IGAEF

Intergalactic Astronomy Educators Fellowship

Small Astronomy Calendar for Amateur Astronomers

Year VIII

2026

Let’s welcome our 2026 Small Astronomy Calendar Edition made by our **Intergalactic Astronomy Educators Fellowship (IGAEF)**’s team.

In 2022, many amateur astronomers asked for calculations for more specific geographical locations. This year we added new useful calculated positions and coordinates for everyone in the world to use.
You should check this calendar every month, specifically the lunar occultations pages for your observation point. There are many interesting and unique events that might not happen every year, because of the different parameters of the Moon orbit. Our hope is to fulfill your expectations. We would like to receive suggestions and feedback, both in English and Spanish. You can find the editor’s email in the last page of the calendar.
We appreciate your support and we are looking forward to having a good observational year, and a better and more complete calendar for this first year of a new decade.

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C A L E N D A R F O R 2026

January

Su	Mo	Tu	We	Th	Fr	Sa
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

February

Su	Mo	Tu	We	Th	Fr	Sa
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28

March

Su	Mo	Tu	We	Th	Fr	Sa
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

April

Su	Mo	Tu	We	Th	Fr	Sa
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

May

Su	Mo	Tu	We	Th	Fr	Sa
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

June

Su	Mo	Tu	We	Th	Fr	Sa
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

July

Su	Mo	Tu	We	Th	Fr	Sa
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

August

Su	Mo	Tu	We	Th	Fr	Sa
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

September

Su	Mo	Tu	We	Th	Fr	Sa
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

October

Su	Mo	Tu	We	Th	Fr	Sa
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

November

Su	Mo	Tu	We	Th	Fr	Sa
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

December

Su	Mo	Tu	We	Th	Fr	Sa
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

Easter Sunday: 2026 Apr 05

IGAEF

Intergalactic Astronomy Educators Fellowship

What is the Intergalactic Astronomy Educators Fellowship (IGAEF)?

Is the organization of people who like to promote, teach and disseminate astronomy, and is based in Miami. We like to invite whose research and educational interests lie within the broad spectrum of subjects comprising contemporary astronomy. Our mission is to support and share scientific understanding of the universe.

The Intergalactic Astronomy Educators Fellowship is working hard to inspire, guide and support astronomy teachers, educators and enthusiasts of all walks of life. We will continuously work to provide projects (or links to projects that already exist) to teachers, educators, students and all who are interested in learning. We enjoy sharing the love of astronomy through our many activities and through every spoken word. We will work tirelessly to accomplish these goals through volunteers, partners, and donors.

Our organization was established with the following goals in mind :

- To better our world's society through the knowledge and appreciation of astronomy.
- To show and teach about our world and our universe through the astronomer's views and perspectives.
- To disseminate the latest news and discoveries about astronomy.
- To promote observational activities.
- To explain the roles of astronomy and astronautics advisers.
- To better promote the connection between professionals, astronauts and engineers with those interested in astronomy and astronautics.
- To empower the teaching of astronomy and to spread its world-changing benefits.
- We will strive to accomplish our goals through all possible means, from using the latest knowledge data to providing a wide array of educational materials.
- We will strive to better our world in the advancement of space science and exploration by implementing these aforementioned goals.
- AND LASTLY, we pledge to teach and reinforce the practices of ethics, respect, and morality in an universal way, for the welfare of all of mankind.

Time Zones and Universal Time

Fomr: https://eclipse.gsfc.nasa.gov/SEhelp/TimeZone.html

Time can be measured in a number of ways. For instance, we can measure the passage of time via the orbital motion of Earth and other planets in the solar system (Dynamical Time). Or we can measure time based on the rotation of Earth on its axis with respect to the stars (Universal Time). Finally, we can measure time through the oscillations of atoms (International Atomic Time).

Universal Time or UT is the precise measure of time used as the basis for all civil time-keeping. Although their exact definitions differ, most readers can assume that Universal Time is equivalent to Greenwich Mean Time or GMT. Universal Time is actually based on the mean sidereal time as measured in Greenwich, England. It's also approximately equal to mean solar time from Greenwich.

Most astronomical calculations and predictions are usually presented in terms of Universal Time. In order to convert eclipse predictions from UT to local time, you need to know what time zone you are in. For North Americans, the conversion from UT to local time is as follows:

```
Atlantic Standard Time (AST) =  UT - 4 hours
Eastern Standard Time (EST)  =  UT - 5 hours
Central Standard Time (CST)  =  UT - 6 hours
Mountain Standard Time (MST) =  UT - 7 hours
Pacific Standard Time (PST)  =  UT - 8 hours
```

If Daylight Saving Time is in effect in the time zone, you must ADD one hour to the above standard times.

For example, let's assume that an eclipse begins in Toledo, Ohio on June 20 at 20:25 UT. Toledo is in the Eastern Standard Time zone, so:

```
Local Time = 20:25 - 5 hours
           = 15:25 (= 3:25 pm)
```

But since Toledo observes Daylight Saving Time in June, we must ADD one more hour to the above time. So the eclipse will begin at 16:25 (=4:25pm) local time.

Time zones for countries around the world can be determined with a special Time Zone Map courtesy of HM Nautical Almanac Office, Royal Greenwich Observatory. Just remember that you'll need to check with your travel agent or with a guide book to find out if Daylight Saving Time is practiced during that time of year.

Coordinated Universal Time (or UTC) is based on atomic time. It is synchronized and adjusted to stay within 0.9 seconds of Universal Time (UT). Occasionally, a "leap second" is added to UTC in order keep it in sync with UT (which varies due to Earth's rotation).

Phases of the Moon 2026

New Moon		First Quarter		Full Moon			Last Quarter	
d	h	d	h	d	h	⊕dist	d	h
				Jan 3	10.1	(56.81)	Jan 10	15.8
Jan 18	19.8	Jan 26	4.8	Feb 1	22.1	(58.23)	Feb 9	12.7
Feb 17	12.0	Feb 24	12.5	Mar 3	11.7	(59.99)	Mar 11	9.7
Mar 19	1.4	Mar 25	19.4	Apr 2	2.3	(61.71)	Apr 10	4.9
Apr 17	11.9	Apr 24	2.6	May 1	17.5	(63.03)	May 9	21.2
May 16	20.0	May 23	11.3	May 31	8.8	(63.68)	Jun 8	9.9
Jun 15	2.9	Jun 21	21.9	Jun 29	23.9	(63.54)	Jul 7	19.4
Jul 14	9.8	Jul 21	11.1	Jul 29	14.6	(62.65)	Aug 6	2.3
Aug 12	17.7	Aug 20	2.8	Aug 28	4.3	(61.21)	Sep 4	7.9
Sep 11	3.5	Sep 18	20.8	Sep 26	16.8	(59.49)	Oct 3	13.5
Oct 10	15.9	Oct 18	16.2	Oct 26	4.2	(57.84)	Nov 1	20.5
Nov 9	7.1	Nov 17	11.7	Nov 24	14.9	(56.57)	Dec 1	6.2
Dec 9	0.9	Dec 17	5.6	Dec 24	1.5	(55.94)	Dec 30	19.0

Moon at Perigee 2026

d	h	d	h	d	h	d	h
Jan 1	21	Jan 29	21	Feb 24	23	Mar 22	12
Apr 19	7	May 17	14	Jun 14	23	Jul 13	8
Aug 10	11	Sep 6	20	Oct 1	21	Oct 28	19
Nov 25	22	Dec 24	9				

Moon at Apogee 2026

d	h	d	h	d	h	d	h
Jan 13	21	Feb 10	17	Mar 10	14	Apr 7	9
May 4	22	Jun 1	4	Jun 28	7	Jul 25	17
Aug 22	8	Sep 19	2	Oct 16	22	Nov 13	17
Dec 11	7						

We invite you to visit our website

https://igaef.org/

IGAEF
Intergalactic Astronomy Educators Fellowship

Full of information, links and useful resources!

Including pages dedicated to children, activities, decision makers, and much more!

And you can help us with a donation from there!

Physical Ephemeris for the Moon 2026

Date	l	b	Axis	Coln	Lat	%ill
	o	o	o	o	o	
Jan 1	-1.3	-6.5	350.0	57.5	-1.3	92
3	2.5	-5.9	2.4	81.7	-1.3	100
5	5.6	-3.7	13.4	106.0	-1.3	97
7	6.9	-0.7	19.8	130.2	-1.2	84
9	6.5	2.3	22.0	154.5	-1.2	66
11	4.7	4.7	20.7	178.8	-1.2	47
13	2.2	6.2	15.9	203.1	-1.2	28
15	-0.4	6.7	7.9	227.5	-1.2	13
17	-2.6	6.1	357.9	251.9	-1.1	3
19	-4.2	4.3	348.3	276.2	-1.1	0
21	-5.2	1.6	341.6	300.6	-1.0	5
23	-5.4	-1.4	338.3	325.0	-1.0	18
25	-4.7	-4.3	338.8	349.3	-0.9	37
27	-3.1	-6.2	343.8	13.7	-0.9	59
29	-0.6	-6.6	353.7	37.9	-0.8	80
31	2.2	-5.4	5.9	62.2	-0.7	95
Feb 2	4.6	-2.8	15.6	86.5	-0.7	100
4	5.7	0.3	20.8	110.7	-0.6	95
6	5.3	3.3	22.0	135.0	-0.6	82
8	3.6	5.5	19.5	159.3	-0.5	64
10	1.3	6.7	13.6	183.6	-0.5	46
12	-1.2	6.7	4.7	208.0	-0.5	27
14	-3.4	5.6	354.5	232.4	-0.4	12
16	-4.7	3.4	345.7	256.7	-0.4	2
18	-5.0	0.5	340.0	281.1	-0.3	0
20	-4.4	-2.7	338.0	305.5	-0.3	7
22	-3.0	-5.3	340.1	329.9	-0.2	23
24	-1.0	-6.7	347.1	354.3	-0.1	44
26	1.1	-6.4	358.1	18.6	0.0	67
28	3.0	-4.7	9.6	42.9	0.0	86
Mar 2	4.3	-1.8	17.7	67.2	0.1	97
4	4.7	1.3	21.6	91.5	0.2	100
6	4.1	4.1	21.6	115.8	0.2	93
8	2.5	6.0	18.0	140.1	0.3	80
10	0.2	6.8	11.0	164.4	0.3	63
12	-2.4	6.5	1.4	188.8	0.4	44
14	-4.5	5.0	351.5	213.2	0.4	26
16	-5.7	2.6	343.6	237.6	0.4	11
18	-5.6	-0.5	338.9	262.0	0.5	1
20	-4.1	-3.6	338.2	286.4	0.5	1
22	-1.7	-5.9	342.0	310.8	0.6	11
24	1.0	-6.7	350.9	335.2	0.6	30
26	3.2	-5.8	2.8	359.6	0.7	52
28	4.5	-3.6	13.1	24.0	0.8	74
30	4.9	-0.7	19.5	48.3	0.8	90
Apr 1	4.6	2.4	22.0	72.6	0.9	99
3	3.4	4.8	20.9	97.0	1.0	99

Date	l	b	Axis	Coln	Lat	%ill
	o	o	o	o	o	
Apr 1	4.6	2.4	22.0	72.6	0.9	99
3	3.4	4.8	20.9	97.0	1.0	99
5	1.6	6.4	16.1	121.3	1.0	92
7	-0.8	6.7	8.0	145.6	1.0	79
9	-3.3	6.0	358.1	170.0	1.1	61
11	-5.5	4.2	348.7	194.4	1.1	42
13	-6.8	1.5	341.8	218.8	1.1	23
15	-6.5	-1.6	338.3	243.2	1.1	8
17	-4.5	-4.5	338.8	267.7	1.1	0
19	-1.2	-6.3	344.3	292.1	1.2	3
21	2.3	-6.4	355.0	316.6	1.2	17
23	4.9	-4.9	7.0	341.0	1.3	38
25	6.1	-2.3	16.1	5.4	1.3	60
27	6.0	0.7	20.9	29.8	1.4	79
29	4.9	3.5	22.0	54.2	1.4	93
May 1	3.3	5.5	19.6	78.5	1.5	99
3	1.2	6.5	13.6	102.9	1.5	98
5	-1.3	6.4	4.6	127.3	1.5	90
7	-3.9	5.2	354.7	151.6	1.5	77
9	-6.1	3.1	346.1	176.0	1.5	59
11	-7.5	0.3	340.3	200.5	1.5	39
13	-7.4	-2.7	337.9	224.9	1.5	19
15	-5.3	-5.2	339.7	249.4	1.5	5
17	-1.5	-6.5	346.9	273.9	1.5	0
19	2.6	-5.9	358.9	298.4	1.5	7
21	5.7	-3.8	10.6	322.8	1.5	24
23	7.1	-0.9	18.3	347.3	1.5	45
25	6.9	2.1	21.8	11.7	1.6	66
27	5.5	4.5	21.6	36.1	1.6	83
29	3.5	6.1	17.8	60.5	1.6	95
31	1.1	6.6	10.6	84.9	1.6	100
Jun 2	-1.4	6.0	1.0	109.3	1.6	98
4	-4.0	4.3	351.3	133.6	1.6	88
6	-6.2	1.9	343.7	158.0	1.5	74
8	-7.6	-1.0	339.1	182.5	1.5	54
10	-7.6	-3.8	338.0	206.9	1.5	33
12	-5.7	-5.9	341.2	231.4	1.4	14
14	-2.0	-6.5	349.9	255.9	1.4	2
16	2.3	-5.3	2.5	280.4	1.4	1
18	5.7	-2.7	13.5	304.9	1.4	12
20	7.4	0.4	20.0	329.4	1.4	30
22	7.3	3.3	22.1	353.8	1.4	51
24	5.8	5.5	20.6	18.3	1.4	70
26	3.7	6.5	15.5	42.7	1.4	86
28	1.2	6.5	7.2	67.1	1.4	96
30	-1.4	5.4	357.2	91.5	1.3	100
Jul 2	-3.8	3.3	348.1	115.9	1.3	96

Date	l	b	Axis	Coln	Lat	%ill
	o	o	o	o	o	
Jul 1	-2.6	4.4	352.4	103.7	1.3	99
3	-4.9	2.0	344.5	128.1	1.3	92
5	-6.5	-0.9	339.5	152.5	1.2	78
7	-7.2	-3.7	337.9	176.9	1.1	59
9	-6.4	-5.8	340.2	201.3	1.1	37
11	-3.9	-6.6	347.6	225.8	1.0	17
13	-0.2	-5.8	359.6	250.3	1.0	3
15	3.6	-3.3	11.4	274.8	0.9	1
17	6.2	0.0	19.0	299.3	0.9	9
19	7.1	3.1	22.0	323.8	0.9	26
21	6.5	5.4	21.1	348.3	0.8	45
23	4.7	6.6	16.5	12.7	0.8	65
25	2.2	6.7	8.5	37.1	0.8	82
27	-0.3	5.6	358.6	61.5	0.8	94
29	-2.7	3.6	349.2	85.9	0.7	100
31	-4.5	0.8	342.2	110.3	0.7	98
Aug 2	-5.7	-2.1	338.5	134.7	0.6	89
4	-5.9	-4.8	338.2	159.1	0.5	72
6	-5.0	-6.4	342.2	183.5	0.4	51
8	-2.9	-6.6	351.2	208.0	0.4	29
10	0.1	-5.2	3.5	232.4	0.3	10
12	3.1	-2.3	14.1	256.9	0.2	1
14	5.4	1.0	20.4	281.4	0.2	2
16	6.3	4.0	22.2	305.9	0.1	13
18	5.7	6.0	20.0	330.4	0.1	30
20	4.0	6.9	14.1	354.8	0.1	49
22	1.6	6.5	5.2	19.3	0.1	68
24	-0.9	5.0	355.2	43.7	0.0	84
26	-3.1	2.6	346.4	68.0	0.0	95
28	-4.5	-0.3	340.5	92.4	-0.1	100
30	-5.0	-3.2	337.9	116.8	-0.2	96
Sep 1	-4.5	-5.6	339.1	141.1	-0.2	84
3	-3.1	-6.7	345.1	165.5	-0.3	65
5	-1.1	-6.3	355.5	189.9	-0.4	42
7	1.2	-4.3	7.4	214.4	-0.4	21
9	3.3	-1.3	16.6	238.8	-0.5	6
11	4.8	2.0	21.4	263.3	-0.6	0
13	5.4	4.8	22.0	287.8	-0.6	4
15	4.8	6.4	18.6	312.2	-0.7	16
17	3.1	6.8	11.5	336.7	-0.7	33
19	0.6	6.0	1.9	1.1	-0.7	51
21	-1.9	4.2	352.1	25.5	-0.7	70
23	-4.0	1.6	344.2	49.8	-0.8	86
25	-5.1	-1.3	339.3	74.2	-0.8	97
27	-4.8	-4.1	337.8	98.5	-0.9	100
29	-3.4	-6.1	340.7	122.8	-0.9	93
Oct 1	-1.2	-6.6	348.6	147.2	-1.0	78

Date	l	b	Axis	Coln	Lat	%ill
	o	o	o	o	o	
Oct 1	-1.2	-6.6	348.6	147.2	-1.0	78
3	1.0	-5.5	0.2	171.5	-1.0	56
5	2.9	-3.1	11.3	195.9	-1.1	34
7	4.2	0.0	18.7	220.3	-1.1	15
9	4.9	3.1	22.0	244.8	-1.2	3
11	4.8	5.4	21.3	269.2	-1.2	0
13	3.9	6.6	16.7	293.6	-1.3	6
15	2.1	6.5	8.5	318.0	-1.3	18
17	-0.4	5.3	358.5	342.4	-1.3	34
19	-3.1	3.2	349.2	6.8	-1.3	53
21	-5.2	0.5	342.3	31.2	-1.3	72
23	-6.1	-2.4	338.4	55.5	-1.3	88
25	-5.3	-4.9	338.2	79.8	-1.4	98
27	-3.0	-6.4	342.7	104.1	-1.4	99
29	0.1	-6.2	352.5	128.4	-1.4	89
31	2.9	-4.5	4.7	152.7	-1.4	71
Nov 2	4.8	-1.7	14.7	177.0	-1.5	48
4	5.6	1.4	20.5	201.4	-1.5	27
6	5.5	4.1	22.3	225.8	-1.5	11
8	4.8	6.0	20.2	250.2	-1.6	2
10	3.4	6.6	14.3	274.6	-1.6	0
12	1.4	6.0	5.2	299.0	-1.6	7
14	-1.2	4.4	355.2	323.4	-1.6	19
16	-4.0	2.1	346.6	347.7	-1.6	36
18	-6.2	-0.7	340.7	12.1	-1.5	55
20	-7.2	-3.4	337.9	36.4	-1.5	74
22	-6.4	-5.6	338.9	60.7	-1.5	91
24	-3.6	-6.5	345.0	85.0	-1.5	99
26	0.2	-5.7	356.2	109.2	-1.5	97
28	3.8	-3.3	8.5	133.5	-1.5	84
30	6.1	-0.2	17.3	157.8	-1.5	64
Dec 2	6.9	2.8	21.6	182.1	-1.5	42
4	6.5	5.2	22.0	206.4	-1.5	23
6	5.3	6.4	18.5	230.8	-1.5	8
8	3.4	6.5	11.3	255.2	-1.5	1
10	1.0	5.4	1.6	279.6	-1.5	1
12	-1.7	3.4	351.9	303.9	-1.4	8
14	-4.4	0.8	344.2	328.3	-1.4	20
16	-6.7	-1.9	339.4	352.6	-1.4	38
18	-7.9	-4.5	337.7	17.0	-1.3	58
20	-7.3	-6.2	340.0	41.3	-1.3	78
22	-4.6	-6.5	347.5	65.5	-1.2	94
24	-0.6	-5.1	359.6	89.8	-1.2	100
26	3.5	-2.3	11.6	114.0	-1.1	94
28	6.4	1.1	19.2	138.3	-1.1	79
30	7.6	4.1	22.2	162.6	-1.0	58
Jan 1	7.2	6.0	21.2	186.9	-1.0	38

Local Time of MOONRISE 2026

Date	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	15.51	18.02	16.50	18.29	19.07	20.39	20.49	21.04	21.23	21.54	.....	0.05
2	16.58	19.06	17.51	19.24	20.03	21.27	21.26	21.34	22.08	22.57	0.12	1.05
3	18.08	20.06	18.49	20.19	20.58	22.10	21.59	22.07	22.59	.....	1.14	2.01
4	19.18	21.03	19.45	21.15	21.52	22.49	22.30	22.42	23.59	0.07	2.13	2.57
5	20.23	21.58	20.40	22.11	22.43	23.24	23.01	23.23	0.02	1.13	3.09	3.53
6	21.25	22.52	21.34	23.06	23.30	23.57	23.32	.....	1.07	2.18	4.06	4.49
7	22.22	23.46	22.30	23.59	.....	.....	.....	0.12	2.15	3.19	5.02	5.46
8	23.16	.....	23.25	.....	0.12	0.28	0.07	1.08	3.23	4.19	5.58	6.42
9	.....	0.41	.....	0.49	0.50	1.00	0.45	2.12	4.28	5.16	6.56	7.35
10	0.10	1.39	0.21	1.36	1.25	1.33	1.29	3.21	5.30	6.13	7.53	8.25
11	1.05	2.34	1.16	2.17	1.58	2.10	2.21	4.32	6.30	7.10	8.48	9.10
12	1.58	3.28	2.10	2.54	2.30	2.51	3.23	5.40	7.28	8.08	9.41	9.50
13	2.53	4.19	2.58	3.28	3.03	3.41	4.31	6.45	8.26	9.06	10.29	10.26
14	3.48	5.06	3.42	4.01	3.38	4.39	5.43	7.47	9.23	10.02	11.12	10.59
15	4.43	5.48	4.22	4.34	4.18	5.45	6.54	8.46	10.21	10.57	11.51	11.30
16	5.36	6.27	4.59	5.09	5.04	6.56	8.01	9.43	11.18	11.48	12.26	12.00
17	6.26	7.02	5.33	5.46	5.58	8.08	9.04	10.40	12.13	12.35	12.59	12.30
18	7.11	7.35	6.06	6.29	7.00	9.16	10.03	11.36	13.07	13.17	13.30	13.02
19	7.52	8.08	6.39	7.18	8.08	10.19	11.00	12.32	13.56	13.55	14.01	13.39
20	8.29	8.41	7.14	8.14	9.18	11.18	11.55	13.29	14.41	14.29	14.33	14.20
21	9.03	9.16	7.53	9.17	10.26	12.14	12.50	14.23	15.22	15.02	15.08	15.10
22	9.35	9.55	8.36	10.24	11.30	13.09	13.46	15.15	15.59	15.33	15.48	16.08
23	10.06	10.39	9.26	11.31	12.29	14.03	14.42	16.03	16.32	16.05	16.34	17.15
24	10.39	11.30	10.23	12.35	13.26	14.57	15.37	16.46	17.05	16.39	17.29	18.27
25	11.15	12.29	11.26	13.36	14.20	15.52	16.30	17.25	17.36	17.16	18.32	19.40
26	11.55	13.33	12.32	14.34	15.13	16.48	17.21	18.01	18.09	17.59	19.40	20.49
27	12.41	14.40	13.38	15.29	16.07	17.43	18.07	18.34	18.43	18.48	20.51	21.54
28	13.36	15.46	14.41	16.23	17.02	18.35	18.49	19.06	19.22	19.45	22.00	22.55
29	14.38	.....	15.41	17.17	17.57	19.24	19.27	19.37	20.05	20.49	23.05	23.53
30	15.46	.....	16.39	18.12	18.53	20.09	20.01	20.09	20.56	21.56	.....	.....
31	16.55	.....	17.35	.....	19.47	.....	20.33	20.44	.....	23.04	.....	0.50

..... No phenomena occurs on this date
----- Moon continuously below the horizon
***** Moon continuously above the horizon

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Local Time of MOONSET 2026

Date	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	5.16	6.56	5.33	5.46	5.22	6.09	6.47	8.24	10.11	11.20	12.58	12.49
2	6.25	7.38	6.10	6.16	5.58	7.01	7.43	9.20	11.15	12.25	13.40	13.22
3	7.28	8.14	6.44	6.48	6.39	7.56	8.39	10.16	12.21	13.23	14.15	13.53
4	8.22	8.47	7.15	7.22	7.24	8.52	9.34	11.15	13.28	14.16	14.48	14.26
5	9.07	9.17	7.46	8.00	8.13	9.48	10.28	12.17	14.33	15.00	15.19	15.00
6	9.45	9.48	8.17	8.42	9.06	10.43	11.24	13.22	15.30	15.39	15.51	15.39
7	10.19	10.19	8.49	9.28	10.02	11.38	12.21	14.33	16.19	16.14	16.24	16.21
8	10.50	10.52	9.24	10.19	10.58	12.34	13.25	15.40	17.02	16.46	17.00	17.08
9	11.19	11.28	10.03	11.14	11.54	13.34	14.30	16.43	17.40	17.18	17.40	17.58
10	11.49	12.10	10.47	12.13	12.53	14.34	15.38	17.38	18.15	17.51	18.24	18.52
11	12.21	12.56	11.36	13.10	13.50	15.39	16.49	18.26	18.47	18.25	19.12	19.47
12	12.55	13.47	12.31	14.08	14.48	16.48	17.56	19.08	19.20	19.03	20.04	20.42
13	13.33	14.43	13.27	15.06	15.48	18.00	18.58	19.45	19.53	19.44	20.58	21.36
14	14.16	15.41	14.26	16.05	16.53	19.11	19.51	20.18	20.28	20.29	21.53	22.29
15	15.04	16.40	15.25	17.06	18.01	20.17	20.36	20.51	21.07	21.19	22.48	23.22
16	15.57	17.39	16.24	18.09	19.13	21.15	21.15	21.23	21.50	22.12	23.42	.....
17	16.54	18.38	17.23	19.15	20.26	22.03	21.49	21.56	22.37	23.07	.....	0.15
18	17.53	19.37	18.23	20.25	21.34	22.44	22.22	22.32	23.27	.....	0.36	1.11
19	18.51	20.36	19.24	21.36	22.35	23.19	22.53	23.12	.....	0.02	1.31	2.09
20	19.50	21.36	20.27	22.46	23.26	23.52	23.25	23.56	0.22	0.58	2.27	3.12
21	20.47	22.39	21.34	23.49	.....	.....	23.58	.....	1.17	1.53	3.25	4.19
22	21.44	23.44	22.42	.....	0.10	0.22	.....	0.44	2.14	2.49	4.28	5.29
23	22.42	.....	23.51	0.44	0.47	0.53	0.35	1.37	3.10	3.45	5.35	6.39
24	23.42	0.51	.....	1.31	1.20	1.25	1.16	2.32	4.07	4.44	6.45	7.44
25	.....	1.59	0.56	2.11	1.51	1.59	2.01	3.28	5.03	5.45	7.56	8.41
26	0.45	3.02	1.56	2.46	2.21	2.37	2.51	4.25	6.00	6.50	9.03	9.30
27	1.51	4.00	2.47	3.18	2.51	3.19	3.45	5.22	6.59	7.58	10.03	10.11
28	3.00	4.50	3.31	3.48	3.23	4.06	4.41	6.18	8.01	9.08	10.54	10.48
29	4.08	.....	4.10	4.18	3.58	4.57	5.37	7.14	9.06	10.15	11.38	11.21
30	5.11	.....	4.44	4.49	4.37	5.51	6.34	8.11	10.13	11.18	12.15	11.54
31	6.08	.....	5.15	.....	5.21	.....	7.29	9.09	.....	12.12	.....	12.26

..... No phenomena occurs on this date
----- Moon continuously below the horizon
***** Moon continuously above the horizon

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Local time of Planets Rise and Set 2026 (EST)

Date	Sun		Mercury		Venus		Mars		Jupiter		Saturn		Uranus		Neptune	
	Rise	Set	Rise	Set	Rise	Set	Rise	Set	Rise	Set	Rise	Set	Rise	Set	Rise	Set
2026 Jan 1	7 8	17 43	6 21	16 49	7 5	17 35	7 20	17 48	18 24	7 56	11 30	23 16	14 41	4 2	11 37	23 30
2026 Jan 6	7 9	17 46	6 36	17 2	7 12	17 44	7 16	17 46	18 1	7 34	11 11	22 58	14 21	3 42	11 17	23 11
2026 Jan 11	7 9	17 50	6 50	17 18	7 18	17 53	7 12	17 44	17 39	7 12	10 53	22 40	14 0	3 22	10 58	22 52
2026 Jan 16	7 9	17 53	7 4	17 35	7 23	18 2	7 7	17 42	17 16	6 50	10 34	22 22	13 40	3 2	10 38	22 33
2026 Jan 21	7 9	17 57	7 16	17 54	7 26	18 12	7 2	17 41	16 53	6 27	10 16	22 4	13 21	2 42	10 19	22 13
2026 Jan 26	7 7	18 1	7 27	18 15	7 29	18 21	6 57	17 39	16 31	6 5	9 57	21 46	13 1	2 22	10 0	21 54
2026 Jan 31	7 5	18 5	7 36	18 36	7 31	18 30	6 51	17 38	16 8	5 43	9 39	21 29	12 41	2 2	9 40	21 35
2026 Feb 5	7 3	18 8	7 44	18 57	7 32	18 40	6 46	17 36	15 46	5 22	9 21	21 11	12 21	1 42	9 21	21 16
2026 Feb 10	7 0	18 12	7 49	19 19	7 32	18 48	6 39	17 35	15 24	5 0	9 2	20 54	11 58	1 19	9 2	20 57
2026 Feb 15	6 56	18 15	7 49	19 33	7 32	18 57	6 33	17 33	15 3	4 39	8 44	20 37	11 38	0 59	8 43	20 38
2026 Feb 20	6 52	18 18	7 43	19 37	7 31	19 6	6 26	17 31	14 41	4 18	8 26	20 20	11 19	0 40	8 24	20 19
2026 Feb 25	6 48	18 21	7 27	19 24	7 30	19 14	6 19	17 30	14 20	3 57	8 8	20 3	10 59	0 21	8 4	20 1
2026 Mar 2	6 44	18 24	7 0	18 54	7 28	19 22	6 12	17 28	14 0	3 37	7 50	19 46	10 40	0 2	7 45	19 42
2026 Mar 7	6 39	18 26	6 28	18 21	7 26	19 30	6 4	17 26	13 40	3 17	7 32	19 29	10 21	23 39	7 26	19 23
2026 Mar 12	6 34	18 29	5 56	17 41	7 24	19 38	5 57	17 24	13 20	2 57	7 15	19 12	10 2	23 20	7 7	19 4
2026 Mar 17	6 28	18 31	5 31	17 9	7 22	19 46	5 49	17 22	13 0	2 37	6 57	18 58	9 43	23 1	6 48	18 49
2026 Mar 22	6 23	18 34	5 14	16 48	7 20	19 54	5 41	17 20	12 41	2 18	6 39	18 41	9 24	22 42	6 29	18 30
2026 Mar 27	6 18	18 36	5 4	16 37	7 18	20 2	5 33	17 18	12 23	2 0	6 21	18 24	9 5	22 23	6 10	18 11
2026 Apr 1	6 13	18 38	4 58	16 34	7 17	20 10	5 24	17 15	12 1	1 37	6 3	18 7	8 46	22 5	5 51	17 52
2026 Apr 6	6 8	18 40	4 55	16 36	7 16	20 19	5 16	17 13	11 43	1 19	5 45	17 51	8 27	21 46	5 31	17 34
2026 Apr 11	6 3	18 43	4 54	16 44	7 16	20 27	5 7	17 11	11 25	1 1	5 27	17 34	8 8	21 27	5 12	17 15
2026 Apr 16	5 58	18 45	4 55	16 55	7 17	20 36	4 59	17 8	11 8	0 44	5 10	17 17	7 49	21 9	4 53	16 56
2026 Apr 21	5 53	18 48	4 57	17 9	7 18	20 45	4 50	17 6	10 51	0 27	4 52	17 0	7 31	20 51	4 34	16 37
2026 Apr 26	5 49	18 50	5 1	17 26	7 20	20 54	4 42	17 3	10 34	0 9	4 34	16 42	7 12	20 32	4 15	16 18
2026 May 1	5 45	18 53	5 7	17 48	7 23	21 3	4 33	17 0	10 17	23 49	4 16	16 25	6 53	20 14	3 56	15 59
2026 May 6	5 41	18 55	5 16	18 13	7 27	21 12	4 25	16 58	10 1	23 32	3 58	16 8	6 35	19 55	3 36	15 40
2026 May 11	5 38	18 58	5 28	18 42	7 31	21 20	4 17	16 55	9 45	23 16	3 40	15 51	6 16	19 37	3 17	15 21
2026 May 16	5 36	19 0	5 43	19 18	7 37	21 28	4 8	16 52	9 29	22 59	3 22	15 33	5 58	19 19	2 58	15 2
2026 May 21	5 33	19 3	6 2	19 50	7 43	21 35	4 0	16 50	9 13	22 43	3 3	15 16	5 39	19 0	2 39	14 43
2026 May 26	5 32	19 6	6 23	20 18	7 50	21 41	3 52	16 47	8 58	22 27	2 45	14 58	5 20	18 46	2 19	14 24

Local time of Planets Rise and Set 2026 (EST)

Date	Sun		Mercury		Venus		Mars		Jupiter		Saturn		Uranus		Neptune	
	Rise	Set	Rise	Set	Rise	Set	Rise	Set	Rise	Set	Rise	Set	Rise	Set	Rise	Set
2026 May 31	5 31	19 8	6 42	20 40	7 57	21 46	3 44	16 44	8 42	22 11	2 27	14 41	5 2	18 27	2 0	14 5
2026 Jun 5	5 30	19 10	6 59	20 54	8 5	21 50	3 37	16 41	8 27	21 55	2 8	14 23	4 43	18 9	1 41	13 45
2026 Jun 10	5 30	19 13	7 11	21 0	8 13	21 53	3 29	16 39	8 12	21 39	1 50	14 5	4 25	17 51	1 21	13 26
2026 Jun 15	5 30	19 14	7 19	20 59	8 20	21 55	3 22	16 36	7 57	21 23	1 31	13 47	4 6	17 32	1 2	13 7
2026 Jun 20	5 31	19 16	7 20	20 50	8 28	21 55	3 15	16 33	7 42	21 7	1 13	13 28	3 47	17 14	0 42	12 47
2026 Jun 25	5 32	19 16	7 13	20 34	8 35	21 55	3 8	16 30	7 27	20 52	0 54	13 10	3 29	16 56	0 23	12 28
2026 Jun 30	5 34	19 17	6 58	20 11	8 42	21 54	3 1	16 27	7 12	20 36	0 35	12 51	3 10	16 37	0 3	12 8
2026 Jul 5	5 36	19 17	6 35	19 41	8 49	21 51	2 54	16 23	6 58	20 20	0 16	12 32	2 51	16 19	23 40	11 49
2026 Jul 10	5 38	19 16	6 5	19 8	8 55	21 48	2 48	16 20	6 43	20 5	23 53	12 13	2 33	16 0	23 20	11 29
2026 Jul 15	5 40	19 15	5 32	18 42	9 0	21 44	2 42	16 16	6 28	19 49	23 34	11 54	2 14	15 41	23 0	11 9
2026 Jul 20	5 42	19 13	5 1	18 15	9 5	21 40	2 36	16 13	6 14	19 33	23 14	11 35	1 55	15 23	22 41	10 49
2026 Jul 25	5 45	19 11	4 38	17 57	9 9	21 35	2 30	16 9	5 59	19 17	22 55	11 15	1 36	15 4	22 21	10 30
2026 Jul 30	5 47	19 8	4 25	17 49	9 13	21 29	2 24	16 4	5 45	19 2	22 35	10 56	1 17	14 45	22 1	10 10
2026 Aug 4	5 50	19 5	4 24	17 51	9 16	21 23	2 19	16 0	5 30	18 49	22 16	10 36	0 58	14 26	21 41	9 50
2026 Aug 9	5 52	19 1	4 33	18 1	9 19	21 16	2 13	15 55	5 16	18 33	21 56	10 16	0 39	14 7	21 21	9 30
2026 Aug 14	5 54	18 58	4 53	18 16	9 21	21 9	2 8	15 50	5 1	18 17	21 36	9 55	0 20	13 48	21 1	9 10
2026 Aug 19	5 57	18 53	5 17	18 31	9 23	21 1	2 2	15 44	4 46	18 2	21 16	9 35	0 0	13 29	20 41	8 50
2026 Aug 24	5 59	18 49	5 44	18 45	9 23	20 52	1 57	15 39	4 32	17 46	20 55	9 14	23 37	13 9	20 21	8 29
2026 Aug 29	6 1	18 44	6 9	18 55	9 23	20 43	1 52	15 32	4 17	17 30	20 35	8 54	23 18	12 50	20 1	8 9
2026 Sep 3	6 3	18 38	6 32	19 5	9 22	20 33	1 46	15 26	4 2	17 13	20 15	8 33	22 58	12 31	19 41	7 49
2026 Sep 8	6 5	18 33	6 52	19 9	9 19	20 22	1 41	15 19	3 47	16 57	19 54	8 12	22 39	12 11	19 21	7 29
2026 Sep 13	6 7	18 28	7 10	19 11	9 14	20 10	1 35	15 12	3 32	16 41	19 33	7 51	22 19	11 51	19 1	7 9
2026 Sep 18	6 9	18 22	7 26	19 12	9 7	19 56	1 30	15 4	3 17	16 25	19 13	7 29	21 59	11 32	18 45	6 48
2026 Sep 23	6 11	18 17	7 40	19 13	8 58	19 40	1 24	14 56	3 2	16 8	18 56	7 8	21 39	11 12	18 25	6 28
2026 Sep 28	6 13	18 11	7 52	19 12	8 44	19 22	1 18	14 48	2 46	15 52	18 35	6 47	21 19	10 52	18 5	6 8
2026 Oct 3	6 15	18 6	8 3	19 11	8 27	19 1	1 12	14 39	2 31	15 35	18 15	6 25	20 59	10 32	17 45	5 48
2026 Oct 8	6 17	18 1	8 11	19 8	8 5	18 42	1 5	14 30	2 15	15 18	17 54	6 4	20 39	10 12	17 25	5 27
2026 Oct 13	6 19	17 56	8 16	19 4	7 38	18 17	0 59	14 20	1 59	15 1	17 33	5 42	20 19	9 51	17 5	5 7
2026 Oct 18	6 22	17 51	8 15	18 57	7 7	17 51	0 52	14 10	1 43	14 44	17 12	5 21	19 59	9 31	16 45	4 47
2026 Oct 23	6 24	17 47	8 4	18 43	6 34	17 25	0 44	14 0	1 27	14 27	16 51	5 0	19 39	9 11	16 25	4 27
2026 Oct 28	6 27	17 43	7 38	18 20	6 0	16 59	0 37	13 49	1 10	14 9	16 31	4 39	19 18	8 50	16 5	4 6

Local time of Planets Rise and Set 2026 (EST)

Date	Sun		Mercury		Venus		Mars		Jupiter		Saturn		Uranus		Neptune	
	Rise	Set	Rise	Set	Rise	Set	Rise	Set	Rise	Set	Rise	Set	Rise	Set	Rise	Set
2026 Nov 2	6 30	17 39	6 55	17 48	5 28	16 36	0 29	13 39	0 53	13 52	16 10	4 18	18 58	8 30	15 45	3 46
2026 Nov 7	6 34	17 36	6 5	17 13	4 59	16 15	0 20	13 27	0 36	13 34	15 50	3 57	18 42	8 9	15 25	3 26
2026 Nov 12	6 37	17 34	5 29	16 48	4 36	15 57	0 11	13 15	0 19	13 16	15 29	3 36	18 21	7 49	15 5	3 6
2026 Nov 17	6 41	17 32	5 14	16 34	4 16	15 42	0 2	13 3	0 1	12 57	15 9	3 15	18 1	7 28	14 45	2 46
2026 Nov 22	6 44	17 31	5 15	16 29	4 1	15 29	23 50	12 51	23 39	12 39	14 48	2 55	17 41	7 8	14 25	2 26
2026 Nov 27	6 48	17 30	5 24	16 30	3 50	15 18	23 39	12 38	23 21	12 20	14 28	2 34	17 20	6 47	14 6	2 6
2026 Dec 2	6 51	17 30	5 37	16 33	3 42	15 9	23 28	12 24	23 2	12 1	14 8	2 14	17 0	6 26	13 46	1 47
2026 Dec 7	6 55	17 31	5 52	16 39	3 36	15 2	23 16	12 10	22 43	11 42	13 48	1 54	16 39	6 6	13 26	1 27
2026 Dec 12	6 58	17 32	6 9	16 47	3 33	14 55	23 3	11 56	22 24	11 23	13 29	1 35	16 19	5 45	13 6	1 7
2026 Dec 17	7 1	17 34	6 25	16 57	3 32	14 50	22 50	11 41	22 4	11 3	13 9	1 15	15 58	5 25	12 43	0 44
2026 Dec 22	7 4	17 36	6 42	17 9	3 32	14 45	22 35	11 25	21 44	10 43	12 46	0 52	15 38	5 4	12 23	0 24
2026 Dec 27	7 6	17 39	6 58	17 22	3 33	14 42	22 20	11 9	21 23	10 23	12 26	0 33	15 18	4 44	12 4	0

Diary of Astronomical Phenomena 2026

January

d	h			d	h	
1	21	Moon at perigee		18	15	Mercury 1.5N of Moon
2	8	Moon furthest North (28.3)		18	19	NEW MOON
3	10	FULL MOON		19	1	Venus 2.0N of Moon
3	18	Earth at perihelion		19	4	Pluto 0.8S of Moon Occn
3	22	Jupiter 3.6S of Moon		20	4	Venus 2.7N of Pluto
4	3	Pollux 3.0N of Moon		21	15	Mercury superior conjunction
6	16	Venus superior conjunction		22	16	Mercury 1.7N of Pluto
6	17	Regulus 0.4S of Moon	Occn	23	9	Saturn 3.8S of Moon
8	2	Venus 0.2N of Mars		23	10	Pluto at conjunction
9	11	Mars at conjunction		23	13	Neptune 3.1S of Moon
10	8	Jupiter at opposition		26	4	FIRST QUARTER
10	15	LAST QUARTER		27	16	Uranus 5.2S of Moon
10	23	Spica 1.5N of Moon		27	23	Mars 2.8N of Pluto
13	21	Moon at apogee		29	10	Mercury 0.7S of Venus
14	19	Antares 0.5N of Moon	Occn	29	16	Moon furthest North (28.4)
16	5	Moon furthest South (-28.3)		29	20	Moon at perigee
18	7	Mercury 1.0S of Mars		31	3	Jupiter 3.8S of Moon
18	15	Mars 2.5N of Moon		31	13	Pollux 3.0N of Moon

February

d	h			d	h	
1	22	FULL MOON		19	14	Mercury greatest elong E(18)
3	3	Regulus 0.3S of Moon	Occn	19	20	Neptune 3.3S of Moon
4	4	Uranus stationary		19	20	Saturn 4.1S of Moon
7	7	Spica 1.7N of Moon		20	16	Saturn 0.8S of Neptune
9	12	LAST QUARTER		23	22	Uranus 5.3S of Moon
10	17	Moon at apogee		24	12	FIRST QUARTER
11	3	Antares 0.7N of Moon	Occn	24	23	Moon at perigee
12	12	Moon furthest South (-28.4)		25	17	Mercury stationary
15	14	Pluto 0.8S of Moon	Occn	25	23	Moon furthest North (28.4)
16	18	Mars 0.7N of Moon	Occn	27	7	Jupiter 3.9S of Moon
17	11	NEW MOON	Eclipse	27	21	Pollux 2.9N of Moon
18	7	Venus 1.6S of Moon		28	0	Mercury 4.5N of Venus
18	22	Mercury 0.1N of Moon	Occn			

March

d	h			d	h	
2	12	Regulus 0.3S of Moon	Occn	19	1	NEW MOON
3	11	FULL MOON	Eclipse	19	6	Neptune 3.3S of Moon

Diary of Astronomical Phenomena 2026

March

d	h		d	h	
6	16	Spica 1.7N of Moon	19	10	Saturn 4.3S of Moon
7	10	Mercury inferior conjunction	19	20	Mercury stationary
7	11	Venus 0.1N of Neptune	20	9	Venus 4.1S of Moon
8	13	Venus 0.9N of Saturn	20	14	Equinox
10	12	Antares 0.7N of Moon Occn	22	11	Moon at perigee
10	14	Moon at apogee	22	11	Neptune at conjunction
11	2	Jupiter stationary	23	5	Uranus 5.3S of Moon
11	9	LAST QUARTER	25	4	Moon furthest North (28.4)
11	20	Moon furthest South (-28.4)	25	8	Saturn at conjunction
15	0	Pluto 0.9S of Moon Occn	25	19	FIRST QUARTER
15	11	Mercury 3.4N of Mars	26	13	Jupiter 3.8S of Moon
17	15	Mercury 1.7N of Moon	27	3	Pollux 3.0N of Moon
17	20	Mars 1.4S of Moon	29	19	Regulus 0.3S of Moon Occn

April

d	h		d	h	
2	2	FULL MOON	17	11	NEW MOON
3	0	Spica 1.6N of Moon	19	6	Moon at perigee
4	1	Mercury greatest elong W(28)	19	6	Venus 4.6S of Moon
6	19	Antares 0.6N of Moon Occn	19	15	Uranus 5.2S of Moon
7	8	Moon at apogee	19	22	Mars 1.2N of Saturn
8	4	Moon furthest South (-28.3)	20	10	Mercury 0.4S of Saturn
10	4	LAST QUARTER	20	20	Mercury 1.6S of Mars
11	10	Pluto 1.2S of Moon	21	11	Moon furthest North (28.2)
13	5	Mars 0.3N of Neptune	22	22	Jupiter 3.5S of Moon
15	15	Mercury 4.6S of Moon	23	8	Pollux 3.2N of Moon
15	18	Neptune 3.5S of Moon	24	2	FIRST QUARTER
15	22	Mars 3.3S of Moon	24	2	Venus 0.8N of Uranus
16	2	Saturn 4.7S of Moon	26	1	Regulus 0.2S of Moon Occn
17	1	Mercury 1.3S of Neptune	30	7	Spica 1.6N of Moon

Diary of Astronomical Phenomena 2026

May

d	h		d	h	
1	17	FULL MOON	17	4	Uranus 5.1S of Moon
4	2	Antares 0.4N of Moon Occn	17	13	Moon at perigee
4	22	Moon at apogee	18	0	Mercury 0.9N of Uranus
5	11	Moon furthest South (-28.1)	18	19	Moon furthest North (28.1)
8	10	Pluto stationary	19	1	Venus 2.9S of Moon
8	18	Pluto 1.5S of Moon	20	13	Jupiter 3.0S of Moon
9	21	LAST QUARTER	20	16	Pollux 3.4N of Moon
13	6	Neptune 3.7S of Moon	22	14	Uranus at conjunction
13	18	Saturn 5.1S of Moon	23	7	Regulus 0.1N of Moon Occn
14	14	Mercury superior conjunction	23	11	FIRST QUARTER
14	21	Mars 4.7S of Moon	27	13	Spica 1.7N of Moon
16	20	NEW MOON	31	8	FULL MOON
17	1	Mercury 4.4S of Moon	31	9	Antares 0.4N of Moon Occn

June

d	h		d	h	
1	4	Moon at apogee	16	20	Mercury 2.6S of Moon
1	16	Moon furthest South (-28.0)	17	1	Pollux 3.5N of Moon
5	0	Pluto 1.8S of Moon	17	7	Jupiter 2.5S of Moon
7	23	Venus 4.7S of Pollux	17	20	Venus 0.3S of Moon Occn
8	9	LAST QUARTER	19	15	Regulus 0.3N of Moon Occn
9	15	Neptune 3.9S of Moon	21	8	Solstice
9	20	Venus 1.6N of Jupiter	21	21	FIRST QUARTER
10	7	Saturn 5.5S of Moon	23	19	Spica 2.0N of Moon
12	18	Mars 5.4S of Moon	27	15	Antares 0.4N of Moon Occn
13	17	Uranus 5.2S of Moon	28	7	Moon at apogee
14	23	Moon at perigee	28	21	Moon furthest South (-28.0)
15	2	NEW MOON	29	2	Mercury stationary
15	5	Moon furthest North (28.0)	29	23	FULL MOON
15	19	Mercury greatest elong E(24)			

Diary of Astronomical Phenomena 2026

July

d	h		d	h	
2	5	Pluto 2.0S of Moon	14	12	Pollux 3.6N of Moon
4	6	Mars 0.1S of Uranus	15	3	Jupiter 1.9S of Moon
6	14	Earth at aphelion	17	0	Regulus 0.4N of Moon Occn
6	23	Neptune 4.2S of Moon	17	15	Venus 1.8N of Moon
7	17	Saturn 5.9S of Moon	21	2	Spica 2.2N of Moon
7	19	LAST QUARTER	21	11	FIRST QUARTER
8	4	Neptune stationary	23	14	Mercury stationary
9	21	Venus 1.0N of Regulus	24	21	Antares 0.6N of Moon Occn
11	5	Uranus 5.3S of Moon	25	17	Moon at apogee
11	13	Mars 5.2S of Moon	26	3	Moon furthest South (-28.1)
12	15	Moon furthest North (28.0)	27	6	Pluto at opposition
13	1	Mercury inferior conjunction	27	23	Saturn stationary
13	5	Mars 5.3N of Aldebaran	29	10	Pluto 2.0S of Moon
13	7	Moon at perigee	29	12	Jupiter at conjunction
14	9	NEW MOON	29	14	FULL MOON

August

d	h		d	h	
2	8	Mercury greatest elong W(19)	15	10	Mercury 0.5N of Jupiter
3	4	Neptune 4.4S of Moon	16	7	Venus 1.8N of Moon
6	2	LAST QUARTER	17	10	Spica 2.2N of Moon
7	14	Uranus 5.3S of Moon	20	2	FIRST QUARTER
8	23	Moon furthest North (28.1)	21	4	Antares 0.6N of Moon Occn
9	5	Mars 4.4S of Moon	22	8	Moon at apogee
10	11	Moon at perigee	22	10	Moon furthest South (-28.1)
10	22	Pollux 3.6N of Moon	25	13	Mercury 1.3N of Regulus
11	13	Mercury 2.0S of Moon	25	16	Pluto 2.0S of Moon
12	0	Jupiter 1.4S of Moon	27	17	Mercury superior conjunction
12	17	NEW MOON Eclipse	28	4	FULL MOON Eclipse
13	10	Regulus 0.5N of Moon Occn	30	9	Neptune 4.3S of Moon
15	5	Venus greatest elong E(46)			

Diary of Astronomical Phenomena 2026

September

d	h			d	h		
2	7	Venus 1.5S of Spica		14	11	Venus 0.5S of Moon	Occn
3	21	Uranus 5.4S of Moon		17	9	Mars 5.9S of Pollux	
4	7	LAST QUARTER		17	12	Antares 0.5N of Moon	Occn
5	6	Moon furthest North (28.1)		18	18	Moon furthest South (-28.1)	
6	19	Mars 2.9S of Moon		18	20	FIRST QUARTER	
6	20	Moon at perigee		19	2	Moon at apogee	
7	6	Pollux 3.6N of Moon		21	23	Pluto 2.0S of Moon	
8	18	Jupiter 0.8S of Moon	Occn	23	0	Equinox	
9	19	Regulus 0.5N of Moon	Occn	26	1	Neptune at opposition	
10	18	Uranus stationary		26	7	Mercury 0.9N of Spica	
11	3	NEW MOON		26	15	Neptune 4.3S of Moon	
12	4	Mercury 3.4N of Moon		26	16	FULL MOON	
13	19	Spica 2.2N of Moon					

October

d	h			d	h		
1	2	Uranus 5.3S of Moon		12	18	Mercury 2.0N of Moon	
1	21	Moon at perigee		14	21	Antares 0.4N of Moon	Occn
2	11	Moon furthest North (28.0)		16	2	Moon furthest South (-27.9)	
2	13	Venus stationary		16	11	Pluto stationary	
3	13	LAST QUARTER		16	22	Moon at apogee	
4	11	Pollux 3.7N of Moon		18	16	FIRST QUARTER	
4	12	Saturn at opposition		19	7	Pluto 2.1S of Moon	
5	6	Mars 1.1S of Moon	Occn	23	23	Neptune 4.3S of Moon	
6	10	Jupiter 0.2S of Moon	Occn	24	3	Venus inferior conjunction	
6	23	Mercury 5.0N of Venus		24	7	Mercury stationary	
7	3	Regulus 0.6N of Moon	Occn	26	4	FULL MOON	
10	15	NEW MOON		28	8	Uranus 5.1S of Moon	
11	4	Spica 2.1N of Moon		28	18	Moon at perigee	
12	4	Mercury greatest elong E(25)		29	17	Moon furthest North (27.8)	
12	4	Venus 2.9S of Moon		31	17	Pollux 3.9N of Moon	

Diary of Astronomical Phenomena 2026

November

d	h			d	h		
1	20	LAST QUARTER		16	6	Mars 1.2N of Jupiter	
2	13	Mars 1.0N of Moon	Occn	17	11	FIRST QUARTER	
2	22	Jupiter 0.5N of Moon	Occn	20	8	Neptune 4.4S of Moon	
3	8	Regulus 0.8N of Moon	Occn	21	8	Mercury greatest elong W(20)	
4	14	Mercury inferior conjunction		22	6	Venus 2.1N of Spica	
6	1	Venus 1.6S of Spica		24	14	FULL MOON	
7	11	Spica 2.1N of Moon		24	17	Uranus 5.1S of Moon	
7	11	Venus 0.9N of Moon	Occn	25	21	Moon at perigee	
8	13	Mercury 5.6N of Moon		25	22	Uranus at opposition	
9	7	NEW MOON		26	2	Moon furthest North (27.7)	
11	4	Antares 0.2N of Moon	Occn	26	12	Mars 1.7N of Regulus	
11	15	Venus stationary		28	0	Pollux 4.1N of Moon	
12	9	Moon furthest South (-27.7)		30	8	Jupiter 1.1N of Moon	Occn
13	11	Mercury stationary		30	14	Regulus 1.0N of Moon	Occn
13	17	Moon at apogee		30	17	Mars 3.0N of Moon	
15	16	Pluto 2.4S of Moon					

December

d	h			d	h		
1	6	LAST QUARTER		17	17	Neptune 4.6S of Moon	
4	17	Spica 2.3N of Moon		21	20	Solstice	
7	19	Mercury 5.7N of Moon		22	2	Uranus 5.1S of Moon	
8	11	Antares 0.2N of Moon	Occn	23	12	Moon furthest North (27.6)	
9	0	NEW MOON		24	1	FULL MOON	
9	15	Moon furthest South (-27.6)		24	8	Moon at perigee	
11	6	Moon at apogee		25	11	Pollux 4.3N of Moon	
11	23	Saturn stationary		27	16	Jupiter 1.4N of Moon	
12	23	Mercury 4.7N of Antares		27	22	Regulus 1.2N of Moon	Occn
12	23	Pluto 2.7S of Moon		28	14	Mars 4.7N of Moon	
13	10	Neptune stationary		30	19	LAST QUARTER	
13	12	Jupiter stationary		31	23	Spica 2.6N of Moon	
17	5	FIRST QUARTER					

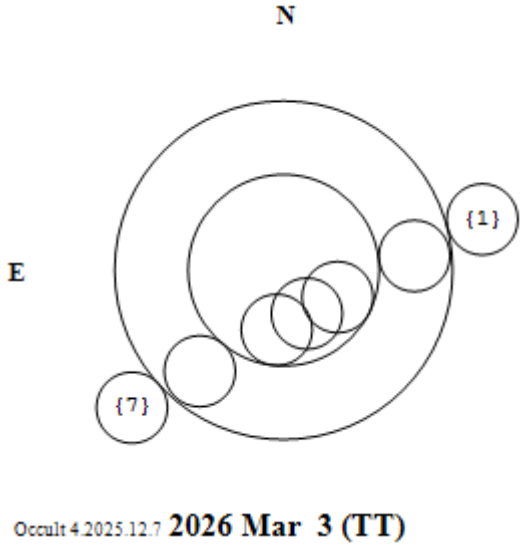
Lunar eclipses

L U N A R E C L I P S E on 2026 Mar 3 (TT)

	Event	UTC h	m	s	P.A. o	Overhead at Long o	Lat o
[1]	Moon Enters Penumbra	8	44	2	104	-130	7
[2]	Moon Enters Umbra	9	49	40	96	-145	7
[3]	Total Eclipse Starts	11	3	57	244	-163	7
[4]	Maximum Eclipse	11	33	43		-171	6
[5]	Total Eclipse Ends	12	2	55	173	-178	6
[6]	Moon Leaves Umbra	13	17	29	320	164	6
[7]	Moon Leaves Penumbra	14	23	21	312	148	6

Magnitude of Umbral Eclipse = 1.153

delta T = 69.2 secs ±1s, Ephemeris = DE440



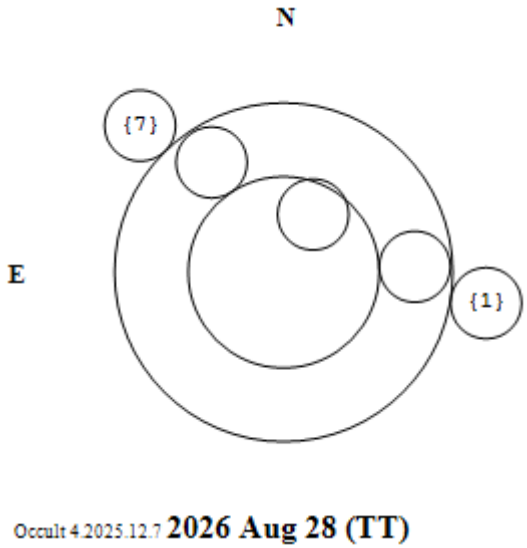
Lunar eclipses

L U N A R E C L I P S E on 2026 Aug 28 (TT)

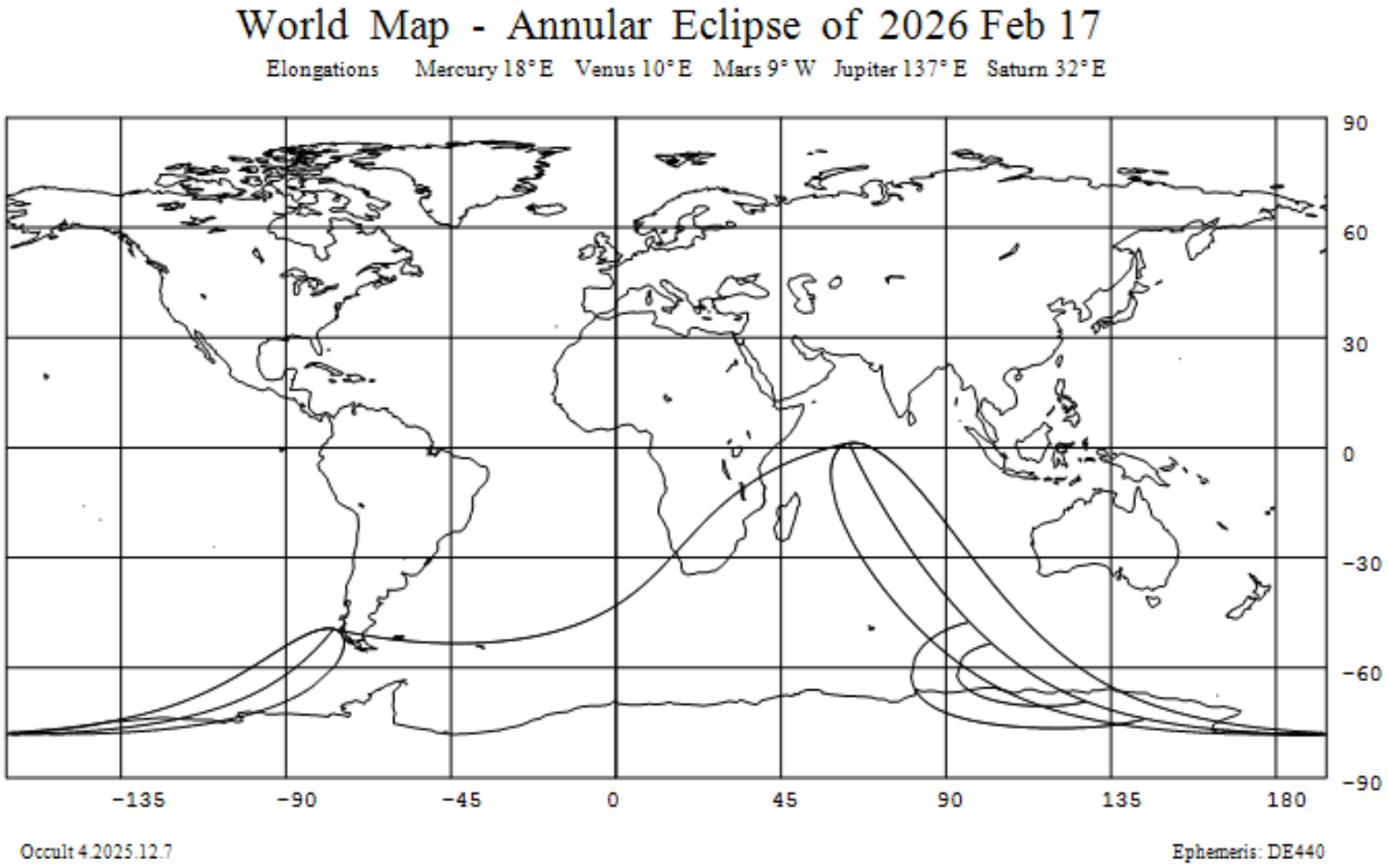
	Event	UTC h	m	s	P.A. o	Overhead at Long o	Lat o
[1]	Moon Enters Penumbra	1	23	33	81	-22	-10
[2]	Moon Enters Umbra	2	33	24	92	-39	-10
[4]	Maximum Eclipse	4	12	55		-63	-9
[6]	Moon Leaves Umbra	5	52	12	213	-87	-9
[7]	Moon Leaves Penumbra	7	2	2	224	-104	-9

Magnitude of Umbral Eclipse = 0.932

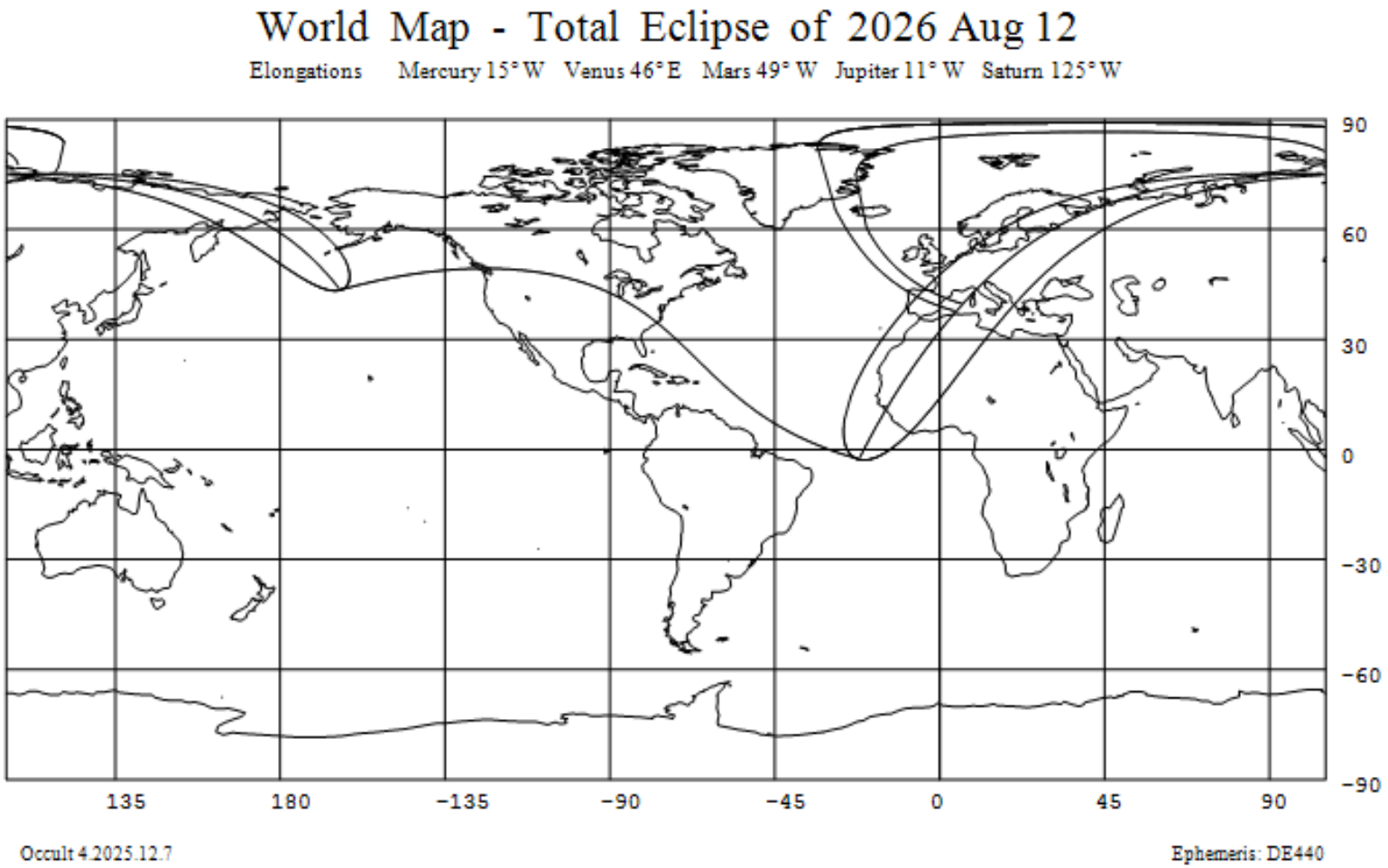
delta T = 69.2 secs ±1s, Ephemeris = DE440



Solar Eclipses



Solar Eclipses



Meteor Showers for 2026

The main two places where you can find a detailed list of the annual meteor showers are:

The **American Meteor Society**: https://www.amsmeteors.org/meteor-showers/meteor-shower-calendar/
The meteor showers listed are the easiest to observe and provide the most activity.

The **International Meteor Organization (IMO)**: https://www.imo.net/files/meteor-shower/cal2023.pdf
This is the most comprehensive list of meteor showers. Looks for the Table 5, pag 25. Next here, for those who can't access internet, a copy of the 2024 IMO calendar. All the rights are for IMO, for more information go to their website.

We included the IMO calendar for whoever doesn't have easy access to Internet:
International Meteor Organization (Edited by J¨urgen Rendtel):

1 Quadrantids (QUA)
Active from December 28th to January 12th, 2026
The Quadrantids have the potential to be the strongest shower of the year but usually fall short due to the short length of maximum activity (6 hours) and the poor weather experienced during early January. The average hourly rates one can expect under dark skies is 25. These meteors usually lack persistent trains but often produce bright fireballs. Due to the high northerly declination (celestial latitude) these meteors are not well seen from the southern hemisphere. Predictions for 2026 show a peak near 21 UT on January 3rd. .Activity will be severely compromised in 2026 as a full moon occurs on January 3rd. The bright moonlight will obscure all but the brightest meteors therefore the best hourly rates are expected to be less than 10.
Shower details - **Radiant:** 15:20 +49° - **ZHR:** 120 - **Velocity:** 25 miles/sec (medium - 40.4km/sec) - **Parent Object:** 2003 EH (Asteroid)
Next Peak - The Quadrantids will next peak on the Jan 2-3, 2026 night. On this night, the moon will be 100% full.
2 Lyrids (LYR)
Active from April 14th to April 30th, 2026
The Lyrids are a medium strength shower that usually produces good rates for three nights centered on the maximum. These meteors also usually lack persistent trains but can produce fireballs. These meteors are best seen from the northern hemisphere where the radiant is high in the sky at dawn. Activity from this shower can be seen from the southern hemisphere, but at a lower rate. In 2026, maximum activity is predicted to occur near 20 UT on April 22nd. On this date the waxing crescent moon will set before the radiant reaches a favorable elevation therefore lunar interference will be minimal in 2026.

Shower details - Radiant: 18:04 +34° - ZHR: 18 - Velocity: 30 miles/sec (medium - 49km/sec) - Parent Object: C/1861 G1 (Thatcher)
Next Peak - The Lyrids will next peak on the Apr 21-22, 2026 night. On this night, the moon will be 27% full.

3 Eta Aquariids (ETA)
Active from April 19th to May 28th, 2026
The eta Aquariids are a strong shower when viewed from the southern tropics. From the equator northward, they usually only produce medium rates of 10-30 per hour just before dawn. Activity is good for a week centered the night of maximum activity. These are swift meteors that produce a high percentage of persistent trains, but few fireballs. In 2026, a waning gibbous moon will severely affect this shower, reducing hourly rates to less than 10.
Shower details - **Radiant:** 22:32 -1° - **ZHR:** 50 - **Velocity:** 40.7 miles/sec (swift - 65.4km/sec) - **Parent Object:** 1P/Halley
Next Peak - The eta Aquariids will next peak on the May 5-6, 2026 night. On this night, the moon will be 84% full.

4 Southern delta Aquariids (SDA)
Active from July 12th to August 23rd, 2026
The Delta Aquariids are another strong shower best seen from the southern tropics. North of the equator the radiant is located lower in the southern sky and therefore rates are less than seen from further south. These meteors produce good rates for a week centered on the night of maximum. These are usually faint meteors that lack both persistent trains and fireballs. In 2026, the full moon occurs only two days prior to the peak therefore activity will be severely compromised y the bright moonlight .
Shower details - **Radiant:** 22:40 -16.4° - **ZHR:** 25 - **Velocity:** 25 miles/sec (medium - 41km/sec) - **Parent Object:** 96P/Machholz?
Next Peak - The Southern delta Aquariids will next peak on the Jul 30-31, 2026 night. On this night, the moon will be 98% full.

5 Alpha Capricornids (CAP)
Active from July 3rd to August 15th, 2026
The alpha Capricornids are active from July 12 through August 12 with a "plateau-like" maximum centered on July 31st. This shower is not very strong and rarely produces in excess of 5 shower members per hour. What is notable about this shower is the number of bright fireballs produced during its activity period. This shower is seen equally well on either side of the equator. In 2026, the full moon occurs only two days prior to the peak therefore activity will be severely compromised by the bright moonlight .

Shower details - **Radiant:** 20:28 -10° - **ZHR:** 5 - **Velocity:** 14 miles/sec (slow - 23km/sec) - **Parent Object:** 169P/NEAT
Next Peak - The alpha Capricornids will next peak on the Jul 30-31, 2026 night. On this night, the moon will be 98% full.

6 Perseids (PER)
Active from July 17th to August 24th, 2026
The Perseids are the most popular meteor shower as they peak on warm August nights as seen from the northern hemisphere. The Perseids are active from July 17 to August 24.. They reach a strong maximum on August 12 or 13, depending on the year. Normal hourly rates seen from rural locations range from 30-50 shower members per hour at maximum. The Perseids are particles released from comet 109P/Swift-Tuttle during its numerous returns to the inner solar system. They are called Perseids since the radiant (the area of the sky where the meteors seem to originate) is located near the prominent constellation of Perseus the hero. When at maximum activity. In 2026, the moon is new on August 12 so conditions are optimum for viewing this shower.
Shower details - **Radiant:** 03:12 +58.1° - **ZHR:** 100 - **Velocity:** 37 miles/sec (swift - 59km/sec) - **Parent Object:** 109P/Swift-Tuttle
Next Peak - The Perseids will next peak on the Aug 12-13, 2026 night. On this night, the moon will be 0% full.

7 Orionids (ORI)
Active from October 2nd to November 7th, 2026
The Orionids are a medium strength shower that sometimes reaches high strength activity. In a normal year the Orionids produce 10-20 shower members at maximum. In exceptional years, such as 2006-2009, the peak rates were on par with the Perseids (50-75 per hour). Recent displays have produced low to average displays of this shower. In 2025, a new moon will occur on October 21st and there will not be any lunar interference at all.
Shower details - **Radiant:** 06:20 +15.8° - **ZHR:** 20 - **Velocity:** 41 miles/sec (swift - 66km/sec) - **Parent Object:** 1P/Halley
Next Peak - The Orionids will next peak on the Oct 21-22, 2026 night. On this night, the moon will be 80% full.

8 Southern Taurids (STA)
Active from September 20th to November 20th, 2026
The Southern Taurids are a complex shower made up of two main components, the annual component which peaks on October 14th and the fireball swarm component which peaks on November 5th. Since 2025 is a swarm year, we will list November 5th as the peak. The Southern Taurids are rich in fireballs and are often responsible for increased number of fireball reports from September through November.

Shower details - **Radiant:** 03:28 +14.5° - **ZHR:** 5 - **Velocity:** 17 miles/sec (slow - 27km/sec) - **Parent Object:** 2P/Encke
Next Peak - The Southern Taurids will next peak on the Nov 4-5, 2026 night. On this night, the moon will be 18% full.

9 Northern Taurids (NTA)
Active from October 20th to December 10th, 2026
This shower is much like the Southern Taurids, just active a bit later in the year. When the two showers are active simultaneously in late October and early November, there is sometimes a notable increase in the fireball activity.
Shower details - **Radiant:** 03:52 +22.2° - **ZHR:** 5 - **Velocity:** 18 miles/sec (slow - 29km/sec) - **Parent Object:** 2P/Encke
Next Peak - The Northern Taurids will next peak on the Nov 11-12, 2026 night. On this night, the moon will be 7% full.

10 Leonids (LEO)
Active from November 6th to November 30th, 2026
The Leonids are best known for producing meteor storms in the years of 1833, 1866, 1966, 1999, 2001 and 2002. These outbursts of meteor activity are best seen when the parent object, comet 55P/Tempel-Tuttle, is near perihelion (closest approach to the sun). Yet it is not the fresh material we see from the comet, but rather debris from earlier returns that also happen to be most dense at the same time. Unfortunately, it appears that the earth will not encounter any dense clouds of debris until 2099. Therefore, when the comet returns in 2031 and 2064, there may not be any meteor storms, but perhaps several good displays of Leonid activity when rates are in excess of 100 per hour. Each passing year also presents new possibilities from old debris fields. In 2025, the waning old crescent moon will rise during the late morning hours and will not spoil the best viewing hours for this shower.
Shower details - **Radiant:** 10:08 +21.8° - **ZHR:** 15 - **Velocity:** 43.5 miles/sec (swift - 69.7km/sec) - **Parent Object:** 55P/Tempel-Tuttle
Next Peak - The Leonids will next peak on the Nov 16-17, 2026 night. On this night, the moon will be 45% full.

11 Geminids (GEM)
Active from December 4th to December 17th, 2025 **Currently active**
The Geminids are usually the strongest meteor shower of the year and meteor enthusiasts are certain to circle December 13 and 14 on their calendars. This is the one major shower that provides good activity prior to midnight as the constellation of Gemini is well placed from 22:00 onward. The Geminids are often bright and intensely colored. Due to their medium-slow velocity, persistent trains are not usually seen. These meteors

are also seen in the southern hemisphere, but only during the middle of the night and at a reduced rate. In 2025, the moon will have a waning crescent phase on December 13/14, which rises near 2am local standard time. Observations prior to this time will be moon-free. Observations after moon rise can still be successful by facing westward with the rising moon at your back. .
Shower details - **Radiant:** 07:28 +33° - **ZHR:** 150 - **Velocity:** 22 miles/sec (medium - 35km/sec) - **Parent Object:** 3200 Phaethon (asteroid)
Next Peak - The Geminids will next peak on the Dec 13-14, 2025 night. On this night, the moon will be 30% full.

12 Ursids (URS)
Active from December 17th to December 26th, 2025
The Ursids are often neglected due to the fact it peaks just before Christmas and the rates are much less than the Geminds, which peaks just a week before the Ursids. Observers will normally see 5-10 Ursids per hour during the late morning hours on the date of maximum activity. There have been occasional outbursts when rates have exceeded 25 per hour. These outbursts appear unrelated to the perihelion dates of comet 8P/Tuttle. This shower is strictly a northern hemisphere event as the radiant fails to clear the horizon or does so simultaneously with the start of morning twilight as seen from the southern tropics.In 2025, a slender crescent moon will be present in the evening sky and will not interfere with viewing this shower.
Shower details - **Radiant:** 14:28 +76° - **ZHR:** 10 - **Velocity:** 20.5 miles/sec (medium - 33.1km/sec) - **Parent Object:** 8P/Tuttle
Next Peak - The Ursids will next peak on the Dec 21-22, 2025 night. On this night, the moon will be 3% full.

Comets for 2026

Pages with information about comets:
http://www.aerith.net/comet/future-n.html
http://www.aerith.net/comet/future-s.html
http://www.earthriseinstitute.org/inboundcoms.html
https://www.cometwatch.co.uk/future-comets-northern-hemisphere/
https://cometografia.es/proximos-cometas-brillantes/

Satellite Eclipses, occultations and transits - with the Planet

As moons orbit around a planet, they undergo eclipses, occultations and transits with the body of the planet. For Saturn, Uranus and Neptune, these events only occur when the equatorial plane of the planet is near to edge-on. This option is for computing these events.

The moons included in the predictions, and the frequency of events, are as follows:

Jupiter. Predictions are generated for Io, Europa, Ganymede and Callisto. Events involving Io, Europa and Ganymede occur continuously, whereas events involving Callisto do not occur for a period of around 3 years every 6 years.

Saturn. Predictions are generated for satellites 3 to 6, and 8 (Tethys, Dione, Rhea, Titan, and Iapetus). Events involving Mimas and Enceladus are not included as they are unlikelly to be observable, and are large in number. Events occur for a period of about 4 years every 14 years. In the first half of the 21st century, events occur between Sep 2007 & Oct 2011, Feb 2023 & Apr 2027, Nov 2036 & Aug 2041, and May 2052 to Mar 2057.

Events involving Iapetus occur about 12 months before the other satellites (and the time periods given above) because of the large inclination of the orbit. Because of the large inclination, additional events involving the transit of Iapetus, and of its shadow, on the rings of Saturn are included. The visibility of events against the rings on the 'far side' of Saturn involve two extra considerations that are unique to these events. They are whether, at an event time: the shadow of Iapetus on the rings is occulted by the disk of Saturn, and whether Iapetus is projected against the shadow of Saturn on the rings. These situations involve significant complexities in their determination, and are vary rare. They are not considered in the prediction; as a result it is possible for some Iapetus transit events to not be visible when they occur against the far side of the rings.

The predictions give the mid-time of the events. However the events are not instantaneous. For Jupiter's satellites the duration is typically several minutes. For Iapetus, the duration can be around 20 minutes.

Importantly, the output can be limited to only those events that are visible from our selected location (Miami)- that is, at the event time the planet's altitude > 0 deg, and Sun's altitude < -6 deg (civil twilight).

Explanation:

Satellites of Jupiter 2008 - March

```
  1 12 48.1  2.Tr.E     11 11 37.2  1.Sh.I     24 10 58.9  4.Sh.E
  2 15 15.1  1.Sh.I        12 45.8  1.Tr.I        15 10.0  2.Oc.R
  3 12 35.1  1.Ec.D        12 54.1  3.Oc.R     25 13  5.5  3.Ec.D
  4 11 57.9  1.Sh.E        13 51.5  1.Sh.E        15 24.4  1.Sh.I
    13  3.3  1.Tr.E        15  1.0  1.Tr.E     26 10 11.9  2.Tr.E
  7 14 35.9  4.Sh.I     12 12 22.7  1.Oc.R        12 43.6  1.Ec.D
    15  3.9  3.Sh.I     15 13  9.4  2.Sh.I     27 11  7.8  1.Tr.I
```

The output is given in the form: day, hour, minute, satellite no, event type, phase with the following symbols being used:

```
Satellite no.     1  2  3  4... 8

Event type  Ec [eclipse]
            Oc [occultation]
            Tr [transit]
            Sh [shadow transit]

Phase D  [disappear]
      R  [reappear]
      I   [ingress]
      E  [egress]
```

For example, an event listed as:

```
23 12 23.5 2.Ec.R
```

means Satellite II reappears from eclipse at 12h 23.5m on the 23rd of the month.

Note that the day number is given only for the first event listed for that day.

Satellites of Jupiter 2026

January

1	2	0.6	2.Sh.I	11	9	14.7	1.Tr.I	21	2	43.4	1.Oc.D
	2	29.0	2.Tr.I		9	16.3	1.Sh.I		5	16.9	1.Ec.R
	4	51.5	2.Sh.E		11	31.2	1.Tr.E		8	54.3	3.Tr.I
	5	20.1	2.Tr.E		11	32.9	1.Sh.E		10	1.8	3.Sh.I
	15	45.0	1.Ec.D		17	50.8	2.Tr.I		12	11.4	3.Tr.E
	18	15.4	1.Oc.R		17	55.2	2.Sh.I		13	20.2	3.Sh.E
	20	10.8	4.Ec.D		20	41.7	2.Tr.E		23	50.3	1.Tr.I
2	2	8.2	4.Oc.R		20	46.2	2.Sh.E	22	0	7.9	1.Sh.I
	12	53.6	1.Sh.I	12	6	33.7	1.Oc.D		2	6.7	1.Tr.E
	13	5.4	1.Tr.I		8	53.7	1.Ec.R		2	24.5	1.Sh.E
	15	10.0	1.Sh.E	13	3	40.5	1.Tr.I		9	12.7	2.Tr.I
	15	21.9	1.Tr.E		3	44.8	1.Sh.I		9	49.4	2.Sh.I
	20	12.3	2.Ec.D		5	57.0	1.Tr.E		12	3.2	2.Tr.E
	23	25.3	2.Oc.R		6	1.4	1.Sh.E		12	40.4	2.Sh.E
3	10	13.6	1.Ec.D		11	55.2	2.Oc.D		21	9.5	1.Oc.D
	11	57.0	3.Ec.D		14	55.4	2.Ec.R		23	45.7	1.Ec.R
	12	41.3	1.Oc.R	14	0	59.6	1.Oc.D	23	18	16.3	1.Tr.I
	15	57.5	3.Oc.R		3	22.3	1.Ec.R		18	36.5	1.Sh.I
4	7	22.1	1.Sh.I		5	37.5	3.Tr.I		20	32.7	1.Tr.E
	7	31.3	1.Tr.I		6	1.9	3.Sh.I		20	53.1	1.Sh.E
	9	38.6	1.Sh.E		8	55.0	3.Tr.E	24	3	16.5	2.Oc.D
	9	47.8	1.Tr.E		9	19.5	3.Sh.E		6	49.3	2.Ec.R
	15	19.0	2.Sh.I		22	6.4	1.Tr.I		15	35.6	1.Oc.D
	15	36.5	2.Tr.I		22	13.4	1.Sh.I		18	14.3	1.Ec.R
	18	10.0	2.Sh.E	15	0	22.9	1.Tr.E		22	24.5	3.Oc.D
	18	27.6	2.Tr.E		0	30.0	1.Sh.E	25	3	13.6	3.Ec.R
5	4	42.2	1.Ec.D		6	57.8	2.Tr.I		12	42.4	1.Tr.I
	7	7.2	1.Oc.R		7	13.1	2.Sh.I		13	5.1	1.Sh.I
6	1	50.6	1.Sh.I		9	48.6	2.Tr.E		14	58.8	1.Tr.E
	1	57.1	1.Tr.I		10	4.2	2.Sh.E		15	21.8	1.Sh.E
	4	7.1	1.Sh.E		19	25.6	1.Oc.D		22	20.6	2.Tr.I
	4	13.6	1.Tr.E		21	51.0	1.Ec.R		23	7.7	2.Sh.I
	9	29.7	2.Ec.D	16	16	32.3	1.Tr.I	26	1	11.0	2.Tr.E
	12	32.0	2.Oc.R		16	42.0	1.Sh.I		1	58.6	2.Sh.E
	23	10.8	1.Ec.D		18	48.8	1.Tr.E		10	1.7	1.Oc.D
7	1	33.0	1.Oc.R		18	58.6	1.Sh.E		12	43.0	1.Ec.R
	2	2.8	3.Sh.I	17	1	2.1	2.Oc.D		21	9.7	4.Tr.I
	2	22.3	3.Tr.I		4	13.3	2.Ec.R	27	1	3.0	4.Sh.I
	5	19.6	3.Sh.E		13	51.5	1.Oc.D		1	4.2	4.Tr.E
	5	40.0	3.Tr.E		16	19.6	1.Ec.R		5	2.7	4.Sh.E
	20	19.2	1.Sh.I		19	8.2	3.Oc.D		7	8.5	1.Tr.I
	20	23.0	1.Tr.I		23	13.7	3.Ec.R		7	33.8	1.Sh.I
	22	35.7	1.Sh.E	18	10	58.3	1.Tr.I		9	24.9	1.Tr.E
	22	39.5	1.Tr.E		11	10.6	1.Sh.I		9	50.4	1.Sh.E
8	4	36.8	2.Sh.I		12	13.8	4.Oc.D		16	24.0	2.Oc.D
	4	43.4	2.Tr.I		13	14.8	1.Tr.E		20	7.2	2.Ec.R
	7	27.9	2.Sh.E		13	27.3	1.Sh.E	28	4	27.8	1.Oc.D
	7	34.4	2.Tr.E		18	11.6	4.Ec.R		7	11.6	1.Ec.R
	17	39.5	1.Ec.D		20	5.4	2.Tr.I		12	12.0	3.Tr.I
	19	58.9	1.Oc.R		20	31.5	2.Sh.I		14	1.0	3.Sh.I
9	14	47.7	1.Sh.I		22	56.0	2.Tr.E		15	28.7	3.Tr.E
	14	48.8	1.Tr.I		23	22.5	2.Sh.E		17	19.9	3.Sh.E
	17	4.2	1.Sh.E	19	8	17.5	1.Oc.D	29	1	34.7	1.Tr.I
	17	5.3	1.Tr.E		10	48.3	1.Ec.R		2	2.4	1.Sh.I
	22	47.3	2.Ec.D	20	5	24.3	1.Tr.I		3	51.1	1.Tr.E
10	1	38.8	2.Oc.R		5	39.2	1.Sh.I		4	19.1	1.Sh.E
	7	0.5	4.Tr.I		7	40.7	1.Tr.E		11	28.5	2.Tr.I
	7	1.7	4.Sh.I		7	55.9	1.Sh.E		12	25.6	2.Sh.I
	10	55.3	4.Sh.E		14	9.1	2.Oc.D		14	18.8	2.Tr.E
	10	56.5	4.Tr.E		17	31.2	2.Ec.R		15	16.5	2.Sh.E
	12	7.8	1.Oc.D						22	54.1	1.Oc.D
	14	25.1	1.Ec.R					30	1	40.4	1.Ec.R
	15	53.3	3.Oc.D						20	0.9	1.Tr.I
	19	14.1	3.Ec.R						20	31.1	1.Sh.I
									22	17.3	1.Tr.E
									22	47.8	1.Sh.E
								31	5	32.1	2.Oc.D
									9	25.5	2.Ec.R
									17	20.3	1.Oc.D
									20	9.0	1.Ec.R

February

1	1	43.7	3.Oc.D	11	1	20.1	2.Ec.R	21	1	20.4	1.Tr.I
	7	14.4	3.Ec.R		7	58.9	1.Oc.D		2	15.8	1.Sh.I
	14	27.2	1.Tr.I		11	1.3	1.Ec.R		2	17.9	4.Ec.D
	14	59.8	1.Sh.I		18	55.8	3.Tr.I		3	36.5	1.Tr.E
	16	43.6	1.Tr.E		21	59.1	3.Sh.I		4	32.3	1.Sh.E
	17	16.5	1.Sh.E		22	11.9	3.Tr.E		6	28.6	4.Ec.R
2	0	37.1	2.Tr.I	12	1	19.2	3.Sh.E		12	29.9	2.Oc.D
	1	43.9	2.Sh.I		5	6.2	1.Tr.I		17	15.6	2.Ec.R
	3	27.2	2.Tr.E		5	52.1	1.Sh.I		22	39.8	1.Oc.D
	4	34.6	2.Sh.E		7	22.3	1.Tr.E	22	1	53.7	1.Ec.R
	11	46.6	1.Oc.D		8	8.7	1.Sh.E		12	1.7	3.Oc.D
	14	37.7	1.Ec.R		11	49.4	4.Tr.I		15	19.6	3.Oc.R
3	8	53.5	1.Tr.I		15	42.6	4.Tr.E		15	53.0	3.Ec.D
	9	28.5	1.Sh.I		16	4.7	2.Tr.I		19	16.0	3.Ec.R
	11	9.8	1.Tr.E		17	38.0	2.Sh.I		19	47.6	1.Tr.I
	11	45.1	1.Sh.E		18	54.3	2.Tr.E		20	44.6	1.Sh.I
	18	40.3	2.Oc.D		19	5.6	4.Sh.I		22	3.6	1.Tr.E
	22	43.5	2.Ec.R		20	28.5	2.Sh.E		23	1.1	1.Sh.E
4	2	33.8	4.Oc.D		23	10.6	4.Sh.E	23	7	37.0	2.Tr.I
	6	12.9	1.Oc.D	13	2	25.6	1.Oc.D		9	32.2	2.Sh.I
	6	30.3	4.Oc.R		5	30.0	1.Ec.R		10	26.2	2.Tr.E
	8	14.9	4.Ec.D		23	32.8	1.Tr.I		12	22.4	2.Sh.E
	9	6.4	1.Ec.R	14	0	20.8	1.Sh.I		17	6.9	1.Oc.D

	12	19.9	4.Ec.R		1	49.0	1.Tr.E		20	22.4	1.Ec.R								
	15	32.3	3.Tr.I		2	37.4	1.Sh.E	24	14	14.7	1.Tr.I					March			
	18	0.1	3.Sh.I		10	8.5	2.Oc.D		15	13.4	1.Sh.I	1	0	28.6	1.Oc.D	11	6	33.9	2.Oc.D
	18	48.7	3.Tr.E		14	38.7	2.Ec.R		16	30.7	1.Tr.E		3	18.4	4.Tr.I		11	48.7	2.Ec.R
	21	19.6	3.Sh.E		20	52.3	1.Oc.D		17	29.9	1.Sh.E		3	48.7	1.Ec.R		15	13.8	1.Oc.D
5	3	20.0	1.Tr.I		23	58.7	1.Ec.R	25	1	41.3	2.Oc.D		7	11.7	4.Tr.E		18	41.2	1.Ec.R
	3	57.2	1.Sh.I	15	8	31.9	3.Oc.D		6	34.0	2.Ec.R		13	8.3	4.Sh.I	12	9	16.2	3.Tr.I
	5	36.2	1.Tr.E		11	49.9	3.Oc.R		11	34.0	1.Oc.D		15	36.0	3.Oc.D		12	22.6	1.Tr.I
	6	13.8	1.Sh.E		11	53.5	3.Ec.D		14	51.1	1.Ec.R		17	18.0	4.Sh.E		12	32.0	3.Tr.E
	13	45.8	2.Tr.I		15	15.8	3.Ec.R	26	1	56.2	3.Tr.I		18	54.0	3.Oc.R		13	32.7	1.Sh.I
	15	1.8	2.Sh.I		17	59.7	1.Tr.I		5	12.0	3.Tr.E		19	52.4	3.Ec.D		13	59.0	3.Sh.I
	16	35.7	2.Tr.E		18	49.6	1.Sh.I		5	58.5	3.Sh.I		21	36.7	1.Tr.I		14	38.4	1.Tr.E
	17	52.6	2.Sh.E		20	15.8	1.Tr.E		8	42.0	1.Tr.I		22	39.8	1.Sh.I		15	49.2	1.Sh.E
6	0	39.4	1.Oc.D		21	6.1	1.Sh.E		9	19.7	3.Sh.E		23	16.2	3.Ec.R		17	21.1	3.Sh.E
	3	35.2	1.Ec.R	16	5	15.0	2.Tr.I		9	42.2	1.Sh.I		23	52.6	1.Tr.E	13	1	41.6	2.Tr.I
	21	46.4	1.Tr.I		6	56.1	2.Sh.I		10	57.9	1.Tr.E	2	0	56.3	1.Sh.E		4	2.0	2.Sh.I
	22	25.9	1.Sh.I		8	4.5	2.Tr.E		11	58.7	1.Sh.E		10	1.2	2.Tr.I		4	30.2	2.Tr.E
7	0	2.6	1.Tr.E		9	46.5	2.Sh.E		20	48.7	2.Tr.I		12	8.2	2.Sh.I		6	51.7	2.Sh.E
	0	42.5	1.Sh.E		15	19.1	1.Oc.D		22	50.1	2.Sh.I		12	50.1	2.Tr.E		9	41.7	1.Oc.D
	7	49.3	2.Oc.D		18	27.5	1.Ec.R		23	37.8	2.Tr.E		14	58.1	2.Sh.E		13	10.0	1.Ec.R
	12	1.9	2.Ec.R	17	12	26.5	1.Tr.I	27	1	40.2	2.Sh.E		18	55.9	1.Oc.D	14	6	50.5	1.Tr.I
	19	5.8	1.Oc.D		13	18.3	1.Sh.I		6	1.3	1.Oc.D		22	17.4	1.Ec.R		8	1.5	1.Sh.I
	22	3.8	1.Ec.R		14	42.6	1.Tr.E		9	19.9	1.Ec.R	3	16	4.1	1.Tr.I		9	6.3	1.Tr.E
8	5	5.6	3.Oc.D		15	34.8	1.Sh.E	28	3	9.2	1.Tr.I		17	8.6	1.Sh.I		10	17.9	1.Sh.E
	11	14.8	3.Ec.R		23	18.7	2.Oc.D		4	10.9	1.Sh.I		18	20.0	1.Tr.E		19	48.8	2.Oc.D
	16	12.9	1.Tr.I	18	3	56.9	2.Ec.R		5	25.2	1.Tr.E		19	25.0	1.Sh.E	15	1	7.8	2.Ec.R
	16	54.6	1.Sh.I		9	45.9	1.Oc.D		6	27.4	1.Sh.E	4	4	6.4	2.Oc.D		4	9.5	1.Oc.D
	18	29.2	1.Tr.E		12	56.2	1.Ec.R		14	53.7	2.Oc.D		9	11.3	2.Ec.R		7	38.7	1.Ec.R
	19	11.3	1.Sh.E		22	23.4	3.Tr.I		19	52.9	2.Ec.R		13	23.3	1.Oc.D		22	58.4	3.Oc.D
9	2	55.2	2.Tr.I	19	1	39.3	3.Tr.E						16	46.1	1.Ec.R	16	1	18.5	1.Tr.I
	4	20.0	2.Sh.I		1	58.4	3.Sh.I					5	5	33.4	3.Tr.I		2	16.9	3.Oc.R
	5	44.9	2.Tr.E		5	19.1	3.Sh.E						8	49.2	3.Tr.E		2	30.4	1.Sh.I
	7	10.6	2.Sh.E		6	53.5	1.Tr.I						9	58.4	3.Sh.I		3	34.3	1.Tr.E
	13	32.3	1.Oc.D		7	47.1	1.Sh.I						10	31.7	1.Tr.I		3	51.2	3.Ec.D
	16	32.6	1.Ec.R		9	9.5	1.Tr.E						11	37.4	1.Sh.I		4	46.8	1.Sh.E
10	10	39.5	1.Tr.I		10	3.6	1.Sh.E						12	47.6	1.Tr.E		7	16.3	3.Ec.R
	11	23.3	1.Sh.I		18	25.6	2.Tr.I						13	20.1	3.Sh.E		14	56.2	2.Tr.I
	12	55.7	1.Tr.E		20	14.1	2.Sh.I						13	53.9	1.Sh.E		17	19.9	2.Sh.I
	13	39.9	1.Sh.E		21	15.0	2.Tr.E						23	14.0	2.Tr.I		17	44.7	2.Tr.E
	20	58.5	2.Oc.D		23	4.4	2.Sh.E					6	1	26.1	2.Sh.I		20	9.5	2.Sh.E
				20	4	12.9	1.Oc.D						2	2.8	2.Tr.E		22	37.5	1.Oc.D
					7	25.0	1.Ec.R						4	16.0	2.Sh.E	17	2	7.5	1.Ec.R
					17	35.0	4.Oc.D						7	50.9	1.Oc.D		19	45.9	4.Tr.I
					21	31.3	4.Oc.R						11	14.9	1.Ec.R		19	46.6	1.Tr.I
												7	4	59.3	1.Tr.I		20	59.2	1.Sh.I
													6	6.2	1.Sh.I		22	2.4	1.Tr.E
													7	15.1	1.Tr.E		23	15.6	1.Sh.E
													8	22.6	1.Sh.E		23	40.7	4.Tr.E
													17	20.0	2.Oc.D	18	7	10.8	4.Sh.I
													22	30.3	2.Ec.R		9	4.0	2.Oc.D
												8	2	18.5	1.Oc.D		11	24.9	4.Sh.E
													5	43.7	1.Ec.R		14	26.4	2.Ec.R

	19	14.7	3.Oc.D		17	5.5	1.Oc.D		12	52.3	1.Tr.E
	22	32.9	3.Oc.R		20	36.2	1.Ec.R		14	8.8	1.Sh.E
	23	27.0	1.Tr.I	19	13	2.7	3.Tr.I	29	0	53.9	2.Oc.D
	23	51.7	3.Ec.D		14	14.7	1.Tr.I		6	23.5	2.Ec.R
9	0	35.1	1.Sh.I		15	28.1	1.Sh.I		7	55.1	1.Oc.D
	1	42.8	1.Tr.E		16	18.7	3.Tr.E		11	28.8	1.Ec.R
	2	51.5	1.Sh.E		16	30.5	1.Tr.E	30	5	5.1	1.Tr.I
	3	16.1	3.Ec.R		17	44.5	1.Sh.E		6	21.3	1.Sh.I
	9	32.4	4.Oc.D		17	58.7	3.Sh.I		6	40.9	3.Oc.D
	12	27.6	2.Tr.I		21	21.4	3.Sh.E		7	20.9	1.Tr.E
	13	30.0	4.Oc.R	20	4	11.3	2.Tr.I		8	37.7	1.Sh.E
	14	44.1	2.Sh.I		6	37.7	2.Sh.I		10	0.3	3.Oc.R
	15	16.3	2.Tr.E		6	59.8	2.Tr.E		11	51.3	3.Ec.D
	17	33.8	2.Sh.E		9	27.3	2.Sh.E		15	17.8	3.Ec.R
	20	21.6	4.Ec.D		11	33.6	1.Oc.D		19	59.9	2.Tr.I
	20	46.1	1.Oc.D		15	5.0	1.Ec.R		22	31.2	2.Sh.I
10	0	12.4	1.Ec.R						22	48.2	2.Tr.E
	0	37.6	4.Ec.R					31	1	20.7	2.Sh.E
	17	54.7	1.Tr.I						2	23.6	1.Oc.D
	19	3.9	1.Sh.I						5	57.5	1.Ec.R
	20	10.6	1.Tr.E						23	33.7	1.Tr.I
	21	20.3	1.Sh.E								

Satellites of Jupiter 2026

April

1	0	50.1	1.Sh.I	11	14	26.7	1.Tr.I	21	3	19.0	3.Ec.R
	1	49.5	1.Tr.E		15	43.3	1.Sh.I		3	49.3	2.Tr.I
	3	6.6	1.Sh.E		16	42.7	1.Tr.E		6	17.3	2.Sh.I
	14	11.4	2.Oc.D		17	59.9	1.Sh.E		6	37.9	2.Tr.E
	19	42.1	2.Ec.R		20	22.2	4.Oc.D		8	10.2	1.Oc.D
	20	52.2	1.Oc.D	12	0	26.5	4.Oc.R		9	6.9	2.Sh.E
2	0	26.3	1.Ec.R		6	8.1	2.Oc.D		11	42.5	1.Ec.R
	18	2.4	1.Tr.I		8	28.6	4.Ec.D	22	5	21.8	1.Tr.I
	19	19.0	1.Sh.I		11	39.5	2.Ec.R		6	36.6	1.Sh.I
	20	18.3	1.Tr.E		11	44.8	1.Oc.D		7	38.1	1.Tr.E
	20	49.0	3.Tr.I		12	54.1	4.Ec.R		8	53.4	1.Sh.E
	21	35.5	1.Sh.E		15	18.8	1.Ec.R		22	8.7	2.Oc.D
3	0	5.8	3.Tr.E	13	8	55.8	1.Tr.I	23	2	39.4	1.Oc.D
	1	57.8	3.Sh.I		10	12.3	1.Sh.I		3	36.3	2.Ec.R
	5	21.7	3.Sh.E		11	11.9	1.Tr.E		6	11.2	1.Ec.R
	9	17.0	2.Tr.I		12	28.9	1.Sh.E		23	51.2	1.Tr.I
	11	48.9	2.Sh.I		14	40.6	3.Oc.D	24	1	5.5	1.Sh.I
	12	5.3	2.Tr.E		18	1.1	3.Oc.R		2	7.5	1.Tr.E
	13	12.5	4.Tr.I		19	51.2	3.Ec.D		3	22.4	1.Sh.E
	14	38.4	2.Sh.E		23	19.0	3.Ec.R		8	59.5	3.Tr.I
	15	20.8	1.Oc.D	14	1	11.2	2.Tr.I		12	18.6	3.Tr.E
	17	10.5	4.Tr.E		3	42.1	2.Sh.I		13	57.9	3.Sh.I
	18	55.0	1.Ec.R		3	59.6	2.Tr.E		17	9.0	2.Tr.I
4	1	14.3	4.Sh.I		6	13.8	1.Oc.D		17	23.9	3.Sh.E
	5	32.8	4.Sh.E		6	31.6	2.Sh.E		19	34.9	2.Sh.I
	12	31.1	1.Tr.I		9	47.5	1.Ec.R		19	57.6	2.Tr.E
	13	47.8	1.Sh.I	15	3	24.9	1.Tr.I		21	8.7	1.Oc.D
	14	47.0	1.Tr.E		4	41.1	1.Sh.I		22	24.6	2.Sh.E
	16	4.3	1.Sh.E		5	41.0	1.Tr.E	25	0	40.0	1.Ec.R
5	3	30.0	2.Oc.D		6	57.8	1.Sh.E		18	20.6	1.Tr.I
	9	1.5	2.Ec.R		19	27.6	2.Oc.D		19	34.3	1.Sh.I
	9	49.5	1.Oc.D	16	0	42.8	1.Oc.D		20	36.9	1.Tr.E
	13	23.8	1.Ec.R		0	58.2	2.Ec.R		21	51.2	1.Sh.E
6	6	59.9	1.Tr.I		4	16.3	1.Ec.R	26	11	30.3	2.Oc.D
	8	16.7	1.Sh.I		21	54.1	1.Tr.I		15	38.0	1.Oc.D
	9	15.9	1.Tr.E		23	10.0	1.Sh.I		16	55.8	2.Ec.R
	10	33.3	1.Sh.E	17	0	10.2	1.Tr.E		19	8.7	1.Ec.R
	10	39.1	3.Oc.D		1	26.7	1.Sh.E	27	12	50.1	1.Tr.I
	13	59.1	3.Oc.R		4	52.3	3.Tr.I		14	3.2	1.Sh.I
	15	51.7	3.Ec.D		8	10.5	3.Tr.E		15	6.5	1.Tr.E
	19	18.8	3.Ec.R		9	57.8	3.Sh.I		16	20.2	1.Sh.E
	22	34.6	2.Tr.I		13	23.1	3.Sh.E		22	53.8	3.Oc.D
7	1	6.6	2.Sh.I		14	30.1	2.Tr.I	28	2	15.8	3.Oc.R
	1	23.0	2.Tr.E		16	59.7	2.Sh.I		3	49.7	3.Ec.D
	3	56.1	2.Sh.E		17	18.5	2.Tr.E		6	29.0	2.Tr.I
	4	18.2	1.Oc.D		19	11.9	1.Oc.D		7	18.7	3.Ec.R
	7	52.5	1.Ec.R		19	49.3	2.Sh.E		8	52.5	2.Sh.I
8	1	28.8	1.Tr.I		22	45.0	1.Ec.R		9	17.7	2.Tr.E
	2	45.6	1.Sh.I	18	16	23.2	1.Tr.I		10	7.3	1.Oc.D
	3	44.7	1.Tr.E		17	38.8	1.Sh.I		11	42.2	2.Sh.E
	5	2.2	1.Sh.E		18	39.4	1.Tr.E		13	37.4	1.Ec.R
	16	48.5	2.Oc.D		19	55.6	1.Sh.E		15	3.9	4.Oc.D
	22	20.1	2.Ec.R	19	8	48.3	2.Oc.D		19	13.5	4.Oc.R
	22	47.0	1.Oc.D		13	41.0	1.Oc.D	29	2	32.5	4.Ec.D
9	2	21.3	1.Ec.R		14	17.7	2.Ec.R		7	2.2	4.Ec.R
	19	57.8	1.Tr.I		17	13.8	1.Ec.R		7	19.6	1.Tr.I
	21	14.5	1.Sh.I	20	7	30.7	4.Tr.I		8	32.1	1.Sh.I
	22	13.7	1.Tr.E		10	52.6	1.Tr.I		9	36.0	1.Tr.E
	23	31.1	1.Sh.E		11	33.5	4.Tr.E		10	49.0	1.Sh.E
10	0	48.4	3.Tr.I		12	7.8	1.Sh.I	30	0	51.5	2.Oc.D
	4	5.8	3.Tr.E		13	8.7	1.Tr.E		4	36.7	1.Oc.D
	5	57.5	3.Sh.I		14	24.5	1.Sh.E		6	14.5	2.Ec.R
	9	22.0	3.Sh.E		18	45.6	3.Oc.D		8	6.1	1.Ec.R
	11	52.7	2.Tr.I		19	17.1	4.Sh.I				
	14	24.4	2.Sh.I		22	6.8	3.Oc.R				
	14	41.1	2.Tr.E		23	39.9	4.Sh.E				
	17	13.9	2.Sh.E		23	50.6	3.Ec.D				
	17	15.9	1.Oc.D								
	20	50.0	1.Ec.R								

May

1	1	49.2	1.Tr.I	11	16	47.3	1.Tr.I	21	9	8.5	2.Oc.D
	3	1.0	1.Sh.I		17	54.2	1.Sh.I		10	32.4	1.Oc.D
	4	5.6	1.Tr.E		19	4.1	1.Tr.E		13	50.5	1.Ec.R
	5	18.0	1.Sh.E		20	11.4	1.Sh.E		14	8.8	2.Ec.R
	13	10.7	3.Tr.I	12	7	20.0	3.Oc.D	22	7	46.8	1.Tr.I
	16	30.6	3.Tr.E		10	43.7	3.Oc.R		8	47.3	1.Sh.I

	17	58.5	3.Sh.I		11	49.1	3.Ec.D		10	3.9	1.Tr.E		1	20.0	2.Tr.E		17	24.9	2.Tr.E		7	1.9	1.Oc.D
	19	49.4	2.Tr.I		11	52.1	2.Tr.I		11	4.7	1.Sh.E		1	25.6	3.Sh.E		19	19.5	3.Ec.R		8	29.6	2.Sh.I
	21	25.2	3.Sh.E		14	2.5	2.Sh.I	23	1	56.9	3.Tr.I		3	35.1	2.Sh.E		19	21.9	1.Ec.R		9	31.9	2.Tr.E
	22	10.1	2.Sh.I		14	3.6	1.Oc.D		3	57.4	2.Tr.I		4	29.7	1.Ec.R		19	27.8	2.Sh.E		9	41.1	3.Tr.E
	22	38.2	2.Tr.E		14	41.3	2.Tr.E		5	2.3	1.Oc.D		22	17.5	1.Tr.I	20	13	16.8	1.Tr.I		9	56.4	3.Sh.I
	23	6.2	1.Oc.D		15	19.3	3.Ec.R		5	20.1	3.Tr.E		23	25.3	1.Sh.I		14	18.4	1.Sh.I		10	13.9	1.Ec.R
2	0	59.9	2.Sh.E		16	52.6	2.Sh.E		5	54.9	2.Sh.I	10	0	34.2	1.Tr.E		15	33.8	1.Tr.E		11	20.3	2.Sh.E
	2	34.8	1.Ec.R		17	27.1	1.Ec.R		5	57.0	3.Sh.I		1	42.4	1.Sh.E		16	35.8	1.Sh.E		13	26.1	3.Sh.E
	20	18.7	1.Tr.I	13	11	17.1	1.Tr.I		6	47.0	2.Tr.E		16	59.0	2.Oc.D					31	4	17.1	1.Tr.I
	21	29.8	1.Sh.I		12	23.0	1.Sh.I		8	19.2	1.Ec.R		19	34.0	1.Oc.D						5	11.3	1.Sh.I
	22	35.2	1.Tr.E		13	33.9	1.Tr.E		8	45.3	2.Sh.E		22	12.1	2.Ec.R						6	34.4	1.Tr.E
	23	46.8	1.Sh.E		14	40.3	1.Sh.E		9	25.9	3.Sh.E		22	58.4	1.Ec.R						7	29.0	1.Sh.E
3	14	13.9	2.Oc.D	14	6	21.5	2.Oc.D		22	7.8	4.Tr.I												
	17	35.7	1.Oc.D		8	33.3	1.Oc.D	24	2	16.8	1.Tr.I												
	19	34.0	2.Ec.R		11	30.7	2.Ec.R		2	23.6	4.Tr.E												
	21	3.6	1.Ec.R		11	55.8	1.Ec.R		3	16.0	1.Sh.I												
4	14	48.4	1.Tr.I	15	5	47.0	1.Tr.I		4	33.9	1.Tr.E												
	15	58.7	1.Sh.I		6	51.9	1.Sh.I		5	33.6	1.Sh.E												
	17	5.0	1.Tr.E		8	3.9	1.Tr.E		7	22.3	4.Sh.I												
	18	15.8	1.Sh.E		9	9.2	1.Sh.E		11	53.4	4.Sh.E												
5	3	5.2	3.Oc.D		10	24.2	4.Oc.D		22	32.8	2.Oc.D												
	6	28.0	3.Oc.R		14	40.1	4.Oc.R		23	32.2	1.Oc.D												
	7	49.0	3.Ec.D		20	35.6	4.Ec.D	25	2	47.9	1.Ec.R												
	9	9.9	2.Tr.I		21	39.3	3.Tr.I		3	28.2	2.Ec.R												
	11	18.7	3.Ec.R	16	1	1.3	3.Tr.E		20	46.9	1.Tr.I												
	11	27.6	2.Sh.I		1	9.1	4.Ec.R		21	44.9	1.Sh.I												
	11	58.9	2.Tr.E		1	13.7	2.Tr.I		23	4.0	1.Tr.E												
	12	5.2	1.Oc.D		1	57.6	3.Sh.I	26	0	2.5	1.Sh.E												
	14	17.5	2.Sh.E		3	3.1	1.Oc.D		15	56.6	3.Oc.D												
	15	32.3	1.Ec.R		3	20.0	2.Sh.I		17	19.6	2.Tr.I												
6	9	18.1	1.Tr.I		4	3.0	2.Tr.E		18	2.1	1.Oc.D												
	10	27.5	1.Sh.I		5	25.8	3.Sh.E		19	12.3	2.Sh.I												
	11	34.6	1.Tr.E		6	10.2	2.Sh.E		19	22.3	3.Oc.R												
	12	44.7	1.Sh.E		6	24.5	1.Ec.R		19	48.6	3.Ec.D												
7	2	31.7	4.Tr.I	17	0	16.9	1.Tr.I		20	9.4	2.Tr.E												
	3	35.8	2.Oc.D		1	20.7	1.Sh.I		21	16.6	1.Ec.R												
	6	34.7	1.Oc.D		2	33.8	1.Tr.E		22	2.8	2.Sh.E												
	6	40.7	4.Tr.E		3	38.0	1.Sh.E		23	20.0	3.Ec.R												
	8	52.6	2.Ec.R		19	45.3	2.Oc.D	27	15	16.9	1.Tr.I												
	10	1.0	1.Ec.R		21	32.8	1.Oc.D		16	13.7	1.Sh.I												
	13	19.5	4.Sh.I	18	0	50.2	2.Ec.R		17	34.1	1.Tr.E												
	17	46.7	4.Sh.E		0	53.2	1.Ec.R		18	31.3	1.Sh.E												
8	3	47.8	1.Tr.I		18	46.9	1.Tr.I	28	11	56.5	2.Oc.D												
	4	56.5	1.Sh.I		19	49.6	1.Sh.I		12	32.0	1.Oc.D												
	6	4.5	1.Tr.E		21	3.8	1.Tr.E		15	45.2	1.Ec.R												
	7	13.6	1.Sh.E		22	7.0	1.Sh.E		16	46.8	2.Ec.R												
	17	23.7	3.Tr.I	19	11	36.9	3.Oc.D	29	9	47.0	1.Tr.I												
	20	44.7	3.Tr.E		14	35.4	2.Tr.I		10	42.6	1.Sh.I												
	21	58.2	3.Sh.I		15	1.7	3.Oc.R		12	4.3	1.Tr.E												
	22	30.9	2.Tr.I		15	48.6	3.Ec.D		13	0.2	1.Sh.E												
9	0	45.1	2.Sh.I		16	2.6	1.Oc.D	30	6	16.7	3.Tr.I												
	1	4.3	1.Oc.D		16	37.5	2.Sh.I		6	42.0	2.Tr.I												

Satellites of Jupiter 2026

June

1	1	21.3	2.Oc.D	11	16	32.1	1.Oc.D	21	1	28.0	3.Sh.E								
	1	31.9	1.Oc.D		17	35.0	2.Oc.D		10	20.1	1.Tr.I								
	4	42.6	1.Ec.R		19	34.4	1.Ec.R		10	56.8	1.Sh.I								
	6	6.1	2.Ec.R		22	2.4	2.Ec.R		12	38.0	1.Tr.E								
	6	15.2	4.Oc.D	12	13	48.6	1.Tr.I		13	14.9	1.Sh.E								
	10	37.8	4.Oc.R		14	33.0	1.Sh.I	22	7	33.0	1.Oc.D								
	14	38.5	4.Ec.D		16	6.3	1.Tr.E		9	50.9	2.Oc.D								
	19	15.5	4.Ec.R		16	51.0	1.Sh.E		10	26.2	1.Ec.R								
	22	47.3	1.Tr.I	13	11	2.3	1.Oc.D		13	59.1	2.Ec.R								
	23	40.2	1.Sh.I		12	13.5	2.Tr.I	23	4	50.5	1.Tr.I								
2	1	4.7	1.Tr.E		13	39.0	2.Sh.I		5	25.6	1.Sh.I								
	1	57.9	1.Sh.E		14	3.1	1.Ec.R		7	8.4	1.Tr.E								
	20	1.9	1.Oc.D		15	2.3	3.Tr.I		7	43.7	1.Sh.E								
	20	4.6	2.Tr.I		15	4.1	2.Tr.E	24	2	3.2	1.Oc.D								
	20	17.3	3.Oc.D		16	30.2	2.Sh.E		4	23.7	2.Tr.I								
	21	47.0	2.Sh.I		17	56.2	3.Sh.I		4	54.8	1.Ec.R								
	22	54.8	2.Tr.E		18	29.2	3.Tr.E		5	30.9	2.Sh.I								
	23	11.2	1.Ec.R		21	27.3	3.Sh.E		7	15.0	2.Tr.E								
	23	44.1	3.Oc.R	14	8	18.8	1.Tr.I		8	22.5	2.Sh.E								
	23	47.8	3.Ec.D		9	1.7	1.Sh.I		9	27.8	3.Oc.D								
3	0	37.8	2.Sh.E		10	36.5	1.Tr.E		15	17.8	3.Ec.R								
	3	19.6	3.Ec.R		11	19.7	1.Sh.E		23	20.8	1.Tr.I								
	17	17.4	1.Tr.I	15	5	32.4	1.Oc.D		23	54.3	1.Sh.I								
	18	9.0	1.Sh.I		7	0.5	2.Oc.D	25	1	38.8	1.Tr.E								
	19	34.9	1.Tr.E		8	31.7	1.Ec.R		2	12.5	1.Sh.E								
	20	26.7	1.Sh.E		11	21.6	2.Ec.R		20	33.4	1.Oc.D								
4	14	31.9	1.Oc.D	16	2	49.2	1.Tr.I		23	15.8	2.Oc.D								
	14	45.4	2.Oc.D		3	30.5	1.Sh.I		23	23.4	1.Ec.R								
	17	39.8	1.Ec.R		5	6.9	1.Tr.E	26	3	17.4	2.Ec.R								
	19	24.6	2.Ec.R		5	48.6	1.Sh.E		14	28.4	4.Tr.I								
5	11	47.7	1.Tr.I	17	0	2.5	1.Oc.D		17	51.2	1.Tr.I								
	12	37.8	1.Sh.I		1	36.8	2.Tr.I		18	23.1	1.Sh.I								
	14	5.2	1.Tr.E		2	56.3	2.Sh.I		18	58.7	4.Tr.E								
	14	55.6	1.Sh.E		3	0.3	1.Ec.R		19	25.6	4.Sh.I								
6	9	1.9	1.Oc.D		4	27.6	2.Tr.E		20	9.2	1.Tr.E								
	9	27.4	2.Tr.I		5	3.0	3.Oc.D		20	41.3	1.Sh.E								
	10	38.9	3.Tr.I		5	47.6	2.Sh.E	27	0	3.8	4.Sh.E								

11	4.4	2.Sh.I		
12	8.5	1.Ec.R		
12	17.7	2.Tr.E		
13	55.3	2.Sh.E		
13	56.5	3.Sh.I		
14	4.6	3.Tr.E		
17	26.9	3.Sh.E		
7 6	17.8	1.Tr.I		
7	6.6	1.Sh.I		
8	35.3	1.Tr.E		
9	24.4	1.Sh.E		
8 3	32.0	1.Oc.D		
4	10.5	2.Oc.D		
6	37.2	1.Ec.R		
8	43.9	2.Ec.R		
9 0	48.1	1.Tr.I		
1	35.4	1.Sh.I		
3	5.7	1.Tr.E		
3	53.3	1.Sh.E		
18	9.0	4.Tr.I		
22	2.1	1.Oc.D		
22	32.2	4.Tr.E		
22	50.3	2.Tr.I		
10 0	21.7	2.Sh.I		
0	39.6	3.Oc.D		
1	5.8	1.Ec.R		
1	24.3	4.Sh.I		
1	40.9	2.Tr.E		
3	12.8	2.Sh.E		
5	59.2	4.Sh.E		
7	19.1	3.Ec.R		
19	18.3	1.Tr.I		
20	4.2	1.Sh.I		
21	35.9	1.Tr.E		
22	22.1	1.Sh.E		
11	18.4	3.Ec.R		
21	19.4	1.Tr.I		
21	59.3	1.Sh.I		
23	37.2	1.Tr.E		
18 0	17.3	1.Sh.E		
2	28.9	4.Oc.D		
6	58.6	4.Oc.R		
8	41.7	4.Ec.D		
13	21.8	4.Ec.R		
18	32.6	1.Oc.D		
20	25.2	2.Oc.D		
21	28.9	1.Ec.R		
19 0	39.9	2.Ec.R		
15	49.8	1.Tr.I		
16	28.1	1.Sh.I		
18	7.7	1.Tr.E		
18	46.2	1.Sh.E		
20 13	2.8	1.Oc.D		
15	0.2	2.Tr.I		
15	57.5	1.Ec.R		
16	13.6	2.Sh.I		
17	51.2	2.Tr.E		
19	5.1	2.Sh.E		
19	27.6	3.Tr.I		
21	56.3	3.Sh.I		
22	55.7	3.Tr.E		
15	3.6	1.Oc.D		
17	47.4	2.Tr.I		
17	52.0	1.Ec.R		
18	48.2	2.Sh.I		
20	38.8	2.Tr.E		
21	39.9	2.Sh.E		
23	53.1	3.Tr.I		
28 1	55.5	3.Sh.I		
3	22.3	3.Tr.E		
5	27.8	3.Sh.E		
12	21.5	1.Tr.I		
12	51.8	1.Sh.I		
14	39.6	1.Tr.E		
15	10.0	1.Sh.E		
29 9	33.8	1.Oc.D		
12	20.6	1.Ec.R		
12	41.7	2.Oc.D		
16	36.4	2.Ec.R		
30 6	51.9	1.Tr.I		
7	20.5	1.Sh.I		
9	10.0	1.Tr.E		
9	38.8	1.Sh.E		

Satellites of Jupiter 2026
July

1 4	4.0	1.Oc.D		
6	49.2	1.Ec.R		
7	11.2	2.Tr.I		
8	5.5	2.Sh.I		
10	2.7	2.Tr.E		
10	57.3	2.Sh.E		
13	54.2	3.Oc.D		
19	17.9	3.Ec.R		
2 1	22.3	1.Tr.I		
1	49.2	1.Sh.I		
3	40.4	1.Tr.E		
4	7.5	1.Sh.E		
22	34.3	1.Oc.D		
3 1	17.8	1.Ec.R		
2	6.7	2.Oc.D		
5	54.6	2.Ec.R		
19	52.8	1.Tr.I		
20	18.0	1.Sh.I		
22	10.9	1.Tr.E		
22	36.3	1.Sh.E		
4 17	4.5	1.Oc.D		
19	46.3	1.Ec.R		
20	35.0	2.Tr.I		
21	22.8	2.Sh.I		
22	57.2	4.Oc.D		
23	26.8	2.Tr.E		
5 0	14.7	2.Sh.E		
4	19.1	3.Tr.I		
5	54.4	3.Sh.I		
7	26.6	4.Ec.R		
7	49.5	3.Tr.E		
9	27.2	3.Sh.E		
14	23.1	1.Tr.I		
14	46.6	1.Sh.I		
16	41.3	1.Tr.E		
17	4.9	1.Sh.E		
6 11	34.8	1.Oc.D		
14	14.9	1.Ec.R		
15	32.7	2.Oc.D		
19	13.5	2.Ec.R		
7 8	53.5	1.Tr.I		
9	15.4	1.Sh.I		
11	11.7	1.Tr.E		
11	33.7	1.Sh.E		
8 6	5.0	1.Oc.D		
8	43.5	1.Ec.R		
9	59.0	2.Tr.I		
10	40.1	2.Sh.I		
12	51.0	2.Tr.E		
13	32.1	2.Sh.E		
18	21.0	3.Oc.D		
23	17.5	3.Ec.R		
9 3	23.9	1.Tr.I		
3	44.0	1.Sh.I		
5	42.1	1.Tr.E		
6	2.4	1.Sh.E		
10 0	35.3	1.Oc.D		
3	12.1	1.Ec.R		
4	57.8	2.Oc.D		
8	31.6	2.Ec.R		
21	54.4	1.Tr.I		
22	12.8	1.Sh.I		
18	43.0	1.Tr.E		
18	59.8	1.Sh.E		
13 10	59.9	4.Tr.I		
13	27.1	4.Sh.I		
13	35.8	1.Oc.D		
15	36.7	4.Tr.E		
16	9.2	1.Ec.R		
18	8.1	4.Sh.E		
18	23.8	2.Oc.D		
21	50.4	2.Ec.R		
14 10	55.2	1.Tr.I		
11	10.1	1.Sh.I		
13	13.5	1.Tr.E		
13	28.5	1.Sh.E		
15 8	6.1	1.Oc.D		
10	37.8	1.Ec.R		
12	47.2	2.Tr.I		
13	14.6	2.Sh.I		
15	39.4	2.Tr.E		
16	6.8	2.Sh.E		
22	48.9	3.Oc.D		
16 3	17.4	3.Ec.R		
5	25.6	1.Tr.I		
5	38.8	1.Sh.I		
7	43.9	1.Tr.E		
7	57.2	1.Sh.E		
17 2	36.3	1.Oc.D		
5	6.3	1.Ec.R		
7	49.0	2.Oc.D		
11	8.5	2.Ec.R		
23	56.0	1.Tr.I		
18 0	7.5	1.Sh.I		
2	14.4	1.Tr.E		
2	25.9	1.Sh.E		
21	6.6	1.Oc.D		
23	34.9	1.Ec.R		
19 2	11.4	2.Tr.I		
2	31.9	2.Sh.I		
5	3.7	2.Tr.E		
5	24.2	2.Sh.E		
13	12.8	3.Tr.I		
13	52.0	3.Sh.I		
16	45.3	3.Tr.E		
17	25.8	3.Sh.E		
18	26.4	1.Tr.I		
18	36.1	1.Sh.I		
20	44.7	1.Tr.E		
20	54.5	1.Sh.E		
20 15	36.9	1.Oc.D		
18	3.5	1.Ec.R		
21	14.9	2.Oc.D		
7	16.4	3.Ec.R		
7	27.2	1.Tr.I		
7	33.4	1.Sh.I		
9	45.6	1.Tr.E		
9	51.8	1.Sh.E		
24 4	37.4	1.Oc.D		
7	0.5	1.Ec.R		
10	40.0	2.Oc.D		
13	45.0	2.Ec.R		
25 1	57.7	1.Tr.I		
2	2.1	1.Sh.I		
4	16.1	1.Tr.E		
4	20.5	1.Sh.E		
23	7.7	1.Oc.D		
26 1	29.0	1.Ec.R		
4	59.9	2.Tr.I		
5	6.5	2.Sh.I		
7	52.6	2.Tr.E		
7	59.0	2.Sh.E		
17	40.9	3.Tr.I		
17	51.5	3.Sh.I		
20	28.0	1.Tr.I		
20	30.7	1.Sh.I		
21	14.4	3.Tr.E		
21	25.7	3.Sh.E		
22	46.4	1.Tr.E		
22	49.1	1.Sh.E		
27 17	38.0	1.Oc.D		
19	57.6	1.Ec.R		
28 0	5.8	2.Oc.D		
3	3.5	2.Ec.R		
14	58.4	1.Tr.I		
14	59.3	1.Sh.I		
17	16.8	1.Tr.E		
17	17.7	1.Sh.E		
29 12	8.2	1.Ec.D		
14	26.1	1.Oc.R		
18	23.7	2.Sh.I		
18	24.2	2.Tr.I		
21	16.3	2.Sh.E		
21	17.0	2.Tr.E		
30 7	27.7	4.Sh.I		
7	36.4	4.Tr.I		
7	39.7	3.Ec.D		
9	27.9	1.Sh.I		
9	28.8	1.Tr.I		
11	18.5	3.Oc.R		
11	46.3	1.Sh.E		
11	47.2	1.Tr.E		
12	10.9	4.Sh.E		
12	18.7	4.Tr.E		
31 6	36.7	1.Ec.D		

Satellites of Jupiter 2026

July

								8	56.4	1.Oc.R	
								13	26.7	2.Ec.D	
								16	25.7	2.Oc.R	

August

1	3	56.6	1.Sh.I	11	5	21.3	2.Ec.D	21	0	42.7	3.Oc.R		6	0.7	1.Tr.I	18	1	59.1	1.Oc.R
	3	59.2	1.Tr.I		8	41.5	2.Oc.R		12	18.5	1.Ec.D		8	9.3	1.Sh.E		7	57.1	2.Ec.D
	6	14.9	1.Sh.E		18	48.1	1.Sh.I		14	59.5	1.Oc.R		8	19.0	1.Tr.E		11	31.2	2.Oc.R
	6	17.6	1.Tr.E		19	1.3	1.Tr.I		21	14.7	2.Ec.D	9	2	59.2	1.Ec.D		20	42.3	1.Sh.I
2	1	5.2	1.Ec.D		21	6.4	1.Sh.E	22	0	55.6	2.Oc.R		5	27.8	1.Oc.R		21	2.4	1.Tr.I
	3	26.7	1.Oc.R		21	19.6	1.Tr.E		9	39.4	1.Sh.I		10	15.7	2.Sh.I		23	0.5	1.Sh.E
	7	41.0	2.Sh.I	12	15	56.2	1.Ec.D		10	2.9	1.Tr.I		10	37.3	2.Tr.I		23	20.7	1.Tr.E
	7	48.6	2.Tr.I		18	28.4	1.Oc.R		11	57.6	1.Sh.E		13	8.5	2.Sh.E	19	17	50.1	1.Ec.D
	10	33.7	2.Sh.E		23	33.0	2.Sh.I		12	21.1	1.Tr.E		13	30.4	2.Tr.E		20	29.3	1.Oc.R
	10	41.5	2.Tr.E	13	0	1.6	2.Tr.I	23	6	47.0	1.Ec.D	10	0	19.5	1.Sh.I	20	2	7.7	2.Sh.I
	21	50.4	3.Sh.I		2	25.8	2.Sh.E		9	29.6	1.Oc.R		0	30.9	1.Tr.I		2	50.1	2.Tr.I
	22	8.6	3.Tr.I		2	54.7	2.Tr.E		15	25.2	2.Sh.I		1	49.9	3.Sh.I		5	0.7	2.Sh.E
	22	25.1	1.Sh.I		13	16.6	1.Sh.I		16	14.4	2.Tr.I		2	36.6	3.Tr.I		5	43.4	2.Tr.E
	22	29.6	1.Tr.I		13	31.5	1.Tr.I		18	18.2	2.Sh.E		2	37.8	1.Sh.E		15	10.8	1.Sh.I
3	0	43.5	1.Sh.E		15	34.9	1.Sh.E		19	7.8	2.Tr.E		2	49.3	1.Tr.E		15	32.6	1.Tr.I
	0	48.0	1.Tr.E		15	36.4	3.Ec.D	24	4	7.9	1.Sh.I		5	24.8	3.Sh.E		17	29.0	1.Sh.E
	1	25.1	3.Sh.E		15	49.9	1.Tr.E		4	33.0	1.Tr.I		6	11.7	3.Tr.E		17	50.9	1.Tr.E
	1	43.0	3.Tr.E		20	14.5	3.Oc.R		6	26.1	1.Sh.E	21	27.7	1.Ec.D		19	35.6	3.Ec.D	
	19	33.7	1.Ec.D	14	10	24.6	1.Ec.D		6	51.3	1.Tr.E	23	58.1	1.Oc.R					
	21	57.0	1.Oc.R		12	58.6	1.Oc.R		8	48.0	4.Ec.D								
4	2	45.2	2.Ec.D		18	39.0	2.Ec.D		9	46.6	3.Sh.I								
	5	51.3	2.Oc.R		22	6.2	2.Oc.R		11	29.1	3.Tr.I								
	16	53.7	1.Sh.I	15	7	45.2	1.Sh.I		13	21.9	3.Sh.E								
	16	59.9	1.Tr.I		8	1.9	1.Tr.I		15	5.4	3.Tr.E								
	19	12.1	1.Sh.E		10	3.5	1.Sh.E		17	42.8	4.Oc.R								
	19	18.3	1.Tr.E		10	20.2	1.Tr.E	25	1	15.5	1.Ec.D								
5	14	2.2	1.Ec.D	16	1	27.6	4.Sh.I		3	59.9	1.Oc.R								
	16	27.3	1.Oc.R		4	12.1	4.Tr.I		10	32.7	2.Ec.D								
	20	58.3	2.Sh.I		4	53.1	1.Ec.D		14	20.3	2.Oc.R								
	21	12.9	2.Tr.I		6	12.5	4.Sh.E		22	36.4	1.Sh.I								
	23	51.0	2.Sh.E		7	28.8	1.Oc.R		23	3.2	1.Tr.I								
6	0	5.9	2.Tr.E		8	58.4	4.Tr.E	26	0	54.6	1.Sh.E								
	11	22.3	1.Sh.I		12	50.4	2.Sh.I		1	21.5	1.Tr.E								
	11	30.3	1.Tr.I		13	25.9	2.Tr.I		19	43.9	1.Ec.D								
	11	38.0	3.Ec.D		15	43.3	2.Sh.E		22	30.0	1.Oc.R								
	13	40.7	1.Sh.E		16	19.2	2.Tr.E	27	4	42.5	2.Sh.I								
	13	48.7	1.Tr.E	17	2	13.7	1.Sh.I		5	38.5	2.Tr.I								
	15	46.5	3.Oc.R		2	32.1	1.Tr.I		7	35.6	2.Sh.E								
7	8	30.7	1.Ec.D		4	32.0	1.Sh.E		8	31.9	2.Tr.E								
	10	57.6	1.Oc.R		4	50.4	1.Tr.E		17	4.9	1.Sh.I								
	14	47.3	4.Ec.D		5	48.4	3.Sh.I		17	33.3	1.Tr.I								
	16	3.0	2.Ec.D		7	3.2	3.Tr.I		19	23.0	1.Sh.E								
	19	16.2	2.Oc.R		9	23.5	3.Sh.E		19	51.6	1.Tr.E								
	21	2.4	4.Oc.R		10	39.0	3.Tr.E		23	34.2	3.Ec.D								
8	5	50.9	1.Sh.I		23	21.6	1.Ec.D	28	5	9.6	3.Oc.R								

September

1	3	9.3	1.Ec.D	11	7	31.4	3.Ec.D	21	1	45.1	2.Sh.I		14	12.4	1.Ec.D		
	6	0.4	1.Oc.R		14	0.2	3.Oc.R		3	24.9	2.Tr.I		17	0.1	1.Oc.R		
	13	8.1	2.Ec.D		17	59.9	1.Ec.D		4	38.2	2.Sh.E		23	50.2	2.Ec.D		
	17	8.7	2.Oc.R		21	0.7	1.Oc.R		6	18.4	2.Tr.E	29	3	44.4	2.Oc.R		
	19	28.1	4.Sh.I	12	5	0.5	2.Ec.D		11	43.5	1.Sh.I		11	33.5	1.Sh.I		
2	0	14.1	4.Sh.E		9	19.7	2.Oc.R		12	33.0	1.Tr.I		12	3.5	1.Tr.I		
	0	30.5	1.Sh.I		15	21.4	1.Sh.I		14	1.1	1.Sh.E		13	51.6	1.Sh.E		
	0	41.6	4.Tr.I		16	3.8	1.Tr.I		14	50.8	1.Tr.E		14	21.7	1.Tr.E		
	1	3.7	1.Tr.I		17	39.2	1.Sh.E	22	1	40.5	3.Sh.I	30	8	40.8	1.Ec.D		
	2	48.5	1.Sh.E		18	21.7	1.Tr.E		5	3.6	3.Tr.I		11	30.2	1.Oc.R		
	3	21.9	1.Tr.E	13	12	28.3	1.Ec.D		5	16.4	3.Sh.E		18	0.0	2.Sh.I		
	5	30.3	4.Tr.E		15	30.6	1.Oc.R		8	41.2	3.Tr.E		19	2.7	2.Tr.I		
	21	37.7	1.Ec.D		23	10.0	2.Sh.I		8	50.4	1.Ec.D		20	53.1	2.Sh.E		
3	0	30.5	1.Oc.R	14	0	38.1	2.Tr.I		12	0.1	1.Oc.R		21	56.1	2.Tr.E		
	7	17.4	2.Sh.I		2	3.1	2.Sh.E		20	52.7	2.Ec.D	31	6	2.0	1.Sh.I		
	8	26.6	2.Tr.I		3	31.6	2.Tr.E	23	1	28.6	2.Oc.R		6	33.6	1.Tr.I		
	10	10.5	2.Sh.E		9	49.8	1.Sh.I		6	12.0	1.Sh.I		8	20.0	1.Sh.E		
	11	20.0	2.Tr.E		10	33.7	1.Tr.I		7	2.8	1.Tr.I		8	51.8	1.Tr.E		
	18	58.9	1.Sh.I		12	7.5	1.Sh.E		8	29.5	1.Sh.E		13	44.8	3.Sh.I		
	19	33.8	1.Tr.I		12	51.6	1.Tr.E		9	20.5	1.Tr.E		15	54.1	3.Tr.I		
	21	16.9	1.Sh.E		21	42.0	3.Sh.I	24	3	18.8	1.Ec.D		17	20.3	3.Sh.E		
	21	51.9	1.Tr.E	15	0	42.0	3.Tr.I		6	29.9	1.Oc.R		19	30.9	3.Tr.E		
4	3	33.2	3.Ec.D		1	17.8	3.Sh.E		15	2.5	2.Sh.I						

Satellites of Jupiter 2026

September

9	35.8	3.Oc.R	4	19.4	3.Tr.E	16	47.9	2.Tr.I			
	16	6.2	1.Ec.D		6	56.7	1.Ec.D		17	55.6	2.Sh.E
	19	0.6	1.Oc.R		10	0.6	1.Oc.R		19	41.3	2.Tr.E
5	2	25.5	2.Ec.D		18	18.0	2.Ec.D	25	0	40.4	1.Sh.I
	6	32.5	2.Oc.R		22	42.9	2.Oc.R		1	32.5	1.Tr.I
	13	27.5	1.Sh.I	16	4	18.2	1.Sh.I		2	57.9	1.Sh.E
	14	3.9	1.Tr.I		5	3.6	1.Tr.I		3	50.2	1.Tr.E
	15	45.4	1.Sh.E		6	36.0	1.Sh.E		15	27.3	3.Ec.D
	16	21.9	1.Tr.E		7	21.4	1.Tr.E		21	47.2	1.Ec.D
6	10	34.6	1.Ec.D	17	1	25.1	1.Ec.D		22	43.9	3.Oc.R
	13	30.6	1.Oc.R		4	30.5	1.Oc.R	26	0	59.7	1.Oc.R
	20	35.0	2.Sh.I		12	27.4	2.Sh.I		10	9.8	2.Ec.D
	21	50.6	2.Tr.I		14	1.4	2.Tr.I		14	51.0	2.Oc.R
	23	28.1	2.Sh.E		15	20.5	2.Sh.E		19	8.8	1.Sh.I
7	0	44.1	2.Tr.E		16	54.8	2.Tr.E		20	2.3	1.Tr.I
	7	55.9	1.Sh.I		22	46.7	1.Sh.I		20	48.9	4.Ec.D
	8	33.9	1.Tr.I		23	33.4	1.Tr.I		21	26.3	1.Sh.E
	10	13.8	1.Sh.E	18	1	4.4	1.Sh.E		22	19.9	1.Tr.E
	10	51.9	1.Tr.E		1	51.2	1.Tr.E	27	1	40.5	4.Ec.R
	17	43.1	3.Sh.I		11	29.4	3.Ec.D		5	28.4	4.Oc.D
	20	18.3	3.Tr.I		13	27.5	4.Sh.I		10	23.1	4.Oc.R
	21	18.8	3.Sh.E		18	14.2	4.Sh.E		16	15.6	1.Ec.D
	23	55.5	3.Tr.E		18	22.8	3.Oc.R		19	29.4	1.Oc.R
8	5	3.0	1.Ec.D		19	53.6	1.Ec.D	28	4	20.3	2.Sh.I
	8	0.7	1.Oc.R		20	57.0	4.Tr.I		6	11.1	2.Tr.I
	15	43.2	2.Ec.D		23	0.4	1.Oc.R		7	13.4	2.Sh.E
	19	56.3	2.Oc.R	19	1	46.7	4.Tr.E		9	4.5	2.Tr.E
9	2	24.4	1.Sh.I		7	35.3	2.Ec.D		13	37.2	1.Sh.I
	3	3.9	1.Tr.I		12	5.9	2.Oc.R		14	31.9	1.Tr.I
	4	42.3	1.Sh.E		17	15.1	1.Sh.I		15	54.6	1.Sh.E
	5	21.9	1.Tr.E		18	3.3	1.Tr.I		16	49.5	1.Tr.E
	23	31.4	1.Ec.D		19	32.8	1.Sh.E	29	5	39.4	3.Sh.I
10	2	30.6	1.Oc.R		20	21.1	1.Tr.E		9	15.2	3.Sh.E
	2	48.4	4.Ec.D	20	14	22.0	1.Ec.D		9	23.9	3.Tr.I
	7	38.9	4.Ec.R		17	30.2	1.Oc.R		10	44.1	1.Ec.D
	9	18.1	4.Oc.D						13	1.5	3.Tr.E
	9	52.4	2.Sh.I						13	59.2	1.Oc.R
	11	14.3	2.Tr.I						23	27.1	2.Ec.D
	12	45.5	2.Sh.E					30	4	13.1	2.Oc.R
	14	7.7	2.Tr.E						8	5.6	1.Sh.I
	14	11.9	4.Oc.R						9	1.5	1.Tr.I
	20	52.9	1.Sh.I						10	23.0	1.Sh.E
	21	33.8	1.Tr.I						11	19.0	1.Tr.E
	23	10.7	1.Sh.E								
	23	51.8	1.Tr.E								

Satellites of Jupiter 2026

October

1	5	12.4	1.Ec.D	11	1	13.0	1.Sh.E	21	1	45.8	3.Tr.E
	8	28.8	1.Oc.R		2	15.7	1.Tr.E		7	9.0	2.Ec.D
	17	37.7	2.Sh.I		20	2.8	1.Ec.D		12	18.8	2.Oc.R
	19	33.7	2.Tr.I		23	26.2	1.Oc.R		13	45.9	1.Sh.I
	20	30.8	2.Sh.E	12	9	30.9	2.Sh.I		14	53.8	1.Tr.I
	22	26.9	2.Tr.E		11	40.8	2.Tr.I		16	2.9	1.Sh.E
2	2	34.0	1.Sh.I		12	23.9	2.Sh.E		17	10.8	1.Tr.E
	3	31.1	1.Tr.I		14	33.9	2.Tr.E	22	1	25.9	4.Sh.I
	4	51.3	1.Sh.E		17	24.2	1.Sh.I		6	12.8	4.Sh.E
	5	48.6	1.Tr.E		18	27.8	1.Tr.I		10	53.1	1.Ec.D
	19	25.3	3.Ec.D		19	41.3	1.Sh.E		12	18.2	4.Tr.I
	23	3.7	3.Ec.R		20	45.0	1.Tr.E		14	22.2	1.Oc.R
	23	23.0	3.Oc.D	13	13	35.0	3.Sh.I		17	5.0	4.Tr.E
	23	40.9	1.Ec.D		14	31.2	1.Ec.D	23	1	23.7	2.Sh.I
3	2	58.5	1.Oc.R		14	48.4	4.Ec.D		3	44.8	2.Tr.I
	3	3.2	3.Oc.R		17	10.8	3.Sh.E		4	16.7	2.Sh.E
	12	44.1	2.Ec.D		17	55.7	1.Oc.R		6	37.5	2.Tr.E
	17	34.9	2.Oc.R		17	56.2	3.Tr.I		8	14.2	1.Sh.I
	21	2.4	1.Sh.I		19	40.8	4.Ec.R		9	22.8	1.Tr.I
	22	0.7	1.Tr.I		21	33.6	3.Tr.E		10	31.1	1.Sh.E
	23	19.7	1.Sh.E	14	1	13.3	4.Oc.D		11	39.9	1.Tr.E
4	0	18.1	1.Tr.E		4	35.2	2.Ec.D	24	5	21.6	1.Ec.D
	18	9.2	1.Ec.D		6	7.3	4.Oc.R		7	21.0	3.Ec.D
	21	28.1	1.Oc.R		9	38.3	2.Oc.R		8	51.4	1.Oc.R
5	6	55.5	2.Sh.I		11	52.6	1.Sh.I		11	0.1	3.Ec.R
	7	26.6	4.Sh.I		12	57.1	1.Tr.I		12	7.5	3.Oc.D
	8	56.5	2.Tr.I		14	9.7	1.Sh.E		15	47.9	3.Oc.R
	9	48.6	2.Sh.E		15	14.3	1.Tr.E		20	25.8	2.Ec.D
	11	49.7	2.Tr.E	15	8	59.6	1.Ec.D	25	1	38.5	2.Oc.R
	12	13.5	4.Sh.E		12	25.0	1.Oc.R		2	42.5	1.Sh.I
	15	30.7	1.Sh.I		22	48.3	2.Sh.I		3	51.9	1.Tr.I
	16	30.1	1.Tr.I	16	1	2.3	2.Tr.I		4	59.4	1.Sh.E
	16	51.8	4.Tr.I		1	41.3	2.Sh.E		6	8.9	1.Tr.E
	17	48.0	1.Sh.E		3	55.2	2.Tr.E		23	49.9	1.Ec.D
	18	47.6	1.Tr.E		6	20.9	1.Sh.I	26	3	20.4	1.Oc.R
	21	40.6	4.Tr.E		7	26.3	1.Tr.I		14	41.7	2.Sh.I
6	9	37.3	3.Sh.I		8	38.0	1.Sh.E		17	5.8	2.Tr.I
	12	37.7	1.Ec.D		9	43.5	1.Tr.E		17	34.7	2.Sh.E
	13	13.2	3.Sh.E	17	3	22.4	3.Ec.D		19	58.5	2.Tr.E
	13	41.3	3.Tr.I		3	28.0	1.Ec.D		21	10.8	1.Sh.I
	15	57.7	1.Oc.R		6	54.4	1.Oc.R		22	20.8	1.Tr.I
	17	18.8	3.Tr.E		7	1.3	3.Ec.R		23	27.7	1.Sh.E
7	2	1.3	2.Ec.D		7	55.3	3.Oc.D	27	0	37.8	1.Tr.E
	6	56.4	2.Oc.R		11	35.8	3.Oc.R		18	18.3	1.Ec.D
	9	59.1	1.Sh.I		17	52.1	2.Ec.D		21	30.3	3.Sh.I
	10	59.6	1.Tr.I		22	58.8	2.Oc.R		21	49.6	1.Oc.R
	12	16.4	1.Sh.E	18	0	49.2	1.Sh.I	28	1	6.3	3.Sh.E
	13	17.0	1.Tr.E		1	55.5	1.Tr.I		2	18.2	3.Tr.I
8	7	6.0	1.Ec.D		3	6.3	1.Sh.E		5	55.2	3.Tr.E
	10	27.2	1.Oc.R		4	12.7	1.Tr.E		9	42.6	2.Ec.D

October

	20	12.9	2.Sh.I
	22	18.5	2.Tr.I
	23	6.0	2.Sh.E
9	1	11.6	2.Tr.E
	4	27.5	1.Sh.I
	5	29.0	1.Tr.I
	6	44.7	1.Sh.E
	7	46.3	1.Tr.E
	23	24.1	3.Ec.D
10	1	34.4	1.Ec.D
	3	2.8	3.Ec.R
	3	40.7	3.Oc.D
	4	56.8	1.Oc.R
	7	21.1	3.Oc.R
	15	18.2	2.Ec.D
	20	17.6	2.Oc.R
	22	55.9	1.Sh.I
	23	58.4	1.Tr.I
	21	56.3	1.Ec.D
19	1	23.7	1.Oc.R
	12	6.3	2.Sh.I
	14	24.0	2.Tr.I
	14	59.3	2.Sh.E
	17	16.9	2.Tr.E
	19	17.6	1.Sh.I
	20	24.7	1.Tr.I
	21	34.6	1.Sh.E
	22	41.8	1.Tr.E
20	16	24.8	1.Ec.D
	17	32.6	3.Sh.I
	19	53.0	1.Oc.R
	21	8.5	3.Sh.E
	22	8.6	3.Tr.I
	14	57.7	2.Oc.R
	15	39.1	1.Sh.I
	16	49.7	1.Tr.I
	17	56.0	1.Sh.E
	19	6.7	1.Tr.E
29	12	46.7	1.Ec.D
	16	18.5	1.Oc.R
30	3	59.2	2.Sh.I
	6	25.9	2.Tr.I
	6	52.1	2.Sh.E
	8	47.9	4.Ec.D
	9	18.5	2.Tr.E
	10	7.4	1.Sh.I
	11	18.6	1.Tr.I
	12	24.2	1.Sh.E
	13	35.5	1.Tr.E
	13	40.8	4.Ec.R
	20	24.7	4.Oc.D
31	1	16.6	4.Oc.R
	7	15.1	1.Ec.D
	10	47.6	1.Oc.R
	11	18.8	3.Ec.D
	14	58.1	3.Ec.R
	16	15.9	3.Oc.D
	19	56.1	3.Oc.R
	22	59.3	2.Ec.D

November

1	4	16.5	2.Oc.R
	4	35.7	1.Sh.I
	5	47.4	1.Tr.I
	6	52.5	1.Sh.E
	8	4.3	1.Tr.E
2	1	43.4	1.Ec.D
	5	16.4	1.Oc.R
	17	17.2	2.Sh.I
	19	46.3	2.Tr.I
	20	10.3	2.Sh.E
	22	38.8	2.Tr.E
	23	4.0	1.Sh.I
3	0	16.2	1.Tr.I
	1	20.8	1.Sh.E
	2	33.0	1.Tr.E
	20	11.8	1.Ec.D
	23	45.3	1.Oc.R
4	1	28.7	3.Sh.I
	5	4.8	3.Sh.E
	6	25.4	3.Tr.I
11	1	40.2	1.Oc.R
	5	26.6	3.Sh.I
	9	2.7	3.Sh.E
	10	28.4	3.Tr.I
	14	5.0	3.Tr.E
	14	49.3	2.Ec.D
	19	25.4	1.Sh.I
	20	10.2	2.Oc.R
	20	39.1	1.Tr.I
	21	42.1	1.Sh.E
	22	55.8	1.Tr.E
12	16	33.7	1.Ec.D
	20	8.8	1.Oc.R
13	9	10.2	2.Sh.I
	11	43.2	2.Tr.I
	12	3.2	2.Sh.E
	13	53.6	1.Sh.I
	14	35.5	2.Tr.E
	15	7.5	1.Tr.I
	16	10.3	1.Sh.E
21	12	55.7	1.Ec.D
	16	30.8	1.Oc.R
	23	12.1	3.Ec.D
22	2	51.9	3.Ec.R
	4	19.3	3.Oc.D
	6	39.1	2.Ec.D
	7	59.0	3.Oc.R
	10	14.9	1.Sh.I
	11	28.6	1.Tr.I
	11	59.5	2.Oc.R
	12	31.5	1.Sh.E
	13	45.2	1.Tr.E
23	7	24.0	1.Ec.D
	10	59.0	1.Oc.R
24	1	4.1	2.Sh.I
	3	36.8	2.Tr.I
	3	57.2	2.Sh.E
	4	43.1	1.Sh.I
	5	56.6	1.Tr.I
	6	28.8	2.Tr.E
	10	2.2	3.Tr.E
	12	16.0	2.Ec.D
	17	32.3	1.Sh.I
	17	34.8	2.Oc.R
	18	44.9	1.Tr.I
	19	49.1	1.Sh.E
	21	1.7	1.Tr.E
5	14	40.2	1.Ec.D
	18	14.1	1.Oc.R
6	6	34.7	2.Sh.I
	9	5.4	2.Tr.I
	9	27.6	2.Sh.E
	11	57.8	2.Tr.E
	12	0.5	1.Sh.I
	13	13.5	1.Tr.I
	14	17.3	1.Sh.E
	15	30.3	1.Tr.E
7	9	8.6	1.Ec.D
	12	42.9	1.Oc.R
	15	16.5	3.Ec.D
	18	55.9	3.Ec.R
	19	24.1	4.Sh.I
	20	20.7	3.Oc.D
8	0	0.8	3.Oc.R
	0	11.0	4.Sh.E
	1	32.7	2.Ec.D
	6	28.8	1.Sh.I
	6	52.8	2.Oc.R
	7	6.2	4.Tr.I
	7	42.1	1.Tr.I
	8	45.6	1.Sh.E
	9	58.8	1.Tr.E
	11	50.0	4.Tr.E
9	3	36.9	1.Ec.D
	7	11.5	1.Oc.R
	19	52.8	2.Sh.I
	22	25.0	2.Tr.I
	22	45.8	2.Sh.E
10	0	57.1	1.Sh.I
	1	17.3	2.Tr.E
	2	10.6	1.Tr.I
	3	13.8	1.Sh.E
	4	27.3	1.Tr.E
	22	5.4	1.Ec.D
	17	24.1	1.Tr.E
14	11	2.1	1.Ec.D
	14	37.4	1.Oc.R
	19	14.2	3.Ec.D
	22	53.8	3.Ec.R
15	0	21.9	3.Oc.D
	4	1.9	3.Oc.R
	4	5.9	2.Ec.D
	8	21.9	1.Sh.I
	9	27.2	2.Oc.R
	9	35.8	1.Tr.I
	10	38.6	1.Sh.E
	11	52.5	1.Tr.E
16	2	47.5	4.Ec.D
	5	30.5	1.Ec.D
	7	40.5	4.Ec.R
	9	5.8	1.Oc.R
	14	52.8	4.Oc.D
	19	41.7	4.Oc.R
	22	28.4	2.Sh.I
17	1	1.9	2.Tr.I
	1	21.5	2.Sh.E
	2	50.1	1.Sh.I
	3	54.0	2.Tr.E
	4	4.1	1.Tr.I
	5	6.8	1.Sh.E
	6	20.8	1.Tr.E
	23	58.9	1.Ec.D
18	3	34.2	1.Oc.R
	9	24.9	3.Sh.I
	13	1.0	3.Sh.E
	14	28.0	3.Tr.I
	17	22.5	2.Ec.D
	18	4.2	3.Tr.E
	21	18.4	1.Sh.I
	22	32.3	1.Tr.I
	22	43.6	2.Oc.R
	23	35.1	1.Sh.E
19	0	49.0	1.Tr.E
	18	27.3	1.Ec.D
	22	2.5	1.Oc.R
20	11	45.8	2.Sh.I
	14	19.2	2.Tr.I
	14	38.9	2.Sh.E
	15	46.6	1.Sh.I
	17	0.5	1.Tr.I
	17	11.3	2.Tr.E
	18	3.3	1.Sh.E
	19	17.1	1.Tr.E
	6	59.8	1.Sh.E
	8	13.2	1.Tr.E
	13	21.7	4.Sh.I
	18	8.4	4.Sh.E
25	1	6.7	4.Tr.I
	1	52.5	1.Ec.D
	5	27.2	1.Oc.R
	5	47.1	4.Tr.E
	13	22.2	3.Sh.I
	16	58.5	3.Sh.E
	18	22.6	3.Tr.I
	19	55.6	2.Ec.D
	21	58.5	3.Tr.E
	23	11.3	1.Sh.I
26	0	24.6	1.Tr.I
	1	15.0	2.Oc.R
	1	28.0	1.Sh.E
	2	41.2	1.Tr.E
	20	20.8	1.Ec.D
	23	55.2	1.Oc.R
27	14	21.5	2.Sh.I
	16	53.0	2.Tr.I
	17	14.6	2.Sh.E
	17	39.6	1.Sh.I
	18	52.4	1.Tr.I
	19	45.0	2.Tr.E
	19	56.2	1.Sh.E
	21	9.1	1.Tr.E
28	14	49.2	1.Ec.D
	18	23.3	1.Oc.R
29	3	10.9	3.Ec.D
	6	50.8	3.Ec.R
	8	13.2	3.Oc.D
	9	12.1	2.Ec.D
	11	52.7	3.Oc.R
	12	7.8	1.Sh.I
	13	20.3	1.Tr.I
	14	24.5	1.Sh.E
	14	29.8	2.Oc.R
	15	36.9	1.Tr.E
30	9	17.6	1.Ec.D
	12	51.1	1.Oc.R

Satellites of Jupiter 2026
December

1	3 39.8	2.Sh.I	11 0 8.0	1.Ec.D
	6 9.6	2.Tr.I	3 37.4	1.Oc.R
	6 32.9	2.Sh.E	7 19.8	4.Sh.I
	6 36.0	1.Sh.I	12 6.6	4.Sh.E
	7 48.1	1.Tr.I	18 12.7	4.Tr.I
	8 52.8	1.Sh.E	19 32.9	2.Sh.I
	9 1.5	2.Tr.E	21 25.4	1.Sh.I
	10 4.7	1.Tr.E	21 54.1	2.Tr.I
2	3 46.0	1.Ec.D	22 26.3	2.Sh.E
	7 19.1	1.Oc.R	22 33.2	1.Tr.I
	17 19.3	3.Sh.I	22 50.0	4.Tr.E
	20 46.5	4.Ec.D	23 42.2	1.Sh.E
	20 55.8	3.Sh.E	12 0 46.0	2.Tr.E
	22 12.6	3.Tr.I	0 49.8	1.Tr.E
	22 28.6	2.Ec.D	18 36.5	1.Ec.D
3	1 4.3	1.Sh.I	22 4.9	1.Oc.R
	1 39.4	4.Ec.R	13 11 7.7	3.Ec.D
	1 48.3	3.Tr.E	14 18.1	2.Ec.D
	2 15.7	1.Tr.I	14 47.7	3.Ec.R
	3 21.0	1.Sh.E	15 46.3	3.Oc.D
	3 44.1	2.Oc.R	15 53.6	1.Sh.I
	4 32.4	1.Tr.E	17 0.5	1.Tr.I
	8 28.1	4.Oc.D	18 10.5	1.Sh.E
	13 13.5	4.Oc.R	19 17.2	1.Tr.E
	22 14.4	1.Ec.D	19 23.8	2.Oc.R
4	1 46.8	1.Oc.R	19 25.2	3.Oc.R
	16 57.2	2.Sh.I	14 13 4.8	1.Ec.D
	19 24.7	2.Tr.I	16 32.2	1.Oc.R
	19 32.5	1.Sh.I	15 8 51.3	2.Sh.I
	19 50.4	2.Sh.E	10 21.8	1.Sh.I
	20 43.4	1.Tr.I	11 8.4	2.Tr.I
	21 49.2	1.Sh.E	11 27.7	1.Tr.I
	22 16.6	2.Tr.E	11 44.7	2.Sh.E
	23 0.0	1.Tr.E	12 38.7	1.Sh.E
5	16 42.8	1.Ec.D	13 44.4	1.Tr.E
	20 14.6	1.Oc.R	14 0.2	2.Tr.E
6	7 9.1	3.Ec.D	16 7 33.3	1.Ec.D
	10 49.1	3.Ec.R	10 59.6	1.Oc.R
	11 45.1	2.Ec.D	17 1 13.8	3.Sh.I
	12 2.0	3.Oc.D	3 34.6	2.Ec.D
	14 0.7	1.Sh.I	4 50.1	1.Sh.I
	15 10.9	1.Tr.I	4 50.7	3.Sh.E
	15 41.2	3.Oc.R	5 39.4	3.Tr.I
	16 17.5	1.Sh.E	5 54.8	1.Tr.I
	16 57.9	2.Oc.R	7 7.0	1.Sh.E
	17 27.6	1.Tr.E	8 11.5	1.Tr.E
7	11 11.2	1.Ec.D	8 35.9	2.Oc.R
	14 42.2	1.Oc.R	9 14.9	3.Tr.E
	21 14 58.5	1.Ec.D	8 6 15.5	2.Sh.I
	18 21.1	1.Oc.R	8 28.9	1.Sh.I
22	11 27.1	2.Sh.I	8 40.2	2.Tr.I
	12 14.8	1.Sh.I	9 8.8	2.Sh.E
	13 15.8	1.Tr.I	9 38.4	1.Tr.I
	13 34.4	2.Tr.I	10 45.7	1.Sh.E
	14 20.7	2.Sh.E	11 32.0	2.Tr.E
	14 31.8	1.Sh.E	11 55.1	1.Tr.E
	15 32.7	1.Tr.E	9 5 39.6	1.Ec.D
	16 26.2	2.Tr.E	9 9.9	1.Oc.R
23	9 27.0	1.Ec.D	21 16.5	3.Sh.I
	12 48.2	1.Oc.R	10 0 53.2	3.Sh.E
24	5 11.9	3.Sh.I	1 1.6	2.Ec.D
	6 7.6	2.Ec.D	1 58.3	3.Tr.I
	6 43.0	1.Sh.I	2 57.2	1.Sh.I
	7 42.7	1.Tr.I	4 5.8	1.Tr.I
	8 49.1	3.Sh.E	5 14.0	1.Sh.E
	9 0.0	1.Sh.E	5 33.9	3.Tr.E
	9 16.6	3.Tr.I	6 11.1	2.Oc.R
	9 59.5	1.Tr.E	6 22.5	1.Tr.E
	10 58.4	2.Oc.R	18 2 1.7	1.Ec.D
	12 52.1	3.Tr.E	5 26.8	1.Oc.R
25	3 55.4	1.Ec.D	22 8.8	2.Sh.I
	7 15.1	1.Oc.R	23 18.3	1.Sh.I
26	0 44.6	2.Sh.I	19 0 21.2	2.Tr.I
	1 11.2	1.Sh.I	0 21.9	1.Tr.I
	2 9.5	1.Tr.I	1 2.2	2.Sh.E
	2 46.0	2.Tr.I	1 35.2	1.Sh.E
	3 28.3	1.Sh.E	2 38.6	1.Tr.E
	3 38.2	2.Sh.E	3 13.0	2.Tr.E
	4 26.4	1.Tr.E	14 46.0	4.Ec.D
	5 37.8	2.Tr.E	19 38.4	4.Ec.R
	22 23.9	1.Ec.D	20 30.2	1.Ec.D
27	1 42.1	1.Oc.R	23 54.0	1.Oc.R
	19 3.5	3.Ec.D	20 1 4.2	4.Oc.D
	19 24.1	2.Ec.D	5 46.3	4.Oc.R
	19 39.5	1.Sh.I	15 5.7	3.Ec.D
	20 36.2	1.Tr.I	16 51.1	2.Ec.D
	21 56.6	1.Sh.E	17 46.5	1.Sh.I
	22 43.6	3.Ec.R	18 45.7	3.Ec.R
	22 53.2	1.Tr.E	18 48.9	1.Tr.I
	22 59.2	3.Oc.D	19 25.2	3.Oc.D
28	0 8.9	2.Oc.R	20 3.5	1.Sh.E
	1 17.0	4.Sh.I	21 5.7	1.Tr.E
	2 37.6	3.Oc.R	21 47.4	2.Oc.R
	6 3.9	4.Sh.E	23 3.8	3.Oc.R
	10 18.4	4.Tr.I	16 52.3	1.Ec.D
	14 53.7	4.Tr.E	20 8.8	1.Oc.R
			29 14 3.0	2.Sh.I
			14 7.7	1.Sh.I
			15 2.9	1.Tr.I
			15 58.0	2.Tr.I
			16 24.9	1.Sh.E
			16 56.7	2.Sh.E
			17 19.9	1.Tr.E
			18 49.8	2.Tr.E
			30 11 20.8	1.Ec.D
			14 35.7	1.Oc.R
			31 8 36.0	1.Sh.I
			8 40.7	2.Ec.D
			9 9.6	3.Sh.I
			9 29.5	1.Tr.I
			10 53.2	1.Sh.E
			11 46.5	1.Tr.E
			12 47.1	3.Sh.E
			12 48.6	3.Tr.I
			13 18.9	2.Oc.R
			16 24.2	3.Tr.E

Star cluster Omega Centauri from South Florida (Everglades):

Satellites of Saturn 2026

Satellites of Saturn 2026
January

1	6	33.9	3.Tr.I	11	11	54.3	5.Oc.D	21	2	29.3	3.Oc.D		4	27.0	5.Ec.R		11	21.2	3.Ec.R		9	25.5	5.Sh.I
	7	14.3	3.Sh.I		13	2.7	4.Tr.I		3	10.9	4.Oc.D		10	32.3	4.Oc.D		16	5.0	6.Oc.D		11	37.3	5.Tr.E
	9	32.8	3.Tr.E		14	4.2	4.Sh.I		5	59.3	3.Ec.R		14	37.6	4.Ec.R		20	36.8	6.Oc.R		12	30.9	5.Sh.E
	10	8.6	3.Sh.E		15	50.9	3.Oc.D		7	8.4	4.Ec.R		21	11.8	3.Oc.D	18	6	29.8	3.Tr.I		17	8.7	3.Tr.I
	15	58.5	6.Oc.D		16	21.9	4.Tr.E	22	1	9.3	3.Tr.I	8	0	46.0	3.Ec.R		6	43.9	5.Tr.I		17	42.4	3.Sh.I
	21	17.3	6.Oc.R		16	54.6	5.Ec.R		1	45.0	3.Sh.I		19	19.2	4.Tr.I		7	6.7	3.Sh.I		20	7.3	3.Tr.E
	23	5.7	4.Oc.D		17	5.6	4.Sh.E		4	8.1	3.Tr.E		19	51.7	3.Tr.I		8	27.0	5.Sh.I		20	35.2	3.Sh.E
2	3	13.2	4.Ec.R		19	24.1	3.Ec.R		4	38.2	3.Sh.E		20	21.6	4.Sh.I		9	26.9	4.Oc.D		23	26.3	4.Tr.I
	5	13.4	3.Oc.D	12	14	30.9	3.Tr.I		11	58.0	4.Tr.I		20	30.9	3.Sh.I		9	28.7	3.Tr.E	28	0	19.9	4.Sh.I
	8	48.9	3.Ec.R		15	9.3	3.Sh.I		12	54.7	4.Sh.I		22	38.7	4.Tr.E		10	0.1	3.Sh.E		2	42.5	4.Tr.E
	10	52.3	5.Oc.D		17	29.9	3.Tr.E		15	15.4	4.Tr.E		22	50.7	3.Tr.E		10	35.3	5.Tr.E		3	18.5	4.Sh.E
	15	59.9	5.Ec.R		18	3.0	3.Sh.E		15	54.3	4.Sh.E		23	23.4	4.Sh.E		11	36.6	5.Sh.E		15	48.6	3.Oc.D
3	3	53.3	3.Tr.I		21	59.4	4.Oc.D		19	16.5	5.Tr.I		23	24.9	3.Sh.E		13	26.3	4.Ec.R		19	15.3	3.Ec.R
	4	33.4	3.Sh.I	13	2	2.0	4.Ec.R		20	56.2	5.Sh.I	9	5	40.2	5.Tr.I	19	5	9.6	3.Oc.D	29	8	23.3	4.Oc.D
	6	52.3	3.Tr.E		13	10.5	3.Oc.D		23	6.1	5.Tr.E		7	28.5	5.Sh.I		8	40.2	3.Ec.R		12	14.8	4.Ec.R
	7	27.7	3.Sh.E		16	43.1	3.Ec.R		23	49.1	3.Oc.D		9	34.1	5.Tr.E		18	14.0	4.Tr.I		14	5.0	5.Oc.D
	7	52.6	4.Tr.I		18	11.7	5.Tr.I	23	0	3.7	5.Sh.E		10	42.0	5.Sh.E		19	12.1	4.Sh.I		14	28.6	3.Tr.I
	8	56.3	4.Sh.I		19	57.7	5.Sh.I		3	18.3	3.Ec.R		17	2.1	6.Tr.I		21	32.0	4.Tr.E		15	1.5	3.Sh.I
	11	12.6	4.Tr.E		22	4.5	5.Tr.E		20	54.9	4.Oc.D		18	31.3	3.Oc.D		22	12.1	4.Sh.E		17	27.0	3.Tr.E
	11	59.1	4.Sh.E		23	9.3	5.Sh.E		22	29.1	3.Tr.I		22	5.1	3.Ec.R	20	3	49.5	3.Tr.I		17	54.2	3.Sh.E
4	2	32.8	3.Oc.D	14	6	46.4	4.Tr.I		23	4.1	3.Sh.I		22	11.1	6.Tr.E		4	25.9	3.Sh.I		18	43.1	5.Ec.R
	6	7.9	3.Ec.R		7	46.8	4.Sh.I	24	0	50.5	4.Ec.R	10	4	15.8	4.Oc.D		6	48.4	3.Tr.E	30	13	8.5	3.Oc.D
	16	48.9	4.Oc.D		10	5.2	4.Tr.E		1	27.8	3.Tr.E		8	19.8	4.Ec.R		7	19.1	3.Sh.E		16	34.3	3.Ec.R
	17	9.4	5.Tr.I		10	47.8	4.Sh.E		1	57.2	3.Sh.E		17	11.3	3.Tr.I		12	58.5	5.Oc.D		17	10.5	4.Tr.I
	18	59.5	5.Sh.I		11	50.5	3.Tr.I		21	8.9	3.Oc.D		17	50.1	3.Sh.I		17	48.9	5.Ec.R		18	2.5	4.Sh.I
	20	55.4	4.Ec.R		12	28.4	3.Sh.I	25	0	37.3	3.Ec.R		20	10.3	3.Tr.E						20	26.1	4.Tr.E
	21	4.3	5.Tr.E		14	49.5	3.Tr.E		1	31.4	5.Oc.D		20	43.9	3.Sh.E						21	0.6	4.Sh.E
	22	14.9	5.Sh.E		15	22.0	3.Sh.E		5	42.1	4.Tr.I									31	11	48.5	3.Tr.I
5	1	12.7	3.Tr.I	15	10	30.2	3.Oc.D		6	15.8	5.Ec.R										12	20.7	3.Sh.I
	1	52.6	3.Sh.I		14	2.2	3.Ec.R		6	37.3	4.Sh.I										14	46.8	3.Tr.E
	4	11.7	3.Tr.E		15	43.1	4.Oc.D		8	58.9	4.Tr.E										15	13.2	3.Sh.E
	4	46.7	3.Sh.E		19	44.1	4.Ec.R		9	36.4	4.Sh.E										20	23.5	5.Tr.I
	23	52.3	3.Oc.D	16	0	25.9	5.Oc.D		17	48.5	6.Tr.I										21	54.5	5.Sh.I
6	1	35.8	4.Tr.I		5	21.6	5.Ec.R		19	48.9	3.Tr.I												
	2	38.9	4.Sh.I		9	10.1	3.Tr.I		20	23.3	3.Sh.I												
	3	27.0	3.Ec.R		9	47.6	3.Sh.I		21	25.2	6.Tr.E												
	4	55.6	4.Tr.E		12	9.1	3.Tr.E		22	47.5	3.Tr.E												
	5	41.3	4.Sh.E		12	41.1	3.Sh.E		23	16.2	3.Sh.E												
	22	32.2	3.Tr.I	17	0	30.1	4.Tr.I	26	14	39.1	4.Oc.D												
	23	11.8	3.Sh.I		1	29.5	4.Sh.I		18	28.7	3.Oc.D												
	23	22.7	5.Oc.D		3	48.6	4.Tr.E		18	32.7	4.Ec.R												
7	1	31.2	3.Tr.E		4	30.0	4.Sh.E		21	56.3	3.Ec.R												
	2	5.8	3.Sh.E		7	49.9	3.Oc.D	27	7	49.9	5.Tr.I												

Satellites of Saturn 2026
February

1	0	8.2	5.Tr.E	11	0	28.1	3.Ec.R	21	5	1.0	5.Oc.D												
	0	57.7	5.Sh.E		19	48.3	3.Tr.I		6	28.9	3.Tr.I												
	2	7.7	4.Oc.D		20	15.3	3.Sh.I		6	50.7	3.Sh.I												
	5	56.8	4.Ec.R		22	45.6	3.Tr.E		8	57.3	5.Ec.R												
	10	28.4	3.Oc.D		23	7.1	3.Sh.E		9	24.7	3.Tr.E												
	13	53.2	3.Ec.R	12	1	6.1	4.Oc.D		9	41.8	3.Sh.E												
2	9	8.4	3.Tr.I		3	49.1	5.Oc.D		15	8.4	4.Tr.I												
	9	39.8	3.Sh.I		4	45.0	4.Ec.R		15	43.0	4.Sh.I												

	10	54.9	4.Tr.I		8	3.8	5.Ec.R		18	15.4	4.Tr.E		22	53.1	5.Sh.I		7	48.9	3.Oc.D
	11	45.1	4.Sh.I		18	28.4	3.Oc.D		18	36.9	4.Sh.E		22	56.2	3.Sh.I		9	51.0	4.Ec.R
	12	6.6	3.Tr.E		21	47.0	3.Ec.R	22	5	9.1	3.Oc.D	10	1	10.8	5.Tr.E		11	2.7	3.Ec.R
	12	32.2	3.Sh.E	13	9	53.5	4.Tr.I		8	21.6	3.Ec.R		1	25.8	3.Tr.E				
	14	9.7	4.Tr.E		10	35.4	4.Sh.I	23	0	6.0	4.Oc.D		1	48.1	3.Sh.E				
	14	42.7	4.Sh.E		13	4.3	4.Tr.E		3	33.0	4.Ec.R		1	51.7	5.Sh.E				
	17	7.4	6.Oc.D		13	30.9	4.Sh.E		3	49.0	3.Tr.I		16	8.7	4.Tr.I				
	19	35.5	6.Oc.R		17	8.4	3.Tr.I		4	9.7	3.Sh.I		16	52.9	4.Sh.I				
3	2	39.1	5.Oc.D		17	34.4	3.Sh.I		6	44.6	3.Tr.E		19	20.7	4.Tr.E				
	7	10.0	5.Ec.R		20	5.4	3.Tr.E		7	0.7	3.Sh.E		19	48.9	4.Sh.E				
	7	48.3	3.Oc.D		20	26.0	3.Sh.E		11	20.9	5.Tr.I		21	8.4	3.Oc.D				
	11	12.2	3.Ec.R	14	10	8.3	5.Tr.I		12	21.0	5.Sh.I								
	19	52.2	4.Oc.D		11	22.4	5.Sh.I		14	44.2	5.Tr.E								
	23	38.9	4.Ec.R		13	42.1	5.Tr.E		15	12.1	5.Sh.E								
4	6	28.3	3.Tr.I		14	18.6	5.Sh.E	24	2	29.3	3.Oc.D								
	6	58.9	3.Sh.I		15	48.5	3.Oc.D		5	40.5	3.Ec.R								
	9	26.4	3.Tr.E		18	51.0	4.Oc.D		8	53.5	4.Tr.I								
	9	51.2	3.Sh.E		19	5.9	3.Ec.R		9	25.5	4.Sh.I								
5	4	39.4	4.Tr.I		22	27.0	4.Ec.R		11	59.0	4.Tr.E								
	5	8.3	3.Oc.D	15	14	28.5	3.Tr.I		12	18.9	4.Sh.E								
	5	27.7	4.Sh.I		14	53.5	3.Sh.I	25	1	9.2	3.Tr.I								
	7	53.3	4.Tr.E		17	25.3	3.Tr.E		1	28.8	3.Sh.I								
	8	24.8	4.Sh.E		17	45.0	3.Sh.E		4	4.4	3.Tr.E								
	8	31.2	3.Ec.R	16	3	38.4	4.Tr.I		4	19.6	3.Sh.E								
	8	58.1	5.Tr.I		4	18.0	4.Sh.I		17	37.6	5.Oc.D								
	10	24.1	5.Sh.I		6	48.0	4.Tr.E		17	51.2	4.Oc.D								
	12	39.8	5.Tr.E		7	12.9	4.Sh.E		21	14.9	4.Ec.R								
	13	25.0	5.Sh.E		13	8.6	3.Oc.D		21	23.7	5.Ec.R								
6	3	48.3	3.Tr.I		16	24.5	5.Oc.D		23	49.5	3.Oc.D								
	4	18.0	3.Sh.I		16	24.9	3.Ec.R	26	2	59.4	3.Ec.R								
	6	46.2	3.Tr.E		20	30.4	5.Ec.R		22	29.4	3.Tr.I								
	7	10.2	3.Sh.E	17	11	48.6	3.Tr.I		22	47.8	3.Sh.I								
	13	36.7	4.Oc.D		12	12.5	3.Sh.I	27	1	24.2	3.Tr.E								
	17	21.0	4.Ec.R		12	35.9	4.Oc.D		1	38.5	3.Sh.E								
7	2	28.3	3.Oc.D		14	45.1	3.Tr.E		2	38.7	4.Tr.I								
	5	50.2	3.Ec.R		15	3.9	3.Sh.E		3	8.1	4.Sh.I								
	15	13.6	5.Oc.D		16	9.0	4.Ec.R		5	42.7	4.Tr.E								
	19	36.7	5.Ec.R	18	10	28.8	3.Oc.D		6	0.8	4.Sh.E								
	22	24.0	4.Tr.I		13	43.8	3.Ec.R		21	9.7	3.Oc.D								
	23	10.3	4.Sh.I		21	23.3	4.Tr.I		23	58.1	5.Tr.I								
8	1	8.3	3.Tr.I		22	0.5	4.Sh.I	28	0	18.3	3.Ec.R								
	1	37.0	4.Tr.E		22	44.4	5.Tr.I		0	50.3	5.Sh.I								
	1	37.1	3.Sh.I		23	51.7	5.Sh.I		3	15.1	5.Tr.E								
	2	6.9	4.Sh.E	19	0	31.7	4.Tr.E		3	38.7	5.Sh.E								
	4	6.0	3.Tr.E		0	54.9	4.Sh.E		11	36.5	4.Oc.D								
	4	29.2	3.Sh.E		2	13.3	5.Tr.E		14	56.8	4.Ec.R								
	23	48.3	3.Oc.D		2	45.4	5.Sh.E		19	49.6	3.Tr.I								
9	3	9.1	3.Ec.R		9	8.7	3.Tr.I		20	6.9	3.Sh.I								
	7	21.4	4.Oc.D		9	31.6	3.Sh.I		22	44.0	3.Tr.E								
	11	3.0	4.Ec.R		12	4.9	3.Tr.E		22	57.4	3.Sh.E								
	21	32.8	5.Tr.I		12	22.8	3.Sh.E												
	22	28.3	3.Tr.I	20	6	20.9	4.Oc.D												

Satellites of Saturn 2026

March

1	18	29.9	3.Oc.D		11	5	11.3	3.Oc.D		21	0	42.9	4.Tr.I						
	20	24.0	4.Tr.I			7	31.4	5.Oc.D			0	47.7	4.Sh.I						
	20	50.6	4.Sh.I			8	11.4	3.Ec.R			3	30.5	4.Tr.E						
	21	37.2	3.Ec.R		10	38.2	4.Oc.D				3	35.5	4.Sh.E						
	23	26.3	4.Tr.E		10	43.0	5.Ec.R			14	32.9	3.Tr.I							
	23	42.7	4.Sh.E		13	44.3	4.Ec.R			14	35.9	3.Sh.I							
2	6	15.2	5.Oc.D	12	3	51.3	3.Tr.I			17	21.4	3.Tr.E							
	9	50.4	5.Ec.R		4	1.0	3.Sh.I			17	24.5	3.Sh.E							
	17	9.9	3.Tr.I		6	42.8	3.Tr.E		22	9	40.9	4.Oc.D							
	17	25.9	3.Sh.I		6	50.5	3.Sh.E			12	31.5	4.Ec.R							
	20	3.8	3.Tr.E		19	25.8	4.Tr.I			13	13.4	3.Oc.D							
	20	16.2	3.Sh.E		19	40.4	4.Sh.I			15	12.9	5.Tr.I							
3	5	21.8	4.Oc.D		22	20.4	4.Tr.E			15	16.7	5.Sh.I							
	8	38.7	4.Ec.R		22	30.2	4.Sh.E			16	4.2	3.Ec.R							
	15	50.2	3.Oc.D	13	2	31.6	3.Oc.D			17	42.3	5.Tr.E							
	18	56.0	3.Ec.R		5	30.2	3.Ec.R			17	50.2	5.Sh.E							
4	12	35.5	5.Tr.I		13	52.8	5.Tr.I		23	11	53.3	3.Tr.I							
	13	19.4	5.Sh.I		14	18.0	5.Sh.I			11	54.9	3.Sh.I							
	14	9.3	4.Tr.I		16	45.0	5.Tr.E			14	41.1	3.Tr.E							
	14	30.1	3.Tr.I		16	57.8	5.Sh.E			14	43.3	3.Sh.E							
	14	33.0	4.Sh.I	14	1	11.6	3.Tr.I			18	28.7	4.Tr.I							
	14	44.9	3.Sh.I		1	20.0	3.Sh.I			18	30.1	4.Sh.I							
	15	45.3	5.Tr.E		4	2.5	3.Tr.E			21	13.7	4.Tr.E							
	16	5.0	5.Sh.E		4	9.3	3.Sh.E			21	17.3	4.Sh.E							
	17	9.9	4.Tr.E		4	23.8	4.Oc.D		24	10	33.7	3.Oc.D							
	17	23.6	3.Tr.E		7	26.1	4.Ec.R			13	23.0	3.Ec.R							
	17	24.6	4.Sh.E		23	52.0	3.Oc.D			21	29.5	5.Ec.D							
	17	35.1	3.Sh.E	15	2	49.0	3.Ec.R		25	0	1.7	5.Ec.R							
5	13	10.5	3.Oc.D		13	11.4	4.Tr.I			3	26.4	4.Ec.D							
	16	14.9	3.Ec.R		13	22.9	4.Sh.I			6	13.2	4.Ec.R							
	23	7.2	4.Oc.D		16	3.8	4.Tr.E			9	13.7	3.Tr.I							
6	2	20.6	4.Ec.R		16	12.0	4.Sh.E			9	13.8	3.Sh.I							
	11	50.4	3.Tr.I		20	10.8	5.Oc.D			12	0.7	3.Tr.E							
	12	4.0	3.Sh.I		22	31.9	3.Tr.I			12	2.1	3.Sh.E							
	14	43.4	3.Tr.E		22	39.0	3.Sh.I		26	7	53.5	3.Ec.D							
	14	54.0	3.Sh.E		23	9.5	5.Ec.R			10	41.7	3.Ec.R							
	18	53.0	5.Oc.D	16	1	22.2	3.Tr.E			12	12.5	4.Sh.I							
	22	16.8	5.Ec.R		1	28.1	3.Sh.E			12	14.5	4.Tr.I							

7	7	54.8	4.Tr.I		21	12.3	3.Oc.D		14	56.8	4.Tr.E		22	28.2	5.Ec.D		7	43.8	3.Ec.D		21	16.0	4.Sh.I
	8	15.5	4.Sh.I		22	9.4	4.Oc.D		14	59.0	4.Sh.E		23	59.3	3.Oc.R		10	36.8	3.Oc.R		21	55.5	4.Tr.I
	10	30.7	3.Oc.D	17	0	7.8	3.Ec.R	27	3	46.1	5.Sh.I	3	0	53.5	5.Ec.R	13	6	23.1	3.Sh.I		23	55.2	4.Sh.E
	10	53.4	4.Tr.E		1	7.9	4.Ec.R		3	54.3	5.Tr.I		17	19.7	4.Sh.I		6	37.4	3.Tr.I	23	0	3.2	4.Tr.E
	11	6.5	4.Sh.E		19	52.2	3.Tr.I		6	9.6	5.Tr.E		17	32.4	4.Tr.I		7	23.0	4.Ec.D		6	42.9	5.Sh.I
	13	33.7	3.Ec.R		19	58.0	3.Sh.I		6	16.2	5.Sh.E		19	48.5	3.Sh.I		9	9.3	3.Sh.E		8	49.6	5.Sh.E
8	9	10.7	3.Tr.I		22	42.0	3.Tr.E		6	32.8	3.Sh.I		19	55.5	3.Tr.I		9	16.2	3.Tr.E		15	37.1	3.Ec.D
	9	23.0	3.Sh.I		22	46.9	3.Sh.E		6	34.0	3.Tr.I		20	4.1	4.Sh.E		10	10.4	4.Oc.R		18	33.1	3.Oc.R
	12	3.2	3.Tr.E	18	2	32.5	5.Tr.I		9	20.4	3.Tr.E		20	5.8	4.Tr.E	14	5	2.7	3.Ec.D	24	6	12.2	4.Ec.D
	12	12.8	3.Sh.E		2	47.4	5.Sh.I		9	20.8	3.Sh.E		22	35.8	3.Sh.E		5	43.7	5.Sh.I		8	59.5	4.Oc.R
	16	52.6	4.Oc.D		5	14.1	5.Tr.E		21	8.8	4.Ec.D		22	38.7	3.Tr.E		7	56.3	3.Oc.R		14	16.4	3.Sh.I
	20	2.4	4.Ec.R		5	24.1	5.Sh.E		23	54.9	4.Ec.R	4	18	28.2	3.Ec.D		7	58.9	5.Sh.E		14	39.5	3.Tr.I
9	1	14.2	5.Tr.I		6	57.1	4.Tr.I	28	5	12.5	3.Ec.D		21	18.8	3.Oc.R		16	9.0	4.Sh.I		17	1.2	3.Sh.E
	1	49.0	5.Sh.I		7	5.3	4.Sh.I		8	0.5	3.Ec.R	5	2	15.9	4.Ec.D		16	36.8	4.Tr.I		17	12.4	3.Tr.E
	4	15.7	5.Tr.E		9	47.2	4.Tr.E	29	3	51.7	3.Sh.I		4	44.7	5.Sh.I		18	50.5	4.Sh.E	25	12	55.6	5.Ec.D
	4	31.7	5.Sh.E		9	53.8	4.Sh.E		3	54.4	3.Tr.I		5	2.4	4.Oc.R		18	56.4	4.Tr.E		12	56.0	3.Ec.D
	7	51.0	3.Oc.D		18	32.6	3.Oc.D		5	54.9	4.Sh.I		5	21.2	5.Tr.I	15	3	42.0	3.Sh.I		14	58.3	4.Sh.I
	10	52.6	3.Ec.R		21	26.6	3.Ec.R		6	0.4	4.Tr.I		6	59.2	5.Tr.E		3	57.8	3.Tr.I		15	0.8	5.Ec.R
10	1	40.3	4.Tr.I	19	15	55.1	4.Oc.D		6	39.6	3.Sh.E		7	7.7	5.Sh.E		6	27.9	3.Sh.E		15	41.9	4.Tr.I
	1	58.0	4.Sh.I		17	12.6	3.Tr.I		6	40.0	3.Tr.E		17	7.4	3.Sh.I		6	35.6	3.Tr.E		15	52.4	3.Oc.R
	4	36.9	4.Tr.E		17	16.9	3.Sh.I		8	39.9	4.Tr.E		17	15.9	3.Tr.I	16	1	5.3	4.Ec.D		17	36.7	4.Sh.E
	4	48.3	4.Sh.E		18	49.7	4.Ec.R		8	40.7	4.Sh.E		19	54.5	3.Sh.E		2	21.6	3.Ec.D		17	45.2	4.Tr.E
	6	31.0	3.Tr.I		20	1.7	3.Tr.E		9	58.5	5.Ec.D		19	58.3	3.Tr.E		3	52.9	4.Oc.R	26	11	35.2	3.Sh.I
	6	42.0	3.Sh.I		20	5.7	3.Sh.E		12	27.4	5.Ec.R	6	11	2.0	4.Sh.I		5	15.7	3.Oc.R		11	59.8	3.Tr.I
	9	23.0	3.Tr.E	20	8	50.5	5.Oc.D	30	2	31.4	3.Ec.D		11	18.4	4.Tr.I		11	56.4	5.Ec.D		14	19.8	3.Sh.E
	9	31.7	3.Sh.E		11	35.4	5.Ec.R		5	20.1	3.Oc.R		13	45.7	4.Sh.E		14	10.3	5.Ec.R		14	31.6	3.Tr.E
					15	53.0	3.Oc.D		14	51.2	4.Ec.D		13	48.6	4.Tr.E	17	1	0.9	3.Sh.I		23	54.5	4.Ec.D
					18	45.4	3.Ec.R		17	36.6	4.Ec.R		15	47.1	3.Ec.D		1	18.1	3.Tr.I	27	2	41.5	4.Oc.R
								31	1	10.7	3.Sh.I		18	38.4	3.Oc.R		3	46.6	3.Sh.E		10	14.8	3.Ec.D
									1	14.8	3.Tr.I	7	10	57.4	5.Ec.D		3	55.0	3.Tr.E		13	11.7	3.Oc.R
									3	58.3	3.Sh.E		13	19.1	5.Ec.R		9	51.4	4.Sh.I		19	12.7	5.Sh.I
									3	59.6	3.Tr.E		14	26.4	3.Sh.I		10	23.0	4.Tr.I		21	14.8	5.Sh.E
									16	15.5	5.Sh.I		14	36.3	3.Tr.I		12	32.1	4.Sh.E	28	8	40.6	4.Sh.I
									16	36.9	5.Tr.I		17	13.2	3.Sh.E		12	38.8	4.Tr.E		8	54.1	3.Sh.I
									18	35.5	5.Tr.E		17	17.8	3.Tr.E		23	40.5	3.Ec.D		9	20.1	3.Tr.I
									18	42.1	5.Sh.E		19	58.3	4.Ec.D	18	2	35.1	3.Oc.R		9	28.2	4.Tr.I
									23	37.3	4.Sh.I		22	45.1	4.Oc.R		18	13.4	5.Sh.I		11	18.2	4.Sh.E
									23	46.4	4.Tr.I	8	13	6.0	3.Ec.D		18	47.6	4.Ec.D		11	27.1	4.Tr.E
									23	50.4	3.Ec.D		15	57.9	3.Oc.R		20	24.5	5.Sh.E		11	38.4	3.Sh.E

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April

1	2	22.4	4.Sh.E	11	9	4.2	3.Sh.I	21	0	25.8	5.Ec.D	9	4	44.4	4.Sh.I		21	35.2	4.Oc.R
	2	22.9	4.Tr.E		9	17.0	3.Tr.I		2	35.5	5.Ec.R		5	4.5	4.Tr.I		22	19.8	3.Sh.I
	2	39.7	3.Oc.R		11	50.6	3.Sh.E		12	29.9	4.Ec.D		7	27.3	4.Sh.E		22	38.5	3.Tr.I
	22	29.6	3.Sh.I		11	56.8	3.Tr.E		15	17.4	4.Oc.R		7	31.3	4.Tr.E	19	1	5.3	3.Sh.E
	22	35.2	3.Tr.I		22	26.7	4.Sh.I		18	18.2	3.Ec.D		11	45.3	3.Sh.I		1	14.4	3.Tr.E
2	1	17.0	3.Sh.E		22	50.6	4.Tr.I		21	13.8	3.Oc.R		11	56.7	3.Tr.I		20	59.4	3.Ec.D
	1	19.2	3.Tr.E		23	26.8	5.Ec.D	22	16	57.5	3.Sh.I		14	31.9	3.Sh.E		23	54.4	3.Oc.R
	8	33.6	4.Ec.D	12	1	8.9	4.Sh.E		17	19.2	3.Tr.I		14	37.3	3.Tr.E	20	3	33.7	4.Sh.I
	11	19.5	4.Oc.R		1	13.9	4.Tr.E		19	42.5	3.Sh.E		17	14.5	5.Sh.I		4	9.3	4.Tr.I
	21	9.3	3.Ec.D		1	44.6	5.Ec.R		19	53.1	3.Tr.E		18	9.7	5.Tr.I		6	13.7	4.Sh.E
													19	19.6	5.Tr.E		6	21.1	4.Tr.E
													19	33.7	5.Sh.E		19	38.6	3.Sh.I
												10	10	24.9	3.Ec.D		19	58.8	3.Tr.I

	21	16.0	4.Sh.I																
	21	55.5	4.Tr.I																
	23	55.2	4.Sh.E																
23	0	3.2	4.Tr.E																
	6	42.9	5.Sh.I																
	8	49.6	5.Sh.E																
	15	37.1	3.Ec.D																
	18	33.1	3.Oc.R																
24	6	12.2	4.Ec.D																
	8	59.5	4.Oc.R																
	14	16.4	3.Sh.I																
	14	39.5	3.Tr.I																
	17	1.2	3.Sh.E																
	17	12.4	3.Tr.E																
25	12	55.6	5.Ec.D																
	12	56.0	3.Ec.D																
	14	58.3	4.Sh.I																
	15	0.8	5.Ec.R																
	15	41.9	4.Tr.I																
	15	52.4	3.Oc.R																
	17	36.7	4.Sh.E																
	17	45.2	4.Tr.E																
26	11	35.2	3.Sh.I																
	11	59.8	3.Tr.I																
	14	19.8	3.Sh.E																
	14	31.6	3.Tr.E																
	23	54.5	4.Ec.D																
27	2	41.5	4.Oc.R																
	10	14.8	3.Ec.D																
	13	11.7	3.Oc.R																
	19	12.7	5.Sh.I																
	21	14.8	5.Sh.E																
28	8	40.6	4.Sh.I																
	8	54.1	3.Sh.I																
	9	20.1	3.Tr.I																
	9	28.2	4.Tr.I																
	11	18.2	4.Sh.E																
	11	27.1	4.Tr.E																
	11	38.4	3.Sh.E																
	11	50.9	3.Tr.E																
29	7	33.7	3.Ec.D																
	10	30.9	3.Oc.R																
	17	36.7	4.Ec.D																
	20	23.3	4.Oc.R																
30	1	25.0	5.Ec.D																
	3	25.6	5.Ec.R																
	6	13.0	3.Sh.I																
	6	40.4	3.Tr.I																
	8	57.0	3.Sh.E																
	9	10.1	3.Tr.E																

	13	17.4	3.Oc.R		22	23.9	3.Sh.E				
	13	40.6	4.Ec.D		22	33.7	3.Tr.E				
	16	27.8	4.Oc.R								

Satellites of Saturn 2026

May

1	2	22.9	4.Sh.I	11	8	42.5	5.Sh.I	21	0	40.1	3.Sh.I
	3	14.6	4.Tr.I		10	29.2	5.Sh.E		1	22.4	3.Tr.I
	4	52.5	3.Ec.D		14	6.0	3.Sh.I		3	21.3	3.Sh.E
	4	59.7	4.Sh.E		14	41.8	3.Tr.I		3	39.6	3.Tr.E
	5	8.8	4.Tr.E		16	48.5	3.Sh.E		15	14.7	4.Ec.D
	7	50.1	3.Oc.R		17	4.8	3.Tr.E		17	50.7	4.Oc.R
2	3	31.8	3.Sh.I	12	1	11.9	4.Sh.I		23	19.5	3.Ec.D
	4	0.7	3.Tr.I		2	20.8	4.Tr.I	22	2	19.6	3.Oc.R
	6	15.6	3.Sh.E		3	45.4	4.Sh.E		15	55.4	5.Ec.D
	6	29.3	3.Tr.E		3	53.8	4.Tr.E		17	28.0	5.Ec.R
	7	42.5	5.Sh.I		12	45.4	3.Ec.D		21	58.9	3.Sh.I
	9	39.8	5.Sh.E		15	44.8	3.Oc.R		22	42.5	3.Tr.I
	11	19.0	4.Ec.D	13	10	8.0	4.Ec.D	23	0	0.9	4.Sh.I
	14	4.9	4.Oc.R		11	24.8	3.Sh.I		0	39.8	3.Sh.E
3	2	11.3	3.Ec.D		12	2.0	3.Tr.I		0	58.5	3.Tr.E
	5	9.3	3.Oc.R		12	49.7	4.Oc.R		1	28.8	4.Tr.I
	20	5.1	4.Sh.I		14	7.1	3.Sh.E		2	30.9	4.Sh.E
	21	1.1	4.Tr.I		14	23.8	3.Tr.E		2	34.8	4.Tr.E
	22	41.1	4.Sh.E		14	54.8	5.Ec.D		20	38.2	3.Ec.D
	22	50.3	4.Tr.E		16	39.8	5.Ec.R		23	38.5	3.Oc.R
4	0	50.7	3.Sh.I	14	10	4.3	3.Ec.D	24	8	56.9	4.Ec.D
	1	21.0	3.Tr.I		13	3.8	3.Oc.R		11	30.4	4.Oc.R
	3	34.2	3.Sh.E		18	54.2	4.Sh.I		19	17.7	3.Sh.I
	3	48.4	3.Tr.E		20	7.6	4.Tr.I		20	2.5	3.Tr.I
	13	55.1	5.Ec.D		21	26.8	4.Sh.E		21	58.3	3.Sh.E
	15	50.8	5.Ec.R		21	34.5	4.Tr.E		22	13.5	5.Sh.I
	23	30.2	3.Ec.D	15	8	43.7	3.Sh.I		22	17.3	3.Tr.E
5	2	28.4	3.Oc.R		9	22.1	3.Tr.I		23	41.1	5.Sh.E
	5	1.3	4.Ec.D		11	25.7	3.Sh.E	25	17	43.1	4.Sh.I
	7	46.4	4.Oc.R		11	42.8	3.Tr.E		17	57.0	3.Ec.D
	22	9.5	3.Sh.I		21	12.5	5.Sh.I		19	16.4	4.Tr.I
	22	41.2	3.Tr.I		22	53.3	5.Sh.E		20	12.2	4.Sh.E
6	0	52.8	3.Sh.E	16	3	50.2	4.Ec.D		20	14.0	4.Tr.E
	1	7.6	3.Tr.E		6	30.4	4.Oc.R		20	57.3	3.Oc.R
	13	47.4	4.Sh.I		7	23.1	3.Ec.D	26	16	36.5	3.Sh.I
	14	47.6	4.Tr.I		10	22.8	3.Oc.R		17	22.4	3.Tr.I
	16	22.6	4.Sh.E	17	6	2.5	3.Sh.I		19	16.9	3.Sh.E
	16	31.6	4.Tr.E		6	42.3	3.Tr.I		19	36.2	3.Tr.E
	20	12.2	5.Sh.I		8	44.2	3.Sh.E	27	2	39.1	4.Ec.D
	20	49.0	3.Ec.D		9	1.8	3.Tr.E		4	26.2	5.Ec.D
	22	4.3	5.Sh.E		12	36.4	4.Sh.I		5	9.4	4.Oc.R
	23	47.6	3.Oc.R		13	54.5	4.Tr.I		5	51.8	5.Ec.R
7	19	28.3	3.Sh.I		15	8.2	4.Sh.E		15	15.8	3.Ec.D
	20	1.4	3.Tr.I		15	14.9	4.Tr.E		18	16.1	3.Oc.R
	22	11.4	3.Sh.E	18	3	25.1	5.Ec.D	28	11	25.4	4.Sh.I
	22	26.7	3.Tr.E		4	41.9	3.Ec.D		13	4.6	4.Tr.I
	22	43.5	4.Ec.D		5	4.1	5.Ec.R		13	52.5	4.Tr.E
8	1	27.7	4.Oc.R		7	41.8	3.Oc.R		13	53.5	4.Sh.E
	18	7.8	3.Ec.D		21	32.4	4.Ec.D		13	55.3	3.Sh.I
	21	6.7	3.Oc.R	19	0	10.7	4.Oc.R		14	42.4	3.Tr.I
9	2	24.7	5.Ec.D		3	21.3	3.Sh.I		16	35.4	3.Sh.E
	4	15.3	5.Ec.R		4	2.4	3.Tr.I		16	55.0	3.Tr.E
	7	29.7	4.Sh.I		6	2.8	3.Sh.E	29	10	44.7	5.Sh.I
	8	34.2	4.Tr.I		6	20.7	3.Tr.E		12	4.6	5.Sh.E
	10	4.0	4.Sh.E	20	2	0.7	3.Ec.D		12	34.6	3.Ec.D
	10	12.8	4.Tr.E		5	0.7	3.Oc.R		15	34.9	3.Oc.R
	16	47.2	3.Sh.I		6	18.7	4.Sh.I		20	21.3	4.Ec.D
	17	21.6	3.Tr.I		7	41.5	4.Tr.I		22	49.4	4.Ec.R
	19	30.0	3.Sh.E		8	49.5	4.Sh.E	30	11	14.1	3.Sh.I
	19	45.7	3.Tr.E		8	55.0	4.Tr.E		12	2.3	3.Tr.I
10	15	26.6	3.Ec.D		9	43.0	5.Sh.I		13	53.9	3.Sh.E
	16	25.7	4.Ec.D		11	17.5	5.Sh.E		14	13.7	3.Tr.E
	18	25.7	3.Oc.R					31	5	7.6	4.Sh.I
	19	8.8	4.Oc.R						6	53.8	4.Tr.I
									7	29.8	4.Tr.E
									7	34.8	4.Sh.E
									9	53.4	3.Ec.D
									12	53.7	3.Oc.R
									16	57.1	5.Ec.D
									18	14.7	5.Ec.R

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June

1	8	32.9	3.Sh.I	11	3	56.5	4.Sh.I	21	4	19.9	3.Ec.D
	9	22.2	3.Tr.I		6	19.8	4.Sh.E		7	18.6	3.Oc.R
	11	12.4	3.Sh.E		17	46.0	3.Ec.D	22	2	45.4	4.Sh.I
	11	32.5	3.Tr.E		20	45.8	3.Oc.R		2	59.4	3.Sh.I
	14	3.5	4.Ec.D	12	0	21.6	5.Sh.I		3	58.1	3.Tr.I
	16	30.7	4.Ec.R		1	10.5	5.Sh.E		5	4.6	4.Sh.E
2	7	12.2	3.Ec.D		12	52.4	4.Ec.D		5	35.6	3.Sh.E
	10	12.5	3.Oc.R		15	15.7	4.Ec.R		5	57.2	3.Tr.E
	22	49.8	4.Sh.I		16	25.6	3.Sh.I	23	1	38.6	3.Ec.D
	23	16.0	5.Sh.I		17	20.6	3.Tr.I		4	37.0	3.Oc.R
3	0	27.4	5.Sh.E		19	3.3	3.Sh.E		11	41.2	4.Ec.D
	0	46.7	4.Tr.I		19	24.5	3.Tr.E		14	0.6	4.Ec.R
	1	3.2	4.Tr.E	13	15	4.8	3.Ec.D	24	0	18.2	3.Sh.I
	1	16.1	4.Sh.E		18	4.4	3.Oc.R		1	17.4	3.Tr.I
	5	51.7	3.Sh.I		21	38.7	4.Sh.I		2	54.1	3.Sh.E
	6	42.0	3.Tr.I	14	0	1.0	4.Sh.E		3	15.6	3.Tr.E
	8	30.9	3.Sh.E		6	34.9	5.Ec.D		20	27.6	4.Sh.I
	8	51.2	3.Tr.E		7	19.7	5.Ec.R		22	45.8	4.Sh.E
4	4	30.9	3.Ec.D		13	44.3	3.Sh.I		22	57.4	3.Ec.D
	7	31.2	3.Oc.R		14	40.2	3.Tr.I	25	1	55.5	3.Oc.R
	7	45.7	4.Ec.D		16	21.8	3.Sh.E		21	37.0	3.Sh.I
	10	12.0	4.Ec.R		16	43.0	3.Tr.E		22	36.7	3.Tr.I
5	3	10.5	3.Sh.I	15	6	34.6	4.Ec.D	26	0	12.5	3.Sh.E

Satellites of Saturn 2026

June

4	1.8	3.Tr.I	
5	29.0	5.Ec.D	
5	49.4	3.Sh.E	
6	9.9	3.Tr.E	
6	37.7	5.Ec.R	
16	32.0	4.Sh.I	
18	57.3	4.Sh.E	
6 1	49.7	3.Ec.D	
4	49.9	3.Oc.R	
7 0	29.2	3.Sh.I	
1	21.6	3.Tr.I	
1	27.9	4.Ec.D	
3	7.9	3.Sh.E	
3	28.6	3.Tr.E	
3	53.2	4.Ec.R	
11	48.1	5.Sh.I	
12	49.3	5.Sh.E	
23	8.5	3.Ec.D	
8 2	8.5	3.Oc.R	
10	14.2	4.Sh.I	
12	38.6	4.Sh.E	
21	48.0	3.Sh.I	
22	41.3	3.Tr.I	
9 0	26.3	3.Sh.E	
0	47.2	3.Tr.E	
18	1.1	5.Ec.D	
18	59.3	5.Ec.R	
19	10.2	4.Ec.D	
20	27.3	3.Ec.D	
21	34.5	4.Ec.R	
23	27.2	3.Oc.R	
10 19	6.8	3.Sh.I	
20	1.0	3.Tr.I	
21	44.8	3.Sh.E	
22	5.9	3.Tr.E	
8	57.0	4.Ec.R	
12	23.6	3.Ec.D	
15	23.0	3.Oc.R	
16 11	3.1	3.Sh.I	
11	59.8	3.Tr.I	
12	57.2	5.Sh.I	
13	28.4	5.Sh.E	
13	40.2	3.Sh.E	
14	1.6	3.Tr.E	
15	20.9	4.Sh.I	
17	42.3	4.Sh.E	
17 9	42.3	3.Ec.D	
12	41.5	3.Oc.R	
18 0	16.8	4.Ec.D	
2	38.2	4.Ec.R	
8	21.9	3.Sh.I	
9	19.3	3.Tr.I	
10	58.7	3.Sh.E	
11	20.1	3.Tr.E	
19	12.3	5.Ec.D	
19	36.4	5.Ec.R	
19 7	1.1	3.Ec.D	
9	3.1	4.Sh.I	
10	0.0	3.Oc.R	
11	23.5	4.Sh.E	
20 5	40.7	3.Sh.I	
6	38.7	3.Tr.I	
8	17.1	3.Sh.E	
8	38.7	3.Tr.E	
17	59.0	4.Ec.D	
20	19.4	4.Ec.R	
0	34.1	3.Tr.E	
5	23.5	4.Ec.D	
7	41.8	4.Ec.R	
20	16.1	3.Ec.D	
23	14.0	3.Oc.R	
27 14	9.8	4.Sh.I	
16	27.0	4.Sh.E	
18	55.7	3.Sh.I	
19	55.9	3.Tr.I	
21	30.9	3.Sh.E	
21	52.5	3.Tr.E	
28 17	34.9	3.Ec.D	
20	32.4	3.Oc.R	
23	5.7	4.Ec.D	
29 1	22.9	4.Ec.R	
16	14.5	3.Sh.I	
17	15.1	3.Tr.I	
18	49.4	3.Sh.E	
19	11.0	3.Tr.E	
30 7	52.1	4.Sh.I	
10	8.2	4.Sh.E	
14	53.7	3.Ec.D	
17	50.8	3.Oc.R	

Satellites of Saturn 2026

July

1 13	33.3	3.Sh.I	
14	34.2	3.Tr.I	
16	7.8	3.Sh.E	
16	29.4	3.Tr.E	
16	47.9	4.Ec.D	
19	4.1	4.Ec.R	
2 12	12.5	3.Ec.D	
15	9.2	3.Oc.R	
3 1	34.3	4.Sh.I	
3	49.3	4.Sh.E	
10	52.1	3.Sh.I	
11	53.2	3.Tr.I	
11 0	7.1	3.Sh.I	
1	8.8	3.Tr.I	
2	40.0	3.Sh.E	
3	1.2	3.Tr.E	
6	41.1	4.Sh.I	
8	52.7	4.Sh.E	
22	46.3	3.Ec.D	
12 1	41.0	3.Oc.R	
15	37.0	4.Ec.D	
17	48.7	4.Ec.R	
21	25.9	3.Sh.I	
22	27.5	3.Tr.I	
13	26.3	3.Sh.E	
13	47.8	3.Tr.E	
4 9	31.2	3.Ec.D	
10	30.2	4.Ec.D	
12	27.6	3.Oc.R	
12	45.2	4.Ec.R	
5 8	10.8	3.Sh.I	
9	12.2	3.Tr.I	
10	44.7	3.Sh.E	
11	6.1	3.Tr.E	
19	16.5	4.Sh.I	
21	30.4	4.Sh.E	
6 6	50.0	3.Ec.D	
9	46.0	3.Oc.R	
7 4	12.4	4.Ec.D	
5	29.6	3.Sh.I	
6	26.4	4.Ec.R	
6	31.1	3.Tr.I	
8	3.2	3.Sh.E	
8	24.5	3.Tr.E	
8 4	8.8	3.Ec.D	
7	4.3	3.Oc.R	
12	58.8	4.Sh.I	
15	11.6	4.Sh.E	
9 2	48.4	3.Sh.I	
3	50.0	3.Tr.I	
5	21.6	3.Sh.E	
5	42.8	3.Tr.E	
21	54.7	4.Ec.D	
10 0	7.5	4.Ec.R	
1	27.5	3.Ec.D	
4	22.7	3.Oc.R	
23	58.5	3.Sh.E	
13 0	19.5	3.Tr.E	
20	5.1	3.Ec.D	
22	59.3	3.Oc.R	
14 0	23.3	4.Sh.I	
2	33.8	4.Sh.E	
18	44.7	3.Sh.I	
19	46.2	3.Tr.I	
21	16.9	3.Sh.E	
21	37.8	3.Tr.E	
15 9	19.3	4.Ec.D	
11	29.8	4.Ec.R	
17	23.9	3.Ec.D	
20	17.6	3.Oc.R	
16 16	3.5	3.Sh.I	
17	4.8	3.Tr.I	
18	5.6	4.Sh.I	
18	35.3	3.Sh.E	
18	56.1	3.Tr.E	
20	14.9	4.Sh.E	
17 14	42.7	3.Ec.D	
17	35.9	3.Oc.R	
18 3	1.6	4.Ec.D	
5	10.9	4.Ec.R	
13	22.3	3.Sh.I	
14	23.3	3.Tr.I	
15	53.8	3.Sh.E	
16	14.4	3.Tr.E	
19 11	47.9	4.Sh.I	
12	1.5	3.Ec.D	
13	56.0	4.Sh.E	
14	54.2	3.Oc.R	
20 10	41.0	3.Sh.I	
11	41.7	3.Tr.I	
13	12.2	3.Sh.E	
13	32.7	3.Tr.E	
20	43.9	4.Ec.D	
22	52.0	4.Ec.R	
24 5	18.6	3.Sh.I	
6	18.5	3.Tr.I	
7	49.1	3.Sh.E	
8	9.2	3.Tr.E	
23	12.6	4.Sh.I	
25 1	18.2	4.Sh.E	
3	57.9	3.Ec.D	
6	49.0	3.Oc.R	
26 2	37.4	3.Sh.I	
3	36.7	3.Tr.I	
5	7.5	3.Sh.E	
5	27.5	3.Tr.E	
8	8.6	4.Ec.D	
10	14.2	4.Ec.R	
27 1	16.7	3.Ec.D	
4	7.2	3.Oc.R	
16	54.9	4.Sh.I	
18	59.3	4.Sh.E	
23	56.2	3.Sh.I	
28 0	54.9	3.Tr.I	
2	25.9	3.Sh.E	
2	45.7	3.Tr.E	
22	35.5	3.Ec.D	
29 1	25.4	3.Oc.R	
1	50.9	4.Ec.D	
3	55.3	4.Ec.R	
21	15.0	3.Sh.I	
22	13.0	3.Tr.I	
23	44.4	3.Sh.E	
30 0	3.9	3.Tr.E	
10	37.3	4.Sh.I	
12	40.4	4.Sh.E	
19	54.3	3.Ec.D	
22	43.7	3.Oc.R	
31 18	33.8	3.Sh.I	
19	31.1	3.Tr.I	
19	33.3	4.Ec.D	
21	2.8	3.Sh.E	
21	22.2	3.Tr.E	
21	36.4	4.Ec.R	

Satellites of Saturn 2026

August

1 17	13.1	3.Ec.D	
20	1.9	3.Oc.R	
2 4	19.6	4.Sh.I	
6	21.5	4.Sh.E	
15	52.6	3.Sh.I	
16	49.0	3.Tr.I	
18	21.2	3.Sh.E	
11 3	47.3	3.Ec.D	
6	32.8	3.Oc.R	
18	23.0	4.Ec.D	
20	20.7	4.Ec.R	
12 2	26.8	3.Sh.I	
3	18.0	3.Tr.I	
4	53.5	3.Sh.E	
21 8	16.9	4.Sh.I	
10	8.9	4.Sh.E	
13	1.1	3.Sh.I	
13	45.5	3.Tr.I	
15	25.8	3.Sh.E	
15	41.9	3.Tr.E	
22 11	40.6	3.Ec.D	

Satellites of Saturn 2026

August

	18	40.4	3.Tr.E		5	11.3	3.Tr.E		14	21.5	3.Oc.R
3	13	15.7	4.Ec.D	13	1	6.2	3.Ec.D		17	13.2	4.Ec.D
	14	31.9	3.Ec.D		3	9.4	4.Sh.I		19	5.0	4.Ec.R
	15	17.5	4.Ec.R		3	50.9	3.Oc.R	23	10	20.0	3.Sh.I
	17	20.1	3.Oc.R		5	5.7	4.Sh.E		11	2.9	3.Tr.I
4	13	11.5	3.Sh.I		23	45.6	3.Sh.I		12	44.3	3.Sh.E
	14	7.0	3.Tr.I	14	0	35.6	3.Tr.I		13	0.0	3.Tr.E
	15	39.7	3.Sh.E		2	11.9	3.Sh.E	24	1	59.5	4.Sh.I
	15	58.6	3.Tr.E		2	29.4	3.Tr.E		3	50.0	4.Sh.E
	22	2.0	4.Sh.I		12	5.5	4.Ec.D		8	59.5	3.Ec.D
5	0	2.5	4.Sh.E		14	1.8	4.Ec.R		11	39.5	3.Oc.R
	11	50.8	3.Ec.D		22	25.0	3.Ec.D	25	7	38.9	3.Sh.I
	14	38.3	3.Oc.R	15	1	9.0	3.Oc.R		8	20.2	3.Tr.I
6	6	58.1	4.Ec.D		20	51.9	4.Sh.I		10	2.7	3.Sh.E
	8	58.5	4.Ec.R		21	4.5	3.Sh.I		10	18.1	3.Tr.E
	10	30.3	3.Sh.I		21	53.2	3.Tr.I		10	55.8	4.Ec.D
	11	24.8	3.Tr.I		22	46.8	4.Sh.E		12	46.0	4.Ec.R
	12	58.1	3.Sh.E		23	30.4	3.Sh.E	26	6	18.4	3.Ec.D
	13	16.8	3.Tr.E		23	47.6	3.Tr.E		8	57.6	3.Oc.R
7	9	9.6	3.Ec.D	16	19	43.9	3.Ec.D		19	42.1	4.Sh.I
	11	56.4	3.Oc.R		22	27.2	3.Oc.R		21	31.0	4.Sh.E
	15	44.5	4.Sh.I	17	5	48.1	4.Ec.D	27	4	57.8	3.Sh.I
	17	43.6	4.Sh.E		7	42.8	4.Ec.R		5	37.4	3.Tr.I
8	7	49.1	3.Sh.I		18	23.4	3.Sh.I		7	21.2	3.Sh.E
	8	42.6	3.Tr.I		19	10.7	3.Tr.I		7	36.2	3.Tr.E
	10	16.6	3.Sh.E		20	48.9	3.Sh.E	28	3	37.3	3.Ec.D
	10	35.0	3.Tr.E		21	5.7	3.Tr.E		4	38.4	4.Ec.D
9	0	40.6	4.Ec.D	18	14	34.4	4.Sh.I		6	15.7	3.Oc.R
	2	39.6	4.Ec.R		16	27.8	4.Sh.E		6	27.1	4.Ec.R
	6	28.4	3.Ec.D		17	2.8	3.Ec.D	29	2	16.7	3.Sh.I
	9	14.6	3.Oc.R		19	45.3	3.Oc.R		2	54.7	3.Tr.I
10	5	7.9	3.Sh.I	19	15	42.2	3.Sh.I		4	39.7	3.Sh.E
	6	0.3	3.Tr.I		16	28.1	3.Tr.I		4	54.2	3.Tr.E
	7	35.0	3.Sh.E		18	7.3	3.Sh.E		13	24.7	4.Sh.I
	7	53.1	3.Tr.E		18	23.8	3.Tr.E		15	12.0	4.Sh.E
	9	26.9	4.Sh.I		23	30.6	4.Ec.D	30	0	56.2	3.Ec.D
	11	24.7	4.Sh.E	20	1	23.9	4.Ec.R		3	33.7	3.Oc.R
					14	21.7	3.Ec.D		22	21.1	4.Ec.D
					17	3.4	3.Oc.R		23	35.6	3.Sh.I
								31	0	8.1	4.Ec.R
									0	11.9	3.Tr.I
									1	58.2	3.Sh.E
									2	12.3	3.Tr.E
									22	15.2	3.Ec.D

Satellites of Saturn 2026

September

1	0	51.7	3.Oc.R	11	7	29.4	3.Sh.I	21	16	44.2	3.Ec.D
	7	7.4	4.Sh.I		7	54.3	3.Tr.I		19	9.2	3.Oc.R
	8	53.1	4.Sh.E		9	49.3	3.Sh.E		20	3.8	4.Ec.D
	20	54.6	3.Sh.I		10	0.3	3.Tr.E		21	41.3	4.Oc.R
									21	29.0	3.Tr.I
									23	16.7	3.Sh.E
									23	30.3	3.Tr.E
								2	16	3.8	4.Ec.D
									17	49.2	4.Ec.R
									19	34.1	3.Ec.D
									22	9.7	3.Oc.R
								3	18	13.5	3.Sh.I
									18	46.1	3.Tr.I
									20	35.2	3.Sh.E
									20	48.3	3.Tr.E
								4	0	50.1	4.Sh.I
									2	34.1	4.Sh.E
									16	53.1	3.Ec.D
									19	27.7	3.Oc.R
								5	9	46.5	4.Ec.D
									11	30.2	4.Ec.R
									15	32.5	3.Sh.I
									16	3.2	3.Tr.I
									17	53.7	3.Sh.E
									18	6.3	3.Tr.E
								6	14	12.1	3.Ec.D
									16	45.7	3.Oc.R
									18	32.9	4.Sh.I
									20	15.2	4.Sh.E
								7	12	51.4	3.Sh.I
									13	20.3	3.Tr.I
									15	12.2	3.Sh.E
									15	24.3	3.Tr.E
								8	3	29.3	4.Ec.D
									5	11.3	4.Ec.R
									11	31.0	3.Ec.D
									14	3.7	3.Oc.R
								9	10	10.4	3.Sh.I
									10	37.3	3.Tr.I
									12	15.6	4.Sh.I
									12	30.8	3.Sh.E
									12	42.3	3.Tr.E
									13	19.8	4.Tr.I
									13	48.5	4.Tr.E
									13	56.2	4.Sh.E
								10	8	50.0	3.Ec.D
									11	21.7	3.Oc.R
									21	12.1	4.Ec.D
									22	52.3	4.Ec.R
								12	5	58.5	4.Sh.I
									6	9.0	3.Ec.D
									6	52.4	4.Tr.I
									7	34.3	4.Tr.E
									7	37.2	4.Sh.E
									8	39.6	3.Oc.R
								13	4	48.4	3.Sh.I
									5	11.3	3.Tr.I
									7	7.8	3.Sh.E
									7	18.2	3.Tr.E
									14	55.0	4.Ec.D
									16	33.3	4.Ec.R
								14	3	28.1	3.Ec.D
									5	57.6	3.Oc.R
									23	41.3	4.Sh.I
								15	0	26.6	4.Tr.I
									1	18.2	4.Sh.E
									1	18.3	4.Tr.E
									2	7.4	3.Sh.I
									2	28.3	3.Tr.I
									4	26.3	3.Sh.E
									4	36.2	3.Tr.E
								16	0	47.1	3.Ec.D
									3	15.5	3.Oc.R
									8	37.9	4.Ec.D
									10	16.0	4.Oc.R
									23	26.4	3.Sh.I
									23	45.3	3.Tr.I
								17	1	44.9	3.Sh.E
									1	54.1	3.Tr.E
									17	24.3	4.Sh.I
									18	1.6	4.Tr.I
									18	59.3	4.Sh.E
									19	1.6	4.Tr.E
									22	6.1	3.Ec.D
								18	0	33.4	3.Oc.R
									20	45.5	3.Sh.I
									21	2.2	3.Tr.I
									23	3.4	3.Sh.E
									23	12.0	3.Tr.E
								19	2	20.8	4.Ec.D
									3	58.9	4.Oc.R
									19	25.2	3.Ec.D
									21	51.3	3.Oc.R
								20	11	7.2	4.Sh.I
									11	37.1	4.Tr.I
									12	40.3	4.Sh.E
									12	44.2	4.Tr.E
									18	4.5	3.Sh.I
									18	19.2	3.Tr.I
									20	22.0	3.Sh.E
									20	29.9	3.Tr.E
								22	15	23.6	3.Sh.I
									15	36.1	3.Tr.I
									17	40.6	3.Sh.E
									17	47.8	3.Tr.E
								23	4	50.2	4.Sh.I
									5	12.9	4.Tr.I
									6	21.3	4.Sh.E
									6	26.5	4.Tr.E
									14	3.3	3.Ec.D
									16	27.1	3.Oc.R
								24	12	42.6	3.Sh.I
									12	53.1	3.Tr.I
									13	46.8	4.Ec.D
									14	59.1	3.Sh.E
									15	5.7	3.Tr.E
									15	23.3	4.Oc.R
								25	11	22.4	3.Ec.D
									13	45.0	3.Oc.R
									22	33.3	4.Sh.I
									22	48.9	4.Tr.I
								26	0	2.2	4.Sh.E
									0	8.5	4.Tr.E
									10	1.7	3.Sh.I
									10	10.0	3.Tr.I
									12	17.7	3.Sh.E
									12	23.6	3.Tr.E
								27	7	29.9	4.Ec.D
									8	41.5	3.Ec.D
									9	5.1	4.Oc.R
									11	2.9	3.Oc.R
								28	7	20.8	3.Sh.I
									7	27.0	3.Tr.I
									9	36.3	3.Sh.E
									9	41.5	3.Tr.E
									16	16.4	4.Sh.I
									16	25.2	4.Tr.I
									17	43.2	4.Sh.E
									17	50.3	4.Tr.E
								29	6	0.6	3.Ec.D
									8	20.7	3.Oc.R
								30	1	13.0	4.Ec.D
									2	46.7	4.Oc.R
									4	39.9	3.Sh.I
									4	44.0	3.Tr.I
									6	54.9	3.Sh.E
									6	59.4	3.Tr.E

Satellites of Saturn 2026

October

1	3	19.7	3.Ec.D	11	1	31.6	4.Oc.R	21	1	16.0	3.Tr.E
	5	38.6	3.Oc.R		12	26.1	3.Tr.I		1	19.7	3.Sh.E
	9	59.6	4.Sh.I		12	34.8	3.Sh.I		21	30.7	3.Oc.D
	10	1.7	4.Tr.I		14	46.5	3.Sh.E		22	16.2	4.Oc.D
	11	24.2	4.Sh.E		14	46.6	3.Tr.E		23	59.4	3.Ec.R
	11	31.8	4.Tr.E	12	8	29.4	4.Tr.I	22	0	15.0	4.Oc.R
2	1	59.0	3.Sh.I		8	52.9	4.Sh.I		20	9.2	3.Tr.I
	2	0.9	3.Tr.I		10	7.8	4.Sh.E		20	30.2	3.Sh.I
	4	13.5	3.Sh.E		10	16.5	4.Tr.E		22	33.9	3.Tr.E
	4	17.2	3.Tr.E		11	4.8	3.Oc.D		22	38.4	3.Sh.E
	18	55.1	4.Oc.D		13	26.1	3.Ec.R	23	6	59.9	4.Tr.I
	20	28.2	4.Oc.R	13	9	43.2	3.Tr.I		7	47.5	4.Sh.I
3	0	38.8	3.Ec.D		9	54.0	3.Sh.I		8	50.7	4.Sh.E
	2	56.5	3.Oc.R		12	4.5	3.Tr.E		8	59.8	4.Tr.E
	23	17.9	3.Tr.I		12	5.1	3.Sh.E		18	48.0	3.Oc.D
	23	18.2	3.Sh.I		17	23.3	4.Oc.D		21	18.0	3.Ec.R
4	1	32.1	3.Sh.E		19	12.5	4.Oc.R	24	15	54.2	4.Oc.D
	1	35.1	3.Tr.E	14	8	21.9	3.Oc.D		17	26.5	3.Tr.I
	3	38.4	4.Tr.I		10	44.8	3.Ec.R		17	49.4	3.Sh.I
	3	42.8	4.Sh.I	15	2	6.8	4.Tr.I		17	55.7	4.Oc.R
	5	5.1	4.Sh.E		2	36.4	4.Sh.I		19	51.9	3.Tr.E
	5	13.2	4.Tr.E		3	48.6	4.Sh.E		19	57.0	3.Sh.E
	21	56.6	3.Oc.D		3	57.4	4.Tr.E	25	16	5.3	3.Oc.D
5	0	14.3	3.Oc.R		7	0.3	3.Tr.I		18	36.7	3.Ec.R
	12	31.9	4.Oc.D		7	13.2	3.Sh.I	26	0	38.0	4.Tr.I
	14	9.4	4.Oc.R		9	22.3	3.Tr.E		1	31.4	4.Sh.I
	20	34.9	3.Tr.I		9	23.8	3.Sh.E		2	31.3	4.Sh.E
	20	37.3	3.Sh.I	16	5	39.1	3.Oc.D		2	40.5	4.Tr.E
	22	50.7	3.Sh.E		8	3.4	3.Ec.R		14	43.8	3.Tr.I
	22	53.0	3.Tr.E		11	0.7	4.Oc.D		15	8.7	3.Sh.I
6	19	13.6	3.Oc.D		12	53.4	4.Oc.R		17	9.8	3.Tr.E
	21	15.2	4.Tr.I	17	4	17.5	3.Tr.I		17	15.7	3.Sh.E
	21	26.1	4.Sh.I		4	32.4	3.Sh.I	27	9	32.3	4.Oc.D
	21	32.2	3.Oc.R		6	40.2	3.Tr.E		11	36.4	4.Oc.R
	22	46.0	4.Sh.E		6	42.4	3.Sh.E		13	22.6	3.Oc.D
	22	54.4	4.Tr.E		19	44.3	4.Tr.I		15	55.4	3.Ec.R
7	17	52.0	3.Tr.I		20	20.0	4.Sh.I	28	12	1.2	3.Tr.I
	17	56.5	3.Sh.I		21	29.3	4.Sh.E		12	28.0	3.Sh.I
	20	9.3	3.Sh.E		21	38.2	4.Tr.E		14	27.8	3.Tr.E
	20	10.8	3.Tr.E	18	2	56.2	3.Oc.D		14	34.4	3.Sh.E
8	6	8.9	4.Oc.D		5	22.1	3.Ec.R		18	16.2	4.Tr.I
	7	50.6	4.Oc.R	19	1	34.7	3.Tr.I		19	15.4	4.Sh.I
	16	30.7	3.Oc.D		1	51.7	3.Sh.I		20	11.8	4.Sh.E
	18	50.1	3.Oc.R		3	58.1	3.Tr.E		20	21.2	4.Tr.E
9	14	52.3	4.Tr.I		4	1.1	3.Sh.E	29	10	40.1	3.Oc.D
	15	9.0	3.Tr.I		4	38.4	4.Oc.D		13	14.1	3.Ec.R
	15	9.5	4.Sh.I		6	34.2	4.Oc.R	30	3	10.6	4.Oc.D
	15	15.6	3.Sh.I	20	0	13.4	3.Oc.D		5	17.1	4.Oc.R
	16	26.9	4.Sh.E		2	40.7	3.Ec.R		9	18.7	3.Tr.I
	16	35.5	4.Tr.E		13	22.0	4.Tr.I		9	47.3	3.Sh.I
	17	27.9	3.Sh.E		14	3.7	4.Sh.I		11	45.8	3.Tr.E
	17	28.7	3.Tr.E		15	10.1	4.Sh.E		11	53.0	3.Sh.E
10	13	47.7	3.Oc.D		15	19.0	4.Tr.E	31	7	57.5	3.Oc.D
	16	7.9	3.Oc.R		22	51.9	3.Tr.I		10	32.8	3.Ec.R
	23	46.0	4.Oc.D		23	10.9	3.Sh.I		11	54.7	4.Tr.I
									12	59.6	4.Sh.I
									13	52.1	4.Sh.E
									14	1.9	4.Tr.E

Satellites of Saturn 2026

November

1	6	36.2	3.Tr.I	11	10	30.3	4.Tr.I	21	0	24.3	4.Oc.D
	7	6.6	3.Sh.I		11	59.0	4.Sh.I		2	12.9	3.Oc.D
	9	3.8	3.Tr.E		12	31.3	4.Sh.E		2	43.1	4.Oc.R
	9	11.7	3.Sh.E		12	44.7	4.Tr.E		4	58.6	3.Ec.R
	20	49.2	4.Oc.D		15	43.3	3.Oc.D	22	0	52.0	3.Tr.I
	22	57.8	4.Oc.R		18	25.0	3.Ec.R		1	39.7	3.Sh.I
2	5	15.0	3.Oc.D	12	14	22.2	3.Tr.I		3	23.2	3.Tr.E
	7	51.4	3.Ec.R		15	2.7	3.Sh.I		3	37.5	3.Sh.E
3	3	53.7	3.Tr.I		16	52.2	3.Tr.E		9	9.2	4.Tr.I
	4	25.9	3.Sh.I		17	3.9	3.Sh.E		11	28.0	4.Tr.E
	5	33.3	4.Tr.I		19	25.2	4.Oc.D		23	31.0	3.Oc.D
	6	21.8	3.Tr.E		21	40.6	4.Oc.R	23	2	17.3	3.Ec.R
	6	30.4	3.Sh.E	13	13	1.1	3.Oc.D		18	4.4	4.Oc.D
	6	44.0	4.Sh.I		15	43.7	3.Ec.R		20	24.0	4.Oc.R
	7	32.3	4.Sh.E	14	4	9.7	4.Tr.I		22	10.2	3.Tr.I
	7	42.5	4.Tr.E		5	45.4	4.Sh.I		22	59.1	3.Sh.I
4	2	32.6	3.Oc.D		6	9.7	4.Sh.E	24	0	41.5	3.Tr.E
	5	10.1	3.Ec.R		6	25.5	4.Tr.E		0	56.2	3.Sh.E
	14	27.9	4.Oc.D		11	40.0	3.Tr.I		20	49.2	3.Oc.D
	16	38.4	4.Oc.R		12	22.1	3.Sh.I		23	36.0	3.Ec.R
5	1	11.3	3.Tr.I		14	10.3	3.Tr.E	25	2	49.5	4.Tr.I
	1	45.2	3.Sh.I		14	22.6	3.Sh.E		5	9.0	4.Tr.E
	3	39.8	3.Tr.E	15	10	19.0	3.Oc.D		19	28.4	3.Tr.I
	3	49.1	3.Sh.E		13	2.4	3.Ec.R		20	18.6	3.Sh.I
	23	12.1	4.Tr.I		13	4.7	4.Oc.D		21	59.8	3.Tr.E
	23	50.2	3.Oc.D		15	21.4	4.Oc.R		22	14.9	3.Sh.E
6	0	28.6	4.Sh.I	16	8	58.0	3.Tr.I	26	11	44.8	4.Oc.D
	1	12.3	4.Sh.E		9	41.5	3.Sh.I		14	5.0	4.Oc.R
	1	23.2	4.Tr.E		11	28.5	3.Tr.E		18	7.4	3.Oc.D
	2	28.8	3.Ec.R		11	41.3	3.Sh.E		20	54.8	3.Ec.R
	22	28.9	3.Tr.I		21	49.4	4.Tr.I	27	16	46.7	3.Tr.I
	23	4.6	3.Sh.I		23	34.9	4.Sh.I		17	38.0	3.Sh.I
7	0	57.9	3.Tr.E		23	45.3	4.Sh.E		19	18.2	3.Tr.E
	1	7.8	3.Sh.E	17	0	6.3	4.Tr.E		19	33.6	3.Sh.E
	8	6.8	4.Oc.D		7	36.9	3.Oc.D		20	29.9	4.Tr.I
	10	19.1	4.Oc.R		10	21.1	3.Ec.R		22	50.0	4.Tr.E
	21	7.8	3.Oc.D	18	6	15.9	3.Tr.I	28	15	25.7	3.Oc.D
	23	47.5	3.Ec.R		6	44.4	4.Oc.D		18	13.5	3.Ec.R
8	16	51.1	4.Tr.I		7	0.9	3.Sh.I	29	5	25.3	4.Oc.D
	18	13.6	4.Sh.I		8	46.7	3.Tr.E		7	46.0	4.Oc.R

	18	52.0	4.Sh.E		9	0.0	3.Sh.E		14	5.0	3.Tr.I
	19	4.0	4.Tr.E		9	2.2	4.Oc.R		14	57.5	3.Sh.I
	19	46.6	3.Tr.I	19	4	54.9	3.Oc.D		16	36.6	3.Tr.E
	20	23.9	3.Sh.I		7	39.8	3.Ec.R		16	52.3	3.Sh.E
	22	15.9	3.Tr.E		15	29.2	4.Tr.I	30	12	44.0	3.Oc.D
	22	26.5	3.Sh.E		17	47.1	4.Tr.E		14	10.6	4.Tr.I
9	18	25.5	3.Oc.D	20	3	34.0	3.Tr.I		15	32.2	3.Ec.R
	21	6.3	3.Ec.R		4	20.3	3.Sh.I		16	31.0	4.Tr.E
10	1	45.9	4.Oc.D		6	4.9	3.Tr.E				
	3	59.9	4.Oc.R		6	18.7	3.Sh.E				
	17	4.4	3.Tr.I								
	17	43.3	3.Sh.I								
	19	34.0	3.Tr.E								
	19	45.2	3.Sh.E								

Satellites of Saturn 2026
December

1	11	23.4	3.Tr.I	11	0	27.5	3.Tr.E	21	2	57.5	4.Oc.D
	12	17.0	3.Sh.I		0	44.7	3.Sh.E		5	16.5	4.Oc.R
	13	55.0	3.Tr.E		12	55.4	4.Tr.I		7	10.0	3.Oc.D
	14	11.1	3.Sh.E		15	15.9	4.Tr.E		9	58.2	3.Ec.R
	23	6.1	4.Oc.D		20	35.4	3.Oc.D	22	5	49.8	3.Tr.I
2	1	27.1	4.Oc.R		23	24.6	3.Ec.R		6	51.7	3.Sh.I
	10	2.4	3.Oc.D	12	19	15.0	3.Tr.I		8	19.5	3.Tr.E
	12	50.9	3.Ec.R		20	14.0	3.Sh.I		8	37.0	3.Sh.E
3	7	51.5	4.Tr.I		21	46.1	3.Tr.E		11	43.8	4.Tr.I
	8	41.8	3.Tr.I		21	51.3	4.Oc.D		14	1.8	4.Tr.E
	9	36.5	3.Sh.I		22	3.4	3.Sh.E	23	4	29.1	3.Oc.D
	10	12.2	4.Tr.E	13	0	12.1	4.Oc.R		7	16.9	3.Ec.R
	11	13.4	3.Tr.E		17	54.2	3.Oc.D		20	40.1	4.Oc.D
	11	29.8	3.Sh.E		20	43.3	3.Ec.R		22	58.1	4.Oc.R
4	7	20.9	3.Oc.D	14	6	37.2	4.Tr.I	24	3	8.9	3.Tr.I
	10	9.7	3.Ec.R		8	57.3	4.Tr.E		4	11.2	3.Sh.I
	16	47.1	4.Oc.D		16	33.9	3.Tr.I		5	38.2	3.Tr.E
	19	8.3	4.Oc.R		17	33.5	3.Sh.I		5	55.7	3.Sh.E
5	6	0.4	3.Tr.I		19	4.7	3.Tr.E	25	1	48.2	3.Oc.D
	6	55.9	3.Sh.I		19	22.1	3.Sh.E		4	35.6	3.Ec.R
	8	31.9	3.Tr.E	15	15	13.0	3.Oc.D		5	26.4	4.Tr.I
	8	48.5	3.Sh.E		15	33.2	4.Oc.D		7	43.4	4.Tr.E
6	1	32.6	4.Tr.I		17	53.6	4.Oc.R	26	0	28.1	3.Tr.I
	3	53.4	4.Tr.E		18	2.0	3.Ec.R		1	30.8	3.Sh.I
	4	39.4	3.Oc.D	16	13	52.7	3.Tr.I		2	57.0	3.Tr.E
	7	28.4	3.Ec.R		14	53.0	3.Sh.I		3	14.4	3.Sh.E
7	3	18.9	3.Tr.I		16	23.4	3.Tr.E		14	22.8	4.Oc.D
	4	15.4	3.Sh.I		16	40.9	3.Sh.E		16	39.7	4.Oc.R
	5	50.4	3.Tr.E	17	0	19.2	4.Tr.I		23	7.4	3.Oc.D
	6	7.2	3.Sh.E		2	38.7	4.Tr.E	27	1	54.3	3.Ec.R
	10	28.3	4.Oc.D		12	32.0	3.Oc.D		21	47.3	3.Tr.I
	11	19.0	5.Oc.D		15	20.8	3.Ec.R		22	50.4	3.Sh.I
	11	26.3	5.Oc.R	18	9	15.3	4.Oc.D		23	9.2	4.Tr.I
	12	49.5	4.Oc.R		11	11.7	3.Tr.I	28	0	15.8	3.Tr.E
8	1	58.0	3.Oc.D		11	35.0	4.Oc.R		0	33.1	3.Sh.E
	4	47.1	3.Ec.R		12	12.6	3.Sh.I		1	25.0	4.Tr.E

Satellites of Saturn 2026
December

	19	13.9	4.Tr.I		13	42.0	3.Tr.E		20	26.7	3.Oc.D
	21	34.6	4.Tr.E		13	59.6	3.Sh.E		23	13.0	3.Ec.R
9	0	37.6	3.Tr.I	19	9	50.9	3.Oc.D	29	8	5.7	4.Oc.D
	1	34.9	3.Sh.I		12	39.5	3.Ec.R		10	21.4	4.Oc.R
	3	8.9	3.Tr.E		18	1.4	4.Tr.I		19	6.6	3.Tr.I
	3	26.0	3.Sh.E		20	20.2	4.Tr.E		20	10.0	3.Sh.I
	23	16.7	3.Oc.D	20	8	30.7	3.Tr.I		21	34.7	3.Tr.E
10	2	5.9	3.Ec.R		9	32.1	3.Sh.I		21	51.8	3.Sh.E
	4	9.7	4.Oc.D		11	0.7	3.Tr.E	30	16	52.3	4.Tr.I
	6	30.8	4.Oc.R		11	18.3	3.Sh.E		17	46.1	3.Oc.D
	21	56.3	3.Tr.I						19	6.7	4.Tr.E
	22	54.5	3.Sh.I						20	31.7	3.Ec.R
								31	16	26.0	3.Tr.I
									17	29.6	3.Sh.I
									18	53.5	3.Tr.E
									19	10.5	3.Sh.E

Mutual Eclipses and Occultations of Planetary Satellites 2026

Jupiter (for Miami, FL):

(For help, look at the end of this part)

Year	**M**	**D**	**h**	**m**	**s**	**Event Type**	**Ph**	**Dur**	**dMag**	**%Ill**	**Sep**	**PA**	**MinD**
Year	M	D	h	m	s	Event Type	Ph	Dur	dMag	%Ill	Sep	PA	MinD
2026	5	11	3	12	54*	(I) ecl (II)	P	5986	0.1	93.7	97.1	99	0.770
2026	5	11	3	12	54*	(I) ecl (II)	P	931	0.1	93.7	97.1	99	0.770
2026	5	14	13	38	30	(I) ecl (II)	P	2370	1.2	34.4	66.4	99	0.302
2026	5	14	18	12	15	(I) ecl (II)	P	2000	2.0	15.5	110.7	100	0.175
2026	5	18	1	3	31	(I) ecl (II)	P	1776	1.0	40.0	44.2	98	0.339
2026	5	18	8	6	5	(I) ecl (II)	P	1242	1.0	39.1	114.0	100	0.331
2026	5	21	17	2	17*	(I) occ (II)	P	1698	0.0	99.7	71.7	99	0.778
2026	5	21	17	2	17*	(I) occ (II)	P	1573	0.0	99.7	71.7	99	0.778
2026	5	21	21	41	48	(I) ecl (II)	P	940	0.6	55.4	114.7	100	0.441
2026	5	24	17	16	56	(I) ecl (II)	E	612	0.0	99.0	74.3	283	0.869
2026	5	25	8	15	55	(I) occ (II)	P	1238	0.1	88.8	89.1	100	0.533
2026	5	25	11	11	33	(I) ecl (II)	P	754	0.4	68.3	114.6	100	0.536
2026	5	28	7	7	39	(I) ecl (II)	P	1489	0.2	80.7	69.2	283	0.637
2026	5	28	11	50	12	(I) ecl (II)	P	2416	2.5	10.0	18.0	288	0.141
2026	5	28	22	12	13	(I) occ (II)	P	521	0.0	97.5	93.5	100	0.695

Mutual Eclipses and Occultations of Planetary Satellites 2026
Jupiter (for Miami, FL):
(For help, look at the end of this part)

2026	5	29	0	35	32	(I)	ecl	(II)	P	628	0.3	77.8	113.8	101	0.611
2026	5	31	22	13	4*	(I)	ecl	(II)	P	17607	0.1	90.4	51.2	284	0.730
2026	6	1	13	57	27	(I)	ecl	(II)	P	529	0.2	85.3	112.6	101	0.679
2026	6	4	13	41	15	(I)	occ	(II)	P	1885	0.6	60.2	28.5	286	0.138
2026	6	5	3	16	13	(I)	ecl	(II)	P	454	0.1	90.7	111.2	101	0.735
2026	6	7	22	18	5	(I)	occ	(II)	P	648	0.0	99.9	78.3	283	0.764
2026	6	8	0	31	26	(I)	occ	(II)	P	3602	0.3	78.7	56.0	284	0.374
2026	6	8	16	34	3	(I)	ecl	(II)	E	390	0.1	94.7	109.6	102	0.786
2026	6	12	5	49	48	(I)	ecl	(II)	E	339	0.0	97.0	107.8	102	0.827
2026	6	15	19	5	4	(I)	ecl	(II)	E	294	0.0	98.4	105.9	102	0.864
2026	6	19	8	18	47	(I)	ecl	(II)	E	258	0.0	99.1	103.9	103	0.894
2026	6	22	21	32	16	(I)	ecl	(II)	E	226	0.0	99.5	101.8	103	0.920
2026	6	26	10	44	33	(I)	ecl	(II)	E	201	0.0	99.7	99.7	103	0.940
2026	6	29	23	56	44	(I)	ecl	(II)	E	181	0.0	99.8	97.5	103	0.956
2026	7	3	13	7	55	(I)	ecl	(II)	E	167	0.0	99.9	95.3	104	0.967
2026	7	7	2	19	4	(I)	ecl	(II)	E	157	0.0	99.9	93.0	104	0.975
2026	7	10	15	29	25	(I)	ecl	(II)	E	153	0.0	99.9	90.7	104	0.977

Mutual Eclipses and Occultations of Planetary Satellites 2026

Jupiter (for Miami, FL):

(For help, look at the end of this part)

2026	7	14	4	39	45	(I) ecl (II)	E	152	0.0	99.9	88.3	105	0.977
2026	7	17	17	49	24	(I) ecl (II)	E	155	0.0	99.9	85.9	105	0.973
2026	7	21	6	59	3	(I) ecl (II)	E	160	0.0	99.8	83.4	105	0.965
2026	7	24	20	8	8	(I) ecl (II)	E	167	0.0	99.7	81.0	106	0.954
2026	7	28	9	17	12	(I) ecl (II)	E	175	0.0	99.5	78.5	106	0.940
2026	7	31	22	25	49	(I) ecl (II)	E	184	0.0	99.3	76.0	106	0.922
2026	8	4	11	34	25	(I) ecl (II)	E	193	0.0	98.8	73.5	106	0.902
2026	8	8	0	42	36	(I) ecl (II)	E	202	0.0	98.2	70.9	107	0.878
2026	8	11	13	50	46	(I) ecl (II)	E	211	0.0	97.3	68.3	107	0.852
2026	8	15	2	58	36	(I) ecl (II)	E	220	0.0	96.0	65.8	107	0.823
2026	8	18	16	6	24	(I) ecl (II)	E	228	0.1	94.3	63.1	108	0.791
2026	8	18	16	36	37	(I) occ (II)	P	92	0.0	99.1	68.0	108	0.700
2026	8	22	5	13	54	(I) ecl (II)	E	236	0.1	92.1	60.5	108	0.757
2026	8	22	5	49	10	(I) occ (II)	P	149	0.0	95.6	66.3	108	0.618
2026	8	23	11	58	6	(II) ecl (I)	E	82	0.0	100.0	47.4	107	1.060
2026	8	25	18	21	23	(I) ecl (II)	E	244	0.1	89.2	57.8	108	0.720
2026	8	25	19	1	34	(I) occ (II)	P	184	0.1	90.6	64.5	108	0.530

Mutual Eclipses and Occultations of Planetary Satellites 2026
Jupiter (for Miami, FL):
(For help, look at the end of this part)

2026	8	27	1	4	42	(II) ecl (I)	E	138	0.0	99.8	48.7	108	0.976
2026	8	27	1	45	57	(II) occ (I)	P	140	0.0	95.7	56.6	108	0.614
2026	8	29	7	28	36	(I) ecl (II)	E	250	0.2	85.7	55.2	109	0.681
2026	8	29	8	13	39	(I) occ (II)	P	208	0.2	84.2	62.7	109	0.437
2026	8	30	14	11	22	(II) ecl (I)	E	176	0.0	98.7	50.2	108	0.893
2026	8	30	14	57	39	(II) occ (I)	P	193	0.1	87.9	58.9	108	0.474
2026	9	1	20	35	47	(I) ecl (II)	P	257	0.2	81.4	52.5	109	0.640
2026	9	1	21	25	33	(I) occ (II)	P	226	0.3	76.8	60.9	109	0.340
2026	9	3	3	18	5	(II) ecl (I)	E	206	0.0	96.4	51.6	108	0.810
2026	9	3	4	9	21	(II) occ (I)	P	227	0.3	78.5	61.1	108	0.336
2026	9	5	9	42	46	(I) ecl (II)	P	263	0.3	76.6	49.8	109	0.596
2026	9	5	10	37	9	(I) occ (II)	P	236	0.4	68.5	59.1	109	0.237
2026	9	6	16	24	54	(II) ecl (I)	E	231	0.1	92.5	53.1	108	0.728
2026	9	6	17	21	7	(II) occ (I)	P	248	0.4	68.4	63.4	109	0.198
2026	9	8	22	49	40	(I) ecl (II)	P	268	0.4	71.1	47.1	110	0.550
2026	9	8	23	48	33	(I) occ (II)	P	242	0.6	59.9	57.3	109	0.130
2026	9	9	2	34	55	(III) occ (IV)	P	479	0.0	96.7	207.4	289	0.891

Mutual Eclipses and Occultations of Planetary Satellites 2026
Jupiter (for Miami, FL):
(For help, look at the end of this part)

2026	9	9	19	59	48	(I) ecl (IV)	E	803	0.0	99.9	102.1	290	1.333
2026	9	10	5	31	44	(II) ecl (I)	P	252	0.2	86.9	54.7	109	0.646
2026	9	10	6	32	49	(II) occ (I)	P	261	0.6	59.4	65.7	109	0.062
2026	9	12	11	56	25	(I) ecl (II)	P	272	0.5	65.0	44.4	110	0.502
2026	9	12	12	59	40	(I) occ (II)	T	242	0.6	55.4	55.5	110	0.018
2026	9	13	18	38	43	(II) ecl (I)	P	271	0.2	80.1	56.3	109	0.565
2026	9	13	19	44	37	(II) occ (I)	P	266	0.6	59.8	68.0	109	0.073
2026	9	15	12	47	24	(III) occ (II)	P	192	0.0	96.4	89.2	289	0.821
2026	9	16	1	3	5	(I) ecl (II)	P	276	0.6	58.4	41.7	110	0.452
2026	9	16	2	10	33	(I) occ (II)	P	238	0.6	57.4	53.6	110	0.098
2026	9	17	7	45	42	(II) ecl (I)	P	287	0.3	72.6	57.9	109	0.485
2026	9	17	8	56	19	(II) occ (I)	P	263	0.4	68.8	70.3	109	0.206
2026	9	19	6	24	15	(IV) occ (II)	P	342	0.8	47.0	47.3	289	0.291
2026	9	19	14	9	38	(I) ecl (II)	P	280	0.7	51.3	38.9	111	0.401
2026	9	19	15	21	11	(I) occ (II)	P	227	0.4	66.7	51.8	110	0.219
2026	9	20	20	52	52	(II) ecl (I)	P	302	0.5	64.6	59.6	110	0.405
2026	9	20	22	8	8	(II) occ (I)	P	251	0.3	78.1	72.6	110	0.338

Mutual Eclipses and Occultations of Planetary Satellites 2026
Jupiter (for Miami, FL):
(For help, look at the end of this part)

2026	9	22	16	18	43	(III) occ (II)	P	339	0.4	71.5	83.2	289	0.391
2026	9	23	3	16	6	(I) ecl (II)	P	283	0.9	43.9	36.2	111	0.347
2026	9	23	4	31	34	(I) occ (II)	P	210	0.3	76.3	49.9	111	0.343
2026	9	24	10	0	2	(II) ecl (I)	P	315	0.6	56.4	61.4	110	0.327
2026	9	24	11	19	50	(II) occ (I)	P	228	0.2	86.5	74.9	110	0.467
2026	9	25	6	37	51	(II) occ (III)	P	288	0.1	95.1	122.4	291	0.747
2026	9	26	16	22	26	(I) ecl (II)	P	285	1.1	36.1	33.5	111	0.292
2026	9	26	17	41	40	(I) occ (II)	P	185	0.2	85.4	48.0	111	0.472
2026	9	27	22	26	44	(II) occ (IV)	A	408	0.2	83.2	96.8	110	0.158
2026	9	27	23	7	25	(II) ecl (I)	A	326	0.8	48.3	63.2	110	0.249
2026	9	28	0	31	42	(II) occ (I)	P	189	0.1	93.5	77.2	110	0.595
2026	9	29	19	48	7	(III) occ (II)	T	363	0.5	64.8	77.0	290	0.054
2026	9	30	5	28	43	(I) ecl (II)	P	286	1.4	28.4	30.7	112	0.235
2026	9	30	6	51	31	(I) occ (II)	P	147	0.1	93.3	46.1	111	0.604
2026	10	1	12	14	47	(II) ecl (I)	A	336	1.0	41.2	65.1	110	0.172
2026	10	1	13	43	23	(II) occ (I)	P	122	0.0	98.6	79.5	110	0.720
2026	10	2	10	13	47	(II) occ (III)	P	419	0.2	84.1	129.7	291	0.464

Mutual Eclipses and Occultations of Planetary Satellites 2026

Jupiter (for Miami, FL):

(For help, look at the end of this part)

2026	10	2	14	14	28	(I) occ (III)	P	266	0.0	98.9	97.3	291	0.960
2026	10	3	12	23	59	(I) occ (III)	P	750	0.2	85.7	98.9	110	0.563
2026	10	3	18	34	54	(I) ecl (II)	P	287	1.7	21.4	28.0	112	0.176
2026	10	3	20	1	6	(I) occ (II)	P	81	0.0	99.0	44.2	112	0.740
2026	10	4	1	27	50	(IV) ecl (III)	E	839	0.1	90.3	193.5	110	1.072
2026	10	4	10	51	47	(IV) ecl (II)	P	1192	0.6	55.6	153.6	111	0.585
2026	10	5	1	22	26	(II) ecl (I)	A	345	1.1	35.8	67.1	110	0.096
2026	10	5	5	16	56	(IV) occ (I)	P	485	0.2	82.5	96.2	110	0.680
2026	10	5	16	10	27	(IV) occ (I)	P	737	0.3	76.7	21.8	111	0.612
2026	10	6	7	42	59	(IV) occ (I)	T	491	1.1	34.9	86.0	291	0.056
2026	10	6	15	20	25	(IV) occ (II)	P	451	0.5	63.9	137.2	290	0.466
2026	10	6	20	15	2	(III) ecl (II)	E	87	0.0	100.0	100.1	290	1.427
2026	10	6	23	15	2	(III) occ (II)	P	305	0.3	78.1	70.7	290	0.512
2026	10	7	7	41	0	(I) ecl (II)	A	287	2.0	15.7	25.2	113	0.116
2026	10	8	14	30	3	(II) ecl (I)	A	352	1.2	33.0	69.1	111	0.021
2026	10	9	13	50	15	(II) occ (III)	A	490	0.3	77.2	137.0	291	0.211
2026	10	9	18	42	22	(I) occ (III)	P	1120	0.1	88.6	97.3	291	0.644

Mutual Eclipses and Occultations of Planetary Satellites 2026

Jupiter (for Miami, FL):

(For help, look at the end of this part)

2026	10	10	16	16	55	(I) occ (III)	P	564	0.3	75.8	96.9	111	0.333
2026	10	10	20	47	2	(I) ecl (II)	A	286	2.3	12.1	22.5	114	0.054
2026	10	12	3	38	0	(II) ecl (I)	A	359	1.2	33.6	71.2	111	0.053
2026	10	12	23	6	20	(II) ecl (IV)	E	684	0.4	67.2	192.4	290	0.187
2026	10	13	3	16	56	(I) ecl (IV)	E	754	0.1	90.0	165.8	290	0.854
2026	10	13	14	16	9	(I) ecl (IV)	A	1139	0.4	66.2	92.8	290	0.453
2026	10	13	23	8	9	(III) occ (IV)	P	418	0.1	91.5	31.7	289	0.715
2026	10	13	23	27	48	(III) ecl (II)	E	269	0.0	98.5	97.0	290	1.199
2026	10	14	2	39	36	(III) occ (II)	P	78	0.0	99.7	64.3	290	0.979
2026	10	14	9	52	58	(I) ecl (II)	A	284	2.4	11.2	19.8	115	0.009
2026	10	14	10	41	48	(I) occ (IV)	P	259	0.1	94.5	48.8	112	0.688
2026	10	14	15	20	17	(II) occ (IV)	P	1745	0.1	88.7	80.9	111	0.433
2026	10	15	2	33	16	(II) occ (IV)	A	1578	0.2	83.2	156.5	111	0.156
2026	10	15	16	45	56	(II) ecl (I)	A	363	1.1	37.2	73.4	111	0.125
2026	10	16	17	26	36	(II) occ (III)	A	532	0.3	77.2	144.3	291	0.012
2026	10	17	19	38	51	(I) occ (III)	A	480	0.4	71.4	90.8	111	0.048
2026	10	19	5	54	14	(II) ecl (I)	A	367	0.9	42.8	75.7	111	0.197

Mutual Eclipses and Occultations of Planetary Satellites 2026
Jupiter (for Miami, FL):
(For help, look at the end of this part)

2026	10	20	20	46	4	(III) occ (I)	T	316	0.6	59.7	30.2	111	0.092
2026	10	21	2	40	9	(III) ecl (II)	E	351	0.1	88.7	93.6	290	0.968
2026	10	21	15	58	15	(IV) ecl (II)	A	586	1.8	19.6	60.1	112	0.084
2026	10	22	9	20	15	(IV) ecl (I)	E	215	0.0	99.9	55.9	291	1.450
2026	10	22	19	2	32	(II) ecl (I)	P	369	0.8	49.8	78.0	111	0.266
2026	10	23	16	42	58	(IV) occ (III)	P	622	0.7	53.9	183.3	291	0.306
2026	10	23	17	15	7	(II) ecl (III)	E	271	0.0	99.9	179.7	291	1.239
2026	10	23	21	3	27	(II) occ (III)	A	557	0.3	77.2	151.6	291	0.199
2026	10	24	22	46	28	(I) occ (III)	P	404	0.3	73.3	82.8	111	0.276
2026	10	26	8	11	16	(II) ecl (I)	P	370	0.6	57.0	80.5	111	0.335
2026	10	27	23	36	1	(III) occ (I)	P	319	0.5	61.7	43.5	112	0.263
2026	10	28	5	52	6	(III) ecl (II)	E	401	0.5	65.9	89.7	290	0.732
2026	10	29	2	53	3	(III) ecl (IV)	A	1038	1.5	25.7	294.8	291	0.027
2026	10	29	21	20	0	(II) ecl (I)	P	370	0.5	64.1	82.9	112	0.403
2026	10	30	7	35	31	(II) ecl (IV)	E	540	0.3	72.7	110.1	290	0.315
2026	10	30	20	39	0	(II) ecl (III)	E	384	0.0	99.2	188.3	292	1.110
2026	10	31	0	40	19	(II) occ (III)	P	575	0.3	79.0	158.7	292	0.349

Mutual Eclipses and Occultations of Planetary Satellites 2026

Jupiter (for Miami, FL):

(For help, look at the end of this part)

2026	11	1	1	44	51	(I) occ (III)	P	314	0.2	86.6	73.5	112	0.628
2026	11	2	10	29	17	(II) ecl (I)	P	367	0.4	70.9	85.5	112	0.469
2026	11	4	2	26	12	(III) occ (I)	P	292	0.3	79.1	56.9	112	0.595
2026	11	4	9	4	1	(III) ecl (II)	P	432	1.1	35.4	85.4	290	0.495
2026	11	5	23	38	32	(II) ecl (I)	P	363	0.3	77.2	88.2	112	0.533
2026	11	7	0	4	58	(II) ecl (III)	E	471	0.0	97.5	196.7	292	0.999
2026	11	7	4	17	55	(II) occ (III)	P	598	0.2	82.4	165.5	292	0.457
2026	11	7	14	7	51	(IV) ecl (I)	A	508	1.1	36.0	39.6	112	0.345
2026	11	7	19	7	4	(IV) ecl (III)	E	524	0.0	97.9	30.6	291	1.446
2026	11	8	1	2	2	(IV) ecl (II)	E	514	0.7	51.7	55.5	290	0.510
2026	11	8	1	37	52	(I) ecl (III)	E	180	0.0	100.0	34.1	113	1.351
2026	11	8	4	36	48	(I) occ (III)	P	172	0.0	97.8	63.3	112	0.995
2026	11	9	12	48	27	(II) ecl (I)	P	356	0.2	83.0	90.9	112	0.597
2026	11	11	5	16	35	(III) occ (I)	P	230	0.1	92.8	70.1	112	0.894
2026	11	11	12	15	21	(III) ecl (II)	P	448	2.3	12.0	80.5	290	0.256
2026	11	13	1	58	23	(II) ecl (I)	P	346	0.1	88.0	93.7	112	0.658
2026	11	14	3	33	31	(II) ecl (III)	E	547	0.1	95.1	204.6	292	0.909

Mutual Eclipses and Occultations of Planetary Satellites 2026

Jupiter (for Miami, FL):

(For help, look at the end of this part)

2026	11	14	7	56	50	(II) occ (III)	P	638	0.2	84.2	172.0	292	0.520
2026	11	15	4	29	1	(I) ecl (III)	E	251	0.0	99.4	23.0	114	1.229
2026	11	15	16	36	29	(I) ecl (IV)	A	693	0.6	58.5	184.1	291	0.250
2026	11	16	7	57	9	(I) ecl (IV)	A	1180	0.6	55.0	71.4	289	0.259
2026	11	16	15	9	9	(II) ecl (I)	P	333	0.1	92.4	96.6	112	0.718
2026	11	17	10	48	1	(III) ecl (IV)	E	125	0.0	100.0	132.7	113	1.828
2026	11	18	5	9	16	(III) ecl (I)	E	140	0.0	100.0	43.4	113	1.393
2026	11	18	8	8	16	(III) occ (I)	P	78	0.0	99.8	82.9	112	1.151
2026	11	18	15	26	32	(III) ecl (II)	A	452	4.1	2.3	74.8	290	0.016
2026	11	20	4	19	56	(II) ecl (I)	E	315	0.0	95.8	99.4	112	0.777
2026	11	21	7	5	36	(II) ecl (III)	P	620	0.1	92.6	212.0	292	0.840
2026	11	21	11	38	18	(II) occ (III)	P	712	0.2	84.3	177.9	292	0.533
2026	11	23	6	28	53	(IV) ecl (III)	E	832	0.1	93.0	221.7	112	1.141
2026	11	23	17	31	44	(II) ecl (I)	E	290	0.0	98.1	102.4	112	0.834
2026	11	24	23	15	34	(IV) ecl (I)	A	518	1.7	21.9	76.8	292	0.107
2026	11	25	7	56	57	(III) ecl (I)	E	270	0.0	97.9	58.0	113	1.183
2026	11	25	9	27	50	(IV) ecl (II)	E	639	0.7	51.4	158.3	292	0.527

Mutual Eclipses and Occultations of Planetary Satellites 2026
Jupiter (for Miami, FL):
(For help, look at the end of this part)

2026	11	25	18	37	9	(III) ecl (II)	P	444	2.5	10.0	68.5	290	0.223
2026	11	27	6	43	39	(II) ecl (I)	E	254	0.0	99.4	105.3	112	0.889
2026	11	28	10	42	47	(II) ecl (III)	P	693	0.1	90.8	218.7	292	0.797
2026	11	28	15	24	38	(II) occ (III)	P	837	0.2	82.3	182.9	292	0.487
2026	11	30	19	56	51	(II) ecl (I)	E	200	0.0	99.9	108.2	112	0.943
2026	12	2	0	5	34	(II) ecl (IV)	E	342	0.0	100.0	266.2	291	1.380
2026	12	2	10	47	58	(III) ecl (I)	E	366	0.1	89.0	73.0	113	0.980
2026	12	2	21	47	29	(III) ecl (II)	P	425	1.2	31.9	61.3	290	0.461
2026	12	3	22	28	2	(II) ecl (IV)	E	1184	0.5	63.4	93.4	114	0.121
2026	12	4	9	10	20	(II) ecl (I)	E	92	0.0	100.0	111.1	112	0.995
2026	12	5	14	25	51	(II) ecl (III)	P	773	0.1	90.0	224.3	292	0.780
2026	12	5	19	17	47	(II) occ (III)	P	1038	0.3	78.7	186.4	292	0.377
2026	12	6	22	29	14	(II) occ (III)	P	4382	0.2	80.0	92.1	113	0.426
2026	12	7	5	26	8	(II) occ (III)	P	3326	0.2	86.9	160.4	113	0.638
2026	12	9	13	44	0	(III) ecl (I)	P	459	0.4	71.8	88.4	112	0.788
2026	12	10	0	57	47	(III) ecl (II)	E	393	0.5	61.6	53.0	289	0.696
2026	12	10	7	50	44	(III) occ (I)	P	861	0.0	96.0	44.5	293	1.067

Mutual Eclipses and Occultations of Planetary Satellites 2026

Jupiter (for Miami, FL):

(For help, look at the end of this part)

2026	12	11	4	3	27	(IV) ecl (I)	E	397	0.1	88.9	27.4	114	0.966
2026	12	12	13	41	5	(IV) ecl (III)	P	867	0.4	72.3	258.5	292	0.722
2026	12	12	18	18	20	(II) ecl (III)	P	864	0.1	90.8	228.2	292	0.797
2026	12	12	23	25	13	(II) occ (III)	A	1373	0.3	77.2	187.2	292	0.187
2026	12	13	15	27	36	(I) ecl (III)	P	369	0.3	74.6	24.0	288	0.571
2026	12	16	16	48	4	(III) ecl (I)	P	573	0.7	50.9	103.4	112	0.612
2026	12	17	6	22	24	(III) occ (I)	Pt	787	0.1	94.5	12.7	108	1.044
2026	12	19	6	13	28	(I) ecl (IV)	E	220	0.0	100.0	176.8	290	1.469
2026	12	19	22	24	5	(II) ecl (III)	P	974	0.1	93.2	229.7	292	0.853
2026	12	20	4	3	10	(II) occ (III)	A	2061	0.3	77.2	182.3	292	0.113
2026	12	20	7	41	48	(I) ecl (IV)	E	1558	0.2	83.1	36.6	120	0.709
2026	12	21	9	24	30	(II) ecl (III)	P	2766	0.3	76.9	133.5	113	0.525
2026	12	23	20	7	1	(III) ecl (I)	P	756	1.3	30.7	117.1	112	0.454
2026	12	24	4	19	20	(III) occ (I)	P	1313	0.0	97.5	77.5	112	1.165
2026	12	24	9	18	29	(III) ecl (I)	Pt	1544	2.8	7.7	8.0	299	0.271
2026	12	24	18	1	6	(III) ecl (I)	P	1135	4.9	1.1	121.1	292	0.101
2026	12	27	2	55	19	(II) ecl (III)	E	1098	0.0	97.3	226.8	292	0.967

Mutual Eclipses and Occultations of Planetary Satellites 2026
Jupiter (for Miami, FL):
(For help, look at the end of this part)

```
2026 12 27 11 51 44* (II) occ (III)  P 12394  0.0  96.4 144.3 291  1.016

2026 12 28 13  7 14  (IV) ecl (I)    E   376  0.0  96.9  95.5 292  1.173

2026 12 28 14 55 43  (II) ecl (III)  A  1699  0.5  65.8 156.3 113  0.062

2026 12 31  0  0 57  (III) ecl (I)   P  1262  2.1  14.6 125.8 112  0.321

2026 12 31  7 36  7  (III) ecl (I)   P  1662  2.9   7.2  55.3 111  0.265

2026 12 31 21 45  9  (III) ecl (I)   P   760  5.4   0.7 125.9 292  0.053
```

Mutual Eclipses and Occultations of Planetary Satellites 2026
Saturn (for Miami, FL):

```
2026  1 10 19 33  4  (II) occ (I)     P    39  0.0  99.5  26.2 275  0.060

2026  1 14  8 16 31  (IV) occ (I)     Tt  352  0.1  90.3   1.6  39  0.034

2026  1 20 11 32 59  (III) occ (II)   T   471  0.3  78.0  30.8 275  0.015

2026  2  8 14 12 24* (II) ecl (III)   A     0  9.9   0.0  39.6 274  0.744

2026  5 20  1 57 36  (II) ecl (III)   E   335  0.0 100.0  11.6 250  0.115

2026  5 20  1 57 36  (II) ecl (III)   E   335  0.0 100.0  11.6 250  0.115
```

Help:

This module computes predictions of mutual eclipses and occultations of the major satellites of Jupiter, Saturn, and Uranus. Eclipses occur in a well-defined period as the sun passes through the orbital plane of the satellites. However, the Earth passes through the orbital plane either once, or three times, at each apparition. As a result, occultations can occur either over an extended period.
For satellites whose orbits are close to co-planar, eclipses and occultations occur when the Sun or Earth passes through the orbital plane. When the orbital planes are not close to being co-planar, mutual events only occur when the respective satellites are at the location of the node of the apparent orbits. There are two such satellites:

- Iapetus (Saturn). The orbit is inclined 15 deg. to the orbits of the other satellites. Its orbit is outside the orbits of the other satellites. The result is that eclipses and occultations do not occur when the Earth/Sun passes through the orbital plane of the other satellites, but several years removed. The number of eclipses and occultations that occur during such an apparition is quite small. In the 2006/7 apparition, there is one such event - on 2007 Jan 6, Iapetus occults Mimas. To make sure events are found, specify a large minimum separation, such as 4”.
- Miranda (Uranus). The orbit is inclined 4.3 deg. to the orbits of the other satellites. Its orbit is inside the orbits of the other major satellites of Uranus. The result is that eclipses and occultations occur over a period centered on when the Earth/Sun passes through the orbital plane of the other satellites, but occur over an extended period. However, the frequency of events is reduced as a result of the significant inclination of the orbit.

The Earth/Sun passes through the orbital planes of the major satellites every 6 years for Jupiter, 14 years for Saturn and 42 years for Uranus. The events occur over a period of around 15 months for Jupiter, 2 years for Saturn (less for Iapetus), and 6 months for Uranus (somewhat longer for events involving Miranda). The mid-times of these events in the near future are:

Planet	**Dates**
Jupiter	2009, 2014, 2021, 2026
Saturn	2009, 2026, 2038
- Iapetus	2007, 2023, 2036
Uranus	2007/8, 2049

The planet for the predictions is selected using the radio buttons at the top left. The search is conducted on the basis of a start year and month, and an end year and month. For the end date, the date is taken as the last day of the specified month. The predictions can be limited to events that are visible at the specified site location. That is, the planet above the horizon, and the sun at least 6 degrees below the horizon. Events where the satellites come close but do not eclipse or transit, can be included by selecting a "miss distance" greater than 0". [For most purposes a miss distance of 0" should be selected.]
The events found in the search are displayed in two boxes. The left box gives the details of all events found. The right box gives the contact times for any highlighted event. A typical prediction line (with the header line) is as follows. It involves satellites of Jupiter.

```
Year  M  D  h  m  s  Event Type     Ph   Dur dMag  %Ill   Sep  PA  MinD
2015  3  9 14 22 39  (I) ecl (II)    P   250  0.4  68.3  30.9 291  0.522
```

The information contained in the prediction line is:

Column	Meaning
Year M D h m s	Year, month, day, hour, minute and second for mid-event. Time is UT. An asterisk following this time indicates that the moons come close but do not cross each other
Event Type	The event description. The first mentioned moon either eclipses (**ecl**) or occults (**occ**) the second mentioned moon. In this example, (II) eclipses (III)
Ph	The kind of event: □ **M** = Miss □ **E** = Penumbral eclipse □ **P** = Partial eclipse/occultation □ **T** = Total eclipse/occultation, where the eclipsed/occulted moon is fully obscured □ **A** = Annular eclipse/occultation, where the umbral eclipse shadow, or occulting moon, fully enters the disk of the eclipsed/occulted moon. Following the event kind, there can be an additional letter with the following meanings: □ **e** =occultation, with the occulting satellite being in Jupiter's shadow. Event will be visible □ **f** = occultation, with the occulted satellite being in Jupiter's shadow. Event will not be visible □ **g** = occultation, with both satellites being in Jupiter's shadow. Only observableif the satellites are detectable in the shadow □ **h** = hidden. The eclipsed/occulted moon is either in the planet's shadow, or behind the planet. □ **t** = transiting. The eclipsed/occulted moon is transiting the planet. The code '**h**' will only appear if the check box to 'Include hidden events' is checked.
Dur	The duration, in seconds.
dMag	The magnitude drop. In the case of occultations, it is in comparison to the combined magnitude of the two moons. A value of 9.99 indicates a total eclipse.
%Ill	The illumination at maximum eclipse or occultation, as a percentage of the full illumination of the moon alone (eclipses) or of both moons (occultations).
Sep	Distance (arcsecs) of the eclipsed/occulted satellite from the centre of the planet.
PA	PA (deg) of the eclipsed/occulted satellite with respect to the planet.
MinD	The minimum separation of the centres of the satellites, or satellite and shadow - in arc secs.

The right box shows the contact times for this event, as follows:

```
        h  m  s
  T1 = 14 20 34
  T2 = 14 21 51
  T3 =
Tmax = 14 22 39
  T5 =
  T6 = 14 23 27
  T7 = 14 24 44
```

The times, in the format hh mm ss, correspond to the following:

Lines	Occurrence
T1and T7	For eclipses only. Commencement/end of contact with the penumbral shadow
T2 and T6	Commencement/end of external contact with: □ for eclipses, the umbral shadow □ for occultations, the limbs of the moon
T3 and T5	Commencement/end of totality or annularity.
Tmax	The mid-time of the event.

For contact times occurring in the day before the date of the mid-event, the hour is preceded by a 'p' (for 'preceding'). E.g. 'p23 56 34'. For events in the following day, the hour value is preceded by an 'f' (for 'following'). E.g. 'f 0 02 23'

After the predictions have been generated, they can be copied to the Clipboard, printed, saved to a file, or appended to an existing file, with the relevant menu item under With predictions….. For each of these options, a choice exists between the events, or the events + times. A sample output for events + times, with header, for 2015 Mar 8 is as follows (for satellites of Jupiter):

```
Year  M  D  h  m  s  Event Type     Ph   Dur dMag  %Ill   Sep  PA  MinD          h  m  s   h  m  s   h  m  s   h  m  s   h  m  s   h  m  s   h  m  s
2015  3  8  6 18  2  (II) occ (I)    P   334  0.5  61.9 115.9 289  0.148     |            6 15 15            6 18  2            6 20 49
2015  3  8  7 24  2  (II) ecl (I)    A   381  0.9  42.6 104.9 289  0.197     |   7 20 52   7 21 58   7 23 36   7 24  2   7 24 28   7 26  6   7 27 13
2015  3  8  9 38 19  (III) occ (IV)  P  1324  0.2  82.5 328.9 109  0.490     |            9 27 17            9 38 19            9 49 21
```

```
2015  3  8 15 49 45  (III) ecl (IV)  P  1452  0.7  51.0 373.3 109  0.548     |  15 37 39  15 44 12            15 49 45            15 55 18  16  1 51
```

If the output is generated for a particular location, the list of events is limited to those where the altitude of Jupiter at the mid-time of the event is greater than 5 deg, and the sun is at least 6 deg below the horizon (Civil twilight). In this case an additional column gives the altitude, as in the following example for 2015 Mar 8:

Visible at Longitude 149°, Latitude -35°

```
Year  M  D  h  m  s  Event Type     Ph   Dur dMag  %Ill   Sep  PA  MinD  Alt     h  m  s   h  m  s   h  m  s   h  m  s   h  m  s   h  m  s   h  m  s
2015  3  8  9 38 19  (III) occ (IV)  P  1324  0.2  82.5 328.9 109  0.490   27 |             9 27 17             9 38 19             9 49 21
2015  3  8 15 49 45  (III) ecl (IV)  P  1452  0.7  51.0 373.3 109  0.548   16 |  15 37 39  15 44 12            15 49 45            15 55 18  16  1 51
```

The events found in the search are displayed in two boxes. The left box gives the details of all events found. The right box gives the contact times for any highlighted event. A typical prediction line (with the header line) is as follows. It involves satellites of Jupiter.

```
Year  M  D  h  m  s  Event Type     Ph   Dur dMag  %Ill   Sep  PA  MinD
2015  3  9 14 22 39  (I) ecl (II)    P   250  0.4  68.3  30.9 291  0.522
```

The information contained in the prediction line is:

Column	Meaning
Year M D h m s	Year, month, day, hour, minute and second for mid-event. Time is UT. An asterisk following this time indicates that the moons come close but do not cross each other
Event Type	The event description. The first mentioned moon either eclipses (ecl) or occults (occ) the second mentioned moon. In this example, (II) eclipses (III)
Ph	The kind of event: M = Miss E = Penumbral eclipse P = Partial eclipse/occultation T = Total eclipse/occultation, where the eclipsed/occulted moon is fully obscured A = Annular eclipse/occultation, where the umbral eclipse shadow, or occulting moon, fully enters the disk of the eclipsed/occulted moon. Following the event kind, there can be an additional letter with the following meanings: e =occultation, with the occulting satellite being in Jupiter's shadow. Event will be visible f = occultation, with the occulted satellite being in Jupiter's shadow. Event will not be visible g = occultation, with both satellites being in Jupiter's shadow. Only observableif the satellites are detectable in the shadow h = hidden. The eclipsed/occulted moon is either in the planet's shadow, or behind the planet. t = transiting. The eclipsed/occulted moon is transiting the planet. The code 'h' will only appear if the check box to 'Include hidden events' is checked.
Dur	The duration, in seconds.
dMag	The magnitude drop. In the case of occultations, it is in comparison to the combined magnitude of the two moons. A value of 9.99 indicates a total eclipse.
%Ill	The illumination at maximum eclipse or occultation, as a percentage of the full illumination of the moon alone (eclipses) or of both moons (occultations).
Sep	Distance (arcsecs) of the eclipsed/occulted satellite from the centre of the planet.
PA	PA (deg) of the eclipsed/occulted satellite with respect to the planet.
MinD	The minimum separation of the centres of the satellites, or satellite and shadow - in arc secs.

Julian Day Number, Apparent Sidereal Time, Obliquity of the Ecliptic, and UT of Solar transit on the Greenwich meridian 2026

Date	Julian day	Sidereal Time	Solar Transit	Ecliptic
		h m s	h m s	o ' "
2026 Jan 1	2461041.5	6 42 39	12 3 34	23 26 17.3
2026 Jan 6	2461046.5	7 2 22	12 5 50	23 26 17.5
2026 Jan 11	2461051.5	7 22 5	12 7 54	23 26 17.6
2026 Jan 16	2461056.5	7 41 47	12 9 44	23 26 17.4
2026 Jan 21	2461061.5	8 1 30	12 11 17	23 26 17.7
2026 Jan 26	2461066.5	8 21 13	12 12 31	23 26 17.7
2026 Jan 31	2461071.5	8 40 56	12 13 24	23 26 17.7
2026 Feb 5	2461076.5	9 0 38	12 13 57	23 26 18.0
2026 Feb 10	2461081.5	9 20 21	12 14 10	23 26 17.9
2026 Feb 15	2461086.5	9 40 4	12 14 4	23 26 18.0
2026 Feb 20	2461091.5	9 59 47	12 13 40	23 26 18.2
2026 Feb 25	2461096.5	10 19 30	12 13 0	23 26 18.0
2026 Mar 2	2461101.5	10 39 12	12 12 5	23 26 18.2
2026 Mar 7	2461106.5	10 58 55	12 10 58	23 26 18.3
2026 Mar 12	2461111.5	11 18 38	12 9 42	23 26 18.1
2026 Mar 17	2461116.5	11 38 21	12 8 18	23 26 18.3
2026 Mar 22	2461121.5	11 58 3	12 6 50	23 26 18.2
2026 Mar 27	2461126.5	12 17 46	12 5 20	23 26 18.1
2026 Apr 1	2461131.5	12 37 29	12 3 50	23 26 18.2
2026 Apr 6	2461136.5	12 57 12	12 2 22	23 26 18.0
2026 Apr 11	2461141.5	13 16 55	12 1 0	23 26 17.9
2026 Apr 16	2461146.5	13 36 37	11 59 46	23 26 18.0
2026 Apr 21	2461151.5	13 56 20	11 58 41	23 26 17.7
2026 Apr 26	2461156.5	14 16 3	11 57 47	23 26 17.7
2026 May 1	2461161.5	14 35 46	11 57 4	23 26 17.6
2026 May 6	2461166.5	14 55 28	11 56 36	23 26 17.3
2026 May 11	2461171.5	15 15 11	11 56 21	23 26 17.4
2026 May 16	2461176.5	15 34 54	11 56 21	23 26 17.2
2026 May 21	2461181.5	15 54 37	11 56 35	23 26 17.0
2026 May 26	2461186.5	16 14 20	11 57 3	23 26 17.1
2026 May 31	2461191.5	16 34 2	11 57 41	23 26 16.8
2026 Jun 5	2461196.5	16 53 45	11 58 30	23 26 16.8
2026 Jun 10	2461201.5	17 13 28	11 59 27	23 26 16.9
2026 Jun 15	2461206.5	17 33 11	12 0 30	23 26 16.6
2026 Jun 20	2461211.5	17 52 53	12 1 36	23 26 16.7
2026 Jun 25	2461216.5	18 12 36	12 2 41	23 26 16.7
2026 Jun 30	2461221.5	18 32 19	12 3 42	23 26 16.5

Julian Day Number, Apparent Sidereal Time, Obliquity of the Ecliptic, and UT of Solar transit on the Greenwich meridian 2026

Date	Julian day	Sidereal Time	Solar Transit	Ecliptic
		h m s	h m s	o ' "
2026 Jul 5	2461226.5	18 52 2	12 4 37	23 26 16.7
2026 Jul 10	2461231.5	19 11 45	12 5 24	23 26 16.6
2026 Jul 15	2461236.5	19 31 27	12 6 1	23 26 16.6
2026 Jul 20	2461241.5	19 51 10	12 6 24	23 26 16.8
2026 Jul 25	2461246.5	20 10 53	12 6 34	23 26 16.7
2026 Jul 30	2461251.5	20 30 36	12 6 28	23 26 16.9
2026 Aug 4	2461256.5	20 50 19	12 6 7	23 26 17.0
2026 Aug 9	2461261.5	21 10 1	12 5 31	23 26 16.9
2026 Aug 14	2461266.5	21 29 44	12 4 42	23 26 17.1
2026 Aug 19	2461271.5	21 49 27	12 3 39	23 26 17.1
2026 Aug 24	2461276.5	22 9 10	12 2 23	23 26 17.1
2026 Aug 29	2461281.5	22 28 52	12 0 56	23 26 17.3
2026 Sep 3	2461286.5	22 48 35	11 59 21	23 26 17.2
2026 Sep 8	2461291.5	23 8 18	11 57 41	23 26 17.2
2026 Sep 13	2461296.5	23 28 1	11 55 56	23 26 17.4
2026 Sep 18	2461301.5	23 47 44	11 54 9	23 26 17.2
2026 Sep 23	2461306.5	0 7 26	11 52 22	23 26 17.3
2026 Sep 28	2461311.5	0 27 9	11 50 39	23 26 17.3
2026 Oct 3	2461316.5	0 46 52	11 49 1	23 26 17.1
2026 Oct 8	2461321.5	1 6 35	11 47 32	23 26 17.2
2026 Oct 13	2461326.5	1 26 17	11 46 15	23 26 17.0
2026 Oct 18	2461331.5	1 46 0	11 45 10	23 26 16.9
2026 Oct 23	2461336.5	2 5 43	11 44 20	23 26 17.0
2026 Oct 28	2461341.5	2 25 26	11 43 47	23 26 16.6
2026 Nov 2	2461346.5	2 45 8	11 43 33	23 26 16.6
2026 Nov 7	2461351.5	3 4 51	11 43 40	23 26 16.5
2026 Nov 12	2461356.5	3 24 34	11 44 8	23 26 16.2
2026 Nov 17	2461361.5	3 44 17	11 44 57	23 26 16.2
2026 Nov 22	2461366.5	4 4 0	11 46 7	23 26 16.2
2026 Nov 27	2461371.5	4 23 42	11 47 36	23 26 15.9
2026 Dec 2	2461376.5	4 43 25	11 49 23	23 26 16.0
2026 Dec 7	2461381.5	5 3 8	11 51 26	23 26 15.7
2026 Dec 12	2461386.5	5 22 51	11 53 41	23 26 15.6
2026 Dec 17	2461391.5	5 42 34	11 56 5	23 26 15.8
2026 Dec 22	2461396.5	6 2 16	11 58 33	23 26 15.5
2026 Dec 27	2461401.5	6 21 59	12 1 2	23 26 15.6
2027 Jan 1	2461406.5	6 41 42	12 3 26	23 26 15.6

Sun 2026, Equinox of J2000

Date			Right Asc.			Declination			Distance	dia	Po	Bo	Lo	Carrington
year	mth	d	h	m	s	o	'	"	AU	"	o	o	o	Rotation #
2026	Jan	1	18	44	25.3673	-23	2	35.100	0.98332677	1951.8	2.06	-3.00	299.44	2306
2026	Jan	6	19	6	25.5683	-22	33	29.166	0.98331911	1951.8	-0.36	-3.57	233.58	2306
2026	Jan	11	19	28	14.8976	-21	53	15.362	0.98346678	1951.5	-2.76	-4.12	167.74	2306
2026	Jan	16	19	49	50.3362	-21	2	21.249	0.98373953	1951.0	-5.12	-4.63	101.90	2306
2026	Jan	21	20	11	9.0936	-20	1	22.655	0.98411198	1950.2	-7.41	-5.11	36.07	2306
2026	Jan	26	20	32	8.8824	-18	51	2.813	0.98457803	1949.3	-9.62	-5.54	330.23	2307
2026	Jan	31	20	52	48.2968	-17	32	9.638	0.98516050	1948.2	-11.74	-5.93	264.40	2307
2026	Feb	5	21	13	7.1623	-16	5	31.325	0.98588589	1946.7	-13.74	-6.28	198.57	2307
2026	Feb	10	21	33	6.1217	-14	31	55.757	0.98674305	1945.0	-15.62	-6.58	132.73	2307
2026	Feb	15	21	52	46.0290	-12	52	13.252	0.98769776	1943.2	-17.37	-6.82	66.90	2307
2026	Feb	20	22	12	7.8954	-11	7	16.814	0.98871843	1941.2	-18.97	-7.01	1.06	2307
2026	Feb	25	22	31	12.9310	- 9	18	1.242	0.98979571	1939.0	-20.43	-7.15	295.21	2308
2026	Mar	2	22	50	2.8871	- 7	25	19.363	0.99095230	1936.8	-21.74	-7.23	229.35	2308
2026	Mar	7	23	8	40.2417	- 5	29	58.988	0.99220594	1934.3	-22.89	-7.25	163.47	2308
2026	Mar	12	23	27	7.7310	- 3	32	45.773	0.99353908	1931.7	-23.88	-7.22	97.59	2308
2026	Mar	17	23	45	27.9442	- 1	34	26.421	0.99491524	1929.1	-24.70	-7.13	31.69	2308
2026	Mar	22	0	3	43.2219	0	24	10.644	0.99629851	1926.4	-25.35	-6.99	325.78	2309
2026	Mar	27	0	21	55.6877	2	22	16.190	0.99768112	1923.7	-25.83	-6.80	259.85	2309
2026	Apr	1	0	40	7.7250	4	19	4.755	0.99908712	1921.0	-26.13	-6.56	193.90	2309
2026	Apr	6	0	58	22.0837	6	13	55.210	1.00052757	1918.2	-26.25	-6.27	127.92	2309
2026	Apr	11	1	16	41.4550	8	6	6.885	1.00198292	1915.5	-26.19	-5.93	61.93	2309
2026	Apr	16	1	35	8.1708	9	54	57.439	1.00341629	1912.7	-25.95	-5.56	355.92	2310
2026	Apr	21	1	53	44.0017	11	39	42.270	1.00479078	1910.1	-25.53	-5.14	289.89	2310
2026	Apr	26	2	12	30.2218	13	19	36.662	1.00610517	1907.6	-24.92	-4.69	223.84	2310
2026	May	1	2	31	28.2062	14	54	0.123	1.00738526	1905.2	-24.12	-4.20	157.77	2310
2026	May	6	2	50	39.3900	16	22	14.995	1.00863891	1902.8	-23.15	-3.69	91.68	2310
2026	May	11	3	10	4.8581	17	43	43.832	1.00984794	1900.5	-22.00	-3.15	25.58	2310
2026	May	16	3	29	45.0499	18	57	48.761	1.01097624	1898.4	-20.69	-2.59	319.46	2311
2026	May	21	3	49	39.4521	20	3	52.059	1.01198982	1896.5	-19.21	-2.01	253.32	2311
2026	May	26	4	9	46.8564	21	1	19.632	1.01289716	1894.8	-17.57	-1.42	187.17	2311
2026	May	31	4	30	6.0650	21	49	43.278	1.01372556	1893.3	-15.80	-0.82	121.01	2311
2026	Jun	5	4	50	35.7562	22	28	38.914	1.01448328	1891.9	-13.91	-0.22	54.84	2311
2026	Jun	10	5	11	14.1995	22	57	45.798	1.01515498	1890.6	-11.90	0.38	348.66	2312
2026	Jun	15	5	31	59.0286	23	16	47.079	1.01570567	1889.6	-9.81	0.98	282.49	2312
2026	Jun	20	5	52	47.0343	23	25	31.699	1.01610841	1888.8	-7.64	1.58	216.30	2312
2026	Jun	25	6	13	34.8258	23	23	56.460	1.01638162	1888.3	-5.41	2.16	150.12	2312
2026	Jun	30	6	34	19.5410	23	12	4.632	1.01655430	1888.0	-3.16	2.73	83.94	2312
2026	Jul	5	6	54	58.7127	22	50	4.331	1.01663755	1887.9	-0.89	3.27	17.76	2312
2026	Jul	10	7	15	30.1026	22	18	8.149	1.01661865	1887.9	1.36	3.80	311.58	2313
2026	Jul	15	7	35	51.4486	21	36	34.054	1.01646406	1888.2	3.60	4.30	245.41	2313
2026	Jul	20	7	56	0.3577	20	45	47.098	1.01615724	1888.7	5.79	4.77	179.26	2313

Sun 2026, Equinox of J2000

Date			Right Asc.			Declination			Distance	dia	Po	Bo	Lo	Carrington
year	mth	d	h	m	s	o	'	"	AU	"	o	o	o	Rotation #
2026	Jul	25	8	15	55.0569	19	46	17.343	1.01572465	1889.5	7.92	5.21	113.11	2313
2026	Jul	30	8	35	34.7460	18	38	36.492	1.01519756	1890.5	9.98	5.61	46.97	2313
2026	Aug	4	8	54	59.3619	17	23	17.033	1.01459098	1891.7	11.96	5.97	340.84	2314
2026	Aug	9	9	14	9.3113	16	0	52.600	1.01389317	1893.0	13.84	6.30	274.72	2314
2026	Aug	14	9	33	5.0460	14	32	0.327	1.01307322	1894.5	15.62	6.58	208.62	2314
2026	Aug	19	9	51	47.0121	12	57	21.661	1.01212626	1896.3	17.28	6.81	142.53	2314
2026	Aug	24	10	10	16.2378	11	17	37.992	1.01108392	1898.2	18.83	7.00	76.46	2314
2026	Aug	29	10	28	34.4292	9	33	28.526	1.00998037	1900.3	20.24	7.13	10.39	2314
2026	Sep	3	10	46	43.7897	7	45	30.611	1.00883397	1902.5	21.52	7.22	304.34	2315
2026	Sep	8	11	4	46.7107	5	54	21.846	1.00763163	1904.7	22.66	7.25	238.31	2315
2026	Sep	13	11	22	45.3184	4	0	43.766	1.00634691	1907.2	23.66	7.23	172.29	2315
2026	Sep	18	11	40	41.5738	2	5	20.815	1.00498486	1909.7	24.50	7.16	106.28	2315
2026	Sep	23	11	58	37.7379	0	8	56.086	1.00357947	1912.4	25.19	7.04	40.28	2315
2026	Sep	28	12	16	36.4375	- 1	47	49.416	1.00216779	1915.1	25.71	6.86	334.28	2316
2026	Oct	3	12	34	40.6051	- 3	44	16.004	1.00076922	1917.8	26.06	6.64	268.30	2316
2026	Oct	8	12	52	53.0896	- 5	39	41.708	0.99936722	1920.5	26.23	6.36	202.33	2316
2026	Oct	13	13	11	16.2043	- 7	33	19.382	0.99794072	1923.2	26.23	6.04	136.37	2316
2026	Oct	18	13	29	51.9322	- 9	24	19.659	0.99650049	1926.0	26.04	5.67	70.42	2316
2026	Oct	23	13	48	42.2684	-11	11	54.036	0.99508041	1928.8	25.66	5.25	4.47	2316
2026	Oct	28	14	7	49.2985	-12	55	15.299	0.99371928	1931.4	25.08	4.80	298.53	2317
2026	Nov	2	14	27	15.1754	-14	33	36.710	0.99243373	1933.9	24.31	4.31	232.59	2317
2026	Nov	7	14	47	1.5076	-16	6	8.398	0.99120247	1936.3	23.35	3.79	166.67	2317
2026	Nov	12	15	7	8.9230	-17	31	57.494	0.99000845	1938.6	22.19	3.23	100.75	2317
2026	Nov	17	15	27	37.3345	-18	50	12.071	0.98886317	1940.9	20.83	2.65	34.83	2317
2026	Nov	22	15	48	26.1998	-20	0	3.471	0.98779827	1943.0	19.30	2.05	328.92	2318
2026	Nov	27	16	9	34.6934	-21	0	47.183	0.98685201	1944.8	17.59	1.43	263.02	2318
2026	Dec	2	16	31	1.7073	-21	51	42.224	0.98603362	1946.4	15.72	0.80	197.12	2318
2026	Dec	7	16	52	45.0943	-22	32	10.134	0.98531638	1947.9	13.70	0.16	131.23	2318
2026	Dec	12	17	14	41.5332	-23	1	38.102	0.98468360	1949.1	11.56	-0.48	65.35	2318
2026	Dec	17	17	36	47.0251	-23	19	41.966	0.98414304	1950.2	9.31	-1.12	359.47	2319
2026	Dec	22	17	58	57.3347	-23	26	7.209	0.98372252	1951.0	6.98	-1.75	293.60	2319
2026	Dec	27	18	21	8.4791	-23	20	48.350	0.98345654	1951.5	4.59	-2.37	227.74	2319

The data produced in the ephemeris is:

Right Asc. right ascension, in hours, min, sec.

Declination declination, in deg, min, sec

Distance the geocentric distance to the planet, in AU

dia the planet's apparent equatorial diameter, in arc sec

Po Position Angle of the Sun's north pole

Bo Latitude of the earth, referred to the Sun's equator

Lo Longitude of the central meridian of the Sun

Carrington Rotation # The current Carrington Solar Rotation number - in continuation of the series that started on 1983 Nov 9.946

Mercury 2026, Equinox of J2000

Date			Right Asc.			Declination			Distance	dia	mag	Elong	I	%Ill	Limb	De	Pp	Ds
year	mth	d	h	m	s	o	'	"	AU	"		o	o		o	o	o	o
2026	Jan	1	17	52	31.4615	-23	59	41.607	1.37758786	4.8	-0.6	11.9w	26	94.9	88.0	-3.96	6.13	-0.02
2026	Jan	6	18	26	19.6597	-24	23	0.896	1.40855378	4.7	-0.7	9.4w	20	97.0	80.8	-4.13	2.12	-0.03
2026	Jan	11	19	0	51.7744	-24	13	16.510	1.42608331	4.7	-0.9	6.7w	14	98.4	71.0	-4.30	357.98	-0.03
2026	Jan	16	19	35	54.0540	-23	28	17.850	1.43011188	4.7	-1.1	4.0w	9	99.4	53.6	-4.47	353.81	-0.03
2026	Jan	21	20	11	13.0064	-22	6	24.763	1.41984790	4.7	-1.4	2.1e	5	99.8	359.6	-4.65	349.73	-0.04
2026	Jan	26	20	46	34.1965	-20	6	33.218	1.39362739	4.8	-1.4	3.6e	9	99.4	289.7	-4.86	345.83	-0.03
2026	Jan	31	21	21	39.0567	-17	28	41.274	1.34876649	5.0	-1.3	6.9e	18	97.6	268.4	-5.10	342.24	-0.03
2026	Feb	5	21	55	56.4347	-14	15	1.618	1.28160818	5.2	-1.1	10.5e	30	93.3	258.5	-5.41	339.08	-0.02
2026	Feb	10	22	28	23.4543	-10	32	55.618	1.18845013	5.6	-1.1	14.1e	46	84.7	252.1	-5.83	336.47	0.00
2026	Feb	15	22	56	53.3336	-	6	40 13.801	1.06873959	6.3	-0.9	17.0e	67	69.8	247.3	-6.44	334.54	0.01
2026	Feb	20	23	17	50.2850	-	3	10 42.401	0.93088600	7.2	-0.5	18.1e	92	48.6	243.2	-7.28	333.34	0.03
2026	Feb	25	23	26	55.1930	-	0	51 3.120	0.79554890	8.4	0.5	16.2e	119	25.6	238.2	-8.33	332.84	0.04
2026	Mar	2	23	21	55.8978	-	0	21 50.510	0.68882615	9.7	2.6	10.6e	147	7.9	228.2	-9.33	332.99	0.03
2026	Mar	7	23	6	23.0593	-	1	46 12.035	0.62939313	10.6	5.4	3.8w	170	0.8	171.3	-9.82	333.75	0.02
2026	Mar	12	22	49	18.8398	-	4	11 48.747	0.62015514	10.8	3.7	9.5w	156	4.5	86.4	-9.48	334.81	0.01
2026	Mar	17	22	39	0.3248	-	6	26 59.902	0.65007393	10.3	1.9	17.3w	135	14.4	74.3	-8.51	335.57	0.00
2026	Mar	22	22	38	19.4801	-	7	50 45.602	0.70399196	9.5	1.0	22.8w	119	25.8	69.8	-7.31	335.69	-0.01
2026	Mar	27	22	46	13.0606	-	8	15 1.630	0.77017521	8.7	0.5	26.1w	106	36.2	67.0	-6.13	335.22	-0.02
2026	Apr	1	23	0	35.0854	-	7	45 14.716	0.84162438	7.9	0.3	27.6w	95	45.3	64.9	-5.07	334.39	-0.02
2026	Apr	6	23	19	37.3810	-	6	29 6.523	0.91463688	7.3	0.2	27.7w	86	53.1	63.2	-4.13	333.41	-0.03
2026	Apr	11	23	42	6.1123	-	4	33 20.598	0.98732022	6.8	0.0	26.8w	78	60.1	61.8	-3.30	332.49	-0.03
2026	Apr	16	0	7	18.2876	-	2	3 23.292	1.05857831	6.3	-0.1	24.9w	71	66.6	60.9	-2.56	331.78	-0.04
2026	Apr	21	0	34	55.4622		0	56 11.416	1.12739770	5.9	-0.2	22.3w	63	73.0	60.5	-1.91	331.42	-0.04
2026	Apr	26	1	4	59.0724		4	21 5.903	1.19221820	5.6	-0.4	18.9w	54	79.7	60.6	-1.32	331.54	-0.03
2026	May	1	1	37	46.9405		8	6 23.674	1.25015217	5.3	-0.8	14.8w	43	86.6	61.5	-0.78	332.26	-0.02
2026	May	6	2	13	47.2286		12	4 49.196	1.29604869	5.2	-1.2	9.9w	30	93.4	63.3	-0.29	333.75	-0.01
2026	May	11	2	53	23.4934		16	4 12.557	1.32191268	5.1	-1.8	4.3w	14	98.6	66.8	0.17	336.16	0.00
2026	May	16	3	36	22.8264		19	45 8.512	1.31832447	5.1	-2.3	1.8e	6	99.8	243.5	0.63	339.55	0.02
2026	May	21	4	21	18.7341		22	43 22.844	1.27974554	5.2	-1.6	7.8e	26	94.8	251.6	1.11	343.79	0.03
2026	May	26	5	5	39.3252		24	40 18.432	1.21016595	5.5	-1.1	13.4e	46	84.6	257.0	1.65	348.51	0.04
2026	May	31	5	46	54.2042		25	31 58.933	1.12108472	6.0	-0.7	18.0e	63	72.4	262.1	2.29	353.22	0.03
2026	Jun	5	6	23	23.6227		25	26 53.685	1.02425659	6.5	-0.3	21.4e	78	60.5	266.9	3.04	357.53	0.02
2026	Jun	10	6	54	13.4909		24	38 36.325	0.92780755	7.2	0.0	23.6e	90	49.7	271.3	3.92	1.23	0.01
2026	Jun	15	7	18	50.3077		23	21 11.602	0.83653719	8.0	0.4	24.5e	102	39.8	275.2	4.94	4.17	0.00
2026	Jun	20	7	36	41.9085		21	48 1.941	0.75348157	8.9	0.8	24.0e	113	30.5	278.9	6.11	6.30	-0.01
2026	Jun	25	7	47	10.8347		20	12 1.140	0.68132910	9.8	1.4	21.9e	125	21.6	282.7	7.41	7.55	-0.02
2026	Jun	30	7	49	44.7423		18	45 52.965	0.62338768	10.7	2.2	18.1e	137	13.3	287.4	8.75	7.87	-0.03
2026	Jul	5	7	44	30.8005		17	41 44.296	0.58408439	11.4	3.4	12.7e	151	6.2	295.9	9.97	7.28	-0.03
2026	Jul	10	7	33	13.5496		17	9 7.451	0.56870522	11.7	5.0	6.6e	165	1.7	321.7	10.82	5.96	-0.03
2026	Jul	15	7	19	52.5116		17	11 50.584	0.58202440	11.5	5.2	5.8w	167	1.4	39.9	11.06	4.36	-0.04

Mercury 2026, Equinox of J2000

Date			Right Asc.			Declination			Distance	dia	mag	Elong	I	%Ill	Limb	De	Pp	Ds
year	mth	d	h	m	s	o	'	"	AU	"		o	o		o	o	o	o
2026	Jul	20	7	9	47.2862	17	45	49.201	0.62644048	10.7	3.4	11.3w	152	6.0	72.8	10.66	3.13	-0.03
2026	Jul	25	7	7	30.0087	18	39	40.779	0.70106333	9.5	1.8	16.2w	134	15.2	83.3	9.79	2.85	-0.03
2026	Jul	30	7	15	26.2632	19	36	48.861	0.80200035	8.3	0.6	18.9w	116	28.4	89.6	8.73	3.80	-0.02
2026	Aug	4	7	34	6.6782	20	16	53.138	0.92237350	7.2	-0.2	19.3w	96	44.8	95.2	7.69	6.01	-0.01
2026	Aug	9	8	2	36.7487	20	17	21.292	1.05104257	6.4	-0.7	17.5w	75	63.3	101.2	6.79	9.33	0.01
2026	Aug	14	8	38	34.5871	19	18	42.562	1.17204813	5.7	-1.1	13.9w	52	80.6	108.0	6.08	13.34	0.03
2026	Aug	19	9	18	19.3239	17	14	19.955	1.26918056	5.3	-1.4	9.1w	31	93.0	116.8	5.57	17.45	0.03
2026	Aug	24	9	58	10.7751	14	15	5.270	1.33411683	5.0	-1.8	4.2w	13	98.8	134.7	5.21	21.11	0.03
2026	Aug	29	10	35	56.3188	10	40	52.593	1.36838803	4.9	-1.9	2.1e	6	99.7	238.4	4.96	24.03	0.03
2026	Sep	3	11	10	56.1544	6	49	48.519	1.37816061	4.8	-1.3	6.1e	16	98.1	279.2	4.78	26.17	0.02
2026	Sep	8	11	43	20.8487	2	54	26.168	1.36946149	4.9	-0.8	10.1e	25	95.3	287.7	4.62	27.60	0.00
2026	Sep	13	12	13	36.8694	- 0	57	16.530	1.34656252	5.0	-0.5	13.6e	33	92.0	291.4	4.47	28.41	-0.01
2026	Sep	18	12	42	10.3470	- 4	40	9.037	1.31206332	5.1	-0.3	16.8e	40	88.5	293.4	4.32	28.68	-0.01
2026	Sep	23	13	9	20.9876	- 8	10	27.950	1.26734728	5.3	-0.2	19.5e	46	84.6	294.4	4.16	28.48	-0.02
2026	Sep	28	13	35	19.0104	-11	25	2.313	1.21298801	5.5	-0.1	21.8e	53	80.2	294.8	4.00	27.88	-0.03
2026	Oct	3	14	0	1.6543	-14	20	32.863	1.14907906	5.8	-0.1	23.6e	60	75.1	294.7	3.82	26.96	-0.03
2026	Oct	8	14	23	6.6174	-16	52	50.747	1.07554989	6.2	-0.1	24.8e	68	68.6	294.3	3.62	25.81	-0.03
2026	Oct	13	14	43	39.5920	-18	56	0.480	0.99267682	6.7	-0.1	25.2e	78	60.3	293.8	3.39	24.55	-0.04
2026	Oct	18	14	59	53.6253	-20	20	44.737	0.90209052	7.4	0.0	24.3e	91	49.3	293.4	3.13	23.42	-0.03
2026	Oct	23	15	8	43.0488	-20	51	30.752	0.80884211	8.3	0.3	21.5e	108	34.7	293.6	2.79	22.75	-0.03
2026	Oct	28	15	5	51.6626	-20	3	24.192	0.72537781	9.2	1.4	15.6e	131	17.3	294.9	2.31	22.96	-0.02
2026	Nov	2	14	49	8.7552	-17	33	37.923	0.67600701	9.9	4.2	6.1e	161	2.6	298.9	1.61	24.15	0.00
2026	Nov	7	14	26	15.6646	-14	0	44.203	0.69017466	9.7	4.2	5.4w	162	2.3	113.3	0.70	25.57	0.02
2026	Nov	12	14	13	0.6779	-11	29	10.908	0.77366001	8.6	0.9	14.4w	127	20.0	116.4	-0.16	26.29	0.03
2026	Nov	17	14	16	29.2832	-11	10	32.434	0.89714831	7.4	-0.3	18.8w	97	43.9	116.2	-0.81	26.11	0.04
2026	Nov	22	14	32	52.4540	-12	33	42.964	1.02591436	6.5	-0.6	19.6w	74	63.8	114.8	-1.30	25.19	0.03
2026	Nov	27	14	56	40.5173	-14	45	31.181	1.14071244	5.9	-0.6	18.4w	57	77.4	112.5	-1.69	23.62	0.02
2026	Dec	2	15	24	27.3493	-17	9	56.989	1.23550977	5.4	-0.6	16.4w	44	86.1	109.3	-2.03	21.48	0.01
2026	Dec	7	15	54	31.1776	-19	27	15.554	1.31028529	5.1	-0.6	13.9w	34	91.5	105.3	-2.34	18.83	0.00
2026	Dec	12	16	26	5.4059	-21	26	48.635	1.36681678	4.9	-0.7	11.4w	26	95.0	100.3	-2.64	15.73	-0.01
2026	Dec	17	16	58	48.3557	-23	2	24.198	1.40698332	4.7	-0.8	8.7w	19	97.3	93.8	-2.93	12.26	-0.02
2026	Dec	22	17	32	28.1358	-24	9	54.288	1.43221136	4.7	-0.9	6.1w	13	98.7	84.5	-3.21	8.46	-0.02
2026	Dec	27	18	6	55.5313	-24	46	8.901	1.44331818	4.6	-1.1	3.5w	7	99.6	67.1	-3.49	4.43	-0.03

Venus 2026, Equinox of J2000

Date			Right Asc.			Declination			Distance	dia	mag	Elong	I	%Ill	Limb	De	Pp	Ds
year	mth	d	h	m	s	o	'	"	AU	"		o	o		o	o	o	o
2026	Jan	1	18	38	39.7124	-23	38	40.859	1.70995636	9.8	-4.0	1.5w	2	100.0	65.8	0.95	357.32	1.67
2026	Jan	6	19	6	3.0235	-23	15	32.488	1.71086035	9.8	-4.0	0.7w	1	100.0	7.1	1.00	354.70	1.94
2026	Jan	11	19	33	12.7358	-22	34	28.589	1.71081211	9.8	-4.0	1.3e	2	100.0	300.6	1.04	352.17	2.17
2026	Jan	16	20	0	2.3841	-21	36	11.622	1.70978550	9.8	-4.0	2.4e	3	99.9	282.9	1.06	349.76	2.35
2026	Jan	21	20	26	26.6410	-20	21	41.919	1.70775677	9.8	-3.9	3.6e	5	99.8	274.7	1.06	347.51	2.49
2026	Jan	26	20	52	21.6712	-18	52	14.638	1.70471707	9.9	-3.9	4.8e	6	99.7	269.4	1.04	345.45	2.59
2026	Jan	31	21	17	45.3926	-17	9	15.398	1.70068278	9.9	-3.9	6.0e	8	99.5	265.4	0.99	343.59	2.63
2026	Feb	5	21	42	37.6224	-15	14	15.052	1.69567458	9.9	-3.9	7.2e	10	99.3	262.2	0.93	341.96	2.63
2026	Feb	10	22	6	59.7514	-13	8	47.086	1.68967714	10.0	-3.9	8.3e	11	99.0	259.4	0.85	340.57	2.58
2026	Feb	15	22	30	54.2351	-10	54	27.566	1.68264919	10.0	-3.9	9.5e	13	98.7	257.2	0.75	339.41	2.47
2026	Feb	20	22	54	24.3513	- 8	32	54.160	1.67454687	10.0	-3.9	10.7e	15	98.4	255.3	0.63	338.49	2.32
2026	Feb	25	23	17	34.0043	- 6	5	45.074	1.66534212	10.1	-3.9	11.9e	16	98.0	253.7	0.49	337.81	2.12
2026	Mar	2	23	40	27.7153	- 3	34	36.716	1.65503792	10.2	-3.9	13.1e	18	97.5	252.4	0.34	337.37	1.89
2026	Mar	7	0	3	10.6368	- 1	1	1.817	1.64363943	10.2	-3.9	14.3e	20	97.0	251.5	0.17	337.17	1.61
2026	Mar	12	0	25	48.2386	1	33	28.807	1.63112108	10.3	-3.9	15.5e	22	96.5	250.8	0.00	337.21	1.31
2026	Mar	17	0	48	25.9592	4	7	23.899	1.61743620	10.4	-3.9	16.7e	23	95.9	250.4	-0.19	337.48	0.98
2026	Mar	22	1	11	9.0036	6	39	10.819	1.60253313	10.5	-3.9	17.9e	25	95.3	250.3	-0.39	337.98	0.63
2026	Mar	27	1	34	2.1665	9	7	15.401	1.58638147	10.6	-3.9	19.2e	27	94.6	250.5	-0.59	338.72	0.26
2026	Apr	1	1	57	9.9512	11	30	4.238	1.56898874	10.7	-3.9	20.4e	29	93.8	250.9	-0.79	339.68	-0.11
2026	Apr	6	2	20	36.6101	13	46	5.466	1.55036492	10.8	-3.9	21.6e	31	93.0	251.6	-1.00	340.86	-0.48
2026	Apr	11	2	44	25.7980	15	53	47.120	1.53049803	11.0	-3.9	22.8e	33	92.1	252.6	-1.19	342.27	-0.84
2026	Apr	16	3	8	40.1786	17	51	36.622	1.50935975	11.1	-3.9	24.0e	35	91.2	253.8	-1.38	343.90	-1.18
2026	Apr	21	3	33	21.0392	19	38	1.718	1.48691572	11.3	-3.9	25.2e	37	90.2	255.3	-1.56	345.72	-1.50
2026	Apr	26	3	58	27.9828	21	11	33.249	1.46316055	11.5	-3.9	26.4e	39	89.1	257.0	-1.73	347.74	-1.79
2026	May	1	4	23	59.1761	22	30	49.810	1.43813086	11.7	-3.9	27.7e	41	88.0	259.0	-1.88	349.93	-2.05
2026	May	6	4	49	51.4637	23	34	40.044	1.41186661	11.9	-3.9	28.9e	43	86.8	261.1	-2.00	352.26	-2.26
2026	May	11	5	16	0.2337	24	22	4.255	1.38439300	12.1	-3.9	30.0e	45	85.5	263.4	-2.11	354.70	-2.43
2026	May	16	5	42	19.4211	24	52	16.896	1.35571958	12.4	-3.9	31.2e	47	84.2	265.8	-2.19	357.22	-2.55
2026	May	21	6	8	41.5688	25	4	49.567	1.32584732	12.7	-3.9	32.4e	49	82.8	268.2	-2.24	359.77	-2.62
2026	May	26	6	34	58.2386	24	59	34.264	1.29481182	13.0	-3.9	33.5e	51	81.4	270.8	-2.26	2.32	-2.64
2026	May	31	7	1	1.1340	24	36	43.807	1.26268816	13.3	-3.9	34.7e	53	79.8	273.3	-2.25	4.82	-2.60
2026	Jun	5	7	26	42.7610	23	56	49.562	1.22955367	13.7	-4.0	35.8e	56	78.3	275.7	-2.21	7.24	-2.51
2026	Jun	10	7	51	56.7230	23	0	38.874	1.19547274	14.1	-4.0	36.9e	58	76.6	278.1	-2.12	9.53	-2.38
2026	Jun	15	8	16	37.8600	21	49	12.672	1.16048891	14.5	-4.0	37.9e	60	74.9	280.3	-2.00	11.67	-2.19
2026	Jun	20	8	40	42.0469	20	23	44.430	1.12463338	15.0	-4.0	38.9e	62	73.2	282.4	-1.85	13.65	-1.96
2026	Jun	25	9	4	6.2642	18	45	37.969	1.08797363	15.5	-4.1	39.9e	65	71.4	284.3	-1.65	15.44	-1.70
2026	Jun	30	9	26	49.0790	16	56	21.490	1.05060905	16.0	-4.1	40.8e	67	69.5	286.1	-1.41	17.03	-1.40
2026	Jul	5	9	48	50.4910	14	57	23.710	1.01263958	16.6	-4.1	41.7e	69	67.6	287.7	-1.14	18.41	-1.07
2026	Jul	10	10	10	11.5792	12	50	11.886	0.97415059	17.3	-4.1	42.5e	72	65.6	289.1	-0.82	19.60	-0.72
2026	Jul	15	10	30	54.0131	10	36	11.942	0.93519927	18.0	-4.2	43.3e	74	63.5	290.3	-0.47	20.59	-0.36

Venus 2026, Equinox of J2000

Date			Right Asc.			Declination			Distance	dia	mag	Elong		I	%Ill	Limb	De	Pp	Ds
year	mth	d	h	m	s	o	'	"	AU	"		o		o		o	o	o	o
2026	Jul	20	10	50	59.3038	8	16	51.613	0.89583093	18.8	-4.2	44.0	e	77	61.4	291.4	-0.07	21.39	0.00
2026	Jul	25	11	10	28.6775	5	53	39.254	0.85612802	19.6	-4.3	44.6	e	79	59.2	292.3	0.36	22.01	0.37
2026	Jul	30	11	29	23.3618	3	27	59.363	0.81620023	20.6	-4.3	45.1	e	82	56.9	293.1	0.82	22.45	0.73
2026	Aug	4	11	47	44.4168	1	1	11.855	0.77616152	21.7	-4.3	45.5	e	85	54.5	293.7	1.32	22.72	1.07
2026	Aug	9	12	5	32.4779	- 1	25	27.397	0.73611276	22.8	-4.4	45.8	e	88	52.0	294.2	1.85	22.85	1.39
2026	Aug	14	12	22	47.1082	- 3	50	42.646	0.69612698	24.2	-4.4	45.9	e	91	49.4	294.6	2.41	22.83	1.69
2026	Aug	19	12	39	25.7880	- 6	13	12.482	0.65628017	25.6	-4.5	45.8	e	94	46.6	294.8	2.99	22.69	1.95
2026	Aug	24	12	55	23.7586	- 8	31	31.831	0.61669747	27.3	-4.6	45.6	e	97	43.8	295.1	3.60	22.44	2.18
2026	Aug	29	13	10	34.1051	-10	44	15.066	0.57754591	29.1	-4.6	45.1	e	101	40.7	295.3	4.23	22.10	2.36
2026	Sep	3	13	24	47.4545	-12	49	55.263	0.53902299	31.2	-4.7	44.3	e	105	37.5	295.6	4.87	21.69	2.50
2026	Sep	8	13	37	51.4618	-14	47	0.779	0.50133918	33.5	-4.7	43.2	e	109	34.0	295.9	5.53	21.24	2.59
2026	Sep	13	13	49	29.3102	-16	33	44.199	0.46471869	36.2	-4.7	41.7	e	113	30.3	296.3	6.19	20.79	2.64
2026	Sep	18	13	59	18.2620	-18	7	49.788	0.42946000	39.2	-4.8	39.7	e	118	26.4	297.1	6.83	20.37	2.63
2026	Sep	23	14	6	50.3087	-19	26	26.929	0.39599057	42.5	-4.8	37.0	e	124	22.2	298.2	7.44	20.03	2.57
2026	Sep	28	14	11	34.4590	-20	26	1.168	0.36488165	46.1	-4.8	33.7	e	130	17.7	299.9	8.00	19.82	2.46
2026	Oct	3	14	13	1.6857	-21	2	8.489	0.33685167	49.9	-4.7	29.5	e	137	13.3	302.5	8.45	19.76	2.31
2026	Oct	8	14	10	52.9108	-21	9	45.287	0.31273718	53.8	-4.6	24.4	e	145	8.9	306.6	8.74	19.89	2.11
2026	Oct	13	14	5	9.3767	-20	43	56.134	0.29347791	57.3	-4.4	18.5	e	154	5.0	313.4	8.79	20.19	1.87
2026	Oct	18	13	56	26.1738	-19	42	5.131	0.28007817	60.1	-4.2	12.1	e	163	2.1	327.1	8.54	20.59	1.60
2026	Oct	23	13	46	0.2626	-18	7	13.963	0.27343185	61.5	-4.3	7.0	w	170	0.7	5.5	7.94	21.02	1.29
2026	Oct	28	13	35	39.3308	-16	10	6.571	0.27406047	61.4	-4.3	8.4	w	168	1.0	68.4	7.01	21.39	0.96
2026	Nov	2	13	27	11.6108	-14	7	14.882	0.28189998	59.7	-4.3	14.6	w	160	3.1	93.6	5.86	21.64	0.60
2026	Nov	7	13	21	53.3140	-12	15	14.379	0.29630510	56.8	-4.5	21.0	w	151	6.4	103.1	4.60	21.77	0.24
2026	Nov	12	13	20	17.1088	-10	45	43.809	0.31631008	53.2	-4.7	26.7	w	142	10.7	107.7	3.36	21.79	-0.13
2026	Nov	17	13	22	22.0719	- 9	44	12.428	0.34088886	49.3	-4.8	31.6	w	134	15.2	110.3	2.22	21.70	-0.50
2026	Nov	22	13	27	48.8333	- 9	11	20.061	0.36909759	45.6	-4.9	35.6	w	127	19.9	111.7	1.21	21.51	-0.86
2026	Nov	27	13	36	11.3948	- 9	4	53.609	0.40012373	42.0	-4.9	38.8	w	121	24.4	112.4	0.36	21.20	-1.20
2026	Dec	2	13	47	3.3553	- 9	21	13.337	0.43326926	38.8	-4.9	41.3	w	115	28.6	112.6	-0.34	20.77	-1.52
2026	Dec	7	14	0	0.0527	- 9	56	4.669	0.46796747	35.9	-4.8	43.2	w	110	32.6	112.5	-0.92	20.19	-1.81
2026	Dec	12	14	14	40.7858	-10	45	18.875	0.50380309	33.4	-4.8	44.6	w	106	36.3	112.0	-1.37	19.46	-2.06
2026	Dec	17	14	30	49.6567	-11	45	10.329	0.54047658	31.1	-4.7	45.6	w	102	39.7	111.2	-1.72	18.56	-2.27
2026	Dec	22	14	48	15.0613	-12	52	17.474	0.57776306	29.1	-4.7	46.3	w	98	42.9	110.2	-1.97	17.49	-2.44
2026	Dec	27	15	6	48.8356	-14	3	38.224	0.61547101	27.3	-4.6	46.7	w	95	45.9	109.0	-2.14	16.24	-2.56

Mars 2026, Equinox of J2000

Date			Right Asc.			Declination			Distance	dia	mag	Elong	I	%Ill	Limb	De	Pp	Ds
year	mth	d	h	m	s	o	'	"	AU	"		o	o		o	o	o	o
2026	Jan	1	18	53	57.3693	-23	45	5.976	2.41069002	3.9	1.2	2.3e	2	100.0	287.5	-7.82	20.01	-7.88
2026	Jan	6	19	10	37.6922	-23	22	18.690	2.40654847	3.9	1.2	1.3e	1	100.0	309.9	-9.42	17.81	-9.09
2026	Jan	11	19	27	15.7533	-22	52	55.242	2.40199338	3.9	1.2	1.0w	1	100.0	13.0	-10.98	15.54	-10.28
2026	Jan	16	19	43	49.8824	-22	17	3.297	2.39703530	3.9	1.2	1.9w	1	100.0	48.5	-12.51	13.21	-11.45
2026	Jan	21	20	0	18.4020	-21	34	54.131	2.39168950	3.9	1.2	3.0w	2	100.0	58.9	-13.99	10.83	-12.60
2026	Jan	26	20	16	39.7535	-20	46	42.470	2.38599212	3.9	1.2	4.1w	3	99.9	62.8	-15.42	8.40	-13.73
2026	Jan	31	20	32	52.6877	-19	52	45.594	2.38000862	3.9	1.2	5.3w	4	99.9	64.4	-16.79	5.93	-14.83
2026	Feb	5	20	48	56.4397	-18	53	21.838	2.37380376	3.9	1.2	6.4w	5	99.8	65.0	-18.09	3.44	-15.90
2026	Feb	10	21	4	50.5575	-17	48	50.640	2.36739918	4.0	1.2	7.5w	5	99.8	65.2	-19.30	0.92	-16.93
2026	Feb	15	21	20	34.6606	-16	39	33.642	2.36079237	4.0	1.2	8.7w	6	99.7	65.1	-20.44	358.40	-17.92
2026	Feb	20	21	36	8.4507	-15	25	54.707	2.35398477	4.0	1.2	9.8w	7	99.6	64.9	-21.47	355.87	-18.86
2026	Feb	25	21	51	31.7702	-14	8	19.375	2.34700163	4.0	1.2	10.8w	8	99.5	64.6	-22.41	353.34	-19.75
2026	Mar	2	22	6	44.7883	-12	47	13.155	2.33989579	4.0	1.2	11.9w	9	99.5	64.3	-23.24	350.83	-20.59
2026	Mar	7	22	21	48.0618	-11	23	0.376	2.33270388	4.0	1.2	13.0w	9	99.3	64.0	-23.96	348.35	-21.37
2026	Mar	12	22	36	42.2958	-	9	56 5.406	2.32542062	4.0	1.2	14.0w	10	99.2	63.8	-24.55	345.91	-22.08
2026	Mar	17	22	51	28.1770	-	8	26 53.716	2.31802222	4.0	1.2	15.1w	11	99.1	63.6	-25.03	343.51	-22.73
2026	Mar	22	23	6	6.3533	-	6	55 51.877	2.31048878	4.1	1.2	16.1w	12	99.0	63.5	-25.37	341.18	-23.31
2026	Mar	27	23	20	37.4927	-	5	23 26.762	2.30283077	4.1	1.2	17.2w	12	98.9	63.5	-25.59	338.92	-23.81
2026	Apr	1	23	35	2.5021	-	3	50 3.403	2.29507978	4.1	1.2	18.2w	13	98.7	63.5	-25.67	336.75	-24.24
2026	Apr	6	23	49	22.4989	-	2	16 5.057	2.28723933	4.1	1.2	19.2w	14	98.6	63.6	-25.63	334.69	-24.60
2026	Apr	11	0	3	38.5897	-	0	41 54.933	2.27927710	4.1	1.2	20.2w	15	98.4	63.8	-25.46	332.73	-24.87
2026	Apr	16	0	17	51.7597		0	52 3.077	2.27114571	4.1	1.2	21.2w	15	98.2	64.1	-25.16	330.91	-25.06
2026	Apr	21	0	32	2.8264		2	25 24.327	2.26280518	4.1	1.2	22.3w	16	98.1	64.5	-24.74	329.22	-25.17
2026	Apr	26	0	46	12.5529		3	57 44.814	2.25425365	4.2	1.2	23.3w	17	97.9	64.9	-24.20	327.68	-25.19
2026	May	1	1	0	21.8861		5	28 43.070	2.24549920	4.2	1.2	24.3w	17	97.7	65.5	-23.55	326.29	-25.14
2026	May	6	1	14	31.8460		6	57 58.965	2.23651692	4.2	1.2	25.3w	18	97.5	66.1	-22.79	325.07	-25.01
2026	May	11	1	28	43.3387		8	25 12.304	2.22725287	4.2	1.2	26.3w	19	97.4	66.7	-21.93	324.02	-24.79
2026	May	16	1	42	57.0567		9	50 2.406	2.21764074	4.2	1.2	27.4w	19	97.2	67.5	-20.99	323.15	-24.51
2026	May	21	1	57	13.4130		11	12 8.247	2.20762989	4.2	1.3	28.4w	20	97.0	68.4	-19.95	322.45	-24.14
2026	May	26	2	11	32.7524		12	31 10.460	2.19721234	4.3	1.3	29.5w	21	96.8	69.3	-18.85	321.92	-23.71
2026	May	31	2	25	55.5572		13	46 52.200	2.18637706	4.3	1.3	30.6w	21	96.5	70.3	-17.67	321.57	-23.21
2026	Jun	5	2	40	22.2689		14	58 57.603	2.17508109	4.3	1.3	31.7w	22	96.3	71.3	-16.43	321.40	-22.65
2026	Jun	10	2	54	53.1303		16	7 11.025	2.16325739	4.3	1.3	32.8w	23	96.1	72.5	-15.14	321.40	-22.02
2026	Jun	15	3	9	28.0649		17	11 16.904	2.15083026	4.4	1.3	33.9w	23	95.9	73.7	-13.80	321.57	-21.34
2026	Jun	20	3	24	6.6421		18	11 0.475	2.13775198	4.4	1.3	35.0w	24	95.7	74.9	-12.42	321.90	-20.61
2026	Jun	25	3	38	48.4164		19	6 9.627	2.12401467	4.4	1.3	36.2w	25	95.4	76.2	-11.01	322.39	-19.83
2026	Jun	30	3	53	33.0426		19	56 34.564	2.10959705	4.4	1.3	37.4w	25	95.2	77.6	-9.57	323.03	-19.01
2026	Jul	5	4	8	20.0774		20	42 6.703	2.09444943	4.5	1.3	38.6w	26	94.9	79.0	-8.11	323.81	-18.14
2026	Jul	10	4	23	8.8413		21	22 38.417	2.07850067	4.5	1.3	39.9w	27	94.7	80.4	-6.64	324.72	-17.24
2026	Jul	15	4	37	58.2819		21	58 3.289	2.06167816	4.5	1.3	41.1w	27	94.4	81.8	-5.16	325.77	-16.30

Mars 2026, Equinox of J2000

Date			Right Asc.			Declination			Distance	dia	mag	Elong		I	%Ill	Limb	De	Pp	Ds
year	mth	d	h	m	s	o	'	"	AU	"		o		o		o	o	o	o
2026	Jul	20	4	52	47.0679	22	28	17.204	2.04394999	4.6	1.3	42.5	w	28	94.2	83.3	-3.68	326.92	-15.34
2026	Jul	25	5	7	34.0141	22	53	18.965	2.02531389	4.6	1.3	43.8	w	29	93.9	84.8	-2.20	328.19	-14.35
2026	Jul	30	5	22	18.0788	23	13	9.347	2.00574893	4.7	1.3	45.2	w	29	93.7	86.3	-0.74	329.55	-13.34
2026	Aug	4	5	36	58.1892	23	27	50.583	1.98520861	4.7	1.3	46.6	w	30	93.4	87.8	0.72	331.01	-12.31
2026	Aug	9	5	51	33.0892	23	37	26.460	1.96362682	4.8	1.3	48.0	w	30	93.1	89.3	2.16	332.54	-11.27
2026	Aug	14	6	6	1.2204	23	42	2.977	1.94094892	4.8	1.3	49.5	w	31	92.9	90.8	3.58	334.14	-10.21
2026	Aug	19	6	20	20.9957	23	41	48.834	1.91716832	4.9	1.3	51.0	w	32	92.6	92.3	4.97	335.80	-9.14
2026	Aug	24	6	34	31.1661	23	36	54.539	1.89229497	4.9	1.3	52.6	w	32	92.3	93.7	6.33	337.52	-8.06
2026	Aug	29	6	48	30.7110	23	27	31.663	1.86631940	5.0	1.3	54.2	w	33	92.1	95.1	7.66	339.27	-6.98
2026	Sep	3	7	2	18.6701	23	13	52.794	1.83920711	5.1	1.2	55.9	w	33	91.8	96.5	8.95	341.07	-5.90
2026	Sep	8	7	15	53.9185	22	56	12.188	1.81090877	5.2	1.2	57.6	w	34	91.5	97.8	10.19	342.88	-4.81
2026	Sep	13	7	29	15.1232	22	34	46.522	1.78140404	5.3	1.2	59.3	w	34	91.3	99.1	11.40	344.72	-3.73
2026	Sep	18	7	42	21.1301	22	9	53.933	1.75071921	5.3	1.2	61.2	w	35	91.0	100.3	12.55	346.57	-2.65
2026	Sep	23	7	55	11.1531	21	41	52.638	1.71888644	5.4	1.2	63.0	w	35	90.8	101.5	13.65	348.42	-1.57
2026	Sep	28	8	7	44.6118	21	11	0.836	1.68591959	5.6	1.1	65.0	w	36	90.6	102.6	14.70	350.27	-0.50
2026	Oct	3	8	20	0.9210	20	37	37.303	1.65180657	5.7	1.1	67.0	w	36	90.4	103.6	15.68	352.11	0.56
2026	Oct	8	8	31	59.1889	20	2	2.968	1.61653272	5.8	1.1	69.0	w	37	90.2	104.6	16.61	353.93	1.61
2026	Oct	13	8	43	38.3340	19	24	40.786	1.58012924	5.9	1.0	71.2	w	37	90.0	105.5	17.48	355.74	2.66
2026	Oct	18	8	54	57.4710	18	45	53.611	1.54266560	6.1	1.0	73.4	w	37	89.8	106.4	18.28	357.51	3.69
2026	Oct	23	9	5	55.9393	18	6	3.415	1.50421185	6.2	1.0	75.6	w	37	89.7	107.1	19.02	359.25	4.71
2026	Oct	28	9	16	33.1383	17	25	31.799	1.46482060	6.4	0.9	78.0	w	38	89.6	107.8	19.69	0.95	5.71
2026	Nov	2	9	26	48.2177	16	44	41.762	1.42452024	6.6	0.9	80.5	w	38	89.5	108.5	20.30	2.60	6.70
2026	Nov	7	9	36	39.7703	16	3	59.738	1.38335927	6.8	0.8	83.0	w	38	89.4	109.0	20.83	4.20	7.67
2026	Nov	12	9	46	6.1569	15	23	53.553	1.34144283	7.0	0.8	85.7	w	38	89.4	109.5	21.30	5.74	8.63
2026	Nov	17	9	55	5.7974	14	44	50.197	1.29890617	7.2	0.7	88.4	w	38	89.5	109.9	21.70	7.20	9.56
2026	Nov	22	10	3	37.1107	14	7	15.900	1.25588582	7.5	0.6	91.3	w	38	89.6	110.3	22.04	8.59	10.48
2026	Nov	27	10	11	38.3276	13	31	37.303	1.21250276	7.7	0.5	94.3	w	37	89.7	110.6	22.32	9.89	11.38
2026	Dec	2	10	19	7.0029	12	58	24.901	1.16886774	8.0	0.5	97.5	w	37	89.9	110.8	22.53	11.10	12.26
2026	Dec	7	10	25	59.8559	12	28	13.685	1.12514453	8.3	0.4	100.8	w	36	90.2	110.9	22.68	12.20	13.11
2026	Dec	12	10	32	13.2924	12	1	38.864	1.08156041	8.7	0.3	104.3	w	36	90.6	111.0	22.78	13.19	13.95
2026	Dec	17	10	37	43.5974	11	39	14.192	1.03837406	9.0	0.2	108.0	w	35	91.0	111.0	22.83	14.06	14.76
2026	Dec	22	10	42	26.8793	11	21	32.182	0.99585424	9.4	0.1	111.9	w	34	91.5	110.9	22.82	14.80	15.54
2026	Dec	27	10	46	18.8224	11	9	5.977	0.95426537	9.8	0.0	116.0	w	33	92.2	110.7	22.78	15.40	16.30

Jupiter 2026, Equinox of J2000

Date			Right Asc.			Declination			Distance	dia	mag	Elong		I	%Ill	Limb	De	Pp	Ds
year	mth	d	h	m	s	o	'	"	AU	"		o		o		o	o	o	o
2026	Jan	1	7	30	55.0366	22	2	4.489	4.24274553	46.4	-2.5	169.2	w	2	100.0	97.6	1.38	10.36	1.48
2026	Jan	6	7	28	5.8163	22	8	48.519	4.23349007	46.5	-2.5	175.0	w	1	100.0	95.7	1.39	10.08	1.46
2026	Jan	11	7	25	13.5180	22	15	25.744	4.23212030	46.5	-2.5	179.2	e	0	100.0	297.7	1.39	9.79	1.44
2026	Jan	16	7	22	21.3730	22	21	49.115	4.23870702	46.5	-2.5	173.5	e	1	100.0	280.4	1.40	9.50	1.42
2026	Jan	21	7	19	32.7445	22	27	52.131	4.25321402	46.3	-2.5	167.7	e	2	100.0	279.1	1.40	9.22	1.40
2026	Jan	26	7	16	50.9523	22	33	29.157	4.27547483	46.1	-2.5	162.0	e	3	99.9	278.4	1.41	8.94	1.38
2026	Jan	31	7	14	19.0391	22	38	35.869	4.30519386	45.7	-2.5	156.4	e	4	99.9	278.0	1.41	8.69	1.36
2026	Feb	5	7	11	59.6036	22	43	9.570	4.34200247	45.4	-2.4	150.7	e	5	99.8	277.6	1.42	8.45	1.34
2026	Feb	10	7	9	54.9150	22	47	8.747	4.38551115	44.9	-2.4	145.2	e	6	99.7	277.3	1.42	8.23	1.32
2026	Feb	15	7	8	7.0167	22	50	32.434	4.43528094	44.4	-2.4	139.7	e	7	99.6	277.1	1.43	8.05	1.30
2026	Feb	20	7	6	37.6460	22	53	20.089	4.49079862	43.9	-2.4	134.3	e	8	99.5	276.9	1.43	7.90	1.28
2026	Feb	25	7	5	28.1244	22	55	31.599	4.55147384	43.3	-2.3	129.0	e	8	99.5	276.7	1.43	7.78	1.26
2026	Mar	2	7	4	39.2387	22	57	7.480	4.61667695	42.7	-2.3	123.8	e	9	99.4	276.6	1.43	7.69	1.23
2026	Mar	7	7	4	11.3380	22	58	8.702	4.68580719	42.0	-2.3	118.7	e	10	99.3	276.5	1.42	7.65	1.21
2026	Mar	12	7	4	4.5587	22	58	36.090	4.75829456	41.4	-2.2	113.7	e	10	99.2	276.5	1.42	7.63	1.19
2026	Mar	17	7	4	18.8730	22	58	30.069	4.83356110	40.7	-2.2	108.7	e	10	99.2	276.4	1.41	7.66	1.17
2026	Mar	22	7	4	54.0485	22	57	50.717	4.91100561	40.1	-2.1	103.9	e	11	99.1	276.5	1.41	7.72	1.15
2026	Mar	27	7	5	49.5658	22	56	38.028	4.99000885	39.5	-2.1	99.2	e	11	99.1	276.5	1.40	7.81	1.13
2026	Apr	1	7	7	4.6139	22	54	52.171	5.06999293	38.8	-2.1	94.5	e	11	99.1	276.6	1.39	7.94	1.11
2026	Apr	6	7	8	38.2946	22	52	33.186	5.15045181	38.2	-2.0	89.9	e	11	99.1	276.7	1.38	8.10	1.09
2026	Apr	11	7	10	29.7386	22	49	40.690	5.23091387	37.6	-2.0	85.4	e	11	99.1	276.9	1.36	8.29	1.07
2026	Apr	16	7	12	38.0794	22	46	13.924	5.31091039	37.1	-2.0	81.0	e	11	99.1	277.1	1.35	8.51	1.05
2026	Apr	21	7	15	2.3925	22	42	11.968	5.38996257	36.5	-1.9	76.7	e	11	99.1	277.3	1.33	8.76	1.03
2026	Apr	26	7	17	41.6016	22	37	34.151	5.46760635	36.0	-1.9	72.5	e	11	99.2	277.5	1.31	9.03	1.01
2026	May	1	7	20	34.5692	22	32	20.075	5.54345209	35.5	-1.9	68.3	e	10	99.2	277.7	1.29	9.32	0.99
2026	May	6	7	23	40.2567	22	26	29.207	5.61716773	35.1	-1.8	64.1	e	10	99.2	278.0	1.27	9.63	0.96
2026	May	11	7	26	57.7267	22	20	0.793	5.68843688	34.6	-1.8	60.1	e	10	99.3	278.2	1.25	9.96	0.94
2026	May	16	7	30	26.0892	22	12	53.998	5.75693780	34.2	-1.8	56.1	e	9	99.4	278.5	1.22	10.31	0.92
2026	May	21	7	34	4.4141	22	5	8.211	5.82233870	33.8	-1.8	52.1	e	9	99.4	278.8	1.20	10.67	0.90
2026	May	26	7	37	51.6799	21	56	43.392	5.88434886	33.5	-1.8	48.2	e	8	99.5	279.1	1.17	11.04	0.88
2026	May	31	7	41	46.9255	21	47	39.694	5.94274985	33.1	-1.7	44.3	e	8	99.5	279.4	1.14	11.43	0.86
2026	Jun	5	7	45	49.3179	21	37	57.146	5.99735214	32.8	-1.7	40.5	e	7	99.6	279.7	1.11	11.82	0.84
2026	Jun	10	7	49	58.1097	21	27	35.712	6.04796494	32.6	-1.7	36.7	e	7	99.7	280.0	1.08	12.22	0.82
2026	Jun	15	7	54	12.5750	21	16	35.490	6.09438217	32.3	-1.7	32.9	e	6	99.7	280.3	1.04	12.62	0.80
2026	Jun	20	7	58	31.9165	21	4	57.124	6.13639767	32.1	-1.7	29.1	e	5	99.8	280.6	1.01	13.03	0.77
2026	Jun	25	8	2	55.2984	20	52	41.821	6.17386704	31.9	-1.7	25.4	e	5	99.8	280.8	0.97	13.44	0.75
2026	Jun	30	8	7	21.9900	20	39	50.774	6.20669701	31.7	-1.7	21.7	e	4	99.9	281.0	0.94	13.86	0.73
2026	Jul	5	8	11	51.3608	20	26	25.057	6.23480169	31.6	-1.6	18.0	e	3	99.9	281.1	0.90	14.27	0.71
2026	Jul	10	8	16	22.8287	20	12	25.779	6.25808268	31.5	-1.6	14.3	e	3	99.9	281.1	0.86	14.68	0.69
2026	Jul	15	8	20	55.7843	19	57	54.405	6.27642411	31.4	-1.6	10.7	e	2	100.0	280.8	0.82	15.08	0.67

Jupiter 2026, Equinox of J2000

Date			Right Asc.			Declination			Distance	dia	mag	Elong		I	%Ill	Limb	De	Pp	Ds
year	mth	d	h	m	s	o	'	"	AU	"		o		o		o	o	o	o
2026	Jul	20	8	25	29.5263	19	42	53.133	6.28973430	31.3	-1.6	7.0	e	1	100.0	279.9	0.78	15.49	0.65
2026	Jul	25	8	30	3.3715	19	27	24.467	6.29798884	31.3	-1.6	3.3	e	1	100.0	276.0	0.73	15.88	0.62
2026	Jul	30	8	34	36.7361	19	11	30.747	6.30119087	31.3	-1.6	0.6	w	0	100.0	157.3	0.69	16.27	0.60
2026	Aug	4	8	39	9.0994	18	55	14.232	6.29933933	31.3	-1.6	4.1	w	1	100.0	111.5	0.65	16.66	0.58
2026	Aug	9	8	43	39.9454	18	38	37.348	6.29241444	31.3	-1.6	7.7	w	1	100.0	108.7	0.60	17.03	0.56
2026	Aug	14	8	48	8.6771	18	21	43.154	6.28039190	31.4	-1.6	11.4	w	2	100.0	107.9	0.56	17.40	0.54
2026	Aug	19	8	52	34.6215	18	4	35.397	6.26329965	31.4	-1.6	15.1	w	3	99.9	107.6	0.51	17.76	0.52
2026	Aug	24	8	56	57.1588	17	47	17.818	6.24122256	31.6	-1.6	18.9	w	4	99.9	107.6	0.47	18.10	0.50
2026	Aug	29	9	1	15.7411	17	29	53.964	6.21425773	31.7	-1.6	22.6	w	4	99.9	107.7	0.42	18.44	0.47
2026	Sep	3	9	5	29.8482	17	12	27.365	6.18249230	31.9	-1.6	26.4	w	5	99.8	107.8	0.37	18.76	0.45
2026	Sep	8	9	9	38.9096	16	55	1.971	6.14599700	32.0	-1.7	30.2	w	5	99.8	108.0	0.33	19.07	0.43
2026	Sep	13	9	13	42.2391	16	37	42.564	6.10486741	32.3	-1.7	34.1	w	6	99.7	108.1	0.28	19.37	0.41
2026	Sep	18	9	17	39.1164	16	20	34.322	6.05926798	32.5	-1.7	38.0	w	7	99.7	108.3	0.23	19.65	0.39
2026	Sep	23	9	21	28.8822	16	3	42.195	6.00940415	32.8	-1.7	41.9	w	7	99.6	108.5	0.19	19.92	0.37
2026	Sep	28	9	25	10.9203	15	47	10.953	5.95548719	33.1	-1.7	45.9	w	8	99.5	108.7	0.14	20.18	0.34
2026	Oct	3	9	28	44.6049	15	31	5.467	5.89771574	33.4	-1.7	49.9	w	8	99.5	108.8	0.09	20.42	0.32
2026	Oct	8	9	32	9.2024	15	15	31.332	5.83628950	33.7	-1.8	53.9	w	9	99.4	109.0	0.05	20.65	0.30
2026	Oct	13	9	35	23.8749	15	0	34.861	5.77146752	34.1	-1.8	58.0	w	9	99.4	109.1	0.00	20.86	0.28
2026	Oct	18	9	38	27.8020	14	46	22.289	5.70357664	34.5	-1.8	62.2	w	10	99.3	109.3	-0.04	21.06	0.26
2026	Oct	23	9	41	20.2246	14	32	59.442	5.63297188	35.0	-1.8	66.5	w	10	99.3	109.4	-0.08	21.24	0.24
2026	Oct	28	9	44	0.4169	14	20	31.884	5.56001059	35.4	-1.8	70.8	w	10	99.2	109.5	-0.12	21.40	0.21
2026	Nov	2	9	46	27.6113	14	9	5.389	5.48503933	35.9	-1.9	75.1	w	10	99.2	109.6	-0.17	21.55	0.19
2026	Nov	7	9	48	40.9167	13	58	46.476	5.40843820	36.4	-1.9	79.6	w	11	99.2	109.7	-0.20	21.69	0.17
2026	Nov	12	9	50	39.4232	13	49	41.686	5.33066580	36.9	-1.9	84.1	w	11	99.1	109.7	-0.24	21.80	0.15
2026	Nov	17	9	52	22.3157	13	41	56.793	5.25223208	37.5	-2.0	88.7	w	11	99.1	109.8	-0.28	21.90	0.13
2026	Nov	22	9	53	48.8858	13	35	36.712	5.17366192	38.1	-2.0	93.4	w	11	99.1	109.8	-0.31	21.99	0.11
2026	Nov	27	9	54	58.5018	13	30	45.693	5.09547201	38.7	-2.0	98.1	w	11	99.2	109.8	-0.34	22.05	0.09
2026	Dec	2	9	55	50.5110	13	27	27.993	5.01817486	39.2	-2.1	103.0	w	10	99.2	109.7	-0.37	22.10	0.06
2026	Dec	7	9	56	24.2551	13	25	47.727	4.94234251	39.9	-2.1	107.9	w	10	99.2	109.7	-0.39	22.13	0.04
2026	Dec	12	9	56	39.2543	13	25	47.608	4.86860732	40.5	-2.1	112.9	w	10	99.3	109.6	-0.42	22.15	0.02
2026	Dec	17	9	56	35.2831	13	27	28.476	4.79761580	41.1	-2.2	118.1	w	9	99.3	109.5	-0.44	22.14	0.00
2026	Dec	22	9	56	12.3706	13	30	49.361	4.72999536	41.6	-2.2	123.2	w	9	99.4	109.4	-0.45	22.12	-0.02
2026	Dec	27	9	55	30.7478	13	35	47.926	4.66633283	42.2	-2.2	128.5	w	8	99.5	109.2	-0.47	22.08	-0.04

Saturn 2026, Equinox of J2000

Date			Right Asc.			Declination			Distance	dia	mag	Elong		I	%Ill	Limb	De	Pp	Ds
year	mth	d	h	m	s	o	'	"	AU	"		o		o		o	o	o	o
2026	Jan	1	23	48	11.3049	- 3	44	26.439	9.71428486	17.2	1.2	75.6	e	6	99.7	247.2	-0.95	4.45	-3.58
2026	Jan	6	23	49	18.2709	- 3	36	9.321	9.79360686	17.0	1.2	70.8	e	6	99.8	247.4	-1.11	4.43	-3.65
2026	Jan	11	23	50	33.4146	- 3	27	1.899	9.87069784	16.9	1.2	66.1	e	5	99.8	247.6	-1.29	4.40	-3.73
2026	Jan	16	23	51	56.3410	- 3	17	6.947	9.94504873	16.8	1.2	61.4	e	5	99.8	247.8	-1.48	4.37	-3.80
2026	Jan	21	23	53	26.6013	- 3	6	27.645	10.01615008	16.6	1.2	56.7	e	5	99.8	248.0	-1.68	4.34	-3.88
2026	Jan	26	23	55	3.6836	- 2	55	7.633	10.08352124	16.5	1.2	52.1	e	5	99.8	248.3	-1.90	4.31	-3.95
2026	Jan	31	23	56	47.0293	- 2	43	10.832	10.14674814	16.4	1.1	47.5	e	4	99.9	248.5	-2.13	4.27	-4.03
2026	Feb	5	23	58	36.0989	- 2	30	40.914	10.20549339	16.3	1.1	42.9	e	4	99.9	248.9	-2.37	4.23	-4.10
2026	Feb	10	0	0	30.4021	- 2	17	41.153	10.25944007	16.2	1.1	38.4	e	4	99.9	249.3	-2.63	4.19	-4.18
2026	Feb	15	0	2	29.4429	- 2	4	14.926	10.30826539	16.2	1.1	33.9	e	3	99.9	249.8	-2.89	4.15	-4.25
2026	Feb	20	0	4	32.6882	- 1	50	25.928	10.35166544	16.1	1.1	29.4	e	3	99.9	250.4	-3.15	4.11	-4.33
2026	Feb	25	0	6	39.5635	- 1	36	18.169	10.38938661	16.0	1.1	24.9	e	3	100.0	251.2	-3.42	4.06	-4.40
2026	Mar	2	0	8	49.4934	- 1	21	55.591	10.42125802	16.0	1.0	20.5	e	2	100.0	252.3	-3.70	4.02	-4.48
2026	Mar	7	0	11	1.9598	- 1	7	21.644	10.44716135	16.0	1.0	16.2	e	2	100.0	253.9	-3.98	3.97	-4.55
2026	Mar	12	0	13	16.4801	- 0	52	39.554	10.46697749	15.9	1.0	11.8	e	1	100.0	256.8	-4.27	3.92	-4.63
2026	Mar	17	0	15	32.5554	- 0	37	52.731	10.48059078	15.9	0.9	7.6	e	1	100.0	262.8	-4.55	3.87	-4.70
2026	Mar	22	0	17	49.6520	- 0	23	4.873	10.48791506	15.9	0.9	3.6	e	0	100.0	282.6	-4.83	3.82	-4.78
2026	Mar	27	0	20	7.2083	- 0	8	19.837	10.48893148	15.9	0.9	2.6	w	0	100.0	10.2	-5.12	3.77	-4.85
2026	Apr	1	0	22	24.6996	0	6	18.901	10.48369564	15.9	0.9	6.1	w	1	100.0	46.3	-5.40	3.72	-4.93
2026	Apr	6	0	24	41.6584	0	20	48.311	10.47227964	15.9	0.9	10.3	w	1	100.0	54.8	-5.68	3.67	-5.00
2026	Apr	11	0	26	57.6250	0	35	5.373	10.45474748	15.9	0.9	14.5	w	2	100.0	58.4	-5.95	3.61	-5.08
2026	Apr	16	0	29	12.1125	0	49	6.837	10.43117457	16.0	0.9	18.7	w	2	100.0	60.4	-6.22	3.56	-5.15
2026	Apr	21	0	31	24.5947	1	2	49.189	10.40167670	16.0	0.9	23.0	w	2	100.0	61.7	-6.48	3.51	-5.22
2026	Apr	26	0	33	34.5404	1	16	9.003	10.36644732	16.1	0.9	27.3	w	3	99.9	62.6	-6.73	3.46	-5.30
2026	May	1	0	35	41.4792	1	29	3.398	10.32572397	16.1	0.9	31.6	w	3	99.9	63.3	-6.98	3.41	-5.37
2026	May	6	0	37	44.9747	1	41	29.732	10.27973517	16.2	0.9	35.8	w	4	99.9	63.9	-7.22	3.36	-5.45
2026	May	11	0	39	44.5764	1	53	25.226	10.22870531	16.3	0.9	40.1	w	4	99.9	64.3	-7.45	3.32	-5.52
2026	May	16	0	41	39.7988	2	4	46.861	10.17287880	16.4	0.9	44.4	w	4	99.9	64.7	-7.66	3.27	-5.60
2026	May	21	0	43	30.1223	2	15	31.457	10.11255611	16.5	0.9	48.8	w	5	99.8	65.0	-7.87	3.23	-5.67
2026	May	26	0	45	15.0621	2	25	36.248	10.04810906	16.6	0.9	53.1	w	5	99.8	65.3	-8.06	3.19	-5.75
2026	May	31	0	46	54.1992	2	34	58.981	9.97991624	16.7	0.9	57.5	w	5	99.8	65.6	-8.24	3.15	-5.82
2026	Jun	5	0	48	27.1257	2	43	37.440	9.90834032	16.8	0.9	61.8	w	5	99.8	65.9	-8.40	3.11	-5.90
2026	Jun	10	0	49	53.4136	2	51	29.240	9.83374836	16.9	0.9	66.2	w	6	99.8	66.1	-8.55	3.07	-5.97
2026	Jun	15	0	51	12.6038	2	58	31.817	9.75653984	17.1	0.8	70.6	w	6	99.7	66.3	-8.69	3.04	-6.05
2026	Jun	20	0	52	24.2400	3	4	42.758	9.67718318	17.2	0.8	75.1	w	6	99.7	66.6	-8.81	3.01	-6.12
2026	Jun	25	0	53	27.9502	3	10	0.358	9.59618816	17.4	0.8	79.6	w	6	99.7	66.8	-8.91	2.99	-6.20
2026	Jun	30	0	54	23.4245	3	14	23.288	9.51404392	17.5	0.8	84.1	w	6	99.7	67.0	-8.99	2.96	-6.27
2026	Jul	5	0	55	10.3640	3	17	50.222	9.43122673	17.7	0.8	88.7	w	6	99.7	67.2	-9.06	2.94	-6.34
2026	Jul	10	0	55	48.4654	3	20	19.768	9.34822464	17.8	0.7	93.3	w	6	99.7	67.4	-9.11	2.93	-6.42
2026	Jul	15	0	56	17.4309	3	21	50.626	9.26557051	18.0	0.7	97.9	w	6	99.7	67.6	-9.14	2.92	-6.49

Saturn 2026, Equinox of J2000

Date	Right Asc.	Declination	Distance	dia	mag	Elong	I	%Ill	Limb	De	Pp	Ds
year mth d	h m s	o ' "	AU	"		o	o		o	o	o	o
2026 Jul 20	0 56 37.0432	3 22 22.177	9.18385560	18.1	0.7	102.6w	6	99.7	67.8	-9.15	2.91	-6.57
2026 Jul 25	0 56 47.2148	3 21 54.679	9.10366441	18.3	0.7	107.3w	6	99.7	68.1	-9.15	2.90	-6.64
2026 Jul 30	0 56 47.9280	3 20 28.726	9.02554425	18.5	0.6	112.1w	6	99.8	68.3	-9.13	2.90	-6.72
2026 Aug 4	0 56 39.2037	3 18 5.063	8.95002678	18.6	0.6	116.9w	5	99.8	68.6	-9.08	2.91	-6.79
2026 Aug 9	0 56 21.0984	3 14 44.641	8.87765523	18.8	0.6	121.8w	5	99.8	68.9	-9.02	2.91	-6.86
2026 Aug 14	0 55 53.7514	3 10 29.042	8.80901181	18.9	0.6	126.7w	5	99.8	69.2	-8.95	2.93	-6.94
2026 Aug 19	0 55 17.4681	3 5 21.026	8.74468566	19.1	0.5	131.7w	5	99.8	69.6	-8.85	2.94	-7.01
2026 Aug 24	0 54 32.6999	2 59 24.185	8.68520589	19.2	0.5	136.7w	4	99.9	70.0	-8.75	2.96	-7.09
2026 Aug 29	0 53 39.9766	2 52 42.461	8.63104482	19.3	0.5	141.8w	4	99.9	70.6	-8.62	2.98	-7.16
2026 Sep 3	0 52 39.8859	2 45 20.067	8.58264165	19.4	0.5	146.9w	3	99.9	71.3	-8.49	3.00	-7.24
2026 Sep 8	0 51 33.0854	2 37 21.680	8.54043303	19.5	0.4	152.0w	3	99.9	72.2	-8.34	3.03	-7.31
2026 Sep 13	0 50 20.3759	2 28 53.011	8.50485127	19.6	0.4	157.2w	2	100.0	73.5	-8.18	3.06	-7.38
2026 Sep 18	0 49 2.7250	2 20 0.799	8.47625826	19.7	0.4	162.4w	2	100.0	75.6	-8.02	3.09	-7.46
2026 Sep 23	0 47 41.1826	2 10 52.113	8.45491443	19.7	0.4	167.5w	1	100.0	79.4	-7.85	3.12	-7.53
2026 Sep 28	0 46 16.8230	2 1 34.004	8.44100188	19.7	0.3	172.6w	1	100.0	88.4	-7.67	3.16	-7.61
2026 Oct 3	0 44 50.7230	1 52 13.449	8.43465408	19.8	0.3	176.8w	0	100.0	126.4	-7.50	3.19	-7.68
2026 Oct 8	0 43 24.0008	1 42 57.747	8.43598185	19.8	0.3	175.4e	0	100.0	210.9	-7.32	3.23	-7.75
2026 Oct 13	0 41 57.8667	1 33 54.795	8.44503104	19.7	0.4	170.6e	1	100.0	230.4	-7.15	3.26	-7.83
2026 Oct 18	0 40 33.5600	1 25 12.487	8.46173065	19.7	0.4	165.4e	2	100.0	236.5	-6.99	3.29	-7.90
2026 Oct 23	0 39 12.2598	1 16 58.099	8.48590635	19.6	0.4	160.1e	2	100.0	239.4	-6.83	3.33	-7.98
2026 Oct 28	0 37 55.0474	1 9 18.121	8.51731427	19.6	0.5	154.8e	3	99.9	241.1	-6.68	3.36	-8.05
2026 Nov 2	0 36 42.9098	1 2 18.421	8.55568161	19.5	0.5	149.5e	3	99.9	242.3	-6.55	3.38	-8.12
2026 Nov 7	0 35 36.8109	0 56 4.787	8.60070608	19.4	0.5	144.2e	4	99.9	243.1	-6.43	3.41	-8.20
2026 Nov 12	0 34 37.6835	0 50 42.715	8.65199657	19.3	0.6	139.0e	4	99.9	243.8	-6.33	3.43	-8.27
2026 Nov 17	0 33 46.3441	0 46 16.748	8.70906804	19.1	0.6	133.7e	4	99.9	244.3	-6.24	3.45	-8.35
2026 Nov 22	0 33 3.4513	0 42 50.280	8.77137815	19.0	0.6	128.5e	5	99.8	244.7	-6.17	3.47	-8.42
2026 Nov 27	0 32 29.5035	0 40 25.642	8.83836650	18.9	0.7	123.3e	5	99.8	245.1	-6.12	3.48	-8.49
2026 Dec 2	0 32 4.8953	0 39 4.624	8.90948976	18.7	0.7	118.2e	5	99.8	245.4	-6.09	3.49	-8.57
2026 Dec 7	0 31 49.9842	0 38 48.848	8.98417905	18.5	0.7	113.0e	6	99.8	245.7	-6.09	3.50	-8.64
2026 Dec 12	0 31 45.0340	0 39 39.225	9.06180229	18.4	0.8	107.9e	6	99.8	246.0	-6.10	3.50	-8.71
2026 Dec 17	0 31 50.1663	0 41 35.653	9.14169296	18.2	0.8	102.9e	6	99.7	246.2	-6.13	3.50	-8.79
2026 Dec 22	0 32 5.3601	0 44 37.106	9.22318737	18.1	0.8	97.9e	6	99.7	246.4	-6.19	3.49	-8.86
2026 Dec 27	0 32 30.4825	0 48 41.943	9.30566253	17.9	0.8	92.9e	6	99.7	246.7	-6.26	3.48	-8.93

Uranus 2026, Equinox of J2000

Date	Right Asc.	Declination	Distance	dia	mag	Elong	I	%Ill	Limb	De	Pp	Ds
year mth d	h m s	o ' "	AU	"		o	o		o	o	o	o
2026 Jan 1	3 41 25.5069	19 25 28.681	18.75401593	3.7	5.6	137.4e	2	100.0	256.7	68.63	278.02	70.44
2026 Jan 6	3 40 53.5102	19 23 48.637	18.81437653	3.6	5.6	132.1e	2	100.0	256.7	68.51	277.86	70.49
2026 Jan 11	3 40 25.9671	19 22 23.083	18.87993389	3.6	5.6	126.9e	2	100.0	256.7	68.40	277.72	70.55
2026 Jan 16	3 40 3.1849	19 21 13.190	18.95016486	3.6	5.7	121.8e	2	100.0	256.7	68.32	277.61	70.60
2026 Jan 21	3 39 45.4327	19 20 19.957	19.02447907	3.6	5.7	116.6e	3	99.9	256.7	68.25	277.53	70.65
2026 Jan 26	3 39 32.9177	19 19 44.121	19.10222688	3.6	5.7	111.5e	3	99.9	256.7	68.20	277.47	70.70
2026 Jan 31	3 39 25.7643	19 19 26.103	19.18273302	3.6	5.7	106.3e	3	99.9	256.7	68.18	277.44	70.75
2026 Feb 5	3 39 24.0299	19 19 26.109	19.26535309	3.6	5.7	101.3e	3	99.9	256.7	68.17	277.44	70.81
2026 Feb 10	3 39 27.7519	19 19 44.294	19.34947064	3.5	5.7	96.2e	3	99.9	256.7	68.18	277.46	70.86
2026 Feb 15	3 39 36.9486	19 20 20.693	19.43444566	3.5	5.7	91.2e	3	99.9	256.8	68.22	277.51	70.91
2026 Feb 20	3 39 51.5944	19 21 15.131	19.51960803	3.5	5.7	86.2e	3	99.9	256.8	68.27	277.58	70.96
2026 Feb 25	3 40 11.6005	19 22 27.159	19.60427513	3.5	5.7	81.3e	3	99.9	256.9	68.35	277.69	71.01
2026 Mar 2	3 40 36.8115	19 23 56.097	19.68780380	3.5	5.7	76.3e	3	99.9	256.9	68.44	277.82	71.06
2026 Mar 7	3 41 7.0473	19 25 41.212	19.76962060	3.5	5.7	71.5e	3	99.9	257.0	68.56	277.98	71.12
2026 Mar 12	3 41 42.1308	19 27 41.772	19.84917868	3.5	5.8	66.6e	3	99.9	257.0	68.69	278.16	71.17
2026 Mar 17	3 42 21.8691	19 29 56.942	19.92592493	3.4	5.8	61.8e	3	99.9	257.1	68.84	278.37	71.22
2026 Mar 22	3 43 6.0343	19 32 25.728	19.99930497	3.4	5.8	57.0e	2	100.0	257.2	69.00	278.60	71.27
2026 Mar 27	3 43 54.3457	19 35 6.949	20.06879416	3.4	5.8	52.2e	2	100.0	257.3	69.18	278.86	71.32
2026 Apr 1	3 44 46.4924	19 37 59.373	20.13395114	3.4	5.8	47.5e	2	100.0	257.4	69.38	279.14	71.37
2026 Apr 6	3 45 42.1766	19 41 1.854	20.19439987	3.4	5.8	42.8e	2	100.0	257.5	69.59	279.45	71.43
2026 Apr 11	3 46 41.1110	19 44 13.268	20.24978018	3.4	5.8	38.1e	2	100.0	257.6	69.81	279.78	71.48
2026 Apr 16	3 47 42.9965	19 47 32.438	20.29973660	3.4	5.8	33.4e	2	100.0	257.7	70.03	280.13	71.53
2026 Apr 21	3 48 47.5037	19 50 58.081	20.34393030	3.4	5.8	28.8e	1	100.0	257.9	70.27	280.50	71.58
2026 Apr 26	3 49 54.2656	19 54 28.848	20.38208788	3.4	5.8	24.2e	1	100.0	258.0	70.52	280.89	71.63
2026 May 1	3 51 2.9231	19 58 3.491	20.41402618	3.4	5.8	19.6e	1	100.0	258.2	70.77	281.30	71.68
2026 May 6	3 52 13.1440	20 1 40.883	20.43959963	3.4	5.8	15.1e	1	100.0	258.5	71.03	281.73	71.74
2026 May 11	3 53 24.6036	20 5 19.922	20.45867016	3.4	5.8	10.5e	1	100.0	258.8	71.29	282.18	71.79
2026 May 16	3 54 36.9642	20 8 59.467	20.47110943	3.3	5.8	6.0e	0	100.0	259.6	71.55	282.64	71.84
2026 May 21	3 55 49.8570	20 12 38.322	20.47682375	3.3	5.8	1.5e	0	100.0	264.5	71.82	283.12	71.89
2026 May 26	3 57 2.8996	20 16 15.336	20.47580826	3.3	5.8	3.1w	0	100.0	75.3	72.08	283.60	71.94
2026 May 31	3 58 15.7418	20 19 49.525	20.46812322	3.3	5.8	7.6w	0	100.0	77.2	72.34	284.10	71.99
2026 Jun 5	3 59 28.0568	20 23 19.986	20.45384140	3.4	5.8	12.1w	1	100.0	77.7	72.60	284.61	72.04
2026 Jun 10	4 0 39.5187	20 26 45.825	20.43303972	3.4	5.8	16.6w	1	100.0	78.1	72.86	285.12	72.09
2026 Jun 15	4 1 49.7836	20 30 6.115	20.40581101	3.4	5.8	21.1w	1	100.0	78.3	73.11	285.64	72.15
2026 Jun 20	4 2 58.4815	20 33 19.913	20.37230702	3.4	5.8	25.6w	1	100.0	78.5	73.35	286.15	72.20
2026 Jun 25	4 4 5.2593	20 36 26.415	20.33276749	3.4	5.8	30.1w	2	100.0	78.6	73.59	286.66	72.25
2026 Jun 30	4 5 9.8033	20 39 24.949	20.28746124	3.4	5.8	34.6w	2	100.0	78.8	73.81	287.17	72.30
2026 Jul 5	4 6 11.8157	20 42 14.880	20.23665681	3.4	5.8	39.1w	2	100.0	78.9	74.03	287.67	72.35
2026 Jul 10	4 7 10.9940	20 44 55.555	20.18062733	3.4	5.8	43.6w	2	100.0	79.0	74.23	288.16	72.40
2026 Jul 15	4 8 7.0163	20 47 26.292	20.11967613	3.4	5.8	48.2w	2	100.0	79.1	74.43	288.63	72.45

Uranus 2026, Equinox of J2000

Date			Right Asc.			Declination			Distance	dia	mag	Elong		I	%Ill	Limb	De	Pp	Ds
year	mth	d	h	m	s	o	'	"	AU	"		o		o		o	o	o	o
2026	Jul	20	4	8	59.5563	20	49	46.461	20.05418538	3.4	5.8	52.8	w	2	100.0	79.2	74.61	289.08	72.50
2026	Jul	25	4	9	48.3326	20	51	55.593	19.98459709	3.4	5.8	57.3	w	3	100.0	79.3	74.78	289.50	72.55
2026	Jul	30	4	10	33.1016	20	53	53.289	19.91135383	3.4	5.8	61.9	w	3	99.9	79.4	74.93	289.90	72.61
2026	Aug	4	4	11	13.6328	20	55	39.154	19.83489212	3.5	5.7	66.6	w	3	99.9	79.5	75.07	290.26	72.66
2026	Aug	9	4	11	49.6911	20	57	12.758	19.75565678	3.5	5.7	71.2	w	3	99.9	79.5	75.19	290.59	72.71
2026	Aug	14	4	12	21.0343	20	58	33.675	19.67414237	3.5	5.7	75.9	w	3	99.9	79.6	75.30	290.89	72.76
2026	Aug	19	4	12	47.4552	20	59	41.604	19.59091667	3.5	5.7	80.6	w	3	99.9	79.6	75.39	291.13	72.81
2026	Aug	24	4	13	8.8094	21	0	36.376	19.50656354	3.5	5.7	85.3	w	3	99.9	79.7	75.46	291.33	72.86
2026	Aug	29	4	13	24.9901	21	1	17.857	19.42164774	3.5	5.7	90.1	w	3	99.9	79.7	75.51	291.49	72.91
2026	Sep	3	4	13	35.9086	21	1	45.898	19.33671995	3.5	5.7	94.9	w	3	99.9	79.8	75.55	291.59	72.96
2026	Sep	8	4	13	41.4797	21	2	0.342	19.25234494	3.6	5.7	99.7	w	3	99.9	79.8	75.57	291.65	73.01
2026	Sep	13	4	13	41.6457	21	2	1.116	19.16914292	3.6	5.7	104.6	w	3	99.9	79.8	75.57	291.65	73.06
2026	Sep	18	4	13	36.4226	21	1	48.324	19.08776482	3.6	5.7	109.4	w	3	99.9	79.8	75.55	291.60	73.11
2026	Sep	23	4	13	25.8951	21	1	22.176	19.00883195	3.6	5.7	114.4	w	3	99.9	79.8	75.52	291.50	73.16
2026	Sep	28	4	13	10.1885	21	0	42.917	18.93292471	3.6	5.6	119.3	w	3	99.9	79.8	75.46	291.35	73.21
2026	Oct	3	4	12	49.4495	20	59	50.804	18.86059538	3.6	5.6	124.3	w	2	100.0	79.8	75.39	291.16	73.27
2026	Oct	8	4	12	23.8453	20	58	46.160	18.79241120	3.6	5.6	129.4	w	2	100.0	79.8	75.31	290.92	73.32
2026	Oct	13	4	11	53.6104	20	57	29.500	18.72896381	3.7	5.6	134.4	w	2	100.0	79.7	75.20	290.64	73.37
2026	Oct	18	4	11	19.0644	20	56	1.532	18.67080969	3.7	5.6	139.5	w	2	100.0	79.7	75.09	290.32	73.42
2026	Oct	23	4	10	40.5830	20	54	23.062	18.61843403	3.7	5.6	144.6	w	2	100.0	79.7	74.95	289.98	73.47
2026	Oct	28	4	9	58.5711	20	52	34.948	18.57225377	3.7	5.6	149.8	w	1	100.0	79.7	74.81	289.60	73.52
2026	Nov	2	4	9	13.4424	20	50	38.094	18.53264522	3.7	5.6	154.9	w	1	100.0	79.7	74.66	289.21	73.57
2026	Nov	7	4	8	25.6448	20	48	33.563	18.49998556	3.7	5.6	160.1	w	1	100.0	79.7	74.49	288.80	73.62
2026	Nov	12	4	7	35.6977	20	46	22.644	18.47461421	3.7	5.6	165.4	w	1	100.0	79.8	74.32	288.38	73.67
2026	Nov	17	4	6	44.1719	20	44	6.759	18.45677892	3.7	5.6	170.6	w	0	100.0	80.0	74.14	287.96	73.72
2026	Nov	22	4	5	51.6533	20	41	47.379	18.44662888	3.7	5.6	175.9	w	0	100.0	81.1	73.96	287.53	73.77
2026	Nov	27	4	4	58.7149	20	39	25.971	18.44423076	3.7	5.6	178.9	e	0	100.0	251.5	73.77	287.11	73.82
2026	Dec	2	4	4	5.9094	20	37	4.038	18.44961614	3.7	5.6	173.6	e	0	100.0	257.6	73.59	286.70	73.87
2026	Dec	7	4	3	13.8143	20	34	43.233	18.46279147	3.7	5.6	168.3	e	1	100.0	258.1	73.40	286.30	73.92
2026	Dec	12	4	2	23.0342	20	32	25.302	18.48367583	3.7	5.6	163.0	e	1	100.0	258.3	73.22	285.92	73.97
2026	Dec	17	4	1	34.1613	20	30	11.964	18.51208126	3.7	5.6	157.8	e	1	100.0	258.3	73.05	285.56	74.02
2026	Dec	22	4	0	47.7453	20	28	4.836	18.54772755	3.7	5.6	152.5	e	1	100.0	258.3	72.88	285.23	74.07
2026	Dec	27	4	0	4.2735	20	26	5.405	18.59027705	3.7	5.6	147.2	e	2	100.0	258.3	72.73	284.92	74.12

Neptune 2026, Equinox of J2000

Date			Right Asc.			Declination			Distance	dia	mag	Elong		I	%Ill	Limb	De	Pp	Ds
year	mth	d	h	m	s	o	'	"	AU	"		o		o		o	o	o	o
2026	Jan	1	23	58	58.5657	- 1	33	48.173	30.05493981	2.4	7.9	78.9	e	2	100.0	246.8	-20.15	317.41	-19.52
2026	Jan	6	23	59	13.4881	- 1	31	58.888	30.13928575	2.4	7.9	73.9	e	2	100.0	246.9	-20.13	317.38	-19.51
2026	Jan	11	23	59	31.3934	- 1	29	50.635	30.22160867	2.4	7.9	68.9	e	2	100.0	247.1	-20.11	317.35	-19.50
2026	Jan	16	23	59	52.1886	- 1	27	24.091	30.30130028	2.4	7.9	63.9	e	2	100.0	247.2	-20.08	317.32	-19.49
2026	Jan	21	0	0	15.7534	- 1	24	40.129	30.37774534	2.4	7.9	58.9	e	2	100.0	247.4	-20.04	317.28	-19.48
2026	Jan	26	0	0	41.9353	- 1	21	39.850	30.45035308	2.4	7.9	54.0	e	2	100.0	247.5	-20.01	317.23	-19.47
2026	Jan	31	0	1	10.5547	- 1	18	24.527	30.51859849	2.4	7.9	49.0	e	1	100.0	247.7	-19.97	317.18	-19.46
2026	Feb	5	0	1	41.4271	- 1	14	55.426	30.58203827	2.4	7.9	44.1	e	1	100.0	247.9	-19.92	317.13	-19.45
2026	Feb	10	0	2	14.3746	- 1	11	13.740	30.64025732	2.4	7.9	39.2	e	1	100.0	248.2	-19.87	317.08	-19.44
2026	Feb	15	0	2	49.2079	- 1	7	20.741	30.69284055	2.4	7.9	34.3	e	1	100.0	248.5	-19.82	317.02	-19.43
2026	Feb	20	0	3	25.7171	- 1	3	17.864	30.73939896	2.4	7.9	29.4	e	1	100.0	248.9	-19.77	316.96	-19.42
2026	Feb	25	0	4	3.6694	- 0	59	6.695	30.77960338	2.4	7.9	24.5	e	1	100.0	249.4	-19.71	316.90	-19.41
2026	Mar	2	0	4	42.8253	- 0	54	48.844	30.81321991	2.4	8.0	19.7	e	1	100.0	250.2	-19.65	316.84	-19.40
2026	Mar	7	0	5	22.9592	- 0	50	25.785	30.84008172	2.4	8.0	14.9	e	0	100.0	251.5	-19.59	316.77	-19.38
2026	Mar	12	0	6	3.8528	- 0	45	58.934	30.86003458	2.4	8.0	10.1	e	0	100.0	253.9	-19.53	316.71	-19.37
2026	Mar	17	0	6	45.2789	- 0	41	29.792	30.87294099	2.4	8.0	5.4	e	0	100.0	260.5	-19.46	316.64	-19.36
2026	Mar	22	0	7	26.9952	- 0	36	59.967	30.87870795	2.4	8.0	1.4	e	0	100.0	317.6	-19.40	316.58	-19.35
2026	Mar	27	0	8	8.7499	- 0	32	31.130	30.87732561	2.4	8.0	4.5	w	0	100.0	49.8	-19.33	316.52	-19.34
2026	Apr	1	0	8	50.3045	- 0	28	4.816	30.86887416	2.4	8.0	9.2	w	0	100.0	58.4	-19.27	316.45	-19.33
2026	Apr	6	0	9	31.4416	- 0	23	42.400	30.85346373	2.4	8.0	13.9	w	0	100.0	61.3	-19.20	316.39	-19.32
2026	Apr	11	0	10	11.9475	- 0	19	25.242	30.83120929	2.4	8.0	18.6	w	1	100.0	62.7	-19.14	316.33	-19.31
2026	Apr	16	0	10	51.6023	- 0	15	14.765	30.80225149	2.4	7.9	23.3	w	1	100.0	63.5	-19.07	316.27	-19.30
2026	Apr	21	0	11	30.1773	- 0	11	12.454	30.76678618	2.4	7.9	28.0	w	1	100.0	64.1	-19.01	316.21	-19.29
2026	Apr	26	0	12	7.4496	- 0	7	19.730	30.72509974	2.4	7.9	32.7	w	1	100.0	64.5	-18.95	316.16	-19.28
2026	May	1	0	12	43.2243	- 0	3	37.788	30.67753081	2.4	7.9	37.4	w	1	100.0	64.9	-18.89	316.11	-19.26
2026	May	6	0	13	17.3242	- 0	0	7.705	30.62441565	2.4	7.9	42.1	w	1	100.0	65.1	-18.83	316.06	-19.25
2026	May	11	0	13	49.5738	0	3	9.430	30.56609458	2.4	7.9	46.8	w	1	100.0	65.4	-18.78	316.01	-19.24
2026	May	16	0	14	19.7945	0	6	12.495	30.50293708	2.4	7.9	51.5	w	2	100.0	65.5	-18.73	315.97	-19.23
2026	May	21	0	14	47.8074	0	9	0.373	30.43537633	2.4	7.9	56.2	w	2	100.0	65.7	-18.68	315.93	-19.22
2026	May	26	0	15	13.4585	0	11	32.156	30.36391778	2.4	7.9	60.9	w	2	100.0	65.9	-18.64	315.90	-19.21
2026	May	31	0	15	36.6254	0	13	47.160	30.28906939	2.4	7.9	65.5	w	2	100.0	66.0	-18.60	315.86	-19.20
2026	Jun	5	0	15	57.1977	0	15	44.761	30.21132117	2.4	7.9	70.2	w	2	100.0	66.1	-18.56	315.84	-19.19
2026	Jun	10	0	16	15.0682	0	17	24.336	30.13116719	2.4	7.9	74.9	w	2	100.0	66.3	-18.53	315.81	-19.18
2026	Jun	15	0	16	30.1315	0	18	45.266	30.04913321	2.4	7.9	79.7	w	2	100.0	66.4	-18.50	315.79	-19.17
2026	Jun	20	0	16	42.2975	0	19	47.060	29.96580777	2.4	7.9	84.4	w	2	100.0	66.5	-18.48	315.78	-19.16
2026	Jun	25	0	16	51.5154	0	20	29.525	29.88180504	2.4	7.9	89.1	w	2	100.0	66.6	-18.46	315.77	-19.14
2026	Jun	30	0	16	57.7615	0	20	52.631	29.79770313	2.5	7.9	93.9	w	2	100.0	66.7	-18.45	315.76	-19.13
2026	Jul	5	0	17	1.0220	0	20	56.387	29.71405615	2.5	7.9	98.6	w	2	100.0	66.8	-18.44	315.75	-19.12
2026	Jul	10	0	17	1.2892	0	20	40.823	29.63141973	2.5	7.9	103.4	w	2	100.0	67.0	-18.44	315.76	-19.11
2026	Jul	15	0	16	58.5665	0	20	6.050	29.55038152	2.5	7.9	108.2	w	2	100.0	67.1	-18.44	315.76	-19.10

Neptune 2026, Equinox of J2000

Date			Right Asc.			Declination			Distance	dia	mag	Elong		I	%Ill	Limb	De	Pp	Ds
year	mth	d	h	m	s	o	'	"	AU	"		o		o		o	o	o	o
2026	Jul	20	0	16	52.8913		0	19 12.441	29.47156570	2.5	7.9	113.0	w	2	100.0	67.2	-18.44	315.77	-19.09
2026	Jul	25	0	16	44.3428		0	18 0.652	29.39556304	2.5	7.8	117.8	w	2	100.0	67.4	-18.45	315.78	-19.08
2026	Jul	30	0	16	33.0192		0	16 31.431	29.32290748	2.5	7.8	122.6	w	2	100.0	67.5	-18.47	315.80	-19.07
2026	Aug	4	0	16	19.0276		0	14 45.557	29.25410217	2.5	7.8	127.4	w	2	100.0	67.7	-18.49	315.82	-19.06
2026	Aug	9	0	16	2.4838		0	12 43.855	29.18964735	2.5	7.8	132.3	w	1	100.0	67.9	-18.51	315.84	-19.05
2026	Aug	14	0	15	43.5268		0	10 27.324	29.13006322	2.5	7.8	137.2	w	1	100.0	68.1	-18.54	315.87	-19.03
2026	Aug	19	0	15	22.3388		0	7 57.277	29.07585150	2.5	7.8	142.1	w	1	100.0	68.4	-18.57	315.90	-19.02
2026	Aug	24	0	14	59.1314		0	5 15.194	29.02743416	2.5	7.8	147.0	w	1	100.0	68.8	-18.61	315.94	-19.01
2026	Aug	29	0	14	34.1241		0	2 22.570	28.98516662	2.5	7.8	151.9	w	1	100.0	69.3	-18.64	315.97	-19.00
2026	Sep	3	0	14	7.5401	-	0	0 39.106	28.94936589	2.5	7.8	156.9	w	1	100.0	69.9	-18.68	316.01	-18.99
2026	Sep	8	0	13	39.6110	-	0	3 48.282	28.92034144	2.5	7.8	161.8	w	1	100.0	70.9	-18.73	316.05	-18.98
2026	Sep	13	0	13	10.5981	-	0	7 3.184	28.89838897	2.5	7.8	166.8	w	0	100.0	72.7	-18.77	316.09	-18.97
2026	Sep	18	0	12	40.7941	-	0	10 21.835	28.88372651	2.5	7.8	171.8	w	0	100.0	76.5	-18.82	316.14	-18.96
2026	Sep	23	0	12	10.4969	-	0	13 42.265	28.87647419	2.5	7.8	176.6	w	0	100.0	91.3	-18.87	316.18	-18.95
2026	Sep	28	0	11	39.9974	-	0	17 2.590	28.87668449	2.5	7.8	177.6	e	0	100.0	210.7	-18.91	316.23	-18.94
2026	Oct	3	0	11	9.5771	-	0	20 21.003	28.88437387	2.5	7.8	172.8	e	0	100.0	235.2	-18.96	316.27	-18.92
2026	Oct	8	0	10	39.5237	-	0	23 35.634	28.89954540	2.5	7.8	167.8	e	0	100.0	240.0	-19.01	316.32	-18.91
2026	Oct	13	0	10	10.1450	-	0	26 44.468	28.92214367	2.5	7.8	162.8	e	1	100.0	242.0	-19.06	316.36	-18.90
2026	Oct	18	0	9	41.7505	-	0	29 45.509	28.95200826	2.5	7.8	157.7	e	1	100.0	243.1	-19.10	316.40	-18.89
2026	Oct	23	0	9	14.6297	-	0	32 36.935	28.98889276	2.5	7.8	152.6	e	1	100.0	243.8	-19.14	316.45	-18.88
2026	Oct	28	0	8	49.0464	-	0	35 17.121	29.03249889	2.5	7.8	147.6	e	1	100.0	244.3	-19.19	316.48	-18.87
2026	Nov	2	0	8	25.2438	-	0	37 44.569	29.08251317	2.5	7.8	142.5	e	1	100.0	244.7	-19.22	316.52	-18.86
2026	Nov	7	0	8	3.4670	-	0	39 57.739	29.13859946	2.5	7.8	137.3	e	1	100.0	245.0	-19.26	316.55	-18.85
2026	Nov	12	0	7	43.9581	-	0	41 55.121	29.20033824	2.5	7.8	132.2	e	1	100.0	245.3	-19.29	316.58	-18.84
2026	Nov	17	0	7	26.9321	-	0	43 35.419	29.26722396	2.5	7.8	127.1	e	2	100.0	245.5	-19.32	316.61	-18.83
2026	Nov	22	0	7	12.5672	-	0	44 57.609	29.33870141	2.5	7.8	122.0	e	2	100.0	245.7	-19.35	316.63	-18.81
2026	Nov	27	0	7	1.0044	-	0	46 0.914	29.41420182	2.5	7.8	116.9	e	2	100.0	245.9	-19.37	316.65	-18.80
2026	Dec	2	0	6	52.3650	-	0	46 44.656	29.49317202	2.5	7.9	111.8	e	2	100.0	246.0	-19.38	316.66	-18.79
2026	Dec	7	0	6	46.7665	-	0	47 8.156	29.57502710	2.5	7.9	106.7	e	2	100.0	246.1	-19.39	316.67	-18.78
2026	Dec	12	0	6	44.3019	-	0	47 10.923	29.65911435	2.5	7.9	101.6	e	2	100.0	246.3	-19.40	316.67	-18.77
2026	Dec	17	0	6	45.0253	-	0	46 52.752	29.74474426	2.5	7.9	96.6	e	2	100.0	246.4	-19.40	316.67	-18.76
2026	Dec	22	0	6	48.9500	-	0	46 13.708	29.83122770	2.5	7.9	91.5	e	2	100.0	246.5	-19.40	316.66	-18.75
2026	Dec	27	0	6	56.0574	-	0	45 14.047	29.91791189	2.4	7.9	86.4	e	2	100.0	246.7	-19.39	316.65	-18.74

Pluto 2026, Equinox of J2000

Date	Right Asc.	Declination	Distance	dia	mag	Elong	I	%Ill	Limb	De	Pp	Ds
year mth d	h m s	o ' "	AU	"		o	o		o	o	o	o
2026 Jan 1	20 22 13.4238	-23 18 5.909	36.32668731	0.2	14.6	22.5e	1	100.0	265.8	59.66	194.75	59.85
2026 Jan 6	20 22 52.2889	-23 16 11.663	36.35964168	0.2	14.6	17.6e	0	100.0	268.5	59.72	194.46	59.85
2026 Jan 11	20 23 32.0278	-23 14 16.637	36.38561108	0.2	14.6	12.8e	0	100.0	273.3	59.79	194.15	59.86
2026 Jan 16	20 24 12.4094	-23 12 21.617	36.40440777	0.2	14.6	8.2e	0	100.0	283.6	59.86	193.84	59.86
2026 Jan 21	20 24 53.1849	-23 10 27.464	36.41589521	0.2	14.5	4.5e	0	100.0	314.0	59.93	193.52	59.87
2026 Jan 26	20 25 34.0950	-23 8 35.075	36.42001677	0.2	14.5	4.6w	0	100.0	20.0	60.00	193.21	59.87
2026 Jan 31	20 26 14.8859	-23 6 45.323	36.41681052	0.2	14.6	8.4w	0	100.0	49.3	60.06	192.89	59.87
2026 Feb 5	20 26 55.3248	-23 4 58.983	36.40637387	0.2	14.6	12.9w	0	100.0	59.3	60.12	192.57	59.88
2026 Feb 10	20 27 35.1880	-23 3 16.792	36.38880936	0.2	14.6	17.7w	0	100.0	64.1	60.18	192.25	59.88
2026 Feb 15	20 28 14.2427	-23 1 39.533	36.36424651	0.2	14.6	22.5w	1	100.0	66.8	60.24	191.94	59.89
2026 Feb 20	20 28 52.2494	-23 0 8.019	36.33287917	0.2	14.6	27.3w	1	100.0	68.6	60.30	191.64	59.89
2026 Feb 25	20 29 28.9728	-22 58 43.044	36.29498724	0.2	14.6	32.2w	1	100.0	69.9	60.35	191.35	59.90
2026 Mar 2	20 30 4.2015	-22 57 25.295	36.25092604	0.2	14.6	37.0w	1	100.0	70.8	60.40	191.07	59.90
2026 Mar 7	20 30 37.7498	-22 56 15.345	36.20106526	0.2	14.6	41.9w	1	100.0	71.6	60.44	190.79	59.90
2026 Mar 12	20 31 9.4364	-22 55 13.754	36.14577150	0.2	14.6	46.7w	1	100.0	72.2	60.48	190.54	59.91
2026 Mar 17	20 31 39.0776	-22 54 21.093	36.08544652	0.2	14.6	51.6w	1	100.0	72.7	60.51	190.30	59.91
2026 Mar 22	20 32 6.4941	-22 53 37.919	36.02055340	0.2	14.6	56.4w	1	100.0	73.2	60.54	190.07	59.92
2026 Mar 27	20 32 31.5267	-22 53 4.689	35.95162847	0.2	14.6	61.3w	1	100.0	73.6	60.57	189.87	59.92
2026 Apr 1	20 32 54.0520	-22 52 41.698	35.87923412	0.2	14.6	66.1w	1	100.0	74.0	60.59	189.68	59.92
2026 Apr 6	20 33 13.9664	-22 52 29.157	35.80390821	0.2	14.6	71.0w	2	100.0	74.3	60.61	189.52	59.93
2026 Apr 11	20 33 31.1698	-22 52 27.262	35.72618520	0.2	14.6	75.8w	2	100.0	74.7	60.62	189.37	59.93
2026 Apr 16	20 33 45.5677	-22 52 36.189	35.64662982	0.2	14.6	80.6w	2	100.0	75.0	60.62	189.25	59.94
2026 Apr 21	20 33 57.0807	-22 52 56.040	35.56585632	0.2	14.6	85.5w	2	100.0	75.3	60.63	189.16	59.94
2026 Apr 26	20 34 5.6650	-22 53 26.750	35.48451645	0.2	14.6	90.3w	2	100.0	75.6	60.62	189.08	59.94
2026 May 1	20 34 11.3119	-22 54 8.102	35.40322912	0.2	14.6	95.1w	2	100.0	76.0	60.61	189.03	59.95
2026 May 6	20 34 14.0240	-22 54 59.838	35.32257174	0.2	14.5	100.0w	2	100.0	76.3	60.60	189.00	59.95
2026 May 11	20 34 13.8097	-22 56 1.683	35.24311675	0.2	14.5	104.8w	2	100.0	76.7	60.59	189.00	59.95
2026 May 16	20 34 10.6899	-22 57 13.308	35.16545526	0.2	14.5	109.6w	2	100.0	77.1	60.56	189.02	59.96
2026 May 21	20 34 4.7126	-22 58 34.271	35.09020728	0.2	14.5	114.5w	1	100.0	77.5	60.54	189.07	59.96
2026 May 26	20 33 55.9680	-23 0 3.940	35.01797361	0.2	14.5	119.3w	1	100.0	78.0	60.51	189.13	59.97
2026 May 31	20 33 44.5689	-23 1 41.613	34.94928187	0.2	14.5	124.1w	1	100.0	78.5	60.47	189.22	59.97
2026 Jun 5	20 33 30.6329	-23 3 26.590	34.88461740	0.2	14.5	128.9w	1	100.0	79.0	60.44	189.33	59.97
2026 Jun 10	20 33 14.2859	-23 5 18.156	34.82445476	0.2	14.5	133.8w	1	100.0	79.7	60.40	189.45	59.98
2026 Jun 15	20 32 55.6706	-23 7 15.540	34.76927383	0.2	14.5	138.6w	1	100.0	80.5	60.35	189.60	59.98
2026 Jun 20	20 32 34.9649	-23 9 17.832	34.71954787	0.2	14.5	143.4w	1	100.0	81.4	60.31	189.76	59.98
2026 Jun 25	20 32 12.3797	-23 11 24.016	34.67567332	0.2	14.5	148.2w	1	100.0	82.6	60.26	189.93	59.99
2026 Jun 30	20 31 48.1300	-23 13 33.100	34.63796470	0.2	14.5	153.1w	1	100.0	84.2	60.20	190.12	59.99
2026 Jul 5	20 31 22.4306	-23 15 44.138	34.60669826	0.2	14.5	157.8w	1	100.0	86.3	60.15	190.32	60.00
2026 Jul 10	20 30 55.5017	-23 17 56.192	34.58213401	0.2	14.5	162.6w	0	100.0	89.6	60.10	190.53	60.00
2026 Jul 15	20 30 27.5830	-23 20 8.275	34.56452142	0.2	14.5	167.3w	0	100.0	95.1	60.04	190.75	60.00

Pluto 2026, Equinox of J2000

Date	Right Asc.	Declination	Distance	dia	mag	Elong	I	%Ill	Limb	De	Pp	Ds
year mth d	h m s	o ' "	AU	"		o	o		o	o	o	o
2026 Jul 20	20 29 58.9443	-23 22 19.301	34.55405557	0.2	14.4	171.7w	0	100.0	106.7	59.98	190.97	60.01
2026 Jul 25	20 29 29.8637	-23 24 28.208	34.55082600	0.2	14.4	175.2w	0	100.0	138.4	59.93	191.20	60.01
2026 Jul 30	20 29 0.6069	-23 26 34.037	34.55485534	0.2	14.4	175.0e	0	100.0	198.0	59.87	191.42	60.01
2026 Aug 4	20 28 31.4309	-23 28 35.911	34.56613483	0.2	14.4	171.3e	0	100.0	226.7	59.82	191.65	60.02
2026 Aug 9	20 28 2.5936	-23 30 32.977	34.58463970	0.2	14.5	166.8e	0	100.0	237.4	59.76	191.87	60.02
2026 Aug 14	20 27 34.3683	-23 32 24.348	34.61031249	0.2	14.5	162.1e	1	100.0	242.7	59.71	192.08	60.02
2026 Aug 19	20 27 7.0381	-23 34 9.133	34.64300378	0.2	14.5	157.3e	1	100.0	245.8	59.66	192.29	60.03
2026 Aug 24	20 26 40.8667	-23 35 46.571	34.68247155	0.2	14.5	152.5e	1	100.0	247.9	59.61	192.49	60.03
2026 Aug 29	20 26 16.0934	-23 37 16.033	34.72843256	0.2	14.5	147.6e	1	100.0	249.4	59.57	192.68	60.04
2026 Sep 3	20 25 52.9403	-23 38 36.981	34.78058729	0.2	14.5	142.7e	1	100.0	250.6	59.52	192.86	60.04
2026 Sep 8	20 25 31.6270	-23 39 48.894	34.83862396	0.2	14.5	137.8e	1	100.0	251.6	59.49	193.02	60.04
2026 Sep 13	20 25 12.3773	-23 40 51.241	34.90217384	0.2	14.5	132.9e	1	100.0	252.3	59.45	193.17	60.05
2026 Sep 18	20 24 55.3973	-23 41 43.584	34.97077525	0.2	14.5	128.0e	1	100.0	253.0	59.42	193.30	60.05
2026 Sep 23	20 24 40.8571	-23 42 25.645	35.04391516	0.2	14.5	123.1e	1	100.0	253.6	59.40	193.41	60.05
2026 Sep 28	20 24 28.8966	-23 42 57.267	35.12107022	0.2	14.5	118.2e	1	100.0	254.1	59.38	193.50	60.06
2026 Oct 3	20 24 19.6363	-23 43 18.352	35.20172464	0.2	14.5	113.2e	1	100.0	254.6	59.37	193.57	60.06
2026 Oct 8	20 24 13.1938	-23 43 28.794	35.28534993	0.2	14.5	108.3e	2	100.0	255.0	59.36	193.62	60.06
2026 Oct 13	20 24 9.6741	-23 43 28.522	35.37135153	0.2	14.6	103.3e	2	100.0	255.4	59.36	193.65	60.07
2026 Oct 18	20 24 9.1464	-23 43 17.604	35.45908064	0.2	14.6	98.4e	2	100.0	255.8	59.36	193.66	60.07
2026 Oct 23	20 24 11.6417	-23 42 56.243	35.54788570	0.2	14.6	93.5e	2	100.0	256.2	59.37	193.64	60.07
2026 Oct 28	20 24 17.1626	-23 42 24.725	35.63713956	0.2	14.6	88.5e	2	100.0	256.5	59.38	193.60	60.08
2026 Nov 2	20 24 25.7001	-23 41 43.337	35.72624583	0.2	14.6	83.6e	2	100.0	256.9	59.40	193.54	60.08
2026 Nov 7	20 24 37.2408	-23 40 52.353	35.81458916	0.2	14.6	78.6e	2	100.0	257.3	59.42	193.45	60.08
2026 Nov 12	20 24 51.7448	-23 39 52.133	35.90151016	0.2	14.6	73.7e	2	100.0	257.6	59.45	193.34	60.09
2026 Nov 17	20 25 9.1344	-23 38 43.167	35.98635140	0.2	14.6	68.7e	1	100.0	258.0	59.48	193.21	60.09
2026 Nov 22	20 25 29.3016	-23 37 26.037	36.06849611	0.2	14.6	63.8e	1	100.0	258.4	59.52	193.06	60.09
2026 Nov 27	20 25 52.1210	-23 36 1.352	36.14738513	0.2	14.6	58.8e	1	100.0	258.9	59.57	192.88	60.09
2026 Dec 2	20 26 17.4674	-23 34 29.677	36.22249862	0.2	14.6	53.9e	1	100.0	259.4	59.61	192.69	60.10
2026 Dec 7	20 26 45.2071	-23 32 51.592	36.29329735	0.2	14.6	48.9e	1	100.0	259.9	59.66	192.48	60.10
2026 Dec 12	20 27 15.1758	-23 31 7.790	36.35924449	0.2	14.6	44.0e	1	100.0	260.6	59.71	192.25	60.10
2026 Dec 17	20 27 47.1816	-23 29 19.055	36.41985401	0.2	14.6	39.1e	1	100.0	261.4	59.77	192.00	60.11
2026 Dec 22	20 28 21.0160	-23 27 26.211	36.47471296	0.2	14.6	34.2e	1	100.0	262.4	59.83	191.74	60.11
2026 Dec 27	20 28 56.4695	-23 25 30.054	36.52348505	0.2	14.6	29.3e	1	100.0	263.7	59.89	191.46	60.11

Central Meridian of Mars, 2026

Date	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	198.8	253.7	336.2	27.3	88.7	142.3	208.4	266.7	326.2	36.0	97.1	170.2
2	189.0	243.9	326.3	17.3	78.7	132.5	198.7	257.0	316.5	26.3	87.4	160.8
3	179.2	234.0	316.3	7.4	68.8	122.6	188.9	247.3	306.8	16.7	77.8	151.3
4	169.4	224.1	306.4	357.4	58.9	112.8	179.2	237.6	297.1	7.0	68.2	141.8
5	159.5	214.2	296.4	347.4	49.0	103.0	169.4	227.9	287.5	357.3	58.6	132.3
6	149.7	204.3	286.5	337.5	39.1	93.2	159.7	218.2	277.8	347.7	49.0	122.9
7	139.9	194.4	276.5	327.5	29.2	83.3	149.9	208.5	268.1	338.0	39.4	113.4
8	130.1	184.5	266.6	317.5	19.3	73.5	140.2	198.8	258.4	328.4	29.8	104.0
9	120.3	174.6	256.6	307.6	9.3	63.7	130.4	189.1	248.7	318.7	20.2	94.5
10	110.4	164.8	246.7	297.6	359.4	53.9	120.7	179.4	239.1	309.0	10.7	85.1
11	100.6	154.9	236.7	287.6	349.5	44.1	110.9	169.7	229.4	299.4	1.1	75.7
12	90.8	144.9	226.7	277.7	339.6	34.3	101.2	160.0	219.7	289.7	351.5	66.2
13	81.0	135.0	216.8	267.7	329.8	24.5	91.4	150.3	210.0	280.1	341.9	56.8
14	71.1	125.1	206.8	257.7	319.9	14.7	81.7	140.6	200.4	270.4	332.3	47.4
15	61.3	115.2	196.8	247.8	310.0	4.9	72.0	130.9	190.7	260.8	322.8	38.0
16	51.4	105.3	186.9	237.8	300.1	355.1	62.2	121.2	181.0	251.2	313.2	28.7
17	41.6	95.4	176.9	227.9	290.2	345.3	52.5	111.5	171.3	241.5	303.6	19.3
18	31.8	85.5	166.9	217.9	280.3	335.5	42.8	101.8	161.7	231.9	294.1	9.9
19	21.9	75.6	157.0	208.0	270.4	325.7	33.1	92.1	152.0	222.2	284.5	0.6
20	12.1	65.6	147.0	198.0	260.6	315.9	23.3	82.4	142.3	212.6	275.0	351.2
21	2.2	55.7	137.0	188.0	250.7	306.1	13.6	72.7	132.6	202.9	265.4	341.9
22	352.4	45.8	127.1	178.1	240.8	296.4	3.9	63.1	123.0	193.3	255.9	332.5
23	342.5	35.8	117.1	168.2	231.0	286.6	354.2	53.4	113.3	183.7	246.3	323.2
24	332.7	25.9	107.1	158.2	221.1	276.8	344.4	43.7	103.6	174.0	236.8	313.9
25	322.8	16.0	97.1	148.3	211.2	267.0	334.7	34.0	94.0	164.4	227.3	304.6
26	313.0	6.0	87.2	138.3	201.4	257.3	325.0	24.3	84.3	154.8	217.8	295.3
27	303.1	356.1	77.2	128.4	191.5	247.5	315.3	14.6	74.6	145.2	208.3	286.0
28	293.2	346.2	67.2	118.5	181.7	237.7	305.6	4.9	65.0	135.5	198.7	276.8
29	283.4		57.2	108.5	171.8	227.9	295.9	355.2	55.3	125.9	189.2	267.5
30	273.5		47.3	98.6	162.0	218.2	286.2	345.6	45.6	116.3	179.7	258.2
31	263.6		37.3		152.2		276.4	335.9		106.7		249.0

Motion of the Central Meridian

m	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h
	o	o	o	o	o	o	o	o	o	o	o	o
0	0.0	14.6	29.2	43.9	58.5	73.1	87.7	102.3	117.0	131.6	146.2	160.8
10	2.4	17.1	31.7	46.3	60.9	75.5	90.2	104.8	119.4	134.0	148.6	163.3
20	4.9	19.5	34.1	48.7	63.4	78.0	92.6	107.2	121.8	136.5	151.1	165.7
30	7.3	21.9	36.6	51.2	65.8	80.4	95.0	109.7	124.3	138.9	153.5	168.1
40	9.7	24.4	39.0	53.6	68.2	82.8	97.5	112.1	126.7	141.3	156.0	170.6
50	12.2	26.8	41.4	56.0	70.7	85.3	99.9	114.5	129.1	143.8	158.4	173.0
60	14.6	29.2	43.9	58.5	73.1	87.7	102.3	117.0	131.6	146.2	160.8	175.4

The computed central meridian of the planets Mars, Jupiter, and Saturn is the central meridian of the geometric disk of the planet - that is, there is no correction for the effect of the phase of the planet.
The output is formatted as a table on a single page, giving the longitude of the meridian at 0hrs UT. A motion table, giving the change in the longitude for 10-minute intervals over 12hrs, follows the table.
For Jupiter, two longitude tables are given. The first gives the 'System I' longitude, which is valid in the equatorial region of Jupiter. The second is the 'System II' longitude, which is valid in the mid-latitudes of Jupiter. [The longitude of the Great Red Spot in 2007 is about 119° in System II; its longitude increases by about 10 deg per year.]

Central Meridian of Jupiter, System I, 2026

Date	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	209.8	68.4	170.2	22.2	73.7	281.3	330.9	178.6	27.3	79.8	292.1	349.0
2	7.9	226.3	328.1	179.9	231.3	79.0	128.6	336.3	185.0	237.6	90.0	147.0
3	165.9	24.3	125.9	337.7	29.0	236.6	286.2	133.9	342.7	35.4	247.8	304.9
4	323.9	182.3	283.8	135.4	186.7	34.3	83.9	291.6	140.5	193.1	45.7	102.8
5	122.0	340.2	81.6	293.2	344.4	191.9	241.5	89.3	298.2	350.9	203.5	260.8
6	280.0	138.2	239.5	90.9	142.1	349.6	39.2	247.0	95.9	148.7	1.4	58.7
7	78.1	296.2	37.3	248.7	299.7	147.2	196.9	44.7	253.6	306.5	159.3	216.7
8	236.1	94.1	195.2	46.4	97.4	304.9	354.5	202.4	51.4	104.3	317.2	14.7
9	34.1	252.1	353.0	204.1	255.1	102.6	152.2	0.1	209.1	262.1	115.0	172.6
10	192.2	50.0	150.8	1.9	52.8	260.2	309.8	157.7	6.9	59.9	272.9	330.6
11	350.2	207.9	308.6	159.6	210.4	57.9	107.5	315.4	164.6	217.7	70.8	128.5
12	148.2	5.9	106.5	317.3	8.1	215.5	265.2	113.1	322.3	15.5	228.7	286.5
13	306.3	163.8	264.3	115.0	165.8	13.2	62.8	270.8	120.1	173.3	26.6	84.5
14	104.3	321.7	62.1	272.8	323.4	170.8	220.5	68.5	277.8	331.1	184.5	242.5
15	262.3	119.7	219.9	70.5	121.1	328.5	18.2	226.2	75.6	128.9	342.3	40.4
16	60.3	277.6	17.7	228.2	278.8	126.1	175.8	23.9	233.3	286.7	140.2	198.4
17	218.4	75.5	175.5	25.9	76.4	283.8	333.5	181.6	31.1	84.6	298.1	356.4
18	16.4	233.4	333.3	183.6	234.1	81.4	131.2	339.3	188.8	242.4	96.0	154.4
19	174.4	31.3	131.1	341.3	31.8	239.1	288.8	137.0	346.6	40.2	253.9	312.4
20	332.4	189.2	288.9	139.0	189.4	36.7	86.5	294.7	144.3	198.0	51.9	110.4
21	130.4	347.1	86.7	296.7	347.1	194.4	244.2	92.4	302.1	355.9	209.8	268.4
22	288.4	145.0	244.5	94.4	144.8	352.0	41.8	250.1	99.9	153.7	7.7	66.4
23	86.4	302.9	42.3	252.1	302.4	149.7	199.5	47.8	257.6	311.5	165.6	224.4
24	244.4	100.8	200.1	49.8	100.1	307.3	357.2	205.5	55.4	109.3	323.5	22.3
25	42.4	258.7	357.8	207.5	257.7	105.0	154.8	3.3	213.1	267.2	121.4	180.4
26	200.4	56.6	155.6	5.2	55.4	262.6	312.5	161.0	10.9	65.0	279.4	338.4
27	358.4	214.5	313.4	162.9	213.0	60.3	110.2	318.7	168.7	222.9	77.3	136.4
28	156.4	12.3	111.2	320.6	10.7	218.0	267.9	116.4	326.5	20.7	235.2	294.4
29	314.4		268.9	118.3	168.4	15.6	65.5	274.1	124.2	178.6	33.1	92.4
30	112.4		66.7	276.0	326.0	173.3	223.2	71.8	282.0	336.4	191.1	250.4
31	270.4		224.4		123.7		20.9	229.6		134.3		48.4

Motion of the Central Meridian

m	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h
	o	o	o	o	o	o	o	o	o	o	o	o
0	0.0	36.6	73.2	109.7	146.3	182.9	219.5	256.1	292.6	329.2	5.8	42.4
10	6.1	42.7	79.3	115.8	152.4	189.0	225.6	262.2	298.7	335.3	11.9	48.5
20	12.2	48.8	85.4	121.9	158.5	195.1	231.7	268.2	304.8	341.4	18.0	54.6
30	18.3	54.9	91.4	128.0	164.6	201.2	237.8	274.3	310.9	347.5	24.1	60.7
40	24.4	61.0	97.5	134.1	170.7	207.3	243.9	280.4	317.0	353.6	30.2	66.8
50	30.5	67.1	103.6	140.2	176.8	213.4	250.0	286.5	323.1	359.7	36.3	72.9
60	36.6	73.2	109.7	146.3	182.9	219.5	256.1	292.6	329.2	5.8	42.4	79.0

The computed central meridian of the planets Mars, Jupiter, and Saturn is the central meridian of the geometric disk of the planet - that is, there is no correction for the effect of the phase of the planet.
The output is formatted as a table on a single page, giving the longitude of the meridian at 0hrs UT. A motion table, giving the change in the longitude for 10-minute intervals over 12hrs, follows the table.
For Jupiter, two longitude tables are given. The first gives the 'System I' longitude, which is valid in the equatorial region of Jupiter. The second is the 'System II' longitude, which is valid in the mid-latitudes of Jupiter. [The longitude of the Great Red Spot in 2007 is about 119° in System II; its longitude increases by about 10 deg per year.]

Central Meridian of Jupiter, System II, 2026

Date	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	87.9	69.9	318.1	293.6	116.2	87.4	268.1	239.2	211.4	35.0	10.7	198.7
2	238.3	220.3	108.4	83.7	266.3	237.4	58.1	29.3	1.5	185.1	161.0	349.0
3	28.7	10.6	258.6	233.9	56.3	27.4	208.1	179.3	151.6	335.3	311.2	139.3
4	179.1	161.0	48.8	24.0	206.4	177.4	358.2	329.4	301.7	125.4	101.4	289.7
5	329.6	311.3	199.0	174.1	356.4	327.5	148.2	119.4	91.8	275.6	251.7	80.0
6	120.0	101.6	349.3	324.2	146.5	117.5	298.2	269.5	241.9	65.7	41.9	230.3
7	270.4	251.9	139.5	114.3	296.5	267.5	88.2	59.5	32.0	215.9	192.1	20.6
8	60.8	42.3	289.7	264.4	86.6	57.5	238.3	209.6	182.1	6.1	342.4	171.0
9	211.2	192.6	79.9	54.5	236.6	207.6	28.3	359.6	332.2	156.2	132.6	321.3
10	1.6	342.9	230.1	204.6	26.6	357.6	178.3	149.7	122.3	306.4	282.9	111.6
11	152.0	133.2	20.3	354.7	176.7	147.6	328.4	299.8	272.4	96.6	73.1	261.9
12	302.4	283.5	170.5	144.8	326.7	297.6	118.4	89.8	62.5	246.7	223.4	52.3
13	92.8	73.8	320.7	294.9	116.8	87.6	268.4	239.9	212.6	36.9	13.6	202.6
14	243.2	224.1	110.9	85.0	266.8	237.7	58.5	30.0	2.7	187.1	163.9	353.0
15	33.6	14.4	261.0	235.1	56.8	27.7	208.5	180.0	152.8	337.3	314.1	143.3
16	184.0	164.7	51.2	25.2	206.9	177.7	358.5	330.1	303.0	127.5	104.4	293.7
17	334.4	315.0	201.4	175.3	356.9	327.7	148.6	120.2	93.1	277.7	254.7	84.0
18	124.8	105.3	351.6	325.3	147.0	117.8	298.6	270.2	243.2	67.8	44.9	234.4
19	275.2	255.6	141.7	115.4	297.0	267.8	88.6	60.3	33.3	218.0	195.2	24.7
20	65.5	45.8	291.9	265.5	87.0	57.8	238.7	210.4	183.4	8.2	345.5	175.1
21	215.9	196.1	82.1	55.6	237.1	207.8	28.7	0.4	333.6	158.4	135.8	325.5
22	6.3	346.4	232.2	205.6	27.1	357.8	178.8	150.5	123.7	308.6	286.1	115.8
23	156.7	136.6	22.4	355.7	177.1	147.9	328.8	300.6	273.8	98.8	76.3	266.2
24	307.1	286.9	172.5	145.8	327.1	297.9	118.8	90.7	64.0	249.0	226.6	56.6
25	97.4	77.2	322.7	295.8	117.2	87.9	268.9	240.8	214.1	39.2	16.9	206.9
26	247.8	227.4	112.8	85.9	267.2	237.9	58.9	30.8	4.2	189.4	167.2	357.3
27	38.2	17.6	263.0	236.0	57.2	28.0	209.0	180.9	154.4	339.6	317.5	147.7
28	188.5	167.9	53.1	26.0	207.3	178.0	359.0	331.0	304.5	129.9	107.8	298.1
29	338.9		203.2	176.1	357.3	328.0	149.1	121.1	94.7	280.1	258.1	88.4
30	129.2		353.4	326.2	147.3	118.0	299.1	271.2	244.8	70.3	48.4	238.8
31	279.6		143.5		297.3		89.2	61.3		220.5		29.2

Motion of the Central Meridian

m	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h
	°	°	°	°	°	°	°	°	°	°	°	°
0	0.0	36.3	72.5	108.8	145.0	181.3	217.6	253.8	290.1	326.4	2.6	38.9
10	6.0	42.3	78.6	114.8	151.1	187.3	223.6	259.9	296.1	332.4	8.7	44.9
20	12.1	48.3	84.6	120.9	157.1	193.4	229.7	265.9	302.2	338.4	14.7	51.0
30	18.1	54.4	90.7	126.9	163.2	199.4	235.7	272.0	308.2	344.5	20.7	57.0
40	24.2	60.4	96.7	133.0	169.2	205.5	241.7	278.0	314.3	350.5	26.8	63.0
50	30.2	66.5	102.7	139.0	175.3	211.5	247.8	284.0	320.3	356.6	32.8	69.1
60	36.3	72.5	108.8	145.0	181.3	217.6	253.8	290.1	326.4	2.6	38.9	75.1

The computed central meridian of the planets Mars, Jupiter, and Saturn is the central meridian of the geometric disk of the planet - that is, there is no correction for the effect of the phase of the planet.
The output is formatted as a table on a single page, giving the longitude of the meridian at 0hrs UT. A motion table, giving the change in the longitude for 10-minute intervals over 12hrs, follows the table.
For Jupiter, two longitude tables are given. The first gives the 'System I' longitude, which is valid in the equatorial region of Jupiter. The second is the 'System II' longitude, which is valid in the mid-latitudes of Jupiter. [The longitude of the Great Red Spot in 2007 is about 119° in System II; its longitude increases by about 10 deg per year.]

Central Meridian of Saturn, System I, 2026

Date	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	109.0	358.0	234.5	124.0	250.6	142.8	272.2	167.5	63.6	195.3	90.1	218.6
2	233.2	122.2	358.6	248.2	14.8	267.1	36.6	291.8	188.0	319.6	214.4	342.8
3	357.4	246.3	122.8	12.4	139.0	31.4	160.9	56.2	312.4	84.0	338.7	107.1
4	121.5	10.5	247.0	136.6	263.3	155.7	285.3	180.6	76.8	208.4	103.0	231.3
5	245.7	134.6	11.1	260.8	27.5	280.0	49.6	305.0	201.2	332.8	227.4	355.6
6	9.9	258.8	135.3	25.0	151.8	44.3	174.0	69.4	325.6	97.1	351.7	119.8
7	134.0	23.0	259.5	149.2	276.0	168.6	298.3	193.7	89.9	221.5	116.0	244.0
8	258.2	147.1	23.6	273.4	40.3	292.9	62.7	318.1	214.3	345.9	240.3	8.3
9	22.4	271.3	147.8	37.6	164.5	57.2	187.0	82.5	338.7	110.2	4.6	132.5
10	146.5	35.4	272.0	161.9	288.8	181.5	311.4	206.9	103.1	234.6	128.9	256.7
11	270.7	159.6	36.2	286.1	53.0	305.8	75.7	331.3	227.5	358.9	253.2	20.9
12	34.9	283.7	160.3	50.3	177.3	70.1	200.1	95.7	351.9	123.3	17.5	145.2
13	159.0	47.9	284.5	174.5	301.6	194.4	324.4	220.1	116.3	247.7	141.7	269.4
14	283.2	172.1	48.7	298.7	65.8	318.7	88.8	344.5	240.7	12.0	266.0	33.6
15	47.4	296.2	172.9	62.9	190.1	83.0	213.2	108.9	5.1	136.4	30.3	157.8
16	171.5	60.4	297.0	187.1	314.3	207.3	337.5	233.3	129.5	260.7	154.6	282.0
17	295.7	184.5	61.2	311.3	78.6	331.6	101.9	357.6	253.9	25.1	278.9	46.3
18	59.8	308.7	185.4	75.6	202.9	96.0	226.2	122.0	18.3	149.4	43.2	170.5
19	184.0	72.8	309.6	199.8	327.1	220.3	350.6	246.4	142.7	273.8	167.4	294.7
20	308.1	197.0	73.8	324.0	91.4	344.6	115.0	10.8	267.1	38.1	291.7	58.9
21	72.3	321.2	197.9	88.2	215.7	108.9	239.3	135.2	31.4	162.5	56.0	183.1
22	196.5	85.3	322.1	212.5	340.0	233.3	3.7	259.6	155.8	286.8	180.3	307.3
23	320.6	209.5	86.3	336.7	104.2	357.6	128.1	24.0	280.2	51.1	304.5	71.5
24	84.8	333.6	210.5	100.9	228.5	121.9	252.4	148.4	44.6	175.5	68.8	195.7
25	208.9	97.8	334.7	225.1	352.8	246.2	16.8	272.8	169.0	299.8	193.1	319.9
26	333.1	222.0	98.9	349.4	117.1	10.6	141.2	37.2	293.4	64.1	317.3	84.1
27	97.2	346.1	223.1	113.6	241.3	134.9	265.6	161.6	57.7	188.5	81.6	208.3
28	221.4	110.3	347.3	237.8	5.6	259.2	29.9	286.0	182.1	312.8	205.8	332.5
29	345.6		111.4	2.1	129.9	23.6	154.3	50.4	306.5	77.1	330.1	96.7
30	109.7		235.6	126.3	254.2	147.9	278.7	174.8	70.9	201.5	94.3	220.9
31	233.9		359.8		18.5		43.1	299.2		325.8		345.1

Motion of the Central Meridian

m	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h
	o	o	o	o	o	o	o	o	o	o	o	o
0	0.0	35.2	70.4	105.5	140.7	175.9	211.1	246.3	281.4	316.6	351.8	27.0
10	5.9	41.0	76.2	111.4	146.6	181.8	216.9	252.1	287.3	322.5	357.7	32.8
20	11.7	46.9	82.1	117.3	152.4	187.6	222.8	258.0	293.2	328.3	3.5	38.7
30	17.6	52.8	87.9	123.1	158.3	193.5	228.7	263.8	299.0	334.2	9.4	44.6
40	23.5	58.6	93.8	129.0	164.2	199.3	234.5	269.7	304.9	340.1	15.2	50.4
50	29.3	64.5	99.7	134.9	170.0	205.2	240.4	275.6	310.7	345.9	21.1	56.3
60	35.2	70.4	105.5	140.7	175.9	211.1	246.3	281.4	316.6	351.8	27.0	62.2

The computed central meridian of the planets Mars, Jupiter, and Saturn is the central meridian of the geometric disk of the planet - that is, there is no correction for the effect of the phase of the planet.
The output is formatted as a table on a single page, giving the longitude of the meridian at 0hrs UT. A motion table, giving the change in the longitude for 10-minute intervals over 12hrs, follows the table.
For Jupiter, two longitude tables are given. The first gives the 'System I' longitude, which is valid in the equatorial region of Jupiter. The second is the 'System II' longitude, which is valid in the mid-latitudes of Jupiter. [The longitude of the Great Red Spot in 2007 is about 119° in System II; its longitude increases by about 10 deg per year.]

Lunar Occultation Predictions 2026

Table information

Item	Meaning
Day	The day of the event. Occult searches for events on the basis of geocentric conjunctions that occur within a 24hr - with that period starting at the UT indicated in the date selection box. Users should ensure that the period starts near the middle of their day.
Time	The predicted UTC, in hours, mins and secs.
P	The Phase of the event. Values are: • D - disappearance • d - disappearance, but star is less than 1 mag brighter than the predicted visibility limit. • R - reappearance • r - reappearance, but star is less than 1 mag brighter than the predicted visibility limit. • Gr - grazing occultation at site. At mid-occultation, or closest approach, the star is less than 4" from the limb of the moon (either above or below). • gr - grazing occultation at site, but star is less than 1 mag brighter than the predicted visibility limit. • M - miss. At closest approach, the star is more than 4" above the limb of the moon • m - miss, but star is less than 1 mag brighter than the predicted visibility limit.
Star	The star identifier. Three formats are used: • nnnn - A ZC star. When reporting occultations, the catalogue is identified with 'R'. • nnnnn, or nnnnnn - An SAO star. When reporting occultations, the catalogue is identified with 'R'. • X nnnnnn - an XZ star. When reporting occultations, the catalogue is identified with 'X'.
D	The double star code
Sp	Star's spectral type. Only basic spectral type information is provided
Mag v	The star's visual magnitude
*****	A flag to indicate a light curve is available for the star
Mag r	The star's red magnitude. For observers using CCD video cameras, the red magnitude provides a better indication of visibility.
D	The variable star code
% ill	the percent illumination of the moon. If followed by a +, values are for a waxing moon; - for a waning moon; and E for illumination during a lunar eclipse.
Elon	the elongation of the moon from the sun, in degrees. [Strictly, the quantity is calculated as the elongation of the star from the sun]

Sun Alt	the altitude of the sun. The field is blank if the sun is lower than -12 deg. (Nautical twilight)
Moon Alt	the altitude of the moon
Moon Az	the azimuth of the moon
	Cusp Angle - the angle of the event around the limb of the moon, measured from the nearest cusp. -'ve values indicate a bright limb event. The cusps are usually N (north) or S (south), but near full moon can be E (East) or W (west).
CA	If a lunar eclipse is in progress, CA gives is the % distance from the centre of the umbra, and is followed by a 'U'. Values up to 103% are possible. Where an event occurs more than 103% of the umbral radius, the usual Cusp Angle value is displayed.
PA	Position Angle - the angle of the event around the limb of the moon, measured from true north
VA	Vertex Angle - the angle of the event around the limb of the moon measured anticlockwise from the vertex of the lunar limb - i.e. the point on the limb highest from the horizon
AA	Axis Angle - the angle of the event around the limb of the moon, measured eastward from the moon's north pole. Essential for reappearance, as it locates the event with reference to lunar features. To use, mark a map of the moon around the circumference at 10 deg intervals, starting at the north pole. Mare Crisium is at about 300 deg. [Note - the so-called Watts Angle differs from the Axis Angle by 0.21 deg. The term Watts Angle is limited to the context of accessing the Watts Charts. In all other situations, the term Axis Angle is preferred.]

The following messages can appear

Item	Meaning
Star name	If the star is brighter than 5.0, and has a proper name, Bayer letter or Flamsteed number, this is given in a line like: R2864 = 52 Sagittarii
Double star details	If the star is a double star, the details are given in a line like: 2405 is triple: AB 6.58 10.15 2.03" 15.3, dT = -3sec : AC 6.6 14.0 24.6" 195.9, dT = +37sec The information provided for each pairing is - the magnitude of each component, - the separation; - the PA; and - the expected time difference between the 1st and 2nd components of the pairing. Pairings are separated by colons. A double asterisk (**)indicates the pairing is an occultation discovery that has not been confirmed. Where an orbit is available for the pairing, the separation and PA are computed for the date of the occultation. Where there is no orbit, the separation and PA are estimated by linear extrapolation of the values in the double star catalogue.
Close and suspected Double stars	Two additional message lines may appear for double stars. If the star is a close double, with a separation less that 2.0" and greater than 0.01", an alert line will appear like: 3157 is a close double. Observations are highly desired Where there are observations which suggest that a star might be a double star, an alert line will appear like: 3177 has been reported as non-instantaneous (OCc1608). Observations are highly desired

The OCC number in brackets gives the identification of the star in the file XZDoubles Discoveries. This message is generated for all double stars where the double star identifier is one of 'OCc', ' ', '---', 'S ' and 'GC '.

Stars in Kepler2

If the star is a target star in The Kepler2 mission, that fact is tagged, together with the EPIC identifier used in the Keppler2 mission. Most messages will state
*** A light curve is desired as...
, but for some stars the message is
*** A light curve is highly desired as...
These stars are a relatively small number of stars in the Kepler2 mission that are measured more frequently than most stars as they are considered to have a greater likelihood of having exoplanets.

Variable star details

If the star is a variable star, the details are given in a line like:
X145167 = KW Sgr, 11.0 to 13.2P, Type SRC, Period 670. days
For regular variables with a known epoch, the phase in the current cycle is also provided.

Object diameter

For planets, moons and asteroids, the prediction is for the center of the object. The prediction also includes a line like:
Duration of planetary disk occultation: predicted time +/-33.1 secs
To indicate the time difference from the start and end of the occultation of the object's disk. In this example, it will take 66 secs for the moon to cover the disk of the object.
Note: the displayed value assumes a circular object. No correction for the oblateness of Jupiter or Saturn is included.

Graze nearby

Where an 'observable' grazing occultation occurs within the graze travel distance for the site, a separate prediction line appears - like:
07 Aug 29 13 22 10 Gr 146693 G5 7.5 7.1   98- 164   49 ** GRAZE: CA 10.9N; Dist. 12km in az. 143deg. [Lat =-35.53+0.61(E.Long-149.06)]
The first part of the line is the same as for any other prediction line. The additional information provided is:

- Cusp angle at mid-graze
- the distance from the site to the closest point on the graze path (in km)
- the azimuth of the direction to the graze path
- a simple formula to give the latitude of a point on the graze path for a specified longitude. In this example, you get the following latitudes by inserting the longitude into the formula
- E. Longitude = +149.06 => latitude = -35.53
- E. Longitude = +150.06 => latitude = -34.92

For observers in US/Canada, remember that your longitude is -'ve.

Terminator distance

If a dark-limb occultation occurs less than 20" from the terminator, the distance to the terminator, and to a theoretical 3" high mountain beyond the terminator which could be sunlit, is given in a message like:
Distance of 2864 to Terminator = 12.2"; to 3km sunlit peak = 1.9"
The distance to the terminator is calculated on an assumption that the moon is perfectly smooth. The distance to a 3km sunlit peak indicates a 'worst-case' scenario of the effect of a high mountain (which could be on the near or far side of the moon).

Lunar Occultation predictions
Bill Sadowski Park
Miami
Florida
USA

Occultation prediction for Bill Sadowski Park, Miami, Florida, USA
E. Longitude - 80 19 13.9, Latitude 25 36 30.9, Alt. 2m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V ill	%	Elon Alt	Sun Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	Jan	4	1	25	24.7	r	79610	F8	7.2	7.0	99-	170	27	74	76S	245	318	236	+5.2	-4.8	+0.3	+1.7	.454	-150.1			7	41	3.1	24	57	54	361.4	918.2
	Distance of 79610 to Terminator = 14.4"; to 3km sunlit peak = 4.8"																																
26	Jan	5	3	32	51.9	r	1315	A2	7.1	7.1	96-	156	40	84	65S	255	329	241	+6.5	-3.5	+1.2	+1.6	.379	-147.4			8	46	20.2	20	37	0	364.9	795.6
26	Jan	5	8	24	31.1	R	1329	pF8	6.8		95-	154	73	254	64N	308	241	293	+5.7	-3.0	+1.6	-1.8	.410	177.1			8	53	55.3	19	58	2	363.9	724.3
	1329 is double: AB 7.32 7.86 0.15" 71.9, dT = +0.21sec																																
	1329 is a close double. Observations are highly desired																																
26	Jan	7	3	20	4	Gr	1547	cB1	3.8	3.9v	82-	130	12	**	GRAZE: CA 3.4S; Dist.378km in az. 175deg. [Lat = 22.19+0.08(E.Long+80.32)]																				
	Distance of 1547 to Terminator = 7.9"; to 3km sunlit peak = 0.0"																																
26	Jan	7	3	39	27.8	R	1547	cB1	3.8	3.9v	82-	130	15	87	42S	244	310	224	+7.9	-0.4	+0.4	+2.6	.307	-127.9			10	32	48.7	9	18	24	378.8	917.8
	R1547 = rho Leonis																																
	1547 is double: AB 3.8 4.8 105.1, dT = -0.06sec																																
	1547 = rho Leo, 3.83 to 3.9, V, Type ACYG, Period 3.4271 days, Phase 53%																																
26	Jan	9	7	56	47.3	R	1754	KF5	7.0	6.7	62-	104	45	125	78S	282	330	260	+6.9	+2.9	+2.1	+0.2	.331	-149.9			12	11	21.8	- 3	46	44	388.7	721.2
26	Jan	10	6	16	4.1	r	139025	K2	7.2	6.5	53-	94	13	107	90S	293	353	271	+6.4	+4.0	+0.5	+0.1	.454	-167.9			12	53	37.0	- 9	3	52	396.1	891.7
26	Jan	10	9	10	46.5	r	139061	DF5	7.3		52-	93	46	139	76N	307	343	285	+5.9	+4.4	+1.6	-0.9	.360	-173.4			12	57	28.6	- 9	45	41	393.6	691.5
	139061 is double: AB 7.31 10.77 1.66" 276.0, dT = -4sec																																
	139061 is a close double. Observations are highly desired																																
26	Jan	10	9	52	44.9	r	139081	cK0	7.5	7.1	52-	92	51	152	24N	358	24	337	+5.8	+4.5	-0.1	-3.2	.249	135.7			12	59	1.6	- 9	50	3	393.3	662.4
	139081 is double: AB 7.6 12.6 0.33" 65.8, dT = -0.5sec																																
	139081 is a close double. Observations are highly desired																																
26	Jan	11	12	11	57.5	r	1970	SA0	6.2	6.2	42-	81	0	48	190	87N	293	283	273	+4.2	+5.8	+2.7	-1.1	.302	-163.6			13	45	35.1	-15	46	3	397.4	606.3
	R1970 = 85 Virginis																																
	1970 is multiple: Aa,Ab 6.5 8.2 : Aa,Ac 6.5 8.4 0.10" : AB 6.2 12.8 44" 312.7, dT = -137sec : AB 6.2 12.8 44" 312.6, dT = -138sec																																
	1970 is a close double. Observations are highly desired																																
26	Jan	12	10	48	21.7	r	158609	dG1	8.1	7.8	33-	70	39	150	49N	328	356	310	+3.5	+6.4	+1.0	-1.5	.318	159.7			14	31	12.3	-19	58	40	400.3	658.9
	158609 is double: AB 8.2 10.6 4.2" 286.0, dT = -10sec																																
	158609 is a close double. Observations are highly desired																																
26	Jan	14	9	10	53.3	R	2312	M2	5.4	4.5s	17-	49	4	122	52N	314	13	303	+1.3	+7.0	-0.1	-0.5	.427	160.1			16	8	7.6	-26	19	36	404.8	891.7
	2312 = NSV 20513, 5.35, range 0.00, 8V, Type VAR, Period 7.61267 days																																
26	Jan	14	10	0	0.0	r	184177	kA0	8.2	8.1	17-	49	13	128	39N	326	19	316	+1.2	+7.1	-0.1	-1.0	.354	148.5			16	9	45.8	-26	26	24	403.9	812.8
26	Jan	14	10	13	31	Gr	2318	A*	6.6	6.6v	17-	48	16	**	GRAZE: CA 19.8S; Dist. 8km in az. 37deg. [Lat = 25.70-0.68(E.Long+80.32)]																				
26	Jan	14	10	13	31	M	2318	A*	6.6	6.6v	17-	48	15	130	20S	205	256	195	+1.1	+7.1	+9.9	+9.9	.000	-90.0			16	10	15.9	-26	54	33	403.6	793.0
	2318 = V0952 Sco, 6.57, range 0.04, V, Type ACV, Period 1.4178 days, Phase 15%																																
26	Jan	14	11	7	13	m	184208	cG3	8.1	7.8	17-	48	23	139	20S	206	248	196	+1.0	+7.2	+9.9	+9.9	.000	-90.0			16	11	36.4	-27	4	41	402.7	714.8
	184208 is double: ** 8.9 8.9 0.10" 63.0																																
	184208 has been reported as non-instantaneous (OCc 764). Observations are highly desired																																
26	Jan	15	10	45	15.9	R	184978	B9	7.7	7.7	10-	37	11	129	52N	306	359	301	-0.1	+7.1	+0.3	-0.3	.391	162.0			17	3	59.1	-28	15	23	402.9	804.1
26	Jan	15	11	1	58.6	R	2453	K1	6.6	6.2	10-	37	13	131	56S	234	284	228	-0.2	+7.2	+2.5	+2.8	.230	-125.3			17	4	27.8	-28	34	58	402.6	778.1
26	Jan	16	10	51	4.0	R	2586	cB3	6.0	6.0	5-	26	2	124	85N	264	323	263	-1.2	+6.8	+0.7	+1.1	.423	-162.9			17	58	39.0	-28	45	33	401.9	863.2
	2586 is double: ** 6.3 7.3 0.30" 276.0, dT = -0.7sec																																
	2586 has been reported as non-instantaneous (OCc1519). Observations are highly desired																																
26	Jan	20	15	15	0	m	3171	cA7	3.7	3.5v	4+	22	34	20	121	11S	156	210	174	-4.5	+2.9	+9.9	+9.9	.000	-90.0			21	40	5.5	-16	39	44	387.2	763.4
	R3171 = Nashira = gamma Capricorni																																
	3171 is double: AB 4.6 4.6 0.013" 239.0																																
	3171 is a close double. Observations are highly desired																																
	3171 = gam Cap, 3.2, range 0.03, J, Type ACV																																
26	Jan	20	15	15	38	Gr	3171	cA7	3.7	3.5v	4+	22	33	21	** GRAZE: CA 10.9S; Dist. 46km in az. 359deg. [Lat = 26.02+0.02(E.Long+80.32)]																				

Occultation prediction for Bill Sadowski Park, Miami, Florida, USA
E. Longitude - 80 19 13.9, Latitude 25 36 30.9, Alt. 2m; Telescope dia 15cm; dMag 0.0

y	m	day d	h	m	s	P	Star No	Sp D	Mag v	Mag r	V ill	% Elon	Sun Alt	Moon Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	dur sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	Jan	22	23	42	24.2	D	3454	K0	7.6	7.1	17+	49	-10	38	244	43S	113	59	135	-6.1	-1.2	+3.0	-3.2	.199	-62.6		23	27	14.7	- 2	38	13	377.7	790.4
26	Jan	23	0	17	52.0	d	146716	pG0	8.4	8.2	17+	49		31	250	46S	109	51	131	-6.2	-1.3	+2.1	-2.5	.249	-56.6		23	28	5.7	- 2	27	33	378.3	829.1
							146716 is triple: AB 9.2 9.2 0.20" 79.7, dT = +0.7sec : AC 8.5 8.1 57" 45.9, dT = +103sec																														
							146716 is a close double. Observations are highly desired																														
26	Jan	23	0	19	37.5	d	146717	PF2	8.1	7.9	17+	49		30	251	47S	109	50	130	-6.2	-1.3	+2.0	-2.4	.255	-55.8		23	28	8.5	- 2	26	53	378.3	831.2
							146717 is double: AB 8.1 8.5 57" 225.9, dT = -102sec																												
26	Jan	23	1	32	21.9	D	3459	K0	6.4	5.8	17+	49		15	261	47N	22	319	44	-6.3	-1.5	+0.2	+1.6	.412	34.9		23	29	27.0	- 1	47	28	379.8	926.2
							R3459 = 11 Piscium																												
26	Jan	24	0	24	33.3	D	30	SA0	7.1	7.1	26+	61		42	252	78N	53	354	75	-5.9	-2.8	+1.3	+0.7	.426	-0.2		0	15	57.3	4	15	4	374.1	772.1
							30 is triple: AB 7.0 14.1 0.8" 246.0, dT = -1.8sec : AC 7.0 12.2 5.0" 347.3, dT = +5sec																												
							30 is a close double. Observations are highly desired																												
26	Jan	24	3	0	36.5	d	41	G5	7.7	7.2	27+	63		9	271	73S	83	18	105	-6.1	-3.1	+0.2	-0.6	.500	-20.1		0	20	21.6	4	46	44	377.1	973.7
26	Jan	27	19	1	54.9	d	539	SB6	4.3	4.4s	69+	112	41	15	70	79S	89	158	102	-1.4	-6.0	+0.2	+0.8	.561	-22.6		3	45	12.5	24	28	2	366.4	1080.4
							R539 = Taygeta = 19 Tauri																												
							539 is multiple: Aa,Ab 4.6 6.1 : AB 0.032" 259.2, dT = -0.06sec : AC 4.3 14.0 53" 53.4, dT = +76sec : AB 4.3 11.0 72" 328.8, dT = -66sec																												
							539 is a close double. Observations are highly desired																												
							539 = NSV 1264, 4.30, range 0.00, 1Kp, Type SPB, Period 1.5664 days																												
26	Jan	27	19	26	5.0	d	541	SB8	3.9	3.9s	69+	112	38	20	72	34S	135	206	148	-1.4	-6.1	+1.9	-1.6	.208	-69.2		3	45	49.6	24	22	4	365.9	1039.6
							R541 = Maia = 20 Tauri																												
							541 is quadruple: Aa,Ab 4.4 5.4 : AB 3.8 13.7 113" 72.6, dT = +248sec : AB 3.8 13.7 113" 72.7, dT = +249sec																												
							541 = NSV 1279, 3.87, range 0.00, 4Kp, Type ACV, Period 10.288 days																												
26	Jan	27	19	33	55	Gr	541	SB8	3.9	3.9s	69+	112	39	22	** GRAZE: CA 13.4S; Dist.143km in az. 143deg. [Lat = 24.00+0.68(E.Long+80.32)]																												
26	Jan	27	23	37	16.0	D	579	kA2	6.4	6.3S	70+	114	-8	74	85	36N	26	114	38	-1.7	-6.6	+0.9	+3.2	.309	39.5		3	53	34.5	25	40	58	361.6	701.5
							579 = NSV 1391, 6.33,																												
26	Jan	27	23	46	26.6	d	76303	kA2	7.8	7.7	70+	114	-10	76	85	22N	12	100	24	-1.7	-6.6	+0.4	+4.5	.232	54.1		3	53	32.0	25	43	48	361.5	694.4
26	Jan	29	5	37	6.1	D	771	SA5	6.1	5.9e	82+	129		42	286	80N	79	359	84	-1.0	-6.5	+1.4	-0.4	.453	17.2		5	9	45.1	28	1	50	361.9	831.4
							771 is triple: Aa,Ab 6.0 0.20" 351.0, dT = +0.02sec : A,BC 6.0 9.1 11.2" 29.1, dT = +16sec																												
							771 is a close double. Observations are highly desired																												
							771 = V1156 Tau, 6. to 6.1, Hp, Type E:, Period 1.40266 days, Phase 13%																												
26	Jan	30	6	23	47.1	d	78191	A0	7.7	7.7	90+	143		45	285	70N	78	357	77	+0.5	-5.9	+1.6	-0.3	.421	27.9		6	17	59.9	28	0	24	361.4	835.7
26	Jan	30	23	48	1.5	d	1089	K0	6.7	6.1	95+	155	-10	35	75	62S	134	210	127	+3.1	-5.3	+1.6	-1.0	.363	-41.7		7	11	30.0	26	24	21	362.9	855.8
26	Jan	31	0	7	24.7	d	79164	cG8	7.4	6.9	95+	155		39	76	79N	95	173	89	+3.0	-5.3	+1.2	+0.6	.470	-2.8		7	12	31.2	26	33	52	362.5	826.9
							79164 is double: ** 8.1 8.5 0.10" 21.0, dT = +0.06sec																												
							79164 has been reported as non-instantaneous (OCc 237). Observations are highly desired																												
26	Jan	31	2	42	47.1	d	79243	K1	7.3	6.7	96+	156		73	83	85S	112	201	105	+2.7	-5.3	+2.3	-0.7	.379	-9.8		7	17	15.6	26	21	49	360.6	673.0
26	Jan	31	2	54	9.9	d	1105	cG7	6.5		96+	156		75	82	14N	31	122	24	+2.7	-5.3	+3.2	+8.3	.117	72.2		7	17	3.4	26	41	22	360.6	668.7
							1105 is double: AB 7.00 7.70 0.20" 236.6, dT = -1.5sec																												
							1105 is a close double. Observations are highly desired																												
							Distance of 1105 to Terminator = 5.3"; to 3km sunlit peak = 0.0"																												
26	Jan	31	3	5	59.4	d	79253	cK1	7.6	7.1	96+	156		78	83	86S	111	202	105	+2.6	-5.3	+2.4	-0.8	.378	-7.3		7	17	54.5	26	19	59	360.5	665.8
							79253 is double: ** 8.7 8.7 0.050"																												
							79253 has been reported as non-instantaneous (OCc1350). Observations are highly desired																												
26	Jan	31	5	16	29.8	d	79316	G2	7.5	7.1v	96+	157		73	276	74N	92	4	85	+2.3	-5.1	+2.4	-0.5	.379	20.8		7	21	32.8	26	9	33	360.8	708.4
							79316 = V0340 Gem, 7.37 to 7.71, V, Type RS, Period 35.37 days, Phase 86%																												
26	Jan	31	23	34	15.6	d	1239	A4	6.6	6.5	99+	168	-7	19	73	81N	109	178	97	+4.4	-4.1	+0.5	+0.2	.531	-9.7		8	13	41.7	23	8	16	366.4	957.2
							Distance of 1239 to Terminator = 19.7"; to 3km sunlit peak = 8.5"																												
26	Feb	2	9	32	7.3	r	1395	G9	6.3	5.8	100-	174		39	271	54N	312	241	295	+4.3	-1.8	+0.6	-1.9	.491	173.8		9	25	32.5	16	35	8	369.2	885.2

Occultation prediction for Bill Sadowski Park, Miami, Florida, USA
E. Longitude - 80 19 13.9, Latitude 25 36 30.9, Alt. 2m; Telescope dia 15cm; dMag 0.0

y	m	d	h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon Alt	Sun Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	dur sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
Distance of 1395 to Terminator = 3.1"; to 3km sunlit peak = 0.0"																																	
26	Feb	4	3	27	25.4	R	1600	wA5	5.0	4.9		94-	151	30	98	8N	15	79	354	+6.5	+0.6	-0.3	-7.5	.133	107.1		11	0	44.8	6	6	5	378.3	828.6
R1600 = 59 Leonis																																	
1600 is double: AB 5.0 12.6 40" 217.4, dT = +282sec																																	
Distance of 1600 to Terminator = 2.9"; to 3km sunlit peak = 0.0"																																	
26	Feb	4	6	52	19.5	r	1606	M*	7.8	7.0v		93-	150	68	155	50N	334	356	313	+6.0	+1.0	+1.2	-2.3	.354	160.1		11	4	19.1	5	13	30	376.3	687.2
1606 = FG Leo, 7.84 to 8.01, Hp, Type SRB, Period 24.962161 days, Phase 38%																																	
26	Feb	6	8	15	21.2	d	1815	SK2	4.7	4.0		79-	125	55	162	-42S	163	179	141	+5.4	+4.1	+0.7	-2.5	.312	-28.2		12	39	14.8	- 7	59	44	387.7	665.8
R1815 = chi Virginis																																	
1815 is multiple: **Aa,Ab 4.8 8.8 0.10" 214.0, dT = +0.2sec : AB 4.8 8.8 177" 135.9, dT = +505sec : AC 4.8 10.6 224" 109.8, dT = +428sec : AD 4.8 9.0 321" 331.1, dT = -1006sec																																	
1815 has been reported as non-instantaneous (OCc 760). Observations are highly desired																																	
26	Feb	6	9	33	6.4	R	1815	SK2	4.7	4.0		79-	125	55	196	81S	286	271	264	+5.1	+4.3	+2.8	-1.0	.306	-152.3		12	39	14.8	- 7	59	44	387.9	651.0
R1815 = chi Virginis																																	
1815 is multiple: **Aa,Ab 4.8 8.8 0.10" 214.0, dT = -0.1sec : AB 4.8 8.8 177" 135.9, dT = +502sec : AC 4.8 10.6 224" 109.8, dT = +728sec : AD 4.8 9.0 321" 331.1, dT = -739sec																																	
1815 has been reported as non-instantaneous (OCc 760). Observations are highly desired																																	
26	Feb	6	10	55	1.5	r	138905	F8	7.3	7.0		78-	124	45	224	50S	255	216	234	+4.8	+4.5	+3.5	+0.0	.209	-125.9		12	40	40.7	- 8	26	54	388.9	672.7
26	Feb	7	6	6	53.9	r	1919	K5	6.9	6.0s		71-	114	27	121	20N	3	56	343	+5.2	+5.0	-0.8	-3.4	.240	124.8		13	22	8.3	-12	34	46	394.2	803.6
1919 = NSV 19751, 6.98 to 7.03, Hp																																	
26	Feb	7	7	30	23.1	r	157895	pA2	7.8	7.7		70-	114	41	138	67S	270	308	250	+4.9	+5.2	+2.7	+0.8	.279	-138.4		13	22	45.6	-13	11	11	393.1	711.3
157895 is double: AB 7.8 10.8 19.4" 311.2, dT = -53sec																																	
26	Feb	9	8	18	22.3	r	2138	WF6	7.9	7.6		51-	91	27	137	63N	313	356	298	+2.8	+6.8	+0.9	-0.7	.371	170.7		14	58	40.7	-22	24	5	400.4	729.4
2138 is double: AB 7.9 9.6 12.0" 95.0, dT = +25sec																																	
26	Feb	9	9	59	54.7	r	183079	M2	7.7	6.8s		51-	91	39	161	86S	282	302	267	+2.4	+7.0	+2.6	-0.1	.299	-158.7		15	0	30.4	-22	50	58	399.5	622.2
183079 = NSV 20220, 7.67 to 7.75, Hp																																	
26	Feb	10	8	26	56.1	d	2263	cB1	4.6	4.7		42-	80	19	132	-58N	70	118	58	+1.6	+7.2	+2.3	+2.0	.262	48.2		15	50	58.7	-25	45	5	402.5	767.3
R2263 = 1 Scorpii																																	
2263 is double: ** 5.6 5.6 0.050"																																	
2263 has been reported as non-instantaneous (OCc1483). Observations are highly desired																																	
26	Feb	10	9	19	31.5	R	2263	cB1	4.6	4.7		41-	80	27	141	25N	347	25	335	+1.4	+7.3	-0.3	-2.4	.237	131.7		15	50	58.7	-25	45	5	401.6	693.4
R2263 = 1 Scorpii																																	
2263 is double: ** 5.6 5.6 0.050"																																	
2263 has been reported as non-instantaneous (OCc1483). Observations are highly desired																																	
26	Feb	11	8	32	26.5	R	2397	K1	6.5	5.9		32-	69	10	128	56N	309	3	301	+0.3	+7.3	+0.2	-0.4	.397	162.1		16	41	37.6	-27	48	35	403.2	814.7
26	Feb	12	11	20	58.0	R	2540	B3	7.2	7.1e		23-	58	-9	27	148	53N	305	338	303	-1.3	+7.2	+1.6	-0.5	.297	155.7		17	40	23.9	-28	55	24	399.7	632.0
2540 = V2382 Oph, 7.26 to 7.29, Hp, Type E+BE, Period 0.9215 days, Phase 40%																																	
26	Feb	13	10	34	48.2	r	186988	A0	8.5	8.3		16-	47	13	131	63N	288	339	291	-2.2	+6.6	+0.9	+0.3	.377	166.5		18	34	12.8	-28	20	45	398.7	750.5
26	Feb	19	0	31	55.7	D	Mercury		-0.6	-0.6		2+	18	1	266	69N	39	339	65	-5.8	-1.1	+0.0	+0.7	.496	17.4		23	14	18.8	- 3	50	16	379.0	956.4
Mercury contacts: Bright limb 0 31 49; Terminator 0 31 58.7; Dark limb 0 32 3: diam = 7.0"; %illum = 53.3%; PA bright limb = 244.0																																	
26	Feb	21	1	43	20.8	d	109530	DF0	8.2	8.0		14+	44	11	276	85N	59	353	80	-4.7	-4.1	+0.3	+0.2	.534	6.4		0	54	45.1	9	25	44	372.6	971.9
109530 is double: AB 8.57 9.60 3.11" 299.9, dT = -2.8sec																																	
109530 is a close double. Observations are highly desired																																	
26	Feb	23	2	56	49.4	d	75537	A2	7.8	7.7		34+	71	21	284	35N	16	306	33	-2.8	-6.2	+1.5	+3.0	.250	60.7		2	43	41.1	21	8	50	368.6	914.3
26	Feb	24	0	21	1.8	d	76041	F0	8.2	8.0		44+	83	68	273	24S	142	59	155	-1.4	-6.7	+2.9	-6.6	.139	-68.4		3	38	35.9	24	36	6	364.4	668.2
26	Feb	24	0	28	13.5	D	76046	cA0	7.1	7.1		44+	83	67	274	48S	118	35	131	-1.4	-6.7	+2.5	-2.4	.276	-43.5		3	39	6.7	24	42	10	364.5	671.7
76046 is double: AB 7.1 45.0, dT = -11sec																																	
26	Feb	24	1	42	11.1	d	76081	K2	7.5	6.9		44+	83	51	279	89N	75	356	88	-1.6	-6.7	+1.8	-0.1	.413	4.1		3	41	18.1	25	0	29	365.4	733.6

Occultation prediction for Bill Sadowski Park, Miami, Florida, USA
E. Longitude - 80 19 13.9, Latitude 25 36 30.9, Alt. 2m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon Alt	Sun Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	Feb	24	2	57	24.3	d	76102	A2	7.5	7.5		45+	84	35	284	89S	77	2	90	-1.7	-6.7	+1.1	-0.4	.466	6.2		3	43	43.2	25	4	51	366.7	833.7
26	Feb	24	3	51	26.2	D	538	pB8	5.7	5.7		45+	84	23	288	20S	146	75	159	-1.8	-6.6	-0.7	-4.0	.249	-61.2		3	45	9.7	24	50	21	367.8	921.8
R538 = 18 Tauri																																	
538 is quadruple: Aa,Ab 6.4 6.4 0.10" : AB 5.6 14.0 72" 128.9, dT = +276sec : AC 5.6 14.8 151" 175.1, dT = +532sec																																	
538 is a close double. Observations are highly desired																																	
26	Feb	24	4	54	30.3	d	555	K5	6.4	5.6s		46+	85	10	293	51S	116	49	128	-1.8	-6.5	-0.3	-1.5	.501	-29.6		3	48	6.5	24	59	18	369.1	1031.3
555 = NSV 1316, 6.44, range 0.02, 0V, Type VAR, Period 1.48987 days																																	
26	Feb	25	1	21	18.6	d	715	cK5	8.0	7.5		56+	97	69	281	79N	72	341	80	-0.2	-6.8	+2.4	+0.4	.367	13.8		4	43	35.4	27	41	15	364.2	667.5
715 is double: ** 8.8 8.8 0.10" 90.0, dT = +0.26sec																																	
715 has been reported as non-instantaneous (OCc 130). Observations are highly desired																																	
26	Feb	26	7	0	11.8	d	77818	K5	6.7	5.8		69+	112	11	296	48N	50	343	50	+0.5	-5.9	+0.8	+0.5	.369	52.6		6	0	4.9	28	7	33	369.3	1086.4
26	Feb	26	23	31	28	m	1042	cA2	6.7	6.6		77+	123	-3	60	79	5S	183	269	179	+2.6	-5.8	+9.9	+9.9	.000	-90.0		6	49	10.2	27	11	25	365.6	697.7
1042 is double: 6.7 9.8 0.10"																																	
1042 is a close double. Observations are highly desired																																	
Distance of 1042 to Terminator = 7.4"; to 3km sunlit peak = 0.0"																																	
26	Feb	26	23	31	43	Gr	1042	cA2	6.7	6.6		77+	123	-3	62	** GRAZE: CA 4.7S; Dist. 51km in az. 349deg. [Lat = 26.08+0.18(E.Long+80.32)]																			
Distance of 1042 to Terminator = 18.6"; to 3km sunlit peak = 2.8"																																	
26	Feb	27	2	46	36.5	d	78873	A2	7.8	7.7		78+	124	77	281	83N	91	356	87	+2.0	-5.6	+2.5	-0.4	.363	16.5		6	55	48.1	27	14	58	365.1	669.8
26	Feb	27	2	52	7.1	d	1056	B9	7.2	7.3		78+	124	76	281	73N	81	347	77	+2.0	-5.6	+2.7	+0.1	.340	26.7		6	55	56.2	27	17	9	365.1	673.6
26	Feb	27	5	17	48.2	d	78957	G8	7.5	7.0		79+	125	45	283	83N	92	12	87	+1.7	-5.3	+1.3	-0.9	.443	20.1		7	0	14.8	26	52	42	366.9	839.0
26	Feb	28	1	43	25.2	d	1194	SK0	7.8	7.2		86+	137	75	90	32N	47	130	37	+3.3	-4.6	+3.6	+4.8	.165	63.3		7	56	1.5	24	39	57	366.5	655.6
1194 is triple: AB 7.8 10.1 18.9" 160.1, dT = -45sec : AB 9.5 11.5 34" 194.1, dT = -175sec																																	
26	Feb	28	5	7	15.5	d	79868	DK0	7.4			87+	138	59	274	72N	87	7	77	+2.7	-4.2	+2.2	-0.6	.363	32.4		8	1	30.3	23	54	46	367.5	767.1
79868 is double: AB 7.43 10.98 1.30" 168.9, dT = +0.5sec																																	
79868 is a close double. Observations are highly desired																																	
26	Feb	28	5	22	1.8	D	1208	DK1	6.4			87+	138	56	275	29S	166	88	156	+2.7	-4.2	-0.2	-3.4	.301	-46.9		8	1	0.8	23	34	59	367.7	785.1
1208 is double: AB 6.48 9.95 1.95" 325.2, dT = -6sec																																	
1208 is a close double. Observations are highly desired																																	
26	Mar	1	1	31	32.0	D	1329	pF8	6.8			93+	150	60	94	61S	140	213	125	+4.3	-3.2	+1.8	-1.8	.352	-24.8		8	53	55.3	19	58	2	369.3	694.1
1329 is double: AB 7.32 7.86 0.15" 72.1, dT = +0.16sec																																	
1329 is a close double. Observations are highly desired																																	
26	Mar	3	11	16	11.6	d	X119629	k	11.5	11.1		0E	179	-7	6	274	23U	68	3	47	+4.1	+1.2	+0.3	-0.2	.338	52.7		10	51	47.3	6	18	53	381.9	1032.8
26	Mar	3	11	20	26.5	d	X210181	k	11.7			0E	179	-6	5	274	48U	106	41	85	+4.1	+1.2	+0.0	-1.2	.543	14.2		10	51	57.8	6	7	28	382.1	1038.6
26	Mar	3	11	25	58.3	d	X119641	k	11.3	11.0		0E	179	-4	3	275	64U	128	63	107	+4.1	+1.2	-0.1	-1.6	.559	-8.2		10	51	57.8	6	0	33	382.2	1046.9
26	Mar	6	11	10	50.7	r	1885	K2	7.3	6.7		91-	145	-7	25	241	69N	319	265	298	+3.4	+5.4	+1.2	-2.3	.370	160.6		13	8	27.9	-11	45	46	392.3	746.4
26	Mar	7	10	53	46.2	R	1993	cK3	6.6	5.9		84-	133	-11	33	226	61S	266	224	247	+2.7	+6.3	+2.3	-0.7	.291	-148.0		13	54	21.4	-17	10	48	395.2	658.5
26	Mar	8	4	41	22.7	r	2084	A3	6.5	6.4		78-	124	13	121	78S	279	335	262	+3.1	+6.4	+0.8	+0.6	.409	-156.1		14	34	50.7	-20	26	22	399.5	866.3
26	Mar	12	9	36	9.7	R	2631	B9	6.5	6.5v		40-	79	24	142	89S	266	305	267	-2.3	+6.9	+2.1	+0.9	.331	-170.3		18	11	58.2	-28	54	6	399.7	650.2
R2631 = V4045 Sagittarii																																	
2631 = V4045 Sgr, 6.51 to 6.54, V, Type ACV, Period 2.8855 days																																	
26	Mar	13	8	43	53.6	d	2784	cK1	3.3	2.7		31-	68	8	126	-33S	138	194	144	-3.2	+6.2	-0.1	-0.9	.278	-47.2	.02	19	6	56.4	-27	40	14	398.6	791.1
R2784 = tau Sagittarii																																	
2784 is double: AB 4.2 4.2 0.008" 319.3, dT = -0.03sec																																	
26	Mar	13	9	11	1.8	r	187672	kA*	7.4	7.4		31-	68	13	129	28N	323	15	329	-3.2	+6.2	+0.0	-1.4	.231	126.7		19	6	19.2	-27	17	14	397.9	746.4
26	Mar	13	9	35	39.1	R	2784	cK1	3.3	2.7		31-	68	17	133	51S	222	270	228	-3.3	+6.2	+2.4	+2.8	.251	-133.0	.02	19	6	56.4	-27	40	14	397.4	710.2
R2784 = tau Sagittarii																																	
2784 is double: AB 4.2 4.2 0.008" 319.3, dT = 0.00sec																																	
26	Mar	15	10	45	48.5	r	189827	A3	8.0	7.9		14-	44	-11	16	123	53S	214	268	229	-4.9	+4.0	+1.5	+2.6	.315	-141.0		20	54	43.6	-20	56	58	388.7	764.7

Occultation prediction for Bill Sadowski Park, Miami, Florida, USA
E. Longitude - 80 19 13.9, Latitude 25 36 30.9, Alt. 2m; Telescope dia 15cm; dMag 0.0

y	m	day d	h	Time m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon Alt	Sun Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	Mar	16	10	23	25.1	R	3182	A2	7.5	7.4		8-	32	5	110	74S	231	293	249	-5.1	+2.6	+0.7	+1.9	.452	-161.3		21	44	18.9	-15	58	18	384.9	890.2
26	Mar	22	0	34	6.4	d X	3230	M2	9.1	8.1v		11+	39	24	281	50S	105	35	123	-2.6	-5.9	+0.5	-1.5	.435	-31.7		2	23	36.5	18	57	54	364.3	903.0
X 3230 = ASAS J022337+1857.9, 9., range 0.3, V, Type MISC, Period 62.5 days, Phase 62%																																	
26	Mar	23	3	4	11.0	d	499	cG5	8.0			20+	54	7	294	33N	15	310	29	-1.1	-6.4	+1.6	+3.2	.216	68.9		3	27	49.6	24	10	58	366.3	1066.3
499 is double: AB 8.04 11.52 0.40" 170.0, dT = -1.7sec																																	
499 is a close double. Observations are highly desired																																	
26	Mar	24	22	26	14	D	810	SB7	1.7	1.7		40+	79	15	86	43	14N	9	145	13	+2.1	-6.6	+9.9	+9.9	.085	76.4	.01	5	26	17.5	28	36	27	363.1	642.1
R810 = El Nath = beta Tauri																																	
810 is multiple: AC 1.9 19.0 8.4" 357.0, dT = +96sec : AD 1.9 18.5 9.8" 70.0, dT = +56sec : AE 1.9 10.9" 80.0, dT = +42sec : AF 1.9 15.8 11.6" 296.0, dT = +39sec																																	
810 is a close double. Observations are highly desired																																	
26	Mar	24	22	36	15	Gr	810	SB7	1.7	1.7		40+	79	12	87	** GRAZE: CA 0.8N; Dist. 46km in az. 357deg. [Lat = 26.02+0.05(E.Long+80.32)]																			
26	Mar	24	22	46	4	R	810	SB7	1.7	1.7		40+	79	10	87	335	-12N	344	189	347	+2.1	-6.6	+9.9	+9.9	.085	103.6	.01	5	26	17.5	28	36	27	363.1	640.5
R810 = El Nath = beta Tauri																																	
810 is multiple: AC 1.9 19.0 8.4" 357.0, dT = -96sec : AD 1.9 18.5 9.8" 70.0, dT = -8sec : AE 1.9 10.9" 80.0, dT = +14sec : AF 1.9 15.8 11.6" 296.0, dT = -91sec																																	
810 is a close double. Observations are highly desired																																	
26	Mar	25	2	35	50.2	d	77268	B8	8.2	8.0v		41+	80	39	286	53S	124	45	127	+1.5	-6.3	+0.5	-1.9	.436	-23.8		5	34	39.1	28	3	4	365.7	844.5
77268 = V1371 Tau, 8.02 to 8.20, V, Type GCAS																																	
26	Mar	26	0	37	22	D	1008	A0	5.3	5.3s		52+	93	78	285	20N	23	284	21	+3.0	-5.8	+9.9	+9.9	.061	80.5		6	35	12.1	28	1	20	365.5	658.0
R1008 = 49 Aurigae																																	
1008 = NSV 3032, 5.05 to 5.27, V																																	
26	Mar	26	0	44	2	Gr	1008	A0	5.3	5.3s		52+	93	75	** GRAZE: CA 10.5N; Dist. 23km in az. 22deg. [Lat = 25.83-0.36(E.Long+80.32)]																			
26	Mar	26	0	50	53	R	1008	A0	5.3	5.3s		52+	93	75	283	2N	5	270	3	+2.9	-5.8	+9.9	+9.9	.062	99.5		6	35	12.1	28	1	20	365.6	667.2
R1008 = 49 Aurigae																																	
1008 = NSV 3032, 5.05 to 5.27, V																																	
26	Mar	26	2	46	9	m	78580	SA2	7.3	7.2		53+	93	50	284	15N	19	296	16	+2.7	-5.6	+9.9	+9.9	.000	90.0		6	38	53.6	27	48	16	367.1	790.7
78580 is triple: AC 7.3 13.8 26.6" 237.2 : AB 7.3 10.5 28.6" 130.4																																	
26	Mar	26	4	4	45.5	d	1028	G8	7.5	7.1		53+	94	34	287	34S	150	74	147	+2.5	-5.5	-0.3	-2.6	.383	-41.2		6	41	42.7	27	4	54	368.6	908.8
26	Mar	27	2	30	42.1	D	79610	F8	7.2	7.0		64+	106	66	274	67S	124	41	115	+3.6	-4.6	+1.5	-1.8	.398	-7.3		7	41	3.1	24	57	54	368.7	717.5
26	Mar	27	4	47	23.5	D	1170	dG8	3.6	3.1		65+	107	36	282	30S	162	86	153	+3.4	-4.3	-0.5	-2.9	.352	-45.1		7	44	26.8	24	23	53	371.0	897.6
R1170 = kappa Geminorum																																	
1170 is double: AB 3.7 10.0 7.3" 241.1, dT = +4sec																																	
1170 is a close double. Observations are highly desired																																	
26	Mar	27	5	30	55.9	R	1170	dG8	3.6	3.1		65+	108	27	286	-59S	250	178	241	+3.3	-4.2	+1.1	-0.2	.379	-135.0		7	44	26.8	24	23	53	372.0	968.5
R1170 = kappa Geminorum																																	
1170 is double: AB 3.7 10.0 7.3" 241.1, dT = -19sec																																	
1170 is a close double. Observations are highly desired																																	
26	Mar	28	4	27	57.8	D	1304	pA0	6.8			75+	120	51	271	21S	175	101	161	+4.1	-3.1	-0.5	-3.6	.277	-51.2		8	41	15.3	20	28	37	372.6	800.1
1304 is double: AB 7.10 8.08 0.29" 70.6, dT = -0.26sec																																	
1304 is a close double. Observations are highly desired																																	
26	Mar	30	0	50	39.7	d	1515	kF8	7.8	7.5		91+	144	53	107	89N	111	173	91	+5.5	-0.5	+1.9	-0.3	.376	14.3		10	21	52.9	10	41	59	378.2	711.0
26	Mar	30	5	55	0	M	1531	wA0	6.0	6.0v		91+	146	50	254	19N	41	339	21	+4.5	+0.2	+9.9	+9.9	.000	90.0		10	27	39.0	9	45	45	379.1	776.1
R1531 = 45 Leonis (CX)																																	
1531 is double: AB 6.0 12.4 34" 119.5																																	
1531 = CX Leo, 6.01 to 6.03, V, Type ACV, Period 3.0525 days, Phase 70%																																	
26	Apr	4	3	48	36.3	r	2045	cK0	6.4			95-	155	28	131	50N	340	26	321	+3.2	+6.2	+0.1	-1.7	.336	147.0		14	17	3.8	-18	35	9	397.1	772.3
2045 is double: AB 6.40 10.51 0.70" 83.1, dT = +0.49sec																																	

Occultation prediction for Bill Sadowski Park, Miami, Florida, USA
E. Longitude - 80 19 13.9, Latitude 25 36 30.9, Alt. 2m; Telescope dia 15cm; dMag 0.0

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      day  Time     P   Star  Sp  Mag  Mag    % Elon Sun  Moon   CA   PA  VA  AA Libration   A    B    RV    Cct durn  R.A. (J2000)  Dec   Mdist   SV
 y   m  d  h  m    s       No  D    v    r V  ill     Alt Alt Az   o    o   o   o   L    B   m/o m/o  "/s     o  sec  h  m   s    o  m  s   Mm   m/s
      2045 is a close double. Observations are highly desired
26 Apr  4  9 59  7.0 r  158538wK1  7.3  6.8   95- 153     26 229  76N 313 267 296 +1.8 +6.8 +1.8-2.2 .325  158.5     14 24  0.4 -19 48  3 397.9 673.9
    158538 is double: AB 7.4 11.6 40" 286.2, dT = -108sec
26 Apr  5  9 58 46.5 R    2174pB8  6.5  6.5   90- 142     30 217  50S 252 216 238 +0.9 +7.3 +2.4-0.1 .261 -145.1     15 13 17.4 -24  0 30 399.8 616.6
      2174 is triple: ** 7.1 7.1 0.030"   0.0 : AB 6.4 12.5 8.2"  45.0, dT = +28sec
      2174 has been reported as non-instantaneous (OCc1471). Observations are highly desired
26 Apr  6  4  0 29.4 d    2287SB1  2.9  3.0v  84- 133      8 124 -86N 103 159  91 +1.1 +7.1 +0.6+0.5 .430   12.6     15 58 51.1 -26  6 51 403.3 861.8
   R2287 = pi Scorpii
      2287 is triple: Aa,Ab 5.1 13.4 2.0" 244.0, dT = -4sec : AB 2.9 11.9 50" 128.1, dT = +106sec
      2287 is a close double. Observations are highly desired
      2287 = pi Sco, 2.88 to 2.91, V, Type ELL, Period 1.570103 days, Phase  64%
26 Apr  6  5 10 27.0 R    2287SB1  2.9  3.0v  84- 133     20 134  67N 309 356 298 +0.9 +7.2 +0.7-0.5 .376  167.2     15 58 51.1 -26  6 51 402.0 751.9
   R2287 = pi Scorpii
      2287 is triple: Aa,Ab 5.1 13.4 2.0" 244.0, dT = -2.2sec : AB 2.9 11.9 50" 128.1, dT = +134sec
      2287 is a close double. Observations are highly desired
      2287 = pi Sco, 2.88 to 2.91, V, Type ELL, Period 1.570103 days, Phase  64%
26 Apr  6  8 41 45.2 r    2297kF7  7.0  6.7   83- 132     38 184  82S 278 274 267 +0.1 +7.5 +3.0-0.4 .285 -169.4     16  3 16.1 -26 43  2 400.5 562.3
26 Apr  6 10  2 16.6 r    2300wK0  7.6  7.1   83- 131     33 205  52S 248 223 237 -0.2 +7.5 +2.7+0.3 .248 -146.7     16  5  1.4 -26 56 52 401.0 577.7
      2300 is double: AB 7.7 13.7 13.4" 351.6, dT = +13sec
26 Apr  9  9 58 12.7 r    2727kA*  7.4  7.4v  57-  98     34 164  36S 212 229 216 -3.6 +6.4 +2.9+2.9 .187 -130.1     18 47 37.1 -28 16 47 398.8 562.8
      2727 = HIP 92215, 7.45 to 7.48, V, Type ACV, Period 1.93789 days, Phase  95%
26 Apr 11 10 32 21.5 r  189425WF7  7.5  7.2   38-  76  -7 34 145  50N 295 329 308 -5.6 +4.4 +2.7-0.4 .224  132.9     20 33 30.9 -22 13 55 391.5 624.7
    189425 is double: AB 7.5 11.6 10.3"  21.3, dT = -2.9sec
26 Apr 14 10 31 34.2 R    3383 M2  6.2  5.4s  12-  40  -7 19 107  33S 190 250 211 -6.2 +0.0 +0.5+3.1 .307 -130.2     23  2 32.6 - 6 34 26 376.3 867.2
   R3383 = 82 Aquarii
      3383 = NSV 25999, 6.24 to 6.29, Hp
26 Apr 19 14 28 40.1 d     539SB6  4.3  4.4s   7+  30  47 25  74  70S  89 162 102 +0.6 -6.1 +0.5+0.8 .536  -23.7      3 45 12.5  24 28  2 359.01018.4
   R539 = Taygeta = 19 Tauri
      539 is multiple: Aa,Ab 4.6 6.1           : AB          0.018" 273.2, dT = -0.03sec : AC 4.3 14.0 53"  53.4, dT = +80sec : AB 4.3 11.0 72"
328.8, dT = -69sec
      539 is a close double. Observations are highly desired
      539 = NSV 1264, 4.30, range 0.00, 1Kp, Type SPB, Period 1.5664 days
26 Apr 19 14 54 36.9 D     541SB8  3.9  3.9s   7+  31  53 31  76  23S 136 210 149 +0.7 -6.1 +2.9-2.2 .182  -71.0      3 45 49.6  24 22  4 358.4 975.4
   R541 = Maia = 20 Tauri
      541 is quadruple: Aa,Ab 4.4 5.4           : AB 3.8 13.7 113"  72.6, dT = +276sec : AB 3.8 13.7 113"  72.7, dT = +277sec
      541 = NSV 1279, 3.87, range 0.00, 4Kp, Type ACV, Period 10.288 days
26 Apr 19 15  2 29   Gr    541SB8  3.9  3.9s   7+  31  55 34 ** GRAZE: CA  4.6S; Dist.110km in az. 141deg. [Lat = 24.33+0.73(E.Long+80.32)]
26 Apr 19 15 13 57.8 r     541SB8  3.9  3.9s   7+  31  57 35  77 -14S 174 249 186 +0.7 -6.1 -2.3+5.2 .176 -108.9      3 45 49.6  24 22  4 358.0 943.8
   R541 = Maia = 20 Tauri
      541 is quadruple: Aa,Ab 4.4 5.4           : AB 3.8 13.7 113"  72.6, dT = +124sec : AB 3.8 13.7 113"  72.7, dT = +123sec
      541 = NSV 1279, 3.87, range 0.00, 4Kp, Type ACV, Period 10.288 days
26 Apr 20  1 27 35.8 d   76460 A0  8.0  7.9    9+  35     13 293  50S 112  45 123 -0.3 -6.4 -0.2-1.4 .550  -23.5      4  6 41.4  25 43 20 360.71049.0
26 Apr 20  2  8 39.0 d   76472cG8  7.2  6.5    9+  35      5 297  81S  81  18  92 -0.2 -6.3 -0.1-0.5 .634    7.4      4  8 39.0  25 52 40 361.61121.2
26 Apr 21  0 16 17.6 D     771SA5  6.1  5.9e  17+  48  -7 41 286  57N  47 328  53 +1.5 -6.4 +2.1+1.2 .319   48.6      5  9 45.1  28  1 50 359.6 840.7
      771 is triple: Aa,Ab 6.0      0.20" 351.0, dT = +0.35sec : A,BC 6.0 9.1 11.2"  29.1, dT = +33sec
      771 is a close double. Observations are highly desired
      771 = V1156 Tau, 6. to 6.1, Hp, Type E:, Period 1.40266 days, Phase  44%
26 Apr 21  0 40 22.5 d     773wF8  7.0  6.7   17+  48     36 287   7S 164  87 169 +1.5 -6.3 -1.3-5.3 .193  -67.4      5 10  3.9  27 33 23 360.1 878.4
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Occultation prediction for Bill Sadowski Park, Miami, Florida, USA
E. Longitude - 80 19 13.9, Latitude 25 36 30.9, Alt. 2m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon Alt	Sun Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	dur sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
							773 is double: AB 7.0 9.3 315" 353.1, dT = -1609sec																											
26	Apr	21	1	27	38.6	d	77030	K0	8.6	7.9		17+	49	26	290	43S	128	54	133	+1.5	-6.2	-0.1	-1.9	.470	-30.6		5	12	34.1	27	36	15	361.1	955.8
26	Apr	22	1	18	0	m	78191	A0	7.7	7.7		27+	62	42	286	17N	16	297	15	+3.1	-5.7	+9.9	+9.9	.000	90.0		6	17	59.9	28	0	24	362.6	855.4
26	Apr	22	1	18	14	Gr	78191	A0	7.7	7.7		27+	62	40	** GRAZE: CA 16.6N; Dist. 18km in az. 215deg. [Lat = 25.41-0.62(E.Long+80.32)]																				
26	Apr	22	2	0	20.0	d	78242	K0	8.8	8.4		27+	63	33	288	86S	93	17	92	+3.0	-5.6	+0.8	-0.9	.509	13.0		6	20	26.0	27	37	36	363.5	920.8
26	Apr	22	2	7	32.8	d	78234	A0	8.2	8.2		27+	63	31	288	29S	151	76	150	+3.0	-5.6	-0.4	-2.7	.375	-44.8		6	20	4.5	27	23	6	363.6	933.2
26	Apr	23	0	31	42.0	d	79319	K2	7.9	7.3		38+	76	-10 65	277	86S	101	17	94	+4.5	-4.8	+1.9	-1.0	.401	12.6		7	21	39.7	25	51	44	364.7	727.4
26	Apr	23	0	49	1	m	79316	G2	7.5	7.1v		38+	76	61	278	17N	24	300	17	+4.4	-4.8	+9.9	+9.9	.000	90.0		7	21	32.8	26	9	33	364.9	747.4
							79316 = V0340 Gem, 7.37 to 7.71, V, Type RS, Period 35.37 days, Phase 17%																											
26	Apr	24	0	54	49.0	d	80119	G5	8.1	7.7		49+	89	72	263	5S	188	113	176	+5.4	-3.5	-1.6	-6.4	.156	-66.7		8	21	4.9	22	1	54	368.7	704.9
26	Apr	24	4	40	42.9	d	1269	kG5	6.9	6.3		50+	90	22	284	33S	161	91	149	+5.0	-3.0	-0.6	-2.5	.404	-43.0		8	28	7.2	21	8	55	373.0	998.0
26	Apr	25	3	9	49.6	d	98511	kF2	7.8	7.6		61+	102	52	265	45N	63	353	47	+5.6	-1.8	+3.7	+1.0	.191	64.0		9	20	38.2	17	7	38	374.4	789.1
26	Apr	25	3	53	59.1	D	1387	cA5	7.0	6.8		61+	103	42	270	55S	143	73	127	+5.5	-1.7	+0.4	-2.2	.441	-17.9		9	21	25.5	16	35	54	375.3	842.6
							1387 is double: ** 7.6 7.6 0.10" 90.0, dT = +0.14sec																											
							1387 has been reported as non-instantaneous (OCc1402). Observations are highly desired																											
26	Apr	26	0	25	50.3	d	98966	SG	8.2	7.7		70+	114	-9 72	137	77S	123	162	104	+6.4	-0.6	+2.1	-1.3	.361	6.3		10	8	12.8	11	59	49	377.2	664.1
							98966 is quadruple: BC 8.2 13.2 0.9" 82.7, dT = +1.8sec : BD 8.2 12.1 108" 210.0, dT = +18sec : BA 8.2 1.4 176" 128.0, dT = +486sec																											
							98966 is a close double. Observations are highly desired																											
26	Apr	26	0	33	58.1	D	1487	SB7	1.4	1.4s		70+	114	-10 73	143	78S	123	157	104	+6.4	-0.6	+2.1	-1.3	.360	7.1		10	8	22.3	11	58	2	377.1	663.9
							R1487 = Regulus = alpha Leonis																											
							1487 is triple: AB 1.4 8.2 176" 308.0, dT = -486sec : AD 1.4 12.1 193" 274.0, dT = -468sec																											
							1487 = NSV 4750, 1.33 to 1.40, V																											
26	Apr	26	1	59	24.0	R	1487	SB7	1.4	1.4s		71+	115	73	220	-61N	320	284	301	+6.1	-0.4	+1.5	-2.2	.371	172.3		10	8	22.3	11	58	2	377.4	686.0
							R1487 = Regulus = alpha Leonis																											
							1487 is triple: AB 1.4 8.2 176" 308.0, dT = -463sec : AD 1.4 12.1 193" 274.0, dT = -361sec																											
							1487 = NSV 4750, 1.33 to 1.40, V																											
26	Apr	27	0	9	14.5	D	1589	pM5	5.9	5.3v		80+	126	-5 57	122	84N	106	156	85	+6.5	+0.9	+2.3	-0.2	.339	24.6		10	56	1.5	6	11	7	381.9	690.3
							R1589 = 56 Leonis (VY)																											
							1589 is double: 6.2 7.1																											
							1589 = VY Leo, 5.69 to 6.03, V, Type SR, Period 46.34 days, Phase 16%																											
26	Apr	28	3	1	15.7	d	138388	K0	7.3	6.8		88+	139	64	190	60N	81	71	59	+5.6	+2.7	+4.3	+0.5	.205	54.8		11	45	1.4	- 0	31	4	385.8	665.1
26	Apr	30	3	13	52.1	d	157822	kK2	7.3	6.6		98+	162	50	160	78S	111	130	90	+4.5	+5.2	+2.4	-0.6	.323	21.5		13	15	54.0	-12	21	0	393.1	660.7
26	May	1	3	40	6.1	d	2011	K2	6.3	5.6		100+	172	44	157	85N	67	88	47	+3.6	+6.1	+5.1	+2.5	.156	62.8	.01	14	3	4.1	-17	22	1	396.3	657.5
							Distance of 2011 to Terminator = 8.2"; to 3km sunlit peak = 0.9"																											
26	May	3	5	54	47.2	r	183731	pF0	7.3	7.1		98-	162	39	172	82N	309	316	296	+1.2	+7.3	+2.2	-1.2	.293	166.3		15	43	11.6	-25	24	56	400.7	586.2
							183731 is double: AB 7.3 9.3 5.9" 291.8, dT = -19sec																											
							183731 is a close double. Observations are highly desired																											
26	May	3	9	39	19.6	r	2256	PA1	7.0	6.9		97-	161	20	226	35S	244	198	232	+0.2	+7.3	+1.3	+0.0	.291	-147.2		15	47	56.5	-25	59	13	402.7	676.0
							2256 is double: ** 7.7 7.7 0.10" 90.0, dT = +0.31sec																											
							2256 has been reported as non-instantaneous (OCc1482). Observations are highly desired																											
							Distance of 2256 to Terminator = 17.3"; to 3km sunlit peak = 6.5"																											
26	May	4	10	11	0.5	r	2397	K1	6.5	5.9		93-	150	-8 22	221	68N	309	267	301	-1.0	+7.3	+2.5	-2.4	.256	139.3		16	41	37.6	-27	48	35	403.3	661.5
26	May	6	4	43	35.4	r	2660	A3	6.2	6.0		82-	130	10	128	60S	241	295	243	-2.1	+6.4	+1.7	+2.0	.320	-144.6		18	22	0.1	-28	25	48	404.0	769.5
26	May	9	8	29	26	m	3078	cA5	4.9			55-	96	29	134	-7S	157	200	172	-6.1	+3.3	+9.9	+9.9	.000	-90.0		21	4	24.3	-19	51	18	392.8	663.5
							R3078 = Chow = eta Capricorni																											
							3078 is double: AB 5.02 7.39 0.23" 30.0																											
							3078 is a close double. Observations are highly desired																											
26	May	12	8	56	42.3	r	3454	K0	7.6	7.1		25-	60	18	102	48N	289	351	311	-7.0	-1.0	+1.0	+0.3	.309	129.4		23	27	14.7	- 2	38	13	376.8	889.8

Occultation prediction for Bill Sadowski Park, Miami, Florida, USA
E. Longitude - 80 19 13.9, Latitude 25 36 30.9, Alt. 2m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon Alt	Sun Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	May	12	9	23	21.4	r	146716	pG0	8.4	8.2		25-	59	24	105	33N	304	5	326	-7.1	-1.1	+1.9	-1.1	.179	112.4		23	28	5.7	- 2	27	33	376.1	854.8
		146716 is triple: AB 9.2 9.2 0.20" 79.6, dT = +0.8sec : AC 8.5 8.1 57" 45.9, dT = +65sec																															
		146716 is a close double. Observations are highly desired																															
26	May	12	9	24	25.4	r	146717	PF2	8.1	7.9		25-	59	25	105	31N	306	6	328	-7.1	-1.1	+2.0	-1.3	.165	110.7		23	28	8.5	- 2	26	53	376.1	853.5
		146717 is double: AB 8.1 8.5 57" 225.9, dT = -60sec																															
26	May	12	9	40	10.1	r	146720	K5	8.1	7.4		25-	59	28	108	87S	244	303	265	-7.1	-1.1	+1.0	+1.6	.453	171.9		23	28	27.0	- 2	39	13	375.7	833.1
26	May	13	9	52	38.9	R	109127	F0	7.2	7.0		16-	46	-10	23	97	55S	214	278	236	-6.5	-2.6	+0.3	+2.1	.474	-157.9		0	18	7.9	3	47	48	369.9	919.1
26	May	19	0	14	20.1	d	77619	F2	7.1	6.9		7+	30	-4	27	289	19S	153	79	154	+1.8	-5.7	-0.7	-2.8	.360	-50.6		5	50	39.7	27	30	18	357.1	983.6
26	May	19	0	17	18.4	D	885	wG7	5.6	5.1		7+	30	-4	26	290	46N	38	324	39	+1.8	-5.7	+2.1	+1.9	.245	64.6		5	50	58.1	27	58	4	357.2	988.7
		885 is double: AB 5.7 12.5 10.8" 233.1, dT = -43sec																															
26	May	19	0	27	32	Gr	885	wG7	5.6	5.1		7+	31	-5	23	** GRAZE: CA 20.1N; Dist.192km in az. 34deg. [Lat = 27.69-0.61(E.Long+80.32)]																			
26	May	19	0	41	56.2	R	885	wG7	5.6	5.1		7+	31	-9	21	292	-5N	347	275	348	+1.8	-5.6	-1.5	-3.8	.255	115.4		5	50	58.1	27	58	4	357.71032.7
		885 is double: AB 5.7 12.5 10.8" 233.1, dT = +17sec																															
26	May	19	0	57	5.0	d	77671	F5	9.2	9.0		7+	31	18	293	73S	99	29	100	+1.8	-5.6	+0.1	-1.0	.607	3.2		5	53	10.4	27	37	27	358.11056.2
26	May	19	1	0	34.3	D	890	cA0	4.6	4.6s		7+	31	17	293	72S	100	30	101	+1.8	-5.6	+0.1	-1.0	.611	2.2		5	53	19.6	27	36	44	358.11062.3
		R890 = 136 Tauri																															
		890 is double: ** 4.8 6.3 0.050" 270.0, dT = -0.08sec																															
		890 has been reported as non-instantaneous (OCc 206). Observations are highly desired																															
		890 = NSV 2696, 4.50 to 4.61, V																															
26	May	19	1	10	7.0	d	77686	F5	9.2	8.7		7+	31	15	294	59S	113	44	115	+1.8	-5.6	-0.2	-1.3	.608	-11.5		5	53	40.6	27	31	45	358.41078.8
26	May	19	1	47	29.7	D	77711	F5	7.9	7.6		7+	31	8	297	31S	142	76	143	+1.8	-5.5	-0.8	-1.9	.499	-40.5		5	55	3.7	27	20	32	359.21143.6
26	May	19	1	55	54.9	D	77724	B1	7.0	7.0		7+	31	7	298	59N	51	347	52	+1.9	-5.5	+0.5	+0.4	.428	49.9		5	55	40.3	27	42	56	359.41158.0
26	May	20	0	47	17.2	D	1061	SF8	6.2	5.9s		14+	45	-10	33	286	11S	171	96	166	+3.6	-4.7	-1.2	-3.7	.268	-60.3		6	58	47.4	26	4	52	359.9	945.3
		R1061 = 39 Geminorum																															
		1061 is triple: Aa,Ab 6.1 0.50" 158.0, dT = +1.8sec : AB 6.1 12.1 35" 69.0, dT = -27sec																															
		1061 is a close double. Observations are highly desired																															
		1061 = NSV 17256, 6.1, range 0.02, V, Type VAR:																															
26	May	20	1	23	56.4	d	78973	A2	8.8	8.6		15+	45	25	288	82S	101	28	96	+3.6	-4.6	+0.4	-1.1	.566	9.8		7	1	13.7	26	11	6	360.71004.4
26	May	20	1	28	20.3	D	78979	G5	8.1	7.6		15+	45	25	289	85N	87	15	82	+3.6	-4.6	+0.5	-0.7	.531	23.2		7	1	25.4	26	14	7	360.81011.8
26	May	20	2	7	17.0	d	78998	G5	8.0	7.7e		15+	45	16	291	30S	153	83	147	+3.6	-4.5	-0.7	-2.2	.448	-43.1		7	2	23.3	25	50	46	361.81077.2
		78998 = V0369 Gem, 7.95 to 8.12, V, Type EB, Period 0.423061 days, Phase 26%																															
26	May	21	2	29	33.6	D	1221	cM3	6.0	5.1v		24+	59	23	285	68S	123	52	112	+5.1	-3.3	+0.1	-1.5	.567	-6.3		8	6	18.4	22	38	8	365.71011.8
		R1221 = 9 Cancri = BL Cnc.																															
		1221 is double: AB 6.0 10.1 0.40"																															
		1221 is a close double. Observations are highly desired																															
		1221 = BL Cnc, 5.97 to 6.04, V, Type SR																															
26	May	21	2	41	53.4	d	79951	G5	7.8	7.2		24+	59	21	286	70N	81	11	70	+5.1	-3.2	+0.6	-0.6	.473	35.6		8	6	56.2	22	46	31	366.01031.8
26	May	21	2	48	59.9	D	1222	cG5	7.2	6.8		24+	59	19	286	37S	154	84	143	+5.1	-3.2	-0.5	-2.2	.464	-37.9		8	6	34.4	22	27	24	366.21043.3
		1222 is double: ** 7.2 0.013" 234.6, dT = 0.00sec																															
		1222 has been reported as non-instantaneous (OCc1381). Observations are highly desired																															
26	May	23	3	28	30.0	D	1466	cB9	5.3	5.3		46+	85	30	270	82N	102	35	84	+6.5	-0.2	+0.8	-1.3	.458	22.5		9	58	13.4	12	26	41	376.1	903.5
		R1466 = nu Leonis																															
		1466 is double: ** 6.0 6.0 0.050"																															
		1466 has been reported as non-instantaneous (OCc1407). Observations are highly desired																															
26	May	24	2	11	55.1	d	118476	PF8	8.2	7.9		56+	97	54	245	63N	85	30	65	+6.8	+1.2	+2.8	-0.6	.277	46.4		10	45	18.9	6	57	39	379.2	738.9
		118476 is double: ** 8.9 8.9 0.10" 90.0, dT = +0.36sec																															
		118476 has been reported as non-instantaneous (OCc1419). Observations are highly desired																															
26	May	24	3	22	11.8	D	1567	kK1	6.4	5.8		57+	98	38	257	39S	163	100	142	+6.7	+1.4	+0.3	-2.7	.361	-34.5		10	46	5.7	6	22	23	380.7	808.2

Occultation prediction for Bill Sadowski Park, Miami, Florida, USA
E. Longitude - 80 19 13.9, Latitude 25 36 30.9, Alt. 2m; Telescope dia 15cm; dMag 0.0

y	m	d	h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon Alt	Sun Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	dur sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
	R1567 = 37 (Sextantis)/Leonis																																
26	May	24	3	50	30.0	d	1573	pA2	7.1	7.0		57+	98	32	261	77S	125	61	104	+6.6	+1.4	+0.8	-1.8	.455	2.0		10	47	19.2	6	20	46	381.3	841.6
	R1573 = 38 (Sextantis)/Leonis																																
26	May	28	0	5	8.4	d	1970	SA0	6.2	6.2		90+	143	-1	33	132	59S	136	180	116	+5.3	+5.8	+0.9	-0.9	.384	-6.8		13	45	35.1	-15	46	3	397.1	744.1
	R1970 = 85 Virginis																																
	1970 is multiple: Aa,Ab 6.5 8.2 : Aa,Ac 6.5 8.4 0.10" : AB 6.2 12.8 44" 312.7, dT = -115sec : AB 6.2 12.8 44" 312.5, dT = -115sec																																
	1970 is a close double. Observations are highly desired																																
26	May	29	1	16	35.0	D	2084	A3	6.5	6.4		95+	155	34	141	87N	94	131	77	+4.1	+6.6	+2.3	+0.6	.309	31.8		14	34	50.7	-20	26	22	399.6	704.0
26	Jun	2	4	39	9.8	r	186286	B7	7.1	7.1		97-	159	28	148	67N	305	338	305	-1.2	+6.5	+1.7	-0.6	.272	149.7		18	6	45.8	-28	21	50	403.0	615.8
26	Jun	2	5	44	19.4	R	2617	cK0	4.6	4.1		97-	159	34	163	87N	285	302	285	-1.5	+6.5	+2.7	-0.1	.280	165.1		18	8	5.0	-28	27	26	402.4	566.1
	2617 is double: AB 5.1 5.9 0.26" 12.0, dT = -0.04sec																																
	2617 is a close double. Observations are highly desired																																
26	Jun	6	6	29	48.1	r	3157	cF6	7.3			71-	115	25	124	51N	291	342	308	-6.0	+2.2	+1.7	+0.1	.260	134.0		21	33	40.2	-16	12	4	393.7	714.6
	3157 is double: AB 7.33 10.00 0.90" 2.6, dT = -1.1sec																																
	3157 is a close double. Observations are highly desired																																
26	Jun	7	7	41	39.9	r	3282	kK0	7.8	7.0		61-	103	33	124	88S	247	297	267	-6.9	+0.7	+1.7	+1.6	.373	169.9		22	22	11.6	-10	50	53	388.0	713.2
26	Jun	7	9	9	45	m	3286	K0	7.2	6.4		60-	102	48	144	18N	321	353	341	-7.2	+0.5	+9.9	+9.9	.000	90.0		22	24	7.6	-10	11	52	386.5	657.8
26	Jun	10	7	34	25.4	r	109413	K2	8.0	7.3		30-	66	13	88	79N	259	324	281	-6.8	-3.5	+0.3	+1.2	.520	159.5		0	43	53.0	7	33	19	373.0	1004.6
26	Jun	10	8	33	59.3	r	109437	kG5	7.8	7.3		29-	65	26	94	79N	259	325	281	-6.8	-3.6	+0.8	+1.2	.467	156.2		0	45	40.4	7	50	42	371.4	919.5
26	Jun	11	8	50	30.9	r	92548	A3	8.1	7.9		19-	52	21	84	75S	237	305	257	-5.8	-4.7	+0.2	+1.6	.564	-178.8		1	38	27.6	13	55	42	366.1	1001.1
26	Jun	11	9	20	33.0	R	244	K0	6.7	6.2		19-	52	28	87	59N	282	351	303	-5.8	-4.8	+1.1	+0.5	.377	134.2		1	39	15.4	14	17	8	365.3	957.9
	R244 = 104 Piscium																																
26	Jun	13	12	14	52.5	r	539	SB6	4.3	4.4s		4-	23	21	44	80	34S	213	291	226	-2.3	-6.2	+0.2	+2.4	.441	-148.4		3	45	12.5	24	28	2	354.8	891.0
	R539 = Taygeta = 19 Tauri																																
	539 is multiple: Aa,Ab 4.6 6.1 : AB 0.019" 73.4, dT = +0.03sec : AC 4.3 14.0 53" 53.4, dT = +113sec : AB 4.3 11.0 72" 328.8, dT = +71sec																																
	539 is a close double. Observations are highly desired																																
	539 = NSV 1264, 4.30, range 0.00, 1Kp, Type SPB, Period 1.5664 days																																
26	Jun	17	1	9	27.3	D	1155	F0	6.4	6.2		5+	27	-12	12	291	60N	64	357	56	+3.4	-3.6	+0.5	-0.1	.427	48.4		7	38	14.4	24	21	38	359.9	1123.5
26	Jun	17	1	29	2.6	D	1157	A2	6.2	6.2		5+	27	8	293	72N	77	11	68	+3.4	-3.5	+0.1	-0.5	.542	34.9		7	39	12.0	24	13	21	360.4	1155.0
26	Jun	17	1	31	13.2	d	79578	cA0	8.8	8.8		5+	27	8	293	49N	54	348	45	+3.4	-3.5	+0.6	+0.4	.353	57.9		7	39	5.6	24	18	51	360.4	1159.0
	79578 is double: ** 9.6 9.6 0.10" 92.0, dT = +0.22sec																																
	79578 has been reported as non-instantaneous (OCc 762). Observations are highly desired																																
26	Jun	17	20	6	54.3	D	Venus		-4.0	-4.0		11+	38	53	85	174	36S	156	161	143	+5.5	-2.9	+1.4	-3.3	.293	-33.7		8	30	20.8	21	2	26	358.3	612.8
	Venus contacts: Bright limb 20 6 29; Terminator 20 7 16; Dark limb 20 7 19: diam = 14.7"; %illum = 74.0%; PA bright limb = 281.5																																
26	Jun	17	21	24	43.9	R	Venus		-4.0	-4.0		11+	39	35	72	259	-80S	274	200	258	+5.3	-2.7	+2.9	-0.5	.317	-146.9		8	30	20.8	21	2	26	358.9	659.0
	Venus contacts: Bright limb 21 24 21; Terminator 21 24 55; Dark limb 21 25 7: diam = 14.7"; %illum = 74.0%; PA bright limb = 281.5																																
26	Jun	18	0	54	12.7	d	80317	pA2	8.3	8.2s		12+	40	-9	26	281	76S	116	46	103	+5.0	-2.2	+0.3	-1.4	.564	3.1		8	39	3.6	19	59	59	362.8	994.4
	80317 is double: ** 8.3 10.6 0.044" 98.7, dT = +0.07sec																																
	80317 has been reported as non-instantaneous (OCc 637). Observations are highly desired																																
	80317 = NSV 4162, 8.32, range 0.02, V																																
26	Jun	18	1	9	31.8	D	80327	pA3	7.8	7.6		12+	40	-12	23	282	70N	83	13	69	+5.0	-2.2	+0.7	-0.7	.465	36.5		8	39	42.8	20	5	10	363.2	1018.4
	80327 is double: AB 7.9 9.6 0.64" 136.3, dT = +0.8sec																																
	80327 is a close double. Observations are highly desired																																
26	Jun	18	1	16	48.6	d	80331	pF0	9.0	8.8		12+	40	22	283	74N	87	17	74	+5.0	-2.1	+0.5	-0.8	.496	31.8		8	39	59.1	20	1	53	363.4	1029.6
	80331 is multiple: AB : Ca,Cb 9.2 0.30" 22.0, dT = +0.26sec : CA 9.0 6.5 134" 129.0, dT = +201sec : CS 9.0 10.1 138" 341.1, dT = -76sec																																

Occultation prediction for Bill Sadowski Park, Miami, Florida, USA
E. Longitude - 80 19 13.9, Latitude 25 36 30.9, Alt. 2m; Telescope dia 15cm; dMag 0.0

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      day  Time     P   Star  Sp  Mag  Mag    % Elon Sun  Moon   CA   PA  VA  AA Libration    A    B    RV    Cct durn  R.A. (J2000)  Dec   Mdist   SV
 y   m  d  h  m    s       No  D    v    r V  ill     Alt Alt Az   o    o   o   o   L    B   m/o m/o  "/s     o  sec  h  m   s    o  m  s   Mm   m/s
     80331 is a close double. Observations are highly desired
26 Jun 18  1 20  6.8 D    1295pK0  6.4  5.9s  12+  40     21 283  76N  89  19  75 +5.0 -2.1 +0.5-0.8 .508   30.0      8 40  6.4  20  0 28 363.51034.7
   R1295 = 39 Cancri
      1295 is multiple: AC 6.5 9.0 134" 309.0, dT = -201sec : AD 6.5 8.8 135" 111.0, dT = +246sec : AB 6.5 6.6 152" 149.9, dT = +144sec : AS 6.5 10.1
262" 325.7, dT = -281sec
      1295 = NSV 4179, 6.39, range 0.04, V
26 Jun 18  1 21 28.0 D    1292kF0  6.7  6.5v  12+  40     20 283  51S 142  73 129 +5.0 -2.1 -0.2-1.9 .539  -23.6      8 39 42.7  19 46 42 363.51036.8
   R1292 = 38 Cancri (BT)
      1292 = BT Cnc, 6.66, range 0.06, V, Type DSCTC, Period 0.10228 days
26 Jun 18  1 22 30.8 D    1296pA1  6.6  6.6   12+  40     20 283  81N  94  25  81 +5.0 -2.1 +0.4-0.9 .536   24.5      8 40 11.5  19 58 16 363.51038.3
   R1296 = 40 Cancri
      1296 is quadruple: Ba,Bb 6.6      0.40" 128.0, dT = +0.6sec : BR 6.6 11.6 140" 146.9, dT = +158sec : BA 6.6 6.5 152" 329.9, dT = -159sec
      1296 is a close double. Observations are highly desired
26 Jun 18  1 23 42.4 d   80330pA5  8.9  8.7   12+  41     20 283  38N  51 341  37 +5.0 -2.1 +1.7+1.1 .222   67.9      8 39 58.4  20  9 30 363.61041.3
     80330 is double: AB 8.9 9.7 91" 153.0, dT = -87sec
26 Jun 18  1 24 12.7 d   80338pF5  8.8  8.6S  12+  41     20 283  74N  87  18  74 +5.0 -2.1 +0.5-0.8 .506   31.0      8 40 15.3  19 59 39 363.61041.1
     80338 is double: DA 8.8 6.5 135" 291.0, dT = -245sec
     80338 = NSV 17951, 8.81, , Type VAR:
26 Jun 18  1 30 46.8 D   80340pA0  7.9  7.8S  12+  41     19 284  78S 115  46 102 +5.0 -2.1 +0.1-1.3 .595    3.0      8 40 23.5  19 50  6 363.81051.1
     80340 is double: ** 8.8 8.8 0.050" 111.0, dT = +0.08sec
     80340 has been reported as non-instantaneous (OCc1074). Observations are highly desired
     80340 = NSV 4183, 8.01,
26 Jun 18  1 39 36.5 D   98020pA0  7.6  7.5e  12+  41     17 284  49S 145  76 131 +5.0 -2.1 -0.3-1.9 .539  -26.8      8 40 20.7  19 41 12 364.01065.2
     98020 is quadruple: ** 9.1 9.1 0.050"       : CA 7.6 6.5 64" 163.1, dT = +113sec : CD 7.6 9.2 76"  91.1, dT = +84sec
     98020 has been reported as non-instantaneous (OCc1392). Observations are highly desired
     98020 = HD 73709, 7.69 to 7.76, V, Type EA, Period 7.22015 days, Phase  75%
26 Jun 18  1 41 32.7 D    1298pK0  6.4  5.9E  12+  41     16 284  46S 148  79 134 +5.0 -2.1 -0.4-1.9 .525  -29.8      8 40 22.1  19 40 12 364.11068.3
      1298 is multiple: AE 6.5 12.5 15.7" 154.8, dT = +30sec : AB 6.4 10.4 20.8"  55.1, dT = -1.7sec : AC 6.5 7.6 64" 343.1, dT = -118sec : AD 6.5
9.2 84"  44.0, dT = -37sec
      1298 = HD 73710, 6.42, , Type EA, Period 7.22030 days, Phase  42%
26 Jun 18  1 43  3.9 d   80351kA2  8.7  8.5   12+  41     16 285  68N  81  13  68 +5.0 -2.1 +0.4-0.6 .488   36.4      8 40 56.9  19 56  5 364.11070.7
26 Jun 18  1 43  4   m   80343kF2  8.2  8.0v  12+  41     16 285  15N  28 320  14 +5.0 -2.1 +9.9+9.9 .000   90.0      8 40 26.7  20 10 55 364.11072.4
     80343 = BQ Cnc, 8.19, range 0.02, V, Type DSCTC, Period 0.074 days
26 Jun 18  1 43 29.7 D    1302pA9  6.8  6.7   12+  41     16 285  64S 129  61 116 +5.0 -2.1 -0.1-1.6 .595  -11.4      8 40 43.2  19 43 10 364.11071.1
   R1302 = 42 Cancri
      1302 is double: ** 7.5 7.5 0.050"
      1302 has been reported as non-instantaneous (OCc1393). Observations are highly desired
26 Jun 18  1 48 57.3 d   80352kF0  9.0  8.8   12+  41     15 285  85N  98  30  84 +5.0 -2.1 +0.1-1.0 .575   19.9      8 41 10.7  19 49 46 364.21079.7
26 Jun 18  1 50 55.2 d   80353kA3  8.3  8.2S  12+  41     14 285  63N  76   9  63 +5.0 -2.1 +0.4-0.5 .461   41.3      8 41 13.8  19 55 19 364.31083.2
     80353 = NSV 17956, 8.33, , Type DSCT:
26 Jun 18  1 58 23.2 D    1303kA6  6.8  6.7v  12+  41     13 286  41S 152  85 139 +5.0 -2.0 -0.5-2.0 .508  -35.0      8 40 56.3  19 34 49 364.51094.8
      1303 = EP Cnc, 6.76, range 0.03, V, Type DSCTC
26 Jun 18  1 59  7.0 D    1299pA*  6.3  6.2   12+  41     12 286  15S 179 112 165 +5.0 -2.0 -1.1-3.1 .294  -61.7      8 40 27.0  19 32 41 364.51096.7
   R1299 = epsilon Cancri
      1299 is double: AB 6.3 7.5 134" 250.1, dT = +146sec
26 Jun 18  2  3  9.4 d   98043kK0  8.4  7.9   12+  41     12 286  73S 120  53 107 +5.0 -2.0 -0.2-1.4 .622   -3.1      8 41 35.1  19 39 45 364.61101.9
26 Jun 18  2  7 24.2 D    1305pK0  6.9  6.4   12+  41     11 287  56N  70   3  56 +5.0 -2.0 +0.4-0.3 .426   47.1      8 41 50.1  19 52 27 364.71109.1
      1305 is double: Ea,Eb 7.2 9.1
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Occultation prediction for Bill Sadowski Park, Miami, Florida, USA
E. Longitude - 80 19 13.9, Latitude 25 36 30.9, Alt. 2m; Telescope dia 15cm; dMag 0.0

day	Time	P	Star	Sp	Mag	Mag	%	Elon	Sun	Moon	CA	PA	VA	AA	Libration		A	B	RV	Cct	durn	R.A. (J2000)			Dec		Mdist	SV
y m d	h m s		No	D	v	r	V	ill	Alt	Alt Az	o	o	o	o	L	B	m/o	m/o	"/s	o	sec	h	m	s	o	m	s	Mm	m/s
26 Jun 18	2 31 10.9	d	98053	kA7	7.9	7.8v	12+	41	6	289 33S	160	95	146	+5.1	-2.0	-0.7	-2.1	.464	-44.2			8	42	6.5	19	24	41	365.4	1146.2
98053 = BX Cnc, 7.96, range 0.02, V, Type DSCTC, Period 0.04412 days																													
26 Jun 19	0 56 1.1	d	98659		8.8	8.5	20+	54	-9	36 270	67N	85	16	68	+6.2	-0.6	+1.4	-0.8	.389	39.5		9	35	32.2	14	49	30	367.4	898.2
26 Jun 19	1 21 25.6	d	98665	w	8.8	8.4	21+	54		30 272	90N	108	39	91	+6.2	-0.6	+0.7	-1.3	.503	15.8		9	36	13.3	14	35	48	368.1	932.9
98665 is double: AB 8.8 9.1 82" 111.0, dT = +162sec																													
26 Jun 19	1 24 6.7	d	98667		9.0	8.7	21+	54		30 273	88N	107	38	90	+6.2	-0.5	+0.7	-1.3	.502	16.7		9	36	18.5	14	35	18	368.1	936.7
26 Jun 19	1 31 30.2	D	1415	WA1	6.3	6.3	21+	54		28 273	40S	158	90	141	+6.2	-0.5	-0.1	-2.4	.434	-35.1		9	35	52.9	14	22	47	368.3	947.5
R1415 = 7 Leonis																													
1415 is double: AB 6.3 9.4 41" 90.5, dT = +35sec																													
26 Jun 19	2 17 22.5	D	1420	F2	6.6	6.4	21+	54		18 278	84N	103	36	86	+6.1	-0.4	+0.3	-1.2	.537	18.3		9	38	1.3	14	20	50	369.5	1014.6
R1420 = 11 Leonis																													
26 Jun 20	0 11 48.8	D	1525	M2	5.6	4.8v	30+	66	0	53 249	24S	178	120	158	+7.0	+0.9	-0.2	-3.4	.288	-47.4	.01	10	25	15.2	8	47	5	371.9	766.1
R1525 = 44 Leonis (DE)																													
1525 = DE Leo, 5.6, range 0.07, V, Type SRB:																													
26 Jun 20	1 54 24.5	d	118317	K2	8.2	7.5	31+	67		31 264	36S	166	101	146	+6.8	+1.1	+0.0	-2.7	.372	-39.9		10	27	56.5	8	18	52	374.2	879.3
26 Jun 21	2 29 42.3	D	1635	cM0	5.2	4.4	41+	80		31 256	56S	147	86	126	+7.0	+2.7	+0.6	-2.3	.419	-21.2		11	17	17.4	2	0	38	380.5	829.1
R1635 = 75 Leonis																													
1635 is double: ** 5.8 6.6 0.044" 0.0																													
1635 has been reported as non-instantaneous (OCc 763). Observations are highly desired																													
26 Jun 21	3 43 45.9	D	1637	K0	5.9	5.4	42+	80		14 265	37S	167	103	145	+6.9	+2.8	+0.1	-2.8	.353	-45.1		11	18	55.0	1	39	1	382.5	928.5
R1637 = 76 Leonis																													
26 Jun 23	4 24 23.0	d	1845	SG8	6.5	5.9s	62+	104		18 248	48S	154	95	132	+6.0	+5.4	+0.9	-2.7	.339	-35.5		12	51	22.9	-10	20	18	392.9	795.0
1845 is triple: AB 6.6 9.7 28.8" 296.3, dT = -68sec : AC 6.6 12.5 142" 211.8, dT = +219sec																													
1845 = NSV 5994, 6.49, range 0.07, V																													
26 Jun 25	1 9 46	m	158499	F2	7.7	7.5	79+	126	-11	45 173	21N	36	43	18	+5.0	+6.8	+9.9	+9.9	.000	90.0		14	20	50.3	-19	19	56	397.4	610.9
26 Jun 25	4 10 3	m	158538	wK1	7.3	6.8	80+	127		31 224	9N	23	342	5	+4.3	+6.9	+9.9	+9.9	.000	90.0		14	24	0.4	-19	48	3	398.9	639.4
158538 is double: AB 7.4 11.6 40" 286.2																													
Distance of 158538 to Terminator = 17.6"; to 3km sunlit peak = 3.1"																													
26 Jun 25	4 10 41	Gr	158538	wK1	7.3	6.8	80+	127		30 ** GRAZE: CA 8.5N; Dist. 43km in az. 190deg. [Lat = 25.22-0.15(E.Long+80.32)]																			
26 Jun 25	4 58 43.0	d	158556	WA2	6.8		80+	127		23 232	33N	47	358	29	+4.1	+7.0	+1.5	+1.5	.166	62.2		14	25	27.7	-19	57	57	399.8	688.4
158556 is double: BA 7.2 6.6 35" 114.8, dT = +80sec																													
26 Jun 25	4 59 52.8	d	2066	SA1	6.6	6.6	80+	127		23 232	33N	48	358	30	+4.1	+7.0	+1.4	+1.5	.170	61.5		14	25	29.9	-19	58	12	399.9	689.8
2066 is quadruple: **Aa,Ab 6.8 7.7 0.018" 329.0, dT = +0.02sec : BC 7.16 8.37 1.21" 89.4, dT = +5sec : AB 6.6 7.2 35" 294.8, dT = -80sec																													
2066 has been reported as non-instantaneous (OCc 204). Observations are highly desired																													
26 Jun 26	3 55 39.2	D	2174	pB8	6.5	6.5	87+	138		35 207	56S	133	106	118	+3.3	+7.3	+2.4	-2.0	.277	-23.4		15	13	17.4	-24	0	30	400.8	585.5
2174 is triple: ** 7.1 7.1 0.030" 0.0 : AB 6.4 12.5 8.2" 45.0, dT = +0.9sec																													
2174 has been reported as non-instantaneous (OCc1471). Observations are highly desired																													
26 Jun 26	23 19 25.6	D	2287	SB1	2.9	3.0v	92+	147	11	16 130	82S	101	152	89	+3.2	+7.1	+1.1	+0.5	.391	14.7		15	58	51.1	-26	6	51	403.9	791.5
R2287 = pi Scorpii																													
2287 is triple: Aa,Ab 5.1 13.4 2.0" 244.0, dT = -4sec : AB 2.9 11.9 50" 128.1, dT = +115sec																													
2287 is a close double. Observations are highly desired																													
2287 = pi Sco, 2.88 to 2.91, V, Type ELL, Period 1.570103 days, Phase 76%																													
26 Jun 27	0 35 30.7	R	2287	SB1	2.9	3.0v	92+	148	-5	28 143	-51N	311	348	300	+3.0	+7.2	+1.1	-0.7	.338	164.9		15	58	51.1	-26	6	51	402.7	683.2
R2287 = pi Scorpii																													
2287 is triple: Aa,Ab 5.1 13.4 2.0" 244.0, dT = -2.3sec : AB 2.9 11.9 50" 128.1, dT = +149sec																													
2287 is a close double. Observations are highly desired																													
2287 = pi Sco, 2.88 to 2.91, V, Type ELL, Period 1.570103 days, Phase 76%																													
26 Jun 27	2 43 19.4	d	2297	kF7	7.0	6.7	93+	148		37 174	51S	131	137	120	+2.5	+7.4	+2.3	-1.3	.274	-20.7		16	3	16.1	-26	43	2	401.8	571.4

Occultation prediction for Bill Sadowski Park, Miami, Florida, USA
E. Longitude - 80 19 13.9, Latitude 25 36 30.9, Alt. 2m; Telescope dia 15cm; dMag 0.0

y	m	day d	h	Time m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon Alt	Sun Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	Jul	1	7	20	39	m	2879	kA3	6.7	6.6		98-	165	38	195	32N	333	318	342	-3.3	+4.7	+9.9	+9.9	.000	90.0		19	42	22.6	-24	51	34	399.3	607.9
	Distance of 2879 to Terminator = 8.5"; to 3km sunlit peak = 1.0"																																	
26	Jul	3	3	57	8.0	R	3113	cB5	5.4	5.5	V	91-	144	18	120	40S	205	260	222	-4.5	+2.4	+1.4	+3.0	.282	-136.3		21	17	57.3	-17	59	7	396.6	749.6
	R3113 = 30 Capricorni																																	
	3113 is double: ** 6.1 6.1 0.10" 87.0, dT = +0.17sec																																	
	3113 has been reported as non-instantaneous (OCc1602). Observations are highly desired																																	
	3113 = HD 202671, 5.40, , Type ACV, Period 1.9917 days, Phase 99%																																	
26	Jul	4	9	4	50.7	R	3253	kB5	5.4	5.5	V	83-	131	53	189	54N	286	278	305	-6.3	+0.5	+4.7	-1.4	.180	121.5		22	10	37.5	-11	33	54	389.3	650.5
	R3253 = 38 Aquarii																																	
	3253 = HD 210424, 5.44, , Type ACV, Period 3.9613 days, Phase 44%																																	
26	Jul	6	10	11	10	m	128354	F8	8.0	7.7		65-	107	-6	65	181	21N	315	314	337	-7.3	-2.5	+9.9	+9.9	.000	90.0		23	44	18.2	0	42	44	379.8	673.7
26	Jul	8	8	30	14.9	r	194	cF5	8.2			44-	83	44	98	63S	221	288	242	-6.3	-4.7	+0.7	+2.1	.451	-168.9		1	19	42.8	12	8	45	371.4	827.8
	194 is double: AB 8.67 9.25 0.11" 323.2, dT = +0.05sec																																	
	194 is a close double. Observations are highly desired																																	
26	Jul	8	10	9	56.8	R	197	cK0	7.0	6.5		43-	82	-6	65	117	64S	223	278	243	-6.5	-5.0	+1.3	+2.1	.405	-173.0		1	21	58.3	12	36	15	369.6	731.0
26	Jul	9	6	39	51.7	R	317	F5	6.4	6.2		33-	71	11	76	66S	228	295	247	-5.4	-5.4	-0.2	+1.6	.586	-166.5		2	9	23.1	17	13	27	369.9	1080.3
	R317 = 20 H1. Arietis																																	
26	Jul	10	8	29	7.4	r	75775	SG5	8.5	8.1	v	22-	56	24	75	58S	226	297	241	-4.1	-6.0	-0.1	+1.8	.546	-162.0		3	11	13.8	22	24	57	363.5	1011.9
	75775 is triple: AC 8.6 13.3 24.1" 301.1, dT = -11sec : AB 8.6 10.6 33" 321.1, dT = +6sec																																	
	75775 = BD+21 418, 8.49 to 8.54, V, Type WTTS																																	
26	Jul	10	9	9	18.9	r	75790	G0	8.8	8.5		22-	56	33	78	56N	292	6	307	-4.1	-6.1	+1.5	+0.0	.348	130.2		3	12	24.7	22	52	50	362.5	949.5
26	Jul	10	9	27	27.8	r	75796	K0	9.0	8.5		22-	56	37	80	84S	253	327	267	-4.1	-6.2	+0.7	+1.3	.516	169.4		3	13	0.1	22	46	14	362.1	921.2
26	Jul	10	10	7	59.9	R	470	WK0	6.8	6.2		22-	55	-7	46	82	88S	257	333	271	-4.1	-6.2	+1.1	+1.2	.475	164.6		3	14	17.2	22	57	14	361.3	862.5
	470 is double: AB 6.9 10.4 42" 33.3, dT = +64sec																																	
26	Jul	11	9	16	34	m	76530	K3	7.8	7.0		13-	42	22	70	16N	340	52	350	-2.4	-6.2	+9.9	+9.9	.000	90.0		4	16	41.6	26	21	29	359.9	1034.7
26	Jul	12	8	50	46.3	r	77125	M0	9.1	8.1		6-	28	5	62	73S	258	322	262	-0.5	-5.7	-0.3	+0.9	.673	-178.9		5	21	38.5	27	25	55	359.4	1173.5
26	Jul	16	19	36	27.9	d	1466	cB9	5.3	5.3		8+	33	60	77	174	89S	111	117	92	+6.1	-0.1	+2.3	-0.9	.379	18.8		9	58	13.4	12	26	41	363.1	705.9
	R1466 = nu Leonis																																	
	1466 is double: ** 6.0 6.0 0.050"																																	
	1466 has been reported as non-instantaneous (OCc1407). Observations are highly desired																																	
26	Jul	17	1	21	39	m	98951	K5	8.4	7.5		9+	36	11	277	9N	31	325	12	+5.6	+0.7	+9.9	+9.9	.000	90.0		10	6	44.1	11	10	41	369.4	1053.0
26	Jul	24	2	31	17.5	d	183789	kA2	7.8	7.7		74+	119	34	204	53N	62	38	50	+3.2	+7.5	+2.9	+0.7	.220	41.9		15	47	23.3	-25	52	4	400.6	574.5
26	Jul	24	2	51	20.4	d	2256	PA1	7.0	6.9		74+	119	32	209	76N	85	56	73	+3.1	+7.5	+2.6	-0.5	.288	16.9		15	47	56.5	-25	59	13	400.9	585.6
	2256 is double: ** 7.7 7.7 0.10" 90.0, dT = +0.35sec																																	
	2256 has been reported as non-instantaneous (OCc1482). Observations are highly desired																																	
26	Jul	24	4	56	4.5	d	2261	K3	6.6	5.8		75+	120	14	231	48S	141	89	129	+2.7	+7.5	+2.1	-2.9	.251	-47.4		15	50	34.9	-26	17	23	402.9	723.9
26	Jul	25	4	3	28	d	2397	K1	6.5	5.9		82+	130	28	213	16N	18	345	11	+1.7	+7.4	+0.2	+5.1	.097	71.8	.01	16	41	37.6	-27	48	35	402.4	608.5
26	Jul	28	2	15	58.2	d	2824	K4	7.3	6.5		98+	163	30	147	59N	37	70	44	-1.3	+5.3	+2.6	+2.7	.232	42.3		19	21	44.2	-26	9	59	399.9	608.7
26	Jul	31	9	32	56.2	r	164779	KG5	7.2	6.8		97-	160	34	232	58N	282	236	301	-5.5	+0.5	+2.7	-1.8	.248	127.9		21	58	24.3	-12	39	53	390.7	767.2
26	Aug	2	7	18	42.6	R	3459	K0	6.4	5.8		87-	137	60	154	38S	193	217	215	-5.8	-2.1	+0.7	+2.9	.310	-147.8		23	29	27.0	- 1	47	28	382.2	678.1
	R3459 = 11 Piscium																																	
26	Aug	2	9	56	55.8	R	3467	kK1	6.4	5.8		86-	136	-12	53	228	54S	209	166	231	-6.3	-2.5	+1.1	+1.9	.362	-161.6		23	31	57.6	- 1	5	9	382.3	707.5
	R3467 = 13 Piscium																																	
26	Aug	3	6	43	8.6	r	30	SA0	7.1	7.1		79-	125	53	119	16S	171	223	193	-5.7	-3.4	-0.7	+4.1	.217	-122.8		0	15	57.3	4	15	4	379.1	736.7
	30 is triple: AB 7.0 14.1 0.8" 246.0, dT = -1sec : AC 7.0 12.2 5.0" 347.2, dT = +23sec																																	
	30 is a close double. Observations are highly desired																																	
26	Aug	4	9	47	57.6	r	163	pF2	7.3	7.1		68-	112	76	190	34N	302	293	324	-6.0	-5.0	+7.3	-5.1	.107	106.6		1	7	4.0	11	33	8	373.6	676.0
	163 is double: AB 7.3 10.5 8.3" 201.5, dT = +15sec																																	

Occultation prediction for Bill Sadowski Park, Miami, Florida, USA
E. Longitude - 80 19 13.9, Latitude 25 36 30.9, Alt. 2m; Telescope dia 15cm; dMag 0.0

y	m	day d	h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon Alt	Sun Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	dur sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
							163 is a close double. Observations are highly desired																												
26	Aug	5	9	48	8.9	r	92732	wF5	7.8	7.5		58-	99	78	132	80N	259	304	279	-5.3	-5.9	+2.6	+0.8	.343	153.2		1	58	47.5	17	1	33	369.7	689.3
							92732 is double: AB 7.8 17.9 79" 249.5, dT = -227sec																												
26	Aug	7	5	28	20.9	r	542	pB8	5.8	5.8		37-	74	3	64	75S	244	307	256	-3.1	-6.1	-0.5	+1.2	.652	-173.5		3	45	54.5	24	33	16	369.1	1174.4
							R542 = Asterope = 21 Tauri																												
							542 is triple: AB 5.8 6.4 150" 130.1, dT = +91sec : AD 5.8 12.7 170" 74.1, dT = +257sec																												
26	Aug	7	5	29	40.0	r	543	pA0	6.4	6.4		37-	74	3	64	67S	236	299	248	-3.0	-6.1	-0.5	+1.3	.635	-165.8		3	46	2.9	24	31	40	369.0	1172.4
							R543 = 22 Tauri																												
							543 is triple: BC 6.4 15.1 52" 267.9, dT = -69sec : BA 6.4 5.8 150" 310.1, dT = -63sec																												
26	Aug	7	5	44	39.2	r	548	pB9	6.8	6.8		36-	74	6	65	48S	217	281	229	-3.0	-6.2	-0.7	+1.7	.540	-147.2		3	46	59.4	24	31	12	368.7	1148.7
							548 is quadruple: Aa,Ab 6.8 6.9 0.011" 249.1, dT = -0.02sec : AB 6.8 14.8 102" 299.3, dT = -24sec : AC 6.8 13.0 123" 190.1, dT = -203sec																												
							548 is a close double. Observations are highly desired																												
26	Aug	7	6	18	52.4	R	555	K5	6.4	5.6s		36-	74	13	68	52N	297	5	309	-3.0	-6.2	+0.5	+0.0	.405	131.4		3	48	6.5	24	59	18	367.8	1093.4
							555 = NSV 1316, 6.44, range 0.02, 0V, Type VAR, Period 1.48987 days																												
26	Aug	7	7	47	12.3	R	571	pA2	6.8	6.7		36-	73	31	75	86N	264	338	276	-3.0	-6.4	+0.7	+1.0	.510	162.5		3	51	25.3	25	9	47	365.8	948.0
							571 is double: ** 7.1 9.1																												
26	Aug	7	8	1	59.8	r	76281	K0	8.0	7.4		35-	73	34	75	59N	291	6	303	-3.0	-6.4	+1.4	+0.1	.371	135.3		3	52	0.9	25	20	30	365.4	924.8
26	Aug	7	8	6	38.1	R	574	pG0	6.8	6.5		35-	73	35	76	79S	248	324	260	-3.0	-6.4	+0.6	+1.4	.517	177.5		3	52	11.4	25	9	47	365.3	917.2
26	Aug	7	9	14	19.2	r	76313	K0	8.3	7.8		35-	73	50	79	35N	315	35	327	-3.0	-6.5	+4.2	-2.9	.162	110.5		3	54	40.6	25	41	9	364.0	817.8
26	Aug	8	7	51	10.9	R	76841	cK1	7.3	6.7		25-	60	20	68	64S	241	312	248	-1.6	-6.1	-0.1	+1.4	.569	-166.7		4	55	34.6	27	12	9	364.0	1032.3
							76841 is double: ** 7.6 10.1 0.08" 82.0, dT = +0.13sec																												
							76841 has been reported as non-instantaneous (OCc 753). Observations are highly desired																												
26	Aug	8	9	27	27.0	R	746	WB7	7.0	6.9		24-	59	39	74	28S	205	283	211	-1.6	-6.2	-0.3	+3.2	.326	-131.0		4	59	53.7	27	19	32	361.9	873.4
							746 is double: AB 7.0 8.7 20.4" 206.1, dT = -63sec																												
26	Aug	9	7	42	15.4	R	909	SB9	6.0	5.9s		15-	46	5	62	88S	273	337	273	-0.1	-5.4	-0.2	+0.6	.638	170.3		6	1	0.5	27	34	21	363.6	1140.6
							909 is triple: Aa,Ab 6.1 9.2 194.0, dT = 0.00sec : AB 6.1 12.4 9.5" 242.4, dT = -13sec																												
							909 is a close double. Observations are highly desired																												
							909 = NSV 16751, 6.04, range 0.01, 2V, Type VAR, Period 9.26012 days																												
26	Aug	9	8	34	40.9	r	77894	SF2	8.8	8.4		15-	46	16	66	89S	273	342	273	+0.0	-5.5	+0.2	+0.7	.587	169.5		6	3	26.6	27	38	33	362.4	1049.1
							77894 is triple: AB 8.9 9.6 11.5" 263.5, dT = -19sec : AC 8.9 11.1 25.6" 189.6, dT = -5sec																												
26	Aug	9	8	46	50.2	R	77909	wA0	7.6	7.6		15-	45	18	67	70S	255	325	255	+0.0	-5.5	+0.0	+1.1	.580	-172.2		6	4	1.0	27	34	14	362.1	1027.9
							77909 is double: AB 7.6 10.8 21.6" 132.5, dT = +20sec																												
26	Aug	9	9	24	15.6	r	77957	B9	8.7	8.6		15-	45	25	70	31N	334	47	334	+0.0	-5.5	+2.8	-3.5	.178	108.8		6	6	15.6	27	56	5	361.3	963.8
26	Aug	9	10	14	41.7	r	77987	B9	8.5	8.5V		14-	45	-9	36	73	70N	296	13	295	+0.0	-5.6	+1.4	-0.1	.426	147.8		6	7	39.9	27	51	36	360.3	879.4
							77987 = HD 41639, 8.44, , Type VAR																												
26	Aug	10	8	42	46.4	R	1085	SG8	7.1	6.7		7-	32	4	63	56S	249	312	242	+1.6	-4.4	-0.5	+1.2	.590	-157.3		7	9	35.4	25	43	43	362.9	1126.3
							1085 is triple: AB 7.2 13.0 34" 68.2, dT = +57sec : AC 7.2 7.8 125" 78.3, dT = +208sec																												
26	Aug	10	8	46	16.1	r	79124	WF0	7.8	7.6		7-	32	4	64	58S	250	314	244	+1.6	-4.4	-0.4	+1.2	.595	-159.1		7	9	44.2	25	44	5	362.8	1120.2
							79124 is double: CA 7.8 7.2 125" 258.3, dT = -208sec																												
26	Aug	10	9	10	34	GrX	98986		9.1	8.6		7-	31	10	** GRAZE: CA 11.5N; Dist. 33km in az. 332deg. [Lat = 25.95+0.49(E.Long+80.32)]																												
26	Aug	10	9	15	20.8	r X	98986		9.1	8.6		7-	31	10	66	22N	351	57	344	+1.6	-4.4	+3.6	-6.8	.113	100.7		7	12	1.4	26	5	34	362.2	1070.2
26	Aug	10	9	45	21.7	r	79159	A5	9.3	9.1		7-	31	16	69	79S	272	341	266	+1.7	-4.4	+0.2	+0.7	.579	179.6		7	12	19.6	25	49	25	361.5	1015.8
26	Aug	10	9	56	16.6	R	1094	A0	7.1	7.1		7-	31	18	70	64S	257	327	251	+1.7	-4.4	+0.1	+1.2	.550	-165.1		7	12	49.4	25	44	55	361.3	996.8
							R1094 = 49 Geminorum																												
26	Aug	14	19	52	45.2	d	1635	cM0	5.2	4.4		6+	28	54	64	207	57S	150	126	129	+5.9	+2.8	+1.2	-2.3	.380	-16.5		11	17	17.4	2	0	38	370.4	711.3
							R1635 = 75 Leonis																												
							1635 is double: ** 5.8 6.6 0.044" 0.0																												
							1635 has been reported as non-instantaneous (OCc 763). Observations are highly desired																												

Occultation prediction for Bill Sadowski Park, Miami, Florida, USA
E. Longitude - 80 19 13.9, Latitude 25 36 30.9, Alt. 2m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon Sun Alt	Moon Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	Aug	16	1	37	41.6	d	1759pA*		6.6	6.4v	13+	43	2	262	77N	105	41	83	+5.7	+4.8	+0.2-1.3	.513	11.4			12	14	15.5	- 5	43	0	382.7	971.6
							1759 is triple: AB 6.6 13.5 10.6" 0.9, dT = -5sec : AC 6.6 11.9 86" 185.9, dT = +27sec																													
							1759 = FG Vir, 6.53 to 6.58, V, Type DSCTC, Period 0.079 days																											
26	Aug	20	1	7	11.3	d	183485 *		7.5	6.9v	49+	89	30	214	62S	133	98	119	+3.7	+7.6	+2.4-2.2	.275	-28.8			15	27	48.3	-25	10	10	398.2	606.8
							183485 = HM Lib, 7.42 to 7.63, V, Type PVTELIII																											
26	Aug	23	0	42	50.2	D	2617cK0		4.6	4.1	76+	122	35	168	48N	44	56	44	+0.4	+6.6	+3.1+2.2	.209	43.1			18	8	5.0	-28	27	26	400.7	555.3
							2617 is double: AB 5.1 5.9 0.26" 12.0, dT = +1.1sec																											
							2617 is a close double. Observations are highly desired																											
26	Aug	23	1	11	7.0	d	186346 F5		7.6	7.4	77+	122	36	176	55S	121	125	121	+0.3	+6.6	+3.2-1.2	.227	-36.6			18	8	52.1	-28	45	19	400.6	550.7
26	Aug	23	2	3	48.2	r	2617cK0		4.6	4.1	77+	122	35	190	-53N	303	292	303	+0.1	+6.5	+3.5-1.7	.212	137.1			18	8	5.0	-28	27	26	400.6	561.7
							2617 is double: AB 5.1 5.9 0.26" 12.0, dT = -0.44sec																											
							2617 is a close double. Observations are highly desired																											
26	Aug	23	4	9	32.5	d	186461cA2		7.4	7.2v	77+	123	24	218	42N	38	358	38	-0.4	+6.4	+0.7+1.1	.284	34.9			18	12	37.6	-28	14	11	401.7	675.6
							186461 is double: ** 8.2 8.2 0.050"																											
							186461 has been reported as non-instantaneous (OCc1536). Observations are highly desired																											
							186461 = V4385 Sgr, 7.42 to 7.46, Hp, Type ELL:, Period 2.62462 days, Phase 27%																											
26	Aug	24	5	4	44.6	d	187716SG6		7.2	6.6	85+	134	25	220	70S	99	58	105	-1.8	+5.4	+2.3-1.2	.302	-34.3			19	8	8.1	-26	50	5	400.1	709.5
							187716 is triple: **Aa,Ab 7.8 7.8 0.050" 160.0, dT = +0.08sec : AB 7.3 8.6 45" 123.9, dT = +136sec																											
							187716 has been reported as non-instantaneous (OCc 769). Observations are highly desired																											
26	Aug	26	6	21	15.4	d	3049 B9		7.3	7.3	96+	157	33	221	53N	32	353	47	-3.9	+2.7	+0.7+1.3	.358	21.1			20	52	16.1	-19	38	37	393.7	732.0
26	Aug	27	6	27	56.3	d	164579SF3		7.2	7.0	99+	169	42	216	79N	55	22	72	-4.6	+1.3	+1.6+0.8	.373	-5.2			21	41	28.1	-14	50	29	389.4	708.2
							164579 is triple: AB 7.2 12.0 17.8" 104.2, dT = +31sec : AC 7.2 12.6 119" 257.0, dT = -294sec																											
							Distance of 164579 to Terminator = 17.2"; to 3km sunlit peak = 6.7"																											
26	Aug	27	7	57	4.7	D	3177cA9		5.9	5.7	99+	169	28	235	56N	33	343	51	-4.9	+1.0	+0.5+1.2	.400	19.3			21	43	4.4	-14	23	59	390.4	803.1
							R3177 = 44 Capricorni																											
							3177 is double: ** 6.8 6.8 0.10" 90.0, dT = +0.14sec																											
							3177 has been reported as non-instantaneous (OCc1608). Observations are highly desired																											
							Distance of 3177 to Terminator = 11.4"; to 3km sunlit peak = 2.8"																											
26	Aug	28	2	46	18.6	r	X242703k		11.7		90E	179	38	129	-87N	219	265	239	-4.2	+0.2	+1.4+2.2	.362	-164.6			22	23	20.8	-10	29	40	386.7	704.1
26	Aug	28	2	51	56.1	d	X182637k		11.1	10.9	83E	180	39	129	92U	62	107	82	-4.3	+0.2	+1.8+1.7	.371	-7.5			22	25	3.2	-10	9	15	386.6	702.4
26	Aug	28	2	53	58.9	d	X182643k		11.5	11.2	80E	180	39	130	80U	94	138	113	-4.3	+0.2	+2.4+0.7	.289	-39.3			22	25	12.9	-10	17	6	386.6	700.8
26	Aug	28	2	57	4.5	r	X242709k		11.5		75E	180	40	131	-86N	219	262	239	-4.3	+0.2	+1.5+2.2	.358	-164.6			22	23	34.8	-10	27	28	386.5	696.3
26	Aug	28	2	59	45.7	r	X182578k		11.1	10.4	71E	180	40	132	-78S	202	245	222	-4.3	+0.2	+1.1+2.7	.314	-147.8			22	23	54.0	-10	29	12	386.5	694.6
26	Aug	28	3	0	48.1	d	X182649k		11.2	10.9	70E	180	40	131	73U	99	143	119	-4.3	+0.2	+2.7+0.4	.260	-45.5			22	25	20.6	-10	17	8	386.5	695.9
26	Aug	28	3	3	27.9	d	X242722		11.5		66E	180	41	132	52N	356	39	16	-4.3	+0.2	+0.2+4.0	.198	57.7			22	24	17.5	- 9	58	36	386.4	693.9
26	Aug	28	3	7	6.1	d	X182655k		11.1	10.8	61E	180	41	133	67U	105	147	125	-4.3	+0.2	+3.0+0.1	.229	-51.7			22	25	27.1	-10	17	16	386.4	691.6
26	Aug	28	3	10	59.9	D	165050 K0		9.8	9.3	55E	180	42	134	59N	1	42	20	-4.3	+0.2	+0.4+3.7	.224	52.4			22	24	31.7	- 9	56	53	386.3	689.2
26	Aug	28	3	19	53.1	d	X182644k		10.9	10.4	42E	180	44	136	92U	34	73	53	-4.4	+0.1	+1.4+2.3	.346	18.8			22	25	16.4	- 9	57	32	386.1	684.5
26	Aug	28	3	24	43.1	R	X 51850k		10.6	10.4	35E	180	45	138	-41N	257	295	277	-4.4	+0.1	+2.4+1.2	.330	155.5			22	23	46.0	-10	12	53	386.1	679.9
26	Aug	28	3	32	30.9	r	X182632k		11.7	11.2	26E	180	45	140	75U	180	217	200	-4.4	+0.1	+0.3+3.6	.225	-128.5			22	24	55.9	-10	23	4	386.0	676.4
26	Aug	28	3	36	51.3	D	X 51928k		10.2	9.9	21E	180	46	141	44U	113	149	133	-4.4	+0.1	+4.2-0.9	.170	-61.9			22	25	59.1	-10	12	45	385.9	675.5
26	Aug	28	3	40	20.4	R	3286 K0		7.2	6.4	17E	180	47	142	-44N	247	281	267	-4.4	+0.1	+2.2+1.4	.346	164.3			22	24	7.6	-10	11	52	385.8	672.6
26	Aug	28	3	48	13.3	R	X 51874		9.8	9.2	11E	180	48	144	84U	219	252	239	-4.4	+0.1	+1.6+2.1	.351	-168.6			22	24	34.2	-10	16	1	385.8	669.6
26	Aug	28	3	50	55.8	r	X242722		11.5		9E	180	48	145	5N	288	320	308	-4.5	+0.1	+4.0-0.5	.192	122.4			22	24	17.5	- 9	58	36	385.7	669.1
26	Aug	28	3	55	52.3	D	165076kG5		9.6	9.0	7E	180	49	146	58U	81	112	101	-4.5	+0.1	+2.7+0.9	.306	-31.2			22	26	25.0	-10	0	0	385.7	668.7
26	Aug	28	3	57	35.8	r	X182643k		11.5	11.2	6E	180	49	147	57U	191	220	211	-4.5	+0.1	+0.8+3.0	.275	-140.6			22	25	12.9	-10	17	6	385.7	666.8
26	Aug	28	3	58	0.5	d	X182702k		11.7	11.5	6E	180	49	147	53U	90	120	110	-4.5	+0.1	+3.0+0.6	.275	-39.7			22	26	28.0	-10	1	49	385.6	668.0
26	Aug	28	3	58	17.3	r	X242731k		11.2		6E	180	49	148	77U	223	252	243	-4.5	+0.1	+1.7+2.0	.353	-172.8			22	24	42.5	-10	13	5	385.6	666.4

Occultation prediction for Bill Sadowski Park, Miami, Florida, USA
E. Longitude - 80 19 13.9, Latitude 25 36 30.9, Alt. 2m; Telescope dia 15cm; dMag 0.0

y	m	day d	h	m	s		P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon Sun Alt	Moon Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	Aug	28	3	58	18.0	r		X182655k		11.1	10.8		6E	180	49	147	48U	178	208	198	-4.5	+0.1	+0.2	+3.7	.221	-128.2		22	25	27.1	-10	17	16	385.6	666.7
26	Aug	28	3	58	35.0	r		X182649k		11.2	10.9		6E	180	49	148	52U	185	214	204	-4.5	+0.1	+0.5	+3.3	.249	-134.4		22	25	20.6	-10	17	8	385.6	666.5
26	Aug	28	4	5	18.0	R		165050	K0	9.8	9.3		4E	180	50	150	99U	282	309	302	-4.5	+0.1	+3.8	-0.2	.217	127.7		22	24	31.7	- 9	56	53	385.5	664.8
26	Aug	28	4	5	19.1	d		X242756k		11.4			4E	180	50	149	90U	33	61	53	-4.5	+0.1	+1.5	+2.2	.341	16.9		22	26	7.4	- 9	47	8	385.5	666.1
26	Aug	28	4	11	13.4	d		X242766k		11.8			3E	180	51	151	69U	74	100	94	-4.5	+0.0	+2.6	+1.1	.323	-24.8		22	26	40.4	- 9	54	33	385.5	664.6
26	Aug	28	4	14	28.6	D		X182712k		10.8	10.3		3E	180	51	152	69U	78	104	98	-4.5	+0.0	+2.7	+0.9	.310	-29.2		22	26	45.0	- 9	54	55	385.5	663.9
26	Aug	28	4	16	5.0	r		X182637k		11.1	10.9		4E	180	51	154	63U	221	246	241	-4.5	+0.0	+1.7	+2.0	.351	-172.3		22	25	3.2	-10	9	15	385.4	662.2
26	Aug	28	4	16	21.4	R		X 51928k		10.2	9.9		4E	180	51	153	32U	167	192	187	-4.5	+0.0	-0.9	+4.6	.166	-118.0		22	25	59.1	-10	12	45	385.5	662.6
26	Aug	28	4	25	51.8	d		X 51935		11.2	11.0		5E	180	52	156	102U	21	42	41	-4.6	+0.0	+1.1	+2.6	.313	28.0		22	26	18.0	- 9	40	53	385.3	662.0
26	Aug	28	4	27	35.5	D		165087	G5	9.0	8.6		6E	180	52	157	68U	96	117	116	-4.6	+0.0	+3.6	+0.1	.240	-47.4		22	27	0.2	- 9	56	38	385.3	661.6
26	Aug	28	4	42	56.1	r		X182644k		10.9	10.4		15E	180	53	164	70U	246	261	266	-4.6	+0.0	+2.4	+1.2	.335	161.5		22	25	16.4	- 9	57	32	385.2	659.6
26	Aug	28	4	55	26	m		X182667		11.0	10.5		28E	180	54	168	31N	317	328	337	-4.7	-0.1	+9.9	+9.9	.000	90.0		22	25	38.6	- 9	35	17	385.1	660.3
26	Aug	28	5	1	16.6	d		X242782		11.6			35E	180	54	170	-82S	84	93	103	-4.7	-0.1	+3.1	+0.5	.286	-36.2		22	27	36.1	- 9	45	16	385.1	661.0
26	Aug	28	5	3	38.7	r		X182702k		11.7	11.5		39E	180	54	172	54U	187	195	207	-4.7	-0.1	+0.5	+3.0	.271	-140.0		22	26	28.0	-10	1	49	385.1	660.6
26	Aug	28	5	9	21.5	R		165076k	G5	9.6	9.0		47E	180	55	174	58U	196	201	216	-4.7	-0.1	+0.8	+2.6	.302	-148.5		22	26	25.0	-10	0	0	385.1	661.3
26	Aug	28	5	25	43.3	R		165087	G5	9.0	8.6		71E	180	55	181	79U	179	178	199	-4.8	-0.1	-0.1	+3.4	.240	-132.3		22	27	0.2	- 9	56	38	385.0	664.3
26	Aug	28	5	29	43.6	d		X242774		11.7			77E	180	55	182	-40N	12	10	32	-4.8	-0.1	+0.6	+2.7	.295	34.2		22	27	17.2	- 9	24	58	385.0	665.5
26	Aug	28	5	29	43.6	r		X242766k		11.8			77E	180	55	183	78U	201	199	221	-4.8	-0.1	+1.0	+2.3	.322	-154.7		22	26	40.4	- 9	54	33	385.0	665.3
26	Aug	28	5	29	45.5	r		X242756k		11.4			77E	180	55	183	87U	243	240	263	-4.8	-0.1	+2.3	+1.0	.342	163.7		22	26	7.4	- 9	47	8	385.0	665.3
26	Aug	28	5	29	51.8	R		X182712k		10.8	10.3		77E	180	55	183	78U	197	195	217	-4.8	-0.1	+0.8	+2.5	.310	-150.4		22	26	45.0	- 9	54	55	385.0	665.3
26	Aug	28	5	30	34.9	D		146104k	G5	10.3	10.0		78E	180	55	182	-88S	65	63	85	-4.8	-0.1	+2.4	+1.0	.338	-18.3		22	28	1.5	- 9	33	21	385.0	665.8
26	Aug	28	5	32	6.4	d		X182760		11.3	10.5		80E	180	55	183	-82S	70	68	90	-4.8	-0.1	+2.6	+0.8	.326	-23.9		22	28	5.4	- 9	34	21	385.0	666.1
26	Aug	29	6	59	46.7	R		3416cA3		5.6	5.5		99-	167	59	205	28S	179	157	201	-5.3	-1.9	-0.1	+3.4	.259	-133.8		23	15	34.3	- 3	29	47	381.0	690.7
								3416 is double: ** 6.4 6.4 0.050"																											
								3416 has been reported as non-instantaneous (OCc1638). Observations are highly desired																											
								Distance of 3416 to Terminator = 5.6"; to 3km sunlit peak = 0.0"																											
26	Aug	30	5	43	48.8	r		128524	K2	7.6	6.9		95-	155	62	143	72N	260	293	282	-4.9	-3.1	+2.7	+0.9	.320	146.5		0	0	23.5	2	40	32	377.5	702.8
26	Aug	30	9	50	35.6	r		6	G5	6.9	6.3		95-	154	42	250	75S	225	167	248	-5.7	-3.7	+1.2	+1.1	.413	-172.5		0	5	22.2	3	36	22	378.3	764.5
26	Sep	1	4	36	22.0	r		244	K0	6.7	6.2		82-	130	37	91	17S	173	242	193	-3.8	-5.2	-1.1	+4.0	.228	-118.0		1	39	15.4	14	17	8	373.5	879.8
								R244 = 104 Piscium																											
26	Sep	2	5	56	12.5	r		93005	K0	7.9	7.3		72-	117	45	86	85S	244	318	262	-3.1	-6.1	+1.0	+1.6	.468	172.8		2	34	23.5	19	59	5	370.1	846.1
26	Sep	2	8	5	19.9	R		387cG5		6.9	6.4S		72-	116	73	103	79N	261	331	279	-3.4	-6.3	+2.4	+0.8	.359	155.2		2	37	34.4	20	34	30	368.3	705.6
								387 is double: ** 7.7 7.7 0.10" 90.0, dT = +0.28sec																											
								387 has been reported as non-instantaneous (OCc1190). Observations are highly desired																											
								387 = NSV 15555, 6.91, , Type VAR:																											
26	Sep	2	9	48	56		Gr	75509	M*	7.9	7.1v		71-	115	80	** GRAZE: CA 9.0N; Dist. 57km in az. 335deg. [Lat = 26.18+0.43(E.Long+80.32)]																										
26	Sep	2	9	58	59		r	75509	M*	7.9	7.1v		71-	115	79	249	24N	317	252	334	-3.7	-6.5	+6.2	-8.4	.096	105.0	.01	2	40	31.7	21	11	16	367.9	657.6
								75509 = AK Ari, 7.94, range 0.07, 8w, Type LB:, Period 19.3 days, Phase 22%																											
26	Sep	3	7	0	41.9	R		518SA3		6.0	s		61-	103	48	81	69N	277	355	290	-2.2	-6.5	+1.7	+0.5	.384	146.1		3	34	26.6	24	27	52	367.6	825.6
								R518 = 7 Tauri																											
								518 is triple: AB 6.60 6.86 0.79" 348.0, dT = -0.7sec : AB,C 5.9 9.9 22.5" 52.2, dT = +42sec																											
								518 is a close double. Observations are highly desired																											
								518 = NSV 1192, 5.92 to 5.96, V																											
26	Sep	3	9	9	29.6	r		76041	F0	8.2	8.0		61-	102	76	90	43S	209	293	222	-2.5	-6.7	+1.1	+3.1	.313	-144.2		3	38	35.9	24	36	6	365.9	684.1
26	Sep	3	9	36	56.8	R		76046cA0		7.1	7.1		60-	102	82	93	54S	220	303	233	-2.6	-6.7	+1.6	+2.5	.336	-153.6		3	39	6.7	24	42	10	365.8	666.2
								76046 is double: AB 7.1 45.0, dT = -30sec																											
26	Sep	3	10	31	28		M	529SA2		6.1	6.1		60-	102	-8	86	270	6N	340	251	353	-2.8	-6.8	+9.9	+9.9	.000	90.0		3	40	46.3	25	19	46	365.6	647.2
								R529 = 11 Tauri																											

Occultation prediction for Bill Sadowski Park, Miami, Florida, USA
E. Longitude - 80 19 13.9, Latitude 25 36 30.9, Alt. 2m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon Alt	Sun Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	dur sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
							529 is triple: **Aa,Ab 6.3 8.3						: AB 6.1 10.9 74" 357.0																					
26	Sep	4	7	6	22.6	r	694SK2	8.1	7.5v	50-	90		37	74	60N	292	10	300	-1.1	-6.3	+1.5	+0.0	.375	138.6		4	36	48.2	27	7	56	366.7	888.5
							694 is quadruple: AC 5.4			7.7" 176.0, dT = +9sec : AD 5.4 19.3 12.7" 104.0, dT = +34sec : AB 8.4 16.0 130" 338.0, dT = -242sec																									
							694 is a close double. Observations are highly desired																											
							694 = V0833 Tau, 8.02 to 8.40, V, Type BY+UV, Period 1.7916 days																									
26	Sep	4	7	47	6.4	R	701SF2	6.6	6.4	49-	89		45	77	51S	224	304	232	-1.1	-6.4	+0.4	+2.3	.413	-152.6		4	38	29.5	26	56	23	365.9	825.9
							701 is triple: 6.6 9.2 3.1" 169.4, dT = -4sec : AB 7.36 7.21 4.48" 187.8, dT = -9sec																									
							701 is a close double. Observations are highly desired																											
26	Sep	4	7	47	10.6	r X 70481p		7.3	7.2	49-	89		45	77	51S	224	304	232	-1.1	-6.4	+0.4	+2.3	.414	-152.8		4	38	29.6	26	56	26	365.9	825.8
							X 70481 is triple: 7.3 9.2 5.8" 174.9, dT = -9sec : AC 7.4 12.9 92" 203.6, dT = -208sec																									
							X 70481 is a close double. Observations are highly desired																											
26	Sep	4	10	39	10.9	r	715cK5	8.0	7.5	49-	88		-6	82	71	34N	319	65	327	-1.6	-6.6	+3.8	-4.3	.175	118.3		4	43	35.4	27	41	15	363.9	651.4
							715 is double: ** 8.8 8.8 0.10" 90.0, dT = +0.37sec																											
							715 has been reported as non-instantaneous (OCc 130). Observations are highly desired																											
26	Sep	5	8	20	6.5	r	868SA0	7.5	7.5	38-	76		39	74	40S	219	298	221	+0.0	-5.9	+0.1	+2.7	.363	-139.3		5	44	21.2	27	43	53	365.1	847.3
							868 is triple: AB 7.5 9.8 8.6" 254.1, dT = -20sec : AC 7.5 12.7 47" 40.4, dT = +131sec																									
							868 is a close double. Observations are highly desired																											
26	Sep	5	8	34	3.8	r	77495cA0	8.1	8.1	38-	76		42	74	31N	329	49	331	+0.0	-5.9	+3.5	-3.6	.172	111.7		5	44	59.0	28	11	40	364.8	826.2
							77495 is double: AB 8.0 8.0 0.20" 42.2, dT = -0.33sec																											
							77495 is a close double. Observations are highly desired																											
26	Sep	5	10	24	45.1	r	77582 B3	8.4	8.3	37-	75	-9	66	77	22N	338	68	340	-0.2	-6.0	+4.5	-7.7	.114	106.9		5	48	41.3	28	19	29	363.2	690.8
26	Sep	6	8	41	35.8	r	78784 A0	8.3	8.2	27-	62		30	72	37N	330	45	326	+1.3	-4.9	+2.1	-2.4	.244	119.1		6	50	2.5	27	0	13	365.1	891.0
26	Sep	7	8	13	2.9	r	79740cF2	8.5	8.3	17-	49		11	69	71S	264	331	254	+2.5	-3.6	+0.0	+1.0	.563	-167.8		7	50	44.7	23	47	1	367.1	1025.6
							79740 is double: ** 9.2 9.2 0.10" 143.0, dT = +0.09sec																											
							79740 has been reported as non-instantaneous (OCc 683). Observations are highly desired																											
26	Sep	7	10	36	25.0	r	79804cG0	7.4		16-	48	-7	41	80	87S	281	357	270	+2.4	-3.6	+1.3	+0.4	.450	-179.5		7	56	2.8	23	41	33	364.2	795.0
							79804 is double: AB 7.90 8.57 0.11" 108.1, dT = +0.25sec																											
							79804 is a close double. Observations are highly desired																											
26	Sep	7	10	39	5.1	R	1195 B8	6.8	6.9	16-	48	-6	42	80	73S	267	343	257	+2.4	-3.6	+1.3	+1.0	.435	-165.8		7	56	6.5	23	37	26	364.2	791.6
26	Sep	8	9	21	0.2	r	98186kB5	8.5	8.6	9-	35		12	74	85N	293	0	279	+3.7	-2.1	+0.3	+0.1	.551	170.8		8	52	20.0	19	21	3	368.0	996.3
26	Sep	8	9	46	21.4	R	98198 K5	7.6	6.8	9-	35		17	76	78N	300	8	285	+3.7	-2.1	+0.6	-0.1	.517	164.9		8	53	20.6	19	19	20	367.4	953.6
26	Sep	8	19	30	4.3	D	Jupiter	-1.7	-1.7	7-	31	53	32	275	-35S	166	93	148	+2.4	-1.1	-0.3	-2.6	.397	-40.3		9	10	15.8	16	52	26	366.6	925.6
							Jupiter limb contacts offset by ±40.4 secs, at 19 29 24 and 19 30 45 Both contacts are against the bright limb of Jupiter																									
26	Sep	8	20	15	27.5	R	Jupiter	-1.7	-1.7	7-	31	43	22	279	62S	263	192	245	+2.4	-1.0	+0.7	-0.6	.426	-139.7		9	10	15.8	16	52	26	367.6	995.5
							Jupiter limb contacts offset by ±37.7 secs, at 20 14 50 and 20 16 5 Both contacts are against the bright limb of Jupiter																									
26	Sep	9	10	4	8.1	r	98781 **	8.3	8.1s	3-	21		7	78	71N	310	15	292	+4.7	-0.5	+0.3	-0.5	.531	160.4		9	48	56.1	13	44	39	370.4	1012.6
							98781 = NSV 18274, 8.3 to 8.35, V																											
26	Sep	17	2	15	17.9	d	2297kF7	7.0	6.7	33+	70		6	237	83S	111	53	99	+2.3	+7.4	+1.1	-1.6	.387	-20.4		16	3	16.1	-26	43	2	400.9	802.4
26	Sep	17	23	58	58.7	d	184749 K0	8.1	7.6	42+	80	-9	32	203	67S	121	97	114	+1.7	+7.3	+3.0	-1.7	.258	-30.0		16	53	12.9	-28	26	53	400.0	577.8
26	Sep	20	3	6	19.2	D	2723 K0	6.6	6.1	61+	103		23	221	85N	79	37	83	-1.4	+5.7	+1.6	-0.4	.356	-11.7		18	46	3.9	-27	29	56	401.1	707.3
26	Sep	23	2	18	25.1	d	3115 F0	7.1	6.9	86+	137		47	175	71N	51	56	67	-4.2	+2.1	+2.1	+1.4	.330	1.7		21	18	15.7	-17	27	44	390.4	624.7
							R3115 = 31 Capricorni																											
26	Sep	23	5	30	48.8	D	3126 G8	4.3	3.8v	87+	138		30	230	85S	75	29	92	-4.9	+1.7	+1.5	-0.2	.375	-22.9		21	22	14.8	-16	50	4	391.3	773.6
							R3126 = Tae = iota Capricorni																											
							3126 = iot Cap, 4.27, range 0.06, V, Type BY																											
26	Sep	24	4	36	56.7	d	3244 K0	7.3	6.7	93+	149		48	210	48N	27	0	46	-5.2	+0.3	+1.0	+1.9	.348	20.3		22	8	34.1	-11	36	49	385.6	693.0
26	Sep	24	5	53	12.3	D	3253kB5	5.4	5.5V	93+	149		38	230	58S	101	56	120	-5.5	+0.1	+2.8	-1.6	.254	-51.1		22	10	37.5	-11	33	54	386.2	758.4
							R3253 = 38 Aquarii																											

Occultation prediction for Bill Sadowski Park, Miami, Florida, USA
E. Longitude - 80 19 13.9, Latitude 25 36 30.9, Alt. 2m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon Alt	Sun Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	dur sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
							3253 = HD 210424, 5.44, , Type ACV, Period 3.9613 days, Phase 11%																												
26	Sep	24	7	9	57.1	d	3255	M0	7.3	6.4v		93+	150	24	244	85N	65	9	84	-5.6	-0.1	+0.9	+0.1	.442	-11.5		22	12	16.9	-11	3	56	387.3	847.9
							3255 = KR Aqr, 7.25 to 7.36, Hp, Type LB																												
26	Sep	25	8	39	18.7	d	3380	cK0	5.9	5.4		98+	162	18	256	73N	55	353	76	-6.0	-1.8	+0.5	+0.4	.486	1.2		23	1	31.7	- 4	42	41	383.2	903.9
							3380 is double: ** 7.0 7.0 0.10" 90.0, dT = +0.17sec																												
							3380 has been reported as non-instantaneous (OCc1633). Observations are highly desired																												
26	Sep	27	5	50	21.3	r	68	SB9	5.8		S	100-	173	71	195	66N	245	231	267	-4.9	-4.2	+2.3	+1.0	.368	162.3		0	32	23.8	6	57	20	371.4	696.3
							R68 = 51 Piscium																												
							68 is multiple: Aa,Ac 5.8 9.5 0.20" : Aa,Ab 5.8 8.0 0.27" 283.9, dT = -0.6sec : AB 5.7 9.5 28.5" 81.5, dT = +74sec : AD 5.7 13.1 82" 307.6, dT = -103sec																												
							68 is a close double. Observations are highly desired																												
							68 = NSV 15113, 5.67 to 9.0, V, Type E:																												
							Distance of 68 to Terminator = 6.5"; to 3km sunlit peak = 0.0"																												
26	Sep	28	4	15	16.1	r	197	cK0	7.0	6.5		97-	160	59	108	69S	217	278	238	-3.7	-5.1	+1.0	+2.2	.417	-166.1		1	21	58.3	12	36	15	368.9	769.3
26	Sep	29	5	16	56.5	r	336	F0	7.4	7.3v		92-	147	63	99	66S	220	290	239	-2.8	-6.0	+1.0	+2.2	.414	-165.6		2	17	45.4	18	27	18	366.2	759.1
							336 = AD Ari, 7.39 to 7.48, V, Type ELL, Period 0.53972 days, Phase 22%																												
26	Sep	30	4	30	23.8	R	470	WK0	6.8	6.2		85-	134	42	81	85N	255	331	270	-1.5	-6.3	+1.0	+1.2	.478	166.2		3	14	17.2	22	57	14	366.0	874.4
							470 is double: AB 6.9 10.4 42" 33.3, dT = +65sec																												
26	Sep	30	5	50	9.9	r	75832	K0	7.3	6.6		84-	133	60	87	64S	224	303	239	-1.6	-6.4	+1.0	+2.2	.416	-163.1		3	16	57.0	23	7	36	364.7	770.0
26	Sep	30	8	14	30.2	r	483	SA5	7.5			84-	132	88	227	87N	253	207	268	-2.0	-6.6	+2.4	+0.8	.373	172.4		3	20	21.2	23	41	21	363.8	663.4
							483 is quadruple: AB 7.62 9.90 2.77" 315.8, dT = -3sec : AB,D 7.6 14.8 25.8" 251.6, dT = -69sec : AC 7.6 14.0 61" 286.7, dT = -137sec																												
							483 is a close double. Observations are highly desired																												
26	Oct	2	7	18	54.5	r	812	SF8	8.0			64-	106	53	77	16S	192	275	195	+0.9	-6.0	-0.9	+6.2	.167	-112.7		5	27	1.3	27	36	37	364.3	762.0
							812 is triple: AB 8.71 8.61 0.59" 277.1, dT = -0.27sec : AB,C 7.9 13.2 27.0" 277.8, dT = -10sec																												
							812 is a close double. Observations are highly desired																												
26	Oct	2	9	59	47.7	r	77224	cF8	7.4	7.1		63-	105	87	43	31S	208	343	211	+0.5	-6.1	+2.4	+5.3	.177	-119.1		5	31	22.8	27	46	9	363.1	641.4
							77224 is double: ** 8.3 8.3 0.10" 90.0, dT = +0.26sec																												
							77224 has been reported as non-instantaneous (OCc 194). Observations are highly desired																												
26	Oct	3	6	14	17.7	R	994	cF5	6.6	6.3		53-	93	26	71	33S	216	289	214	+2.2	-5.1	-0.5	+2.9	.335	-129.9		6	28	56.4	26	58	3	367.1	928.0
							994 is double: ** 6.8 7.7 0.003" 269.0, dT = -0.01sec																												
26	Oct	3	8	45	46.4	r	78501	K0	7.8	7.3		52-	92	58	79	42S	226	310	223	+1.9	-5.2	+1.3	+3.2	.283	-134.7		6	33	58.0	27	2	41	364.6	710.2
26	Oct	3	10	22	43.8	R	1013	cG0	7.0			51-	91	79	78	75N	289	26	286	+1.7	-5.1	+2.5	-0.7	.360	169.2		6	36	26.3	27	16	42	363.8	646.0
							1013 is double: AB 7.14 8.97 0.68" 270.0, dT = -1.8sec																												
							1013 is a close double. Observations are highly desired																												
26	Oct	4	7	48	58.3	r	79521	cG2	7.4	7.0		41-	79	33	76	52N	318	33	310	+3.2	-3.9	+1.5	-1.2	.351	137.6		7	34	50.4	24	57	16	367.6	848.0
							79521 is double: ** 8.8 8.8 0.050"																												
							79521 has been reported as non-instantaneous (OCc1366). Observations are highly desired																												
26	Oct	4	9	17	31	m	1155	F0	6.4	6.2		40-	79	51	82	0S	191	270	182	+3.0	-3.9	+9.9	+9.9	.000	-90.0		7	38	14.4	24	21	38	366.1	729.5
							Distance of 1155 to Terminator = 5.3"; to 3km sunlit peak = 0.0"																												
26	Oct	4	12	18	33.6	d	1170	dG8	3.6	3.1		39-	78	13	89	219	-64N	75	36	66	+2.5	-3.8	+3.2	+0.9	.291	38.7		7	44	26.8	24	23	53	364.9	658.4
							R1170 = kappa Geminorum																												
							1170 is double: AB 3.7 10.0 7.4" 241.1, dT = -25sec																												
							1170 is a close double. Observations are highly desired																												
26	Oct	4	13	23	51.1	R	1170	dG8	3.6	3.1		39-	77	28	74	270	35N	336	254	327	+2.3	-3.7	+0.9	-3.3	.306	141.0		7	44	26.8	24	23	53	365.2	696.7
							R1170 = kappa Geminorum																												
							1170 is double: AB 3.7 10.0 7.4" 241.1, dT = +2sec																												
							1170 is a close double. Observations are highly desired																												
26	Oct	5	8	42	51.5	r	80269	kF0	8.4	8.3		29-	66	31	80	53S	248	320	235	+4.0	-2.5	+0.7	+1.9	.378	-143.5		8	35	17.8	20	33	53	369.3	841.9

Occultation prediction for Bill Sadowski Park, Miami, Florida, USA
E. Longitude - 80 19 13.9, Latitude 25 36 30.9, Alt. 2m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon	Sun Alt	Moon Alt	Az	CA o	PA o	VA o	AA o	Libration L	B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	Oct	5	9	56	35.9	r	80294kF8		8.0	7.7		29-	65	47	87	70S	266	340	252	+3.9	-2.5	+1.6	+1.0	.384	-156.6			8	37	26.4	20	29	14	368.0	745.8
26	Oct	5	10	57	30	m	80327pA3		7.8	7.6		29-	65	-5 60	94	8S	204	277	190	+3.7	-2.4	+9.9	+9.9	.000	-90.0			8	39	42.8	20	5	10	367.2	693.2
							80327 is double: AB 7.9 9.6 0.64" 136.2																													
							80327 is a close double. Observations are highly desired																													
26	Oct	6	8	21	36.4	D	Jupiter		-1.7	-1.7		20-	53	13	79	-47S	150	219	135	+4.8	-0.9	+0.7	-1.6	.382	-43.2			9	31	5.4	15	20	24	373.0	948.2
							Jupiter limb contacts offset by ±44.0 secs, at 8 20 52 and 8 22 20 Both contacts are against the bright limb of Jupiter																													
26	Oct	6	9	3	19.9	R	Europa		6.1	6.1		20-	52	22	83	48S	247	316	231	+4.8	-0.9	+0.5	+2.1	.355	-136.9			9	30	55.2	15	21	19	372.1	878.9
							Europa limb contacts offset by ±1.0 secs, at 9 3 18.9 and 9 3 20.9 Both contacts are against the bright limb of Europa																													
26	Oct	6	9	5	30.8	R	Callisto		6.4	6.4		20-	52	22	83	48S	247	316	231	+4.8	-0.9	+0.5	+2.1	.355	-136.8			9	30	58.9	15	20	59	372.0	879.4
							Callisto limb contacts offset by ±1.6 secs, at 9 5 29.2 and 9 5 32.4 Both contacts are against the bright limb of Callisto																													
26	Oct	6	9	6	15.7	R	Io		5.8	5.8		20-	52	23	83	48S	246	316	231	+4.8	-0.9	+0.5	+2.1	.351	-136.7			9	31	1.2	15	20	47	372.0	870.0
							Io limb contacts offset by ±1.2 secs, at 9 6 14.5 and 9 6 16.9 Both contacts are against the bright limb of Io																													
26	Oct	6	9	8	48.8	R	Jupiter		-1.7	-1.7		19-	52	23	84	48S	247	316	231	+4.8	-0.9	+0.5	+2.1	.351	-136.6			9	31	5.4	15	20	24	372.0	870.9
							Jupiter limb contacts offset by ±47.9 secs, at 9 8 1 and 9 9 37 Both contacts are against the bright limb of Jupiter																													
26	Oct	6	9	10	47.9	R	Ganymede		5.4	5.4		19-	52	24	84	48S	247	316	231	+4.8	-0.9	+0.6	+2.1	.351	-136.5			9	31	8.7	15	20	5	371.9	872.4
							Ganymede limb contacts offset by ±1.8 secs, at 9 10 46.1 and 9 10 49.6 Both contacts are against the bright limb of Ganymede																													
26	Oct	8	10	21	46.0	r	X 16891kG0		9.7	9.1		5-	26	13	93	57N	322	27	301	+5.7	+2.3	+0.4	-1.0	.473	157.2			11	14	0.7	3	14	9	378.4	941.4
26	Oct	14	0	12	38.4	d	2238	F0	8.0	7.8		11+	39	5	238	69S	131	73	118	+2.5	+7.3	+1.4	-2.3	.335	-37.4			15	40	37.8	-25	35	33	399.2	815.7
26	Oct	15	23	56	47.6	d	185420	B8	8.1	8.0		25+	61	23	219	50N	56	16	52	+0.4	+6.7	+1.2	+0.4	.311	24.1			17	27	45.7	-28	21	32	401.6	662.8
26	Oct	16	0	5	12	m	185410kA0		7.8	7.7		25+	61	22	220	17S	170	128	166	+0.4	+6.7	+9.9	+9.9	.000	-90.0			17	27	16.5	-28	46	13	401.7	674.8
26	Oct	20	2	56	10.5	D	3069	A*	6.3	6.3v		63+	105	33	223	64S	99	59	114	-5.0	+2.2	+2.7	-1.4	.261	-46.6			20	59	36.1	-19	2	7	394.9	726.2
							R3069 = 20 Capricorni (AO)																													
							3069 = AO Cap, 6.25 to 6.30, V, Type ACV, Period 2.2411 days, Phase 83%																													
26	Oct	20	23	49	26.2	D	3181SA7		6.0	5.8		72+	116	45	152	90S	70	96	88	-5.1	+1.2	+2.5	+1.2	.320	-16.7			21	44	1.0	-14	44	58	390.0	631.4
							R3181 = 45 Capricorni																													
							3181 is triple: ** 6.7 6.7 0.050" : AB 5.4 9.5 4.3" 229.0, dT = -13sec																													
							3181 has been reported as non-instantaneous (OCc1610). Observations are highly desired																													
26	Oct	22	6	7	13.7	d	3322cG1		6.4			82+	130	21	250	38S	121	62	142	-6.8	-1.1	+2.3	-4.2	.181	-67.0			22	38	22.1	- 7	53	51	385.9	868.4
							3322 is double: AB 6.64 8.11 0.08" 296.3, dT = -0.46sec																													
							3322 is a close double. Observations are highly desired																													
26	Oct	22	6	19	54	Gr	3322cG1		6.4			82+	130	18	** GRAZE: CA 13.9S; Dist.143km in az. 160deg. [Lat = 24.24+0.33(E.Long+80.32)]																													
26	Oct	23	5	35	16.3	d	146693	G5	7.5	7.1		89+	141	40	244	90N	69	15	91	-6.8	-2.5	+1.5	+0.1	.402	-18.0			23	24	39.0	- 1	44	29	378.7	775.8
26	Oct	24	3	59	50.5	d	109052	G5	7.4	6.9		95+	153	67	204	80S	82	61	104	-6.1	-3.7	+2.9	+0.2	.316	-35.3			0	11	5.7	4	7	59	371.9	697.5
26	Oct	25	8	2	22.5	d	163pF2		7.3	7.1		99+	167	35	267	59N	55	348	76	-5.8	-5.2	+1.1	+0.6	.456	7.6			1	7	4.0	11	33	8	368.5	821.7
							163 is double: AB 7.3 10.5 8.3" 201.5, dT = -15sec																													
							163 is a close double. Observations are highly desired																													
							Distance of 163 to Terminator = 16.4"; to 3km sunlit peak = 6.2"																													
26	Oct	28	0	17	47.5	r	541SB8		3.9	3.9s		95-	154	5	65	86N	253	317	265	-0.7	-5.9	-0.3	+1.0	.663	177.3			3	45	49.6	24	22	4	364.2	1172.6
							R541 = Maia = 20 Tauri																													
							541 is quadruple: Aa,Ab 4.4 5.4 : AB 3.8 13.7 113" 72.6, dT = +171sec : AB 3.8 13.7 113" 72.7, dT = +171sec																													
							541 = NSV 1279, 3.87, range 0.00, 4Kp, Type ACV, Period 10.288 days																													
26	Oct	28	1	11	32.9	r	562pB9		6.6	6.6		95-	153	15	70	20S	179	247	191	-0.6	-6.0	-1.8	+4.1	.213	-110.2			3	49	21.8	24	22	51	363.0	1085.5
							562 is multiple: Aa,Ab 7.3 7.4 5.3" : AB 6.6 7.5 87" 309.1, dT = +265sec : AE 6.6 13.8 115" 82.8, dT = +56sec : AG 6.6 15.1 158" 212.2, dT = -620sec																													
							562 is a close double. Observations are highly desired																													
							Distance of 562 to Terminator = 13.5"; to 3km sunlit peak = 3.6"																													
26	Oct	28	2	52	57.0	r	574pG0		6.8	6.5		94-	152	37	77	40N	299	15	311	-0.6	-6.2	+1.9	-0.4	.319	127.4			3	52	11.4	25	9	47	360.8	920.1
26	Oct	28	5	21	58.7	r	76345kG8		7.5	7.0		94-	151	69	85	60S	219	304	231	-0.8	-6.4	+1.2	+2.5	.368	-151.4			3	57	11.8	25	16	58	358.6	728.2

Occultation prediction for Bill Sadowski Park, Miami, Florida, USA
E. Longitude - 80 19 13.9, Latitude 25 36 30.9, Alt. 2m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon Alt	Sun Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	Oct	29	4	0	45.4	r	746	WB7	7.0	6.9		87-	138	38	74	71N	278	356	284	+1.1	-5.9	+1.2	+0.5	.464	156.2		4	59	53.7	27	19	32	360.5	886.2
		746 is double: AB 7.0 8.7 20.4" 206.1, dT = -14sec																																
26	Oct	29	6	19	15.0	R	756	F0	6.6	6.5		87-	137	68	79	47N	302	33	308	+0.9	-6.1	+2.9	-1.4	.292	135.8		5	4	38.0	27	41	46	358.7	709.3
26	Oct	29	9	30	19.7	R	773	wF8	7.0	6.7		86-	136	70	281	76S	247	156	252	+0.4	-6.1	+2.5	+0.7	.358	-155.1		5	10	3.9	27	33	23	358.7	687.3
		773 is double: AB 7.0 9.3 315" 353.1, dT = +249sec																																
26	Oct	30	5	10	55.6	r	78041	cG5	7.8	7.3		78-	124	39	75	36S	214	292	214	+2.6	-5.2	+0.0	+3.3	.309	-129.9		6	9	26.6	27	11	38	361.6	844.6
		78041 is double: ** 8.6 8.6 0.040" 237.0, dT = -0.12sec																																
		78041 has been reported as non-instantaneous (OCc1052). Observations are highly desired																																
26	Oct	30	10	18	55.8	R	958	cK1	6.7	6.1		77-	122	74	280	60S	240	148	239	+1.9	-5.1	+3.0	+1.4	.287	-136.9		6	18	20.8	27	12	37	359.9	686.1
		958 is double: ** 7.5 7.5 0.050"																																
		958 has been reported as non-instantaneous (OCc1307). Observations are highly desired																																
26	Oct	31	4	37	48.3	r	1094	A0	7.1	7.1		68-	111	19	70	33N	334	44	327	+4.0	-4.0	+1.7	-2.3	.257	118.0		7	12	49.4	25	44	55	365.6	971.8
		R1094 = 49 Geminorum																																
26	Oct	31	9	26	52.6	d	1117	cG8	5.0	4.6		66-	109	81	91	-52S	135	220	128	+3.5	-4.0	+2.2	-2.1	.330	-27.8		7	23	28.5	25	3	2	362.0	655.6
		R1117 = 57 Geminorum																																
		1117 is double: ** 5.9 5.9 0.10" 90.0, dT = +0.21sec																																
		1117 has been reported as non-instantaneous (OCc1358). Observations are highly desired																																
26	Oct	31	10	46	19.3	R	1117	cG8	5.0	4.6		66-	109	-10	81	269	77S	265	180	258	+3.3	-3.9	+2.8	+0.1	.341	-152.5		7	23	28.5	25	3	2	362.1	675.8
		R1117 = 57 Geminorum																																
		1117 is double: ** 5.9 5.9 0.10" 90.0, dT = +0.29sec																																
		1117 has been reported as non-instantaneous (OCc1358). Observations are highly desired																																
26	Nov	4	7	45	5.1	r	118579	kA2	7.8	7.7		23-	58		7	88	73N	308	13	287	+6.6	+2.0	+0.2	-0.4	.519	168.2		10	56	30.9	5	16	24	380.4	978.5
26	Nov	5	9	47	51.3	r	138402	F2	8.7	8.5		15-	45		21	103	56S	257	318	235	+6.5	+3.5	+1.1	+1.8	.323	-133.0		11	47	0.0	- 1	37	46	382.7	878.1
26	Nov	7	10	44	1.0	r	157895	pA2	7.8	7.7		3-	21	-12	8	109	39N	332	33	311	+6.0	+5.7	-0.1	-1.2	.436	150.8		13	22	45.6	-13	11	11	391.0	946.7
		157895 is double: AB 7.8 10.8 19.4" 311.2, dT = -42sec																																
26	Nov	11	23	25	54.1	d	185071	G8	8.8	8.2		7+	30	-12	8	234	64S	130	74	124	+0.7	+6.6	+1.9	-2.6	.270	-49.0		17	8	49.4	-28	13	1	403.3	804.5
26	Nov	11	23	33	23.1	d	185075	K0	8.3	7.7		7+	30		7	235	37N	51	354	45	+0.7	+6.6	+0.1	+0.4	.361	30.1		17	9	3.8	-27	53	41	403.4	816.6
26	Nov	12	23	37	14.3	D	2601	SK4	6.8			12+	41		15	229	25N	30	340	29	-0.5	+5.9	-0.1	+1.4	.281	43.5		18	2	54.3	-27	49	36	403.7	758.9
		R2601 = 7 Sagittarii																																
		2601 is triple: Aa,Ab 6.90 9.37 0.34" 332.0, dT = +0.6sec : AB 6.9 13.0 9.7" 48.2, dT = +33sec																																
		2601 is a close double. Observations are highly desired																																
26	Nov	12	23	42	23.6	d	X 43260	dS*	8.9	8.0		12+	41		14	229	50N	55	5	55	-0.5	+5.9	+0.5	+0.2	.372	18.0		18	3	24.8	-27	53	28	403.8	766.6
		X 43260 is double: AB 11.7 12.4 4.5" 170.3, dT = -5sec																																
		X 43260 is a close double. Observations are highly desired																																
26	Nov	12	23	43	47.1	d	186184	K0	8.9	8.0		12+	41		14	229	57N	62	11	61	-0.5	+5.9	+0.7	+0.0	.385	11.4		18	3	31.1	-27	54	45	403.8	768.8
26	Nov	13	0	21	49.7	d	186228	K5	8.4	7.5		12+	41		7	234	64N	68	12	68	-0.6	+5.8	+0.5	-0.2	.422	5.0		18	4	41.7	-27	51	51	404.5	830.3
26	Nov	13	0	42	6.4	d	186250	K5	7.7	6.8		12+	41		4	237	66N	71	12	71	-0.7	+5.8	+0.3	-0.3	.440	2.3		18	5	20.8	-27	50	3	405.0	864.3
26	Nov	13	23	24	39.0	d	187471	G0	9.0	8.4v		19+	51	-12	25	219	73N	71	31	75	-1.8	+5.0	+1.6	-0.1	.351	-4.8		18	56	17.0	-26	42	15	402.8	688.5
		187471 = ASAS J185616-2642.1, 9.086, range 0.04, 3V, Type ROT, Period 97.44 days																																
26	Nov	14	1	19	36.4	d	187541	G5	8.3	7.7		19+	52		7	236	84S	93	36	98	-2.1	+4.8	+0.9	-1.0	.394	-26.0		18	59	26.2	-26	29	49	404.8	860.7
26	Nov	15	23	16	32.1	D	3007	K2	7.2	6.5		35+	73	-10	42	198	24N	10	352	23	-4.3	+2.7	+0.3	+2.8	.228	45.0		20	36	26.5	-20	35	8	398.6	622.4
26	Nov	16	20	44	39.9	d	3126	G8	4.3	3.8v		44+	83	21	36	138	87S	75	114	92	-4.8	+1.6	+2.3	+1.3	.319	-14.7		21	22	14.8	-16	50	4	396.3	634.6
		R3126 = Tae = iota Capricorni																																
		3126 = iot Cap, 4.27, range 0.06, V, Type BY																																
26	Nov	16	22	14	21.1	r	3126	G8	4.3	3.8v		45+	84	3	46	164	-57S	219	234	235	-5.1	+1.5	+1.9	+2.0	.305	-165.0		21	22	14.8	-16	50	4	395.2	604.5
		R3126 = Tae = iota Capricorni																																
		3126 = iot Cap, 4.27, range 0.06, V, Type BY																																
26	Nov	17	22	32	17.6	D	3253	kB5	5.4	5.5V		54+	95	-1	49	152	49S	110	135	129	-6.1	+0.0	+4.5	-0.8	.171	-59.2		22	10	37.5	-11	33	54	390.7	635.1

Occultation prediction for Bill Sadowski Park, Miami, Florida, USA
E. Longitude - 80 19 13.9, Latitude 25 36 30.9, Alt. 2m; Telescope dia 15cm; dMag 0.0

y	m	day d	h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon Alt	Sun Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	dur sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
							R3253 = 38 Aquarii																											
							3253 = HD 210424, 5.44, , Type ACV, Period 3.9613 days, Phase 93%																											
26	Nov	18	0	7	24.6	D	3255	M0	7.3	6.4v	55+	96	53	189	83S	76	68	95	-6.5	-0.2	+2.9	+0.5	.298	-28.8		22	12	16.9	-11	3	56	390.0	643.3
							3255 = KR Aqr, 7.25 to 7.36, Hp, Type LB																											
26	Nov	19	3	10	48.7	D	3380	cK0	5.9	5.4	66+	108	41	238	58S	100	50	121	-7.7	-2.0	+2.7	-1.7	.254	-50.6		23	1	31.7	- 4	42	41	384.9	746.6
							3380 is double: ** 7.0 7.0 0.10" 90.0, dT = +0.39sec																											
							3380 has been reported as non-instantaneous (OCc1633). Observations are highly desired																											
26	Nov	19	23	51	16.3	d	128354	F8	8.0	7.7	74+	119	59	139	77N	55	91	77	-7.1	-2.9	+1.9	+1.7	.376	-8.0		23	44	18.2	0	42	44	378.5	696.2
26	Nov	20	5	38	39.5	d	128417	cG5	7.0	6.4	76+	121	23	261	63N	41	338	63	-8.1	-3.6	+0.6	+1.0	.448	16.9		23	51	6.8	2	14	16	380.0	863.8
							128417 is double: ** 6.9 0.001" 333.1, dT = 0.00sec																											
26	Nov	20	23	47	42.2	D	68	SB9	5.8	S	83+	132	55	116	65N	44	99	66	-6.8	-4.1	+1.2	+2.0	.416	4.8		0	32	23.8	6	57	20	372.6	755.2
							R68 = 51 Piscium																											
							68 is multiple: Aa,Ac 5.8 9.5 0.20" : Aa,Ab 5.8 8.0 0.28" 283.8, dT = -0.34sec : AB 5.7 9.5 28.5" 81.5, dT = +54sec : AD 5.7 13.1 82" 307.6, dT = -23sec																											
							68 is a close double. Observations are highly desired																											
							68 = NSV 15113, 5.67 to 9.0, V, Type E:																											
26	Nov	21	5	28	47.8	d	109354	kF5	7.3	7.1	84+	133	38	260	53S	107	43	130	-7.7	-4.8	+1.8	-2.2	.286	-49.2		0	39	42.6	8	7	22	372.4	791.8
26	Nov	22	7	48	26.5	d	233	cB9	6.2	6.3	92+	147	21	277	70S	96	28	116	-7.0	-5.8	+0.5	-1.1	.459	-26.4		1	35	46.4	14	39	41	367.7	914.5
							R233 = 101 Piscium																											
26	Nov	23	6	52	50.7	D	370	A9	6.1	6.0v	97+	160	46	273	70S	106	32	124	-5.5	-6.4	+1.5	-1.6	.362	-35.0		2	30	38.4	19	51	19	360.6	773.0
							R370 = 26 Arietis (UU)																											
							370 = UU Ari, 6.10 to 6.15, V, Type DSCTC, Period 0.0676 days																											
26	Nov	25	7	51	3.3	R	701	SF2	6.6	6.4	99-	169	62	280	63N	263	177	271	-1.6	-6.2	+2.0	-0.3	.424	-174.2		4	38	29.5	26	56	23	354.0	731.4
							701 is triple: 6.6 9.2 3.1" 169.4, dT = +0.41sec : AB 7.36 7.21 4.49" 187.7, dT = -2.8sec																											
							701 is a close double. Observations are highly desired																											
							Distance of 701 to Terminator = 12.7"; to 3km sunlit peak = 3.7"																											
26	Nov	25	7	51	4.6	r	X 70481	p	7.3	7.2	99-	169	62	280	63N	263	177	271	-1.6	-6.2	+2.0	-0.3	.424	-174.3		4	38	29.6	26	56	26	354.0	731.4
							X 70481 is triple: 7.3 9.2 5.8" 174.9, dT = -0.5sec : AC 7.4 12.9 92" 203.6, dT = -111sec																											
							X 70481 is a close double. Observations are highly desired																											
							Distance of X 70481 to Terminator = 12.7"; to 3km sunlit peak = 3.7"																											
26	Nov	26	6	5	16.9	r	868	SA0	7.5	7.5	96-	156	80	74	59N	290	31	292	+0.9	-5.5	+2.5	-0.8	.373	159.7		5	44	21.2	27	43	53	353.2	681.4
							868 is triple: AB 7.5 9.8 8.6" 254.1, dT = -19sec : AC 7.5 12.7 47" 40.5, dT = +45sec																											
							868 is a close double. Observations are highly desired																											
26	Nov	26	8	22	56.3	r	77588	cB8	7.7	7.7	96-	156	69	280	53S	223	133	225	+0.6	-5.4	+3.2	+2.8	.235	-124.3		5	48	49.0	27	21	50	353.6	716.2
							77588 is double: 8.1 9.1																											
26	Nov	26	9	1	18.0	r	77604	K0	7.0	6.2	95-	155	61	281	74N	276	189	277	+0.5	-5.3	+1.8	-0.8	.437	-175.0		5	49	38.1	27	33	3	354.0	752.9
26	Nov	26	9	25	45.2	r	77621	M3	7.5	6.6s	95-	155	56	282	35N	315	230	317	+0.4	-5.3	+0.9	-2.5	.380	146.8		5	50	48.2	27	41	9	354.3	780.7
							77621 = NSV 16688, 7.47, range 0.02, 6V, Type VAR, Period 4.88496 days																											
26	Nov	26	9	32	19.9	r	77619	F2	7.1	6.9	95-	155	54	282	75N	276	192	277	+0.4	-5.3	+1.6	-0.9	.456	-173.9		5	50	39.7	27	30	18	354.4	789.1
26	Nov	26	10	30	50.0	R	890	cA0	4.6	4.6s	95-	155	42	285	22N	329	249	330	+0.4	-5.2	+0.0	-2.9	.356	134.8		5	53	19.6	27	36	44	355.4	870.3
							R890 = 136 Tauri																											
							890 is double: ** 4.8 6.3 0.050" 270.0, dT = -0.07sec																											
							890 has been reported as non-instantaneous (OCc 206). Observations are highly desired																											
							890 = NSV 2696, 4.50 to 4.61, V																											
							Distance of 890 to Terminator = 14.6"; to 3km sunlit peak = 4.4"																											
26	Nov	27	9	32	34.7	R	1061	SF8	6.2	5.9s	89-	141	68	277	51N	311	224	306	+2.5	-4.1	+1.4	-2.1	.401	160.0		6	58	47.4	26	4	52	355.4	735.6
							R1061 = 39 Geminorum																											
							1061 is triple: Aa,Ab 6.1 0.50" 158.0, dT = +1.1sec : AB 6.1 12.1 35" 69.2, dT = +41sec																											

Occultation prediction for Bill Sadowski Park, Miami, Florida, USA
E. Longitude - 80 19 13.9, Latitude 25 36 30.9, Alt. 2m; Telescope dia 15cm; dMag 0.0

y	m	day d	h	Time m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon Alt	Sun Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
							1061 is a close double. Observations are highly desired																												
							1061 = NSV 17256, 6.1, range 0.02, V, Type VAR:																												
26	Nov	27	10	2	42.6	R	1062cB8		6.4	6.5		89-	141	62	278	73N	290	206	285	+2.4	-4.1	+1.6	-1.3	.444	-178.0		6	59	27.9	25	54	51	355.8	766.6
							R1062 = 40 Geminorum																												
							1062 is double: AB 6.4 0.10" 160.5, dT = +0.14sec																												
							1062 is a close double. Observations are highly desired																												
26	Nov	27	11	10	30	gr	78995	A3	7.4	7.2		89-	141	-9	47	281	20S	202	123	197	+2.3	-3.9	+9.9	+9.9	.000	-90.0		7	2	20.5	25	21	52	356.8	851.4
26	Nov	27	11	10	31	Gr	78995	A3	7.4	7.2		89-	141	-9	46	** GRAZE: CA 19.7S; Dist. 1km in az. 217deg. [Lat = 25.60-0.67(E.Long+80.32)]																						
26	Nov	27	11	19	8.2	r	1068	A2	7.1	7.0		89-	141	-7	45	281	50S	233	154	228	+2.3	-3.9	+2.7	+1.3	.252	-120.3		7	2	7.2	25	25	32	357.0	864.5
26	Nov	29	7	1	32.2	R	1340kA0		6.6	6.6		71-	115		51	92	75N	301	13	286	+6.1	-1.3	+1.7	-0.6	.417	173.0		8	58	18.3	18	18	30	363.2	740.1
26	Nov	29	7	39	20.8	R	1343 M4		6.3	5.5v		71-	114		59	97	90N	286	357	271	+6.0	-1.3	+2.1	-0.1	.397	-169.7		8	59	10.7	18	8	6	362.8	710.4
							1343 = FZ Cnc, 6.28 to 6.38, Hp, Type SRB, Period 17.6 days																												
26	Nov	30	5	43	51.2	R	1449 M0		6.5	5.6s		60-	102		20	85	41N	338	46	320	+7.2	+0.2	+0.8	-2.0	.352	134.5		9	51	2.0	13	3	58	370.5	902.4
							R1449 = 23 Leonis																												
							1449 = NSV 18283, 6.45, range 0.00, 6V, Type VAR, Period 2.82446 days																												
26	Dec	1	8	33	27.6	R	1567kK1		6.4	5.8		48-	88		44	107	43N	339	39	318	+7.5	+2.0	+0.9	-2.2	.348	146.6		10	46	5.7	6	22	23	373.8	756.1
							R1567 = 37 (Sextantis)/Leonis																												
26	Dec	2	10	24	26.1	D	1685cG9		4.3	3.8		37-	75		53	131	-33S	170	213	148	+7.4	+3.7	+0.4	-2.8	.306	-38.1		11	36	56.9	- 0	49	25	378.5	712.7
							R1685 = upsilon Leonis																												
							1685 is double: ** 4.5 9.0 0.10" 195.0, dT = +0.3sec																												
							1685 has been reported as non-instantaneous (OCc1427). Observations are highly desired																												
26	Dec	2	11	20	28.4	r	138302	K0	7.7	7.1		37-	75	-7	61	151	53N	330	356	308	+7.3	+3.8	+1.2	-2.0	.359	163.8		11	37	16.8	- 0	34	41	378.2	685.3
26	Dec	2	11	31	11.6	R	1685cG9		4.3	3.8		37-	75	-5	62	157	74S	276	297	254	+7.2	+3.8	+3.0	-0.1	.294	-142.2		11	36	56.9	- 0	49	25	378.2	682.2
							R1685 = upsilon Leonis																												
							1685 is double: ** 4.5 9.0 0.10" 195.0, dT = -0.05sec																												
							1685 has been reported as non-instantaneous (OCc1427). Observations are highly desired																												
26	Dec	4	9	22	24.3	R	1885	K2	7.3	6.7		19-	52		17	113	41N	338	36	316	+7.2	+5.7	+0.0	-1.6	.389	146.9		13	8	27.9	-11	45	46	390.3	878.9
26	Dec	6	10	26	38.1	R	2109	K4	6.1	5.2		6-	28		7	118	18N	350	49	333	+5.8	+6.8	-0.8	-2.3	.300	129.3	.01	14	47	13.7	-21	19	30	398.3	916.4
26	Dec	11	23	56	13	m	188260	K0	8.7	8.0		7+	31		9	237	22S	153	97	161	-2.5	+3.8	+9.9	+9.9	.000	-90.0		19	32	44.8	-24	55	39	405.2	862.5
26	Dec	11	23	56	13	Gr	188260	K0	8.7	8.0		7+	31		8	** GRAZE: CA 22.3S; Dist. 12km in az. 328deg. [Lat = 25.73+0.56(E.Long+80.32)]																						
26	Dec	11	23	57	12	m	188262	K0	8.5	8.0		7+	31		9	237	22S	153	97	161	-2.5	+3.8	+9.9	+9.9	.000	-90.0		19	32	48.9	-24	56	36	405.3	864.1
26	Dec	12	23	14	23.5	d	189195	F0	7.8	7.6		13+	42	-10	27	227	47N	36	351	48	-3.7	+2.7	+0.5	+1.1	.357	20.5		20	21	32.8	-21	25	8	402.4	743.0
26	Dec	13	0	21	28.6	d	189226	F7	8.7	8.4		13+	42		15	237	78S	90	36	102	-3.9	+2.5	+1.2	-1.0	.364	-31.7		20	23	35.8	-21	22	14	403.5	837.2
26	Dec	13	0	44	22.5	d	189240	A7	8.6	8.4		13+	42		11	240	72N	61	4	73	-3.9	+2.5	+0.4	+0.1	.445	-1.4		20	24	5.6	-21	10	18	404.0	871.7
26	Dec	14	0	30	18.0	d	3095	F0	8.4	8.2		20+	53		24	236	23N	6	315	22	-5.2	+1.1	-0.5	+2.6	.274	47.7		21	10	22.5	-16	57	31	400.6	791.3
26	Dec	15	1	25	46.9	d	3219	K1	8.3	7.6		29+	65		25	242	74S	86	32	105	-6.5	-0.4	+1.4	-0.8	.350	-33.2		21	58	17.7	-12	6	8	397.4	807.1
26	Dec	16	1	54	4.8	d	146275kK0		8.1	7.6		38+	76		31	245	65N	43	347	63	-7.6	-1.8	+0.8	+1.0	.407	9.4		22	43	21.3	- 6	24	3	392.6	785.6
26	Dec	17	2	9	58.6	d	146725pF8		7.8			48+	88		39	246	43S	114	58	136	-8.3	-3.2	+3.1	-3.4	.187	-62.2		23	28	46.2	- 0	50	8	386.8	752.1
							146725 is double: AB 7.98 10.59 1.38" 62.1, dT = +5sec																												
							146725 is a close double. Observations are highly desired																												
26	Dec	18	3	32	39.1	d	29	K0	7.0	6.4		59+	100		34	260	17N	355	291	17	-8.7	-4.6	+0.1	+4.9	.196	62.7		0	15	38.6	5	50	38	381.1	789.6
26	Dec	19	0	50	16.2	d	139cG5		8.1	7.6		68+	111		75	197	33N	12	357	34	-8.0	-5.3	+0.7	+3.3	.295	37.6		1	1	13.9	11	10	50	372.9	673.7
26	Dec	19	23	8	5.5	d	92663	K0	7.9	7.1		78+	124	-8	58	100	45N	28	96	48	-6.9	-5.8	+0.6	+2.6	.392	25.5		1	51	38.2	16	23	56	367.8	773.8
26	Dec	21	23	21	22.5	d	571pA2		6.8	6.7		94+	151	-10	38	77	39N	36	112	48	-3.9	-6.2	+0.0	+2.3	.452	31.0		3	51	25.3	25	9	47	358.2	915.8
							571 is double: ** 7.1 9.1																												
26	Dec	21	23	36	8.0	d	574pG0		6.8	6.5		94+	151		41	78	55N	51	129	64	-4.0	-6.2	+0.5	+1.8	.497	15.1		3	52	11.4	25	9	47	357.9	893.6
26	Dec	22	2	19	36.8	d	76345kG8		7.5	7.0		94+	152		77	87	45S	133	219	145	-4.2	-6.4	+4.1	-3.5	.185	-63.2		3	57	11.8	25	16	58	355.4	706.2
26	Dec	22	8	12	13.1	d	76472cG8		7.2	6.5		95+	154		27	288	88N	87	14	98	-4.9	-6.3	+0.6	-0.7	.540	2.8		4	8	39.0	25	52	40	357.8	938.9

Occultation prediction for Bill Sadowski Park, Miami, Florida, USA
E. Longitude - 80 19 13.9, Latitude 25 36 30.9, Alt. 2m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon Sun Alt	Moon Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	Dec	23	4	54	45.1	d	773	wF8	7.0	6.7		99+	167	83	290	67N	82	336	88	-2.4	-5.9	+2.4	+0.2	.398	5.5		5	10	3.9	27	33	23	351.7	682.3
			773 is double: AB 7.0 9.3 315" 353.1, dT = +7sec																															
26	Dec	25	3	18	57.9	R	1117	cG8	5.0	4.6		98-	164	47	80	28N	331	50	324	+2.5	-3.6	+2.1	-2.6	.280	126.7		7	23	28.5	25	3	2	352.6	802.0
			R1117 = 57 Geminorum																															
			1117 is double: ** 5.9 5.9 0.10" 90.0, dT = +0.17sec																															
			1117 has been reported as non-instantaneous (OCc1358). Observations are highly desired																															
			Distance of 1117 to Terminator = 8.6"; to 3km sunlit peak = 1.0"																															
26	Dec	25	6	24	57.7	r	79416	SF8	7.6	7.4		98-	163	87	108	57N	304	15	296	+2.2	-3.4	+2.1	-1.5	.398	166.6		7	28	40.6	24	38	55	351.1	696.0
			79416 is triple: AC 7.7 11.8 29.0" 124.2, dT = +73sec : AB 7.7 8.9 65" 19.4, dT = -41sec																															
26	Dec	26	6	14	19.2	R	1277	wK3	5.3	4.7		93-	148	70	101	42N	330	41	317	+4.3	-1.8	+1.6	-2.5	.342	146.0		8	32	42.5	20	26	28	354.2	707.7
			R1277 = eta Cancri																															
			1277 is double: AB 5.3 20.0 164" 280.0, dT = -309sec																															
26	Dec	26	7	59	44	M	1282	G0	6.6	6.2		92-	148	82	220	19S	212	174	199	+4.0	-1.6	+9.9	+9.9	.000	-90.0		8	35	19.4	19	35	24	354.1	716.6
			R1282 = 35 Cancri																															
			Distance of 1282 to Terminator = 18.8"; to 3km sunlit peak = 6.8"																															
26	Dec	26	8	36	3.7	r	97941	A*	7.5	7.4		92-	148	76	249	90S	283	219	269	+3.9	-1.5	+2.2	-0.9	.403	-159.8		8	35	45.1	19	46	16	354.4	737.9
26	Dec	26	9	28	19.3	r	97973	A0	7.7	7.6		92-	147	65	262	47N	326	254	313	+3.8	-1.4	+0.9	-2.4	.419	157.3		8	37	37.0	19	43	59	354.9	781.2
26	Dec	26	9	46	11.8	R	1287	kA5	6.7	6.6		92-	147	60	264	43S	236	164	223	+3.8	-1.3	+4.4	+2.2	.178	-112.6		8	37	46.8	19	16	2	355.2	798.6
26	Dec	26	10	23	47.2	r	1293	pK0	6.8	s		92-	147	52	269	12N	1	288	348	+3.7	-1.2	-0.9	-4.0	.258	121.9		8	39	50.7	19	32	27	355.8	841.2
			1293 is multiple: Da,Db 6.67 9.87 0.50" 252.6, dT = +0.6sec : DE 6.7 11.8 35" 3.1, dT = -137sec : DA 6.7 7.3 92" 61.0, dT = -180sec : DC 6.7 7.5 100" 89.1, dT = -15sec																															
			1293 has been reported as non-instantaneous (S 571). Observations are highly desired																															
			1293 = NSV 4171, 6.52 to 6.61, V																															
			Distance of 1293 to Terminator = 8.8"; to 3km sunlit peak = 0.6"																															
26	Dec	26	10	54	44.6	r	98009	kA7	7.6	7.6v		92-	147	45	272	71N	303	231	290	+3.7	-1.1	+0.8	-1.7	.510	179.2		8	39	44.7	19	16	31	356.4	880.9
			98009 = BU Cnc, 7.67, range 0.03, V, Type DSCTC, Period 0.071 days																															
26	Dec	26	10	59	27.0	r	1297	pA9	6.8	6.6S		92-	147	44	273	41N	333	260	319	+3.7	-1.1	+0.2	-2.4	.443	149.6		8	40	20.1	19	20	56	356.5	886.9
			1297 is double: AB 6.8 8.5 0.016" 342.8, dT = -0.04sec																															
			1297 is a close double. Observations are highly desired																															
			1297 = NSV 17953, 6.78, , Type DSCT:																															
26	Dec	27	9	16	54.4	r	98654	WB9	7.9	7.9		84-	133	75	223	80N	299	260	281	+5.6	+0.3	+2.0	-1.4	.413	-170.2		9	35	9.5	14	4	32	358.9	728.8
			98654 is double: AB 7.8 9.1 45" 48.5, dT = +36sec																															
26	Dec	27	12	3	2.5	r	1425	SF7	7.0	6.8		84-	132	-1	40	266	79N	301	233	284	+5.2	+0.8	+0.8	-1.6	.501	-175.4		9	39	17.2	13	18	45	361.5	881.6
			1425 is quadruple: Aa,Ab 7.7 7.7 : ** 7.7 7.7 0.006" 90.0, dT = +0.01sec : AB 7.1 15.1 51" 131.0, dT = +99sec																															
26	Dec	28	4	40	4.2	r	1516	K5	6.6	5.8s		76-	122	22	91	84N	298	4	278	+7.5	+1.5	+0.7	-0.1	.506	179.1		10	22	14.2	8	57	52	367.1	901.0
			1516 = NSV 18388, 6.72 to 6.81, Hp, Type IB																															
26	Dec	28	6	1	35.0	R	1525	M2	5.6	4.8v		76-	121	40	100	35N	347	51	327	+7.4	+1.6	+0.8	-2.8	.316	134.6	.01	10	25	15.2	8	47	5	365.7	798.1
			R1525 = 44 Leonis (DE)																															
			1525 = DE Leo, 5.6, range 0.07, V, Type SRB:																															
26	Dec	28	6	5	18.5	r	118292	DF0	7.7	7.6S		76-	121	41	101	22N	360	64	340	+7.4	+1.6	+0.5	-4.1	.240	122.4		10	25	35.1	8	46	35	365.7	794.4
			118292 is double: AB 7.8 9.1 3.6" 74.4, dT = -4sec																															
			118292 is a close double. Observations are highly desired																															
			118292 = NSV 4851, 7.7,																															
26	Dec	28	12	54	17.4	r	1549	cG8	5.1	4.6v		74-	119	9	38	258	10N	13	310	353	+6.3	+2.6	-1.1	-4.4	.194	114.0		10	34	48.0	6	57	14	367.5	850.7
			R1549 = 48 Leonis																															
			1549 is double: ** 6.0 6.0 0.10" 90.0, dT = -0.12sec																															
			1549 has been reported as non-instantaneous (OCc 197). Observations are highly desired																															
			1549 = HIP 51775, 5.07, range 0.00, 4V, Type VAR, Period 0.09302 days																															

Occultation prediction for Bill Sadowski Park, Miami, Florida, USA
E. Longitude - 80 19 13.9, Latitude 25 36 30.9, Alt. 2m; Telescope dia 15cm; dMag 0.0

y	m	day d	h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon Alt	Sun Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	Dec	29	5	31	28.8	r	1624	PF2	6.8	6.5		66-	108	20	98	71S	275	338	253	+8.2	+3.1	+0.8	+0.7	.444	-153.4		11	13	53.0	2	16	7	373.4	899.3
		1624 is double: AB 6.8 16.2 85.0, dT = 0.00sec																															
26	Dec	29	7	22	7.8	R	1635	cM0	5.2	4.4		65-	108	43	114	49N	335	31	313	+8.0	+3.3	+0.8	-1.9	.380	152.8		11	17	17.4	2	0	38	371.7	769.3
		R1635 = 75 Leonis																															
		1635 is double: ** 5.8 6.6 0.044" 0.0																															
		1635 has been reported as non-instantaneous (OCc 763). Observations are highly desired																															
26	Dec	29	8	42	20.0	R	1637	K0	5.9	5.4		65-	107	58	135	52N	332	11	310	+7.8	+3.5	+1.1	-2.0	.373	160.3		11	18	55.0	1	39	1	371.0	713.7
		R1637 = 76 Leonis																															
26	Dec	30	10	29	50.7	r	138612	cK5	8.3	7.5		53-	94	59	167	66N	318	329	296	+7.9	+5.0	+1.6	-1.7	.370	175.9		12	8	59.9	- 5	8	57	377.5	679.8
		138612 is double: ** 8.3 0.09" 281.0, dT = -0.21sec																															
		138612 has been reported as non-instantaneous (OCc1769). Observations are highly desired																															
26	Dec	30	10	58	28.3	R	138617	KF2	7.2	7.0		53-	94	59	181	47N	336	336	314	+7.8	+5.1	+1.1	-2.3	.340	157.5		12	9	47.8	- 5	13	33	377.6	674.2
26	Dec	31	6	50	59.4	r	1845	SG8	6.5	5.9s		44-	83	12	108	51S	253	314	231	+8.4	+5.6	+1.0	+2.0	.312	-129.3		12	51	22.9	-10	20	18	386.4	923.7
		1845 is triple: AB 6.6 9.7 28.8" 296.2, dT = -67sec : AC 6.6 12.5 142" 211.8, dT = -342sec																															
		1845 = NSV 5994, 6.49, range 0.07, V																															

Lunar Occultation predictions
Fox Observatory
Broward
Florida
USA

Occultation prediction for Fox Observatory Broward
E. Longitude - 80 21 35.6, Latitude 26 7 45.6, Alt. 3m; Telescope dia 15cm; dMag 0.0

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      day  Time     P   Star  Sp  Mag  Mag    % Elon Sun  Moon   CA   PA  VA  AA Libration   A   B   RV    Cct durn  R.A. (J2000)  Dec   Mdist   SV
 y   m  d  h  m   s       No  D    v    r V  ill     Alt Alt Az   o    o   o   o   L    B   m/o m/o "/s     o  sec  h  m   s    o  m  s   Mm   m/s
26 Jan  4  1 26 16.7 r   79610 F8  7.2  7.0   99- 170     27  74  78S 247 319 238 +5.2 -4.8 +0.3+1.6 .463 -152.1      7 41  3.1  24 57 54 361.4 917.7
   Distance of 79610 to Terminator = 14.6"; to 3km sunlit peak = 4.9"
26 Jan  4 11 58 23.6 r    1208DK1  6.4        98- 166  -3 16 289  46N 315 246 304 +4.1 -3.9 -0.3-1.6 .576  160.0      8  1  0.8  23 34 59 364.21083.5
      1208 is double: AB 6.48 9.95 1.95" 325.2, dT = -3sec
      1208 is a close double. Observations are highly desired
   Distance of 1208 to Terminator = 15.2"; to 3km sunlit peak = 5.3"
26 Jan  5  3 33 37.8 r    1315 A2  7.1  7.1   96- 156     40  84  68S 257 330 243 +6.5 -3.5 +1.2+1.5 .388 -149.6      8 46 20.2  20 37  0 364.9 796.0
26 Jan  5  8 23 28.9 R    1329pF8  6.8        95- 154     74 252  62N 309 244 294 +5.7 -3.0 +1.6-1.8 .409  175.6      8 53 55.3  19 58  2 363.9 724.7
      1329 is double: AB 7.32 7.86 0.15"  71.9, dT = +0.2sec
      1329 is a close double. Observations are highly desired
26 Jan  7  3 40 42.4 R    1547cB1  3.8  3.9v  82- 130     16  87  45S 247 312 227 +7.9 -0.4 +0.4+2.3 .327 -130.9     10 32 48.7   9 18 24 378.7 916.6
   R1547 = rho Leonis
      1547 is double: AB 3.8 4.8      105.1, dT = -0.06sec
      1547 = rho Leo, 3.83 to 3.9, V, Type ACYG, Period 3.4271 days, Phase  53%
26 Jan  9  7 56 48.5 R    1754KF5  7.0  6.7   62- 104     44 126  80S 284 331 262 +6.9 +3.0 +2.0+0.1 .337 -151.7     12 11 21.8 - 3 46 44 388.7 722.4
26 Jan 10  6 16  6.3 r  139025 K2  7.2  6.5   53-  94     13 107  89N 294 355 273 +6.4 +4.0 +0.5+0.0 .457 -169.7     12 53 37.0 - 9  3 52 396.1 892.3
26 Jan 10  9 10 13.7 r  139061DF5  7.3        52-  93     45 140  75N 308 344 287 +5.9 +4.4 +1.6-0.9 .362 -174.9     12 57 28.6 - 9 45 41 393.6 693.1
    139061 is double: AB 7.31 10.77 1.66" 276.0, dT = -4sec
    139061 is a close double. Observations are highly desired
26 Jan 10  9 51  8.6 r  139081cK0  7.5  7.1   52-  92     50 152  23N   0  25 339 +5.8 +4.5 -0.2-3.3 .242  133.9     12 59  1.6 - 9 50  3 393.4 664.7
    139081 is double: AB 7.6 12.6 0.33"  65.8, dT = -0.6sec
    139081 is a close double. Observations are highly desired
26 Jan 11 12 11 17.2 r    1970SA0  6.2  6.2   42-  81  -1 48 190  86N 294 285 274 +4.2 +5.8 +2.6-1.1 .304 -164.7     13 45 35.1 -15 46  3 397.4 607.9
   R1970 = 85 Virginis
      1970 is multiple: Aa,Ab 6.5 8.2           : Aa,Ac 6.5 8.4 0.10"       : AB 6.2 12.8 44" 312.7, dT = -137sec : AB 6.2 12.8 44" 312.6, dT = -
137sec
      1970 is a close double. Observations are highly desired
26 Jan 12 10 47 28.7 r  158609dG1  8.1  7.8   33-  70     38 150  47N 329 358 312 +3.5 +6.4 +0.9-1.6 .316  158.3     14 31 12.3 -19 58 40 400.3 661.0
    158609 is double: AB 8.2 10.6 4.2" 286.0, dT = -10sec
    158609 is a close double. Observations are highly desired
26 Jan 14  9 10 38.6 R    2312 M2  5.4  4.5s  17-  49      4 122  50N 315  14 305 +1.3 +7.0 -0.2-0.5 .423  158.4     16  8  7.6 -26 19 36 404.9 892.7
      2312 = NSV 20513, 5.35, range 0.00, 8V, Type VAR, Period 7.61267 days
26 Jan 14  9 59 26.9 r  184177kA0  8.2  8.1   17-  49     12 128  37N 328  21 318 +1.2 +7.1 -0.1-1.1 .347  146.7     16  9 45.8 -26 26 24 403.9 814.5
26 Jan 14 10  5 56   D    2318 A*  6.6  6.6v  17-  48     13 129   8S 194 245 183 +1.2 +7.1 -5.2-8.9 .081  -78.6     16 10 15.9 -26 54 33 403.8 805.3
      2318 = V0952 Sco, 6.57, range 0.04, V, Type ACV, Period 1.4178 days, Phase  15%
26 Jan 14 10 13 29   Gr   2318 A*  6.6  6.6v  17-  48     16 ** GRAZE: CA 19.8S; Dist. 35km in az. 217deg. [Lat = 25.73-0.68(E.Long+80.36)]
26 Jan 14 10 20 48   R    2318 A*  6.6  6.6v  17-  48     16 131  31S 217 266 207 +1.1 +7.1 +7.0+9.1 .079 -101.4     16 10 15.9 -26 54 33 403.5 782.5
      2318 = V0952 Sco, 6.57, range 0.04, V, Type ACV, Period 1.4178 days, Phase  15%
26 Jan 14 11  7  5   m  184208cG3  8.1  7.8   17-  48     23 139  20S 206 247 195 +1.0 +7.2 +9.9+9.9 .000  -90.0     16 11 36.4 -27  4 41 402.8 716.2
    184208 is double: ** 8.9 8.9 0.10"  63.0
    184208 has been reported as non-instantaneous (OCc 764). Observations are highly desired
26 Jan 15 10 45  7.4 R  184978 B9  7.7  7.7   10-  37     10 129  50N 308   1 302 -0.1 +7.1 +0.3-0.3 .388  160.4     17  3 59.1 -28 15 23 403.0 805.3
26 Jan 15 11  3 18.1 R    2453 K1  6.6  6.2   10-  37     13 131  58S 236 286 231 -0.2 +7.2 +2.4+2.6 .243 -127.7     17  4 27.8 -28 34 58 402.7 777.0
26 Jan 16 10 51 34.8 R    2586cB3  6.0  6.0    5-  26      2 124  84N 265 324 265 -1.2 +6.8 +0.7+1.1 .427 -164.5     17 58 39.0 -28 45 33 401.9 862.9
      2586 is double: ** 6.3 7.3 0.30" 276.0, dT = -0.7sec
      2586 has been reported as non-instantaneous (OCc1519). Observations are highly desired
26 Jan 20 15 12 29   d    3171cA7  3.7  3.5v   4+  22  33 20 121  16S 151 204 168 -4.5 +2.9 +9.9+9.9 .038  -84.7 .03 21 40  5.5 -16 39 44 387.3 768.0
   R3171 = Nashira = gamma Capricorni
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Occultation prediction for Fox Observatory Broward
E. Longitude - 80 21 35.6, Latitude 26 7 45.6, Alt. 3m; Telescope dia 15cm; dMag 0.0

y	m	day d	h	m	s	P	Star No	Sp D	Mag v	Mag r	V ill	%	Elon	Sun Alt	Moon Alt	Az	CA o	PA o	VA o	AA o	Libration L	B	A m/o	B m/o	RV "/s	Cct	dur sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
							3171 is double: AB 4.6 4.6 0.013" 239.0																												
							3171 is a close double. Observations are highly desired																												
							3171 = gam Cap, 3.2, range 0.03, J, Type ACV																												
26	Jan	20	15	15	35	Gr	3171cA7	3.7	3.5v		4+	22	33	21	** GRAZE: CA 10.9S; Dist. 12km in az. 179deg. [Lat = 26.02+0.02(E.Long+80.36)]																				
26	Jan	20	15	19	7	r	3171cA7	3.7	3.5v		4+	22	34	21	122	6S	161	214	179	-4.5	+2.9	+9.9	+9.9	.037	-95.3	.03	21	40	5.5	-16	39	44	387.1	759.5
							R3171 = Nashira = gamma Capricorni																												
							3171 is double: AB 4.6 4.6 0.013" 239.0																												
							3171 is a close double. Observations are highly desired																												
							3171 = gam Cap, 3.2, range 0.03, J, Type ACV																												
26	Jan	22	23	40	43.1	D	3454 K0		7.6	7.1		17+	49	-10	38	244	46S	110	56	131	-6.1	-1.2	+2.8	-2.7	.222	-59.1		23	27	14.7	- 2	38	13	377.7	789.4
26	Jan	23	0	16	32.7	d	146716pG0		8.4	8.2		17+	49		31	250	50S	106	49	128	-6.2	-1.3	+1.9	-2.2	.269	-53.5		23	28	5.7	- 2	27	33	378.3	828.2
							146716 is triple: AB 9.2 9.2 0.20" 79.7, dT = +0.7sec : AC 8.5 8.1 57" 45.9, dT = +106sec																												
							146716 is a close double. Observations are highly desired																												
26	Jan	23	0	18	19.8	D	146717PF2		8.1	7.9		17+	49		30	250	50S	106	48	127	-6.2	-1.3	+1.9	-2.1	.274	-52.7		23	28	8.5	- 2	26	53	378.3	830.2
							146717 is double: AB 8.1 8.5 57" 225.9, dT = -105sec																												
26	Jan	23	1	33	14.6	D	3459 K0		6.4	5.8		17+	49		15	261	44N	20	318	42	-6.3	-1.4	+0.2	+1.7	.401	37.3		23	29	27.0	- 1	47	28	379.8	927.6
							R3459 = 11 Piscium																												
26	Jan	24	0	24	53.5	D	30SA0		7.1	7.1		26+	61		42	251	76N	51	353	73	-5.9	-2.8	+1.3	+0.8	.426	1.6		0	15	57.3	4	15	4	374.1	773.3
							30 is triple: AB 7.0 14.1 0.8" 246.0, dT = -1.8sec : AC 7.0 12.2 5.0" 347.3, dT = +5sec																												
							30 is a close double. Observations are highly desired																												
26	Jan	24	3	0	14.2	d	41 G5		7.7	7.2		27+	63		9	271	75S	81	16	103	-6.1	-3.0	+0.2	-0.6	.506	-18.1		0	20	21.6	4	46	44	377.1	973.2
26	Jan	27	19	2	22.1	d	539SB6		4.3	4.4s		69+	112		41	15	70	81S	88	156	101	-1.4	-6.0	+0.1	+0.8	.566	-21.3		3	45	12.5	24	28	2	366.4	1079.8
							R539 = Taygeta = 19 Tauri																												
							539 is multiple: Aa,Ab 4.6 6.1 : AB 0.032" 259.2, dT = -0.06sec : AC 4.3 14.0 53" 53.4, dT = +77sec : AB 4.3 11.0 72" 328.8, dT = -63sec																												
							539 is a close double. Observations are highly desired																												
							539 = NSV 1264, 4.30, range 0.00, 1Kp, Type SPB, Period 1.5664 days																												
26	Jan	27	19	25	25.7	d	541SB8		3.9	3.9s		69+	112		38	20	72	37S	132	202	145	-1.4	-6.1	+1.6	-1.1	.239	-65.9		3	45	49.6	24	22	4	365.9	1041.2
							R541 = Maia = 20 Tauri																												
							541 is quadruple: Aa,Ab 4.4 5.4 : AB 3.8 13.7 113" 72.6, dT = +239sec : AB 3.8 13.7 113" 72.7, dT = +240sec																												
							541 = NSV 1279, 3.87, range 0.00, 4Kp, Type ACV, Period 10.288 days																												
26	Jan	27	19	33	53	Gr	541SB8		3.9	3.9s		69+	112		39	22	** GRAZE: CA 13.4S; Dist.192km in az. 143deg. [Lat = 23.97+0.68(E.Long+80.36)]																				
26	Jan	27	23	38	55.4	D	579kA2		6.4	6.3S		70+	114		-9	75	87	34N	24	110	36	-1.7	-6.5	+0.9	+3.4	.298	41.8		3	53	34.5	25	40	58	361.6	701.8
							579 = NSV 1391, 6.33,																												
26	Jan	27	23	48	50.2	d	76303kA2		7.8	7.7		70+	114	-11	77	88	19N	9	95	21	-1.7	-6.6	+0.2	+4.9	.214	57.3		3	53	32.0	25	43	48	361.5	694.2
26	Jan	29	5	36	51.6	D	771SA5		6.1	5.9e		82+	129		42	285	78N	77	358	82	-1.0	-6.5	+1.4	-0.3	.449	18.8		5	9	45.1	28	1	50	361.9	831.7
							771 is triple: Aa,Ab 6.0 0.20" 351.0, dT = +0.03sec : A,BC 6.0 9.1 11.2" 29.1, dT = +17sec																												
							771 is a close double. Observations are highly desired																												
							771 = V1156 Tau, 6. to 6.1, Hp, Type E:, Period 1.40266 days, Phase 13%																												
26	Jan	30	6	23	34.2	d	78191 A0		7.7	7.7		90+	143		46	284	68N	76	356	75	+0.5	-5.9	+1.6	-0.3	.415	29.5		6	17	59.9	28	0	24	361.4	836.1
26	Jan	30	23	47	29.1	d	1089 K0		6.7	6.1		95+	155	-10	35	75	65S	131	207	125	+3.1	-5.3	+1.5	-0.9	.377	-39.4		7	11	30.0	26	24	21	362.9	857.8
26	Jan	31	0	7	42.2	d	79164cG8		7.4	6.9		95+	155		40	76	78N	94	171	87	+3.0	-5.3	+1.2	+0.7	.471	-1.0		7	12	31.2	26	33	52	362.5	827.8
							79164 is double: ** 8.1 8.5 0.10" 21.0, dT = +0.06sec																												
							79164 has been reported as non-instantaneous (OCc 237). Observations are highly desired																												
26	Jan	31	2	42	19.9	d	79243 K1		7.3	6.7		96+	156		73	85	87S	110	197	103	+2.7	-5.3	+2.3	-0.6	.382	-7.9		7	17	15.6	26	21	49	360.6	675.0
26	Jan	31	3	5	30.1	d	79253cK1		7.6	7.1		96+	156		78	86	87S	109	198	103	+2.6	-5.3	+2.4	-0.7	.380	-5.5		7	17	54.5	26	19	59	360.5	667.7
							79253 is double: ** 8.7 8.7 0.050"																												
							79253 has been reported as non-instantaneous (OCc1350). Observations are highly desired																												

Occultation prediction for Fox Observatory Broward
E. Longitude - 80 21 35.6, Latitude 26 7 45.6, Alt. 3m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon	Sun Alt	Moon Alt	Az	CA o	PA o	VA o	AA o	Libration L	B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	Jan	31	5	16	11.5	d	79316	G2	7.5	7.1v	96+	157	74	275	73N	90	4	83	+2.3	-5.1	+2.4	-0.4	.375	22.4		7	21	32.8	26	9	33	360.8	709.6
							79316 = V0340 Gem, 7.37 to 7.71, V, Type RS, Period 35.37 days, Phase 86%																													
26	Jan	31	23	34	23.8	d	1239	A4	6.6	6.5	99+	168	-7	19	73	79N	107	176	95	+4.4	-4.1	+0.5	+0.3	.534	-7.9		8	13	41.7	23	8	16	366.4	957.7
							Distance of 1239 to Terminator = 19.5"; to 3km sunlit peak = 8.3"																												
26	Feb	2	9	31	7.6	r	1395	G9	6.3	5.8	100-	174	40	270	53N	313	243	296	+4.3	-1.8	+0.5	-1.9	.490	172.7		9	25	32.5	16	35	8	369.1	884.3
							Distance of 1395 to Terminator = 3.0"; to 3km sunlit peak = 0.0"																												
26	Feb	4	6	51	6.6	r	1606	M*	7.8	7.0v	93-	150	67	155	49N	335	358	314	+6.0	+1.1	+1.1	-2.4	.351	158.6		11	4	19.1	5	13	30	376.4	688.7
							1606 = FG Leo, 7.84 to 8.01, Hp, Type SRB, Period 24.962161 days, Phase 38%																												
26	Feb	6	8	14	5.3	d	1815SK2		4.7	4.0	79-	125	54	162	-44S	162	178	140	+5.4	+4.2	+0.8	-2.4	.316	-27.0		12	39	14.8	- 7	59	44	387.7	667.6
							R1815 = chi Virginis																												
							1815 is multiple: **Aa,Ab 4.8 8.8 0.10" 214.0, dT = +0.19sec : AB 4.8 8.8 177" 135.9, dT = +504sec : AC 4.8 10.6 224" 109.8, dT = +435sec : AD 4.8 9.0 321" 331.1, dT = -997sec																												
							1815 has been reported as non-instantaneous (OCc 760). Observations are highly desired																												
26	Feb	6	9	32	30.5	R	1815SK2		4.7	4.0	79-	125	55	196	82S	287	273	265	+5.1	+4.3	+2.7	-1.0	.310	-153.5		12	39	14.8	- 7	59	44	388.0	652.3
							R1815 = chi Virginis																												
							1815 is multiple: **Aa,Ab 4.8 8.8 0.10" 214.0, dT = -0.09sec : AB 4.8 8.8 177" 135.9, dT = +501sec : AC 4.8 10.6 224" 109.8, dT = +720sec : AD 4.8 9.0 321" 331.1, dT = -744sec																												
							1815 has been reported as non-instantaneous (OCc 760). Observations are highly desired																												
26	Feb	6	10	54	51.4	r	138905	F8	7.3	7.0	78-	124	45	224	51S	257	218	235	+4.8	+4.5	+3.4	-0.1	.217	-127.5		12	40	40.7	- 8	26	54	388.9	673.9
26	Feb	7	6	5	3.7	r	1919	K5	6.9	6.0s	71-	114	26	121	17N	6	59	346	+5.2	+5.0	-0.9	-3.7	.222	121.8		13	22	8.3	-12	34	46	394.2	806.8
							1919 = NSV 19751, 6.98 to 7.03, Hp																												
26	Feb	7	7	30	39.6	r	157895	pA2	7.8	7.7	70-	114	40	138	68S	272	310	251	+4.9	+5.2	+2.6	+0.7	.287	-140.2		13	22	45.6	-13	11	11	393.1	712.3
							157895 is double: AB 7.8 10.8 19.4" 311.2, dT = -52sec																												
26	Feb	9	8	17	58.1	r	2138	WF6	7.9	7.6	51-	91	27	137	62N	315	357	299	+2.8	+6.8	+0.8	-0.7	.370	169.3		14	58	40.7	-22	24	5	400.5	731.0
							2138 is double: AB 7.9 9.6 12.0" 95.0, dT = +25sec																												
26	Feb	9	9	59	44.1	r	183079	M2	7.7	6.8s	51-	91	39	161	87S	284	303	268	+2.4	+7.0	+2.6	-0.1	.303	-160.0		15	0	30.4	-22	50	58	399.5	623.8
							183079 = NSV 20220, 7.67 to 7.75, Hp																												
26	Feb	10	8	27	54.5	d	2263cB1		4.6	4.7	42-	80	19	132	-56N	68	115	55	+1.6	+7.2	+2.4	+2.2	.251	50.2		15	50	58.7	-25	45	5	402.5	766.7
							R2263 = 1 Scorpii																												
							2263 is double: ** 5.6 5.6 0.050"																												
							2263 has been reported as non-instantaneous (OCc1483). Observations are highly desired																												
26	Feb	10	9	18	19.7	R	2263cB1		4.6	4.7	41-	80	26	141	23N	348	27	337	+1.4	+7.3	-0.4	-2.5	.228	129.6		15	50	58.7	-25	45	5	401.7	696.3
							R2263 = 1 Scorpii																												
							2263 is double: ** 5.6 5.6 0.050"																												
							2263 has been reported as non-instantaneous (OCc1483). Observations are highly desired																												
26	Feb	11	8	32	14.6	R	2397	K1	6.5	5.9	32-	69	10	128	55N	310	4	303	+0.3	+7.3	+0.2	-0.4	.393	160.6		16	41	37.6	-27	48	35	403.2	815.8
26	Feb	12	11	20	36.7	R	2540	B3	7.2	7.1e	23-	58	-9	27	148	52N	306	340	304	-1.3	+7.2	+1.5	-0.5	.295	154.3		17	40	23.9	-28	55	24	399.8	634.0
							2540 = V2382 Oph, 7.26 to 7.29, Hp, Type E+BE, Period 0.9215 days, Phase 40%																												
26	Feb	13	10	34	56.1	r	186988	A0	8.5	8.3	16-	47	13	131	62N	290	340	293	-2.2	+6.6	+0.9	+0.3	.375	165.1		18	34	12.8	-28	20	45	398.7	751.5
26	Feb	19	0	32	19.1	D	Mercury		-0.6	-0.6	2+	18	0	266	67N	37	337	63	-5.8	-1.1	+0.0	+0.8	.491	19.4		23	14	18.8	- 3	50	16	379.0	956.8
							Mercury contacts: Bright limb 0 32 12; Terminator 0 32 22.4; Dark limb 0 32 26: diam = 7.0"; %illum = 53.3%; PA bright limb = 244.0																												
26	Feb	21	1	43	27.2	d	109530	DF0	8.2	8.0	14+	44	11	275	83N	57	352	78	-4.7	-4.1	+0.3	+0.2	.532	8.3		0	54	45.1	9	25	44	372.6	972.2
							109530 is double: AB 8.57 9.60 3.11" 299.9, dT = -2.7sec																												
							109530 is a close double. Observations are highly desired																												
26	Feb	23	2	58	26.5	d	75537	A2	7.8	7.7	34+	71	21	284	32N	12	303	29	-2.8	-6.2	+1.7	+3.6	.220	64.6		2	43	41.1	21	8	50	368.6	917.4
26	Feb	24	0	17	53.3	d	76041	F0	8.2	8.0	44+	83	69	271	29S	137	56	150	-1.4	-6.7	+2.9	-5.3	.166	-63.9		3	38	35.9	24	36	6	364.4	668.2
26	Feb	24	0	26	55.4	D	76046	cA0	7.1	7.1	44+	83	67	273	51S	115	34	128	-1.4	-6.7	+2.4	-2.1	.287	-41.0		3	39	6.7	24	42	10	364.5	672.6
							76046 is double: AB 7.1 45.0, dT = -12sec																												

Occultation prediction for Fox Observatory Broward
E. Longitude - 80 21 35.6, Latitude 26 7 45.6, Alt. 3m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon Sun Alt	Moon Alt	Az	CA o	PA o	VA o	AA o	Libration L	B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	Feb	24	1	42	1.8	d	76081	K2	7.5	6.9		44+	83	51	278	87N	74	355	87	-1.6	-6.7	+1.8	-0.1	.412	5.9		3	41	18.1	25	0	29	365.4	734.7
26	Feb	24	2	57	11.6	d	76102	A2	7.5	7.5		45+	84	35	284	89N	76	1	88	-1.7	-6.7	+1.1	-0.3	.465	7.9		3	43	43.2	25	4	51	366.6	834.1
26	Feb	24	3	49	29.9	D	538	pB8	5.7	5.7		45+	84	24	287	24S	143	72	156	-1.7	-6.6	-0.6	-3.6	.273	-58.0		3	45	9.7	24	50	21	367.7	918.7
R538 = 18 Tauri																																	
538 is quadruple: Aa,Ab 6.4 6.4 0.10" : AB 5.6 14.0 72" 128.9, dT = +256sec : AC 5.6 14.8 151" 175.1, dT = +470sec																																	
538 is a close double. Observations are highly desired																																	
26	Feb	24	4	53	44.5	d	555	K5	6.4	5.6s		46+	85	11	293	53S	114	48	127	-1.8	-6.5	-0.3	-1.5	.508	-27.9		3	48	6.5	24	59	18	369.1	1029.7
555 = NSV 1316, 6.44, range 0.02, 0V, Type VAR, Period 1.48987 days																																	
26	Feb	25	1	21	27.4	d	715	cK5	8.0	7.5		56+	97	69	280	77N	70	341	78	-0.2	-6.8	+2.4	+0.5	.365	15.7		4	43	35.4	27	41	15	364.2	669.2
715 is double: ** 8.8 8.8 0.10" 90.0, dT = +0.26sec																																	
715 has been reported as non-instantaneous (OCc 130). Observations are highly desired																																	
26	Feb	26	7	0	27.2	d	77818	K5	6.7	5.8		69+	112	12	296	46N	48	341	48	+0.5	-5.9	+0.8	+0.6	.351	54.6		6	0	4.9	28	7	33	369.3	1086.3
26	Feb	26	23	31	38	Gr	1042	cA2	6.7	6.6		77+	123	-3	62	** GRAZE: CA 4.7S; Dist. 6km in az. 169deg. [Lat = 26.07+0.18(E.Long+80.36)]																				
Distance of 1042 to Terminator = 18.7"; to 3km sunlit peak = 2.9"																																	
26	Feb	26	23	31	40	gr	1042	cA2	6.7	6.6		77+	123	-3	60	80	5S	183	268	179	+2.6	-5.7	+9.9	+9.9	.000	-90.0		6	49	10.2	27	11	25	365.6	699.2
1042 is double: 6.7 9.8 0.10"																																	
1042 is a close double. Observations are highly desired																																	
Distance of 1042 to Terminator = 7.3"; to 3km sunlit peak = 0.0"																																	
26	Feb	27	2	46	20.4	d	78873	A2	7.8	7.7		78+	124	78	279	81N	89	357	85	+2.0	-5.6	+2.5	-0.3	.360	18.2		6	55	48.1	27	14	58	365.1	671.2
26	Feb	27	2	52	5.9	d	1056	B9	7.2	7.3		78+	124	76	279	71N	79	348	75	+2.0	-5.6	+2.7	+0.2	.335	28.5		6	55	56.2	27	17	9	365.1	675.1
26	Feb	27	5	17	18.2	d	78957	G8	7.5	7.0		79+	125	45	283	82N	90	11	85	+1.7	-5.3	+1.4	-0.8	.439	21.5		7	0	14.8	26	52	42	366.9	838.9
26	Feb	28	1	46	9.0	d	1194	SK0	7.8	7.2		86+	137	76	92	28N	43	124	33	+3.3	-4.6	+3.9	+6.1	.139	67.9		7	56	1.5	24	39	57	366.5	656.8
1194 is triple: AB 7.8 10.1 18.9" 160.1, dT = -63sec : AB 9.5 11.5 34" 194.1, dT = -218sec																																	
26	Feb	28	5	6	51.7	d	79868	DK0	7.4			87+	138	59	273	71N	86	7	75	+2.7	-4.2	+2.2	-0.5	.358	33.9		8	1	30.3	23	54	46	367.5	767.6
79868 is double: AB 7.43 10.98 1.30" 168.9, dT = +0.44sec																																	
79868 is a close double. Observations are highly desired																																	
26	Feb	28	5	20	14.2	D	1208	DK1	6.4			87+	138	56	274	31S	165	87	154	+2.7	-4.2	-0.1	-3.3	.310	-45.1		8	1	0.8	23	34	59	367.7	783.7
1208 is double: AB 6.48 9.95 1.95" 325.2, dT = -6sec																																	
1208 is a close double. Observations are highly desired																																	
26	Mar	1	1	30	37.8	D	1329	pF8	6.8			93+	150	59	95	62S	138	210	123	+4.3	-3.2	+1.8	-1.6	.358	-22.9		8	53	55.3	19	58	2	369.3	696.3
1329 is double: AB 7.32 7.86 0.15" 72.1, dT = +0.17sec																																	
1329 is a close double. Observations are highly desired																																	
26	Mar	3	11	16	5.2	d	X119629	k	11.5	11.1		0E	179	-7	6	274	22U	66	2	45	+4.1	+1.2	+0.3	-0.1	.324	54.4		10	51	47.3	6	18	53	381.9	1032.4
26	Mar	3	11	19	48.7	d	X210181	k	11.7			0E	179	-6	5	274	47U	105	41	84	+4.1	+1.2	+0.0	-1.2	.540	15.3		10	51	57.8	6	7	28	382.0	1037.3
26	Mar	3	11	25	9.1	d	X119641	k	11.3	11.0		0E	179	-5	4	275	63U	127	63	106	+4.1	+1.2	-0.1	-1.6	.560	-7.1		10	51	57.8	6	0	33	382.2	1045.3
26	Mar	6	11	9	36.9	r	1885	K2	7.3	6.7		91-	145	-8	25	241	68N	320	267	299	+3.4	+5.4	+1.2	-2.3	.368	159.6		13	8	27.9	-11	45	46	392.3	745.8
26	Mar	7	10	53	17.1	R	1993	cK3	6.6	5.9		84-	133	-11	32	226	62S	268	225	248	+2.7	+6.3	+2.3	-0.8	.295	-149.2		13	54	21.4	-17	10	48	395.2	659.4
26	Mar	8	4	41	34.7	r	2084	A3	6.5	6.4		78-	124		13	121	79S	281	336	263	+3.1	+6.4	+0.8	+0.6	.414	-157.9		14	34	50.7	-20	26	22	399.5	866.6
26	Mar	12	9	36	32.2	R	2631	B9	6.5	6.5v		40-	79		23	143	90N	268	306	268	-2.3	+6.9	+2.0	+0.9	.332	-171.5		18	11	58.2	-28	54	6	399.7	651.3
R2631 = V4045 Sagittarii																																	
2631 = V4045 Sgr, 6.51 to 6.54, V, Type ACV, Period 2.8855 days																																	
26	Mar	13	8	43	30.5	d	2784	cK1	3.3	2.7		31-	68		7	126	-35S	136	192	142	-3.2	+6.2	-0.1	-0.8	.288	-45.4	.02	19	6	56.4	-27	40	14	398.6	792.9
R2784 = tau Sagittarii																																	
2784 is double: AB 4.2 4.2 0.008" 319.3, dT = -0.03sec																																	
26	Mar	13	9	10	15.2	r	187672	kA*	7.4	7.4		31-	68	12	129	26N	325	17	331	-3.2	+6.2	-0.1	-1.6	.220	124.5		19	6	19.2	-27	17	14	398.0	748.7
26	Mar	13	9	36	56.8	R	2784	cK1	3.3	2.7		31-	68	17	133	53S	224	271	230	-3.3	+6.2	+2.3	+2.7	.259	-134.8	.02	19	6	56.4	-27	40	14	397.5	709.6
R2784 = tau Sagittarii																																	
2784 is double: AB 4.2 4.2 0.008" 319.3, dT = 0.00sec																																	

Occultation prediction for Fox Observatory Broward
E. Longitude - 80 21 35.6, Latitude 26 7 45.6, Alt. 3m; Telescope dia 15cm; dMag 0.0

y	m	day d	h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon Sun Alt	Moon Alt	Az	CA o	PA o	VA o	AA o	Libration L	B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	Mar	15	10	47	4.4	r	189827	A3	8.0	7.9		14-	-11	16	123	55S	215	269	230	-4.9	+4.0	+1.5	+2.6	.322	-142.6		20	54	43.6	-20	56	58	388.7	764.1
26	Mar	16	10	24	22.4	R	3182	A2	7.5	7.4		8-	32	5	110	75S	232	294	250	-5.1	+2.6	+0.7	+1.9	.455	-162.6		21	44	18.9	-15	58	18	384.9	889.5
26	Mar	22	0	33	17.4	d	X 3230	M2	9.1	8.1v		11+	39	25	280	53S	103	33	121	-2.6	-5.9	+0.5	-1.4	.444	-29.6		2	23	36.5	18	57	54	364.3	902.2
X 3230 = ASAS J022337+1857.9, 9., range 0.3, V, Type MISC, Period 62.5 days, Phase 62%																																	
26	Mar	24	22	36	9	Gr	810SB7		1.7	1.7		40+	79	12	87	** GRAZE: CA 0.8N; Dist. 12km in az. 177deg. [Lat = 26.02+0.05(E.Long+80.36)]																				
26	Mar	24	22	36	10	M	810SB7		1.7	1.7		40+	79	12	87	16	1N	357	160	0	+2.1	-6.5	+9.9	+9.9	.000	90.0		5	26	17.5	28	36	27	363.1	642.7
R810 = El Nath = beta Tauri																																	
810 is multiple: AC 1.9 19.0 8.4" 357.0 : AD 1.9 18.5 9.8" 70.0 : AE 1.9 10.9" 80.0 : AF 1.9 15.8 11.6" 296.0																																	
810 is a close double. Observations are highly desired																																	
Distance of 810 to Terminator = 12.9"; to 3km sunlit peak = 0.0"																																	
26	Mar	25	2	34	50.0	d	77268	B8	8.2	8.0v		41+	80	40	286	54S	122	44	125	+1.5	-6.3	+0.5	-1.9	.440	-22.2		5	34	39.1	28	3	4	365.7	843.5
77268 = V1371 Tau, 8.02 to 8.20, V, Type GCAS																																	
26	Mar	26	0	43	41	M	1008	A0	5.3	5.3s		52+	93	77	282	11N	14	279	12	+3.0	-5.8	+9.9	+9.9	.000	90.0		6	35	12.1	28	1	20	365.6	663.6
R1008 = 49 Aurigae																																	
1008 = NSV 3032, 5.05 to 5.27, V																																	
26	Mar	26	0	43	56	Gr	1008	A0	5.3	5.3s		52+	93	75	** GRAZE: CA 10.5N; Dist. 30km in az. 202deg. [Lat = 25.84-0.36(E.Long+80.36)]																				
26	Mar	26	2	45	26	m	78580	SA2	7.3	7.2		53+	93	51	283	15N	19	297	16	+2.7	-5.6	+9.9	+9.9	.000	90.0		6	38	53.6	27	48	16	367.1	790.5
78580 is triple: AC 7.3 13.8 26.6" 237.2 : AB 7.3 10.5 28.6" 130.4																																	
26	Mar	26	4	3	26.0	d	1028	G8	7.5	7.1		53+	94	34	286	36S	149	73	145	+2.5	-5.5	-0.3	-2.6	.391	-39.5		6	41	42.7	27	4	54	368.6	906.8
26	Mar	27	2	29	43.1	D	79610	F8	7.2	7.0		64+	106	67	273	68S	123	41	114	+3.7	-4.6	+1.5	-1.8	.399	-5.9		7	41	3.1	24	57	54	368.7	717.7
26	Mar	27	4	45	54.4	D	1170	dG8	3.6	3.1		65+	107	37	282	31S	160	85	151	+3.4	-4.3	-0.4	-2.8	.361	-43.5		7	44	26.8	24	23	53	371.0	895.6
R1170 = kappa Geminorum																																	
1170 is double: AB 3.7 10.0 7.3" 241.1, dT = +3sec																																	
1170 is a close double. Observations are highly desired																																	
26	Mar	27	5	30	44.6	R	1170	dG8	3.6	3.1		65+	108	27	285	-61S	252	180	243	+3.3	-4.2	+1.0	-0.3	.390	-136.6		7	44	26.8	24	23	53	372.0	968.2
R1170 = kappa Geminorum																																	
1170 is double: AB 3.7 10.0 7.3" 241.1, dT = -19sec																																	
1170 is a close double. Observations are highly desired																																	
26	Mar	28	4	25	58.5	D	1304	pA0	6.8			75+	120	52	270	23S	173	100	159	+4.1	-3.1	-0.4	-3.5	.287	-49.5		8	41	15.3	20	28	37	372.5	798.5
1304 is double: AB 7.10 8.08 0.29" 70.6, dT = -0.22sec																																	
1304 is a close double. Observations are highly desired																																	
26	Mar	30	0	50	26.6	d	1515	kF8	7.8	7.5		91+	144	53	108	88N	109	170	90	+5.5	-0.5	+1.9	-0.2	.373	16.0		10	21	52.9	10	41	59	378.2	712.6
26	Apr	4	3	47	40.1	r	2045	cK0	6.4			95-	155	27	131	48N	341	27	323	+3.2	+6.2	+0.0	-1.8	.330	145.2		14	17	3.8	-18	35	9	397.2	774.5
2045 is double: AB 6.40 10.51 0.70" 83.1, dT = +0.43sec																																	
2045 is a close double. Observations are highly desired																																	
26	Apr	4	9	57	55.6	r	158538	wK1	7.3	6.8		95-	153	26	228	75N	315	269	297	+1.8	+6.8	+1.8	-2.2	.322	157.4		14	24	0.4	-19	48	3	397.9	673.9
158538 is double: AB 7.4 11.6 40" 286.2, dT = -108sec																																	
26	Apr	5	9	58	35.6	R	2174	pB8	6.5	6.5		90-	142	30	216	51S	254	218	239	+0.9	+7.3	+2.4	-0.2	.265	-146.3		15	13	17.4	-24	0	30	399.8	617.9
2174 is triple: ** 7.1 7.1 0.030" 0.0 : AB 6.4 12.5 8.2" 45.0, dT = +27sec																																	
2174 has been reported as non-instantaneous (OCc1471). Observations are highly desired																																	
26	Apr	6	4	0	44.2	d	2287	SB1	2.9	3.0v		84-	133	8	124	-85N	101	157	90	+1.1	+7.1	+0.6	+0.6	.427	14.1		15	58	51.1	-26	6	51	403.3	862.0
R2287 = pi Scorpii																																	
2287 is triple: Aa,Ab 5.1 13.4 2.0" 244.0, dT = -4sec : AB 2.9 11.9 50" 128.1, dT = +105sec																																	
2287 is a close double. Observations are highly desired																																	
2287 = pi Sco, 2.88 to 2.91, V, Type ELL, Period 1.570103 days, Phase 64%																																	
26	Apr	6	5	10	10.3	R	2287	SB1	2.9	3.0v		84-	133	20	134	66N	311	357	300	+0.9	+7.2	+0.6	-0.5	.374	165.7		15	58	51.1	-26	6	51	402.1	753.3
R2287 = pi Scorpii																																	
2287 is triple: Aa,Ab 5.1 13.4 2.0" 244.0, dT = -2.1sec : AB 2.9 11.9 50" 128.1, dT = +135sec																																	

Occultation prediction for Fox Observatory Broward
E. Longitude - 80 21 35.6, Latitude 26 7 45.6, Alt. 3m; Telescope dia 15cm; dMag 0.0

y	m	day d	h	m	s	P	Star No	Sp D	Mag v	Mag r	V ill	% Elon Alt	Sun Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	dur sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
							2287 is a close double. Observations are highly desired																										
							2287 = pi Sco, 2.88 to 2.91, V, Type ELL, Period 1.570103 days, Phase 64%																								
26	Apr	6	8	41	25.6	r	2297kF7	7.0	6.7	83-	132	37	184	83S	279	275	268	+0.1	+7.5	+3.0	-0.4	.286	-170.5		16	3	16.1	-26	43	2	400.6	564.2
26	Apr	6	10	2	20.2	r	2300wK0	7.6	7.1	83-	131	32	205	53S	249	224	239	-0.2	+7.5	+2.7	+0.2	.253	-148.0		16	5	1.4	-26	56	52	401.1	579.3
							2300 is double: AB 7.7 13.7 13.4" 351.6, dT = +11sec																								
26	Apr	9	9	59	34.7	r	2727kA*	7.4	7.4v	57-	98	34	164	38S	214	230	218	-3.6	+6.4	+2.8	+2.7	.194	-131.8		18	47	37.1	-28	16	47	398.9	564.2
							2727 = HIP 92215, 7.45 to 7.48, V, Type ACV, Period 1.93789 days, Phase 95%																								
26	Apr	11	10	32	3.2	r	189425WF7	7.5	7.2	38-	76	-7	33	145	48N	296	331	310	-5.6	+4.4	+2.7	-0.5	.218	131.3		20	33	30.9	-22	13	55	391.5	626.6
							189425 is double: AB 7.5 11.6 10.3" 21.3, dT = -4sec																								
26	Apr	14	10	33	6.9	R	3383 M2	6.2	5.4s	12-	40	-7	19	107	34S	191	251	213	-6.2	+0.0	+0.5	+3.0	.317	-131.9		23	2	32.6	- 6	34	26	376.3	866.0
							R3383 = 82 Aquarii																								
							3383 = NSV 25999, 6.24 to 6.29, Hp																								
26	Apr	19	14	29	4.7	d	539SB6	4.3	4.4s	7+	30	47	26	74	71S	88	160	101	+0.6	-6.1	+0.5	+0.9	.541	-22.3		3	45	12.5	24	28	2	358.9	1018.1
							R539 = Taygeta = 19 Tauri																								
							539 is multiple: Aa,Ab 4.6 6.1 : AB 0.018" 273.2, dT = -0.03sec : AC 4.3 14.0 53" 53.4, dT = +80sec : AB 4.3 11.0 72" 328.8, dT = -66sec																								
							539 is a close double. Observations are highly desired																								
							539 = NSV 1264, 4.30, range 0.00, 1Kp, Type SPB, Period 1.5664 days																								
26	Apr	19	14	53	37.3	D	541SB8	3.9	3.9s	7+	31	52	31	76	27S	133	206	145	+0.6	-6.1	+2.5	-1.5	.217	-67.3		3	45	49.6	24	22	4	358.4	977.8
							R541 = Maia = 20 Tauri																								
							541 is quadruple: Aa,Ab 4.4 5.4 : AB 3.8 13.7 113" 72.6, dT = +261sec : AB 3.8 13.7 113" 72.7, dT = +262sec																								
							541 = NSV 1279, 3.87, range 0.00, 4Kp, Type ACV, Period 10.288 days																								
26	Apr	19	15	2	26	Gr	541SB8	3.9	3.9s	7+	31	55	34	** GRAZE: CA 4.6S; Dist.158km in az. 141deg. [Lat = 24.30+0.73(E.Long+80.36)]																				
26	Apr	19	15	16	36.2	r	541SB8	3.9	3.9s	7+	31	57	36	78	-18S	177	252	190	+0.6	-6.1	-1.8	+4.6	.209	-112.7		3	45	49.6	24	22	4	358.0	940.4
							R541 = Maia = 20 Tauri																								
							541 is quadruple: Aa,Ab 4.4 5.4 : AB 3.8 13.7 113" 72.6, dT = +139sec : AB 3.8 13.7 113" 72.7, dT = +138sec																								
							541 = NSV 1279, 3.87, range 0.00, 4Kp, Type ACV, Period 10.288 days																								
26	Apr	20	1	26	52.9	d	76460 A0	8.0	7.9	9+	35	13	293	52S	110	43	121	-0.3	-6.4	-0.2	-1.3	.556	-21.9		4	6	41.4	25	43	20	360.6	1047.5
26	Apr	20	2	8	25.6	D	76472cG8	7.2	6.5	9+	35	5	296	82S	80	17	91	-0.2	-6.3	-0.1	-0.5	.631	8.8		4	8	39.0	25	52	40	361.6	1120.2
26	Apr	21	0	16	50.9	D	771SA5	6.1	5.9e	17+	48	-7	41	286	54N	45	326	50	+1.5	-6.4	+2.1	+1.4	.304	51.0		5	9	45.1	28	1	50	359.6	842.3
							771 is triple: Aa,Ab 6.0 0.20" 351.0, dT = +0.39sec : A,BC 6.0 9.1 11.2" 29.1, dT = +36sec																								
							771 is a close double. Observations are highly desired																								
							771 = V1156 Tau, 6. to 6.1, Hp, Type E:, Period 1.40266 days, Phase 44%																								
26	Apr	21	0	37	54.3	D	773wF8	7.0	6.7	17+	48	-12	37	286	11S	160	83	165	+1.5	-6.3	-0.9	-4.7	.221	-63.8		5	10	3.9	27	33	23	360.0	874.8
							773 is double: AB 7.0 9.3 315" 353.1, dT = -1385sec																								
26	Apr	21	1	26	38.9	d	77030 K0	8.6	7.9	17+	49	27	289	45S	126	53	131	+1.5	-6.2	+0.0	-1.9	.477	-29.0		5	12	34.1	27	36	15	361.0	954.3
26	Apr	22	1	17	20	m	78191 A0	7.7	7.7	27+	62	42	285	17N	16	297	15	+3.1	-5.7	+9.9	+9.9	.000	90.0		6	17	59.9	28	0	24	362.6	854.9
26	Apr	22	1	59	50.3	d	78242 K0	8.8	8.4	27+	63	33	287	88S	92	16	91	+3.0	-5.6	+0.8	-0.9	.506	14.3		6	20	26.0	27	37	36	363.4	920.3
26	Apr	22	2	6	11.4	d	78234 A0	8.2	8.2	27+	63	32	287	31S	149	74	148	+3.0	-5.6	-0.4	-2.6	.386	-43.0		6	20	4.5	27	23	6	363.6	931.1
26	Apr	22	3	38	22.6	d	78309dA0	7.4	7.4	28+	64	13	294	12S	168	101	167	+3.0	-5.3	-1.5	-3.3	.275	-63.3		6	23	30.2	27	7	5	365.7	1087.2
							78309 is double: AB 7.4 1.3" 304.0, dT = -3sec																								
							78309 is a close double. Observations are highly desired																								
26	Apr	23	0	31	7.4	d	79319 K2	7.9	7.3	38+	76	-10	65	276	87S	100	16	93	+4.5	-4.8	+2.0	-1.0	.399	14.0		7	21	39.7	25	51	44	364.7	727.9
26	Apr	24	0	51	57.6	d	80119 G5	8.1	7.7	49+	89	72	261	8S	185	112	173	+5.4	-3.5	-1.1	-5.8	.175	-63.6		8	21	4.9	22	1	54	368.6	703.5
26	Apr	24	4	39	31.1	d	1269kG5	6.9	6.3	50+	90	23	283	34S	160	90	147	+5.0	-3.0	-0.5	-2.4	.412	-41.5		8	28	7.2	21	8	55	372.9	995.8
26	Apr	25	3	10	17.7	d	98511kF2	7.8	7.6	61+	102	52	265	43N	61	351	44	+5.6	-1.8	+4.0	+1.3	.174	66.4		9	20	38.2	17	7	38	374.4	790.4
26	Apr	25	3	52	49.0	D	1387cA5	7.0	6.8	61+	103	42	269	56S	142	73	126	+5.5	-1.7	+0.4	-2.2	.443	-16.8		9	21	25.5	16	35	54	375.3	841.6
							1387 is double: ** 7.6 7.6 0.10" 90.0, dT = +0.14sec																								

Occultation prediction for Fox Observatory Broward
E. Longitude - 80 21 35.6, Latitude 26 7 45.6, Alt. 3m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon Alt	Sun Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	dur sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
							1387 has been reported as non-instantaneous (OCc1402). Observations are highly desired																												
26	Apr	26	0	25	8.1	d	98966SG		8.2	7.7		70+	114	-8	72	138	79S	122	160	103	+6.4	-0.6	+2.2	-1.2	.361	7.7		10	8	12.8	11	59	49	377.2	665.6
							98966 is quadruple: BC 8.2 13.2 0.9" 82.7, dT = +1.8sec : BD 8.2 12.1 108" 210.0, dT = +10sec : BA 8.2 1.4 176" 128.0, dT = +485sec																												
							98966 is a close double. Observations are highly desired																												
26	Apr	26	0	33	14.7	D	1487SB7		1.4	1.4s		70+	114	-10	73	143	79S	121	155	102	+6.4	-0.6	+2.2	-1.2	.360	8.4		10	8	22.3	11	58	2	377.2	665.3
							R1487 = Regulus = alpha Leonis																												
							1487 is triple: AB 1.4 8.2 176" 308.0, dT = -486sec : AD 1.4 12.1 193" 274.0, dT = -475sec																												
							1487 = NSV 4750, 1.33 to 1.40, V																												
26	Apr	26	1	58	12.8	R	1487SB7		1.4	1.4s		71+	115		73	218	-60N	321	287	302	+6.1	-0.4	+1.4	-2.2	.370	171.0		10	8	22.3	11	58	2	377.4	686.6
							R1487 = Regulus = alpha Leonis																												
							1487 is triple: AB 1.4 8.2 176" 308.0, dT = -463sec : AD 1.4 12.1 193" 274.0, dT = -355sec																												
							1487 = NSV 4750, 1.33 to 1.40, V																												
26	Apr	27	0	9	5.4	D	1589pM5		5.9	5.3v		80+	126	-5	57	122	82N	104	154	83	+6.5	+0.9	+2.3	-0.1	.335	26.2		10	56	1.5	6	11	7	381.9	691.8
							R1589 = 56 Leonis (VY)																												
							1589 is double: 6.2 7.1																												
							1589 = VY Leo, 5.69 to 6.03, V, Type SR, Period 46.34 days, Phase 16%																												
26	Apr	28	3	1	23.9	d	138388	K0	7.3	6.8		88+	139		63	190	58N	79	70	57	+5.6	+2.7	+4.4	+0.7	.196	56.6		11	45	1.4	- 0	31	4	385.8	666.4
26	Apr	30	3	13	28.9	d	157822kK	2	7.3	6.6		98+	162		49	160	79S	110	129	89	+4.5	+5.2	+2.4	-0.5	.321	22.6		13	15	54.0	-12	21	0	393.1	662.3
26	May	1	3	41	14.8	d	2011 K2		6.3	5.6		100+	172		43	157	82N	64	85	45	+3.6	+6.1	+5.4	+2.9	.143	65.3	.01	14	3	4.1	-17	22	1	396.3	657.9
							Distance of 2011 to Terminator = 8.1"; to 3km sunlit peak = 0.9"																												
26	May	1	3	57	54	Gr	2011 K2		6.3	5.6		100+	172		44	** GRAZE: CA 57.8N; Dist.178km in az. 47deg. [Lat = 28.47-0.96(E.Long+80.36)]																				
							Distance of 2011 to Terminator = 6.2"; to 3km sunlit peak = 0.0"																												
26	May	3	5	54	7.8	r	183731pF0		7.3	7.1		98-	162		38	172	81N	310	318	297	+1.2	+7.3	+2.1	-1.2	.293	165.2		15	43	11.6	-25	24	56	400.7	588.2
							183731 is double: AB 7.3 9.3 5.9" 291.8, dT = -19sec																												
							183731 is a close double. Observations are highly desired																												
26	May	3	9	39	17.8	r	2256PA1		7.0	6.9		97-	161		20	226	36S	245	200	233	+0.3	+7.3	+1.3	-0.1	.296	-148.6		15	47	56.5	-25	59	13	402.7	677.0
							2256 is double: ** 7.7 7.7 0.10" 90.0, dT = +0.31sec																												
							2256 has been reported as non-instantaneous (OCc1482). Observations are highly desired																												
							Distance of 2256 to Terminator = 18.6"; to 3km sunlit peak = 7.4"																												
26	May	4	10	9	41.1	r	2397 K1		6.5	5.9		93-	150	-8	22	221	67N	311	269	303	-1.0	+7.3	+2.6	-2.5	.250	137.7		16	41	37.6	-27	48	35	403.4	660.9
26	May	6	4	44	31.8	r	2660 A3		6.2	6.0		82-	130		10	129	61S	243	296	245	-2.1	+6.4	+1.6	+1.9	.326	-146.3		18	22	0.1	-28	25	48	404.0	769.0
26	May	9	8	30	8	m	3078cA5		4.9			55-	96		29	134	-7S	156	200	172	-6.1	+3.4	+9.9	+9.9	.000	-90.0		21	4	24.3	-19	51	18	392.9	664.4
							R3078 = Chow = eta Capricorni																												
							3078 is double: AB 5.02 7.39 0.23" 30.0																												
							3078 is a close double. Observations are highly desired																												
26	May	12	8	56	48.6	r	3454 K0		7.6	7.1		25-	60		18	102	47N	291	352	312	-7.0	-1.0	+1.0	+0.2	.298	127.7		23	27	14.7	- 2	38	13	376.8	890.5
26	May	12	9	22	35.9	r	146716pG0		8.4	8.2		25-	59		24	105	30N	307	7	329	-7.1	-1.1	+2.1	-1.5	.157	109.6		23	28	5.7	- 2	27	33	376.2	856.7
							146716 is triple: AB 9.2 9.2 0.20" 79.6, dT = +0.9sec : AC 8.5 8.1 57" 45.9, dT = +56sec																												
							146716 is a close double. Observations are highly desired																												
26	May	12	9	23	33.9	r	146717PF2		8.1	7.9		25-	59		24	106	28N	309	9	331	-7.1	-1.1	+2.2	-1.9	.142	107.6		23	28	8.5	- 2	26	53	376.1	855.6
							146717 is double: AB 8.1 8.5 57" 225.9, dT = -48sec																												
26	May	12	9	40	56.5	r	146720 K5		8.1	7.4		25-	59		28	108	88S	245	304	267	-7.1	-1.1	+1.0	+1.6	.451	170.9		23	28	27.0	- 2	39	13	375.7	833.2
26	May	13	9	53	44.2	R	109127 F0		7.2	7.0		16-	46	-10	24	97	57S	215	278	237	-6.5	-2.6	+0.4	+2.1	.478	-159.0		0	18	7.9	3	47	48	369.9	918.4
26	May	19	0	12	56.0	d	77619 F2		7.1	6.9		7+	30	-3	27	289	21S	151	77	152	+1.8	-5.7	-0.6	-2.7	.375	-48.6		5	50	39.7	27	30	18	357.1	981.2
26	May	19	0	18	12.3	D	885wG7		5.6	5.1		7+	30	-4	26	290	43N	34	321	36	+1.8	-5.7	+2.4	+2.3	.215	67.9		5	50	58.1	27	58	4	357.2	990.5
							885 is double: AB 5.7 12.5 10.8" 233.1, dT = -48sec																												
26	May	19	0	27	30	Gr	885wG7		5.6	5.1		7+	31	-5	24	** GRAZE: CA 20.1N; Dist.146km in az. 34deg. [Lat = 27.72-0.61(E.Long+80.36)]																				
26	May	19	0	39	52.4	R	885wG7		5.6	5.1		7+	31	-9	22	292	-2N	350	279	351	+1.8	-5.6	-1.8	-4.3	.223	112.1		5	50	58.1	27	58	4	357.7	1029.0

Occultation prediction for Fox Observatory Broward
E. Longitude - 80 21 35.6, Latitude 26 7 45.6, Alt. 3m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	% V ill	Elon Sun Alt	Moon Alt	Az	CA o	PA o	VA o	AA o	Libration L	B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
							885 is double: AB 5.7 12.5 10.8" 233.1, dT = +22sec																										
26	May	19	0	56	34.8	d	77671	F5	9.2	9.0	7+ 31	-12 18	292	75S	97	28	99	+1.8	-5.6	+0.1	-0.9	.606	4.5			5	53	10.4	27	37	27	358.01055.1	
26	May	19	1	0	3.0	D	890cA0	4.6	4.6s	7+ 31		18	293	74S	98	29	100	+1.8	-5.6	+0.1	-1.0	.610	3.5			5	53	19.6	27	36	44	358.11061.1	
		R890 = 136 Tauri																														
		890 is double: ** 4.8 6.3 0.050" 270.0, dT = -0.08sec																														
		890 has been reported as non-instantaneous (OCc 206). Observations are highly desired																														
		890 = NSV 2696, 4.50 to 4.61, V																														
26	May	19	1	9	28.3	d	77686	F5	9.2	8.7	7+ 31	16	293	60S	112	44	113	+1.8	-5.6	-0.1	-1.2	.610	-10.2			5	53	40.6	27	31	45	358.31077.3	
26	May	19	1	46	35.4	D	77711	F5	7.9	7.6	7+ 31	8	296	32S	140	75	141	+1.8	-5.5	-0.7	-1.8	.510	-38.9			5	55	3.7	27	20	32	359.21141.3	
26	May	19	1	56	5.3	D	77724	B1	7.0	7.0	7+ 31	7	298	57N	49	345	51	+1.9	-5.5	+0.5	+0.4	.410	51.8			5	55	40.3	27	42	56	359.41157.7	
26	May	20	0	45	26.2	D	1061SF8	6.2	5.9s	14+ 45	-10 33	285	14S	169	94	164	+3.6	-4.7	-1.0	-3.5	.287	-57.9			6	58	47.4	26	4	52	359.8	942.5
		R1061 = 39 Geminorum																														
		1061 is triple: Aa,Ab 6.1 0.50" 158.0, dT = +1.7sec : AB 6.1 12.1 35" 69.0, dT = -20sec																														
		1061 is a close double. Observations are highly desired																														
		1061 = NSV 17256, 6.1, range 0.02, V, Type VAR:																														
26	May	20	1	23	23.8	d	78973	A2	8.8	8.6	15+ 45	26	288	83S	99	27	94	+3.6	-4.6	+0.4	-1.0	.563	11.0			7	1	13.7	26	11	6	360.71003.4	
26	May	20	1	27	56.9	D	78979	G5	8.1	7.6	15+ 45	25	288	83N	86	14	81	+3.6	-4.6	+0.6	-0.7	.526	24.5			7	1	25.4	26	14	7	360.81011.0	
26	May	20	2	6	11.1	d	78998	G5	8.0	7.7e	15+ 45	17	291	32S	151	82	146	+3.6	-4.5	-0.7	-2.2	.458	-41.6			7	2	23.3	25	50	46	361.71075.0	
		78998 = V0369 Gem, 7.95 to 8.12, V, Type EB, Period 0.423061 days, Phase 26%																														
26	May	21	2	28	46.7	D	1221cM3	6.0	5.1v	24+ 59		24	285	69S	122	51	111	+5.1	-3.3	+0.1	-1.5	.567	-5.2			8	6	18.4	22	38	8	365.61010.4	
		R1221 = 9 Cancri = BL Cnc.																														
		1221 is double: AB 6.0 10.1 0.40"																														
		1221 is a close double. Observations are highly desired																														
		1221 = BL Cnc, 5.97 to 6.04, V, Type SR																														
26	May	21	2	41	34.4	d	79951	G5	7.8	7.2	24+ 59	21	286	69N	79	10	68	+5.1	-3.2	+0.6	-0.6	.465	36.9			8	6	56.2	22	46	31	365.91031.1	
26	May	21	2	47	53.7	D	1222cG5	7.2	6.8	24+ 59		20	286	38S	152	83	141	+5.1	-3.2	-0.5	-2.1	.471	-36.5			8	6	34.4	22	27	24	366.11041.2	
		1222 is double: ** 7.2 0.013" 234.6, dT = 0.00sec																														
		1222 has been reported as non-instantaneous (OCc1381). Observations are highly desired																														
26	May	23	3	27	49.4	D	1466cB9	5.3	5.3	46+ 85		30	270	81N	101	34	83	+6.5	-0.1	+0.8	-1.3	.454	23.5			9	58	13.4	12	26	41	376.1	902.8
		R1466 = nu Leonis																														
		1466 is double: ** 6.0 6.0 0.050"																														
		1466 has been reported as non-instantaneous (OCc1407). Observations are highly desired																														
26	May	24	2	11	32.8	d	118476PF8	8.2	7.9	56+ 97		54	244	62N	84	29	63	+6.8	+1.2	+2.8	-0.5	.270	47.8			10	45	18.9	6	57	39	379.2	739.5
		118476 is double: ** 8.9 8.9 0.10" 90.0, dT = +0.37sec																														
		118476 has been reported as non-instantaneous (OCc1419). Observations are highly desired																														
26	May	24	3	20	46.6	D	1567kK1	6.4	5.8	57+ 98		39	256	41S	162	100	141	+6.7	+1.4	+0.3	-2.7	.365	-33.3			10	46	5.7	6	22	23	380.6	807.2
		R1567 = 37 (Sextantis)/Leonis																														
26	May	24	3	49	32.3	d	1573pA2	7.1	7.0	57+ 98		33	260	78S	124	61	103	+6.6	+1.4	+0.8	-1.8	.454	2.9			10	47	19.2	6	20	46	381.3	840.8
		R1573 = 38 (Sextantis)/Leonis																														
26	May	28	0	4	40.2	d	1970SA0	6.2	6.2	90+ 143	0	33	132	61S	134	178	114	+5.3	+5.8	+0.9	-0.8	.385	-5.5			13	45	35.1	-15	46	3	397.1	745.7
		R1970 = 85 Virginis																														
		1970 is multiple: Aa,Ab 6.5 8.2 : Aa,Ac 6.5 8.4 0.10" : AB 6.2 12.8 44" 312.7, dT = -114sec : AB 6.2 12.8 44" 312.5, dT = -115sec																														
		1970 is a close double. Observations are highly desired																														
26	May	29	1	16	49.4	D	2084	A3	6.5	6.4	95+ 155	33	142	85N	93	129	75	+4.1	+6.6	+2.3	+0.7	.304	33.2			14	34	50.7	-20	26	22	399.6	704.9
26	Jun	2	4	38	47.7	r	186286	B7	7.1	7.1	97- 159	28	148	66N	306	339	307	-1.2	+6.5	+1.7	-0.6	.269	148.3			18	6	45.8	-28	21	50	403.1	617.9
26	Jun	2	5	44	11.7	R	2617cK0	4.6	4.1	97- 159		33	163	86N	286	303	286	-1.5	+6.5	+2.7	-0.2	.280	163.9			18	8	5.0	-28	27	26	402.5	568.0
		2617 is double: AB 5.1 5.9 0.26" 12.0, dT = -0.06sec																														

Occultation prediction for Fox Observatory Broward
E. Longitude - 80 21 35.6, Latitude 26 7 45.6, Alt. 3m; Telescope dia 15cm; dMag 0.0

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      day  Time     P   Star  Sp  Mag  Mag    % Elon Sun  Moon   CA   PA  VA  AA Libration   A   B   RV    Cct durn  R.A. (J2000)  Dec   Mdist   SV
 y   m  d  h  m   s       No  D    v    r V  ill     Alt Alt Az   o    o   o   o   L    B   m/o m/o  "/s     o  sec  h  m   s    o  m  s   Mm   m/s
      2617 is a close double. Observations are highly desired
26 Jun  6  6 29 47.6 r    3157cF6  7.3        71- 115     24 124  50N 292 343 310 -6.0 +2.2 +1.7+0.1 .253  132.5     21 33 40.2 -16 12  4 393.7 716.0
      3157 is double: AB 7.33 10.00 0.90"   2.6, dT = -1.2sec
      3157 is a close double. Observations are highly desired
26 Jun  7  7 42 26.6 r    3282kK0  7.8  7.0   61- 103     33 124  89S 248 297 268 -6.9 +0.7 +1.7+1.6 .372  168.9     22 22 11.6 -10 50 53 388.0 713.8
26 Jun 10  7 35  0.2 r  109413 K2  8.0  7.3   30-  66     13  88  78N 260 325 282 -6.8 -3.5 +0.3+1.2 .516  158.4      0 43 53.0   7 33 19 373.01004.1
26 Jun 10  8 34 34.8 r  109437kG5  7.8  7.3   29-  65     26  94  78N 260 325 282 -6.8 -3.6 +0.8+1.2 .463  155.0      0 45 40.4   7 50 42 371.4 919.4
26 Jun 11  8 51 20.3 r   92548 A3  8.1  7.9   19-  52     21  84  76S 238 305 258 -5.8 -4.7 +0.2+1.5 .563 -179.8      1 38 27.6  13 55 42 366.01000.4
26 Jun 11  9 20 45.8 R     244 K0  6.7  6.2   19-  52     28  87  58N 284 352 304 -5.8 -4.8 +1.2+0.5 .366  132.6      1 39 15.4  14 17  8 365.3 958.3
   R244 = 104 Piscium
26 Jun 13 12 16  5.5 r     539SB6  4.3  4.4s   4-  23  22 44  80  36S 215 292 227 -2.3 -6.2 +0.2+2.3 .448 -150.0      3 45 12.5  24 28  2 354.8 890.2
   R539 = Taygeta = 19 Tauri
      539 is multiple: Aa,Ab 4.6 6.1           : AB          0.019"  73.4, dT = +0.03sec : AC 4.3 14.0 53"  53.4, dT = +112sec : AB 4.3 11.0 72"
328.8, dT = +66sec
      539 is a close double. Observations are highly desired
      539 = NSV 1264, 4.30, range 0.00, 1Kp, Type SPB, Period 1.5664 days
26 Jun 17  1  9 25.5 D    1155 F0  6.4  6.2    5+  27 -11 13 291  58N  62 355  54 +3.4 -3.6 +0.5+0.0 .413   50.1      7 38 14.4  24 21 38 359.91123.0
26 Jun 17  1 28 47.8 D    1157 A2  6.2  6.2    5+  27      9 293  71N  75  10  67 +3.4 -3.5 +0.1-0.4 .533   36.2      7 39 12.0  24 13 21 360.41154.0
26 Jun 17  1 31 25.9 d   79578cA0  8.8  8.8    5+  27      8 293  47N  52 347  43 +3.4 -3.5 +0.6+0.5 .332   59.9      7 39  5.6  24 18 51 360.41158.8
     79578 is double: ** 9.6 9.6 0.10"  92.0, dT = +0.23sec
     79578 has been reported as non-instantaneous (OCc 762). Observations are highly desired
26 Jun 17 20  5 11.3 D Venus      -4.0 -4.0   11+  38  53 85 170  38S 154 163 141 +5.5 -2.9 +1.4-3.2 .299  -32.0      8 30 20.8  21  2 26 358.3 613.7
   Venus contacts: Bright limb 20  4 47; Terminator 20  5 32; Dark limb 20  5 36: diam = 14.7"; %illum = 74.0%; PA bright limb = 281.5
26 Jun 17 21 24 18.7 R Venus      -4.0 -4.0   11+  39  36 72 258 -81S 275 203 260 +5.3 -2.7 +2.8-0.6 .323 -148.5      8 30 20.8  21  2 26 358.9 659.8
   Venus contacts: Bright limb 21 23 56; Terminator 21 24 30; Dark limb 21 24 42: diam = 14.7"; %illum = 74.0%; PA bright limb = 281.5
26 Jun 18  1  9 10.8 D   80327pA3  7.8  7.6   12+  40 -11 23 282  68N  81  12  68 +5.0 -2.2 +0.7-0.6 .457   37.8      8 39 42.8  20  5 10 363.21017.7
     80327 is double: AB 7.9 9.6 0.64" 136.3, dT = +0.8sec
     80327 is a close double. Observations are highly desired
26 Jun 18  1 16 23.8 d   80331pF0  9.0  8.8   12+  40     22 282  73N  86  17  72 +5.0 -2.1 +0.6-0.8 .489   33.0      8 39 59.1  20  1 53 363.41028.8
     80331 is multiple: AB                    : Ca,Cb 9.2      0.30"  22.0, dT = +0.27sec : CA 9.0 6.5 134" 129.0, dT = +200sec : CS 9.0 10.1 138"
341.1, dT = -71sec
     80331 is a close double. Observations are highly desired
26 Jun 18  1 19 41.3 D    1295pK0  6.4  5.9s  12+  40     21 283  74N  87  19  74 +5.0 -2.1 +0.5-0.8 .502   31.2      8 40  6.4  20  0 28 363.51033.9
   R1295 = 39 Cancri
      1295 is multiple: AC 6.5 9.0 134" 309.0, dT = -200sec : AD 6.5 8.8 135" 111.0, dT = +247sec : AB 6.5 6.6 152" 149.9, dT = +140sec : AS 6.5 10.1
262" 325.7, dT = -275sec
      1295 = NSV 4179, 6.39, range 0.04, V
26 Jun 18  1 20 33.0 D    1292kF0  6.7  6.5v  12+  40     21 282  52S 141  72 128 +5.0 -2.1 -0.2-1.8 .543  -22.5      8 39 42.7  19 46 42 363.51035.1
   R1292 = 38 Cancri (BT)
      1292 = BT Cnc, 6.66, range 0.06, V, Type DSCTC, Period 0.10228 days
26 Jun 18  1 22  0.1 D    1296pA1  6.6  6.6   12+  40     21 283  80N  93  24  79 +5.0 -2.1 +0.4-0.9 .530   25.7      8 40 11.5  19 58 16 363.51037.3
   R1296 = 40 Cancri
      1296 is quadruple: Ba,Bb 6.6      0.40" 128.0, dT = +0.6sec : BR 6.6 11.6 140" 146.9, dT = +156sec : BA 6.6 6.5 152" 329.9, dT = -156sec
      1296 is a close double. Observations are highly desired
26 Jun 18  1 23 47.3 d   80338pF5  8.8  8.6S  12+  41     20 283  73N  86  18  73 +5.0 -2.1 +0.5-0.8 .499   32.2      8 40 15.3  19 59 39 363.61040.3
     80338 is double: DA 8.8 6.5 135" 291.0, dT = -246sec
     80338 = NSV 17951, 8.81, , Type VAR:
26 Jun 18  1 24 18.9 d   80330pA5  8.9  8.7   12+  41     20 283  35N  48 339  34 +5.0 -2.1 +1.9+1.5 .195   70.8      8 39 58.4  20  9 30 363.61042.1
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Occultation prediction for Fox Observatory Broward
E. Longitude - 80 21 35.6, Latitude 26 7 45.6, Alt. 3m; Telescope dia 15cm; dMag 0.0

y	m	day d	h	Time m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon	Sun Alt	Moon Alt	Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	dur sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
							80330 is double: AB 8.9 9.7 91" 153.0, dT = -123sec																														
26	Jun	18	1	30	6.4	D	80340pA0	7.9	7.8S	12+	41		19	283	79S	114	46	101	+5.0	-2.1	+0.1	-1.3	.594		4.1			8	40	23.5	19	50	6	363.7	1049.8
							80340 is double: ** 8.8 8.8 0.050" 111.0, dT = +0.08sec																														
							80340 has been reported as non-instantaneous (OCc1074). Observations are highly desired																														
							80340 = NSV 4183, 8.01,																														
26	Jun	18	1	30	30.3	d	97999pF0	7.4	7.3S	12+	41		18	283	1S	192	124	178	+5.0	-2.1	-2.1	-4.9	.165	-73.9				8	39	6.1	19	40	37	363.8	1051.8
							97999 is triple: AB 7.5 9.6 57" 84.0, dT = -107sec : AC 7.5 9.4 179" 345.0, dT = -965sec																														
							97999 = NSV 4163, 7.45,																														
							Distance of 97999 to Terminator = 19.4"; to 3km sunlit peak = 0.0"																														
26	Jun	18	1	38	38.8	D	98020pA0	7.6	7.5e	12+	41		17	284	50S	143	76	130	+5.0	-2.1	-0.3	-1.9	.543	-25.6				8	40	20.7	19	41	12	364.0	1063.4
							98020 is quadruple: ** 9.1 9.1 0.050" : CA 7.6 6.5 64" 163.1, dT = +111sec : CD 7.6 9.2 76" 91.1, dT = +85sec																														
							98020 has been reported as non-instantaneous (OCc1392). Observations are highly desired																														
							98020 = HD 73709, 7.69 to 7.76, V, Type EA, Period 7.22015 days, Phase 75%																														
26	Jun	18	1	40	33.5	D	1298pK0	6.4	5.9E	12+	41		17	284	47S	146	79	133	+5.0	-2.1	-0.3	-1.9	.530	-28.6				8	40	22.1	19	40	12	364.0	1066.4
							1298 is multiple: AE 6.5 12.5 15.7" 154.8, dT = +29sec : AB 6.4 10.4 20.8" 55.1, dT = -0.9sec : AC 6.5 7.6 64" 343.1, dT = -116sec : AD 6.5 9.2 84" 44.0, dT = -34sec																														
							1298 = HD 73710, 6.42, , Type EA, Period 7.22030 days, Phase 42%																														
26	Jun	18	1	42	42.6	D	1302pA9	6.8	6.7	12+	41		16	284	65S	128	60	115	+5.0	-2.1	-0.1	-1.5	.596	-10.3				8	40	43.2	19	43	10	364.1	1069.5
							R1302 = 42 Cancri																														
							1302 is double: ** 7.5 7.5 0.050"																														
							1302 has been reported as non-instantaneous (OCc1393). Observations are highly desired																														
26	Jun	18	1	42	42.7	d	80351kA2	8.7	8.5	12+	41		16	285	67N	80	13	67	+5.0	-2.1	+0.4	-0.6	.480	37.7				8	40	56.9	19	56	5	364.1	1069.9
26	Jun	18	1	48	27.6	d	80352kF0	9.0	8.8	12+	41		15	285	83N	97	29	83	+5.0	-2.1	+0.2	-1.0	.570	20.9				8	41	10.7	19	49	46	364.2	1078.5
26	Jun	18	1	50	40.0	d	80353kA3	8.3	8.2S	12+	41		15	285	62N	75	8	61	+5.0	-2.1	+0.4	-0.5	.451	42.6				8	41	13.8	19	55	19	364.3	1082.4
							80353 = NSV 17956, 8.33, , Type DSCT:																														
26	Jun	18	1	57	22.2	D	1303kA6	6.8	6.7v	12+	41		13	286	42S	151	84	137	+5.0	-2.0	-0.4	-2.0	.514	-33.7				8	40	56.3	19	34	49	364.5	1092.7
							1303 = EP Cnc, 6.76, range 0.03, V, Type DSCTC																														
26	Jun	18	1	57	40.0	D	1299pA*	6.3	6.2	12+	41		13	286	17S	177	110	163	+5.0	-2.0	-1.0	-3.0	.314	-59.5				8	40	27.0	19	32	41	364.5	1093.8
							R1299 = epsilon Cancri																														
							1299 is double: AB 6.3 7.5 134" 250.1, dT = +122sec																														
26	Jun	18	2	2	25.6	d	98043kK0	8.4	7.9	12+	41		12	286	74S	119	53	106	+5.0	-2.0	-0.1	-1.3	.622	-2.1				8	41	35.1	19	39	45	364.6	1100.3
26	Jun	18	2	7	15.0	D	1305pK0	6.9	6.4	12+	41		11	287	55N	68	2	55	+5.0	-2.0	+0.4	-0.2	.414	48.7				8	41	50.1	19	52	27	364.7	1108.4
							1305 is double: Ea,Eb 7.2 9.1																														
26	Jun	18	2	30	7.5	d	98053kA7	7.9	7.8v	12+	41		6	289	35S	159	94	145	+5.1	-2.0	-0.6	-2.1	.474	-42.8				8	42	6.5	19	24	41	365.3	1143.9
							98053 = BX Cnc, 7.96, range 0.02, V, Type DSCTC, Period 0.04412 days																														
26	Jun	19	1	20	41.5	d	98665w	8.8	8.4	21+	54		31	272	89N	107	39	90	+6.2	-0.5	+0.7	-1.3	.500	16.8				9	36	13.3	14	35	48	368.0	932.1
							98665 is double: AB 8.8 9.1 82" 111.0, dT = +163sec																														
26	Jun	19	1	23	24.2	d	98667	9.0	8.7	21+	54		30	272	87N	106	38	89	+6.2	-0.5	+0.7	-1.3	.499	17.7				9	36	18.5	14	35	18	368.1	935.9
26	Jun	19	1	30	16.5	D	1415WA1	6.3	6.3	21+	54		28	273	41S	157	89	140	+6.2	-0.5	-0.1	-2.4	.439	-33.9				9	35	52.9	14	22	47	368.3	945.9
							R1415 = 7 Leonis																														
							1415 is double: AB 6.3 9.4 41" 90.5, dT = +37sec																														
26	Jun	19	2	16	44.6	D	1420 F2	6.6	6.4	21+	54		18	277	83N	102	35	85	+6.1	-0.4	+0.3	-1.2	.534	19.4				9	38	1.3	14	20	50	369.5	1013.5
							R1420 = 11 Leonis																														
26	Jun	20	0	10	4.0	d	1525 M2	5.6	4.8v	30+	66	0	54	248	25S	176	119	157	+7.0	+0.9	-0.1	-3.3	.295	-46.0	.01	10	25	15.2	8	47	5	371.9	765.4
							R1525 = 44 Leonis (DE)																														
							1525 = DE Leo, 5.6, range 0.07, V, Type SRB:																														
26	Jun	20	1	52	59.8	d	118317 K2	8.2	7.5	31+	67		31	264	37S	165	100	145	+6.8	+1.1	+0.0	-2.7	.378	-38.7		10	27	56.5	8	18	52	374.1	877.9
26	Jun	21	2	28	28.6	D	1635cM0	5.2	4.4	41+	80		31	256	57S	146	86	125	+7.0	+2.7	+0.6	-2.3	.421	-20.1		11	17	17.4	2	0	38	380.5	828.2

Occultation prediction for Fox Observatory Broward
E. Longitude - 80 21 35.6, Latitude 26 7 45.6, Alt. 3m; Telescope dia 15cm; dMag 0.0

y	m	day d	h	Time m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon	Sun Alt	Moon Alt	Az	CA o	PA o	VA o	AA o	Libration L	B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
	R1635 = 75 Leonis																																		
	1635 is double: ** 5.8 6.6 0.044" 0.0																																		
	1635 has been reported as non-instantaneous (OCc 763). Observations are highly desired																																		
26	Jun	21	3	42	20.8	D	1637	K0	5.9	5.4		42+	80	15	264	38S	165	102	144	+6.9	+2.8	+0.1	-2.7	.362	-43.6		11	18	55.0	1	39	1	382.4	926.5
	R1637 = 76 Leonis																																		
26	Jun	23	4	22	58.4	d	1845	SG8	6.5	5.9s		62+	104	18	248	50S	152	94	130	+6.0	+5.4	+0.9	-2.6	.345	-34.2		12	51	22.9	-10	20	18	392.9	793.7
	1845 is triple: AB 6.6 9.7 28.8" 296.3, dT = -68sec : AC 6.6 12.5 142" 211.8, dT = +208sec																																		
	1845 = NSV 5994, 6.49, range 0.07, V																																		
26	Jun	25	1	9	9	m	158499	F2	7.7	7.5		79+	126	-11	44	173	21N	36	43	18	+5.0	+6.8	+9.9	+9.9	.000	90.0		14	20	50.3	-19	19	56	397.4	612.7
26	Jun	25	4	9	5	m	158538	wK1	7.3	6.8		80+	127	31	223	9N	23	342	5	+4.3	+7.0	+9.9	+9.9	.000	90.0		14	24	0.4	-19	48	3	399.0	639.9
	158538 is double: AB 7.4 11.6 40" 286.2																																		
	Distance of 158538 to Terminator = 17.8"; to 3km sunlit peak = 3.3"																																		
26	Jun	25	4	59	32.1	d	158556	WA2	6.8			80+	127	22	232	30N	45	356	27	+4.2	+7.0	+1.4	+1.8	.152	64.7		14	25	27.7	-19	57	57	399.9	690.4
	158556 is double: BA 7.2 6.6 35" 114.8, dT = +77sec																																		
26	Jun	25	5	0	38.5	d	2066	SA1	6.6	6.6		80+	127	22	232	31N	45	356	27	+4.1	+7.0	+1.4	+1.7	.157	63.9		14	25	29.9	-19	58	12	399.9	691.8
	2066 is quadruple: **Aa,Ab 6.8 7.7 0.018" 329.0, dT = +0.03sec : BC 7.16 8.37 1.21" 89.4, dT = +6sec : AB 6.6 7.2 35" 294.8, dT = -77sec																																		
	2066 has been reported as non-instantaneous (OCc 204). Observations are highly desired																																		
26	Jun	26	3	54	32.5	D	2174	pB8	6.5	6.5		87+	138	35	207	57S	132	106	117	+3.3	+7.3	+2.4	-2.0	.280	-22.1		15	13	17.4	-24	0	30	400.8	586.6
	2174 is triple: ** 7.1 7.1 0.030" 0.0 : AB 6.4 12.5 8.2" 45.0, dT = +1.5sec																																		
	2174 has been reported as non-instantaneous (OCc1471). Observations are highly desired																																		
26	Jun	26	23	19	39.6	D	2287	SB1	2.9	3.0v		92+	147	11	15	130	84S	100	150	88	+3.2	+7.1	+1.1	+0.6	.388	16.1		15	58	51.1	-26	6	51	403.9	792.0
	R2287 = pi Scorpii																																		
	2287 is triple: Aa,Ab 5.1 13.4 2.0" 244.0, dT = -4sec : AB 2.9 11.9 50" 128.1, dT = +114sec																																		
	2287 is a close double. Observations are highly desired																																		
	2287 = pi Sco, 2.88 to 2.91, V, Type ELL, Period 1.570103 days, Phase 76%																																		
26	Jun	27	0	35	7.4	R	2287	SB1	2.9	3.0v		92+	148	-4	27	143	-50N	312	349	301	+3.0	+7.2	+1.1	-0.7	.336	163.6		15	58	51.1	-26	6	51	402.7	685.0
	R2287 = pi Scorpii																																		
	2287 is triple: Aa,Ab 5.1 13.4 2.0" 244.0, dT = -2.2sec : AB 2.9 11.9 50" 128.1, dT = +150sec																																		
	2287 is a close double. Observations are highly desired																																		
	2287 = pi Sco, 2.88 to 2.91, V, Type ELL, Period 1.570103 days, Phase 76%																																		
26	Jun	27	2	42	35.3	d	2297	kF7	7.0	6.7		93+	148	37	174	52S	130	136	119	+2.5	+7.4	+2.3	-1.2	.277	-19.6		16	3	16.1	-26	43	2	401.9	573.5
26	Jul	1	7	20	47	m	2879	kA3	6.7	6.6		98-	165	38	195	32N	333	318	342	-3.3	+4.8	+9.9	+9.9	.000	90.0		19	42	22.6	-24	51	34	399.3	609.4
	Distance of 2879 to Terminator = 8.5"; to 3km sunlit peak = 1.0"																																		
26	Jul	3	3	58	34.5	R	3113	cB5	5.4	5.5V		91-	144	18	121	42S	207	261	223	-4.5	+2.4	+1.4	+2.9	.289	-138.0		21	17	57.3	-17	59	7	396.6	748.8
	R3113 = 30 Capricorni																																		
	3113 is double: ** 6.1 6.1 0.10" 87.0, dT = +0.17sec																																		
	3113 has been reported as non-instantaneous (OCc1602). Observations are highly desired																																		
	3113 = HD 202671, 5.40, , Type ACV, Period 1.9917 days, Phase 99%																																		
26	Jul	4	9	3	53.0	R	3253	kB5	5.4	5.5V		83-	131	52	188	51N	288	281	307	-6.3	+0.5	+5.0	-1.7	.168	119.2		22	10	37.5	-11	33	54	389.4	651.4
	R3253 = 38 Aquarii																																		
	3253 = HD 210424, 5.44, , Type ACV, Period 3.9613 days, Phase 44%																																		
26	Jul	6	10	11	55	m	128354	F8	8.0	7.7		65-	107	-5	65	181	21N	315	314	337	-7.3	-2.5	+9.9	+9.9	.000	90.0		23	44	18.2	0	42	44	379.8	674.9
26	Jul	8	8	31	16.9	r	194	cF5	8.2			44-	83	44	98	64S	222	288	243	-6.3	-4.7	+0.7	+2.1	.452	-170.0		1	19	42.8	12	8	45	371.3	827.5
	194 is double: AB 8.67 9.25 0.11" 323.2, dT = +0.04sec																																		
	194 is a close double. Observations are highly desired																																		
26	Jul	8	10	10	58.0	R	197	cK0	7.0	6.5		43-	82	-6	65	118	65S	224	278	245	-6.5	-5.0	+1.3	+2.1	.406	-174.2		1	21	58.3	12	36	15	369.6	731.5
26	Jul	9	6	40	41.4	R	317	F5	6.4	6.2		33-	71	11	76	67S	229	295	248	-5.4	-5.4	-0.2	+1.6	.588	-167.6		2	9	23.1	17	13	27	369.9	1079.1
	R317 = 20 H1. Arietis																																		

Occultation prediction for Fox Observatory Broward
E. Longitude - 80 21 35.6, Latitude 26 7 45.6, Alt. 3m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V ill	%	Elon	Sun Alt	Moon Alt	Az	CA o	PA o	VA o	AA o	Libration L	B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	Jul	10	8	30	2.0	r	75775	SG5	8.5	8.1v	22-	56		24	76	59S	227	297	242	-4.1	-6.0	-0.1	+1.7	.549	-163.2			3	11	13.8	22	24	57	363.5	1010.9
		75775 is triple: AC 8.6 13.3 24.1" 301.1, dT = -12sec : AB 8.6 10.6 33" 321.1, dT = +5sec																																	
		75775 = BD+21 418, 8.49 to 8.54, V, Type WTTS																																	
26	Jul	10	9	9	16.4	r	75790	G0	8.8	8.5	22-	56		33	78	54N	294	7	309	-4.1	-6.1	+1.6	+0.0	.335	128.3			3	12	24.7	22	52	50	362.5	950.3
26	Jul	10	9	28	5.8	r	75796	K0	9.0	8.5	22-	56		37	80	86S	254	328	269	-4.1	-6.1	+0.8	+1.3	.513	168.2			3	13	0.1	22	46	14	362.1	921.0
26	Jul	10	10	8	34.0	R	470	WK0	6.8	6.2	22-	55	-6	46	83	90S	258	334	273	-4.1	-6.2	+1.2	+1.2	.472	163.3			3	14	17.2	22	57	14	361.3	862.7
		470 is double: AB 6.9 10.4 42" 33.3, dT = +63sec																																	
26	Jul	11	9	17	11	m	76530	K3	7.8	7.0	13-	42		23	71	15N	340	51	350	-2.4	-6.2	+9.9	+9.9	.000	90.0			4	16	41.6	26	21	29	359.8	1034.0
26	Jul	12	8	51	14.6	r	77125	M0	9.1	8.1	6-	28		5	62	75S	259	323	263	-0.5	-5.7	-0.3	+0.9	.673	179.7			5	21	38.5	27	25	55	359.4	1172.5
26	Jul	16	19	35	55.7	d	1466	cB9	5.3	5.3	8+	33	60	76	173	90N	110	116	91	+6.1	-0.1	+2.4	-0.9	.377	20.2			9	58	13.4	12	26	41	363.1	707.2
		R1466 = nu Leonis																																	
		1466 is double: ** 6.0 6.0 0.050"																																	
		1466 has been reported as non-instantaneous (OCc1407). Observations are highly desired																																	
26	Jul	24	2	31	32.3	d	183789	kA2	7.8	7.7	74+	119		34	204	51N	61	37	48	+3.2	+7.5	+2.9	+0.7	.216	43.4			15	47	23.3	-25	52	4	400.7	576.3
26	Jul	24	2	50	58.6	d	2256	PA1	7.0	6.9	74+	119		32	209	75N	84	56	72	+3.1	+7.5	+2.6	-0.4	.287	18.1			15	47	56.5	-25	59	13	400.9	586.9
		2256 is double: ** 7.7 7.7 0.10" 90.0, dT = +0.35sec																																	
		2256 has been reported as non-instantaneous (OCc1482). Observations are highly desired																																	
26	Jul	24	4	54	32.1	d	2261	K3	6.6	5.8	75+	120		14	231	50S	139	88	127	+2.7	+7.5	+2.1	-2.8	.260	-45.4			15	50	34.9	-26	17	23	402.9	722.3
26	Jul	25	4	6	23	d	2397	K1	6.5	5.9	82+	130		27	213	11N	14	340	6	+1.7	+7.4	-0.5	+6.9	.076	76.0	.01		16	41	37.6	-27	48	35	402.5	612.9
26	Jul	28	2	17	15.8	d	2824	K4	7.3	6.5	98+	163		30	148	58N	36	68	43	-1.3	+5.3	+2.6	+2.8	.227	43.8			19	21	44.2	-26	9	59	399.9	609.4
26	Jul	31	9	31	48.4	r	164779	KG5	7.2	6.8	97-	160		34	232	56N	285	239	304	-5.5	+0.6	+2.9	-2.1	.233	125.2			21	58	24.3	-12	39	53	390.8	766.7
26	Aug	2	7	20	10.6	R	3459	K0	6.4	5.8	87-	137		60	155	40S	195	217	217	-5.8	-2.1	+0.7	+2.8	.314	-149.1			23	29	27.0	-	1	47	28	382.3	679.1
		R3459 = 11 Piscium																																	
26	Aug	2	9	57	50.5	R	3467	kK1	6.4	5.8	86-	136	-11	53	228	56S	211	169	232	-6.3	-2.5	+1.1	+1.8	.366	-163.2			23	31	57.6	-	1	5	9	382.3	709.2
		R3467 = 13 Piscium																																	
26	Aug	3	6	45	2.1	r	30	SA0	7.1	7.1	79-	125		53	120	18S	173	224	195	-5.7	-3.4	-0.6	+3.9	.228	-124.8			0	15	57.3	4	15	4	379.1	736.3
		30 is triple: AB 7.0 14.1 0.8" 246.0, dT = -1sec : AC 7.0 12.2 5.0" 347.2, dT = +22sec																																	
		30 is a close double. Observations are highly desired																																	
26	Aug	4	9	29	40	d	163	pF2	7.3	7.1	68-	112		76	172	7N	329	336	350	-5.9	-4.9	+9.9	+9.9	.066	79.9			1	7	4.0	11	33	8	373.7	681.9
		163 is double: AB 7.3 10.5 8.3" 201.5, dT = -76sec																																	
		163 is a close double. Observations are highly desired																																	
26	Aug	4	9	37	22	Gr	163	pF2	7.3	7.1	68-	112		75	** GRAZE: CA 17.3N; Dist. 27km in az. 318deg. [Lat = 26.46+0.80(E.Long+80.36)]																					
26	Aug	4	9	44	1	r	163	pF2	7.3	7.1	68-	112		76	186	27N	309	303	330	-5.9	-5.0	+9.9	+9.9	.066	100.1			1	7	4.0	11	33	8	373.7	678.2
		163 is double: AB 7.3 10.5 8.3" 201.5, dT = +37sec																																	
		163 is a close double. Observations are highly desired																																	
26	Aug	5	9	48	24.6	r	92732	wF5	7.8	7.5	58-	99		78	134	78N	261	304	281	-5.3	-5.9	+2.7	+0.7	.339	151.6			1	58	47.5	17	1	33	369.7	690.6
		92732 is double: AB 7.8 17.9 79" 249.5, dT = -229sec																																	
26	Aug	7	5	28	59.0	R	542	pB8	5.8	5.8	37-	74		3	64	76S	245	307	257	-3.1	-6.1	-0.5	+1.2	.653	-174.7			3	45	54.5	24	33	16	369.0	1173.1
		R542 = Asterope = 21 Tauri																																	
		542 is triple: AB 5.8 6.4 150" 130.1, dT = +95sec : AD 5.8 12.7 170" 74.1, dT = +258sec																																	
26	Aug	7	5	30	21.9	r	543	pA0	6.4	6.4	37-	74		3	64	68S	237	300	249	-3.1	-6.1	-0.5	+1.3	.637	-167.0			3	46	2.9	24	31	40	369.0	1171.0
		R543 = 22 Tauri																																	
		543 is triple: BC 6.4 15.1 52" 267.9, dT = -69sec : BA 6.4 5.8 150" 310.1, dT = -68sec																																	
26	Aug	7	5	45	33.7	r	548	pB9	6.8	6.8	36-	74		6	66	49S	218	282	231	-3.0	-6.1	-0.7	+1.7	.548	-148.6			3	46	59.4	24	31	12	368.6	1147.0
		548 is quadruple: Aa,Ab 6.8 6.9 0.011" 249.1, dT = -0.02sec : AB 6.8 14.8 102" 299.3, dT = -29sec : AC 6.8 13.0 123" 190.1, dT = -198sec																																	
		548 is a close double. Observations are highly desired																																	
26	Aug	7	6	18	50.6	R	555	K5	6.4	5.6s	36-	74		13	68	50N	299	6	311	-3.0	-6.2	+0.6	+0.0	.390	129.6			3	48	6.5	24	59	18	367.8	1093.5
		555 = NSV 1316, 6.44, range 0.02, 0V, Type VAR, Period 1.48987 days																																	

Occultation prediction for Fox Observatory Broward
E. Longitude - 80 21 35.6, Latitude 26 7 45.6, Alt. 3m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon Alt	Sun Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	Aug	7	7	47	42.1	R	571pA2		6.8	6.7		36-	73	31	75	84N	265	339	277	-3.0	-6.4	+0.7	+1.0	.506	161.2		3	51	25.3	25	9	47	365.7	947.8
	571 is double: ** 7.1 9.1																																
26	Aug	7	8	2	0.6	r	76281	K0	8.0	7.4		35-	73	34	76	57N	293	7	304	-3.0	-6.4	+1.5	+0.0	.359	133.5		3	52	0.9	25	20	30	365.4	925.6
26	Aug	7	8	7	16.5	R	574pG0		6.8	6.5		35-	73	35	76	80S	250	325	262	-3.0	-6.4	+0.6	+1.4	.516	176.2		3	52	11.4	25	9	47	365.3	916.8
26	Aug	7	9	12	22.9	r	76313	K0	8.3	7.8		35-	73	49	80	30N	319	39	331	-3.0	-6.5	+5.1	-4.2	.128	105.9		3	54	40.6	25	41	9	364.0	821.8
26	Aug	8	7	51	56.1	R	76841cK1		7.3	6.7		25-	60	20	69	66S	243	313	249	-1.6	-6.1	-0.1	+1.4	.572	-168.1		4	55	34.6	27	12	9	364.0	1031.3
	76841 is double: ** 7.6 10.1 0.08" 82.0, dT = +0.14sec																																
	76841 has been reported as non-instantaneous (OCc 753). Observations are highly desired																																
26	Aug	8	9	29	6.8	R	746WB7		7.0	6.9		24-	59	40	75	30S	207	285	213	-1.6	-6.2	-0.2	+3.0	.340	-133.2		4	59	53.7	27	19	32	361.9	871.8
	746 is double: AB 7.0 8.7 20.4" 206.1, dT = -60sec																																
26	Aug	9	7	42	36.3	R	909SB9		6.0	5.9s		15-	46	6	62	90S	274	338	275	-0.1	-5.4	-0.1	+0.6	.634	168.9		6	1	0.5	27	34	21	363.5	1139.9
	909 is triple: Aa,Ab 6.1 9.2 194.0, dT = 0.00sec : AB 6.1 12.4 9.5" 242.4, dT = -13sec																																
	909 is a close double. Observations are highly desired																																
	909 = NSV 16751, 6.04, range 0.01, 2V, Type VAR, Period 9.26012 days																																
26	Aug	9	8	35	2.3	r	77894SF2		8.8	8.4		15-	46	16	67	90N	275	343	275	+0.0	-5.5	+0.2	+0.7	.584	168.0		6	3	26.6	27	38	33	362.4	1048.8
	77894 is triple: AB 8.9 9.6 11.5" 263.5, dT = -19sec : AC 8.9 11.1 25.6" 189.6, dT = -4sec																																
26	Aug	9	8	47	23.3	R	77909wA0		7.6	7.6		15-	45	18	68	72S	257	326	257	+0.0	-5.5	+0.0	+1.1	.581	-173.7		6	4	1.0	27	34	14	362.1	1027.3
	77909 is double: AB 7.6 10.8 21.6" 132.5, dT = +21sec																																
26	Aug	9	9	15	46	Gr	77957 B9		8.7	8.6		15-	45	25	** GRAZE: CA 12.1N; Dist. 50km in az. 328deg. [Lat = 26.66+0.55(E.Long+80.36)]																				
26	Aug	9	9	22	1.9	r	77957 B9		8.7	8.6		15-	45	25	70	25N	340	52	340	+0.0	-5.5	+3.9	-5.5	.126	103.2		6	6	15.6	27	56	5	361.4	968.7
26	Aug	9	10	14	35.1	r	77987 B9		8.5	8.5V		14-	45	-9	36	73	68N	298	14	297	+0.0	-5.6	+1.4	-0.2	.417	145.9		6	7	39.9	27	51	36	360.3	880.6
	77987 = HD 41639, 8.44, , Type VAR																																
26	Aug	10	8	43	26.5	R	1085SG8		7.1	6.7		7-	32	4	63	58S	250	313	244	+1.6	-4.4	-0.5	+1.2	.597	-159.0		7	9	35.4	25	43	43	362.8	1125.1
	1085 is triple: AB 7.2 13.0 34" 68.2, dT = +56sec : AC 7.2 7.8 125" 78.3, dT = +207sec																																
26	Aug	10	8	43	32.1	r	79125 K2		8.4	7.7		7-	32	4	63	38S	230	293	224	+1.6	-4.4	-0.8	+1.8	.481	-138.8		7	9	48.2	25	38	40	362.8	1125.2
26	Aug	10	8	46	51.6	r	79124WF0		7.8	7.6		7-	32	5	64	59S	252	315	246	+1.6	-4.4	-0.4	+1.2	.600	-160.7		7	9	44.2	25	44	5	362.8	1119.1
	79124 is double: CA 7.8 7.2 125" 258.3, dT = -207sec																																
26	Aug	10	9	10	33	GrX	98986		9.1	8.6		7-	31	10	** GRAZE: CA 11.5N; Dist. 20km in az. 151deg. [Lat = 25.93+0.49(E.Long+80.36)]																				
26	Aug	10	9	32	56.9	r	79168 K2		8.7	8.1		7-	31	14	68	2S	195	262	189	+1.7	-4.4	-2.8	+7.1	.135	-103.2		7	12	41.4	25	32	39	361.8	1039.2
26	Aug	10	9	45	41.4	r	79159 A5		9.3	9.1		7-	31	16	69	81S	274	342	267	+1.7	-4.4	+0.2	+0.7	.579	178.0		7	12	19.6	25	49	25	361.5	1015.7
26	Aug	10	9	56	52.3	R	1094 A0		7.1	7.1		7-	31	19	70	65S	259	328	252	+1.7	-4.4	+0.1	+1.1	.554	-166.8		7	12	49.4	25	44	55	361.3	996.3
	R1094 = 49 Geminorum																																
26	Aug	14	19	51	33.6	d	1635cM0		5.2	4.4		6+	28	54	64	206	58S	149	126	128	+5.9	+2.8	+1.2	-2.2	.382	-15.5		11	17	17.4	2	0	38	370.4	712.2
	R1635 = 75 Leonis																																
	1635 is double: ** 5.8 6.6 0.044" 0.0																																
	1635 has been reported as non-instantaneous (OCc 763). Observations are highly desired																																
26	Aug	16	1	37	1.6	d	1759pA*		6.6	6.4v		13+	43	2	262	76N	104	40	82	+5.7	+4.8	+0.2	-1.2	.510	12.7		12	14	15.5	- 5	43	0	382.6	970.5
	1759 is triple: AB 6.6 13.5 10.6" 0.9, dT = -5sec : AC 6.6 11.9 86" 185.9, dT = +24sec																																
	1759 = FG Vir, 6.53 to 6.58, V, Type DSCTC, Period 0.079 days																																
26	Aug	20	1	6	0.1	d	183485 *		7.5	6.9v		49+	89	30	214	63S	132	98	117	+3.7	+7.6	+2.4	-2.1	.279	-27.4		15	27	48.3	-25	10	10	398.2	607.3
	183485 = HM Lib, 7.42 to 7.63, V, Type PVTELIII																																
26	Aug	23	0	43	51.7	D	2617cK0		4.6	4.1		76+	122	35	169	47N	43	54	43	+0.4	+6.6	+3.1	+2.3	.204	44.5		18	8	5.0	-28	27	26	400.7	556.8
	2617 is double: AB 5.1 5.9 0.26" 12.0, dT = +1.1sec																																
	2617 is a close double. Observations are highly desired																																
26	Aug	23	1	10	25.9	d	186346 F5		7.6	7.4		77+	122	35	176	56S	120	124	120	+0.3	+6.6	+3.1	-1.1	.232	-35.2		18	8	52.1	-28	45	19	400.7	552.5
26	Aug	23	2	2	46.6	r	2617cK0		4.6	4.1		77+	122	35	190	-51N	304	294	305	+0.1	+6.5	+3.5	-1.8	.207	135.6		18	8	5.0	-28	27	26	400.7	563.0
	2617 is double: AB 5.1 5.9 0.26" 12.0, dT = -0.48sec																																
	2617 is a close double. Observations are highly desired																																

Occultation prediction for Fox Observatory Broward
E. Longitude - 80 21 35.6, Latitude 26 7 45.6, Alt. 3m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon Alt	Sun Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	Aug	23	4	10	6.8	d	186461cA2		7.4	7.2v		77+	123	24	218	41N	36	357	37	-0.4	+6.4	+0.6	+1.2	.279	36.6		18	12	37.6	-28	14	11	401.7	677.3
							186461 is double: ** 8.2 8.2 0.050"																											
							186461 has been reported as non-instantaneous (OCc1536). Observations are highly desired																											
							186461 = V4385 Sgr, 7.42 to 7.46, Hp, Type ELL:, Period 2.62462 days, Phase 27%																											
26	Aug	24	5	4	0.6	d	187716SG6		7.2	6.6		85+	134	24	220	72S	97	57	103	-1.8	+5.4	+2.2	-1.1	.308	-32.5		19	8	8.1	-26	50	5	400.1	709.4
							187716 is triple: **Aa,Ab 7.8 7.8 0.050" 160.0, dT = +0.07sec : AB 7.3 8.6 45" 123.9, dT = +131sec																											
							187716 has been reported as non-instantaneous (OCc 769). Observations are highly desired																											
26	Aug	26	6	21	55.9	d	3049	B9	7.3	7.3		96+	157	32	221	52N	31	352	45	-3.9	+2.7	+0.6	+1.4	.354	22.8		20	52	16.1	-19	38	37	393.7	733.6
26	Aug	27	6	28	17.9	d	164579SF3		7.2	7.0		99+	169	42	215	77N	53	20	71	-4.6	+1.3	+1.5	+0.8	.375	-3.6		21	41	28.1	-14	50	29	389.4	709.4
							164579 is triple: AB 7.2 12.0 17.8" 104.2, dT = +30sec : AC 7.2 12.6 119" 257.0, dT = -290sec																											
							Distance of 164579 to Terminator = 17.1"; to 3km sunlit peak = 6.6"																											
26	Aug	27	7	57	41.7	D	3177cA9		5.9	5.7		99+	169	28	235	55N	31	341	49	-4.9	+1.0	+0.4	+1.3	.396	21.1		21	43	4.4	-14	23	59	390.5	804.4
							R3177 = 44 Capricorni																											
							3177 is double: ** 6.8 6.8 0.10" 90.0, dT = +0.13sec																											
							3177 has been reported as non-instantaneous (OCc1608). Observations are highly desired																											
							Distance of 3177 to Terminator = 10.9"; to 3km sunlit peak = 2.5"																											
26	Aug	28	2	47	23.4	r	X242703k		11.7			88E	179	38	129	-86N	221	266	240	-4.3	+0.2	+1.5	+2.2	.364	-165.7		22	23	20.8	-10	29	40	386.7	704.6
26	Aug	28	2	52	45.6	d	X182637k		11.1	10.9		81E	180	39	130	92U	61	105	81	-4.3	+0.2	+1.8	+1.7	.373	-6.4		22	25	3.2	-10	9	15	386.6	703.2
26	Aug	28	2	54	16.6	d	X182643k		11.5	11.2		80E	180	39	130	80U	92	137	112	-4.3	+0.2	+2.4	+0.8	.295	-38.0		22	25	12.9	-10	17	6	386.6	702.0
26	Aug	28	2	58	11.2	r	X242709k		11.5			74E	180	40	132	-85N	220	263	240	-4.3	+0.2	+1.5	+2.2	.360	-165.7		22	23	34.8	-10	27	28	386.5	697.0
26	Aug	28	3	0	54.7	d	X182649k		11.2	10.9		70E	180	40	132	73U	98	141	118	-4.3	+0.2	+2.6	+0.5	.268	-44.0		22	25	20.6	-10	17	8	386.5	697.2
26	Aug	28	3	1	7.5	r	X182578k		11.1	10.4		70E	180	40	132	-79S	203	245	223	-4.3	+0.2	+1.2	+2.7	.318	-149.1		22	23	54.0	-10	29	12	386.5	695.1
26	Aug	28	3	5	34.6	d	X242722		11.5			63E	180	41	133	51N	354	36	14	-4.3	+0.2	+0.0	+4.2	.187	59.6		22	24	17.5	-	9	58	386.4	693.9
26	Aug	28	3	7	5.7	d	X182655k		11.1	10.8		61E	180	41	133	67U	103	145	123	-4.3	+0.2	+2.9	+0.2	.238	-50.0		22	25	27.1	-10	17	16	386.4	693.1
26	Aug	28	3	12	55.6	D	165050	K0	9.8	9.3		52E	180	42	135	58N	359	39	19	-4.3	+0.2	+0.3	+3.8	.216	54.1		22	24	31.7	-	9	56	53	386.3	689.5
26	Aug	28	3	21	0.8	d	X182644k		10.9	10.4		40E	180	44	136	92U	33	71	52	-4.4	+0.1	+1.4	+2.3	.344	19.9		22	25	16.4	-	9	57	32	386.1	685.3
26	Aug	28	3	25	12.4	R	X 51850k		10.6	10.4		35E	180	44	138	-39N	258	295	278	-4.4	+0.1	+2.4	+1.1	.328	154.4		22	23	46.0	-10	12	53	386.1	681.0
26	Aug	28	3	34	23.1	r	X182632k		11.7	11.2		24E	180	45	141	74U	182	217	202	-4.4	+0.1	+0.4	+3.5	.233	-130.2		22	24	55.9	-10	23	4	386.0	677.0
26	Aug	28	3	36	18.7	D	X 51928k		10.2	9.9		21E	180	46	141	44U	111	146	131	-4.4	+0.1	+3.9	-0.6	.183	-59.7		22	25	59.1	-10	12	45	386.0	677.2
26	Aug	28	3	40	58.8	R	3286	K0	7.2	6.4		17E	180	46	143	-42N	248	282	268	-4.4	+0.1	+2.2	+1.4	.345	163.3		22	24	7.6	-10	11	52	385.9	673.8
26	Aug	28	3	49	14.0	R	X 51874		9.8	9.2		10E	180	47	145	83U	220	252	240	-4.5	+0.1	+1.6	+2.1	.353	-169.7		22	24	34.2	-10	16	1	385.8	670.7
26	Aug	28	3	50	26.3	r	X242722		11.5			10E	180	48	145	6N	290	321	310	-4.5	+0.1	+4.1	-0.7	.182	120.5		22	24	17.5	-	9	58	36	385.7	670.7
26	Aug	28	3	56	19.1	D	165076kG5		9.6	9.0		7E	180	48	147	59U	80	110	100	-4.5	+0.1	+2.7	+1.0	.311	-29.9		22	26	25.0	-10	0	0	385.7	670.0
26	Aug	28	3	58	12.3	d	X182702k		11.7	11.5		6E	180	49	147	54U	89	118	108	-4.5	+0.1	+3.0	+0.6	.281	-38.3		22	26	28.0	-10	1	49	385.7	669.4
26	Aug	28	3	59	7.3	r	X182643k		11.5	11.2		6E	180	49	148	56U	192	221	212	-4.5	+0.1	+0.8	+2.9	.281	-141.9		22	25	12.9	-10	17	6	385.7	667.7
26	Aug	28	3	59	15.0	r	X242731k		11.2			6E	180	49	148	76U	224	253	244	-4.5	+0.1	+1.7	+1.9	.355	-173.8		22	24	42.5	-10	13	5	385.7	667.5
26	Aug	28	4	0	7.6	r	X182655k		11.1	10.8		5E	180	49	148	48U	180	209	200	-4.5	+0.1	+0.2	+3.5	.229	-129.9		22	25	27.1	-10	17	16	385.7	667.6
26	Aug	28	4	0	13.5	r	X182649k		11.2	10.9		5E	180	49	148	51U	186	215	206	-4.5	+0.1	+0.6	+3.2	.256	-135.9		22	25	20.6	-10	17	8	385.7	667.5
26	Aug	28	4	5	2.6	R	165050	K0	9.8	9.3		4E	180	50	150	100U	284	311	304	-4.5	+0.1	+3.8	-0.3	.209	126.0		22	24	31.7	-	9	56	53	385.6	666.3
26	Aug	28	4	6	23.4	d	X242756k		11.4			4E	180	50	150	90U	32	59	52	-4.5	+0.1	+1.4	+2.3	.339	18.0		22	26	7.4	-	9	47	8	385.6	667.2
26	Aug	28	4	11	44.2	d	X242766k		11.8			3E	180	50	152	70U	73	99	93	-4.5	+0.0	+2.5	+1.1	.326	-23.5		22	26	40.4	-	9	54	33	385.5	665.9
26	Aug	28	4	14	54.7	D	X182712k		10.8	10.3		3E	180	50	153	70U	77	102	97	-4.5	+0.0	+2.7	+1.0	.315	-27.9		22	26	45.0	-	9	54	55	385.5	665.2
26	Aug	28	4	17	1.8	r	X182637k		11.1	10.9		4E	180	51	154	63U	223	246	243	-4.6	+0.0	+1.7	+1.9	.352	-173.3		22	25	3.2	-10	9	15	385.5	663.4
26	Aug	28	4	18	37.7	R	X 51928k		10.2	9.9		4E	180	51	154	32U	169	193	189	-4.6	+0.0	-0.6	+4.3	.179	-120.2		22	25	59.1	-10	12	45	385.5	663.5
26	Aug	28	4	27	9.1	d	X 51935		11.2	11.0		6E	180	52	157	103U	19	40	39	-4.6	+0.0	+1.0	+2.6	.309	29.3		22	26	18.0	-	9	40	53	385.4	663.2
26	Aug	28	4	27	34.9	D	165087	G5	9.0	8.6		6E	180	52	157	69U	94	115	114	-4.6	+0.0	+3.5	+0.2	.248	-45.7		22	27	0.2	-	9	56	38	385.4	663.0
26	Aug	28	4	43	26.0	r	X182644k		10.9	10.4		16E	180	53	164	71U	248	262	268	-4.7	+0.0	+2.5	+1.1	.333	160.4		22	25	16.4	-	9	57	32	385.2	661.0
26	Aug	28	4	56	8	m	X182667		11.0	10.5		29E	180	54	169	33N	318	328	338	-4.7	-0.1	+9.9	+9.9	.000	90.0		22	25	38.6	-	9	35	17	385.1	661.7

Occultation prediction for Fox Observatory Broward
E. Longitude - 80 21 35.6, Latitude 26 7 45.6, Alt. 3m; Telescope dia 15cm; dMag 0.0

y	m	day d	h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon Sun Alt	Moon Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	Aug	28	5	1	19.0	d	X242782		11.6			36E	180	54	170	-85S	82	91	102	-4.7	-0.1	+3.0	+0.5	.292	-34.7		22	27	36.1	- 9	45	16	385.1	662.4
26	Aug	28	5	5	9.3	r	X182702k		11.7	11.5		41E	180	54	172	55U	189	196	209	-4.7	-0.1	+0.5	+2.9	.277	-141.4		22	26	28.0	-10	1	49	385.1	662.1
26	Aug	28	5	10	41.0	R	165076kG5		9.6	9.0		49E	180	54	175	60U	197	202	217	-4.8	-0.1	+0.9	+2.5	.307	-149.8		22	26	25.0	-10	0	0	385.1	662.8
26	Aug	28	5	27	24.4	R	165087 G5		9.0	8.6		73E	180	54	181	80U	181	180	201	-4.8	-0.1	+0.0	+3.2	.248	-134.0		22	27	0.2	- 9	56	38	385.1	666.0
26	Aug	28	5	30	8.9	r	X242756k		11.4			77E	180	54	183	88U	244	242	264	-4.8	-0.1	+2.4	+1.0	.340	162.5		22	26	7.4	- 9	47	8	385.0	666.7
26	Aug	28	5	30	53.8	r	X242766k		11.8			78E	180	54	183	79U	203	200	223	-4.8	-0.1	+1.0	+2.3	.326	-156.0		22	26	40.4	- 9	54	33	385.0	666.8
26	Aug	28	5	30	59.1	D	146104kG5		10.3	10.0		79E	180	55	183	-90N	64	61	84	-4.8	-0.1	+2.3	+1.0	.342	-16.9		22	28	1.5	- 9	33	21	385.0	667.2
26	Aug	28	5	31	2.1	R	X182712k		10.8	10.3		79E	180	54	183	79U	198	196	218	-4.8	-0.1	+0.9	+2.4	.314	-151.7		22	26	45.0	- 9	54	55	385.0	666.9
26	Aug	28	5	31	5.0	d	X242774		11.7			79E	180	55	183	-38N	11	8	31	-4.8	-0.1	+0.6	+2.7	.290	35.8		22	27	17.2	- 9	24	58	385.0	667.2
26	Aug	28	5	32	26.2	d	X182760		11.3	10.5		81E	180	55	183	-84S	69	66	89	-4.8	-0.1	+2.5	+0.8	.330	-22.4		22	28	5.4	- 9	34	21	385.0	667.5
26	Aug	29	7	1	30.9	R	3416cA3		5.6	5.5		99-	167	58	206	30S	181	158	203	-5.3	-1.9	+0.0	+3.3	.268	-135.7		23	15	34.3	- 3	29	47	381.0	692.5
							3416 is double: ** 6.4 6.4 0.050"																											
							3416 has been reported as non-instantaneous (OCc1638). Observations are highly desired																											
							Distance of 3416 to Terminator = 6.3"; to 3km sunlit peak = 0.0"																											
26	Aug	30	5	44	8.5	r	128524 K2		7.6	6.9		95-	155	62	143	70N	261	294	283	-4.9	-3.1	+2.7	+0.9	.316	145.2		0	0	23.5	2	40	32	377.5	704.0
26	Aug	30	9	51	4.1	r	6 G5		6.9	6.3		95-	154	42	250	76S	227	169	249	-5.7	-3.7	+1.2	+1.0	.415	-174.3		0	5	22.2	3	36	22	378.3	766.0
26	Sep	1	4	38	19.4	r	244 K0		6.7	6.2		82-	130	37	91	20S	175	243	195	-3.8	-5.2	-1.0	+3.8	.245	-120.3		1	39	15.4	14	17	8	373.4	877.9
							R244 = 104 Piscium																											
26	Sep	2	5	56	55.4	r	93005 K0		7.9	7.3		72-	117	45	87	86S	246	318	263	-3.1	-6.1	+1.0	+1.5	.466	171.6		2	34	23.5	19	59	5	370.1	846.0
26	Sep	2	8	5	38.6	R	387cG5		6.9	6.4S		72-	116	73	105	77N	263	331	280	-3.4	-6.3	+2.5	+0.7	.355	153.6		2	37	34.4	20	34	30	368.3	706.8
							387 is double: ** 7.7 7.7 0.10" 90.0, dT = +0.28sec																											
							387 has been reported as non-instantaneous (OCc1190). Observations are highly desired																											
							387 = NSV 15555, 6.91, , Type VAR:																											
26	Sep	2	9	48	48	gr	75509 M*		7.9	7.1v		71-	115	81	239	9N	331	275	348	-3.7	-6.5	+9.9	+9.9	.000	90.0		2	40	31.7	21	11	16	367.9	659.9
							75509 = AK Ari, 7.94, range 0.07, 8w, Type LB:, Period 19.3 days, Phase 22%																											
26	Sep	2	9	48	50	Gr	75509 M*		7.9	7.1v		71-	115	80	** GRAZE: CA 9.1N; Dist. 3km in az. 334deg. [Lat = 26.16+0.43(E.Long+80.36)]																								
26	Sep	3	7	0	54.3	R	518SA3		6.0	s		61-	103	48	81	67N	278	356	292	-2.2	-6.5	+1.8	+0.5	.377	144.5		3	34	26.6	24	27	52	367.6	826.4
							R518 = 7 Tauri																											
							518 is triple: AB 6.60 6.86 0.79" 348.0, dT = -0.7sec : AB,C 5.9 9.9 22.5" 52.2, dT = +41sec																											
							518 is a close double. Observations are highly desired																											
							518 = NSV 1192, 5.92 to 5.96, V																											
26	Sep	3	9	10	58.7	r	76041 F0		8.2	8.0		61-	102	76	92	46S	211	293	224	-2.5	-6.7	+1.2	+3.0	.320	-146.1		3	38	35.9	24	36	6	365.9	684.6
26	Sep	3	9	38	9.1	R	76046cA0		7.1	7.1		60-	102	82	97	56S	222	301	235	-2.6	-6.7	+1.7	+2.4	.342	-155.5		3	39	6.7	24	42	10	365.8	667.2
							76046 is double: AB 7.1 45.0, dT = -29sec																											
26	Sep	3	10	31	47	M	529SA2		6.1	6.1		60-	102	-8	86	263	6N	340	259	353	-2.8	-6.8	+9.9	+9.9	.000	90.0		3	40	46.3	25	19	46	365.6	649.0
							R529 = 11 Tauri																											
							529 is triple: **Aa,Ab 6.3 8.3 : AB 6.1 10.9 74" 357.0																											
26	Sep	4	7	6	17.3	r	694SK2		8.1	7.5v		50-	90	37	74	58N	294	11	302	-1.1	-6.3	+1.6	-0.1	.364	136.7		4	36	48.2	27	7	56	366.7	889.5
							694 is quadruple: AC 5.4 7.7" 176.0, dT = +10sec : AD 5.4 19.3 12.7" 104.0, dT = +34sec : AB 8.4 16.0 130" 338.0, dT = -258sec																											
							694 is a close double. Observations are highly desired																											
							694 = V0833 Tau, 8.02 to 8.40, V, Type BY+UV, Period 1.7916 days																											
26	Sep	4	7	48	15.8	R	701SF2		6.6	6.4		49-	89	46	77	53S	225	305	233	-1.2	-6.4	+0.5	+2.2	.419	-154.3		4	38	29.5	26	56	23	365.9	825.4
							701 is triple: 6.6 9.2 3.1" 169.4, dT = -4sec : AB 7.36 7.21 4.48" 187.8, dT = -8sec																											
							701 is a close double. Observations are highly desired																											
26	Sep	4	7	48	19.6	r	X 70481p		7.3	7.2		49-	89	46	77	53S	226	305	234	-1.2	-6.4	+0.5	+2.2	.419	-154.4		4	38	29.6	26	56	26	365.9	825.3
							X 70481 is triple: 7.3 9.2 5.8" 174.9, dT = -9sec : AC 7.4 12.9 92" 203.6, dT = -203sec																											
							X 70481 is a close double. Observations are highly desired																											
26	Sep	4	10	36	38.2	r	715cK5		8.0	7.5		49-	88	-7	82	76	29N	324	64	331	-1.5	-6.6	+4.1	-5.3	.150	113.9		4	43	35.4	27	41	15	364.0	654.4

Occultation prediction for Fox Observatory Broward
E. Longitude - 80 21 35.6, Latitude 26 7 45.6, Alt. 3m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon Alt	Sun Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	dur sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
							715 is double: ** 8.8 8.8 0.10" 90.0, dT = +0.4sec																												
							715 has been reported as non-instantaneous (OCc 130). Observations are highly desired																												
26	Sep	5	8	21	26.9	r	868SA0	7.5	7.5	38-	76	40	74	42S	222	300	224	+0.0	-5.9	+0.2	+2.6	.373	-141.3		5	44	21.2	27	43	53	365.0	846.3
							868 is triple: AB 7.5 9.8 8.6" 254.1, dT = -19sec : AC 7.5 12.7 47" 40.4, dT = +127sec																												
							868 is a close double. Observations are highly desired																												
26	Sep	5	8	31	40.8	r	77495cA0	8.1	8.1	38-	76	42	74	26N	334	53	336	+0.0	-5.9	+4.2	-5.1	.134	106.6		5	44	59.0	28	11	40	364.8	831.1
							77495 is double: AB 8.0 8.0 0.20" 42.2, dT = -0.5sec																												
							77495 is a close double. Observations are highly desired																												
26	Sep	5	10	18	59	r	77582 B3	8.4	8.3	37-	75	-11	64	78	14N	347	75	348	-0.2	-5.9	+9.9	+9.9	.055	97.9		5	48	41.3	28	19	29	363.3	697.9
26	Sep	6	8	40	8.1	r	78784 A0	8.3	8.2	27-	62		30	73	34N	334	48	330	+1.3	-4.9	+2.4	-2.9	.216	115.3		6	50	2.5	27	0	13	365.2	894.4
26	Sep	7	8	13	30.6	r	79740cF2	8.5	8.3	17-	49		11	69	72S	266	332	256	+2.5	-3.6	+0.0	+0.9	.566	-169.5		7	50	44.7	23	47	1	367.1	1025.1
							79740 is double: ** 9.2 9.2 0.10" 143.0, dT = +0.1sec																												
							79740 has been reported as non-instantaneous (OCc 683). Observations are highly desired																												
26	Sep	7	9	31	26.5	r	79781 K2	8.8	8.2	17-	48		27	76	24S	218	290	208	+2.5	-3.6	-0.3	+4.0	.251	-119.8		7	54	14.3	23	30	14	365.5	893.7
26	Sep	7	10	36	33.2	r	79804cG0	7.4		16-	48	-7	41	80	88S	283	358	272	+2.4	-3.6	+1.3	+0.3	.451	178.6		7	56	2.8	23	41	33	364.2	796.2
							79804 is double: AB 7.90 8.57 0.11" 108.1, dT = +0.25sec																												
							79804 is a close double. Observations are highly desired																												
26	Sep	7	10	39	31.7	R	1195 B8	6.8	6.9	16-	48	-6	42	81	75S	269	344	259	+2.4	-3.6	+1.3	+0.9	.438	-167.7		7	56	6.5	23	37	26	364.1	792.4
26	Sep	8	9	21	1.4	r	98186kB5	8.5	8.6	9-	35		12	74	83N	295	1	281	+3.7	-2.1	+0.3	+0.1	.548	169.0		8	52	20.0	19	21	3	368.0	996.8
26	Sep	8	9	46	15.4	R	98198 K5	7.6	6.8	9-	35		17	76	77N	302	10	287	+3.7	-2.1	+0.6	-0.2	.512	163.0		8	53	20.6	19	19	20	367.4	954.5
26	Sep	8	19	28	46.2	D	Jupiter	-1.7	-1.7	7-	31	53	32	274	-36S	164	93	147	+2.4	-1.1	-0.2	-2.6	.404	-39.0		9	10	15.8	16	52	26	366.5	923.8
							Jupiter limb contacts offset by ±39.7 secs, at 19 28 6 and 19 29 26 Both contacts are against the bright limb of Jupiter																												
26	Sep	8	20	15	5.9	R	Jupiter	-1.7	-1.7	7-	31	43	22	279	64S	264	194	246	+2.4	-1.0	+0.7	-0.7	.434	-141.0		9	10	15.8	16	52	26	367.6	994.8
							Jupiter limb contacts offset by ±37.0 secs, at 20 14 29 and 20 15 43 Both contacts are against the bright limb of Jupiter																												
26	Sep	9	10	3	53.3	r	98781 **	8.3	8.1s	3-	21		7	78	69N	312	17	294	+4.7	-0.4	+0.3	-0.5	.524	158.4		9	48	56.1	13	44	39	370.4	1013.5
							98781 = NSV 18274, 8.3 to 8.35, V																												
26	Sep	17	2	14	27.7	d	2297kF7	7.0	6.7	33+	70		6	236	84S	109	52	98	+2.3	+7.4	+1.1	-1.5	.390	-18.8		16	3	16.1	-26	43	2	400.9	801.4
26	Sep	20	3	6	0.1	D	2723 K0	6.6	6.1	61+	103		22	221	83N	78	36	81	-1.4	+5.7	+1.5	-0.4	.358	-10.2		18	46	3.9	-27	29	56	401.2	707.7
26	Sep	23	2	19	6.0	d	3115 F0	7.1	6.9	86+	137		47	175	70N	50	55	66	-4.2	+2.1	+2.1	+1.4	.330	2.9		21	18	15.7	-17	27	44	390.5	626.3
							R3115 = 31 Capricorni																												
26	Sep	23	5	30	38.6	D	3126 G8	4.3	3.8v	87+	138		30	229	87S	74	28	90	-4.9	+1.7	+1.5	-0.2	.380	-21.1		21	22	14.8	-16	50	4	391.4	774.0
							R3126 = Tae = iota Capricorni																												
							3126 = iot Cap, 4.27, range 0.06, V, Type BY																												
26	Sep	24	4	37	52.5	d	3244 K0	7.3	6.7	93+	149		48	209	47N	26	359	45	-5.2	+0.3	+0.9	+1.9	.345	21.9		22	8	34.1	-11	36	49	385.6	694.8
26	Sep	24	5	52	23.7	D	3253kB5	5.4	5.5V	93+	149		38	229	61S	98	54	117	-5.5	+0.1	+2.7	-1.4	.268	-48.6		22	10	37.5	-11	33	54	386.2	758.3
							R3253 = 38 Aquarii																												
							3253 = HD 210424, 5.44, , Type ACV, Period 3.9613 days, Phase 11%																												
26	Sep	24	7	9	58.0	d	3255 M0	7.3	6.4v	93+	150		24	244	84N	63	8	82	-5.6	+0.0	+0.8	+0.1	.445	-9.7		22	12	16.9	-11	3	56	387.3	848.4
							3255 = KR Aqr, 7.25 to 7.36, Hp, Type LB																												
26	Sep	25	8	39	29.6	d	3380cK0	5.9	5.4	98+	162		18	256	71N	53	352	74	-6.0	-1.7	+0.5	+0.4	.486	3.1		23	1	31.7	- 4	42	41	383.2	904.4
							3380 is double: ** 7.0 7.0 0.10" 90.0, dT = +0.16sec																												
							3380 has been reported as non-instantaneous (OCc1633). Observations are highly desired																												
26	Sep	27	5	50	47.0	r	68SB9	5.8		S	100-	173		71	195	65N	247	233	269	-4.9	-4.2	+2.3	+1.0	.366	160.9		0	32	23.8	6	57	20	371.4	697.6
							R68 = 51 Piscium																												
							68 is multiple: Aa,Ac 5.8 9.5 0.20" : Aa,Ab 5.8 8.0 0.27" 283.9, dT = -0.6sec : AB 5.7 9.5 28.5" 81.5, dT = +75sec : AD 5.7 13.1 82" 307.6, dT = -109sec																												
							68 is a close double. Observations are highly desired																												
							68 = NSV 15113, 5.67 to 9.0, V, Type E:																												

Occultation prediction for Fox Observatory Broward
E. Longitude - 80 21 35.6, Latitude 26 7 45.6, Alt. 3m; Telescope dia 15cm; dMag 0.0

y	m	day d	h	Time m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon Sun Alt	Moon Alt	Az	CA o	PA o	VA o	AA o	Libration L	B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
							Distance of 68 to Terminator = 6.4"; to 3km sunlit peak = 0.0"																												
26	Sep	28	4	16	23.9	r	197	cK0	7.0	6.5		97-	160	59	109	71S	218	278	239	-3.7	-5.1	+1.0	+2.2	.419	-167.3		1	21	58.3	12	36	15	368.9	769.5
26	Sep	29	5	18	2.2	r	336	F0	7.4	7.3v		92-	147	63	100	68S	222	290	240	-2.8	-6.0	+1.1	+2.2	.417	-166.9		2	17	45.4	18	27	18	366.1	759.4
							336 = AD Ari, 7.39 to 7.48, V, Type ELL, Period 0.53972 days, Phase 22%																												
26	Sep	30	4	30	59.8	R	470	WK0	6.8	6.2		85-	134	42	82	84N	257	332	271	-1.5	-6.3	+1.0	+1.2	.476	164.9		3	14	17.2	22	57	14	366.0	874.5
							470 is double: AB 6.9 10.4 42" 33.3, dT = +64sec																												
26	Sep	30	5	51	14.6	r	75832	K0	7.3	6.6		84-	133	60	88	65S	226	303	240	-1.6	-6.4	+1.0	+2.1	.420	-164.5		3	16	57.0	23	7	36	364.7	770.1
26	Sep	30	8	14	46.2	r	483	SA5	7.5			84-	132	87	220	85N	255	216	270	-2.0	-6.6	+2.5	+0.7	.372	170.7		3	20	21.2	23	41	21	363.8	665.1
							483 is quadruple: AB 7.62 9.90 2.77" 315.8, dT = -4sec : AB,D 7.6 14.8 25.8" 251.6, dT = -69sec : AC 7.6 14.0 61" 286.7, dT = -140sec																												
							483 is a close double. Observations are highly desired																												
26	Oct	2	7	21	45.7	r	812	SF8	8.0			64-	106	53	78	20S	196	279	199	+0.9	-6.0	-0.4	+5.4	.193	-116.7		5	27	1.3	27	36	37	364.3	759.5
							812 is triple: AB 8.71 8.61 0.59" 277.1, dT = -0.45sec : AB,C 7.9 13.2 27.0" 277.8, dT = -19sec																												
							812 is a close double. Observations are highly desired																												
26	Oct	2	10	2	16.0	r	77224	cF8	7.4	7.1		63-	105	88	43	35S	211	347	215	+0.5	-6.0	+2.4	+4.6	.197	-122.7		5	31	22.8	27	46	9	363.1	643.0
							77224 is double: ** 8.3 8.3 0.10" 90.0, dT = +0.26sec																												
							77224 has been reported as non-instantaneous (OCc 194). Observations are highly desired																												
26	Oct	3	6	15	46.0	R	994	cF5	6.6	6.3		53-	93	26	71	35S	218	291	216	+2.2	-5.1	-0.4	+2.8	.351	-132.4		6	28	56.4	26	58	3	367.1	926.1
							994 is double: ** 6.8 7.7 0.003" 269.0, dT = -0.01sec																												
26	Oct	3	8	47	18.4	r	78501	K0	7.8	7.3		52-	92	58	80	45S	229	312	226	+1.9	-5.1	+1.4	+2.9	.295	-137.2		6	33	58.0	27	2	41	364.5	710.3
26	Oct	3	10	22	13.5	R	1013	cG0	7.0			51-	91	79	81	73N	291	25	288	+1.7	-5.1	+2.5	-0.8	.358	167.2		6	36	26.3	27	16	42	363.8	648.0
							1013 is double: AB 7.14 8.97 0.68" 270.0, dT = -1.8sec																												
							1013 is a close double. Observations are highly desired																												
26	Oct	4	7	48	13.3	r	79521	cG2	7.4	7.0		41-	79	32	76	49N	321	35	313	+3.2	-3.9	+1.6	-1.4	.338	135.1		7	34	50.4	24	57	16	367.6	850.3
							79521 is double: ** 8.8 8.8 0.050"																												
							79521 has been reported as non-instantaneous (OCc1366). Observations are highly desired																												
26	Oct	4	9	17	37	m	1155	F0	6.4	6.2		40-	79	51	83	0S	191	269	182	+3.0	-3.9	+9.9	+9.9	.000	-90.0		7	38	14.4	24	21	38	366.1	731.0
							Distance of 1155 to Terminator = 5.6"; to 3km sunlit peak = 0.0"																												
26	Oct	4	9	18	6	Gr	1155	F0	6.4	6.2		40-	79	53	**	GRAZE: CA 0.5S; Dist.151km in az. 353deg. [Lat = 27.50+0.12(E.Long+80.36)]																			
26	Oct	4	12	18	58.6	d	1170	dG8	3.6	3.1		39-	78	13	88	211	-62N	73	43	64	+2.5	-3.8	+3.2	+1.1	.282	40.8	.01	7	44	26.8	24	23	53	364.9	660.2
							R1170 = kappa Geminorum																												
							1170 is double: AB 3.7 10.0 7.4" 241.1, dT = -25sec																												
							1170 is a close double. Observations are highly desired																												
26	Oct	4	13	22	5.7	R	1170	dG8	3.6	3.1		39-	77	27	75	268	33N	338	258	329	+2.3	-3.6	+0.8	-3.4	.296	138.9		7	44	26.8	24	23	53	365.1	696.6
							R1170 = kappa Geminorum																												
							1170 is double: AB 3.7 10.0 7.4" 241.1, dT = +2.9sec																												
							1170 is a close double. Observations are highly desired																												
26	Oct	5	8	43	48.2	r	80269	kF0	8.4	8.3		29-	66	31	81	55S	251	322	237	+4.0	-2.5	+0.7	+1.8	.388	-145.7		8	35	17.8	20	33	53	369.2	841.6
26	Oct	5	9	57	4.7	r	80294	kF8	8.0	7.7		29-	65	47	87	72S	268	341	254	+3.9	-2.5	+1.6	+0.9	.390	-158.6		8	37	26.4	20	29	14	368.0	746.8
26	Oct	5	10	57	8	m	80327	pA3	7.8	7.6		29-	65	-5	60	95	8S	204	276	190	+3.7	-2.4	+9.9	+9.9	.000	-90.0		8	39	42.8	20	5	10	367.2	695.1
							80327 is double: AB 7.9 9.6 0.64" 136.2																												
							80327 is a close double. Observations are highly desired																												
26	Oct	5	11	16	20	m	1295	pK0	6.4	5.9s		29-	65	-1	64	98	9S	205	276	192	+3.7	-2.4	+9.9	+9.9	.000	-90.0		8	40	6.4	20	0	28	367.0	683.8
							R1295 = 39 Cancri																												
							1295 is multiple: AC 6.5 9.0 134" 309.0 : AD 6.5 8.8 135" 111.0 : AB 6.5 6.6 152" 149.9 : AS 6.5 10.1 262" 325.7																												
							1295 = NSV 4179, 6.39, range 0.04, V																												
26	Oct	6	8	20	45.6	D	Jupiter		-1.7	-1.7		20-	53	13	79	-49S	148	216	133	+4.8	-0.9	+0.7	-1.4	.398	-40.7		9	31	5.4	15	20	24	373.0	950.2
							Jupiter limb contacts offset by ±42.3 secs, at 8 20 3 and 8 21 28 Both contacts are against the bright limb of Jupiter																												
26	Oct	6	9	4	20.2	R	Europa		6.1	6.1		20-	52	22	83	51S	249	318	233	+4.8	-0.9	+0.5	+1.9	.369	-139.3		9	30	55.2	15	21	19	372.1	878.2

Occultation prediction for Fox Observatory Broward
E. Longitude - 80 21 35.6, Latitude 26 7 45.6, Alt. 3m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon Alt	Sun Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
Europa limb contacts offset by ±1.0 secs, at 9 4 19.2 and 9 4 21.2 Both contacts are against the bright limb of Europa																																	
26	Oct	6	9	6	31.9	R	Callisto		6.4	6.4		20-	52	23	84	51S	250	318	233	+4.8	-0.9	+0.5	+1.9	.369	-139.3		9	30	58.9	15	20	59	372.0	878.7
Callisto limb contacts offset by ±1.5 secs, at 9 6 30.4 and 9 6 33.4 Both contacts are against the bright limb of Callisto																																	
26	Oct	6	9	7	16.2	R	Io		5.8	5.8		20-	52	23	84	51S	249	318	233	+4.8	-0.9	+0.5	+2.0	.365	-139.2		9	31	1.2	15	20	47	372.0	869.3
Io limb contacts offset by ±1.2 secs, at 9 7 15.0 and 9 7 17.4 Both contacts are against the bright limb of Io																																	
26	Oct	6	9	9	49.8	R	Jupiter		-1.7	-1.7		19-	52	23	84	51S	250	318	233	+4.8	-0.9	+0.6	+2.0	.365	-139.1		9	31	5.4	15	20	24	372.0	870.3
Jupiter limb contacts offset by ±46.1 secs, at 9 9 4 and 9 10 36 Both contacts are against the bright limb of Jupiter																																	
26	Oct	6	9	11	49.6	R	Ganymede		5.4	5.4		19-	52	24	84	51S	250	318	233	+4.8	-0.9	+0.6	+2.0	.365	-139.0		9	31	8.7	15	20	5	371.9	871.8
Ganymede limb contacts offset by ±1.7 secs, at 9 11 47.9 and 9 11 51.3 Both contacts are against the bright limb of Ganymede																																	
26	Oct	8	10	21	13.6	r	X 16891	kG0	9.7	9.1		5-	26	13	93	55N	324	28	303	+5.7	+2.3	+0.3	-1.0	.466	155.1		11	14	0.7	3	14	9	378.4	942.9
26	Oct	14	0	11	28.1	d	2238	F0	8.0	7.8		11+	39	5	238	71S	129	71	116	+2.5	+7.3	+1.3	-2.2	.342	-35.6		15	40	37.8	-25	35	33	399.2	814.0
26	Oct	15	23	56	55.6	d	185420	B8	8.1	8.0		25+	61	23	219	48N	54	15	51	+0.4	+6.7	+1.2	+0.4	.307	25.6		17	27	45.7	-28	21	32	401.6	664.1
26	Oct	16	0	4	57	m	185410	kA0	7.8	7.7		25+	61	21	220	16S	170	128	166	+0.4	+6.7	+9.9	+9.9	.000	-90.0		17	27	16.5	-28	46	13	401.8	675.4
26	Oct	20	2	55	24.6	D	3069	A*	6.3	6.3v		63+	105	33	222	66S	97	58	112	-5.0	+2.2	+2.6	-1.3	.271	-44.3		20	59	36.1	-19	2	7	394.9	726.0
R3069 = 20 Capricorni (AO)																																	
3069 = AO Cap, 6.25 to 6.30, V, Type ACV, Period 2.2411 days, Phase 83%																																	
26	Oct	20	23	49	58.4	D	3181	SA7	6.0	5.8		72+	116	45	152	89N	69	95	87	-5.1	+1.2	+2.5	+1.2	.322	-15.5		21	44	1.0	-14	44	58	390.1	632.8
R3181 = 45 Capricorni																																	
3181 is triple: ** 6.7 6.7 0.050" : AB 5.4 9.5 4.3" 229.0, dT = -13sec																																	
3181 has been reported as non-instantaneous (OCc1610). Observations are highly desired																																	
26	Oct	22	6	5	11.0	d	3322	cG1	6.4			82+	130	21	249	42S	117	59	137	-6.8	-1.1	+2.0	-3.4	.211	-62.8		22	38	22.1	- 7	53	51	385.8	865.9
3322 is double: AB 6.64 8.11 0.08" 296.3, dT = -0.4sec																																	
3322 is a close double. Observations are highly desired																																	
26	Oct	22	6	19	52	Gr	3322	cG1	6.4			82+	130	18	** GRAZE: CA 13.9S; Dist.199km in az. 160deg. [Lat = 24.22+0.33(E.Long+80.36)]																				
26	Oct	23	5	35	19.5	d	146693	G5	7.5	7.1		89+	141	40	244	88N	67	14	89	-6.8	-2.5	+1.5	+0.2	.406	-16.1		23	24	39.0	- 1	44	29	378.7	776.7
26	Oct	24	3	59	45.2	d	109052	G5	7.4	6.9		95+	153	67	203	82S	80	60	103	-6.1	-3.7	+2.8	+0.3	.323	-33.4		0	11	5.7	4	7	59	371.9	698.8
26	Oct	25	8	2	37.6	d	163	pF2	7.3	7.1		99+	167	35	266	57N	53	346	74	-5.8	-5.2	+1.1	+0.6	.454	9.5		1	7	4.0	11	33	8	368.5	822.8
163 is double: AB 7.3 10.5 8.3" 201.5, dT = -16sec																																	
163 is a close double. Observations are highly desired																																	
Distance of 163 to Terminator = 15.8"; to 3km sunlit peak = 5.7"																																	
26	Oct	28	0	18	19.6	R	541	SB8	3.9	3.9s		95-	154	5	65	85N	254	318	266	-0.7	-5.9	-0.3	+1.0	.662	176.1		3	45	49.6	24	22	4	364.2	1171.5
R541 = Maia = 20 Tauri																																	
541 is quadruple: Aa,Ab 4.4 5.4 : AB 3.8 13.7 113" 72.6, dT = +171sec : AB 3.8 13.7 113" 72.7, dT = +171sec																																	
541 = NSV 1279, 3.87, range 0.00, 4Kp, Type ACV, Period 10.288 days																																	
26	Oct	28	1	13	44.2	r	562	pB9	6.6	6.6		95-	153	16	70	23S	182	250	194	-0.6	-6.0	-1.6	+3.7	.246	-113.6		3	49	21.8	24	22	51	363.0	1082.1
562 is multiple: Aa,Ab 7.3 7.4 5.3" : AB 6.6 7.5 87" 309.1, dT = +214sec : AE 6.6 13.8 115" 82.8, dT = +76sec : AG 6.6 15.1 158" 212.2, dT = -557sec																																	
562 is a close double. Observations are highly desired																																	
Distance of 562 to Terminator = 17.9"; to 3km sunlit peak = 6.5"																																	
26	Oct	28	2	52	37.6	r	574	pG0	6.8	6.5		94-	152	37	77	38N	301	17	313	-0.6	-6.2	+2.0	-0.5	.303	125.1		3	52	11.4	25	9	47	360.8	921.4
26	Oct	28	5	23	14.1	r	76345	kG8	7.5	7.0		94-	151	70	87	61S	221	304	233	-0.8	-6.4	+1.2	+2.4	.374	-153.2		3	57	11.8	25	16	58	358.6	728.7
26	Oct	29	4	0	59.7	r	746	WB7	7.0	6.9		87-	138	39	75	69N	280	357	286	+1.1	-5.9	+1.2	+0.5	.458	154.6		4	59	53.7	27	19	32	360.5	886.8
746 is double: AB 7.0 8.7 20.4" 206.1, dT = -12sec																																	
26	Oct	29	6	18	22.7	R	756	F0	6.6	6.5		87-	137	68	80	45N	305	34	311	+0.9	-6.1	+2.9	-1.6	.280	133.3		5	4	38.0	27	41	46	358.7	711.8
26	Oct	29	9	30	35.6	R	773	wF8	7.0	6.7		86-	136	70	280	78S	249	159	254	+0.4	-6.0	+2.4	+0.6	.365	-157.1		5	10	3.9	27	33	23	358.7	689.0
773 is double: AB 7.0 9.3 315" 353.1, dT = +215sec																																	
26	Oct	30	5	12	33.8	r	78041	cG5	7.8	7.3		78-	124	40	75	38S	217	294	216	+2.6	-5.2	+0.1	+3.1	.324	-132.4		6	9	26.6	27	11	38	361.6	843.2
78041 is double: ** 8.6 8.6 0.040" 237.0, dT = -0.12sec																																	

Occultation prediction for Fox Observatory Broward
E. Longitude - 80 21 35.6, Latitude 26 7 45.6, Alt. 3m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon	Sun Alt	Moon Alt	Az	CA o	PA o	VA o	AA o	Libration L	B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
							78041 has been reported as non-instantaneous (OCc1052). Observations are highly desired																													
26	Oct	30	10	19	31.8	R	958	cK1	6.7	6.1		77-	122	74	278	63S	242	152	241	+1.9	-5.1	+2.9	+1.2	.299	-139.2		6	18	20.8	27	12	37	359.9	688.0
							958 is double: ** 7.5 7.5 0.050"																												
							958 has been reported as non-instantaneous (OCc1307). Observations are highly desired																													
26	Oct	31	4	36	24.0	r	1094	A0	7.1	7.1		68-	111	19	70	29N	337	47	331	+4.0	-4.0	+1.9	-2.8	.225	114.2		7	12	49.4	25	44	55	365.7	974.9
							R1094 = 49 Geminorum																												
26	Oct	31	9	25	45.9	d	1117	cG8	5.0	4.6		66-	109	80	94	-54S	133	215	126	+3.5	-4.0	+2.2	-2.0	.337	-25.9		7	23	28.5	25	3	2	362.0	657.4
							R1117 = 57 Geminorum																												
							1117 is double: ** 5.9 5.9 0.10" 90.0, dT = +0.22sec																												
							1117 has been reported as non-instantaneous (OCc1358). Observations are highly desired																													
26	Oct	31	10	46	14.1	R	1117	cG8	5.0	4.6		66-	109	-10	81	266	79S	267	185	260	+3.3	-3.9	+2.7	+0.0	.348	-154.5		7	23	28.5	25	3	2	362.1	677.3
							R1117 = 57 Geminorum																												
							1117 is double: ** 5.9 5.9 0.10" 90.0, dT = +0.29sec																												
							1117 has been reported as non-instantaneous (OCc1358). Observations are highly desired																													
26	Nov	4	7	44	51.0	r	118579	kA2	7.8	7.7		23-	58	7	88	72N	310	15	289	+6.6	+2.0	+0.2	-0.5	.516	166.3		10	56	30.9	5	16	24	380.4	979.4
26	Nov	5	9	48	42.3	r	138402	F2	8.7	8.5		15-	45	21	103	58S	259	320	237	+6.5	+3.5	+1.1	+1.7	.338	-135.6		11	47	0.0	- 1	37	46	382.7	877.8
26	Nov	7	10	43	20.8	r	157895	pA2	7.8	7.7		3-	21	-12	8	109	37N	334	35	313	+6.0	+5.7	-0.2	-1.3	.427	148.7		13	22	45.6	-13	11	11	391.1	948.1
							157895 is double: AB 7.8 10.8 19.4" 311.2, dT = -42sec																												
26	Nov	11	23	24	33.8	d	185071	G8	8.8	8.2		7+	30	-12	8	233	67S	128	73	122	+0.7	+6.6	+1.8	-2.5	.281	-46.7		17	8	49.4	-28	13	1	403.3	802.6
26	Nov	11	23	33	36.0	d	185075	K0	8.3	7.7		7+	30		6	235	35N	49	353	43	+0.7	+6.6	+0.0	+0.4	.355	31.9		17	9	3.8	-27	53	41	403.4	817.2
26	Nov	12	23	37	59.8	D	2601	SK4	6.8			12+	41	14	229	23N	28	338	27	-0.5	+5.9	-0.2	+1.5	.271	45.7		18	2	54.3	-27	49	36	403.7	760.7
							R2601 = 7 Sagittarii																												
							2601 is triple: Aa,Ab 6.90 9.37 0.34" 332.0, dT = +0.7sec : AB 6.9 13.0 9.7" 48.2, dT = +34sec																												
							2601 is a close double. Observations are highly desired																													
26	Nov	12	23	43	45.7	d	186184	K0	8.9	8.0		12+	41	14	229	55N	60	10	60	-0.5	+5.9	+0.6	+0.1	.383	13.1		18	3	31.1	-27	54	45	403.8	769.3
26	Nov	13	0	21	44.1	d	186228	K5	8.4	7.5		12+	41	7	234	62N	67	11	66	-0.6	+5.8	+0.4	-0.2	.420	6.6		18	4	41.7	-27	51	51	404.6	830.3
26	Nov	13	23	24	31.3	d	187471	G0	9.0	8.4v		19+	51	-12	25	219	72N	70	30	74	-1.7	+5.0	+1.5	-0.1	.352	-3.3		18	56	17.0	-26	42	15	402.9	689.3
							187471 = ASAS J185616-2642.1, 9.086, range 0.04, 3V, Type ROT, Period 97.44 days																												
26	Nov	14	1	19	3.2	d	187541	G5	8.3	7.7		19+	52	7	236	86S	91	35	96	-2.1	+4.8	+0.8	-1.0	.400	-24.1		18	59	26.2	-26	29	49	404.8	859.9
26	Nov	15	23	18	1.3	D	3007	K2	7.2	6.5		35+	73	-11	41	198	22N	8	350	21	-4.3	+2.7	+0.2	+2.9	.221	46.9		20	36	26.5	-20	35	8	398.6	624.7
26	Nov	16	20	45	15.8	d	3126	G8	4.3	3.8v		44+	83	20	36	139	88S	74	112	90	-4.8	+1.6	+2.3	+1.3	.321	-13.6		21	22	14.8	-16	50	4	396.3	635.7
							R3126 = Tae = iota Capricorni																												
							3126 = iot Cap, 4.27, range 0.06, V, Type BY																												
26	Nov	16	22	15	19.5	r	3126	G8	4.3	3.8v		45+	84	3	46	164	-58S	220	235	237	-5.1	+1.5	+1.9	+2.0	.307	-166.1		21	22	14.8	-16	50	4	395.2	606.1
							R3126 = Tae = iota Capricorni																												
							3126 = iot Cap, 4.27, range 0.06, V, Type BY																												
26	Nov	17	22	31	48.3	D	3253	kB5	5.4	5.5V		54+	95	-1	49	152	51S	108	133	127	-6.1	+0.0	+4.3	-0.6	.183	-57.0		22	10	37.5	-11	33	54	390.7	636.7
							R3253 = 38 Aquarii																												
							3253 = HD 210424, 5.44, , Type ACV, Period 3.9613 days, Phase 93%																												
26	Nov	18	0	7	31.3	D	3255	M0	7.3	6.4v		55+	96	53	188	85S	75	67	94	-6.5	-0.2	+2.8	+0.6	.303	-27.3		22	12	16.9	-11	3	56	390.1	644.7
							3255 = KR Aqr, 7.25 to 7.36, Hp, Type LB																												
26	Nov	19	3	9	56.8	D	3380	cK0	5.9	5.4		66+	108	41	237	60S	98	48	119	-7.7	-2.0	+2.6	-1.5	.268	-48.0		23	1	31.7	- 4	42	41	384.9	746.6
							3380 is double: ** 7.0 7.0 0.10" 90.0, dT = +0.37sec																												
							3380 has been reported as non-instantaneous (OCc1633). Observations are highly desired																													
26	Nov	19	23	52	6.5	d	128354	F8	8.0	7.7		74+	119	58	140	76N	54	89	76	-7.1	-2.9	+1.8	+1.8	.377	-6.8		23	44	18.2	0	42	44	378.5	697.1
26	Nov	20	5	39	11.3	d	128417	cG5	7.0	6.4		76+	121	23	261	61N	39	336	61	-8.1	-3.6	+0.6	+1.0	.444	19.0		23	51	6.8	2	14	16	380.0	864.9
							128417 is double: ** 6.9 0.001" 333.1, dT = 0.00sec																												
26	Nov	20	23	48	45.0	D	68	SB9	5.8	S		83+	132	54	116	64N	43	97	65	-6.8	-4.1	+1.2	+2.1	.416	6.0		0	32	23.8	6	57	20	372.6	755.6

Occultation prediction for Fox Observatory Broward
E. Longitude - 80 21 35.6, Latitude 26 7 45.6, Alt. 3m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon	Sun Alt	Moon Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
R68 = 51 Piscium																																		
68 is multiple: Aa,Ac 5.8 9.5 0.20" : Aa,Ab 5.8 8.0 0.28" 283.8, dT = -0.32sec : AB 5.7 9.5 28.5" 81.5, dT = +54sec : AD 5.7 13.1 82" 307.6, dT = -19sec																																		
68 is a close double. Observations are highly desired																																		
68 = NSV 15113, 5.67 to 9.0, V, Type E:																																		
26	Nov	21	5	27	41.8	d	109354	kF5	7.3	7.1		84+	133		38	260	56S	105	41	127	-7.7	-4.8	+1.8	-1.9	.302	-46.5		0	39	42.6	8	7	22	372.4	791.4
26	Nov	21	22	35	22.7	d	197	cK0	7.0	6.5		90+	144	-2	31	90	82N	66	133	87	-5.8	-4.9	+0.7	+1.5	.508	-9.8		1	21	58.3	12	36	15	368.8	921.3
26	Nov	22	7	47	49.8	d	233	cB9	6.2	6.3		92+	147		21	277	72S	94	26	114	-7.0	-5.8	+0.5	-1.1	.467	-24.4		1	35	46.4	14	39	41	367.7	913.9
R233 = 101 Piscium																																		
26	Nov	23	6	51	56.3	D	370	A9	6.1	6.0v		97+	160		47	272	72S	103	31	122	-5.5	-6.4	+1.6	-1.5	.372	-32.8		2	30	38.4	19	51	19	360.6	773.1
R370 = 26 Arietis (UU)																																		
370 = UU Ari, 6.10 to 6.15, V, Type DSCTC, Period 0.0676 days																																		
26	Nov	25	7	50	50.0	R	701	SF2	6.6	6.4		99-	169		62	279	61N	265	180	273	-1.6	-6.2	+2.0	-0.3	.426	-176.1		4	38	29.5	26	56	23	354.0	732.6
701 is triple: 6.6 9.2 3.1" 169.4, dT = +0.6sec : AB 7.36 7.21 4.49" 187.7, dT = -2.4sec																																		
701 is a close double. Observations are highly desired																																		
Distance of 701 to Terminator = 12.3"; to 3km sunlit peak = 3.4"																																		
26	Nov	25	7	50	51.2	r	X 70481p		7.3	7.2		99-	169		62	279	61N	265	180	273	-1.6	-6.2	+2.0	-0.3	.426	-176.2		4	38	29.6	26	56	26	354.0	732.6
X 70481 is triple: 7.3 9.2 5.8" 174.9, dT = -0.08sec : AC 7.4 12.9 92" 203.6, dT = -104sec																																		
X 70481 is a close double. Observations are highly desired																																		
Distance of X 70481 to Terminator = 12.3"; to 3km sunlit peak = 3.4"																																		
26	Nov	26	6	4	43.9	r	868	SA0	7.5	7.5		96-	156		80	77	57N	292	30	294	+0.9	-5.5	+2.5	-0.9	.369	157.6		5	44	21.2	27	43	53	353.2	683.5
868 is triple: AB 7.5 9.8 8.6" 254.1, dT = -19sec : AC 7.5 12.7 47" 40.5, dT = +42sec																																		
868 is a close double. Observations are highly desired																																		
26	Nov	26	8	24	9.2	r	77588	cB8	7.7	7.7		96-	156		69	279	56S	226	138	228	+0.6	-5.4	+3.0	+2.4	.254	-127.3		5	48	49.0	27	21	50	353.6	718.7
77588 is double: 8.1 9.1																																		
26	Nov	26	9	0	46.7	r	77604	K0	7.0	6.2		95-	155		61	280	73N	278	192	279	+0.5	-5.3	+1.8	-0.9	.438	-176.8		5	49	38.1	27	33	3	354.0	753.6
26	Nov	26	9	24	22.0	r	77621	M3	7.5	6.6s		95-	155		56	282	33N	317	233	319	+0.4	-5.3	+0.9	-2.6	.371	144.7		5	50	48.2	27	41	9	354.3	780.2
77621 = NSV 16688, 7.47, range 0.02, 6V, Type VAR, Period 4.88496 days																																		
26	Nov	26	9	31	47.0	r	77619	F2	7.1	6.9		95-	155		55	282	73N	278	194	279	+0.4	-5.3	+1.5	-0.9	.458	-175.6		5	50	39.7	27	30	18	354.4	789.5
26	Nov	26	10	29	19.7	R	890	cA0	4.6	4.6s		95-	155		42	285	20N	331	252	332	+0.4	-5.2	-0.1	-3.1	.341	132.6		5	53	19.6	27	36	44	355.3	868.6
R890 = 136 Tauri																																		
890 is double: ** 4.8 6.3 0.050" 270.0, dT = -0.07sec																																		
890 has been reported as non-instantaneous (OCc 206). Observations are highly desired																																		
890 = NSV 2696, 4.50 to 4.61, V																																		
Distance of 890 to Terminator = 12.1"; to 3km sunlit peak = 2.8"																																		
26	Nov	27	9	31	26.6	R	1061	SF8	6.2	5.9s		89-	141		69	275	50N	312	227	307	+2.5	-4.1	+1.4	-2.2	.396	158.2		6	58	47.4	26	4	52	355.4	735.8
R1061 = 39 Geminorum																																		
1061 is triple: Aa,Ab 6.1 0.50" 158.0, dT = +1.1sec : AB 6.1 12.1 35" 69.2, dT = +39sec																																		
1061 is a close double. Observations are highly desired																																		
1061 = NSV 17256, 6.1, range 0.02, V, Type VAR:																																		
26	Nov	27	10	1	58.6	R	1062	cB8	6.4	6.5		89-	141		62	277	71N	291	208	286	+2.4	-4.1	+1.6	-1.4	.444	-179.6		6	59	27.9	25	54	51	355.7	766.9
R1062 = 40 Geminorum																																		
1062 is double: AB 6.4 0.10" 160.5, dT = +0.15sec																																		
1062 is a close double. Observations are highly desired																																		
26	Nov	27	11	10	26	Gr	78995	A3	7.4	7.2		89-	141	-9	46	** GRAZE: CA 19.7S; Dist. 45km in az. 217deg. [Lat = 25.63-0.67(E.Long+80.36)]																				
26	Nov	27	11	17	1.1	r	78995	A3	7.4	7.2		89-	141	-7	46	280	32S	215	137	210	+2.3	-3.9	+5.7	+5.7	.108	-102.5		7	2	20.5	25	21	52	356.9	861.6
26	Nov	27	11	19	36.6	r	1068	A2	7.1	7.0		89-	141	-7	45	281	52S	235	157	230	+2.3	-3.9	+2.5	+1.0	.272	-122.9		7	2	7.2	25	25	32	357.0	865.9
26	Nov	28	12	18	17	m	1224	cG2	5.3	5.0		80-	126	5	45	275	18S	210	135	199	+3.9	-2.3	+9.9	+9.9	.000	-90.0		8	7	45.9	21	34	55	360.4	868.7

Occultation prediction for Fox Observatory Broward
E. Longitude - 80 21 35.6, Latitude 26 7 45.6, Alt. 3m; Telescope dia 15cm; dMag 0.0

y	day m	d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon	Sun Alt	Moon Alt	Az	CA o	PA o	VA o	AA o	Libration L	B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
	R1224 = mu Cancri																																		
	1224 is double: ** 5.4 7.8 0.53" 301.8																																		
	1224 has been reported as non-instantaneous (OCc1849). Observations are highly desired																																		
26	Nov 29	7	1	7.4	R		1340kA0		6.6	6.6		71-	115	51	93	73N	303	14	288	+6.1	-1.3	+1.7	-0.7	.416	171.0		8	58	18.3	18	18	30	363.3	742.1
26	Nov 29	7	39	12.6	R		1343 M4		6.3	5.5v		71-	114	59	98	88N	288	357	273	+6.0	-1.3	+2.0	-0.2	.400	-171.6		8	59	10.7	18	8	6	362.8	712.2
	1343 = FZ Cnc, 6.28 to 6.38, Hp, Type SRB, Period 17.6 days																																		
26	Nov 30	5	42	41.9	R		1449 M0		6.5	5.6s		60-	102	20	85	39N	341	48	323	+7.2	+0.3	+0.8	-2.2	.335	131.7		9	51	2.0	13	3	58	370.5	905.0
	R1449 = 23 Leonis																																		
	1449 = NSV 18283, 6.45, range 0.00, 6V, Type VAR, Period 2.82446 days																																		
26	Dec 1	8	32	14.9	R		1567kK1		6.4	5.8		48-	88	44	107	41N	341	41	320	+7.5	+2.0	+0.8	-2.3	.340	144.3		10	46	5.7	6	22	23	373.9	758.6
	R1567 = 37 (Sextantis)/Leonis																																		
26	Dec 2	10	23	1.3	D		1685cG9		4.3	3.8		37-	75	52	131	-34S	168	211	146	+7.4	+3.7	+0.5	-2.7	.313	-36.4		11	36	56.9	- 0	49	25	378.6	714.9
	R1685 = upsilon Leonis																																		
	1685 is double: ** 4.5 9.0 0.10" 195.0, dT = +0.28sec																																		
	1685 has been reported as non-instantaneous (OCc1427). Observations are highly desired																																		
26	Dec 2	11	19	23.9	r		138302 K0		7.7	7.1		37-	75	-8	60	151	51N	331	357	309	+7.3	+3.8	+1.2	-2.1	.357	162.3		11	37	16.8	- 0	34	41	378.2	687.0
26	Dec 2	11	31	3.2	R		1685cG9		4.3	3.8		37-	75	-5	61	157	75S	278	298	256	+7.2	+3.8	+2.9	-0.1	.301	-143.9		11	36	56.9	- 0	49	25	378.2	683.6
	R1685 = upsilon Leonis																																		
	1685 is double: ** 4.5 9.0 0.10" 195.0, dT = -0.04sec																																		
	1685 has been reported as non-instantaneous (OCc1427). Observations are highly desired																																		
26	Dec 4	9	21	31.6	R		1885 K2		7.3	6.7		19-	52	17	113	39N	340	38	319	+7.2	+5.7	-0.1	-1.7	.380	144.8		13	8	27.9	-11	45	46	390.3	880.8
26	Dec 6	10	25	28.6	R		2109 K4		6.1	5.2		6-	28	6	118	15N	353	51	336	+5.8	+6.8	-0.9	-2.5	.283	126.5	.01	14	47	13.7	-21	19	30	398.3	918.7
26	Dec 11	23	48	49	d		188260 K0		8.7	8.0		7+	31	10	236	35S	141	86	149	-2.4	+3.8	+5.3	-8.5	.090	-77.9		19	32	44.8	-24	55	39	405.1	850.9
26	Dec 11	23	56	12	Gr		188260 K0		8.7	8.0		7+	31	8	** GRAZE: CA 22.3S; Dist. 39km in az. 148deg. [Lat = 25.71+0.56(E.Long+80.36)]																						
26	Dec 11	23	57	11	m		188262 K0		8.5	8.0		7+	31	8	237	22S	153	97	161	-2.5	+3.8	+9.9	+9.9	.000	-90.0		19	32	48.9	-24	56	36	405.3	864.2
26	Dec 12	0	3	13	r		188260 K0		8.7	8.0		7+	31	7	238	10S	166	109	174	-2.5	+3.8	-4.3	+8.3	.093	-102.1		19	32	44.8	-24	55	39	405.4	874.2
26	Dec 12	23	14	58.2	D		189195 F0		7.8	7.6		13+	42	-10	26	226	45N	34	350	46	-3.7	+2.7	+0.5	+1.1	.353	22.3		20	21	32.8	-21	25	8	402.4	744.4
26	Dec 13	0	20	57.2	d		189226 F7		8.7	8.4		13+	42		15	237	80S	88	34	100	-3.9	+2.5	+1.1	-0.9	.371	-29.7		20	23	35.8	-21	22	14	403.5	836.6
26	Dec 13	0	44	25.8	d		189240 A7		8.6	8.4		13+	42		11	240	71N	59	2	71	-3.9	+2.5	+0.3	+0.1	.445	0.3		20	24	5.6	-21	10	18	404.0	871.8
26	Dec 14	0	31	42.0	d		3095 F0		8.4	8.2		20+	53		24	236	20N	4	313	19	-5.2	+1.1	-0.6	+2.8	.260	50.4		21	10	22.5	-16	57	31	400.6	793.7
26	Dec 15	1	25	14.6	d		3219 K1		8.3	7.6		29+	65		25	242	76S	84	30	103	-6.5	-0.4	+1.3	-0.7	.358	-31.2		21	58	17.7	-12	6	8	397.4	806.9
26	Dec 16	1	54	37.3	d		146275kK0		8.1	7.6		38+	76		30	245	63N	41	346	61	-7.6	-1.8	+0.7	+1.0	.405	11.3		22	43	21.3	- 6	24	3	392.7	786.8
26	Dec 17	2	8	14.0	d		146725pF8		7.8			48+	88		39	246	46S	110	55	132	-8.3	-3.2	+2.8	-2.9	.208	-58.7		23	28	46.2	- 0	50	8	386.8	751.2
	146725 is double: AB 7.98 10.59 1.38" 62.1, dT = +4sec																																		
	146725 is a close double. Observations are highly desired																																		
26	Dec 18	3	35	23.9	d		29 K0		7.0	6.4		59+	100		33	260	13N	350	287	12	-8.7	-4.6	-0.1	+5.9	.166	67.3		0	15	38.6	5	50	38	381.1	793.7
26	Dec 19	0	51	56.9	d		139cG5		8.1	7.6		68+	111		75	197	31N	10	354	32	-8.0	-5.3	+0.6	+3.4	.287	39.7		1	1	13.9	11	10	50	372.9	674.9
26	Dec 19	23	9	24.4	d		92663 K0		7.9	7.1		78+	124	-8	58	101	44N	26	93	46	-6.9	-5.8	+0.6	+2.6	.387	27.0		1	51	38.2	16	23	56	367.7	773.6
26	Dec 20	4	21	6	Gr		92732wF5		7.8	7.5		79+	125		47	** GRAZE: CA 7.6S; Dist. 44km in az. 354deg. [Lat = 26.53+0.09(E.Long+80.36)]																						
26	Dec 21	23	22	32.2	d		571pA2		6.8	6.7		94+	151	-11	39	77	38N	34	110	46	-3.9	-6.2	+0.0	+2.3	.443	32.7		3	51	25.3	25	9	47	358.2	914.8
	571 is double: ** 7.1 9.1																																		
26	Dec 21	23	37	4.2	d		574pG0		6.8	6.5		94+	151		42	78	54N	50	127	62	-4.0	-6.2	+0.4	+1.9	.493	16.7		3	52	11.4	25	9	47	357.9	893.2
26	Dec 22	2	17	51.6	d		76345kG8		7.5	7.0		94+	152		77	89	49S	129	213	141	-4.2	-6.4	+3.8	-2.8	.209	-59.5		3	57	11.8	25	16	58	355.4	709.1
26	Dec 22	8	11	50.4	d		76472cG8		7.2	6.5		95+	154		27	287	86N	85	13	96	-4.9	-6.3	+0.6	-0.7	.539	4.3		4	8	39.0	25	52	40	357.7	938.5
26	Dec 23	4	54	45.8	d		773wF8		7.0	6.7		99+	167		83	286	66N	81	338	86	-2.4	-5.9	+2.4	+0.3	.398	7.4		5	10	3.9	27	33	23	351.7	684.1
	773 is double: AB 7.0 9.3 315" 353.1, dT = +33sec																																		
26	Dec 25	3	17	22.4	R		1117cG8		5.0	4.6		98-	164		46	80	25N	334	52	327	+2.5	-3.5	+2.2	-2.9	.259	123.4		7	23	28.5	25	3	2	352.7	805.4
	R1117 = 57 Geminorum																																		

Occultation prediction for Fox Observatory Broward
E. Longitude - 80 21 35.6, Latitude 26 7 45.6, Alt. 3m; Telescope dia 15cm; dMag 0.0

y	m	day d	h	Time m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon Alt	Sun Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
							1117 is double: ** 5.9 5.9 0.10" 90.0, dT = +0.17sec																												
							1117 has been reported as non-instantaneous (OCc1358). Observations are highly desired																												
							Distance of 1117 to Terminator = 6.8"; to 3km sunlit peak = 0.1"																												
26	Dec	25	6	24	6.5	r	79416SF8		7.6	7.4		98-	163	87	115	55N	306	9	298	+2.2	-3.4	+2.0	-1.6	.395	164.7		7	28	40.6	24	38	55	351.1	697.5
							79416 is triple: AC 7.7 11.8 29.0" 124.2, dT = +73sec : AB 7.7 8.9 65" 19.4, dT = -46sec																												
26	Dec	25	8	0	40.3	r	79470	K0	7.6	7.1		98-	162	71	268	38S	219	140	211	+1.9	-3.2	+6.4	+6.7	.108	-104.3		7	31	39.2	23	59	59	351.6	748.0
							Distance of 79470 to Terminator = 17.8"; to 3km sunlit peak = 7.0"																												
26	Dec	26	6	12	55.0	R	1277wK3		5.3	4.7		93-	148	70	102	40N	332	42	319	+4.3	-1.8	+1.6	-2.6	.333	143.7		8	32	42.5	20	26	28	354.2	709.9
							R1277 = eta Cancri																												
							1277 is double: AB 5.3 20.0 164" 280.0, dT = -303sec																												
26	Dec	26	7	58	49	M	1282	G0	6.6	6.2		92-	148	82	216	19S	212	177	199	+4.0	-1.6	+9.9	+9.9	.000	-90.0		8	35	19.4	19	35	24	354.1	717.7
							R1282 = 35 Cancri																												
							Distance of 1282 to Terminator = 18.6"; to 3km sunlit peak = 6.6"																												
26	Dec	26	8	35	29.4	r	97941	A*	7.5	7.4		92-	148	76	247	89N	284	223	271	+4.0	-1.5	+2.2	-0.9	.407	-161.4		8	35	45.1	19	46	16	354.4	738.8
26	Dec	26	9	27	2.7	r	97973	A0	7.7	7.6		92-	147	65	261	46N	328	257	314	+3.8	-1.4	+0.8	-2.4	.414	155.8		8	37	37.0	19	43	59	354.9	781.0
26	Dec	26	9	46	55.8	R	1287kA5		6.7	6.6		92-	147	60	263	46S	239	168	226	+3.8	-1.3	+3.9	+1.6	.201	-115.7		8	37	46.8	19	16	2	355.2	800.4
26	Dec	26	10	21	45.7	r	1293pK0		6.8	s		92-	147	53	268	10N	4	291	350	+3.7	-1.2	-1.0	-4.2	.241	119.6		8	39	50.7	19	32	27	355.7	839.4
							1293 is multiple: Da,Db 6.67 9.87 0.50" 252.6, dT = +0.7sec : DE 6.7 11.8 35" 3.1, dT = -147sec : DA 6.7 7.3 92" 61.0, dT = -205sec : DC 6.7 7.5 100" 89.1, dT = -33sec																												
							1293 has been reported as non-instantaneous (S 571). Observations are highly desired																												
							1293 = NSV 4171, 6.52 to 6.61, V																												
							Distance of 1293 to Terminator = 5.9"; to 3km sunlit peak = 0.0"																												
26	Dec	26	10	53	50.5	r	98009kA7		7.6	7.6v		92-	147	46	271	69N	305	232	291	+3.7	-1.1	+0.8	-1.7	.509	178.0		8	39	44.7	19	16	31	356.3	880.3
							98009 = BU Cnc, 7.67, range 0.03, V, Type DSCTC, Period 0.071 days																												
26	Dec	26	10	58	11.2	r	1297pA9		6.8	6.6S		92-	147	45	272	40N	334	262	321	+3.7	-1.1	+0.1	-2.4	.436	148.3		8	40	20.1	19	20	56	356.4	885.7
							1297 is double: AB 6.8 8.5 0.016" 342.8, dT = -0.04sec																												
							1297 is a close double. Observations are highly desired																												
							1297 = NSV 17953, 6.78, , Type DSCT:																												
26	Dec	27	9	16	3.5	r	98654WB9		7.9	7.9		84-	133	75	221	79N	300	263	283	+5.6	+0.3	+1.9	-1.4	.415	-171.6		9	35	9.5	14	4	32	358.9	729.7
							98654 is double: AB 7.8 9.1 45" 48.5, dT = +34sec																												
26	Dec	27	12	2	10.4	r	1425SF7		7.0	6.8		84-	132	-2	41	265	78N	302	235	285	+5.3	+0.8	+0.8	-1.7	.501	-176.5		9	39	17.2	13	18	45	361.5	880.9
							1425 is quadruple: Aa,Ab 7.7 7.7 : ** 7.7 7.7 0.006" 90.0, dT = +0.01sec : AB 7.1 15.1 51" 131.0, dT = +100sec																												
26	Dec	28	4	39	56.1	r	1516	K5	6.6	5.8s		76-	122	22	91	82N	300	5	280	+7.5	+1.5	+0.7	-0.2	.506	177.2		10	22	14.2	8	57	52	367.1	902.0
							1516 = NSV 18388, 6.72 to 6.81, Hp, Type IB																												
26	Dec	28	6	0	3.0	R	1525	M2	5.6	4.8v		76-	121	39	101	32N	350	53	330	+7.4	+1.6	+0.7	-3.0	.301	131.8	.01	10	25	15.2	8	47	5	365.7	801.1
							R1525 = 44 Leonis (DE)																												
							1525 = DE Leo, 5.6, range 0.07, V, Type SRB:																												
26	Dec	28	6	3	3.4	r	118292DF0		7.7	7.6S		76-	121	40	101	19N	3	67	343	+7.4	+1.6	+0.3	-4.6	.216	118.7		10	25	35.1	8	46	35	365.7	798.1
							118292 is double: AB 7.8 9.1 3.6" 74.4, dT = -5sec																												
							118292 is a close double. Observations are highly desired																												
							118292 = NSV 4851, 7.7,																												
26	Dec	28	12	51	56.1	r	1549cG8		5.1	4.6v		74-	119	8	38	258	7N	16	313	355	+6.4	+2.6	-1.4	-4.8	.175	111.6		10	34	48.0	6	57	14	367.5	848.5
							R1549 = 48 Leonis																												
							1549 is double: ** 6.0 6.0 0.10" 90.0, dT = -0.15sec																												
							1549 has been reported as non-instantaneous (OCc 197). Observations are highly desired																												
							1549 = HIP 51775, 5.07, range 0.00, 4V, Type VAR, Period 0.09302 days																												
26	Dec	29	5	31	51.3	r	1624PF2		6.8	6.5		66-	108	20	98	73S	277	340	255	+8.2	+3.1	+0.7	+0.7	.452	-155.4		11	13	53.0	2	16	7	373.4	899.7
							1624 is double: AB 6.8 16.2 85.0, dT = 0.00sec																												

Occultation prediction for Fox Observatory Broward
E. Longitude - 80 21 35.6, Latitude 26 7 45.6, Alt. 3m; Telescope dia 15cm; dMag 0.0

y	m	day d	h	Time m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon Sun Alt	Moon Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	Dec	29	7	21	7.3	R	1635	cM0	5.2	4.4		65-	108	43	114	47N	337	32	315	+8.0	+3.3	+0.8	-2.0	.374	150.8		11	17	17.4	2	0	38	371.7	771.5

R1635 = 75 Leonis

1635 is double: ** 5.8 6.6 0.044" 0.0

1635 has been reported as non-instantaneous (OCc 763). Observations are highly desired

26	Dec	29	8	41	13.2	R	1637	K0	5.9	5.4		65-	107	57	135	51N	333	12	311	+7.8	+3.5	+1.1	-2.0	.370	158.7		11	18	55.0	1	39	1	371.0	715.6

R1637 = 76 Leonis

26	Dec	30	10	28	56.5	r	138612	cK5	8.3	7.5		53-	94	58	167	65N	319	331	297	+7.9	+5.0	+1.6	-1.7	.371	174.7		12	8	59.9	- 5	8	57	377.5	681.4

138612 is double: ** 8.3 0.09" 281.0, dT = -0.2sec

138612 has been reported as non-instantaneous (OCc1769). Observations are highly desired

26	Dec	30	10	57	15.1	R	138617	KF2	7.2	7.0		53-	94	59	180	46N	337	337	315	+7.8	+5.1	+1.0	-2.4	.338	156.2		12	9	47.8	- 5	13	33	377.6	675.7
26	Dec	31	6	51	57.1	r	1845	SG8	6.5	5.9s		44-	83	12	108	53S	256	316	234	+8.4	+5.6	+1.0	+1.8	.330	-132.0		12	51	22.9	-10	20	18	386.4	922.8

1845 is triple: AB 6.6 9.7 28.8" 296.2, dT = -66sec : AC 6.6 12.5 142" 211.8, dT = -310sec

1845 = NSV 5994, 6.49, range 0.07, V

Lunar Occultation predictions
Marathon Key Airport
Florida
USA

Occultation prediction for Marathon Key Airport
E. Longitude - 81 3 4.0, Latitude 24 43 29.2, Alt. 1m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon Sun Alt	Moon Alt	Az	CA o	PA o	VA o	AA o	Libration L	B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	Jan	5	3	30	28.6	r	1315	A2	7.1	7.1		96-	156	39	83	62S	252	326	237	+6.5	-3.5	+1.2	+1.8	.367	-144.2		8	46	20.2	20	37	0	365.0	800.7
26	Jan	5	8	24	47.8	R	1329	pF8	6.8			95-	154	74	256	68N	304	234	289	+5.7	-3.1	+1.7	-1.7	.408	-178.9		8	53	55.3	19	58	2	363.9	720.0
							1329 is double: AB 7.32 7.86 0.15" 71.9, dT = +0.23sec																												
							1329 is a close double. Observations are highly desired																												
26	Jan	7	3	19	45	Gr	1547	cB1	3.8	3.9	v	82-	130	11	**	GRAZE: CA 3.2S; Dist.287km in az. 175deg. [Lat = 22.13+0.08(E.Long+81.05)]																				
							Distance of 1547 to Terminator = 7.5"; to 3km sunlit peak = 0.0"																												
26	Jan	7	3	36	46.1	R	1547	cB1	3.8	3.9	v	82-	130	14	86	37S	238	305	218	+7.9	-0.4	+0.3	+3.0	.274	-122.9		10	32	48.7	9	18	24	378.9	926.0
							R1547 = rho Leonis																												
							1547 is double: AB 3.8 4.8 105.1, dT = -0.06sec																												
							1547 = rho Leo, 3.83 to 3.9, V, Type ACYG, Period 3.4271 days, Phase 53%																												
26	Jan	9	7	54	59.7	R	1754	KF5	7.0	6.7		62-	104	44	124	73S	277	327	255	+6.9	+2.9	+2.2	+0.4	.315	-145.2		12	11	21.8	- 3	46	44	388.7	723.6
26	Jan	10	9	10	17.7	r	139061	DF5	7.3			52-	93	46	138	80N	303	341	281	+5.9	+4.3	+1.7	-0.8	.357	-169.3		12	57	28.6	- 9	45	41	393.6	692.5
							139061 is double: AB 7.31 10.77 1.66" 276.0, dT = -4sec																												
							139061 is a close double. Observations are highly desired																												
26	Jan	10	9	55	20.8	r	139081	cK0	7.5	7.1		52-	92	52	152	29N	353	19	332	+5.8	+4.4	+0.2	-2.9	.270	141.1		12	59	1.6	- 9	50	3	393.3	660.6
							139081 is double: AB 7.6 12.6 0.33" 65.8, dT = -0.36sec																												
							139081 is a close double. Observations are highly desired																												
26	Jan	11	12	10	51.9	r	1970	SA0	6.2	6.2		42-	81	-1	49	189	89S	289	281	270	+4.2	+5.8	+2.8	-1.0	.294	-159.8		13	45	35.1	-15	46	3	397.3	604.6
							R1970 = 85 Virginis																												
							1970 is multiple: Aa,Ab 6.5 8.2 : Aa,Ac 6.5 8.4 0.10" : AB 6.2 12.8 44" 312.7, dT = -137sec : AB 6.2 12.8 44" 312.6, dT = -138sec																												
							1970 is a close double. Observations are highly desired																												
26	Jan	12	10	48	53.1	r	158609	dG1	8.1	7.8		33-	70	39	149	53N	324	354	306	+3.5	+6.4	+1.1	-1.4	.326	163.8		14	31	12.3	-19	58	40	400.2	659.3
							158609 is double: AB 8.2 10.6 4.2" 286.0, dT = -10sec																												
							158609 is a close double. Observations are highly desired																												
26	Jan	14	9	11	20.3	R	2312	M2	5.4	4.5	s	17-	49	4	121	56N	310	10	299	+1.3	+7.0	-0.1	-0.4	.439	164.3		16	8	7.6	-26	19	36	404.8	895.6
							2312 = NSV 20513, 5.35, range 0.00, 8V, Type VAR, Period 7.61267 days																												
26	Jan	14	10	0	49.8	r	184177	kA0	8.2	8.1		17-	49	13	127	44N	322	16	312	+1.2	+7.1	+0.0	-0.9	.371	153.1		16	9	45.8	-26	26	24	403.8	815.2
26	Jan	14	10	13	0	M	2318	A*	6.6	6.6	v	17-	48	15	129	20S	205	257	195	+1.1	+7.1	+9.9	+9.9	.000	-90.0		16	10	15.9	-26	54	33	403.6	797.4
							2318 = V0952 Sco, 6.57, range 0.04, V, Type ACV, Period 1.4178 days, Phase 15%																												
26	Jan	14	11	6	30	m	184208	cG3	8.1	7.8		17-	48	23	138	21S	206	249	196	+1.0	+7.2	+9.9	+9.9	.000	-90.0		16	11	36.4	-27	4	41	402.7	718.4
							184208 is double: ** 8.9 8.9 0.10" 63.0																												
							184208 has been reported as non-instantaneous (OCc 764). Observations are highly desired																												
26	Jan	14	11	22	59.1	r	184206	dF8	9.0	8.7		17-	48	-11	26	141	61S	247	287	237	+0.9	+7.2	+3.0	+2.1	.233	-130.9		16	11	33.6	-26	57	39	402.5	695.3
							184206 is double: AB 9.0 13.2 5.1" 89.9, dT = +20sec																												
							184206 is a close double. Observations are highly desired																												
26	Jan	15	10	45	10.5	R	184978	B9	7.7	7.7		10-	37	11	128	56N	302	357	297	-0.1	+7.1	+0.4	-0.2	.401	166.1		17	3	59.1	-28	15	23	402.9	808.1
26	Jan	15	10	57	11.1	R	2453	K1	6.6	6.2		10-	37	13	130	49S	226	279	221	-0.1	+7.1	+3.0	+3.7	.190	-118.0		17	4	27.8	-28	34	58	402.7	789.5
26	Jan	16	10	49	35.1	R	2586	cB3	6.0	6.0		5-	26	2	123	89N	260	320	259	-1.2	+6.8	+0.8	+1.2	.416	-158.8		17	58	39.0	-28	45	33	402.0	870.5
							2586 is double: ** 6.3 7.3 0.30" 276.0, dT = -0.7sec																												
							2586 has been reported as non-instantaneous (OCc1519). Observations are highly desired																												
26	Jan	16	11	19	58.0	r	186054	G5	9.1	8.5		5-	26	-12	8	126	67N	282	338	282	-1.3	+6.8	+0.7	+0.5	.420	178.9		17	59	38.6	-28	42	19	401.3	818.4
26	Jan	20	15	12	54	m	3171	cA7	3.7	3.5	v	4+	22	34	20	120	11S	156	211	174	-4.5	+2.9	+9.9	+9.9	.000	-90.0		21	40	5.5	-16	39	44	387.3	768.2
							R3171 = Nashira = gamma Capricorni																												
							3171 is double: AB 4.6 4.6 0.013" 239.0																												
							3171 is a close double. Observations are highly desired																												
							3171 = gam Cap, 3.2, range 0.03, J, Type ACV																												
26	Jan	20	15	14	51	Gr	3171	cA7	3.7	3.5	v	4+	22	33	21	**	GRAZE: CA 10.6S; Dist.143km in az. 360deg. [Lat = 26.02+0.01(E.Long+81.05)]																				

Occultation prediction for Marathon Key Airport
E. Longitude - 81 3 4.0, Latitude 24 43 29.2, Alt. 1m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon Alt	Sun Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	Jan	22	23	43	18.4	D	3454	K0	7.6	7.1		17+	49	-10	39	245	39S	117	62	139	-6.1	-1.3	+3.5	-4.0	.169	-66.8		23	27	14.7	- 2	38	13	377.7	786.5
26	Jan	23	0	18	45.7	d	146716	pG0	8.4	8.2		17+	49		31	251	43S	113	54	135	-6.2	-1.3	+2.3	-3.0	.220	-60.7		23	28	5.7	- 2	27	33	378.2	825.3
		146716 is triple: AB 9.2 9.2 0.20" 79.7, dT = +0.8sec : AC 8.5 8.1 57" 45.9, dT = +100sec																																
		146716 is a close double. Observations are highly desired																																
26	Jan	23	0	20	28.3	d	146717	PF2	8.1	7.9		17+	49		31	251	43S	113	53	134	-6.2	-1.3	+2.2	-2.9	.227	-59.8		23	28	8.5	- 2	26	53	378.3	827.2
		146717 is double: AB 8.1 8.5 57" 225.9, dT = -100sec																																
26	Jan	23	1	30	48.7	D	3459	K0	6.4	5.8		17+	49		16	260	50N	26	322	47	-6.3	-1.5	+0.2	+1.5	.426	31.4		23	29	27.0	- 1	47	28	379.6	918.8
		R3459 = 11 Piscium																																
26	Jan	24	0	22	57.0	D	30	SA0	7.1	7.1		26+	61		43	252	80N	55	355	77	-5.9	-2.8	+1.4	+0.7	.422	-2.6		0	15	57.3	4	15	4	374.0	765.9
		30 is triple: AB 7.0 14.1 0.8" 246.0, dT = -1.9sec : AC 7.0 12.2 5.0" 347.3, dT = +4sec																																
		30 is a close double. Observations are highly desired																																
26	Jan	24	3	1	3.6	d	41	G5	7.7	7.2		27+	63		9	271	69S	86	20	108	-6.1	-3.1	+0.3	-0.7	.485	-23.8		0	20	21.6	4	46	44	377.0	969.2
26	Jan	27	19	26	10.4	d	541	SB8	3.9	3.9s		69+	112	39	19	71	31S	138	209	151	-1.4	-6.1	+2.2	-2.1	.183	-71.9		3	45	49.6	24	22	4	366.0	1044.4
		R541 = Maia = 20 Tauri																																
		541 is quadruple: Aa,Ab 4.4 5.4 : AB 3.8 13.7 113" 72.6, dT = +256sec : AB 3.8 13.7 113" 72.7, dT = +257sec																																
		541 = NSV 1279, 3.87, range 0.00, 4Kp, Type ACV, Period 10.288 days																																
26	Jan	27	19	33	17	Gr	541	SB8	3.9	3.9s		69+	112	40	21	** GRAZE: CA 13.3S; Dist.109km in az. 144deg. [Lat = 23.51+0.67(E.Long+81.05)]																				
26	Jan	27	23	33	46.2	D	579	kA2	6.4	6.3S		70+	114	-7	73	82	38N	28	118	40	-1.7	-6.6	+1.0	+3.1	.320	37.2		3	53	34.5	25	40	58	361.7	704.4
		579 = NSV 1391, 6.33,																																
26	Jan	27	23	42	15.8	d	76303	kA2	7.8	7.7		70+	114	-9	75	82	24N	15	105	26	-1.7	-6.6	+0.5	+4.2	.249	51.1		3	53	32.0	25	43	48	361.6	697.4
26	Jan	29	5	35	11	Gr	768	A2	7.0	6.7S		82+	129		41	** GRAZE: CA 6.7N; Dist. 22km in az. 207deg. [Lat = 24.50-0.47(E.Long+81.05)]																				
		Distance of 768 to Terminator = 18.5"; to 3km sunlit peak = 4.2"																																
26	Jan	29	5	36	32.2	D	771	SA5	6.1	5.9e		82+	129		42	286	84N	83	2	88	-1.0	-6.5	+1.3	-0.5	.457	13.2		5	9	45.1	28	1	50	361.8	824.3
		771 is triple: Aa,Ab 6.0 0.20" 351.0, dT = -0.01sec : A,BC 6.0 9.1 11.2" 29.1, dT = +15sec																																
		771 is a close double. Observations are highly desired																																
		771 = V1156 Tau, 6. to 6.1, Hp, Type E:, Period 1.40266 days, Phase 13%																																
26	Jan	30	6	22	59.0	d	78191	A0	7.7	7.7		90+	143		46	286	74N	82	360	81	+0.5	-5.9	+1.5	-0.5	.433	23.7		6	17	59.9	28	0	24	361.4	828.6
26	Jan	30	23	47	51.4	d	1089	K0	6.7	6.1		95+	155	-9	34	74	59S	136	214	130	+3.1	-5.3	+1.7	-1.2	.347	-44.7		7	11	30.0	26	24	21	363.0	859.4
26	Jan	31	0	6	4.0	d	79164	cG8	7.4	6.9		95+	155		38	75	82N	97	176	91	+3.0	-5.3	+1.2	+0.5	.471	-5.2		7	12	31.2	26	33	52	362.6	831.8
		79164 is double: ** 8.1 8.5 0.10" 21.0, dT = +0.05sec																																
		79164 has been reported as non-instantaneous (OCc 237). Observations are highly desired																																
26	Jan	31	2	41	44.6	d	79243	K1	7.3	6.7		96+	156		72	80	81S	115	207	109	+2.7	-5.3	+2.4	-0.8	.373	-13.5		7	17	15.6	26	21	49	360.7	671.8
26	Jan	31	2	46	21.6	D	1105	cG7	6.5			96+	156		73	79	23N	40	133	33	+2.7	-5.3	+2.7	+5.1	.176	62.6		7	17	3.4	26	41	22	360.6	669.6
		1105 is double: AB 7.00 7.70 0.20" 236.6, dT = -1.1sec																																
		1105 is a close double. Observations are highly desired																																
		Distance of 1105 to Terminator = 13.7"; to 3km sunlit peak = 3.9"																																
26	Jan	31	3	5	0.5	d	79253	cK1	7.6	7.1		96+	156		77	79	82S	115	209	108	+2.7	-5.3	+2.4	-0.9	.372	-11.2		7	17	54.5	26	19	59	360.5	663.8
		79253 is double: ** 8.7 8.7 0.050"																																
		79253 has been reported as non-instantaneous (OCc1350). Observations are highly desired																																
26	Jan	31	5	15	15.8	d	79316	G2	7.5	7.1v		96+	157		74	279	79N	96	4	89	+2.3	-5.2	+2.3	-0.6	.385	16.5		7	21	32.8	26	9	33	360.8	702.5
		79316 = V0340 Gem, 7.37 to 7.71, V, Type RS, Period 35.37 days, Phase 86%																																
26	Jan	31	23	33	43.9	d	1239	A4	6.6	6.5		99+	168	-6	18	72	83N	111	181	99	+4.5	-4.1	+0.5	+0.1	.530	-12.0		8	13	41.7	23	8	16	366.5	962.7
		Distance of 1239 to Terminator = 19.9"; to 3km sunlit peak = 8.7"																																
26	Feb	2	9	33	17.4	r	1395	G9	6.3	5.8		100-	174		40	271	57N	308	237	291	+4.3	-1.8	+0.6	-1.8	.492	177.1		9	25	32.5	16	35	8	369.1	881.7
		Distance of 1395 to Terminator = 3.3"; to 3km sunlit peak = 0.0"																																
26	Feb	4	3	32	33.4	R	1600	wA5	5.0	4.9		94-	151		30	98	18N	6	71	345	+6.5	+0.6	+0.2	-4.7	.204	117.0		11	0	44.8	6	6	5	378.3	824.3
		R1600 = 59 Leonis																																
		1600 is double: AB 5.0 12.6 40" 217.4, dT = +169sec																																

Occultation prediction for Marathon Key Airport
E. Longitude - 81 3 4.0, Latitude 24 43 29.2, Alt. 1m; Telescope dia 15cm; dMag 0.0

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      day  Time     P   Star  Sp  Mag  Mag    % Elon Sun  Moon   CA   PA  VA  AA Libration   A   B   RV    Cct durn  R.A. (J2000)  Dec   Mdist   SV
 y   m  d  h  m    s       No  D    v    r V  ill     Alt Alt Az   o    o   o   o   L    B   m/o m/o  "/s     o  sec  h  m    s    o  m  s   Mm   m/s
   Distance of 1600 to Terminator = 13.2"; to 3km sunlit peak = 3.3"
26 Feb  4  6 53 23.1 r    1606 M*  7.8  7.0v  93- 150     68 153  55N 330 354 308 +6.0 +1.0 +1.3-2.2 .362  164.4     11  4 19.1   5 13 30 376.3 685.2
      1606 = FG Leo, 7.84 to 8.01, Hp, Type SRB, Period 24.962161 days, Phase  38%
26 Feb  6  8 17  9.8 d    1815SK2  4.7  4.0   79- 125     56 161 -38S 168 184 146 +5.4 +4.1 +0.6-2.7 .298  -32.4     12 39 14.8 - 7 59 44 387.7 664.2
   R1815 = chi Virginis
      1815 is multiple: **Aa,Ab 4.8 8.8 0.10" 214.0, dT = +0.23sec : AB 4.8 8.8 177" 135.9, dT = +506sec : AC 4.8 10.6 224" 109.8, dT = +401sec : AD
4.8 9.0 321" 331.1, dT = -1032sec
      1815 has been reported as non-instantaneous (OCc 760). Observations are highly desired
26 Feb  6  9 31 49.4 R    1815SK2  4.7  4.0   79- 125     56 195  77S 282 268 260 +5.1 +4.3 +3.0-0.8 .293 -148.0     12 39 14.8 - 7 59 44 387.9 648.7
   R1815 = chi Virginis
      1815 is multiple: **Aa,Ab 4.8 8.8 0.10" 214.0, dT = -0.13sec : AB 4.8 8.8 177" 135.9, dT = +503sec : AC 4.8 10.6 224" 109.8, dT = +757sec : AD
4.8 9.0 321" 331.1, dT = -719sec
      1815 has been reported as non-instantaneous (OCc 760). Observations are highly desired
26 Feb  6 10 52  1.0 r  138905 F8  7.3  7.0   78- 124     47 223  45S 250 211 228 +4.8 +4.5 +4.1+0.6 .178 -120.1     12 40 40.7 - 8 26 54 388.8 667.4
26 Feb  7  6 10  2.9 r    1919 K5  6.9  6.0s  71- 114     27 120  27N 357  51 336 +5.2 +5.0 -0.4-2.8 .278  131.5     13 22  8.3 -12 34 46 394.1 802.1
      1919 = NSV 19751, 6.98 to 7.03, Hp
26 Feb  7  7 27 30.2 r  157895pA2  7.8  7.7   70- 114     40 136  61S 265 305 244 +4.9 +5.2 +2.9+1.1 .255 -132.8     13 22 45.6 -13 11 11 393.1 715.3
    157895 is double: AB 7.8 10.8 19.4" 311.2, dT = -52sec
26 Feb  9  8 18 16.3 r    2138WF6  7.9  7.6   51-  91     28 136  67N 309 353 294 +2.8 +6.8 +1.0-0.6 .375  174.8     14 58 40.7 -22 24  5 400.4 731.9
      2138 is double: AB 7.9 9.6 12.0"  95.0, dT = +26sec
26 Feb  9  9 57 56.4 r  183079 M2  7.7  6.8s  51-  91     40 159  82S 278 299 263 +2.4 +7.0 +2.8+0.1 .291 -154.6     15  0 30.4 -22 50 58 399.4 624.0
    183079 = NSV 20220, 7.67 to 7.75, Hp
26 Feb 10  8 23 46.7 d    2263cB1  4.6  4.7   42-  80     18 131 -64N  75 125  63 +1.6 +7.2 +2.0+1.6 .292   42.6     15 50 58.7 -25 45  5 402.5 775.3
   R2263 = 1 Scorpii
      2263 is double: ** 5.6 5.6 0.050"
      2263 has been reported as non-instantaneous (OCc1483). Observations are highly desired
26 Feb 10  9 21 32.4 R    2263cB1  4.6  4.7   41-  80     27 141  30N 341  21 329 +1.4 +7.3 +0.0-2.0 .261  137.2     15 50 58.7 -25 45  5 401.6 692.9
   R2263 = 1 Scorpii
      2263 is double: ** 5.6 5.6 0.050"
      2263 has been reported as non-instantaneous (OCc1483). Observations are highly desired
26 Feb 11  8 32 29.0 R    2397 K1  6.5  5.9   32-  69     10 127  60N 305 360 297 +0.3 +7.3 +0.3-0.2 .407  166.3     16 41 37.6 -27 48 35 403.2 818.6
26 Feb 12 11 20 12.2 R    2540 B3  7.2  7.1e  23-  58 -10 27 147  57N 301 336 299 -1.3 +7.2 +1.6-0.4 .306  159.3     17 40 23.9 -28 55 24 399.7 633.9
      2540 = V2382 Oph, 7.26 to 7.29, Hp, Type E+BE, Period 0.9215 days, Phase  40%
26 Feb 13 10 33 47.6 r  186988 A0  8.5  8.3   16-  47     13 130  67N 285 337 288 -2.1 +6.6 +0.9+0.4 .385  170.1     18 34 12.8 -28 20 45 398.7 755.2
26 Feb 13 11 21 34.2 r  187016 G5  8.3  7.7   16-  47  -9 21 137  56N 295 340 298 -2.3 +6.7 +1.3+0.0 .329  157.9     18 35 37.8 -28 19 31 397.8 685.7
26 Feb 19  0 31 20.0 D Mercury    -0.6 -0.6    2+  18      1 265  72N  44 341  68 -5.8 -1.1 +0.0+0.7 .502   14.1     23 14 18.8 - 3 50 16 378.9 950.8
   Mercury contacts: Bright limb  0 31 13; Terminator  0 31 22.5; Dark limb  0 31 27: diam = 7.0"; %illum = 53.3%; PA bright limb = 244.0
26 Feb 21  0 13 17.7 d  109503kK2  9.0  8.4   14+  43     31 266  23N 356 290  18 -4.6 -4.1 +0.5+4.7 .207   63.6      0 51  2.1   9 13 44 370.6 837.5
26 Feb 21  1 42 57.6 d  109530DF0  8.2  8.0   14+  44     11 275  88N  62 356  84 -4.7 -4.1 +0.4+0.1 .534    2.8      0 54 45.1   9 25 44 372.5 965.9
    109530 is double: AB 8.57 9.60 3.11" 299.9, dT = -3sec
    109530 is a close double. Observations are highly desired
26 Feb 23  2 53 26.5 d   75537 A2  7.8  7.7   34+  71     23 284  42N  23 312  40 -2.8 -6.2 +1.3+2.3 .300   53.6      2 43 41.1  21  8 50 368.5 902.7
26 Feb 24  0 27 10   d   76041 F0  8.2  8.0   44+  83     68 275  13S 153  67 166 -1.4 -6.7 +9.9+9.9 .073  -78.8      3 38 35.9  24 36  6 364.4 666.8
26 Feb 24  0 28 40.8 D   76046cA0  7.1  7.1   44+  83     67 276  44S 122  37 135 -1.4 -6.7 +2.6-2.8 .252  -48.0      3 39  6.7  24 42 10 364.5 667.5
     76046 is double: AB 7.1           45.0, dT = -9sec
26 Feb 24  0 35 44   Gr  76041 F0  8.2  8.0   44+  83     64 ** GRAZE: CA  1.6S; Dist. 35km in az. 177deg. [Lat = 24.40+0.04(E.Long+81.05)]
26 Feb 24  1 40 58.9 d   76081 K2  7.5  6.9   44+  83     52 280  87S  79 358  92 -1.6 -6.7 +1.8-0.2 .410    0.3      3 41 18.1  25  0 29 365.3 726.7
26 Feb 24  2 56 58.7 d   76102 A2  7.5  7.5   45+  84     35 284  85S  81   5  94 -1.7 -6.7 +1.1-0.5 .465    2.3      3 43 43.2  25  4 51 366.6 827.0
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Occultation prediction for Marathon Key Airport
E. Longitude - 81 3 4.0, Latitude 24 43 29.2, Alt. 1m; Telescope dia 15cm; dMag 0.0

	day	Time	P	Star	Sp	Mag	Mag	%	Elon	Sun	Moon	CA	PA	VA	AA	Libration		A	B	RV	Cct durn	R.A. (J2000)			Dec			Mdist	SV
y	m d	h m s		No	D	v	r	V	ill	Alt	Alt Az	o	o	o	o	L	B	m/o	m/o	"/s	o sec	h	m	s	o	m	s	Mm	m/s
26	Feb 24	3 56 26.3	D	538	pB8	5.7	5.7		45+	84	23 288	11S	156	84	168	-1.8	-6.6	-1.5	-5.7	.174	-70.4	3	45	9.7	24	50	21	367.8	924.4
	R538 = 18 Tauri																												
	538 is quadruple: Aa,Ab 6.4 6.4 0.10" : AB 5.6 14.0 72" 128.9, dT = +371sec : AC 5.6 14.8 151" 175.1, dT = +821sec																												
	538 is a close double. Observations are highly desired																												
26	Feb 24	4 56 14.0	d	555	K5	6.4	5.6s		46+	85	10 293	47S	120	53	133	-1.8	-6.5	-0.4	-1.7	.477	-34.0	3	48	6.5	24	59	18	369.1	1029.0
	555 = NSV 1316, 6.44, range 0.02, 0V, Type VAR, Period 1.48987 days																												
26	Feb 25	1 19 16.1	d	715	cK5	8.0	7.5		56+	97	70 284	82N	75	342	83	-0.2	-6.8	+2.4	+0.3	.369	9.9	4	43	35.4	27	41	15	364.2	661.4
	715 is double: ** 8.8 8.8 0.10" 90.0, dT = +0.26sec																												
	715 has been reported as non-instantaneous (OCc 130). Observations are highly desired																												
26	Feb 26	6 59 19.4	d	77818	K5	6.7	5.8		69+	112	12 296	53N	55	347	56	+0.5	-5.9	+0.6	+0.3	.407	47.5	6	0	4.9	28	7	33	369.3	1079.9
26	Feb 26	23 29 16	m	1042	cA2	6.7	6.6		77+	123	-2 59 78	5S	183	270	179	+2.6	-5.8	+9.9	+9.9	.000	-90.0	6	49	10.2	27	11	25	365.7	700.2
	1042 is double: 6.7 9.8 0.10"																												
	1042 is a close double. Observations are highly desired																												
	Distance of 1042 to Terminator = 8.6"; to 3km sunlit peak = 0.0"																												
26	Feb 27	2 45 11.0	d	78873	A2	7.8	7.7		78+	124	78 286	87N	95	355	91	+2.0	-5.6	+2.5	-0.5	.367	12.3	6	55	48.1	27	14	58	365.1	664.3
26	Feb 27	2 50 9.4	d	1056	B9	7.2	7.3		78+	124	77 285	77N	86	347	81	+2.0	-5.6	+2.7	-0.1	.349	22.2	6	55	56.2	27	17	9	365.1	667.5
26	Feb 27	5 17 39.7	d	78957	G8	7.5	7.0		79+	125	45 284	87N	96	15	91	+1.7	-5.4	+1.3	-1.0	.449	16.3	7	0	14.8	26	52	42	366.9	833.0
26	Feb 28	1 37 30.5	d	1194	SK0	7.8	7.2		86+	137	73 86	39N	54	140	44	+3.4	-4.6	+3.2	+3.4	.209	55.5	7	56	1.5	24	39	57	366.6	655.0
	1194 is triple: AB 7.8 10.1 18.9" 160.1, dT = -25sec : AB 9.5 11.5 34" 194.1, dT = -126sec																												
26	Feb 28	5 6 15.8	d	79868	DK0	7.4			87+	138	60 275	76N	92	10	81	+2.7	-4.3	+2.1	-0.7	.377	28.1	8	1	30.3	23	54	46	367.4	760.6
	79868 is double: AB 7.43 10.98 1.30" 168.9, dT = +0.8sec																												
	79868 is a close double. Observations are highly desired																												
26	Feb 28	5 25 37.1	D	1208	DK1	6.4			87+	138	56 276	23S	172	92	162	+2.7	-4.2	-0.5	-3.9	.267	-52.5	8	1	0.8	23	34	59	367.7	784.0
	1208 is double: AB 6.48 9.95 1.95" 325.2, dT = -7sec																												
	1208 is a close double. Observations are highly desired																												
26	Mar 1	1 31 51.3	D	1329	pF8	6.8			93+	150	59 92	56S	144	219	129	+4.3	-3.3	+1.8	-2.0	.339	-29.0	8	53	55.3	19	58	2	369.3	693.3
	1329 is double: AB 7.32 7.86 0.15" 72.1, dT = +0.14sec																												
	1329 is a close double. Observations are highly desired																												
26	Mar 3	11 16 14.1	d	X119629	k	11.5	11.1		0E	179	-7 6 274	25U	71	5	50	+4.1	+1.2	+0.3	-0.3	.361	49.5	10	51	47.3	6	18	53	381.9	1028.2
26	Mar 3	11 21 30.6	d	X210181	k	11.7			0E	179	-6 5 274	50U	108	42	87	+4.1	+1.2	+0.0	-1.2	.547	12.1	10	51	57.8	6	7	28	382.0	1035.7
26	Mar 3	11 27 27.8	d	X119641	k	11.3	11.0		0E	179	-5 4 275	66U	130	65	109	+4.1	+1.2	-0.1	-1.6	.555	-10.3	10	51	57.8	6	0	33	382.2	1044.7
26	Mar 6	11 11 53.1	r	1885	K2	7.3	6.7		91-	145	-8 26 241	71N	317	262	296	+3.3	+5.4	+1.2	-2.2	.373	163.1	13	8	27.9	-11	45	46	392.2	742.4
26	Mar 7	10 52 39.3	R	1993	cK3	6.6	5.9		84-	133	-12 34 226	59S	264	221	244	+2.7	+6.3	+2.4	-0.6	.279	-144.9	13	54	21.4	-17	10	48	395.1	652.9
26	Mar 8	4 40 5.0	r	2084	A3	6.5	6.4		78-	124	13 120	73S	274	332	257	+3.1	+6.4	+0.9	+0.7	.396	-151.7	14	34	50.7	-20	26	22	399.5	872.1
26	Mar 12	9 33 48.2	R	2631	B9	6.5	6.5v		40-	79	24 141	86S	263	304	264	-2.3	+6.9	+2.1	+1.0	.329	-166.7	18	11	58.2	-28	54	6	399.7	654.7
	R2631 = V4045 Sagittarii																												
	2631 = V4045 Sgr, 6.51 to 6.54, V, Type ACV, Period 2.8855 days																												
26	Mar 13	8 44 59.6	d	2784	cK1	3.3	2.7		31-	68	8 125	-28S	143	200	149	-3.2	+6.2	-0.3	-1.4	.251	-52.3	.02	19	6 56.4	-27	40	14	398.5	792.9
	R2784 = tau Sagittarii																												
	2784 is double: AB 4.2 4.2 0.008" 319.3, dT = -0.03sec																												
26	Mar 13	9 12 3.5	r	187672	kA*	7.4	7.4		31-	68	13 129	33N	318	11	324	-3.2	+6.2	+0.2	-1.1	.259	132.0		19	6 19.2	-27	17	14	397.9	747.8
26	Mar 13	9 31 14.7	R	2784	cK1	3.3	2.7		31-	68	16 131	46S	217	267	223	-3.3	+6.2	+2.5	+3.2	.229	-127.8	.02	19	6 56.4	-27	40	14	397.5	719.1
	R2784 = tau Sagittarii																												
	2784 is double: AB 4.2 4.2 0.008" 319.3, dT = +0.01sec																												
26	Mar 15	10 42 20.3	r	189827	A3	8.0	7.9		14-	44	15 122	50S	211	266	225	-4.9	+4.0	+1.5	+2.8	.302	-137.4		20	54 43.6	-20	56	58	388.8	772.2
26	Mar 16	10 21 15.5	r	3182	A2	7.5	7.4		8-	32	4 109	71S	228	291	246	-5.1	+2.6	+0.7	+1.9	.447	-158.3		21	44 18.9	-15	58	18	385.0	897.7
26	Mar 22	0 35 8.1	d	X 3230	M2	9.1	8.1v		11+	39	25 281	46S	109	38	128	-2.6	-5.9	+0.5	-1.7	.411	-36.1		2	23 36.5	18	57	54	364.3	898.8
	X 3230 = ASAS J022337+1857.9, 9., range 0.3, V, Type MISC, Period 62.5 days, Phase 62%																												

Occultation prediction for Marathon Key Airport
E. Longitude - 81 3 4.0, Latitude 24 43 29.2, Alt. 1m; Telescope dia 15cm; dMag 0.0

y	m	day d	h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon Alt	Sun Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	Mar	23	3	0	56.6	d	499cG5	8.0				20+	53	8	293	42N	24	317	38	-1.1	-6.4	+1.2	+2.1	.295	60.2		3	27	49.6	24	10	58	366.2	1055.1
							499 is double: AB 8.04 11.52 0.40" 170.0, dT = -1.1sec																												
							499 is a close double. Observations are highly desired																												
26	Mar	24	22	17	15.8	D	810SB7	1.7	1.7			40+	79	17	83	53	23N	18	143	22	+2.2	-6.6	+1.7	+6.9	.146	66.4		5	26	17.5	28	36	27	363.1	641.8
R810 = El Nath = beta Tauri																																	
							810 is multiple: AC 1.9 19.0 8.4" 357.0, dT = +54sec : AD 1.9 18.5 9.8" 70.0, dT = +42sec : AE 1.9 10.9" 80.0, dT = +36sec : AF 1.9 15.8 11.6" 296.0, dT = +10sec																										
							810 is a close double. Observations are highly desired																												
26	Mar	24	22	34	37	Gr	810SB7	1.7	1.7			40+	79	13	87	** GRAZE: CA 0.5N; Dist.138km in az. 356deg. [Lat = 25.97+0.06(E.Long+81.05)]																			
26	Mar	24	22	51	32.0	R	810SB7	1.7	1.7			40+	79	10	85	334	-22N	334	181	337	+2.1	-6.6	+2.8	-6.5	.145	113.6		5	26	17.5	28	36	27	363.1	637.5
R810 = El Nath = beta Tauri																																	
							810 is multiple: AC 1.9 19.0 8.4" 357.0, dT = -53sec : AD 1.9 18.5 9.8" 70.0, dT = +7sec : AE 1.9 10.9" 80.0, dT = +21sec : AF 1.9 15.8 11.6" 296.0, dT = -63sec																										
							810 is a close double. Observations are highly desired																												
26	Mar	25	2	37	19.3	d	77268 B8	8.2	8.0	v		41+	80	39	287	48S	128	48	131	+1.5	-6.3	+0.4	-2.1	.418	-28.0		5	34	39.1	28	3	4	365.7	840.7
77268 = V1371 Tau, 8.02 to 8.20, V, Type GCAS																																	
26	Mar	26	0	26	27.5	D	1008 A0	5.3	5.3	s		52+	93	-12	81	293	33N	37	288	34	+3.0	-5.9	+4.2	+5.3	.147	66.3		6	35	12.1	28	1	20	365.5	647.4
R1008 = 49 Aurigae																																	
1008 = NSV 3032, 5.05 to 5.27, V																																	
26	Mar	26	0	42	21	Gr	1008 A0	5.3	5.3	s		52+	93	76	** GRAZE: CA 10.2N; Dist.140km in az. 21deg. [Lat = 26.08-0.34(E.Long+81.05)]																			
26	Mar	26	1	0	18.9	r	1008 A0	5.3	5.3	s		52+	93	73	286	-12N	352	254	349	+2.9	-5.8	-0.1	-6.9	.151	113.7		6	35	12.1	28	1	20	365.7	669.2
R1008 = 49 Aurigae																																	
1008 = NSV 3032, 5.05 to 5.27, V																																	
26	Mar	26	2	46	25	m	78580SA2	7.3	7.2			53+	93	51	285	15N	19	295	16	+2.7	-5.7	+9.9	+9.9	.000	90.0		6	38	53.6	27	48	16	367.1	785.3
78580 is triple: AC 7.3 13.8 26.6" 237.2 : AB 7.3 10.5 28.6" 130.4																																	
26	Mar	26	4	7	21.0	d	1028 G8	7.5	7.1			53+	94	33	287	29S	155	78	152	+2.5	-5.5	-0.5	-2.8	.352	-46.0		6	41	42.7	27	4	54	368.6	907.5
26	Mar	27	2	31	17.7	D	79610 F8	7.2	7.0			64+	106	67	276	63S	128	43	119	+3.6	-4.7	+1.4	-2.0	.391	-11.2		7	41	3.1	24	57	54	368.7	713.0
26	Mar	27	4	50	27.5	D	1170dG8	3.6	3.1			65+	107	36	283	25S	167	90	158	+3.4	-4.3	-0.7	-3.1	.320	-50.0		7	44	26.8	24	23	53	371.0	896.9
R1170 = kappa Geminorum																																	
1170 is double: AB 3.7 10.0 7.3" 241.1, dT = +6sec																																	
1170 is a close double. Observations are highly desired																																	
26	Mar	27	5	30	6.6	R	1170dG8	3.6	3.1			65+	108	27	286	-54S	246	172	236	+3.3	-4.2	+1.3	+0.0	.343	-130.0		7	44	26.8	24	23	53	371.9	961.9
R1170 = kappa Geminorum																																	
1170 is double: AB 3.7 10.0 7.3" 241.1, dT = -21sec																																	
1170 is a close double. Observations are highly desired																																	
26	Mar	28	4	31	44.0	D	1304pA0	6.8				75+	120	51	272	15S	181	105	167	+4.1	-3.1	-1.0	-4.1	.240	-57.1		8	41	15.3	20	28	37	372.6	799.9
1304 is double: AB 7.10 8.08 0.29" 70.6, dT = -0.42sec																																	
1304 is a close double. Observations are highly desired																																	
26	Mar	30	0	49	35.3	d	1515kF8	7.8	7.5			91+	144	52	105	87S	115	178	95	+5.5	-0.5	+1.9	-0.5	.382	10.1		10	21	52.9	10	41	59	378.2	711.8
26	Mar	30	5	55	44	M	1531wA0	6.0	6.0	v		91+	146	51	254	20N	41	338	21	+4.5	+0.2	+9.9	+9.9	.000	90.0		10	27	39.0	9	45	45	379.0	772.2
R1531 = 45 Leonis (CX)																																	
1531 is double: AB 6.0 12.4 34" 119.5																																	
1531 = CX Leo, 6.01 to 6.03, V, Type ACV, Period 3.0525 days, Phase 70%																																	
26	Apr	4	2	22	15.9	r	2039 A0	5.5	5.5			96-	156	12	117	26N	4	63	345	+3.4	+6.0	-1.2	-3.5	.227	119.3		14	15	24.1	-18	12	2	398.6	896.7
Distance of 2039 to Terminator = 17.3"; to 3km sunlit peak = 6.3"																																	
26	Apr	4	3	49	57.6	R	2045cK0	6.4				95-	155	28	130	55N	335	22	317	+3.2	+6.2	+0.2	-1.6	.354	151.7		14	17	3.8	-18	35	9	397.1	773.1
2045 is double: AB 6.40 10.51 0.70" 83.1, dT = +0.6sec																																	
2045 is a close double. Observations are highly desired																																	

Occultation prediction for Marathon Key Airport
E. Longitude - 81 3 4.0, Latitude 24 43 29.2, Alt. 1m; Telescope dia 15cm; dMag 0.0

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      day  Time     P   Star  Sp  Mag  Mag    % Elon Sun  Moon   CA   PA  VA  AA Libration    A    B   RV    Cct durn  R.A. (J2000)  Dec   Mdist   SV
 y   m  d  h  m    s       No  D    v    r V  ill     Alt Alt Az   o    o   o   o   L    B   m/o m/o  "/s     o  sec  h  m    s    o  m  s   Mm   m/s
26 Apr  4  4 25 36.2 r    2051 A*  5.9  5.9v  95- 155     33 137  11N  19  60   0 +3.1 +6.3 -3.2-6.3 .122  108.7      14 18 38.3 -18 42 57 396.6 730.2
      2051 = CS Vir, 5.84 to 5.95, V, Type ACV, Period 9.2954 days, Phase  55%
   Distance of 2051 to Terminator = 3.5"; to 3km sunlit peak = 0.0"
26 Apr  4  7 12 22.1 r  158499 F2  7.7  7.5   95- 154     46 186  66N 323 318 305 +2.4 +6.6 +1.8-1.9 .300  162.0      14 20 50.3 -19 19 56 395.9 605.7
26 Apr  4  9 59 43.3 r  158538wK1  7.3  6.8   95- 153     27 229  78N 311 265 293 +1.8 +6.7 +1.8-2.1 .327  160.8      14 24  0.4 -19 48  3 397.8 669.2
    158538 is double: AB 7.4 11.6 40" 286.2, dT = -109sec
26 Apr  5  9 56 55.4 R    2174pB8  6.5  6.5   90- 142     32 216  47S 250 214 235 +0.9 +7.3 +2.5+0.1 .249 -142.2      15 13 17.4 -24  0 30 399.7 610.3
      2174 is triple: ** 7.1 7.1 0.030"   0.0 : AB 6.4 12.5 8.2"  45.0, dT = +30sec
      2174 has been reported as non-instantaneous (OCc1471). Observations are highly desired
26 Apr  6  3 59 41.0 d    2287SB1  2.9  3.0v  84- 133      8 124 -90S 107 164  95 +1.1 +7.1 +0.5+0.3 .438    8.5      15 58 51.1 -26  6 51 403.3 867.3
   R2287 = pi Scorpii
      2287 is triple: Aa,Ab 5.1 13.4 2.0" 244.0, dT = -3sec : AB 2.9 11.9 50" 128.1, dT = +107sec
      2287 is a close double. Observations are highly desired
      2287 = pi Sco, 2.88 to 2.91, V, Type ELL, Period 1.570103 days, Phase  64%
26 Apr  6  5 10 16.6 R    2287SB1  2.9  3.0v  84- 133     21 134  71N 306 353 294 +0.9 +7.2 +0.8-0.4 .383  171.3      15 58 51.1 -26  6 51 402.0 755.1
   R2287 = pi Scorpii
      2287 is triple: Aa,Ab 5.1 13.4 2.0" 244.0, dT = -2.5sec : AB 2.9 11.9 50" 128.1, dT = +132sec
      2287 is a close double. Observations are highly desired
      2287 = pi Sco, 2.88 to 2.91, V, Type ELL, Period 1.570103 days, Phase  64%
26 Apr  6  8 39 50.0 r    2297kF7  7.0  6.7   83- 132     39 183  79S 275 273 265 +0.1 +7.4 +3.1-0.3 .280 -166.2      16  3 16.1 -26 43  2 400.5 560.3
26 Apr  6  9 59 53.6 r    2300wK0  7.6  7.1   83- 131     34 204  50S 246 221 235 -0.2 +7.5 +2.8+0.5 .238 -143.9      16  5  1.4 -26 56 52 400.9 572.0
      2300 is double: AB 7.7 13.7 13.4" 351.6, dT = +15sec
26 Apr  9  9 53 23.2 r    2727kA*  7.4  7.4v  57-  99     35 161  33S 209 228 213 -3.6 +6.4 +3.0+3.3 .172 -126.3      18 47 37.1 -28 16 47 398.8 563.0
      2727 = HIP 92215, 7.45 to 7.48, V, Type ACV, Period 1.93789 days, Phase  95%
26 Apr 11  7 39 54.1 r    2991 K5  6.1  5.3   39-  77      4 117  14N 331  32 344 -5.1 +4.4 -1.2-3.5 .137  108.3 .02 20 29 31.3 -22 23 30 395.1 838.3
26 Apr 11 10 30 42.6 r  189425WF7  7.5  7.2   38-  76  -9 34 143  52N 293 329 306 -5.6 +4.4 +2.7-0.3 .234  135.4      20 33 30.9 -22 13 55 391.5 625.2
    189425 is double: AB 7.5 11.6 10.3"  21.3, dT = -1.1sec
26 Apr 14 10 28 26.2 R    3383 M2  6.2  5.4s  12-  40  -9 18 106  30S 187 249 208 -6.2 +0.0 +0.5+3.2 .291 -127.4      23  2 32.6 - 6 34 26 376.4 874.5
   R3383 = 82 Aquarii
      3383 = NSV 25999, 6.24 to 6.29, Hp
26 Apr 19 14 27 34.9 d     539SB6  4.3  4.4s   7+  30  46 24  73  69S  90 163 103 +0.7 -6.1 +0.5+0.8 .535  -24.6       3 45 12.5  24 28  2 359.11024.9
   R539 = Taygeta = 19 Tauri
       539 is multiple: Aa,Ab 4.6 6.1           : AB          0.018" 273.2, dT = -0.03sec : AC 4.3 14.0 53"  53.4, dT = +79sec : AB 4.3 11.0 72"
328.8, dT = -71sec
       539 is a close double. Observations are highly desired
       539 = NSV 1264, 4.30, range 0.00, 1Kp, Type SPB, Period 1.5664 days
26 Apr 19 14 54 26.5 D     541SB8  3.9  3.9s   7+  31  52 30  75  20S 139 214 152 +0.7 -6.1 +3.4-2.9 .156  -73.9       3 45 49.6  24 22  4 358.5 979.7
   R541 = Maia = 20 Tauri
       541 is quadruple: Aa,Ab 4.4 5.4           : AB 3.8 13.7 113"  72.6, dT = +289sec : AB 3.8 13.7 113"  72.7, dT = +290sec
       541 = NSV 1279, 3.87, range 0.00, 4Kp, Type ACV, Period 10.288 days
26 Apr 19 15  1 29   Gr     541SB8  3.9  3.9s   7+  31  54 33 ** GRAZE: CA  4.6S; Dist. 80km in az. 142deg. [Lat = 23.80+0.72(E.Long+81.05)]
26 Apr 19 15 10 51.4 r     541SB8  3.9  3.9s   7+  31  56 34  76 -11S 171 247 183 +0.7 -6.2 -2.8+5.9 .152 -106.1       3 45 49.6  24 22  4 358.2 952.6
   R541 = Maia = 20 Tauri
       541 is quadruple: Aa,Ab 4.4 5.4           : AB 3.8 13.7 113"  72.6, dT = +108sec : AB 3.8 13.7 113"  72.7, dT = +106sec
       541 = NSV 1279, 3.87, range 0.00, 4Kp, Type ACV, Period 10.288 days
26 Apr 20  1 29  0.2 d   76460 A0  8.0  7.9    9+  35     13 293  46S 116  48 127 -0.3 -6.4 -0.3-1.5 .530  -27.6       4  6 41.4  25 43 20 360.71046.1
26 Apr 20  2  9 14.9 D   76472cG8  7.2  6.5    9+  35      5 296  77S  85  20  96 -0.3 -6.3 -0.1-0.6 .636    3.8       4  8 39.0  25 52 40 361.61117.2
26 Apr 21  0 13 55.5 D     771SA5  6.1  5.9e  17+  48  -6 42 286  62N  53 332  58 +1.5 -6.4 +1.9+0.9 .349   43.0       5  9 45.1  28  1 50 359.5 831.0
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Occultation prediction for Marathon Key Airport
E. Longitude - 81 3 4.0, Latitude 24 43 29.2, Alt. 1m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon Alt	Sun Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
							771 is triple: Aa,Ab 6.0 0.20" 351.0, dT = +0.27sec : A,BC 6.0 9.1 11.2" 29.1, dT = +29sec																												
							771 is a close double. Observations are highly desired																												
							771 = V1156 Tau, 6. to 6.1, Hp, Type E:, Period 1.40266 days, Phase 44%																										
26	Apr	21	1	29	30.3	d	77030	K0	8.6	7.9		17+	49	26	290	39S	132	58	137	+1.5	-6.2	-0.1	-2.1	.446	-35.0	5	12	34.1	27	36	15	361.1	953.2
26	Apr	22	1	7	5.7	d	78191	A0	7.7	7.7		27+	62	45	286	36N	36	314	35	+3.1	-5.7	+4.0	+3.8	.157	70.6	6	17	59.9	28	0	24	362.3	832.4
26	Apr	22	2	0	36.1	d	78242	K0	8.8	8.4		27+	63	33	288	83S	97	20	96	+3.0	-5.6	+0.7	-1.0	.512	9.4	6	20	26.0	27	37	36	363.4	915.5
26	Apr	22	2	10	21.8	d	78234	A0	8.2	8.2		27+	63	31	288	24S	156	80	155	+3.0	-5.6	-0.6	-3.0	.339	-50.1	6	20	4.5	27	23	6	363.7	932.3
26	Apr	23	0	31	17.4	d	79319	K2	7.9	7.3		38+	76	-10 66	279	82S	105	18	98	+4.5	-4.8	+1.9	-1.2	.403	8.6	7	21	39.7	25	51	44	364.6	721.6
26	Apr	23	0	49	10	m	79316	G2	7.5	7.1v		38+	76	62	280	17N	24	298	17	+4.4	-4.8	+9.9	+9.9	.000	90.0	7	21	32.8	26	9	33	364.9	742.1
							79316 = V0340 Gem, 7.37 to 7.71, V, Type RS, Period 35.37 days, Phase 17%																										
26	Apr	24	4	43	20.5	d	1269	kG5	6.9	6.3		50+	90	22	284	29S	165	94	153	+5.0	-3.0	-0.7	-2.6	.376	-47.0	8	28	7.2	21	8	55	373.0	997.4
26	Apr	25	3	6	45.3	d	98511	kF2	7.8	7.6		61+	102	54	266	52N	70	359	54	+5.6	-1.8	+3.2	+0.4	.233	57.3	9	20	38.2	17	7	38	374.3	780.6
26	Apr	25	3	55	37.4	D	1387	cA5	7.0	6.8		61+	103	42	270	51S	147	75	130	+5.5	-1.7	+0.4	-2.3	.431	-21.1	9	21	25.5	16	35	54	375.3	839.8
							1387 is double: ** 7.6 7.6 0.10" 90.0, dT = +0.13sec																										
							1387 has been reported as non-instantaneous (OCc1402). Observations are highly desired																										
26	Apr	26	0	25	30.8	d	98966	SG	8.2	7.7		70+	114	-8 72	133	73S	127	170	108	+6.4	-0.7	+2.0	-1.5	.362	2.3	10	8	12.8	11	59	49	377.2	662.0
							98966 is quadruple: BC 8.2 13.2 0.9" 82.7, dT = +1.7sec : BD 8.2 12.1 108" 210.0, dT = +39sec : BA 8.2 1.4 176" 128.0, dT = +486sec																										
							98966 is a close double. Observations are highly desired																										
26	Apr	26	0	33	37.9	D	1487	SB7	1.4	1.4s		70+	114	-10 74	139	74S	127	165	108	+6.4	-0.6	+2.1	-1.5	.361	3.1	10	8	22.3	11	58	2	377.1	661.6
							R1487 = Regulus = alpha Leonis																										
							1487 is triple: AB 1.4 8.2 176" 308.0, dT = -487sec : AD 1.4 12.1 193" 274.0, dT = -447sec																										
							1487 = NSV 4750, 1.33 to 1.40, V																										
26	Apr	26	2	0	7.4	R	1487	SB7	1.4	1.4s		71+	115	74	220	-65N	316	279	297	+6.1	-0.4	+1.6	-2.1	.372	176.3	10	8	22.3	11	58	2	377.4	682.7
							R1487 = Regulus = alpha Leonis																										
							1487 is triple: AB 1.4 8.2 176" 308.0, dT = -468sec : AD 1.4 12.1 193" 274.0, dT = -385sec																										
							1487 = NSV 4750, 1.33 to 1.40, V																										
26	Apr	27	0	7	50.2	D	1589	pM5	5.9	5.3v		80+	126	-4 57	119	88N	110	163	89	+6.5	+0.8	+2.2	-0.4	.350	20.1	10	56	1.5	6	11	7	381.9	690.5
							R1589 = 56 Leonis (VY)																										
							1589 is double: 6.2 7.1																										
							1589 = VY Leo, 5.69 to 6.03, V, Type SR, Period 46.34 days, Phase 16%																										
26	Apr	28	2	57	56.8	d	138388	K0	7.3	6.8		88+	139	65	187	66N	87	80	65	+5.6	+2.7	+3.9	+0.1	.232	49.1	11	45	1.4	- 0	31	4	385.7	662.6
26	Apr	30	3	12	42.9	d	157822	kK2	7.3	6.6		98+	162	50	158	74S	115	136	94	+4.5	+5.2	+2.3	-0.7	.330	17.6	13	15	54.0	-12	21	0	393.1	661.0
26	May	1	3	34	52.2	d	2011	K2	6.3	5.6		100+	172	44	154	88S	74	99	55	+3.6	+6.1	+4.2	+1.7	.194	55.6	14	3	4.1	-17	22	1	396.3	661.8
							Distance of 2011 to Terminator = 8.2"; to 3km sunlit peak = 0.9"																										
26	May	3	5	54	9.8	r	183731	pF0	7.3	7.1		98-	162	39	171	85N	305	314	293	+1.2	+7.2	+2.3	-1.1	.297	169.8	15	43	11.6	-25	24	56	400.6	585.4
							183731 is double: AB 7.3 9.3 5.9" 291.8, dT = -19sec																										
							183731 is a close double. Observations are highly desired																										
26	May	3	9	38	16.1	r	2256	PA1	7.0	6.9		97-	161	22	225	33S	242	196	230	+0.3	+7.3	+1.4	+0.2	.281	-145.3	15	47	56.5	-25	59	13	402.5	668.7
							2256 is double: ** 7.7 7.7 0.10" 90.0, dT = +0.31sec																										
							2256 has been reported as non-instantaneous (OCc1482). Observations are highly desired																										
							Distance of 2256 to Terminator = 15.8"; to 3km sunlit peak = 5.5"																										
26	May	4	10	11	12.3	r	2397	K1	6.5	5.9		93-	150	-8 23	221	70N	307	265	300	-1.0	+7.3	+2.6	-2.3	.261	141.0	16	41	37.6	-27	48	35	403.2	655.9
26	May	6	4	40	33.9	r	2660	A3	6.2	6.0		82-	130	10	127	55S	237	292	239	-2.1	+6.4	+1.7	+2.2	.304	-139.9	18	22	0.1	-28	25	48	404.0	778.2
26	May	9	8	26	59	m	3078	cA5	4.9			55-	96	29	132	-7S	157	203	172	-6.1	+3.3	+9.9	+9.9	.000	-90.0	21	4	24.3	-19	51	18	392.9	666.4
							R3078 = Chow = eta Capricorni																										
							3078 is double: AB 5.02 7.39 0.23" 30.0																										
							3078 is a close double. Observations are highly desired																										
26	May	12	8	55	44.8	r	3454	K0	7.6	7.1		25-	60	18	101	50N	287	350	308	-7.0	-1.0	+0.9	+0.4	.326	131.7	23	27	14.7	- 2	38	13	376.9	894.4

Occultation prediction for Marathon Key Airport
E. Longitude - 81 3 4.0, Latitude 24 43 29.2, Alt. 1m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon Alt	Sun Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	May	12	9	22	59.4	r	146716pG0	8.4	8.2			25-	59	24	104	36N	301	3	323	-7.1	-1.1	+1.7	-0.8	.203	115.5		23	28	5.7	- 2	27	33	376.2	858.2
							146716 is triple: AB 9.2 9.2 0.20" 79.6, dT = +0.7sec : AC 8.5 8.1 57" 45.9, dT = +72sec																													
							146716 is a close double. Observations are highly desired																													
26	May	12	9	24	4.0	r	146717PF2	8.1	7.9			25-	59	24	105	34N	303	4	324	-7.1	-1.1	+1.8	-0.9	.191	114.0		23	28	8.5	- 2	26	53	376.1	856.7
							146717 is double: AB 8.1 8.5 57" 225.9, dT = -68sec																													
26	May	12	9	38	0.9	r	146720 K5	8.1	7.4			25-	59	27	107	85S	243	303	264	-7.1	-1.1	+1.0	+1.6	.457	173.3		23	28	27.0	- 2	39	13	375.8	838.2
26	May	13	9	50	34.4	R	109127 F0	7.2	7.0			16-	46	-11	22	96	54S	213	278	235	-6.5	-2.6	+0.3	+2.1	.473	-156.5		0	18	7.9	3	47	48	370.1	925.4
26	May	19	0	14	37.7	D	885wG7	5.6	5.1			7+	30	-3	27	290	54N	45	330	47	+1.8	-5.7	+1.7	+1.2	.306	57.2		5	50	58.1	27	58	4	357.1	978.2
							885 is double: AB 5.7 12.5 10.8" 233.1, dT = -35sec																													
26	May	19	0	17	36.9	d	77619 F2	7.1	6.9			7+	30	-4	26	290	13S	159	84	160	+1.8	-5.7	-0.9	-3.3	.312	-56.7		5	50	39.7	27	30	18	357.2	983.5
26	May	19	0	45	53.2	r	885wG7	5.6	5.1			7+	31	-10	20	292	-13N	339	267	341	+1.8	-5.6	-1.1	-3.1	.323	122.8		5	50	58.1	27	58	4	357.8	1034.2
							885 is double: AB 5.7 12.5 10.8" 233.1, dT = +9sec																													
26	May	19	0	57	55.0	d	77671 F5	9.2	9.0			7+	31		18	293	70S	102	31	104	+1.8	-5.6	+0.1	-1.0	.606	-0.2		5	53	10.4	27	37	27	358.0	1052.3
26	May	19	1	1	27.3	D	890cA0	4.6	4.6s			7+	31		18	293	69S	103	32	105	+1.8	-5.6	+0.0	-1.0	.609	-1.2		5	53	19.6	27	36	44	358.1	1058.4
							R890 = 136 Tauri																													
							890 is double: ** 4.8 6.3 0.050" 270.0, dT = -0.08sec																													
							890 has been reported as non-instantaneous (OCc 206). Observations are highly desired																													
							890 = NSV 2696, 4.50 to 4.61, V																													
26	May	19	1	11	22.6	d	77686 F5	9.2	8.7			7+	31		15	294	55S	117	47	118	+1.8	-5.6	-0.2	-1.3	.598	-14.9		5	53	40.6	27	31	45	358.4	1075.9
26	May	19	1	49	48.2	D	77711 F5	7.9	7.6			7+	31		8	297	26S	146	80	147	+1.8	-5.5	-0.9	-2.0	.464	-44.9		5	55	3.7	27	20	32	359.3	1143.0
26	May	19	1	55	20.4	D	77724 B1	7.0	7.0			7+	31		7	297	63N	56	350	57	+1.8	-5.5	+0.4	+0.2	.466	45.2		5	55	40.3	27	42	56	359.4	1152.4
26	May	20	0	52	3.2	D	1061SF8	6.2	5.9s			14+	45	-11	32	286	3S	179	103	174	+3.6	-4.7	-1.9	-4.8	.200	-68.4		6	58	47.4	26	4	52	360.0	947.6
							R1061 = 39 Geminorum																													
							1061 is triple: Aa,Ab 6.1 0.50" 158.0, dT = +2.3sec : AB 6.1 12.1 35" 69.0, dT = -60sec																													
							1061 is a close double. Observations are highly desired																													
							1061 = NSV 17256, 6.1, range 0.02, V, Type VAR:																													
26	May	20	1	24	40.4	d	78973 A2	8.8	8.6			15+	45		26	289	78S	104	30	99	+3.6	-4.7	+0.3	-1.1	.568	6.5		7	1	13.7	26	11	6	360.7	1000.2
26	May	20	1	28	37.7	D	78979 G5	8.1	7.6			15+	45		25	289	88N	91	17	86	+3.6	-4.6	+0.5	-0.8	.541	19.8		7	1	25.4	26	14	7	360.8	1006.9
26	May	20	2	9	46.7	d	78998 G5	8.0	7.7e			15+	45		16	291	26S	157	87	152	+3.6	-4.5	-0.8	-2.4	.414	-47.6		7	2	23.3	25	50	46	361.8	1076.7
							78998 = V0369 Gem, 7.95 to 8.12, V, Type EB, Period 0.423061 days, Phase 26%																													
26	May	21	2	30	54.3	D	1221cM3	6.0	5.1v			24+	59		23	285	65S	126	54	115	+5.0	-3.3	+0.0	-1.6	.561	-9.2		8	6	18.4	22	38	8	365.7	1008.9
							R1221 = 9 Cancri = BL Cnc.																													
							1221 is double: AB 6.0 10.1 0.40"																													
							1221 is a close double. Observations are highly desired																													
							1221 = BL Cnc, 5.97 to 6.04, V, Type SR																													
26	May	21	2	42	2.1	d	79951 G5	7.8	7.2			24+	59		21	286	74N	84	13	73	+5.0	-3.2	+0.5	-0.7	.490	32.1		8	6	56.2	22	46	31	365.9	1027.1
26	May	21	2	51	20.9	D	1222cG5	7.2	6.8			24+	59		19	287	33S	157	87	147	+5.1	-3.2	-0.6	-2.3	.439	-41.6		8	6	34.4	22	27	24	366.2	1042.3
							1222 is double: ** 7.2 0.013" 234.6, dT = +0.01sec																													
							1222 has been reported as non-instantaneous (OCc1381). Observations are highly desired																													
26	May	23	3	29	3.0	D	1466cB9	5.3	5.3			46+	85		30	270	85N	105	37	87	+6.5	-0.2	+0.8	-1.3	.464	19.7		9	58	13.4	12	26	41	376.0	899.3
							R1466 = nu Leonis																													
							1466 is double: ** 6.0 6.0 0.050"																													
							1466 has been reported as non-instantaneous (OCc1407). Observations are highly desired																													
26	May	24	2	10	29.4	d	118476PF8	8.2	7.9			56+	97		55	245	68N	90	34	69	+6.8	+1.2	+2.6	-0.7	.296	42.2		10	45	18.9	6	57	39	379.1	733.4
							118476 is double: ** 8.9 8.9 0.10" 90.0, dT = +0.34sec																													
							118476 has been reported as non-instantaneous (OCc1419). Observations are highly desired																													
26	May	24	3	24	30.6	D	1567kK1	6.4	5.8			57+	98		39	258	36S	166	103	145	+6.6	+1.4	+0.2	-2.9	.345	-37.9		10	46	5.7	6	22	23	380.6	806.1
							R1567 = 37 (Sextantis)/Leonis																													

Occultation prediction for Marathon Key Airport
E. Longitude - 81 3 4.0, Latitude 24 43 29.2, Alt. 1m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon Alt	Sun Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	May	24	3	51	32.5	d	1573	pA2	7.1	7.0		57+	98	33	261	75S	127	63	107	+6.6	+1.4	+0.8	-1.9	.453	-0.5		10	47	19.2	6	20	46	381.3	838.0
	R1573 = 38 (Sextantis)/Leonis																																
26	May	28	0	5	21.7	d	1970	SA0	6.2	6.2		90+	143	-1	33	131	55S	140	185	120	+5.3	+5.8	+0.8	-1.1	.380	-10.9		13	45	35.1	-15	46	3	397.0	745.7
	R1970 = 85 Virginis																																
	1970 is multiple: Aa,Ab 6.5 8.2 : Aa,Ac 6.5 8.4 0.10" : AB 6.2 12.8 44" 312.7, dT = -115sec : AB 6.2 12.8 44" 312.5, dT = -115sec																																
	1970 is a close double. Observations are highly desired																																
26	May	29	1	14	35.2	D	2084	A3	6.5	6.4		95+	155	34	140	89S	99	137	81	+4.1	+6.5	+2.1	+0.4	.324	27.4		14	34	50.7	-20	26	22	399.6	708.0
26	Jun	2	4	38	19.3	r	186286	B7	7.1	7.1		97-	159	28	147	71N	302	336	302	-1.2	+6.5	+1.8	-0.5	.282	153.3		18	6	45.8	-28	21	50	403.0	617.3
26	Jun	2	5	42	22.4	R	2617	cK0	4.6	4.1		97-	159	34	162	90N	282	301	283	-1.5	+6.5	+2.8	+0.0	.283	167.9		18	8	5.0	-28	27	26	402.4	565.7
	2617 is double: AB 5.1 5.9 0.26" 12.0, dT = -0.01sec																																
	2617 is a close double. Observations are highly desired																																
26	Jun	2	9	3	53.2	r	186461	cA2	7.4	7.2v		96-	158	29	212	71N	300	267	301	-2.3	+6.4	+3.3	-2.2	.225	133.9		18	12	37.6	-28	14	11	402.8	635.2
	186461 is double: ** 8.2 8.2 0.050"																																
	186461 has been reported as non-instantaneous (OCc1536). Observations are highly desired																																
	186461 = V4385 Sgr, 7.42 to 7.46, Hp, Type ELL:, Period 2.62462 days, Phase 9%																																
26	Jun	6	6	28	26.0	r	3157	cF6	7.3			71-	115	24	123	54N	288	341	306	-6.0	+2.2	+1.6	+0.2	.274	136.7		21	33	40.2	-16	12	4	393.7	717.8
	3157 is double: AB 7.33 10.00 0.90" 2.6, dT = -0.9sec																																
	3157 is a close double. Observations are highly desired																																
26	Jun	7	7	39	4.4	r	3282	kK0	7.8	7.0		61-	103	33	122	87S	246	298	266	-6.8	+0.7	+1.6	+1.6	.376	171.4		22	22	11.6	-10	50	53	388.1	716.6
26	Jun	7	9	6	30	m	3286	K0	7.2	6.4		60-	102	48	142	18N	321	356	341	-7.1	+0.5	+9.9	+9.9	.000	90.0		22	24	7.6	-10	11	52	386.5	658.0
26	Jun	10	7	33	13.6	r	109413	K2	8.0	7.3		30-	66	12	87	81N	258	324	279	-6.7	-3.5	+0.2	+1.2	.528	161.1		0	43	53.0	7	33	19	373.1	1010.8
26	Jun	10	8	32	21.7	r	109437	kG5	7.8	7.3		29-	65	25	93	80N	258	325	280	-6.8	-3.6	+0.7	+1.2	.474	157.4		0	45	40.4	7	50	42	371.5	925.2
26	Jun	11	8	49	0.9	r	92548	A3	8.1	7.9		19-	52	20	83	74S	236	304	256	-5.8	-4.7	+0.2	+1.6	.567	-177.7		1	38	27.6	13	55	42	366.2	1007.7
26	Jun	11	9	19	16.6	R	244	K0	6.7	6.2		19-	52	27	86	60N	281	351	302	-5.8	-4.8	+1.1	+0.5	.387	135.4		1	39	15.4	14	17	8	365.4	963.6
	R244 = 104 Piscium																																
26	Jun	12	10	16	46.1	r	93033	SK0	7.2	6.4		10-	38	-4	29	80	43S	211	283	228	-4.3	-5.6	-0.1	+2.1	.489	-150.6		2	38	37.3	19	43	40	360.0	980.4
	93033 is triple: **Aa,Ab 7.5 8.5 0.30" 70.0, dT = +0.47sec : AB 7.2 14.4 45" 57.7, dT = +82sec																																
	93033 has been reported as non-instantaneous (OCc 312). Observations are highly desired																																
26	Jun	13	9	5	10	m	522	G5	7.8	7.1		4-	24	3	65	17N	339	43	352	-2.5	-5.9	+9.9	+9.9	.000	90.0		3	37	43.5	24	15	33	359.3	1200.6
26	Jun	13	12	12	43.2	r	539	SB6	4.3	4.4s		4-	23	20	42	78	33S	212	290	225	-2.3	-6.2	+0.1	+2.4	.439	-147.4		3	45	12.5	24	28	2	355.0	897.4
	R539 = Taygeta = 19 Tauri																																
	539 is multiple: Aa,Ab 4.6 6.1 : AB 0.019" 73.4, dT = +0.03sec : AC 4.3 14.0 53" 53.4, dT = +112sec : AB 4.3 11.0 72" 328.8, dT = +74sec																																
	539 is a close double. Observations are highly desired																																
	539 = NSV 1264, 4.30, range 0.00, 1Kp, Type SPB, Period 1.5664 days																																
26	Jun	17	1	9	12.5	D	1155	F0	6.4	6.2		5+	27	-12	13	291	64N	68	360	60	+3.4	-3.6	+0.4	-0.2	.458	44.3		7	38	14.4	24	21	38	359.9	1118.4
26	Jun	17	1	29	24.2	D	1157	A2	6.2	6.2		5+	27		9	293	76N	80	13	72	+3.4	-3.6	+0.1	-0.5	.561	31.6		7	39	12.0	24	13	21	360.4	1151.2
26	Jun	17	1	30	36.0	d	79578	cA0	8.8	8.8		5+	27		8	293	54N	59	352	50	+3.4	-3.6	+0.5	+0.2	.397	53.0		7	39	5.6	24	18	51	360.4	1153.6
	79578 is double: ** 9.6 9.6 0.10" 92.0, dT = +0.21sec																																
	79578 has been reported as non-instantaneous (OCc 762). Observations are highly desired																																
26	Jun	17	20	8	54.4	D	Venus		-4.0	-4.0		11+	38	53	86	170	31S	162	170	148	+5.5	-2.9	+1.2	-3.6	.274	-38.5		8	30	20.8	21	2	26	358.3	609.9
	Venus contacts: Bright limb 20 8 28; Terminator 20 9 19; Dark limb 20 9 21: diam = 14.7"; %illum = 74.0%; PA bright limb = 281.5																																
26	Jun	17	21	22	54.7	R	Venus		-4.0	-4.0		11+	39	36	73	261	-75S	270	192	254	+5.3	-2.8	+3.1	-0.2	.296	-142.0		8	30	20.8	21	2	26	358.8	652.9
	Venus contacts: Bright limb 21 22 30; Terminator 21 23 7; Dark limb 21 23 20: diam = 14.7"; %illum = 74.0%; PA bright limb = 281.5																																
26	Jun	18	0	55	17.0	d	80317	pA2	8.3	8.2s		12+	40	-9	27	281	73S	119	48	106	+5.0	-2.2	+0.3	-1.5	.563	0.3		8	39	3.6	19	59	59	362.8	991.0
	80317 is double: ** 8.3 10.6 0.044" 98.7, dT = +0.07sec																																
	80317 has been reported as non-instantaneous (OCc 637). Observations are highly desired																																

Occultation prediction for Marathon Key Airport
E. Longitude - 81 3 4.0, Latitude 24 43 29.2, Alt. 1m; Telescope dia 15cm; dMag 0.0

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      day  Time     P   Star  Sp  Mag  Mag    % Elon Sun  Moon   CA   PA  VA  AA Libration   A   B   RV    Cct durn  R.A. (J2000)  Dec   Mdist   SV
 y   m  d  h  m    s       No  D    v    r V  ill     Alt Alt Az   o    o   o   o   L    B   m/o m/o  "/s     o  sec  h  m   s    o  m  s   Mm   m/s
     80317 = NSV 4162, 8.32, range 0.02, V
26 Jun 18  1  9 39.9 D   80327pA3  7.8  7.6   12+  40 -12 24 282  73N  86  15  73 +5.0 -2.2 +0.6-0.7 .482   33.1      8 39 42.8  20  5 10 363.21013.6
     80327 is double: AB 7.9 9.6 0.64" 136.3, dT = +0.9sec
     80327 is a close double. Observations are highly desired
26 Jun 18  1 17  9.5 d   80331pF0  9.0  8.8   12+  40     22 283  77N  90  20  77 +5.0 -2.2 +0.5-0.8 .510   28.7      8 39 59.1  20  1 53 363.41025.2
     80331 is multiple: AB                  : Ca,Cb 9.2      0.30"  22.0, dT = +0.22sec : CA 9.0 6.5 134" 129.0, dT = +205sec : CS 9.0 10.1 138"
341.1, dT = -89sec
     80331 is a close double. Observations are highly desired
26 Jun 18  1 20 32.9 D    1295pK0  6.4  5.9s  12+  40     21 283  79N  92  21  79 +5.0 -2.1 +0.5-0.9 .521   26.9      8 40  6.4  20  0 28 363.41030.4
   R1295 = 39 Cancri
      1295 is multiple: AC 6.5 9.0 134" 309.0, dT = -205sec : AD 6.5 8.8 135" 111.0, dT = +245sec : AB 6.5 6.6 152" 149.9, dT = +155sec : AS 6.5 10.1
262" 325.7, dT = -297sec
      1295 = NSV 4179, 6.39, range 0.04, V
26 Jun 18  1 21 59.9 d   80330pA5  8.9  8.7   12+  40     21 283  44N  57 347  44 +5.0 -2.1 +1.3+0.5 .280   61.5      8 39 58.4  20  9 30 363.51033.5
     80330 is double: AB 8.9 9.7 91" 153.0, dT = -32sec
26 Jun 18  1 23  4.8 D    1296pA1  6.6  6.6   12+  40     21 283  84N  97  27  84 +5.0 -2.1 +0.4-1.0 .545   21.6      8 40 11.5  19 58 16 363.51034.3
   R1296 = 40 Cancri
      1296 is quadruple: Ba,Bb 6.6      0.40" 128.0, dT = +0.6sec : BR 6.6 11.6 140" 146.9, dT = +166sec : BA 6.6 6.5 152" 329.9, dT = -169sec
      1296 is a close double. Observations are highly desired
26 Jun 18  1 23 19.3 D    1292kF0  6.7  6.5v  12+  40     20 283  48S 145  75 132 +5.0 -2.1 -0.2-1.9 .525  -26.6      8 39 42.7  19 46 42 363.51034.9
   R1292 = 38 Cancri (BT)
      1292 = BT Cnc, 6.66, range 0.06, V, Type DSCTC, Period 0.10228 days
26 Jun 18  1 24 36.0 d   80338pF5  8.8  8.6S  12+  41     20 283  78N  91  21  77 +5.0 -2.1 +0.4-0.8 .520   27.9      8 40 15.3  19 59 39 363.61036.8
     80338 is double: DA 8.8 6.5 135" 291.0, dT = -244sec
     80338 = NSV 17951, 8.81, , Type VAR:
26 Jun 18  1 31 54.9 D   80340pA0  7.9  7.8S  12+  41     19 284  75S 118  48 105 +5.0 -2.1 +0.1-1.4 .594    0.4      8 40 23.5  19 50  6 363.81048.1
     80340 is double: ** 8.8 8.8 0.050" 111.0, dT = +0.08sec
     80340 has been reported as non-instantaneous (OCc1074). Observations are highly desired
     80340 = NSV 4183, 8.01,
26 Jun 18  1 41 33.3 D   98020pA0  7.6  7.5e  12+  41     17 284  45S 148  79 134 +5.0 -2.1 -0.3-1.9 .523  -29.8      8 40 20.7  19 41 12 364.01063.6
     98020 is quadruple: ** 9.1 9.1 0.050"       : CA 7.6 6.5 64" 163.1, dT = +118sec : CD 7.6 9.2 76"  91.1, dT = +80sec
     98020 has been reported as non-instantaneous (OCc1392). Observations are highly desired
     98020 = HD 73709, 7.69 to 7.76, V, Type EA, Period 7.22015 days, Phase  75%
26 Jun 18  1 43 20.6 d   80351kA2  8.7  8.5   12+  41     16 285  72N  85  16  71 +5.0 -2.1 +0.4-0.7 .505   33.2      8 40 56.9  19 56  5 364.01066.5
26 Jun 18  1 43 33.1 D    1298pK0  6.4  5.9E  12+  41     16 285  42S 151  82 137 +5.0 -2.1 -0.4-2.0 .507  -32.9      8 40 22.1  19 40 12 364.11066.8
      1298 is multiple: AE 6.5 12.5 15.7" 154.8, dT = +31sec : AB 6.4 10.4 20.8"  55.1, dT = -4sec : AC 6.5 7.6 64" 343.1, dT = -123sec : AD 6.5 9.2
84"  44.0, dT = -48sec
      1298 = HD 73710, 6.42, , Type EA, Period 7.22030 days, Phase  42%
26 Jun 18  1 44 12   m   80343kF2  8.2  8.0v  12+  41     16 285  15N  28 319  14 +5.0 -2.1 +9.9+9.9 .000   90.0      8 40 26.7  20 10 55 364.11069.6
     80343 = BQ Cnc, 8.19, range 0.02, V, Type DSCTC, Period 0.074 days
26 Jun 18  1 44 59.2 D    1302pA9  6.8  6.7   12+  41     16 285  61S 132  63 118 +5.0 -2.1 -0.2-1.6 .587  -14.1      8 40 43.2  19 43 10 364.11068.8
   R1302 = 42 Cancri
      1302 is double: ** 7.5 7.5 0.050"
      1302 has been reported as non-instantaneous (OCc1393). Observations are highly desired
26 Jun 18  1 49 45.3 d   80352kF0  9.0  8.8   12+  41     15 285  87N 101  32  87 +5.0 -2.1 +0.1-1.0 .582   17.1      8 41 10.7  19 49 46 364.21076.3
26 Jun 18  1 51  5.3 d   80353kA3  8.3  8.2S  12+  41     15 285  67N  80  11  66 +5.0 -2.1 +0.4-0.5 .482   37.9      8 41 13.8  19 55 19 364.21078.8
     80353 = NSV 17956, 8.33, , Type DSCT:
26 Jun 18  2  0 33.2 D    1303kA6  6.8  6.7v  12+  41     12 286  38S 155  87 142 +5.0 -2.0 -0.5-2.1 .486  -38.2      8 40 56.3  19 34 49 364.51093.7
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Occultation prediction for Marathon Key Airport
E. Longitude - 81 3 4.0, Latitude 24 43 29.2, Alt. 1m; Telescope dia 15cm; dMag 0.0

y	m	day d	h	Time m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon Alt	Sun Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
							1303 = EP Cnc, 6.76, range 0.03, V, Type DSCTC																											
26	Jun	18	2	3	5.1	d	1299pA*		6.3	6.2		12+	41	12	286	8S	185	117	171	+5.0	-2.0	-1.4	-3.7	.233	-67.9		8	40	27.0	19	32	41	364.6	1098.5
							R1299 = epsilon Cancri																											
							1299 is double: AB 6.3 7.5 134" 250.1, dT = +242sec																											
26	Jun	18	2	4	30.3	d	98043kK0		8.4	7.9		12+	41	12	286	71S	123	55	109	+5.0	-2.0	-0.2	-1.4	.619	-5.7		8	41	35.1	19	39	45	364.6	1099.5
26	Jun	18	2	7	25.2	D	1305pK0		6.9	6.4		12+	41	11	287	60N	74	6	60	+5.0	-2.0	+0.3	-0.4	.453	43.6		8	41	50.1	19	52	27	364.7	1104.7
							1305 is double: Ea,Eb 7.2 9.1																											
26	Jun	18	2	33	32.3	d	98053kA7		7.9	7.8v		12+	41	5	289	30S	164	98	150	+5.1	-2.0	-0.7	-2.2	.434	-47.8		8	42	6.5	19	24	41	365.4	1146.0
							98053 = BX Cnc, 7.96, range 0.02, V, Type DSCTC, Period 0.04412 days																											
26	Jun	19	0	55	43.4	d	98659		8.8	8.5		20+	54	-9	37	270	71N	89	19	72	+6.2	-0.6	+1.3	-0.9	.406	36.0		9	35	32.2	14	49	30	367.4	892.8
26	Jun	19	1	22	8.0	d	98665w		8.8	8.4		21+	54		31	273	88S	111	41	94	+6.2	-0.6	+0.7	-1.4	.507	13.0		9	36	13.3	14	35	48	368.0	928.9
							98665 is double: AB 8.8 9.1 82" 111.0, dT = +161sec																											
26	Jun	19	1	24	49.5	d	98667		9.0	8.7		21+	54		30	273	89S	110	40	93	+6.2	-0.6	+0.7	-1.4	.507	13.9		9	36	18.5	14	35	18	368.1	932.7
26	Jun	19	1	33	47.3	D	1415WA1		6.3	6.3		21+	54		28	274	37S	162	92	145	+6.1	-0.5	-0.2	-2.5	.414	-38.5		9	35	52.9	14	22	47	368.3	945.9
							R1415 = 7 Leonis																											
							1415 is double: AB 6.3 9.4 41" 90.5, dT = +31sec																											
26	Jun	19	2	18	12.3	D	1420 F2		6.6	6.4		21+	54		18	278	87N	106	37	88	+6.1	-0.4	+0.3	-1.2	.543	15.8		9	38	1.3	14	20	50	369.5	1011.1
							R1420 = 11 Leonis																											
26	Jun	20	0	15	16.1	D	1525 M2		5.6	4.8v		30+	66	-1	54	250	19S	183	123	163	+7.0	+0.9	-0.5	-3.7	.259	-52.4	.01	10	25	15.2	8	47	5	371.9	764.7
							R1525 = 44 Leonis (DE)																											
							1525 = DE Leo, 5.6, range 0.07, V, Type SRB:																											
26	Jun	20	1	56	48.0	d	118317 K2		8.2	7.5		31+	67		31	265	33S	169	103	149	+6.8	+1.1	-0.1	-2.9	.351	-43.4		10	27	56.5	8	18	52	374.2	877.7
26	Jun	21	2	31	19.9	D	1635cM0		5.2	4.4		41+	80		31	256	54S	150	88	128	+7.0	+2.7	+0.6	-2.4	.410	-23.8		11	17	17.4	2	0	38	380.4	826.2
							R1635 = 75 Leonis																											
							1635 is double: ** 5.8 6.6 0.044" 0.0																											
							1635 has been reported as non-instantaneous (OCc 763). Observations are highly desired																											
26	Jun	21	3	46	11.7	D	1637 K0		5.9	5.4		42+	80		14	265	34S	170	105	148	+6.9	+2.8	+0.1	-2.9	.333	-48.2		11	18	55.0	1	39	1	382.5	927.2
							R1637 = 76 Leonis																											
26	Jun	23	4	26	5.9	d	1845SG8		6.5	5.9s		62+	104		19	249	46S	156	97	134	+6.0	+5.4	+0.9	-2.8	.328	-38.0		12	51	22.9	-10	20	18	392.9	792.0
							1845 is triple: AB 6.6 9.7 28.8" 296.3, dT = -68sec : AC 6.6 12.5 142" 211.8, dT = +243sec																											
							1845 = NSV 5994, 6.49, range 0.07, V																											
26	Jun	25	1	8	57	m	158499 F2		7.7	7.5		79+	126	-11	46	172	21N	36	44	18	+5.1	+6.7	+9.9	+9.9	.000	90.0		14	20	50.3	-19	19	56	397.3	610.4
26	Jun	25	3	59	36	d	158538wK1		7.3	6.8		80+	127		33	221	22N	36	357	18	+4.4	+6.9	+4.2	+6.5	.067	78.1		14	24	0.4	-19	48	3	398.7	625.8
							158538 is double: AB 7.4 11.6 40" 286.2, dT = -204sec																											
26	Jun	25	4	56	24.9	d	158556WA2		6.8			80+	127		24	232	36N	51	2	33	+4.2	+7.0	+1.6	+1.2	.182	58.7		14	25	27.7	-19	57	57	399.7	680.0
							158556 is double: BA 7.2 6.6 35" 114.8, dT = +84sec																											
26	Jun	25	4	57	40.2	d	2066SA1		6.6	6.6		80+	127		24	232	37N	52	2	33	+4.2	+7.0	+1.6	+1.2	.185	58.2		14	25	29.9	-19	58	12	399.7	681.5
							2066 is quadruple: **Aa,Ab 6.8 7.7 0.018" 329.0, dT = +0.01sec : BC 7.16 8.37 1.21" 89.4, dT = +5sec : AB 6.6 7.2 35" 294.8, dT = -84sec																											
							2066 has been reported as non-instantaneous (OCc 204). Observations are highly desired																											
26	Jun	26	3	55	41.4	D	2174pB8		6.5	6.5		87+	138		36	207	53S	136	109	121	+3.3	+7.3	+2.4	-2.1	.270	-25.5		15	13	17.4	-24	0	30	400.7	581.4
							2174 is triple: ** 7.1 7.1 0.030" 0.0 : AB 6.4 12.5 8.2" 45.0, dT = -0.32sec																											
							2174 has been reported as non-instantaneous (OCc1471). Observations are highly desired																											
26	Jun	26	23	18	19.4	D	2287SB1		2.9	3.0v		92+	147	11	15	129	78S	105	157	93	+3.3	+7.1	+0.9	+0.4	.400	10.7		15	58	51.1	-26	6	51	403.9	796.8
							R2287 = pi Scorpii																											
							2287 is triple: Aa,Ab 5.1 13.4 2.0" 244.0, dT = -4sec : AB 2.9 11.9 50" 128.1, dT = +116sec																											
							2287 is a close double. Observations are highly desired																											
							2287 = pi Sco, 2.88 to 2.91, V, Type ELL, Period 1.570103 days, Phase 76%																											
26	Jun	27	0	35	12.6	R	2287SB1		2.9	3.0v		92+	148	-5	28	142	-55N	307	346	296	+3.0	+7.2	+1.2	-0.6	.344	168.9		15	58	51.1	-26	6	51	402.7	685.5

Occultation prediction for Marathon Key Airport
E. Longitude - 81 3 4.0, Latitude 24 43 29.2, Alt. 1m; Telescope dia 15cm; dMag 0.0

y	m	day d	h	Time m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon Alt	Sun Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	dur sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
							R2287 = pi Scorpii																												
							2287 is triple: Aa,Ab 5.1 13.4 2.0" 244.0, dT = -2.6sec : AB 2.9 11.9 50" 128.1, dT = +147sec																											
							2287 is a close double. Observations are highly desired																											
							2287 = pi Sco, 2.88 to 2.91, V, Type ELL, Period 1.570103 days, Phase 76%																									
26	Jun	27	2	42	53.3	d	2297kF7	7.0	6.7	93+	148	38	173	48S	134	142	123	+2.5	+7.3	+2.2	-1.4	.268	-23.4	16	3	16.1	-26	43	2	401.8	570.2
26	Jul	1	7	18	19	m	2879kA3	6.7	6.6	98-	165	39	194	32N	333	319	342	-3.2	+4.7	+9.9	+9.9	.000	90.0	19	42	22.6	-24	51	34	399.2	601.7	
							Distance of 2879 to Terminator = 8.5"; to 3km sunlit peak = 1.0"																										
26	Jul	3	3	53	21.5	R	3113cB5	5.4	5.5	V	91-	144	17	119	37S	202	259	218	-4.4	+2.4	+1.4	+3.2	.267	-132.8	21	17	57.3	-17	59	7	396.7	757.2	
							R3113 = 30 Capricorni																										
							3113 is double: ** 6.1 6.1 0.10" 87.0, dT = +0.16sec																										
							3113 has been reported as non-instantaneous (OCc1602). Observations are highly desired																										
							3113 = HD 202671, 5.40, , Type ACV, Period 1.9917 days, Phase 99%																									
26	Jul	4	9	2	31.9	R	3253kB5	5.4	5.5	V	83-	131	54	187	54N	285	279	304	-6.3	+0.5	+4.8	-1.3	.181	122.0	22	10	37.5	-11	33	54	389.3	646.5	
							R3253 = 38 Aquarii																										
							3253 = HD 210424, 5.44, , Type ACV, Period 3.9613 days, Phase 44%																										
26	Jul	4	10	27	22	m	3255 M0	7.3	6.4	v	83-	131	-3	47	217	22N	317	283	337	-6.6	+0.3	+9.9	+9.9	.000	90.0	22	12	16.9	-11	3	56	389.5	694.0	
							3255 = KR Aqr, 7.25 to 7.36, Hp, Type LB																										
26	Jul	6	10	8	28	m	128354 F8	8.0	7.7		65-	107	-7	66	178	21N	315	317	337	-7.3	-2.5	+9.9	+9.9	.000	90.0	23	44	18.2	0	42	44	379.8	671.7	
26	Jul	7	10	54	19.9	r	68SB9	5.8		S	54-	95	2	73	178	63N	273	275	295	-7.2	-4.0	+3.6	-0.2	.255	132.9	0	32	23.8	6	57	20	374.4	679.7	
							R68 = 51 Piscium																										
							68 is multiple: Aa,Ac 5.8 9.5 0.20" : Aa,Ab 5.8 8.0 0.27" 284.1, dT = -1.1sec : AB 5.7 9.5 28.5" 81.5, dT = +109sec : AD 5.7 13.1 82" 307.6, dT = -266sec																										
							68 is a close double. Observations are highly desired																										
							68 = NSV 15113, 5.67 to 9.0, V, Type E:																										
26	Jul	8	8	27	54.4	r	194cF5	8.2			44-	83	43	96	62S	221	288	242	-6.3	-4.7	+0.7	+2.1	.453	-168.3	1	19	42.8	12	8	45	371.5	832.9	
							194 is double: AB 8.67 9.25 0.11" 323.2, dT = +0.05sec																										
							194 is a close double. Observations are highly desired																										
26	Jul	8	10	7	8.2	R	197cK0	7.0	6.5		43-	82	-8	65	114	63S	222	281	243	-6.5	-5.0	+1.3	+2.1	.406	-172.6	1	21	58.3	12	36	15	369.7	733.5	
26	Jul	9	6	38	38.4	R	317 F5	6.4	6.2		33-	71	10	75	65S	227	294	246	-5.4	-5.4	-0.3	+1.6	.586	-165.2	2	9	23.1	17	13	27	370.0	1087.3	
							R317 = 20 H1. Arietis																										
26	Jul	10	8	27	38.6	r	75775SG5	8.5	8.1	v	22-	56	23	75	57S	225	296	240	-4.1	-6.0	-0.1	+1.8	.546	-161.0	3	11	13.8	22	24	57	363.6	1019.0	
							75775 is triple: AC 8.6 13.3 24.1" 301.1, dT = -10sec : AB 8.6 10.6 33" 321.1, dT = +7sec																										
							75775 = BD+21 418, 8.49 to 8.54, V, Type WTTS																										
26	Jul	10	9	8	11.1	r	75790 G0	8.8	8.5		22-	56	32	77	57N	291	5	306	-4.1	-6.1	+1.4	+0.1	.359	131.4	3	12	24.7	22	52	50	362.6	955.3	
26	Jul	10	9	25	48.7	r	75796 K0	9.0	8.5		22-	56	36	79	84S	252	327	267	-4.1	-6.2	+0.7	+1.3	.520	170.2	3	13	0.1	22	46	14	362.2	927.5	
26	Jul	10	10	6	7.5	R	470WK0	6.8	6.2		22-	55	-8	44	81	87S	256	333	270	-4.1	-6.2	+1.1	+1.2	.479	165.4	3	14	17.2	22	57	14	361.4	868.2	
							470 is double: AB 6.9 10.4 42" 33.3, dT = +64sec																										
26	Jul	11	9	14	58	Gr	76530 K3	7.8	7.0		13-	42	22	** GRAZE: CA 15.5N; Dist. 34km in az. 144deg. [Lat = 24.34+0.67(E.Long+81.05)]																										
26	Jul	11	9	15	24	m	76530 K3	7.8	7.0		13-	42	21	70	16N	340	52	350	-2.4	-6.2	+9.9	+9.9	.000	90.0	4	16	41.6	26	21	29	360.0	1041.6	
26	Jul	16	19	35	40.1	d	1466cB9	5.3	5.3		8+	33	61	78	169	85S	115	125	97	+6.1	-0.1	+2.3	-1.1	.386	14.7	9	58	13.4	12	26	41	363.1	702.8	
							R1466 = nu Leonis																										
							1466 is double: ** 6.0 6.0 0.050"																										
							1466 has been reported as non-instantaneous (OCc1407). Observations are highly desired																										
26	Jul	17	1	22	50	m	98951 K5	8.4	7.5		9+	36	11	277	9N	31	324	12	+5.6	+0.7	+9.9	+9.9	.000	90.0	10	6	44.1	11	10	41	369.4	1050.2	
26	Jul	24	2	28	36.6	d	183789kA2	7.8	7.7		74+	119	36	203	56N	65	42	52	+3.2	+7.5	+3.0	+0.6	.225	39.7	15	47	23.3	-25	52	4	400.5	569.0	
26	Jul	24	2	49	51.3	d	2256PA1	7.0	6.9		74+	119	34	208	78N	87	59	75	+3.1	+7.5	+2.7	-0.5	.288	15.3	15	47	56.5	-25	59	13	400.7	580.0	
							2256 is double: ** 7.7 7.7 0.10" 90.0, dT = +0.35sec																										
							2256 has been reported as non-instantaneous (OCc1482). Observations are highly desired																										

Occultation prediction for Marathon Key Airport
E. Longitude - 81 3 4.0, Latitude 24 43 29.2, Alt. 1m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon Sun Alt	Moon Alt	Az	CA o	PA o	VA o	AA o	Libration L	B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	Jul	24	4	57	7.5	d	2261	K3	6.6	5.8		75+	120 15	231	46S	143	91	131	+2.7	+7.5	+2.3	-3.1	.239	-49.5		15	50	34.9	-26	17	23	402.8	719.4
26	Jul	25	3	58	58.8	D	2397	K1	6.5	5.9		82+	130 30	211	20N	23	350	15	+1.7	+7.4	+0.8	+4.2	.115	68.0		16	41	37.6	-27	48	35	402.2	598.8
26	Jul	28	2	11	44.2	d	2824	K4	7.3	6.5		98+	163 30	145	62N	40	75	47	-1.3	+5.3	+2.6	+2.6	.241	40.1		19	21	44.2	-26	9	59	399.9	612.1
26	Jul	31	9	32	27.1	r	164779	KG5	7.2	6.8		97-	160 35	232	60N	281	233	299	-5.5	+0.5	+2.7	-1.6	.256	129.5		21	58	24.3	-12	39	53	390.6	762.0
26	Aug	2	7	15	41.5	R	3459	K0	6.4	5.8		87-	137 60	151	38S	193	220	215	-5.8	-2.1	+0.7	+2.9	.309	-147.6		23	29	27.0	-	1	47	28	382.2	677.6
R3459 = 11 Piscium																																	
26	Aug	2	9	54	26.5	R	3467	kK1	6.4	5.8		86-	136 55	227	53S	208	166	230	-6.3	-2.5	+1.1	+2.0	.358	-160.9		23	31	57.6	-	1	5	9	382.2	702.2
R3467 = 13 Piscium																																	
26	Aug	3	6	40	3.9	r	30	SA0	7.1	7.1		79-	125 52	117	16S	170	225	193	-5.7	-3.4	-0.8	+4.2	.214	-122.1		0	15	57.3	4	15	4	379.2	739.9
30 is triple: AB 7.0 14.1 0.8" 246.0, dT = -0.9sec : AC 7.0 12.2 5.0" 347.2, dT = +23sec																																	
30 is a close double. Observations are highly desired																																	
26	Aug	4	9	46	54.5	r	163	pF2	7.3	7.1		68-	112 77	187	36N	300	293	321	-5.9	-5.0	+6.7	-4.2	.121	109.0		1	7	4.0	11	33	8	373.6	674.5
163 is double: AB 7.3 10.5 8.3" 201.5, dT = +10sec																																	
163 is a close double. Observations are highly desired																																	
26	Aug	5	9	45	33.5	r	92732	wF5	7.8	7.5		58-	99 78	124	81N	259	310	278	-5.3	-5.9	+2.6	+0.8	.346	153.9		1	58	47.5	17	1	33	369.7	690.2
92732 is double: AB 7.8 17.9 79" 249.5, dT = -226sec																																	
26	Aug	7	5	43	37.8	r	548	pB9	6.8	6.8		36-	74 5	65	47S	215	280	228	-3.0	-6.2	-0.7	+1.7	.535	-145.8		3	46	59.4	24	31	12	368.8	1156.1
548 is quadruple: Aa,Ab 6.8 6.9 0.011" 249.1, dT = -0.02sec : AB 6.8 14.8 102" 299.3, dT = -20sec : AC 6.8 13.0 123" 190.1, dT = -207sec																																	
548 is a close double. Observations are highly desired																																	
26	Aug	7	6	18	29.2	R	555	K5	6.4	5.6s		36-	74 12	68	54N	296	4	308	-3.0	-6.2	+0.5	+0.0	.419	132.9		3	48	6.5	24	59	18	368.0	1099.5
555 = NSV 1316, 6.44, range 0.02, 0V, Type VAR, Period 1.48987 days																																	
26	Aug	7	7	45	49.1	R	571	pA2	6.8	6.7		36-	73 30	74	87N	263	338	275	-2.9	-6.4	+0.6	+1.0	.516	163.4		3	51	25.3	25	9	47	365.9	954.5
571 is double: ** 7.1 9.1																																	
26	Aug	7	8	0	50.6	r	76281	K0	8.0	7.4		35-	73 33	75	60N	289	5	301	-2.9	-6.4	+1.4	+0.1	.381	136.5		3	52	0.9	25	20	30	365.5	930.7
26	Aug	7	8	5	0.5	R	574	pG0	6.8	6.5		35-	73 34	75	78S	248	324	259	-2.9	-6.4	+0.5	+1.4	.521	178.4		3	52	11.4	25	9	47	365.5	923.7
26	Aug	7	9	13	47.4	r	76313	K0	8.3	7.8		35-	73 49	78	38N	312	33	324	-3.0	-6.5	+3.8	-2.4	.182	113.0		3	54	40.6	25	41	9	364.1	821.3
26	Aug	8	7	50	1.4	R	76841	cK1	7.3	6.7		25-	60 18	68	63S	240	311	247	-1.6	-6.1	-0.2	+1.4	.570	-165.6		4	55	34.6	27	12	9	364.1	1039.4
76841 is double: ** 7.6 10.1 0.08" 82.0, dT = +0.13sec																																	
76841 has been reported as non-instantaneous (OCc 753). Observations are highly desired																																	
26	Aug	8	9	24	57.5	R	746	WB7	7.0	6.9		24-	59 38	74	26S	203	282	209	-1.6	-6.3	-0.5	+3.2	.317	-129.1		4	59	53.7	27	19	32	362.1	880.9
746 is double: AB 7.0 8.7 20.4" 206.1, dT = -64sec																																	
26	Aug	9	7	41	49.5	R	909	SB9	6.0	5.9s		15-	46 4	62	87S	272	336	272	-0.1	-5.4	-0.2	+0.6	.643	171.6		6	1	0.5	27	34	21	363.7	1147.2
909 is triple: Aa,Ab 6.1 9.2 194.0, dT = 0.00sec : AB 6.1 12.4 9.5" 242.4, dT = -13sec																																	
909 is a close double. Observations are highly desired																																	
909 = NSV 16751, 6.04, range 0.01, 2V, Type VAR, Period 9.26012 days																																	
26	Aug	9	8	33	57.5	r	77894	SF2	8.8	8.4		15-	46 14	66	87S	272	341	272	+0.0	-5.5	+0.1	+0.7	.593	170.7		6	3	26.6	27	38	33	362.5	1055.7
77894 is triple: AB 8.9 9.6 11.5" 263.5, dT = -19sec : AC 8.9 11.1 25.6" 189.6, dT = -6sec																																	
26	Aug	9	8	45	50.7	R	77909	wA0	7.6	7.6		15-	45 17	67	69S	254	324	254	+0.0	-5.5	+0.0	+1.1	.582	-170.9		6	4	1.0	27	34	14	362.3	1034.9
77909 is double: AB 7.6 10.8 21.6" 132.5, dT = +19sec																																	
26	Aug	9	9	24	58.8	r	77957	B9	8.7	8.6		15-	45 25	69	35N	330	44	330	+0.0	-5.5	+2.4	-2.7	.213	112.7		6	6	15.6	27	56	5	361.4	966.9
26	Aug	9	10	13	47.1	r	77987	B9	8.5	8.5V		14-	45 -10 35	72	72N	294	12	293	+0.0	-5.6	+1.3	-0.1	.436	149.5		6	7	39.9	27	51	36	360.4	884.4
77987 = HD 41639, 8.44, , Type VAR																																	
26	Aug	10	8	42	3.8	r	1085	SG8	7.1	6.7		7-	32 3	63	54S	247	311	241	+1.6	-4.4	-0.5	+1.2	.587	-155.7		7	9	35.4	25	43	43	363.0	1133.3
1085 is triple: AB 7.2 13.0 34" 68.2, dT = +57sec : AC 7.2 7.8 125" 78.3, dT = +208sec																																	
26	Aug	10	8	45	31.9	r	79124	WF0	7.8	7.6		7-	32 3	63	56S	249	313	243	+1.6	-4.4	-0.5	+1.2	.592	-157.5		7	9	44.2	25	44	5	362.9	1127.2
79124 is double: CA 7.8 7.2 125" 258.3, dT = -208sec																																	
26	Aug	10	9	17	48.8	r	X 98986		9.1	8.6		7-	31 10	66	29N	344	51	338	+1.7	-4.4	+2.2	-3.9	.180	107.2		7	12	1.4	26	5	34	362.2	1071.2
26	Aug	10	9	44	32.8	r	79159	A5	9.3	9.1		7-	31 15	68	77S	270	340	264	+1.7	-4.4	+0.2	+0.7	.583	-178.8		7	12	19.6	25	49	25	361.6	1022.3

Occultation prediction for Marathon Key Airport
E. Longitude - 81 3 4.0, Latitude 24 43 29.2, Alt. 1m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon Alt	Sun Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	Aug	10	9	55	11.4	R	1094	A0	7.1	7.1		7-	17	69	62S	255	325	249	+1.7	-4.5	+0.0	+1.2	.549	-163.4		7	12	49.4	25	44	55	361.4	1003.6
	R1094 = 49 Geminorum																																
26	Aug	14	19	54	0.6	d	1635	cM0	5.2	4.4		6+	28	54	65	207	53S	154	130	133	+5.9	+2.8	+1.1	-2.4	.370	-20.1		11	17	17.4	2	0	38	370.3	708.7
	R1635 = 75 Leonis																																
	1635 is double: ** 5.8 6.6 0.044" 0.0																																
	1635 has been reported as non-instantaneous (OCc 763). Observations are highly desired																																
26	Aug	16	1	38	38.2	d	1759	pA*	6.6	6.4v		13+	43	3	262	79N	107	42	85	+5.7	+4.8	+0.2	-1.3	.514	9.6		12	14	15.5	- 5	43	0	382.6	968.0
	1759 is triple: AB 6.6 13.5 10.6" 0.9, dT = -6sec : AC 6.6 11.9 86" 185.9, dT = +32sec																																
	1759 = FG Vir, 6.53 to 6.58, V, Type DSCTC, Period 0.079 days																																
26	Aug	20	1	7	22.2	d	183485	*	7.5	6.9v		49+	89	31	214	59S	135	101	121	+3.7	+7.6	+2.5	-2.3	.268	-30.7		15	27	48.3	-25	10	10	398.1	601.9
	183485 = HM Lib, 7.42 to 7.63, V, Type PVTELIII																																
26	Aug	23	0	38	39.3	D	2617	cK0	4.6	4.1		76+	122	-11	36	166	51N	47	61	47	+0.5	+6.6	+3.2	+2.1	.216	41.0		18	8	5.0	-28	27	26	400.7	554.7
	2617 is double: AB 5.1 5.9 0.26" 12.0, dT = +1sec																																
	2617 is a close double. Observations are highly desired																																
26	Aug	23	1	9	46.7	d	186346	F5	7.6	7.4		77+	122	36	175	52S	124	129	124	+0.3	+6.6	+3.2	-1.3	.221	-38.5		18	8	52.1	-28	45	19	400.6	547.9
26	Aug	23	2	2	39.5	r	2617	cK0	4.6	4.1		77+	122	36	189	-55N	301	291	301	+0.1	+6.5	+3.5	-1.6	.217	139.1		18	8	5.0	-28	27	26	400.5	557.1
	2617 is double: AB 5.1 5.9 0.26" 12.0, dT = -0.39sec																																
	2617 is a close double. Observations are highly desired																																
26	Aug	23	4	8	1.6	d	186461	cA2	7.4	7.2v		77+	123	25	218	44N	39	360	40	-0.4	+6.4	+0.8	+1.1	.285	33.7		18	12	37.6	-28	14	11	401.5	667.8
	186461 is double: ** 8.2 8.2 0.050"																																
	186461 has been reported as non-instantaneous (OCc1536). Observations are highly desired																																
	186461 = V4385 Sgr, 7.42 to 7.46, Hp, Type ELL:, Period 2.62462 days, Phase 27%																																
26	Aug	24	5	4	7.8	d	187716	SG6	7.2	6.6		85+	134	26	220	69S	100	60	106	-1.8	+5.4	+2.4	-1.2	.295	-35.5		19	8	8.1	-26	50	5	400.0	703.0
	187716 is triple: **Aa,Ab 7.8 7.8 0.050" 160.0, dT = +0.08sec : AB 7.3 8.6 45" 123.9, dT = +140sec																																
	187716 has been reported as non-instantaneous (OCc 769). Observations are highly desired																																
26	Aug	26	6	19	34.9	d	3049	B9	7.3	7.3		96+	157	34	221	54N	33	354	48	-3.9	+2.7	+0.7	+1.3	.357	19.9		20	52	16.1	-19	38	37	393.6	725.1
26	Aug	27	6	26	4.2	d	164579	SF3	7.2	7.0		99+	169	44	215	79N	55	23	73	-4.6	+1.2	+1.6	+0.8	.370	-6.1		21	41	28.1	-14	50	29	389.3	702.1
	164579 is triple: AB 7.2 12.0 17.8" 104.2, dT = +31sec : AC 7.2 12.6 119" 257.0, dT = -298sec																																
	Distance of 164579 to Terminator = 17.3"; to 3km sunlit peak = 6.8"																																
26	Aug	27	7	55	40.5	D	3177	cA9	5.9	5.7		99+	169	30	235	58N	34	344	52	-4.9	+1.0	+0.5	+1.2	.401	17.6		21	43	4.4	-14	23	59	390.3	796.3
	R3177 = 44 Capricorni																																
	3177 is double: ** 6.8 6.8 0.10" 90.0, dT = +0.14sec																																
	3177 has been reported as non-instantaneous (OCc1608). Observations are highly desired																																
	Distance of 3177 to Terminator = 11.8"; to 3km sunlit peak = 3.0"																																
26	Aug	28	2	49	11.0	d	X182637	k	11.1	10.9		86E	180	39	128	94U	63	110	83	-4.2	+0.2	+1.8	+1.6	.372	-8.0		22	25	3.2	-10	9	15	386.6	704.7
26	Aug	28	2	51	33.4	d	X182643	k	11.5	11.2		83E	180	39	128	83U	95	141	115	-4.2	+0.2	+2.4	+0.7	.287	-40.1		22	25	12.9	-10	17	6	386.6	702.7
26	Aug	28	2	54	4.0	r	X242709	k	11.5			80E	180	39	129	-87N	218	264	238	-4.3	+0.2	+1.4	+2.3	.357	-163.5		22	23	34.8	-10	27	28	386.6	698.5
26	Aug	28	2	56	31.2	r	X182578	k	11.1	10.4		76E	180	40	130	-76S	201	246	221	-4.3	+0.2	+1.1	+2.8	.310	-146.6		22	23	54.0	-10	29	12	386.5	696.9
26	Aug	28	2	58	23.8	d	X182649	k	11.2	10.9		73E	180	40	130	76U	100	146	120	-4.3	+0.2	+2.7	+0.4	.257	-46.3		22	25	20.6	-10	17	8	386.5	697.5
26	Aug	28	2	59	46.3	d	X242722		11.5			72E	180	41	130	53N	357	42	17	-4.3	+0.2	+0.3	+4.0	.204	56.7		22	24	17.5	- 9	58	36	386.4	696.4
26	Aug	28	3	4	47.3	d	X182655	k	11.1	10.8		64E	180	41	131	70U	106	150	126	-4.3	+0.2	+3.0	+0.0	.225	-52.6		22	25	27.1	-10	17	16	386.4	692.9
26	Aug	28	3	7	28.9	D	165050	K0	9.8	9.3		60E	180	42	132	59N	2	45	22	-4.3	+0.2	+0.5	+3.6	.229	51.7		22	24	31.7	- 9	56	53	386.3	691.3
26	Aug	28	3	16	48.3	d	X182644	k	10.9	10.4		46E	180	43	134	93U	34	76	54	-4.3	+0.1	+1.4	+2.3	.347	18.5		22	25	16.4	- 9	57	32	386.2	685.9
26	Aug	28	3	21	57.8	R	X	51850	k	10.6	10.4		39E	180	44	136	-42N	256	296	276	-4.3	+0.1	+2.3	+1.2	.333	156.4		22	23	46.0	-10	12	53	386.1	680.7
26	Aug	28	3	29	6.0	r	X182632	k	11.7	11.2		30E	180	45	137	78U	179	218	199	-4.4	+0.1	+0.3	+3.7	.220	-127.4		22	24	55.9	-10	23	4	386.0	677.4
26	Aug	28	3	34	36.4	D	X	51928	k	10.2	9.9		23E	180	46	139	45U	114	152	134	-4.4	+0.1	+4.2	-1.0	.165	-62.8		22	25	59.1	-10	12	45	385.9	675.8
26	Aug	28	3	37	28.4	R	3286	K0	7.2	6.4		20E	180	47	140	-44N	246	283	266	-4.4	+0.1	+2.2	+1.4	.347	165.0		22	24	7.6	-10	11	52	385.9	672.9
26	Aug	28	3	45	9.5	R	X	51874		9.8	9.2		13E	180	48	142	86U	219	254	239	-4.4	+0.1	+1.6	+2.1	.350	-168.0		22	24	34.2	-10	16	1	385.8	669.7

Occultation prediction for Marathon Key Airport
E. Longitude - 81 3 4.0, Latitude 24 43 29.2, Alt. 1m; Telescope dia 15cm; dMag 0.0

	day	Time	P	Star	Sp	Mag	Mag	%	Elon	Sun	Moon	CA	PA	VA	AA	Libration		A	B	RV	Cct durn		R.A. (J2000)			Dec			Mdist	SV
y	m d	h m s		No	D	v	r	V	ill	Alt	Alt Az	o	o	o	o	L	B	m/o	m/o	"/s	o	sec	h	m	s	o	m	s	Mm	m/s
26	Aug 28	3 48 28.3	r	X242722		11.5			11E	180	48 143	4N	287	321	307	-4.4	+0.1	+3.9	-0.4	.197	123.3		22	24	17.5	- 9	58	36	385.7	668.9
26	Aug 28	3 53 3.4	D	165076	kG5	9.6	9.0		8E	180	49 144	57U	82	115	102	-4.5	+0.1	+2.7	+0.9	.305	-31.5		22	26	25.0	-10	0	0	385.7	668.5
26	Aug 28	3 54 23.6	r	X182643	k	11.5	11.2		8E	180	49 145	59U	190	222	210	-4.5	+0.1	+0.8	+3.1	.272	-139.8		22	25	12.9	-10	17	6	385.7	666.6
26	Aug 28	3 54 57.4	r	X182655	k	11.1	10.8		7E	180	49 145	51U	178	210	198	-4.5	+0.1	+0.1	+3.8	.216	-127.4		22	25	27.1	-10	17	16	385.7	666.5
26	Aug 28	3 55 16.9	d	X182702	k	11.7	11.5		7E	180	49 144	52U	90	123	110	-4.5	+0.1	+3.0	+0.6	.273	-40.1		22	26	28.0	-10	1	49	385.6	667.7
26	Aug 28	3 55 17.6	r	X242731	k	11.2			7E	180	49 145	79U	223	254	242	-4.5	+0.1	+1.7	+2.0	.353	-172.2		22	24	42.5	-10	13	5	385.6	666.0
26	Aug 28	3 55 18.0	r	X182649	k	11.2	10.9		7E	180	49 145	54U	184	216	204	-4.5	+0.1	+0.5	+3.4	.246	-133.6		22	25	20.6	-10	17	8	385.7	666.3
26	Aug 28	4 2 16.7	d	X242756	k	11.4			5E	180	50 147	88U	33	64	53	-4.5	+0.0	+1.5	+2.3	.341	16.7		22	26	7.4	- 9	47	8	385.5	665.6
26	Aug 28	4 2 41.6	R	165050	K0	9.8	9.3		5E	180	50 147	100U	281	311	301	-4.5	+0.0	+3.7	-0.1	.221	128.4		22	24	31.7	- 9	56	53	385.5	664.1
26	Aug 28	4 8 20.6	d	X242766	k	11.8			4E	180	51 149	68U	75	103	94	-4.5	+0.0	+2.6	+1.1	.322	-25.0		22	26	40.4	- 9	54	33	385.5	663.8
26	Aug 28	4 11 42.6	D	X182712	k	10.8	10.3		3E	180	51 150	67U	79	107	99	-4.5	+0.0	+2.7	+0.9	.309	-29.4		22	26	45.0	- 9	54	55	385.5	662.9
26	Aug 28	4 12 43.6	R	X 51928	k	10.2	9.9		3E	180	51 151	33U	167	194	186	-4.5	+0.0	-0.9	+4.8	.161	-117.1		22	25	59.1	-10	12	45	385.5	661.7
26	Aug 28	4 13 5.8	r	X182637	k	11.1	10.9		3E	180	51 151	64U	221	248	241	-4.5	+0.0	+1.7	+2.0	.350	-171.8		22	25	3.2	-10	9	15	385.4	661.2
26	Aug 28	4 22 47.9	d	X 51935		11.2	11.0		5E	180	53 154	101U	21	45	41	-4.6	+0.0	+1.1	+2.6	.313	27.8		22	26	18.0	- 9	40	53	385.3	660.7
26	Aug 28	4 24 52.9	D	165087	G5	9.0	8.6		5E	180	52 154	65U	96	120	116	-4.6	+0.0	+3.6	+0.1	.238	-47.7		22	27	0.2	- 9	56	38	385.3	660.2
26	Aug 28	4 40 5.9	r	X182644	k	10.9	10.4		13E	180	54 161	70U	246	264	266	-4.6	+0.0	+2.5	+1.2	.335	161.9		22	25	16.4	- 9	57	32	385.2	657.6
26	Aug 28	4 52 33	m	X182667		11.0	10.5		25E	180	55 166	31N	317	331	337	-4.7	-0.1	+9.9	+9.9	.000	90.0		22	25	38.6	- 9	35	17	385.1	657.9
26	Aug 28	4 58 33.6	d	X242782		11.6			32E	180	55 167	-81S	84	95	104	-4.7	-0.1	+3.1	+0.5	.283	-36.5		22	27	36.1	- 9	45	16	385.1	658.4
26	Aug 28	5 0 38.8	r	X182702	k	11.7	11.5		35E	180	55 169	52U	187	197	207	-4.7	-0.1	+0.5	+3.0	.269	-139.7		22	26	28.0	-10	1	49	385.1	657.9
26	Aug 28	5 6 27.1	R	165076	kG5	9.6	9.0		43E	180	55 171	56U	195	203	215	-4.7	-0.1	+0.8	+2.7	.300	-148.2		22	26	25.0	-10	0	0	385.0	658.4
26	Aug 28	5 22 45.6	R	165087	G5	9.0	8.6		67E	180	56 178	76U	179	180	199	-4.8	-0.1	-0.1	+3.5	.237	-132.0		22	27	0.2	- 9	56	38	385.0	660.9
26	Aug 28	5 26 51.0	d	X242774		11.7			73E	180	56 180	-40N	13	13	33	-4.8	-0.1	+0.7	+2.7	.295	33.7		22	27	17.2	- 9	24	58	384.9	662.1
26	Aug 28	5 26 55.4	r	X242766	k	11.8			73E	180	56 180	75U	201	201	221	-4.8	-0.1	+1.0	+2.4	.320	-154.5		22	26	40.4	- 9	54	33	385.0	661.7
26	Aug 28	5 27 2.9	R	X182712	k	10.8	10.3		73E	180	56 180	75U	197	197	217	-4.8	-0.1	+0.8	+2.6	.307	-150.2		22	26	45.0	- 9	54	55	385.0	661.8
26	Aug 28	5 27 7.5	r	X242756	k	11.4			73E	180	56 181	85U	243	242	263	-4.8	-0.1	+2.4	+1.1	.340	163.8		22	26	7.4	- 9	47	8	385.0	661.8
26	Aug 28	5 27 55.5	D	146104	kG5	10.3	10.0		74E	180	56 180	-88S	65	65	85	-4.8	-0.1	+2.4	+1.0	.336	-18.7		22	28	1.5	- 9	33	21	384.9	662.3
26	Aug 28	5 29 26.9	d	X182760		11.3	10.5		76E	180	56 181	-82S	71	70	91	-4.8	-0.1	+2.6	+0.8	.324	-24.3		22	28	5.4	- 9	34	21	384.9	662.7
26	Aug 29	6 56 49.8	R	3416	cA3	5.6	5.5		99-	167	60 203	28S	179	157	200	-5.3	-1.9	-0.1	+3.5	.255	-133.3		23	15	34.3	- 3	29	47	380.9	686.6

3416 is double: ** 6.4 6.4 0.050"

3416 has been reported as non-instantaneous (OCc1638). Observations are highly desired

Distance of 3416 to Terminator = 5.3"; to 3km sunlit peak = 0.0"

26	Aug 30	5 41 3.4	r	128524	K2	7.6	6.9		95-	155	62 139	72N	259	296	281	-4.9	-3.1	+2.7	+0.9	.321	146.8		0	0	23.5	2	40	32	377.5	703.3
26	Aug 30	9 48 44.8	r	6	G5	6.9	6.3		95-	154	44 250	73S	223	164	246	-5.6	-3.7	+1.2	+1.2	.408	-171.0		0	5	22.2	3	36	22	378.2	758.2
26	Sep 1	4 33 32.9	r	244	K0	6.7	6.2		82-	130	35 89	16S	171	241	192	-3.8	-5.2	-1.2	+4.1	.218	-116.5		1	39	15.4	14	17	8	373.6	886.7

R244 = 104 Piscium

26	Sep 2	5 54 11.2	r	93005	K0	7.9	7.3		72-	117	44 85	84S	244	318	261	-3.1	-6.1	+0.9	+1.5	.471	173.5		2	34	23.5	19	59	5	370.2	851.8
26	Sep 2	8 2 51.4	R	387c	G5	6.9	6.4S		72-	116	72 99	80N	260	334	278	-3.4	-6.3	+2.4	+0.9	.362	156.0		2	37	34.4	20	34	30	368.3	707.8

387 is double: ** 7.7 7.7 0.10" 90.0, dT = +0.27sec

387 has been reported as non-instantaneous (OCc1190). Observations are highly desired

387 = NSV 15555, 6.91, , Type VAR:

26	Sep 2	10 0 53.3	r	75509	M*	7.9	7.1v		71-	115	80 253	30N	310	241	327	-3.7	-6.5	+5.1	-5.5	.132	111.1	.01	2	40	31.7	21	11	16	367.9	654.9

75509 = AK Ari, 7.94, range 0.07, 8w, Type LB:, Period 19.3 days, Phase 22%

26	Sep 3	6 58 55.8	R	518	SA3	6.0	s		61-	103	47 80	70N	276	355	289	-2.2	-6.5	+1.7	+0.6	.391	147.0		3	34	26.6	24	27	52	367.7	831.0

R518 = 7 Tauri

518 is triple: AB 6.60 6.86 0.79" 348.0, dT = -0.6sec : AB,C 5.9 9.9 22.5" 52.2, dT = +42sec

518 is a close double. Observations are highly desired

518 = NSV 1192, 5.92 to 5.96, V

26	Sep 3	9 5 57.0	r	76041	F0	8.2	8.0		61-	102	74 86	42S	207	294	220	-2.5	-6.7	+1.0	+3.2	.308	-142.7		3	38	35.9	24	36	6	366.0	686.6

Occultation prediction for Marathon Key Airport
E. Longitude - 81 3 4.0, Latitude 24 43 29.2, Alt. 1m; Telescope dia 15cm; dMag 0.0

y	m	day d	h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon Sun Alt	Moon Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	Sep	3	9	33	31.1	R	76046cA0		7.1	7.1		60- 102	81	87	52S	218	307	231	-2.6	-6.7	+1.6	+2.6	.333	-152.1		3	39	6.7	24	42	10	365.8	667.2
		76046 is double: AB 7.1 45.0, dT = -30sec																															
26	Sep	3	10	27	51	Gr	529SA2		6.1	6.1		60- 102	-10	85	** GRAZE: CA 6.8N; Dist.174km in az. 161deg. [Lat = 23.06+0.32(E.Long+81.05)]																				
26	Sep	3	10	29	15	M	529SA2		6.1	6.1		60- 102	-9	87	287	7N	339	234	352	-2.7	-6.8	+9.9	+9.9	.000	90.0		3	40	46.3	25	19	46	365.6	645.2
		R529 = 11 Tauri																															
		529 is triple: **Aa,Ab 6.3 8.3 : AB 6.1 10.9 74" 357.0																															
26	Sep	4	7	5	13.6	r	694SK2		8.1	7.5	v	50- 90		36	73	61N	291	9	299	-1.1	-6.3	+1.5	+0.1	.384	139.9		4	36	48.2	27	7	56	366.8	894.2
		694 is quadruple: AC 5.4 7.7" 176.0, dT = +8sec : AD 5.4 19.3 12.7" 104.0, dT = +33sec : AB 8.4 16.0 130" 338.0, dT = -230sec																															
		694 is a close double. Observations are highly desired																															
		694 = V0833 Tau, 8.02 to 8.40, V, Type BY+UV, Period 1.7916 days																															
26	Sep	4	7	44	48.9	R	701SF2		6.6	6.4		49- 89		44	75	50S	222	303	230	-1.1	-6.4	+0.4	+2.3	.412	-151.4		4	38	29.5	26	56	23	366.0	832.4
		701 is triple: 6.6 9.2 3.1" 169.4, dT = -5sec : AB 7.36 7.21 4.48" 187.8, dT = -9sec																															
		701 is a close double. Observations are highly desired																															
26	Sep	4	7	44	52.5	r	X 70481p		7.3	7.2		49- 89		44	75	50S	222	303	230	-1.1	-6.4	+0.4	+2.3	.412	-151.6		4	38	29.6	26	56	26	366.0	832.3
		X 70481 is triple: 7.3 9.2 5.8" 174.9, dT = -9sec : AC 7.4 12.9 92" 203.6, dT = -210sec																															
		X 70481 is a close double. Observations are highly desired																															
26	Sep	4	10	40	4.1	r	715cK5		8.0	7.5		49- 88	-7	82	66	38N	315	64	322	-1.5	-6.6	+3.6	-3.4	.199	122.8		4	43	35.4	27	41	15	364.0	649.6
		715 is double: ** 8.8 8.8 0.10" 90.0, dT = +0.36sec																															
		715 has been reported as non-instantaneous (OCc 130). Observations are highly desired																															
26	Sep	5	8	17	40.4	r	868SA0		7.5	7.5		38- 76		38	73	38S	217	297	219	+0.1	-5.9	+0.0	+2.8	.355	-137.4		5	44	21.2	27	43	53	365.2	854.6
		868 is triple: AB 7.5 9.8 8.6" 254.1, dT = -19sec : AC 7.5 12.7 47" 40.4, dT = +133sec																															
		868 is a close double. Observations are highly desired																															
26	Sep	5	8	34	29.4	r	77495cA0		8.1	8.1		38- 76		41	73	35N	325	46	327	+0.0	-5.9	+3.1	-2.9	.201	115.4		5	44	59.0	28	11	40	364.9	828.5
		77495 is double: AB 8.0 8.0 0.20" 42.2, dT = -0.21sec																															
		77495 is a close double. Observations are highly desired																															
26	Sep	5	10	27	8.4	r	77582 B3		8.4	8.3		37- 75	-10	65	75	29N	331	64	333	-0.2	-6.0	+3.8	-5.1	.156	113.6		5	48	41.3	28	19	29	363.2	688.6
26	Sep	6	8	42	9.8	r	78784 A0		8.3	8.2		27- 62		30	72	41N	327	42	322	+1.3	-4.9	+2.0	-2.0	.271	122.4		6	50	2.5	27	0	13	365.2	894.1
26	Sep	6	10	54	38.6	r	78853 A0		7.7	7.7		26- 61	-4	58	79	27S	215	300	210	+1.1	-5.0	+1.2	+4.9	.201	-119.8		6	54	29.2	26	31	51	362.9	711.2
26	Sep	7	8	12	13.2	r	79740cF2		8.5	8.3		17- 49		10	68	69S	262	329	252	+2.5	-3.6	-0.1	+1.0	.562	-166.0		7	50	44.7	23	47	1	367.3	1032.2
		79740 is double: ** 9.2 9.2 0.10" 143.0, dT = +0.09sec																															
		79740 has been reported as non-instantaneous (OCc 683). Observations are highly desired																															
26	Sep	7	10	35	4.2	R	79804cG0		7.4			16- 48	-8	40	79	84S	278	355	268	+2.4	-3.7	+1.3	+0.5	.452	-177.1		7	56	2.8	23	41	33	364.3	799.1
		79804 is double: AB 7.90 8.57 0.11" 108.1, dT = +0.25sec																															
		79804 is a close double. Observations are highly desired																															
26	Sep	7	10	37	20.9	R	1195 B8		6.8	6.9		16- 48	-8	40	79	70S	264	341	254	+2.4	-3.7	+1.2	+1.0	.432	-163.3		7	56	6.5	23	37	26	364.3	796.1
26	Sep	8	9	20	40.1	r	98186kB5		8.5	8.6		9- 35		11	74	88N	291	358	276	+3.7	-2.1	+0.3	+0.1	.557	173.0		8	52	20.0	19	21	3	368.1	1001.7
26	Sep	8	9	46	2.6	R	98198 K5		7.6	6.8		9- 35		16	76	81N	298	6	283	+3.7	-2.1	+0.5	-0.1	.524	167.2		8	53	20.6	19	19	20	367.5	958.5
26	Sep	8	19	32	41.3	D	Jupiter		-1.7	-1.7		7- 31	53	32	275	-31S	170	96	152	+2.4	-1.1	-0.4	-2.8	.372	-44.2		9	10	15.8	16	52	26	366.6	924.3
		Jupiter limb contacts offset by ±43.1 secs, at 19 31 58 and 19 33 24 Both contacts are against the bright limb of Jupiter																															
26	Sep	8	20	15	25.5	R	Jupiter		-1.7	-1.7		7- 31	44	22	279	59S	259	187	241	+2.4	-1.0	+0.8	-0.5	.398	-135.8		9	10	15.8	16	52	26	367.6	990.4
		Jupiter limb contacts offset by ±40.3 secs, at 20 14 45 and 20 16 6 Both contacts are against the bright limb of Jupiter																															
26	Sep	9	10	4	17.5	r	98781 **		8.3	8.1	s	3- 21		6	78	74N	307	13	289	+4.7	-0.5	+0.3	-0.4	.541	163.0		9	48	56.1	13	44	39	370.5	1017.1
		98781 = NSV 18274, 8.3 to 8.35, V																															
26	Sep	15	1	11	27	m	2046 A5		7.0	6.8	v	16+ 47		4	246	10S	195	132	176	+4.1	+7.1	+9.9	+9.9	.000	-90.0		14	17	27.7	-19	57	50	394.0	855.8
		2046 = MW Vir, 7. to 7.04, Hp, Type EW, Period 0.493086 days, Phase 47%																															
26	Sep	16	1	55	55.4	d	2164dK4		6.6	5.7		24+ 59		2	242	35S	164	102	148	+3.3	+7.4	+2.2	-4.8	.175	-66.4	.01	15	9	51.3	-23	59	9	398.2	842.8
		2164 is double: AB 6.7 12.5 9.1" 204.6, dT = +39sec																															
		2164 is a close double. Observations are highly desired																															

Occultation prediction for Marathon Key Airport
E. Longitude - 81 3 4.0, Latitude 24 43 29.2, Alt. 1m; Telescope dia 15cm; dMag 0.0

	day	Time	P	Star	Sp	Mag	Mag	%	Elon	Sun	Moon	CA	PA	VA	AA	Libration		A	B	RV	Cct	durn	R.A. (J2000)			Dec			Mdist	SV
y	m d	h m s		No	D	v	r	V	ill	Alt	Alt Az	o	o	o	o	L	B	m/o	m/o	"/s	o	sec	h	m	s	o	m	s	Mm	m/s
26	Sep 17	2 15 51.9	d	2297	kF7	7.0	6.7		33+	70	7 236	81S	112	54	101	+2.3	+7.4	+1.2	-1.6	.380	-21.9		16	3	16.1	-26	43	2	400.8	797.2
26	Sep 17	23 58 18.6	d	184749	K0	8.1	7.6		42+	80	-8 33 203	65S	123	99	116	+1.7	+7.3	+3.0	-1.7	.251	-31.6		16	53	12.9	-28	26	53	399.9	572.5
26	Sep 20	3 5 32.4	D	2723	K0	6.6	6.1		61+	103	24 221	86N	80	38	84	-1.4	+5.7	+1.7	-0.4	.351	-12.8		18	46	3.9	-27	29	56	401.0	700.4
26	Sep 23	2 15 35.5	d	3115	F0	7.1	6.9		86+	137	48 173	71N	52	59	68	-4.2	+2.1	+2.2	+1.5	.328	1.4		21	18	15.7	-17	27	44	390.4	621.0
R3115 = 31 Capricorni																														
26	Sep 23	5 29 52.4	D	3126	G8	4.3	3.8	v	87+	138	31 229	84S	76	30	93	-4.9	+1.7	+1.6	-0.2	.368	-24.4		21	22	14.8	-16	50	4	391.2	767.4
R3126 = Tae = iota Capricorni																														
3126 = iot Cap, 4.27, range 0.06, V, Type BY																														
26	Sep 23	6 35 42.0	r	3126	G8	4.3	3.8	v	87+	138	19 240	-50S	210	155	227	-5.0	+1.5	+0.1	+1.2	.410	-155.5		21	22	14.8	-16	50	4	392.3	856.0
R3126 = Tae = iota Capricorni																														
3126 = iot Cap, 4.27, range 0.06, V, Type BY																														
26	Sep 24	4 34 35.0	d	3244	K0	7.3	6.7		93+	149	50 208	49N	28	2	47	-5.2	+0.3	+1.0	+1.9	.347	19.5		22	8	34.1	-11	36	49	385.5	687.5
26	Sep 24	5 52 35.2	D	3253	kB5	5.4	5.5	V	93+	149	39 230	57S	102	57	122	-5.4	+0.1	+3.0	-1.7	.241	-53.2		22	10	37.5	-11	33	54	386.1	753.1
R3253 = 38 Aquarii																														
3253 = HD 210424, 5.44, , Type ACV, Period 3.9613 days, Phase 11%																														
26	Sep 24	7 9 15.0	d	3255	M0	7.3	6.4	v	93+	150	25 244	87N	66	10	86	-5.6	-0.1	+0.9	+0.1	.436	-13.6		22	12	16.9	-11	3	56	387.2	842.0
3255 = KR Aqr, 7.25 to 7.36, Hp, Type LB																														
26	Sep 25	8 38 37.2	D	3380	cK0	5.9	5.4		98+	162	19 256	75N	57	355	78	-6.0	-1.8	+0.5	+0.3	.483	-1.5		23	1	31.7	- 4	42	41	383.1	897.9
3380 is double: ** 7.0 7.0 0.10" 90.0, dT = +0.17sec																														
3380 has been reported as non-instantaneous (OCc1633). Observations are highly desired																														
26	Sep 27	5 47 45.1	r	68	SB9	5.8		S	100-	173	72 191	67N	244	234	266	-4.8	-4.2	+2.3	+1.1	.368	162.8		0	32	23.8	6	57	20	371.3	694.3
R68 = 51 Piscium																														
68 is multiple: Aa,Ac 5.8 9.5 0.20" : Aa,Ab 5.8 8.0 0.27" 283.9, dT = -0.6sec : AB 5.7 9.5 28.5" 81.5, dT = +74sec : AD 5.7 13.1 82" 307.6, dT = -100sec																														
68 is a close double. Observations are highly desired																														
68 = NSV 15113, 5.67 to 9.0, V, Type E:																														
Distance of 68 to Terminator = 6.6"; to 3km sunlit peak = 0.1"																														
26	Sep 28	4 12 35.5	r	197	cK0	7.0	6.5		97-	160	58 106	69S	216	280	237	-3.7	-5.1	+0.9	+2.2	.418	-165.6		1	21	58.3	12	36	15	369.0	772.9
26	Sep 29	5 14 15.1	r	336	F0	7.4	7.3	v	92-	147	62 97	66S	219	292	238	-2.8	-6.0	+1.0	+2.2	.415	-165.0		2	17	45.4	18	27	18	366.2	762.9
336 = AD Ari, 7.39 to 7.48, V, Type ELL, Period 0.53972 days, Phase 22%																														
26	Sep 30	4 28 35.4	R	470	WK0	6.8	6.2		85-	134	41 80	86N	254	331	269	-1.4	-6.3	+0.9	+1.2	.483	166.9		3	14	17.2	22	57	14	366.1	880.4
470 is double: AB 6.9 10.4 42" 33.3, dT = +65sec																														
26	Sep 30	5 47 33.7	r	75832	K0	7.3	6.6		84-	133	58 85	63S	223	303	238	-1.6	-6.4	+0.9	+2.2	.417	-162.3		3	16	57.0	23	7	36	364.8	774.7
26	Sep 30	8 11 59.5	r	483	SA5	7.5			84-	132	89 214	89N	252	218	266	-1.9	-6.6	+2.4	+0.9	.373	174.0		3	20	21.2	23	41	21	363.8	662.1
483 is quadruple: AB 7.62 9.90 2.77" 315.8, dT = -3sec : AB,D 7.6 14.8 25.8" 251.6, dT = -69sec : AC 7.6 14.0 61" 286.7, dT = -133sec																														
483 is a close double. Observations are highly desired																														
26	Oct 2	7 13 36.3	r	812	SF8	8.0			64-	106	51 76	11S	187	271	190	+0.9	-6.0	-1.7	+7.5	.136	-108.2		5	27	1.3	27	36	37	364.5	770.8
812 is triple: AB 8.71 8.61 0.59" 277.1, dT = +0.04sec : AB,C 7.9 13.2 27.0" 277.8, dT = +4sec																														
812 is a close double. Observations are highly desired																														
26	Oct 2	9 52 46.9	r	77224	cF8	7.4	7.1		63-	105	84 53	24S	201	325	204	+0.5	-6.1	+2.1	+7.0	.142	-112.9		5	31	22.8	27	46	9	363.1	639.9
77224 is double: ** 8.3 8.3 0.10" 90.0, dT = +0.25sec																														
77224 has been reported as non-instantaneous (OCc 194). Observations are highly desired																														
26	Oct 3	6 12 2.1	R	994	cF5	6.6	6.3		53-	93	25 70	30S	213	287	211	+2.2	-5.1	-0.6	+3.1	.320	-127.5		6	28	56.4	26	58	3	367.2	936.3
994 is double: ** 6.8 7.7 0.003" 269.0, dT = -0.01sec																														
26	Oct 3	8 41 59.1	r	78501	K0	7.8	7.3		52-	92	56 78	39S	222	308	220	+2.0	-5.2	+1.2	+3.4	.268	-131.5		6	33	58.0	27	2	41	364.7	715.1
26	Oct 3	10 21 21.4	R	1013	cG0	7.0			51-	91	78 74	78N	286	25	283	+1.7	-5.2	+2.6	-0.5	.362	172.2		6	36	26.3	27	16	42	363.8	644.2
1013 is double: AB 7.14 8.97 0.68" 270.0, dT = -1.8sec																														
1013 is a close double. Observations are highly desired																														

Occultation prediction for Marathon Key Airport
E. Longitude - 81 3 4.0, Latitude 24 43 29.2, Alt. 1m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon Sun Alt	Moon Alt	Az	CA o	PA o	VA o	AA o	Libration L	B	A m/o	B m/o	RV "/s	Cct durn o	sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	Oct	4	7	48	52.4	r	79521cG2		7.4	7.0		41-	79	32	75	55N	315	31	307	+3.2	-3.9	+1.5	-1.1	.367	140.3		7	34	50.4	24	57	16	367.6	851.5
	79521 is double: ** 8.8 8.8 0.050"																																
	79521 has been reported as non-instantaneous (OCc1366). Observations are highly desired																																
26	Oct	4	12	15	37.2	d	1170dG8		3.6	3.1		39-	78	12	90	121	-69N	80	139	71	+2.5	-3.8	+3.0	+0.6	.308	33.6		7	44	26.8	24	23	53	364.8	653.8
	R1170 = kappa Geminorum																																
	1170 is double: AB 3.7 10.0 7.4" 241.1, dT = -23sec																																
	1170 is a close double. Observations are highly desired																																
26	Oct	4	13	25	59.4	R	1170dG8		3.6	3.1		39-	77	28	74	273	40N	331	245	322	+2.3	-3.7	+1.0	-3.0	.325	146.1		7	44	26.8	24	23	53	365.1	693.6
	R1170 = kappa Geminorum																																
	1170 is double: AB 3.7 10.0 7.4" 241.1, dT = -0.04sec																																
	1170 is a close double. Observations are highly desired																																
26	Oct	5	8	40	39.1	r	80269kF0		8.4	8.3		29-	66	29	79	49S	245	318	232	+4.0	-2.5	+0.6	+2.1	.365	-140.4		8	35	17.8	20	33	53	369.4	848.4
26	Oct	5	9	54	26.5	r	80294kF8		8.0	7.7		29-	65	46	85	67S	262	338	249	+3.9	-2.5	+1.6	+1.2	.376	-153.4		8	37	26.4	20	29	14	368.1	749.4
26	Oct	5	10	56	13	m	80327pA3		7.8	7.6		29-	65	-6	59	92	8S	203	279	190	+3.8	-2.4	+9.9	+9.9	.000	-90.0		8	39	42.8	20	5	10	367.2	693.6
	80327 is double: AB 7.9 9.6 0.64" 136.2																																
	80327 is a close double. Observations are highly desired																																
26	Oct	6	8	22	35.2	D	Jupiter		-1.7	-1.7		20-	53	12	79	-43S	154	223	139	+4.8	-0.9	+0.7	-1.8	.358	-47.1		9	31	5.4	15	20	24	373.1	951.0
	Jupiter limb contacts offset by ±47.0 secs, at 8 21 48 and 8 23 22 Both contacts are against the bright limb of Jupiter																																
26	Oct	6	8	51	53.9	r	1407 K0		7.7	7.1		20-	53	19	81	16N	3	72	346	+4.8	-0.9	+1.6	-6.5	.145	106.6		9	31	39.0	15	46	12	372.4	913.9
26	Oct	6	9	1	3.7	R	Europa		6.1	6.1		20-	52	21	82	44S	243	313	226	+4.8	-0.9	+0.4	+2.3	.335	-133.1		9	30	55.2	15	21	19	372.2	886.1
	Europa limb contacts offset by ±1.1 secs, at 9 1 2.6 and 9 1 4.8 Both contacts are against the bright limb of Europa																																
26	Oct	6	9	3	14.3	R	Callisto		6.4	6.4		20-	52	21	82	44S	243	313	226	+4.8	-0.9	+0.4	+2.3	.335	-133.0		9	30	58.9	15	20	59	372.2	886.5
	Callisto limb contacts offset by ±1.7 secs, at 9 3 12.6 and 9 3 16.0 Both contacts are against the bright limb of Callisto																																
26	Oct	6	9	3	56.4	R	Io		5.8	5.8		20-	52	21	82	44S	242	313	226	+4.8	-0.9	+0.4	+2.4	.331	-132.9		9	31	1.2	15	20	47	372.2	877.2
	Io limb contacts offset by ±1.3 secs, at 9 3 55.1 and 9 3 57.7 Both contacts are against the bright limb of Io																																
26	Oct	6	9	6	28.8	R	Jupiter		-1.7	-1.7		20-	52	22	83	44S	243	313	226	+4.8	-0.9	+0.4	+2.4	.331	-132.8		9	31	5.4	15	20	24	372.1	878.1
	Jupiter limb contacts offset by ±50.9 secs, at 9 5 38 and 9 7 20 Both contacts are against the bright limb of Jupiter																																
26	Oct	6	9	8	27.7	R	Ganymede		5.4	5.4		19-	52	22	83	44S	243	313	226	+4.8	-0.9	+0.5	+2.4	.330	-132.6		9	31	8.7	15	20	5	372.1	879.5
	Ganymede limb contacts offset by ±1.9 secs, at 9 8 25.8 and 9 8 29.6 Both contacts are against the bright limb of Ganymede																																
26	Oct	8	10	22	19.3	r	X 16891kG0		9.7	9.1		5-	26	13	93	61N	319	24	297	+5.7	+2.3	+0.4	-0.9	.486	160.7		11	14	0.7	3	14	9	378.4	944.4
26	Oct	14	0	13	39.8	d	2238 F0		8.0	7.8		11+	39	6	238	68S	133	74	120	+2.4	+7.3	+1.4	-2.4	.325	-39.2		15	40	37.8	-25	35	33	399.1	811.3
26	Oct	15	23	55	32.8	d	185420 B8		8.1	8.0		25+	61	25	218	51N	57	17	53	+0.4	+6.7	+1.3	+0.4	.310	22.9		17	27	45.7	-28	21	32	401.4	655.3
26	Oct	16	0	4	24	m	185410kA0		7.8	7.7		25+	61	23	220	17S	170	128	166	+0.4	+6.7	+9.9	+9.9	.000	-90.0		17	27	16.5	-28	46	13	401.6	667.8
26	Oct	20	2	55	19.4	D	3069 A*		6.3	6.3v		63+	105	34	222	62S	101	60	116	-5.0	+2.2	+2.9	-1.5	.251	-48.1		20	59	36.1	-19	2	7	394.7	720.3
	R3069 = 20 Capricorni (AO)																																
	3069 = AO Cap, 6.25 to 6.30, V, Type ACV, Period 2.2411 days, Phase 83%																																
26	Oct	20	23	46	30.0	D	3181SA7		6.0	5.8		72+	116	46	150	89S	71	99	89	-5.0	+1.2	+2.5	+1.2	.319	-17.0		21	44	1.0	-14	44	58	390.0	630.5
	R3181 = 45 Capricorni																																
	3181 is triple: ** 6.7 6.7 0.050" : AB 5.4 9.5 4.3" 229.0, dT = -13sec																																
	3181 has been reported as non-instantaneous (OCc1610). Observations are highly desired																																
26	Oct	22	6	9	36.6	d	3322cG1		6.4			82+	130	21	250	31S	127	68	148	-6.8	-1.1	+3.0	-6.1	.133	-73.3		22	38	22.1	- 7	53	51	385.8	866.9
	3322 is double: AB 6.64 8.11 0.08" 296.3, dT = -0.6sec																																
	3322 is a close double. Observations are highly desired																																
26	Oct	22	6	19	17	Gr	3322cG1		6.4			82+	130	18	** GRAZE: CA 14.2S; Dist. 77km in az. 160deg. [Lat = 23.99+0.34(E.Long+81.05)]																				
26	Oct	23	5	34	4.7	d	146693 G5		7.5	7.1		89+	141	41	244	88S	71	16	93	-6.8	-2.5	+1.6	+0.1	.394	-20.1		23	24	39.0	- 1	44	29	378.6	770.0
26	Oct	24	3	57	30.6	d	109052 G5		7.4	6.9		95+	153	68	202	79S	83	64	105	-6.1	-3.7	+3.0	+0.2	.310	-36.4		0	11	5.7	4	7	59	371.9	694.7
26	Oct	25	8	1	3.4	d	163pF2		7.3	7.1		99+	167	36	267	61N	57	349	79	-5.8	-5.2	+1.2	+0.5	.455	4.3		1	7	4.0	11	33	8	368.4	814.6
	163 is double: AB 7.3 10.5 8.3" 201.5, dT = -15sec																																

Occultation prediction for Marathon Key Airport
E. Longitude - 81 3 4.0, Latitude 24 43 29.2, Alt. 1m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon Sun Alt	Moon Alt	Az	CA o	PA o	VA o	AA o	Libration L	B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
							163 is a close double. Observations are highly desired																											
							Distance of 163 to Terminator = 17.4"; to 3km sunlit peak = 6.9"																											
26	Oct	28	0	17	8.5	r	541SB8	3.9	3.9s		95-	154	4	65	87N	252	316	264	-0.7	-5.9	-0.4	+1.0	.667	178.5		3	45	49.6	24	22	4	364.3	1179.4
							R541 = Maia = 20 Tauri																											
							541 is quadruple: Aa,Ab 4.4 5.4 : AB 3.8 13.7 113" 72.6, dT = +170sec : AB 3.8 13.7 113" 72.7, dT = +170sec																											
							541 = NSV 1279, 3.87, range 0.00, 4Kp, Type ACV, Period 10.288 days																											
26	Oct	28	2	51	53.9	r	574pG0	6.8	6.5		94-	152	36	76	42N	297	14	309	-0.6	-6.2	+1.8	-0.3	.331	128.8		3	52	11.4	25	9	47	360.9	925.5
26	Oct	28	5	18	54.6	r	76345kG8	7.5	7.0		94-	151	68	83	58S	217	304	229	-0.8	-6.4	+1.1	+2.6	.364	-150.0		3	57	11.8	25	16	58	358.7	731.6
26	Oct	29	3	59	25.0	r	746WB7	7.0	6.9		87-	138	37	73	72N	277	356	283	+1.1	-5.9	+1.1	+0.6	.471	157.4		4	59	53.7	27	19	32	360.7	891.9
							746 is double: AB 7.0 8.7 20.4" 206.1, dT = -14sec																											
26	Oct	29	6	18	15.1	R	756 F0	6.6	6.5		87-	137	67	77	50N	300	31	305	+0.9	-6.1	+2.8	-1.1	.305	138.3		5	4	38.0	27	41	46	358.7	710.3
26	Oct	29	9	27	41.2	R	773wF8	7.0	6.7		86-	136	71	284	72S	243	148	248	+0.4	-6.1	+2.6	+1.0	.343	-151.3		5	10	3.9	27	33	23	358.6	680.7
							773 is double: AB 7.0 9.3 315" 353.1, dT = +321sec																											
26	Oct	30	10	15	10.0	R	958cK1	6.7	6.1		77-	122	75	284	55S	234	138	233	+1.9	-5.2	+3.2	+2.0	.258	-131.6		6	18	20.8	27	12	37	359.9	678.6
							958 is double: ** 7.5 7.5 0.050"																											
							958 has been reported as non-instantaneous (OCc1307). Observations are highly desired																											
26	Oct	31	4	38	36.0	r	1094 A0	7.1	7.1		68-	111	18	69	36N	330	41	324	+4.0	-4.1	+1.5	-1.9	.286	121.4		7	12	49.4	25	44	55	365.7	975.3
							R1094 = 49 Geminorum																											
26	Oct	31	9	27	20.6	d	1117cG8	5.0	4.6		66-	109	80	85	-48S	139	230	132	+3.5	-4.0	+2.1	-2.4	.315	-32.2		7	23	28.5	25	3	2	362.0	652.9
							R1117 = 57 Geminorum																											
							1117 is double: ** 5.9 5.9 0.10" 90.0, dT = +0.21sec																											
							1117 has been reported as non-instantaneous (OCc1358). Observations are highly desired																											
26	Oct	31	10	44	5.3	R	1117cG8	5.0	4.6		66-	109	-11	82	275	73S	260	169	253	+3.3	-3.9	+2.9	+0.4	.324	-148.1		7	23	28.5	25	3	2	362.1	670.2
							R1117 = 57 Geminorum																											
							1117 is double: ** 5.9 5.9 0.10" 90.0, dT = +0.3sec																											
							1117 has been reported as non-instantaneous (OCc1358). Observations are highly desired																											
26	Nov	1	8	20	3.9	r	1253cK0	7.3	6.8		55-	96	52	86	16N	357	75	345	+4.9	-2.7	+1.8	-6.8	.146	111.1		8	21	28.1	21	54	34	366.0	719.9
							1253 is double: ** 8.2 8.2 0.10" 90.0, dT = +0.04sec																											
							1253 has been reported as non-instantaneous (OCc 236). Observations are highly desired																											
26	Nov	4	7	45	16.0	r	118579kA2	7.8	7.7		23-	58	6	87	77N	305	11	284	+6.6	+2.0	+0.2	-0.3	.526	171.3		10	56	30.9	5	16	24	380.5	982.6
26	Nov	5	9	45	14.8	r	138402 F2	8.7	8.5		15-	45	20	102	50S	251	314	229	+6.5	+3.5	+1.2	+2.3	.291	-127.6		11	47	0.0	- 1	37	46	382.8	885.0
26	Nov	6	10	17	22.0	r	1804 F0	8.1	7.9		8-	33	14	105	2N	16	78	354	+6.4	+4.7	-1.3	-6.4	.148	107.6		12	35	44.9	- 7	26	49	386.9	916.2
26	Nov	7	10	45	8.4	r	157895pA2	7.8	7.7		3-	21	-12	8	109	43N	327	30	307	+6.0	+5.7	-0.1	-1.1	.454	155.1		13	22	45.6	-13	11	11	391.0	949.1
							157895 is double: AB 7.8 10.8 19.4" 311.2, dT = -41sec																											
26	Nov	11	23	26	51.3	d	185071 G8	8.8	8.2		7+	30	-11	9	233	62S	132	76	126	+0.7	+6.6	+2.0	-2.8	.257	-51.1		17	8	49.4	-28	13	1	403.2	800.1
26	Nov	11	23	32	57.4	d	185075 K0	8.3	7.7		7+	30	8	234	38N	52	355	47	+0.7	+6.6	+0.2	+0.4	.364	28.5		17	9	3.8	-27	53	41	403.3	809.8
26	Nov	12	23	36	6.6	D	2601SK4	6.8			12+	41	16	228	26N	31	341	31	-0.5	+5.9	+0.0	+1.4	.286	41.9		18	2	54.3	-27	49	36	403.5	751.2
							R2601 = 7 Sagittarii																											
							2601 is triple: Aa,Ab 6.90 9.37 0.34" 332.0, dT = +0.6sec : AB 6.9 13.0 9.7" 48.2, dT = +33sec																											
							2601 is a close double. Observations are highly desired																											
26	Nov	12	23	41	44.9	d	X 43260dS*	8.9	8.0		12+	41	15	229	52N	57	6	56	-0.5	+5.9	+0.6	+0.2	.372	16.6		18	3	24.8	-27	53	28	403.6	759.7
							X 43260 is double: AB 11.7 12.4 4.5" 170.3, dT = -5sec																											
							X 43260 is a close double. Observations are highly desired																											
26	Nov	12	23	43	15.1	d	186184 K0	8.9	8.0		12+	41	15	229	58N	63	12	62	-0.5	+5.9	+0.7	+0.0	.383	10.1		18	3	31.1	-27	54	45	403.7	762.0
26	Nov	13	0	21	41.0	d	186228 K5	8.4	7.5		12+	41	8	234	65N	70	13	69	-0.6	+5.8	+0.5	-0.2	.419	3.5		18	4	41.7	-27	51	51	404.4	824.2
26	Nov	13	0	42	7.8	d	186250 K5	7.7	6.8		12+	41	5	236	68N	73	13	72	-0.7	+5.8	+0.4	-0.3	.437	0.8		18	5	20.8	-27	50	3	404.8	858.6
26	Nov	14	1	19	49.4	d	187541 G5	8.3	7.7		19+	52	8	236	82S	95	37	99	-2.1	+4.8	+0.9	-1.1	.386	-27.7		18	59	26.2	-26	29	49	404.7	855.7
26	Nov	15	23	13	48.0	D	3007 K2	7.2	6.5		35+	73	-9	43	197	24N	10	354	24	-4.3	+2.7	+0.4	+2.9	.228	44.2		20	36	26.5	-20	35	8	398.5	616.1

Occultation prediction for Marathon Key Airport
E. Longitude - 81 3 4.0, Latitude 24 43 29.2, Alt. 1m; Telescope dia 15cm; dMag 0.0

y	m	day d	h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon Alt	Sun Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	Nov	16	20	41	51.3	d	3126	G8	4.3	3.8v		44+	83	22	36	136	86S	76	117	93	-4.7	+1.6	+2.3	+1.3	.319	-15.5		21	22	14.8	-16	50	4	396.3	636.2
	R3126 = Tae = iota Capricorni																																	
	3126 = iot Cap, 4.27, range 0.06, V, Type BY																																	
26	Nov	16	22	11	11.3	r	3126	G8	4.3	3.8v		45+	84	5	47	161	-56S	218	236	235	-5.1	+1.5	+1.9	+2.1	.302	-164.3		21	22	14.8	-16	50	4	395.2	602.1
	R3126 = Tae = iota Capricorni																																	
	3126 = iot Cap, 4.27, range 0.06, V, Type BY																																	
26	Nov	17	22	29	45.9	D	3253kB5		5.4	5.5V		54+	95	1	49	150	49S	111	138	130	-6.1	+0.0	+4.5	-0.9	.168	-59.9		22	10	37.5	-11	33	54	390.7	634.1
	R3253 = 38 Aquarii																																	
	3253 = HD 210424, 5.44, , Type ACV, Period 3.9613 days, Phase 93%																																	
26	Nov	18	0	4	50.7	D	3255	M0	7.3	6.4v		55+	96		54	186	83S	76	70	96	-6.5	-0.2	+2.9	+0.6	.295	-29.3		22	12	16.9	-11	3	56	390.0	639.3
	3255 = KR Aqr, 7.25 to 7.36, Hp, Type LB																																	
26	Nov	19	3	10	21.2	D	3380cK0		5.9	5.4		66+	108		42	238	55S	103	52	124	-7.7	-2.0	+2.9	-1.9	.238	-53.1		23	1	31.7	- 4	42	41	384.8	741.7
	3380 is double: ** 7.0 7.0 0.10" 90.0, dT = +0.41sec																																	
	3380 has been reported as non-instantaneous (OCc1633). Observations are highly desired																																	
26	Nov	19	23	48	22.9	d	128354	F8	8.0	7.7		74+	119		59	136	77N	55	95	77	-7.1	-2.9	+1.9	+1.7	.376	-8.2		23	44	18.2	0	42	44	378.5	697.0
26	Nov	20	5	37	25.0	d	128417cG5		7.0	6.4		76+	121		24	261	66N	44	340	66	-8.1	-3.6	+0.7	+0.9	.451	13.9		23	51	6.8	2	14	16	379.9	856.8
	128417 is double: ** 6.9 0.001" 333.1, dT = 0.00sec																																	
26	Nov	20	23	45	0.9	D	68SB9		5.8	S		83+	132		54	113	65N	45	102	67	-6.7	-4.1	+1.2	+2.0	.418	4.5		0	32	23.8	6	57	20	372.7	758.3
	R68 = 51 Piscium																																	
	68 is multiple: Aa,Ac 5.8 9.5 0.20" : Aa,Ab 5.8 8.0 0.28" 283.8, dT = -0.34sec : AB 5.7 9.5 28.5" 81.5, dT = +55sec : AD 5.7 13.1 82" 307.6, dT = -24sec																																	
	68 is a close double. Observations are highly desired																																	
	68 = NSV 15113, 5.67 to 9.0, V, Type E:																																	
26	Nov	21	5	29	35.2	d	109354kF5		7.3	7.1		84+	133		38	261	49S	112	47	134	-7.7	-4.8	+1.9	-2.6	.259	-53.5		0	39	42.6	8	7	22	372.4	787.5
26	Nov	22	7	49	8.2	d	233cB9		6.2	6.3		92+	147		21	277	66S	100	31	120	-7.0	-5.8	+0.5	-1.3	.440	-30.5		1	35	46.4	14	39	41	367.7	909.8
	R233 = 101 Piscium																																	
26	Nov	23	6	53	8.8	D	370	A9	6.1	6.0v		97+	160		47	273	66S	110	35	128	-5.5	-6.4	+1.6	-1.9	.340	-39.2		2	30	38.4	19	51	19	360.6	767.9
	R370 = 26 Arietis (UU)																																	
	370 = UU Ari, 6.10 to 6.15, V, Type DSCTC, Period 0.0676 days																																	
26	Nov	25	7	49	42.0	R	701SF2		6.6	6.4		99-	169		62	282	67N	259	171	267	-1.6	-6.2	+2.1	-0.1	.417	-170.7		4	38	29.5	26	56	23	354.0	724.8
	701 is triple: 6.6 9.2 3.1" 169.4, dT = -0.06sec : AB 7.36 7.21 4.49" 187.7, dT = -3sec																																	
	701 is a close double. Observations are highly desired																																	
	Distance of 701 to Terminator = 13.5"; to 3km sunlit peak = 4.2"																																	
26	Nov	25	7	49	43.7	r	X 70481p		7.3	7.2		99-	169		62	282	67N	259	171	267	-1.6	-6.2	+2.1	-0.1	.417	-170.8		4	38	29.6	26	56	26	354.0	724.8
	X 70481 is triple: 7.3 9.2 5.8" 174.9, dT = -1.4sec : AC 7.4 12.9 92" 203.6, dT = -125sec																																	
	X 70481 is a close double. Observations are highly desired																																	
	Distance of X 70481 to Terminator = 13.5"; to 3km sunlit peak = 4.2"																																	
26	Nov	26	6	3	59.6	r	868SA0		7.5	7.5		96-	156		79	70	63N	287	31	288	+0.9	-5.5	+2.5	-0.6	.378	162.5		5	44	21.2	27	43	53	353.2	680.0
	868 is triple: AB 7.5 9.8 8.6" 254.1, dT = -19sec : AC 7.5 12.7 47" 40.5, dT = +51sec																																	
	868 is a close double. Observations are highly desired																																	
26	Nov	26	8	17	33.1	r	77588cB8		7.7	7.7		96-	156		71	283	46S	216	122	217	+0.6	-5.4	+3.5	+4.1	.188	-117.2		5	48	49.0	27	21	50	353.5	706.8
	77588 is double: 8.1 9.1																																	
26	Nov	26	9	0	30.1	r	77604	K0	7.0	6.2		95-	155		62	283	78N	272	183	273	+0.5	-5.4	+1.9	-0.6	.430	-171.1		5	49	38.1	27	33	3	354.0	746.5
26	Nov	26	9	27	6.6	r	77621	M3	7.5	6.6s		95-	155		56	284	40N	311	224	312	+0.4	-5.3	+1.0	-2.2	.397	151.4		5	50	48.2	27	41	9	354.3	776.6
	77621 = NSV 16688, 7.47, range 0.02, 6V, Type VAR, Period 4.88496 days																																	
26	Nov	26	9	31	47.4	r	77619	F2	7.1	6.9		95-	155		55	283	79N	272	186	273	+0.4	-5.3	+1.7	-0.7	.448	-169.9		5	50	39.7	27	30	18	354.4	782.6
26	Nov	26	10	33	14.7	R	890cA0		4.6	4.6s		95-	155		42	286	28N	324	243	325	+0.3	-5.2	+0.1	-2.6	.386	140.1		5	53	19.6	27	36	44	355.4	868.1
	R890 = 136 Tauri																																	

Occultation prediction for Marathon Key Airport
E. Longitude - 81 3 4.0, Latitude 24 43 29.2, Alt. 1m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	% V	Elon ill	Sun Alt	Moon Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
							890 is double: ** 4.8 6.3 0.050" 270.0, dT = -0.08sec																												
							890 has been reported as non-instantaneous (OCc 206). Observations are highly desired																												
							890 = NSV 2696, 4.50 to 4.61, V																												
26	Nov	27	9	33	14.7	R	1061SF8	6.2	5.9s	89-	141	69	279	56N	307	218	302	+2.5	-4.1	+1.5	-1.9	.408	164.2	6	58	47.4	26	4	52	355.4	731.1	
	R1061 = 39 Geminorum																																	
							1061 is triple: Aa,Ab 6.1 0.50" 158.0, dT = +1sec : AB 6.1 12.1 35" 69.2, dT = +46sec																												
							1061 is a close double. Observations are highly desired																												
							1061 = NSV 17256, 6.1, range 0.02, V, Type VAR:																												
26	Nov	27	10	2	33.7	R	1062cB8	6.4	6.5	89-	141	62	279	77N	286	200	281	+2.4	-4.1	+1.7	-1.1	.439	-174.0	6	59	27.9	25	54	51	355.7	761.0	
	R1062 = 40 Geminorum																																	
							1062 is double: AB 6.4 0.10" 160.5, dT = +0.13sec																												
							1062 is a close double. Observations are highly desired																												
26	Nov	27	11	11	6	m	78995	A3	7.4	7.2	89-	141	-9	47	281	20S	203	122	197	+2.3	-3.9	+9.9	+9.9	.000	-90.0	7	2	20.5	25	21	52	356.8	846.5
26	Nov	27	11	15	14.0	r	1068	A2	7.1	7.0	89-	141	-8	47	282	41S	224	144	219	+2.3	-3.9	+3.7	+2.7	.182	-111.7	7	2	7.2	25	25	32	356.9	852.9
26	Nov	28	6	55	37.0	r	1200	K0	6.9	6.4	81-	128	62		87	14N	356	77	346	+4.7	-2.9	+1.7	-6.8	.151	111.9	7	59	42.6	23	10	58	358.4	703.3
26	Nov	29	7	0	44.8	R	1340kA0	6.6	6.6	71-	115	50		91	79N	297	11	282	+6.1	-1.3	+1.7	-0.5	.420	176.2	8	58	18.3	18	18	30	363.3	741.4
26	Nov	29	7	37	55.8	R	1343 M4	6.3	5.5v	71-	114	58		95	86S	283	355	268	+6.0	-1.3	+2.1	+0.0	.392	-166.2	8	59	10.7	18	8	6	362.9	710.9
							1343 = FZ Cnc, 6.28 to 6.38, Hp, Type SRB, Period 17.6 days																												
26	Nov	30	5	44	56.2	R	1449 M0	6.5	5.6s	60-	102	20		84	46N	334	42	316	+7.2	+0.2	+0.8	-1.8	.377	138.5	9	51	2.0	13	3	58	370.5	904.2	
	R1449 = 23 Leonis																																	
							1449 = NSV 18283, 6.45, range 0.00, 6V, Type VAR, Period 2.82446 days																												
26	Dec	1	8	34	37.4	R	1567kK1	6.4	5.8	48-	88	44		106	48N	334	36	314	+7.5	+2.0	+1.0	-2.0	.365	151.0	10	46	5.7	6	22	23	373.8	755.8	
	R1567 = 37 (Sextantis)/Leonis																																	
26	Dec	2	10	26	46.8	D	1685cG9	4.3	3.8	37-	75	53		130	-27S	175	220	153	+7.4	+3.7	+0.2	-3.2	.282	-43.3	11	36	56.9	- 0	49	25	378.5	711.0	
	R1685 = upsilon Leonis																																	
							1685 is double: ** 4.5 9.0 0.10" 195.0, dT = +0.33sec																												
							1685 has been reported as non-instantaneous (OCc1427). Observations are highly desired																												
26	Dec	2	11	21	20.9	r	138302	K0	7.7	7.1	37-	75	-7	61	150	57N	326	353	304	+7.3	+3.8	+1.4	-1.9	.365	168.0	11	37	16.8	- 0	34	41	378.2	683.9
26	Dec	2	11	28	44.4	R	1685cG9	4.3	3.8	37-	75	-6	62	154	68S	271	295	249	+7.2	+3.8	+3.3	+0.3	.272	-137.0	11	36	56.9	- 0	49	25	378.2	681.6
	R1685 = upsilon Leonis																																	
							1685 is double: ** 4.5 9.0 0.10" 195.0, dT = -0.09sec																												
							1685 has been reported as non-instantaneous (OCc1427). Observations are highly desired																												
26	Dec	4	9	23	42.1	R	1885 K2	7.3	6.7	19-	52	17		112	46N	333	33	312	+7.2	+5.7	+0.1	-1.4	.409	151.5	13	8	27.9	-11	45	46	390.3	880.5
26	Dec	6	10	28	58.5	R	2109 K4	6.1	5.2	6-	28	7		118	24N	344	44	327	+5.8	+6.8	-0.6	-1.9	.337	135.3	14	47	13.7	-21	19	30	398.3	917.0
26	Dec	11	23	55	49	m	188260	K0	8.7	8.0	7+	31	10		237	23S	153	96	161	-2.5	+3.8	+9.9	+9.9	.000	-90.0	19	32	44.8	-24	55	39	405.1	856.5
26	Dec	11	23	55	52	Gr	188260	K0	8.7	8.0	7+	31	8	** GRAZE: CA 22.5S; Dist. 56km in az. 328deg. [Lat = 25.32+0.57(E.Long+81.05)]																					
26	Dec	11	23	56	48	m	188262	K0	8.5	8.0	7+	31	10		237	23S	153	96	161	-2.5	+3.8	+9.9	+9.9	.000	-90.0	19	32	48.9	-24	56	36	405.1	858.0
26	Dec	12	23	13	0.2	d	189195	F0	7.8	7.6	13+	42	-8	28	226	48N	37	352	49	-3.7	+2.7	+0.6	+1.1	.356	19.2	20	21	32.8	-21	25	8	402.3	735.9
26	Dec	13	0	21	31.0	d	189226	F7	8.7	8.4	13+	42	16		237	77S	92	37	104	-3.9	+2.5	+1.3	-1.0	.354	-33.6	20	23	35.8	-21	22	14	403.4	832.0
26	Dec	13	0	44	0.8	d	189240	A7	8.6	8.4	13+	42	12		240	74N	62	5	74	-3.9	+2.4	+0.4	+0.1	.441	-3.3	20	24	5.6	-21	10	18	403.8	866.0
26	Dec	14	0	28	25.3	d	3095	F0	8.4	8.2	20+	53	25		235	25N	8	317	24	-5.2	+1.1	-0.4	+2.5	.283	45.4	21	10	22.5	-16	57	31	400.4	783.6
26	Dec	15	1	25	32.2	d	3219	K1	8.3	7.6	29+	65	26		242	72S	88	33	107	-6.5	-0.4	+1.5	-0.9	.339	-35.5	21	58	17.7	-12	6	8	397.3	801.7
26	Dec	16	1	52	40.3	d	146275	kK0	8.1	7.6	38+	76	32		245	67N	44	348	65	-7.6	-1.9	+0.8	+1.0	.406	7.3	22	43	21.3	- 6	24	3	392.5	779.0
26	Dec	17	2	10	54.1	d	146725	pF8	7.8		48+	88	40		247	39S	118	61	140	-8.3	-3.2	+3.6	-4.3	.158	-66.6	23	28	46.2	- 0	50	8	386.7	748.4
							146725 is double: AB 7.98 10.59 1.38" 62.1, dT = +5sec																												
							146725 is a close double. Observations are highly desired																												
26	Dec	18	3	28	36.3	d	29	K0	7.0	6.4	59+	100	35		259	22N	360	296	22	-8.7	-4.6	+0.3	+4.1	.229	57.1	0	15	38.6	5	50	38	380.9	779.6
26	Dec	19	0	46	53.4	d	139cG5	8.1	7.6	68+	111	77		191	34N	13	3	35	-7.9	-5.3	+0.7	+3.2	.300	36.1	1	1	13.9	11	10	50	372.9	672.3

Occultation prediction for Marathon Key Airport
E. Longitude - 81 3 4.0, Latitude 24 43 29.2, Alt. 1m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon Alt	Sun Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	Dec	19	23	5	22.7	d	92663	K0	7.9	7.1		78+	124	-6	57	97	46N	28	98	48	-6.9	-5.8	+0.6	+2.5	.396	24.9		1	51	38.2	16	23	56	367.8	778.1
26	Dec	21	23	19	23.6	d	571	pA2	6.8	6.7		94+	151	-9	37	76	40N	37	114	49	-3.9	-6.2	+0.0	+2.2	.460	29.9		3	51	25.3	25	9	47	358.3	922.6
		571 is double: ** 7.1 9.1																																
26	Dec	21	23	34	12.2	d	574	pG0	6.8	6.5		94+	151	-12	40	77	56N	52	131	65	-3.9	-6.2	+0.5	+1.8	.503	14.1		3	52	11.4	25	9	47	358.0	900.0
26	Dec	22	2	19	50.1	d	76345	kG8	7.5	7.0		94+	152		76	84	41S	137	227	149	-4.2	-6.5	+4.7	-4.5	.155	-67.8		3	57	11.8	25	16	58	355.4	705.4
26	Dec	22	8	12	24.5	d	76472	cG8	7.2	6.5		95+	154		27	288	89S	91	16	102	-4.9	-6.3	+0.6	-0.8	.538	-1.0		4	8	39.0	25	52	40	357.7	933.2
26	Dec	23	4	52	48.4	d	773	wF8	7.0	6.7		99+	167		84	301	71N	86	328	91	-2.4	-5.9	+2.5	+0.1	.398	1.9		5	10	3.9	27	33	23	351.6	678.4
		773 is double: AB 7.0 9.3 315" 353.1, dT = -38sec																																
26	Dec	25	3	19	35.2	R	1117	cG8	5.0	4.6		98-	164		46	79	32N	327	47	320	+2.6	-3.6	+2.0	-2.2	.306	130.7		7	23	28.5	25	3	2	352.7	802.9
		R1117 = 57 Geminorum																																
		1117 is double: ** 5.9 5.9 0.10" 90.0, dT = +0.18sec																																
		1117 has been reported as non-instantaneous (OCc1358). Observations are highly desired																																
		Distance of 1117 to Terminator = 11.0"; to 3km sunlit peak = 2.5"																																
26	Dec	25	6	24	37.3	r	79416	SF8	7.6	7.4		98-	163		87	89	61N	300	29	292	+2.2	-3.4	+2.2	-1.3	.401	170.4		7	28	40.6	24	38	55	351.1	692.6
		79416 is triple: AC 7.7 11.8 29.0" 124.2, dT = +72sec : AB 7.7 8.9 65" 19.4, dT = -30sec																																
26	Dec	26	6	15	7.7	R	1277	wK3	5.3	4.7		93-	148		70	98	47N	326	39	313	+4.3	-1.8	+1.7	-2.2	.357	150.4		8	32	42.5	20	26	28	354.2	705.7
		R1277 = eta Cancri																																
		1277 is double: AB 5.3 20.0 164" 280.0, dT = -322sec																																
26	Dec	26	7	59	35	M	1282	G0	6.6	6.2		92-	148		83	220	19S	212	173	199	+4.0	-1.6	+9.9	+9.9	.000	-90.0		8	35	19.4	19	35	24	354.1	712.7
		R1282 = 35 Cancri																																
		Distance of 1282 to Terminator = 18.9"; to 3km sunlit peak = 6.8"																																
26	Dec	26	8	35	2.4	r	97941	A*	7.5	7.4		92-	148		77	251	85S	278	213	265	+4.0	-1.5	+2.4	-0.7	.388	-155.5		8	35	45.1	19	46	16	354.3	732.8
26	Dec	26	9	26	52	d	1287	kA5	6.7	6.6		92-	147		65	262	12S	205	133	192	+3.8	-1.4	+9.9	+9.9	.065	-81.7		8	37	46.8	19	16	2	354.9	774.3
		Distance of 1287 to Terminator = 8.2"; to 3km sunlit peak = 0.3"																																
26	Dec	26	9	29	40.4	r	97973	A0	7.7	7.6		92-	147		65	264	51N	322	248	309	+3.8	-1.4	+1.0	-2.2	.428	161.5		8	37	37.0	19	43	59	354.9	777.6
26	Dec	26	9	33	6	Gr	1287	kA5	6.7	6.6		92-	147		63	** GRAZE: CA 20.4S; Dist. 19km in az. 221deg. [Lat = 24.49-0.80(E.Long+81.05)]																				
26	Dec	26	9	38	14	R	1287	kA5	6.7	6.6		92-	147		63	264	29S	222	149	209	+3.8	-1.4	+9.9	+9.9	.066	-98.3		8	37	46.8	19	16	2	355.0	785.0
26	Dec	26	10	27	35.7	r	1293	pK0	6.8	s		92-	147		52	270	18N	355	280	342	+3.7	-1.2	-0.5	-3.5	.302	128.2		8	39	50.7	19	32	27	355.8	840.7
		1293 is multiple: Da,Db 6.67 9.87 0.50" 252.6, dT = +0.36sec : DE 6.7 11.8 35" 3.1, dT = -116sec : DA 6.7 7.3 92" 61.0, dT = -124sec : DC 6.7 7.5 100" 89.1, dT = +23sec																																
		1293 has been reported as non-instantaneous (S 571). Observations are highly desired																																
		1293 = NSV 4171, 6.52 to 6.61, V																																
		Distance of 1293 to Terminator = 19.2"; to 3km sunlit peak = 6.9"																																
26	Dec	26	10	55	32.4	r	98009	kA7	7.6	7.6v		92-	147		46	273	74N	300	226	286	+3.7	-1.1	+0.9	-1.6	.507	-177.2		8	39	44.7	19	16	31	356.3	876.7
		98009 = BU Cnc, 7.67, range 0.03, V, Type DSCTC, Period 0.071 days																																
26	Dec	26	11	1	23.0	r	1297	pA9	6.8	6.6S		92-	147		45	273	45N	329	255	315	+3.7	-1.1	+0.3	-2.3	.458	153.6		8	40	20.1	19	20	56	356.4	884.2
		1297 is double: AB 6.8 8.5 0.016" 342.8, dT = -0.03sec																																
		1297 is a close double. Observations are highly desired																																
		1297 = NSV 17953, 6.78, , Type DSCT:																																
26	Dec	27	9	16	34.2	r	98654	WB9	7.9	7.9		84-	133		76	223	84N	295	255	277	+5.6	+0.3	+2.1	-1.3	.404	-166.1		9	35	9.5	14	4	32	358.9	724.8
		98654 is double: AB 7.8 9.1 45" 48.5, dT = +44sec																																
26	Dec	27	12	3	48.4	r	1425	SF7	7.0	6.8		84-	132	-1	41	266	82N	298	229	280	+5.2	+0.8	+0.9	-1.6	.496	-172.1		9	39	17.2	13	18	45	361.5	877.5
		1425 is quadruple: Aa,Ab 7.7 7.7 : ** 7.7 7.7 0.006" 90.0, dT = +0.01sec : AB 7.1 15.1 51" 131.0, dT = +99sec																																
26	Dec	28	4	39	37.4	r	1516	K5	6.6	5.8s		76-	122		21	90	87N	295	2	275	+7.5	+1.5	+0.7	-0.1	.508	-177.8		10	22	14.2	8	57	52	367.1	904.8
		1516 = NSV 18388, 6.72 to 6.81, Hp, Type IB																																
26	Dec	28	6	3	19.9	R	1525	M2	5.6	4.8v		76-	121		40	99	40N	342	47	322	+7.4	+1.6	+0.8	-2.4	.343	139.7	.01	10	25	15.2	8	47	5	365.7	797.6
		R1525 = 44 Leonis (DE)																																
		1525 = DE Leo, 5.6, range 0.07, V, Type SRB:																																

Occultation prediction for Marathon Key Airport
E. Longitude - 81 3 4.0, Latitude 24 43 29.2, Alt. 1m; Telescope dia 15cm; dMag 0.0

y	m	day d	h	Time m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon Alt	Sun Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	Dec	28	6	8	6.9	r	118292	DF0	7.7	7.6	S	76-	121	41	100	29N	353	58	333	+7.4	+1.6	+0.6	-3.3	.281	128.9		10	25	35.1	8	46	35	365.7	792.7
	118292 is double: AB 7.8 9.1 3.6" 74.4, dT = -2sec																																	
	118292 is a close double. Observations are highly desired																																	
	118292 = NSV 4851, 7.7,																																	
26	Dec	28	12	58	30.7	r	1549	cG8	5.1	4.6	v	74-	119	9	38	259	16N	7	303	+6.3	+2.6	-0.7	-3.8	.240	120.2		10	34	48.0	6	57	14	367.6	851.0
	R1549 = 48 Leonis																																	
	1549 is double: ** 6.0 6.0 0.10" 90.0, dT = -0.05sec																																	
	1549 has been reported as non-instantaneous (OCc 197). Observations are highly desired																																	
	1549 = HIP 51775, 5.07, range 0.00, 4V, Type VAR, Period 0.09302 days																																	
26	Dec	29	5	30	11.5	r	1624	PF2	6.8	6.5		66-	108	19	97	67S	271	335	249	+8.2	+3.1	+0.8	+0.9	.430	-149.6		11	13	53.0	2	16	7	373.5	904.5
	1624 is double: AB 6.8 16.2 85.0, dT = 0.00sec																																	
26	Dec	29	7	23	6.2	R	1635	cM0	5.2	4.4		65-	108	43	113	53N	331	28	309	+8.0	+3.3	+0.9	-1.7	.393	157.2		11	17	17.4	2	0	38	371.7	769.3
	R1635 = 75 Leonis																																	
	1635 is double: ** 5.8 6.6 0.044" 0.0																																	
	1635 has been reported as non-instantaneous (OCc 763). Observations are highly desired																																	
26	Dec	29	8	43	11.2	R	1637	K0	5.9	5.4		65-	107	58	133	57N	327	9	306	+7.8	+3.5	+1.2	-1.9	.382	164.6		11	18	55.0	1	39	1	371.0	712.6
	R1637 = 76 Leonis																																	
26	Dec	30	10	29	59.5	r	138612	cK5	8.3	7.5		53-	94	59	166	70N	314	327	292	+7.9	+5.0	+1.7	-1.5	.371	179.9		12	8	59.9	- 5	8	57	377.4	678.4
	138612 is double: ** 8.3 0.09" 281.0, dT = -0.21sec																																	
	138612 has been reported as non-instantaneous (OCc1769). Observations are highly desired																																	
26	Dec	30	10	59	37.9	R	138617	KF2	7.2	7.0		53-	94	60	180	51N	332	332	310	+7.8	+5.1	+1.2	-2.2	.348	161.6		12	9	47.8	- 5	13	33	377.5	672.2
26	Dec	31	6	48	11.2	r	1845	SG8	6.5	5.9	s	44-	83	11	107	44S	246	309	225	+8.4	+5.6	+1.1	+2.6	.272	-123.1		12	51	22.9	-10	20	18	386.5	931.9
	1845 is triple: AB 6.6 9.7 28.8" 296.2, dT = -68sec : AC 6.6 12.5 142" 211.8, dT = -429sec																																	
	1845 = NSV 5994, 6.49, range 0.07, V																																	

Lunar Occultation predictions
Coleman Science Works Theater
Tampa
Florida
USA

Occultation prediction for Tampa Coleman Science Works Thea
E. Longitude - 82 24 25.4, Latitude 28 3 13.1, Alt. 3m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V ill	%	Elon	Sun Alt	Moon Alt	Az	CA o	PA o	VA o	AA o	Libration L	B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	Jan	4	1	28	26.0	r	79610	F8	7.2	7.0	99-	170		26	74	87S	257	327	248	+5.2	-4.7	+0.4	+1.3	.504	-161.7		7	41	3.1	24	57	54	361.5	930.4
	Distance of 79610 to Terminator = 15.2"; to 3km sunlit peak = 5.4"																																	
26	Jan	4	5	37	56.7	r	1180	F5	7.1	6.8	99-	168		79	105	54S	228	297	218	+4.8	-4.7	+3.4	+4.3	.184	-117.9		7	49	18.9	24	29	19	358.7	684.1
	Distance of 1180 to Terminator = 13.3"; to 3km sunlit peak = 4.1"																																	
26	Jan	4	11	55	45.0	r	1208	DK1	6.4		98-	166	-6	19	287	45N	316	249	305	+4.2	-3.9	-0.3	-1.7	.563	158.9		8	1	0.8	23	34	59	363.9	1065.2
	1208 is double: AB 6.48 9.95 1.95" 325.2, dT = -3sec																																	
	1208 is a close double. Observations are highly desired																																	
	Distance of 1208 to Terminator = 14.5"; to 3km sunlit peak = 4.8"																																	
26	Jan	5	3	33	41.5	r	1315	A2	7.1	7.1	96-	156		39	85	76S	266	336	252	+6.5	-3.4	+1.2	+1.1	.426	-158.6		8	46	20.2	20	37	0	365.0	811.1
26	Jan	5	8	16	40.4	R	1329	pF8	6.8		95-	154		76	238	61N	310	257	295	+5.8	-3.0	+1.6	-1.9	.405	173.9		8	53	55.3	19	58	2	363.8	719.3
	1329 is double: AB 7.32 7.86 0.15" 71.9, dT = +0.2sec																																	
	1329 is a close double. Observations are highly desired																																	
26	Jan	7	3	43	39.0	R	1547	cB1	3.8	3.9v	82-	130		15	87	55S	257	320	237	+7.9	-0.4	+0.4	+1.7	.394	-141.3		10	32	48.7	9	18	24	378.9	926.6
	R1547 = rho Leonis																																	
	1547 is double: AB 3.8 4.8 105.1, dT = -0.05sec																																	
	1547 = rho Leo, 3.83 to 3.9, V, Type ACYG, Period 3.4271 days, Phase 53%																																	
26	Jan	9	7	53	3.5	R	1754	KF5	7.0	6.7	62-	104		41	124	82S	286	333	264	+7.0	+3.0	+1.8	+0.1	.354	-154.9		12	11	21.8	- 3	46	44	389.0	736.9
26	Jan	10	9	5	29.8	r	139061	DF5	7.3		52-	93		42	137	74N	309	346	288	+6.0	+4.4	+1.4	-0.8	.370	-176.5		12	57	28.6	- 9	45	41	393.9	708.0
	139061 is double: AB 7.31 10.77 1.66" 276.0, dT = -4sec																																	
	139061 is a close double. Observations are highly desired																																	
26	Jan	10	9	45	24.7	r	139081	cK0	7.5	7.1	52-	92		47	149	22N	0	28	339	+5.8	+4.5	-0.2	-3.2	.242	133.0		12	59	1.6	- 9	50	3	393.6	678.1
	139081 is double: AB 7.6 12.6 0.33" 65.8, dT = -0.6sec																																	
	139081 is a close double. Observations are highly desired																																	
26	Jan	11	12	4	1.0	R	1970	SA0	6.2	6.2	42-	81	-5	46	184	87N	293	290	274	+4.3	+5.8	+2.5	-1.0	.307	-164.1		13	45	35.1	-15	46	3	397.5	616.5
	R1970 = 85 Virginis																																	
	1970 is multiple: Aa,Ab 6.5 8.2 : Aa,Ac 6.5 8.4 0.10" : AB 6.2 12.8 44" 312.7, dT = -135sec : AB 6.2 12.8 44" 312.6, dT = -136sec																																	
	1970 is a close double. Observations are highly desired																																	
26	Jan	12	10	42	52.0	r	158609	dG1	8.1	7.8	33-	70		35	148	47N	329	360	312	+3.5	+6.4	+0.8	-1.4	.322	157.5		14	31	12.3	-19	58	40	400.6	677.9
	158609 is double: AB 8.2 10.6 4.2" 286.0, dT = -9sec																																	
	158609 is a close double. Observations are highly desired																																	
26	Jan	14	9	57	47.4	r	184177	kA0	8.2	8.1	17-	49		9	127	35N	330	23	320	+1.2	+7.1	-0.3	-1.1	.343	143.9		16	9	45.8	-26	26	24	404.2	832.2
26	Jan	14	10	0	56.0	d	2318	A*	6.6	6.6v	17-	49		10	128	1S	187	239	177	+1.2	+7.1	-2.9	-5.3	.129	-72.2		16	10	15.9	-26	54	33	404.2	828.5
	2318 = V0952 Sco, 6.57, range 0.04, V, Type ACV, Period 1.4178 days, Phase 15%																																	
26	Jan	14	10	23	13.5	R	2318	A*	6.6	6.6v	17-	48		13	131	37S	223	271	213	+1.1	+7.2	+4.4	+5.7	.124	-107.8		16	10	15.9	-26	54	33	403.8	794.0
	2318 = V0952 Sco, 6.57, range 0.04, V, Type ACV, Period 1.4178 days, Phase 15%																																	
26	Jan	14	11	4	30	m	184208	cG3	8.1	7.8	17-	48		20	137	20S	205	247	195	+1.0	+7.2	+9.9	+9.9	.000	-90.0		16	11	36.4	-27	4	41	403.1	734.8
	184208 is double: ** 8.9 8.9 0.10" 63.0																																	
	184208 has been reported as non-instantaneous (OCc 764). Observations are highly desired																																	
26	Jan	14	11	25	15.5	r	184206	dF8	9.0	8.7	17-	48		23	141	70S	255	293	245	+0.9	+7.3	+2.5	+1.6	.276	-139.8		16	11	33.6	-26	57	39	402.8	706.3
	184206 is double: AB 9.0 13.2 5.1" 89.9, dT = +18sec																																	
	184206 is a close double. Observations are highly desired																																	
26	Jan	15	10	44	7.3	r	184978	B9	7.7	7.7	10-	37		8	128	48N	310	2	304	-0.1	+7.1	+0.2	-0.3	.390	158.2		17	3	59.1	-28	15	23	403.3	822.6
26	Jan	15	11	3	34.7	R	2453	K1	6.6	6.2	10-	37		11	131	61S	238	288	233	-0.2	+7.2	+2.1	+2.5	.263	-130.5		17	4	27.8	-28	34	58	402.9	792.3
26	Jan	20	15	2	50.4	d	3171	cA7	3.7	3.5v	4+	22	29	15	119	32S	135	189	152	-4.5	+2.9	+0.8	-1.6	.161	-67.6		21	40	5.5	-16	39	44	387.8	795.4
	R3171 = Nashira = gamma Capricorni																																	
	3171 is double: AB 4.6 4.6 0.013" 239.0, dT = -0.02sec																																	
	3171 is a close double. Observations are highly desired																																	

Occultation prediction for Tampa Coleman Science Works Thea
E. Longitude - 82 24 25.4, Latitude 28 3 13.1, Alt. 3m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon Alt	Sun Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
							3171 = gam Cap, 3.2, range 0.03, J, Type ACV																												
26	Jan	20	15	13	29	Gr	3171	cA7	3.7	3.5	v	4+	22	32	19	** GRAZE: CA 10.2S; Dist.223km in az. 181deg. [Lat = 26.04-0.02(E.Long+82.41)]																				
26	Jan	21	0	37	53.2	d	3207	DF*	8.2			5+	25	3	252	85N	68	7	86	-6.1	+1.8	+0.1	-0.2	.520	-9.7		21	53	21.6	-14	11	23	387.8	991.7
							3207 is double: AB 8.21 11.42 1.49" 32.3, dT = +2.3sec																												
							3207 is a close double. Observations are highly desired																												
26	Jan	22	1	35	22.5	D	3333	SA5	6.4			10+	37	3	259	58S	100	38	120	-6.3	+0.1	+0.4	-1.5	.402	-41.4		22	43	3.4	- 8	18	41	384.3	999.9
							3333 is quadruple: AB 6.79 7.88 2.37" 306.8, dT = -5sec : AC 6.8 11.4 70" 355.8, dT = -42sec : AD 6.8 14.2 75" 278.1, dT = -186sec																												
							3333 is a close double. Observations are highly desired																												
26	Jan	22	23	32	9.3	d	3454	K0	7.6	7.1		17+	49	-7	40	239	61S	95	45	116	-6.1	-1.2	+2.2	-1.2	.303	-44.5		23	27	14.7	- 2	38	13	377.5	776.8
26	Jan	23	0	9	46.4	d	146716	pG0	8.4	8.2		17+	49		33	246	63S	93	39	115	-6.2	-1.3	+1.7	-1.2	.336	-40.7		23	28	5.7	- 2	27	33	378.1	814.1
							146716 is triple: AB 9.2 9.2 0.20" 79.7, dT = +0.6sec : AC 8.5 8.1 57" 45.9, dT = +117sec																												
							146716 is a close double. Observations are highly desired																												
26	Jan	23	0	11	44.8	D	146717	PF2	8.1	7.9		17+	49		33	247	64S	92	38	114	-6.2	-1.3	+1.7	-1.2	.340	-40.2		23	28	8.5	- 2	26	53	378.1	816.2
							146717 is double: AB 8.1 8.5 57" 225.9, dT = -115sec																												
26	Jan	23	1	36	52.6	D	3459	K0	6.4	5.8		18+	49		15	260	33N	9	309	31	-6.3	-1.4	+0.1	+2.4	.334	48.2		23	29	27.0	- 1	47	28	379.7	922.8
							R3459 = 11 Piscium																												
26	Jan	24	0	24	16.3	D	30	SA0	7.1	7.1		26+	61		43	248	67N	42	347	64	-5.9	-2.8	+1.2	+1.1	.417	10.4		0	15	57.3	4	15	4	374.0	769.3
							30 is triple: AB 7.0 14.1 0.8" 246.0, dT = -1.8sec : AC 7.0 12.2 5.0" 347.3, dT = +7sec																												
							30 is a close double. Observations are highly desired																												
26	Jan	24	2	58	45.2	d	41	G5	7.7	7.2		27+	63		11	270	82S	73	11	95	-6.1	-3.0	+0.3	-0.4	.514	-11.4		0	20	21.6	4	46	44	376.8	959.2
26	Jan	27	19	22	17.0	d	541	SB8	3.9	3.9	s	69+	112	38	18	71	51S	118	185	131	-1.4	-6.0	+0.8	+0.0	.371	-51.6		3	45	49.6	24	22	4	366.1	1060.2
							R541 = Maia = 20 Tauri																												
							541 is quadruple: Aa,Ab 4.4 5.4 : AB 3.8 13.7 113" 72.6, dT = +213sec : AB 3.8 13.7 113" 72.7, dT = +213sec																												
							541 = NSV 1279, 3.87, range 0.00, 4Kp, Type ACV, Period 10.288 days																												
26	Jan	27	23	45	25.4	D	579	kA2	6.4	6.3	S	70+	114	-9	74	94	19N	10	88	22	-1.7	-6.5	+0.1	+4.7	.224	56.4		3	53	34.5	25	40	58	361.6	708.9
							579 = NSV 1391, 6.33,																												
26	Jan	29	5	33	21.1	D	771	SA5	6.1	5.9	e	82+	129		45	283	75N	74	356	79	-1.0	-6.5	+1.5	-0.2	.433	21.7		5	9	45.1	28	1	50	361.6	818.2
							771 is triple: Aa,Ab 6.0 0.20" 351.0, dT = +0.06sec : A,BC 6.0 9.1 11.2" 29.1, dT = +18sec																												
							771 is a close double. Observations are highly desired																												
							771 = V1156 Tau, 6. to 6.1, Hp, Type E:, Period 1.40266 days, Phase 13%																												
26	Jan	30	6	19	40.2	d	78191	A0	7.7	7.7		90+	143		49	282	66N	74	355	73	+0.6	-5.9	+1.8	-0.2	.400	31.6		6	17	59.9	28	0	24	361.2	822.3
26	Jan	30	23	43	47.3	d	1089	K0	6.7	6.1		95+	155	-8	33	75	75S	120	193	114	+3.1	-5.3	+1.2	-0.2	.438	-28.8		7	11	30.0	26	24	21	363.1	880.2
26	Jan	31	0	7	16.6	d	79164	cG8	7.4	6.9		95+	155		38	77	69N	85	159	79	+3.0	-5.3	+0.9	+1.1	.476	7.8		7	12	31.2	26	33	52	362.6	844.7
							79164 is double: ** 8.1 8.5 0.10" 21.0, dT = +0.09sec																												
							79164 has been reported as non-instantaneous (OCc 237). Observations are highly desired																												
26	Jan	31	2	36	56.4	d	79243	K1	7.3	6.7		96+	156		70	89	87N	103	184	97	+2.7	-5.3	+2.2	-0.1	.393	-2.1		7	17	15.6	26	21	49	360.7	688.1
26	Jan	31	2	59	45.8	d	79253	cK1	7.6	7.1		96+	156		75	92	86N	103	183	97	+2.7	-5.3	+2.3	-0.3	.388	-0.4		7	17	54.5	26	19	59	360.6	678.5
							79253 is double: ** 8.7 8.7 0.050"																												
							79253 has been reported as non-instantaneous (OCc1350). Observations are highly desired																												
26	Jan	31	5	10	38.0	d	79316	G2	7.5	7.1	v	96+	157		77	266	70N	87	8	80	+2.3	-5.1	+2.5	-0.2	.366	24.7		7	21	32.8	26	9	33	360.7	705.0
							79316 = V0340 Gem, 7.37 to 7.71, V, Type RS, Period 35.37 days, Phase 86%																												
26	Jan	31	23	34	28.3	d	1239	A4	6.6	6.5		99+	168	-6	18	73	70N	98	165	87	+4.4	-4.1	+0.3	+0.6	.548	0.9		8	13	41.7	23	8	16	366.5	973.4
							Distance of 1239 to Terminator = 18.0"; to 3km sunlit peak = 7.2"																												
26	Feb	2	9	26	16.6	r	1395	G9	6.3	5.8		100-	174		43	267	53N	313	246	296	+4.4	-1.8	+0.6	-1.9	.482	172.7		9	25	32.5	16	35	8	368.9	869.5
							Distance of 1395 to Terminator = 3.0"; to 3km sunlit peak = 0.0"																												
26	Feb	4	6	44	24.6	r	1606	M*	7.8	7.0	v	93-	150		64	149	48N	336	4	315	+6.0	+1.1	+1.1	-2.3	.351	156.9		11	4	19.1	5	13	30	376.5	696.1
							1606 = FG Leo, 7.84 to 8.01, Hp, Type SRB, Period 24.962161 days, Phase 38%																												
26	Feb	6	8	8	4.8	d	1815	SK2	4.7	4.0		79-	125		51	157	-43S	162	182	140	+5.5	+4.2	+0.7	-2.3	.319	-27.7		12	39	14.8	- 7	59	44	387.9	678.8

Occultation prediction for Tampa Coleman Science Works Thea
E. Longitude - 82 24 25.4, Latitude 28 3 13.1, Alt. 3m; Telescope dia 15cm; dMag 0.0

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      day  Time     P   Star  Sp  Mag  Mag    % Elon Sun  Moon   CA   PA  VA  AA Libration   A   B   RV    Cct durn  R.A. (J2000)  Dec   Mdist   SV
 y   m  d  h  m    s       No  D    v    r V  ill     Alt Alt Az   o    o   o   o   L    B   m/o m/o  "/s     o  sec  h  m   s    o  m  s   Mm   m/s
   R1815 = chi Virginis
      1815 is multiple: **Aa,Ab 4.8 8.8 0.10" 214.0, dT = +0.19sec : AB 4.8 8.8 177" 135.9, dT = +499sec : AC 4.8 10.6 224" 109.8, dT = +429sec : AD
4.8 9.0 321" 331.1, dT = -987sec
      1815 has been reported as non-instantaneous (OCc 760). Observations are highly desired
26 Feb  6  9 25 11.8 R    1815SK2  4.7  4.0   78- 125     54 189  81S 286 279 265 +5.2 +4.3 +2.7-0.9 .311 -152.7     12 39 14.8 - 7 59 44 388.0 657.7
   R1815 = chi Virginis
      1815 is multiple: **Aa,Ab 4.8 8.8 0.10" 214.0, dT = -0.1sec : AB 4.8 8.8 177" 135.9, dT = +497sec : AC 4.8 10.6 224" 109.8, dT = +719sec : AD
4.8 9.0 321" 331.1, dT = -734sec
      1815 has been reported as non-instantaneous (OCc 760). Observations are highly desired
26 Feb  6 10 47 38.1 r  138905 F8  7.3  7.0   78- 124     46 218  51S 257 224 235 +4.9 +4.5 +3.5-0.1 .214 -126.9     12 40 40.7 - 8 26 54 388.8 671.5
26 Feb  7  5 59 34.3 r    1919 K5  6.9  6.0s  71- 114     22 119  12N  12  64 351 +5.2 +5.0 -1.4-4.6 .183  115.1 .01 13 22  8.3 -12 34 46 394.6 827.1
      1919 = NSV 19751, 6.98 to 7.03, Hp
26 Feb  7  7 26 58.0 r  157895pA2  7.8  7.7   70- 114     37 137  70S 273 312 252 +5.0 +5.2 +2.3+0.7 .301 -142.1     13 22 45.6 -13 11 11 393.4 727.6
    157895 is double: AB 7.8 10.8 19.4" 311.2, dT = -51sec
26 Feb  9  9 54 30.1 r  183079 M2  7.7  6.8s  51-  91     36 157  88S 284 305 268 +2.5 +7.0 +2.4+0.0 .311 -160.3     15  0 30.4 -22 50 58 399.8 640.1
    183079 = NSV 20220, 7.67 to 7.75, Hp
26 Feb 10  8 27 28.8 d    2263cB1  4.6  4.7   42-  80     16 131 -54N  65 113  53 +1.6 +7.2 +2.4+2.4 .246   52.1     15 50 58.7 -25 45  5 402.8 782.4
   R2263 = 1 Scorpii
      2263 is double: ** 5.6 5.6 0.050"
      2263 has been reported as non-instantaneous (OCc1483). Observations are highly desired
26 Feb 10  9 14 37.4 R    2263cB1  4.6  4.7   41-  80     23 140  21N 350  29 338 +1.4 +7.3 -0.6-2.4 .225  127.8     15 50 58.7 -25 45  5 402.0 715.7
   R2263 = 1 Scorpii
      2263 is double: ** 5.6 5.6 0.050"
      2263 has been reported as non-instantaneous (OCc1483). Observations are highly desired
26 Feb 11  8 31 15.9 R    2397 K1  6.5  5.9   32-  69      7 127  53N 312   6 305 +0.3 +7.3 +0.1-0.4 .395  158.2     16 41 37.6 -27 48 35 403.5 832.9
26 Feb 12 11 16 49.7 R    2540 B3  7.2  7.1e  23-  58     23 146  50N 308 343 306 -1.3 +7.2 +1.3-0.5 .299  152.8     17 40 23.9 -28 55 24 400.1 653.1
      2540 = V2382 Oph, 7.26 to 7.29, Hp, Type E+BE, Period 0.9215 days, Phase  40%
26 Feb 13 10 33 57.6 r  186988 A0  8.5  8.3   16-  47     10 130  60N 292 342 295 -2.2 +6.7 +0.7+0.3 .380  163.0     18 34 12.8 -28 20 45 399.0 769.4
26 Feb 13 11 19 47.7 r  187016 G5  8.3  7.7   16-  47 -11 17 137  49N 302 346 305 -2.3 +6.7 +1.0-0.1 .318  150.8     18 35 37.8 -28 19 31 398.2 703.4
26 Feb 19  0 34  8.7 D Mercury    -0.6 -0.6    2+  18      2 265  59N  26 331  54 -5.8 -1.0 +0.0+1.1 .458   27.3     23 14 18.8 - 3 50 16 378.9 946.9
   Mercury contacts: Bright limb  0 34  1; Terminator  0 34 13.4; Dark limb  0 34 16: diam = 7.0"; %illum = 53.3%; PA bright limb = 244.0
26 Feb 20  1 27 59.5 d  108995 K2  7.9  7.3    7+  31      3 272  65N  38 336  60 -5.3 -2.7 +0.1+0.8 .513   24.1      0  4 37.5   2 56 14 375.71024.5
26 Feb 21  1 43 18.1 d  109530DF0  8.2  8.0   14+  44     13 274  76N  50 347  72 -4.7 -4.1 +0.4+0.4 .515   14.4      0 54 45.1   9 25 44 372.4 960.2
    109530 is double: AB 8.57 9.60 3.11" 299.9, dT = -2.1sec
    109530 is a close double. Observations are highly desired
26 Feb 23  3  4 33   d   75537 A2  7.8  7.7   34+  71     22 283  16N 357 289  14 -2.8 -6.1 +9.9+9.9 .089   80.0      2 43 41.1  21  8 50 368.5 916.2
26 Feb 24  0  4 36.1 d   76041 F0  8.2  8.0   44+  83  -9 74 263  43S 123  48 136 -1.3 -6.6 +2.9-2.9 .239  -50.7      3 38 35.9  24 36  6 364.2 666.5
26 Feb 24  0 18 35.3 D   76046cA0  7.1  7.1   44+  83     71 265  61S 105  30 119 -1.3 -6.7 +2.5-1.4 .320  -32.6      3 39  6.7  24 42 10 364.3 671.1
     76046 is double: AB 7.1           45.0, dT = -15sec
26 Feb 24  1 38 26.6 d   76081 K2  7.5  6.9   44+  83     54 275  81N  68 351  80 -1.5 -6.7 +1.9+0.2 .403   11.2      3 41 18.1  25  0 29 365.2 727.5
26 Feb 24  2 54 14.8 d   76102 A2  7.5  7.5   45+  84     38 281  85N  71 358  84 -1.7 -6.6 +1.2-0.2 .452   11.9      3 43 43.2  25  4 51 366.4 821.0
26 Feb 24  3 43 45.6 D     538pB8  5.7  5.7   45+  84     27 285  30S 136  66 149 -1.7 -6.6 -0.2-3.1 .311  -51.9      3 45  9.7  24 50 21 367.4 897.5
   R538 = 18 Tauri
      538 is quadruple: Aa,Ab 6.4 6.4 0.10"       : AB 5.6 14.0 72" 128.9, dT = +230sec : AC 5.6 14.8 151" 175.1, dT = +380sec
      538 is a close double. Observations are highly desired
26 Feb 24  4 51 25.0 d     555 K5  6.4  5.6s  46+  85     14 291  56S 111  46 123 -1.7 -6.5 -0.2-1.5 .514  -24.7      3 48  6.5  24 59 18 368.81011.1
      555 = NSV 1316, 6.44, range 0.02, 0V, Type VAR, Period 1.48987 days
26 Feb 25  1 17 50.5 d     715cK5  8.0  7.5   56+  97     72 274  70N  63 339  71 -0.2 -6.8 +2.4+0.9 .352   21.5      4 43 35.4  27 41 15 364.1 668.6
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Occultation prediction for Tampa Coleman Science Works Thea
E. Longitude - 82 24 25.4, Latitude 28 3 13.1, Alt. 3m; Telescope dia 15cm; dMag 0.0

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      day  Time     P   Star  Sp  Mag  Mag    % Elon Sun  Moon   CA   PA  VA  AA Libration   A   B   RV    Cct durn  R.A. (J2000)  Dec   Mdist   SV
 y  m  d  h  m   s       No  D    v    r V  ill     Alt Alt Az   o    o   o   o   L   B   m/o m/o "/s     o  sec  h  m   s    o  m  s   Mm   m/s
       715 is double: ** 8.8 8.8 0.10"  90.0, dT = +0.25sec
       715 has been reported as non-instantaneous (OCc 130). Observations are highly desired
26 Feb 26  6 59 51.2 d   77818 K5  6.7  5.8   69+ 112     14 295  43N  45 339  46 +0.5 -5.9 +1.0+0.7 .321   57.5      6  0  4.9  28  7 33 369.01070.1
26 Feb 27  2 40 49.1 d   78873 A2  7.8  7.7   78+ 124     81 268  77N  85   2  81 +2.1 -5.6 +2.6+0.0 .352   21.4      6 55 48.1  27 14 58 365.0 669.3
26 Feb 27  2 47  9.2 d    1056 B9  7.2  7.3   78+ 124     79 269  67N  75 351  70 +2.1 -5.6 +2.8+0.5 .322   31.9      6 55 56.2  27 17  9 365.0 672.9
26 Feb 27  5 12 52.0 d   78957 G8  7.5  7.0   79+ 125     48 280  80N  89  12  84 +1.7 -5.3 +1.5-0.8 .427   22.8      7  0 14.8  26 52 42 366.7 823.8
26 Feb 28  5  1 21.5 d   79868DK0  7.4        87+ 138     63 268  69N  84  10  74 +2.8 -4.2 +2.3-0.4 .349   34.8      8  1 30.3  23 54 46 367.3 756.5
     79868 is double: AB 7.43 10.98 1.30" 168.9, dT = +0.37sec
     79868 is a close double. Observations are highly desired
26 Feb 28  5 13 47.8 D    1208DK1  6.4        87+ 138     60 269  32S 163  89 153 +2.8 -4.2 +0.1-3.3 .311  -44.1      8  1  0.8  23 34 59 367.5 770.4
      1208 is double: AB 6.48 9.95 1.95" 325.2, dT = -6sec
      1208 is a close double. Observations are highly desired
26 Mar  1  1 24 14.5 D    1329pF8  6.8        93+ 150     56  96  69S 132 201 117 +4.4 -3.2 +1.8-1.2 .379  -17.8      8 53 55.3  19 58  2 369.5 712.7
      1329 is double: AB 7.32 7.86 0.15"  72.1, dT = +0.2sec
      1329 is a close double. Observations are highly desired
26 Mar  3 11 15 18.2 d X119629k   11.5 11.1    0E 179  -9  8 273  20U  61 358  40 +4.1 +1.2 +0.4+0.1 .274   60.1     10 51 47.3   6 18 53 381.71018.6
26 Mar  3 11 17 20.5 d X210181k   11.7         0E 179  -8  7 273  44U 102  39  81 +4.1 +1.2 +0.1-1.2 .522   18.8     10 51 57.8   6  7 28 381.71020.7
26 Mar  3 11 22 10.8 d X119641k   11.3 11.0    0E 179  -7  6 273  60U 124  62 103 +4.1 +1.2 +0.0-1.6 .554   -3.6     10 51 57.8   6  0 33 381.91027.7
26 Mar  3 11 43 38.8 r X119629k   11.5 11.1    0E 179  -3  2 276  20U 360 297 339 +4.1 +1.2 -0.3-3.1 .286  119.9     10 51 47.3   6 18 53 382.51062.6
26 Mar  6 11  2 41.6 r    1885 K2  7.3  6.7   91- 145 -11 27 238  66N 323 273 302 +3.4 +5.4 +1.2-2.3 .357  157.9     13  8 27.9 -11 45 46 392.0 733.4
26 Mar  7 10 46 57.3 R    1993cK3  6.6  5.9   84- 133     33 222  65S 270 232 251 +2.8 +6.3 +2.3-0.9 .297 -150.6     13 54 21.4 -17 10 48 395.1 654.0
26 Mar  8  4 41  9.6 r    2084 A3  6.5  6.4   78- 124     10 120  82S 284 338 266 +3.1 +6.4 +0.6+0.5 .431 -161.4     14 34 50.7 -20 26 22 399.8 881.1
26 Mar  9 11 15 18.3 r  183572kG0  7.6  7.3   68- 111  -8 34 202  43N 332 312 319 +0.7 +7.5 +2.2-2.7 .216  136.2     15 33 54.8 -25  6 38 400.1 581.6
26 Mar 12  9 34 17.1 R    2631 B9  6.5  6.5v  40-  79     20 141  88N 269 309 270 -2.3 +7.0 +1.8+0.9 .343 -173.2     18 11 58.2 -28 54  6 400.0 669.4
   R2631 = V4045 Sagittarii
      2631 = V4045 Sgr, 6.51 to 6.54, V, Type ACV, Period 2.8855 days
26 Mar 12 11 17 43.6 r  186512 B8  7.9  8.0   40-  78  -6 31 163  65N 292 309 293 -2.7 +7.0 +2.6-0.3 .276  157.7     18 14 33.2 -28 50 20 398.8 576.8
26 Mar 13  9 37 29.8 R    2784cK1  3.3  2.7   31-  67     14 132  56S 227 274 233 -3.3 +6.2 +2.1+2.5 .278 -137.7 .02 19  6 56.4 -27 40 14 397.7 725.0
   R2784 = tau Sagittarii
      2784 is double: AB 4.2 4.2 0.008" 319.3, dT = 0.00sec
26 Mar 15 10 48 55.8 r  189827 A3  8.0  7.9   14-  44 -12 13 123  59S 219 272 234 -4.9 +4.0 +1.4+2.4 .343 -146.3     20 54 43.6 -20 56 58 388.9 777.1
26 Mar 16 10 26 35.2 r    3182 A2  7.5  7.4    8-  32      3 110  78S 235 296 253 -5.1 +2.6 +0.6+1.8 .468 -165.8     21 44 18.9 -15 58 18 385.1 901.3
26 Mar 22  0 29 36.7 d X  3230 M2  9.1  8.1v  11+  39 -11 28 278  59S  97  29 115 -2.5 -5.9 +0.7-1.2 .459  -24.0      2 23 36.5  18 57 54 364.0 886.5
   X  3230 = ASAS J022337+1857.9, 9., range 0.3, V, Type MISC, Period 62.5 days, Phase  62%
26 Mar 24 22 31 36   Gr     810SB7  1.7  1.7   40+  79  15 86 ** GRAZE: CA -0.2N; Dist.243km in az. 174deg. [Lat = 25.85+0.09(E.Long+82.41)]
26 Mar 24 22 32 10   M      810SB7  1.7  1.7   40+  79  15 86  77   0N 356  97 359 +2.2 -6.5 +9.9+9.9 .000   90.0      5 26 17.5  28 36 27 363.1 651.3
   R810 = El Nath = beta Tauri
       810 is multiple: AC 1.9 19.0 8.4" 357.0 : AD 1.9 18.5 9.8"  70.0 : AE 1.9      10.9"  80.0 : AF 1.9 15.8 11.6" 296.0
       810 is a close double. Observations are highly desired
26 Mar 25  2 30  2.9 d   77268 B8  8.2  8.0v  41+  80     43 284  57S 119  43 122 +1.6 -6.3 +0.7-1.8 .439  -19.8      5 34 39.1  28  3  4 365.4 826.9
     77268 = V1371 Tau, 8.02 to 8.20, V, Type GCAS
26 Mar 26  0 38  1   M    1008 A0  5.3  5.3s  52+  93     80 273   9N  13 285  10 +3.0 -5.8 +9.9+9.9 .000   90.0      6 35 12.1  28  1 20 365.5 661.8
   R1008 = 49 Aurigae
      1008 = NSV 3032, 5.05 to 5.27, V
26 Mar 26  0 39 13   Gr   1008 A0  5.3  5.3s  52+  93     78 ** GRAZE: CA  9.7N; Dist.161km in az. 200deg. [Lat = 26.51-0.32(E.Long+82.41)]
26 Mar 26  2 40 30   m   78580SA2  7.3  7.2   53+  93     54 280  14N  19 299  15 +2.7 -5.6 +9.9+9.9 .000   90.0      6 38 53.6  27 48 16 366.8 776.9
     78580 is triple: AC 7.3 13.8 26.6" 237.2 : AB 7.3 10.5 28.6" 130.4
26 Mar 26  3 58 57.1 d    1028 G8  7.5  7.1   53+  94     37 284  38S 147  73 143 +2.6 -5.5 -0.1-2.6 .393  -37.8      6 41 42.7  27  4 54 368.3 888.4
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Occultation prediction for Tampa Coleman Science Works Thea
E. Longitude - 82 24 25.4, Latitude 28 3 13.1, Alt. 3m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon Sun Alt	Moon Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	Mar	27	2	23	3.5	D	79610	F8	7.2	7.0		64+	106	70	267	70S	121	44	112	+3.7	-4.6	+1.7	-1.7	.395	-4.7		7	41	3.1	24	57	54	368.5	708.5
26	Mar	27	4	41	17.9	D	1170dG8		3.6	3.1		65+	107	40	279	32S	159	86	150	+3.4	-4.3	-0.3	-2.8	.361	-42.3		7	44	26.8	24	23	53	370.7	877.9
R1170 = kappa Geminorum																																	
1170 is double: AB 3.7 10.0 7.3" 241.1, dT = +2.8sec																																	
1170 is a close double. Observations are highly desired																																	
26	Mar	27	5	27	49.7	R	1170dG8		3.6	3.1		65+	108	30	283	-62S	253	183	244	+3.4	-4.2	+1.1	-0.4	.390	-137.7		7	44	26.8	24	23	53	371.7	951.1
R1170 = kappa Geminorum																																	
1170 is double: AB 3.7 10.0 7.3" 241.1, dT = -18sec																																	
1170 is a close double. Observations are highly desired																																	
26	Mar	28	4	20	0.8	D	1304pA0		6.8			75+	120	55	266	24S	173	102	159	+4.1	-3.1	-0.3	-3.5	.285	-49.0		8	41	15.3	20	28	37	372.3	784.9
1304 is double: AB 7.10 8.08 0.29" 70.6, dT = -0.21sec																																	
1304 is a close double. Observations are highly desired																																	
26	Mar	28	6	32	1.8	d	1313kF8		7.6	7.3		76+	121	27	279	69S	127	59	113	+3.9	-2.7	+0.1	-1.7	.526	-7.1		8	45	50.1	20	1	20	375.0	963.3
26	Mar	30	0	46	31.4	d	1515kF8		7.8	7.5		91+	144	49	107	83N	105	164	85	+5.6	-0.5	+1.9	+0.1	.374	19.3		10	21	52.9	10	41	59	378.4	726.9
26	Apr	4	3	44	19.4	r	2045cK0		6.4			95-	155	24	129	46N	343	30	325	+3.2	+6.2	-0.1	-1.8	.326	142.4		14	17	3.8	-18	35	9	397.5	792.4
2045 is double: AB 6.40 10.51 0.70" 83.1, dT = +0.36sec																																	
2045 is a close double. Observations are highly desired																																	
26	Apr	4	9	49	56.0	r	158538wK1		7.3	6.8		95-	153	28	225	71N	318	277	300	+1.9	+6.8	+1.8	-2.3	.311	154.9		14	24	0.4	-19	48	3	397.8	663.5
158538 is double: AB 7.4 11.6 40" 286.2, dT = -108sec																																	
26	Apr	4	10	55	7.5	r	158556WA2		6.8			95-	153	-5	17	236	79N	310	259	292	+1.7	+6.8	+1.4	-2.1	.353	158.2		14	25	27.7	-19	57	57	399.0	734.9
158556 is double: BA 7.2 6.6 35" 114.8, dT = +94sec																																	
26	Apr	4	10	56	39.3	r	2066SA1		6.6	6.6		95-	153	-5	16	236	79N	310	259	292	+1.7	+6.8	+1.4	-2.1	.354	158.4		14	25	29.9	-19	58	12	399.1	736.8
2066 is quadruple: **Aa,Ab 6.8 7.7 0.018" 329.0, dT = -0.05sec : BC 7.16 8.37 1.21" 89.4, dT = +2.6sec : AB 6.6 7.2 35" 294.8, dT = -94sec																																	
2066 has been reported as non-instantaneous (OCc 204). Observations are highly desired																																	
26	Apr	5	9	53	6.9	R	2174pB8		6.5	6.5		90-	142	30	213	55S	258	226	243	+0.9	+7.3	+2.5	-0.3	.273	-149.4		15	13	17.4	-24	0	30	399.8	614.0
2174 is triple: ** 7.1 7.1 0.030" 0.0 : AB 6.4 12.5 8.2" 45.0, dT = +25sec																																	
2174 has been reported as non-instantaneous (OCc1471). Observations are highly desired																																	
26	Apr	6	5	8	5.4	R	2287SB1		2.9	3.0v		84-	133	17	133	64N	312	358	301	+0.9	+7.2	+0.5	-0.4	.380	163.9		15	58	51.1	-26	6	51	402.4	771.4
R2287 = pi Scorpii																																	
2287 is triple: Aa,Ab 5.1 13.4 2.0" 244.0, dT = -1.9sec : AB 2.9 11.9 50" 128.1, dT = +133sec																																	
2287 is a close double. Observations are highly desired																																	
2287 = pi Sco, 2.88 to 2.91, V, Type ELL, Period 1.570103 days, Phase 64%																																	
26	Apr	6	8	34	45.3	r	2297kF7		7.0	6.7		83-	132	35	180	85S	281	281	270	+0.2	+7.5	+2.8	-0.4	.292	-171.3		16	3	16.1	-26	43	2	400.7	574.2
26	Apr	6	9	56	55.2	r	2300wK0		7.6	7.1		83-	131	32	201	58S	254	233	243	-0.2	+7.5	+2.8	+0.0	.261	-151.1		16	5	1.4	-26	56	52	401.1	579.4
2300 is double: AB 7.7 13.7 13.4" 351.6, dT = +7sec																																	
26	Apr	9	9	58	37.4	r	2727kA*		7.4	7.4v		57-	98	31	162	44S	219	237	224	-3.6	+6.4	+2.8	+2.3	.216	-136.6		18	47	37.1	-28	16	47	399.1	574.6
2727 = HIP 92215, 7.45 to 7.48, V, Type ACV, Period 1.93789 days, Phase 95%																																	
26	Apr	11	10	25	36.6	r	189425WF7		7.5	7.2		38-	76	-10	30	142	41N	304	340	317	-5.6	+4.4	+2.5	-0.8	.195	125.2		20	33	30.9	-22	13	55	391.9	643.1
189425 is double: AB 7.5 11.6 10.3" 21.3, dT = -12sec																																	
26	Apr	14	10	37	24.7	R	3383 M2		6.2	5.4s		12-	40	-7	17	107	41S	198	256	219	-6.2	+0.0	+0.6	+2.7	.356	-138.1		23	2	32.6	- 6	34	26	376.4	874.1
R3383 = 82 Aquarii																																	
3383 = NSV 25999, 6.24 to 6.29, Hp																																	
26	Apr	19	14	30	5.8	d	539SB6		4.3	4.4s		7+	30	45	25	74	79S	80	149	93	+0.6	-6.0	+0.3	+1.1	.574	-14.0		3	45	12.5	24	28	2	359.0	1030.8
R539 = Taygeta = 19 Tauri																																	
539 is multiple: Aa,Ab 4.6 6.1 : AB 0.018" 273.2, dT = -0.03sec : AC 4.3 14.0 53" 53.4, dT = +82sec : AB 4.3 11.0 72" 328.8, dT = -46sec																																	
539 is a close double. Observations are highly desired																																	
539 = NSV 1264, 4.30, range 0.00, 1Kp, Type SPB, Period 1.5664 days																																	

Occultation prediction for Tampa Coleman Science Works Thea
E. Longitude - 82 24 25.4, Latitude 28 3 13.1, Alt. 3m; Telescope dia 15cm; dMag 0.0

y	m	day d	h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon Alt	Sun Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	Apr	19	14	48	52.1	D	541SB8		3.9	3.9s	7+	31	49	29	76	42S	117	188	130	+0.6	-6.0	+1.3+0.0		.359	-51.4		3	45	49.6	24	22	4	358.7	1000.3
	R541 = Maia = 20 Tauri																																
	541 is quadruple: Aa,Ab 4.4 5.4 : AB 3.8 13.7 113" 72.6, dT = +225sec : AB 3.8 13.7 113" 72.7, dT = +225sec																																
	541 = NSV 1279, 3.87, range 0.00, 4Kp, Type ACV, Period 10.288 days																																
26	Apr	19	15	25	50.6	r	541SB8		3.9	3.9s	7+	31	57	37	79	-34S	194	266	206	+0.6	-6.1	-0.6+3.1		.338	-128.5		3	45	49.6	24	22	4	357.9	941.0
	R541 = Maia = 20 Tauri																																
	541 is quadruple: Aa,Ab 4.4 5.4 : AB 3.8 13.7 113" 72.6, dT = +172sec : AB 3.8 13.7 113" 72.7, dT = +172sec																																
	541 = NSV 1279, 3.87, range 0.00, 4Kp, Type ACV, Period 10.288 days																																
26	Apr	20	1	24	39.4	D	76460	A0	8.0	7.9	9+	35	16	291	55S	107	41	118	-0.3	-6.4	-0.1-1.3		.557	-19.0		4	6	41.4	25	43	20	360.3	1029.2
26	Apr	20	2	7	32.6	D	76472cG8		7.2	6.5	9+	35	8	295	85S	77	15	88	-0.2	-6.3	+0.0-0.5		.617	11.3		4	8	39.0	25	52	40	361.3	1103.2
26	Apr	21	0	15	17.8	D	771SA5		6.1	5.9e	17+	48	-5	44	283	49N	40	323	45	+1.6	-6.3	+2.4+1.8		.267	55.9		5	9	45.1	28	1	50	359.4	831.5
	771 is triple: Aa,Ab 6.0 0.20" 351.0, dT = +0.49sec : A,BC 6.0 9.1 11.2" 29.1, dT = +41sec																																
	771 is a close double. Observations are highly desired																																
	771 = V1156 Tau, 6. to 6.1, Hp, Type E:, Period 1.40266 days, Phase 44%																																
26	Apr	21	0	30	42.2	D	773wF8		7.0	6.7	17+	48	-8	40	284	17S	154	78	159	+1.5	-6.3	-0.4-4.0		.259	-58.1		5	10	3.9	27	33	23	359.7	854.2
	773 is double: AB 7.0 9.3 315" 353.1, dT = -1149sec																																
26	Apr	21	1	22	55.2	d	77030	K0	8.6	7.9	17+	49	30	288	48S	123	51	128	+1.5	-6.2	+0.1-1.9		.479	-26.5		5	12	34.1	27	36	15	360.7	935.8
26	Apr	22	1	13	6	m	78191	A0	7.7	7.7	27+	62	45	283	16N	16	298	15	+3.1	-5.7	+9.9+9.9		.000	90.0		6	17	59.9	28	0	24	362.3	839.4
26	Apr	22	1	56	23.9	d	78242	K0	8.8	8.4	27+	63	36	285	90S	90	16	89	+3.1	-5.6	+0.9-0.9		.493	15.9		6	20	26.0	27	37	36	363.2	903.4
26	Apr	22	2	1	49.3	d	78234	A0	8.2	8.2	27+	63	35	285	33S	147	73	146	+3.1	-5.6	-0.2-2.6		.391	-40.9		6	20	4.5	27	23	6	363.3	912.2
26	Apr	22	3	35	8.6	d	78309dA0		7.4	7.4	28+	64	16	293	15S	165	99	163	+3.0	-5.3	-1.3-3.1		.302	-59.9		6	23	30.2	27	7	5	365.4	1066.6
	78309 is double: AB 7.4 1.3" 304.0, dT = -3sec																																
	78309 is a close double. Observations are highly desired																																
26	Apr	23	0	25	11.7	d	79319	K2	7.9	7.3	38+	76	-6	68	270	89S	98	19	91	+4.5	-4.8	+2.1-0.9		.392	15.6		7	21	39.7	25	51	44	364.5	719.0
26	Apr	24	0	42	52.1	d	80119	G5	8.1	7.7	49+	89	-10	75	249	12S	182	119	170	+5.5	-3.5	-0.6-5.4		.189	-61.0		8	21	4.9	22	1	54	368.5	695.4
26	Apr	24	4	35	51.0	d	1269kG5		6.9	6.3	50+	90	26	281	36S	158	90	146	+5.0	-3.0	-0.4-2.4		.415	-39.9		8	28	7.2	21	8	55	372.6	977.4
26	Apr	25	3	4	29.4	d	98511kF2		7.8	7.6	61+	102	55	260	42N	60	355	44	+5.7	-1.8	+4.2+1.4		.171	66.5		9	20	38.2	17	7	38	374.2	778.1
26	Apr	25	3	47	35.6	D	1387cA5		7.0	6.8	61+	103	45	265	56S	142	75	126	+5.6	-1.7	+0.5-2.2		.436	-16.4		9	21	25.5	16	35	54	375.0	827.0
	1387 is double: ** 7.6 7.6 0.10" 90.0, dT = +0.14sec																																
	1387 has been reported as non-instantaneous (OCc1402). Observations are highly desired																																
26	Apr	26	0	26	36.7	D	1487SB7		1.4	1.4s	70+	114	-6	69	138	81S	120	157	101	+6.4	-0.6	+2.1-1.1		.362	9.2		10	8	22.3	11	58	2	377.3	671.8
	R1487 = Regulus = alpha Leonis																																
	1487 is triple: AB 1.4 8.2 176" 308.0, dT = -480sec : AD 1.4 12.1 193" 274.0, dT = -478sec																																
	1487 = NSV 4750, 1.33 to 1.40, V																																
26	Apr	26	1	51	3.4	R	1487SB7		1.4	1.4s	71+	115	73	204	-60N	321	300	302	+6.1	-0.4	+1.5-2.2		.369	170.3		10	8	22.3	11	58	2	377.4	684.7
	R1487 = Regulus = alpha Leonis																																
	1487 is triple: AB 1.4 8.2 176" 308.0, dT = -464sec : AD 1.4 12.1 193" 274.0, dT = -355sec																																
	1487 = NSV 4750, 1.33 to 1.40, V																																
26	Apr	27	0	4	27.1	D	1589pM5		5.9	5.3v	80+	126	-2	54	121	79N	101	151	80	+6.5	+0.9	+2.2+0.2		.336	28.0		10	56	1.5	6	11	7	382.1	704.0
	R1589 = 56 Leonis (VY)																																
	1589 is double: 6.2 7.1																																
	1589 = VY Leo, 5.69 to 6.03, V, Type SR, Period 46.34 days, Phase 16%																																
26	Apr	28	2	53	54.1	d	138388	K0	7.3	6.8	88+	139	61	181	59N	80	78	58	+5.7	+2.7	+4.2+0.8		.203	55.5		11	45	1.4	- 0	31	4	385.9	670.7
26	Apr	30	3	7	44.0	d	157822kK2		7.3	6.6	98+	162	46	156	79S	110	132	89	+4.5	+5.2	+2.3-0.4		.328	22.0		13	15	54.0	-12	21	0	393.3	675.4
26	May	1	3	36	8.0	d	2011 K2		6.3	5.6	100+	172	40	154	82N	64	88	44	+3.6	+6.1	+5.1+3.0		.147	65.1	.01	14	3	4.1	-17	22	1	396.5	673.0
	Distance of 2011 to Terminator = 8.1"; to 3km sunlit peak = 0.9"																																
26	May	1	3	52	47	Gr	2011 K2		6.3	5.6	100+	172	41	** GRAZE: CA 57.5N; Dist.178km in az. 47deg. [Lat = 30.39-0.93(E.Long+82.41)]																				
	Distance of 2011 to Terminator = 6.2"; to 3km sunlit peak = 0.0"																																

Occultation prediction for Tampa Coleman Science Works Thea
E. Longitude - 82 24 25.4, Latitude 28 3 13.1, Alt. 3m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon Alt	Sun Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	May	3	5	47	50.5	r	183731	pF0	7.3	7.1		98-	162	36	168	80N	311	322	298	+1.2	+7.3	+2.0	-1.0	.299	164.8		15	43	11.6	-25	24	56	401.0	602.7
			183731 is double: AB 7.3 9.3 5.9" 291.8, dT = -19sec																															
			183731 is a close double. Observations are highly desired																															
26	May	3	9	35	53.7	r	2256	PA1	7.0	6.9		97-	161	21	223	43S	252	210	240	+0.3	+7.3	+1.6	-0.4	.309	-154.5		15	47	56.5	-25	59	13	402.6	667.7
			2256 is double: ** 7.7 7.7 0.10" 90.0, dT = +0.31sec																															
			2256 has been reported as non-instantaneous (OCc1482). Observations are highly desired																															
26	May	4	9	58	49.7	r	2397	K1	6.5	5.9		93-	150	-11	23	217	57N	320	283	313	-0.9	+7.3	+2.9	-3.0	.209	129.4		16	41	37.6	-27	48	35	403.2	643.4
26	May	9	8	29	54	m	3078	cA5	4.9			55-	96	26	133	-6S	157	200	173	-6.1	+3.4	+9.9	+9.9	.000	-90.0		21	4	24.3	-19	51	18	393.1	677.9
			R3078 = Chow = eta Capricorni																															
			3078 is double: AB 5.02 7.39 0.23" 30.0																															
			3078 is a close double. Observations are highly desired																															
26	May	9	8	31	53	Gr	3078	cA5	4.9			55-	96	26	** GRAZE: CA -6.5S; Dist.144km in az. 352deg. [Lat = 29.37+0.13(E.Long+82.41)]																			
26	May	12	8	54	47.9	r	3454	K0	7.6	7.1		25-	60	16	102	38N	299	359	321	-7.1	-1.0	+1.0	-0.2	.247	119.8		23	27	14.7	- 2	38	13	377.1	907.2
26	May	12	9	41	56.0	r	146720	K5	8.1	7.4		25-	59	26	108	87N	250	308	272	-7.1	-1.1	+1.0	+1.5	.450	166.0		23	28	27.0	- 2	39	13	375.9	845.5
26	May	13	9	56	55.9	R	109127	F0	7.2	7.0		16-	46	-10	22	98	62S	221	282	243	-6.5	-2.5	+0.4	+2.0	.498	-164.4		0	18	7.9	3	47	48	370.1	927.5
26	May	14	8	59	19.8	r	166	kM*	6.7	5.8	S	8-	34	2	80	14S	175	237	197	-5.5	-3.7	-0.6	+3.3	.257	-114.0		1	8	21.8	9	54	30	366.9	1121.7
			166 = NSV 15246, 6.73, , Type VAR:																															
26	May	19	0	18	6.0	D	885	wG7	5.6	5.1		7+	30	-2	29	288	37N	29	317	30	+1.8	-5.7	+3.2	+3.5	.162	73.3		5	50	58.1	27	58	4	356.9	977.5
			885 is double: AB 5.7 12.5 10.8" 233.1, dT = -61sec																															
26	May	19	0	25	30	Gr	885	wG7	5.6	5.1		7+	31	-3	26	** GRAZE: CA 20.0N; Dist. 83km in az. 35deg. [Lat = 28.96-0.61(E.Long+82.41)]																			
26	May	19	0	34	49.4	R	885	wG7	5.6	5.1		7+	31	-5	25	290	3N	355	285	357	+1.8	-5.6	-2.4	-5.6	.167	106.7		5	50	58.1	27	58	4	357.3	1006.5
			885 is double: AB 5.7 12.5 10.8" 233.1, dT = +35sec																															
26	May	19	0	57	53.8	D	890	cA0	4.6	4.6	s	7+	31	-10	21	291	75S	97	28	98	+1.8	-5.6	+0.2	-1.0	.599	5.2		5	53	19.6	27	36	44	357.8	1043.1
			R890 = 136 Tauri																															
			890 is double: ** 4.8 6.3 0.050" 270.0, dT = -0.08sec																															
			890 has been reported as non-instantaneous (OCc 206). Observations are highly desired																															
			890 = NSV 2696, 4.50 to 4.61, V																															
26	May	19	1	7	17.6	d	77686	F5	9.2	8.7		7+	31	-11	19	292	62S	110	43	112	+1.8	-5.6	-0.1	-1.3	.603	-8.5		5	53	40.6	27	31	45	358.0	1059.0
26	May	19	1	44	28.4	D	77711	F5	7.9	7.6		7+	31		11	295	35S	138	74	139	+1.8	-5.5	-0.6	-1.8	.518	-36.6		5	55	3.7	27	20	32	358.9	1122.2
26	May	19	1	50	51.6	r	890	cA0	4.6	4.6	s	7+	31		10	296	-66N	287	223	287	+1.9	-5.5	-0.3	-1.1	.650	174.8		5	53	19.6	27	36	44	359.0	1136.3
			R890 = 136 Tauri																															
			890 is double: ** 4.8 6.3 0.050" 270.0, dT = -0.07sec																															
			890 has been reported as non-instantaneous (OCc 206). Observations are highly desired																															
			890 = NSV 2696, 4.50 to 4.61, V																															
26	May	19	1	55	48.9	D	77724	B1	7.0	7.0		7+	31		9	296	54N	46	343	48	+1.9	-5.4	+0.7	+0.5	.378	54.8		5	55	40.3	27	42	56	359.1	1141.6
26	May	19	2	21	49.8	D	77753	G2	7.2	6.7		7+	32		4	299	49S	124	63	125	+1.9	-5.4	-0.6	-1.4	.625	-23.0		5	57	5.6	27	19	0	359.7	1184.2
26	May	20	0	40	38.2	D	1061	SF8	6.2	5.9	s	14+	45	-6	37	283	16S	166	93	161	+3.7	-4.7	-0.8	-3.4	.300	-55.5		6	58	47.4	26	4	52	359.5	923.5
			R1061 = 39 Geminorum																															
			1061 is triple: Aa,Ab 6.1 0.50" 158.0, dT = +1.6sec : AB 6.1 12.1 35" 69.0, dT = -15sec																															
			1061 is a close double. Observations are highly desired																															
			1061 = NSV 17256, 6.1, range 0.02, V, Type VAR:																															
26	May	20	1	20	27.9	d	78973	A2	8.8	8.6		15+	45	29	286	84S	98	27	93	+3.6	-4.6	+0.5	-1.1	.551	12.3		7	1	13.7	26	11	6	360.4	985.7
26	May	20	1	25	15.8	D	78979	G5	8.1	7.6		15+	45	28	287	82N	84	14	79	+3.6	-4.6	+0.7	-0.7	.511	25.9		7	1	25.4	26	14	7	360.5	993.5
26	May	20	2	3	18.6	d	78998	G5	8.0	7.7	e	15+	45	20	289	34S	149	81	144	+3.7	-4.5	-0.6	-2.2	.464	-39.6		7	2	23.3	25	50	46	361.4	1055.8
			78998 = V0369 Gem, 7.95 to 8.12, V, Type EB, Period 0.423061 days, Phase 26%																															
26	May	21	2	25	33.7	D	1221	cM3	6.0	5.1	v	24+	59	27	283	70S	121	52	110	+5.1	-3.2	+0.2	-1.5	.559	-4.0		8	6	18.4	22	38	8	365.3	992.6
			R1221 = 9 Cancri = BL Cnc.																															
			1221 is double: AB 6.0 10.1 0.40"																															

Occultation prediction for Tampa Coleman Science Works Thea
E. Longitude - 82 24 25.4, Latitude 28 3 13.1, Alt. 3m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon	Sun Alt	Moon Alt	Az	CA o	PA o	VA o	AA o	Libration L	B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
							1221 is a close double. Observations are highly desired																													
							1221 = BL Cnc, 5.97 to 6.04, V, Type SR																													
26	May	21	2	39	4.6	D	79951	G5	7.8	7.2		24+	59	24	284	67N	78	10	67	+5.1	-3.2	+0.7	-0.6	.448	38.4		8	6	56.2	22	46	31	365.7	1013.9
26	May	21	2	44	40.4	D	1222	cG5	7.2	6.8		24+	59	22	284	40S	151	83	140	+5.1	-3.2	-0.4	-2.1	.473	-34.8		8	6	34.4	22	27	24	365.8	1022.6
							1222 is double: ** 7.2 0.013" 234.6, dT = 0.00sec																													
							1222 has been reported as non-instantaneous (OCc1381). Observations are highly desired																													
26	May	22	4	54	40.1	d	1362	pK3	7.2	6.6		36+	73	5	287	83N	99	37	84	+6.1	-1.5	-0.2	-1.0	.589	17.7		9	9	2.3	17	28	11	373.5	1119.5
							R1362 = 78 Cancri																													
							1362 is triple: AB 7.5 9.0 : ** 7.5 9.0 0.005" 341.0, dT = 0.00sec																													
26	May	23	3	23	32.1	D	1466	cB9	5.3	5.3		46+	85	33	267	80N	100	36	82	+6.6	-0.1	+1.0	-1.3	.442	24.8		9	58	13.4	12	26	41	375.8	887.4
							R1466 = nu Leonis																													
							1466 is double: ** 6.0 6.0 0.050"																													
							1466 has been reported as non-instantaneous (OCc1407). Observations are highly desired																													
26	May	24	2	4	42.1	d	118476	PF8	8.2	7.9		56+	97	56	238	62N	84	36	64	+6.9	+1.2	+2.9	-0.5	.269	47.5		10	45	18.9	6	57	39	379.1	731.5
							118476 is double: ** 8.9 8.9 0.10" 90.0, dT = +0.37sec																													
							118476 has been reported as non-instantaneous (OCc1419). Observations are highly desired																													
26	May	24	3	14	54.5	D	1567	kK1	6.4	5.8		57+	98	41	253	41S	161	103	140	+6.7	+1.4	+0.4	-2.7	.364	-32.4		10	46	5.7	6	22	23	380.4	794.6
							R1567 = 37 (Sextantis)/Leonis																													
26	May	24	3	44	19.3	d	1573	pA2	7.1	7.0		57+	98	35	257	79S	123	63	102	+6.6	+1.4	+0.9	-1.8	.446	4.2		10	47	19.2	6	20	46	381.0	826.9
							R1573 = 38 (Sextantis)/Leonis																													
26	May	28	7	21	10.0	d	1993	cK3	6.6	5.9		91+	145	13	242	59S	134	79	115	+3.7	+6.4	+1.1	-2.2	.366	-23.9		13	54	21.4	-17	10	48	399.9	777.2
26	May	29	1	13	39.5	d	2084	A3	6.5	6.4		95+	155	-11	30	140	84N	92	129	74	+4.1	+6.6	+2.2	+0.8	.310	33.6		14	34	50.7	-20	26	22	399.9	721.8
26	Jun	2	4	34	27.1	r	186286	B7	7.1	7.1		97-	159	24	146	64N	309	343	309	-1.2	+6.5	+1.4	-0.6	.271	146.3		18	6	45.8	-28	21	50	403.4	636.9
26	Jun	2	5	38	34.7	R	2617	cK0	4.6	4.1		97-	159	31	160	83N	289	309	289	-1.4	+6.5	+2.5	-0.1	.283	161.8		18	8	5.0	-28	27	26	402.7	582.4
							2617 is double: AB 5.1 5.9 0.26" 12.0, dT = -0.11sec																													
							2617 is a close double. Observations are highly desired																													
26	Jun	6	6	26	31.9	r	3157	cF6	7.3			71-	115	21	123	43N	299	350	316	-6.0	+2.2	+1.5	-0.2	.229	126.6		21	33	40.2	-16	12	4	394.0	734.2
							3157 is double: AB 7.33 10.00 0.90" 2.6, dT = -1.7sec																													
							3157 is a close double. Observations are highly desired																													
26	Jun	7	7	42	1.5	r	3282	kK0	7.8	7.0		61-	103	30	124	85N	254	302	274	-6.9	+0.7	+1.6	+1.5	.371	164.1		22	22	11.6	-10	50	53	388.3	726.9
26	Jun	10	7	36	35.1	r	109413	K2	8.0	7.3		30-	66	12	87	73N	266	329	287	-6.8	-3.5	+0.3	+1.1	.501	153.2		0	43	53.0	7	33	19	373.1	1014.9
26	Jun	10	8	35	10.7	r	109437	kG5	7.8	7.3		29-	65	24	94	71N	267	330	289	-6.8	-3.6	+0.8	+1.1	.443	148.9		0	45	40.4	7	50	42	371.5	932.0
26	Jun	11	8	53	42.4	r	92548	A3	8.1	7.9		19-	52	20	84	82S	244	309	264	-5.8	-4.7	+0.2	+1.5	.566	174.5		1	38	27.6	13	55	42	366.2	1010.1
26	Jun	11	9	18	50.2	R	244	K0	6.7	6.2		19-	52	26	87	47N	295	0	315	-5.8	-4.7	+1.4	+0.1	.297	122.7		1	39	15.4	14	17	8	365.5	974.9
							R244 = 104 Piscium																													
26	Jun	13	12	14	14.5	r	541	SB8	3.9	3.9s		4-	23	20	42	81	4S	182	256	195	-2.3	-6.2	-1.2	+4.2	.241	-117.2		3	45	49.6	24	22	4	355.0	908.7
							R541 = Maia = 20 Tauri																													
							541 is quadruple: Aa,Ab 4.4 5.4 : AB 3.8 13.7 113" 72.6, dT = +159sec : AB 3.8 13.7 113" 72.7, dT = +159sec																													
							541 = NSV 1279, 3.87, range 0.00, 4Kp, Type ACV, Period 10.288 days																													
26	Jun	13	12	19	36.1	r	539	SB6	4.3	4.4s		4-	23	21	43	82	46S	224	298	237	-2.3	-6.2	+0.4	+2.0	.489	-159.2		3	45	12.5	24	28	2	354.9	900.0
							R539 = Taygeta = 19 Tauri																													
							539 is multiple: Aa,Ab 4.6 6.1 : AB 0.019" 73.4, dT = +0.03sec : AC 4.3 14.0 53" 53.4, dT = +107sec : AB 4.3 11.0 72" 328.8, dT = +37sec																													
							539 is a close double. Observations are highly desired																													
							539 = NSV 1264, 4.30, range 0.00, 1Kp, Type SPB, Period 1.5664 days																													
26	Jun	17	1	8	10.4	D	1155	F0	6.4	6.2		5+	27	-9	15	290	56N	60	354	52	+3.4	-3.6	+0.7	+0.0	.386	52.5		7	38	14.4	24	21	38	359.6	1106.4
26	Jun	17	1	27	35.0	D	1157	A2	6.2	6.2		5+	27		11	291	69N	73	9	65	+3.5	-3.5	+0.2	-0.5	.511	38.4		7	39	12.0	24	13	21	360.1	1137.1
26	Jun	17	1	30	59.8	d	79578	cA0	8.8	8.8		5+	27		11	292	44N	48	344	40	+3.5	-3.5	+0.9	+0.7	.293	63.4		7	39	5.6	24	18	51	360.1	1143.1

Occultation prediction for Tampa Coleman Science Works Thea
E. Longitude - 82 24 25.4, Latitude 28 3 13.1, Alt. 3m; Telescope dia 15cm; dMag 0.0

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      day  Time     P   Star  Sp  Mag  Mag    % Elon Sun  Moon   CA   PA  VA  AA Libration   A   B   RV    Cct durn  R.A. (J2000)  Dec   Mdist   SV
 y   m  d  h  m   s       No  D    v    r V  ill    Alt Alt Az   o    o   o   o   L   B   m/o m/o "/s     o  sec  h  m   s    o  m  s   Mm   m/s
     79578 is double: ** 9.6 9.6 0.10"  92.0, dT = +0.25sec
     79578 has been reported as non-instantaneous (OCc 762). Observations are highly desired
26 Jun 17 19 56 11.2 D Venus      -4.0 -4.0   11+  38  57 82 144  41S 150 184 138 +5.6 -2.9 +1.6-2.9 .306  -30.1      8 30 20.8  21  2 26 358.3 615.6
   Venus contacts: Bright limb 19 55 47; Terminator 19 56 31; Dark limb 19 56 35: diam = 14.7"; %illum = 74.0%; PA bright limb = 281.5
26 Jun 17 21 17 24.9 R Venus      -4.0 -4.0   11+  39  39 75 246 -82S 276 214 261 +5.4 -2.7 +2.8-0.6 .327 -150.4      8 30 20.8  21  2 26 358.8 653.2
   Venus contacts: Bright limb 21 17  2; Terminator 21 17 36; Dark limb 21 17 48: diam = 14.7"; %illum = 74.0%; PA bright limb = 281.5
26 Jun 18  1  6 19.6 d   80327pA3  7.8  7.6   12+  40  -8 26 280  67N  80  12  67 +5.0 -2.1 +0.8-0.7 .440   39.3      8 39 42.8  20  5 10 362.91001.0
     80327 is double: AB 7.9 9.6 0.64" 136.3, dT = +0.8sec
     80327 is a close double. Observations are highly desired
26 Jun 18  1 16 58.0 D    1295pK0  6.4  5.9s  12+  40 -10 24 281  73N  86  19  73 +5.0 -2.1 +0.6-0.8 .485   32.8      8 40  6.4  20  0 28 363.21016.9
   R1295 = 39 Cancri
     1295 is multiple: AC 6.5 9.0 134" 309.0, dT = -202sec : AD 6.5 8.8 135" 111.0, dT = +252sec : AB 6.5 6.6 152" 149.9, dT = +138sec : AS 6.5 10.1
262" 325.7, dT = -274sec
     1295 = NSV 4179, 6.39, range 0.04, V
26 Jun 18  1 17 16.0 D    1292kF0  6.7  6.5v  12+  40 -10 24 281  53S 140  72 126 +5.0 -2.1 -0.1-1.9 .539  -20.9      8 39 42.7  19 46 42 363.21017.3
   R1292 = 38 Cancri (BT)
     1292 = BT Cnc, 6.66, range 0.06, V, Type DSCTC, Period 0.10228 days
26 Jun 18  1 19 14.5 D    1296pA1  6.6  6.6   12+  40 -11 23 281  79N  92  24  78 +5.0 -2.1 +0.5-1.0 .515   27.2      8 40 11.5  19 58 16 363.21020.3
   R1296 = 40 Cancri
     1296 is quadruple: Ba,Bb 6.6      0.40" 128.0, dT = +0.6sec : BR 6.6 11.6 140" 146.9, dT = +155sec : BA 6.6 6.5 152" 329.9, dT = -155sec
     1296 is a close double. Observations are highly desired
26 Jun 18  1 21  9.3 d   80338pF5  8.8  8.6S  12+  41 -11 23 281  72N  85  18  71 +5.0 -2.1 +0.6-0.8 .482   33.9      8 40 15.3  19 59 39 363.31023.3
     80338 is double: DA 8.8 6.5 135" 291.0, dT = -251sec
     80338 = NSV 17951, 8.81, , Type VAR:
26 Jun 18  1 23 11.2 d   80330pA5  8.9  8.7   12+  41 -11 23 282  31N  44 337  30 +5.0 -2.1 +2.6+2.2 .152   74.9      8 39 58.4  20  9 30 363.31027.5
     80330 is double: AB 8.9 9.7 91" 153.0, dT = -197sec
26 Jun 18  1 25 40.0 d   97999pF0  7.4  7.3S  12+  41 -12 22 281   5S 188 121 174 +5.0 -2.1 -1.6-4.1 .205  -69.5      8 39  6.1  19 40 37 363.41031.2
     97999 is triple: AB 7.5 9.6 57"  84.0, dT = -67sec : AC 7.5 9.4 179" 345.0, dT = -802sec
     97999 = NSV 4163, 7.45,
26 Jun 18  1 27 16.1 D   80340pA0  7.9  7.8S  12+  41     22 282  80S 113  46  99 +5.0 -2.1 +0.2-1.4 .583    5.6      8 40 23.5  19 50  6 363.41032.3
     80340 is double: ** 8.8 8.8 0.050" 111.0, dT = +0.09sec
     80340 has been reported as non-instantaneous (OCc1074). Observations are highly desired
     80340 = NSV 4183, 8.01,
26 Jun 18  1 35 34.7 D   98020pA0  7.6  7.5e  12+  41     20 282  51S 142  76 128 +5.0 -2.1 -0.2-1.9 .542  -23.8      8 40 20.7  19 41 12 363.71045.3
     98020 is quadruple: ** 9.1 9.1 0.050"       : CA 7.6 6.5 64" 163.1, dT = +110sec : CD 7.6 9.2 76"  91.1, dT = +89sec
     98020 has been reported as non-instantaneous (OCc1392). Observations are highly desired
     98020 = HD 73709, 7.69 to 7.76, V, Type EA, Period 7.22015 days, Phase  75%
26 Jun 18  1 37 27.4 D    1298pK0  6.4  5.9E  12+  41     19 282  48S 145  78 131 +5.0 -2.1 -0.3-1.9 .531  -26.8      8 40 22.1  19 40 12 363.71048.2
     1298 is multiple: AE 6.5 12.5 15.7" 154.8, dT = +29sec : AB 6.4 10.4 20.8"  55.1, dT = +0.18sec : AC 6.5 7.6 64" 343.1, dT = -115sec : AD 6.5
9.2 84"  44.0, dT = -30sec
     1298 = HD 73710, 6.42, , Type EA, Period 7.22030 days, Phase  42%
26 Jun 18  1 39 53.8 D    1302pA9  6.8  6.7   12+  41     19 283  67S 127  60 113 +5.0 -2.1 -0.1-1.6 .589   -8.6      8 40 43.2  19 43 10 363.81051.7
   R1302 = 42 Cancri
     1302 is double: ** 7.5 7.5 0.050"
     1302 has been reported as non-instantaneous (OCc1393). Observations are highly desired
26 Jun 18  1 40 33.5 d   80351kA2  8.7  8.5   12+  41     19 283  65N  78  12  65 +5.0 -2.1 +0.5-0.6 .459   39.7      8 40 56.9  19 56  5 363.81053.1
26 Jun 18  1 46  7.9 d   80352kF0  9.0  8.8   12+  41     18 283  82N  95  29  82 +5.0 -2.0 +0.2-1.0 .554   22.8      8 41 10.7  19 49 46 363.91061.3
26 Jun 18  1 48 46.3 d   80353kA3  8.3  8.2S  12+  41     17 284  60N  73   7  59 +5.0 -2.0 +0.6-0.5 .428   44.9      8 41 13.8  19 55 19 364.01065.8
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Occultation prediction for Tampa Coleman Science Works Thea
E. Longitude - 82 24 25.4, Latitude 28 3 13.1, Alt. 3m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon	Sun Alt	Moon Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	dur sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
							80353 = NSV 17956, 8.33, , Type DSCT:																													
26	Jun	18	1	53	51.2	D	1299pA*		6.3	6.2		12+	41		16	284	20S	174	108	160	+5.1	-2.0	-0.9	-2.8	.338	-56.2		8	40	27.0	19	32	41	364.1	1074.2
							R1299 = epsilon Cancri																													
							1299 is double: AB 6.3 7.5 134" 250.1, dT = +93sec																													
26	Jun	18	1	54	25.6	D	1303kA6		6.8	6.7v		12+	41		16	284	44S	149	84	135	+5.1	-2.0	-0.4	-2.0	.519	-31.5		8	40	56.3	19	34	49	364.1	1074.3
							1303 = EP Cnc, 6.76, range 0.03, V, Type DSCTC																													
26	Jun	18	2	0	3.0	d	98043kK0		8.4	7.9		12+	41		15	285	76S	117	52	104	+5.1	-2.0	-0.1	-1.4	.613	-0.2		8	41	35.1	19	39	45	364.3	1082.6
26	Jun	18	2	5	52.1	D	1305pK0		6.9	6.4		12+	41		14	285	52N	66	1	52	+5.1	-2.0	+0.5	-0.2	.385	51.5		8	41	50.1	19	52	27	364.4	1092.2
							1305 is double: Ea,Eb 7.2 9.1																													
26	Jun	18	2	27	25.0	d	98053kA7		7.9	7.8v		12+	41		9	287	37S	156	93	142	+5.1	-2.0	-0.6	-2.0	.488	-39.8		8	42	6.5	19	24	41	365.0	1125.1
							98053 = BX Cnc, 7.96, range 0.02, V, Type DSCTC, Period 0.04412 days																													
26	Jun	19	1	16	33.9	d	98665w		8.8	8.4		21+	54	-10	33	269	88N	106	40	89	+6.2	-0.5	+0.8	-1.4	.489	17.9		9	36	13.3	14	35	48	367.8	916.3
							98665 is double: AB 8.8 9.1 82" 111.0, dT = +167sec																													
26	Jun	19	1	19	20.6	d	98667		9.0	8.7		21+	54	-11	33	270	87N	105	39	88	+6.2	-0.5	+0.8	-1.3	.488	18.9		9	36	18.5	14	35	18	367.8	920.1
26	Jun	19	1	25	52.5	D	1415WA1		6.3	6.3		21+	54	-12	31	270	42S	156	90	139	+6.2	-0.5	+0.0	-2.4	.439	-32.5		9	35	52.9	14	22	47	368.0	929.2
							R1415 = 7 Leonis																													
							1415 is double: AB 6.3 9.4 41" 90.5, dT = +38sec																													
26	Jun	19	2	13	44.2	D	1420 F2		6.6	6.4		21+	54		21	275	82N	100	35	83	+6.2	-0.4	+0.4	-1.2	.519	21.3		9	38	1.3	14	20	50	369.2	996.9
							R1420 = 11 Leonis																													
26	Jun	20	1	47	43.9	d	118317 K2		8.2	7.5		31+	67		34	261	38S	163	102	144	+6.9	+1.1	+0.1	-2.7	.379	-37.1		10	27	56.5	8	18	52	373.9	862.8
26	Jun	21	2	22	49.7	D	1635cM0		5.2	4.4		41+	80		33	252	58S	145	88	123	+7.0	+2.7	+0.7	-2.3	.419	-18.3		11	17	17.4	2	0	38	380.2	814.6
							R1635 = 75 Leonis																													
							1635 is double: ** 5.8 6.6 0.044" 0.0																													
							1635 has been reported as non-instantaneous (OCc 763). Observations are highly desired																													
26	Jun	21	3	36	56.5	D	1637 K0		5.9	5.4		42+	80		17	262	42S	162	101	140	+6.9	+2.9	+0.2	-2.6	.378	-39.6		11	18	55.0	1	39	1	382.1	908.2
							R1637 = 76 Leonis																													
26	Jun	23	4	16	10.1	D	1845SG8		6.5	5.9s		62+	104		21	245	53S	148	94	127	+6.1	+5.4	+1.0	-2.5	.356	-29.4		12	51	22.9	-10	20	18	392.6	777.3
							1845 is triple: AB 6.6 9.7 28.8" 296.3, dT = -69sec : AC 6.6 12.5 142" 211.8, dT = +178sec																													
							1845 = NSV 5994, 6.49, range 0.07, V																													
26	Jun	25	1	2	47	m	158499 F2		7.7	7.5		79+	126	-7	42	168	21N	36	47	18	+5.1	+6.8	+9.9	+9.9	.000	90.0		14	20	50.3	-19	19	56	397.6	626.0
26	Jun	25	4	0	42	m	158538wK1		7.3	6.8		80+	127		32	219	10N	25	348	6	+4.4	+7.0	+9.9	+9.9	.000	90.0		14	24	0.4	-19	48	3	398.9	632.5
							158538 is double: AB 7.4 11.6 40" 286.2																													
26	Jun	25	5	2	43	d	158556WA2		6.8			80+	127		22	231	16N	31	344	13	+4.2	+7.0	+1.3	+6.1	.069	78.8		14	25	27.7	-19	57	57	399.9	689.4
							158556 is double: BA 7.2 6.6 35" 114.8, dT = +54sec																													
26	Jun	25	5	3	25	d	2066SA1		6.6	6.6		80+	127		22	231	18N	32	345	14	+4.2	+7.0	+1.3	+5.2	.077	77.5		14	25	29.9	-19	58	12	399.9	690.1
							2066 is quadruple: **Aa,Ab 6.8 7.7 0.018" 329.0, dT = +0.1sec : BC 7.16 8.37 1.21" 89.4, dT = +9sec : AB 6.6 7.2 35" 294.8, dT = -58sec																													
							2066 has been reported as non-instantaneous (OCc 204). Observations are highly desired																													
26	Jun	26	3	46	6.4	D	2174pB8		6.5	6.5		87+	138		35	202	60S	129	108	114	+3.4	+7.3	+2.4	-1.7	.287	-18.1		15	13	17.4	-24	0	30	400.8	586.6
							2174 is triple: ** 7.1 7.1 0.030" 0.0 : AB 6.4 12.5 8.2" 45.0, dT = +2.8sec																													
							2174 has been reported as non-instantaneous (OCc1471). Observations are highly desired																													
26	Jun	26	23	18	47.0	d	2287SB1		2.9	3.0v		92+	147	14	13	129	85S	98	148	86	+3.3	+7.1	+1.0	+0.7	.393	17.5		15	58	51.1	-26	6	51	404.2	808.5
							R2287 = pi Scorpii																													
							2287 is triple: Aa,Ab 5.1 13.4 2.0" 244.0, dT = -4sec : AB 2.9 11.9 50" 128.1, dT = +111sec																													
							2287 is a close double. Observations are highly desired																													
							2287 = pi Sco, 2.88 to 2.91, V, Type ELL, Period 1.570103 days, Phase 76%																													
26	Jun	27	0	31	54.3	R	2287SB1		2.9	3.0v		92+	148	-1	24	141	-49N	313	351	302	+3.0	+7.2	+0.9	-0.6	.343	162.3		15	58	51.1	-26	6	51	403.0	703.8
							R2287 = pi Scorpii																													
							2287 is triple: Aa,Ab 5.1 13.4 2.0" 244.0, dT = -2sec : AB 2.9 11.9 50" 128.1, dT = +147sec																													

Occultation prediction for Tampa Coleman Science Works Thea
E. Longitude - 82 24 25.4, Latitude 28 3 13.1, Alt. 3m; Telescope dia 15cm; dMag 0.0

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      day  Time     P   Star  Sp  Mag  Mag    % Elon Sun  Moon   CA   PA  VA  AA Libration   A   B   RV    Cct durn  R.A. (J2000)  Dec   Mdist   SV
 y   m  d  h  m    s       No  D    v    r V  ill     Alt Alt Az   o    o   o   o   L    B   m/o m/o  "/s     o  sec  h  m   s    o  m  s   Mm   m/s
      2287 is a close double. Observations are highly desired
      2287 = pi Sco, 2.88 to 2.91, V, Type ELL, Period 1.570103 days, Phase  76%
26 Jun 27  2 35 59.1 d    2297kF7  7.0  6.7   93+ 148     35 170  53S 129 139 117 +2.6 +7.4 +2.1-1.0 .287  -17.5     16  3 16.1 -26 43  2 402.1 587.4
26 Jul  3  4  1  9.2 R    3113cB5  5.4  5.5V  91- 144     15 120  47S 212 265 228 -4.5 +2.5 +1.3+2.7 .313 -142.4     21 17 57.3 -17 59  7 396.8 760.4
   R3113 = 30 Capricorni
      3113 is double: ** 6.1 6.1 0.10"  87.0, dT = +0.18sec
      3113 has been reported as non-instantaneous (OCc1602). Observations are highly desired
      3113 = HD 202671, 5.40, , Type ACV, Period 1.9917 days, Phase  99%
26 Jul  4  8 39 35   Gr   3253kB5  5.4  5.5V  83- 131     50 ** GRAZE: CA 21.4N; Dist. 39km in az. 130deg. [Lat = 27.51+1.03(E.Long+82.41)]
26 Jul  4  8 40 20   M    3253kB5  5.4  5.5V  83- 131     51 175  21N 318 323 338 -6.2 +0.6 +9.9+9.9 .000   90.0     22 10 37.5 -11 33 54 389.6 648.3
   R3253 = 38 Aquarii
      3253 = HD 210424, 5.44, , Type ACV, Period 3.9613 days, Phase  44%
26 Jul  7 10 32  7   Gr     68SB9  5.8     S  54-  95  -1 66 ** GRAZE: CA 19.3N; Dist.143km in az. 313deg. [Lat = 29.93+0.93(E.Long+82.41)]
26 Jul  7 10 44 56.1 R     68SB9  5.8     S  54-  95   0 69 168  42N 294 305 316 -7.2 -3.9 +5.6-2.5 .146  112.5      0 32 23.8   6 57 20 374.5 691.4
   R68 = 51 Piscium
       68 is multiple: Aa,Ac 5.8 9.5 0.20"       : Aa,Ab 5.8 8.0 0.27" 284.1, dT = -1.8sec : AB 5.7 9.5 28.5"  81.5, dT = +164sec : AD 5.7 13.1 82"
307.6, dT = -548sec
       68 is a close double. Observations are highly desired
       68 = NSV 15113, 5.67 to 9.0, V, Type E:
26 Jul  8  8 33 34.3 r     194cF5  8.2        44-  83     43  99  71S 230 293 251 -6.3 -4.7 +0.8+1.9 .464 -176.9      1 19 42.8  12  8 45 371.5 837.8
      194 is double: AB 8.67 9.25 0.11" 323.2, dT = +0.01sec
      194 is a close double. Observations are highly desired
26 Jul  8 10 11 50.4 R     197cK0  7.0  6.5   43-  82  -6 63 119  74S 233 285 253 -6.5 -4.9 +1.5+1.8 .413  177.5      1 21 58.3  12 36 15 369.8 741.8
26 Jul  9  6 44  4.2 R     317 F5  6.4  6.2   33-  71     11  76  73S 235 299 254 -5.4 -5.3 -0.2+1.5 .601 -173.1      2  9 23.1  17 13 27 369.91086.2
   R317 = 20 H1. Arietis
26 Jul 10  8 33 17.2 r   75775SG5  8.5  8.1v  22-  56     24  76  66S 234 302 249 -4.1 -6.0 +0.0+1.6 .570 -170.3      3 11 13.8  22 24 57 363.51019.6
     75775 is triple: AC 8.6 13.3 24.1" 301.1, dT = -16sec : AB 8.6 10.6 33" 321.1, dT = -3sec
     75775 = BD+21 418, 8.49 to 8.54, V, Type WTTS
26 Jul 10  9 28 50.5 r   75796 K0  9.0  8.5   22-  56     36  81  86N 262 333 277 -4.1 -6.1 +0.8+1.1 .501  160.4      3 13  0.1  22 46 14 362.2 934.7
26 Jul 10 10  8 10.7 R     470WK0  6.8  6.2   22-  55  -7 44  84  81N 267 340 282 -4.1 -6.2 +1.3+1.0 .453  154.7      3 14 17.2  22 57 14 361.4 878.1
      470 is double: AB 6.9 10.4 42"  33.3, dT = +55sec
26 Jul 11  9 19 12   m   76530 K3  7.8  7.0   13-  42     22  71  15N 340  49 350 -2.4 -6.1 +9.9+9.9 .000   90.0      4 16 41.6  26 21 29 359.91045.1
26 Jul 12  8 53 26.1 r   77125 M0  9.1  8.1    6-  28      5  61  82S 267 328 271 -0.6 -5.7 -0.3+0.8 .672  172.6      5 21 38.5  27 25 55 359.41181.1
26 Jul 16 19 29 31.5 d    1466cB9  5.3  5.3    8+  33  63 74 161  88N 108 125  90 +6.2 -0.1 +2.3-0.7 .377   20.7      9 58 13.4  12 26 41 363.2 710.4
   R1466 = nu Leonis
      1466 is double: ** 6.0 6.0 0.050"
      1466 has been reported as non-instantaneous (OCc1407). Observations are highly desired
26 Jul 18  2 22 14.9 d    1597 K5  8.3  7.5   17+  49      7 271  53N  77  15  56 +6.3 +2.5 +0.3-0.6 .406   43.2     10 59 34.7   4 21 14 375.91017.2
26 Jul 24  2 27  9.1 d  183789kA2  7.8  7.7   74+ 119     33 200  47N  56  36  43 +3.3 +7.6 +3.1+1.0 .194   49.2     15 47 23.3 -25 52  4 400.7 577.6
26 Jul 24  2 44 53.6 d    2256PA1  7.0  6.9   74+ 119     32 205  71N  80  56  68 +3.2 +7.6 +2.7-0.3 .276   23.3     15 47 56.5 -25 59 13 400.9 585.1
      2256 is double: ** 7.7 7.7 0.10"  90.0, dT = +0.36sec
      2256 has been reported as non-instantaneous (OCc1482). Observations are highly desired
26 Jul 24  4 45 30.0 d    2261 K3  6.6  5.8   75+ 120     16 228  59S 130  83 118 +2.7 +7.5 +2.0-2.3 .292  -35.5     15 50 34.9 -26 17 23 402.7 701.7
26 Jul 28  2 17 31.4 d    2824 K4  7.3  6.5   98+ 163     27 146  53N  31  64  38 -1.3 +5.3 +2.6+3.0 .208   49.4     19 21 44.2 -26  9 59 400.2 622.1
26 Jul 31  9 14 20   r  164779KG5  7.2  6.8   97- 160     37 225  30N 311 271 330 -5.4 +0.6 +9.9+9.9 .058   98.6     21 58 24.3 -12 39 53 390.5 743.7
   Distance of 164779 to Terminator = 14.4"; to 3km sunlit peak = 4.5"
26 Aug  2  7 23 18.2 R    3459 K0  6.4  5.8   87- 137     58 154  49S 204 227 226 -5.8 -2.1 +1.0+2.4 .343 -158.0     23 29 27.0 - 1 47 28 382.4 685.3
   R3459 = 11 Piscium
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Occultation prediction for Tampa Coleman Science Works Thea
E. Longitude - 82 24 25.4, Latitude 28 3 13.1, Alt. 3m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon	Sun Alt	Moon Alt	Az	CA o	PA o	VA o	AA o	Libration L	B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	Aug	2	9	58	28.2	R	3467	kK1	6.4	5.8		86-	136	-12	53	224	66S	220	183	242	-6.3	-2.4	+1.4	+1.4	.380	-173.0		23	31	57.6	- 1	5	9	382.3	709.3
	R3467 = 13 Piscium																																	
26	Aug	3	6	52	12.0	r	30	SA0	7.1	7.1		79-	125		52	122	30S	185	234	207	-5.7	-3.4	+0.1	+3.2	.291	-136.3		0	15	57.3		4	15	4	379.1	741.4
	30 is triple: AB 7.0 14.1 0.8" 246.0, dT = -1.3sec : AC 7.0 12.2 5.0" 347.2, dT = +16sec																																	
	30 is a close double. Observations are highly desired																																	
26	Aug	4	9	36	19	m	163	pF2	7.3	7.1		68-	112		74	171	17N	319	327	340	-5.9	-4.9	+9.9	+9.9	.000	90.0		1	7	4.0	11	33	8	373.7	687.6
	163 is double: AB 7.3 10.5 8.3" 201.5																																	
	163 is a close double. Observations are highly desired																																	
26	Aug	5	9	43	35.8	r	92732	wF5	7.8	7.5		58-	99		74	130	67N	273	317	292	-5.3	-5.8	+3.0	+0.2	.302	140.4		1	58	47.5	17	1	33	369.8	703.6
	92732 is double: AB 7.8 17.9 79" 249.5, dT = -241sec																																	
26	Aug	7	5	31	59.0	r	542	pB8	5.8	5.8		37-	74		3	63	82S	251	311	263	-3.1	-6.1	-0.4	+1.1	.659	179.3		3	45	54.5	24	33	16	369.0	1179.4
	R542 = Asterope = 21 Tauri																																	
	542 is triple: AB 5.8 6.4 150" 130.1, dT = +116sec : AD 5.8 12.7 170" 74.1, dT = +258sec																																	
26	Aug	7	5	33	45.1	r	543	pA0	6.4	6.4		37-	74		3	64	74S	243	304	256	-3.1	-6.1	-0.5	+1.2	.653	-173.1		3	46	2.9	24	31	40	369.0	1176.7
	R543 = 22 Tauri																																	
	543 is triple: BC 6.4 15.1 52" 267.9, dT = -72sec : BA 6.4 5.8 150" 310.1, dT = -90sec																																	
26	Aug	7	5	49	56.4	r	548	pB9	6.8	6.8		36-	74		6	65	57S	226	288	238	-3.0	-6.1	-0.6	+1.6	.587	-155.7		3	46	59.4	24	31	12	368.6	1151.7
	548 is quadruple: Aa,Ab 6.8 6.9 0.011" 249.1, dT = -0.02sec : AB 6.8 14.8 102" 299.3, dT = -48sec : AC 6.8 13.0 123" 190.1, dT = -170sec																																	
	548 is a close double. Observations are highly desired																																	
26	Aug	7	6	16	46.8	R	555	K5	6.4	5.6s		36-	74		12	68	38N	311	16	324	-3.0	-6.2	+0.9	-0.6	.289	117.7		3	48	6.5	24	59	18	368.0	1109.8
	555 = NSV 1316, 6.44, range 0.02, 0V, Type VAR, Period 1.48987 days																																	
26	Aug	7	7	47	55.2	R	571	pA2	6.8	6.7		36-	73		30	75	76N	274	345	286	-3.0	-6.3	+0.8	+0.8	.483	153.0		3	51	25.3	25	9	47	365.9	962.3
	571 is double: ** 7.1 9.1																																	
26	Aug	7	7	58	5.9	r	76281	K0	8.0	7.4		35-	73		32	76	44N	306	18	318	-3.0	-6.3	+1.9	-0.7	.271	120.4		3	52	0.9	25	20	30	365.6	947.0
26	Aug	7	8	8	25.0	R	574	pG0	6.8	6.5		35-	73		34	77	88S	258	330	270	-3.0	-6.3	+0.7	+1.2	.514	168.3		3	52	11.4	25	9	47	365.4	930.0
26	Aug	8	7	54	35.1	R	76841	cK1	7.3	6.7		25-	60		20	69	74S	251	319	257	-1.6	-6.1	+0.0	+1.3	.588	-175.8		4	55	34.6	27	12	9	364.0	1041.3
	76841 is double: ** 7.6 10.1 0.08" 82.0, dT = +0.14sec																																	
	76841 has been reported as non-instantaneous (OCc 753). Observations are highly desired																																	
26	Aug	8	8	47	16.6	r	76857	cF5	8.9	8.6		24-	59		30	73	82S	259	331	265	-1.6	-6.1	+0.5	+1.2	.540	175.2		4	57	40.8	27	22	33	362.9	953.6
	76857 is double: ** 9.7 9.7 0.050" 55.0, dT = +0.08sec																																	
	76857 has been reported as non-instantaneous (OCc1118). Observations are highly desired																																	
26	Aug	8	9	33	34.7	r	X 6391	WA0	8.7	8.5		24-	59		40	76	41S	218	293	224	-1.6	-6.2	+0.1	+2.5	.404	-143.6		4	59	53.1	27	19	14	361.9	880.6
	X 6391 is double: BA 8.7 7.0 20.4" 26.1, dT = +49sec																																	
26	Aug	8	9	34	23.2	R	746	WB7	7.0	6.9		24-	59		40	76	42S	219	294	225	-1.6	-6.2	+0.1	+2.4	.409	-144.7		4	59	53.7	27	19	32	361.9	879.3
	746 is double: AB 7.0 8.7 20.4" 206.1, dT = -49sec																																	
26	Aug	9	7	43	56.3	R	909	SB9	6.0	5.9s		15-	46		5	61	82N	283	344	283	-0.1	-5.4	-0.1	+0.5	.617	161.0		6	1	0.5	27	34	21	363.6	1150.6
	909 is triple: Aa,Ab 6.1 9.2 194.0, dT = 0.00sec : AB 6.1 12.4 9.5" 242.4, dT = -12sec																																	
	909 is a close double. Observations are highly desired																																	
	909 = NSV 16751, 6.04, range 0.01, 2V, Type VAR, Period 9.26012 days																																	
26	Aug	9	8	35	42.4	r	77894	SF2	8.8	8.4		15-	46		15	66	81N	284	350	284	+0.0	-5.4	+0.3	+0.5	.566	159.5		6	3	26.6	27	38	33	362.5	1062.5
	77894 is triple: AB 8.9 9.6 11.5" 263.5, dT = -19sec : AC 8.9 11.1 25.6" 189.6, dT = +3sec																																	
26	Aug	9	8	49	11.9	R	77909	wA0	7.6	7.6		15-	45		18	68	80S	265	332	265	+0.0	-5.4	+0.1	+1.0	.591	178.1		6	4	1.0	27	34	14	362.2	1039.1
	77909 is double: AB 7.6 10.8 21.6" 132.5, dT = +25sec																																	
26	Aug	9	10	6	44.9	r	927	G0	8.0	7.7		15-	45	-11	33	74	18S	203	276	203	+0.0	-5.5	-0.8	+4.0	.258	-119.7		6	7	59.1	27	25	42	360.5	910.0
26	Aug	9	10	10	46.7	r	77987	B9	8.5	8.5V		14-	45	-10	34	74	56N	309	23	309	+0.0	-5.5	+1.6	-0.7	.360	134.2		6	7	39.9	27	51	36	360.4	903.2
	77987 = HD 41639, 8.44, , Type VAR																																	
26	Aug	10	8	46	22.4	R	1085	SG8	7.1	6.7		7-	32		4	63	66S	259	320	253	+1.6	-4.3	-0.4	+1.0	.629	-167.5		7	9	35.4	25	43	43	362.9	1133.5
	1085 is triple: AB 7.2 13.0 34" 68.2, dT = +53sec : AC 7.2 7.8 125" 78.3, dT = +198sec																																	

Occultation prediction for Tampa Coleman Science Works Thea
E. Longitude - 82 24 25.4, Latitude 28 3 13.1, Alt. 3m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon Alt	Sun Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	Aug	10	8	48	2.6	r	79125	K2	8.4	7.7		7-	32	4	63	48S	241	301	234	+1.6	-4.3	-0.6	+1.5	.551	-149.1		7	9	48.2	25	38	40	362.8	1130.7
26	Aug	10	8	49	40.8	r	79124	WF0	7.8	7.6		7-	32	5	63	68S	261	322	255	+1.6	-4.3	-0.3	+1.0	.630	-169.3		7	9	44.2	25	44	5	362.8	1127.8
							79124 is double: CA 7.8 7.2 125" 258.3, dT = -198sec																												
26	Aug	10	9	43	49.8	r	79168	K2	8.7	8.1		7-	31	15	69	23S	216	282	210	+1.7	-4.4	-0.9	+2.9	.335	-124.6		7	12	41.4	25	32	39	361.7	1035.1
26	Aug	10	9	46	20.5	r	79159	A5	9.3	9.1		7-	31	15	69	89S	283	348	276	+1.7	-4.4	+0.3	+0.5	.577	169.3		7	12	19.6	25	49	25	361.6	1030.0
26	Aug	10	9	58	33.1	R	1094	A0	7.1	7.1		7-	31	18	70	74S	268	334	261	+1.7	-4.4	+0.2	+0.9	.574	-175.6		7	12	49.4	25	44	55	361.3	1009.1
							R1094 = 49 Geminorum																												
26	Aug	14	19	44	51.0	d	1635	cM0	5.2	4.4		6+	28	57	63	197	58S	150	135	128	+6.0	+2.8	+1.2	-2.2	.382	-16.1		11	17	17.4	2	0	38	370.4	713.5
							R1635 = 75 Leonis																												
							1635 is double: ** 5.8 6.6 0.044" 0.0																												
							1635 has been reported as non-instantaneous (OCc 763). Observations are highly desired																												
26	Aug	16	1	34	7.8	D	1759	pA*	6.6	6.4v		13+	43	5	261	72N	99	38	77	+5.7	+4.8	+0.3	-1.2	.490	17.7		12	14	15.5	- 5	43	0	382.4	954.0
							1759 is triple: AB 6.6 13.5 10.6" 0.9, dT = -3sec : AC 6.6 11.9 86" 185.9, dT = +11sec																												
							1759 = FG Vir, 6.53 to 6.58, V, Type DSCTC, Period 0.079 days																												
26	Aug	20	0	57	20.3	d	183485	*	7.5	6.9v		49+	89	30	209	67S	127	99	113	+3.8	+7.6	+2.4	-1.8	.289	-21.8		15	27	48.3	-25	10	10	398.1	601.6
							183485 = HM Lib, 7.42 to 7.63, V, Type PVTELIII																												
26	Aug	23	0	42	15.3	D	2617	cK0	4.6	4.1		76+	122	-10	32	167	41N	37	51	37	+0.5	+6.6	+3.1	+2.6	.185	50.7		18	8	5.0	-28	27	26	401.0	567.0
							2617 is double: AB 5.1 5.9 0.26" 12.0, dT = +1.3sec																												
							2617 is a close double. Observations are highly desired																												
26	Aug	23	1	2	40.7	d	186346	F5	7.6	7.4		77+	122	33	172	61S	115	123	115	+0.4	+6.6	+2.9	-0.7	.253	-28.9		18	8	52.1	-28	45	19	400.9	561.5
26	Aug	23	1	51	49.0	r	2617	cK0	4.6	4.1		77+	122	33	185	-43N	312	308	313	+0.2	+6.6	+3.5	-2.1	.184	129.3	.01	18	8	5.0	-28	27	26	400.8	563.2
							2617 is double: AB 5.1 5.9 0.26" 12.0, dT = -0.7sec																												
							2617 is a close double. Observations are highly desired																												
26	Aug	23	4	11	57.7	d	186461	cA2	7.4	7.2v		77+	123	23	217	30N	25	348	26	-0.4	+6.4	+0.2	+1.8	.230	48.2		18	12	37.6	-28	14	11	401.8	673.7
							186461 is double: ** 8.2 8.2 0.050"																												
							186461 has been reported as non-instantaneous (OCc1536). Observations are highly desired																												
							186461 = V4385 Sgr, 7.42 to 7.46, Hp, Type ELL:, Period 2.62462 days, Phase 27%																												
26	Aug	24	4	57	54.2	d	187716	SG6	7.2	6.6		85+	134	25	216	82S	87	51	93	-1.7	+5.4	+2.0	-0.7	.332	-22.1		19	8	8.1	-26	50	5	400.1	695.0
							187716 is triple: **Aa,Ab 7.8 7.8 0.050" 160.0, dT = +0.04sec : AB 7.3 8.6 45" 123.9, dT = +110sec																												
							187716 has been reported as non-instantaneous (OCc 769). Observations are highly desired																												
26	Aug	26	6	23	57.9	d	3049	B9	7.3	7.3		96+	157	32	219	41N	20	344	34	-3.9	+2.8	+0.3	+1.7	.318	33.7		20	52	16.1	-19	38	37	393.8	730.4
26	Aug	27	6	27	13.7	d	164579	SF3	7.2	7.0		99+	169	41	212	68N	44	15	61	-4.6	+1.3	+1.3	+1.1	.372	6.0		21	41	28.1	-14	50	29	389.5	705.8
							164579 is triple: AB 7.2 12.0 17.8" 104.2, dT = +23sec : AC 7.2 12.6 119" 257.0, dT = -267sec																												
							Distance of 164579 to Terminator = 15.4"; to 3km sunlit peak = 5.5"																												
26	Aug	27	7	59	55.1	d	3177	cA9	5.9	5.7		99+	169	28	233	44N	20	333	38	-4.9	+1.1	+0.2	+1.7	.359	31.8		21	43	4.4	-14	23	59	390.5	800.0
							R3177 = 44 Capricorni																												
							3177 is double: ** 6.8 6.8 0.10" 90.0, dT = +0.1sec																												
							3177 has been reported as non-instantaneous (OCc1608). Observations are highly desired																												
							Distance of 3177 to Terminator = 8.0"; to 3km sunlit peak = 0.8"																												
26	Aug	28	2	48	25.0	r	X242703	k	11.7				87E	179	35	129	-77N	227	271	246	-4.2	+0.2	+1.5	+2.0	.376	-171.0		22	23	20.8	-10	29	40	386.9	715.3
26	Aug	28	2	51	32.0	d	X182643	k	11.5	11.2			83E	179	36	129	84U	85	129	105	-4.3	+0.2	+2.0	+1.1	.331	-29.8		22	25	12.9	-10	17	6	386.9	715.4
26	Aug	28	2	52	41.3	d	X182637	k	11.1	10.9			82E	179	36	129	95U	55	99	75	-4.3	+0.2	+1.6	+1.8	.381	0.3		22	25	3.2	-10	9	15	386.9	714.6
26	Aug	28	2	57	34.0	d	X182649	k	11.2	10.9			75E	180	37	130	77U	90	133	110	-4.3	+0.2	+2.2	+0.9	.310	-35.1		22	25	20.6	-10	17	8	386.8	710.8
26	Aug	28	2	59	6.9	r	X242709	k	11.5				72E	180	37	131	-75N	226	269	246	-4.3	+0.2	+1.5	+2.0	.373	-171.2		22	23	34.8	-10	27	28	386.7	707.3
26	Aug	28	3	2	46.5	d	X182655	k	11.1	10.8			67E	180	38	131	72U	95	137	115	-4.3	+0.2	+2.4	+0.7	.288	-40.2		22	25	27.1	-10	17	16	386.7	707.0
26	Aug	28	3	3	28.4	r	X182578	k	11.1	10.4			66E	180	38	132	-90S	210	252	230	-4.3	+0.2	+1.3	+2.4	.341	-155.4		22	23	54.0	-10	29	12	386.7	704.3
26	Aug	28	3	17	14	d	X242722		11.5				46E	180	40	135	41N	337	16	357	-4.3	+0.2	-2.5	+7.4	.085	76.8		22	24	17.5	- 9	58	36	386.4	696.9
26	Aug	28	3	21	18.1	D	165050	K0	9.8	9.3			40E	180	41	136	51N	346	24	5	-4.4	+0.2	-0.8	+5.0	.141	67.6		22	24	31.7	- 9	56	53	386.4	694.5

Occultation prediction for Tampa Coleman Science Works Thea
E. Longitude - 82 24 25.4, Latitude 28 3 13.1, Alt. 3m; Telescope dia 15cm; dMag 0.0

	day	Time	P	Star	Sp	Mag	Mag	%	Elon	Sun	Moon	CA	PA	VA	AA	Libration		A	B	RV	Cct durn	R.A. (J2000)			Dec			Mdist	SV
y	m d	h m s		No	D	v	r V	ill		Alt	Alt Az	o	o	o	o	L	B	m/o	m/o	"/s	o sec	h	m	s	o	m	s	Mm	m/s
26	Aug 28	3 22 21.1	R	X 51850k		10.6	10.4	38E	180		41 137	-29N	265	303	285	-4.4	+0.2	+2.4	+1.0	.313	147.9	22	23	46.0	-10	12	53	386.3	692.5
26	Aug 28	3 22 59.6	d	X182644k		10.9	10.4	38E	180		41 136	96U	25	64	45	-4.4	+0.2	+1.2	+2.5	.328	27.7	22	25	16.4	- 9	57	32	386.3	694.1
26	Aug 28	3 29 24.1	D	X 51928k		10.2	9.9	29E	180		42 138	51U	100	137	120	-4.4	+0.2	+2.9	+0.4	.250	-47.2	22	25	59.1	-10	12	45	386.3	690.3
26	Aug 28	3 36 42	r	X242722		11.5		21E	180		43 140	22N	309	344	329	-4.4	+0.1	+6.6	-3.9	.084	103.3	22	24	17.5	- 9	58	36	386.1	685.4
26	Aug 28	3 38 54.5	R	3286	K0	7.2	6.4	19E	180		44 141	-30N	255	290	275	-4.4	+0.1	+2.3	+1.2	.336	156.9	22	24	7.6	-10	11	52	386.1	683.8
26	Aug 28	3 39 6.5	r	X182632k		11.7	11.2	19E	180		43 141	75U	192	226	211	-4.4	+0.1	+0.8	+2.9	.277	-139.3	22	24	55.9	-10	23	4	386.1	683.9
26	Aug 28	3 49 30.2	R	X 51874		9.8	9.2	10E	180		45 144	87U	228	260	247	-4.4	+0.1	+1.7	+1.9	.362	-176.0	22	24	34.2	-10	16	1	386.0	679.2
26	Aug 28	3 53 18.3	D	165076	kG5	9.6	9.0	8E	180		45 144	63U	72	104	92	-4.5	+0.1	+2.3	+1.3	.339	-21.0	22	26	25.0	-10	0	0	385.9	679.5
26	Aug 28	3 54 11.3	d	X182702k		11.7	11.5	8E	180		45 144	58U	80	111	100	-4.5	+0.1	+2.5	+1.0	.318	-28.7	22	26	28.0	-10	1	49	385.9	679.1
26	Aug 28	3 54 44.0	R	165050	K0	9.8	9.3	7E	180		46 145	26N	299	330	319	-4.5	+0.1	+4.9	-1.6	.138	112.4	22	24	31.7	- 9	56	53	385.9	677.7
26	Aug 28	3 59 6.3	r	X242731k		11.2		6E	180		46 147	81U	231	261	251	-4.5	+0.1	+1.8	+1.8	.361	179.7	22	24	42.5	-10	13	5	385.9	675.7
26	Aug 28	4 2 19.6	r	X182643k		11.5	11.2	5E	180		46 148	59U	201	230	221	-4.5	+0.1	+1.1	+2.5	.312	-150.0	22	25	12.9	-10	17	6	385.8	674.7
26	Aug 28	4 4 18.9	r	X182649k		11.2	10.9	4E	180		47 148	54U	196	224	215	-4.5	+0.1	+0.9	+2.7	.294	-144.8	22	25	20.6	-10	17	8	385.8	674.1
26	Aug 28	4 5 7.9	r	X182655k		11.1	10.8	4E	180		47 148	50U	190	218	210	-4.5	+0.1	+0.7	+2.9	.275	-139.7	22	25	27.1	-10	17	16	385.8	673.9
26	Aug 28	4 8 15.6	d	X242756k		11.4		4E	180		47 149	94U	24	51	44	-4.5	+0.1	+1.2	+2.5	.322	26.7	22	26	7.4	- 9	47	8	385.7	674.4
26	Aug 28	4 9 19.8	d	X242766k		11.8		4E	180		47 149	74U	65	93	85	-4.5	+0.1	+2.2	+1.4	.348	-14.8	22	26	40.4	- 9	54	33	385.7	674.1
26	Aug 28	4 11 57.7	D	X182712k		10.8	10.3	3E	180		48 150	73U	69	96	89	-4.5	+0.1	+2.3	+1.3	.341	-18.8	22	26	45.0	- 9	54	55	385.7	673.4
26	Aug 28	4 16 47.6	r	X182637k		11.1	10.9	4E	180		48 152	68U	230	255	250	-4.5	+0.1	+1.9	+1.7	.359	179.9	22	25	3.2	-10	9	15	385.7	670.7
26	Aug 28	4 22 6.6	D	165087	G5	9.0	8.6	4E	180		49 153	71U	84	108	104	-4.6	+0.1	+2.8	+0.7	.295	-34.6	22	27	0.2	- 9	56	38	385.6	670.9
26	Aug 28	4 25 47.9	R	X 51928k		10.2	9.9	5E	180		49 155	35U	182	205	202	-4.6	+0.0	+0.3	+3.3	.243	-132.7	22	25	59.1	-10	12	45	385.6	669.1
26	Aug 28	4 30 33.7	d	X 51935		11.2	11.0	7E	180		50 156	22N	10	31	30	-4.6	+0.0	+0.7	+2.9	.277	39.3	22	26	18.0	- 9	40	53	385.5	669.3
26	Aug 28	4 40 13.4	r	X182644k		10.9	10.4	13E	180		50 160	76U	256	274	276	-4.6	+0.0	+2.6	+0.9	.317	152.5	22	25	16.4	- 9	57	32	385.4	667.1
26	Aug 28	4 57 2.8	d	X242782		11.6		30E	180		52 166	-75N	73	85	93	-4.7	+0.0	+2.6	+0.9	.325	-24.4	22	27	36.1	- 9	45	16	385.3	667.3
26	Aug 28	5 8 37.1	r	X182702k		11.7	11.5	46E	180		52 171	58U	199	207	219	-4.7	+0.0	+0.9	+2.4	.312	-151.0	22	26	28.0	-10	1	49	385.3	667.0
26	Aug 28	5 12 59.4	R	165076	kG5	9.6	9.0	52E	180		52 173	62U	206	213	226	-4.7	-0.1	+1.2	+2.2	.333	-158.6	22	26	25.0	-10	0	0	385.2	667.4
26	Aug 28	5 26 42.6	r	X242756k		11.4		73E	180		52 178	91U	254	255	274	-4.8	-0.1	+2.6	+0.7	.321	153.7	22	26	7.4	- 9	47	8	385.2	669.4
26	Aug 28	5 28 48.5	D	146104	kG5	10.3	10.0	76E	180		53 178	-75N	55	56	75	-4.8	-0.1	+2.0	+1.3	.356	-7.4	22	28	1.5	- 9	33	21	385.2	670.2
26	Aug 28	5 29 33.1	d	X182760		11.3	10.5	77E	180		53 178	-80N	60	61	80	-4.8	-0.1	+2.2	+1.1	.350	-12.7	22	28	5.4	- 9	34	21	385.2	670.3
26	Aug 28	5 32 11.6	R	165087	G5	9.0	8.6	80E	180		52 180	82U	192	192	212	-4.8	-0.1	+0.6	+2.6	.294	-145.0	22	27	0.2	- 9	56	38	385.2	670.4
26	Aug 28	5 32 23.4	r	X242766k		11.8		81E	180		52 180	80U	212	212	232	-4.8	-0.1	+1.3	+1.9	.346	-164.7	22	26	40.4	- 9	54	33	385.2	670.5
26	Aug 28	5 33 9.6	R	X182712k		10.8	10.3	82E	180		52 180	81U	208	208	228	-4.8	-0.1	+1.2	+2.0	.339	-160.7	22	26	45.0	- 9	54	55	385.2	670.6
26	Aug 28	5 36 14.3	d	X242774		11.7		86E	180		53 182	-22N	359	358	19	-4.8	-0.1	-0.1	+3.3	.241	48.0	22	27	17.2	- 9	24	58	385.1	671.6
26	Aug 28	5 38 47.2	r	X 51935		11.2	11.0	89E	180		53 183	71N	266	263	286	-4.8	-0.1	+3.1	+0.1	.280	141.1	22	26	18.0	- 9	40	53	385.1	672.0
26	Aug 29	7 6 19.2	R	3416	cA3	5.6	5.5	99-	167		57 203	42S	193	173	215	-5.3	-1.8	+0.6	+2.6	.317	-147.4	23	15	34.3	- 3	29	47	381.1	696.2

3416 is double: ** 6.4 6.4 0.050"

3416 has been reported as non-instantaneous (OCc1638). Observations are highly desired

Distance of 3416 to Terminator = 11.1"; to 3km sunlit peak = 2.7"

26	Aug 30	5 39 34.8	r	128524	K2	7.6	6.9	95-	155		59 140	60N	272	307	294	-4.9	-3.1	+3.1	+0.5	.275	134.9	0	0	23.5	2	40	32	377.7	714.7
26	Aug 30	9 49 54.7	r	6	G5	6.9	6.3	95-	154		43 247	85S	236	182	259	-5.6	-3.6	+1.4	+0.6	.414	176.2	0	5	22.2	3	36	22	378.2	761.5
26	Sep 1	4 45 56.6	r	244	K0	6.7	6.2	82-	130		37 93	32S	187	253	207	-3.8	-5.2	-0.4	+3.0	.326	-132.1	1	39	15.4	14	17	8	373.4	881.0

R244 = 104 Piscium

26	Sep 2	5 57 35.5	r	93005	K0	7.9	7.3	72-	117		43 88	86N	254	324	271	-3.1	-6.0	+1.1	+1.4	.460	163.9	2	34	23.5	19	59	5	370.2	859.2
26	Sep 2	8 1 26.8	R	387	cG5	6.9	6.4S	72-	116		70 107	66N	274	339	291	-3.4	-6.3	+2.7	+0.3	.322	142.8	2	37	34.4	20	34	30	368.4	722.1

387 is double: ** 7.7 7.7 0.10" 90.0, dT = +0.31sec

387 has been reported as non-instantaneous (OCc1190). Observations are highly desired

387 = NSV 15555, 6.91, , Type VAR:

26	Sep 2	9 46 54	m	75509	M*	7.9	7.1v	71-	115		82 218	9N	331	295	348	-3.7	-6.4	+9.9	+9.9	.000	90.0	2	40	31.7	21	11	16	367.9	667.6

75509 = AK Ari, 7.94, range 0.07, 8w, Type LB:, Period 19.3 days, Phase 22%

Occultation prediction for Tampa Coleman Science Works Thea
E. Longitude - 82 24 25.4, Latitude 28 3 13.1, Alt. 3m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon Sun Alt	Moon Alt	Az	CA o	PA o	VA o	AA o	Libration L	B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	Sep	3	6	57	34.8	R	518	SA3	6.0	s		61-	103	46	82	56N	290	4	303	-2.2	-6.4	+2.0	+0.1	.326	133.4		3	34	26.6	24	27	52	367.7	846.1
R518 = 7 Tauri																																	
518 is triple: AB 6.60 6.86 0.79" 348.0, dT = -1.3sec : AB,C 5.9 9.9 22.5" 52.2, dT = +37sec																																	
518 is a close double. Observations are highly desired																																	
518 = NSV 1192, 5.92 to 5.96, V																																	
26	Sep	3	9	13	23.4	r	76041	F0	8.2	8.0		61-	102	75	98	56S	222	296	235	-2.5	-6.6	+1.4	+2.4	.360	-156.7		3	38	35.9	24	36	6	366.0	694.7
26	Sep	3	9	38	45.0	R	76046	cA0	7.1	7.1		60-	102	80	106	66S	232	301	245	-2.6	-6.7	+1.8	+1.9	.370	-165.4		3	39	6.7	24	42	10	365.8	677.7
76046 is double: AB 7.1 45.0, dT = -27sec																																	
26	Sep	4	7	51	5.8	R	701	SF2	6.6	6.4		49-	89	45	79	63S	235	311	243	-1.2	-6.4	+0.6	+1.9	.452	-163.6		4	38	29.5	26	56	23	365.9	836.8
701 is triple: 6.6 9.2 3.1" 169.4, dT = -2.8sec : AB 7.36 7.21 4.48" 187.8, dT = -7sec																																	
701 is a close double. Observations are highly desired																																	
26	Sep	4	7	51	8.8	r	X 70481	p	7.3	7.2		49-	89	45	79	63S	235	312	243	-1.2	-6.4	+0.6	+1.9	.453	-163.7		4	38	29.6	26	56	26	365.9	836.7
X 70481 is triple: 7.3 9.2 5.8" 174.9, dT = -6sec : AC 7.4 12.9 92" 203.6, dT = -173sec																																	
X 70481 is a close double. Observations are highly desired																																	
26	Sep	4	10	17	19	m	715	cK5	8.0	7.5		49-	88	76	87	7N	346	72	354	-1.5	-6.5	+9.9	+9.9	.000	90.0		4	43	35.4	27	41	15	364.1	676.7
715 is double: ** 8.8 8.8 0.10" 90.0																																	
715 has been reported as non-instantaneous (OCc 130). Observations are highly desired																																	
26	Sep	5	8	22	26	m	77495	cA0	8.1	8.1		38-	76	38	75	10N	350	66	352	+0.0	-5.8	+9.9	+9.9	.000	90.0		5	44	59.0	28	11	40	365.1	862.1
77495 is double: AB 8.0 8.0 0.20" 42.2																																	
77495 is a close double. Observations are highly desired																																	
26	Sep	5	8	25	19.5	r	868	SA0	7.5	7.5		38-	76	39	76	52S	232	308	234	+0.0	-5.8	+0.4	+2.1	.427	-151.9		5	44	21.2	27	43	53	365.1	856.3
868 is triple: AB 7.5 9.8 8.6" 254.1, dT = -19sec : AC 7.5 12.7 47" 40.4, dT = +109sec																																	
868 is a close double. Observations are highly desired																																	
26	Sep	7	8	15	1.1	r	79740	cF2	8.5	8.3		17-	49	11	69	81S	275	339	265	+2.5	-3.6	+0.0	+0.7	.582	-178.2		7	50	44.7	23	47	1	367.2	1037.4
79740 is double: ** 9.2 9.2 0.10" 143.0, dT = +0.11sec																																	
79740 has been reported as non-instantaneous (OCc 683). Observations are highly desired																																	
26	Sep	7	9	37	36.0	r	79781	K2	8.8	8.2		17-	48	27	76	39S	233	302	223	+2.5	-3.6	+0.1	+2.6	.354	-134.2		7	54	14.3	23	30	14	365.5	899.7
26	Sep	7	10	34	17.6	R	79804	cG0	7.4			16-	48	-9	39	81	83N	291	3	281	+2.4	-3.6	+1.3	+0.1	.454	169.9		7	56	2.8	23	41	33	364.4	815.1
79804 is double: AB 7.90 8.57 0.11" 108.1, dT = +0.25sec																																	
79804 is a close double. Observations are highly desired																																	
26	Sep	7	10	38	24.1	R	1195	B8	6.8	6.9		16-	48	-8	40	82	83S	277	350	267	+2.4	-3.6	+1.2	+0.6	.457	-176.4		7	56	6.5	23	37	26	364.3	809.6
26	Sep	8	9	20	15.5	r	98186	kB5	8.5	8.6		9-	35	10	74	74N	304	8	289	+3.6	-2.1	+0.4	-0.2	.533	159.9		8	52	20.0	19	21	3	368.1	1013.4
26	Sep	8	9	44	28.4	R	98198	K5	7.6	6.8		9-	35	15	76	67N	311	16	297	+3.7	-2.1	+0.6	-0.5	.489	153.6		8	53	20.6	19	19	20	367.6	973.2
26	Sep	8	19	24	14.5	D	Jupiter		-1.7	-1.7		7-	31	54	35	272	-37S	163	94	146	+2.5	-1.1	-0.2	-2.6	.403	-37.9		9	10	15.8	16	52	26	366.3	907.3
Jupiter limb contacts offset by ±39.8 secs, at 19 23 35 and 19 24 54 Both contacts are against the bright limb of Jupiter																																	
26	Sep	8	20	12	10.1	R	Jupiter		-1.7	-1.7		7-	31	45	25	277	65S	265	197	248	+2.5	-1.0	+0.8	-0.8	.433	-142.1		9	10	15.8	16	52	26	367.3	978.4
Jupiter limb contacts offset by ±37.0 secs, at 20 11 33 and 20 12 47 Both contacts are against the bright limb of Jupiter																																	
26	Sep	9	10	55	3	m	1449	M0	6.5	5.6s		3-	21	-5	16	84	1S	202	267	184	+4.7	-0.4	+9.9	+9.9	.000	-90.0		9	51	2.0	13	3	58	369.5	948.1
R1449 = 23 Leonis																																	
1449 = NSV 18283, 6.45, range 0.00, 6V, Type VAR, Period 2.82446 days																																	
26	Sep	15	0	52	33.9	D	2046	A5	7.0	6.8v		16+	47	7	243	33S	172	115	153	+4.2	+7.2	+1.8	-4.6	.175	-66.0		14	17	27.7	-19	57	50	393.6	820.6
2046 = MW Vir, 7. to 7.04, Hp, Type EW, Period 0.493086 days, Phase 47%																																	
26	Sep	16	1	41	46.0	D	2164	dK4	6.6	5.7		24+	59	5	240	54S	145	89	130	+3.4	+7.5	+1.5	-2.9	.287	-47.1		15	9	51.3	-23	59	9	397.9	813.8
2164 is double: AB 6.7 12.5 9.1" 204.6, dT = +16sec																																	
2164 is a close double. Observations are highly desired																																	
26	Sep	17	2	9	32.1	d	2297	kF7	7.0	6.7		33+	70	7	235	88N	101	48	90	+2.4	+7.5	+1.1	-1.3	.396	-10.3		16	3	16.1	-26	43	2	400.8	782.6
26	Sep	20	3	2	25.9	D	2723	K0	6.6	6.1		61+	103	22	218	75N	69	31	73	-1.4	+5.7	+1.4	-0.2	.358	-1.0		18	46	3.9	-27	29	56	401.1	695.8
26	Sep	23	2	18	6.5	d	3115	F0	7.1	6.9		86+	137	44	172	62N	42	49	58	-4.2	+2.2	+1.8	+1.7	.326	11.5		21	18	15.7	-17	27	44	390.6	630.2

Occultation prediction for Tampa Coleman Science Works Thea
E. Longitude - 82 24 25.4, Latitude 28 3 13.1, Alt. 3m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon	Sun Alt	Moon Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
	R3115 = 31 Capricorni																																		
26	Sep	23	5	27	47.5	D	3126	G8	4.3	3.8v		87+	138	30	226	83N	64	22	80	-4.8	+1.7	+1.3+0.1	.395	-11.2			21	22	14.8	-16	50	4	391.3	764.1
	R3126 = Tae = iota Capricorni																																		
	3126 = iot Cap, 4.27, range 0.06, V, Type BY																																		
26	Sep	24	4	40	20.6	d	3244	K0	7.3	6.7		93+	149	47	207	36N	15	351	34	-5.2	+0.4	+0.5+2.3	.313	32.8			22	8	34.1	-11	36	49	385.7	695.6
26	Sep	24	5	45	39.5	D	3253kB5	5.4	5.5V			93+	149	39	225	74S	85	46	104	-5.4	+0.2	+2.2-0.6	.323	-35.8			22	10	37.5	-11	33	54	386.2	747.2
	R3253 = 38 Aquarii																																		
	3253 = HD 210424, 5.44, , Type ACV, Period 3.9613 days, Phase 11%																																		
26	Sep	24	7	8	52.7	d	3255	M0	7.3	6.4v		93+	150	25	242	74N	53	1	73	-5.6	+0.0	+0.7+0.4	.447	-0.6			22	12	16.9	-11	3	56	387.2	838.7
	3255 = KR Aqr, 7.25 to 7.36, Hp, Type LB																																		
26	Sep	25	8	39	38.2	D	3380cK0	5.9	5.4			98+	163	19	254	63N	44	346	65	-6.0	-1.7	+0.4+0.7	.472	11.4			23	1	31.7	- 4	42	41	383.0	895.1
	3380 is double: ** 7.0 7.0 0.10" 90.0, dT = +0.15sec																																		
	3380 has been reported as non-instantaneous (OCc1633). Observations are highly desired																																		
26	Sep	27	5	47	17.5	r	68SB9	5.8		S		100-	173	69	186	55N	257	252	279	-4.8	-4.1	+2.6+0.6	.340	150.6			0	32	23.8	6	57	20	371.5	703.7
	R68 = 51 Piscium																																		
	68 is multiple: Aa,Ac 5.8 9.5 0.20" : Aa,Ab 5.8 8.0 0.27" 283.9, dT = -0.7sec : AB 5.7 9.5 28.5" 81.5, dT = +83sec : AD 5.7 13.1 82" 307.6, dT = -153sec																																		
	68 is a close double. Observations are highly desired																																		
	68 = NSV 15113, 5.67 to 9.0, V, Type E:																																		
	Distance of 68 to Terminator = 5.2"; to 3km sunlit peak = 0.0"																																		
26	Sep	28	4	18	14.1	r	197cK0	7.0	6.5			97-	160	57	111	79S	226	284	247	-3.7	-5.0	+1.1+2.0	.434	-175.3			1	21	58.3	12	36	15	369.1	779.7
26	Sep	29	5	19	36.6	r	336	F0	7.4	7.3v		92-	147	62	103	77S	231	296	249	-2.8	-5.9	+1.2+1.9	.432	-175.6			2	17	45.4	18	27	18	366.2	770.4
	336 = AD Ari, 7.39 to 7.48, V, Type ELL, Period 0.53972 days, Phase 22%																																		
26	Sep	30	4	31	2.6	R	470WK0	6.8	6.2			85-	134	41	83	75N	265	338	280	-1.5	-6.2	+1.1+1.0	.460	156.6			3	14	17.2	22	57	14	366.1	889.2
	470 is double: AB 6.9 10.4 42" 33.3, dT = +56sec																																		
26	Sep	30	5	52	53.0	r	75832 K0	7.3	6.6			84-	133	58	90	74S	235	309	249	-1.6	-6.4	+1.1+1.8	.439	-173.5			3	16	57.0	23	7	36	364.8	782.1
26	Sep	30	8	10	39.3	r	483SA5	7.5				84-	132	86	166	76N	265	278	279	-1.9	-6.6	+2.6+0.3	.361	160.8			3	20	21.2	23	41	21	363.8	675.1
	483 is quadruple: AB 7.62 9.90 2.77" 315.8, dT = -5sec : AB,D 7.6 14.8 25.8" 251.6, dT = -70sec : AC 7.6 14.0 61" 286.7, dT = -157sec																																		
	483 is a close double. Observations are highly desired																																		
26	Oct	2	7	29	45.9	r	812SF8	8.0				64-	106	54	80	36S	212	291	215	+0.9	-6.0	+0.4+3.5	.293	-132.6			5	27	1.3	27	36	37	364.3	764.7
	812 is triple: AB 8.71 8.61 0.59" 277.1, dT = -0.8sec : AB,C 7.9 13.2 27.0" 277.8, dT = -37sec																																		
	812 is a close double. Observations are highly desired																																		
26	Oct	2	10	4	30.1	r	77224cF8	7.4	7.1			63-	105	87	91	47S	223	310	226	+0.5	-6.0	+2.4+3.0	.261	-134.8			5	31	22.8	27	46	9	363.1	650.7
	77224 is double: ** 8.3 8.3 0.10" 90.0, dT = +0.26sec																																		
	77224 has been reported as non-instantaneous (OCc 194). Observations are highly desired																																		
26	Oct	3	6	20	56.1	R	994cF5	6.6	6.3			53-	93	26	72	47S	230	301	228	+2.2	-5.0	-0.1+2.2	.424	-144.0			6	28	56.4	26	58	3	367.1	933.2
	994 is double: ** 6.8 7.7 0.003" 269.0, dT = -0.01sec																																		
26	Oct	3	8	49	14.2	r	78501 K0	7.8	7.3			52-	92	57	83	56S	239	319	236	+2.0	-5.1	+1.5+2.2	.347	-148.1			6	33	58.0	27	2	41	364.6	722.6
26	Oct	3	10	15	28.8	R	1013cG0	7.0				51-	91	76	89	66N	298	22	295	+1.7	-5.1	+2.4-1.1	.349	158.8			6	36	26.3	27	16	42	363.8	659.8
	1013 is double: AB 7.14 8.97 0.68" 270.0, dT = -1.7sec																																		
	1013 is a close double. Observations are highly desired																																		
26	Oct	4	7	41	4.1	r	79521cG2	7.4	7.0			41-	79	30	76	35N	335	46	327	+3.2	-3.9	+1.9-2.6	.249	120.4			7	34	50.4	24	57	16	367.8	878.0
	79521 is double: ** 8.8 8.8 0.050"																																		
	79521 has been reported as non-instantaneous (OCc1366). Observations are highly desired																																		
26	Oct	4	9	14	3	Gr	1155	F0	6.4	6.2		40-	79	50	** GRAZE: CA -0.3S; Dist. 92km in az. 171deg. [Lat = 27.22+0.15(E.Long+82.41)]																						
26	Oct	4	9	27	7.9	R	1155	F0	6.4	6.2		40-	78	52	85	19S	209	284	201	+3.0	-3.9	+0.8+7.9	.130	-108.3			7	38	14.4	24	21	38	366.1	734.9
26	Oct	4	12	14	53.9	d	1170dG8	3.6	3.1			39-	77	10	86	153	-57N	68	94	59	+2.5	-3.7	+3.2+1.5	.265	45.0	.01	7	44	26.8	24	23	53	364.9	663.2
	R1170 = kappa Geminorum																																		

Occultation prediction for Tampa Coleman Science Works Thea
E. Longitude - 82 24 25.4, Latitude 28 3 13.1, Alt. 3m; Telescope dia 15cm; dMag 0.0

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      day  Time     P   Star  Sp  Mag  Mag    % Elon Sun  Moon   CA   PA  VA  AA Libration   A   B   RV    Cct durn  R.A. (J2000)  Dec   Mdist   SV
 y   m  d  h  m   s       No  D    v    r V  ill     Alt Alt Az   o    o   o   o   L    B   m/o m/o "/s     o  sec  h  m   s    o  m  s   Mm   m/s
      1170 is double: AB 3.7 10.0 7.4" 241.1, dT = -28sec
      1170 is a close double. Observations are highly desired
26 Oct  4 13 13 40.5 R    1170dG8  3.6  3.1   39-  77  23 78 256  30N 341 271 332 +2.4 -3.6 +0.8-3.7 .274  134.7 .01  7 44 26.8  24 23 53 365.0 690.2
   R1170 = kappa Geminorum
      1170 is double: AB 3.7 10.0 7.4" 241.1, dT = +5sec
      1170 is a close double. Observations are highly desired
26 Oct  5  8 45 23.7 r   80269kF0  8.4  8.3   29-  66     30  81  65S 260 329 247 +4.0 -2.5 +0.7+1.4 .434 -155.4      8 35 17.8  20 33 53 369.4 855.1
26 Oct  5  9 55 24.9 r   80294kF8  8.0  7.7   29-  65     45  88  80S 275 346 262 +3.9 -2.4 +1.5+0.7 .416 -166.8      8 37 26.4  20 29 14 368.1 763.0
26 Oct  5 10 13  6.6 r    1288kF5  7.8  7.6   29-  65     48  91  22S 218 288 204 +3.9 -2.4 +1.7+7.6 .129 -108.0      8 38 23.1  20 12 26 367.9 744.9
26 Oct  5 11  3  6.4 r   80327pA3  7.8  7.6   29-  65  -6 59  98  23S 219 288 205 +3.8 -2.4 +3.3+9.0 .105 -105.5      8 39 42.8  20  5 10 367.2 702.7
     80327 is double: AB 7.9 9.6 0.64" 136.2, dT = -0.8sec
     80327 is a close double. Observations are highly desired
26 Oct  5 11  9 23   Gr   1295pK0  6.4  5.9s  29-  65  -4 61 ** GRAZE: CA  7.9S; Dist.164km in az.  11deg. [Lat = 29.56-0.17(E.Long+82.41)]
26 Oct  5 11 10  8   M    1295pK0  6.4  5.9s  29-  65  -4 61  99   8S 204 272 190 +3.7 -2.4 +9.9+9.9 .000  -90.0      8 40  6.4  20  0 28 367.2 698.3
   R1295 = 39 Cancri
      1295 is multiple: AC 6.5 9.0 134" 309.0 : AD 6.5 8.8 135" 111.0 : AB 6.5 6.6 152" 149.9 : AS 6.5 10.1 262" 325.7
      1295 = NSV 4179, 6.39, range 0.04, V
26 Oct  5 11 15 29   M    1296pA1  6.6  6.6   29-  65  -3 62 100   8S 204 272 191 +3.7 -2.3 +9.9+9.9 .000  -90.0      8 40 11.5  19 58 16 367.1 695.2
   R1296 = 40 Cancri
      1296 is quadruple: Ba,Bb 6.6      0.40" 128.0 : BR 6.6 11.6 140" 146.9 : BA 6.6 6.5 152" 329.9
      1296 is a close double. Observations are highly desired
26 Oct  6  8 17 39.4 D Jupiter    -1.7 -1.7   20-  53     10  78 -60S 138 203 122 +4.8 -0.9 +0.5-0.8 .460  -30.8      9 31  5.4  15 20 24 373.3 970.6
   Jupiter limb contacts offset by ±36.5 secs, at  8 17  3 and  8 18 16  Both contacts are against the bright limb of Jupiter
26 Oct  6  9  6 35.9 R Europa      6.1  6.1   20-  52     21  83  61S 259 325 243 +4.8 -0.9 +0.5+1.5 .424 -149.2      9 30 55.2  15 21 19 372.2 890.1
   Europa limb contacts offset by ±0.9 secs, at  9  6 35.0 and  9  6 36.8  Both contacts are against the bright limb of Europa
26 Oct  6  9  8 44.3 R Callisto    6.4  6.4   19-  52     22  84  61S 259 325 243 +4.8 -0.9 +0.5+1.4 .424 -149.1      9 30 58.9  15 20 59 372.1 890.7
   Callisto limb contacts offset by ±1.3 secs, at  9  8 42.9 and  9  8 45.6  Both contacts are against the bright limb of Callisto
26 Oct  6  9  9 29.8 R Io          5.8  5.8   19-  52     22  84  61S 259 325 243 +4.8 -0.9 +0.5+1.5 .419 -149.1      9 31  1.2  15 20 47 372.1 881.3
   Io limb contacts offset by ±1.0 secs, at  9  9 28.8 and  9  9 30.8  Both contacts are against the bright limb of Io
26 Oct  6  9 11 59.9 R Jupiter    -1.7 -1.7   19-  52     22  84  61S 259 325 243 +4.8 -0.9 +0.5+1.5 .419 -149.0      9 31  5.4  15 20 24 372.1 882.4
   Jupiter limb contacts offset by ±40.1 secs, at  9 11 20 and  9 12 40  Both contacts are against the bright limb of Jupiter
26 Oct  6  9 13 55.9 R Ganymede    5.4  5.4   19-  52     23  84  61S 260 325 243 +4.8 -0.9 +0.6+1.5 .419 -148.9      9 31  8.7  15 20  5 372.0 884.0
   Ganymede limb contacts offset by ±1.5 secs, at  9 13 54.4 and  9 13 57.3  Both contacts are against the bright limb of Ganymede
26 Oct  8 10 18 21.5 r X 16891kG0  9.7  9.1    5-  26     11  92  48N 332  34 310 +5.7 +2.3 +0.3-1.3 .438  146.9     11 14  0.7   3 14  9 378.7 961.3
26 Oct 14  0  4 52.4 d    2238 F0  8.0  7.8   11+  39      7 236  80S 121  66 107 +2.5 +7.4 +1.3-1.9 .367  -26.3     15 40 37.8 -25 35 33 399.0 792.5
26 Oct 15 23 55 42.4 d  185420 B8  8.1  8.0   25+  61     23 217  40N  46   9  42 +0.5 +6.7 +1.1+0.7 .277   35.0     17 27 45.7 -28 21 32 401.6 657.3
26 Oct 16  0  1  4   gr 185410kA0  7.8  7.7   25+  61     22 217  16S 170 133 167 +0.4 +6.7 +9.9+9.9 .000  -90.0     17 27 16.5 -28 46 13 401.8 664.6
26 Oct 16  0  1  7   Gr 185410kA0  7.8  7.7   25+  61     20 ** GRAZE: CA 15.8S; Dist.  7km in az. 146deg. [Lat = 27.97+0.60(E.Long+82.41)]
26 Oct 20  2 48 38.1 D    3069 A*  6.3  6.3v  63+ 105     33 218  78S  85  50 100 -4.9 +2.3 +2.2-0.6 .315  -32.2     20 59 36.1 -19  2  7 394.8 713.3
   R3069 = 20 Capricorni (AO)
      3069 = AO Cap, 6.25 to 6.30, V, Type ACV, Period 2.2411 days, Phase  83%
26 Oct 20 23 47 46.8 D    3181SA7  6.0  5.8   72+ 116     42 150  82N  62  89  80 -5.1 +1.2 +2.2+1.5 .336   -7.6     21 44  1.0 -14 44 58 390.3 641.4
   R3181 = 45 Capricorni
      3181 is triple: ** 6.7 6.7 0.050"       : AB 5.4 9.5 4.3" 229.0, dT = -12sec
      3181 has been reported as non-instantaneous (OCc1610). Observations are highly desired
26 Oct 22  5 56 47.3 D    3322cG1  6.4        82+ 129     24 246  58S 101  46 121 -6.8 -1.1 +1.6-1.8 .305  -47.6     22 38 22.1 - 7 53 51 385.6 846.3
      3322 is double: AB 6.64 8.11 0.08" 296.3, dT = -0.27sec
      3322 is a close double. Observations are highly desired
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Occultation prediction for Tampa Coleman Science Works Thea
E. Longitude - 82 24 25.4, Latitude 28 3 13.1, Alt. 3m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon Alt	Sun Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	dur sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	Oct	23	5	33	5.6	d	146693	G5	7.5	7.1		89+	141	41	240	79N	58	8	79	-6.8	-2.5	+1.3	+0.5	.417	-6.9		23	24	39.0	- 1	44	29	378.6	770.5
26	Oct	24	3	55	33.1	d	109052	G5	7.4	6.9		95+	153	66	195	88N	70	57	92	-6.1	-3.6	+2.4	+0.8	.360	-22.5		0	11	5.7	4	7	59	372.0	703.0
26	Oct	25	8	1	51.9	d	163	pF2	7.3	7.1		99+	167	37	264	49N	45	341	66	-5.8	-5.2	+1.1	+0.9	.437	17.0		1	7	4.0	11	33	8	368.4	815.9
							163 is double: AB 7.3 10.5 8.3" 201.5, dT = -17sec																												
							163 is a close double. Observations are highly desired																												
							Distance of 163 to Terminator = 12.8"; to 3km sunlit peak = 3.7"																												
26	Oct	28	0	20	48.5	r	541	SB8	3.9	3.9s		95-	154	5	65	78N	260	322	273	-0.7	-5.9	-0.3	+0.9	.657	170.0		3	45	49.6	24	22	4	364.2	1179.1
							R541 = Maia = 20 Tauri																												
							541 is quadruple: Aa,Ab 4.4 5.4 : AB 3.8 13.7 113" 72.6, dT = +171sec : AB 3.8 13.7 113" 72.7, dT = +171sec																												
							541 = NSV 1279, 3.87, range 0.00, 4Kp, Type ACV, Period 10.288 days																												
26	Oct	28	1	21	51.9	r	562	pB9	6.6	6.6		95-	153	17	71	37S	196	263	209	-0.6	-6.0	-0.9	+2.6	.374	-127.5		3	49	21.8	24	22	51	362.9	1081.9
							562 is multiple: Aa,Ab 7.3 7.4 5.3" : AB 6.6 7.5 87" 309.1, dT = +91sec : AE 6.6 13.8 115" 82.8, dT = +122sec : AG 6.6 15.1 158" 212.2, dT = -406sec																												
							562 is a close double. Observations are highly desired																												
26	Oct	28	2	45	0.4	r	574	pG0	6.8	6.5		94-	153	34	77	19N	320	32	332	-0.6	-6.1	+3.5	-2.8	.155	106.6		3	52	11.4	25	9	47	361.1	948.6
							Distance of 574 to Terminator = 13.0"; to 3km sunlit peak = 3.2"																												
26	Oct	28	5	24	49.1	r	76345	kG8	7.5	7.0		94-	151	68	91	71S	231	309	243	-0.8	-6.4	+1.4	+2.0	.407	-163.1		3	57	11.8	25	16	58	358.7	740.4
26	Oct	29	3	59	3.9	r	746	WB7	7.0	6.9		87-	138	37	75	59N	290	4	296	+1.1	-5.9	+1.3	+0.2	.422	144.6		4	59	53.7	27	19	32	360.7	905.9
							746 is double: AB 7.0 8.7 20.4" 206.1, dT = -5sec																												
26	Oct	29	6	7	16.8	R	756	F0	6.6	6.5		87-	137	64	83	29N	321	43	326	+0.9	-6.0	+3.6	-3.4	.191	116.8		5	4	38.0	27	41	46	358.8	736.0
26	Oct	29	9	26	34.8	R	773	wF8	7.0	6.7		86-	136	73	273	84S	255	170	260	+0.4	-6.0	+2.4	+0.3	.380	-164.1		5	10	3.9	27	33	23	358.6	687.7
							773 is double: AB 7.0 9.3 315" 353.1, dT = +121sec																												
26	Oct	30	5	17	14.9	r	78041	cG5	7.8	7.3		78-	124	40	77	50S	229	304	228	+2.6	-5.2	+0.4	+2.4	.395	-144.3		6	9	26.6	27	11	38	361.6	852.2
							78041 is double: ** 8.6 8.6 0.040" 237.0, dT = -0.1sec																												
							78041 has been reported as non-instantaneous (OCc1052). Observations are highly desired																												
26	Oct	30	10	15	43.2	R	958	cK1	6.7	6.1		77-	122	76	271	68S	248	164	247	+1.9	-5.1	+2.7	+0.9	.324	-145.6		6	18	20.8	27	12	37	359.9	686.3
							958 is double: ** 7.5 7.5 0.050"																												
							958 has been reported as non-instantaneous (OCc1307). Observations are highly desired																												
26	Oct	31	9	18	1.9	d	1117	cG8	5.0	4.6		66-	109	77	99	-60S	127	201	120	+3.6	-4.0	+2.2	-1.5	.355	-21.0		7	23	28.5	25	3	2	362.0	666.8
							R1117 = 57 Geminorum																												
							1117 is double: ** 5.9 5.9 0.10" 90.0, dT = +0.23sec																												
							1117 has been reported as non-instantaneous (OCc1358). Observations are highly desired																												
26	Oct	31	10	40	34.6	R	1117	cG8	5.0	4.6		66-	108	84	244	83S	271	209	263	+3.3	-3.9	+2.6	-0.2	.360	-159.3		7	23	28.5	25	3	2	362.0	676.6
							R1117 = 57 Geminorum																												
							1117 is double: ** 5.9 5.9 0.10" 90.0, dT = +0.28sec																												
							1117 has been reported as non-instantaneous (OCc1358). Observations are highly desired																												
26	Nov	1	7	18	14.5	r	80087	K0	7.9	7.2		56-	96	38	84	28S	221	292	209	+5.0	-2.6	+0.6	+4.7	.208	-117.3		8	18	54.5	21	29	39	366.9	807.0
26	Nov	4	7	43	22.7	r	118579	kA2	7.8	7.7		23-	58	5	87	64N	318	20	297	+6.6	+2.0	+0.2	-0.7	.500	158.1		10	56	30.9	5	16	24	380.7	995.7
26	Nov	5	9	49	32.9	r	138402	F2	8.7	8.5		15-	45	19	103	65S	266	326	244	+6.5	+3.5	+0.9	+1.3	.383	-143.0		11	47	0.0	- 1	37	46	382.9	890.3
26	Nov	7	10	41	9.2	r	157895	pA2	7.8	7.7		3-	21	5	108	31N	339	39	318	+6.0	+5.7	-0.3	-1.5	.404	142.6		13	22	45.6	-13	11	11	391.4	964.8
							157895 is double: AB 7.8 10.8 19.4" 311.2, dT = -42sec																												
26	Nov	11	23	35	0.3	d	185075	K0	8.3	7.7		7+	30	7	234	24N	38	345	33	+0.7	+6.6	-0.2	+0.9	.302	43.0		17	9	3.8	-27	53	41	403.4	808.2
26	Nov	12	23	43	1.0	d	2601	SK4	6.8			12+	41	14	228	8N	13	325	13	-0.5	+5.9	-1.0	+2.7	.190	60.7		18	2	54.3	-27	49	36	403.8	758.9
							R2601 = 7 Sagittarii																												
							2601 is triple: Aa,Ab 6.90 9.37 0.34" 332.0, dT = +1.3sec : AB 6.9 13.0 9.7" 48.2, dT = +42sec																												
							2601 is a close double. Observations are highly desired																												
26	Nov	13	0	20	47.3	d	186228	K5	8.4	7.5		12+	41	8	233	53N	58	5	57	-0.6	+5.9	+0.3	+0.0	.400	16.0		18	4	41.7	-27	51	51	404.5	817.1
26	Nov	13	0	41	5.2	d	186250	K5	7.7	6.8		12+	41	4	235	56N	60	5	60	-0.6	+5.8	+0.2	-0.1	.421	13.4		18	5	20.8	-27	50	3	404.9	850.1

Occultation prediction for Tampa Coleman Science Works Thea
E. Longitude - 82 24 25.4, Latitude 28 3 13.1, Alt. 3m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V ill	%	Elon Alt	Sun Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	Nov	14	1	15	47.6	d	187541	G5	8.3	7.7	19+	52	8	235	84N	81	28	86	-2.1	+4.8	+0.7	-0.7	.416	-14.2			18	59	26.2	-26	29	49	404.7	842.6
26	Nov	15	23	25	21.4	d	3007	K2	7.2	6.5	35+	73	-11	40	198	7N	353	336	6	-4.3	+2.7	-1.1	+4.3	.152	62.2			20	36	26.5	-20	35	8	398.7	629.4
26	Nov	16	20	43	35.7	d	3126	G8	4.3	3.8v	44+	83	21	33	137	86N	69	107	85	-4.8	+1.6	+2.1	+1.5	.334	-7.2			21	22	14.8	-16	50	4	396.5	648.3
R3126 = Tae = iota Capricorni																																	
3126 = iot Cap, 4.27, range 0.06, V, Type BY																																	
26	Nov	16	22	14	46.9	r	3126	G8	4.3	3.8v	45+	84	4	43	162	-65S	227	244	244	-5.1	+1.5	+2.1	+1.7	.317	-172.6			21	22	14.8	-16	50	4	395.4	612.1
R3126 = Tae = iota Capricorni																																	
3126 = iot Cap, 4.27, range 0.06, V, Type BY																																	
26	Nov	17	22	24	20.2	d	3253kB5		5.4	5.5V	54+	95	2	45	148	63S	96	125	116	-6.1	+0.1	+3.2	+0.4	.244	-44.4			22	10	37.5	-11	33	54	391.0	646.7
R3253 = 38 Aquarii																																	
3253 = HD 210424, 5.44, , Type ACV, Period 3.9613 days, Phase 93%																																	
26	Nov	18	0	3	44.2	D	3255 M0		7.3	6.4v	55+	96	51	183	86N	65	62	84	-6.5	-0.1	+2.4	+0.9	.326	-17.2			22	12	16.9	-11	3	56	390.2	646.0
3255 = KR Aqr, 7.25 to 7.36, Hp, Type LB																																	
26	Nov	19	3	3	14.6	D	3380cK0		5.9	5.4	66+	108	43	232	73S	85	40	106	-7.6	-2.0	+2.2	-0.6	.321	-35.6			23	1	31.7	- 4	42	41	384.8	737.0
3380 is double: ** 7.0 7.0 0.10" 90.0, dT = +0.31sec																																	
3380 has been reported as non-instantaneous (OCc1633). Observations are highly desired																																	
26	Nov	19	23	52	14.8	d	128354	F8	8.0	7.7	74+	119	56	139	68N	46	81	68	-7.1	-2.9	+1.5	+2.0	.384	2.0			23	44	18.2	0	42	44	378.7	705.9
26	Nov	20	5	40	18.2	d	128417	cG5	7.0	6.4	76+	121	24	259	52N	30	330	52	-8.1	-3.6	+0.5	+1.4	.413	27.6			23	51	6.8	2	14	16	379.9	858.0
128417 is double: ** 6.9 0.001" 333.1, dT = 0.00sec																																	
26	Nov	20	6	40	59.3	d	3515	cA1	6.3	6.3	76+	122	11	267	27S	131	69	154	-8.2	-3.7	+0.6	-5.4	.172	-70.4			23	53	4.8	2	5	26	381.0	944.2
R3515 = 25 Piscium																																	
3515 is double: ** 7.0 7.0 0.050"																																	
3515 has been reported as non-instantaneous (OCc1650). Observations are highly desired																																	
26	Nov	20	23	50	42.9	D	68	SB9	5.8	S	83+	132	52	117	56N	35	88	57	-6.8	-4.1	+0.9	+2.3	.410	14.6			0	32	23.8	6	57	20	372.7	765.2
R68 = 51 Piscium																																	
68 is multiple: Aa,Ac 5.8 9.5 0.20" : Aa,Ab 5.8 8.0 0.28" 283.8, dT = -0.24sec : AB 5.7 9.5 28.5" 81.5, dT = +48sec : AD 5.7 13.1 82" 307.6, dT = +8sec																																	
68 is a close double. Observations are highly desired																																	
68 = NSV 15113, 5.67 to 9.0, V, Type E:																																	
26	Nov	21	5	21	10.9	d	109354	kF5	7.3	7.1	84+	133	41	256	67S	93	33	115	-7.7	-4.7	+1.7	-1.2	.350	-36.0			0	39	42.6	8	7	22	372.2	779.9
26	Nov	22	7	44	52.2	D	233	cB9	6.2	6.3	92+	147	24	275	79S	87	21	108	-6.9	-5.8	+0.7	-0.9	.479	-18.3			1	35	46.4	14	39	41	367.4	899.0
R233 = 101 Piscium																																	
26	Nov	23	6	46	11.3	D	370	A9	6.1	6.0v	97+	160	50	268	80S	95	25	114	-5.4	-6.3	+1.7	-1.1	.394	-25.5			2	30	38.4	19	51	19	360.4	763.5
R370 = 26 Arietis (UU)																																	
370 = UU Ari, 6.10 to 6.15, V, Type DSCTC, Period 0.0676 days																																	
26	Nov	25	7	45	58.1	R	701	SF2	6.6	6.4	99-	169	65	275	56N	270	189	278	-1.5	-6.2	+2.0	-0.6	.423	177.5			4	38	29.5	26	56	23	353.8	727.3
701 is triple: 6.6 9.2 3.1" 169.4, dT = +1.4sec : AB 7.36 7.21 4.49" 187.7, dT = -1.4sec																																	
701 is a close double. Observations are highly desired																																	
Distance of 701 to Terminator = 11.0"; to 3km sunlit peak = 2.6"																																	
26	Nov	25	7	45	58.3	r	X 70481p		7.3	7.2	99-	169	65	275	56N	270	189	278	-1.5	-6.2	+2.0	-0.6	.423	177.4			4	38	29.6	26	56	26	353.8	727.3
X 70481 is triple: 7.3 9.2 5.8" 174.9, dT = +1.3sec : AC 7.4 12.9 92" 203.6, dT = -86sec																																	
X 70481 is a close double. Observations are highly desired																																	
Distance of X 70481 to Terminator = 11.0"; to 3km sunlit peak = 2.5"																																	
26	Nov	26	5	57	39.2	r	868	SA0	7.5	7.5	96-	156	77	87	49N	300	26	302	+1.0	-5.5	+2.5	-1.3	.344	147.8			5	44	21.2	27	43	53	353.3	696.6
868 is triple: AB 7.5 9.8 8.6" 254.1, dT = -17sec : AC 7.5 12.7 47" 40.5, dT = +24sec																																	
868 is a close double. Observations are highly desired																																	
26	Nov	26	8	22	3.8	r	77588	cB8	7.7	7.7	96-	156	72	273	63S	233	150	235	+0.6	-5.4	+2.7	+1.7	.296	-135.0			5	48	49.0	27	21	50	353.5	716.9
77588 is double: 8.1 9.1																																	

Occultation prediction for Tampa Coleman Science Works Thea
E. Longitude - 82 24 25.4, Latitude 28 3 13.1, Alt. 3m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon Sun Alt	Moon Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	dur sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	Nov	26	8	55	16.0	r	77604	K0	7.0	6.2		95-	155	64	276	69N	281	199	283	+0.5	-5.3	+1.8	-1.0	.434	178.6		5	49	38.1	27	33	3	353.8	745.1
26	Nov	26	9	17	21.1	r	77621	M3	7.5	6.6s		95-	155	60	278	29N	321	240	323	+0.5	-5.3	+0.9	-2.9	.341	139.7		5	50	48.2	27	41	9	354.1	767.5
		77621 = NSV 16688, 7.47, range 0.02, 6V, Type VAR, Period 4.88496 days																															
26	Nov	26	9	26	39.7	r	77619	F2	7.1	6.9		95-	155	58	278	70N	281	200	282	+0.5	-5.3	+1.6	-1.1	.453	-179.5		5	50	39.7	27	30	18	354.2	778.2
26	Nov	26	10	23	19.9	R	890	cA0	4.6	4.6s		95-	155	46	282	17N	335	257	336	+0.4	-5.2	-0.1	-3.5	.307	128.5		5	53	19.6	27	36	44	355.0	851.0
		R890 = 136 Tauri																															
		890 is double: ** 4.8 6.3 0.050" 270.0, dT = -0.07sec																															
		890 has been reported as non-instantaneous (OCc 206). Observations are highly desired																															
		890 = NSV 2696, 4.50 to 4.61, V																															
		Distance of 890 to Terminator = 8.3"; to 3km sunlit peak = 0.6"																															
26	Nov	27	9	24	21.0	R	1061	SF8	6.2	5.9s		89-	141	72	269	47N	316	236	311	+2.5	-4.1	+1.4	-2.3	.380	154.2		6	58	47.4	26	4	52	355.2	728.1
		R1061 = 39 Geminorum																															
		1061 is triple: Aa,Ab 6.1 0.50" 158.0, dT = +1.2sec : AB 6.1 12.1 35" 69.2, dT = +37sec																															
		1061 is a close double. Observations are highly desired																															
		1061 = NSV 17256, 6.1, range 0.02, V, Type VAR:																															
26	Nov	27	9	56	4.0	R	1062	cB8	6.4	6.5		89-	141	65	272	69N	294	214	288	+2.5	-4.0	+1.6	-1.4	.438	177.4		6	59	27.9	25	54	51	355.6	756.9
		R1062 = 40 Geminorum																															
		1062 is double: AB 6.4 0.10" 160.5, dT = +0.16sec																															
		1062 is a close double. Observations are highly desired																															
26	Nov	27	11	15	30.3	r	78995	A3	7.4	7.2		89-	141	-10	48	278	38S	221	145	215	+2.3	-3.9	+4.1	+3.4	.156	-108.5		7	2	20.5	25	21	52	356.7	851.2
26	Nov	27	11	16	11.4	r	1068	A2	7.1	7.0		89-	141	-10	48	278	55S	238	162	233	+2.3	-3.9	+2.4	+0.8	.289	-125.8		7	2	7.2	25	25	32	356.8	852.6
26	Nov	28	12	13	21	m	1224	cG2	5.3	5.0		80-	126	2	48	272	18S	210	138	199	+4.0	-2.3	+9.9	+9.9	.000	-90.0		8	7	45.9	21	34	55	360.2	853.7
		R1224 = mu Cancri																															
		1224 is double: ** 5.4 7.8 0.53" 301.8																															
		1224 has been reported as non-instantaneous (OCc1849). Observations are highly desired																															
26	Nov	29	6	56	23.0	R	1340	kA0	6.6	6.6		71-	115	48	93	67N	309	18	294	+6.1	-1.3	+1.5	-0.9	.414	163.6		8	58	18.3	18	18	30	363.5	760.1
26	Nov	29	7	34	43.3	R	1343	M4	6.3	5.5v		71-	114	56	99	82N	294	0	279	+6.0	-1.2	+1.8	-0.3	.413	-178.1		8	59	10.7	18	8	6	363.0	726.9
		1343 = FZ Cnc, 6.28 to 6.38, Hp, Type SRB, Period 17.6 days																															
26	Nov	30	5	35	38.5	r	1449	M0	6.5	5.6s		60-	102	17	84	25N	355	59	336	+7.2	+0.3	+0.9	-3.6	.238	117.4	.01	9	51	2.0	13	3	58	370.8	931.3
		R1449 = 23 Leonis																															
		1449 = NSV 18283, 6.45, range 0.00, 6V, Type VAR, Period 2.82446 days																															
26	Dec	1	8	25	55.5	R	1567	kK1	6.4	5.8		48-	88	40	107	36N	347	45	326	+7.5	+2.0	+0.7	-2.6	.316	137.6		10	46	5.7	6	22	23	374.1	777.2
		R1567 = 37 (Sextantis)/Leonis																															
26	Dec	2	10	17	1.2	D	1685	cG9	4.3	3.8		37-	75	48	128	-37S	166	210	144	+7.5	+3.7	+0.5	-2.5	.325	-35.1		11	36	56.9	- 0	49	25	378.8	729.3
		R1685 = upsilon Leonis																															
		1685 is double: ** 4.5 9.0 0.10" 195.0, dT = +0.27sec																															
		1685 has been reported as non-instantaneous (OCc1427). Observations are highly desired																															
26	Dec	2	11	13	10.5	r	138302	K0	7.7	7.1		37-	75	-11	57	147	50N	332	1	310	+7.3	+3.8	+1.1	-2.0	.359	160.8		11	37	16.8	- 0	34	41	378.4	697.3
26	Dec	2	11	25	3.3	R	1685	cG9	4.3	3.8		37-	75	-9	58	152	76S	278	303	256	+7.3	+3.8	+2.8	+0.0	.310	-145.1		11	36	56.9	- 0	49	25	378.4	692.9
		R1685 = upsilon Leonis																															
		1685 is double: ** 4.5 9.0 0.10" 195.0, dT = -0.04sec																															
		1685 has been reported as non-instantaneous (OCc1427). Observations are highly desired																															
26	Dec	4	9	18	23.6	R	1885	K2	7.3	6.7		19-	52	14	112	34N	345	42	323	+7.2	+5.7	-0.2	-1.9	.358	139.1		13	8	27.9	-11	45	46	390.6	898.8
26	Dec	6	10	22	29.4	R	2109	K4	6.1	5.2		6-	28	3	116	9N	358	57	342	+5.8	+6.8	-1.2	-3.0	.242	120.0	.01	14	47	13.7	-21	19	30	398.7	937.5
26	Dec	11	23	34	40.7	d	188260	K0	8.7	8.0		7+	31	13	232	58S	118	67	125	-2.4	+3.9	+2.2	-2.7	.241	-54.7		19	32	44.8	-24	55	39	404.8	817.5
26	Dec	11	23	40	49.6	d	188262	K0	8.5	8.0		7+	31	12	233	49S	127	76	135	-2.4	+3.9	+2.8	-3.8	.183	-64.2		19	32	48.9	-24	56	36	404.9	826.9
26	Dec	12	23	16	47.9	d	189195	F0	7.8	7.6		13+	42	-9	26	225	35N	24	342	36	-3.7	+2.7	+0.2	+1.5	.317	33.1		20	21	32.8	-21	25	8	402.5	739.4
26	Dec	13	0	17	22.6	d	189226	F7	8.7	8.4		13+	42		16	235	89N	78	27	90	-3.9	+2.6	+1.0	-0.5	.396	-19.4		20	23	35.8	-21	22	14	403.4	821.1

Occultation prediction for Tampa Coleman Science Works Thea
E. Longitude - 82 24 25.4, Latitude 28 3 13.1, Alt. 3m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V ill	%	Elon Sun Alt	Moon Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	Dec	13	0	44	17.8	d	189240	A7	8.6	8.4	13+	42	11	239	61N	50	355	62	-3.9	+2.5	+0.2+0.4	.433	9.7			20	24	5.6	-21	10	18	403.9	860.3
26	Dec	15	1	21	39.5	d	3219	K1	8.3	7.6	28+	65	26	239	86S	74	23	92	-6.5	-0.3	+1.2-0.3	.385	-21.0			21	58	17.7	-12	6	8	397.3	794.4
26	Dec	16	1	55	33.4	d	146275	kK0	8.1	7.6	38+	76	31	243	54N	31	339	52	-7.6	-1.8	+0.6+1.4	.384	20.8			22	43	21.3	- 6	24	3	392.6	781.4
26	Dec	17	1	59	12.1	d	146725	pF8	7.8		48+	88	42	241	61S	95	45	117	-8.2	-3.2	+2.4-1.3	.281	-44.4			23	28	46.2	- 0	50	8	386.6	738.5
146725 is double: AB 7.98 10.59 1.38" 62.1, dT = +4sec																																	
146725 is a close double. Observations are highly desired																																	
26	Dec	19	4	39	52.7	d		163pF2	7.3	7.1	69+	113	33	266	28S	131	67	153	-8.6	-5.6	+1.5-5.7	.163	-68.5			1	7	4.0	11	33	8	374.5	808.3
163 is double: AB 7.3 10.5 8.3" 201.5, dT = +17sec																																	
163 is a close double. Observations are highly desired																																	
26	Dec	19	23	13	54.7	d	92663	K0	7.9	7.1	78+	124	-8	57	103	34N	16	80	36	-6.9	-5.8	+0.2+3.0	.348	37.5			1	51	38.2	16	23	56	367.8	781.6
26	Dec	20	3	58	49.1	d	92732	wF5	7.8	7.5	79+	125	55	260	36S	127	61	147	-7.7	-6.2	+2.7-4.6	.182	-63.3			1	58	47.5	17	1	33	366.7	719.9
92732 is double: AB 7.8 17.9 79" 249.5, dT = -234sec																																	
26	Dec	21	23	27	41.8	d		571pA2	6.8	6.7	94+	151	-11	38	79	27N	23	97	36	-4.0	-6.2	-0.3+2.7	.383	43.7			3	51	25.3	25	9	47	358.2	922.1
571 is double: ** 7.1 9.1																																	
26	Dec	21	23	40	15.5	d		574pG0	6.8	6.5	94+	151	41	80	44N	41	115	53	-4.0	-6.2	+0.2+2.2	.467	26.2			3	52	11.4	25	9	47	357.9	903.6
26	Dec	22	2	7	48.7	d	76345	kG8	7.5	7.0	94+	152	72	94	63S	114	191	126	-4.2	-6.4	+2.9-0.9	.299	-44.9			3	57	11.8	25	16	58	355.6	729.0
26	Dec	22	8	9	5.8	d	76472	cG8	7.2	6.5	95+	154	30	285	83N	82	11	93	-4.9	-6.3	+0.8-0.6	.528	7.4			4	8	39.0	25	52	40	357.5	922.6
26	Dec	23	4	50	49.2	d		773wF8	7.0	6.7	99+	167	86	266	59N	73	349	79	-2.3	-5.9	+2.4+0.7	.393	13.7			5	10	3.9	27	33	23	351.6	689.4
773 is double: AB 7.0 9.3 315" 353.1, dT = +133sec																																	
Distance of 773 to Terminator = 17.9"; to 3km sunlit peak = 7.2"																																	
26	Dec	25	6	16	51.6	r	79416	SF8	7.6	7.4	98-	163	83	116	50N	311	11	303	+2.2	-3.4	+2.0-1.7	.384	158.6			7	28	40.6	24	38	55	351.2	702.7
79416 is triple: AC 7.7 11.8 29.0" 124.2, dT = +75sec : AB 7.7 8.9 65" 19.4, dT = -61sec																																	
26	Dec	25	7	59	26.8	r	79470	K0	7.6	7.1	98-	162	73	260	45S	227	155	219	+2.0	-3.2	+4.5+3.7	.167	-112.5			7	31	39.2	23	59	59	351.5	745.8
26	Dec	26	6	4	24.3	R	1277	wK3	5.3	4.7	93-	148	66	103	34N	339	45	326	+4.4	-1.8	+1.5-3.0	.302	135.9			8	32	42.5	20	26	28	354.3	722.7
R1277 = eta Cancri																																	
1277 is double: AB 5.3 20.0 164" 280.0, dT = -283sec																																	
26	Dec	26	7	51	24	Gr	1282	G0	6.6	6.2	92-	148	82	** GRAZE: CA 18.0S; Dist. 11km in az. 32deg. [Lat = 28.17-0.55(E.Long+82.41)]																				
26	Dec	26	7	51	34	M	1282	G0	6.6	6.2	92-	148	82	187	18S	211	204	198	+4.1	-1.6	+9.9+9.9	.000	-90.0			8	35	19.4	19	35	24	354.1	717.6
R1282 = 35 Cancri																																	
Distance of 1282 to Terminator = 17.0"; to 3km sunlit peak = 5.5"																																	
26	Dec	26	8	29	16.8	r	97941	A*	7.5	7.4	92-	148	77	232	87N	286	239	273	+4.0	-1.5	+2.2-0.9	.411	-163.8			8	35	45.1	19	46	16	354.3	735.1
26	Dec	26	9	20	37.9	r	97973	A0	7.7	7.6	92-	147	68	253	45N	329	265	315	+3.9	-1.4	+0.9-2.5	.405	154.4			8	37	37.0	19	43	59	354.8	772.2
26	Dec	26	9	42	1.3	R	1287	kA5	6.7	6.6	92-	147	63	257	47S	241	175	227	+3.9	-1.3	+3.8+1.4	.213	-117.6			8	37	46.8	19	16	2	355.0	791.3
26	Dec	26	10	15	42.1	r	1293	pK0	6.8	s	92-	147	56	264	9N	5	296	351	+3.8	-1.2	-1.1-4.4	.228	118.5			8	39	50.7	19	32	27	355.5	826.3
1293 is multiple: Da,Db 6.67 9.87 0.50" 252.6, dT = +0.8sec : DE 6.7 11.8 35" 3.1, dT = -155sec : DA 6.7 7.3 92" 61.0, dT = -223sec : DC 6.7 7.5 100" 89.1, dT = -43sec																																	
1293 has been reported as non-instantaneous (S 571). Observations are highly desired																																	
1293 = NSV 4171, 6.52 to 6.61, V																																	
Distance of 1293 to Terminator = 4.7"; to 3km sunlit peak = 0.0"																																	
26	Dec	26	10	48	51.8	r	98009	kA7	7.6	7.6v	92-	147	49	268	69N	305	236	291	+3.7	-1.1	+0.9-1.7	.501	177.5			8	39	44.7	19	16	31	356.1	866.1
98009 = BU Cnc, 7.67, range 0.03, V, Type DSCTC, Period 0.071 days																																	
26	Dec	26	10	53	3.7	R	1297	pA9	6.8	6.6S	92-	147	48	268	39N	335	265	321	+3.7	-1.1	+0.2-2.5	.426	147.7			8	40	20.1	19	20	56	356.2	871.2
1297 is double: AB 6.8 8.5 0.016" 342.8, dT = -0.04sec																																	
1297 is a close double. Observations are highly desired																																	
1297 = NSV 17953, 6.78, , Type DSCT:																																	
26	Dec	27	9	9	25.4	r	98654	WB9	7.9	7.9	84-	133	75	205	78N	301	278	284	+5.7	+0.4	+1.9-1.4	.415	-172.9			9	35	9.5	14	4	32	358.9	727.9
98654 is double: AB 7.8 9.1 45" 48.5, dT = +32sec																																	
26	Dec	27	11	57	10.1	r	1425	SF7	7.0	6.8	84-	132	-5	43	262	77N	303	239	285	+5.3	+0.8	+0.9-1.7	.494	-176.6			9	39	17.2	13	18	45	361.3	867.2

Occultation prediction for Tampa Coleman Science Works Thea
E. Longitude - 82 24 25.4, Latitude 28 3 13.1, Alt. 3m; Telescope dia 15cm; dMag 0.0

day	Time	P	Star	Sp	Mag	Mag	%	Elon	Sun	Moon	CA	PA	VA	AA	Libration		A	B	RV	Cct	durn	R.A. (J2000)	Dec	Mdist	SV
y m d	h m s		No	D	v	r	V	ill		Alt	Alt	Az	o	o	o	o	L	B	m/o	m/o	"/s	o	sec	h m s	o m s	Mm	m/s
1425 is quadruple: Aa,Ab 7.7 7.7 : ** 7.7 7.7 0.006" 90.0, dT = +0.01sec : AB 7.1 15.1 51" 131.0, dT = +101sec																									
26 Dec 28	4 38 4.5	r	1516	K5	6.6	5.8s	76-	122		20	90	75N	307	10	287	+7.5	+1.6	+0.6	-0.4	.508	169.7		10 22 14.2	8 57 52	367.3	919.5
1516 = NSV 18388, 6.72 to 6.81, Hp, Type IB																									
26 Dec 28	5 52 25.4	R	1525	M2	5.6	4.8v	76-	121		35	100	23N	359	61	339	+7.4	+1.6	+0.5	-3.9	.244	121.7	.01	10 25 15.2	8 47 5	366.0	823.2
R1525 = 44 Leonis (DE)																									
1525 = DE Leo, 5.6, range 0.07, V, Type SRB:																									
26 Dec 29	5 31 33.0	r	1624	PF2	6.8	6.5	66-	108		18	97	79S	283	344	261	+8.2	+3.1	+0.6	+0.5	.481	-162.4		11 13 53.0	2 16 7	373.6	914.1
1624 is double: AB 6.8 16.2 85.0, dT = 0.00sec																									
26 Dec 29	7 15 45.2	R	1635	cM0	5.2	4.4	65-	108		39	113	43N	341	36	319	+8.1	+3.3	+0.6	-2.1	.361	145.6		11 17 17.4	2 0 38	372.0	788.8
R1635 = 75 Leonis																									
1635 is double: ** 5.8 6.6 0.044" 0.0																									
1635 has been reported as non-instantaneous (OCc 763). Observations are highly desired																									
26 Dec 29	8 35 15.2	R	1637	K0	5.9	5.4	65-	107		54	132	49N	335	16	313	+7.9	+3.5	+1.0	-2.0	.369	156.0		11 18 55.0	1 39 1	371.2	727.9
R1637 = 76 Leonis																									
26 Dec 29	12 30 32	Gr	1649	K3	6.1	5.3	64-	106		1	47	** GRAZE: CA 15.7S; Dist.126km in az. 47deg. [Lat = 29.71-0.94(E.Long+82.41)]													
26 Dec 30	10 22 41.8	r	138612	cK5	8.3	7.5	53-	94		55	161	65N	319	335	297	+7.9	+5.0	+1.5	-1.6	.375	174.2		12 8 59.9	- 5 8 57	377.6	690.9
138612 is double: ** 8.3 0.09" 281.0, dT = -0.2sec																									
138612 has been reported as non-instantaneous (OCc1769). Observations are highly desired																									
26 Dec 30	10 50 44.6	R	138617	KF2	7.2	7.0	53-	94		57	173	47N	337	343	315	+7.9	+5.1	+1.0	-2.3	.341	156.2		12 9 47.8	- 5 13 33	377.7	683.2
26 Dec 31	6 53 24.3	r	1845	SG8	6.5	5.9s	44-	83		10	108	60S	262	321	240	+8.4	+5.6	+0.7	+1.5	.375	-138.9		12 51 22.9	-10 20 18	386.6	934.1
1845 is triple: AB 6.6 9.7 28.8" 296.2, dT = -63sec : AC 6.6 12.5 142" 211.8, dT = -242sec																									
1845 = NSV 5994, 6.49, range 0.07, V																									

Lunar Occultation predictions
Capitolio Nacional
Havana City
Cuba

Occultation prediction for Capitolio Nacional Habana
E. Longitude - 82 21 34.2, Latitude 23 8 6.6, Alt. 3m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V ill	% Elon	Sun Alt	Moon Alt	Az	CA o	PA o	VA o	AA o	Libration L	B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	Jan	5	3	25	58.6	r	1315	A2	7.1	7.1	96-	156	36	81	55S	245	321	231	+6.5	-3.5	+1.0	+2.1	.341	-138.1			8	46	20.2	20	37	0	365.2	811.0
26	Jan	5	8	24	46.0	R	1329	pF8	6.8		95-	154	76	260	75N	297	222	282	+5.8	-3.1	+2.0	-1.4	.399	-171.6			8	53	55.3	19	58	2	363.8	712.2
							1329 is double: AB 7.32 7.86 0.15" 71.9, dT = +0.27sec																												
							1329 is a close double. Observations are highly desired																												
26	Jan	7	3	19	13	Gr	1547	cB1	3.8	3.9v	82-	130	10	** GRAZE: CA 2.9S; Dist.124km in az. 174deg. [Lat = 22.01+0.09(E.Long+82.36)]																					
							Distance of 1547 to Terminator = 6.9"; to 3km sunlit peak = 0.0"																												
26	Jan	7	3	30	32.1	R	1547	cB1	3.8	3.9v	82-	130	11	85	25S	226	295	206	+7.9	-0.5	+0.0	+4.9	.188	-111.5			10	32	48.7	9	18	24	379.2	943.6
							R1547 = rho Leonis																												
							1547 is double: AB 3.8 4.8 105.1, dT = -0.07sec																												
							1547 = rho Leo, 3.83 to 3.9, V, Type ACYG, Period 3.4271 days, Phase 53%																												
26	Jan	7	7	29	11.3	r	118418	PF5	7.6		81-	128	63	119	9N	13	67	352	+7.4	-0.1	-0.8	-5.7	.175	117.7			10	39	42.1	8	50	35	375.7	684.0
							118418 is triple: AB 7.84 8.98 0.45" 118.2, dT = +0.7sec : AC 7.8 2.1" 37.0, dT = -11sec																												
							118418 is a close double. Observations are highly desired																												
							Distance of 118418 to Terminator = 18.3"; to 3km sunlit peak = 3.8"																												
26	Jan	9	7	50	41.4	R	1754	KF5	7.0	6.7	62-	104	43	120	64S	268	321	246	+7.0	+2.9	+2.5	+1.0	.279	-136.1			12	11	21.8	- 3	46	44	388.8	729.4
26	Jan	10	9	8	55.5	r	139061	DF5	7.3		52-	93	46	135	88N	295	337	274	+6.0	+4.3	+1.9	-0.5	.346	-161.8			12	57	28.6	- 9	45	41	393.5	695.1
							139061 is double: AB 7.31 10.77 1.66" 276.0, dT = -5sec																												
							139061 is a close double. Observations are highly desired																												
26	Jan	10	9	59	12.2	r	139081	cK0	7.5	7.1	52-	92	53	150	38N	345	12	323	+5.8	+4.4	+0.6	-2.5	.299	150.0			12	59	1.6	- 9	50	3	393.2	658.2
							139081 is double: AB 7.6 12.6 0.33" 65.8, dT = -0.17sec																												
							139081 is a close double. Observations are highly desired																												
26	Jan	11	12	8	17.4	R	1970	SA0	6.2	6.2	42-	81	-2	51	186	83S	283	277	263	+4.3	+5.7	+3.1	-0.7	.277	-152.5			13	45	35.1	-15	46	3	397.2	602.1
							R1970 = 85 Virginis																												
							1970 is multiple: Aa,Ab 6.5 8.2 : Aa,Ac 6.5 8.4 0.10" : AB 6.2 12.8 44" 312.7, dT = -138sec : AB 6.2 12.8 44" 312.6, dT = -138sec																												
							1970 is a close double. Observations are highly desired																												
26	Jan	12	10	49	22.1	r	158609	dG1	8.1	7.8	33-	70	40	147	60N	317	349	299	+3.5	+6.4	+1.3	-1.2	.336	171.2			14	31	12.3	-19	58	40	400.2	660.7
							158609 is double: AB 8.2 10.6 4.2" 286.0, dT = -11sec																												
							158609 is a close double. Observations are highly desired																												
26	Jan	14	9	11	46.9	R	2312	M2	5.4	4.5s	17-	49	4	121	64N	302	4	292	+1.3	+7.0	+0.0	-0.2	.455	171.7			16	8	7.6	-26	19	36	404.9	903.2
							2312 = NSV 20513, 5.35, range 0.00, 8V, Type VAR, Period 7.61267 days																												
26	Jan	14	10	1	56.8	r	184177	kA0	8.2	8.1	17-	48	13	127	51N	314	10	304	+1.2	+7.1	+0.2	-0.6	.396	161.0			16	9	45.8	-26	26	24	403.8	820.5
26	Jan	14	10	12	11	M	2318	A*	6.6	6.6v	17-	48	15	128	20S	205	260	195	+1.2	+7.1	+9.9	+9.9	.000	-90.0			16	10	15.9	-26	54	33	403.7	805.5
							2318 = V0952 Sco, 6.57, range 0.04, V, Type ACV, Period 1.4178 days, Phase 15%																												
26	Jan	14	11	14	27.4	r	184206	dF8	9.0	8.7	17-	48	25	138	49S	235	279	225	+1.0	+7.2	+3.9	+3.4	.174	-118.6			16	11	33.6	-26	57	39	402.6	711.5
							184206 is double: AB 9.0 13.2 5.1" 89.9, dT = +24sec																												
							184206 is a close double. Observations are highly desired																												
26	Jan	14	11	17	2.5	r	184203	A2	9.1	8.9	17-	48	25	138	74N	291	334	281	+1.0	+7.2	+1.4	+0.0	.361	-174.9			16	11	29.4	-26	44	12	402.5	707.3
26	Jan	15	10	39	4	M	2453	K1	6.6	6.2	10-	37	9	127	20S	198	256	193	-0.1	+7.1	+9.9	+9.9	.000	-90.0			17	4	27.8	-28	34	58	403.1	827.0
26	Jan	15	10	39	5	Gr	2453	K1	6.6	6.2	10-	37	11	** GRAZE: CA 20.4S; Dist. 9km in az. 35deg. [Lat = 23.23-0.64(E.Long+82.36)]																					
26	Jan	15	10	44	42.3	R	184978	B9	7.7	7.7	10-	37	11	127	63N	295	352	290	-0.1	+7.1	+0.5	+0.0	.415	173.3			17	3	59.1	-28	15	23	403.0	816.1
26	Jan	16	10	46	27.4	r	2586	cB3	6.0	6.0	5-	26	1	122	83S	252	315	252	-1.2	+6.8	+0.9	+1.4	.397	-151.1			17	58	39.0	-28	45	33	402.1	884.5
							2586 is double: ** 6.3 7.3 0.30" 276.0, dT = -0.7sec																												
							2586 has been reported as non-instantaneous (OCc1519). Observations are highly desired																												
26	Jan	16	11	18	6.4	r	186054	G5	9.1	8.5	5-	26	7	125	74N	275	334	275	-1.2	+6.8	+0.7	+0.7	.424	-174.1			17	59	38.6	-28	42	19	401.3	829.0
26	Jan	20	15	9	14	m	3171	cA7	3.7	3.5v	4+	22	33	19	118	10S	157	215	174	-4.5	+2.8	+9.9	+9.9	.000	-90.0			21	40	5.5	-16	39	44	387.4	777.3
							R3171 = Nashira = gamma Capricorni																												
							3171 is double: AB 4.6 4.6 0.013" 239.0																												

Occultation prediction for Capitolio Nacional Habana
E. Longitude - 82 21 34.2, Latitude 23 8 6.6, Alt. 3m; Telescope dia 15cm; dMag 0.0

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      day  Time     P   Star  Sp  Mag  Mag    % Elon Sun  Moon   CA   PA  VA  AA Libration   A   B   RV    Cct durn  R.A. (J2000)  Dec   Mdist   SV
 y   m  d  h  m    s       No  D    v    r V  ill     Alt Alt Az   o    o   o   o   L    B   m/o m/o  "/s     o  sec  h  m   s    o  m  s   Mm   m/s
      3171 is a close double. Observations are highly desired
      3171 = gam Cap, 3.2, range 0.03, J, Type ACV
26 Jan 20 15 13 32   Gr   3171cA7  3.7  3.5v   4+  22  32 19 ** GRAZE: CA 10.2S; Dist.322km in az.   1deg. [Lat = 26.04-0.02(E.Long+82.36)]
26 Jan 21  0 40  3.5 d    3207DF*  8.2         5+  25      4 253  77S  86  21 104 -6.1 +1.7 +0.3-0.7 .467  -28.0     21 53 21.6 -14 11 23 387.7 994.8
      3207 is double: AB 8.21 11.42 1.49"  32.3, dT = +1.9sec
      3207 is a close double. Observations are highly desired
26 Jan 22 23 46  6   d    3454 K0  7.6  7.1   17+  49  -9 40 245  29S 127  70 148 -6.1 -1.3 +5.6-7.8 .099  -76.6     23 27 14.7 - 2 38 13 377.6 781.5
26 Jan 22 23 54 38   Gr   3454 K0  7.6  7.1   17+  49 -10 37 ** GRAZE: CA 15.2S; Dist. 50km in az. 153deg. [Lat = 22.63+0.48(E.Long+82.36)]
26 Jan 23  0 21 19.8 d  146716pG0  8.4  8.2   17+  49     33 251  34S 122  61 144 -6.2 -1.4 +3.2-4.8 .156  -69.6     23 28  5.7 - 2 27 33 378.1 819.6
    146716 is triple: AB 9.2 9.2 0.20"  79.7, dT = +0.9sec : AC 8.5 8.1 57"  45.9, dT = +89sec
    146716 is a close double. Observations are highly desired
26 Jan 23  0 22 51.5 d  146717PF2  8.1  7.9   17+  49     32 251  35S 121  60 143 -6.2 -1.4 +3.0-4.5 .165  -68.4     23 28  8.5 - 2 26 53 378.2 821.4
    146717 is double: AB 8.1 8.5 57" 225.9, dT = -90sec
26 Jan 23  1 28 11.6 D    3459 K0  6.4  5.8   17+  49     18 260  55N  31 326  53 -6.3 -1.5 +0.3+1.4 .444   25.5     23 29 27.0 - 1 47 28 379.4 905.8
   R3459 = 11 Piscium
26 Jan 24  0 19 57.8 D     30SA0  7.1  7.1   26+  61     46 252  83N  59 358  81 -5.8 -2.9 +1.5+0.7 .414   -6.8      0 15 57.3   4 15  4 373.8 755.0
       30 is triple: AB 7.0 14.1 0.8" 246.0, dT = -1.9sec : AC 7.0 12.2 5.0" 347.3, dT = +4sec
       30 is a close double. Observations are highly desired
26 Jan 24  3  1 56.0 d      41 G5  7.7  7.2   27+  63     10 271  63S  93  25 115 -6.1 -3.1 +0.3-1.0 .453  -30.5      0 20 21.6   4 46 44 376.9 961.4
26 Jan 27 19 27 27.0 d     541SB8  3.9  3.9s  69+ 112  41 18  70  24S 145 217 157 -1.3 -6.1 +3.5-4.3 .118  -78.5      3 45 49.6  24 22  4 366.11051.5
   R541 = Maia = 20 Tauri
      541 is quadruple: Aa,Ab 4.4 5.4           : AB 3.8 13.7 113"  72.6, dT = +294sec : AB 3.8 13.7 113"  72.7, dT = +295sec
      541 = NSV 1279, 3.87, range 0.00, 4Kp, Type ACV, Period 10.288 days
26 Jan 27 19 32 14   Gr    541SB8  3.9  3.9s  69+ 112  41 20 ** GRAZE: CA 13.2S; Dist. 44km in az. 145deg. [Lat = 22.65+0.65(E.Long+82.36)]
26 Jan 27 19 38  9.7 r     541SB8  3.9  3.9s  69+ 112  40 20  71   2S 167 241 180 -1.3 -6.1 -3.7+6.9 .116 -101.5      3 45 49.6  24 22  4 365.91032.6
   R541 = Maia = 20 Tauri
      541 is quadruple: Aa,Ab 4.4 5.4           : AB 3.8 13.7 113"  72.6, dT = +82sec : AB 3.8 13.7 113"  72.7, dT = +80sec
      541 = NSV 1279, 3.87, range 0.00, 4Kp, Type ACV, Period 10.288 days
   Distance of 541 to Terminator = 2.8"; to 3km sunlit peak = 0.0"
26 Jan 27 23 27 48.5 D     579kA2  6.4  6.3S  70+ 114  -4 70  78  41N  31 124  43 -1.6 -6.6 +1.0+2.9 .338   33.5      3 53 34.5  25 40 58 361.8 710.6
      579 = NSV 1391, 6.33,
26 Jan 27 23 35 21.1 d   76303kA2  7.8  7.7   70+ 114  -5 72  77  28N  19 113  30 -1.6 -6.6 +0.6+3.7 .276   46.5      3 53 32.0  25 43 48 361.7 703.6
26 Jan 29  5 18 35.9 d     768 A2  7.0  6.7S  82+ 129     46 288  34N  33 307  38 -1.0 -6.6 +3.1+3.2 .207   62.6      5  8 35.3  28 16 24 361.5 787.9
      768 = NSV 16250, 7., , Type VAR:
26 Jan 29  5 35 45.2 D     771SA5  6.1  5.9e  82+ 129     43 288  89S  90   6  95 -1.0 -6.6 +1.3-0.7 .460    6.0      5  9 45.1  28  1 50 361.8 812.3
      771 is triple: Aa,Ab 6.0      0.20" 351.0, dT = -0.07sec : A,BC 6.0 9.1 11.2"  29.1, dT = +12sec
      771 is a close double. Observations are highly desired
      771 = V1156 Tau, 6. to 6.1, Hp, Type E:, Period 1.40266 days, Phase  13%
26 Jan 30  6 21 56.0 d   78191 A0  7.7  7.7   90+ 143     47 287  82N  90   4  89 +0.5 -6.0 +1.5-0.7 .447   16.3      6 17 59.9  28  0 24 361.3 816.4
26 Jan 30 23 47 51.2 d    1089 K0  6.7  6.1   95+ 155  -8 33  73  54S 142 220 136 +3.1 -5.3 +1.8-1.7 .314  -50.3      7 11 30.0  26 24 21 363.1 865.6
26 Jan 30 23 48 23.6 d    1088 A4  5.8  5.7S  95+ 155  -8 33  72  15N  31 110  25 +3.1 -5.3 -0.5+4.1 .243   60.3      7 11 23.1  26 51 24 363.1 864.6
   R1088 = 47 Geminorum
      1088 = NSV 17371, 5.77, , Type DSCT:
   Distance of 1088 to Terminator = 6.9"; to 3km sunlit peak = 0.0"
26 Jan 31  0  3 50.5 d   79164cG8  7.4  6.9   95+ 155 -11 36  73  85N 101 181  95 +3.1 -5.4 +1.2+0.3 .471   -9.4      7 12 31.2  26 33 52 362.8 840.7
     79164 is double: ** 8.1 8.5 0.10"  21.0, dT = +0.04sec
     79164 has been reported as non-instantaneous (OCc 237). Observations are highly desired
26 Jan 31  2 36 42.7 D    1105cG7  6.5        96+ 156     69  75  34N  50 146  44 +2.8 -5.4 +2.4+3.2 .243   50.7      7 17  3.4  26 41 22 360.8 671.9
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Occultation prediction for Capitolio Nacional Habana
E. Longitude - 82 21 34.2, Latitude 23 8 6.6, Alt. 3m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	% V	Elon ill	Sun Alt	Moon Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	dur sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
							1105 is double: AB 7.00 7.70 0.20" 236.6, dT = -0.8sec																												
							1105 is a close double. Observations are highly desired																												
26	Jan	31	2	40	11.9	d	79243	K1	7.3	6.7	96+	156	70	76	75S	122	217	115	+2.7	-5.4	+2.4	-1.2	.360	-20.2		7	17	15.6	26	21	49	360.7	670.2
26	Jan	31	3	3	34.0	d	79253	cK1	7.6	7.1	96+	156	75	74	76S	121	221	115	+2.7	-5.4	+2.4	-1.3	.359	-18.1		7	17	54.5	26	19	59	360.6	660.7
							79253 is double: ** 8.7 8.7 0.050"																												
							79253 has been reported as non-instantaneous (OCc1350). Observations are highly desired																												
26	Jan	31	5	13	26.3	d	79316	G2	7.5	7.1v	96+	157	75	286	86N	103	4	96	+2.3	-5.2	+2.3	-0.9	.391	9.1		7	21	32.8	26	9	33	360.7	692.6
							79316 = V0340 Gem, 7.37 to 7.71, V, Type RS, Period 35.37 days, Phase 86%																												
26	Jan	31	23	32	54.5	d	1239	A4	6.6	6.5	99+	168	-4	16	71	87N	115	186	103	+4.5	-4.2	+0.5	+0.0	.525	-16.1		8	13	41.7	23	8	16	366.7	972.4
26	Feb	2	9	35	5.0	r	1395	G9	6.3	5.8	100-	174		41	272	63N	303	229	286	+4.3	-1.8	+0.8	-1.6	.488	-176.9		9	25	32.5	16	35	8	369.1	875.1
							Distance of 1395 to Terminator = 3.7"; to 3km sunlit peak = 0.0"																												
26	Feb	4	3	38	10.9	R	1600wA5		5.0	4.9	94-	151		31	97	30N	354	60	333	+6.5	+0.6	+0.5	-3.2	.282	129.1		11	0	44.8	6	6	5	378.3	821.3
							R1600 = 59 Leonis																												
							1600 is double: AB 5.0 12.6 40" 217.4, dT = +103sec																												
26	Feb	4	6	54	49.5	r	1606	M*	7.8	7.0v	93-	150		69	149	62N	322	351	301	+6.0	+1.0	+1.6	-1.9	.370	171.9		11	4	19.1	5	13	30	376.3	682.0
							1606 = FG Leo, 7.84 to 8.01, Hp, Type SRB, Period 24.962161 days, Phase 38%																												
26	Feb	6	8	21	14.8	d	1815SK2		4.7	4.0	79-	125		57	160	-29S	176	194	154	+5.4	+4.1	+0.1	-3.1	.267	-40.7	.01	12	39	14.8	- 7	59	44	387.6	661.2
							R1815 = chi Virginis																												
							1815 is multiple: **Aa,Ab 4.8 8.8 0.10" 214.0, dT = +0.3sec : AB 4.8 8.8 177" 135.9, dT = +508sec : AC 4.8 10.6 224" 109.8, dT = +337sec : AD 4.8 9.0 321" 331.1, dT = -1091sec																												
							1815 has been reported as non-instantaneous (OCc 760). Observations are highly desired																												
26	Feb	6	9	28	33.7	R	1815SK2		4.7	4.0	79-	125		58	192	69S	274	263	252	+5.1	+4.3	+3.4	-0.4	.261	-139.7	.01	12	39	14.8	- 7	59	44	387.7	645.1
							R1815 = chi Virginis																												
							1815 is multiple: **Aa,Ab 4.8 8.8 0.10" 214.0, dT = -0.19sec : AB 4.8 8.8 177" 135.9, dT = +507sec : AC 4.8 10.6 224" 109.8, dT = +824sec : AD 4.8 9.0 321" 331.1, dT = -671sec																												
							1815 has been reported as non-instantaneous (OCc 760). Observations are highly desired																												
26	Feb	6	10	42	44	r	138905	F8	7.3	7.0	78-	124		50	220	30S	236	199	214	+4.9	+4.4	+7.3	+3.9	.089	-104.8		12	40	40.7	- 8	26	54	388.5	656.9
26	Feb	7	6	14	18.2	r	1919	K5	6.9	6.0s	71-	114		28	119	37N	347	42	326	+5.2	+5.0	-0.1	-2.2	.329	141.6		13	22	8.3	-12	34	46	394.1	801.4
							1919 = NSV 19751, 6.98 to 7.03, Hp																												
26	Feb	7	7	20	29.4	r	157895	pA2	7.8	7.7	70-	114		40	132	49S	252	297	232	+5.0	+5.1	+3.7	+2.3	.195	-120.8		13	22	45.6	-13	11	11	393.2	724.9
							157895 is double: AB 7.8 10.8 19.4" 311.2, dT = -52sec																												
26	Feb	9	8	17	42.7	r	2138	WF6	7.9	7.6	51-	91		28	134	74N	302	348	286	+2.8	+6.8	+1.1	-0.4	.379	-177.9		14	58	40.7	-22	24	5	400.4	737.2
							2138 is double: AB 7.9 9.6 12.0" 95.0, dT = +28sec																												
26	Feb	9	9	53	46.2	r	183079	M2	7.7	6.8s	51-	91		40	156	75S	271	295	255	+2.5	+7.0	+3.1	+0.4	.271	-146.5		15	0	30.4	-22	50	58	399.4	628.6
							183079 = NSV 20220, 7.67 to 7.75, Hp																												
26	Feb	10	8	19	17.3	d	2263cB1		4.6	4.7	42-	80		18	129	-73N	84	137	72	+1.6	+7.1	+1.6	+1.1	.337	33.5		15	50	58.7	-25	45	5	402.6	788.5
							R2263 = 1 Scorpii																												
							2263 is double: ** 5.6 5.6 0.050"																												
							2263 has been reported as non-instantaneous (OCc1483). Observations are highly desired																												
26	Feb	10	9	24	13.7	R	2263cB1		4.6	4.7	41-	80		28	140	39N	332	13	320	+1.4	+7.3	+0.3	-1.6	.296	146.3		15	50	58.7	-25	45	5	401.5	693.5
							R2263 = 1 Scorpii																												
							2263 is double: ** 5.6 5.6 0.050"																												
							2263 has been reported as non-instantaneous (OCc1483). Observations are highly desired																												
26	Feb	11	8	32	15.2	R	2397	K1	6.5	5.9	32-	69		10	126	68N	298	355	290	+0.4	+7.2	+0.4	-0.1	.420	173.6		16	41	37.6	-27	48	35	403.2	826.4
26	Feb	12	11	18	32.5	R	2540	B3	7.2	7.1e	23-	58	-11	28	145	63N	295	333	293	-1.3	+7.2	+1.7	-0.2	.319	165.9		17	40	23.9	-28	55	24	399.7	638.1
							2540 = V2382 Oph, 7.26 to 7.29, Hp, Type E+BE, Period 0.9215 days, Phase 40%																												
26	Feb	13	10	31	46.6	r	186988	A0	8.5	8.3	16-	47		13	129	73N	278	333	282	-2.1	+6.6	+1.0	+0.6	.395	176.8		18	34	12.8	-28	20	45	398.7	764.5
26	Feb	13	11	19	45.8	r	187016	G5	8.3	7.7	16-	47	-11	21	135	62N	289	336	292	-2.3	+6.6	+1.3	+0.1	.346	164.4		18	35	37.8	-28	19	31	397.8	692.1

Occultation prediction for Capitolio Nacional Habana
E. Longitude - 82 21 34.2, Latitude 23 8 6.6, Alt. 3m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon Sun Alt	Moon Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	dur sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	Feb	19	0	30	21.5	D	Mercury		-0.6	-0.6		2+	18	3	265	78N	51	345	73	-5.8	-1.1	+0.0	+0.5	.507	8.3		23	14	18.8	- 3	50	16	378.7	940.7
	Mercury contacts: Bright limb 0 30 15; Terminator 0 30 23.1; Dark limb 0 30 28: diam = 7.0"; %illum = 53.3%; PA bright limb = 244.0																																
26	Feb	20	1	25	19.0	d	108995	K2	7.9	7.3		7+	31	4	272	84N	57	350	79	-5.3	-2.7	+0.1	+0.3	.557	5.4		0	4	37.5	2	56	14	375.7	1019.5
26	Feb	21	1	42	24.4	d	109530	DF0	8.2	8.0		14+	44	13	275	85S	68	0	90	-4.7	-4.2	+0.4	+0.0	.528	-3.6		0	54	45.1	9	25	44	372.4	955.4
	109530 is double: AB 8.57 9.60 3.11" 299.9, dT = -4sec																																
	109530 is a close double. Observations are highly desired																																
26	Feb	23	2	48	48.5	d	75537	A2	7.8	7.7		33+	71	24	284	53N	33	320	50	-2.8	-6.2	+1.2	+1.6	.361	43.1		2	43	41.1	21	8	50	368.3	884.2
26	Feb	24	0	30	26.7	D	76046	cA0	7.1	7.1		44+	83	68	280	35S	131	41	144	-1.4	-6.7	+2.8	-4.0	.202	-57.2		3	39	6.7	24	42	10	364.4	660.8
	76046 is double: AB 7.1 45.0, dT = -3sec																																
26	Feb	24	1	39	12.1	d	76081	K2	7.5	6.9		44+	83	53	282	81S	85	1	98	-1.5	-6.8	+1.9	-0.5	.401	-6.5		3	41	18.1	25	0	29	365.2	714.8
26	Feb	24	2	8	55	M	529	SA2	6.1	6.1		44+	84	46	283	5N	351	268	4	-1.6	-6.7	+9.9	+9.9	.000	90.0		3	40	46.3	25	19	46	365.7	750.4
	R529 = 11 Tauri																																
	529 is triple: **Aa,Ab 6.3 8.3 : AB 6.1 10.9 74" 357.0																																
26	Feb	24	2	37	4	m	76084	K2	7.9	7.2		45+	84	40	285	6N	353	272	5	-1.7	-6.7	+9.9	+9.9	.000	90.0		3	41	41.5	25	22	12	366.2	788.2
26	Feb	24	2	56	32.7	d	76102	A2	7.5	7.5		45+	84	36	285	78S	88	9	101	-1.7	-6.7	+1.1	-0.7	.457	-4.7		3	43	43.2	25	4	51	366.5	815.3
26	Feb	24	4	59	50.7	d	555	K5	6.4	5.6s		46+	85	10	293	38S	129	60	141	-1.8	-6.6	-0.6	-2.0	.422	-42.5		3	48	6.5	24	59	18	369.1	1025.8
	555 = NSV 1316, 6.44, range 0.02, 0V, Type VAR, Period 1.48987 days																																
26	Feb	25	1	15	47.6	d	715	cK5	8.0	7.5		56+	97	71	289	89N	82	342	89	-0.2	-6.8	+2.5	+0.0	.368	3.1		4	43	35.4	27	41	15	364.1	651.2
	715 is double: ** 8.8 8.8 0.10" 90.0, dT = +0.27sec																																
	715 has been reported as non-instantaneous (OCc 130). Observations are highly desired																																
26	Feb	26	6	58	21.3	d	77818	K5	6.7	5.8		69+	112	12	296	62N	63	353	64	+0.5	-6.0	+0.5	+0.0	.461	39.4		6	0	4.9	28	7	33	369.2	1069.1
26	Feb	27	2	43	1.4	d	78873	A2	7.8	7.7		78+	124	79	295	86S	102	352	98	+2.1	-5.7	+2.5	-0.8	.369	4.9		6	55	48.1	27	14	58	365.0	655.0
26	Feb	27	2	47	5.2	d	1056	B9	7.2	7.3		78+	124	78	294	85N	93	344	88	+2.0	-5.7	+2.6	-0.4	.360	14.5		6	55	56.2	27	17	9	365.1	657.4
26	Feb	27	5	17	42.5	d	78957	G8	7.5	7.0		79+	125	46	285	86S	103	19	98	+1.7	-5.4	+1.2	-1.1	.456	9.5		7	0	14.8	26	52	42	366.9	822.7
26	Feb	28	1	29	14.9	d	1194	SK0	7.8	7.2		86+	137	70	81	49N	64	154	54	+3.4	-4.7	+2.8	+2.2	.263	44.5		7	56	1.5	24	39	57	366.7	654.9
	1194 is triple: AB 7.8 10.1 18.9" 160.1, dT = -7sec : AB 9.5 11.5 34" 194.1, dT = -84sec																																
26	Feb	28	5	4	53.9	d	79868	DK0	7.4			87+	138	61	278	84N	99	14	89	+2.8	-4.3	+2.0	-0.9	.394	20.7		8	1	30.3	23	54	46	367.4	749.6
	79868 is double: AB 7.43 10.98 1.30" 168.9, dT = +1.2sec																																
	79868 is a close double. Observations are highly desired																																
26	Feb	28	5	33	49.9	d	1208	DK1	6.4			87+	138	55	279	10S	185	103	175	+2.7	-4.2	-1.7	-5.4	.182	-65.6		8	1	0.8	23	34	59	367.8	785.1
	1208 is double: AB 6.48 9.95 1.95" 325.2, dT = -8sec																																
	1208 is a close double. Observations are highly desired																																
	Distance of 1208 to Terminator = 10.8"; to 3km sunlit peak = 1.0"																																
26	Mar	1	1	33	10.6	D	1329	pF8	6.8			93+	150	58	89	49S	152	230	137	+4.3	-3.3	+1.7	-2.5	.309	-36.9		8	53	55.3	19	58	2	369.4	691.8
	1329 is double: AB 7.32 7.86 0.15" 72.1, dT = +0.09sec																																
	1329 is a close double. Observations are highly desired																																
26	Mar	3	11	16	27.0	d	X119629k		11.5	11.1		0E	179	-8	7	274	28U	77	9	56	+4.1	+1.2	+0.3	-0.4	.396	44.0		10	51	47.3	6	18	53	381.7	1020.2
26	Mar	3	11	23	28.9	d	X210181k		11.7			0E	179	-7	6	274	54U	112	45	91	+4.1	+1.2	+0.0	-1.3	.550	8.4		10	51	57.8	6	7	28	382.0	1030.5
26	Mar	3	11	30	11.6	d	X119641k		11.3	11.0		0E	179	-5	4	275	69U	134	67	113	+4.1	+1.2	-0.1	-1.7	.545	-14.0		10	51	57.8	6	0	33	382.1	1040.9
26	Mar	6	11	13	34.8	r	1885	K2	7.3	6.7		91-	145	-8	28	242	76N	313	257	292	+3.3	+5.3	+1.3	-2.1	.377	167.5		13	8	27.9	-11	45	46	392.0	735.1
26	Mar	7	10	50	3.3	R	1993	cK3	6.6	5.9		84-	133	36	225	53S	258	216	239	+2.7	+6.3	+2.7	-0.3	.252	-138.8		13	54	21.4	-17	10	48	394.9	642.8
26	Mar	8	4	37	24.3	r	2084	A3	6.5	6.4		78-	124	12	119	65S	266	325	249	+3.1	+6.4	+1.0	+1.1	.366	-143.3		14	34	50.7	-20	26	22	399.6	883.6
26	Mar	9	11	27	52.3	r	183572	kG0	7.6	7.3		68-	111	-4	37	206	56N	320	293	306	+0.6	+7.5	+2.5	-2.4	.250	148.1		15	33	54.8	-25	6	38	399.8	570.7
26	Mar	12	9	29	23.1	R	2631	B9	6.5	6.5v		40-	79	23	139	80S	257	301	258	-2.2	+6.9	+2.1	+1.2	.322	-160.1		18	11	58.2	-28	54	6	399.7	663.9
	R2631 = V4045 Sagittarii																																
	2631 = V4045 Sgr, 6.51 to 6.54, V, Type ACV, Period 2.8855 days																																
26	Mar	12	11	18	33.2	r	186512	B8	7.9	8.0		40-	78	-6	36	162	76N	280	300	282	-2.7	+6.9	+2.8	+0.0	.284	168.8		18	14	33.2	-28	50	20	398.3	559.8
26	Mar	13	8	48	57.0	d	2784	cK1	3.3	2.7		31-	68	8	125	-16S	155	213	161	-3.2	+6.1	-1.0	-2.8	.181	-63.9	.03	19	6	56.4	-27	40	14	398.5	793.1

Occultation prediction for Capitolio Nacional Habana
E. Longitude - 82 21 34.2, Latitude 23 8 6.6, Alt. 3m; Telescope dia 15cm; dMag 0.0

y	m	day d	h	Time m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon Sun Alt	Moon Alt	Az	CA o	PA o	VA o	AA o	Libration L	B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
							R2784 = tau Sagittarii																											
							2784 is double: AB 4.2 4.2 0.008" 319.3, dT = -0.04sec																											
26	Mar	13	9	3	38	Gr	2784cK1	3.3	2.7	31-	68		14	** GRAZE: CA 9.6S; Dist.205km in az. 209deg. [Lat = 21.01-0.52(E.Long+82.36)]																			
26	Mar	13	9	13	5.4	r	187672kA*	7.4	7.4	31-	68		13	128	41N	310	5	316	-3.2	+6.2	+0.4	-0.7	.300	140.5		19	6	19.2	-27	17	14	397.9	752.0
26	Mar	13	9	21	48.6	R	2784cK1	3.3	2.7	31-	68		15	129	35S	206	260	212	-3.2	+6.2	+3.1	+4.5	.169	-116.2	.03	19	6	56.4	-27	40	14	397.7	738.8
							R2784 = tau Sagittarii																											
							2784 is double: AB 4.2 4.2 0.008" 319.3, dT = +0.02sec																											
26	Mar	15	10	35	35.3	r	189827	A3	8.0	7.9	14-	44		13	120	43S	204	263	219	-4.8	+4.0	+1.6	+3.2	.269	-130.1		20	54	43.6	-20	56	58	389.0	787.4
26	Mar	22	0	37	40.3	d	X 3230	M2	9.1	8.1v	11+	39		25	281	37S	118	45	136	-2.6	-6.0	+0.4	-2.2	.358	-44.8		2	23	36.5	18	57	54	364.3	892.2
							X 3230 = ASAS J022337+1857.9, 9., range 0.3, V, Type MISC, Period 62.5 days, Phase 62%																											
26	Mar	22	1	58	22.5	d	92940cK0	7.9	7.4	11+	39		8	288	29N	5	297	23	-2.6	-5.9	+1.7	+4.7	.185	71.4		2	25	39.8	19	33	16	366.1	1028.5
							92940 is double: ** 8.0 10.4 0.040" 69.0, dT = +0.09sec																											
							92940 has been reported as non-instantaneous (OCc1705). Observations are highly desired																											
26	Mar	23	2	57	11.8	d	499cG5	8.0		20+	53		9	293	54N	36	327	50	-1.1	-6.4	+0.8	+1.2	.388	48.5		3	27	49.6	24	10	58	366.1	1038.4
							499 is double: AB 8.04 11.52 0.40" 170.0, dT = -0.7sec																											
							499 is a close double. Observations are highly desired																											
26	Mar	24	22	6	11.9	D	810SB7	1.7	1.7	40+	79	21	79	57	33N	29	147	32	+2.2	-6.6	+1.8	+4.5	.210	54.9		5	26	17.5	28	36	27	363.1	642.5
							R810 = El Nath = beta Tauri																											
							810 is multiple: AC 1.9 19.0 8.4" 357.0, dT = +34sec : AD 1.9 18.5 9.8" 70.0, dT = +35sec : AE 1.9 10.9" 80.0, dT = +32sec : AF 1.9 15.8 11.6" 296.0, dT = -2.5sec																											
							810 is a close double. Observations are highly desired																											
26	Mar	24	22	31	42	Gr	810SB7	1.7	1.7	40+	79	15	86	** GRAZE: CA -0.2N; Dist.301km in az. 354deg. [Lat = 25.86+0.09(E.Long+82.36)]																			
26	Mar	24	22	55	45.7	R	810SB7	1.7	1.7	40+	79	10	84	342	-34N	322	161	326	+2.1	-6.6	+2.8	-4.1	.207	125.1		5	26	17.5	28	36	27	363.1	632.3
							R810 = El Nath = beta Tauri																											
							810 is multiple: AC 1.9 19.0 8.4" 357.0, dT = -33sec : AD 1.9 18.5 9.8" 70.0, dT = +14sec : AE 1.9 10.9" 80.0, dT = +24sec : AF 1.9 15.8 11.6" 296.0, dT = -50sec																											
							810 is a close double. Observations are highly desired																											
26	Mar	25	2	40	32.0	d	77268	B8	8.2	8.0v	41+	80		39	288	40S	136	54	139	+1.5	-6.4	+0.2	-2.4	.380	-36.1		5	34	39.1	28	3	4	365.7	834.9
							77268 = V1371 Tau, 8.02 to 8.20, V, Type GCAS																											
26	Mar	26	0	15	28.9	D	1008	A0	5.3	5.3s	52+	93	-8	83	315	46N	50	277	47	+3.1	-5.9	+3.5	+2.9	.221	52.0		6	35	12.1	28	1	20	365.4	635.4
							R1008 = 49 Aurigae																											
							1008 = NSV 3032, 5.05 to 5.27, V																											
26	Mar	26	1	8	3.7	r	1008	A0	5.3	5.3s	53+	93		72	290	-26N	338	236	335	+2.9	-5.9	+0.9	-4.4	.231	127.8		6	35	12.1	28	1	20	365.8	666.7
							R1008 = 49 Aurigae																											
							1008 = NSV 3032, 5.05 to 5.27, V																											
26	Mar	26	2	31	55.9	d	78580SA2	7.3	7.2	53+	93		55	286	39N	43	314	40	+2.7	-5.7	+4.2	+3.3	.170	66.5		6	38	53.6	27	48	16	366.8	754.9
							78580 is triple: AC 7.3 13.8 26.6" 237.2, dT = -152sec : AB 7.3 10.5 28.6" 130.4, dT = +7sec																											
26	Mar	26	4	13	25.6	d	1028	G8	7.5	7.1	54+	94		33	288	19S	166	87	162	+2.5	-5.5	-1.0	-3.5	.281	-56.3		6	41	42.7	27	4	54	368.7	907.2
26	Mar	27	2	32	47.7	d	79610	F8	7.2	7.0	64+	106		67	280	55S	135	46	127	+3.7	-4.7	+1.3	-2.3	.374	-18.4		7	41	3.1	24	57	54	368.6	705.4
26	Mar	27	4	57	17.0	D	1170dG8	3.6	3.1	65+	107		35	284	14S	178	100	169	+3.3	-4.4	-1.3	-4.0	.243	-60.9	.01	7	44	26.8	24	23	53	371.1	897.9
							R1170 = kappa Geminorum																											
							1170 is double: AB 3.7 10.0 7.3" 241.1, dT = +14sec																											
							1170 is a close double. Observations are highly desired																											
26	Mar	27	5	16	48	Gr	1170dG8	3.6	3.1	65+	108		29	** GRAZE: CA-15.3S; Dist.255km in az. 218deg. [Lat = 20.21-0.72(E.Long+82.36)]																			
26	Mar	27	5	27	26.4	R	1170dG8	3.6	3.1	65+	108		29	286	-44S	235	159	226	+3.3	-4.3	+2.0	+0.9	.256	-119.1	.01	7	44	26.8	24	23	53	371.8	947.8
							R1170 = kappa Geminorum																											
							1170 is double: AB 3.7 10.0 7.3" 241.1, dT = -29sec																											
							1170 is a close double. Observations are highly desired																											

Occultation prediction for Capitolio Nacional Habana
E. Longitude - 82 21 34.2, Latitude 23 8 6.6, Alt. 3m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V ill	% Elon Sun Alt	Moon Alt	Az	CA o	PA o	VA o	AA o	Libration L	B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	Mar	30	0	48	15.6	d	1515kF8		7.8	7.5	91+	144	51	102	80S	122	188	102	+5.5	-0.6	+1.7	-0.8	.388	2.8		10	21	52.9	10	41	59	378.3	713.2
26	Mar	30	5	57	1	M	1531wA0		6.0	6.0v	91+	146	52	256	20N	41	336	21	+4.5	+0.1	+9.9	+9.9	.000	90.0		10	27	39.0	9	45	45	379.0	765.5

R1531 = 45 Leonis (CX)

1531 is double: AB 6.0 12.4 34" 119.5

1531 = CX Leo, 6.01 to 6.03, V, Type ACV, Period 3.0525 days, Phase 70%

26	Mar	30	5	59	5	Gr	1531wA0		6.0	6.0v	91+	146	50	** GRAZE: CA 20.0N; Dist. 83km in az. 226deg. [Lat = 22.05-0.96(E.Long+82.36)]																			
26	Apr	4	2	27	52.5	r	2039 A0		5.5	5.5	96-	156	12	116	38N	351	52	333	+3.4	+6.0	-0.7	-2.4	.309	131.8		14	15	24.1	-18	12	2	398.5	895.1
26	Apr	4	3	51	39.8	R	2045cK0		6.4		95-	155	28	129	63N	327	16	309	+3.2	+6.2	+0.4	-1.3	.378	159.8		14	17	3.8	-18	35	9	397.0	775.4

2045 is double: AB 6.40 10.51 0.70" 83.1, dT = +0.8sec

2045 is a close double. Observations are highly desired

26	Apr	4	4	34	56.8	R	2051 A*		5.9	5.9v	95-	155	35	137	27N	3	45	345	+3.1	+6.3	-1.0	-3.5	.216	125.0		14	18	38.3	-18	42	57	396.5	722.6

2051 = CS Vir, 5.84 to 5.95, V, Type ACV, Period 9.2954 days, Phase 55%

Distance of 2051 to Terminator = 19.7"; to 3km sunlit peak = 7.9"

26	Apr	4	7	12	46.9	r	158499 F2		7.7	7.5	95-	154	47	184	72N	317	313	299	+2.5	+6.6	+2.0	-1.7	.308	168.6		14	20	50.3	-19	19	56	395.7	602.7
26	Apr	4	10	0	30.0	r	158538wK1		7.3	6.8	95-	153	29	229	82N	308	260	290	+1.8	+6.7	+1.9	-2.0	.331	165.0		14	24	0.4	-19	48	3	397.6	660.7

158538 is double: AB 7.4 11.6 40" 286.2, dT = -111sec

26	Apr	4	11	6	8.6	r	2066SA1		6.6	6.6	95-	153	-4	17	239	89S	298	242	281	+1.6	+6.7	+1.4	-1.7	.376	169.2		14	25	29.9	-19	58	12	399.0	740.4

2066 is quadruple: **Aa,Ab 6.8 7.7 0.018" 329.0, dT = -0.04sec : BC 7.16 8.37 1.21" 89.4, dT = +2.8sec : AB 6.6 7.2 35" 294.8, dT = -92sec

2066 has been reported as non-instantaneous (OCc 204). Observations are highly desired

26	Apr	5	9	53	11.6	R	2174pB8		6.5	6.5	90-	142	34	215	42S	245	210	230	+0.9	+7.2	+2.7	+0.5	.225	-136.6		15	13	17.4	-24	0	30	399.4	599.1

2174 is triple: ** 7.1 7.1 0.030" 0.0 : AB 6.4 12.5 8.2" 45.0, dT = +34sec

2174 has been reported as non-instantaneous (OCc1471). Observations are highly desired

26	Apr	6	3	58	52.4	d	2287SB1		2.9	3.0v	84-	133	8	123	-83S	114	174	103	+1.1	+7.0	+0.3	+0.0	.448	1.3		15	58	51.1	-26	6	51	403.4	876.7

R2287 = pi Scorpii

2287 is triple: Aa,Ab 5.1 13.4 2.0" 244.0, dT = -2.9sec : AB 2.9 11.9 50" 128.1, dT = +109sec

2287 is a close double. Observations are highly desired

2287 = pi Sco, 2.88 to 2.91, V, Type ELL, Period 1.570103 days, Phase 64%

26	Apr	6	5	9	37.6	R	2287SB1		2.9	3.0v	84-	133	21	132	78N	298	348	287	+1.0	+7.1	+0.9	-0.2	.391	178.5		15	58	51.1	-26	6	51	402.0	761.7

R2287 = pi Scorpii

2287 is triple: Aa,Ab 5.1 13.4 2.0" 244.0, dT = -3sec : AB 2.9 11.9 50" 128.1, dT = +127sec

2287 is a close double. Observations are highly desired

2287 = pi Sco, 2.88 to 2.91, V, Type ELL, Period 1.570103 days, Phase 64%

26	Apr	6	8	36	1.5	r	2297kF7		7.0	6.7	83-	132	40	180	74S	270	270	259	+0.2	+7.4	+3.3	+0.0	.270	-160.2		16	3	16.1	-26	43	2	400.3	557.7
26	Apr	6	9	55	2.9	r	2300wK0		7.6	7.1	83-	131	37	202	45S	241	219	230	-0.2	+7.5	+3.1	+0.9	.216	-138.3		16	5	1.4	-26	56	52	400.7	562.3

2300 is double: AB 7.7 13.7 13.4" 351.6, dT = +22sec

26	Apr	9	9	43	14.7	r	2727kA*		7.4	7.4v	57-	99	35	157	26S	202	226	206	-3.5	+6.4	+3.3	+4.5	.137	-117.8		18	47	37.1	-28	16	47	398.8	566.0

2727 = HIP 92215, 7.45 to 7.48, V, Type ACV, Period 1.93789 days, Phase 95%

26	Apr	11	7	44	13.4	r	2991 K5		6.1	5.3	39-	77	5	117	27N	318	21	331	-5.1	+4.4	-0.4	-1.5	.229	121.6	.01	20	29	31.3	-22	23	30	395.0	838.0
26	Apr	11	10	27	35.8	r	189425WF7		7.5	7.2	38-	76	-11	34	141	56N	289	328	302	-5.6	+4.3	+2.5	-0.1	.253	140.0		20	33	30.9	-22	13	55	391.5	626.9

189425 is double: AB 7.5 11.6 10.3" 21.3, dT = +1.7sec

26	Apr	14	10	22	27.5	R	3383 M2		6.2	5.4s	12-	40	-11	16	104	25S	182	246	203	-6.1	+0.0	+0.4	+3.6	.254	-121.5	.01	23	2	32.6	-	6	34	26	376.6	889.0

R3383 = 82 Aquarii

3383 = NSV 25999, 6.24 to 6.29, Hp

26	Apr	19	14	25	46.2	d	539SB6		4.3	4.4s	7+	30	45	22	72	67S	92	166	105	+0.7	-6.1	+0.5	+0.7	.533	-26.4		3	45	12.5	24	28	2	359.3	1036.5

R539 = Taygeta = 19 Tauri

539 is multiple: Aa,Ab 4.6 6.1 : AB 0.018" 273.2, dT = -0.03sec : AC 4.3 14.0 53" 53.4, dT = +77sec : AB 4.3 11.0 72" 328.8, dT = -75sec

539 is a close double. Observations are highly desired

Occultation prediction for Capitolio Nacional Habana
E. Longitude - 82 21 34.2, Latitude 23 8 6.6, Alt. 3m; Telescope dia 15cm; dMag 0.0

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      day  Time     P   Star  Sp  Mag  Mag    % Elon Sun  Moon   CA   PA  VA  AA Libration   A    B    RV    Cct durn  R.A. (J2000)  Dec   Mdist   SV
 y   m  d  h  m    s       No  D    v    r V  ill     Alt Alt Az   o    o   o   o   L    B   m/o m/o  "/s     o  sec  h  m   s    o  m  s   Mm   m/s
       539 = NSV 1264, 4.30, range 0.00, 1Kp, Type SPB, Period 1.5664 days
26 Apr 19 14 55 40   D     541SB8  3.9  3.9s   7+  31  52 29  74  13S 146 223 159 +0.7 -6.1 +6.1-6.9 .086  -81.3      3 45 49.6  24 22  4 358.6 985.6
   R541 = Maia = 20 Tauri
       541 is quadruple: Aa,Ab 4.4 5.4           : AB 3.8 13.7 113"  72.6, dT = +368sec : AB 3.8 13.7 113"  72.7, dT = +370sec
       541 = NSV 1279, 3.87, range 0.00, 4Kp, Type ACV, Period 10.288 days
26 Apr 19 14 59 47   Gr    541SB8  3.9  3.9s   7+  31  53 31 ** GRAZE: CA  4.5S; Dist. 23km in az. 142deg. [Lat = 22.87+0.71(E.Long+82.36)]
26 Apr 19 15  4 33   r     541SB8  3.9  3.9s   7+  31  54 31  74  -4S 164 240 176 +0.7 -6.1 -5.6+9.7 .084  -98.7      3 45 49.6  24 22  4 358.5 970.7
   R541 = Maia = 20 Tauri
       541 is quadruple: Aa,Ab 4.4 5.4           : AB 3.8 13.7 113"  72.6, dT = +24sec : AB 3.8 13.7 113"  72.7, dT = +21sec
       541 = NSV 1279, 3.87, range 0.00, 4Kp, Type ACV, Period 10.288 days
26 Apr 20  1 12 13   m   76431dM0  8.3  7.4v   9+  35     17 292  17N 359 287  10 -0.3 -6.5 +9.9+9.9 .000   90.0      4  4 46.5  26 12  2 360.31007.5
     76431 is double: AB 8.5 10.5 7.0"  91.3
     76431 is a close double. Observations are highly desired
     76431 = ASAS J040446+2612.1, 8.28, range 0.17, V, Type MISC, Period 43.68 days, Phase  72%
26 Apr 20  1 32  0.5 d   76460 A0  8.0  7.9    9+  35     13 293  38S 124  54 135 -0.3 -6.4 -0.4-1.7 .485  -35.4      4  6 41.4  25 43 20 360.71041.6
26 Apr 20  2 10 26.9 D   76472cG8  7.2  6.5    9+  35      5 296  71S  92  25 102 -0.3 -6.4 -0.2-0.7 .632   -2.7      4  8 39.0  25 52 40 361.61110.3
26 Apr 21  0 10 25.6 D    771SA5  6.1  5.9e  17+  48  -5 44 288  72N  62 338  67 +1.5 -6.4 +1.8+0.4 .388   33.9      5  9 45.1  28  1 50 359.4 814.8
       771 is triple: Aa,Ab 6.0      0.20" 351.0, dT = +0.17sec : A,BC 6.0 9.1 11.2"  29.1, dT = +24sec
       771 is a close double. Observations are highly desired
       771 = V1156 Tau, 6. to 6.1, Hp, Type E:, Period 1.40266 days, Phase  44%
26 Apr 21  1 33 23.3 d   77030 K0  8.6  7.9   17+  49     26 291  30S 141  65 146 +1.5 -6.3 -0.4-2.5 .392  -43.7      5 12 34.1  27 36 15 361.1 949.5
26 Apr 22  0 59 13.3 D   78191 A0  7.7  7.7   27+  62     47 287  52N  51 326  50 +3.1 -5.8 +2.7+1.5 .263   55.2      6 17 59.9  28  0 24 362.1 809.9
26 Apr 22  1 37 57   m   78206 K0  8.0  7.4   27+  63     39 288  17N  17 295  15 +3.0 -5.7 +9.9+9.9 .000   90.0      6 18 47.3  28  3 20 362.9 869.9
26 Apr 22  2  1 24.6 d   78242 K0  8.8  8.4   27+  63     34 289  76S 104  24 103 +3.0 -5.6 +0.7-1.1 .514    2.9      6 20 26.0  27 37 36 363.4 906.3
26 Apr 23  0 30 49.5 d   79319 K2  7.9  7.3   38+  76  -9 67 282  74S 113  21 106 +4.5 -4.9 +1.8-1.4 .402    1.5      7 21 39.7  25 51 44 364.6 711.8
26 Apr 23  0 42 20   d   79316 G2  7.5  7.1v  38+  76 -12 64 283  28N  35 304  28 +4.5 -4.8 +8.7+9.6 .075   79.4      7 21 32.8  26  9 33 364.8 724.5
     79316 = V0340 Gem, 7.37 to 7.71, V, Type RS, Period 35.37 days, Phase  17%
26 Apr 23  0 48 55   Gr  79316 G2  7.5  7.1v  38+  76     61 ** GRAZE: CA 17.4N; Dist. 30km in az.  35deg. [Lat = 23.46-0.65(E.Long+82.36)]
26 Apr 23  0 56 19   r   79316 G2  7.5  7.1v  38+  76     61 283   7N  14 285   7 +4.4 -4.8 +9.9+9.9 .077  100.6      7 21 32.8  26  9 33 365.0 741.1
     79316 = V0340 Gem, 7.37 to 7.71, V, Type RS, Period 35.37 days, Phase  17%
26 Apr 24  4 48 56.4 d    1269kG5  6.9  6.3   50+  90     22 285  20S 174 101 161 +5.0 -3.0 -1.0-3.1 .312  -55.5      8 28  7.2  21  8 55 373.1 997.5
26 Apr 25  3  2 49.8 d   98511kF2  7.8  7.6   61+ 102     56 267  62N  80   7  64 +5.6 -1.8 +2.7-0.2 .286   47.3      9 20 38.2  17  7 38 374.2 767.3
26 Apr 25  3 59  4.4 D    1387cA5  7.0  6.8   61+ 103     43 272  45S 153  80 137 +5.5 -1.7 +0.2-2.5 .408  -27.2      9 21 25.5  16 35 54 375.3 835.3
      1387 is double: ** 7.6 7.6 0.10"  90.0, dT = +0.11sec
      1387 has been reported as non-instantaneous (OCc1402). Observations are highly desired
26 Apr 26  0 25 30.1 d   98966SG   8.2  7.7   70+ 114  -8 72 127  66S 135 184 116 +6.4 -0.7 +1.9-1.8 .359   -5.0     10  8 12.8  11 59 49 377.2 658.5
     98966 is quadruple: BC 8.2 13.2 0.9"  82.7, dT = +1.5sec : BD 8.2 12.1 108" 210.0, dT = +77sec : BA 8.2 1.4 176" 128.0, dT = +487sec
     98966 is a close double. Observations are highly desired
26 Apr 26  0 33 37.6 D    1487SB7  1.4  1.4s  70+ 114  -9 74 131  67S 134 179 115 +6.4 -0.7 +1.9-1.8 .359   -4.1     10  8 22.3  11 58  2 377.1 657.8
   R1487 = Regulus = alpha Leonis
      1487 is triple: AB 1.4 8.2 176" 308.0, dT = -487sec : AD 1.4 12.1 193" 274.0, dT = -410sec
      1487 = NSV 4750, 1.33 to 1.40, V
26 Apr 26  2  0 51.5 R    1487SB7  1.4  1.4s  71+ 115     76 221 -72N 309 271 290 +6.1 -0.5 +1.9-1.8 .369 -176.5     10  8 22.3  11 58  2 377.3 676.9
   R1487 = Regulus = alpha Leonis
      1487 is triple: AB 1.4 8.2 176" 308.0, dT = -476sec : AD 1.4 12.1 193" 274.0, dT = -427sec
      1487 = NSV 4750, 1.33 to 1.40, V
26 Apr 27  0  5 58.2 D    1589pM5  5.9  5.3v  80+ 126  -3 56 116  84S 118 174  97 +6.5 +0.8 +2.0-0.7 .364   12.4     10 56  1.5   6 11  7 381.9 691.0
   R1589 = 56 Leonis (VY)
```

Occultation prediction for Capitolio Nacional Habana
E. Longitude - 82 21 34.2, Latitude 23 8 6.6, Alt. 3m; Telescope dia 15cm; dMag 0.0

y	m	day d	h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon	Sun Alt	Moon Alt	Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	dur sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
							1589 is double: 6.2 7.1																													
							1589 = VY Leo, 5.69 to 6.03, V, Type SR, Period 46.34 days, Phase 16%																													
26	Apr	28	2	53	25.6	d	138388	K0	7.3	6.8		88+	139		66	181	75N	96	95	74	+5.6	+2.7	+3.4	-0.4	.270	39.9		11	45	1.4	- 0	31	4	385.6	658.7
26	Apr	30	3	11	15.5	d	157822	kK2	7.3	6.6		98+	162		51	155	67S	123	146	101	+4.5	+5.1	+2.0	-1.0	.341	10.8		13	15	54.0	-12	21	0	393.0	661.7
26	May	1	3	28	0.5	d	2011	K2	6.3	5.6		100+	172		44	150	77S	85	114	65	+3.7	+6.1	+3.4	+0.9	.246	45.1		14	3	4.1	-17	22	1	396.2	668.6
							Distance of 2011 to Terminator = 7.8"; to 3km sunlit peak = 0.7"																													
26	May	3	5	52	37.4	r	183731	pF0	7.3	7.1		98-	162		41	169	89S	300	311	287	+1.2	+7.2	+2.4	-0.9	.300	176.2		15	43	11.6	-25	24	56	400.5	584.9
							183731 is double: AB 7.3 9.3 5.9" 291.8, dT = -19sec																													
							183731 is a close double. Observations are highly desired																													
26	May	3	9	35	55.4	r	2256	PA1	7.0	6.9		97-	161		24	225	29S	239	193	227	+0.3	+7.3	+1.5	+0.5	.262	-141.4		15	47	56.5	-25	59	13	402.3	655.3
							2256 is double: ** 7.7 7.7 0.10" 90.0, dT = +0.33sec																													
							2256 has been reported as non-instantaneous (OCc1482). Observations are highly desired																													
							Distance of 2256 to Terminator = 13.0"; to 3km sunlit peak = 3.6"																													
26	May	4	10	11	20.1	r	2397	K1	6.5	5.9		93-	150	-10	25	221	73N	304	262	297	-1.0	+7.2	+2.6	-2.1	.268	144.2		16	41	37.6	-27	48	35	403.0	645.6
26	May	12	8	53	54.8	r	3454	K0	7.6	7.1		25-	60		17	100	54N	283	348	305	-7.0	-1.1	+0.8	+0.5	.355	136.0		23	27	14.7	- 2	38	13	377.1	903.2
26	May	12	9	21	47.4	r	146716	pG0	8.4	8.2		25-	59		23	103	41N	296	0	318	-7.0	-1.1	+1.5	-0.4	.242	120.7		23	28	5.7	- 2	27	33	376.3	864.9
							146716 is triple: AB 9.2 9.2 0.20" 79.6, dT = +0.7sec : AC 8.5 8.1 57" 45.9, dT = +79sec																													
							146716 is a close double. Observations are highly desired																													
26	May	12	9	23	6.6	r	146717	PF2	8.1	7.9		25-	59		23	103	40N	298	1	319	-7.0	-1.1	+1.5	-0.5	.232	119.4		23	28	8.5	- 2	26	53	376.2	863.2
							146717 is double: AB 8.1 8.5 57" 225.9, dT = -77sec																													
26	May	12	9	34	15.6	r	146720	K5	8.1	7.4		25-	59		25	105	83S	240	303	262	-7.0	-1.1	+0.9	+1.6	.464	175.9		23	28	27.0	- 2	39	13	376.0	847.7
26	May	13	9	46	46.0	R	109127	F0	7.2	7.0		16-	46		21	95	52S	210	277	232	-6.5	-2.6	+0.2	+2.2	.468	-153.7		0	18	7.9	3	47	48	370.3	937.2
26	May	19	0	11	20.1	D	885	wG7	5.6	5.1		7+	30	-2	28	290	65N	56	339	58	+1.8	-5.8	+1.4	+0.5	.382	46.6		5	50	58.1	27	58	4	356.9	961.9
							885 is double: AB 5.7 12.5 10.8" 233.1, dT = -28sec																													
26	May	19	0	25	59.1	d	77619	F2	7.1	6.9		7+	30	-5	25	291	-2S	174	98	176	+1.8	-5.7	-2.3	-5.4	.178	-71.8		5	50	39.7	27	30	18	357.3	987.9
26	May	19	0	51	14.2	r	885	wG7	5.6	5.1		7+	31	-11	20	293	-23N	329	255	330	+1.8	-5.7	-0.7	-2.4	.409	133.4		5	50	58.1	27	58	4	357.9	1034.1
							885 is double: AB 5.7 12.5 10.8" 233.1, dT = +2.7sec																													
26	May	19	0	59	34.3	d	77671	F5	9.2	9.0		7+	31		18	293	63S	109	36	110	+1.8	-5.6	+0.0	-1.1	.598	-6.4		5	53	10.4	27	37	27	358.0	1045.5
26	May	19	1	3	12.2	D	890	cA0	4.6	4.6s		7+	31		18	293	62S	110	37	111	+1.8	-5.6	+0.0	-1.2	.601	-7.4		5	53	19.6	27	36	44	358.1	1051.8
							R890 = 136 Tauri																													
							890 is double: ** 4.8 6.3 0.050" 270.0, dT = -0.08sec																													
							890 has been reported as non-instantaneous (OCc 206). Observations are highly desired																													
							890 = NSV 2696, 4.50 to 4.61, V																													
26	May	19	1	13	51.5	d	77686	F5	9.2	8.7		7+	31		15	294	49S	123	52	125	+1.8	-5.6	-0.3	-1.5	.574	-21.4		5	53	40.6	27	31	45	358.4	1070.9
26	May	19	1	54	37.8	D	77711	F5	7.9	7.6		7+	31		7	297	17S	156	88	157	+1.8	-5.5	-1.1	-2.5	.385	-54.0		5	55	3.7	27	20	32	359.4	1143.1
26	May	19	1	54	46.1	D	77724	B1	7.0	7.0		7+	31		7	297	72N	64	356	65	+1.8	-5.5	+0.3	+0.0	.520	37.5		5	55	40.3	27	42	56	359.3	1142.9
26	May	20	1	26	7.2	d	78973	A2	8.8	8.6		15+	45		26	289	72S	110	35	105	+3.6	-4.7	+0.3	-1.2	.568	0.5		7	1	13.7	26	11	6	360.7	992.8
26	May	20	1	29	22.0	D	78979	G5	8.1	7.6		15+	45		25	289	85S	97	22	92	+3.6	-4.7	+0.4	-0.9	.555	13.6		7	1	25.4	26	14	7	360.7	998.3
26	May	20	2	15	15.9	d	78998	G5	8.0	7.7e		15+	45		16	292	16S	167	95	161	+3.6	-4.6	-1.1	-2.9	.335	-56.9		7	2	23.3	25	50	46	361.9	1077.2
							78998 = V0369 Gem, 7.95 to 8.12, V, Type EB, Period 0.423061 days, Phase 26%																													
26	May	21	2	33	27.4	D	1221	cM3	6.0	5.1v		24+	59		24	286	59S	132	58	121	+5.0	-3.3	+0.0	-1.7	.547	-14.7		8	6	18.4	22	38	8	365.7	1003.9
							R1221 = 9 Cancri = BL Cnc.																													
							1221 is double: AB 6.0 10.1 0.40"																													
							1221 is a close double. Observations are highly desired																													
							1221 = BL Cnc, 5.97 to 6.04, V, Type SR																													
26	May	21	2	42	33.2	D	79951	G5	7.8	7.2		24+	59		22	286	80N	91	17	80	+5.0	-3.3	+0.5	-0.8	.516	26.1		8	6	56.2	22	46	31	365.9	1018.8
26	May	21	2	55	58.5	D	1222	cG5	7.2	6.8		24+	59		19	287	25S	165	93	154	+5.0	-3.2	-0.8	-2.6	.383	-49.2		8	6	34.4	22	27	24	366.3	1041.3
							1222 is double: ** 7.2 0.013" 234.6, dT = +0.01sec																													

Occultation prediction for Capitolio Nacional Habana
E. Longitude - 82 21 34.2, Latitude 23 8 6.6, Alt. 3m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon	Sun Alt	Moon Alt	Az	CA o	PA o	VA o	AA o	Libration L	B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
							1222 has been reported as non-instantaneous (OCc1381). Observations are highly desired																													
26	May	23	3	30	8.9	D	1466cB9	5.3	5.3	46+		85	31	271	89S	111	40	92	+6.5	-0.2	+0.8	-1.4	.473	14.7		9	58	13.4	12	26	41	375.9	891.9
							R1466 = nu Leonis																													
							1466 is double: ** 6.0 6.0 0.050"																													
							1466 has been reported as non-instantaneous (OCc1407). Observations are highly desired																													
26	May	24	2	8	31.9	d	118476PF8	8.2	7.9	56+		97	57	245	75N	97	40	77	+6.8	+1.1	+2.5	-1.0	.323	35.0		10	45	18.9	6	57	39	379.0	724.4
							118476 is double: ** 8.9 8.9 0.10" 90.0, dT = +0.31sec																													
							118476 has been reported as non-instantaneous (OCc1419). Observations are highly desired																													
26	May	24	3	29	3.5	D	1567kK1	6.4	5.8	57+		98	39	259	29S	173	108	152	+6.6	+1.3	+0.0	-3.1	.310	-44.5		10	46	5.7	6	22	23	380.6	803.0
							R1567 = 37 (Sextantis)/Leonis																													
26	May	24	3	53	34.0	d	1573pA2	7.1	7.0	57+		98	34	262	70S	132	66	112	+6.6	+1.4	+0.7	-1.9	.448	-5.1		10	47	19.2	6	20	46	381.2	831.8
							R1573 = 38 (Sextantis)/Leonis																													
26	May	28	0	6	26.8	d	1970SA0	6.2	6.2	90+		143	0	33	130	48S	147	195	127	+5.3	+5.7	+0.6	-1.4	.369	-18.3		13	45	35.1	-15	46	3	397.0	748.3
							R1970 = 85 Virginis																													
							1970 is multiple: Aa,Ab 6.5 8.2 : Aa,Ac 6.5 8.4 0.10" : AB 6.2 12.8 44" 312.7, dT = -115sec : AB 6.2 12.8 44" 312.5, dT = -116sec																													
							1970 is a close double. Observations are highly desired																													
26	May	29	1	11	43.0	D	2084 A3	6.5	6.4	95+		155	33	138	81S	107	148	89	+4.1	+6.5	+1.8	+0.0	.347	19.7		14	34	50.7	-20	26	22	399.6	714.8
26	Jun	2	4	36	34.1	r	186286 B7	7.1	7.1	97-		159	29	145	76N	296	333	296	-1.2	+6.5	+1.8	-0.3	.298	159.7		18	6	45.8	-28	21	50	402.9	620.8
26	Jun	2	5	38	43.0	R	2617cK0	4.6	4.1	97-		159	35	159	86S	278	300	278	-1.4	+6.5	+2.8	+0.1	.288	173.1		18	8	5.0	-28	27	26	402.3	566.1
							2617 is double: AB 5.1 5.9 0.26" 12.0, dT = +0.06sec																													
							2617 is a close double. Observations are highly desired																													
26	Jun	2	9	2	52.5	r	186461cA2	7.4	7.2v	96-		158	31	212	73N	298	265	298	-2.3	+6.4	+3.3	-2.0	.232	136.5		18	12	37.6	-28	14	11	402.6	624.1
							186461 is double: ** 8.2 8.2 0.050"																													
							186461 has been reported as non-instantaneous (OCc1536). Observations are highly desired																													
							186461 = V4385 Sgr, 7.42 to 7.46, Hp, Type ELL:, Period 2.62462 days, Phase 9%																													
26	Jun	3	10	25	25.0	r	187716SG6	7.2	6.6	92-		147	-5	28	219	62S	241	201	247	-3.8	+5.4	+1.4	+0.3	.352	-176.3		19	8	8.1	-26	50	5	401.6	687.3
							187716 is triple: **Aa,Ab 7.8 7.8 0.050" 160.0, dT = -0.02sec : AB 7.3 8.6 45" 123.9, dT = +59sec																													
							187716 has been reported as non-instantaneous (OCc 769). Observations are highly desired																													
26	Jun	6	6	25	53.2	r	3157cF6	7.3		71-		115	24	121	58N	284	339	301	-5.9	+2.2	+1.5	+0.4	.297	141.7		21	33	40.2	-16	12	4	393.8	724.1
							3157 is double: AB 7.33 10.00 0.90" 2.6, dT = -0.6sec																													
							3157 is a close double. Observations are highly desired																													
26	Jun	7	7	34	25.2	r	3282kK0	7.8	7.0	61-		103	31	120	85S	244	298	264	-6.8	+0.7	+1.5	+1.7	.382	174.2		22	22	11.6	-10	50	53	388.2	723.5
26	Jun	7	9	0	34	m	3286 K0	7.2	6.4	60-		102	47	137	17N	322	1	341	-7.1	+0.5	+9.9	+9.9	.000	90.0		22	24	7.6	-10	11	52	386.6	659.3
26	Jun	10	7	31	7.3	r	109413 K2	8.0	7.3	30-		66	10	86	83N	255	323	277	-6.7	-3.5	+0.2	+1.2	.543	164.0		0	43	53.0	7	33	19	373.3	1022.2
26	Jun	10	8	29	32.4	r	109437kG5	7.8	7.3	29-		65	23	91	82N	256	325	278	-6.7	-3.6	+0.6	+1.2	.487	159.6		0	45	40.4	7	50	42	371.7	935.7
26	Jun	11	8	46	24.1	r	92548 A3	8.1	7.9	19-		52	18	82	72S	234	304	254	-5.8	-4.7	+0.1	+1.5	.572	-175.6		1	38	27.6	13	55	42	366.4	1019.7
26	Jun	11	9	17	6.3	R	244 K0	6.7	6.2	19-		52	25	84	63N	279	350	299	-5.8	-4.8	+0.9	+0.5	.407	137.7		1	39	15.4	14	17	8	365.6	973.9
							R244 = 104 Piscium																													
26	Jun	12	10	13	35.5	r	93033SK0	7.2	6.4	10-		38	-7	27	79	41S	209	283	226	-4.2	-5.6	-0.2	+2.1	.486	-148.7		2	38	37.3	19	43	40	360.2	993.0
							93033 is triple: **Aa,Ab 7.5 8.5 0.30" 70.0, dT = +0.47sec : AB 7.2 14.4 45" 57.7, dT = +81sec																													
							93033 has been reported as non-instantaneous (OCc 312). Observations are highly desired																													
26	Jun	13	12	8	55.0	r	539SB6	4.3	4.4s	4-		23	17	40	77	31S	210	290	223	-2.3	-6.2	+0.0	+2.4	.435	-145.5		3	45	12.5	24	28	2	355.2	909.4
							R539 = Taygeta = 19 Tauri																													
							539 is multiple: Aa,Ab 4.6 6.1 : AB 0.019" 73.4, dT = +0.03sec : AC 4.3 14.0 53" 53.4, dT = +112sec : AB 4.3 11.0 72" 328.8, dT = +80sec																													
							539 is a close double. Observations are highly desired																													
							539 = NSV 1264, 4.30, range 0.00, 1Kp, Type SPB, Period 1.5664 days																													

Occultation prediction for Capitolio Nacional Habana
E. Longitude - 82 21 34.2, Latitude 23 8 6.6, Alt. 3m; Telescope dia 15cm; dMag 0.0

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      day  Time     P   Star  Sp  Mag  Mag    % Elon Sun  Moon   CA   PA  VA  AA Libration   A   B   RV    Cct durn  R.A. (J2000)  Dec   Mdist   SV
 y   m  d  h  m    s       No  D    v    r V  ill     Alt Alt Az   o    o   o   o   L    B   m/o m/o "/s     o  sec  h  m   s    o  m  s   Mm   m/s
26 Jun 17  1  9  5.0 D    1155 F0  6.4  6.2    5+  27 -11 13 291  71N  75   5  67 +3.4 -3.6 +0.4-0.3 .505   37.5      7 38 14.4  24 21 38 359.81109.7
26 Jun 17  1 30  0.8 d   79578cA0  8.8  8.8    5+  27      9 293  62N  67 358  58 +3.4 -3.6 +0.3-0.1 .460   45.3      7 39  5.6  24 18 51 360.31144.5
     79578 is double: ** 9.6 9.6 0.10"  92.0, dT = +0.2sec
     79578 has been reported as non-instantaneous (OCc 762). Observations are highly desired
26 Jun 17  1 30 13.6 D    1157 A2  6.2  6.2    5+  27      9 293  82N  86  18  78 +3.4 -3.6 +0.0-0.6 .589   25.9      7 39 12.0  24 13 21 360.31144.5
26 Jun 17 20 13 54.9 D Venus      -4.0 -4.0   11+  38  52 88 162  21S 173 188 158 +5.5 -3.0 +0.7-4.5 .232  -48.2      8 30 20.8  21  2 26 358.3 605.5
   Venus contacts: Bright limb 20 13 23; Terminator 20 14 25; Dark limb 20 14 27: diam = 14.7"; %illum = 74.0%; PA bright limb = 281.5
26 Jun 17 21 18 10.1 R Venus      -4.0 -4.0   11+  39  38 76 265 -65S 262 178 244 +5.3 -2.8 +3.8+0.5 .247 -132.2      8 30 20.8  21  2 26 358.7 641.2
   Venus contacts: Bright limb 21 17 40; Terminator 21 18 27; Dark limb 21 18 40: diam = 14.7"; %illum = 74.0%; PA bright limb = 281.5
26 Jun 18  0 57 21.8 d   80317pA2  8.3  8.2s  12+  40  -9 27 281  68S 125  51 112 +5.0 -2.2 +0.2-1.6 .558   -5.0      8 39  3.6  19 59 59 362.8 985.1
     80317 is double: ** 8.3 10.6 0.044"  98.7, dT = +0.07sec
     80317 has been reported as non-instantaneous (OCc 637). Observations are highly desired
     80317 = NSV 4162, 8.32, range 0.02, V
26 Jun 18  1 10  7.8 D   80327pA3  7.8  7.6   12+  40 -12 24 282  79N  92  19  79 +5.0 -2.2 +0.6-0.8 .508   27.2      8 39 42.8  20  5 10 363.11005.2
     80327 is double: AB 7.9 9.6 0.64" 136.3, dT = +0.9sec
     80327 is a close double. Observations are highly desired
26 Jun 18  1 17 56.1 d   80331pF0  9.0  8.8   12+  40     23 283  83N  96  24  83 +5.0 -2.2 +0.5-0.9 .531   23.1      8 39 59.1  20  1 53 363.31017.4
     80331 is multiple: AB                   : Ca,Cb 9.2      0.30"  22.0, dT = +0.15sec : CA 9.0 6.5 134" 129.0, dT = +212sec : CS 9.0 10.1 138"
341.1, dT = -110sec
     80331 is a close double. Observations are highly desired
26 Jun 18  1 20  4.3 d   80330pA5  8.9  8.7   12+  40     22 283  54N  67 355  54 +5.0 -2.2 +1.1+0.0 .355   52.2      8 39 58.4  20  9 30 363.31021.3
     80330 is double: AB 8.9 9.7 91" 153.0, dT = +18sec
26 Jun 18  1 21 25.6 D    1295pK0  6.4  5.9s  12+  40     22 283  85N  98  25  84 +5.0 -2.2 +0.4-1.0 .540   21.4      8 40  6.4  20  0 28 363.41022.9
   R1295 = 39 Cancri
     1295 is multiple: AC 6.5 9.0 134" 309.0, dT = -212sec : AD 6.5 8.8 135" 111.0, dT = +243sec : AB 6.5 6.6 152" 149.9, dT = +172sec : AS 6.5 10.1
262" 325.7, dT = -325sec
     1295 = NSV 4179, 6.39, range 0.04, V
26 Jun 18  1 24 15.2 D    1296pA1  6.6  6.6   12+  40     21 283  90N 103  31  89 +5.0 -2.2 +0.3-1.1 .559   16.3      8 40 11.5  19 58 16 363.51027.3
   R1296 = 40 Cancri
     1296 is quadruple: Ba,Bb 6.6      0.40" 128.0, dT = +0.6sec : BR 6.6 11.6 140" 146.9, dT = +180sec : BA 6.6 6.5 152" 329.9, dT = -185sec
     1296 is a close double. Observations are highly desired
26 Jun 18  1 25 29.4 d   80338pF5  8.8  8.6S  12+  41     21 283  84N  97  24  83 +5.0 -2.2 +0.4-0.9 .540   22.4      8 40 15.3  19 59 39 363.51029.3
     80338 is double: DA 8.8 6.5 135" 291.0, dT = -242sec
     80338 = NSV 17951, 8.81, , Type VAR:
26 Jun 18  1 26 52.7 D    1292kF0  6.7  6.5v  12+  41     21 283  42S 151  79 138 +5.0 -2.2 -0.3-2.1 .494  -32.5      8 39 42.7  19 46 42 363.61031.7
   R1292 = 38 Cancri (BT)
     1292 = BT Cnc, 6.66, range 0.06, V, Type DSCTC, Period 0.10228 days
26 Jun 18  1 34  7.5 D   80340pA0  7.9  7.8S  12+  41     19 284  70S 123  52 110 +5.0 -2.1 +0.0-1.4 .589   -4.6      8 40 23.5  19 50  6 363.71042.9
     80340 is double: ** 8.8 8.8 0.050" 111.0, dT = +0.08sec
     80340 has been reported as non-instantaneous (OCc1074). Observations are highly desired
     80340 = NSV 4183, 8.01,
26 Jun 18  1 44  3.5 d   80351kA2  8.7  8.5   12+  41     17 285  78N  91  20  77 +5.0 -2.1 +0.3-0.8 .532   27.6      8 40 56.9  19 56  5 364.01059.0
26 Jun 18  1 45 15.9 D   98020pA0  7.6  7.5e  12+  41     17 285  39S 154  83 140 +5.0 -2.1 -0.4-2.1 .488  -35.7      8 40 20.7  19 41 12 364.01061.0
     98020 is quadruple: ** 9.1 9.1 0.050"       : CA 7.6 6.5 64" 163.1, dT = +129sec : CD 7.6 9.2 76"  91.1, dT = +71sec
     98020 has been reported as non-instantaneous (OCc1392). Observations are highly desired
     98020 = HD 73709, 7.69 to 7.76, V, Type EA, Period 7.22015 days, Phase  75%
26 Jun 18  1 46 14   m   80343kF2  8.2  8.0v  12+  41     16 285  15N  28 317  15 +5.0 -2.1 +9.9+9.9 .000   90.0      8 40 26.7  20 10 55 364.01064.3
     80343 = BQ Cnc, 8.19, range 0.02, V, Type DSCTC, Period 0.074 days
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Occultation prediction for Capitolio Nacional Habana
E. Longitude - 82 21 34.2, Latitude 23 8 6.6, Alt. 3m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon	Sun Alt	Moon Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	Jun	18	1	47	26.5	D	1298pK0		6.4	5.9E		12+	41	16	285	36S	157	86	144	+5.0	-2.1	-0.5	-2.2	.468	-39.0		8	40	22.1	19	40	12	364.1	1064.6
			1298 is multiple: AE 6.5 12.5 15.7" 154.8, dT = +33sec : AB 6.4 10.4 20.8" 55.1, dT = -9sec : AC 6.5 7.6 64" 343.1, dT = -136sec : AD 6.5 9.2 84" 44.0, dT = -70sec																																		
			1298 = HD 73710, 6.42, , Type EA, Period 7.22030 days, Phase 42%																																		
26	Jun	18	1	47	49.8	D	1302pA9		6.8	6.7		12+	41	16	285	56S	137	66	124	+5.0	-2.1	-0.2	-1.7	.570	-19.2		8	40	43.2	19	43	10	364.1	1064.9	
			R1302 = 42 Cancri																																		
			1302 is double: ** 7.5 7.5 0.050"																																		
			1302 has been reported as non-instantaneous (OCc1393). Observations are highly desired																																		
26	Jun	18	1	51	17.2	d	80352kF0		9.0	8.8		12+	41	15	285	87S	106	35	92	+5.0	-2.1	+0.1	-1.1	.592	12.2		8	41	10.7	19	49	46	364.2	1070.3	
26	Jun	18	1	51	34.9	d	80353kA3		8.3	8.2S		12+	41	15	285	73N	86	15	72	+5.0	-2.1	+0.3	-0.7	.514	32.1		8	41	13.8	19	55	19	364.2	1071.0	
			80353 = NSV 17956, 8.33, , Type DSCT:																																		
26	Jun	18	2	4	41.7	D	1303kA6		6.8	6.7v		12+	41	12	286	31S	162	92	148	+5.0	-2.1	-0.6	-2.3	.440	-44.6		8	40	56.3	19	34	49	364.6	1092.4	
			1303 = EP Cnc, 6.76, range 0.03, V, Type DSCTC																																		
26	Jun	18	2	7	0.4	d	98043kK0		8.4	7.9		12+	41	12	286	66S	128	58	114	+5.0	-2.1	-0.2	-1.5	.609	-10.4		8	41	35.1	19	39	45	364.6	1095.4	
26	Jun	18	2	7	41.2	D	1305pK0		6.9	6.4		12+	41	12	287	67N	80	10	66	+5.0	-2.1	+0.3	-0.5	.493	37.4		8	41	50.1	19	52	27	364.6	1096.9	
			1305 is double: Ea,Eb 7.2 9.1																																		
26	Jun	18	2	38	21.6	d	98053kA7		7.9	7.8v		12+	41	5	289	22S	171	104	158	+5.0	-2.0	-0.9	-2.6	.369	-55.2		8	42	6.5	19	24	41	365.5	1146.3	
			98053 = BX Cnc, 7.96, range 0.02, V, Type DSCTC, Period 0.04412 days																																		
26	Jun	19	1	23	33.8	d	98665w		8.8	8.4		21+	54	32	273	82S	116	45	99	+6.1	-0.6	+0.6	-1.5	.512	7.9		9	36	13.3	14	35	48	367.9	921.9	
			98665 is double: AB 8.8 9.1 82" 111.0, dT = +159sec																																		
26	Jun	19	1	26	12.2	d	98667		9.0	8.7		21+	54	31	274	83S	115	44	98	+6.1	-0.6	+0.6	-1.4	.512	8.9		9	36	18.5	14	35	18	368.0	925.6	
26	Jun	19	1	38	12.4	D	1415WA1		6.3	6.3		21+	54	28	274	30S	169	98	152	+6.1	-0.6	-0.4	-2.7	.372	-45.3		9	35	52.9	14	22	47	368.3	943.6	
			R1415 = 7 Leonis																																		
			1415 is double: AB 6.3 9.4 41" 90.5, dT = +22sec																																		
26	Jun	19	2	19	48.0	D	1420 F2		6.6	6.4		21+	54	19	278	88S	111	40	93	+6.1	-0.5	+0.3	-1.3	.550	11.1		9	38	1.3	14	20	50	369.4	1004.9	
			R1420 = 11 Leonis																																		
26	Jun	20	0	23	1.5	D	1525 M2		5.6	4.8v	-2	30+	66	54	253	8S	194	132	174	+7.0	+0.9	-1.4	-4.7	.189	-63.5	.02	10	25	15.2	8	47	5	372.0	764.1	
			R1525 = 44 Leonis (DE)																																		
			1525 = DE Leo, 5.6, range 0.07, V, Type SRB:																																		
26	Jun	20	2	1	45.8	d	118317 K2		8.2	7.5		31+	67	32	265	25S	177	109	157	+6.8	+1.1	-0.3	-3.2	.306	-50.6		10	27	56.5	8	18	52	374.2	875.6	
26	Jun	21	2	34	28.6	D	1635cM0		5.2	4.4		41+	80	32	257	48S	155	91	134	+7.0	+2.7	+0.5	-2.5	.390	-28.8		11	17	17.4	2	0	38	380.4	821.3	
			R1635 = 75 Leonis																																		
			1635 is double: ** 5.8 6.6 0.044" 0.0																																		
			1635 has been reported as non-instantaneous (OCc 763). Observations are highly desired																																		
26	Jun	21	3	50	59.8	D	1637 K0		5.9	5.4		42+	80	15	265	27S	176	110	155	+6.9	+2.8	+0.0	-3.3	.289	-54.6		11	18	55.0	1	39	1	382.5	925.5	
			R1637 = 76 Leonis																																		
26	Jun	23	4	29	29.4	D	1845SG8		6.5	5.9s		62+	104	20	249	41S	161	100	139	+6.0	+5.4	+0.9	-3.0	.303	-42.7		12	51	22.9	-10	20	18	392.8	787.0	
			1845 is triple: AB 6.6 9.7 28.8" 296.3, dT = -68sec : AC 6.6 12.5 142" 211.8, dT = +294sec																																		
			1845 = NSV 5994, 6.49, range 0.07, V																																		
26	Jun	25	0	52	29.6	d	158499 F2		7.7	7.5		79+	126	-8	46	164	40N	56	71	37	+5.1	+6.7	+7.4	+4.6	.101	71.7		14	20	50.3	-19	19	56	397.2	619.4	
26	Jun	25	3	48	30.5	d	158538wK1		7.3	6.8		80+	127		37	218	35N	50	12	32	+4.4	+6.9	+3.7	+2.5	.128	66.1		14	24	0.4	-19	48	3	398.3	609.9	
			158538 is double: AB 7.4 11.6 40" 286.2, dT = -171sec																																		
26	Jun	25	4	52	33.9	d	158556WA2		6.8			80+	127		27	231	43N	57	8	39	+4.2	+6.9	+1.9	+0.8	.206	53.2		14	25	27.7	-19	57	57	399.4	665.8	
			158556 is double: BA 7.2 6.6 35" 114.8, dT = +90sec																																		
26	Jun	25	4	53	54.6	d	2066SA1		6.6	6.6		80+	127		27	231	43N	58	8	40	+4.2	+6.9	+1.8	+0.8	.209	52.7		14	25	29.9	-19	58	12	399.4	667.3	
			2066 is quadruple: **Aa,Ab 6.8 7.7 0.018" 329.0, dT = 0.00sec : BC 7.16 8.37 1.21" 89.4, dT = +5sec : AB 6.6 7.2 35" 294.8, dT = -90sec																																		
			2066 has been reported as non-instantaneous (OCc 204). Observations are highly desired																																		
26	Jun	26	3	55	57.7	D	2174pB8		6.5	6.5		87+	138		38	206	49S	140	114	125	+3.3	+7.3	+2.4	-2.3	.257	-29.6		15	13	17.4	-24	0	30	400.5	574.5	

Occultation prediction for Capitolio Nacional Habana
E. Longitude - 82 21 34.2, Latitude 23 8 6.6, Alt. 3m; Telescope dia 15cm; dMag 0.0

y	m	day d	h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon Alt	Sun Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
							2174 is triple: ** 7.1 7.1 0.030" 0.0 : AB 6.4 12.5 8.2" 45.0, dT = -2.9sec																												
							2174 has been reported as non-instantaneous (OCc1471). Observations are highly desired																										
26	Jun	26	23	16	52.2	D	2287	SB1	2.9	3.0v		92+	147	12	15	128	71S	112	166	101	+3.3	+7.0	+0.7	+0.1	.411	3.6		15	58	51.1	-26	6	51	403.9	805.8
R2287 = pi Scorpii																																		
							2287 is triple: Aa,Ab 5.1 13.4 2.0" 244.0, dT = -3sec : AB 2.9 11.9 50" 128.1, dT = +118sec																										
							2287 is a close double. Observations are highly desired																										
							2287 = pi Sco, 2.88 to 2.91, V, Type ELL, Period 1.570103 days, Phase 76%																								
26	Jun	27	0	34	16.9	R	2287	SB1	2.9	3.0v		92+	148	-4	28	140	-62N	300	341	289	+3.0	+7.2	+1.3	-0.4	.353	176.1		15	58	51.1	-26	6	51	402.6	690.5
R2287 = pi Scorpii																																		
							2287 is triple: Aa,Ab 5.1 13.4 2.0" 244.0, dT = -3sec : AB 2.9 11.9 50" 128.1, dT = +142sec																										
							2287 is a close double. Observations are highly desired																										
							2287 = pi Sco, 2.88 to 2.91, V, Type ELL, Period 1.570103 days, Phase 76%																								
26	Jun	27	2	42	35.5	d	2297	kF7	7.0	6.7		93+	148		40	171	42S	140	149	129	+2.5	+7.3	+2.0	-1.7	.256	-28.8		16	3	16.1	-26	43	2	401.7	568.3
26	Jul	1	7	13	49	m	2879	kA3	6.7	6.6		98-	165		41	191	31N	333	321	342	-3.2	+4.7	+9.9	+9.9	.000	90.0		19	42	22.6	-24	51	34	399.0	591.0
Distance of 2879 to Terminator = 8.4"; to 3km sunlit peak = 1.0"																																		
26	Jul	3	3	46	7.0	R	3113	cB5	5.4	5.5V		91-	144		15	117	31S	196	255	212	-4.4	+2.4	+1.5	+3.7	.233	-125.5		21	17	57.3	-17	59	7	396.9	772.8
R3113 = 30 Capricorni																																		
							3113 is double: ** 6.1 6.1 0.10" 87.0, dT = +0.14sec																										
							3113 has been reported as non-instantaneous (OCc1602). Observations are highly desired																										
							3113 = HD 202671, 5.40, , Type ACV, Period 1.9917 days, Phase 99%																								
26	Jul	4	8	58	10.1	R	3253	kB5	5.4	5.5V		83-	131		56	183	55N	284	282	303	-6.3	+0.5	+4.8	-1.1	.184	122.8		22	10	37.5	-11	33	54	389.2	639.7
R3253 = 38 Aquarii																																		
							3253 = HD 210424, 5.44, , Type ACV, Period 3.9613 days, Phase 44%																								
26	Jul	4	10	23	55	m	3255	M0	7.3	6.4v		83-	131	-6	49	216	22N	317	284	336	-6.6	+0.3	+9.9	+9.9	.000	90.0		22	12	16.9	-11	3	56	389.4	684.1
							3255 = KR Aqr, 7.25 to 7.36, Hp, Type LB																								
26	Jul	6	10	3	28	m	128354	F8	8.0	7.7		65-	107	-10	68	171	22N	314	323	336	-7.2	-2.5	+9.9	+9.9	.000	90.0		23	44	18.2	0	42	44	379.7	668.7
26	Jul	7	10	49	53.1	R	68	SB9	5.8	S		54-	95	-1	74	169	64N	272	282	294	-7.2	-4.0	+3.6	-0.1	.258	133.8		0	32	23.8	6	57	20	374.3	677.9
R68 = 51 Piscium																																		
							68 is multiple: Aa,Ac 5.8 9.5 0.20" : Aa,Ab 5.8 8.0 0.27" 284.1, dT = -1sec : AB 5.7 9.5 28.5" 81.5, dT = +108sec : AD 5.7 13.1 82" 307.6, dT = -258sec																								
							68 is a close double. Observations are highly desired																								
							68 = NSV 15113, 5.67 to 9.0, V, Type E:																								
26	Jul	8	8	23	46.4	r	194	cF5	8.2			44-	83		41	94	61S	220	290	241	-6.3	-4.7	+0.6	+2.1	.456	-167.0		1	19	42.8	12	8	45	371.6	842.6
							194 is double: AB 8.67 9.25 0.11" 323.2, dT = +0.05sec																								
							194 is a close double. Observations are highly desired																								
26	Jul	8	10	2	9.8	R	197	cK0	7.0	6.5		43-	82	-11	63	108	63S	221	285	242	-6.5	-5.0	+1.2	+2.1	.408	-171.9		1	21	58.3	12	36	15	369.8	738.8
26	Jul	9	6	36	30.8	R	317	F5	6.4	6.2		33-	71		8	74	63S	225	293	244	-5.4	-5.4	-0.3	+1.6	.585	-162.7		2	9	23.1	17	13	27	370.2	1100.0
R317 = 20 H1. Arietis																																		
26	Jul	10	8	25	4.1	r	75775	SG5	8.5	8.1v		22-	56		21	74	55S	223	296	238	-4.1	-6.1	-0.2	+1.7	.546	-159.1		3	11	13.8	22	24	57	363.9	1031.8
							75775 is triple: AC 8.6 13.3 24.1" 301.1, dT = -9sec : AB 8.6 10.6 33" 321.1, dT = +9sec																										
							75775 = BD+21 418, 8.49 to 8.54, V, Type WTTS																								
26	Jul	10	9	6	13.8	r	75790	G0	8.8	8.5		22-	56		30	76	59N	289	4	304	-4.0	-6.1	+1.3	+0.1	.378	133.6		3	12	24.7	22	52	50	362.8	965.9
26	Jul	10	9	22	57.2	r	75796	K0	9.0	8.5		22-	56		33	77	82S	250	327	265	-4.0	-6.2	+0.6	+1.3	.529	171.7		3	13	0.1	22	46	14	362.5	939.0
26	Jul	10	10	2	50.7	R	470	WK0	6.8	6.2		22-	55	-11	42	79	86S	254	333	269	-4.1	-6.2	+1.0	+1.2	.488	166.8		3	14	17.2	22	57	14	361.6	878.7
							470 is double: AB 6.9 10.4 42" 33.3, dT = +65sec																								
26	Jul	11	9	13	49	Gr	76530	K3	7.8	7.0		13-	42		21	** GRAZE: CA 15.4N; Dist. 31km in az. 324deg. [Lat = 23.48+0.66(E.Long+82.36)]																				
26	Jul	11	9	18	4.0	R	76530	K3	7.8	7.0		13-	42		20	69	25N	330	44	340	-2.4	-6.2	+4.6	-5.8	.102	99.8	.01	4	16	41.6	26	21	29	360.1	1045.7
26	Jul	12	9	53	4	m	77159	B9	9.4	9.3		6-	28		14	65	17N	348	59	352	-0.4	-5.8	+9.9	+9.9	.000	90.0		5	25	36.6	27	57	50	358.3	1083.2

Occultation prediction for Capitolio Nacional Habana
E. Longitude - 82 21 34.2, Latitude 23 8 6.6, Alt. 3m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon	Sun Alt	Moon Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	Jul	16	19	34	45.5	d	1466	cB9	5.3	5.3		8+	33	62	79	160	77S	122	141	104	+6.2	-0.2	+2.1	-1.4	.393	7.5		9	58	13.4	12	26	41	363.0	697.7
	R1466 = nu Leonis																																		
	1466 is double: ** 6.0 6.0 0.050"																																		
	1466 has been reported as non-instantaneous (OCc1407). Observations are highly desired																																		
26	Jul	17	1	24	58	m	98951	K5	8.4	7.5		9+	36	12	277	10N	31	323	12	+5.5	+0.7	+9.9	+9.9	.000	90.0		10	6	44.1	11	10	41	369.3	1045.1
26	Jul	18	2	25	50.0	d	1597	K5	8.3	7.5		17+	49	6	272	65N	90	22	69	+6.3	+2.4	+0.2	-0.8	.483	30.5		10	59	34.7	4	21	14	376.0	1022.3
26	Jul	24	2	23	45.3	d	183789	kA2	7.8	7.7		74+	119	38	201	61N	70	48	57	+3.3	+7.5	+3.2	+0.5	.234	35.7		15	47	23.3	-25	52	4	400.3	560.1
26	Jul	24	2	47	4.4	d	2256	PA1	7.0	6.9		74+	119	36	207	82N	91	64	79	+3.2	+7.5	+2.8	-0.6	.287	12.3		15	47	56.5	-25	59	13	400.5	570.4
	2256 is double: ** 7.7 7.7 0.10" 90.0, dT = +0.35sec																																		
	2256 has been reported as non-instantaneous (OCc1482). Observations are highly desired																																		
26	Jul	24	4	59	11.9	d	2261	K3	6.6	5.8		75+	120	16	231	42S	147	94	135	+2.7	+7.5	+2.5	-3.5	.216	-53.7		15	50	34.9	-26	17	23	402.6	711.6
26	Jul	25	3	51	34.1	D	2397	K1	6.5	5.9		82+	130	33	209	27N	29	359	21	+1.7	+7.3	+1.5	+3.3	.139	62.2		16	41	37.6	-27	48	35	402.0	583.0
26	Jul	28	2	4	27.1	d	2824	K4	7.3	6.5		98+	163	30	142	67N	46	84	52	-1.2	+5.3	+2.6	+2.4	.259	35.8		19	21	44.2	-26	9	59	400.0	619.5
26	Jul	31	9	31	18.6	r	164779	KG5	7.2	6.8		97-	160	37	232	63N	278	230	296	-5.5	+0.5	+2.7	-1.3	.266	132.0		21	58	24.3	-12	39	53	390.5	752.3
26	Aug	2	7	10	9.9	R	3459	K0	6.4	5.8		87-	137	61	144	38S	193	225	215	-5.7	-2.1	+0.7	+3.0	.307	-147.1		23	29	27.0	-	1	47	28	382.2	677.3
	R3459 = 11 Piscium																																		
26	Aug	2	9	49	47.4	R	3467	kK1	6.4	5.8		86-	136	57	226	51S	206	165	228	-6.3	-2.5	+1.0	+2.2	.351	-159.8		23	31	57.6	-	1	5	9	382.0	693.2
	R3467 = 13 Piscium																																		
26	Aug	3	6	34	23.8	r	30	SA0	7.1	7.1		79-	125	50	112	14S	169	228	191	-5.6	-3.4	-0.9	+4.3	.206	-120.5		0	15	57.3	4	15	4	379.3	746.3
	30 is triple: AB 7.0 14.1 0.8" 246.0, dT = -0.9sec : AC 7.0 12.2 5.0" 347.2, dT = +24sec																																		
	30 is a close double. Observations are highly desired																																		
26	Aug	4	9	44	28.6	r	163	pF2	7.3	7.1		68-	112	79	178	40N	296	298	317	-5.9	-5.0	+6.0	-3.1	.141	112.3		1	7	4.0	11	33	8	373.6	672.4
	163 is double: AB 7.3 10.5 8.3" 201.5, dT = +4sec																																		
	163 is a close double. Observations are highly desired																																		
26	Aug	5	9	40	50.4	r	92732	wF5	7.8	7.5		58-	99	76	113	82N	257	320	276	-5.2	-5.9	+2.5	+0.9	.350	155.0		1	58	47.5	17	1	33	369.8	692.7
	92732 is double: AB 7.8 17.9 79" 249.5, dT = -224sec																																		
26	Aug	7	6	17	48.5	R	555	K5	6.4	5.6s		36-	74	10	67	56N	293	2	305	-3.0	-6.2	+0.4	+0.1	.445	135.6		3	48	6.5	24	59	18	368.2	1110.4
	555 = NSV 1316, 6.44, range 0.02, 0V, Type VAR, Period 1.48987 days																																		
26	Aug	7	7	43	26.9	R	571	pA2	6.8	6.7		36-	73	28	73	88N	261	337	273	-2.9	-6.4	+0.5	+1.0	.526	165.1		3	51	25.3	25	9	47	366.1	966.4
	571 is double: ** 7.1 9.1																																		
26	Aug	7	7	58	52.2	r	76281	K0	8.0	7.4		35-	73	31	73	62N	287	5	299	-2.9	-6.4	+1.2	+0.2	.398	138.6		3	52	0.9	25	20	30	365.7	941.5
26	Aug	7	8	2	12.0	R	574	pG0	6.8	6.5		35-	73	32	74	76S	246	323	258	-2.9	-6.4	+0.4	+1.4	.528	180.0		3	52	11.4	25	9	47	365.7	935.7
26	Aug	7	9	12	21.7	r	76313	K0	8.3	7.8		35-	72	47	76	42N	308	31	320	-3.0	-6.5	+3.3	-1.8	.212	116.9		3	54	40.6	25	41	9	364.2	828.4
26	Aug	8	7	48	0.7	R	76841	cK1	7.3	6.7		25-	60	16	67	61S	238	310	244	-1.6	-6.1	-0.2	+1.4	.571	-163.5		4	55	34.6	27	12	9	364.4	1052.4
	76841 is double: ** 7.6 10.1 0.08" 82.0, dT = +0.13sec																																		
	76841 has been reported as non-instantaneous (OCc 753). Observations are highly desired																																		
26	Aug	8	9	20	26.2	R	746	WB7	7.0	6.9		24-	59	35	72	22S	199	280	206	-1.6	-6.3	-0.7	+3.4	.297	-125.7		4	59	53.7	27	19	32	362.3	895.1
	746 is double: AB 7.0 8.7 20.4" 206.1, dT = -68sec																																		
26	Aug	9	7	41	6.9	r	909	SB9	6.0	5.9s		15-	46	2	61	85S	269	334	270	-0.1	-5.4	-0.3	+0.6	.653	173.9		6	1	0.5	27	34	21	363.9	1159.0
	909 is triple: Aa,Ab 6.1 9.2 194.0, dT = 0.00sec : AB 6.1 12.4 9.5" 242.4, dT = -13sec																																		
	909 is a close double. Observations are highly desired																																		
	909 = NSV 16751, 6.04, range 0.01, 2V, Type VAR, Period 9.26012 days																																		
26	Aug	9	8	32	43.7	r	77894	SF2	8.8	8.4		15-	46	12	65	85S	270	340	270	+0.0	-5.5	+0.1	+0.7	.602	173.1		6	3	26.6	27	38	33	362.7	1067.7
	77894 is triple: AB 8.9 9.6 11.5" 263.5, dT = -19sec : AC 8.9 11.1 25.6" 189.6, dT = -7sec																																		
26	Aug	9	8	44	5.9	R	77909	wA0	7.6	7.6		15-	45	15	66	66S	251	323	251	+0.0	-5.5	-0.1	+1.2	.584	-168.5		6	4	1.0	27	34	14	362.5	1047.5
	77909 is double: AB 7.6 10.8 21.6" 132.5, dT = +18sec																																		
26	Aug	9	9	25	50.0	r	77957	B9	8.7	8.6		15-	45	23	68	41N	324	39	324	+0.0	-5.5	+1.9	-1.9	.264	118.4		6	6	15.6	27	56	5	361.5	973.9
26	Aug	9	10	12	8.3	r	77987	B9	8.5	8.5V		14-	45	-12	33	71	75N	291	10	290	+0.0	-5.6	+1.2	+0.0	.454	152.6		6	7	39.9	27	51	36	360.6	893.9

Occultation prediction for Capitolio Nacional Habana
E. Longitude - 82 21 34.2, Latitude 23 8 6.6, Alt. 3m; Telescope dia 15cm; dMag 0.0

y	m	d	h	m	s	P	Star No	Sp	Mag v	Mag r	V	% ill	Elon Sun Alt	Moon Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	dur sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
							77987 = HD 41639, 8.44, , Type VAR																											
26	Aug	10	9	20	2.4	r	X 98986		9.1	8.6		7-	31	8	65	37N	336	44	330	+1.7	-4.4	+1.5	-2.4	.259	115.0		7	12	1.4	26	5	34	362.4	1076.5
26	Aug	10	9	43	15.3	r	79159	A5	9.3	9.1		7-	31	13	67	74S	267	338	261	+1.7	-4.5	+0.1	+0.8	.588	-176.0		7	12	19.6	25	49	25	361.8	1034.0
26	Aug	10	9	53	16.5	R	1094	A0	7.1	7.1		7-	31	15	68	59S	252	323	245	+1.7	-4.5	-0.1	+1.2	.546	-160.4		7	12	49.4	25	44	55	361.6	1016.0
							R1094 = 49 Geminorum																											
26	Aug	14	19	56	46.8	d	1635cM0		5.2	4.4		6+	28	55	67	207	46S	161	137	140	+5.9	+2.7	+0.8	-2.7	.350	-27.0	.01	11	17	17.4	2	0	38	370.3	704.3
							R1635 = 75 Leonis																											
							1635 is double: ** 5.8 6.6 0.044" 0.0																											
							1635 has been reported as non-instantaneous (OCc 763). Observations are highly desired																											
26	Aug	16	1	40	23.6	D	1759pA*		6.6	6.4v		13+	43	4	262	83N	110	44	88	+5.6	+4.8	+0.3	-1.3	.515	6.3		12	14	15.5	- 5	43	0	382.5	961.5
							1759 is triple: AB 6.6 13.5 10.6" 0.9, dT = -7sec : AC 6.6 11.9 86" 185.9, dT = +42sec																											
							1759 = FG Vir, 6.53 to 6.58, V, Type DSCTC, Period 0.079 days																											
26	Aug	20	1	7	46.3	d	183485	*	7.5	6.9v		49+	89	33	214	55S	139	105	125	+3.7	+7.6	+2.5	-2.5	.254	-34.4		15	27	48.3	-25	10	10	397.9	593.6
							183485 = HM Lib, 7.42 to 7.63, V, Type PVTELIII																											
26	Aug	23	0	2	26	d	186286	B7	7.1	7.1		76+	122	-2	34	156	15N	11	36	11	+0.7	+6.5	+9.9	+9.9	.046	81.0		18	6	45.8	-28	21	50	400.8	572.2
26	Aug	23	0	10	58	Gr	186286	B7	7.1	7.1		76+	122	-4	36	** GRAZE: CA 5.0N; Dist. 35km in az. 15deg. [Lat = 23.46-0.25(E.Long+82.36)]																						
26	Aug	23	0	31	16.5	D	2617cK0		4.6	4.1		76+	122	-9	36	163	56N	52	70	52	+0.5	+6.5	+3.2	+2.0	.228	37.1		18	8	5.0	-28	27	26	400.6	555.0
							2617 is double: AB 5.1 5.9 0.26" 12.0, dT = +0.9sec																											
							2617 is a close double. Observations are highly desired																											
26	Aug	23	1	7	51.6	d	186346	F5	7.6	7.4		77+	122	38	173	48S	128	136	128	+0.4	+6.5	+3.2	-1.6	.207	-42.2		18	8	52.1	-28	45	19	400.4	543.5
26	Aug	23	2	0	26.2	r	2617cK0		4.6	4.1		77+	122	38	187	-58N	298	290	298	+0.1	+6.5	+3.5	-1.4	.226	143.0		18	8	5.0	-28	27	26	400.4	549.1
							2617 is double: AB 5.1 5.9 0.26" 12.0, dT = -0.31sec																											
							2617 is a close double. Observations are highly desired																											
26	Aug	23	4	5	6.5	d	186461cA2		7.4	7.2v		77+	123	28	217	46N	41	3	42	-0.4	+6.4	+1.0	+1.1	.286	31.5		18	12	37.6	-28	14	11	401.3	653.7
							186461 is double: ** 8.2 8.2 0.050"																											
							186461 has been reported as non-instantaneous (OCc1536). Observations are highly desired																											
							186461 = V4385 Sgr, 7.42 to 7.46, Hp, Type ELL:, Period 2.62462 days, Phase 27%																											
26	Aug	24	5	2	53.4	d	187716SG6		7.2	6.6		85+	134	28	219	67S	102	62	108	-1.8	+5.3	+2.6	-1.3	.282	-37.7		19	8	8.1	-26	50	5	399.7	691.4
							187716 is triple: **Aa,Ab 7.8 7.8 0.050" 160.0, dT = +0.09sec : AB 7.3 8.6 45" 123.9, dT = +149sec																											
							187716 has been reported as non-instantaneous (OCc 769). Observations are highly desired																											
26	Aug	26	6	16	25.3	d	3049	B9	7.3	7.3		96+	157	37	220	56N	35	356	49	-3.9	+2.7	+0.8	+1.4	.355	18.0		20	52	16.1	-19	38	37	393.3	712.7
26	Aug	27	6	22	31.9	d	164579SF3		7.2	7.0		99+	169	46	213	80N	56	25	74	-4.6	+1.2	+1.8	+0.9	.363	-7.6		21	41	28.1	-14	50	29	389.1	691.4
							164579 is triple: AB 7.2 12.0 17.8" 104.2, dT = +33sec : AC 7.2 12.6 119" 257.0, dT = -306sec																											
							Distance of 164579 to Terminator = 17.4"; to 3km sunlit peak = 6.9"																											
26	Aug	27	7	53	1.6	D	3177cA9		5.9	5.7		99+	169	32	234	60N	37	346	54	-4.9	+1.0	+0.6	+1.2	.401	14.7		21	43	4.4	-14	23	59	390.1	784.3
							R3177 = 44 Capricorni																											
							3177 is double: ** 6.8 6.8 0.10" 90.0, dT = +0.15sec																											
							3177 has been reported as non-instantaneous (OCc1608). Observations are highly desired																											
							Distance of 3177 to Terminator = 12.3"; to 3km sunlit peak = 3.4"																											
26	Aug	28	2	47	24.2	d	X182643k		11.5	11.2		88E	180	38	125	87U	97	147	117	-4.2	+0.2	+2.4	+0.5	.281	-41.7		22	25	12.9	-10	17	6	386.7	706.8
26	Aug	28	2	48	32.6	r	X242709k		11.5			87E	180	38	126	-90N	216	266	236	-4.2	+0.2	+1.4	+2.3	.355	-161.2		22	23	34.8	-10	27	28	386.7	703.5
26	Aug	28	2	50	36.4	r	X182578k		11.1	10.4		84E	180	39	126	-74S	199	248	219	-4.2	+0.2	+1.1	+2.9	.303	-144.1		22	23	54.0	-10	29	12	386.6	702.0
26	Aug	28	2	53	2.3	d	X242722		11.5			81E	180	40	126	55N	360	49	20	-4.2	+0.2	+0.4	+3.9	.216	54.8		22	24	17.5	- 9	58	36	386.6	702.0
26	Aug	28	2	54	28.8	d	X182649k		11.2	10.9		79E	180	39	127	80U	103	151	122	-4.2	+0.2	+2.7	+0.2	.250	-48.0		22	25	20.6	-10	17	8	386.6	701.0
26	Aug	28	3	1	0.2	d	X182655k		11.1	10.8		70E	180	41	128	74U	109	156	128	-4.2	+0.1	+3.0	-0.2	.216	-54.5		22	25	27.1	-10	17	16	386.4	695.8
26	Aug	28	3	1	2.5	D	165050	K0	9.8	9.3		70E	180	41	128	61N	4	51	24	-4.2	+0.1	+0.6	+3.6	.238	50.1		22	24	31.7	- 9	56	53	386.4	696.0
26	Aug	28	3	11	13.1	d	X182644k		10.9	10.4		55E	180	43	130	95U	36	81	55	-4.3	+0.1	+1.4	+2.3	.350	17.7		22	25	16.4	- 9	57	32	386.2	689.2
26	Aug	28	3	16	58.9	R	X 51850k		10.6	10.4		46E	180	44	132	-43N	255	299	275	-4.3	+0.1	+2.2	+1.3	.339	158.2		22	23	46.0	-10	12	53	386.1	683.1

Occultation prediction for Capitolio Nacional Habana
E. Longitude - 82 21 34.2, Latitude 23 8 6.6, Alt. 3m; Telescope dia 15cm; dMag 0.0

y	m	day d	h	Time m	s	P	Star No	Sp D	Mag v	Mag r	V	% Ill	Elon Sun Alt	Moon Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	dur sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	Aug	28	3	22	38.7	r	X182632k		11.7	11.2		38E	180	44	133	84U	178	220	197	-4.3	+0.1	+0.3	+4.0	.208	-124.9		22	24	55.9	-10	23	4	386.1	680.2
26	Aug	28	3	30	55.9	D	X 51928k		10.2	9.9		27E	180	46	135	47U	117	158	137	-4.3	+0.1	+4.3	-1.3	.154	-64.8		22	25	59.1	-10	12	45	386.0	676.7
26	Aug	28	3	32	18.2	R	3286	K0	7.2	6.4		26E	180	46	136	-45N	245	286	265	-4.3	+0.1	+2.2	+1.5	.350	166.5		22	24	7.6	-10	11	52	385.9	674.3
26	Aug	28	3	39	38.5	R	X 51874		9.8	9.2		18E	180	47	138	91U	218	257	238	-4.4	+0.1	+1.6	+2.2	.349	-166.6		22	24	34.2	-10	16	1	385.8	670.8
26	Aug	28	3	44	0.7	r	X242722		11.5			14E	180	48	139	4N	286	324	306	-4.4	+0.1	+3.7	-0.3	.207	125.3		22	24	17.5	-	9	58	385.7	669.2
26	Aug	28	3	48	9.2	D	165076	kG5	9.6	9.0		11E	180	48	139	55U	83	120	103	-4.4	+0.1	+2.7	+0.9	.303	-32.1		22	26	25.0	-10	0	0	385.7	668.8
26	Aug	28	3	48	27.4	r	X182643k		11.5	11.2		11E	180	48	140	64U	189	226	209	-4.4	+0.1	+0.7	+3.2	.266	-138.3		22	25	12.9	-10	17	6	385.7	667.1
26	Aug	28	3	48	38.8	r	X182655k		11.1	10.8		11E	180	48	140	56U	176	213	196	-4.4	+0.1	+0.1	+4.0	.207	-125.5		22	25	27.1	-10	17	16	385.7	667.2
26	Aug	28	3	49	16.2	r	X182649k		11.2	10.9		10E	180	49	140	59U	183	219	203	-4.4	+0.1	+0.5	+3.5	.238	-132.0		22	25	20.6	-10	17	8	385.7	666.8
26	Aug	28	3	49	47.4	r	X242731k		11.2			10E	180	49	141	84U	222	258	242	-4.4	+0.1	+1.7	+2.1	.352	-171.0		22	24	42.5	-10	13	5	385.7	666.3
26	Aug	28	3	50	26.1	d	X182702k		11.7	11.5		10E	180	49	140	50U	92	128	111	-4.4	+0.1	+3.0	+0.5	.270	-40.8		22	26	28.0	-10	1	49	385.7	667.8
26	Aug	28	3	56	43.2	d	X242756k		11.4			7E	180	50	142	87U	34	69	54	-4.4	+0.0	+1.5	+2.3	.342	16.3		22	26	7.4	-	9	47	8	385.6	665.5
26	Aug	28	3	57	58.2	R	165050	K0	9.8	9.3		6E	180	50	143	103U	280	314	300	-4.4	+0.0	+3.6	+0.0	.228	129.9		22	24	31.7	-	9	56	53	385.5	663.5
26	Aug	28	4	3	18.8	d	X242766k		11.8			4E	180	51	144	64U	75	109	95	-4.5	+0.0	+2.6	+1.1	.320	-25.5		22	26	40.4	-	9	54	33	385.5	663.1
26	Aug	28	4	6	16.6	R	X 51928k		10.2	9.9		4E	180	51	146	35U	165	197	185	-4.5	+0.0	-1.1	+5.1	.150	-115.2		22	25	59.1	-10	12	45	385.5	661.0
26	Aug	28	4	6	35.8	D	X182712k		10.8	10.3		4E	180	51	145	63U	80	112	99	-4.5	+0.0	+2.8	+0.9	.307	-29.9		22	26	45.0	-	9	54	55	385.5	662.0
26	Aug	28	4	7	36.8	r	X182637k		11.1	10.9		4E	180	51	146	68U	220	252	240	-4.5	+0.0	+1.7	+2.1	.349	-170.8		22	25	3.2	-10	9	15	385.5	660.1
26	Aug	28	4	17	9.4	d	X 51935		11.2	11.0		4E	180	53	149	98U	22	51	42	-4.5	+0.0	+1.2	+2.6	.313	27.3		22	26	18.0	-	9	40	53	385.3	659.2
26	Aug	28	4	20	1.6	D	165087	G5	9.0	8.6		4E	180	53	150	61U	97	125	117	-4.5	+0.0	+3.7	+0.1	.234	-48.4		22	27	0.2	-	9	56	38	385.3	658.3
26	Aug	28	4	34	54.2	r	X182644k		10.9	10.4		9E	180	54	156	70U	246	268	266	-4.6	+0.0	+2.5	+1.3	.334	162.6		22	25	16.4	-	9	57	32	385.2	654.7
26	Aug	28	4	47	11	m	X182667		11.0	10.5		19E	180	56	161	30N	318	336	338	-4.6	-0.1	+9.9	+9.9	.000	90.0		22	25	38.6	-	9	35	17	385.0	654.3
26	Aug	28	4	53	37.8	d	X242782		11.6			26E	180	56	163	100U	84	101	104	-4.6	-0.1	+3.2	+0.5	.280	-37.0		22	27	36.1	-	9	45	16	385.0	654.5
26	Aug	28	4	55	7.4	r	X182702k		11.7	11.5		28E	180	56	164	47U	186	201	206	-4.6	-0.1	+0.5	+3.2	.264	-139.0		22	26	28.0	-10	1	49	385.0	653.7
26	Aug	28	5	1	4.4	R	165076	kG5	9.6	9.0		35E	180	56	166	52U	195	207	215	-4.7	-0.1	+0.8	+2.8	.296	-147.6		22	26	25.0	-10	0	0	385.0	653.8
26	Aug	28	5	17	19.4	R	165087	G5	9.0	8.6		58E	180	57	173	70U	178	184	198	-4.7	-0.1	-0.1	+3.6	.232	-131.4		22	27	0.2	-	9	56	38	384.9	655.4
26	Aug	28	5	21	34.0	d	X242774		11.7			65E	180	58	175	-41N	13	18	33	-4.7	-0.1	+0.7	+2.8	.295	33.1		22	27	17.2	-	9	24	58	384.9	656.5
26	Aug	28	5	21	42.3	r	X242766k		11.8			65E	180	57	175	70U	201	205	221	-4.7	-0.1	+1.0	+2.5	.316	-154.1		22	26	40.4	-	9	54	33	384.9	656.0
26	Aug	28	5	21	50.2	R	X182712k		10.8	10.3		65E	180	57	175	70U	196	200	216	-4.7	-0.1	+0.9	+2.7	.303	-149.7		22	26	45.0	-	9	54	55	384.9	656.0
26	Aug	28	5	22	12.1	r	X242756k		11.4			66E	180	57	176	82U	242	246	262	-4.8	-0.1	+2.4	+1.2	.338	164.3		22	26	7.4	-	9	47	8	384.9	656.0
26	Aug	28	5	23	1.3	D	146104	kG5	10.3	10.0		67E	180	57	175	-87S	66	70	86	-4.8	-0.1	+2.5	+1.1	.332	-19.3		22	28	1.5	-	9	33	21	384.9	656.7
26	Aug	28	5	24	37.7	d	X182760		11.3	10.5		69E	180	58	176	-81S	71	75	91	-4.8	-0.1	+2.7	+0.9	.319	-24.9		22	28	5.4	-	9	34	21	384.9	657.0
26	Aug	28	5	36	42.1	r	X 51935		11.2	11.0		86E	180	57	183	98U	253	251	273	-4.8	-0.2	+2.8	+0.7	.315	153.1		22	26	18.0	-	9	40	53	384.8	659.1
26	Aug	29	6	51	26.5	R	3416	cA3	5.6	5.5		99-	167	62	199	26S	177	160	199	-5.2	-1.9	-0.2	+3.6	.249	-132.5		23	15	34.3	-	3	29	47	380.8	679.7
							3416 is double: ** 6.4 6.4 0.050"																												
							3416 has been reported as non-instantaneous (OCc1638). Observations are highly desired																												
							Distance of 3416 to Terminator = 4.9"; to 3km sunlit peak = 0.0"																												
26	Aug	30	5	36	2.6	r	128524	K2	7.6	6.9		95-	155	62	133	73N	259	301	281	-4.8	-3.1	+2.6	+1.0	.324	147.3		0	0	23.5		2	40	32	377.6	704.9
26	Aug	30	9	45	8.1	r	6	G5	6.9	6.3		95-	154	46	250	69S	220	160	242	-5.6	-3.7	+1.2	+1.4	.399	-168.2		0	5	22.2		3	36	22	378.0	746.8
26	Sep	1	4	28	30.9	r	244	K0	6.7	6.2		82-	130	33	87	13S	168	240	189	-3.7	-5.2	-1.5	+4.5	.196	-113.3		1	39	15.4		14	17	8	373.8	899.8
							R244 = 104 Piscium																												
26	Sep	2	5	50	37.4	r	93005	K0	7.9	7.3		72-	117	42	83	83S	243	319	260	-3.1	-6.1	+0.8	+1.5	.478	174.7		2	34	23.5		19	59	5	370.4	862.4
26	Sep	2	7	58	22.7	R	387	cG5	6.9	6.4S		72-	116	70	93	81N	259	338	276	-3.3	-6.3	+2.3	+0.9	.368	157.3		2	37	34.4		20	34	30	368.4	712.5
							387 is double: ** 7.7 7.7 0.10" 90.0, dT = +0.27sec																												
							387 has been reported as non-instantaneous (OCc1190). Observations are highly desired																												
							387 = NSV 15555, 6.91, , Type VAR:																												
26	Sep	2	10	1	44.9	r	75509	M*	7.9	7.1v		71-	115	81	260	38N	302	225	319	-3.7	-6.5	+4.4	-3.5	.175	118.7		2	40	31.7		21	11	16	367.9	650.5
							75509 = AK Ari, 7.94, range 0.07, 8w, Type LB:, Period 19.3 days, Phase 22%																												
26	Sep	3	6	55	51.2	R	518	SA3	6.0	s		61-	103	44	78	71N	274	355	287	-2.2	-6.5	+1.6	+0.6	.403	148.7		3	34	26.6		24	27	52	367.8	840.9

Occultation prediction for Capitolio Nacional Habana
E. Longitude - 82 21 34.2, Latitude 23 8 6.6, Alt. 3m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon	Sun Alt	Moon Alt	Az	CA o	PA o	VA o	AA o	Libration L	B	A m/o	B m/o	RV "/s	Cct	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
		R518 = 7 Tauri																																
		518 is triple: AB 6.60 6.86 0.79" 348.0, dT = -0.5sec : AB,C 5.9 9.9 22.5" 52.2, dT = +42sec																																
		518 is a close double. Observations are highly desired																																
		518 = NSV 1192, 5.92 to 5.96, V																																
26	Sep	3	8	59	34.0	r	76041	F0	8.2	8.0		61-	102		72	81	38S	204	295	217	-2.4	-6.7	+0.8	+3.3	.299	-140.1		3	38	35.9	24	36	6	366.1	692.4
26	Sep	3	9	27	18.9	R	76046	cA0	7.1	7.1		60-	102		78	79	49S	215	310	228	-2.5	-6.7	+1.4	+2.8	.326	-149.5		3	39	6.7	24	42	10	365.9	670.4
		76046 is double: AB 7.1 45.0, dT = -30sec																																
26	Sep	3	10	24	37	Gr	529	SA2	6.1	6.1		60-	102	-12	87	** GRAZE: CA 7.5N; Dist. 55km in az. 159deg. [Lat = 22.61+0.35(E.Long+82.36)]																				
26	Sep	3	10	25	6	M	529	SA2	6.1	6.1		60-	102	-12	87	342	7N	338	177	351	-2.7	-6.8	+9.9	+9.9	.000	90.0		3	40	46.3	25	19	46	365.6	642.4
		R529 = 11 Tauri																																
		529 is triple: **Aa,Ab 6.3 8.3 : AB 6.1 10.9 74" 357.0																																
26	Sep	3	11	8	18.7	r	76081	K2	7.5	6.9		60-	101	-2	79	284	71S	237	138	250	-2.8	-6.8	+2.4	+1.4	.348	-165.3		3	41	18.1	25	0	29	365.7	638.9
26	Sep	4	7	3	15.8	r	694	SK2	8.1	7.5v		50-	90		34	72	64N	289	8	297	-1.1	-6.4	+1.3	+0.1	.402	142.2		4	36	48.2	27	7	56	367.0	904.7
		694 is quadruple: AC 5.4 7.7" 176.0, dT = +7sec : AD 5.4 19.3 12.7" 104.0, dT = +32sec : AB 8.4 16.0 130" 338.0, dT = -210sec																																
		694 is a close double. Observations are highly desired																																
		694 = V0833 Tau, 8.02 to 8.40, V, Type BY+UV, Period 1.7916 days																																
26	Sep	4	7	40	46.3	R	701	SF2	6.6	6.4		49-	89		41	74	48S	220	302	228	-1.1	-6.4	+0.2	+2.3	.408	-149.2		4	38	29.5	26	56	23	366.2	844.6
		701 is triple: 6.6 9.2 3.1" 169.4, dT = -5sec : AB 7.36 7.21 4.48" 187.8, dT = -9sec																																
		701 is a close double. Observations are highly desired																																
26	Sep	4	7	40	50.7	r	X 70481	p	7.3	7.2		49-	89		41	74	48S	220	302	228	-1.1	-6.4	+0.2	+2.3	.409	-149.3		4	38	29.6	26	56	26	366.2	844.4
		X 70481 is triple: 7.3 9.2 5.8" 174.9, dT = -10sec : AC 7.4 12.9 92" 203.6, dT = -215sec																																
		X 70481 is a close double. Observations are highly desired																																
26	Sep	4	10	40	6.3	r	715	cK5	8.0	7.5		49-	88	-8	80	60	46N	307	63	315	-1.5	-6.6	+3.5	-2.5	.233	129.5		4	43	35.4	27	41	15	364.0	647.2
		715 is double: ** 8.8 8.8 0.10" 90.0, dT = +0.34sec																																
		715 has been reported as non-instantaneous (OCc 130). Observations are highly desired																																
26	Sep	5	8	13	20.0	r	868	SA0	7.5	7.5		38-	76		35	71	34S	214	294	216	+0.1	-5.9	-0.2	+2.9	.340	-134.0		5	44	21.2	27	43	53	365.4	868.3
		868 is triple: AB 7.5 9.8 8.6" 254.1, dT = -19sec : AC 7.5 12.7 47" 40.4, dT = +138sec																																
		868 is a close double. Observations are highly desired																																
26	Sep	5	8	34	42.5	r	77495	cA0	8.1	8.1		38-	76		40	72	41N	319	41	321	+0.1	-5.9	+2.6	-2.0	.243	121.1		5	44	59.0	28	11	40	365.0	834.1
		77495 is double: AB 8.0 8.0 0.20" 42.2, dT = -0.09sec																																
		77495 is a close double. Observations are highly desired																																
26	Sep	5	10	28	57.6	r	77582	B3	8.4	8.3		37-	75	-11	64	72	38N	322	58	324	-0.2	-6.0	+3.3	-3.3	.208	122.2		5	48	41.3	28	19	29	363.3	687.2
26	Sep	6	8	42	36.3	r	78784	A0	8.3	8.2		27-	62		28	71	46N	321	38	317	+1.3	-4.9	+1.7	-1.5	.311	127.7		6	50	2.5	27	0	13	365.4	900.7
26	Sep	6	10	44	10.9	r	78853	A0	7.7	7.7		26-	61	-7	54	76	15S	203	290	199	+1.1	-5.0	+0.3	+7.5	.137	-109.4		6	54	29.2	26	31	51	363.2	724.1
26	Sep	7	8	10	48.6	r	79740	cF2	8.5	8.3		17-	49		8	68	65S	259	327	249	+2.5	-3.6	-0.2	+1.0	.560	-162.8		7	50	44.7	23	47	1	367.5	1044.3
		79740 is double: ** 9.2 9.2 0.10" 143.0, dT = +0.08sec																																
		79740 has been reported as non-instantaneous (OCc 683). Observations are highly desired																																
26	Sep	7	10	32	33.9	R	79804	cG0	7.4			16-	48	-10	38	77	79S	273	352	263	+2.5	-3.7	+1.2	+0.6	.453	-172.9		7	56	2.8	23	41	33	364.5	807.1
		79804 is double: AB 7.90 8.57 0.11" 108.1, dT = +0.24sec																																
		79804 is a close double. Observations are highly desired																																
26	Sep	7	10	34	1.3	R	1195	B8	6.8	6.9		16-	48	-10	38	77	65S	259	338	249	+2.5	-3.7	+1.1	+1.2	.425	-158.9		7	56	6.5	23	37	26	364.5	805.1
26	Sep	8	9	20	2.4	r	98186	kB5	8.5	8.6		9-	35		9	73	88S	287	355	272	+3.7	-2.1	+0.2	+0.2	.565	176.9		8	52	20.0	19	21	3	368.3	1011.6
26	Sep	8	9	45	27.5	R	98198	K5	7.6	6.8		9-	35		14	75	85N	293	3	278	+3.7	-2.1	+0.5	+0.0	.536	171.3		8	53	20.6	19	19	20	367.7	967.5
26	Sep	8	19	38	6.2	D	Jupiter		-1.7	-1.7		7-	31		54	32	276	-23S	178	103	160	+2.4	-1.1	-0.7	-3.1	.318	-52.2		9	10	15.8	16	52	26	366.6	923.2
		Jupiter limb contacts offset by ±50.5 secs, at 19 37 16 and 19 38 57 Both contacts are against the bright limb of Jupiter																																
26	Sep	8	20	14	36.2	R	Jupiter		-1.7	-1.7		7-	31		46	23	279	51S	252	178	234	+2.4	-1.0	+1.1	-0.1	.337	-127.8		9	10	15.8	16	52	26	367.5	980.3
		Jupiter limb contacts offset by ±47.6 secs, at 20 13 49 and 20 15 24 Both contacts are against the bright limb of Jupiter																																
26	Sep	15	1	2	32.8	d	158479	K0	8.3	7.8		16+	47		8	245	41N	65	3	46	+4.1	+7.1	+0.4	+0.0	.332	40.2		14	18	26.3	-19	33	45	393.5	829.3

Occultation prediction for Capitolio Nacional Habana
E. Longitude - 82 21 34.2, Latitude 23 8 6.6, Alt. 3m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon Sun Alt	Moon Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	Sep	15	1	12	41	m	2046	A5	7.0	6.8v		16+	47	5	246	10S	195	131	176	+4.1	+7.1	+9.9	+9.9	.000	-90.0		14	17	27.7	-19	57	50	393.8	847.3
							2046 = MW Vir, 7. to 7.04, Hp, Type EW, Period 0.493086 days, Phase 47%																													
26	Sep	16	2	1	33.4	d	2164	dK4	6.6	5.7		24+	59	3	242	27S	172	109	156	+3.3	+7.4	+3.3	-7.0	.116	-74.6	.02	15	9	51.3	-23	59	9	398.1	841.6
							2164 is double: AB 6.7 12.5 9.1" 204.6, dT = +66sec																												
							2164 is a close double. Observations are highly desired																												
26	Sep	17	2	16	51.5	d	2297	kF7	7.0	6.7		33+	70	9	236	78S	115	56	104	+2.3	+7.4	+1.3	-1.7	.368	-24.7		16	3	16.1	-26	43	2	400.6	788.0
26	Sep	20	3	3	55.0	D	2723	K0	6.6	6.1		61+	103	26	220	88N	82	40	86	-1.4	+5.7	+1.8	-0.4	.342	-14.7		18	46	3.9	-27	29	56	400.8	688.0
26	Sep	21	5	27	46.5	d	2879	kA3	6.7	6.6		71+	115	12	236	71S	98	40	106	-3.0	+4.3	+1.2	-1.2	.358	-35.5		19	42	22.6	-24	51	34	400.1	854.9
26	Sep	23	2	10	20.1	d	3115	F0	7.1	6.9		86+	137	49	169	72N	52	63	69	-4.1	+2.1	+2.2	+1.5	.325	0.9		21	18	15.7	-17	27	44	390.3	615.0
			R3115 = 31 Capricorni																														
26	Sep	23	5	28	1.9	D	3126	G8	4.3	3.8v		87+	138	34	229	82S	79	32	95	-4.9	+1.7	+1.8	-0.2	.356	-26.9		21	22	14.8	-16	50	4	391.0	756.4
			R3126 = Tae = iota Capricorni																														
			3126 = iot Cap, 4.27, range 0.06, V, Type BY																														
26	Sep	23	6	33	29.2	r	3126	G8	4.3	3.8v		87+	138	21	240	-46S	207	151	224	-5.0	+1.5	+0.1	+1.4	.395	-153.0		21	22	14.8	-16	50	4	392.0	843.7
			R3126 = Tae = iota Capricorni																														
			3126 = iot Cap, 4.27, range 0.06, V, Type BY																														
26	Sep	24	4	30	10.3	d	3244	K0	7.3	6.7		93+	149	52	206	50N	29	5	48	-5.2	+0.3	+1.1	+1.9	.345	18.1		22	8	34.1	-11	36	49	385.3	677.9
26	Sep	24	5	51	20.7	D	3253	kB5	5.4	5.5V		93+	149	41	229	53S	106	60	125	-5.4	+0.1	+3.4	-2.0	.217	-56.9		22	10	37.5	-11	33	54	385.9	743.8
			R3253 = 38 Aquarii																														
			3253 = HD 210424, 5.44, , Type ACV, Period 3.9613 days, Phase 11%																														
26	Sep	24	7	7	54.1	d	3255	M0	7.3	6.4v		93+	150	27	243	90S	70	13	89	-5.6	-0.1	+1.1	+0.0	.423	-17.3		22	12	16.9	-11	3	56	387.0	831.4
			3255 = KR Aqr, 7.25 to 7.36, Hp, Type LB																														
26	Sep	25	8	37	21.5	D	3380	cK0	5.9	5.4		98+	162	20	255	80N	61	358	83	-6.0	-1.8	+0.6	+0.3	.475	-6.2		23	1	31.7	-	4	42	41	382.9	887.1
			3380 is double: ** 7.0 7.0 0.10" 90.0, dT = +0.18sec																														
			3380 has been reported as non-instantaneous (OCc1633). Observations are highly desired																														
26	Sep	27	5	42	56.1	r	68	SB9	5.8		S	100-	173	74	184	68N	243	240	265	-4.8	-4.2	+2.3	+1.2	.368	163.5		0	32	23.8	6	57	20	371.3	691.6
			R68 = 51 Piscium																														
			68 is multiple: Aa,Ac 5.8 9.5 0.20" : Aa,Ab 5.8 8.0 0.27" 283.9, dT = -0.6sec : AB 5.7 9.5 28.5" 81.5, dT = +73sec : AD 5.7 13.1 82" 307.6, dT = -96sec																														
			68 is a close double. Observations are highly desired																														
			68 = NSV 15113, 5.67 to 9.0, V, Type E:																														
			Distance of 68 to Terminator = 6.7"; to 3km sunlit peak = 0.1"																														
26	Sep	28	4	7	51.8	r	197	cK0	7.0	6.5		97-	160	56	101	68S	215	283	236	-3.7	-5.1	+0.9	+2.3	.420	-164.8		1	21	58.3	12	36	15	369.1	779.9
26	Sep	29	5	9	26.8	r	336	F0	7.4	7.3v		92-	147	60	92	64S	218	294	237	-2.7	-6.0	+0.9	+2.2	.417	-164.0		2	17	45.4	18	27	18	366.3	770.5
			336 = AD Ari, 7.39 to 7.48, V, Type ELL, Period 0.53972 days, Phase 22%																														
26	Sep	30	4	25	26.7	R	470	WK0	6.8	6.2		85-	134	39	78	87N	253	331	268	-1.4	-6.3	+0.9	+1.2	.491	168.4		3	14	17.2	22	57	14	366.3	891.4
			470 is double: AB 6.9 10.4 42" 33.3, dT = +65sec																														
26	Sep	30	5	42	56.4	r	75832	K0	7.3	6.6		84-	133	56	82	61S	221	304	236	-1.5	-6.4	+0.8	+2.2	.418	-160.8		3	16	57.0	23	7	36	365.0	783.9
26	Sep	30	8	7	19.7	r	483	SA5	7.5			84-	132	88	65	87S	248	2	263	-1.9	-6.6	+2.4	+1.1	.374	176.6		3	20	21.2	23	41	21	363.8	660.8
			483 is quadruple: AB 7.62 9.90 2.77" 315.8, dT = -2.8sec : AB,D 7.6 14.8 25.8" 251.6, dT = -69sec : AC 7.6 14.0 61" 286.7, dT = -127sec																														
			483 is a close double. Observations are highly desired																														
26	Oct	3	6	7	58.3	R	994	cF5	6.6	6.3		53-	93	22	69	26S	208	283	206	+2.2	-5.1	-0.9	+3.4	.290	-122.8		6	28	56.4	26	58	3	367.5	952.0
			994 is double: ** 6.8 7.7 0.003" 269.0, dT = -0.01sec																														
26	Oct	3	8	34	41.7	r	78501	K0	7.8	7.3		52-	92	53	75	32S	215	302	213	+2.0	-5.2	+0.8	+4.1	.237	-125.3		6	33	58.0	27	2	41	364.9	725.6
26	Oct	3	10	18	32.8	R	1013	cG0	7.0			51-	91	76	70	84N	280	24	277	+1.7	-5.2	+2.6	-0.2	.363	177.5		6	36	26.3	27	16	42	363.9	641.9
			1013 is double: AB 7.14 8.97 0.68" 270.0, dT = -1.9sec																														
			1013 is a close double. Observations are highly desired																														
26	Oct	4	7	48	30.2	r	79521	cG2	7.4	7.0		41-	79	30	74	60N	311	27	302	+3.2	-4.0	+1.3	-0.8	.394	144.9		7	34	50.4	24	57	16	367.8	858.4

Occultation prediction for Capitolio Nacional Habana
E. Longitude - 82 21 34.2, Latitude 23 8 6.6, Alt. 3m; Telescope dia 15cm; dMag 0.0

y	m	day d	h	Time m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon	Sun Alt	Moon Alt	Az	CA o	PA o	VA o	AA o	Libration L	B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
							79521 is double: ** 8.8 8.8 0.050"																													
							79521 has been reported as non-instantaneous (OCc1366). Observations are highly desired																													
26	Oct	4	12	11	11.3	d	1170dG8	3.6	3.1			39-	78	10	87	63	-77N	88	204	79	+2.5	-3.8	+2.9	+0.2	.331	25.0		7	44	26.8	24	23	53	364.9	646.5
	R1170 = kappa Geminorum																																		
							1170 is double: AB 3.7 10.0 7.4" 241.1, dT = -20sec																													
							1170 is a close double. Observations are highly desired																													
26	Oct	4	13	28	51.7	R	1170dG8	3.6	3.1			39-	77	28	75	278	48N	323	231	314	+2.3	-3.7	+1.3	-2.6	.350	154.5		7	44	26.8	24	23	53	365.1	687.5
	R1170 = kappa Geminorum																																		
							1170 is double: AB 3.7 10.0 7.4" 241.1, dT = -3sec																													
							1170 is a close double. Observations are highly desired																													
26	Oct	5	8	36	26.7	r	80269kF0	8.4	8.3			29-	66		27	78	43S	239	312	225	+4.0	-2.5	+0.4	+2.4	.337	-134.5		8	35	17.8	20	33	53	369.6	861.1
26	Oct	5	9	50	16.4	r	80294kF8	8.0	7.7			29-	65		43	83	60S	256	333	242	+3.9	-2.5	+1.5	+1.5	.358	-147.6		8	37	26.4	20	29	14	368.2	757.0
26	Oct	6	8	24	58.0	D	Jupiter	-1.7	-1.7			20-	53		11	78	-36S	161	232	146	+4.8	-1.0	+0.9	-2.5	.304	-54.8		9	31	5.4	15	20	24	373.2	955.0
	Jupiter limb contacts offset by ±55.3 secs, at 8 24 3 and 8 25 53 Both contacts are against the bright limb of Jupiter																																		
26	Oct	6	8	42	48		GrJupiter	-1.7	-1.7			20-	53		16	**	GRAZE: CA -1.9S; Dist.325km in az. 169deg. [Lat = 20.15+0.17(E.Long+82.36)]																			
	Distance of Jupiter to Terminator = 18.6"; to 3km sunlit peak = 0.0"																																		
26	Oct	6	8	56	33.6	R	Europa	6.1	6.1			20-	52		18	81	36S	234	306	218	+4.8	-1.0	+0.2	+2.9	.290	-125.5		9	30	55.2	15	21	19	372.5	900.4
	Europa limb contacts offset by ±1.3 secs, at 8 56 32.4 and 8 56 34.9 Both contacts are against the bright limb of Europa																																		
26	Oct	6	8	57	26.3	r	1407 K0	7.7	7.1			20-	52		18	80	29N	350	61	333	+4.8	-1.0	+1.1	-3.5	.248	119.4		9	31	39.0	15	46	12	372.5	911.8
26	Oct	6	8	58	42.6	R	Callisto	6.4	6.4			20-	52		19	81	36S	235	306	218	+4.8	-1.0	+0.2	+3.0	.289	-125.4		9	30	58.9	15	20	59	372.4	900.7
	Callisto limb contacts offset by ±2.0 secs, at 8 58 40.7 and 8 58 44.6 Both contacts are against the bright limb of Callisto																																		
26	Oct	6	8	59	20.1	R	Io	5.8	5.8			20-	52		19	81	36S	234	306	218	+4.8	-1.0	+0.2	+3.0	.286	-125.4		9	31	1.2	15	20	47	372.4	891.5
	Io limb contacts offset by ±1.5 secs, at 8 59 18.6 and 8 59 21.6 Both contacts are against the bright limb of Io																																		
26	Oct	6	9	1	50.0	R	Jupiter	-1.7	-1.7			20-	52		19	81	36S	234	306	218	+4.8	-1.0	+0.2	+3.0	.284	-125.1		9	31	5.4	15	20	24	372.4	892.3
	Jupiter limb contacts offset by ±59.1 secs, at 9 0 51 and 9 2 49 Both contacts are against the bright limb of Jupiter																																		
26	Oct	6	9	3	46.0	R	Ganymede	5.4	5.4			20-	52		20	81	36S	235	306	218	+4.8	-1.0	+0.3	+3.0	.283	-124.9		9	31	8.7	15	20	5	372.3	893.7
	Ganymede limb contacts offset by ±2.2 secs, at 9 3 43.8 and 9 3 48.2 Both contacts are against the bright limb of Ganymede																																		
26	Oct	8	10	23	2.5	r	X 16891kG0	9.7	9.1			5-	26		12	92	67N	312	19	291	+5.7	+2.3	+0.3	-0.7	.504	166.8		11	14	0.7	3	14	9	378.6	950.3
26	Oct	14	0	15	33.3	d	2238 F0	8.0	7.8			11+	39		8	238	64S	136	76	123	+2.4	+7.3	+1.6	-2.5	.305	-42.7		15	40	37.8	-25	35	33	399.0	803.6
26	Oct	15	23	53	1.9	d	185420 B8	8.1	8.0			25+	61		27	217	53N	59	20	56	+0.4	+6.7	+1.5	+0.4	.308	20.7		17	27	45.7	-28	21	32	401.2	641.8
26	Oct	20	2	53	40.2	D	3069 A*	6.3	6.3v			63+	105		36	222	60S	103	63	118	-5.0	+2.2	+3.2	-1.6	.235	-50.7		20	59	36.1	-19	2	7	394.5	709.7
	R3069 = 20 Capricorni (AO)																																		
							3069 = AO Cap, 6.25 to 6.30, V, Type ACV, Period 2.2411 days, Phase 83%																													
26	Oct	20	23	41	12.0	D	3181SA7	6.0	5.8			72+	116	-10	46	146	88S	72	105	90	-5.0	+1.2	+2.6	+1.2	.317	-17.7		21	44	1.0	-14	44	58	390.0	629.7
	R3181 = 45 Capricorni																																		
							3181 is triple: ** 6.7 6.7 0.050" : AB 5.4 9.5 4.3" 229.0, dT = -12sec																													
							3181 has been reported as non-instantaneous (OCc1610). Observations are highly desired																													
26	Oct	22	5	25	41.9	d	146188 F0	7.0	6.8			82+	129		32	244	10N	348	292	9	-6.7	-1.1	-1.1	+4.7	.194	63.1		22	36	17.1	-	7	39	52	384.9	801.5
	Distance of 146188 to Terminator = 18.1"; to 3km sunlit peak = 3.9"																																		
26	Oct	22	5	46	9.4	d	146201 F0	7.5	7.3v			82+	129		28	247	24N		3	304	23	-6.7	-1.1	-0.3	+3.0	.285	49.8		22	37	0.9	-	7	34	0	385.2	826.5
	146201 = LO Aqr, 7.44 to 7.59, Hp, Type IB:																																		
26	Oct	22	6	17	53	m	3322cG1	6.4				82+	130		21	251	15S	144	83	165	-6.8	-1.2	+9.9	+9.9	.000	-90.0		22	38	22.1	-	7	53	51	385.8	869.4
							3322 is double: AB 6.64 8.11 0.08" 296.3																													
							3322 is a close double. Observations are highly desired																													
26	Oct	22	6	18	5		Gr	3322cG1	6.4			82+	130		20	**	GRAZE: CA 14.6S; Dist. 41km in az. 339deg. [Lat = 23.53+0.36(E.Long+82.36)]																			
26	Oct	23	5	31	51.7	d	146693 G5	7.5	7.1			89+	141		43	244	85S		74	18	96	-6.8	-2.5	+1.8	+0.0	.379	-23.9		23	24	39.0	-	1	44	29	378.4	759.7
26	Oct	24	3	53	20.6	d	109052 G5	7.4	6.9			95+	153		71	196	78S		85	70	107	-6.1	-3.7	+3.1	+0.2	.300	-38.4		0	11	5.7		4	7	59	371.8	690.4
26	Oct	25	7	58	47.5	d	163pF2	7.3	7.1			99+	167		38	267	67N		63	353	84	-5.8	-5.3	+1.3	+0.4	.449	-1.4		1	7	4.0		11	33	8	368.3	802.4

Occultation prediction for Capitolio Nacional Habana
E. Longitude - 82 21 34.2, Latitude 23 8 6.6, Alt. 3m; Telescope dia 15cm; dMag 0.0

y	m	day d	h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon Alt	Sun Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	dur sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
							163 is double: AB 7.3 10.5 8.3" 201.5, dT = -14sec																											
							163 is a close double. Observations are highly desired																											
							Distance of 163 to Terminator = 19.1"; to 3km sunlit peak = 8.0"																											
26	Oct	28	2	50	5.1	r	574pG0		6.8	6.5		94-	152	34	74	44N	295	13	307	-0.5	-6.2	+1.6	-0.2	.352	131.3		3	52	11.4	25	9	47	361.1	935.5
26	Oct	28	5	13	24.5	r	76345kG8		7.5	7.0		94-	151	65	79	55S	214	304	226	-0.7	-6.4	+0.9	+2.7	.358	-147.5		3	57	11.8	25	16	58	358.8	738.7
26	Oct	28	10	29	40.3	r	603	F8	7.6	7.3		93-	150	45	285	25N	315	232	326	-1.5	-6.5	+0.7	-3.1	.299	131.5		4	6	4.6	26	12	42	360.0	788.4
26	Oct	29	3	57	4.1	r	746WB7		7.0	6.9		87-	138	35	72	75N	275	354	281	+1.1	-5.9	+1.0	+0.6	.484	159.6		4	59	53.7	27	19	32	360.8	902.6
							746 is double: AB 7.0 8.7 20.4" 206.1, dT = -16sec																											
26	Oct	29	6	16	10.7	R	756	F0	6.6	6.5		87-	137	65	73	55N	295	30	301	+0.9	-6.1	+2.7	-0.8	.325	142.5		5	4	38.0	27	41	46	358.8	713.1
26	Oct	29	9	22	12.6	R	773wF8		7.0	6.7		86-	136	73	290	65S	235	133	240	+0.4	-6.1	+2.7	+1.6	.313	-144.3		5	10	3.9	27	33	23	358.6	669.1
							773 is double: AB 7.0 9.3 315" 353.1, dT = +475sec																											
26	Oct	30	10	6	27.8	R	958cK1		6.7	6.1		77-	122	78	292	43S	223	116	221	+2.0	-5.2	+3.7	+3.7	.194	-120.6		6	18	20.8	27	12	37	359.8	664.9
							958 is double: ** 7.5 7.5 0.050"																											
							958 has been reported as non-instantaneous (OCc1307). Observations are highly desired																											
26	Oct	31	4	39	29.8	r	1094	A0	7.1	7.1		68-	111	17	69	42N	325	37	318	+4.1	-4.1	+1.3	-1.5	.332	126.8		7	12	49.4	25	44	55	365.9	982.4
							R1094 = 49 Geminorum																											
26	Oct	31	9	28	52.7	d	1117cG8		5.0	4.6		66-	109	79	77	-40S	147	246	141	+3.5	-4.1	+2.1	-3.0	.281	-40.5		7	23	28.5	25	3	2	362.0	648.3
							R1117 = 57 Geminorum																											
							1117 is double: ** 5.9 5.9 0.10" 90.0, dT = +0.19sec																											
							1117 has been reported as non-instantaneous (OCc1358). Observations are highly desired																											
26	Oct	31	10	38	59.6	R	1117cG8		5.0	4.6		66-	109	84	292	64S	252	142	244	+3.3	-4.0	+3.2	+1.0	.287	-139.7		7	23	28.5	25	3	2	362.0	660.3
							R1117 = 57 Geminorum																											
							1117 is double: ** 5.9 5.9 0.10" 90.0, dT = +0.33sec																											
							1117 has been reported as non-instantaneous (OCc1358). Observations are highly desired																											
26	Nov	1	8	25	31.1	r	1253cK0		7.3	6.8		55-	96	52	84	29N	344	65	332	+4.9	-2.7	+1.9	-4.0	.224	123.8		8	21	28.1	21	54	34	366.0	715.3
							1253 is double: ** 8.2 8.2 0.10" 90.0, dT = +0.12sec																											
							1253 has been reported as non-instantaneous (OCc 236). Observations are highly desired																											
26	Nov	4	7	45	29.0	r	118579kA2		7.8	7.7		23-	58	5	86	82N	299	7	278	+6.6	+1.9	+0.2	-0.2	.536	176.6		10	56	30.9	5	16	24	380.7	990.5
26	Nov	5	9	39	5.4	r	138402	F2	8.7	8.5		15-	45	18	100	37S	238	303	216	+6.5	+3.4	+1.3	+3.8	.209	-115.6		11	47	0.0	- 1	37	46	383.1	900.2
26	Nov	6	10	25	16.5	R	1804	F0	8.1	7.9		8-	33	15	105	17N	0	64	338	+6.4	+4.7	-0.4	-3.3	.269	123.7		12	35	44.9	- 7	26	49	386.9	911.1
26	Nov	7	10	46	43.5	r	157895pA2		7.8	7.7		3-	21	8	108	50N	320	24	299	+6.0	+5.6	+0.0	-0.9	.480	162.4		13	22	45.6	-13	11	11	391.1	954.3
							157895 is double: AB 7.8 10.8 19.4" 311.2, dT = -40sec																											
26	Nov	11	23	32	6.0	d	185075	K0	8.3	7.7		7+	30	-11	10	234	41N	55	358	49	+0.7	+6.6	+0.3	+0.3	.368	25.7		17	9	3.8	-27	53	41	403.0	797.6
26	Nov	12	23	33	57.1	D	2601SK4		6.8			12+	40	-11	19	227	29N	34	344	34	-0.5	+5.9	+0.1	+1.3	.293	39.0		18	2	54.3	-27	49	36	403.3	737.1
							R2601 = 7 Sagittarii																											
							2601 is triple: Aa,Ab 6.90 9.37 0.34" 332.0, dT = +0.5sec : AB 6.9 13.0 9.7" 48.2, dT = +32sec																											
							2601 is a close double. Observations are highly desired																											
26	Nov	12	23	40	29.7	d	X 43260dS*		8.9	8.0		12+	41	17	228	54N	59	8	58	-0.5	+5.9	+0.7	+0.3	.370	14.3		18	3	24.8	-27	53	28	403.4	747.0
							X 43260 is double: AB 11.7 12.4 4.5" 170.3, dT = -4sec																											
							X 43260 is a close double. Observations are highly desired																											
26	Nov	12	23	42	10.9	d	186184	K0	8.9	8.0		12+	41	17	228	60N	65	14	65	-0.5	+5.9	+0.9	+0.0	.380	7.8		18	3	31.1	-27	54	45	403.4	749.6
26	Nov	13	0	21	19.3	d	186228	K5	8.4	7.5		12+	41	10	234	67N	72	15	72	-0.6	+5.8	+0.6	-0.2	.415	0.9		18	4	41.7	-27	51	51	404.2	813.1
26	Nov	13	0	42	5.9	d	186250	K5	7.7	6.8		12+	41	7	236	70N	75	15	75	-0.7	+5.8	+0.5	-0.3	.432	-1.9		18	5	20.8	-27	50	3	404.6	848.3
26	Nov	14	1	20	19.8	d	187541	G5	8.3	7.7		19+	52	10	236	80S	97	39	102	-2.1	+4.8	+1.1	-1.1	.370	-30.9		18	59	26.2	-26	29	49	404.5	846.5
26	Nov	15	23	8	37.1	d	3007	K2	7.2	6.5		35+	73	-6	45	194	26N	12	358	25	-4.2	+2.7	+0.5	+2.9	.229	42.9		20	36	26.5	-20	35	8	398.3	605.1
26	Nov	16	20	36	57.9	d	3126	G8	4.3	3.8v		44+	83	25	36	133	84S	79	123	95	-4.7	+1.6	+2.3	+1.2	.318	-17.2		21	22	14.8	-16	50	4	396.3	639.9
							R3126 = Tae = iota Capricorni																											
							3126 = iot Cap, 4.27, range 0.06, V, Type BY																											

Occultation prediction for Capitolio Nacional Habana
E. Longitude - 82 21 34.2, Latitude 23 8 6.6, Alt. 3m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon	Sun Alt	Moon Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	Nov	16	22	5	18.4	r	3126	G8	4.3	3.8	v	45+	84	8	47	157	-55S	217	239	234	-5.1	+1.5	+1.9	+2.2	.298	-162.7		21	22	14.8	-16	50	4	395.1	598.7
	R3126 = Tae = iota Capricorni																																		
	3126 = iot Cap, 4.27, range 0.06, V, Type BY																																		
26	Nov	17	22	25	21.6	d	3253	kB5	5.4	5.5	V	54+	95	3	49	146	47S	112	144	132	-6.0	+0.0	+4.6	-1.1	.161	-61.2		22	10	37.5	-11	33	54	390.7	632.9
	R3253 = 38 Aquarii																																		
	3253 = HD 210424, 5.44, , Type ACV, Period 3.9613 days, Phase 93%																																		
26	Nov	18	0	0	2.2	D	3255	M0	7.3	6.4	v	55+	96		56	182	82S	77	75	96	-6.4	-0.2	+3.0	+0.6	.289	-30.1		22	12	16.9	-11	3	56	389.9	632.5
	3255 = KR Aqr, 7.25 to 7.36, Hp, Type LB																																		
26	Nov	19	3	9	23.2	D	3380	cK0	5.9	5.4		66+	108		44	238	51S	107	55	128	-7.6	-2.1	+3.4	-2.3	.209	-57.9		23	1	31.7	- 4	42	41	384.7	733.0
	3380 is double: ** 7.0 7.0 0.10" 90.0, dT = +0.46sec																																		
	3380 has been reported as non-instantaneous (OCc1633). Observations are highly desired																																		
26	Nov	19	23	43	11.5	d	128354	F8	8.0	7.7		74+	119		58	130	78N	56	100	78	-7.0	-2.9	+1.9	+1.7	.376	-8.6		23	44	18.2	0	42	44	378.6	699.1
26	Nov	20	5	35	10.3	d	128417	cG5	7.0	6.4		76+	121		26	261	70N	49	343	71	-8.1	-3.7	+0.8	+0.8	.453	8.5		23	51	6.8	2	14	16	379.7	844.4
	128417 is double: ** 6.9 0.001" 333.1, dT = 0.00sec																																		
26	Nov	20	23	40	14.1	D		68SB9	5.8		S	83+	132		52	109	66N	45	107	68	-6.7	-4.1	+1.2	+2.0	.422	4.0		0	32	23.8	6	57	20	372.8	764.5
	R68 = 51 Piscium																																		
	68 is multiple: Aa,Ac 5.8 9.5 0.20" : Aa,Ab 5.8 8.0 0.28" 283.8, dT = -0.34sec : AB 5.7 9.5 28.5" 81.5, dT = +55sec : AD 5.7 13.1 82" 307.6, dT = -27sec																																		
	68 is a close double. Observations are highly desired																																		
	68 = NSV 15113, 5.67 to 9.0, V, Type E:																																		
26	Nov	21	5	31	43.7	d	109354	kF5	7.3	7.1		84+	134		39	262	40S	120	53	142	-7.7	-4.8	+2.3	-3.8	.200	-62.4		0	39	42.6	8	7	22	372.3	780.9
26	Nov	22	7	50	43.0	D	233	cB9	6.2	6.3		92+	147		22	277	58S	107	37	128	-7.0	-5.9	+0.5	-1.7	.397	-38.2		1	35	46.4	14	39	41	367.6	902.2
	R233 = 101 Piscium																																		
26	Nov	23	6	54	34.1	D	370	A9	6.1	6.0	v	97+	160		48	275	58S	118	41	136	-5.4	-6.4	+1.7	-2.5	.294	-47.4		2	30	38.4	19	51	19	360.5	759.7
	R370 = 26 Arietis (UU)																																		
	370 = UU Ari, 6.10 to 6.15, V, Type DSCTC, Period 0.0676 days																																		
26	Nov	24	7	51	32.5	d	518	SA3	6.0		s	100+	173		49	281	41N	74	351	88	-3.7	-6.6	+1.7	+0.0	.440	6.7		3	34	26.6	24	27	52	356.7	766.8
	R518 = 7 Tauri																																		
	518 is triple: AB 6.60 6.86 0.79" 348.0, dT = +0.13sec : AB,C 5.9 9.9 22.5" 52.2, dT = +48sec																																		
	518 is a close double. Observations are highly desired																																		
	518 = NSV 1192, 5.92 to 5.96, V																																		
	Distance of 518 to Terminator = 3.0"; to 3km sunlit peak = 0.0"																																		
26	Nov	25	7	46	48.1	R		701SF2	6.6	6.4		99-	169		64	285	73N	252	160	260	-1.5	-6.3	+2.2	+0.3	.400	-164.4		4	38	29.5	26	56	23	353.9	712.9
	701 is triple: 6.6 9.2 3.1" 169.4, dT = -1sec : AB 7.36 7.21 4.49" 187.7, dT = -5sec																																		
	701 is a close double. Observations are highly desired																																		
	Distance of 701 to Terminator = 14.7"; to 3km sunlit peak = 5.0"																																		
26	Nov	25	7	46	50.3	r	X 70481	p	7.3	7.2		99-	169		64	285	73N	252	160	261	-1.5	-6.3	+2.2	+0.3	.400	-164.5		4	38	29.6	26	56	26	353.9	712.9
	X 70481 is triple: 7.3 9.2 5.8" 174.9, dT = -3sec : AC 7.4 12.9 92" 203.6, dT = -151sec																																		
	X 70481 is a close double. Observations are highly desired																																		
	Distance of X 70481 to Terminator = 14.7"; to 3km sunlit peak = 5.0"																																		
26	Nov	26	6	1	22.0	r		868SA0	7.5	7.5		96-	156		77	66	68N	281	30	283	+1.0	-5.5	+2.5	-0.3	.386	167.3		5	44	21.2	27	43	53	353.3	678.2
	868 is triple: AB 7.5 9.8 8.6" 254.1, dT = -20sec : AC 7.5 12.7 47" 40.5, dT = +60sec																																		
	868 is a close double. Observations are highly desired																																		
26	Nov	26	8	58	35.7	r	77604	K0	7.0	6.2		95-	155		63	286	85N	265	172	266	+0.5	-5.4	+2.1	-0.3	.412	-164.1		5	49	38.1	27	33	3	353.9	734.7
26	Nov	26	9	28	49.0	r	77621	M3	7.5	6.6	s	95-	155		56	286	48N	303	213	304	+0.5	-5.3	+1.2	-1.8	.418	159.2		5	50	48.2	27	41	9	354.3	768.5
	77621 = NSV 16688, 7.47, range 0.02, 6V, Type VAR, Period 4.88496 days																																		
26	Nov	26	9	30	21.7	r	77619	F2	7.1	6.9		95-	155		56	286	86N	265	176	266	+0.4	-5.3	+1.9	-0.4	.428	-162.7		5	50	39.7	27	30	18	354.3	770.5
26	Nov	26	10	36	50.9	R		890cA0	4.6	4.6	s	95-	155		42	287	36N	315	232	316	+0.4	-5.2	+0.4	-2.2	.428	148.8		5	53	19.6	27	36	44	355.4	862.7

Occultation prediction for Capitolio Nacional Habana
E. Longitude - 82 21 34.2, Latitude 23 8 6.6, Alt. 3m; Telescope dia 15cm; dMag 0.0

y	m	day d	h	Time m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon	Sun Alt	Moon Alt	Az	CA o	PA o	VA o	AA o	Libration L	B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
	R890 = 136 Tauri																																	
	890 is double: ** 4.8 6.3 0.050" 270.0, dT = -0.08sec																																	
	890 has been reported as non-instantaneous (OCc 206). Observations are highly desired																																	
	890 = NSV 2696, 4.50 to 4.61, V																																	
26	Nov	27	6	34	29.5	r	78853	A0	7.7	7.7		90-	142		70	75	16N	346	81	341	+3.0	-4.4	+2.5	-6.3	.158	113.4		6	54	29.2	26	31	51	355.0	684.1
	Distance of 78853 to Terminator = 19.6"; to 3km sunlit peak = 6.7"																																	
26	Nov	27	9	33	54.9	R	1061SF8		6.2	5.9s		89-	141		69	283	63N	299	205	294	+2.5	-4.2	+1.7	-1.6	.415	171.6		6	58	47.4	26	4	52	355.3	722.6
	R1061 = 39 Geminorum																																	
	1061 is triple: Aa,Ab 6.1 0.50" 158.0, dT = +0.9sec : AB 6.1 12.1 35" 69.2, dT = +54sec																																	
	1061 is a close double. Observations are highly desired																																	
	1061 = NSV 17256, 6.1, range 0.02, V, Type VAR:																																	
26	Nov	27	10	1	44.0	R	1062cB8		6.4	6.5		89-	141		63	282	84N	279	188	273	+2.4	-4.1	+1.9	-0.8	.423	-166.7		6	59	27.9	25	54	51	355.7	750.4
	R1062 = 40 Geminorum																																	
	1062 is double: AB 6.4 0.10" 160.5, dT = +0.11sec																																	
	1062 is a close double. Observations are highly desired																																	
26	Nov	27	11	3	25	m	1068	A2	7.1	7.0		89-	141	-11	50	283	20S	203	119	198	+2.3	-4.0	+9.9	+9.9	.000	-90.0		7	2	7.2	25	25	32	356.6	825.5
26	Nov	27	11	12	5	m	78995	A3	7.4	7.2		89-	141	-9	48	283	20S	203	120	198	+2.3	-4.0	+9.9	+9.9	.000	-90.0		7	2	20.5	25	21	52	356.7	837.7
26	Nov	28	7	1	18.7	R	1200	K0	6.9	6.4		81-	128		62	84	27N	343	67	333	+4.7	-2.9	+1.9	-4.1	.230	124.9		7	59	42.6	23	10	58	358.4	698.3
26	Nov	28	11	13	49.9	r	1222cG5		7.2	6.8		80-	127	-9	61	275	13N	358	275	347	+4.0	-2.5	-0.7	-4.3	.243	123.1		8	6	34.4	22	27	24	359.2	773.1
	1222 is double: ** 7.2 0.017" 254.2, dT = +0.02sec																																	
	1222 has been reported as non-instantaneous (OCc1381). Observations are highly desired																																	
26	Nov	29	6	59	4.9	R	1340kA0		6.6	6.6		71-	115		48	88	85N	291	7	276	+6.1	-1.4	+1.7	-0.2	.422	-178.1		8	58	18.3	18	18	30	363.4	744.4
26	Nov	29	7	34	51.3	R	1343 M4		6.3	5.5v		71-	114		56	92	80S	276	351	261	+6.0	-1.3	+2.1	+0.4	.380	-159.9		8	59	10.7	18	8	6	363.0	712.8
	1343 = FZ Cnc, 6.28 to 6.38, Hp, Type SRB, Period 17.6 days																																	
26	Nov	30	5	46	23.7	R	1449 M0		6.5	5.6s		60-	102		19	84	52N	327	37	309	+7.2	+0.2	+0.7	-1.4	.415	145.1		9	51	2.0	13	3	58	370.6	908.5
	R1449 = 23 Leonis																																	
	1449 = NSV 18283, 6.45, range 0.00, 6V, Type VAR, Period 2.82446 days																																	
26	Dec	1	8	36	11.5	R	1567kK1		6.4	5.8		48-	88		44	104	56N	327	31	306	+7.5	+2.0	+1.1	-1.7	.388	158.6		10	46	5.7	6	22	23	373.9	756.2
	R1567 = 37 (Sextantis)/Leonis																																	
26	Dec	1	8	51	7.7	r	1573pA2		7.1	7.0		48-	88		47	106	6N	16	79	355	+7.5	+2.0	-0.9	-7.1	.142	110.2		10	47	19.2	6	20	46	373.7	742.9
	R1573 = 38 (Sextantis)/Leonis																																	
26	Dec	2	10	32	33.7	D	1685cG9		4.3	3.8		37-	75		54	128	-16S	186	233	164	+7.4	+3.6	-0.4	-4.1	.226	-54.0		11	36	56.9	- 0	49	25	378.4	707.3
	R1685 = upsilon Leonis																																	
	1685 is double: ** 4.5 9.0 0.10" 195.0, dT = +0.44sec																																	
	1685 has been reported as non-instantaneous (OCc1427). Observations are highly desired																																	
26	Dec	2	11	4	12	Gr	1685cG9		4.3	3.8		37-	75	-10	64	** GRAZE: CA 21.6S; Dist.331km in az. 223deg. [Lat = 19.06-0.85(E.Long+82.36)]																					
26	Dec	2	11	22	14.1	r	138302	K0	7.7	7.1		37-	75	-8	62	146	64N	319	350	297	+7.3	+3.7	+1.6	-1.7	.371	175.4		11	37	16.8	- 0	34	41	378.1	681.8
26	Dec	2	11	22	52.7	R	1685cG9		4.3	3.8		37-	75	-8	62	147	58S	260	290	238	+7.3	+3.7	+4.0	+1.2	.219	-126.1	.01	11	36	56.9	- 0	49	25	378.2	681.6
	R1685 = upsilon Leonis																																	
	1685 is double: ** 4.5 9.0 0.10" 195.0, dT = -0.19sec																																	
	1685 has been reported as non-instantaneous (OCc1427). Observations are highly desired																																	
26	Dec	4	9	25	35.8	R	1885	K2	7.3	6.7		19-	52		17	111	53N	326	27	304	+7.2	+5.6	+0.2	-1.2	.437	159.2		13	8	27.9	-11	45	46	390.3	884.1
26	Dec	6	10	32	17.7	R	2109	K4	6.1	5.2		6-	28		8	117	33N	335	36	318	+5.8	+6.7	-0.4	-1.4	.389	144.7		14	47	13.7	-21	19	30	398.2	919.7
26	Dec	11	23	54	58	m	188260	K0	8.7	8.0		7+	31		12	236	23S	153	95	161	-2.5	+3.8	+9.9	+9.9	.000	-90.0		19	32	44.8	-24	55	39	404.9	845.4
26	Dec	11	23	55	56	m	188262	K0	8.5	8.0		7+	31		12	236	23S	153	95	161	-2.5	+3.8	+9.9	+9.9	.000	-90.0		19	32	48.9	-24	56	36	404.9	846.9
26	Dec	12	23	10	25.4	d	189195	F0	7.8	7.6		13+	42	-6	30	225	50N	39	354	51	-3.7	+2.7	+0.7	+1.1	.355	16.9		20	21	32.8	-21	25	8	402.0	723.1
26	Dec	13	0	21	31.9	d	189226	F7	8.7	8.4		13+	42		18	237	74S	95	39	107	-3.9	+2.5	+1.4	-1.1	.335	-37.1		20	23	35.8	-21	22	14	403.2	822.5
26	Dec	13	0	43	19.7	d	189240	A7	8.6	8.4		13+	42		14	240	77N	65	7	77	-3.9	+2.4	+0.5	+0.0	.434	-6.5		20	24	5.6	-21	10	18	403.6	855.5

Occultation prediction for Capitolio Nacional Habana
E. Longitude - 82 21 34.2, Latitude 23 8 6.6, Alt. 3m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon	Sun Alt	Moon Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	Dec	13	1	16	5.7	d	189246	K0	8.3	7.6		13+	43		7	244	28N	17	315	29	-4.0	+2.4	-0.6	+1.9	.336	43.5		20	24	20.7	-20	54	50	404.3	907.4
26	Dec	14	0	25	0.0	d	3095	F0	8.4	8.2		20+	53		28	234	28N	12	320	27	-5.2	+1.1	-0.2	+2.4	.296	41.6		21	10	22.5	-16	57	31	400.2	770.0
26	Dec	15	1	24	57.4	d	3219	K1	8.3	7.6		29+	65		28	241	68S	92	36	110	-6.5	-0.4	+1.7	-1.0	.317	-39.6		21	58	17.7	-12	6	8	397.1	792.1
26	Dec	16	1	50	1.7	d	146275	kK0	8.1	7.6		38+	76		34	244	70N	47	351	68	-7.6	-1.9	+1.0	+0.9	.402	3.6		22	43	21.3	-	6	24	3	392.3	767.3
26	Dec	17	2	14	22	d	146725	pF8	7.8			48+	88		41	248	28S	128	70	150	-8.3	-3.3	+5.8	-8.8	.088	-77.1		23	28	46.2	-	0	50	8	386.6	743.9
146725 is double: AB 7.98 10.59 1.38" 62.1, dT = +6sec																																			
146725 is a close double. Observations are highly desired																																			
26	Dec	17	2	23	5	Gr	146725	pF8	7.8			48+	88		38	** GRAZE: CA 15.0S; Dist. 46km in az. 154deg. [Lat = 22.67+0.44(E.Long+82.36)]																					
26	Dec	18	3	22	13.5	D	29	K0	7.0	6.4		59+	100		38	259	30N	7	302	29	-8.7	-4.6	+0.5	+3.3	.271	49.0		0	15	38.6	5	50	38	380.7	763.3
26	Dec	19	0	40	50.6	d	139	cG5	8.1	7.6		68+	111		78	179	36N	15	16	37	-7.9	-5.3	+0.8	+3.1	.308	33.8		1	1	13.9	11	10	50	372.9	670.7
26	Dec	20	4	0	7.7	d	92727	cF8	8.0	7.7		79+	125		55	268	29N	13	298	32	-7.7	-6.3	+1.3	+3.7	.251	50.9		1	58	3.8	17	32	21	366.7	707.0
26	Dec	20	4	15	32	m	92732	wF5	7.8	7.5		79+	125		52	269	9S	155	80	174	-7.7	-6.3	+9.9	+9.9	.000	-90.0		1	58	47.5	17	1	33	366.8	720.4
92732 is double: AB 7.8 17.9 79" 249.5																																			
Distance of 92732 to Terminator = 19.5"; to 3km sunlit peak = 3.9"																																			
26	Dec	21	23	15	57.2	d	571	pA2	6.8	6.7		94+	151	-6	35	74	42N	39	117	51	-3.9	-6.2	+0.0	+2.1	.475	28.0		3	51	25.3	25	9	47	358.5	935.1
571 is double: ** 7.1 9.1																																			
26	Dec	21	23	30	52.9	d	574	pG0	6.8	6.5		94+	151	-10	38	75	58N	54	134	67	-3.9	-6.2	+0.4	+1.7	.513	12.3		3	52	11.4	25	9	47	358.2	911.7
26	Dec	22	2	23	22	d	76345	kG8	7.5	7.0		94+	152		76	77	29S	148	245	160	-4.2	-6.5	+9.9	+9.9	.075	-79.4		3	57	11.8	25	16	58	355.4	702.4
26	Dec	22	2	30	39	Gr	76345	kG8	7.5	7.0		94+	152		79	** GRAZE: CA 18.5S; Dist. 31km in az. 154deg. [Lat = 22.83+0.44(E.Long+82.36)]																					
Distance of 76345 to Terminator = 17.0"; to 3km sunlit peak = 5.8"																																			
26	Dec	22	8	13	11.4	d	76472	cG8	7.2	6.5		95+	154		28	288	82S	98	21	109	-4.9	-6.4	+0.6	-1.0	.527	-7.9		4	8	39.0	25	52	40	357.7	923.4
26	Dec	23	4	49	37.9	d	773	wF8	7.0	6.7		99+	167		84	324	76N	92	310	97	-2.3	-6.0	+2.5	-0.2	.393	-4.5		5	10	3.9	27	33	23	351.6	672.2
773 is double: AB 7.0 9.3 315" 353.1, dT = -119sec																																			
26	Dec	25	3	20	4.8	R	1117	cG8	5.0	4.6		98-	164		45	77	39N	320	42	313	+2.6	-3.6	+1.9	-1.7	.345	137.0		7	23	28.5	25	3	2	352.8	805.7
R1117 = 57 Geminorum																																			
1117 is double: ** 5.9 5.9 0.10" 90.0, dT = +0.19sec																																			
1117 has been reported as non-instantaneous (OCc1358). Observations are highly desired																																			
Distance of 1117 to Terminator = 15.2"; to 3km sunlit peak = 5.2"																																			
26	Dec	25	6	23	27.2	r	79416	SF8	7.6	7.4		98-	163		85	71	67N	293	40	285	+2.2	-3.5	+2.3	-1.0	.403	177.0		7	28	40.6	24	38	55	351.1	686.8
79416 is triple: AC 7.7 11.8 29.0" 124.2, dT = +71sec : AB 7.7 8.9 65" 19.4, dT = -10sec																																			
26	Dec	26	6	15	54.9	R	1277	wK3	5.3	4.7		93-	148		69	93	54N	318	37	305	+4.3	-1.8	+1.9	-1.8	.379	157.8		8	32	42.5	20	26	28	354.2	702.6
R1277 = eta Cancri																																			
1277 is double: AB 5.3 20.0 164" 280.0, dT = -342sec																																			
26	Dec	26	8	32	25.8	r	97941	A*	7.5	7.4		92-	148		79	255	77S	270	200	257	+4.0	-1.6	+2.7	-0.2	.354	-147.3		8	35	45.1	19	46	16	354.3	723.5
26	Dec	26	9	31	34.3	r	97973	A0	7.7	7.6		92-	147		66	267	58N	315	238	302	+3.8	-1.4	+1.2	-2.0	.439	168.8		8	37	37.0	19	43	59	354.9	770.9
26	Dec	26	9	33	36	M	1287	kA5	6.7	6.6		92-	147		65	266	21S	214	137	201	+3.8	-1.4	+9.9	+9.9	.000	-90.0		8	37	46.8	19	16	2	354.9	771.8
26	Dec	26	10	3	9.0	r	97999	pF0	7.4	7.3S		92-	147		59	270	23N	350	273	337	+3.8	-1.3	-0.1	-3.3	.322	133.7		8	39	6.1	19	40	37	355.3	803.2
97999 is triple: AB 7.5 9.6 57" 84.0, dT = +12sec : AC 7.5 9.4 179" 345.0, dT = -552sec																																			
97999 = NSV 4163, 7.45,																																			
26	Dec	26	10	31	38.9	r	1294	pA0	7.3	7.2S		92-	147		53	272	21N	352	275	339	+3.7	-1.2	-0.3	-3.3	.320	131.3		8	39	56.5	19	33	11	355.8	836.5
1294 is quadruple: AB 7.3 12.3 0.8" 289.8, dT = -1.1sec : AC 7.3 7.5 46" 157.0, dT = +138sec : AD 7.3 6.7 92" 241.0, dT = +104sec																																			
1294 has been reported as non-instantaneous (S 571). Observations are highly desired																																			
1294 = NSV 4175, 7.32,																																			
26	Dec	26	10	32	57.6	R	1293	pK0	6.8	s		92-	147		52	272	28N	346	268	332	+3.7	-1.2	-0.1	-3.0	.360	137.9		8	39	50.7	19	32	27	355.8	838.2
1293 is multiple: Da,Db 6.67 9.87 0.50" 252.6, dT = +0.07sec : DE 6.7 11.8 35" 3.1, dT = -94sec : DA 6.7 7.3 92" 61.0, dT = -64sec : DC 6.7 7.5 100" 89.1, dT = +64sec																																			
1293 has been reported as non-instantaneous (S 571). Observations are highly desired																																			
1293 = NSV 4171, 6.52 to 6.61, V																																			

Occultation prediction for Capitolio Nacional Habana
E. Longitude - 82 21 34.2, Latitude 23 8 6.6, Alt. 3m; Telescope dia 15cm; dMag 0.0

y	m	day d	h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon Sun Alt	Moon Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	Dec	26	10	33	54.3	r	98014pA0		7.5	7.3s		92- 147	52	273	23N	350	273	337	+3.7	-1.2	-0.3	-3.2	.334	133.4		8	39	57.8	19	32	29	355.8	839.2
	98014 is quadruple: ** 8.8 8.8 : CA 7.5 7.3 46" 337.0, dT = -133sec : CD 7.5 6.7 100" 269.1, dT = -46sec																																
	98014 = NSV 4174, 7.53, range 0.01, V																																
26	Dec	26	10	56	34.7	r	98009kA7		7.6	7.6v		92- 147	47	274	80N	294	217	280	+3.7	-1.2	+1.1	-1.4	.496	-170.7		8	39	44.7	19	16	31	356.3	868.7
	98009 = BU Cnc, 7.67, range 0.03, V, Type DSCTC, Period 0.071 days																																
26	Dec	26	11	4	21.7	r	1297pA9		6.8	6.6S		92- 147	45	275	52N	322	246	309	+3.7	-1.2	+0.4	-2.1	.479	160.6		8	40	20.1	19	20	56	356.4	878.9
	1297 is double: AB 6.8 8.5 0.016" 342.8, dT = -0.03sec																																
	1297 is a close double. Observations are highly desired																																
	1297 = NSV 17953, 6.78, , Type DSCT:																																
26	Dec	27	8	48	34.4	r	1415WA1		6.3	6.3		84- 134	81	188	8N	11	3	354	+5.7	+0.2	-1.0	-5.5	.186	117.3		9	35	52.9	14	22	47	358.7	707.0
R1415 = 7 Leonis																																	
	1415 is double: AB 6.3 9.4 41" 90.5, dT = -41sec																																
Distance of 1415 to Terminator = 9.4"; to 3km sunlit peak = 0.0"																																	
26	Dec	27	9	15	26.1	r	98654WB9		7.9	7.9		84- 133	78	222	88S	287	248	270	+5.6	+0.3	+2.4	-1.0	.384	-158.5		9	35	9.5	14	4	32	358.8	717.7
	98654 is double: AB 7.8 9.1 45" 48.5, dT = +60sec																																
26	Dec	27	12	4	51.9	r	1425SF7		7.0	6.8		84- 132	-2	42	267	87N	292	221	275	+5.2	+0.7	+1.1	-1.4	.482	-166.0		9	39	17.2	13	18	45	361.4	869.8
	1425 is quadruple: Aa,Ab 7.7 7.7 : ** 7.7 7.7 0.006" 90.0, dT = +0.01sec : AB 7.1 15.1 51" 131.0, dT = +99sec																																
26	Dec	28	4	38	43.0	r	1516 K5		6.6	5.8s		76- 122	20	89	87S	289	357	269	+7.5	+1.5	+0.6	+0.1	.507	-172.2		10	22	14.2	8	57	52	367.3	912.4
	1516 = NSV 18388, 6.72 to 6.81, Hp, Type IB																																
26	Dec	28	6	5	38.9	R	1525 M2		5.6	4.8v		76- 121	39	98	48N	334	41	314	+7.4	+1.6	+1.0	-2.0	.381	147.8		10	25	15.2	8	47	5	365.8	797.8
R1525 = 44 Leonis (DE)																																	
	1525 = DE Leo, 5.6, range 0.07, V, Type SRB:																																
26	Dec	28	6	11	48.6	r	118292DF0		7.7	7.6S		76- 121	41	99	38N	344	51	324	+7.4	+1.6	+0.8	-2.6	.334	138.6		10	25	35.1	8	46	35	365.7	791.2
	118292 is double: AB 7.8 9.1 3.6" 74.4, dT = +0.13sec																																
	118292 is a close double. Observations are highly desired																																
	118292 = NSV 4851, 7.7,																																
26	Dec	28	13	4	36.2	r	1549cG8		5.1	4.6v		74- 119	10	38	260	25N	358	292	337	+6.3	+2.5	-0.2	-3.3	.303	129.5		10	34	48.0	6	57	14	367.6	849.8
R1549 = 48 Leonis																																	
	1549 is double: ** 6.0 6.0 0.10" 90.0, dT = +0.01sec																																
	1549 has been reported as non-instantaneous (OCc 197). Observations are highly desired																																
	1549 = HIP 51775, 5.07, range 0.00, 4V, Type VAR, Period 0.09302 days																																
26	Dec	29	5	27	30.0	r	1624PF2		6.8	6.5		66- 108	18	95	59S	263	329	241	+8.2	+3.1	+0.7	+1.2	.399	-142.3		11	13	53.0	2	16	7	373.7	914.7
	1624 is double: AB 6.8 16.2 85.0, dT = 0.00sec																																
26	Dec	29	7	24	20.5	R	1635cM0		5.2	4.4		65- 108	43	110	61N	323	23	301	+8.1	+3.3	+1.0	-1.5	.412	164.7		11	17	17.4	2	0	38	371.7	770.1
R1635 = 75 Leonis																																	
	1635 is double: ** 5.8 6.6 0.044" 0.0																																
	1635 has been reported as non-instantaneous (OCc 763). Observations are highly desired																																
26	Dec	29	8	44	8.6	R	1637 K0		5.9	5.4		65- 107	59	130	64N	320	5	298	+7.8	+3.4	+1.4	-1.6	.392	172.1		11	18	55.0	1	39	1	371.0	711.2
R1637 = 76 Leonis																																	
26	Dec	30	10	29	49.2	r	138612cK5		8.3	7.5		53- 94	60	162	77N	307	323	285	+7.9	+5.0	+2.0	-1.3	.367	-172.8		12	8	59.9	- 5	8	57	377.4	676.4
	138612 is double: ** 8.3 0.09" 281.0, dT = -0.23sec																																
	138612 has been reported as non-instantaneous (OCc1769). Observations are highly desired																																
26	Dec	30	11	1	13.3	R	138617KF2		7.2	7.0		53- 94	62	178	58N	325	327	303	+7.8	+5.0	+1.5	-2.0	.359	168.9		12	9	47.8	- 5	13	33	377.4	669.0
26	Dec	31	6	40	42.2	r	1845SG8		6.5	5.9s		44- 83	9	105	28S	231	295	209	+8.4	+5.5	+1.8	+5.5	.155	-107.8		12	51	22.9	-10	20	18	386.7	950.9
	1845 is triple: AB 6.6 9.7 28.8" 296.2, dT = -76sec : AC 6.6 12.5 142" 211.8, dT = -864sec																																
	1845 = NSV 5994, 6.49, range 0.07, V																																

Lunar Occultation predictions
Teide Observatory
Canary Islands
Spain

Occultation prediction for Teide Observatory Canary Islands
E. Longitude 16 18 39.8, Latitude 28 28 31.6, Alt. 3000m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon	Sun Alt	Moon Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	dur sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
25	Dec	31	21	13	2.4	d	603	F8	7.6	7.3		90+	144		78	263	27N	23	306	34	-1.7	-6.5	+1.8	+3.8	.245	52.3		4	6	4.6	26	12	42	355.0	690.2
25	Dec	31	22	23	48.5	d	76472	cG8	7.2	6.5		91+	144		63	272	47S	129	51	140	-1.9	-6.5	+1.8	-3.1	.276	-48.8		4	8	39.0	25	52	40	355.4	724.4
26	Jan	1	1	6	27.2	d	76514	G5	7.2	6.9		91+	146		29	286	75N	72	1	82	-2.1	-6.4	+0.8	-0.3	.513	16.6		4	14	32.2	26	15	21	357.9	928.6
26	Jan	1	16	32	10.8	d	756	F0	6.6	6.5		96+	156	-5	28	72	39N	44	115	50	+0.9	-6.1	-0.2	+2.0	.494	30.3		5	4	38.0	27	41	46	357.4	991.3
26	Jan	1	18	51	40.2	D	771	SA5	6.1	5.9e		96+	157		57	81	34N	40	121	46	+0.8	-6.4	+0.8	+2.6	.374	35.2		5	9	45.1	28	1	50	355.0	787.5
							771 is triple: Aa,Ab 6.0 0.20" 351.0, dT = +0.35sec : A,BC 6.0 9.1 11.2" 29.1, dT = +29sec																															
							771 is a close double. Observations are highly desired																															
							771 = V1156 Tau, 6. to 6.1, Hp, Type E:, Period 1.40266 days, Phase 64%																															
26	Jan	1	19	16	14	m	773	wF8	7.0	6.7		96+	157		63	84	20S	167	248	172	+0.7	-6.4	+9.9	+9.9	.000	-90.0		5	10	3.9	27	33	23	354.7	759.4
							773 is double: AB 7.0 9.3 315" 353.1																															
							Distance of 773 to Terminator = 9.7"; to 3km sunlit peak = 1.5"																															
26	Jan	2	0	34	34.0	D	797	cB9	6.4	6.3e		97+	159		50	281	90N	99	21	103	+0.0	-6.3	+1.3	-1.1	.470	-3.0		5	20	59.3	27	57	26	355.5	811.1
							797 is double: ** 6.5 8.5																															
							797 = HR 1750, 6.21, range 0.03, H1, Type EA, Period 3.315 days, Phase 70%																															
26	Jan	4	4	46	2.4	d	1170	dG8	3.6	3.1		99-	170		24	286	-54S	119	50	110	+3.7	-4.3	+0.1	-1.5	.586	-4.8		7	44	26.8	24	23	53	362.2	1033.0
							R1170 = kappa Geminorum																															
							1170 is double: AB 3.7 10.0 7.3" 241.1, dT = -7sec																															
							1170 is a close double. Observations are highly desired																															
26	Jan	4	5	39	32.9	R	1170	dG8	3.6	3.1		99-	169	-2	12	291	67N	288	223	278	+3.8	-4.1	-0.1	-1.2	.634	-175.2		7	44	26.8	24	23	53	363.6	1122.2
							R1170 = kappa Geminorum																															
							1170 is double: AB 3.7 10.0 7.3" 241.1, dT = -8sec																															
							1170 is a close double. Observations are highly desired																															
							Distance of 1170 to Terminator = 14.2"; to 3km sunlit peak = 4.7"																															
26	Jan	5	3	50	6.8	r	1304	pA0	6.8			96-	157		46	271	51S	241	171	227	+5.2	-3.1	+2.8	+0.6	.238	-119.2		8	41	15.3	20	28	37	364.5	864.1
							1304 is double: AB 7.10 8.08 0.29" 70.6, dT = +1.2sec																															
							1304 is a close double. Observations are highly desired																															
26	Jan	6	22	41	58.6	r	1515	kF8	7.8	7.5		84-	133		38	99	73S	274	336	254	+7.7	-0.7	+1.4	+0.8	.385	-153.2		10	21	52.9	10	41	59	375.3	786.2
26	Jan	7	0	6	12.0	R	1522	K0	6.8	6.2		84-	132		55	114	55N	326	21	307	+7.5	-0.6	+1.3	-1.8	.369	159.6		10	24	19.5	10	35	16	374.3	714.7
26	Jan	7	3	8	56.7	R	1531	wA0	6.0	6.0v		83-	131		68	216	77N	305	273	284	+6.9	-0.2	+1.8	-1.6	.386	-172.1		10	27	39.0	9	45	45	374.4	708.2
							R1531 = 45 Leonis (CX)																															
							1531 is double: AB 6.0 12.4 34" 119.6, dT = +87sec																															
							1531 = CX Leo, 6.01 to 6.03, V, Type ACV, Period 3.0525 days, Phase 80%																															
26	Jan	9	1	7	7.9	r	138521	K0	7.1	6.6		65-	108		42	123	40N	344	32	322	+7.1	+2.6	+0.5	-2.3	.327	146.4		11	59	34.0	- 1	55	7	387.4	737.2
26	Jan	9	5	7	10	m	138553	kK2	7.5	6.9		64-	106	-9	52	215	19S	223	192	201	+6.3	+3.1	+9.9	+9.9	.000	-90.0		12	3	13.2	- 3	23	44	387.5	676.3
26	Jan	9	23	49	53.0	r	1822	K5	6.8	6.0		56-	97		16	108	63N	321	18	299	+6.6	+3.7	+0.3	-0.8	.441	164.4		12	41	57.7	- 7	30	1	394.7	876.3
							R1822 = 28 Virginis																															
26	Jan	10	2	15	26	m	138948	pK0	7.6	7.0		55-	96		42	136	19S	222	261	201	+6.3	+4.0	+9.9	+9.9	.000	-90.0		12	44	59.7	- 8	31	55	392.6	714.0
							138948 is double: AB 7.7 11.2 7.6" 96.1																															
							138948 is a close double. Observations are highly desired																															
26	Jan	12	1	42	12.3	R	2039	A0	5.5	5.5		36-	74		15	121	28N	350	42	331	+4.3	+5.9	-0.5	-2.1	.304	134.6		14	15	24.1	-18	12	2	401.9	843.7
26	Jan	12	3	10	58.3	R	2045	cK0	6.4			36-	73		30	137	50N	327	7	309	+4.0	+6.1	+0.6	-1.2	.353	159.9		14	17	3.8	-18	35	9	400.5	729.6
							2045 is double: AB 6.40 10.51 0.70" 83.2, dT = +0.9sec																															
							2045 is a close double. Observations are highly desired																															
26	Jan	12	3	56	17.2	R	2051	A*	5.9	5.9v		35-	73		36	147	13N	5	35	347	+3.9	+6.2	-1.0	-3.6	.192	123.1		14	18	38.3	-18	42	57	400.0	682.2
							2051 = CS Vir, 5.84 to 5.95, V, Type ACV, Period 9.2954 days, Phase 73%																															
26	Jan	13	3	44	50.5	R	2152	kA0	7.5	7.5		27-	62		25	138	66S	259	299	243	+2.7	+6.8	+2.4	+1.6	.269	-135.7		15	5	16.8	-23	0	48	402.5	732.3
26	Jan	13	4	6	59.6	r	183164	K0	8.1	7.5		27-	62		28	142	87N	286	322	271	+2.6	+6.8	+1.7	+0.2	.346	-162.9		15	5	47.8	-22	58	14	402.2	705.2
26	Jan	14	3	15	16.6	r	183923	K0	7.8	7.1		19-	52		11	127	46N	322	13	310	+1.5	+7.1	+0.0	-0.7	.380	154.4		15	55	12.3	-25	46	43	404.2	827.2

Occultation prediction for Teide Observatory Canary Islands
E. Longitude 16 18 39.8, Latitude 28 28 31.6, Alt. 3000m; Telescope dia 15cm; dMag 0.0

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      day  Time     P   Star  Sp  Mag  Mag    % Elon Sun  Moon   CA   PA  VA  AA Libration    A    B    RV    Cct durn  R.A. (J2000)  Dec   Mdist   SV
 y   m  d  h  m   s       No  D    v    r V  ill     Alt Alt Az   o    o   o   o   L    B   m/o m/o  "/s     o  sec  h  m   s    o  m  s   Mm   m/s
26 Jan 14  3 54 20.2 R  183942pA2  7.6  7.5   19-  51     17 133  58N 309 354 297 +1.4 +7.1 +0.6-0.3 .384  168.0     15 56  5.1 -25 56  9 403.5 769.3
    183942 is double: AB 8.1 13.8 2.3"  40.0, dT = +0.12sec
    183942 is a close double. Observations are highly desired
26 Jan 14  4 28 31.2 D    2287SB1  2.9  3.0v  19-  51     22 139 -65N  72 112  61 +1.3 +7.2 +2.5+1.8 .263   44.7     15 58 51.1 -26  6 51 403.0 724.2
   R2287 = pi Scorpii
      2287 is triple: Aa,Ab 5.1 13.4 2.0" 244.0, dT = -8sec : AB 2.9 11.9 50" 128.1, dT = +107sec
      2287 is a close double. Observations are highly desired
      2287 = pi Sco, 2.88 to 2.91, V, Type ELL, Period 1.570103 days, Phase  42%
26 Jan 14  5 28 31.9 R    2287SB1  2.9  3.0v  18-  51  -5 29 151  26N 341   9 330 +1.1 +7.3 +0.3-2.0 .236  135.0     15 58 51.1 -26  6 51 402.3 651.4
   R2287 = pi Scorpii
      2287 is triple: Aa,Ab 5.1 13.4 2.0" 244.0, dT = +1.1sec : AB 2.9 11.9 50" 128.1, dT = +179sec
      2287 is a close double. Observations are highly desired
      2287 = pi Sco, 2.88 to 2.91, V, Type ELL, Period 1.570103 days, Phase  42%
26 Jan 15  5  0  9.9 r    2421 K2  7.9  7.2   12-  40 -11 18 137  20N 340  23 333 +0.1 +7.3 -0.3-1.9 .239  129.8     16 51  5.5 -27 58 48 402.5 730.4
26 Jan 21 17 18 33   m  165081 K0  9.2  8.7    8+  33 -12 20 245  16S 144  89 164 -6.2 +0.8 +9.9+9.9 .000  -90.0     22 26 49.1 -10 37 32 383.6 878.8
26 Jan 21 17 58 26.2 d  165087 G5  9.0  8.6    8+  33     13 251  11N 351 293  11 -6.2 +0.7 -0.9+4.3 .209   65.3     22 27  0.2 - 9 56 38 384.3 932.1
26 Jan 21 18 30 19.9 d  165111PG0  8.7         8+  34      6 255  85N  64   4  84 -6.3 +0.6 +0.2-0.1 .520   -6.6     22 29  2.7 - 9 56  9 385.0 976.9
    165111 is quadruple: Aa,Ab 8.81 11.44 0.40"  71.0, dT = +0.8sec : AB 8.7 9.6 36" 156.8, dT = -4sec : AC 8.7 11.6 51" 232.2, dT = -96sec
    165111 is a close double. Observations are highly desired
26 Jan 23 17 41  1.1 D       1SG0  7.2     S  23+  58     41 246  41S 115  61 137 -6.0 -2.4 +3.0-3.5 .196  -62.7      0  2 47.2   2  7 49 375.1 778.5
        1 is triple: AB 7.40 9.36 1.52" 156.6, dT = +6sec : AC 7.4 12.4 47" 328.5, dT = -202sec
        1 is a close double. Observations are highly desired
        1 = NSV 3, 9. to 11., V
26 Jan 23 19 22 31.2 d  108995 K2  7.9  7.3   24+  59     20 262  39N  14 313  36 -6.1 -2.5 +0.3+2.2 .350   44.4      0  4 37.5   2 56 14 376.8 894.5
26 Jan 24 19 59 38.3 d  109530DF0  8.2  8.0   34+  72     25 267  54N  31 327  52 -5.7 -4.0 +0.7+1.4 .409   31.3      0 54 45.1   9 25 44 373.1 867.1
    109530 is double: AB 8.57 9.60 3.11" 299.9, dT = -0.09sec
    109530 is a close double. Observations are highly desired
26 Jan 26 22  9 48.4 d   75558 A0  7.7  7.6   57+  99     24 282  28S 136  68 152 -4.1 -6.1 -0.1-3.8 .259  -59.3      2 45 47.8  20 41 34 367.4 904.1
26 Jan 27 17 44 11   m     522 G5  7.8  7.1   67+ 110     84 128  13S 156 206 169 -2.2 -6.5 +9.9+9.9 .000  -90.0      3 37 43.5  24 15 33 361.9 682.9
26 Jan 27 17 53 43.2 d   76041 F0  8.2  8.0   67+ 110     85 140  83S  85 123  98 -2.2 -6.5 +2.5+0.3 .366  -18.7      3 38 35.9  24 36  6 361.8 679.2
26 Jan 27 18 14 55.5 D   76046cA0  7.1  7.1   67+ 110     86 206  87N  75  50  88 -2.3 -6.5 +2.4+0.7 .380   -7.4      3 39  6.7  24 42 10 361.8 672.7
     76046 is double: AB 7.1           45.0, dT = -23sec
26 Jan 27 19 47 11.0 d   76081 K2  7.5  6.9   68+ 111     68 267  60N  48 332  61 -2.5 -6.6 +2.1+1.5 .351   25.9      3 41 18.1  25  0 29 362.1 685.8
26 Jan 27 21  5 16.1 d   76102 A2  7.5  7.5   68+ 111     51 276  71N  60 345  73 -2.7 -6.6 +1.8+0.5 .401   19.4      3 43 43.2  25  4 51 363.0 749.1
26 Jan 27 21 52 27.8 D     538pB8  5.7  5.7   69+ 112     41 279  43S 126  53 138 -2.8 -6.6 +0.7-2.7 .331  -43.6      3 45  9.7  24 50 21 363.7 807.4
   R538 = 18 Tauri
      538 is quadruple: Aa,Ab 6.4 6.4 0.10"       : AB 5.6 14.0 72" 128.9, dT = +217sec : AC 5.6 14.8 151" 175.1, dT = +298sec
      538 is a close double. Observations are highly desired
26 Jan 27 23  9 52.3 D     555 K5  6.4  5.6s  69+ 112     25 286  62S 107  38 119 -2.9 -6.5 +0.3-1.5 .485  -21.8      3 48  6.5  24 59 18 365.1 924.6
      555 = NSV 1316, 6.44, range 0.02, 0V, Type VAR, Period 1.48987 days
26 Jan 28 18 48 47.9 d     715cK5  8.0  7.5   78+ 124     86  97  41N  37 118  45 -0.8 -6.7 +1.8+3.0 .293   40.3      4 43 35.4  27 41 15 360.2 670.6
      715 is double: ** 8.8 8.8 0.10"  90.0, dT = +0.21sec
      715 has been reported as non-instantaneous (OCc 130). Observations are highly desired
26 Jan 29 23 52 59.7 D   77818 K5  6.7  5.8   88+ 140     43 283  80N  86  10  86 +0.1 -6.1 +1.2-0.7 .464   17.1      6  0  4.9  28  7 33 361.5 851.9
26 Jan 30 18 11 53.3 d    1056 B9  7.2  7.3   94+ 151     50  80  51N  64 142  59 +2.6 -5.6 +1.2+1.9 .391   27.8      6 55 56.2  27 17  9 361.4 774.2
26 Jan 30 20 40  5.6 d   78957 G8  7.5  7.0   94+ 152     82  98  64S 130 207 125 +2.2 -5.5 +2.2-1.8 .340  -27.8      7  0 14.8  26 52 42 360.1 671.6
26 Jan 30 21  1  6.1 d    1067cK2  7.1  6.4   94+ 152     86 108  47N  62 132  57 +2.1 -5.5 +2.8+1.9 .287   41.8      7  0 58.1  27  9 26 360.1 671.3
     1067 is double: ** 8.0 8.0 0.10"  90.0, dT = +0.31sec
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Occultation prediction for Teide Observatory Canary Islands
E. Longitude 16 18 39.8, Latitude 28 28 31.6, Alt. 3000m; Telescope dia 15cm; dMag 0.0

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      day  Time     P   Star  Sp  Mag  Mag    % Elon Sun  Moon   CA   PA  VA  AA Libration   A    B    RV    Cct durn  R.A. (J2000)  Dec   Mdist   SV
 y   m  d  h  m   s       No  D    v    r V  ill     Alt Alt Az   o    o   o   o   L    B   m/o m/o  "/s     o  sec  h  m   s    o  m  s   Mm   m/s
     1067 has been reported as non-instantaneous (OCc1341). Observations are highly desired
26 Jan 31 19 15 38.7 d   79868DK0  7.4        98+ 165     50  86  79S 126 199 115 +3.9 -4.4 +1.7-0.7 .398  -22.5      8  1 30.3  23 54 46 363.2 759.0
    79868 is double: AB 7.43 10.98 1.30" 168.9, dT = +2.4sec
    79868 is a close double. Observations are highly desired
26 Feb  4  3 44 29.1 r  118571pK0  7.4  7.0s  94- 152     44 249  88S 293 237 271 +5.3 +1.1 +1.4-1.6 .416 -162.9     10 54 45.6   5 50 52 377.2 795.9
   118571 is double: ** 8.0 8.8 0.034" 104.5, dT = +0.08sec
   118571 has been reported as non-instantaneous (OCc 585). Observations are highly desired
   118571 = NSV 5015, 8.9 to 9.27, pg, Type E:
26 Feb 11  4  9 58.7 R    2370pB8  6.9  6.9   34-  72     28 152  65S 252 280 243 +0.3 +7.5 +3.0+1.5 .253 -140.5     16 30 15.7 -27 54 59 401.5 638.3
     2370 is double: ** 7.6 7.6 0.25" 112.0, dT = +0.8sec
     2370 has been reported as non-instantaneous (OCc1132). Observations are highly desired
26 Feb 11  6 56 59.8 D    2383cB0  2.8  2.9   34-  71  16 32 193 -61S 125 112 116 -0.4 +7.6 +2.8-1.5 .263  -25.5     16 35 53.0 -28 12 58 401.0 565.6
  R2383 = tau Scorpii
     2383 is double: AB 2.9 5.8       71.0, dT = 0.00sec
26 Feb 11  8 23 11.9 R    2383cB0  2.8  2.9   33-  71  32 25 213  60S 246 213 238 -0.8 +7.6 +1.9+0.0 .286 -154.1     16 35 53.0 -28 12 58 401.6 619.6
  R2383 = tau Scorpii
     2383 is double: AB 2.9 5.8       71.0, dT = 0.00sec
26 Feb 12  4 41  5.4 r  185371 K0  8.4  7.7   26-  61     25 149  72N 288 320 285 -1.0 +7.4 +1.8+0.2 .330  174.7     17 25  7.0 -28 55 51 400.5 642.8
26 Feb 13  3  6 15.1 R    2645 A5  6.2  6.1   18-  50      3 125  74N 280 335 281 -1.8 +6.8 +0.6+0.7 .429  177.9     18 17 24.1 -28 39  7 400.7 834.9
26 Feb 19 17 26 55.6 d  128394 G5  8.9  8.5    5+  27  -9 18 261  39S 114  54 136 -5.4 -2.1 +1.0-2.8 .281  -56.4     23 48 57.9   0 26 15 375.0 922.9
26 Feb 19 17 42 39.4 d X 31954 G0  9.5  9.3    5+  27     14 263  65N  38 337  60 -5.5 -2.1 +0.3+0.9 .486   20.6     23 49  6.5   0 49 27 375.3 944.1
26 Feb 19 18 31 49   Gr   3508cA5  5.8  5.7    6+  27      3 ** GRAZE: CA -1.8N; Dist. 58km in az. 180deg. [Lat = 27.96+0.01(E.Long-16.31)]
  Distance of 3508 to Terminator = 18.9"; to 3km sunlit peak = 0.0"
26 Feb 19 18 31 52   M    3508cA5  5.8  5.7    6+  27      4 269  -2N 331 270 353 -5.5 -2.2 +9.9+9.9 .000   90.0     23 49 27.5   1  4 34 376.41017.6
  R3508 = 21 Piscium
     3508 is double: ** 6.6 6.6 0.050"
     3508 has been reported as non-instantaneous (OCc1648). Observations are highly desired
26 Feb 20 18 22 51.2 d  109345 F8  8.7  8.4   12+  40     19 269  46N  20 317  41 -4.8 -3.7 +0.5+1.9 .376   42.3      0 39  6.3   7 34 19 372.3 917.5
26 Feb 20 18 50 27.5 d  109359kK0  8.8  8.1   12+  40     13 272  58N  32 329  54 -4.9 -3.7 +0.4+1.1 .452   31.4      0 40  9.9   7 39 22 372.9 957.5
26 Feb 22 18 58 13.3 d   92940cK0  7.9  7.4   30+  67     38 274  43N  22 314  40 -3.0 -5.9 +1.4+2.4 .301   48.2      2 25 39.8  19 33 16 367.3 805.4
    92940 is double: ** 8.0 10.4 0.040"  69.0, dT = +0.09sec
    92940 has been reported as non-instantaneous (OCc1705). Observations are highly desired
26 Feb 22 21 17 30.4 D     370 A9  6.1  6.0v  31+  68      9 288  53N  32 329  50 -3.1 -5.9 +0.6+1.1 .406   44.3      2 30 38.4  19 51 19 370.21017.9
  R370 = 26 Arietis (UU)
     370 = UU Ari, 6.10 to 6.15, V, Type DSCTC, Period 0.0676 days
26 Feb 23 20 45  9.7 d     499cG5  8.0        42+  81     29 284  68N  53 344  67 -2.0 -6.5 +1.1+0.4 .434   28.6      3 27 49.6  24 10 58 367.3 881.4
     499 is double: AB 8.04 11.52 0.40" 170.0, dT = -0.41sec
     499 is a close double. Observations are highly desired
26 Feb 25 16 50 39   Gr    810SB7  1.7  1.7   64+ 106   0 76 ** GRAZE: CA -6.4N; Dist.102km in az. 164deg. [Lat = 27.52+0.25(E.Long-16.31)]
26 Feb 25 16 51 17   M     810SB7  1.7  1.7   64+ 106  -1 75  85  -6N 352  79 356 +1.1 -6.5 +9.9+9.9 .000   90.0      5 26 17.5  28 36 27 364.1 673.1
  R810 = El Nath = beta Tauri
     810 is multiple: AC 1.9 19.0 8.4" 357.0 : AD 1.9 18.5 9.8"  70.0 : AE 1.9      10.9"  80.0 : AF 1.9 15.8 11.6" 296.0
     810 is a close double. Observations are highly desired
26 Feb 26 17  0 19.6 d   78480cK5  7.5  6.7   74+ 119  -2 63  84  86S 100 181  97 +2.3 -5.9 +2.1+0.2 .391   -8.6      6 33  2.1  27 49 31 365.2 699.8
    78480 is double: ** 8.3 8.3 0.10"  63.0, dT = +0.21sec
    78480 has been reported as non-instantaneous (OCc 720). Observations are highly desired
26 Feb 26 17 17 12.6 d   78483 A2  8.0  7.9   74+ 119  -6 67  84  33N  38 122  36 +2.2 -5.9 +1.6+4.1 .230   53.5      6 33  4.9  28  4 55 365.1 685.7
26 Feb 26 17 26  2.1 d   78496 K0  7.5  6.9   75+ 119  -8 68  85  59N  65 149  63 +2.2 -5.9 +2.0+1.8 .341   27.4      6 33 41.4  27 58 49 365.0 679.6
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Occultation prediction for Teide Observatory Canary Islands
E. Longitude 16 18 39.8, Latitude 28 28 31.6, Alt. 3000m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon Alt	Sun Alt	Sun Az	Moon o	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	Feb	26	18	27	45.7	D	1008	A0	5.3	5.3s		75+	120	82	90	40N	46	132	44	+2.0	-5.9	+2.6	+3.3	.233	50.9		6	35	12.1	28	1	20	364.6	652.7
	R1008 = 49 Aurigae																																	
	1008 = NSV 3032, 5.05 to 5.27, V																																	
26	Feb	26	20	34	29.8	d	78580	SA2	7.3	7.2		75+	120	71	274	55N	61	338	58	+1.7	-5.8	+3.0	+1.2	.279	44.9		6	38	53.6	27	48	16	365.0	696.6
	78580 is triple: AC 7.3 13.8 26.6" 237.2, dT = -95sec : AB 7.3 10.5 28.6" 130.4, dT = +36sec																																	
26	Feb	27	20	25	43.1	d	79610	F8	7.2	7.0		85+	134	85	232	38S	155	105	146	+2.8	-4.8	+1.3	-3.4	.280	-42.2		7	41	3.1	24	57	54	366.0	671.5
26	Feb	28	0	48	47.0	d	1180	F5	7.1	6.8		86+	135	29	284	46N	59	349	50	+2.3	-4.2	+1.6	+0.2	.299	56.4		7	49	18.9	24	29	19	369.5	969.0
26	Feb	28	1	21	50.7	d	79739	F0	7.1	7.0		86+	136	22	286	89N	103	35	93	+2.3	-4.1	+0.2	-1.2	.556	11.8		7	50	39.8	24	9	40	370.3	1020.6
26	Mar	1	0	3	39.6	d	80413	F8	7.6	7.3		92+	148	49	269	64N	83	13	69	+3.3	-3.0	+1.9	-0.6	.353	40.5		8	46	21.4	20	24	50	369.8	831.7
26	Mar	1	0	24	39.0	d	1313	kF8	7.6	7.3		93+	148	44	271	20S	179	109	165	+3.2	-2.9	-0.8	-3.6	.268	-55.9		8	45	50.1	20	1	20	370.2	858.8
26	Mar	2	20	56	57.3	d	1531	wA0	6.0	6.0v		100+	173	59	122	64S	140	189	120	+5.1	-0.3	+1.5	-1.6	.382	-11.6		10	27	39.0	9	45	45	374.8	709.1
	R1531 = 45 Leonis (CX)																																	
	1531 is double: AB 6.0 12.4 34" 119.5, dT = +83sec																																	
	1531 = CX Leo, 6.01 to 6.03, V, Type ACV, Period 3.0525 days, Phase 76%																																	
	Distance of 1531 to Terminator = 5.8"; to 3km sunlit peak = 0.0"																																	
26	Mar	7	2	3	40.5	r	1958	K0	7.6	7.1		87-	137	46	190	68N	318	309	298	+3.5	+5.9	+1.8	-1.7	.329	171.1		13	39	20.1	-15	12	31	392.8	633.6
26	Mar	7	23	43	43.3	r	158538	wK1	7.3	6.8		80-	127	29	138	45S	247	286	229	+3.2	+6.5	+3.5	+2.7	.194	-120.5		14	24	0.4	-19	48	3	397.2	738.5
	158538 is double: AB 7.4 11.6 40" 286.2, dT = -158sec																																	
26	Mar	8	0	58	44.1	R	158556	WA2	6.8			79-	126	38	156	70S	273	295	255	+2.9	+6.6	+2.8	+0.4	.284	-145.5		14	25	27.7	-19	57	57	396.6	663.4
	158556 is double: BA 7.2 6.6 35" 114.8, dT = +113sec																																	
26	Mar	8	1	0	30.9	R	2066	SA1	6.6	6.6		79-	126	38	156	71S	273	295	255	+2.9	+6.6	+2.8	+0.4	.285	-146.0		14	25	29.9	-19	58	12	396.6	661.9
	2066 is quadruple: **Aa,Ab 6.8 7.7 0.018" 329.0, dT = -0.04sec : BC 7.16 8.37 1.21" 89.5, dT = +4sec : AB 6.6 7.2 35" 294.8, dT = -113sec																																	
	2066 has been reported as non-instantaneous (OCc 204). Observations are highly desired																																	
26	Mar	9	2	22	39.0	r	183333	cA2	7.3	7.2		71-	115	37	168	71N	306	318	292	+1.6	+7.3	+2.0	-0.9	.314	173.7		15	16	48.0	-24	0	36	399.2	611.3
	183333 is double: 7.8 8.2																																	
26	Mar	9	4	19	16.1	r	2188	SA2	7.5	7.3		70-	114	35	200	69N	309	290	294	+1.1	+7.4	+2.4	-1.6	.289	163.3		15	19	9.2	-24	15	54	399.5	585.0
	2188 is triple: AB 7.5 8.6 2.0" 161.5, dT = +6sec : AC 7.5 11.2 46" 84.0, dT = +113sec																																	
	2188 is a close double. Observations are highly desired																																	
26	Mar	9	4	38	25.9	r	183377	cF2	7.4			70-	114	-8	33	205	59N	318	294	304	+1.0	+7.4	+2.3	-2.1	.270	152.2		15	19	40.4	-24	16	12	399.7	591.0
	183377 is double: AB 7.90 8.27 0.65" 227.7, dT = +0.02sec																																	
	183377 is a close double. Observations are highly desired																																	
26	Mar	10	3	28	9.7	R	2318	A*	6.6	6.6v		62-	103	34	173	33N	339	346	328	+0.2	+7.6	+1.3	-2.5	.198	131.6		16	10	15.9	-26	54	33	400.7	579.6
	2318 = V0952 Sco, 6.57, range 0.04, V, Type ACV, Period 1.4178 days, Phase 71%																																	
26	Mar	10	4	57	35.3	r	2320	B9	7.0	6.9		61-	103	-4	33	196	74N	298	282	288	-0.2	+7.6	+2.7	-1.3	.283	165.0		16	11	33.5	-27	9	3	400.9	570.0
26	Mar	11	1	41	53.8	r	2444	kA0	7.6	7.6		53-	93		19	139	75S	260	302	255	-0.6	+7.4	+2.0	+1.3	.322	-152.3		17	0	28.9	-28	38	4	402.2	709.1
26	Mar	11	2	2	21.6	r	184914	K2	7.5	6.9		52-	93		21	143	77N	288	326	283	-0.6	+7.4	+1.5	+0.3	.350	179.3		17	1	3.3	-28	33	11	401.9	681.9
26	Mar	11	4	5	50.6	R	2453	K1	6.6	6.2		52-	92		32	170	34N	332	342	326	-1.1	+7.5	+1.8	-2.3	.187	129.5		17	4	27.8	-28	34	58	400.7	570.8
26	Mar	13	3	44	1.2	r	187398	K0	8.2	7.6		33-	70		22	142	68S	240	278	245	-3.2	+6.5	+2.3	+1.8	.300	-151.8		18	52	58.5	-28	8	43	397.8	656.4
26	Mar	14	4	15	15.0	r	188570	K4	7.8	7.1		24-	59	-12	21	137	82N	264	306	274	-4.2	+5.6	+1.8	+1.1	.355	175.8		19	47	39.6	-25	37	35	394.0	680.7
26	Mar	20	17	54	3.7	d	92318	cG0	7.9	7.6		3+	22	-11	10	278	73N	42	339	63	-4.2	-4.5	+0.4	+0.7	.507	25.3		1	13	8.9	11	40	58	367.3	998.5
	92318 is double: ** 7.9 0.008" 233.1, dT = -0.01sec																																	
26	Mar	20	18	0	19.0	d	92317	K	8.4	7.4		4+	22		9	279	56N	25	322	46	-4.2	-4.5	+0.5	+1.5	.418	42.5		1	13	6.0	11	44	57	367.5	1008.6
26	Mar	21	18	20	43.0	d	92808	M0	8.5	7.6v		9+	35		18	281	68S	86	21	105	-2.9	-5.6	+0.4	-0.8	.521	-14.0		2	8	56.7	17	34	46	365.1	950.7
	92808 = AU Ari, 8.44 to 8.65, V, Type SRS, Period 22.22 days, Phase 47%																																	
26	Mar	22	18	33	55.9	d	75741	cG5	9.0	8.4		17+	49		29	281	62S	97	28	113	-1.5	-6.3	+0.6	-1.2	.474	-18.8		3	7	38.7	22	34	20	363.8	883.9
	75741 is double: ** 9.6 9.6 0.10" 351.0, dT = -0.06sec																																	
	75741 has been reported as non-instantaneous (OCc 812). Observations are highly desired																																	
26	Mar	23	19	25	8.3	D	616	F2	5.4	5.2v		27+	63		32	285	43N	29	318	40	-0.1	-6.6	+2.0	+2.2	.260	58.5		4	10	49.9	26	28	51	364.3	880.6

Occultation prediction for Teide Observatory Canary Islands
E. Longitude 16 18 39.8, Latitude 28 28 31.6, Alt. 3000m; Telescope dia 15cm; dMag 0.0

y	m	day d	h	Time m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon	Sun Alt	Moon Alt	Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
							R616 = 44 Tauri (IM)																													
							616 = IM Tau, 5.33 to 5.46, V, Type DSCT, Period 0.14497 days, Phase 14%																											
26	Mar	23	20	42	59.4	D	76514	G5	7.2	6.9		28+	63		17	291	76S	91	25	101	-0.1	-6.5	+0.1	-0.9	.568	-1.6		4	14	32.2	26	15	21	365.9	1009.0
26	Mar	23	21	33	39.3	d	76530	K3	7.8	7.0		28+	64		7	296	82N	70	8	80	-0.1	-6.4	+0.1	-0.3	.580	19.7		4	16	41.6	26	21	29	367.0	1096.4
26	Mar	24	21	37	59.3	D	797	cB9	6.4	6.3e		39+	77		19	292	84N	79	12	83	+1.2	-6.2	+0.4	-0.6	.539	19.0		5	20	59.3	27	57	26	367.3	1016.2
							797 is double: ** 6.5 8.5																													
							797 = HR 1750, 6.21, range 0.03, H1, Type EA, Period 3.315 days, Phase 40%																											
26	Mar	25	17	47	21.9	d	78191	A0	7.7	7.7		49+	89	-9	80	271	75S	107	21	106	+2.8	-6.0	+2.3	-1.1	.371	-6.7		6	17	59.9	28	0	24	364.8	660.9
26	Mar	25	18	13	38.8	d	78206	K0	8.0	7.4		49+	89		74	273	88N	90	5	89	+2.7	-6.0	+2.3	-0.4	.374	11.9		6	18	47.3	28	3	20	365.0	676.3
26	Mar	25	20	34	42.5	d	78291	K0	7.7	7.0		50+	90		44	283	46N	48	332	47	+2.4	-5.8	+2.6	+1.4	.245	58.5		6	22	47.9	27	59	12	366.9	834.6
26	Mar	26	17	54	20.0	d	79316	G2	7.5	7.1v		61+	102	-11	87	145	88N	96	131	90	+3.8	-5.1	+2.5	-0.3	.358	11.6		7	21	32.8	26	9	33	367.2	650.5
							79316 = V0340 Gem, 7.37 to 7.71, V, Type RS, Period 35.37 days, Phase 40%																											
26	Mar	26	18	29	39.5	d	79319	K2	7.9	7.3		61+	102		83	250	28S	161	94	154	+3.7	-5.1	+1.1	-4.2	.237	-50.4		7	21	39.7	25	51	44	367.3	662.5
26	Mar	28	19	48	6.8	D	1383	cF5	6.6	6.4		81+	129		79	177	49N	68	71	52	+4.9	-2.3	+4.2	+1.9	.200	57.6		9	18	58.9	17	42	19	373.2	674.9
							R1383 = 83 Cancri																											
							1383 is double: AB 6.6 0.30" 328.1, dT = -0.27sec																											
							1383 is a close double. Observations are highly desired																											
26	Mar	28	21	11	50.7	d	98511	kF2	7.8	7.6		82+	129		68	243	73S	126	71	110	+4.6	-2.1	+1.6	-1.8	.397	1.7		9	20	38.2	17	7	38	373.7	720.3
26	Mar	29	0	23	13.6	D	1395	G9	6.3	5.8		82+	130		28	275	38N	57	351	41	+4.2	-1.6	+2.0	+0.5	.214	65.5		9	25	32.5	16	35	8	377.1	941.3
26	Mar	29	18	52	54.9	D	1487	SB7	1.4	1.4s		89+	141		61	119	30S	171	223	152	+5.4	-0.8	+0.8	-3.4	.270	-44.6		10	8	22.3	11	58	2	376.9	692.1
							R1487 = Regulus = alpha Leonis																											
							1487 is triple: AB 1.4 8.2 176" 308.0, dT = -477sec : AD 1.4 12.1 193" 274.0, dT = -160sec																											
							1487 = NSV 4750, 1.33 to 1.40, V																											
26	Mar	29	19	55	6.2	R	1487	SB7	1.4	1.4s		89+	141		71	148	-64S	265	294	246	+5.2	-0.7	+3.3	+0.6	.266	-135.6		10	8	22.3	11	58	2	376.6	678.7
							R1487 = Regulus = alpha Leonis																											
							1487 is triple: AB 1.4 8.2 176" 308.0, dT = -486sec : AD 1.4 12.1 193" 274.0, dT = -717sec																											
							1487 = NSV 4750, 1.33 to 1.40, V																											
26	Mar	30	18	0	14.1	D	1589	pM5	5.9	5.3v		95+	153	-11	38	106	56S	146	204	125	+5.6	+0.6	+1.0	-1.4	.392	-21.2		10	56	1.5	6	11	7	381.7	777.7
							R1589 = 56 Leonis (VY)																											
							1589 is double: 6.2 7.1																											
							1589 = VY Leo, 5.69 to 6.03, V, Type SR, Period 46.34 days, Phase 57%																											
26	Mar	31	20	2	16.9	d	138388	K0	7.3	6.8		98+	166		49	130	50S	147	189	125	+5.2	+2.4	+1.1	-1.6	.375	-14.7		11	45	1.4	- 0	31	4	384.5	723.9
							Distance of 138388 to Terminator = 17.1"; to 3km sunlit peak = 6.6"																											
26	Apr	2	23	4	9.0	r	157849	KF2	7.3	7.1		99-	169		48	171	71N	333	341	312	+3.8	+5.3	+1.1	-1.9	.324	159.0		13	18	58.6	-12	38	53	391.7	659.9
							Distance of 157849 to Terminator = 15.7"; to 3km sunlit peak = 5.7"																											
26	Apr	3	20	57	23.0	r	2011	K2	6.3	5.6		96-	158		25	128	90N	302	348	283	+3.5	+6.0	+0.9	-0.2	.412	-175.5		14	3	4.1	-17	22	1	396.6	795.0
26	Apr	6	1	13	21.1	r	2256	PA1	7.0	6.9		85-	135		35	171	70S	268	278	256	+0.7	+7.4	+3.0	+0.3	.276	-154.1		15	47	56.5	-25	59	13	400.4	595.3
							2256 is double: ** 7.7 7.7 0.10" 90.0, dT = +0.36sec																											
							2256 has been reported as non-instantaneous (OCc1482). Observations are highly desired																											
26	Apr	6	3	15	18.6	R	2261	K3	6.6	5.8		85-	134		32	203	48S	246	223	234	+0.2	+7.5	+2.8	+0.3	.234	-141.0		15	50	34.9	-26	17	23	400.8	586.0
26	Apr	7	3	49	55	r	2406	pA3	6.0	5.9s		77-	123	-11	31	198	5S	196	178	189	-1.1	+7.5	+2.0	+8.7	.054	-100.6		16	45	0.2	-28	30	35	401.7	573.3
							2406 is double: AB 6.0 13.8 5.5" 221.0, dT = -92sec																											
							2406 is a close double. Observations are highly desired																											
							2406 = NSV 7944, 6.7, range 0.4, pg																											
							Distance of 2406 to Terminator = 8.0"; to 3km sunlit peak = 0.0"																											
26	Apr	14	3	58	46.3	r	3346	K2	7.4	6.6		14-	43	-8	18	110	77N	260	317	281	-6.3	+0.5	+0.9	+1.3	.436	159.6		22	48	22.5	- 8	6	44	377.9	851.9
26	Apr	14	6	48	13.6	R	3353	cM2	3.7	2.9v		13-	42	29	48	145	66S	224	254	245	-6.7	+0.2	+1.6	+1.9	.388	-173.9	.02	22	52	36.9	- 7	34	47	374.5	708.0
							R3353 = lambda Aquarii																											

Occultation prediction for Teide Observatory Canary Islands
E. Longitude 16 18 39.8, Latitude 28 28 31.6, Alt. 3000m; Telescope dia 15cm; dMag 0.0

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      day  Time     P   Star  Sp  Mag  Mag    % Elon Sun  Moon   CA   PA  VA  AA Libration    A    B    RV    Cct durn  R.A. (J2000)  Dec   Mdist   SV
 y   m  d  h  m   s       No  D    v    r V  ill     Alt Alt Az   o    o   o   o   L    B   m/o m/o  "/s     o  sec  h  m   s    o  m  s   Mm   m/s
      3353 is double: AB 3.8 8.3 0.50" 242.0, dT = -1.2sec
      3353 is a close double. Observations are highly desired
      3353 = lam Aqr, 3.57 to 3.80, V, Type SRS, Period 24.5 days
26 Apr 19 18  4 22.4 d   76184PA9  8.3  8.1v   7+  31 -10 21 288  53S 106  39 119 -0.8 -6.4 +0.1-1.4 .523  -21.2      3 47  3.6  24 49 11 359.5 977.3
     76184 is double: AB 8.7 10.7 0.61" 220.9, dT = -0.48sec
     76184 is a close double. Observations are highly desired
     76184 = V0534 Tau, 8.26 to 8.3, V, Type DSCTC, Period 0.032 days
26 Apr 19 18 15 21.0 r     538pB8  5.7  5.7    7+  31 -12 19 289 -83N 256 189 268 -0.8 -6.4 +0.4-0.5 .565 -170.5      3 45  9.7  24 50 21 359.8 999.2
   R538 = 18 Tauri
      538 is quadruple: Aa,Ab 6.4 6.4 0.10"       : AB 5.6 14.0 72" 128.9, dT = +77sec : AC 5.6 14.8 151" 175.1, dT = -43sec
      538 is a close double. Observations are highly desired
26 Apr 19 18 29  8.4 D     555 K5  6.4  5.6s   7+  31     16 290  84S  75   9  88 -0.8 -6.4 +0.3-0.5 .574   10.7      3 48  6.5  24 59 18 360.01019.1
      555 = NSV 1316, 6.44, range 0.02, 0V, Type VAR, Period 1.48987 days
26 Apr 19 18 31 38.1 d X  4907pB8  8.8  8.6    7+  31     16 290  -1S 160  95 173 -0.8 -6.4 -2.2-6.3 .156  -74.6      3 47 26.5  24 39 30 360.11024.4
   X  4907 is double: AB 8.8 11.3 6.8" 329.9, dT = -43sec
   X  4907 is a close double. Observations are highly desired
26 Apr 20 18 10 29.8 d   76803 K5  9.0  8.2   14+  45 -11 34 285  53S 116  43 122 +1.0 -6.4 +0.4-1.7 .479  -21.8      4 52 53.0  27 18 51 359.7 899.3
26 Apr 20 19 21  0.2 D   76841cK1  7.3  6.7   15+  45     20 291  37S 132  65 139 +1.0 -6.2 -0.4-2.1 .460  -37.5      4 55 34.6  27 12  9 361.21016.2
     76841 is double: ** 7.6 10.1 0.08"  82.0, dT = +0.11sec
     76841 has been reported as non-instantaneous (OCc 753). Observations are highly desired
26 Apr 20 20 47  7.8 d     746WB7  7.0  6.9   15+  46      3 299  81S  88  29  95 +1.1 -6.1 -0.3-0.7 .657    5.9      4 59 53.7  27 19 32 363.11162.6
      746 is double: AB 7.0 8.7 20.4" 206.1, dT = -14sec
26 Apr 21 18 26 43.1 D   77818 K5  6.7  5.8   24+  59     44 283  53N  50 334  51 +2.7 -5.9 +2.3+1.1 .291   52.8      6  0  4.9  28  7 33 361.5 843.3
26 Apr 21 20  8 45.9 D   77909wA0  7.6  7.6   25+  59     23 290  48S 130  61 130 +2.6 -5.7 -0.2-1.8 .511  -26.3      6  4  1.0  27 34 14 363.61005.1
     77909 is double: AB 7.6 10.8 21.6" 132.5, dT = +42sec
26 Apr 21 21 34 21.5 d     927 G0  8.0  7.7   25+  60      7 298  61S 118  56 118 +2.7 -5.5 -0.5-1.3 .624  -15.4      6  7 59.1  27 25 42 365.61148.1
26 Apr 22 17 57 24   m   79022 K0  8.0  7.6   35+  72  -8 63 274  16N  21 301  16 +4.2 -5.1 +9.9+9.9 .000   90.0      7  3 48.8  26 50 11 363.7 741.5
26 Apr 22 17 57 41   Gr  79022 K0  8.0  7.6   35+  72  -8 62 ** GRAZE: CA 16.1N; Dist. 22km in az. 213deg. [Lat = 28.24-0.58(E.Long-16.31)]
26 Apr 22 18  2 35.8 d   79032 G5  8.4  7.9   35+  72  -9 62 273  42S 143  64 137 +4.2 -5.1 +0.9-2.7 .361  -31.5      7  4 15.8  26 20 52 363.7 746.2
26 Apr 22 21 54  0.6 d    1094 A0  7.1  7.1   36+  74     14 292  74S 112  47 106 +4.0 -4.5 -0.2-1.3 .607   -1.8      7 12 49.4  25 44 55 368.51085.4
   R1094 = 49 Geminorum
26 Apr 23 20 54 48.7 d   79997 K0  8.0  7.3   47+  86     37 278  87S 105  34  94 +4.9 -3.5 +0.8-1.3 .488   13.6      8 10 54.7  22 43 43 370.1 902.0
26 Apr 24 21  9 32.3 d   98371 K0  8.2  7.6   58+  99     44 268  90N 107  39  91 +5.5 -2.1 +1.1-1.4 .443   17.6      9  7 11.5  18  8 36 373.9 843.6
26 Apr 25 21 42 19.7 D    1466cB9  5.3  5.3   69+ 112     44 259   3S 197 135 178 +5.7 -0.5 -2.0-5.1 .157  -69.2      9 58 13.4  12 26 41 378.3 812.1
   R1466 = nu Leonis
      1466 is double: ** 6.0 6.0 0.050"
      1466 has been reported as non-instantaneous (OCc1407). Observations are highly desired
   Distance of 1466 to Terminator = 8.7"; to 3km sunlit peak = 0.0"
26 Apr 26 19 53  4   m  118479kK0  7.6  7.0   78+ 124     68 201  22N  44  25  23 +6.0 +0.8 +9.9+9.9 .000   90.0     10 45 33.7   7 30 51 380.6 684.8
26 May  5 22 38 11.2 R    2617cK0  4.6  4.1   84- 133     14 134  64N 299 346 300 -1.9 +6.6 +0.8+0.0 .345  158.6     18  8  5.0 -28 27 26 403.8 726.6
      2617 is double: AB 5.1 5.9 0.26"  12.0, dT = -0.23sec
      2617 is a close double. Observations are highly desired
26 May  6  3 48 23.8 r  186536cA3  7.5  7.4   83- 131  -5 29 203  70S 253 230 254 -3.1 +6.6 +2.2+0.0 .311 -176.8     18 15 13.5 -28 36 49 402.1 607.5
    186536 is double: ** 8.8 8.8 0.10"  90.0, dT = +0.31sec
    186536 has been reported as non-instantaneous (OCc 151). Observations are highly desired
26 May  7  1 47 39.0 r  187672kA*  7.4  7.4   76- 121     32 160  80S 256 275 262 -3.8 +5.9 +2.7+0.9 .297 -176.4     19  6 19.2 -27 17 14 400.3 578.5
26 May 12  2 58 58.9 r    3415pF2  8.3  8.1   27-  63     25 110  67S 225 280 246 -7.2 -0.6 +0.8+2.0 .443 -167.8     23 15 20.0 - 4 32  3 377.7 829.5
      3415 is double: ** 8.9 9.4 0.027" 129.9, dT = 0.00sec
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Occultation prediction for Teide Observatory Canary Islands
E. Longitude 16 18 39.8, Latitude 28 28 31.6, Alt. 3000m; Telescope dia 15cm; dMag 0.0

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      day  Time     P   Star  Sp  Mag  Mag    % Elon Sun  Moon   CA   PA  VA  AA Libration   A    B    RV    Cct durn  R.A. (J2000)  Dec   Mdist   SV
 y   m  d  h  m   s       No  D    v    r V  ill     Alt Alt Az   o    o   o   o   L    B   m/o m/o  "/s     o  sec  h  m   s    o  m  s   Mm   m/s
      3415 has been reported as non-instantaneous (OCc1802). Observations are highly desired
26 May 12  3 40 22.0 r  146615 K2  7.6  6.9   27-  63  -6 33 117  14S 171 223 192 -7.3 -0.7 -0.2+4.2 .192 -116.5     23 17 15.0 - 4 26  7 376.7 785.7
26 May 13  2 19 48   Gr      1SG0  7.2     S  18-  50     12 ** GRAZE: CA  8.6N; Dist. 67km in az. 345deg. [Lat = 29.10+0.24(E.Long-16.31)]
26 May 13  2 24 36.2 R       1SG0  7.2     S  18-  50     12  94  20N 318  19 340 -6.7 -2.1 +1.5-3.4 .104  101.0      0  2 47.2   2  7 49 373.0 979.6
        1 is triple: AB 7.40 9.36 1.52" 156.5, dT = +14sec : AC 7.4 12.4 47" 328.5, dT = -451sec
        1 is a close double. Observations are highly desired
        1 = NSV 3, 9. to 11., V
26 May 18 18 38 57.5 D   77280 M0  8.8  7.9    5+  27     14 294  56S 113  48 116 +1.3 -5.7 -0.2-1.3 .614  -13.5      5 35 15.6  27 30 53 357.91096.2
26 May 18 18 45 59   M   77267cK2  8.3  7.6    6+  27     13 295  20N   9 305  12 +1.3 -5.7 +9.9+9.9 .000   90.0      5 34 38.4  27 53 45 358.01109.9
     77267 is double: ** 8.9 8.9 0.10" 311.0
     77267 has been reported as non-instantaneous (OCc 711). Observations are highly desired
26 May 18 18 48 35.4 d   77282 G0  9.4  9.0    6+  27     12 295  51N  40 336  43 +1.3 -5.7 +1.0+1.0 .326   59.4      5 35 21.4  27 49 12 358.11113.3
26 May 18 18 51 34.3 D    840cK0  6.3  5.5    6+  27     12 295  88N  77  13  80 +1.3 -5.7 +0.1-0.5 .597   21.8      5 35 55.5  27 39 44 358.11117.7
       840 is double: ** 7.3 7.3 0.050"
       840 has been reported as non-instantaneous (OCc1267). Observations are highly desired
26 May 18 19 10 14.1 d X 75881     9.4  8.8    6+  27      8 297  63S 107  45 110 +1.3 -5.6 -0.3-1.1 .654   -7.8      5 36 48.2  27 29 24 358.61148.9
26 May 19 18 20  4.5 d    1028 G8  7.5  7.1   12+  41  -9 31 286  39N  39 327  35 +3.2 -5.0 +2.7+2.2 .194   69.7      6 41 42.7  27  4 54 359.1 971.5
26 May 19 18 52 56.2 d   78670kG0  9.0  8.7   12+  41     24 289  52N  52 343  48 +3.2 -4.9 +1.3+0.5 .327   56.2      6 43 14.8  26 56 24 359.81024.6
26 May 19 19 54 14.3 d   78716 M0  8.8  7.9s  13+  42     12 294  41N  41 337  38 +3.2 -4.7 +1.2+1.1 .268   65.4      6 45 46.7  26 47 23 361.21125.8
     78716 = NSV 3194, 8.81, range 0.37, V, Type LB, Period 44.6 days, Phase  71%
26 May 19 20 21 55.6 d   78736 K2  8.4  7.8   13+  42      6 296  44S 137  75 133 +3.3 -4.7 -0.7-1.6 .573  -30.6      6 47  6.5  26 17 51 361.91169.9
26 May 20 17 10 53.0 D    1170dG8  3.6  3.1   21+  54   5 58 271  84N  92  17  83 +4.9 -4.0 +1.8-0.8 .410   25.1      7 44 26.8  24 23 53 360.9 792.2
   R1170 = kappa Geminorum
      1170 is double: AB 3.7 10.0 7.3" 241.1, dT = -15sec
      1170 is a close double. Observations are highly desired
26 May 20 18 13 54.1 R    1170dG8  3.6  3.1   21+  55  -7 44 278 -46N 322 249 313 +4.8 -3.8 +0.3-2.2 .451  154.7      7 44 26.8  24 23 53 362.1 876.7
   R1170 = kappa Geminorum
      1170 is double: AB 3.7 10.0 7.3" 241.1, dT = -2.6sec
      1170 is a close double. Observations are highly desired
26 May 20 19 40  3.4 d   79717 S*  8.0     V  21+  55     26 284  74S 115  46 106 +4.7 -3.6 +0.2-1.4 .568    0.0      7 49 18.2  23 44  4 364.01002.9
     79717 = T Gem, 7.98 to 15.0, V, Type M, Period 289. days, Phase  22%
26 May 20 20 15 43.6 d   79740cF2  8.5  8.3   22+  56     19 287  65N  74   7  64 +4.8 -3.5 +0.5-0.5 .457   40.2      7 50 44.7  23 47  1 364.91059.6
     79740 is double: ** 9.2 9.2 0.10" 143.0, dT = +0.08sec
     79740 has been reported as non-instantaneous (OCc 683). Observations are highly desired
26 May 21 18 10  2.2 d    1313kF8  7.6  7.3   31+  68  -7 56 264  69N  83  15  70 +6.0 -2.5 +2.2-0.5 .341   40.3      8 45 50.1  20  1 20 366.3 794.7
26 May 21 18 35 26.2 d   98109kA5  8.4  8.2   31+  68 -11 50 267  64S 130  61 116 +6.0 -2.4 +0.8-1.9 .460   -7.0      8 46 15.5  19 42 33 366.8 824.0
26 May 21 19 24 25   m   80426 K0  7.7  7.2   32+  68     40 273  17N  32 323  18 +5.9 -2.3 +9.9+9.9 .000   90.0      8 47 26.7  19 55 19 367.8 889.0
26 May 22 20 31 38.5 D    1434wM2  5.4  4.5s  43+  82     34 268  87S 112  47  94 +6.5 -0.6 +0.8-1.5 .478   13.2      9 43 43.9  14  1 18 374.1 889.8
   R1434 = psi Leonis
      1434 is double: AB 5.5 11.6 283" 138.9, dT = +528sec
      1434 = NSV 4594, 5.35 to 5.39, V, Type LB
26 May 24 23 11 11.1 D    1652cG8  5.4  4.9   65+ 108     13 264  76S 126  65 105 +6.3 +2.7 +0.3-1.8 .488   -5.0     11 24  2.3   1 24 28 387.3 920.7
   R1652 = 79 Leonis
      1652 is double: ** 5.9 6.5 0.003" 155.0, dT = +0.01sec
26 May 25 18 14 23.3 d  138553kK2  7.5  6.9   73+ 118  -7 57 165  69S 133 146 111 +6.8 +3.5 +1.8-1.5 .356    2.0     12  3 13.2 - 3 23 44 387.1 669.0
26 May 25 22 28 40.0 d    1747kK0  7.5  7.0   74+ 119     28 247  78N  99  45  77 +5.9 +4.0 +1.3-1.4 .373   25.0     12  8 12.5 - 4 17 13 390.2 779.7
26 May 26 18 43 34.0 d  138978 K2  7.6  7.0   82+ 129     51 163  85N 105 120  83 +6.1 +4.7 +2.6-0.4 .307   28.7     12 49  0.6 - 9 13 13 391.6 664.0
26 May 28 20 46 58.3 d  158538wK1  7.3  6.8   94+ 152     42 178  75S 114 116  96 +3.9 +6.7 +2.5-0.8 .313   11.0     14 24  0.4 -19 48  3 398.4 615.5
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Occultation prediction for Teide Observatory Canary Islands
E. Longitude 16 18 39.8, Latitude 28 28 31.6, Alt. 3000m; Telescope dia 15cm; dMag 0.0

y	m	d	h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon	Sun Alt	Moon Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
							158538 is double: AB 7.4 11.6 40" 286.2, dT = -126sec																													
26	May	28	22	1	17.6	d	158556	WA2	6.8			94+	153		39	200	86S	103	84	84	+3.6	+6.8	+2.7	-0.9	.298	17.7		14	25	27.7	-19	57	57	398.8	605.0
							158556 is double: BA 7.2 6.6 35" 114.8, dT = +113sec																													
26	May	28	22	3	6.0	D	2066	SA1	6.6	6.6		94+	153		39	200	86S	102	83	84	+3.6	+6.8	+2.7	-0.9	.298	17.7		14	25	29.9	-19	58	12	398.8	605.2
							2066 is quadruple: **Aa,Ab 6.8 7.7 0.018" 329.0, dT = -0.04sec : BC 7.16 8.37 1.21" 89.4, dT = +4sec : AB 6.6 7.2 35" 294.8, dT = -113sec																													
							2066 has been reported as non-instantaneous (OCc 204). Observations are highly desired																													
26	May	29	23	37	33.8	d	183333	cA2	7.3	7.2		98+	164		31	211	74S	101	72	86	+2.2	+7.2	+2.4	-1.1	.310	6.8		15	16	48.0	-24	0	36	401.5	607.6
							183333 is double: 7.8 8.2																													
26	May	30	18	17	10.1	r	2287	SB1	2.9	3.0v		100+	172	-7	10	127	-68N	261	312	249	+2.2	+7.0	+1.3	+1.4	.352	-145.8		15	58	51.1	-26	6	51	404.6	834.6
							R2287 = pi Scorpii																													
							2287 is triple: Aa,Ab 5.1 13.4 2.0" 244.0, dT = -5sec : AB 2.9 11.9 50" 128.1, dT = +97sec																													
							2287 is a close double. Observations are highly desired																													
							2287 = pi Sco, 2.88 to 2.91, V, Type ELL, Period 1.570103 days, Phase 41%																													
26	Jun	2	2	44	50.0	r	2586	cB3	6.0	6.0		97-	161		22	216	19S	213	178	213	-2.0	+6.6	+0.6	+1.3	.251	-137.4		17	58	39.0	-28	45	33	403.6	667.3
							2586 is double: ** 6.3 7.3 0.30" 276.0, dT = -0.6sec																													
							2586 has been reported as non-instantaneous (OCc1519). Observations are highly desired																													
							Distance of 2586 to Terminator = 5.9"; to 3km sunlit peak = 0.0"																													
26	Jun	2	21	58	32.6	r	2723	K0	6.6	6.1		94-	151		20	139	36N	327	9	331	-2.1	+6.0	+0.5	-1.8	.185	122.6		18	46	3.9	-27	29	56	403.1	671.5
26	Jun	13	2	43	5	M	75882	cF0	8.5	8.3		6-	28		9	68	16N	337	40	351	-3.0	-5.8	+9.9	+9.9	.000	90.0		3	20	45.7	23	11	2	359.5	1157.8
							75882 is double: ** 8.5 12.8 0.60" 63.0																													
							75882 has been reported as non-instantaneous (OCc 771). Observations are highly desired																													
26	Jun	13	2	50	27.3	r	75877	K5	9.3	8.6		6-	28		11	69	57N	296	360	310	-3.0	-5.8	+0.4	+0.2	.429	130.7		3	20	31.6	23	3	18	359.3	1145.0
26	Jun	18	19	33	34.6	D	98533	kA2	7.8	7.7		18+	51		20	278	66S	132	67	115	+5.9	-0.9	+0.0	-1.7	.560	-11.0		9	22	46.2	15	46	36	367.7	1018.1
26	Jun	20	19	51	43.8	d	118638	DF0	7.3			38+	76		31	256	30S	173	114	152	+7.0	+2.3	+0.1	-3.0	.314	-46.9		11	3	58.9	3	38	20	378.8	844.4
							118638 is double: BA 8.1 7.9 1.2" 304.1, dT = -2.5sec																													
							118638 is a close double. Observations are highly desired																													
26	Jun	20	19	51	46.3	d	X120230	D	8.0	7.8		38+	76		31	256	30S	173	114	152	+7.0	+2.3	+0.0	-3.0	.314	-46.9		11	3	59.0	3	38	19	378.8	844.4
							X120230 is double: AB 7.92 8.05 1.21" 124.1, dT = +2.5sec																													
							X120230 is a close double. Observations are highly desired																													
26	Jun	21	19	32	40.3	d	1711	DG0	7.9			49+	89		40	239	47S	156	107	134	+7.0	+3.7	+0.8	-2.6	.353	-27.9		11	50	26.4	- 2	25	7	383.8	743.1
							1711 is double: AB 7.96 11.09 1.94" 222.1, dT = +2.2sec																													
							1711 is a close double. Observations are highly desired																													
26	Jun	22	20	8	30.6	D	1809	cA0	7.0	7.0		59+	101		37	232	78N	101	56	79	+6.5	+5.0	+2.0	-1.3	.338	25.2		12	37	21.2	- 8	18	1	389.5	704.4
							1809 is double: ** 7.5 8.1 0.014" 122.8, dT = +0.04sec																													
							1809 has been reported as non-instantaneous (OCc1673). Observations are highly desired																													
26	Jun	24	19	20	2.5	d	158384	G8	7.7	7.2		77+	123		43	189	72N	88	80	69	+5.2	+6.7	+3.3	-0.1	.254	36.5		14	9	1.1	-18	30	3	396.8	609.0
26	Jun	26	19	17	19.6	d	2256	PA1	7.0	6.9		91+	145		33	162	46S	138	156	126	+3.1	+7.3	+1.6	-1.1	.290	-22.9		15	47	56.5	-25	59	13	401.9	614.1
							2256 is double: ** 7.7 7.7 0.10" 90.0, dT = +0.23sec																													
							2256 has been reported as non-instantaneous (OCc1482). Observations are highly desired																													
26	Jun	26	21	41	43.0	d	2261	K3	6.6	5.8		91+	146		32	200	24S	160	140	148	+2.5	+7.4	+2.3	-3.4	.170	-55.2	.01	15	50	34.9	-26	17	23	402.1	579.7
26	Jun	27	0	35	52.4	d	2276	A3	5.6	5.6		92+	147		10	233	75S	108	56	96	+1.8	+7.4	+1.3	-1.5	.371	-14.8		15	55	30.1	-26	15	58	404.5	753.7
							R2276 = 4 Scorpii																													
26	Jun	27	19	48	25.8	d	2397	K1	6.5	5.9		96+	156		30	158	75N	70	92	62	+1.8	+7.2	+3.1	+1.4	.249	37.2		16	41	37.6	-27	48	35	403.0	610.2
26	Jul	4	2	48	11.5	r	164780	K0	7.5	6.9		85-	134		47	195	71S	231	218	250	-6.2	+0.9	+1.8	+1.1	.349	177.0		21	58	29.8	-13	15	8	390.7	663.1
26	Jul	5	0	13	23.3	r	3333	SA5	6.4			78-	124		38	129	4S	162	206	183	-6.2	-0.2	-1.1	+5.7	.119	-108.5		22	43	3.4	- 8	18	41	388.0	708.3
							3333 is quadruple: AB 6.79 7.88 2.37" 306.8, dT = +16sec : AC 6.8 11.4 70" 355.8, dT = +571sec : AD 6.8 14.2 75" 278.1, dT = +274sec																													
							3333 is a close double. Observations are highly desired																													
							Distance of 3333 to Terminator = 5.7"; to 3km sunlit peak = 0.0"																													

Occultation prediction for Teide Observatory Canary Islands
E. Longitude 16 18 39.8, Latitude 28 28 31.6, Alt. 3000m; Telescope dia 15cm; dMag 0.0

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      day  Time     P   Star  Sp  Mag  Mag    % Elon Sun  Moon   CA   PA  VA  AA Libration   A    B    RV    Cct durn  R.A. (J2000)  Dec   Mdist   SV
 y   m  d  h  m    s       No  D    v    r V  ill     Alt Alt Az   o    o   o   o   L    B   m/o m/o  "/s     o  sec  h  m    s    o  m  s   Mm   m/s
26 Jul  5  2 42 40.7 r  146287 A5  8.0  7.9v  77- 123     54 178  81S 239 241 260 -6.8 -0.5 +2.2+1.2 .345  167.4      22 44 35.7 - 7 37  2 386.3 663.1
    146287 = HIP 112283, 8.06 to 8.12, Hp, Type DSCT, Period 0.07705 days
26 Jul  6  1 42 40.8 R    3459 K0  6.4  5.8   68- 111     51 135  84N 252 291 274 -6.9 -1.8 +2.2+1.3 .348  156.3      23 29 27.0 - 1 47 28 382.3 705.4
   R3459 = 11 Piscium
26 Jul  6  4  6  8.1 r    3467kK1  6.4  5.8   67- 110   0 60 197  63N 273 258 295 -7.3 -2.2 +3.5-0.5 .250  132.7      23 31 57.6 - 1  5  9 381.3 682.0
   R3467 = 13 Piscium
26 Jul  7  1 22 48.2 R      30SA0  7.1  7.1   58-  99     43 113  81S 237 292 259 -6.8 -3.2 +1.2+1.8 .423  173.5       0 15 57.3   4 15  4 378.1 780.4
       30 is triple: AB 7.0 14.1 0.8" 246.0, dT = -1.9sec : AC 7.0 12.2 5.0" 347.2, dT = +4sec
       30 is a close double. Observations are highly desired
26 Jul  9  3 27 31.0 r     296cF2  7.7        35-  73  -8 55 102  27S 188 252 208 -5.8 -5.5 -0.1+3.3 .312 -134.4       2  1  9.8  16 33 55 366.5 792.9
      296 is double: AB 7.70 11.23 0.32" 278.4, dT = 0.00sec
      296 is a close double. Observations are highly desired
26 Jul 10  2  7 35.2 r   75634wF8  8.7  8.3   25-  60     29  79  42N 304  13 320 -4.5 -5.9 +1.8-0.5 .257  117.7       2 55  4.9  21 35 43 364.2 979.9
    75634 is double: AB 7.2 13.8 49"  37.0, dT = +10sec
26 Jul 10  2 51 49.1 r   75652 A5  8.8  8.6   25-  59     38  84  55S 222 292 238 -4.5 -6.0 +0.2+2.0 .491 -161.1       2 56 46.1  21 25 41 363.2 913.9
26 Jul 10  3 49 24.8 R     438cA3  6.8        24-  59  -4 50  90  36S 202 274 218 -4.6 -6.1 +0.1+2.8 .379 -142.6       2 58 53.1  21 37  4 362.0 836.4
      438 is double: AB 7.47 7.45 0.54" 279.3, dT = -0.32sec
      438 is a close double. Observations are highly desired
26 Jul 11  1 31 55.4 r   76319kA2  8.4  8.3   16-  46     11  67  69N 284 347 295 -3.0 -6.0 +0.1+0.5 .536  146.1       3 55  7.6  25  6 21 362.21134.2
26 Jul 11  2 20  9.2 R   76345kG8  7.5  7.0   15-  46     21  71  70N 283 351 295 -2.9 -6.1 +0.5+0.6 .495  145.2       3 57 11.8  25 16 58 361.01056.4
26 Jul 11  3  5 38.9 r   76369 K2  8.3  7.5   15-  46     30  75  59S 233 303 244 -2.9 -6.2 +0.1+1.7 .543 -164.8       3 59 14.0  25 12 57 360.0 983.1
26 Jul 16 13 13  6.7 d    1434wM2  5.4  4.5s   7+  30  59 75 190  88S 110 101  93 +5.8 -0.5 +2.2-1.0 .390   18.1 .01   9 43 43.9  14  1 18 361.7 719.1
   R1434 = psi Leonis
      1434 is double: AB 5.5 11.6 283" 138.9, dT = +639sec
      1434 = NSV 4594, 5.35 to 5.39, V, Type LB
26 Jul 18 19 11 44.2 d  138256PF8  8.1  7.8   23+  58     19 258  21S 184 124 162 +6.6 +3.5 -0.1-3.7 .233  -61.2      11 32 18.6 - 0 24 53 378.9 890.9
    138256 is double: AB 8.1 15.6 15.9" 256.7, dT = +20sec
26 Jul 21 20  5 30   M    1993cK3  6.6  5.9   53+  94     25 232   4N  25 338   5 +5.4 +6.8 +9.9+9.9 .000   90.0      13 54 21.4 -17 10 48 394.8 697.4
26 Jul 23 20 33 50.9 d  183572kG0  7.6  7.3   72+ 116     28 213  28N  39   6  25 +3.4 +7.6 +2.2+2.3 .135   64.6      15 33 54.8 -25  6 38 400.8 612.0
26 Jul 26 20 51 31.3 d  186536cA3  7.5  7.4   93+ 149     33 180  54S 116 117 117 -0.2 +6.5 +3.1-0.9 .241  -33.9      18 15 13.5 -28 36 49 401.4 565.2
    186536 is double: ** 8.8 8.8 0.10"  90.0, dT = +0.37sec
    186536 has been reported as non-instantaneous (OCc 151). Observations are highly desired
26 Jul 26 22 29 54.7 D    2644cF8  6.4  6.1   93+ 150     29 204  72N  62  38  63 -0.6 +6.4 +2.0+0.3 .308   13.0      18 17 23.8 -28 17 20 401.8 615.4
      2644 is double: ** 7.1 7.1 0.10"  90.0, dT = +0.29sec
      2644 has been reported as non-instantaneous (OCc 168). Observations are highly desired
26 Jul 27 20 12 28.4 d  187716SG6  7.2  6.6   97+ 160     31 157  69N  50  73  55 -1.1 +5.6 +2.6+1.9 .265   29.9      19  8  8.1 -26 50  5 400.3 592.6
    187716 is triple: **Aa,Ab 7.8 7.8 0.050" 160.0, dT = -0.07sec : AB 7.3 8.6 45" 123.9, dT = +46sec
    187716 has been reported as non-instantaneous (OCc 769). Observations are highly desired
26 Jul 31  1 28 29.6 R    3181SA7  6.0  5.8   98- 164     43 208  68S 232 207 250 -5.0 +1.2 +1.6+0.9 .364  177.1      21 44  1.0 -14 44 58 391.1 691.5
   R3181 = 45 Capricorni
      3181 is triple: ** 6.7 6.7 0.050"       : AB 5.4 9.5 4.3" 229.0, dT = -12sec
      3181 has been reported as non-instantaneous (OCc1610). Observations are highly desired
26 Jul 31 23 31 44.2 r  146111 G0  7.7  7.4   94- 153     48 152  53S 211 236 231 -5.1 +0.0 +1.4+2.2 .336 -161.3      22 29  4.9 - 9 44 28 387.7 666.4
26 Aug  2  0 11 31.3 R    3416cA3  5.6  5.5   89- 141     53 146  87N 248 278 270 -5.6 -1.6 +2.2+1.3 .346  159.0      23 15 34.3 - 3 29 47 383.7 689.0
      3416 is double: ** 6.4 6.4 0.050"
      3416 has been reported as non-instantaneous (OCc1638). Observations are highly desired
26 Aug  3  1 46 45.6 r  108995 K2  7.9  7.3   81- 128     64 164  34S 188 202 210 -6.0 -3.2 +0.4+3.1 .296 -142.2       0  4 37.5   2 56 14 379.2 688.8
26 Aug  3  3 18  0.7 R       6 G5  6.9  6.3   80- 128     61 214  61N 274 244 296 -6.3 -3.4 +3.3-0.7 .260  133.8       0  5 22.2   3 36 22 379.1 691.5
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Occultation prediction for Teide Observatory Canary Islands
E. Longitude 16 18 39.8, Latitude 28 28 31.6, Alt. 3000m; Telescope dia 15cm; dMag 0.0

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      day  Time     P   Star  Sp  Mag  Mag    % Elon Sun  Moon   CA   PA  VA  AA Libration   A    B    RV    Cct durn  R.A. (J2000)  Dec   Mdist   SV
 y   m  d  h  m    s       No  D    v    r V  ill     Alt Alt Az   o    o   o   o   L    B   m/o m/o  "/s     o  sec  h  m    s    o  m  s   Mm   m/s
26 Aug  4 23 22 15.9 R     244 K0  6.7  6.2   62- 104     29  88  52S 210 275 230 -5.0 -5.1 +0.0+2.2 .456 -153.2      1 39 15.4  14 17  8 374.6 927.7
   R244 = 104 Piscium
26 Aug  6  0 22 41.3 r   93005 K0  7.9  7.3   50-  90     33  83  66N 276 344 293 -4.3 -5.9 +1.1+0.8 .416  143.5      2 34 23.5  19 59  5 370.2 928.7
26 Aug  6  1 50 27   D     387cG5  6.9  6.4S  50-  90     52  92   9N 333  43 351 -4.4 -6.1 +9.9+9.9 .050   83.7 .01  2 37 34.4  20 34 30 368.4 812.5
       387 is double: ** 7.7 7.7 0.10"  90.0
       387 has been reported as non-instantaneous (OCc1190). Observations are highly desired
       387 = NSV 15555, 6.91, , Type VAR:
26 Aug  6  1 54 31   Gr    387cG5  6.9  6.4S  50-  90     54 ** GRAZE: CA 15.2N; Dist. 14km in az. 316deg. [Lat = 28.65+0.85(E.Long-16.31)]
26 Aug  6  1 58  0   R     387cG5  6.9  6.4S  50-  90     54  93  22N 321  31 338 -4.5 -6.1 +9.9+9.9 .049   96.3 .01  2 37 34.4  20 34 30 368.3 802.7
       387 is double: ** 7.7 7.7 0.10"  90.0
       387 has been reported as non-instantaneous (OCc1190). Observations are highly desired
       387 = NSV 15555, 6.91, , Type VAR:
26 Aug  6 23 42 18.1 r     513cK0  7.3  6.7   39-  78     14  70  28S 195 260 209 -3.3 -6.1 -0.9+2.6 .371 -127.8      3 32  0.6  23 38 50 368.61082.8
       513 is double: ** 8.7 8.7 0.10"  90.0, dT = +0.07sec
       513 has been reported as non-instantaneous (OCc1204). Observations are highly desired
26 Aug  7  0 29 20.2 r   75990cK0  7.5  6.9   39-  77     24  75  27S 195 263 208 -3.3 -6.2 -0.8+2.8 .356 -129.0      3 33 51.4  23 49 52 367.51007.8
     75990 is double: ** 8.4 8.4 0.10"  85.0, dT = +0.1sec
     75990 has been reported as non-instantaneous (OCc 773). Observations are highly desired
26 Aug  7  0 52 42   M     518SA3  6.0     s  39-  77     29  76  13N 335  45 348 -3.3 -6.3 +9.9+9.9 .000   90.0      3 34 26.6  24 27 52 366.9 972.0
   R518 = 7 Tauri
       518 is triple: AB 6.60 6.86 0.79" 348.1 : AB,C 5.9 9.9 22.5"  52.2
       518 is a close double. Observations are highly desired
       518 = NSV 1192, 5.92 to 5.96, V
26 Aug  7  2 23 42.9 r     522 G5  7.8  7.1   38-  76     48  84  29S 197 271 210 -3.4 -6.4 -0.2+3.2 .324 -133.3      3 37 43.5  24 15 33 365.1 836.5
26 Aug  7  3 18 41.3 r   76041 F0  8.2  8.0   38-  76     60  89  80S 248 324 261 -3.5 -6.5 +1.5+1.5 .433  175.8      3 38 35.9  24 36  6 364.1 767.5
26 Aug  7  3 38 42.9 R   76046cA0  7.1  7.1   38-  76  -9 64  91  88S 256 332 269 -3.5 -6.6 +1.8+1.1 .413  167.8      3 39  6.7  24 42 10 363.9 745.8
     76046 is double: AB 7.1           45.0, dT = -21sec
26 Aug  7 10  3 57.6 r     569cA2  5.3        36-  73  72 32 284  48N 301 230 313 -4.4 -6.7 +0.4-2.2 .400  144.8      3 50 18.9  25 34 46 365.3 868.5
       569 is double: AB 5.73 6.52 0.66" 204.1, dT = +0.2sec
       569 is a close double. Observations are highly desired
26 Aug  8  1 40  5.2 R     701SF2  6.6  6.4   27-  63     27  72  85N 270 340 278 -2.0 -6.2 +0.5+0.9 .531  162.6      4 38 29.5  26 56 23 363.9 982.9
       701 is triple:  6.6 9.2 3.1" 169.4, dT = +1sec : AB 7.36 7.21 4.48" 187.8, dT = -1.2sec
       701 is a close double. Observations are highly desired
26 Aug  8  1 40  5.6 R X 70481p    7.3  7.2   27-  63     27  72  85N 270 340 278 -2.0 -6.2 +0.5+0.9 .531  162.5      4 38 29.6  26 56 26 363.9 982.9
   X 70481 is triple:  7.3 9.2 5.8" 174.9, dT = +0.9sec : AC 7.4 12.9 92" 203.6, dT = -70sec
   X 70481 is a close double. Observations are highly desired
26 Aug  9  1 41 59.3 R     868SA0  7.5  7.5   18-  49     15  66  84N 279 344 280 -0.5 -5.6 +0.2+0.6 .579  162.3      5 44 21.2  27 43 53 362.91069.8
       868 is triple: AB 7.5 9.8 8.6" 254.1, dT = -14sec : AC 7.5 12.7 47"  40.4, dT = +43sec
       868 is a close double. Observations are highly desired
26 Aug  9  2  9 48.2 r   77514cK0  8.9  8.3   17-  49     21  69  67N 296   4 298 -0.5 -5.7 +0.7+0.1 .475  144.7      5 45 41.5  27 51 20 362.31022.7
     77514 is double: ** 9.7 9.7 0.10"  79.0, dT = +0.17sec
     77514 has been reported as non-instantaneous (OCc 714). Observations are highly desired
26 Aug  9  2 55 49.0 r   77563 A3  8.2  8.0   17-  49     30  73  49S 232 303 234 -0.4 -5.7 +0.0+2.0 .472 -151.2      5 47 45.2  27 38  9 361.3 945.3
26 Aug  9  4 28 59.1 r     885wG7  5.6  5.1   17-  48   1 49  79  84N 279 357 281 -0.5 -5.8 +1.5+0.5 .441  163.1      5 50 58.1  27 58  4 359.6 804.4
       885 is double: AB 5.7 12.5 10.8" 233.1, dT = -17sec
26 Aug 10  2 13 46.4 r   78810 A3  8.0  7.8    9-  35      8  64  67S 257 320 253 +1.2 -4.7 -0.3+1.1 .615 -167.9      6 51 53.4  26 24  1 362.51105.2
26 Aug 10  3 11 42.0 R   78853 A0  7.7  7.7    9-  35     19  70  88N 283 350 278 +1.2 -4.7 +0.4+0.5 .558  166.4      6 54 29.2  26 31 51 361.21005.6
26 Aug 11  3 44 59.4 r    1200 K0  6.9  6.4    3-  21  -9 12  70  66S 265 329 254 +2.8 -3.4 +0.0+1.0 .575 -167.2      7 59 42.6  23 10 58 362.31036.4
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Occultation prediction for Teide Observatory Canary Islands
E. Longitude 16 18 39.8, Latitude 28 28 31.6, Alt. 3000m; Telescope dia 15cm; dMag 0.0

y	m	day d	h	Time m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon Alt	Sun Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	Aug	19	17	55	51.9	D	2174	pB8	6.5	6.5		46+	86	-6	32	207	53N	69	43	54	+4.1	+7.6	+2.8	+0.1	.239	40.0		15	13	17.4	-24	0	30	397.1	599.7
							2174 is triple: ** 7.1 7.1 0.030" 0.0 : AB 6.4 12.5 8.2" 45.0, dT = +31sec																														
							2174 has been reported as non-instantaneous (OCc1471). Observations are highly desired																												
26	Aug	19	18	42	9.6	d	183286	K0	7.8	7.3		47+	86		27	217	50S	146	111	131	+4.0	+7.6	+2.2	-2.7	.247	-40.9		15	13	54.0	-24	22	44	397.7	630.0
26	Aug	20	13	31	5	Gr	2287	SB1	2.9	3.0	v	55+	96	51	19	** GRAZE: CA 14.7N; Dist.173km in az. 218deg. [Lat = 26.50-0.68(E.Long-16.31)]																						
26	Aug	20	13	31	26	M	2287	SB1	2.9	3.0	v	55+	96	51	16	133	14N	25	72	14	+4.1	+7.3	+9.9	+9.9	.000	90.0		15	58	51.1	-26	6	51	400.9	773.7
							R2287 = pi Scorpii																											
							2287 is triple: Aa,Ab 5.1 13.4 2.0" 244.0 : AB 2.9 11.9 50" 128.1																											
							2287 is a close double. Observations are highly desired																											
							2287 = pi Sco, 2.88 to 2.91, V, Type ELL, Period 1.570103 days, Phase 53%																									
26	Aug	20	17	59	45.0	d	184100	F3	8.0	7.8		56+	97	-7	33	194	90N	100	86	89	+3.1	+7.6	+2.8	-0.7	.294	3.4		16	5	28.9	-26	57	34	399.6	570.8
26	Aug	21	19	8	15.4	d	2444	kA0	7.6	7.6		66+	108		30	198	71S	113	94	106	+1.7	+7.3	+2.9	-1.2	.275	-21.6		17	0	28.9	-28	38	4	401.2	575.1
26	Aug	21	19	29	41.5	d	184914	K2	7.5	6.9		66+	108		29	203	89N	93	70	87	+1.6	+7.3	+2.6	-0.7	.302	-3.8		17	1	3.3	-28	33	11	401.4	588.3
26	Aug	21	21	47	57.3	d	2453	K1	6.6	6.2		66+	109		11	229	67S	117	68	110	+1.1	+7.2	+1.8	-1.9	.316	-34.3		17	4	27.8	-28	34	58	403.3	749.0
26	Aug	22	21	52	41.2	D	2586	cB3	6.0	6.0		75+	120		18	221	55S	122	81	121	-0.1	+6.6	+2.7	-2.4	.244	-47.5		17	58	39.0	-28	45	33	402.5	706.2
							2586 is double: ** 6.3 7.3 0.30" 276.0, dT = -1.1sec																											
							2586 has been reported as non-instantaneous (OCc1519). Observations are highly desired																											
26	Aug	25	23	20	53.0	d	3014	cK0	7.3	6.8		95+	154		33	215	68N	48	16	62	-3.6	+3.2	+1.2	+0.7	.368	6.6		20	38	25.5	-20	59	39	394.7	709.2
							3014 is double: AB 8.1 8.1 129.3, dT = -0.09sec																											
26	Aug	28	3	51	56.6	D	X 51800	G5	10.1	9.8		9E	179	-9	8	254	66U	68	8	87	-5.5	-0.4	+0.3	-0.2	.495	-10.7		22	21	43.4	-	9	53	59	389.5	951.2
26	Aug	28	4	21	51.4	D	146046	kA5	9.4	9.2		4E	179	-3	2	258	102U	13	313	33	-5.5	-0.4	-0.3	+1.9	.370	45.2		22	21	53.0	-	9	36	39	390.2	995.4
26	Aug	28	4	29	21.0	d	X 51832		11.3	11.1		7E	179	-1	1	259	63U	107	46	127	-5.5	-0.4	+0.4	-2.0	.353	-48.4		22	22	51.8	-	9	54	2	390.3	1006.6
26	Aug	29	1	53	55.0	r	3385	F8	6.7	6.4		99-	170		42	232	64S	215	171	236	-5.5	-1.6	+0.9	+1.4	.393	-165.7		23	3	57.3	-	4	47	42	382.9	753.8
							Distance of 3385 to Terminator = 12.0"; to 3km sunlit peak = 3.2"																											
26	Aug	29	22	11	32.8	r	3502	G5	7.2	6.7		97-	159		50	129	80S	231	274	253	-4.8	-2.6	+1.5	+1.9	.398	177.3		23	46	34.6		0	31	48	379.3	733.4
26	Aug	30	0	30	14.0	R	3508	cA5	5.8	5.7		96-	158		63	190	59S	210	201	232	-5.2	-2.9	+1.2	+2.1	.363	-163.9		23	49	27.5		1	4	34	378.2	693.1
							R3508 = 21 Piscium																											
							3508 is double: ** 6.6 6.6 0.050"																											
							3508 has been reported as non-instantaneous (OCc1648). Observations are highly desired																											
26	Aug	30	3	51	33.8	R	3515	cA1	6.3	6.3		96-	157	-9	32	253	79N	251	194	274	-5.8	-3.3	+1.2	-0.2	.424	163.4		23	53	4.8		2	5	26	380.0	815.0
							R3515 = 25 Piscium																											
							3515 is double: ** 7.0 7.0 0.050"																											
							3515 has been reported as non-instantaneous (OCc1650). Observations are highly desired																											
26	Aug	30	23	27	57.8	r	109306	F5	7.8	7.5		91-	146		61	131	80S	233	275	255	-4.7	-4.1	+1.6	+1.8	.399	175.1		0	36	3.7		7	9	22	375.2	729.6
26	Aug	31	2	46	16.1	r	109354	kF5	7.3	7.1		91-	145		58	237	71N	261	212	283	-5.3	-4.5	+2.3	-0.2	.342	150.9		0	39	42.6		8	7	22	375.0	711.1
26	Aug	31	20	54	53.4	r	197	cK0	7.0	6.5		85-	134		23	87	68N	266	331	287	-3.9	-4.8	+0.6	+1.1	.461	150.7		1	21	58.3		12	36	15	375.7	962.7
26	Sep	1	22	34	52.8	r	336	F0	7.4	7.3	v	75-	120		36	87	81N	258	326	276	-3.3	-5.8	+0.9	+1.3	.471	159.8		2	17	45.4		18	27	18	371.6	905.0
							336 = AD Ari, 7.39 to 7.48, V, Type ELL, Period 0.53972 days, Phase 73%																											
26	Sep	2	3	49	11.3	r	92940	cK0	7.9	7.4		74-	119	-10	71	246	74S	233	174	251	-4.1	-6.4	+2.0	+1.3	.372	-171.6		2	25	39.8		19	33	16	368.7	673.3
							92940 is double: ** 8.0 10.4 0.040" 69.0, dT = +0.1sec																											
							92940 has been reported as non-instantaneous (OCc1705). Observations are highly desired																											
26	Sep	2	22	30	1.9	r	470	WK0	6.8	6.2		65-	107		25	76	71N	273	341	288	-2.4	-6.2	+0.6	+0.9	.485	151.1		3	14	17.2		22	57	14	370.3	994.1
							470 is double: AB 6.9 10.4 42" 33.3, dT = +44sec																											
26	Sep	2	23	45	48.1	r	75832	K0	7.3	6.6		65-	107		41	83	81S	244	316	259	-2.5	-6.3	+0.7	+1.6	.491	177.6		3	16	57.0		23	7	36	368.7	879.4
26	Sep	3	1	48	56.7	r	483	SA5	7.5			64-	106		67	96	73N	271	344	286	-2.7	-6.5	+2.3	+0.5	.357	150.7		3	20	21.2		23	41	21	366.8	729.2
							483 is quadruple: AB 7.62 9.90 2.77" 315.8, dT = -6sec : AB,D 7.6 14.8 25.8" 251.6, dT = -68sec : AC 7.6 14.0 61" 286.7, dT = -164sec																											
							483 is a close double. Observations are highly desired																											
26	Sep	5	1	45	42.1	r	812	SF8	8.0			41-	79		42	77	15S	193	269	197	-0.3	-6.0	-1.1	+5.0	.203	-115.1		5	27	1.3		27	36	37	365.2	845.1

Occultation prediction for Teide Observatory Canary Islands
E. Longitude 16 18 39.8, Latitude 28 28 31.6, Alt. 3000m; Telescope dia 15cm; dMag 0.0

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      day  Time     P   Star  Sp  Mag  Mag    % Elon Sun  Moon   CA   PA  VA  AA Libration   A    B    RV    Cct durn  R.A. (J2000)  Dec   Mdist   SV
 y   m  d  h  m    s       No  D    v    r V  ill     Alt Alt Az   o    o   o   o   L    B   m/o m/o  "/s     o  sec  h  m    s    o  m  s   Mm    m/s
       812 is triple: AB 8.71 8.61 0.59" 277.1, dT = -0.31sec : AB,C 7.9 13.2 27.0" 277.8, dT = -12sec
       812 is a close double. Observations are highly desired
26 Sep  5  3 54  0   r   77224cF8  7.4  7.1   40-  79 -10 69  86   4S 182 265 186 -0.6 -6.1 +9.9+9.9 .065  -99.5      5 31 22.8  27 46  9 363.4 692.4
     77224 is double: ** 8.3 8.3 0.10"  90.0, dT = +0.06sec
     77224 has been reported as non-instantaneous (OCc 194). Observations are highly desired
26 Sep  6  0 44 42.9 R     994cF5  6.6  6.3   30-  67     16  68  34S 219 285 217 +1.0 -5.1 -0.7+2.5 .390 -132.7      6 28 56.4  26 58  3 366.71024.3
       994 is double: ** 6.8 7.7 0.003" 269.0, dT = 0.00sec
26 Sep  6  2 56 35.3 r   78501 K0  7.8  7.3   29-  66     43  78  38S 223 299 220 +0.9 -5.2 +0.4+3.0 .323 -134.7      6 33 58.0  27  2 41 364.1 811.8
26 Sep  6  4 25 12.3 r    1013cG0  7.0        29-  65  -3 62  85  88N 278 358 274 +0.7 -5.2 +2.0+0.3 .401  175.3      6 36 26.3  27 16 42 362.8 708.2
      1013 is double: AB 7.14 8.97 0.68" 270.1, dT = -1.7sec
      1013 is a close double. Observations are highly desired
26 Sep  7  1 48  8.4 R   79521cG2  7.4  7.0   20-  53     16  70  44N 328  34 320 +2.2 -3.9 +1.1-1.4 .333  126.2      7 34 50.4  24 57 16 366.51000.8
     79521 is double: ** 8.8 8.8 0.050"
     79521 has been reported as non-instantaneous (OCc1366). Observations are highly desired
26 Sep  7  2 18 13.9 r   79535 K0  8.3  7.8   19-  52     22  73  52N 320  28 312 +2.2 -3.9 +1.1-1.0 .378  135.0      7 35 54.9  24 54 24 365.9 949.8
26 Sep  7  5 37  4.4 d    1170dG8  3.6  3.1   18-  51  13 63  92 -88S 104 179  95 +1.9 -3.9 +2.1+0.0 .398    0.9      7 44 26.8  24 23 53 362.6 700.7
   R1170 = kappa Geminorum
      1170 is double: AB 3.7 10.0 7.3" 241.1, dT = -13sec
      1170 is a close double. Observations are highly desired
26 Sep  7  7  1 54.7 R    1170dG8  3.6  3.1   18-  50  31 82 116  81N 292 352 283 +1.6 -3.8 +2.3-0.9 .383  179.1      7 44 26.8  24 23 53 362.0 672.5
   R1170 = kappa Geminorum
      1170 is double: AB 3.7 10.0 7.3" 241.1, dT = -12sec
      1170 is a close double. Observations are highly desired
26 Sep  8  2 16 58.1 r   80269kF0  8.4  8.3   11-  39      8  71  65S 262 325 249 +3.3 -2.5 -0.1+1.1 .547 -160.1      8 35 17.8  20 33 53 368.01037.6
26 Sep  8  3 12 45.3 R   80294kF8  8.0  7.7   11-  38     20  77  72S 269 335 256 +3.3 -2.5 +0.4+1.0 .515 -165.7      8 37 26.4  20 29 14 366.8 944.7
26 Sep 14  9 39 40.8 D Venus      -4.7 -4.7   12+  41  60 21 124  37S 165 218 149 +5.9 +6.4 -0.3-2.1 .308  -43.2     13 52 33.4 -17  2 35 389.2 797.8
   Venus contacts: Bright limb  9 38 41; Cusp  9 40 26; Dark limb  9 40 41: diam = 37.0"; %illum = 29.2%; PA bright limb = 296.5
26 Sep 14 10 36 28.9 R Venus      -4.7 -4.7   12+  41  65 31 135 -58S 263 305 245 +5.8 +6.5 +2.4+1.3 .281 -136.9     13 52 33.4 -17  2 35 388.4 726.6
   Venus contacts: Bright limb 10 35 23; Cusp 10 37  5; Dark limb 10 37 35: diam = 37.0"; %illum = 29.2%; PA bright limb = 296.5
26 Sep 16 18 49  4.1 d  183789kA2  7.8  7.7   30+  67     13 231  46N  62  12  49 +2.8 +7.5 +0.8-0.1 .318   33.0     15 47 23.3 -25 52  4 399.3 733.8
26 Sep 16 19  3 56.5 D    2256PA1  7.0  6.9   30+  67     10 233  73N  89  37  76 +2.7 +7.5 +1.0-1.0 .388    5.5     15 47 56.5 -25 59 13 399.6 755.2
      2256 is double: ** 7.7 7.7 0.10"  90.0, dT = +0.26sec
      2256 has been reported as non-instantaneous (OCc1482). Observations are highly desired
26 Sep 17 16 16 19   Gr   2383cB0  2.8  2.9   39+  77   8 32 ** GRAZE: CA  0.1S; Dist. 49km in az.   9deg. [Lat = 28.93-0.15(E.Long-16.31)]
26 Sep 17 16 16 33   M    2383cB0  2.8  2.9   39+  77   8 33 188   0S 189 181 181 +2.3 +7.4 +9.9+9.9 .000  -90.0     16 35 53.0 -28 12 58 399.4 564.9
   R2383 = tau Scorpii
      2383 is double: AB 2.9 5.8       71.0
   Distance of 2383 to Terminator = 1.4"; to 3km sunlit peak = 0.0"
26 Sep 17 19 34  1.6 d    2397 K1  6.5  5.9   40+  78     13 228  33N  42 354  34 +1.6 +7.3 +0.3+0.8 .270   44.3     16 41 37.6 -27 48 35 401.7 735.1
26 Sep 19 20  7 13.4 d  186903 K4  7.7  6.8   59+ 100     23 217  75N  71  34  73 -1.0 +6.0 +1.5-0.2 .350   -0.1     18 30 53.7 -27 57  6 401.4 681.4
26 Sep 20 18 30 34.4 d    2824 K4  7.3  6.5   68+ 111     36 183  58N  49  46  55 -1.8 +5.2 +2.2+1.2 .282   20.1     19 21 44.2 -26  9 59 398.8 581.7
26 Sep 22 17 41 31.8 d  164087 K1  7.0  6.3   84+ 133 -12 33 142  83S  78 113  94 -3.5 +2.7 +2.3+1.2 .327  -15.3     21  2 45.2 -19 14 56 393.1 646.4
26 Sep 23 20 17  1.3 D    3206 F3  5.1  4.9s  91+ 145     48 172  26N   5  12  23 -4.7 +1.0 +0.4+3.0 .244   45.2     21 53 17.8 -13 33  6 387.2 652.0
   R3206 = Kuh = mu Capricorni
      3206 = NSV 25781, 5.07, range 0.03, V, Type VAR:
26 Sep 24  0  6 11.6 d  164779KG5  7.2  6.8   92+ 146     26 237  57N  36 347  55 -5.4 +0.5 +0.5+1.0 .417   16.4     21 58 24.3 -12 39 53 388.4 819.3
26 Sep 25 20 32  8.7 D    3459 K0  6.4  5.8   99+ 170     52 139  85S  79 115 101 -5.0 -2.0 +2.4+1.1 .335  -31.1     23 29 27.0 - 1 47 28 377.9 718.1
   R3459 = 11 Piscium
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Occultation prediction for Teide Observatory Canary Islands
E. Longitude 16 18 39.8, Latitude 28 28 31.6, Alt. 3000m; Telescope dia 15cm; dMag 0.0

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      day  Time     P   Star  Sp  Mag  Mag    % Elon Sun  Moon   CA   PA  VA  AA Libration   A   B   RV    Cct durn  R.A. (J2000)  Dec   Mdist   SV
 y   m  d  h  m    s       No  D    v    r V  ill     Alt Alt Az   o    o   o   o   L    B   m/o m/o  "/s     o  sec  h  m   s    o  m  s   Mm   m/s
   Distance of 3459 to Terminator = 15.5"; to 3km sunlit peak = 5.5"
26 Sep 25 22 53 47.9 D    3467kK1  6.4  5.8   99+ 170     59 202  73N  60  41  82 -5.4 -2.4 +2.0+1.0 .374  -13.7     23 31 57.6 - 1  5  9 377.0 703.5
   R3467 = 13 Piscium
   Distance of 3467 to Terminator = 12.5"; to 3km sunlit peak = 3.5"
26 Sep 29  2 44 34.1 R     311cA3  6.6  6.5e  93- 149     58 259  67N 265 200 284 -3.7 -6.1 +2.1-0.5 .373  157.9      2  7 46.0  18  1 46 366.6 716.1
      311 is double:  6.7 9.1
      311 = HIP 9924, 6.612, range 0.04, 7w, Type E, Period 2.575 days, Phase  38%
26 Sep 29 22  2  4.8 R     438cA3  6.8        87- 138     45  87  44S 202 273 218 -1.8 -6.2 +0.0+2.7 .384 -142.2      2 58 53.1  21 37  4 366.2 862.9
      438 is double: AB 7.47 7.45 0.54" 279.4, dT = -0.31sec
      438 is a close double. Observations are highly desired
26 Sep 30  0 39 15.8 r    75699 F5  7.9  7.7   86- 136     78 118  84N 255 312 270 -2.1 -6.4 +2.2+1.0 .386  166.4      3  2 27.4  22 22 25 364.3 700.8
26 Sep 30 21 16 33.1 r    76345kG8  7.5  7.0   78- 125     24  73  72N 273 342 284 -0.6 -6.2 +0.5+0.8 .513  155.2      3 57 11.8  25 16 58 367.01006.1
26 Oct  1  1 54 15.2 r      603 F8  7.6  7.3   77- 123     83 106  47N 299  10 310 -1.0 -6.6 +3.2-1.8 .257  132.2      4  6  4.6  26 12 42 363.2 673.3
26 Oct  1  4 42  1.2 R      616 F2  5.4  5.2v  76- 122  -2 60 275  37N 309 230 320 -1.5 -6.6 +1.6-3.0 .281  134.4      4 10 49.9  26 28 51 363.9 710.0
   R616 = 44 Tauri (IM)
      616 = IM Tau, 5.33 to 5.46, V, Type DSCT, Period 0.14497 days, Phase  24%
26 Oct  1 22 36 34   m      756 F0  6.6  6.5   68- 111     29  72   8N 345  56 351 +0.7 -5.9 +9.9+9.9 .000   90.0      5  4 38.0  27 41 46 366.3 954.5
26 Oct  2  1 32 59.2 R      773wF8  7.0  6.7   67- 109     66  85  53S 227 309 232 +0.4 -6.2 +1.3+2.5 .344 -148.5      5 10  3.9  27 33 23 363.5 711.3
      773 is double: AB 7.0 9.3 315" 353.1, dT = +541sec
26 Oct  3  1 31 14   m      952 K2  8.0  7.2   55-  96     52  80   5N 357  75 356 +1.7 -5.4 +9.9+9.9 .000   90.0      6 15 54.8  27 51 42 364.7 759.8
26 Oct  3  4 27 31.9 r    78234 A0  8.2  8.2   54-  95  -5 89 162  58S 240 258 239 +1.2 -5.3 +2.8+1.8 .290 -141.6      6 20  4.5  27 23  6 363.5 652.0
26 Oct  3 23  6 24.1 r     1094 A0  7.1  7.1   45-  84      9  66  60N 308  11 302 +2.9 -4.2 +0.4-0.2 .474  143.3      7 12 49.4  25 44 55 369.51058.7
   R1094 = 49 Geminorum
26 Oct  5  2 38 56.4 r    80119 G5  8.1  7.7   32-  69     40  84  40N 335  45 323 +3.7 -2.9 +1.7-2.4 .286  129.9      8 21  4.9  22  1 54 368.0 796.6
26 Oct  5  3  5  0.9 R     1253cK0  7.3  6.8   32-  69     45  87  65N 310  21 297 +3.7 -2.8 +1.6-0.8 .393  156.6      8 21 28.1  21 54 34 367.6 764.3
      1253 is double: ** 8.2 8.2 0.10"  90.0, dT = +0.2sec
      1253 has been reported as non-instantaneous (OCc 236). Observations are highly desired
26 Oct  5  4 12 19.3 r    80149 K2  8.6  7.8   32-  68  -9 59  95  47N 327  38 315 +3.5 -2.8 +1.8-2.2 .317  143.4      8 23 37.3  21 49 16 366.7 701.8
26 Oct  6  3 17 17.9 r     1379 A0  8.4  8.3e  22-  56     34  89  56S 255 322 239 +4.5 -1.3 +1.1+1.8 .364 -143.1      9 17 38.1  16 42 18 370.4 817.9
      1379 = GO Cnc, 8.4 to 8.66, Hp, Type EA, Period 3.6502 days, Phase  82%
26 Oct 16 16 52 35.3 d  186286 B7  7.1  7.1   32+  68  -7 29 203  82N  83  60  83 -0.3 +6.3 +2.4-0.3 .308   -6.2     18  6 45.8 -28 21 50 401.5 602.5
26 Oct 16 16 53 47.7 d  186281 K0  7.8  7.2   32+  68  -7 29 203  57S 125 101 124 -0.3 +6.3 +3.5-2.2 .209  -47.7     18  6 36.0 -28 31 56 401.5 603.8
26 Oct 16 17 57 32.7 D    2617cK0  4.6  4.1   32+  69     22 216  53S 128  92 128 -0.6 +6.2 +3.3-2.8 .202  -54.1     18  8  5.0 -28 27 26 402.2 670.7
      2617 is double: AB 5.1 5.9 0.26"  12.0, dT = -0.6sec
      2617 is a close double. Observations are highly desired
26 Oct 16 18 45 31.5 r    2617cK0  4.6  4.1   32+  69     15 225 -18S 199 154 199 -0.7 +6.1 -0.5+2.1 .220 -125.8     18  8  5.0 -28 27 26 402.9 736.3
      2617 is double: AB 5.1 5.9 0.26"  12.0, dT = +1.2sec
      2617 is a close double. Observations are highly desired
26 Oct 16 19 19 47.6 d  186400 G5  7.8  7.3   32+  69     10 230  88N  89  39  89 -0.8 +6.0 +1.1-1.0 .386  -15.9     18 10 32.2 -28  9 13 403.5 786.1
26 Oct 18 19  3  6.8 D    2907SK3  6.2  5.7v  51+  91     30 212  38N  26 355  36 -3.3 +4.1 +0.6+1.5 .292   33.1     19 54 17.7 -23 56 28 399.3 675.3
      2907 is triple: AC 6.3 16.0 42" 108.0, dT = +21sec : AB 6.3 10.7 48"  23.4, dT = +163sec
      2907 = V4200 Sgr, 6.18, range 0.07, V, Type BY, Period 3.24738 days, Phase   5%
26 Oct 22 17 18  0.5 d     3385 F8  6.7  6.4   86+ 136     40 125   5N 344  30   5 -5.7 -1.3 -1.0+5.1 .143   69.0     23  3 57.3 - 4 47 42 381.5 739.4
   Distance of 3385 to Terminator = 3.7"; to 3km sunlit peak = 0.0"
26 Oct 27 19 50 57.8 r    75990cK0  7.5  6.9   96- 156     33  79  82S 238 308 251 -1.1 -6.1 +0.3+1.6 .541 -172.4      3 33 51.4  23 49 52 361.5 956.0
     75990 is double: ** 8.4 8.4 0.10"  85.0, dT = +0.16sec
     75990 has been reported as non-instantaneous (OCc 773). Observations are highly desired
26 Oct 27 21 49  7.7 r      522 G5  7.8  7.1   96- 156     59  89  82S 239 313 252 -1.2 -6.3 +1.2+1.7 .453 -174.1      3 37 43.5  24 15 33 359.4 793.5
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Occultation prediction for Teide Observatory Canary Islands
E. Longitude 16 18 39.8, Latitude 28 28 31.6, Alt. 3000m; Telescope dia 15cm; dMag 0.0

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      day  Time     P   Star  Sp  Mag  Mag    % Elon Sun  Moon   CA   PA  VA  AA Libration   A   B   RV    Cct durn  R.A. (J2000)  Dec   Mdist   SV
 y   m  d  h  m    s       No  D    v    r V  ill     Alt Alt Az   o    o   o   o   L    B   m/o m/o "/s     o  sec  h  m   s    o  m  s   Mm   m/s
26 Oct 27 22 36 19.0 r   76046cA0  7.1  7.1   95- 155     69  94  33N 303  18 316 -1.3 -6.4 +3.5-1.7 .229  122.4      3 39  6.7  24 42 10 358.9 744.7
     76046 is double: AB 7.1           45.0, dT = -9sec
26 Oct 28  1 25 57.7 r   76102 A2  7.5  7.5   95- 154     74 263  40N 297 222 310 -1.7 -6.5 +2.5-2.1 .294  138.0      3 43 43.2  25  4 51 358.6 688.3
26 Oct 28  2  9 40.7 R     538pB8  5.7  5.7   95- 154     64 269  71S 228 152 241 -1.8 -6.5 +2.1+1.5 .354 -150.1      3 45  9.7  24 50 21 358.9 710.3
   R538 = 18 Tauri
       538 is quadruple: Aa,Ab 6.4 6.4 0.10"       : AB 5.6 14.0 72" 128.9, dT = +32sec : AC 5.6 14.8 151" 175.1, dT = -258sec
       538 is a close double. Observations are highly desired
26 Oct 28  3 47 27.4 R     555 K5  6.4  5.6s  95- 153     44 279  80S 238 164 250 -2.0 -6.5 +1.6+0.4 .417 -154.2      3 48  6.5  24 59 18 360.2 809.6
       555 = NSV 1316, 6.44, range 0.02, 0V, Type VAR, Period 1.48987 days
26 Oct 29  0 27 23.9 r   76764cG8  7.9  7.2   89- 141     79  94  32S 199 279 207 +0.3 -6.2 +1.1+5.1 .204 -120.9      4 48 20.4  26 57 59 358.2 687.9
     76764 is double: ** 8.6 8.6 0.10" 160.0, dT = -0.38sec
     76764 has been reported as non-instantaneous (OCc 736). Observations are highly desired
26 Oct 29  4 48  0.1 r   76841cK1  7.3  6.7   88- 139  -4 45 281  78S 246 170 253 -0.3 -6.1 +1.6+0.1 .415 -151.8      4 55 34.6  27 12  9 360.0 822.3
     76841 is double: ** 7.6 10.1 0.08"  82.0, dT = +0.19sec
     76841 has been reported as non-instantaneous (OCc 753). Observations are highly desired
26 Oct 29 22  6  0.7 r   77604 K0  7.0  6.2   81- 128     36  75  81N 275 348 276 +2.2 -5.4 +0.9+0.7 .494  166.7      5 49 38.1  27 33  3 361.5 890.5
26 Oct 29 22 33 15.1 r   77619 F2  7.1  6.9   81- 128     42  77  82S 258 333 260 +2.2 -5.4 +0.9+1.2 .484 -176.3      5 50 39.7  27 30 18 361.0 848.9
26 Oct 29 22 34 20.9 r   77621 M3  7.5  6.6s  81- 128     42  77  60N 297  12 298 +2.2 -5.4 +1.6-0.1 .398  145.4      5 50 48.2  27 41  9 361.0 847.4
     77621 = NSV 16688, 7.47, range 0.02, 6V, Type VAR, Period 4.88496 days
26 Oct 29 22 39 16.5 d     890cA0  4.6  4.6s  81- 128     42  77 -85N  81 157  83 +2.2 -5.4 +1.0+1.1 .481    1.0      5 53 19.6  27 36 44 361.0 842.5
   R890 = 136 Tauri
       890 is double: ** 4.8 6.3 0.050" 270.0, dT = -0.1sec
       890 has been reported as non-instantaneous (OCc 206). Observations are highly desired
       890 = NSV 2696, 4.50 to 4.61, V
26 Oct 29 23 52 25.8 R     890cA0  4.6  4.6s  80- 127     58  83  89S 265 345 266 +2.1 -5.5 +1.7+0.9 .427  179.4      5 53 19.6  27 36 44 359.9 745.7
   R890 = 136 Tauri
       890 is double: ** 4.8 6.3 0.050" 270.0, dT = -0.12sec
       890 has been reported as non-instantaneous (OCc 206). Observations are highly desired
       890 = NSV 2696, 4.50 to 4.61, V
26 Oct 30  1  8 26.1 R   77724 B1  7.0  7.0   80- 127     75  88  76N 280   4 281 +1.9 -5.5 +2.3-0.1 .384  168.8      5 55 40.3  27 42 56 359.3 682.7
26 Oct 30  3  6 33.7 r   77804 A0  7.3  7.1   79- 126     80 268  80S 257 174 258 +1.6 -5.4 +2.5+0.4 .364 -159.7      5 59  5.6  27 33 43 359.3 676.6
26 Oct 30  4 11 58.3 R     909SB9  6.0  5.9s  79- 126     66 275  83N 275 193 275 +1.4 -5.3 +2.0-0.8 .411 -173.3      6  1  0.5  27 34 21 359.8 721.9
       909 is triple: Aa,Ab 6.1 9.2      194.0, dT = 0.00sec : AB 6.1 12.4 9.5" 242.4, dT = -19sec
       909 is a close double. Observations are highly desired
       909 = NSV 16751, 6.04, range 0.01, 2V, Type VAR, Period 9.26012 days
26 Oct 30 23 51 47.7 R    1061SF8  6.2  5.9s  70- 114     44  80  75S 260 335 255 +3.6 -4.4 +1.2+1.3 .443 -167.3      6 58 47.4  26  4 52 362.8 798.1
   R1061 = 39 Geminorum
      1061 is triple: Aa,Ab 6.1      0.50" 158.0, dT = +0.24sec : AB 6.1 12.1 35"  69.2, dT = +77sec
       1061 is a close double. Observations are highly desired
       1061 = NSV 17256, 6.1, range 0.02, V, Type VAR:
26 Oct 30 23 59 11.2 R    1062cB8  6.4  6.5   70- 114     46  81  35S 219 294 214 +3.6 -4.4 +0.5+3.8 .265 -126.2      6 59 27.9  25 54 51 362.7 788.7
   R1062 = 40 Geminorum
      1062 is double: AB 6.4      0.10" 160.2, dT = -0.19sec
       1062 is a close double. Observations are highly desired
26 Oct 31  1  9 25.2 r   78979 G5  8.1  7.6   70- 113     61  86  62N 303  21 298 +3.4 -4.4 +2.1-0.9 .364  153.8      7  1 25.4  26 14  7 361.8 711.4
26 Oct 31  1 32 30.2 r   78998 G5  8.0  7.7e  70- 113     66  90  33S 218 296 212 +3.4 -4.4 +1.9+5.0 .191 -119.0      7  2 23.3  25 50 46 361.6 693.7
     78998 = V0369 Gem, 7.95 to 8.12, V, Type EB, Period 0.423061 days, Phase   1%
26 Oct 31 23 12 52.5 r    1200 K0  6.9  6.4   59- 101     23  75  47N 324  32 314 +4.8 -3.0 +1.2-1.2 .361  134.1      7 59 42.6  23 10 58 367.4 924.7
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Occultation prediction for Teide Observatory Canary Islands
E. Longitude 16 18 39.8, Latitude 28 28 31.6, Alt. 3000m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon	Sun Alt	Moon Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	Nov	1	3	3	10.0	R	1221	cM3	6.0	5.1	v	58-	99		72	104	86N	286	353	275	+4.4	-2.9	+2.3	-0.3	.380	-173.8		8	6	18.4	22	38	8	364.3	674.8
	R1221 = 9 Cancri = BL Cnc.																																		
	1221 is double: AB 6.0 10.1 0.40"																																		
	1221 is a close double. Observations are highly desired																																		
	1221 = BL Cnc, 5.97 to 6.04, V, Type SR																																		
26	Nov	1	3	9	8.6	r	79951	G5	7.8	7.2		58-	99		73	105	46N	326	33	315	+4.4	-2.9	+1.8	-2.4	.316	146.0		8	6	56.2	22	46	31	364.2	673.2
26	Nov	1	3	13	1.9	R	1222	cG5	7.2	6.8		58-	99		74	107	61S	253	318	242	+4.4	-2.9	+2.8	+1.5	.292	-140.1		8	6	34.4	22	27	24	364.2	672.3
	1222 is double: ** 7.2 0.017" 251.9, dT = -0.06sec																																		
	1222 has been reported as non-instantaneous (OCc1381). Observations are highly desired																																		
26	Nov	2	0	2	54.2	R	1340	kA0	6.6	6.6		48-	87		20	80	64S	260	326	245	+5.7	-1.5	+0.3	+1.4	.459	-153.9		8	58	18.3	18	18	30	370.9	918.7
26	Nov	2	0	20	46.2	R	1343	M4	6.3	5.5	v	47-	87		24	81	32S	229	295	214	+5.7	-1.5	+0.1	+3.7	.260	-121.6		8	59	10.7	18	8	6	370.6	891.3
	1343 = FZ Cnc, 6.28 to 6.38, Hp, Type SRB, Period 17.6 days																																		
26	Nov	2	4	17	6	m	1353	kA2	8.1	8.0		46-	86	-11	73	126	15S	212	260	196	+5.1	-1.3	+9.9	+9.9	.000	-90.0		9	5	45.5	17	23	24	367.6	678.3
	R1353 = 71 Cancri																																		
26	Nov	2	23	54	28.0	r	1449	M0	6.5	5.6	s	37-	74		5	78	85N	295	357	276	+6.2	+0.0	+0.1	+0.1	.552	175.4		9	51	2.0	13	3	58	375.9	1010.5
	R1449 = 23 Leonis																																		
	1449 = NSV 18283, 6.45, range 0.00, 6V, Type VAR, Period 2.82446 days																																		
26	Nov	3	2	42	4.4	d	1466	cB9	5.3	5.3		36-	73		40	98	-63N	83	146	64	+6.1	+0.2	+1.6	+1.4	.346	36.2		9	58	13.4	12	26	41	372.8	776.3
	R1466 = nu Leonis																																		
	1466 is double: ** 6.0 6.0 0.050"																																		
	1466 has been reported as non-instantaneous (OCc1407). Observations are highly desired																																		
26	Nov	3	3	43	0.7	R	1466	cB9	5.3	5.3		35-	73		53	109	41N	339	38	320	+5.9	+0.2	+1.1	-2.5	.323	143.8		9	58	13.4	12	26	41	372.0	721.3
	R1466 = nu Leonis																																		
	1466 is double: ** 6.0 6.0 0.050"																																		
	1466 has been reported as non-instantaneous (OCc1407). Observations are highly desired																																		
26	Nov	4	2	55	38.1	R	1567	kK1	6.4	5.8		25-	61		31	100	76S	278	338	257	+6.4	+1.7	+1.2	+0.7	.412	-156.1		10	46	5.7	6	22	23	377.2	823.8
	R1567 = 37 (Sextantis)/Leonis																																		
26	Nov	4	3	35	44.7	R	1573	pA2	7.1	7.0		25-	60		39	106	72N	309	8	288	+6.3	+1.8	+1.2	-0.7	.425	174.8		10	47	19.2	6	20	46	376.6	779.3
	R1573 = 38 (Sextantis)/Leonis																																		
26	Nov	6	4	32	31.2	R	138754	KF8	7.2	6.9		9-	36	-9	26	113	42N	336	31	314	+6.3	+4.6	+0.3	-1.6	.391	150.3		12	23	27.6	- 6	7	8	384.9	840.9
26	Nov	7	3	43	17.0	r	1885	K2	7.3	6.7		4-	24		4	106	83N	290	351	269	+6.1	+5.5	+0.2	+0.3	.507	-168.9		13	8	27.9	-11	45	46	390.6	978.6
26	Nov	12	17	3	1.5	d	185786	K0	8.3	7.7		10+	38		12	228	90S	98	49	96	-0.1	+6.2	+1.4	-1.2	.364	-21.9		17	48	50.9	-28	14	46	403.8	767.4
26	Nov	13	16	48	2.3	d	187141	B2	8.3	8.3		17+	48	-10	22	218	54S	126	88	129	-1.4	+5.3	+3.4	-3.0	.192	-57.3		18	41	47.6	-27	26	41	403.2	694.4
26	Nov	13	18	58	27.3	D	2721	cB8	3.2	3.2		17+	49		2	238	88S	91	34	95	-1.7	+5.1	+0.6	-1.1	.419	-22.1		18	45	39.4	-26	59	27	405.4	888.7
	R2721 = phi Sagittarii																																		
	2721 is double: 3.1 0.8" 269.5, dT = -1.9sec																																		
	2721 is a close double. Observations are highly desired																																		
26	Nov	14	18	21	15.0	D	2861	cA1	5.6	5.5	v	25+	60		18	228	57N	49	3	57	-3.0	+4.1	+0.6	+0.4	.385	12.7		19	36	1.7	-24	43	9	403.1	771.9
	R2861 = 51 Sagittarii																																		
	2861 is double: ** 5.9 7.9																																		
	2861 = V5548 Sgr, 5.82, range 0.04, B, Type DSCTC:, Period 0.11340 days																																		
26	Nov	14	18	38	37.1	D	2864	dB8	4.6	4.6		25+	60		15	230	69S	103	55	112	-3.0	+4.1	+1.7	-1.7	.307	-41.1		19	36	42.4	-24	53	1	403.4	797.1
	R2864 = 52 Sagittarii																																		
	2864 is double: AB 4.7 9.2 2.3" 175.8, dT = +2.3sec																																		
	2864 is a close double. Observations are highly desired																																		
26	Nov	15	17	54	43.2	d	189269	K0	8.5	7.9		33+	70		31	216	85S	83	48	95	-4.2	+2.9	+2.1	-0.5	.321	-26.5		20	25	33.2	-21	39	40	400.1	695.2
26	Nov	15	20	34	23.5	d	2988	A1	7.1	7.0		34+	71		5	243	44N	30	333	43	-4.6	+2.6	-0.3	+1.0	.404	30.1		20	29	0.3	-20	54	5	402.6	911.8
26	Nov	16	18	11	50.8	d	164228	K5	8.1	7.2		42+	81		38	212	43S	120	90	136	-5.4	+1.6	+5.4	-3.9	.132	-68.3		21	13	47.5	-17	33	57	396.5	683.4

Occultation prediction for Teide Observatory Canary Islands
E. Longitude 16 18 39.8, Latitude 28 28 31.6, Alt. 3000m; Telescope dia 15cm; dMag 0.0

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      day  Time     P   Star  Sp  Mag  Mag    % Elon Sun  Moon   CA   PA   VA   AA Libration    A    B    RV    Cct durn  R.A. (J2000)  Dec   Mdist   SV
 y   m  d  h  m   s       No  D    v    r V  ill     Alt Alt Az   o    o    o    o   L    B   m/o m/o  "/s     o  sec  h  m   s    o  m  s   Mm   m/s
26 Nov 16 19 24  6   D    3105 K0  6.1  5.5S  43+  82      27 229  26S 137  93 153 -5.7 +1.4 +9.9+9.9 .045  -83.5 .02 21 15  6.6 -17 20 43 397.3 760.9
      3105 = NSV 25528, 6.04, , Type VAR:
26 Nov 16 19 29 10   Gr   3105 K0  6.1  5.5S  43+  82      26 ** GRAZE: CA 19.5S; Dist. 11km in az. 144deg. [Lat = 28.35+0.65(E.Long-16.31)]
26 Nov 16 19 33 55   R    3105 K0  6.1  5.5S  43+  82      26 230  13S 150 105 166 -5.7 +1.4 +9.9+9.9 .045  -96.5 .02 21 15  6.6 -17 20 43 397.4 771.8
      3105 = NSV 25528, 6.04, , Type VAR:
26 Nov 17 16 32  0.7 D  164779KG5  7.2  6.8   52+  92  -7 48 167  61N  41  53  60 -6.0 +0.4 +1.8+1.8 .329    8.9     21 58 24.3 -12 39 53 391.9 633.1
26 Nov 18 19  5 45.6 d    3341 F0  7.9  7.7   62+ 104      51 210  62S  96  70 117 -7.2 -1.4 +3.5-1.0 .238  -49.5     22 47 22.3 - 6 43 49 386.1 686.6
26 Nov 19 17 30 40.8 D    3467kK1  6.4  5.8   72+ 116      57 150  73S  85 111 107 -7.2 -2.5 +2.9+0.7 .296  -37.6     23 31 57.6 - 1  5  9 380.2 689.2
   R3467 = 13 Piscium
26 Nov 21 20  4 32   m   92318cG0  7.9  7.6   89+ 142      74 179  22S 141 142 162 -6.6 -5.2 +9.9+9.9 .000  -90.0      1 13  8.9  11 40 58 366.6 704.2
     92318 is double: ** 7.9      0.015" 112.3
     92318 has been reported as non-instantaneous (OCc1158). Observations are highly desired
26 Nov 23 23 50 59.7 d     470WK0  6.8  6.2   99+ 170      64 265  68S 125  52 140 -4.1 -6.5 +2.3-3.1 .257  -51.8      3 14 17.2  22 57 14 356.8 718.2
      470 is double: AB 6.9 10.4 42"  33.3, dT = -4sec
   Distance of 470 to Terminator = 13.4"; to 3km sunlit peak = 4.1"
26 Nov 24  1 16 34.5 d   75832 K0  7.3  6.6   99+ 170      46 275  74S 120  48 135 -4.2 -6.5 +1.2-2.4 .340  -42.1      3 16 57.0  23  7 36 357.7 796.3
   Distance of 75832 to Terminator = 13.0"; to 3km sunlit peak = 3.9"
26 Nov 26 20 49  4.6 R     994cF5  6.6  6.3   92- 147      35  75  45N 312  25 310 +2.7 -4.6 +1.5-0.8 .369  135.1      6 28 56.4  26 58  3 356.6 901.2
      994 is double: ** 6.8 7.7 0.003" 269.0, dT = -0.01sec
26 Nov 27 22 11 45.1 R    1155 F0  6.4  6.2   84- 133      38  80  21N 346  58 338 +4.5 -3.3 +2.4-4.7 .178  111.5      7 38 14.4  24 21 38 358.9 845.7
26 Nov 27 22 58  2.7 R    1157 A2  6.2  6.2   84- 133      47  84  55N 313  26 304 +4.4 -3.3 +1.7-1.1 .381  147.5      7 39 12.0  24 13 21 358.2 784.4
26 Nov 28  3 14 22.3 r   79679 B9  7.7  7.7   83- 131      76 254  84N 284 217 275 +3.8 -3.0 +2.1-1.0 .408 -168.2      7 46 10.3  23 32 55 357.3 721.9
26 Nov 28  3 31  2.9 r   79688 K0  7.5  7.0   83- 131      72 259  41N 328 257 318 +3.8 -3.0 +1.0-2.7 .364  149.2      7 47  9.0  23 39 49 357.5 734.3
26 Nov 28  4 39 13.1 R    1178SG2  6.3     S  82- 130 -11 58 269  69S 258 185 249 +3.6 -2.8 +2.2-0.2 .355 -140.4      7 48 33.6  23  8 27 358.3 801.5
   R1178 = 82 Geminorum
      1178 is quadruple: AB 6.85 7.30 0.25"  19.0, dT = +0.36sec : AB,C 5.6 13.5 4.1"  36.0, dT = +9sec : AB,D 5.6 12.0 66"  25.0, dT = +112sec
      1178 is a close double. Observations are highly desired
      1178 = NSV 17606, 6.18, , Type VAR:
26 Nov 28 22 36  8.0 r   97999pF0  7.4  7.3S  74- 119      29  82  54S 248 316 234 +5.9 -1.8 +0.6+2.0 .395 -142.5      8 39  6.1  19 40 37 363.6 876.8
     97999 is triple: AB 7.5 9.6 57"  84.0, dT = +140sec : AC 7.5 9.4 179" 345.0, dT = +55sec
      97999 = NSV 4163, 7.45,
26 Nov 28 22 47 21.6 R    1295pK0  6.4  5.9s  74- 119      31  83  37N 337  46 324 +5.9 -1.8 +1.4-2.3 .305  128.6      8 40  6.4  20  0 28 363.4 860.7
   R1295 = 39 Cancri
      1295 is multiple: AC 6.5 9.0 134" 309.0, dT = -387sec : AD 6.5 8.8 135" 111.0, dT = +306sec : AB 6.5 6.6 152" 149.9, dT = +495sec : AS 6.5 10.1
262" 325.7, dT = -842sec
      1295 = NSV 4179, 6.39, range 0.04, V
26 Nov 28 22 48  3.4 r    1293pK0  6.8     s  74- 119      31  83  25S 219 287 206 +5.9 -1.8 +0.2+5.3 .191 -113.0      8 39 50.7  19 32 27 363.4 860.1
      1293 is multiple: Da,Db 6.67 9.87 0.50" 252.6, dT = -2.2sec : DE 6.7 11.8 35"   3.1, dT = +150sec : DA 6.7 7.3 92"  61.0, dT = +446sec : DC 6.7
7.5 100"  89.1, dT = +335sec
      1293 has been reported as non-instantaneous (S   571). Observations are highly desired
      1293 = NSV 4171, 6.52 to 6.61, V
26 Nov 28 22 53 28.0 r   98014pA0  7.5  7.3s  74- 119      32  84  29S 223 291 210 +5.9 -1.8 +0.4+4.6 .219 -116.9      8 39 57.8  19 32 29 363.3 852.2
     98014 is quadruple: ** 8.8 8.8           : CA 7.5 7.3 46" 337.0, dT = +84sec : CD 7.5 6.7 100" 269.1, dT = -317sec
     98014 = NSV 4174, 7.53, range 0.01, V
26 Nov 28 22 54 40.0 r    1294pA0  7.3  7.2S  74- 119      33  84  33S 227 296 214 +5.9 -1.8 +0.5+3.9 .249 -121.0      8 39 56.5  19 33 11 363.3 850.5
      1294 is quadruple: AB 7.3 12.3 0.8" 289.8, dT = -1.5sec : AC 7.3 7.5 46" 157.0, dT = -62sec : AD 7.3 6.7 92" 241.0, dT = -359sec
      1294 has been reported as non-instantaneous (S   571). Observations are highly desired
      1294 = NSV 4175, 7.32,
```

Occultation prediction for Teide Observatory Canary Islands
E. Longitude 16 18 39.8, Latitude 28 28 31.6, Alt. 3000m; Telescope dia 15cm; dMag 0.0

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      day  Time     P   Star  Sp  Mag  Mag    % Elon Sun  Moon   CA   PA   VA  AA Libration    A    B    RV    Cct durn  R.A. (J2000)  Dec   Mdist   SV
 y   m  d  h  m    s       No  D     v    r V  ill     Alt Alt Az   o    o    o   o   L    B   m/o m/o  "/s     o  sec  h  m    s    o  m  s   Mm   m/s
26 Nov 28 22 54 56.3 R    1296pA1  6.6  6.6   74- 119     33  84  46N 328  37 315 +5.9 -1.8 +1.3-1.6 .359  138.1      8 40 11.5  19 58 16 363.2 849.8
   R1296 = 40 Cancri
      1296 is quadruple: Ba,Bb 6.6      0.40" 128.0, dT = +1sec : BR 6.6 11.6 140" 146.9, dT = +391sec : BA 6.6 6.5 152" 329.9, dT = -423sec
      1296 is a close double. Observations are highly desired
26 Nov 28 22 56 36.5 R    1292kF0  6.7  6.5v  74- 119     33  84  85S 279 348 266 +5.9 -1.8 +1.0+0.6 .477 -172.9      8 39 42.7  19 46 42 363.2 847.2
   R1292 = 38 Cancri (BT)
      1292 = BT Cnc, 6.66, range 0.06, V, Type DSCTC, Period 0.10228 days
26 Nov 28 23  6 25.4 r   98018pA0  7.5  7.4   74- 119     35  85  35S 229 298 216 +5.9 -1.8 +0.7+3.8 .251 -122.1      8 40 18.1  19 31 55 363.1 834.2
     98018 is double: BA 7.5 6.3 134"  70.1, dT = +498sec
26 Nov 28 23 14  8.9 R    1299pA*  6.3  6.2   74- 119     37  86  43S 237 306 224 +5.9 -1.8 +0.9+2.9 .299 -129.7      8 40 27.0  19 32 41 362.9 823.8
   R1299 = epsilon Cancri
      1299 is double: AB 6.3 7.5 134" 250.1, dT = -437sec
26 Nov 28 23 16 52.9 r   98020pA0  7.6  7.5e  74- 119     38  86  75S 270 339 256 +5.9 -1.8 +1.1+1.0 .444 -162.3      8 40 20.7  19 41 12 362.9 819.9
     98020 is quadruple: ** 9.1 9.1 0.050"       : CA 7.6 6.5 64" 163.1, dT = +42sec : CD 7.6 9.2 76"  91.1, dT = +171sec
      98020 has been reported as non-instantaneous (OCc1392). Observations are highly desired
      98020 = HD 73709, 7.69 to 7.76, V, Type EA, Period 7.22015 days, Phase  46%
26 Nov 28 23 17 28.5 R    1298pK0  6.4  5.9E  74- 119     38  86  72S 267 335 253 +5.9 -1.8 +1.1+1.1 .435 -159.1      8 40 22.1  19 40 12 362.9 819.1
      1298 is multiple: AE 6.5 12.5 15.7" 154.8, dT = +13sec : AB 6.4 10.4 20.8"  55.1, dT = +41sec : AC 6.5 7.6 64" 343.1, dT = -34sec : AD 6.5 9.2
84"  44.0, dT = +141sec
      1298 = HD 73710, 6.42, , Type EA, Period 7.22030 days, Phase  14%
26 Nov 28 23 28  1.1 R    1302pA9  6.8  6.7   74- 119     40  87  88S 282 351 269 +5.9 -1.8 +1.3+0.4 .456 -174.1      8 40 43.2  19 43 10 362.7 805.6
   R1302 = 42 Cancri
      1302 is double: ** 7.5 7.5 0.050"
      1302 has been reported as non-instantaneous (OCc1393). Observations are highly desired
26 Nov 28 23 34 52.5 R    1303kA6  6.8  6.7v  74- 119     41  88  62S 256 325 243 +5.9 -1.7 +1.3+1.6 .384 -147.8      8 40 56.3  19 34 49 362.6 797.4
      1303 = EP Cnc, 6.76, range 0.03, V, Type DSCTC
26 Nov 28 23 43 13.3 R    1305pK0  6.9  6.4   74- 119     43  89  39N 335  44 322 +5.9 -1.7 +1.5-2.3 .310  133.8      8 41 50.1  19 52 27 362.5 787.7
      1305 is double: Ea,Eb 7.2 9.1
26 Nov 29  0  9 16.4 r   98053kA7  7.9  7.8v  74- 118     49  92  43S 237 306 224 +5.8 -1.7 +1.7+3.2 .257 -126.5      8 42  6.5  19 24 41 362.1 759.8
     98053 = BX Cnc, 7.96, range 0.02, V, Type DSCTC, Period 0.04412 days
26 Nov 29  2 36  9.7 r   98100kA*  8.0  7.9   73- 118     78 139  58S 253 291 239 +5.4 -1.5 +3.3+1.4 .266 -132.4      8 45 46.5  19  2 58 361.1 690.3
26 Nov 29  5  8 42.5 R    1322kA2  6.4  6.4   72- 117  -5 62 256   7N   8 304 354 +5.0 -1.2 -1.3-5.0 .194  116.1      8 50 45.1  18 49 56 362.2 773.1
26 Nov 29 23 10 42.7 R    1415WA1  6.3  6.3   63- 106     23  86  78S 277 342 260 +7.0 -0.1 +0.6+0.7 .485 -165.3      9 35 52.9  14 22 47 368.9 896.0
   R1415 = 7 Leonis
      1415 is double: AB 6.3 9.4 41"  90.5, dT = +84sec
26 Nov 30  0 11  7.6 R    1420 F2  6.6  6.4   63- 105     36  92  64N 315  20 297 +6.9 -0.1 +1.1-0.9 .430  160.4      9 38  1.3  14 20 50 367.8 813.9
   R1420 = 11 Leonis
26 Nov 30  4 12  0.8 R   98730 K0  7.1  6.4   62- 104     75 188  73N 306 299 288 +6.3 +0.3 +1.9-1.6 .394 -177.7      9 43 36.4  13 26 31 366.2 700.7
26 Dec  1  5 19 15.2 r  118389 K0  7.8  7.3   50-  90  -3 68 198  89S 291 275 271 +6.8 +2.1 +2.3-1.1 .362 -158.6     10 36  5.1   7  2 11 371.7 700.9
26 Dec  2  0  4 40.0 R    1635cM0  5.2  4.4   41-  80      9  92  60S 262 324 241 +7.9 +3.0 +0.3+1.4 .421 -143.7     11 17 17.4   2  0 38 380.6 963.5
   R1635 = 75 Leonis
      1635 is double: ** 5.8 6.6 0.044"   0.0
      1635 has been reported as non-instantaneous (OCc 763). Observations are highly desired
26 Dec  2  0 43 19   Gr    1637 K0  5.9  5.4   41-  80     17 ** GRAZE: CA  8.0S; Dist. 62km in az.   8deg. [Lat = 29.04-0.13(E.Long-16.31)]
26 Dec  2  0 43 20   M     1637 K0  5.9  5.4   41-  80     16  97   8S 211 272 189 +7.8 +3.0 +9.9+9.9 .000  -90.0     11 18 55.0   1 39  1 379.8 908.4
   R1637 = 76 Leonis
26 Dec  2  3 24 28   m     1652cG8  5.4  4.9   40-  78     49 125 -17N  40  86  18 +7.5 +3.3 +9.9+9.9 .000   90.0     11 24  2.3   1 24 28 377.4 732.5
   R1652 = 79 Leonis
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Occultation prediction for Teide Observatory Canary Islands
E. Longitude 16 18 39.8, Latitude 28 28 31.6, Alt. 3000m; Telescope dia 15cm; dMag 0.0

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      day  Time     P   Star  Sp  Mag  Mag    % Elon Sun  Moon   CA   PA  VA  AA Libration   A   B   RV    Cct durn  R.A. (J2000)  Dec   Mdist   SV
 y   m  d  h  m   s       No  D    v    r V  ill     Alt Alt Az   o    o   o   o   L    B   m/o m/o "/s     o  sec  h  m   s    o  m  s   Mm   m/s
     1652 is double: ** 5.9 6.5 0.003" 155.0
26 Dec  2  3 24 48   Gr   1652cG8  5.4  4.9   40-  78     50 ** GRAZE: CA-17.3N; Dist. 33km in az. 213deg. [Lat = 28.12-0.57(E.Long-16.31)]
26 Dec  3  1 59 28.6 r    1747kK0  7.5  7.0   30-  67     20 107  27N 355  53 333 +7.7 +4.4 -0.1-2.8 .295  129.0     12  8 12.5 - 4 17 13 384.4 873.5
26 Dec  4  2 41 40.6 r  157588 F0  8.5  8.3   21-  55     17 112  87S 287 343 265 +7.3 +5.5 +0.7+0.4 .446 -162.3     12 54 51.2 -10 26  3 389.2 883.2
26 Dec  4  4 12 17.7 r    1857 F0  8.9  8.7   21-  54     33 128  76S 275 320 254 +7.2 +5.6 +1.8+0.7 .341 -146.3     12 56 57.9 -10 52 59 387.8 772.3
26 Dec  5  3 48 12.6 r  158119 G6  9.0  8.6   13-  43     18 120  85S 280 333 260 +6.7 +6.3 +1.0+0.6 .410 -155.9     13 43 46.9 -15 59  3 393.1 855.6
26 Dec  5  4 17 34.2 R    1967 G1  5.6  5.1   13-  43     23 125  69S 264 313 244 +6.7 +6.4 +1.7+1.3 .322 -138.6     13 44 29.8 -16 10 45 392.6 816.7
   R1967 = 83 Virginis
26 Dec  5  4 18 52.7 r  158142 A3  8.6  8.4   13-  43     23 125  37N 338  27 318 +6.7 +6.4 +0.1-1.6 .360  147.2     13 45 11.6 -15 55 26 392.6 814.9
26 Dec  6  4 34  2.9 R    2084 A3  6.5  6.4    7-  31     15 124  11N 359  50 341 +5.9 +6.8 -1.0-2.9 .240  123.0     14 34 50.7 -20 26 22 396.7 850.7
26 Dec 11 17 18 18.7 d  187950 F0  9.1  8.9    6+  29      7 236  37N  35 340  41 -2.1 +4.2 -0.2+0.9 .378   30.5     19 18 56.5 -25 16  2 405.6 862.4
26 Dec 12 16 47 57.1 d  188952WF5  8.8  8.6   11+  39 -11 22 227  61S 109  65 120 -3.3 +3.0 +2.5-2.2 .245  -51.0     20  8 49.8 -22 41 37 403.2 761.4
    188952 is double: AB 8.8 10.3 20.8" 311.8, dT = -78sec
26 Dec 13 16 56 38.4 d  164004 A0  8.9  8.8   18+  50     30 223  51S 114  75 129 -4.7 +1.7 +3.6-2.9 .184  -60.4     20 57 12.8 -18 47  6 400.7 726.5
26 Dec 14 15 42 43.4 d    3173cG2  5.2  4.8v  25+  61   3 47 194  33N  14   1  31 -5.6 +0.5 +0.6+2.5 .271   35.5     21 41 32.9 -14  2 51 396.8 640.1
   R3173 = 42 Capricorni
      3173 is double: ** 5.5 7.5
      3173 = BY Cap, 5.13 to 5.18, V, Type RS
26 Dec 14 16 53 50.8 r    3173cG2  5.2  4.8v  26+  61 -12 40 216 -76N 265 233 283 -5.9 +0.3 +2.5-0.5 .293  144.9     21 41 32.9 -14  2 51 397.1 689.4
   R3173 = 42 Capricorni
      3173 is double: ** 5.5 7.5
      3173 = BY Cap, 5.13 to 5.18, V, Type RS
26 Dec 14 18 18 27.3 d  164626WK3  8.7  7.9   26+  61     28 234  74S  87  39 104 -6.1 +0.1 +1.7-0.9 .331  -34.3     21 45 18.4 -13 40 33 398.1 775.1
    164626 is double: AB 8.7 11.6 27.4" 222.7, dT = -60sec
26 Dec 14 19 56 31.3 d X180642DA5  8.1  8.1   26+  62      9 250  70N  50 352  68 -6.4 -0.1 +0.2+0.4 .464    6.7     21 47 26.8 -13  7 18 399.8 905.5
   X180642 is double: AC 8.7 9.1 4.0"  81.1, dT = +7sec
   X180642 is a close double. Observations are highly desired
26 Dec 15 18  0 12.8 d  146122kG0  8.3  8.1   35+  72     42 226  85S  74  34  94 -7.1 -1.2 +2.0+0.0 .340  -24.9     22 29 55.9 - 8 25  8 393.1 714.0
26 Dec 15 18 46  0.1 d    3306pF0  7.8  7.6   35+  73     34 236  65N  43 355  63 -7.2 -1.3 +0.9+0.9 .393    8.0     22 30 32.8 - 8  6 53 393.6 757.6
      3306 is double: AB 7.8 8.6 8.1" 328.4, dT = +6sec
      3306 is a close double. Observations are highly desired
26 Dec 16 17 45 58.1 D    3411pA2  7.2        45+  84     54 214  59N  36   6  57 -7.8 -2.6 +1.3+1.7 .355   11.2     23 14  6.4 - 2 38  6 387.5 679.9
      3411 is double: AB 7.41 9.20 0.49" 100.0, dT = +0.6sec
      3411 is a close double. Observations are highly desired
26 Dec 17 16 19 30.2 d  128494 F0  7.6  7.4   55+  95  -4 62 153   9N 346  10   8 -7.8 -3.7 -1.2+4.7 .182   60.3     23 57 24.3   3  0 36 381.8 681.8
26 Dec 17 20 41 20.5 d       2 F0  7.9  7.7   56+  97     35 254  84S  73  15  95 -8.6 -4.2 +1.3-0.2 .401  -17.5      0  3 40.1   3 54 25 382.7 781.2
26 Dec 18 17 56  5.0 d     100 A2  8.1  7.9   65+ 108     71 181  79S  79  78 101 -8.0 -4.9 +2.7+0.6 .324  -30.4      0 48 10.8   9 13 18 374.9 682.0
26 Dec 19 20 37 41.8 d     251 K0  7.6  7.0   76+ 122     61 251  51N  33 333  53 -7.8 -6.0 +1.5+2.0 .350   26.9      1 42 26.9  15 46 43 368.2 700.2
26 Dec 20 17 20 15.5 d   93005 K0  7.9  7.3   85+ 134     59  98  74S  92 161 110 -6.1 -6.2 +2.1+0.6 .368  -34.6      2 34 23.5  19 59  5 363.1 787.4
26 Dec 20 19 29 58.5 D     387cG5  6.9  6.4S  85+ 134     82 169  81N  68  78  85 -6.4 -6.4 +2.2+1.0 .391   -7.6      2 37 34.4  20 34 30 361.8 692.3
       387 is double: ** 7.7 7.7 0.10"  90.0, dT = +0.24sec
       387 has been reported as non-instantaneous (OCc1190). Observations are highly desired
       387 = NSV 15555, 6.91, , Type VAR:
26 Dec 20 23 17  0.8 d   75537 A2  7.8  7.7   86+ 136     41 274  85N  73   2  90 -7.0 -6.5 +1.3-0.2 .455    2.1      2 43 41.1  21  8 50 363.0 801.9
26 Dec 21 16 36 44.2 d   75990cK0  7.5  6.9   92+ 147  -8 38  81  56S 118 190 132 -4.5 -6.2 +1.8-0.2 .321  -52.6      3 33 51.4  23 49 52 359.5 921.8
     75990 is double: ** 8.4 8.4 0.10"  85.0, dT = +0.26sec
     75990 has been reported as non-instantaneous (OCc 773). Observations are highly desired
26 Dec 21 18 36 40.6 d     522 G5  7.8  7.1   92+ 148     64  92  60S 114 190 128 -4.6 -6.4 +2.9-0.7 .290  -49.2      3 37 43.5  24 15 33 357.3 767.8
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Occultation prediction for Teide Observatory Canary Islands
E. Longitude 16 18 39.8, Latitude 28 28 31.6, Alt. 3000m; Telescope dia 15cm; dMag 0.0

y	m	day d	h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon Sun Alt	Moon Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	Dec	21	19	30	21.9	d	76046cA0		7.1	7.1		92+	148	75	100	57N	52	125	66	-4.7	-6.4	+1.6	+1.9	.403	14.7		3	39	6.7	24	42	10	356.7	721.2
		76046 is double: AB 7.1								45.0, dT = -25sec																							
26	Dec	21	21	4	49.1	d	76081 K2		7.5	6.9		93+	149	83	245	31N	26	325	40	-5.0	-6.5	+1.7	+3.4	.277	45.7		3	41	18.1	25	0	29	356.2	685.5
26	Dec	21	22	17	51.8	d	76102 A2		7.5	7.5		93+	149	68	268	51N	46	330	60	-5.1	-6.5	+2.1	+1.6	.350	30.9		3	43	43.2	25	4	51	356.5	706.0
26	Dec	21	22	57	32.8	D	538pB8		5.7	5.7		93+	149	59	272	64S	112	36	125	-5.2	-6.5	+1.8	-1.8	.361	-31.8		3	45	9.7	24	50	21	356.8	734.9
		R538 = 18 Tauri																															
		538 is quadruple: Aa,Ab 6.4 6.4 0.10" : AB 5.6 14.0 72" 128.9, dT = +191sec : AC 5.6 14.8 151" 175.1, dT = +189sec																															
		538 is a close double. Observations are highly desired																															
26	Dec	22	0	24	53.8	D	555 K5		6.4	5.6s		93+	150	41	280	78S	98	25	111	-5.4	-6.5	+1.0	-1.2	.468	-13.7		3	48	6.5	24	59	18	357.8	835.6
		555 = NSV 1316, 6.44, range 0.02, 0V, Type VAR, Period 1.48987 days																															
26	Dec	22	1	52	50.7	d	571pA2		6.8	6.7		94+	151	22	288	76N	73	5	85	-5.4	-6.4	+0.6	-0.4	.540	14.6		3	51	25.3	25	9	47	359.3	973.3
		571 is double: ** 7.1 9.1																															
26	Dec	22	2	10	53.7	d	574pG0		6.8	6.5		94+	151	19	289	78N	75	8	87	-5.4	-6.3	+0.4	-0.4	.561	13.1		3	52	11.4	25	9	47	359.61	003.9
26	Dec	23	0	35	23.1	d	76841cK1		7.3	6.7		98+	164	53	279	79N	89	11	96	-3.3	-6.0	+1.5	-0.7	.462	4.6		4	55	34.6	27	12	9	353.4	794.0
		76841 is double: ** 7.6 10.1 0.08" 82.0, dT = +0.18sec																															
		76841 has been reported as non-instantaneous (OCc 753). Observations are highly desired																															
26	Dec	24	19	28	31.4	r	1068 A2		7.1	7.0		99-	168	33	77	49S	222	293	217	+2.0	-3.9	+0.0	+3.1	.334	-129.1		7	2	7.2	25	25	32	353.4	907.2
		Distance of 1068 to Terminator = 11.7"; to 3km sunlit peak = 3.1"																															
26	Dec	25	2	16	33.4	R	1099wM1		5.8	5.0s		98-	165	59	272	79S	256	180	250	+1.3	-3.5	+2.2	-0.1	.379	-142.9		7	14	42.0	24	53	6	351.8	810.2
		R1099 = 52 Geminorum																															
		1099 is double: AB 6.0 12.7 32" 282.6, dT = -75sec																															
		1099 = NSV 3469, 5.79, range 0.08, V																															
26	Dec	26	0	35	49.2	r	80063 G5		7.6	7.1		94-	152	82	148	65S	255	285	243	+3.7	-2.1	+3.0	+1.1	.307	-137.7		8	16	45.5	21	13	52	353.1	710.9
26	Dec	26	2	49	10.2	R	1250pK1		5.8	5.2		94-	151	64	259	62S	253	186	241	+3.4	-1.8	+2.8	+0.2	.308	-132.1		8	20	21.0	20	44	52	354.0	789.9
		1250 is double: 3.1 8.9																															
26	Dec	26	5	13	22.3	r	1261pA5		7.3	7.0		93-	150	-7	33	277	66S	259	190	246	+3.2	-1.4	+1.1	-0.6	.427	-139.5		8	24	49.2	20	9	11	356.6	970.8
		1261 is double: AB 7.4 8.6 37" 192.1, dT = -35sec																															
26	Dec	26	22	6	35.3	r	X113668DA0		7.8	7.7		88-	139	38	91	75S	272	339	256	+5.8	-0.6	+1.2	+0.9	.446	-159.5		9	12	40.1	16	31	30	358.9	828.8
		X113668 is double: BA 8.7 8.3 1.7" 233.1, dT = -3sec																															
		X113668 is a close double. Observations are highly desired																															
26	Dec	26	22	6	35.3	r	98430DA0		7.7	7.6		88-	139	38	91	75S	272	339	256	+5.8	-0.6	+1.2	+0.9	.446	-159.5		9	12	40.1	16	31	30	358.9	828.8
		98430 is double: AB 8.32 8.71 1.70" 53.1, dT = +3sec																															
		98430 is a close double. Observations are highly desired																															
26	Dec	27	3	41	49.1	R	1385kA1		6.6	6.6		86-	137	62	248	83N	295	237	279	+5.1	+0.1	+1.6	-1.5	.441	-168.1		9	21	15.3	15	22	17	358.3	783.8
26	Dec	28	2	58	54.9	r	118183 F5		8.0	7.7		78-	123	70	191	44S	246	236	226	+6.6	+1.7	+4.9	+2.2	.173	-115.1		10	14	57.5	9	12	40	363.1	719.4
26	Dec	29	1	2	4.9	r	118638DF0		7.3			68-	111	47	118	58N	326	16	304	+7.9	+3.0	+1.1	-1.5	.403	162.4		11	3	58.9	3	38	20	369.8	759.3
		118638 is double: BA 8.1 7.9 1.2" 304.2, dT = -2.8sec																															
		118638 is a close double. Observations are highly desired																															
26	Dec	29	1	2	7.6	r	X120230D		8.0	7.8		68-	111	47	118	58N	326	16	304	+7.9	+3.0	+1.1	-1.5	.403	162.4		11	3	59.0	3	38	19	369.8	759.3
		X120230 is double: AB 7.92 8.05 1.21" 124.2, dT = +2.8sec																															
		X120230 is a close double. Observations are highly desired																															
26	Dec	29	5	33	58.0	r	118693KG5		7.7	7.3		67-	109	-3	52	233	45N	339	294	317	+7.1	+3.6	+0.7	-2.6	.369	152.2		11	9	40.2	2	27	22	370.6	749.7
26	Dec	30	5	39	58	d	1727 F2		6.9	6.7		56-	97	-2	52	214	7S	211	182	189	+7.5	+4.9	-6.2	-9.7	.067	-80.0		11	58	6.8	- 4	22	14	376.7	697.3
26	Dec	30	5	47	44	Gr	1727 F2		6.9	6.7		56-	97	0	51	** GRAZE: CA 17.0S; Dist. 31km in az. 228deg. [Lat = 28.06-0.99(E.Long-16.31)]																						
26	Dec	31	2	8	31.6	r	138911cM*		7.7	6.9v		46-	86	34	126	66S	269	315	247	+8.3	+5.6	+2.0	+1.1	.320	-139.7		12	41	8.9	- 9	14	44	383.1	779.2
		138911 = KS Vir, 7.62 to 7.82, Hp, Type LB																															
26	Dec	31	4	22	16.7	r	138935SF0		7.7	7.5		46-	85	51	165	77S	279	293	257	+7.9	+5.8	+2.8	-0.2	.307	-147.0		12	43	48.6	- 9	46	7	382.3	678.6
		138935 is triple: ** 7.9 9.8 0.08" 141.0, dT = +0.19sec : 7.9 9.8 0.10" 141.0, dT = +0.24sec																															

Occultation prediction for Teide Observatory Canary Islands

E. Longitude 16 18 39.8, Latitude 28 28 31.6, Alt. 3000m; Telescope dia 15cm; dMag 0.0

day			Time			P	Star	Sp	Mag	Mag	%	Elon	Sun	Moon	CA	PA	VA	AA	Libration		A	B	RV	Cct	durn	R.A. (J2000)			Dec			Mdist	SV
y	m	d	h	m	s		No	D	v	r	V	ill	Alt	Alt	Az	o	o	o	o	L	B	m/o	m/o	"/s	o	sec	h	m	s	o	m	s	Mm	m/s

138935 has been reported as non-instantaneous (OCc1677). Observations are highly desired

Lunar Occultation predictions
San Vicente, Antioquia
Colombia

Occultation prediction for Jonathan Ospina observatory
E. Longitude - 75 19 59.3, Latitude 6 18 47.6, Alt. 100m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon	Sun Alt	Moon Alt	Az	CA o	PA o	VA o	AA o	Libration L	B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	Jan	1	6	41	42.0	d	673cA0		6.5	6.5		93+	149	31	298		35N	35	295	44	-1.6	-6.8	+2.5	+2.7	.269	56.0		4	29	19.8	27	24	15	357.4	834.4
							673 is double: ** 7.4 7.4 0.10" 286.0, dT = -0.12sec																													
							673 has been reported as non-instantaneous (OCc 722). Observations are highly desired																													
26	Jan	2	0	27	13.0	D	810SB7		1.7	1.7		97+	161	39	58	14N	26	132	29	+1.4	-6.6	-0.1	+3.0	.306	49.4		5	26	17.5	28	36	27	356.4	814.2
							R810 = El Nath = beta Tauri																												
							810 is multiple: AC 1.9 19.0 8.4" 357.0, dT = +24sec : AD 1.9 18.5 9.8" 70.0, dT = +23sec : AE 1.9 10.9" 80.0, dT = +21sec : AF 1.9 15.8 11.6" 296.0, dT = +0.12sec																													
							810 is a close double. Observations are highly desired																													
							Distance of 810 to Terminator = 3.5"; to 3km sunlit peak = 0.0"																													
26	Jan	2	1	15	6.6	R	810SB7		1.7	1.7		97+	161	49	53	-66N	306	61	309	+1.4	-6.7	+3.1	-1.8	.281	130.7		5	26	17.5	28	36	27	355.6	742.2
							R810 = El Nath = beta Tauri																												
							810 is multiple: AC 1.9 19.0 8.4" 357.0, dT = -19sec : AD 1.9 18.5 9.8" 70.0, dT = +20sec : AE 1.9 10.9" 80.0, dT = +27sec : AF 1.9 15.8 11.6" 296.0, dT = -41sec																													
							810 is a close double. Observations are highly desired																													
26	Jan	5	1	41	43.9	R	1308SA1		4.7	4.7		96-	156	15	70	45N	323	52	309	+6.6	-3.8	+1.1	-1.8	.389	139.1		8	43	17.1	21	28	7	367.0	917.5
							R1308 = Asellus Borealis = Gamma Cancri																												
							1308 is triple: AC 4.7 14.1 91" 258.0, dT = -98sec : AB 4.7 10.2 117" 67.1, dT = +73sec																													
26	Jan	5	8	54	25.8	R	1329pF8		6.8			95-	154	58	298	72S	263	152	249	+5.5	-3.3	+3.0	+0.2	.304	-136.3		8	53	55.3	19	58	2	364.7	744.0
							1329 is double: AB 7.32 7.86 0.15" 71.9, dT = +0.49sec																												
							1329 is a close double. Observations are highly desired																													
26	Jan	7	8	31	57.3	r	118418PF5		7.6			81-	128	87	15	49N	332	137	312	+7.0	-0.2	+1.4	-2.6	.342	163.5		10	39	42.1	8	50	35	375.3	650.1
							118418 is triple: AB 7.84 8.98 0.45" 118.2, dT = +1.1sec : AC 7.8 2.1" 37.0, dT = -2.6sec																													
							118418 is a close double. Observations are highly desired																													
26	Jan	7	9	43	0.4	r	1560 M*		7.7	7.4v		81-	128	73	278	23N	359	263	339	+6.7	+0.0	-0.1	-3.8	.270	136.6		10	41	23.5	8	33	45	375.9	677.9
							1560 = EU Leo, 7.59 to 7.71, Hp, Type LB																													
26	Jan	10	9	31	51.9	R	139061DF5		7.3			52-	93	66	133	59S	262	309	240	+5.7	+4.2	+4.8	+0.9	.190	-124.8		12	57	28.6	- 9	45	41	392.3	635.7
							139061 is double: AB 7.31 10.77 1.66" 276.0, dT = -8sec																													
							139061 is a close double. Observations are highly desired																													
26	Jan	10	10	49	0.1	r	139081cK0		7.5	7.1		52-	92	-7	74	186	62N	321	315	300	+5.4	+4.4	+1.9	-2.3	.316	175.5		12	59	1.6	- 9	50	3	392.3	602.2
							139081 is double: AB 7.6 12.6 0.33" 65.8, dT = +0.26sec																													
							139081 is a close double. Observations are highly desired																													
26	Jan	11	9	47	6.9	r	158108pF3		8.3	8.1		42-	81	58	133	81S	281	330	261	+4.7	+5.3	+3.0	-0.5	.280	-146.8		13	42	53.6	-15	2	7	396.4	644.4
							158108 is double: AB 8.4 14.3 19.0" 356.6, dT = -17sec																													
26	Jan	13	9	43	36.2	r	183352 K3		8.8	8.0		25-	59	36	125	84N	288	351	274	+2.4	+6.6	+1.5	-0.5	.362	-164.6		15	18	2.6	-23	28	19	401.6	731.3
26	Jan	14	9	13	21.9	R	2312 M2		5.4	4.5s		17-	49	19	121	75S	261	334	251	+1.3	+6.8	+1.2	+0.6	.355	-145.3	.01	16	8	7.6	-26	19	36	403.3	845.7
							2312 = NSV 20513, 5.35, range 0.00, 8V, Type VAR, Period 7.61267 days																													
26	Jan	14	10	13	53.2	R	184177kA0		8.2	8.1		17-	48	31	126	87N	278	342	268	+1.1	+6.9	+1.5	-0.1	.360	-160.8		16	9	45.8	-26	26	24	402.0	742.5
26	Jan	15	9	36	6.8	R	184936kA3		7.3	7.2		10-	38	12	120	66N	292	8	287	+0.1	+6.8	+0.2	-0.5	.449	176.7		17	1	56.3	-27	56	20	402.8	878.5
26	Jan	15	10	47	9.2	r	184978 B9		7.7	7.7		10-	37	-8	27	126	79S	257	323	252	-0.1	+6.9	+1.9	+0.8	.324	-147.1		17	3	59.1	-28	15	23	401.3	751.3
26	Jan	16	10	8	16.1	r	185996 B9		9.0	9.0		5-	27		8	120	53S	223	301	223	-1.1	+6.5	+2.0	+2.8	.238	-121.0		17	57	50.4	-28	38	20	401.4	897.3
26	Jan	16	10	12	45.2	R	185993 K5		8.7	7.8		5-	27		9	120	75S	245	322	244	-1.1	+6.5	+1.1	+1.2	.363	-142.7		17	57	44.5	-28	34	13	401.2	888.3
26	Jan	16	10	17	47	M	2586cB3		6.0	6.0		5-	27		10	121	22S	192	269	192	-1.1	+6.6	+9.9	+9.9	.000	-90.0		17	58	39.0	-28	45	33	401.1	880.1
							2586 is double: ** 6.3 7.3 0.30" 276.0																													
							2586 has been reported as non-instantaneous (OCc1519). Observations are highly desired																													
26	Jan	16	16	8	36.5	d	2617cK0		4.6	4.1		5-	25	59	54	196	-39N	27	9	28	-2.4	+6.8	+2.1	+4.2	.166	53.1	.01	18	8	5.0	-28	27	26	396.5	533.4
							2617 is double: AB 5.1 5.9 0.26" 12.0, dT = +1.5sec																													
							2617 is a close double. Observations are highly desired																													
26	Jan	16	17	14	57.8	R	2617cK0		4.6	4.1		5-	25	63	47	216	40N	308	267	308	-2.7	+6.7	+4.3	-2.8	.186	127.4		18	8	5.0	-28	27	26	396.9	588.4

Occultation prediction for Jonathan Ospina observatory
E. Longitude - 75 19 59.3, Latitude 6 18 47.6, Alt. 100m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon	Sun Alt	Moon Alt	Az	CA o	PA o	VA o	AA o	Libration L	B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
							2617 is double: AB 5.1 5.9 0.26" 12.0, dT = -0.6sec																													
							2617 is a close double. Observations are highly desired																													
26	Jan	21	0	9	20.8	d	164699	G5	9.4	8.9	5+	25	9	255	74N	56	335	75	-6.1	+1.5	+0.1	+0.8	.527	1.0		21	51	52.7	-13	55	46	387.2	990.5
26	Jan	23	1	24	51.4	D	3459	K0	6.4	5.8	17+	49	14	267	58S	97	14	119	-6.3	-1.8	+0.6	-0.6	.391	-39.7		23	29	27.0	- 1	47	28	379.9	936.4
							R3459 = 11 Piscium																											
26	Jan	23	1	34	2.4	d	146730	pK2	8.6	8.0	18+	49	12	267	45N	20	297	42	-6.3	-1.8	+0.1	+2.2	.405	38.3		23	29	2.1	- 1	28	13	380.1	951.2
							146730 is double: ** 9.5 9.5 0.10" 131.0, dT = -0.09sec																											
							146730 has been reported as non-instantaneous (OCc 950). Observations are highly desired																											
26	Jan	24	0	50	28	M	30	SA0	7.1	7.1	26+	62	34	271	10S	145	60	167	-5.9	-3.2	+9.9	+9.9	.000	-90.0		0	15	57.3	4	15	4	374.7	801.4
							30 is triple: AB 7.0 14.1 0.8" 246.0 : AC 7.0 12.2 5.0" 347.3																											
							30 is a close double. Observations are highly desired																											
26	Jan	26	1	19	29.6	d	92732	wF5	7.8	7.5	48+	88	50	289	86N	66	325	85	-4.5	-5.8	+2.1	+0.9	.388	-3.9		1	58	47.5	17	1	33	367.4	693.1
							92732 is double: AB 7.8 17.9 79" 249.6, dT = -204sec																											
26	Jan	27	23	20	56.6	D	579	kA2	6.4	6.3S	70+	114	-4	65	37	70S	100	238	112	-1.6	-6.9	+3.3	-0.5	.305	-36.1		3	53	34.5	25	40	58	362.0	663.9
							579 = NSV 1391, 6.33,																											
26	Jan	29	5	19	19.1	d	768	A2	7.0	6.7S	82+	129	33	300	90N	89	347	94	-1.1	-6.8	+1.3	-0.2	.458	8.2		5	8	35.3	28	16	24	362.6	814.0
							768 = NSV 16250, 7., , Type VAR:																											
26	Jan	29	6	1	34.8	D	771	SA5	6.1	5.9e	82+	130	24	298	44S	135	39	140	-1.1	-6.8	+0.0	-1.9	.402	-37.1		5	9	45.1	28	1	50	363.5	888.5
							771 is triple: Aa,Ab 6.0 0.20" 351.0, dT = -0.4sec : A,BC 6.0 9.1 11.2" 29.1, dT = -8sec																											
							771 is a close double. Observations are highly desired																											
							771 = V1156 Tau, 6. to 6.1, Hp, Type E:, Period 1.40266 days, Phase 13%																											
26	Jan	30	1	52	3.6	d	78042	K7	7.9	7.0v	89+	142	65	23	69N	76	230	76	+1.1	-6.6	+2.9	+0.7	.342	15.5		6	9	32.6	28	39	57	360.1	619.2
							78042 = V0450 Aur, 7.94 to 8.1, Hp, Type SRB:																											
26	Jan	30	23	32	3.5	D	1088	A4	5.8	5.7S	95+	155	-6	29	63	89S	107	206	101	+3.1	-5.7	+1.4	-0.4	.450	-16.8		7	11	23.1	26	51	24	363.4	827.9
							R1088 = 47 Geminorum																											
							1088 = NSV 17371, 5.77, , Type DSCT:																											
26	Jan	31	2	45	23.5	D	1105	cG7	6.5		96+	156	66	30	83S	115	260	108	+2.6	-5.7	+2.8	-1.1	.351	-10.3		7	17	3.4	26	41	22	360.9	624.4
							1105 is double: AB 7.00 7.70 0.20" 236.6, dT = -0.3sec																											
							1105 is a close double. Observations are highly desired																											
26	Jan	31	5	52	19.7	d	79316	G2	7.5	7.1v	96+	157	53	306	55S	143	26	136	+2.0	-5.4	+0.9	-2.2	.375	-26.8		7	21	32.8	26	9	33	361.8	736.4
							79316 = V0340 Gem, 7.37 to 7.71, V, Type RS, Period 35.37 days, Phase 86%																											
26	Feb	3	7	25	8.4	r	1501	G5	7.2	6.7	98-	162	74	290	45N	334	226	315	+5.2	-0.8	+1.1	-2.6	.361	160.3		10	15	9.7	11	40	27	371.2	691.0
26	Feb	4	4	15	55.3	R	1600	wA5	5.0	4.9	94-	151	48	88	83N	300	27	279	+6.3	+0.4	+1.7	-1.1	.393	-171.5		11	0	44.8	6	6	5	377.0	726.5
							R1600 = 59 Leonis																											
							1600 is double: AB 5.0 12.6 40" 217.4, dT = -14sec																											
26	Feb	4	7	38	8.4	r	1606	M*	7.8	7.0v	93-	150	83	261	87N	297	217	276	+5.6	+0.9	+2.6	-1.4	.342	-160.1		11	4	19.1	5	13	30	376.1	664.1
							1606 = FG Leo, 7.84 to 8.01, Hp, Type SRB, Period 24.962161 days, Phase 38%																											
26	Feb	5	5	1	51.5	R	1708	wF7	6.2	5.9	87-	138	47	98	60N	325	46	303	+6.2	+2.1	+1.1	-2.0	.383	166.1		11	49	1.3	- 0	19	7	382.4	732.8
							1708 is double: AB 6.2 13.1 27.4" 128.3, dT = +68sec																											
26	Feb	6	9	40	24	Gr	1815	SK2	4.7	4.0	79-	125	67	** GRAZE: CA 19.6S; Dist. 41km in az. 44deg. [Lat = 6.83-0.97(E.Long+75.33)]																							
26	Feb	6	9	41	27	M	1815	SK2	4.7	4.0	79-	125	68	229	20S	225	176	203	+4.9	+4.1	+9.9	+9.9	.000	-90.0		12	39	14.8	- 7	59	44	387.3	623.8
							R1815 = chi Virginis																											
							1815 is multiple: **Aa,Ab 4.8 8.8 0.10" 214.0 : AB 4.8 8.8 177" 135.9 : AC 4.8 10.6 224" 109.8 : AD 4.8 9.0 321" 331.1																							
							1815 has been reported as non-instantaneous (OCc 760). Observations are highly desired																											
26	Feb	7	6	47	36.5	R	1919	K5	6.9	6.0s	70-	114	49	117	73N	310	15	289	+5.0	+4.9	+1.4	-1.5	.373	-176.9		13	22	8.3	-12	34	46	392.4	711.1
							1919 = NSV 19751, 6.98 to 7.03, Hp																											
26	Feb	9	7	33	52.5	r	183041	F7	8.0	7.7	51-	92	36	123	80S	277	341	261	+2.9	+6.5	+1.8	-0.1	.336	-151.2		14	57	25.0	-22	9	12	399.6	743.7
26	Feb	9	8	34	23.4	r	2138	WF6	7.9	7.6	51-	91	47	133	73S	270	321	254	+2.7	+6.7	+3.0	+0.2	.272	-142.8		14	58	40.7	-22	24	5	398.7	661.2

Occultation prediction for Jonathan Ospina observatory
E. Longitude - 75 19 59.3, Latitude 6 18 47.6, Alt. 100m; Telescope dia 15cm; dMag 0.0

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      day  Time     P   Star  Sp  Mag  Mag    % Elon Sun  Moon   CA   PA  VA  AA Libration   A   B   RV    Cct durn  R.A. (J2000)  Dec   Mdist   SV
 y   m  d  h  m    s       No  D    v    r V  ill     Alt Alt Az   o    o   o   o   L    B   m/o m/o  "/s     o  sec  h  m   s    o  m  s   Mm   m/s
      2138 is double: AB 7.9 9.6 12.0"  95.0, dT = +44sec
26 Feb  9  9 49  8   Gr 183079 M2  7.7  6.8s  51-  91     59 ** GRAZE: CA 19.6S; Dist. 43km in az.  42deg. [Lat =  6.83-0.89(E.Long+75.33)]
26 Feb  9  9 49 56    m 183079 M2  7.7  6.8s  51-  91     58 156  20S 216 242 200 +2.3 +6.8 +9.9+9.9 .000  -90.0     15  0 30.4 -22 50 58 398.1 582.6
    183079 = NSV 20220, 7.67 to 7.75, Hp
26 Feb 10  7 29 22.5 r 183802pA0  7.2        42-  81     24 121  39N 333  43 321 +1.7 +6.9 -0.3-2.0 .346  146.3     15 48  3.3 -25 12 56 401.9 809.8
    183802 is double: AB 7.60 8.49 0.10"  95.9, dT = +0.16sec
    183802 is a close double. Observations are highly desired
26 Feb 10  8 27 48.8 d    2263cB1  4.6  4.7   42-  80     35 128 -71S 120 181 108 +1.5 +7.0 +1.1-0.9 .369    0.0     15 50 58.7 -25 45  5 400.8 717.4
   R2263 = 1 Scorpii
      2263 is double: ** 5.6 5.6 0.050"
      2263 has been reported as non-instantaneous (OCc1483). Observations are highly desired
26 Feb 10  9 56 22.7 R    2263cB1  4.6  4.7   41-  80     50 145  71N 300 340 289 +1.2 +7.2 +2.2-1.2 .308  179.4     15 50 58.7 -25 45  5 399.6 597.5
   R2263 = 1 Scorpii
      2263 is double: ** 5.6 5.6 0.050"
      2263 has been reported as non-instantaneous (OCc1483). Observations are highly desired
26 Feb 10 15  6 37.0 D    2287SB1  2.9  3.0v  40-  79  52 30 235 -26N  37 332  25 -0.2 +7.3 +0.4+3.3 .185   57.0     15 58 51.1 -26  6 51 401.4 660.6
   R2287 = pi Scorpii
      2287 is triple: Aa,Ab 5.1 13.4 2.0" 244.0, dT = -10sec : AB 2.9 11.9 50" 128.1, dT = -8sec
      2287 is a close double. Observations are highly desired
      2287 = pi Sco, 2.88 to 2.91, V, Type ELL, Period 1.570103 days, Phase  83%
26 Feb 10 15 29 11   Gr   2287SB1  2.9  3.0v  40-  79  55 22 ** GRAZE: CA  7.9N; Dist.316km in az. 337deg. [Lat =  9.40+0.42(E.Long+75.33)]
26 Feb 10 15 53  6.0 R    2287SB1  2.9  3.0v  40-  78  61 20 239  42N 328 256 317 -0.3 +7.2 +2.6-3.6 .207  123.2     15 58 51.1 -26  6 51 402.4 738.9
   R2287 = pi Scorpii
      2287 is triple: Aa,Ab 5.1 13.4 2.0" 244.0, dT = -1sec : AB 2.9 11.9 50" 128.1, dT = +229sec
      2287 is a close double. Observations are highly desired
      2287 = pi Sco, 2.88 to 2.91, V, Type ELL, Period 1.570103 days, Phase  83%
26 Feb 11  8 35 31.1 R    2397 K1  6.5  5.9   32-  69     26 125  74S 260 326 252 +0.3 +7.1 +1.8+0.7 .327 -146.6     16 41 37.6 -27 48 35 401.5 761.6
26 Feb 13  8 36 44.1 r  186903 K4  7.7  6.8   16-  47      5 119  40N 312  32 315 -1.9 +6.3 -0.5-1.2 .386  145.3     18 30 53.7 -27 57  6 399.8 910.1
26 Feb 13 10  4 18.9 r  186964 M2  8.7  7.8   16-  47     23 124  60N 292   1 295 -2.0 +6.4 +0.8-0.6 .373  164.7     18 33 29.7 -28  6 14 397.7 746.6
26 Feb 13 10 26 32.3 r  186988 A0  8.5  8.3   16-  47     27 126  66S 238 303 241 -2.1 +6.4 +2.3+1.7 .290 -142.0     18 34 12.8 -28 20 45 397.2 709.2
26 Feb 13 10 43 24.0 r  186998 G8  8.6  8.2S  16-  47  -9 31 128  45N 306   9 310 -2.2 +6.4 +1.0-1.4 .302  148.6     18 34 43.7 -28  4 20 396.9 682.0
    186998 = NSV 24504, 8.61, , Type BY:
26 Feb 14  9 21  3.5 r  188125wA0  7.8  7.7   10-  36      4 117  90N 255 337 263 -2.8 +5.5 +0.5+0.7 .459 -165.8     19 26 42.2 -26 19  6 396.5 910.9
    188125 is double: AB 7.8 12.0 12.7" 168.1, dT = -1.2sec
26 Feb 22 23 18 39.9 d     387cG5  6.9  6.4S  32+  69  -2 60 301  45S 115   0 132 -2.4 -6.5 +3.3-2.1 .230  -51.2      2 37 34.4  20 34 30 365.6 648.8
      387 is double: ** 7.7 7.7 0.10"  90.0, dT = +0.4sec
      387 has been reported as non-instantaneous (OCc1190). Observations are highly desired
      387 = NSV 15555, 6.91, , Type VAR:
26 Feb 23  1 22 29.5 d   75509 M*  7.9  7.1v  33+  70     32 291  60N  41 304  58 -2.7 -6.5 +1.6+1.9 .365   33.2      2 40 31.7  21 11 16 367.6 777.4
    75509 = AK Ari, 7.94, range 0.07, 8w, Type LB:, Period 19.3 days, Phase  31%
26 Feb 23  1 30 28.8 d   75511 G8  8.4  7.8   33+  70     30 291  54N  34 299  51 -2.8 -6.5 +1.7+2.2 .338   40.1      2 40 40.0  21 13 21 367.7 789.5
26 Feb 23  2 46 20.0 d   75537 A2  7.8  7.7   33+  71     13 290  72S  89   1 106 -2.8 -6.5 +0.4-0.2 .503  -11.1      2 43 41.1  21  8 50 369.4 918.5
26 Feb 24  1 44  5.0 D     529SA2  6.1  6.1   44+  83     39 298  83N  69 326  82 -1.6 -7.0 +1.9+0.7 .402   12.4      3 40 46.3  25 19 46 366.3 730.7
   R529 = 11 Tauri
      529 is triple: **Aa,Ab 6.3 8.3           : AB 6.1 10.9 74" 357.0, dT = +56sec
26 Feb 24  2 14 29.5 d   76084 K2  7.9  7.2   44+  84     33 296  80N  66 327  79 -1.7 -7.0 +1.6+0.7 .417   16.9      3 41 41.5  25 22 12 366.9 776.0
26 Feb 25  1 56 16.8 d     715cK5  8.0  7.5   56+  97     49 306  28S 145  31 153 -0.4 -7.1 +1.0-3.8 .221  -55.1      4 43 35.4  27 41 15 365.4 682.8
      715 is double: ** 8.8 8.8 0.10"  90.0, dT = +0.26sec
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Occultation prediction for Jonathan Ospina observatory
E. Longitude - 75 19 59.3, Latitude 6 18 47.6, Alt. 100m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon Alt	Sun Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
							715 has been reported as non-instantaneous (OCc 130). Observations are highly desired																												
26	Feb	27	3	24	15.0	d	1056	B9	7.2	7.3		78+	124	56	311	52S	137	14	132	+1.8	-5.9	+1.3	-2.1	.353	-24.5		6	55	56.2	27	17	9	366.1	688.8
26	Feb	27	3	26	8.2	d	78873	A2	7.8	7.7		78+	124	56	311	41S	147	25	143	+1.8	-5.9	+0.9	-2.7	.317	-35.4		6	55	48.1	27	14	58	366.1	691.0
26	Feb	27	5	45	23.0	d	78957	G8	7.5	7.0		79+	125	27	297	52S	137	40	132	+1.5	-5.5	+0.0	-1.6	.461	-24.1		7	0	14.8	26	52	42	368.5	902.9
26	Feb	27	5	59	3.2	d	1067	cK2	7.1	6.4		79+	125	24	297	53N	62	327	57	+1.5	-5.5	+1.7	+1.1	.329	50.7		7	0	58.1	27	9	26	368.8	927.5
							1067 is double: ** 8.0 8.0 0.10" 90.0, dT = +0.27sec																												
							1067 has been reported as non-instantaneous (OCc1341). Observations are highly desired																												
26	Feb	28	1	48	4.4	d	1194	SK0	7.8	7.2		86+	137	69	26	74S	121	272	111	+3.2	-4.9	+2.7	-1.4	.342	-7.5		7	56	1.5	24	39	57	366.7	612.9
							1194 is triple: AB 7.8 10.1 18.9" 160.1, dT = +43sec : AB 9.5 11.5 34" 194.1, dT = +29sec																												
26	Feb	28	5	36	29.8	d	79868	DK0	7.4			87+	138	42	297	65S	130	26	120	+2.5	-4.4	+0.8	-1.6	.448	-9.3		8	1	30.3	23	54	46	368.7	812.0
							79868 is double: AB 7.43 10.98 1.30" 168.9, dT = +2.3sec																												
							79868 is a close double. Observations are highly desired																												
26	Mar	9	7	49	5.4	r	183513	K0	7.8	7.2		69-	112	51	144	64N	312	352	299	+1.5	+7.0	+1.7	-1.7	.311	170.3		15	29	9.9	-24	27	5	398.4	610.2
26	Mar	12	6	30	7.9	r	186286	B7	7.1	7.1		41-	80	6	119	60N	298	17	298	-1.8	+6.5	-0.1	-0.7	.444	162.9		18	6	45.8	-28	21	50	401.9	904.8
26	Mar	12	7	12	4.6	R	2617	cK0	4.6	4.1		41-	79	14	122	69N	289	3	289	-1.8	+6.6	+0.4	-0.4	.420	171.9		18	8	5.0	-28	27	26	400.8	824.6
							2617 is double: AB 5.1 5.9 0.26" 12.0, dT = -0.07sec																												
							2617 is a close double. Observations are highly desired																												
26	Mar	12	7	24	12.8	r	186346	F5	7.6	7.4		41-	79	17	123	38S	216	289	216	-1.9	+6.6	+3.2	+4.1	.174	-114.9		18	8	52.1	-28	45	19	400.6	802.9
26	Mar	12	8	52	22	D	2631	B9	6.5	6.5v		40-	79	34	131	5S	182	241	183	-2.1	+6.7	+9.9	+9.9	.038	-83.5		18	11	58.2	-28	54	6	398.7	653.1
							R2631 = V4045 Sagittarii																												
							2631 = V4045 Sgr, 6.51 to 6.54, V, Type ACV, Period 2.8855 days																												
26	Mar	12	8	57	58	Gr	2631	B9	6.5	6.5v		40-	79	36	** GRAZE: CA 11.0S; Dist. 12km in az. 208deg. [Lat = 6.20-0.52(E.Long+75.33)]																				
26	Mar	12	9	3	27	R	2631	B9	6.5	6.5v		40-	79	36	133	17S	195	251	196	-2.2	+6.7	+9.9	+9.9	.037	-96.5		18	11	58.2	-28	54	6	398.5	638.3
							R2631 = V4045 Sagittarii																												
							2631 = V4045 Sgr, 6.51 to 6.54, V, Type ACV, Period 2.8855 days																												
26	Mar	13	9	23	16.2	R	187672	kA*	7.4	7.4		31-	68	31	127	84N	267	331	273	-3.2	+6.0	+1.8	+0.3	.349	-177.7		19	6	19.2	-27	17	14	396.0	671.2
26	Mar	20	23	53	47.1	d	92435		9.3	9.0		5+	25	-11	11	282	12S	138	51	158	-3.9	-5.2	-0.3	-4.4	.189	-69.3		1	26	0.2	13	12	41	366.8	952.6
26	Mar	23	21	56	44.5	d	638	SK1	5.0	4.4		29+	65	18	67	337	45N	33	238	42	+0.8	-7.1	+2.5	+3.3	.251	43.9		4	20	21.2	27	21	3	361.9	611.8
							R638 = phi Tauri																												
							638 is triple: AB 5.1 7.5 48" 259.8, dT = -131sec : AC 5.1 12.3 117" 22.8, dT = +460sec																												
26	Mar	24	2	37	10.8	D	673	cA0	6.5	6.5		30+	67	14	297	55N	44	314	53	+0.2	-6.9	+1.4	+1.7	.353	49.0		4	29	19.8	27	24	15	366.5	956.6
							673 is double: ** 7.4 7.4 0.10" 286.0, dT = -0.13sec																												
							673 has been reported as non-instantaneous (OCc 722). Observations are highly desired																												
26	Mar	24	22	0	44.9	D	810	SB7	1.7	1.7		40+	78	17	67	11	76S	100	268	104	+2.2	-6.9	+3.1	-0.5	.329	-15.0		5	26	17.5	28	36	27	363.5	601.0
							R810 = El Nath = beta Tauri																												
							810 is multiple: AC 1.9 19.0 8.4" 357.0, dT = -6sec : AD 1.9 18.5 9.8" 70.0, dT = +26sec : AE 1.9 10.9" 80.0, dT = +31sec : AF 1.9 15.8 11.6" 296.0, dT = -34sec																												
							810 is a close double. Observations are highly desired																												
26	Mar	24	23	35	2.7	R	810	SB7	1.7	1.7		40+	79	-7	61	324	-83S	259	121	262	+1.9	-6.9	+2.9	+0.5	.341	-165.2		5	26	17.5	28	36	27	363.9	622.9
							R810 = El Nath = beta Tauri																												
							810 is multiple: AC 1.9 19.0 8.4" 357.0, dT = +4sec : AD 1.9 18.5 9.8" 70.0, dT = +28sec : AE 1.9 10.9" 80.0, dT = +32sec : AF 1.9 15.8 11.6" 296.0, dT = -27sec																												
							810 is a close double. Observations are highly desired																												
26	Mar	25	23	40	22.3	d	78496	K0	7.5	6.9		52+	92	-8	68	350	50S	133	325	131	+3.1	-6.2	+2.5	-2.3	.289	-31.2		6	33	41.4	27	58	49	365.8	600.1
26	Mar	26	0	28	53.0	D	1008	A0	5.3	5.3s		52+	93	63	327	77S	107	325	104	+2.9	-6.2	+2.6	-0.9	.353	-0.5		6	35	12.1	28	1	20	366.1	627.5
							R1008 = 49 Aurigae																												
							1008 = NSV 3032, 5.05 to 5.27, V																												
26	Mar	26	1	8	46	d	78530	cB9	7.8	7.8		52+	93	57	315	26N	30	263	27	+2.8	-6.1	+9.9	+9.9	.074	78.7		6	35	40.3	28	15	51	366.5	665.5

Occultation prediction for Jonathan Ospina observatory
E. Longitude - 75 19 59.3, Latitude 6 18 47.6, Alt. 100m; Telescope dia 15cm; dMag 0.0

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       day  Time     P   Star  Sp  Mag  Mag    % Elon Sun  Moon   CA   PA  VA  AA Libration   A   B   RV    Cct durn  R.A. (J2000)  Dec   Mdist   SV
 y   m  d  h  m   s       No  D     v    r V  ill     Alt Alt Az   o    o   o   o   L    B   m/o m/o "/s     o  sec  h  m   s    o  m  s   Mm   m/s
     78530 is double: AB 8.6 8.9 0.19"  39.8, dT = +2.5sec
     78530 is a close double. Observations are highly desired
26 Mar 26  1 16 32   Gr  78530cB9  7.8  7.8   52+  93     54 ** GRAZE: CA 14.9N; Dist. 33km in az.  31deg. [Lat =  6.66-0.59(E.Long+75.33)]
26 Mar 26  1 24 54   r   78530cB9  7.8  7.8   52+  93     54 311   4N   8 246   5 +2.7 -6.1 +9.9+9.9 .076  101.3      6 35 40.3  28 15 51 366.7 684.7
     78530 is double: AB 8.6 8.9 0.19"  39.8, dT = -2.1sec
     78530 is a close double. Observations are highly desired
26 Mar 26  2 39  1.4 d   78580SA2  7.3  7.2   53+  93     40 301  90N  94 348  91 +2.5 -5.9 +1.6-0.3 .422   17.2      6 38 53.6  27 48 16 367.9 787.4
     78580 is triple: AC 7.3 13.8 26.6" 237.2, dT = -51sec : AB 7.3 10.5 28.6" 130.4, dT = +55sec
26 Mar 27  3 25 28.6 d   79610 F8  7.2  7.0   64+ 107     43 299  12S 179  73 170 +3.3 -4.8 -1.3-4.4 .222  -59.7      7 41  3.1  24 57 54 370.3 788.8
26 Mar 29 23 42  0.3 d    1510pK0  7.7  7.1   90+ 144  -9 42  81  72N  94 186  74 +5.6 -0.9 +2.0+0.0 .345   28.8     10 20 26.4  11 21 10 378.8 723.6
     1510 is double: AB 7.8 12.2 43"   6.5, dT = +6sec
26 Mar 30  1 33 59.3 d    1515kF8  7.8  7.5   91+ 144     70  76  37S 166 266 146 +5.2 -0.7 +1.0-3.3 .292  -34.2     10 21 52.9  10 41 59 377.4 647.0
26 Mar 30  3  9  8.5 D    1522 K0  6.8  6.2   91+ 145     85 324  64N  86 302  66 +4.9 -0.5 +4.3+0.3 .232   49.4     10 24 19.5  10 35 16 377.2 650.4
26 Mar 30  6  6 15.9 D    1531wA0  6.0  6.0v  91+ 146     44 277  72N  93   3  73 +4.3 +0.0 +2.0-0.4 .341   37.5     10 27 39.0   9 45 45 379.6 791.3
   R1531 = 45 Leonis (CX)
     1531 is double: AB 6.0 12.4 34" 119.5, dT = +89sec
     1531 = CX Leo, 6.01 to 6.03, V, Type ACV, Period 3.0525 days, Phase  70%
26 Apr  3  1 20  5.2 R    1930pK5  5.3  4.5s  99- 168     22 107  45N 353  71 333 +4.2 +4.8 -0.5-2.9 .312  132.8 .01 13 26 43.2 -12 42 28 394.4 879.5
   R1930 = 68 Virginis
     1930 is double: ** 6.4 6.4 0.10"  90.0, dT = +0.04sec
     1930 has been reported as non-instantaneous (OCc 164). Observations are highly desired
     1930 = NSV 6244, 5.20 to 5.28, V
   Distance of 1930 to Terminator = 11.1"; to 3km sunlit peak = 2.6"
26 Apr  4  2 53 57.6 R    2039 A0  5.5  5.5   96- 156     32 116  82N 307  18 289 +3.3 +5.9 +0.7-1.1 .417  179.7     14 15 24.1 -18 12  2 396.6 802.7
26 Apr  4  4 17 48.2 R    2045cK0  6.4        95- 155     49 128  86S 295 351 277 +3.0 +6.0 +1.9-0.9 .348 -165.1     14 17  3.8 -18 35  9 395.3 690.4
     2045 is double: AB 6.40 10.51 0.70"  83.1, dT = +1.7sec
     2045 is a close double. Observations are highly desired
26 Apr  4  5 21 39.8 R    2051 A*  5.9  5.9v  95- 155     60 146  61N 328   4 310 +2.8 +6.2 +1.3-2.3 .311  162.4     14 18 38.3 -18 42 57 394.7 625.3
     2051 = CS Vir, 5.84 to 5.95, V, Type ACV, Period 9.2954 days, Phase  55%
26 Apr  4  7 57 12.8 r  158499 F2  7.7  7.5   95- 154     57 218  80S 289 248 271 +2.1 +6.4 +3.0-1.1 .291 -166.8     14 20 50.3 -19 19 56 395.2 572.3
26 Apr  4 10 30 51.8 r  158538wK1  7.3  6.8   95- 153  -8 27 244  51S 260 188 242 +1.5 +6.5 +1.4+0.2 .327 -152.2     14 24  0.4 -19 48  3 398.0 712.4
    158538 is double: AB 7.4 11.6 40" 286.2, dT = -109sec
26 Apr  5  3 34  8.7 r  183168kK1  7.1  6.5   91- 144     29 120  33N 350  59 334 +2.2 +6.5 -0.7-2.9 .283  133.4     15  6  3.1 -22 24 14 399.4 799.4
26 Apr  6  4 15 22.2 D    2287SB1  2.9  3.0v  84- 133     26 123 -43S 154 222 142 +1.1 +6.9 -0.3-2.1 .330  -35.7     15 58 51.1 -26  6 51 401.4 791.9
   R2287 = pi Scorpii
     2287 is triple: Aa,Ab 5.1 13.4 2.0" 244.0, dT = -0.03sec : AB 2.9 11.9 50" 128.1, dT = +138sec
     2287 is a close double. Observations are highly desired
     2287 = pi Sco, 2.88 to 2.91, V, Type ELL, Period 1.570103 days, Phase  64%
26 Apr  6  5 19 41.2 R    2287SB1  2.9  3.0v  84- 133     39 131  67S 263 320 252 +0.9 +7.0 +2.6+0.6 .289 -144.5     15 58 51.1 -26  6 51 400.3 688.2
   R2287 = pi Scorpii
     2287 is triple: Aa,Ab 5.1 13.4 2.0" 244.0, dT = -7sec : AB 2.9 11.9 50" 128.1, dT = +125sec
     2287 is a close double. Observations are highly desired
     2287 = pi Sco, 2.88 to 2.91, V, Type ELL, Period 1.570103 days, Phase  64%
26 Apr  6  7 25 50.1 r  184047pM2  7.5  6.7v  84- 132     56 163  20N 356  14 345 +0.3 +7.2 -0.1-5.9 .137  119.1 .01 16  2 29.1 -26  8 53 399.1 547.3
    184047 is double: AB 7.6      10.0"   1.1, dT = -72sec
    184047 is a close double. Observations are highly desired
    184047 = V1043 Sco, 7.45 to 7.58, Hp, Type SRB
26 Apr  6  8 40  8   r    2297kF7  7.0  6.7   83- 132     56 193  22S 219 204 208 +0.0 +7.3 +5.8+6.6 .093 -110.3     16  3 16.1 -26 43  2 399.1 519.9
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Occultation prediction for Jonathan Ospina observatory
E. Longitude - 75 19 59.3, Latitude 6 18 47.6, Alt. 100m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon Sun Alt	Moon Alt	Az	CA o	PA o	VA o	AA o	Libration L	B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	Apr	11	7	52	21.2	R	2991	K5	6.1	5.3		38-	77	20	116	79N	266	340	279	-5.0	+4.2	+1.1	+0.4	.395	172.4		20	29	31.3	-22	23	30	393.3	761.2
26	Apr	11	9	39	41.3	r	189403	WF0	7.7	7.5		38-	76	42	128	63N	282	340	295	-5.4	+4.2	+2.5	-0.4	.276	148.4		20	32	13.3	-22	9	17	390.9	614.8
							189403 is double: AB 7.8 8.1 40" 128.8, dT = +128sec																												
26	Apr	11	9	41	45.5	r	189405	SF0	8.1	7.9		38-	76	43	128	65N	279	337	293	-5.4	+4.2	+2.5	-0.3	.282	150.6		20	32	15.5	-22	9	42	390.8	612.7
							189405 is quadruple: **Ba,Bb 9.2 9.2 0.10" : ** 9.2 9.2 0.10" 44.0, dT = +0.2sec : BA 8.1 7.8 40" 308.8, dT = -123sec																												
							189405 has been reported as non-instantaneous (OCc 674). Observations are highly desired																												
26	Apr	11	10	35	4.2	r	189425	WF7	7.5	7.2		38-	76	-6 52	139	74S	238	283	252	-5.6	+4.1	+2.8	+1.6	.302	-173.4		20	33	30.9	-22	13	55	390.0	574.1
							189425 is double: AB 7.5 11.6 10.3" 21.3, dT = +27sec																												
26	Apr	13	10	23	54	M	3262	pG5	6.9	6.5		19-	52	-8 36	109	9N	329	43	349	-6.3	+1.3	+9.9	+9.9	.000	90.0		22	13	26.4	-11	55	34	380.5	731.9
							R3262 = 40 Aquarii																												
							3262 is double: ** 7.6 8.2 0.004" 75.0																												
26	Apr	19	17	8	26.7	d	569	cA2	5.3			8+	32	85 57	51	73N	52	173	65	+0.6	-6.7	+1.5	+1.6	.418	10.3		3	50	18.9	25	34	46	356.4	734.4
							569 is double: AB 5.73 6.52 0.65" 204.0, dT = -1.4sec																												
							569 is a close double. Observations are highly desired																												
26	Apr	19	23	55	56.1	d	76405	G5	8.9	8.3		9+	34	20	295	39S	122	29	133	-0.4	-6.8	+0.1	-1.4	.436	-33.6		4	2	17.8	25	55	9	359.8	912.4
26	Apr	20	0	6	11.9	d	76407	A0	8.2	8.1		9+	34	18	295	39S	122	30	133	-0.4	-6.8	+0.0	-1.4	.445	-33.4		4	2	41.8	25	55	17	360.1	931.4
26	Apr	20	0	55	0.1	d	76431	dM0	8.3	7.4v		9+	35	7	296	82N	63	337	74	-0.4	-6.7	+0.6	+0.6	.524	26.3		4	4	46.5	26	12	2	361.3	1024.4
							76431 is double: AB 8.5 10.5 7.0" 91.3, dT = +12sec																												
							76431 is a close double. Observations are highly desired																												
							76431 = ASAS J040446+2612.1, 8.28, range 0.17, V, Type MISC, Period 43.68 days, Phase 72%																												
26	Apr	20	23	54	13.6	d	76973	F2	8.8	8.6		17+	48	-12 34	300	42N	32	290	38	+1.5	-6.7	+3.4	+3.8	.198	64.9		5	8	8.8	28	22	33	360.2	817.1
26	Apr	20	23	54	26.1	D	768	A2	7.0	6.7S		17+	48	-12 34	300	71N	62	319	67	+1.5	-6.7	+1.9	+1.0	.380	35.7		5	8	35.3	28	16	24	360.2	816.9
							768 = NSV 16250, 7., , Type VAR:																												
26	Apr	21	0	24	3.7	D	771	SA5	6.1	5.9e		17+	48	28	298	63S	107	9	112	+1.4	-6.6	+0.7	-0.8	.489	-9.2		5	9	45.1	28	1	50	360.8	867.5
							771 is triple: Aa,Ab 6.0 0.20" 351.0, dT = -0.18sec : A,BC 6.0 9.1 11.2" 29.1, dT = +5sec																												
							771 is a close double. Observations are highly desired																												
							771 = V1156 Tau, 6. to 6.1, Hp, Type E:, Period 1.40266 days, Phase 44%																												
26	Apr	21	0	24	7.9	d	76991	MA3	8.6			17+	48	28	298	64S	106	8	112	+1.4	-6.6	+0.7	-0.7	.490	-8.4		5	9	45.5	28	2	2	360.8	867.6
							76991 is triple: BC 9.11 9.71 0.26" 63.3, dT = +0.39sec : BC,A 9.1 6.0 11.2" 209.1, dT = -5sec																												
							76991 is a close double. Observations are highly desired																												
26	Apr	22	0	9	51.3	d	78154	A0	8.5	8.4		26+	62	44	304	85N	84	334	83	+3.0	-6.1	+2.0	+0.1	.398	23.0		6	16	3.2	28	12	6	362.3	760.5
26	Apr	22	0	32	31.9	d	952	K2	8.0	7.2		27+	62	39	301	17S	163	57	162	+3.0	-6.0	-0.5	-3.7	.258	-55.3		6	15	54.8	27	51	42	362.7	795.7
26	Apr	22	1	8	41.2	D	78191	A0	7.7	7.7		27+	62	32	299	82S	97	356	96	+2.9	-6.0	+1.1	-0.4	.476	10.9		6	17	59.9	28	0	24	363.5	855.1
26	Apr	22	1	31	53.8	d	78206	K0	8.0	7.4		27+	62	27	298	75N	74	337	73	+2.9	-5.9	+1.4	+0.4	.424	33.4		6	18	47.3	28	3	20	364.0	896.0
26	Apr	23	0	45	53.7	D	79316	G2	7.5	7.1v		37+	76	50	304	87N	94	341	87	+4.3	-5.1	+2.1	-0.3	.386	22.7		7	21	32.8	26	9	33	365.6	741.8
							79316 = V0340 Gem, 7.37 to 7.71, V, Type RS, Period 35.37 days, Phase 17%																												
26	Apr	23	1	10	59.5	d	79319	K2	7.9	7.3		38+	76	45	301	37S	150	42	143	+4.2	-5.0	+0.3	-2.4	.366	-33.3		7	21	39.7	25	51	44	366.1	777.4
26	Apr	25	0	48	5	m	98471	cG5	8.0	7.6		60+	101	75	321	22N	40	261	24	+5.9	-2.4	+9.9	+9.9	.000	90.0		9	16	54.9	18	7	45	372.9	652.0
							98471 is double: ** 9.0 9.0 0.10" 146.0																												
							98471 has been reported as non-instantaneous (OCc 740). Observations are highly desired																												
26	Apr	25	2	29	51	M	1383	cF5	6.6	6.4		60+	102	54	291	22N	40	296	23	+5.5	-2.1	+9.9	+9.9	.000	90.0		9	18	58.9	17	42	19	374.2	746.9
							R1383 = 83 Cancri																												
							1383 is double: AB 6.6 0.30" 328.1																												
							1383 is a close double. Observations are highly desired																												
26	Apr	25	3	28	24.7	d	98511	kF2	7.8	7.6		61+	102	41	287	87S	111	15	95	+5.4	-2.0	+1.2	-1.0	.433	16.1		9	20	38.2	17	7	38	375.4	821.3
26	Apr	26	1	18	48.4	d	98966	SG	8.2	7.7		70+	114	82	314	35S	166	34	147	+6.0	-0.8	+0.7	-3.3	.300	-31.8		10	8	12.8	11	59	49	377.1	646.4
							98966 is quadruple: BC 8.2 13.2 0.9" 82.7, dT = +0.32sec : BD 8.2 12.1 108" 210.0, dT = +260sec : BA 8.2 1.4 176" 128.0, dT = +460sec																												
							98966 is a close double. Observations are highly desired																												

Occultation prediction for Jonathan Ospina observatory
E. Longitude - 75 19 59.3, Latitude 6 18 47.6, Alt. 100m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon Alt	Sun Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct durn o	sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	Apr	26	1	26	27.7	D	1487SB7		1.4	1.4s		70+	114		80	306	36S	165	40	146	+6.0	-0.8	+0.8	-3.2	.307	-30.3		10	8	22.3	11	58	2	377.1	649.9
	R1487 = Regulus = alpha Leonis																																	
	1487 is triple: AB 1.4 8.2 176" 308.0, dT = -459sec : AD 1.4 12.1 193" 274.0, dT = -206sec																																	
	1487 = NSV 4750, 1.33 to 1.40, V																																	
26	Apr	26	2	40	40.2	R	1487SB7		1.4	1.4s		71+	115		63	284	-83S	284	184	265	+5.7	-0.6	+2.6	-0.9	.332	-150.2		10	8	22.3	11	58	2	377.9	702.0
	R1487 = Regulus = alpha Leonis																																	
	1487 is triple: AB 1.4 8.2 176" 308.0, dT = -483sec : AD 1.4 12.1 193" 274.0, dT = -571sec																																	
	1487 = NSV 4750, 1.33 to 1.40, V																																	
26	Apr	27	0	48	6.5	D	1589pM5		5.9	5.3v		80+	126		77	90	51S	151	240	130	+6.2	+0.7	+1.5	-2.6	.333	-15.6		10	56	1.5	6	11	7	381.1	639.8
	R1589 = 56 Leonis (VY)																																	
	1589 is double: 6.2 7.1																																	
	1589 = VY Leo, 5.69 to 6.03, V, Type SR, Period 46.34 days, Phase 16%																																	
26	Apr	28	1	35	48.7	d	1697kA2		7.8	7.8		87+	138		77	118	50N	72	133	50	+5.7	+2.3	+6.5	+2.3	.140	65.9		11	43	19.9	0	11	7	385.1	642.1
26	Apr	28	3	32	4.3	d	138388	K0	7.3	6.8		88+	139		71	249	81S	120	53	98	+5.3	+2.5	+2.5	-1.6	.332	16.5		11	45	1.4	- 0	31	4	385.5	648.2
26	Apr	28	23	58	10.0	d	138781cF2		7.7			93+	150		43	104	84S	115	191	93	+5.6	+3.4	+1.5	-0.9	.380	16.5		12	26	47.7	- 5	35	32	390.2	749.4
	138781 is double: AB 8.11 8.79 0.37" 85.9, dT = +0.9sec																																	
	138781 is a close double. Observations are highly desired																																	
26	Apr	29	23	43	16.6	d	157785kK0		6.9	6.3		97+	161	-9	28	106	74S	119	195	98	+5.0	+4.5	+0.8	-0.9	.431	8.9		13	11	40.6	-11	13	18	394.6	834.7
26	Apr	30	3	54	6.1	d	157822kK2		7.3	6.6		98+	162		71	186	44S	146	139	124	+4.1	+5.0	+1.8	-2.4	.313	-11.0		13	15	54.0	-12	21	0	392.0	605.7
26	Apr	30	6	30	4.8	d	157849KF2		7.3	7.1		98+	163		46	244	75N	84	17	63	+3.5	+5.3	+2.7	+0.1	.261	40.0		13	18	58.6	-12	38	53	393.8	650.4
26	May	1	3	53	34.5	d	2011 K2		6.3	5.6		100+	172		65	160	49S	114	136	95	+3.4	+5.9	+2.8	-1.2	.302	17.1		14	3	4.1	-17	22	1	394.9	604.4
	Distance of 2011 to Terminator = 4.6"; to 3km sunlit peak = 0.0"																																	
26	May	3	6	24	16.8	r	183731pF0		7.3	7.1		98-	162		58	190	57S	266	256	254	+0.9	+7.1	+3.8	+0.2	.245	-153.6		15	43	11.6	-25	24	56	399.3	530.1
	183731 is double: AB 7.3 9.3 5.9" 291.8, dT = -22sec																																	
	183731 is a close double. Observations are highly desired																																	
26	May	4	10	35	23.4	r	2397 K1		6.5	5.9		93-	150	-4	27	234	46S	243	177	236	-1.2	+7.0	+1.0	+0.9	.333	-158.3		16	41	37.6	-27	48	35	402.8	701.0
26	May	5	3	38	34.3	r	185400 F5		7.2	7.0		89-	141		23	125	59S	248	317	244	-0.7	+6.6	+1.9	+1.3	.307	-141.4		17	26	15.7	-28	25	0	403.3	767.1
26	May	7	9	17	9.1	r	2824 K4		7.3	6.5		73-	118		58	177	51N	302	306	310	-4.4	+5.4	+5.0	-2.7	.161	126.4		19	21	44.2	-26	9	59	397.5	525.0
26	May	9	8	20	5.8	R	164087 K1		7.0	6.3		55-	96		44	124	46N	298	358	313	-6.0	+3.1	+2.9	-1.8	.196	127.0		21	2	45.2	-19	14	56	391.5	619.7
26	May	10	10	4	56.6	r	3207DF*		8.2			44-	84	-11	58	130	89S	249	301	267	-7.0	+1.6	+2.8	+1.2	.315	163.5		21	53	21.6	-14	11	23	385.1	613.9
	3207 is double: AB 8.21 11.42 1.49" 32.3, dT = +4sec																																	
	3207 is a close double. Observations are highly desired																																	
26	May	12	8	43	5.0	R	3454 K0		7.6	7.1		25-	60		23	95	75S	232	314	254	-6.9	-1.3	+0.7	+1.5	.472	-174.8		23	27	14.7	- 2	38	13	376.4	865.7
26	May	12	9	2	38.0	r	146720 K5		8.1	7.4		25-	59		28	96	31S	188	270	210	-6.9	-1.3	+0.3	+3.3	.307	-131.9		23	28	27.0	- 2	39	13	375.9	838.3
26	May	12	9	18	58.7	r	146716pG0		8.4	8.2		25-	59		32	97	81S	239	320	260	-6.9	-1.3	+1.1	+1.4	.447	176.1		23	28	5.7	- 2	27	33	375.4	815.6
	146716 is triple: AB 9.2 9.2 0.20" 79.6, dT = +0.42sec : AC 8.5 8.1 57" 45.9, dT = +125sec																																	
	146716 is a close double. Observations are highly desired																																	
26	May	12	9	21	3.9	r	146717PF2		8.1	7.9		24-	59		32	97	82S	239	320	261	-6.9	-1.3	+1.1	+1.3	.445	175.5		23	28	8.5	- 2	26	53	375.4	812.8
	146717 is double: AB 8.1 8.5 57" 225.9, dT = -125sec																																	
26	May	14	9	8	48	m	92270cF8		8.7	8.4		8-	33		8	80	14N	329	54	350	-5.2	-4.1	+9.9	+9.9	.000	90.0		1	8	24.2	10	51	30	366.2	1066.7
	92270 is double: AB 8.8 11.5 0.10" 298.0																																	
	92270 is a close double. Observations are highly desired																																	
26	May	14	9	32	19.8	r	92275k		9.5	9.3		8-	33		13	80	72S	234	320	255	-5.2	-4.1	+0.1	+1.2	.577	-176.4		1	8	57.3	10	33	43	365.5	1025.7
26	May	14	9	49	1.7	r	92280kG0		9.5	9.2		8-	33		17	80	69N	274	0	295	-5.2	-4.1	+0.7	+0.1	.450	142.9		1	9	16.9	10	49	37	365.0	999.3
26	May	18	23	54	21	m	X 78301		9.2	8.6		7+	30	-11	19	298	23N	13	281	15	+1.6	-6.0	+9.9	+9.9	.000	90.0		5	49	1.8	28	20	52	357.9	978.3
26	May	18	23	58	25.0	r	77582 B3		8.4	8.3		7+	30		18	298	0N	351	259	353	+1.6	-6.0	-2.0	-4.4	.217	112.5		5	48	41.3	28	19	29	358.0	986.8
26	May	19	0	17	59.0	D	885wG7		5.6	5.1		7+	30		14	297	73S	98	8	100	+1.7	-6.0	+0.3	-0.4	.585	5.0		5	50	58.1	27	58	4	358.4	1021.0
	885 is double: AB 5.7 12.5 10.8" 233.1, dT = -13sec																																	

Occultation prediction for Jonathan Ospina observatory
E. Longitude - 75 19 59.3, Latitude 6 18 47.6, Alt. 100m; Telescope dia 15cm; dMag 0.0

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      day  Time     P   Star  Sp  Mag  Mag    % Elon Sun  Moon   CA   PA  VA  AA Libration   A   B   RV    Cct durn  R.A. (J2000)  Dec   Mdist   SV
 y   m  d  h  m    s       No  D    v    r V  ill     Alt Alt Az   o    o   o   o   L    B   m/o m/o "/s     o  sec  h  m   s    o  m  s   Mm   m/s
26 May 19  0 33 47.9 D   77638 B8  8.2  8.1    7+  30     10 297  73N  64 336  66 +1.7 -5.9 +0.7+0.6 .472   38.6      5 51 33.0  28  5 32 358.81051.4
26 May 19  0 36 41.4 D   77639 K0  8.3  7.7    7+  31     10 297  55S 117  29 118 +1.7 -5.9 -0.2-0.9 .590  -13.6      5 51 40.2  27 50 31 358.91056.5
26 May 19  0 38 51.7 D   77621 M3  7.5  6.6s   7+  31      9 297  -1S 173  85 174 +1.7 -5.9 -2.2-4.5 .211  -69.8      5 50 48.2  27 41  9 359.01061.7
    77621 = NSV 16688, 7.47, range 0.02, 6V, Type VAR, Period 4.88496 days
26 May 20  0 10 50.4 d   78909 F8  8.9  8.6   14+  44     29 297  62N  64 325  59 +3.5 -5.1 +1.9+1.0 .342   48.9      6 57 48.5  26 52 26 360.1 907.7
26 May 20  0 16  6.6 d   78914 K2  8.6  8.0   14+  44     28 297  55S 127  29 122 +3.5 -5.1 +0.3-1.3 .509  -14.2      6 57 53.2  26 34  8 360.2 916.3
26 May 20  0 55 17.6 d   78940 K8  8.9  8.0   14+  44     20 296  46S 136  43 131 +3.5 -5.0 -0.2-1.5 .512  -24.5      6 59 13.5  26 24  6 361.2 986.3
26 May 20  1 47 13.4 d   78979 G5  8.1  7.6   15+  45      9 296  51S 132  44 127 +3.5 -4.8 -0.4-1.2 .573  -21.2      7  1 25.4  26 14  7 362.61081.3
26 May 21  0  0  9.1 D    1208DK1  6.4        23+  58     46 297  78S 111   6 101 +5.0 -3.9 +1.4-1.0 .449    9.7      8  1  0.8  23 34 59 363.1 801.5
     1208 is double: AB 6.48 9.95 1.95" 325.2, dT = -4sec
     1208 is a close double. Observations are highly desired
26 May 21  1 36 35.9 d   79906 K2  8.7  8.1   24+  58     24 293  54N  64 330  53 +4.9 -3.6 +1.8+1.1 .309   55.0      8  3 58.9  23 24 21 365.4 955.4
26 May 21  2 58 11.8 d   79951 G5  7.8  7.2   24+  59      6 292  66S 124  39 113 +4.9 -3.4 -0.3-1.0 .608   -8.6      8  6 56.2  22 46 31 367.61096.9
26 May 21  3  3 22.2 D    1221cM3  6.0  5.1v  24+  59      5 292  17S 173  88 163 +4.9 -3.4 -1.2-2.9 .328  -58.1      8  6 18.4  22 38  8 367.81106.9
   R1221 = 9 Cancri = BL Cnc.
     1221 is double: AB 6.0 10.1 0.40"
     1221 is a close double. Observations are highly desired
     1221 = BL Cnc, 5.97 to 6.04, V, Type SR
26 May 23  3 57 57.6 D    1466cB9  5.3  5.3   46+  85     16 281  58S 143  56 124 +6.3 -0.3 +0.0-1.7 .501  -19.4      9 58 13.4  12 26 41 377.6 973.2
   R1466 = nu Leonis
     1466 is double: ** 6.0 6.0 0.050"
     1466 has been reported as non-instantaneous (OCc1407). Observations are highly desired
26 May 24  2 43 13.8 d  118476PF8  8.2  7.9   56+  97     45 273  78S 124  36 103 +6.5 +1.0 +1.3-1.5 .414    7.2     10 45 18.9   6 57 39 380.0 769.0
    118476 is double: ** 8.9 8.9 0.10"  90.0, dT = +0.2sec
    118476 has been reported as non-instantaneous (OCc1419). Observations are highly desired
26 May 24  4 32 56.6 d    1573pA2  7.1  7.0   57+  98     18 275  34S 168  83 148 +6.3 +1.3 -0.1-2.8 .354  -44.5     10 47 19.2   6 20 46 382.9 921.0
   R1573 = 38 (Sextantis)/Leonis
26 May 28  0 51 10.6 d    1970SA0  6.2  6.2   90+ 143     58 134  12S 183 232 163 +5.0 +5.6 -0.7-4.2 .216  -50.4     13 45 35.1 -15 46  3 395.2 651.1
   R1970 = 85 Virginis
     1970 is multiple: Aa,Ab 6.5 8.2           : Aa,Ac 6.5 8.4 0.10"       : AB 6.2 12.8 44" 312.7, dT = -129sec : AB 6.2 12.8 44" 312.5, dT = -
129sec
     1970 is a close double. Observations are highly desired
   Distance of 1970 to Terminator = 10.0"; to 3km sunlit peak = 1.0"
26 May 29  1 38 28.9 D    2084 A3  6.5  6.4   95+ 155     55 140  52S 136 178 118 +3.9 +6.4 +1.6-1.8 .326   -6.8     14 34 50.7 -20 26 22 397.9 633.0
26 Jun  2  4 52 22.5 r  186286 B7  7.1  7.1   97- 159     49 148  65S 256 294 257 -1.3 +6.3 +3.3+0.8 .269 -163.0     18  6 45.8 -28 21 50 401.2 547.3
26 Jun  2  5 47 28.0 R    2617cK0  4.6  4.1   97- 159     54 165  42S 234 251 234 -1.5 +6.3 +3.7+2.2 .219 -145.7     18  8  5.0 -28 27 26 400.8 514.9
     2617 is double: AB 5.1 5.9 0.26"  12.0, dT = +0.9sec
     2617 is a close double. Observations are highly desired
26 Jun  2  8 49 34.6 r  186434 K5  7.5  6.6   96- 158     42 222  73N 297 248 298 -2.4 +6.1 +3.6-1.9 .224  135.1     18 11 44.7 -28  1 56 401.6 617.4
26 Jun  2  9 22 55.6 r  186461cA2  7.4  7.2v  96- 158     36 228  43S 233 177 234 -2.5 +6.1 +1.2+1.3 .325 -162.3     18 12 37.6 -28 14 11 402.1 664.5
    186461 is double: ** 8.2 8.2 0.050"
    186461 has been reported as non-instantaneous (OCc1536). Observations are highly desired
    186461 = V4385 Sgr, 7.42 to 7.46, Hp, Type ELL:, Period 2.62462 days, Phase   9%
26 Jun  5  5 51 42.2 r  189638DK0  7.7        79- 126     38 123  57S 224 287 238 -4.9 +3.3 +2.2+2.3 .296 -153.7     20 44 49.2 -20 53 34 396.2 634.9
    189638 is double: AB 7.95 9.63 2.05"  97.4, dT = +4sec
    189638 is a close double. Observations are highly desired
26 Jun  6  6 21 36.3 r    3157cF6  7.3        71- 114     37 115  74S 236 305 253 -5.9 +2.0 +1.8+1.7 .350 -172.0     21 33 40.2 -16 12  4 392.5 672.3
     3157 is double: AB 7.33 10.00 0.90"   2.6, dT = +1.5sec
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Occultation prediction for Jonathan Ospina observatory
E. Longitude - 75 19 59.3, Latitude 6 18 47.6, Alt. 100m; Telescope dia 15cm; dMag 0.0

y	m	day d	h	Time m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon	Sun Alt	Moon Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
							3157 is a close double. Observations are highly desired																													
26	Jun	7	7	5	14.5	r	3282	kK0	7.8	7.0		61-	103	38	109	33S	192	265	212	-6.7	+0.5	+1.0	+3.6	.263	-134.7			22	22	11.6	-10	50	53	387.7	703.2
26	Jun	7	9	29	22.2	R	3286	K0	7.2	6.4		60-	102	69	140	85S	243	284	263	-7.2	+0.2	+2.8	+1.4	.315	162.9			22	24	7.6	-10	11	52	385.2	616.1
26	Jun	10	8	5	57.8	r	109437	kG5	7.8	7.3		29-	65	24	84	47S	206	292	228	-6.6	-3.8	+0.1	+2.2	.446	-150.9			0	45	40.4	7	50	42	371.7	920.5
26	Jun	11	9	3	42.7	R	244	K0	6.7	6.2		19-	52	26	77	62S	224	314	244	-5.6	-5.0	+0.3	+1.5	.522	-168.8			1	39	15.4	14	17	8	365.5	943.7
							R244 = 104 Piscium																													
26	Jun	12	10	0	52.1	r	93031	cF0	8.8			10-	38	-11	26	71	63S	232	325	249	-4.1	-5.9	+0.3	+1.3	.546	-173.2			2	37	55.1	20	3	10	360.3	961.2
							93031 is double: AB 9.48 9.34 0.49" 145.0, dT = -0.05sec																													
							93031 is a close double. Observations are highly desired																													
26	Jun	17	0	2	58.6	D	79521	cG2	7.4	7.0		5+	26	-11	15	294	48N	51	321	43	+3.2	-4.0	+1.7	+1.9	.268	63.6			7	34	50.4	24	57	16	359.5	1048.6
							79521 is double: ** 8.8 8.8 0.050"																													
							79521 has been reported as non-instantaneous (OCc1366). Observations are highly desired																													
26	Jun	17	0	38	39	M	79535	K0	8.3	7.8		5+	26		7	294	20N	23	297	15	+3.2	-3.9	+9.9	+9.9	.000	90.0			7	35	54.9	24	54	24	360.4	1113.7
26	Jun	18	0	11	19.5	D	80278	kA*	7.5	7.4		12+	40	26	290	24S	168	75	155	+4.8	-2.6	-0.6	-2.7	.372	-46.8			8	36	17.4	20	20	29	362.7	954.3
26	Jun	18	0	19	40.2	D	80294	kF8	8.0	7.7		12+	40	25	290	84S	108	16	95	+4.8	-2.5	+0.6	-0.8	.535	13.4			8	37	26.4	20	29	14	362.9	967.4
26	Jun	18	0	55	13.0	D	1288	kF5	7.8	7.6		12+	40	16	289	57S	135	46	122	+4.8	-2.4	-0.1	-1.4	.561	-15.5			8	38	23.1	20	12	26	363.9	1027.1
26	Jun	18	1	23	53.3	d	80309	kF0	8.1	8.0v		12+	40	10	289	13S	180	93	167	+4.8	-2.4	-1.2	-3.4	.290	-61.6			8	38	37.9	19	59	23	364.7	1077.4
							80309 = CY Cnc, 8.14, range 0.02, V, Type DSCTC, Period 0.1 days																													
26	Jun	18	1	25	4.9	d	80317	pA2	8.3	8.2s		12+	40		10	289	32S	161	74	147	+4.8	-2.4	-0.6	-2.1	.451	-42.3			8	39	3.6	19	59	59	364.7	1078.8
							80317 is double: ** 8.3 10.6 0.044" 98.7, dT = +0.05sec																													
							80317 has been reported as non-instantaneous (OCc 637). Observations are highly desired																													
							80317 = NSV 4162, 8.32, range 0.02, V																													
26	Jun	18	1	27	33.9	D	80327	pA3	7.8	7.6		12+	40		9	289	67S	126	39	112	+4.8	-2.4	-0.2	-1.1	.607	-7.4			8	39	42.8	20	5	10	364.8	1082.5
							80327 is double: AB 7.9 9.6 0.64" 136.3, dT = +1sec																													
							80327 is a close double. Observations are highly desired																													
26	Jun	18	1	39	31.1	D	1295	pK0	6.4	5.9s		12+	40		6	289	62S	131	46	118	+4.8	-2.3	-0.3	-1.2	.606	-13.4			8	40	6.4	20	0	28	365.1	1103.1
							R1295 = 39 Cancri																													
							1295 is multiple: AC 6.5 9.0 134" 309.0, dT = -221sec : AD 6.5 8.8 135" 111.0, dT = +209sec : AB 6.5 6.6 152" 149.9, dT = +238sec : AS 6.5 10.1																													
262" 325.7, dT = -419sec																																			
							1295 = NSV 4179, 6.39, range 0.04, V																													
26	Jun	18	1	40	49.9	d	80343	kF2	8.2	8.0v		12+	40		6	290	77N	90	4	76	+4.8	-2.3	+0.1	-0.2	.551	28.0			8	40	26.7	20	10	55	365.2	1105.5
							80343 = BQ Cnc, 8.19, range 0.02, V, Type DSCTC, Period 0.074 days																													
26	Jun	18	1	43	27.8	D	1296	pA1	6.6	6.6		12+	41		5	289	56S	136	51	123	+4.9	-2.3	-0.4	-1.3	.593	-18.7			8	40	11.5	19	58	16	365.2	1109.9
							R1296 = 40 Cancri																													
							1296 is quadruple: Ba,Bb 6.6 0.40" 128.0, dT = +0.7sec : BR 6.6 11.6 140" 146.9, dT = +233sec : BA 6.6 6.5 152" 329.9, dT = -249sec																													
							1296 is a close double. Observations are highly desired																													
26	Jun	19	1	19	57.5	d	98659		8.8	8.5		20+	54		23	283	72S	126	37	109	+6.0	-0.8	+0.3	-1.3	.533	-2.4			9	35	32.2	14	49	30	368.8	954.6
26	Jun	19	2	42	43.6	d	1420	F2	6.6	6.4		21+	54		4	284	52S	146	62	129	+6.0	-0.6	-0.3	-1.6	.542	-26.6			9	38	1.3	14	20	50	371.2	1090.8
							R1420 = 11 Leonis																													
26	Jun	22	2	37	4	m	138553	kK2	7.5	6.9		51+	92		36	261	13N	36	317	14	+6.6	+3.9	+9.9	+9.9	.000	90.0			12	3	13.2	- 3	23	44	385.7	755.5
26	Jun	23	0	47	47.9	d	138958	G5	8.1	7.7		61+	103		68	226	14S	188	142	166	+6.5	+4.9	-0.4	-4.9	.192	-53.9			12	46	1.2	- 9	18	48	388.3	612.5
26	Jun	23	0	51	50.5	d	1835	K2	7.6	6.9		61+	103		67	227	79S	123	75	101	+6.5	+4.9	+2.5	-1.7	.319	10.9			12	47	6.3	- 9	12	52	388.3	612.9
26	Jun	24	23	16	8	M	2051	A*	5.9	5.9v		79+	125	0	53	133	24N	40	90	21	+5.4	+6.3	+9.9	+9.9	.000	90.0			14	18	38.3	-18	42	57	396.6	656.0
							2051 = CS Vir, 5.84 to 5.95, V, Type ACV, Period 9.2954 days, Phase 35%																													
26	Jun	24	23	19	24	Gr	2051	A*	5.9	5.9v		79+	125	-2	57	** GRAZE: CA 24.4N; Dist.173km in az. 224deg. [Lat = 4.16-0.95(E.Long+75.33)]																							
26	Jun	25	1	6	43.5	d	158499	F2	7.7	7.5		79+	126		64	178	82N	97	100	79	+4.9	+6.5	+3.7	-0.4	.255	30.7			14	20	50.3	-19	19	56	396.1	569.5
26	Jun	25	4	3	36.3	d	158538	wK1	7.3	6.8		80+	126		41	237	87N	102	40	84	+4.1	+6.7	+2.3	-0.8	.315	10.4			14	24	0.4	-19	48	3	398.0	619.0
							158538 is double: AB 7.4 11.6 40" 286.2, dT = -125sec																													

Occultation prediction for Jonathan Ospina observatory
E. Longitude - 75 19 59.3, Latitude 6 18 47.6, Alt. 100m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon Sun Alt	Moon Alt	Az	CA o	PA o	VA o	AA o	Libration L	B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	Jun	25	5	9	42.8	d	158556	WA2	6.8			80+	127	27	244	84S	111	39	93	+3.9	+6.7	+1.6	-1.1	.362	-4.3		14	25	27.7	-19	57	57	399.5	704.0
	158556 is double: BA 7.2 6.6 35" 114.8, dT = +95sec																																
26	Jun	25	5	11	14.6	d	2066	SA1	6.6	6.6		80+	127	26	244	83S	112	40	93	+3.9	+6.7	+1.5	-1.1	.363	-4.7		14	25	29.9	-19	58	12	399.5	706.3
	2066 is quadruple: **Aa,Ab 6.8 7.7 0.018" 329.0, dT = -0.04sec : BC 7.16 8.37 1.21" 89.4, dT = +3sec : AB 6.6 7.2 35" 294.8, dT = -95sec																																
	2066 has been reported as non-instantaneous (OCc 204). Observations are highly desired																																
26	Jun	26	23	36	4.9	D	2287	SB1	2.9	3.0v		92+	147	-5	35	128	35S	148	209	137	+3.2	+6.9	+0.3	-2.1	.318	-30.2		15	58	51.1	-26	6	51	402.0	716.5
	R2287 = pi Scorpii																																
	2287 is triple: Aa,Ab 5.1 13.4 2.0" 244.0, dT = -0.6sec : AB 2.9 11.9 50" 128.1, dT = +149sec																																
	2287 is a close double. Observations are highly desired																																
	2287 = pi Sco, 2.88 to 2.91, V, Type ELL, Period 1.570103 days, Phase 76%																																
26	Jun	27	0	51	49.2	R	2287	SB1	2.9	3.0v		92+	148		48	142	-85S	268	311	257	+2.9	+7.0	+3.1	+0.3	.273	-150.2		15	58	51.1	-26	6	51	400.9	610.8
	R2287 = pi Scorpii																																
	2287 is triple: Aa,Ab 5.1 13.4 2.0" 244.0, dT = -7sec : AB 2.9 11.9 50" 128.1, dT = +142sec																																
	2287 is a close double. Observations are highly desired																																
	2287 = pi Sco, 2.88 to 2.91, V, Type ELL, Period 1.570103 days, Phase 76%																																
26	Jun	27	2	12	37.3	d	184047	pM2	7.5	6.7v		92+	148		57	167	56N	58	73	47	+2.5	+7.1	+5.2	+2.8	.158	55.2		16	2	29.1	-26	8	53	400.4	538.4
	184047 is double: AB 7.6 10.0" 1.1, dT = +34sec																																
	184047 is a close double. Observations are highly desired																																
	184047 = V1043 Sco, 7.45 to 7.58, Hp, Type SRB																																
26	Jun	27	6	44	57.4	D	2312	M2	5.4	4.5s		93+	149		24	237	42N	43	334	32	+1.4	+7.1	+0.3	+2.1	.251	46.7	.02	16	8	7.6	-26	19	36	403.2	715.5
	2312 = NSV 20513, 5.35, range 0.00, 8V, Type VAR, Period 7.61267 days																																
26	Jun	28	7	0	59.6	d	184936	kA3	7.3	7.2		97+	160		31	232	71N	62	359	56	+0.1	+6.8	+1.1	+0.9	.327	20.0		17	1	56.3	-27	56	20	403.0	680.4
26	Jun	29	7	36	27.4	D	2583	cA7	5.8	5.7		99+	171		33	230	68N	38	338	37	-1.2	+6.3	+0.5	+2.1	.285	35.5		17	56	41.8	-28	3	55	402.4	682.8
	Distance of 2583 to Terminator = 10.9"; to 3km sunlit peak = 2.5"																																
26	Jul	1	8	3	8.0	r	2879	kA3	6.7	6.6		98-	165		48	221	61S	244	198	253	-3.5	+4.4	+2.0	+1.0	.328	174.3		19	42	22.6	-24	51	34	398.4	637.1
26	Jul	2	10	32	55.4	r	3007	K2	7.2	6.5		95-	154	-5	31	242	49N	300	231	314	-5.0	+2.8	+3.6	-3.0	.173	114.7		20	36	26.5	-20	35	8	397.4	798.1
26	Jul	3	4	31	24.4	r	3115	F0	7.1	6.9		90-	144		39	118	83N	262	329	278	-4.5	+2.2	+2.1	+0.6	.326	162.5		21	18	15.7	-17	27	44	394.5	654.7
	R3115 = 31 Capricorni																																
26	Jul	3	6	43	8.0	d	3126	G8	4.3	3.8v		90-	143		63	149	-41N	25	57	41	-5.0	+2.0	+1.7	+3.1	.270	27.8		21	22	14.8	-16	50	4	392.5	581.2
	R3126 = Tae = iota Capricorni																																
	3126 = iot Cap, 4.27, range 0.06, V, Type BY																																
26	Jul	3	8	12	1.6	R	3126	G8	4.3	3.8v		90-	143		66	199	89N	255	235	272	-5.4	+1.8	+3.2	+0.8	.284	153.0		21	22	14.8	-16	50	4	392.2	606.6
	R3126 = Tae = iota Capricorni																																
	3126 = iot Cap, 4.27, range 0.06, V, Type BY																																
26	Jul	4	7	0	59	m	3244	K0	7.3	6.7		83-	132		63	131	21N	319	9	338	-5.8	+0.5	+9.9	+9.9	.000	90.0		22	8	34.1	-11	36	49	389.0	611.8
26	Jul	4	9	3	27.8	R	3253	kB5	5.4	5.5V		83-	131		70	209	57S	217	187	236	-6.3	+0.2	+1.7	+2.2	.331	-172.3		22	10	37.5	-11	33	54	388.4	629.3
	R3253 = 38 Aquarii																																
	3253 = HD 210424, 5.44, , Type ACV, Period 3.9613 days, Phase 44%																																
26	Jul	5	7	45	6	m	146389	K5	7.2	6.3s		75-	120		67	120	22N	315	15	336	-6.5	-1.1	+9.9	+9.9	.000	90.0		22	55	21.2	-	5	41	23	384.7	639.1
	146389 = NSV 25974, 7.27 to 7.31, Hp																																
26	Jul	6	10	28	40.9	r	128354	F8	8.0	7.7		65-	107	-6	79	242	69S	225	164	247	-7.3	-2.9	+2.0	+2.0	.352	177.6		23	44	18.2		0	42	44	379.3	648.0
26	Jul	7	10	42	1.3	R	68	SB9	5.8	S		54-	95	-3	88	291	50S	206	95	228	-7.2	-4.3	+1.3	+2.7	.341	-162.3		0	32	23.8		6	57	20	374.1	650.0
	R68 = 51 Piscium																																
	68 is multiple: Aa,Ac 5.8 9.5 0.20" : Aa,Ab 5.8 8.0 0.27" 284.1, dT = -0.17sec : AB 5.7 9.5 28.5" 81.5, dT = +48sec : AD 5.7 13.1 82" 307.6, dT = +47sec																																
	68 is a close double. Observations are highly desired																																
	68 = NSV 15113, 5.67 to 9.0, V, Type E:																																
26	Jul	10	8	56	54.6	r	75790	G0	8.8	8.5		22-	56		29	67	59S	227	323	242	-3.9	-6.4	+0.2	+1.5	.512	-166.4		3	12	24.7		22	52	50	363.0	926.5

Occultation prediction for Jonathan Ospina observatory
E. Longitude - 75 19 59.3, Latitude 6 18 47.6, Alt. 100m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon	Sun Alt	Moon Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	Jul	10	9	33	55.9	R	470	WK0	6.8	6.2		22-	56	37	66	21S	189	289	204	-4.0	-6.5	-0.7	+3.2	.312	-129.1			3	14	17.2	22	57	14	362.1	867.2
		470 is double: AB 6.9 10.4 42" 33.3, dT = +122sec																																	
26	Jul	11	8	35	43.5	R	76514	G5	7.2	6.9		13-	42	11	64	89S	265	353	275	-2.3	-6.4	+0.2	+0.3	.588	164.6			4	14	32.2	26	15	21	361.2	1068.0
26	Jul	11	9	26	56.9	R	76530	K3	7.8	7.0		13-	42	22	64	71S	247	341	257	-2.3	-6.5	+0.3	+0.8	.558	-179.4			4	16	41.6	26	21	29	359.9	974.6
26	Jul	12	10	8	54.9	r	77159	B9	9.4	9.3		6-	27	-11	17	63	77S	264	355	267	-0.3	-6.2	+0.4	+0.4	.570	172.9			5	25	36.6	27	57	50	358.0	997.4
26	Jul	16	20	19	44.7	d	1466	cB9	5.3	5.3		8+	33	41	75	294	49S	151	39	132	+5.8	-0.3	+1.2	-2.4	.379	-17.9			9	58	13.4	12	26	41	363.3	702.5
R1466 = nu Leonis																																			
1466 is double: ** 6.0 6.0 0.050"																																			
1466 has been reported as non-instantaneous (OCc1407). Observations are highly desired																																			
26	Jul	17	0	1	36.7	D	1476	A0	7.1	7.1v		9+	35	-10	22	280	65N	85	358	67	+5.4	+0.3	+0.9	-0.1	.415	39.3		10	4	8.4	11	37	43	367.9	957.8
1476 = GM Leo, 7.139, range 0.02, 6w, Type DSCTC, Period 0.043988 days, Phase 97%																																			
26	Jul	19	1	0	58.9	d	1699	M*	8.2	7.4v		26+	61	29	265	77N	102	20	80	+6.4	+3.6	+1.2	-0.7	.412	22.7		11	44	36.1	- 1	23	5	379.3	822.5
1699 = IX Vir, 8.07 to 8.43, V, Type SR, Period 472. days, Phase 78%																																			
26	Jul	21	0	21	33.2	d	1906	pK0	7.8	7.2		45+	85	55	236	75S	128	70	107	+6.1	+5.8	+2.3	-1.9	.328	-1.0		13	16	58.4	-13	9	32	388.4	618.1
1906 is double: AB 7.9 13.0 48" 101.4, dT = +132sec																																			
26	Jul	24	1	45	51.7	d	2250	M1	7.7	6.8		74+	119	55	206	31N	40	12	28	+3.3	+7.3	+4.8	+5.7	.107	66.9	.01	15	45	46.4	-25	29	44	399.0	525.2
26	Jul	24	2	52	25.7	d	183789	kA2	7.8	7.7		74+	119	45	223	74S	116	67	103	+3.0	+7.3	+2.9	-1.4	.281	-15.4		15	47	23.3	-25	52	4	399.7	564.7
26	Jul	24	3	32	1.2	d	2256	PA1	7.0	6.9		74+	119	38	230	47S	142	85	130	+2.8	+7.3	+3.0	-3.2	.219	-45.6		15	47	56.5	-25	59	13	400.4	608.0
2256 is double: ** 7.7 7.7 0.10" 90.0, dT = +0.28sec																																			
2256 has been reported as non-instantaneous (OCc1482). Observations are highly desired																																			
26	Jul	24	5	14	43.0	D	2263	cB1	4.6	4.7		75+	120	17	240	63N	72	358	59	+2.5	+7.2	+0.6	+0.5	.371	19.6		15	50	58.7	-25	45	5	402.5	768.1
R2263 = 1 Scorpii																																			
2263 is double: ** 5.6 5.6 0.050"																																			
2263 has been reported as non-instantaneous (OCc1483). Observations are highly desired																																			
26	Jul	25	3	51	22.5	D	2397	K1	6.5	5.9		82+	130	42	223	89N	92	42	84	+1.6	+7.1	+2.6	-0.3	.298	-3.5		16	41	37.6	-27	48	35	401.1	581.6
26	Jul	27	4	25	6.7	d	186903	K4	7.7	6.8		94+	152	52	206	64S	104	75	106	-0.8	+5.9	+3.8	-0.9	.242	-32.4		18	30	53.7	-27	57	6	399.5	555.3
26	Jul	28	2	0	42.8	d	2824	K4	7.3	6.5		98+	163	46	139	68S	91	137	97	-1.2	+5.1	+2.9	+0.2	.288	-11.0		19	21	44.2	-26	9	59	398.5	567.0
26	Jul	31	5	6	30.3	R	3206	F3	5.1	4.9s		97-	162	63	137	87N	255	299	273	-4.5	+0.9	+3.1	+0.9	.293	155.4		21	53	17.8	-13	33	6	389.2	607.4
R3206 = Kuh = mu Capricorni																																			
3206 = NSV 25781, 5.07, range 0.03, V, Type VAR:																																			
26	Jul	31	9	30	24.0	r	164779	KG5	7.2	6.8		97-	160	40	248	48S	208	138	227	-5.5	+0.2	+0.5	+2.1	.379	-158.9		21	58	24.3	-12	39	53	390.2	769.2
26	Aug	1	8	15	33.7	r	146272	G5	7.7	7.2		93-	149	68	233	79S	235	182	256	-5.7	-1.1	+2.2	+1.5	.345	168.2		22	43	12.9	- 7	12	54	385.3	658.8
26	Aug	1	8	26	29.1	R	3334	A0	6.4	6.4		93-	149	66	237	53N	283	226	304	-5.8	-1.1	+5.0	-1.4	.182	120.8		22	43	14.3	- 6	57	47	385.3	665.2
R3334 = 67 Aquarii																																			
26	Aug	2	8	25	20.7	R	3460	kG0	6.9	6.6		86-	137	78	233	85N	250	198	272	-6.0	-2.6	+3.0	+1.0	.311	152.5		23	29	30.3	- 1	2	9	381.4	648.8
R3460 = 12 Piscium																																			
26	Aug	3	3	58	11.5	r	109052	G5	7.4	6.9		79-	126	23	88	53N	281	6	303	-5.2	-3.3	+1.2	-0.3	.329	133.6		0	11	5.7	4	7	59	382.1	883.9
26	Aug	4	8	26	52.0	r	92234	kF5	8.1	7.9		69-	112	77	66	83N	253	5	274	-5.6	-5.1	+2.9	+1.0	.328	152.7		1	5	9.6	11	18	57	373.8	668.4
26	Aug	4	9	54	51.3	r	163	pF2	7.3	7.1		68-	112	79	301	63S	219	99	240	-5.9	-5.3	+1.9	+2.2	.350	-171.2		1	7	4.0	11	33	8	373.5	640.9
163 is double: AB 7.3 10.5 8.3" 201.5, dT = -23sec																																			
163 is a close double. Observations are highly desired																																			
26	Aug	5	9	17	56.5	r	92732	wF5	7.8	7.5		58-	99	74	46	32S	191	323	211	-5.2	-6.2	+0.5	+3.5	.289	-141.2		1	58	47.5	17	1	33	369.9	664.5
92732 is double: AB 7.8 17.9 79" 249.5, dT = -144sec																																			
26	Aug	7	6	7	27.9	R	555	K5	6.4	5.6s		36-	74	7	65	65S	234	320	246	-2.8	-6.5	-0.3	+1.1	.590	-167.0		3	48	6.5	24	59	18	368.5	1082.3
555 = NSV 1316, 6.44, range 0.02, 0V, Type VAR, Period 1.48987 days																																			
26	Aug	7	6	51	23	Gr	569	cA2	5.3			36-	74	18	** GRAZE: CA 13.7N; Dist. 75km in az. 148deg. [Lat = 5.51+0.63(E.Long+75.33)]																						
26	Aug	7	6	52	4	M	569	cA2	5.3			36-	73	17	65	14N	336	67	348	-2.8	-6.6	+9.9	+9.9	.000	90.0		3	50	18.9	25	34	46	367.3	1003.7
569 is double: AB 5.73 6.52 0.66" 204.1																																			

Occultation prediction for Jonathan Ospina observatory
E. Longitude - 75 19 59.3, Latitude 6 18 47.6, Alt. 100m; Telescope dia 15cm; dMag 0.0

y	m	day d	h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon	Sun Alt	Moon Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
							569 is a close double. Observations are highly desired																													
26	Aug	7	7	17	52.7	R	571pA2		6.8	6.7		36-	73	22	65	29S	198	292	210	-2.8	-6.6	-0.7+2.6	.366	-132.9			3	51	25.3	25	9	47	366.7	956.2
							571 is double: ** 7.1 9.1																													
26	Aug	7	7	48	26.2	r	76281	K0	8.0	7.4		35-	73	29	64	55S	225	322	236	-2.8	-6.7	+0.2+1.6	.478	-160.2			3	52	0.9	25	20	30	366.0	902.4
26	Aug	7	8	47	22.0	r	76303	kA2	7.8	7.7		35-	73	42	61	83N	267	12	278	-2.9	-6.8	+1.7+0.3	.419	156.8			3	53	32.0	25	43	48	364.7	806.3
26	Aug	7	8	47	37.0	R	579	kA2	6.4	6.3S		35-	73	42	61	86S	256	2	268	-2.9	-6.8	+1.4+0.7	.444	167.1			3	53	34.5	25	40	58	364.7	805.7
							579 = NSV 1391, 6.33,																													
26	Aug	7	9	18	17.8	r	76313	K0	8.3	7.8		35-	72	48	58	63S	233	344	245	-3.0	-6.9	+1.1+1.5	.424	-169.9			3	54	40.6	25	41	9	364.1	760.7
26	Aug	9	9	33	13.1	r	77957	B9	8.7	8.6		15-	45	24	62	63S	249	344	248	+0.1	-5.9	+0.5+0.9	.499	-166.9			6	6	15.6	27	56	5	361.5	899.1
26	Aug	9	10	1	29.5	r	77987	B9	8.5	8.5V		15-	45	30	61	35S	221	320	220	+0.0	-5.9	+0.1+2.2	.363	-138.5			6	7	39.9	27	51	36	360.8	849.1
							77987 = HD 41639, 8.44, , Type VAR																													
26	Aug	10	8	59	53.8	R	1089	K0	6.7	6.1		7-	31	3	64	35N	339	63	333	+1.7	-4.7	+2.0-3.8	.219	111.3			7	11	30.0	26	24	21	363.0	1060.7
26	Aug	10	9	29	13.4	r X	98986		9.1	8.6		7-	31	9	65	65S	258	346	252	+1.7	-4.8	+0.1+0.5	.558	-167.9			7	12	1.4	26	5	34	362.2	1002.7
26	Aug	10	9	46	43	m	79189	G5	9.3	8.8		7-	31	13	64	13N	1	90	354	+1.7	-4.8	+9.9+9.9	.000	90.0			7	13	57.9	26	28	11	361.9	970.8
26	Aug	14	20	55	43.8	d	1635	cM0	5.2	4.4		6+	28	33	58	264	14S	193	112	171	+5.5	+2.7	-1.0-4.9	.204	-59.9	.02	11	17	17.4	2	0	38	370.9	729.6
							R1635 = 75 Leonis																													
							1635 is double: ** 5.8 6.6 0.044" 0.0																													
							1635 has been reported as non-instantaneous (OCc 763). Observations are highly desired																													
26	Aug	15	0	36	43.1	D	1652	cG8	5.4	4.9		6+	29	4	271	26N	54	330	32	+5.2	+3.1	+0.3+2.2	.232	65.5			11	24	2.3	1	24	28	376.7	1019.8
							R1652 = 79 Leonis																													
							1652 is double: ** 5.9 6.5 0.003" 155.0, dT = 0.00sec																													
26	Aug	22	23	32	35.3	d	186281	K0	7.8	7.2		76+	122	-6	49	149	61S	115	151	115	+0.7	+6.4	+2.8-1.2	.258	-22.5			18	6	36.0	-28	31	56	399.6	542.0
26	Aug	22	23	36	51.0	d	186286	B7	7.1	7.1		76+	122	-7	49	150	79N	75	110	75	+0.7	+6.4	+3.4+0.9	.266	17.0			18	6	45.8	-28	21	50	399.6	538.6
26	Aug	23	0	40	23.7	D	2617	cK0	4.6	4.1		76+	122		55	170	78S	98	109	98	+0.4	+6.4	+3.6-0.4	.257	-12.2			18	8	5.0	-28	27	26	399.2	509.1
							2617 is double: AB 5.1 5.9 0.26" 12.0, dT = +0.08sec																													
							2617 is a close double. Observations are highly desired																													
26	Aug	23	2	26	30.9	r	2617	cK0	4.6	4.1		77+	122		50	208	-66S	242	210	243	-0.1	+6.3	+2.6+1.2	.277	-167.0			18	8	5.0	-28	27	26	399.4	551.5
							2617 is double: AB 5.1 5.9 0.26" 12.0, dT = +0.6sec																													
							2617 is a close double. Observations are highly desired																													
26	Aug	23	2	52	50.8	d	186400	G5	7.8	7.3		77+	122		47	215	56N	52	11	52	-0.2	+6.2	+2.0+1.7	.276	21.7			18	10	32.2	-28	9	13	399.6	576.5
26	Aug	23	3	51	2.9	d	186434	K5	7.5	6.6		77+	123		38	227	47N	43	348	43	-0.5	+6.1	+0.9+1.8	.296	27.9			18	11	44.7	-28	1	56	400.3	651.1
26	Aug	23	4	14	1.9	d	186461	cA2	7.4	7.2v		77+	123		34	230	71S	105	46	106	-0.5	+6.1	+2.5-1.0	.290	-34.7			18	12	37.6	-28	14	11	400.7	685.9
							186461 is double: ** 8.2 8.2 0.050"																													
							186461 has been reported as non-instantaneous (OCc1536). Observations are highly desired																													
							186461 = V4385 Sgr, 7.42 to 7.46, Hp, Type ELL:, Period 2.62462 days, Phase 27%																													
26	Aug	26	6	21	52.2	d	3049	B9	7.3	7.3		96+	157		42	237	55S	105	43	119	-4.0	+2.4	+3.2-1.2	.235	-52.6			20	52	16.1	-19	38	37	392.9	737.0
26	Aug	26	7	29	59.6	d	3055	K0	6.8	6.3		96+	157		28	245	62N	42	330	56	-4.2	+2.3	+0.3+1.4	.426	12.7			20	53	32.2	-19	6	49	394.0	835.5
26	Aug	27	7	59	30.8	d	3177	cA9	5.9	5.7		99+	169		33	249	48S	110	38	128	-4.9	+0.7	+2.7-1.8	.223	-58.9			21	43	4.4	-14	23	59	390.0	817.8
							R3177 = 44 Capricorni																													
							3177 is double: ** 6.8 6.8 0.10" 90.0, dT = +0.42sec																													
							3177 has been reported as non-instantaneous (OCc1608). Observations are highly desired																													
							Distance of 3177 to Terminator = 9.0"; to 3km sunlit peak = 1.4"																													
26	Aug	28	2	48	47.7	d X	182576		10.9	10.6		87E	180		53	115	14N	352	58	12	-4.2	-0.1	-0.1+5.2	.180	59.4			22	23	52.1	-	9	45	385.5	660.0
26	Aug	28	2	49	34	m X	242731	k	11.2			86E	180		53	116	98U	142	207	161	-4.2	-0.1	+9.9+9.9	.000	-90.0			22	24	42.5	-10	13	5	385.5	658.9
26	Aug	28	2	54	25.9	d X	182569		11.1	10.7		79E	180		55	116	1N	341	45	0	-4.2	-0.1	-1.7+7.5	.118	70.4			22	23	46.2	-	9	44	39	385.4	656.2
26	Aug	28	2	57	30.5	R X	51850	k	10.6	10.4		75E	180		55	118	-44S	203	266	223	-4.2	-0.1	+1.3+2.9	.308	-151.9			22	23	46.0	-10	12	53	385.4	652.8
26	Aug	28	3	0	14.8	d X	182644	k	10.9	10.4		71E	180		56	118	76U	88	152	108	-4.2	-0.1	+3.1+0.3	.278	-37.4			22	25	16.4	-	9	57	32	385.3	653.3
26	Aug	28	3	0	17.9	d X	242729		11.4			71E	180		56	117	40N	21	85	41	-4.2	-0.1	+1.3+3.0	.305	29.3			22	24	36.6	-	9	43	33	385.3	653.3

Occultation prediction for Jonathan Ospina observatory
E. Longitude - 75 19 59.3, Latitude 6 18 47.6, Alt. 100m; Telescope dia 15cm; dMag 0.0

y	m	day d	h	Time m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon Sun Alt	Moon Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	Aug	28	3	6	12.1	R	3286	K0	7.2	6.4		62E	180 57	119	-29S	191	253	211	-4.2	-0.1	+0.9+3.5	.270	-141.2		22	24	7.6	-10	11	52	385.2	648.1
26	Aug	28	3	6	42	m	X182637k		11.1	10.9		61E	180 57	119	78U	140	202	160	-4.2	-0.1	+9.9+9.9	.000	-90.0		22	25	3.2	-10	9	15	385.2	648.8
26	Aug	28	3	13	2.4	d	X242737		11.7			52E	180 59	120	99U	28	89	48	-4.3	-0.1	+1.5+2.7	.323	21.3		22	24	57.4	- 9	41	31	385.1	646.6
26	Aug	28	3	17	45	M	146065	K0	9.3	8.6		45E	180 60	121	-32N	319	19	339	-4.3	-0.1	+9.9+9.9	.000	90.0		22	23	47.5	- 9	41	15	385.0	643.4
26	Aug	28	3	25	54.1	r	X182569		11.1	10.7		33E	180 62	124	-60N	299	356	319	-4.3	-0.1	+6.6-3.7	.115	109.6		22	23	46.2	- 9	44	39	384.9	639.5
26	Aug	28	3	28	38.1	D	146075	K0	9.5	8.9		30E	180 62	124	-3N	360	56	19	-4.3	-0.2	+0.3+4.3	.225	48.9		22	24	43.5	- 9	36	7	384.9	639.5
26	Aug	28	3	34	54.0	R	X 51852		10.9	10.6		23E	180 63	126	-84S	273	328	293	-4.3	-0.2	+3.8-0.1	.240	134.8		22	23	47.4	- 9	49	18	384.8	636.0
26	Aug	28	3	36	47.0	r	X182576		10.9	10.6		21E	180 64	127	-86N	287	341	307	-4.3	-0.2	+5.0-1.4	.174	120.7		22	23	52.1	- 9	45	10	384.8	635.6
26	Aug	28	3	45	31.3	d	X182667		11.0	10.5		13E	180 65	129	85U	36	88	56	-4.4	-0.2	+1.8+2.4	.334	11.2		22	25	38.6	- 9	35	17	384.7	634.5
26	Aug	28	3	46	15.8	r	X242722		11.5			12E	180 65	131	89U	225	275	245	-4.4	-0.2	+2.1+2.1	.339	-177.6		22	24	17.5	- 9	58	36	384.7	632.6
26	Aug	28	3	48	39.3	d	X242756k		11.4			11E	180 65	130	51U	90	140	110	-4.4	-0.2	+3.7+0.1	.250	-42.7		22	26	7.4	- 9	47	8	384.7	633.5
26	Aug	28	3	57	4.7	R	165050	K0	9.8	9.3		6E	180 67	135	77U	221	266	241	-4.4	-0.2	+2.0+2.2	.336	-174.0		22	24	31.7	- 9	56	53	384.6	630.4
26	Aug	28	3	57	36	m	X182602		11.3	10.5		6E	180 68	134	-78S	317	3	337	-4.4	-0.2	+9.9+9.9	.000	90.0		22	24	21.9	- 9	31	30	384.6	631.0
26	Aug	28	4	0	35.1	d	X 51935		11.2	11.0		5E	180 68	135	63U	77	122	97	-4.4	-0.2	+3.2+0.8	.291	-30.5		22	26	18.0	- 9	40	53	384.5	631.2
26	Aug	28	4	9	51.9	r	X182644k		10.9	10.4		4E	180 69	141	46U	188	228	208	-4.5	-0.2	+0.7+3.6	.267	-142.3		22	25	16.4	- 9	57	32	384.5	628.9
26	Aug	28	4	10	42.7	R	165046	K0	8.5	7.8		3E	180 70	141	82U	247	286	267	-4.5	-0.2	+2.9+1.3	.315	159.1		22	24	28.6	- 9	48	1	384.4	628.7
26	Aug	28	4	20	43.6	d	X182672		11.5	10.8		4E	180 71	146	-87S	8	42	28	-4.5	-0.3	+0.6+3.6	.267	37.8		22	25	45.0	- 9	24	13	384.4	629.3
26	Aug	28	4	21	41.3	r	X242729		11.4			4E	180 71	148	80U	254	287	274	-4.5	-0.3	+3.2+0.9	.295	151.2		22	24	36.6	- 9	43	33	384.3	628.3
26	Aug	28	4	27	56	d	X 51895		10.9	10.6		6E	180 72	151	-43N	322	351	342	-4.6	-0.3	+9.9+9.9	.041	83.0		22	25	4.7	- 9	25	38	384.3	628.9
26	Aug	28	4	31	5.0	R	146075	K0	9.5	8.9		7E	180 73	154	88U	274	300	294	-4.6	-0.3	+4.4-0.2	.223	131.4		22	24	43.5	- 9	36	7	384.3	628.6
26	Aug	28	4	34	0	Gr	X 51895		10.9	10.6		9E	180 73	** GRAZE: CA-31.7N; Dist. 14km in az. 314deg. [Lat = 6.50+1.03(E.Long+75.33)]																			
26	Aug	28	4	38	29	r	X 51895		10.9	10.6		12E	180 73	160	-22N	308	328	328	-4.6	-0.3	+9.9+9.9	.041	97.0		22	25	4.7	- 9	25	38	384.2	629.5
26	Aug	28	4	39	38.7	r	X242737		11.7			13E	180 73	161	70U	246	265	266	-4.6	-0.3	+2.9+1.3	.316	159.3		22	24	57.4	- 9	41	31	384.2	629.2
26	Aug	28	4	47	19	Gr	X242743		11.9			19E	180 74	** GRAZE: CA-25.6N; Dist. 13km in az. 133deg. [Lat = 6.14+1.06(E.Long+75.33)]																			
26	Aug	28	4	47	40	m	X242743		11.9			19E	180 74	167	-25N	315	328	334	-4.6	-0.3	+9.9+9.9	.000	90.0		22	25	17.3	- 9	22	11	384.2	630.5
26	Aug	28	4	54	22.7	r	X242756k		11.4			27E	180 74	172	48U	181	189	201	-4.7	-0.3	+0.1+3.9	.248	-137.0		22	26	7.4	- 9	47	8	384.2	631.4
26	Aug	28	5	2	29.8	d	X242774		11.7			37E	180 74	178	-42S	73	74	93	-4.7	-0.4	+3.2+1.0	.299	-28.6		22	27	17.2	- 9	24	58	384.1	633.6
26	Aug	28	5	16	8.8	r	X182667		11.0	10.5		57E	180 74	192	74U	234	222	254	-4.7	-0.4	+2.4+1.6	.336	169.5		22	25	38.6	- 9	35	17	384.1	637.0
26	Aug	28	5	18	17.6	r	X 51935		11.2	11.0		60E	180 74	193	68U	193	179	213	-4.8	-0.4	+0.7+3.2	.293	-148.9		22	26	18.0	- 9	40	53	384.1	637.7
26	Aug	28	5	25	32.6	d	X242777		11.8			71E	180 74	199	-75S	43	24	63	-4.8	-0.4	+1.9+2.0	.344	0.6		22	27	22.1	- 9	12	37	384.1	640.3
26	Aug	28	5	33	7.2	d	X242770		11.1			81E	179 73	206	-77N	15	350	35	-4.8	-0.4	+0.8+3.0	.304	28.4		22	27	3.1	- 9	7	3	384.1	643.2
26	Aug	28	5	34	3.3	r	X182672		11.5	10.8		83E	179 73	207	102U	261	234	281	-4.8	-0.4	+3.5+0.5	.275	142.8		22	25	45.0	- 9	24	13	384.1	643.7
26	Aug	28	5	37	57	d	X182695		11.5	11.0		88E	179 72	210	-25N	324	294	344	-4.8	-0.5	+9.9+9.9	.060	79.9		22	26	13.7	- 9	8	18	384.1	645.2
26	Aug	30	5	17	44.9	r	128524	K2	7.6	6.9		95-	155 72	100	50S	201	279	223	-4.7	-3.4	+1.0+2.8	.341	-156.9		0	0	23.5	2	40	32	377.2	677.4
26	Sep	1	2	58	17	m	233cB9		6.2	6.3		83-	131 16	76	8N	327	55	347	-3.5	-5.3	+9.9+9.9	.000	90.0		1	35	46.4	14	39	41	375.7	989.0
R233 = 101 Piscium																																	
Distance of 233 to Terminator = 12.6"; to 3km sunlit peak = 1.1"																																	
26	Sep	1	8	2	0.6	r	251	K0	7.6	7.0		81-	129 80	2	66N	270	88	290	-4.2	-6.0	+3.7+0.0	.276	140.1		1	42	26.9	15	46	43	370.6	646.3
26	Sep	2	3	51	47.1	R	370	A9	6.1	6.0v		73-	117 17	71	74N	265	355	283	-2.9	-6.1	+0.5+0.4	.495	154.0		2	30	38.4	19	51	19	372.9	997.0
R370 = 26 Arietis (UU)																																	
370 = UU Ari, 6.10 to 6.15, V, Type DSCTC, Period 0.0676 days																																	
26	Sep	2	7	34	39.0	R	387cG5		6.9	6.4S		72-	116 66	51	32S	192	316	209	-3.3	-6.6	+0.3+3.5	.283	-137.7		2	37	34.4	20	34	30	368.6	684.7
387 is double: ** 7.7 7.7 0.10" 90.0, dT = +0.07sec																																	
387 has been reported as non-instantaneous (OCc1190). Observations are highly desired																																	
387 = NSV 15555, 6.91, , Type VAR:																																	
26	Sep	2	10	20	55.0	r	75509	M*	7.9	7.1v		71-	115 -9	65	309	67S	227	104	244	-3.8	-6.9	+2.4+1.9	.336	-163.8		2	40	31.7	21	11	16	368.4	625.7
75509 = AK Ari, 7.94, range 0.07, 8w, Type LB:, Period 19.3 days, Phase 22%																																	
26	Sep	3	6	39	39.2	R	518SA3		6.0	s		61-	103 41	63	45S	211	315	224	-2.1	-6.8	+0.2+2.3	.390	-149.5		3	34	26.6	24	27	52	368.1	807.7

Occultation prediction for Jonathan Ospina observatory
E. Longitude - 75 19 59.3, Latitude 6 18 47.6, Alt. 100m; Telescope dia 15cm; dMag 0.0

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      day  Time     P   Star  Sp  Mag  Mag    % Elon Sun  Moon   CA   PA  VA  AA Libration   A   B   RV    Cct durn  R.A. (J2000)  Dec   Mdist   SV
 y   m  d  h  m    s       No  D    v    r V  ill     Alt Alt Az   o    o   o   o   L    B   m/o m/o  "/s     o  sec  h  m   s    o  m  s   Mm   m/s
   R518 = 7 Tauri
      518 is triple: AB 6.60 6.86 0.79" 348.0, dT = +1.5sec : AB,C 5.9 9.9 22.5"  52.2, dT = +54sec
      518 is a close double. Observations are highly desired
      518 = NSV 1192, 5.92 to 5.96, V
26 Sep  5  8 45 45.4 r   77495cA0  8.1  8.1   38-  76     41  58  63S 243 351 245 +0.0 -6.2 +1.2+1.2 .409 -163.8      5 44 59.0  28 11 40 364.9 753.2
    77495 is double: AB 8.0 8.0 0.20"  42.2, dT = +0.46sec
    77495 is a close double. Observations are highly desired
26 Sep  5  8 54  4.8 r   77498 A5  8.4  8.3   38-  76     43  57  74S 254   3 256 +0.0 -6.2 +1.5+0.8 .417 -174.2      5 45  9.6  28 15 10 364.7 740.7
26 Sep  5  9 42 18.7 r   77551cB9  8.3  8.2   37-  75     52  50  27N 333  93 335 -0.1 -6.3 +5.1-6.6 .125  109.0      5 47 14.3  28 37 26 364.0 677.5
    77551 is double: AB 8.4 10.7 0.8" 197.5, dT = +5sec
    77551 is a close double. Observations are highly desired
26 Sep  6  7 38 25.0 r   78740 K0  8.3  7.8   27-  63     14  64  88N 279   9 275 +1.4 -5.2 +0.6-0.1 .524  167.7      6 47 16.2  27  7 28 366.8 954.9
26 Sep  6  8 26 42.0 R    1042cA2  6.7  6.6   27-  62     24  63  78N 289  25 285 +1.3 -5.2 +1.2-0.5 .453  158.5      6 49 10.2  27 11 25 365.7 864.8
     1042 is double:  6.7 9.8 0.10"
     1042 is a close double. Observations are highly desired
26 Sep  6  8 50 28.0 r   78784 A0  8.3  8.2   27-  62     29  63  60S 248 346 244 +1.3 -5.3 +0.7+1.0 .435 -159.3      6 50  2.5  27  0 13 365.2 822.9
26 Sep  7  8  1 58.6 R   79739 F0  7.1  7.0   17-  49      6  66  79S 273 358 263 +2.5 -3.9 +0.1+0.1 .563 -177.5      7 50 39.8  24  9 40 367.71004.7
26 Sep  7  9 53 16.3 r   79790 A5  8.7  8.6   17-  48     30  66  76N 298  35 288 +2.5 -4.0 +1.5-0.9 .428  160.6      7 54 53.8  24 10  9 365.2 802.9
26 Sep  7 10 13 32.4 r   79801 F0  8.8  8.6   17-  48 -11 35  65  53N 321  61 311 +2.4 -4.0 +2.0-2.1 .328  138.8      7 55 50.9  24 13 41 364.8 771.7
26 Sep  8  9 17 50   Gr  98198 K5  7.6  6.8    9-  35     11 ** GRAZE: CA -5.0S; Dist. 19km in az. 163deg. [Lat =  6.13+0.30(E.Long+75.33)]
26 Sep  8  9 22  3   r   98198 K5  7.6  6.8    9-  35     11  72   4S 202 289 188 +3.6 -2.4 +9.9+9.9 .078  -98.4 .02  8 53 20.6  19 19 20 368.1 950.9
26 Sep  8 10  6 19.4 r   98212cM0  8.4         9-  35     21  72  88N 291  22 277 +3.6 -2.4 +0.9-0.5 .487  174.5      8 54 14.8  19 34 32 367.1 870.6
    98212 is double: AB 8.47 12.18 0.90" 351.0, dT = -0.9sec
    98212 is a close double. Observations are highly desired
26 Sep 15 23 31 12.4 D  183171kF3  7.2  7.0s  23+  58  -8 37 235  73N  93  31  77 +3.5 +7.3 +2.1-0.4 .327   10.9     15  6 11.4 -23 19 23 394.3 637.1
   183171 = NSV 6927, 7.1, range 0.01, V
26 Sep 16 17 38 50.6 d    2263cB1  4.6  4.7   31+  67  79 29 124  71S 124 190 112 +4.1 +7.0 +0.7-1.0 .397   -5.7     15 50 58.7 -25 45  5 397.5 768.6
   R2263 = 1 Scorpii
      2263 is double: ** 5.6 5.6 0.050"
      2263 has been reported as non-instantaneous (OCc1483). Observations are highly desired
26 Sep 17  0  9 29.3 D    2287SB1  2.9  3.0v  32+  69     37 230  16N  29 331  18 +2.5 +7.3 +0.7+5.1 .135   65.2     15 58 51.1 -26  6 51 397.5 619.6
   R2287 = pi Scorpii
      2287 is triple: Aa,Ab 5.1 13.4 2.0" 244.0, dT = -12sec : AB 2.9 11.9 50" 128.1, dT = -56sec
      2287 is a close double. Observations are highly desired
      2287 = pi Sco, 2.88 to 2.91, V, Type ELL, Period 1.570103 days, Phase  94%
26 Sep 17  0 28 48   Gr   2287SB1  2.9  3.0v  32+  69     31 ** GRAZE: CA-10.3N; Dist.190km in az. 341deg. [Lat =  8.13+0.35(E.Long+75.33)]
26 Sep 17  0 34 33.6 d  183993pA2  8.1  8.0   32+  69     32 233  28S 166 103 154 +2.4 +7.3 +4.7-8.1 .100  -72.8     15 59 11.9 -26 35  1 398.0 654.6
   183993 is double: AB 7.7 10.1 0.70" 192.0, dT = +6sec
   183993 is a close double. Observations are highly desired
26 Sep 17  0 48 43.1 R    2287SB1  2.9  3.0v  32+  69     29 235 -36N 337 272 326 +2.4 +7.3 +3.6-5.4 .148  115.0     15 58 51.1 -26  6 51 398.3 677.0
   R2287 = pi Scorpii
      2287 is triple: Aa,Ab 5.1 13.4 2.0" 244.0, dT = +0.7sec : AB 2.9 11.9 50" 128.1, dT = +298sec
      2287 is a close double. Observations are highly desired
      2287 = pi Sco, 2.88 to 2.91, V, Type ELL, Period 1.570103 days, Phase  94%
26 Sep 20  3 33 47.1 D    2721cB8  3.2  3.2   61+ 103     27 235  31N  25 319  29 -1.6 +5.4 -0.3+2.4 .297   40.8     18 45 39.4 -26 59 27 400.6 761.4
   R2721 = phi Sagittarii
      2721 is double:  3.1      0.8" 269.7, dT = -1.2sec
      2721 is a close double. Observations are highly desired
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Occultation prediction for Jonathan Ospina observatory
E. Longitude - 75 19 59.3, Latitude 6 18 47.6, Alt. 100m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon	Sun Alt	Moon Alt	Az	CA o	PA o	VA o	AA o	Libration L	B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	Sep	20	4	27	33.5	R	2721	cB8	3.2	3.2		62+	104	16	240	-66N	288	214	292	-1.7	+5.2	+1.3	-1.0	.334	139.3		18	45	39.4	-26	59	27	401.8	858.5
R2721 = phi Sagittarii																																		
2721 is double: 3.1 0.8" 269.7, dT = -2.2sec																																		
2721 is a close double. Observations are highly desired																																		
26	Sep	21	2	32	55.5	D	2864	dB8	4.6	4.6		70+	114	48	220	23N	12	326	20	-2.5	+4.5	-0.1	+3.6	.220	47.5		19	36	42.4	-24	53	1	397.0	628.4
R2864 = 52 Sagittarii																																		
2864 is double: AB 4.7 9.2 2.3" 175.7, dT = -10sec																																		
2864 is a close double. Observations are highly desired																																		
26	Sep	21	3	31	38.3	r	2864	dB8	4.6	4.6		71+	114	38	232	-62N	286	227	295	-2.7	+4.3	+3.0	-1.2	.249	132.7		19	36	42.4	-24	53	1	397.7	708.4
R2864 = 52 Sagittarii																																		
2864 is double: AB 4.7 9.2 2.3" 175.7, dT = +3sec																																		
2864 is a close double. Observations are highly desired																																		
26	Sep	23	2	44	39	gr	3115	F0	7.1	6.9		86+	137	65	198	22S	139	120	155	-4.3	+1.8	+9.9	+9.9	.000	-90.0		21	18	15.7	-17	27	44	389.2	611.4
R3115 = 31 Capricorni																																		
26	Sep	23	2	44	41	Gr	3115	F0	7.1	6.9		86+	137	64	** GRAZE: CA 22.1S; Dist. 1km in az. 315deg. [Lat = 6.33+0.99(E.Long+75.33)]																					
26	Sep	23	5	57	11.0	d	164338	G2	7.5	7.1		87+	138	31	247	47N	28	316	45	-5.0	+1.3	+0.2	+1.9	.393	24.5		21	21	51.1	-16	16	26	391.2	819.6
26	Sep	24	4	29	10.2	d	3244	K0	7.3	6.7		93+	149	61	232	64S	96	43	115	-5.2	+0.0	+3.9	-0.6	.232	-50.1		22	8	34.1	-11	36	49	384.8	675.3
26	Sep	24	6	33	18.1	d	3252	K0	6.6	6.1		93+	150	34	252	51N	31	316	50	-5.6	-0.3	+0.4	+1.9	.406	20.3		22	10	31.8	-10	49	13	386.4	810.6
R3252 = 37 Aquarii																																		
26	Sep	25	2	23	16.0	d	3357	A2	6.9	6.8		97+	160	67	122	51N	31	90	52	-4.8	-1.2	+1.5	+2.5	.344	14.4		22	53	27.6	-	5	59	17	380.4	654.2
26	Sep	25	3	56	29.4	d	146389	K5	7.2	6.3s		97+	161	78	197	80N	60	43	81	-5.2	-1.4	+2.6	+1.4	.337	-17.2		22	55	21.2	-	5	41	23	379.7	650.6
146389 = NSV 25974, 7.27 to 7.31, Hp																																		
26	Sep	27	5	11	55.2	r	68	SB9	5.8		S	100-	173	89	346	47S	176	10	198	-4.7	-4.4	-0.3	+4.2	.247	-131.9		0	32	23.8	6	57	20	371.1	667.5
R68 = 51 Piscium																																		
68 is multiple: Aa,Ac 5.8 9.5 0.20" : Aa,Ab 5.8 8.0 0.27" 283.9, dT = +0.33sec : AB 5.7 9.5 28.5" 81.5, dT = +10sec : AD 5.7 13.1 82" 307.6, dT = +218sec																																		
68 is a close double. Observations are highly desired																																		
68 = NSV 15113, 5.67 to 9.0, V, Type E:																																		
Distance of 68 to Terminator = 4.2"; to 3km sunlit peak = 0.0"																																		
26	Sep	30	3	55	22.5	r	470	WK0	6.8	6.2		85-	134	33	66	28S	188	286	203	-1.3	-6.5	-0.8	+3.2	.304	-127.7		3	14	17.2	22	57	14	366.8	883.7
470 is double: AB 6.9 10.4 42" 33.3, dT = +124sec																																		
26	Sep	30	6	41	32	Gr	75850	K0	7.3	6.6		84-	133	68	** GRAZE: CA 10.0N; Dist. 44km in az. 145deg. [Lat = 5.83+0.71(E.Long+75.33)]																					
26	Sep	30	6	42	10	m	75850	K0	7.3	6.6		84-	133	67	38	10N	330	107	345	-1.7	-6.8	+9.9	+9.9	.000	90.0		3	18	19.9	24	4	55	364.3	667.5
Distance of 75850 to Terminator = 15.8"; to 3km sunlit peak = 3.1"																																		
26	Oct	1	3	45	51.8	r	76514	G5	7.2	6.9		76-	121	18	64	83S	250	342	261	-0.1	-6.5	+0.2	+0.8	.552	177.7		4	14	32.2	26	15	21	367.5	984.6
26	Oct	2	4	50	55.5	R	797	cB9	6.4	6.3e		65-	107	19	63	81N	274	6	278	+1.1	-6.1	+0.7	+0.1	.507	161.9		5	20	59.3	27	57	26	367.3	950.4
797 is double: ** 6.5 8.5																																		
797 = HR 1750, 6.21, range 0.03, H1, Type EA, Period 3.315 days, Phase 13%																																		
26	Oct	3	6	6	52.9	r	78410	K1	7.7	7.1		53-	93	21	63	67N	296	30	294	+2.2	-5.4	+1.2	-0.8	.425	148.1		6	28	32.2	27	38	4	367.6	892.4
26	Oct	3	8	3	7.8	r	78480	cK5	7.5	6.7		52-	92	45	56	27N	336	87	334	+2.0	-5.5	+4.1	-5.7	.150	112.2		6	33	2.1	27	49	31	365.4	703.3
78480 is double: ** 8.3 8.3 0.10" 63.0, dT = -0.04sec																																		
78480 has been reported as non-instantaneous (OCc 720). Observations are highly desired																																		
26	Oct	3	9	54	53	Gr	1013	cG0	7.0			51-	92	66	** GRAZE: CA 3.8S; Dist. 13km in az. 182deg. [Lat = 6.20-0.03(E.Long+75.33)]																					
26	Oct	3	10	0	17	R	1013	cG0	7.0			51-	92	66	28	11S	194	342	192	+1.7	-5.5	+9.9	+9.9	.038	-96.4		6	36	26.3	27	16	42	364.2	604.8
1013 is double: AB 7.14 8.97 0.68" 270.0																																		
1013 is a close double. Observations are highly desired																																		
26	Oct	4	7	50	50.6	r	79521	cG2	7.4	7.0		41-	79	31	65	50S	241	338	232	+3.1	-4.3	+0.8	+1.5	.361	-144.6		7	34	50.4	24	57	16	367.7	790.3
79521 is double: ** 8.8 8.8 0.050"																																		

Occultation prediction for Jonathan Ospina observatory
E. Longitude - 75 19 59.3, Latitude 6 18 47.6, Alt. 100m; Telescope dia 15cm; dMag 0.0

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       day  Time     P   Star  Sp  Mag  Mag    % Elon Sun  Moon   CA   PA  VA  AA Libration   A   B   RV    Cct durn  R.A. (J2000)  Dec   Mdist   SV
 y   m  d  h  m   s       No  D    v    r V  ill     Alt Alt Az   o    o   o   o   L    B   m/o m/o  "/s     o  sec  h  m   s    o  m  s   Mm   m/s
     79521 has been reported as non-instantaneous (OCc1366). Observations are highly desired
26 Oct  4  9  5 31.7 r   79544 F0  8.4  8.2   40-  79     47  60  80S 270  19 262 +3.0 -4.3 +2.1+0.2 .379 -169.8      7 36 56.0  25  1  1 366.4 685.2
26 Oct  4 12 46 18.1 d    1170dG8  3.6  3.1   39-  78  28 68 327 -59S 132 348 123 +2.2 -4.0 +2.0-1.9 .356  -13.4      7 44 26.8  24 23 53 365.3 648.1
   R1170 = kappa Geminorum
      1170 is double: AB 3.7 10.0 7.4" 241.1, dT = -7sec
      1170 is a close double. Observations are highly desired
26 Oct  4 14  8 34.3 R    1170dG8  3.6  3.1   39-  77  48 53 303  84N 287 174 278 +2.0 -3.8 +1.9-0.9 .404 -167.2      7 44 26.8  24 23 53 366.2 735.7
   R1170 = kappa Geminorum
      1170 is double: AB 3.7 10.0 7.4" 241.1, dT = -13sec
      1170 is a close double. Observations are highly desired
26 Oct  6  9 23 38.6 R    1407 K0  7.7  7.1   19-  52     28  76  78S 278   9 261 +4.7 -1.2 +1.1-0.1 .434 -165.3      9 31 39.0  15 46 12 371.5 809.4
26 Oct  7  9 55 34.1 r   99106 K0  8.2  7.4   11-  39     24  82  29N 353  80 333 +5.2 +0.4 +0.8-3.7 .269  125.1     10 25  2.0   9 58 56 374.4 849.1
26 Oct 15  0 59 24.4 d X 41147 K0  8.0  7.3   18+  50     11 241  28N  41 324  32 +1.2 +6.8 -0.5+1.8 .316   43.3     16 34 45.8 -27  6 37 401.3 844.4
26 Oct 15 23 14 13.8 D  185400 F5  7.2  7.0   25+  60  -8 41 223  66S 121  70 117 +0.4 +6.5 +3.4-1.9 .235  -41.2     17 26 15.7 -28 25  0 399.9 604.3
26 Oct 15 23 37 54   m  185394pG8  7.8  7.3   25+  60     37 227  18S 168 113 164 +0.4 +6.5 +9.9+9.9 .000  -90.0     17 26  6.8 -28 32 37 400.2 637.2
    185394 is double: AB 7.9 14.2 7.0" 338.2
    185394 is a close double. Observations are highly desired
26 Oct 16  0  6 27.5 d  185418 A0  8.7  8.6   25+  60     32 231  72N  78  16  74 +0.2 +6.4 +1.6+0.3 .349   -0.2     17 27 40.3 -28 10 47 400.7 679.1
26 Oct 16  0 16 21.4 d  185420 B8  8.1  8.0   25+  61     30 232  62S 124  61 120 +0.2 +6.4 +2.8-2.1 .245  -46.8     17 27 45.7 -28 21 32 400.9 695.4
26 Oct 17  1 22 42.4 d  186747 B9  8.1  8.0   34+  72     27 235  52N  51 345  53 -1.2 +5.6 +0.6+1.2 .364   17.7     18 23 26.2 -27 30  9 401.7 744.1
26 Oct 18  1 33 50.5 D  187898 K0  7.1  6.5   44+  83     36 232  33N  26 326  33 -2.5 +4.6 +0.1+2.4 .296   35.5     19 16 11.4 -25 40  0 400.1 706.4
26 Oct 20 23 33 37.1 D   3177cA9  5.9  5.7   72+ 116     62 138  49N  29  73  47 -5.0 +1.0 +1.8+2.8 .293   21.9     21 43  4.4 -14 23 59 389.0 596.5
   R3177 = 44 Capricorni
      3177 is double: ** 6.8 6.8 0.10"  90.0, dT = +0.17sec
      3177 has been reported as non-instantaneous (OCc1608). Observations are highly desired
26 Oct 22  4 56 33.4 d  146188 F0  7.0  6.8   82+ 129     38 255  85N  64 348  84 -6.6 -1.3 +1.3+0.9 .409  -13.8     22 36 17.1 - 7 39 52 384.5 785.3
26 Oct 22  5 26 23.4 d  146201 F0  7.5  7.3v  82+ 129     31 257  86S  73 355  93 -6.7 -1.4 +1.2+0.5 .413  -21.0     22 37  0.9 - 7 34  0 385.0 825.1
    146201 = LO Aqr, 7.44 to 7.59, Hp, Type IB:
26 Oct 24  0  1 33.7 d       6 G5  6.9  6.3   94+ 152     46  91  24N   5  90  28 -5.3 -3.4 +0.1+3.3 .307   44.2      0  5 22.2   3 36 22 374.1 775.5
26 Oct 28  2 27 21.8 r     571pA2  6.8  6.7   94- 153     29  64  86S 245 342 257 -0.5 -6.4 +0.6+1.0 .522  179.9      3 51 25.3  25  9 47 361.5 915.6
      571 is double: ** 7.1 9.1
26 Oct 28  2 44 20.0 r     574pG0  6.8  6.5   94- 152     33  64  71S 229 328 241 -0.5 -6.5 +0.4+1.5 .488 -164.6      3 52 11.4  25  9 47 361.2 886.9
26 Oct 28  3 25 48.6 R     579kA2  6.4  6.3S  94- 152     42  61  25N 314  60 326 -0.5 -6.6 +4.7-3.9 .160  110.0      3 53 34.5  25 40 58 360.4 820.9
      579 = NSV 1391, 6.33,
26 Oct 29  3 37 19.1 r     746WB7  7.0  6.9   87- 138     30  62  37S 206 305 212 +1.2 -6.2 -0.4+2.7 .340 -132.9      4 59 53.7  27 19 32 361.3 875.6
      746 is double: AB 7.0 8.7 20.4" 206.1, dT = -60sec
26 Oct 29  6 19 53.3 R     756 F0  6.6  6.5   87- 137     62  38  56S 225   1 231 +0.9 -6.4 +1.9+2.3 .315 -147.0      5  4 38.0  27 41 46 359.0 654.1
26 Oct 29  9 40  5.5 R     771SA5  6.1  5.9e  86- 136     55 311  68N 282 160 287 +0.2 -6.4 +2.2-0.7 .384  172.6      5  9 45.1  28  1 50 359.5 675.9
      771 is triple: Aa,Ab 6.0      0.20" 351.0, dT = -0.19sec : A,BC 6.0 9.1 11.2"  29.1, dT = +9sec
      771 is a close double. Observations are highly desired
      771 = V1156 Tau, 6. to 6.1, Hp, Type E:, Period 1.40266 days, Phase  88%
26 Oct 30  9 10 15.4 r     952 K2  8.0  7.2   77- 123     68 345  67N 292 129 291 +2.0 -5.5 +2.7-1.1 .348  168.8      6 15 54.8  27 51 42 360.1 619.3
26 Oct 31  4 45 33.1 r    1094 A0  7.1  7.1   68- 111     18  65  65S 251 343 245 +4.1 -4.4 +0.3+0.8 .483 -160.4      7 12 49.4  25 44 55 365.8 910.1
   R1094 = 49 Geminorum
26 Oct 31  7 45 41.8 r   79277cF0  8.1        67- 110     56  52  48N 319  78 312 +3.7 -4.4 +2.7-2.4 .291  142.1      7 18 54.9  25 56 29 362.8 649.8
    79277 is double: AB 8.13 11.07 0.57" 261.4, dT = -1.1sec
    79277 is a close double. Observations are highly desired
26 Oct 31  9 16 24.6 r   79319 K2  7.9  7.3   66- 109     69  19  25N 342 141 335 +3.4 -4.4 +1.8-4.5 .208  126.5      7 21 39.7  25 51 44 362.3 614.1
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Occultation prediction for Jonathan Ospina observatory
E. Longitude - 75 19 59.3, Latitude 6 18 47.6, Alt. 100m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon	Sun Alt	Moon Alt	Az	CA o	PA o	VA o	AA o	Libration L	B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	Nov	1	8	47	51.7	r	80119	G5	8.1	7.7		55-	96	58	57	76N	298	53	285	+4.7	-3.0	+2.5	-1.1	.362	174.9			8	21	4.9	22	1	54	365.6	644.2
26	Nov	1	9	8	47.1	R	1253	cK0	7.3	6.8		55-	96	63	53	88S	281	42	269	+4.6	-2.9	+2.8	-0.4	.348	-166.9			8	21	28.1	21	54	34	365.4	633.2
		1253 is double: ** 8.2 8.2 0.10" 90.0, dT = +0.28sec																																	
		1253 has been reported as non-instantaneous (OCc 236). Observations are highly desired																																	
26	Nov	6	9	23	41.8	r	138841	F8	9.3	9.0		8-	33	12	99	51S	249	331	227	+6.4	+4.4	+0.8	+1.5	.302	-126.5			12	33	11.9	- 7	16	5	387.1	954.7
26	Nov	6	13	24	6.5	r	1815	SK2	4.7	4.0		7-	32	36	66	128	29N	348	41	326	+5.8	+4.9	+0.5	-3.1	.301	147.1			12	39	14.8	- 7	59	44	383.1	665.9
		R1815 = chi Virginis																																	
		1815 is multiple: **Aa,Ab 4.8 8.8 0.10" 214.0, dT = +0.23sec : AB 4.8 8.8 177" 135.9, dT = +497sec : AC 4.8 10.6 224" 109.8, dT = +388sec : AD 4.8 9.0 321" 331.1, dT = -1019sec																																	
		1815 has been reported as non-instantaneous (OCc 760). Observations are highly desired																																	
26	Nov	11	23	36	52.7	d	185069	K5	8.6	7.8		7+	30	12	240	44N	58	342	52	+0.6	+6.3	+0.1	+0.9	.404	21.4			17	8	47.4	-27	38	25	402.8	848.0
26	Nov	11	23	45	48.2	D	185075	K0	8.3	7.7		7+	30	11	240	70S	123	46	118	+0.6	+6.3	+1.4	-1.7	.319	-43.9			17	9	3.8	-27	53	41	403.0	865.4
26	Nov	12	0	13	18.6	d	185097	pF2	7.9	7.7		7+	30	5	241	89N	102	22	97	+0.5	+6.2	+0.5	-0.6	.433	-22.5			17	10	9.1	-27	46	24	403.6	917.9
		185097 is double: AB 7.9 11.4 1.8" 62.0, dT = +3sec																																	
		185097 is a close double. Observations are highly desired																																	
26	Nov	12	23	27	52.9	d	X148353		8.8	8.3		12+	40	25	235	56S	129	61	128	-0.6	+5.7	+3.0	-2.7	.210	-57.4			18	2	27.6	-27	56	59	402.7	760.2
26	Nov	12	23	35	39.6	D	2601	SK4	6.8			12+	40	23	236	84S	101	32	101	-0.6	+5.7	+1.6	-0.7	.344	-29.5			18	2	54.3	-27	49	36	402.8	773.2
		R2601 = 7 Sagittarii																																	
		2601 is triple: Aa,Ab 6.90 9.37 0.34" 332.0, dT = -0.6sec : AB 6.9 13.0 9.7" 48.2, dT = +17sec																																	
		2601 is a close double. Observations are highly desired																																	
26	Nov	12	23	49	15.9	d	186171	A0	9.1	9.1		12+	40	20	237	68S	117	46	117	-0.7	+5.6	+2.0	-1.6	.286	-45.4			18	3	11.6	-27	51	47	403.1	797.6
26	Nov	13	0	2	43.1	d	X 43260	dS*	8.9	8.0		12+	41	18	238	51S	133	61	133	-0.7	+5.6	+2.8	-3.1	.201	-61.5			18	3	24.8	-27	53	28	403.4	822.5
		X 43260 is double: AB 11.7 12.4 4.5" 170.3, dT = +18sec																																	
		X 43260 is a close double. Observations are highly desired																																	
26	Nov	13	0	47	49.4	d	186218	B9	7.8	7.8		12+	41	8	241	14N	18	300	18	-0.8	+5.5	-1.3	+2.8	.266	54.8			18	4	22.6	-27	23	16	404.4	906.2
26	Nov	13	15	43	1.8	D	2721	cB8	3.2	3.2		17+	49	61	16	120	81S	98	172	101	+0.1	+5.0	+0.7	+0.0	.403	-3.3			18	45	39.4	-26	59	27	403.9	791.0
		R2721 = phi Sagittarii																																	
		2721 is double: 3.1 0.8" 269.5, dT = -1.9sec																																	
		2721 is a close double. Observations are highly desired																																	
26	Nov	13	17	3	20.2	r	2721	cB8	3.2	3.2		18+	50	65	33	128	-90N	269	331	273	-0.2	+5.1	+1.9	+0.3	.333	-177.2			18	45	39.4	-26	59	27	402.2	651.3
		R2721 = phi Sagittarii																																	
		2721 is double: 3.1 0.8" 269.5, dT = -2.4sec																																	
		2721 is a close double. Observations are highly desired																																	
26	Nov	13	23	27	13.3	D	2750	SB2	2.1	2.1		19+	51	-12	35	231	27N	25	325	29	-1.9	+4.8	+0.0	+2.6	.275	39.7			18	55	15.9	-26	17	48	401.9	697.9
		R2750 = Nunki = sigma Sagittarii																																	
		2750 is triple: Aa,Ab 2.0 202.0, dT = 0.00sec : AB 2.0 9.9 356" 238.1, dT = -1077sec																																	
26	Nov	14	0	26	32.2	R	2750	SB2	2.1	2.1		19+	51	23	238	-72N	285	215	289	-2.0	+4.6	+1.7	-0.9	.315	140.5			18	55	15.9	-26	17	48	403.1	797.7
		R2750 = Nunki = sigma Sagittarii																																	
		2750 is triple: Aa,Ab 2.0 202.0, dT = 0.00sec : AB 2.0 9.9 356" 238.1, dT = -777sec																																	
26	Nov	14	1	22	14.2	d	187534	pA0	8.5	8.3v		19+	52	12	242	88S	89	12	94	-2.2	+4.5	+0.6	-0.2	.422	-22.4			18	59	3.8	-26	11	33	404.2	894.5
		187534 is double: AB 8.6 12.6 5.4" 105.0, dT = +12sec																																	
		187534 is a close double. Observations are highly desired																																	
		187534 = HD 175977, 8.48 to 8.54, V, Type GDOR, Period 0.59399 days, Phase 35%																																	
26	Nov	15	1	12	30.7	d	X 46972	dA0	8.4	8.4		27+	63	25	240	80S	91	20	100	-3.5	+3.4	+1.4	-0.3	.354	-31.3			19	49	56.2	-23	43	6	402.0	808.0
		X 46972 is double: AB 8.4 10.4 6.8" 271.0, dT = -19sec																																	
		X 46972 is a close double. Observations are highly desired																																	
26	Nov	15	22	51	39.6	d	3007	K2	7.2	6.5		35+	73	-3	60	205	88N	74	47	87	-4.2	+2.5	+3.1	+0.8	.284	-21.4			20	36	26.5	-20	35	8	397.3	587.5
26	Nov	15	23	20	49.4	d	189491	A0	8.6	8.6		35+	73	-10	57	216	76S	90	51	103	-4.3	+2.4	+3.6	-0.2	.249	-38.6			20	36	59.5	-20	33	53	397.5	612.7

Occultation prediction for Jonathan Ospina observatory
E. Longitude - 75 19 59.3, Latitude 6 18 47.6, Alt. 100m; Telescope dia 15cm; dMag 0.0

y	m	day d	h	Time m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon	Sun Alt	Moon Alt	Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	Nov	16	21	6	45	M	3126	G8	4.3	3.8	v	44+	83	21	57	135	17S	145	193	162	-4.8	+1.3	+9.9	+9.9	.000	-90.0		21	22	14.8	-16	50	4	394.6	577.6
	R3126 = Tae = iota Capricorni																																		
	3126 = iot Cap, 4.27, range 0.06, V, Type BY																																		
26	Nov	17	23	13	53.8	D	3252	K0	6.6	6.1		55+	95	-9	73	171	46N	25	35	45	-6.2	-0.3	+1.4	+2.8	.301	19.9		22	10	31.8	-10	49	13	389.2	603.3
	R3252 = 37 Aquarii																																		
26	Nov	19	0	25	7.7	D	3367	G9	6.3	5.8		65+	107		78	202	28N	6	344	27	-7.1	-1.9	+0.3	+3.6	.271	37.0		22	57	17.2	- 4	48	36	383.5	631.9
26	Nov	19	4	14	37.0	d	146456	cK4	7.5	7.0		66+	108		29	262	46N	24	304	46	-7.8	-2.5	+0.4	+2.2	.385	29.2		23	1	51.5	- 3	50	55	385.8	825.8
	146456 is double: AB 7.5 0.007" 153.5, dT = -0.01sec																																		
26	Nov	20	0	2	29	m	128354	F8	8.0	7.7		74+	119		77	114	24S	134	199	156	-7.1	-3.3	+9.9	+9.9	.000	-90.0		23	44	18.2	0	42	44	377.7	654.9
26	Nov	20	4	22	5.7	D	3507	cF5	6.5	6.2		75+	121		38	268	67N	45	321	67	-8.0	-3.8	+1.1	+1.6	.415	8.4		23	48	49.4	2	12	52	378.9	771.5
	3507 is double: ** 7.2 7.2 0.050"																																		
	3507 has been reported as non-instantaneous (OCc1647). Observations are highly desired																																		
26	Nov	20	5	48	26.7	d	128417	cG5	7.0	6.4		76+	121		17	271	34S	125	40	147	-8.1	-4.0	+1.1	-3.2	.203	-65.2		23	51	6.8	2	14	16	380.6	895.3
	128417 is double: ** 6.9 0.001" 333.1, dT = -0.01sec																																		
26	Nov	20	23	40	43.1	D	68	SB9	5.8		S	83+	132		62	87	47S	113	203	135	-6.6	-4.4	+5.3	-2.2	.160	-66.3		0	32	23.8	6	57	20	372.2	718.5
	R68 = 51 Piscium																																		
	68 is multiple: Aa,Ac 5.8 9.5 0.20" : Aa,Ab 5.8 8.0 0.28" 283.8, dT = -1.7sec : AB 5.7 9.5 28.5" 81.5, dT = +152sec : AD 5.7 13.1 82" 307.6, dT = -495sec																																		
	68 is a close double. Observations are highly desired																																		
	68 = NSV 15113, 5.67 to 9.0, V, Type E:																																		
26	Nov	20	23	40	45.6	d	109263	MB9	8.0		S	83+	132		62	87	47S	113	203	135	-6.6	-4.4	+5.3	-2.2	.160	-66.3		0	32	23.8	6	57	20	372.2	718.5
	109263 is quadruple: Ac,Aa 9.5 5.8 0.20" 170.0, dT = +0.7sec : DA 13.1 5.7 82" 127.6, dT = +497sec : CA 9.9 5.7 175" 45.9, dT = +428sec																																		
	109263 is a close double. Observations are highly desired																																		
	109263 = NSV 15113, 5.67 to 9.0, V, Type E:																																		
26	Nov	20	23	53	18	Gr	68	SB9	5.8		S	83+	132		66	** GRAZE: CA 23.8S; Dist.149km in az. 136deg. [Lat = 4.44+0.97(E.Long+75.33)]																						
26	Nov	24	8	17	48.4	d	518	SA3	6.0		s	100+	173		31	295	82S	133	36	147	-3.8	-6.8	+0.5	-2.4	.308	-49.4		3	34	26.6	24	27	52	358.1	822.6
	R518 = 7 Tauri																																		
	518 is triple: AB 6.60 6.86 0.79" 348.0, dT = -2.1sec : AB,C 5.9 9.9 22.5" 52.2, dT = +11sec																																		
	518 is a close double. Observations are highly desired																																		
	518 = NSV 1192, 5.92 to 5.96, V																																		
	Distance of 518 to Terminator = 6.9"; to 3km sunlit peak = 0.3"																																		
26	Nov	26	1	55	23.2	r	840	cK0	6.3	5.5		96-	158		24	62	90S	257	352	259	+1.3	-5.7	+0.6	+0.6	.535	-178.3		5	35	55.5	27	39	44	356.8	925.6
	840 is double: ** 7.3 7.3 0.050"																																		
	840 has been reported as non-instantaneous (OCc1267). Observations are highly desired																																		
26	Nov	26	5	55	26.5	r	868	SA0	7.5	7.5		96-	157		67	18	40S	208	8	210	+0.9	-5.8	+2.5	+5.0	.178	-118.6		5	44	21.2	27	43	53	353.6	636.2
	868 is triple: AB 7.5 9.8 8.6" 254.1, dT = -34sec : AC 7.5 12.7 47" 40.5, dT = +261sec																																		
	868 is a close double. Observations are highly desired																																		
26	Nov	26	8	48	28	m	77604	K0	7.0	6.2		96-	156		51	307	23S	193	76	194	+0.4	-5.7	+9.9	+9.9	.000	-90.0		5	49	38.1	27	33	3	354.6	728.6
	Distance of 77604 to Terminator = 14.5"; to 3km sunlit peak = 4.3"																																		
26	Nov	26	9	21	10	m	77619	F2	7.1	6.9		95-	155		45	303	24S	194	84	195	+0.3	-5.6	+9.9	+9.9	.000	-90.0		5	50	39.7	27	30	18	355.1	772.7
	Distance of 77619 to Terminator = 15.8"; to 3km sunlit peak = 5.2"																																		
26	Nov	26	9	44	49.6	R	885	wG7	5.6	5.1		95-	155		40	301	29N	321	215	322	+0.3	-5.6	+0.4	-2.2	.377	143.5		5	50	58.1	27	58	4	355.5	809.6
	885 is double: AB 5.7 12.5 10.8" 233.1, dT = -1.1sec																																		
26	Nov	26	9	52	55.2	r	77621	M3	7.5	6.6	s	95-	155		38	300	90S	260	155	261	+0.3	-5.5	+1.7	+0.2	.434	-155.5		5	50	48.2	27	41	9	355.7	822.5
	77621 = NSV 16688, 7.47, range 0.02, 6V, Type VAR, Period 4.88496 days																																		
26	Nov	26	11	1	15.5	R	890	cA0	4.6	4.6	s	95-	155	1	24	297	76N	275	180	276	+0.2	-5.4	+0.7	-0.4	.536	-170.3		5	53	19.6	27	36	44	357.1	941.0
	R890 = 136 Tauri																																		
	890 is double: ** 4.8 6.3 0.050" 270.0, dT = -0.09sec																																		

Occultation prediction for Jonathan Ospina observatory
E. Longitude - 75 19 59.3, Latitude 6 18 47.6, Alt. 100m; Telescope dia 15cm; dMag 0.0

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      day  Time     P   Star  Sp  Mag  Mag    % Elon Sun  Moon   CA   PA  VA  AA Libration   A    B    RV    Cct durn  R.A. (J2000)  Dec   Mdist   SV
 y   m  d  h  m    s       No  D    v    r V  ill     Alt Alt Az   o    o   o   o   L    B   m/o m/o  "/s     o  sec  h  m   s    o  m  s   Mm   m/s
       890 has been reported as non-instantaneous (OCc 206). Observations are highly desired
       890 = NSV 2696, 4.50 to 4.61, V
26 Nov 27  7 24 31.9 r   78853 A0  7.7  7.7   89- 142     70   5  84N 277  91 273 +2.7 -4.6 +2.9-0.3 .365 -171.7      6 54 29.2  26 31 51 355.1 634.6
26 Nov 27  9 58 45   Gr   1062cB8  6.4  6.5   89- 141     48 ** GRAZE: CA 21.9S; Dist.160km in az. 214deg. [Lat =  4.57-0.68(E.Long+75.33)]
26 Nov 27  9 59 57.5 R    1061SF8  6.2  5.9s  89- 141     51 304  77S 259 145 254 +2.3 -4.4 +2.5+0.4 .360 -144.9      6 58 47.4  26  4 52 356.4 760.1
   R1061 = 39 Geminorum
      1061 is triple: Aa,Ab 6.1      0.50" 158.0, dT = +0.25sec : AB 6.1 12.1 35"  69.2, dT = +95sec
      1061 is a close double. Observations are highly desired
      1061 = NSV 17256, 6.1, range 0.02, V, Type VAR:
26 Nov 27 10 12 45.3 R    1062cB8  6.4  6.5   89- 141 -11 48 302  47S 229 117 224 +2.2 -4.3 +4.3+3.2 .188 -114.7      6 59 27.9  25 54 51 356.6 777.2
   R1062 = 40 Geminorum
      1062 is double: AB 6.4      0.10" 160.5, dT = -0.2sec
      1062 is a close double. Observations are highly desired
26 Nov 28  5  5  6.9 r   79804cG0  7.4        81- 129     38  65  31N 339  79 328 +4.9 -3.3 +2.3-3.8 .237  122.8      7 56  2.8  23 41 33 359.9 762.7
     79804 is double: AB 7.90 8.57 0.11" 110.6, dT = +0.32sec
     79804 is a close double. Observations are highly desired
26 Nov 28  5 18 45.2 R    1195 B8  6.8  6.9   81- 129     41  64  50N 319  62 309 +4.8 -3.3 +2.1-2.1 .341  143.1      7 56  6.5  23 37 26 359.7 743.9
26 Nov 28  7 47 35.9 R    1200 K0  6.9  6.4   81- 128     70  32  87N 283  68 273 +4.4 -3.2 +2.9-0.6 .360 -168.8      7 59 42.6  23 10 58 358.2 638.1
26 Nov 29  6 42  7   Gr   1340kA0  6.6  6.6   71- 115     49 ** GRAZE: CA  8.5S; Dist. 56km in az.   8deg. [Lat =  6.82-0.14(E.Long+75.33)]
26 Nov 29  6 42 35   M    1340kA0  6.6  6.6   71- 115     48  70   9S 204 305 189 +6.1 -1.7 +9.9+9.9 .000  -90.0      8 58 18.3  18 18 30 363.4 706.5
26 Nov 30  5 59  5.7 R    1449 M0  6.5  5.6s  60- 102     26  79  63S 263 352 245 +7.1 -0.1 +1.1+0.6 .393 -148.2      9 51  2.0  13  3 58 369.9 829.1
   R1449 = 23 Leonis
      1449 = NSV 18283, 6.45, range 0.00, 6V, Type VAR, Period 2.82446 days
26 Nov 30  9 48 31   d    1466cB9  5.3  5.3   59- 101     79  55 -32N  52 176  34 +6.5 +0.3 +9.9+9.9 .069   79.1      9 58 13.4  12 26 41 367.2 652.4
   R1466 = nu Leonis
      1466 is double: ** 6.0 6.0 0.050"
      1466 has been reported as non-instantaneous (OCc1407). Observations are highly desired
26 Nov 30  9 55 50   Gr   1466cB9  5.3  5.3   59- 101     82 ** GRAZE: CA-21.4N; Dist. 30km in az.  41deg. [Lat =  6.67-0.86(E.Long+75.33)]
26 Nov 30 10  4 35   r    1466cB9  5.3  5.3   59- 101     82  38 -11N  31 172  13 +6.4 +0.3 +9.9+9.9 .069  100.8      9 58 13.4  12 26 41 367.2 654.1
   R1466 = nu Leonis
      1466 is double: ** 6.0 6.0 0.050"
      1466 has been reported as non-instantaneous (OCc1407). Observations are highly desired
26 Dec  1  9  6 52.7 R    1567kK1  6.4  5.8   48-  88     60  88  81S 283  11 262 +7.3 +1.8 +2.6-0.5 .336 -152.5     10 46  5.7   6 22 23 372.9 684.6
   R1567 = 37 (Sextantis)/Leonis
26 Dec  1  9 50 43.0 R    1573pA2  7.1  7.0   48-  88     71  89  59N 323  52 303 +7.1 +1.9 +1.7-2.2 .361  169.7     10 47 19.2   6 20 46 372.5 663.1
   R1573 = 38 (Sextantis)/Leonis
26 Dec  3 10 34  4.4 R  138754KF8  7.2  6.9   27-  63  -6 57 112  35N 347  55 324 +7.2 +4.6 +0.5-3.0 .316  147.3     12 23 27.6 - 6  7  8 382.9 696.3
26 Dec  4  9 42 28.7 R    1885 K2  7.3  6.7   19-  51     33 109  83S 282 357 261 +7.1 +5.4 +1.4-0.3 .385 -154.0     13  8 27.9 -11 45 46 388.7 807.9
26 Dec  6 10 10 42.7 R    2108cG2  6.6         6-  29 -12 17 114  76N 292   8 275 +5.8 +6.5 +0.4-0.5 .463 -171.3     14 46 10.9 -21 10 33 397.2 902.7
      2108 is double: AB 7.30 7.30 0.29" 133.5, dT = +0.6sec
      2108 is a close double. Observations are highly desired
26 Dec  6 10 13 16.2 r  182859 K5  9.0  8.2    6-  29 -11 17 115  65N 303  19 286 +5.8 +6.5 +0.2-0.9 .466  177.5     14 46 21.2 -21  8 36 397.2 898.3
26 Dec  6 10 48 35.6 R    2109 K4  6.1  5.2    6-  28  -3 25 117  75N 292   4 275 +5.7 +6.6 +0.8-0.6 .430 -170.1     14 47 13.7 -21 19 30 396.4 839.2
26 Dec 11 23 32 11.6 d  188243 K2  8.8  8.1    7+  31 -11 20 241  52N  47 334  55 -2.5 +3.6 +0.1+1.2 .417   15.0     19 31 54.4 -24 20 28 404.1 846.6
26 Dec 12 23 19 17.1 d  189195 F0  7.8  7.6   13+  42  -8 33 239  58S 111  44 123 -3.8 +2.4 +3.0-1.7 .221  -55.5     20 21 32.8 -21 25  8 401.7 761.1
26 Dec 13  1  3 58.3 d  189246 K0  8.3  7.6   13+  43     11 247  82S  86   7  98 -4.0 +2.1 +0.5-0.1 .427  -26.3     20 24 20.7 -20 54 50 403.9 932.4
26 Dec 14  0 10 50.3 d    3095 F0  8.4  8.2   20+  53     34 245  83S  80  10  96 -5.2 +0.9 +1.5+0.2 .355  -27.6     21 10 22.5 -16 57 31 399.7 776.8
26 Dec 14 23 52 18.8 d    3211WA2  8.1  7.9   28+  64     49 244  28N   8 302  27 -6.3 -0.5 +0.0+3.2 .282   39.5     21 55  1.8 -11 58 13 395.5 699.9
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Occultation prediction for Jonathan Ospina observatory
E. Longitude - 75 19 59.3, Latitude 6 18 47.6, Alt. 100m; Telescope dia 15cm; dMag 0.0

y	m	day d	h	Time m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon	Sun Alt	Moon Alt	Az	CA o	PA o	VA o	AA o	Libration L	B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
							3211 is double: AB 8.1 10.5 31" 275.1, dT = -6sec																													
26	Dec	15	2	37	19.1	d	164785wK0		7.8	7.2		29+	65		11	257	43N	22	301	41	-6.7	-0.9	-0.2	+2.1	.395	35.2		21	59	1.3	-11	17	4	398.7	933.6
							164785 is double: AB 7.9 11.6 28.0" 264.2, dT = -33sec																													
26	Dec	15	23	57	46.3	D	146232kG0		7.2	6.8		37+	75		59	246	36N	13	307	34	-7.2	-1.9	+0.5	+3.1	.300	31.6		22	40	12.4	- 6	32	4	390.8	666.7
26	Dec	18	3	5	2.9	D	29 K0		7.0	6.4		59+	100		37	273	81S	76	350	99	-8.6	-4.8	+1.6	+0.4	.384	-20.3		0	15	38.6	5	50	38	380.9	757.3
26	Dec	19	0	23	17.5	d	139cG5		8.1	7.6		68+	111		84	334	79S	80	286	102	-7.8	-5.6	+3.4	+0.6	.297	-33.4		1	1	13.9	11	10	50	372.8	642.7
26	Dec	20	3	47	48.0	d	92727cF8		8.0	7.7		79+	125		49	290	81S	82	341	102	-7.7	-6.6	+2.2	+0.2	.371	-17.7		1	58	3.8	17	32	21	367.2	694.0
26	Dec	20	4	4	17.7	D	288cK1		5.1	4.6		79+	125		45	289	17N	0	261	20	-7.7	-6.6	+1.4	+6.1	.165	65.5		1	57	21.1	17	49	3	367.4	711.3
							R288 = iota Arietis																											
26	Dec	20	5	53	48.6	d	92755 M*		7.2	6.4s		79+	126		20	287	78N	62	332	81	-7.9	-6.6	+0.9	+0.8	.476	11.3		2	1	30.4	17	57	14	369.3	868.4
							92755 = NSV 15423, 7.24 to 7.31, Hp																											
26	Dec	21	6	32	43.5	d	443 G5		7.1	6.6		88+	140		23	292	61N	51	318	68	-6.7	-6.9	+1.3	+1.2	.426	29.4		3	0	36.4	22	49	44	363.0	860.6
26	Dec	21	23	3	16.2	d	571pA2		6.8	6.7		94+	151	-3	32	64	75S	102	201	114	-3.8	-6.5	+1.5	-0.3	.414	-36.7		3	51	25.3	25	9	47	358.8	898.2
							571 is double: ** 7.1 9.1																											
26	Dec	21	23	31	55.2	d	574pG0		6.8	6.5		94+	151	-10	38	63	52S	125	228	138	-3.9	-6.5	+3.1	-2.1	.241	-60.5		3	52	11.4	25	9	47	358.2	850.7
26	Dec	22	0	20	37.0	D	579kA2		6.4	6.3S		94+	151		49	58	48N	45	157	58	-3.9	-6.6	+0.9	+1.8	.424	19.3		3	53	34.5	25	40	58	357.2	778.7
							579 = NSV 1391, 6.33,																											
26	Dec	22	23	44	20.6	d	746WB7		7.0	6.9		98+	165		27	62	85S	107	204	113	-1.8	-6.1	+1.3	-0.4	.449	-33.0		4	59	53.7	27	19	32	355.7	923.6
							746 is double: AB 7.0 8.7 20.4" 206.1, dT = -7sec																											
26	Dec	23	2	0	59.9	D	756 F0		6.6	6.5		98+	166		54	49	77N	91	212	97	-2.0	-6.2	+2.3	+0.1	.406	-14.2		5	4	38.0	27	41	46	353.1	716.3
26	Dec	23	5	9	38.7	d	771SA5		6.1	5.9e		99+	167		63	327	34N	50	268	56	-2.5	-6.3	+3.1	+2.1	.290	40.8		5	9	45.1	28	1	50	352.3	654.0
							771 is triple: Aa,Ab 6.0 0.20" 351.0, dT = +0.35sec : A,BC 6.0 9.1 11.2" 29.1, dT = +36sec																											
							771 is a close double. Observations are highly desired																											
							771 = V1156 Tau, 6. to 6.1, Hp, Type E:, Period 1.40266 days, Phase 0%																											
							Distance of 771 to Terminator = 7.9"; to 3km sunlit peak = 0.7"																											
26	Dec	25	3	36	32.9	R	1117cG8		5.0	4.6		98-	164		48	59	74S	252	2	245	+2.5	-3.9	+1.9	+1.0	.375	-152.4		7	23	28.5	25	3	2	352.5	723.9
							R1117 = 57 Geminorum																											
							1117 is double: ** 5.9 5.9 0.10" 90.0, dT = +0.25sec																											
							1117 has been reported as non-instantaneous (OCc1358). Observations are highly desired																											
26	Dec	25	6	40	31.4	r	79416SF8		7.6	7.4		98-	163		71	343	60S	239	78	232	+2.0	-3.7	+4.2	+2.3	.227	-125.4		7	28	40.6	24	38	55	351.5	669.3
							79416 is triple: AC 7.7 11.8 29.0" 124.2, dT = +54sec : AB 7.7 8.9 65" 19.4, dT = +221sec																											
26	Dec	26	3	41	35.9	r	1269kG5		6.9	6.3		93-	149		37	68	54N	317	55	305	+4.5	-2.3	+1.7	-1.8	.391	149.3		8	28	7.2	21	8	55	356.0	784.7
26	Dec	26	6	48	39.0	R	1277wK3		5.3	4.7		93-	148		74	25	79S	271	64	258	+4.1	-2.0	+3.2	+0.0	.334	-149.7		8	32	42.5	20	26	28	354.1	664.8
							R1277 = eta Cancri																											
							1277 is double: AB 5.3 20.0 164" 280.0, dT = -485sec																											
26	Dec	26	8	31	32.2	r	80278kA*		7.5	7.4		92-	148		68	310	15N	358	231	344	+3.8	-1.8	-0.3	-4.1	.256	127.7		8	36	17.4	20	20	29	354.6	719.1
							Distance of 80278 to Terminator = 11.8"; to 3km sunlit peak = 2.3"																											
26	Dec	26	8	39	8	m	97941 A*		7.5	7.4		92-	148		66	306	23S	215	93	202	+3.8	-1.8	+9.9	+9.9	.000	-90.0		8	35	45.1	19	46	16	354.7	725.3
26	Dec	26	10	5	22.2	r	97973 A0		7.7	7.6		92-	147		48	292	88N	285	183	272	+3.6	-1.5	+1.6	-0.8	.450	-160.6		8	37	37.0	19	43	59	356.0	824.4
26	Dec	26	10	40	1.7	r	1292kF0		6.7	6.5v		92-	147	-7	40	291	15N	358	259	345	+3.5	-1.4	-0.8	-3.5	.297	126.1		8	39	42.7	19	46	42	356.7	872.4
							R1292 = 38 Cancri (BT)																											
							1292 = BT Cnc, 6.66, range 0.06, V, Type DSCTC, Period 0.10228 days																											
							Distance of 1292 to Terminator = 13.3"; to 3km sunlit peak = 3.1"																											
26	Dec	26	10	45	26.8	r	97999pF0		7.4	7.3S		92-	147	-6	39	290	57N	317	219	303	+3.5	-1.4	+0.5	-1.6	.496	167.1		8	39	6.1	19	40	37	356.9	881.0
							97999 is triple: AB 7.5 9.6 57" 84.0, dT = +70sec : AC 7.5 9.4 179" 345.0, dT = -317sec																											
							97999 = NSV 4163, 7.45,																											
26	Dec	26	11	2	46.9	r	1298pK0		6.4	5.9E		92-	147	-2	35	290	17N	356	260	343	+3.5	-1.4	-0.8	-3.3	.315	127.0		8	40	22.1	19	40	12	357.3	906.6

E. Longitude - 75 19 59.3, Latitude 6 18 47.6, Alt. 100m; Telescope dia 15cm; dMag 0.0

day	Time	P	Star	Sp	Mag	Mag	%	Elon	Sun	Moon	CA	PA	VA	AA	Libration		A	B	RV	Cct durn	R.A. (J2000)	Dec	Mdist	SV
y m d	h m s		No	D	v	r	V	ill	Alt	Alt	Az	o	o	o	o	L	B	m/o	m/o	"/s	o sec	h m s	o m s	Mm	m/s

1298 is multiple: AE 6.5 12.5 15.7" 154.8, dT = +46sec : AB 6.4 10.4 20.8" 55.1, dT = -34sec : AC 6.5 7.6 64" 343.1, dT = -198sec : AD 6.5 9.2 84" 44.0, dT = -179sec

1298 = HD 73710, 6.42, , Type EA, Period 7.22030 days, Phase 93%

Distance of 1298 to Terminator = 16.5"; to 3km sunlit peak = 5.1"

26 Dec 27 9 39 54.7 r 98654WB9 7.9 7.9 84- 134 68 292 51S 250 142 232 +5.3 +0.1 +4.7+1.6 .203 -119.0 9 35 9.5 14 4 32 359.3 729.0

98654 is double: AB 7.8 9.1 45" 48.5, dT = +205sec

26 Dec 27 9 48 13.6 R 1415WA1 6.3 6.3 84- 133 66 291 47N 333 226 315 +5.3 +0.1 +0.9-2.4 .393 158.4 9 35 52.9 14 22 47 359.4 736.5

R1415 = 7 Leonis

1415 is double: AB 6.3 9.4 41" 90.5, dT = +49sec

26 Dec 28 6 36 1.7 R 1525 M2 5.6 4.8v 76- 121 54 84 83S 285 16 265 +7.2 +1.4 +2.2-0.5 .375 -157.7 10 25 15.2 8 47 5 364.8 717.8

R1525 = 44 Leonis (DE)

1525 = DE Leo, 5.6, range 0.07, V, Type SRB:

26 Dec 28 6 48 29.7 r 118292DF0 7.7 7.6S 76- 121 57 84 88N 294 26 274 +7.2 +1.4 +2.1-0.9 .389 -166.4 10 25 35.1 8 46 35 364.6 708.4

118292 is double: AB 7.8 9.1 3.6" 74.4, dT = +7sec

118292 is a close double. Observations are highly desired

118292 = NSV 4851, 7.7,

26 Dec 28 8 45 4.2 r 118317 K2 8.2 7.5 75- 120 85 67 80N 302 54 282 +6.8 +1.7 +2.4-1.5 .373 -167.9 10 27 56.5 8 18 52 364.1 673.2

26 Dec 29 7 53 26.6 R 1635cM0 5.2 4.4 65- 108 61 97 79S 283 4 261 +7.8 +3.1 +2.6-0.5 .339 -150.6 .01 11 17 17.4 2 0 38 370.6 700.6

R1635 = 75 Leonis

1635 is double: ** 5.8 6.6 0.044" 0.0

1635 has been reported as non-instantaneous (OCc 763). Observations are highly desired

26 Dec 29 9 21 42.8 R 1637 K0 5.9 5.4 65- 107 81 124 86S 290 346 268 +7.5 +3.3 +2.9-1.0 .333 -154.0 11 18 55.0 1 39 1 370.3 665.4

R1637 = 76 Leonis

Lunar Occultation predictions
Museo de Astronomía
El Meteorito
Mexico

Occultation prediction for Museo de Astronomía El Meteorito
E. Longitude -101 6 23.0, Latitude 23 7 11.9, Alt. 2020m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon	Sun Alt	Moon Alt	Az	CA o	PA o	VA o	AA o	Libration L	B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	Jan	1	9	55	46.2	d	701	SF2	6.6	6.4		94+	151	20	292	69S	112	39	120	-1.4	-6.4	+0.0	-1.3	.542	-19.6		4	38	29.5	26	56	23	358.4	999.4
		701 is triple: 6.6 9.2 3.1" 169.4, dT = +3sec : AB 7.36 7.21 4.48" 187.8, dT = +2sec																																
		701 is a close double. Observations are highly desired																																
26	Jan	2	11	36	45.0	d	885	wG7	5.6	5.1		98+	165	13	295	62N	78	8	80	+0.6	-5.9	+0.2	-0.4	.577	23.0		5	50	58.1	27	58	4	359.2	1091.5
		885 is double: AB 5.7 12.5 10.8" 233.1, dT = -17sec																																
26	Jan	4	11	58	18.0	R	1208	DK1	6.4			98-	166	34	284	86N	274	197	264	+4.2	-4.0	+0.9	-0.9	.493	-156.7		8	1	0.8	23	34	59	362.5	943.8
		1208 is double: AB 6.48 9.95 1.95" 325.2, dT = -2.5sec																																
		1208 is a close double. Observations are highly desired																																
26	Jan	5	7	34	6.6	R	1329	pF8	6.8			95-	154	74	98	68S	259	334	244	+6.2	-3.3	+3.1	+1.1	.290	-139.4		8	53	55.3	19	58	2	363.7	672.8
		1329 is double: AB 7.32 7.86 0.15" 71.9, dT = +0.5sec																																
		1329 is a close double. Observations are highly desired																																
26	Jan	7	7	17	12.2	r	118418	PF5	7.6			81-	128	44	101	49N	333	39	312	+7.7	-0.2	+1.1	-2.0	.358	151.7		10	39	42.1	8	50	35	376.9	744.0
		118418 is triple: AB 7.84 8.98 0.45" 118.2, dT = +1sec : AC 7.8 2.1" 37.0, dT = -2.6sec																																
		118418 is a close double. Observations are highly desired																																
26	Jan	7	8	31	52.7	r	1560	M*	7.7	7.4v		81-	128	60	115	42N	340	37	319	+7.5	-0.1	+1.1	-2.6	.327	149.7		10	41	23.5	8	33	45	376.2	690.2
		1560 = EU Leo, 7.59 to 7.71, Hp, Type LB																																
26	Jan	7	12	29	4.8	r	118479	kK0	7.6	7.0		80-	127	56	248	56N	326	267	306	+6.7	+0.5	+1.0	-2.3	.392	166.1		10	45	33.7	7	30	51	377.4	738.9
26	Jan	9	7	3	30	m	1754	KF5	7.0	6.7		63-	104	17	102	10S	214	279	192	+7.2	+2.7	+9.9	+9.9	.000	-90.0		12	11	21.8	- 3	46	44	391.1	879.5
26	Jan	9	11	16	51.1	r	138684	kK0	8.1	7.6		61-	103	62	165	68N	316	330	294	+6.5	+3.3	+1.8	-1.7	.346	-179.4		12	16	16.1	- 4	27	7	388.3	651.4
26	Jan	10	8	30	32.2	r	139061	DF5	7.3			52-	93	24	113	46S	249	308	228	+6.2	+4.1	+2.2	+2.7	.223	-121.4		12	57	28.6	- 9	45	41	395.4	822.8
		139061 is double: AB 7.31 10.77 1.66" 276.0, dT = -7sec																																
		139061 is a close double. Observations are highly desired																																
26	Jan	10	9	38	14.3	r	139081	cK0	7.5	7.1		52-	92	38	124	81N	302	352	280	+6.1	+4.3	+1.3	-0.6	.382	-170.3		12	59	1.6	- 9	50	3	394.3	740.8
		139081 is double: AB 7.6 12.6 0.33" 65.8, dT = +0.48sec																																
		139081 is a close double. Observations are highly desired																																
26	Jan	12	10	22	4.9	r	158609	dG1	8.1	7.8		33-	70	24	126	78S	275	327	257	+3.7	+6.2	+1.5	+0.7	.347	-149.2		14	31	12.3	-19	58	40	401.7	786.5
		158609 is double: AB 8.2 10.6 4.2" 286.0, dT = -12sec																																
		158609 is a close double. Observations are highly desired																																
26	Jan	12	13	11	37.1	R	2084	A3	6.5	6.4		32-	69	-4	45	166	65N	311	324	293	+3.1	+6.5	+2.0	-1.3	.312	176.2		14	34	50.7	-20	26	22	399.9	606.0
26	Jan	13	12	49	49.7	r	183426	A0	8.6	8.5		24-	58	-9	36	149	56N	315	346	301	+2.0	+7.0	+1.4	-1.1	.324	167.3		15	23	29.3	-24	5	29	401.6	646.1
26	Jan	14	13	4	44	r	2334	pG1	7.5	7.2		16-	47	-6	29	144	36S	220	258	210	+0.8	+7.2	+7.3	+7.1	.088	-104.9		16	15	19.1	-27	12	37	402.1	667.5
		2334 is double: AB 7.6 11.2 192" 196.0, dT = -1995sec																																
26	Jan	15	12	35	35.5	r	185044	SA5	8.6	8.4		10-	37	16	132	71S	248	299	243	-0.2	+7.1	+2.0	+1.8	.298	-139.7		17	7	49.6	-28	34	48	402.2	761.5
		185044 is multiple: AB 8.7 10.9 22.4" 264.4, dT = -72sec : AF 8.7 13.5 30" 127.6, dT = +51sec : AD 8.6 12.8 81" 37.6, dT = +234sec : AE 8.6 13.7 95" 303.6, dT = -181sec																																
26	Jan	22	1	27	12.3	D	X183491	D	7.9	7.8		10+	37	23	250	60S	98	38	119	-6.2	+0.1	+1.4	-1.4	.333	-45.1		22	43	3.3	- 8	18	40	382.2	874.3
		X183491 is double: BA 7.9 6.8 2.4" 126.8, dT = +6sec																																
		X183491 is a close double. Observations are highly desired																																
26	Jan	22	1	27	17.5	D	3333	SA5	6.4			10+	37	23	250	59S	99	38	119	-6.2	+0.1	+1.4	-1.4	.332	-45.3		22	43	3.4	- 8	18	41	382.2	874.4
		3333 is quadruple: AB 6.79 7.88 2.37" 306.8, dT = -6sec : AC 6.8 11.4 70" 355.8, dT = -47sec : AD 6.8 14.2 75" 278.1, dT = -225sec																																
		3333 is a close double. Observations are highly desired																																
26	Jan	23	1	21	43.5	D	3459	K0	6.4	5.8		18+	49	36	249	30N	6	307	28	-6.1	-1.4	+0.1	+2.9	.307	45.3		23	29	27.0	- 1	47	28	377.7	799.2
		R3459 = 11 Piscium																																
26	Jan	23	3	48	13.8	D	3474	kA2	5.9	5.8		18+	51	5	267	81N	57	350	79	-6.3	-1.7	+0.1	+0.3	.540	3.4		23	34	9.0	- 1	14	51	380.6	998.6
		R3474 = 14 Piscium																																
26	Jan	24	2	48	4.8	D	41	G5	7.7	7.2		27+	63	30	262	70S	85	19	107	-6.0	-3.1	+1.2	-0.7	.401	-28.5		0	20	21.6	4	46	44	374.8	830.0
26	Jan	25	4	49	59.8	d	92318	cG0	7.9	7.6		38+	76	16	276	75N	52	343	73	-5.5	-4.5	+0.6	+0.5	.495	14.1		1	13	8.9	11	40	58	373.0	922.8
		92318 is double: ** 7.9 0.011" 263.2, dT = -0.02sec																																

Occultation prediction for Museo de Astronomía El Meteorito
E. Longitude -101 6 23.0, Latitude 23 7 11.9, Alt. 2020m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon	Sun Alt	Moon Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
							92318 has been reported as non-instantaneous (OCc1158). Observations are highly desired																														
26	Jan	26	2	3	20	m	296cF2	7.7		48+	88		66	259	12S	148	77	167	-4.4	-5.5	+9.9	+9.9	.000	-90.0		2	1	9.8	16	33	55	366.4	681.0	
							296 is double: AB 7.70 11.23 0.32" 278.3																														
							296 is a close double. Observations are highly desired																														
26	Jan	27	2	26	11.3	d	75670	A5	8.2	8.1		60+	102		75	270	72S	92	9	108	-3.2	-6.3	+2.8	-0.5	.331	-27.8		2	58	51.8	22	0	16	363.4	660.6
26	Jan	27	4	41	32.4	d	75699	F5	7.9	7.7		61+	102		44	280	85S	80	1	96	-3.6	-6.4	+1.6	-0.3	.427	-5.2		3	2	27.4	22	22	25	364.9	759.0
26	Jan	28	5	53	53.1	d	603	F8	7.6	7.3		72+	116		42	285	81N	73	351	84	-2.3	-6.7	+1.5	-0.1	.437	13.1		4	6	4.6	26	12	42	363.0	790.8
26	Jan	28	8	28	0	m	616	F2	5.4	5.2v		73+	117		10	295	7N	360	291	10	-2.4	-6.5	+9.9	+9.9	.000	90.0		4	10	49.9	26	28	51	366.0	1051.9
							R616 = 44 Tauri (IM)																														
							616 = IM Tau, 5.33 to 5.46, V, Type DSCT, Period 0.14497 days, Phase 20%																														
26	Jan	29	4	28	14.1	D	768	A2	7.0	6.7S		82+	129		74	293	60N	60	314	65	-0.6	-6.7	+2.6	+1.3	.331	28.9		5	8	35.3	28	16	24	360.0	660.0
							768 = NSV 16250, 7., , Type VAR:																														
26	Jan	29	5	5	31.2	D	771SA5	6.1	5.9e			82+	130		66	288	67S	112	16	118	-0.7	-6.7	+2.0	-1.5	.365	-21.2		5	9	45.1	28	1	50	360.3	684.8
							771 is triple: Aa,Ab 6.0 0.20" 351.0, dT = -0.29sec : A,BC 6.0 9.1 11.2" 29.1, dT = +4sec																														
							771 is a close double. Observations are highly desired																														
							771 = V1156 Tau, 6. to 6.1, Hp, Type E:, Period 1.40266 days, Phase 13%																														
26	Jan	30	5	50	58.3	d	78191	A0	7.7	7.7		90+	144		70	289	69S	119	20	118	+0.9	-6.1	+1.9	-1.7	.378	-16.9		6	17	59.9	28	0	24	359.9	689.7
26	Jan	30	8	19	57.7	d	78291	K0	7.7	7.0		91+	144		38	288	52N	61	339	59	+0.6	-5.9	+1.9	+0.5	.347	46.1		6	22	47.9	27	59	12	362.0	879.0
26	Jan	31	2	0	55.7	d	79243	K1	7.3	6.7		96+	156		44	75	85S	112	194	105	+3.1	-5.3	+1.6	-0.2	.425	-17.4		7	17	15.6	26	21	49	362.2	782.7
26	Jan	31	2	8	47.8	d	1105cG7	6.5				96+	156		46	75	17N	34	118	27	+3.1	-5.3	+0.4	+4.6	.216	60.5		7	17	3.4	26	41	22	362.1	771.7
							1105 is double: AB 7.00 7.70 0.20" 236.6, dT = -0.9sec																														
							1105 is a close double. Observations are highly desired																														
							Distance of 1105 to Terminator = 7.9"; to 3km sunlit peak = 0.5"																														
26	Jan	31	2	22	1.0	d	79253cK1	7.6	7.1			96+	156		49	76	81S	116	200	109	+3.0	-5.3	+1.9	-0.4	.403	-20.4		7	17	54.5	26	19	59	361.9	755.3
							79253 is double: ** 8.7 8.7 0.050"																														
							79253 has been reported as non-instantaneous (OCc1350). Observations are highly desired																														
26	Jan	31	4	29	51.9	d	79316	G2	7.5	7.1v		96+	157		77	73	73S	124	225	117	+2.7	-5.3	+2.4	-1.4	.355	-19.5		7	21	32.8	26	9	33	360.6	658.6
							79316 = V0340 Gem, 7.37 to 7.71, V, Type RS, Period 35.37 days, Phase 86%																														
26	Feb	2	9	2	50.3	r	1395	G9	6.3	5.8		100-	174		65	259	75S	258	188	241	+4.6	-2.0	+3.2	+0.1	.269	-129.8		9	25	32.5	16	35	8	367.3	749.2
							Distance of 1395 to Terminator = 4.5"; to 3km sunlit peak = 0.0"																														
26	Feb	3	6	8	30.6	r	1501	G5	7.2	6.7		98-	162		60	107	55N	324	28	304	+5.9	-0.8	+1.5	-1.9	.373	162.5		10	15	9.7	11	40	27	371.6	703.9
26	Feb	4	3	29	18.9	R	1600wA5	5.0	4.9			94-	151		12	88	39N	345	52	324	+6.6	+0.6	+0.4	-2.3	.349	132.9		11	0	44.8	6	6	5	380.2	944.7
							R1600 = 59 Leonis																														
							1600 is double: AB 5.0 12.6 40" 217.4, dT = +70sec																														
26	Feb	5	8	31	17.8	r	138476KG5	7.6	7.2			86-	137		60	144	17N	8	41	346	+5.9	+2.7	-0.6	-4.2	.220	126.8		11	54	52.0	- 1	27	5	382.3	682.4
26	Feb	6	12	43	9.2	r	138948pK0	7.6	7.0			78-	124	-9	44	231	11N	14	328	353	+4.7	+4.6	-0.8	-5.3	.145	113.7		12	44	59.7	- 8	31	55	389.4	678.0
							138948 is double: AB 7.7 11.2 7.6" 96.1, dT = -8sec																														
							138948 is a close double. Observations are highly desired																														
26	Feb	9	12	22	27.5	r	2152kA0	7.5	7.5			50-	90		44	177	31N	345	348	329	+2.1	+7.1	+1.0	-2.9	.216	136.4		15	5	16.8	-23	0	48	399.2	578.2
26	Feb	10	9	13	11.2	R	2263cB1	4.6	4.7			41-	80		14	126	78N	293	348	281	+1.6	+7.1	+0.6	+0.1	.419	-175.4		15	50	58.7	-25	45	5	403.0	822.0
							R2263 = 1 Scorpii																														
							2263 is double: ** 5.6 5.6 0.050"																														
							2263 has been reported as non-instantaneous (OCc1483). Observations are highly desired																														
26	Feb	10	12	26	33.4	R	2276	A3	5.6	5.6		40-	79		39	165	74N	297	312	285	+0.9	+7.4	+2.4	-0.7	.300	178.6		15	55	30.1	-26	15	58	400.5	582.7
							R2276 = 4 Scorpii																														
26	Feb	11	12	6	15.4	r	184648	F2	8.1	7.9		31-	68		31	149	69S	253	286	246	-0.1	+7.4	+3.0	+1.4	.260	-143.6		16	47	57.6	-28	22	50	400.9	629.0
26	Feb	12	10	51	49.0	R	2540	B3	7.2	7.1e		23-	58		12	129	85S	263	319	261	-1.0	+7.1	+1.2	+1.1	.380	-159.9		17	40	23.9	-28	55	24	401.4	788.8
							2540 = V2382 Oph, 7.26 to 7.29, Hp, Type E+BE, Period 0.9215 days, Phase 40%																														

Occultation prediction for Museo de Astronomía El Meteorito
E. Longitude -101 6 23.0, Latitude 23 7 11.9, Alt. 2020m; Telescope dia 15cm; dMag 0.0

y	m	day d	h	Time m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon Sun Alt	Moon Alt	Az	CA o	PA o	VA o	AA o	Libration L	B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	Feb	13	11	29	15.9	R	2702	K0	6.8	6.3		15- 46	9	126		42S	213	270	216	-2.1	+6.5	+2.8	+4.1	.189	-117.3		18	37	3.3	-28	30	47	399.0	797.8
26	Feb	19	0	25	13.4	D	Mercury		-0.6	-0.6		2+ 18	3	21	256	65N	35	336	61	-5.7	-1.1	+0.5	+1.1	.431	15.4		23	14	18.8	- 3	50	16	376.8	818.0
Mercury contacts: Bright limb 0 25 5; Terminator 0 25 17.3; Dark limb 0 25 21: diam = 7.0"; %illum = 53.3%; PA bright limb = 244.0																																	
26	Feb	19	1	17	57.8	D	3416	cA3	5.6	5.5		3+ 18	-9	10	262	38N	12	306	33	-5.7	-1.1	+0.0	+2.2	.369	46.2		23	15	34.3	- 3	29	47	377.9	976.6
3416 is double: ** 6.4 6.4 0.050"																																	
3416 has been reported as non-instantaneous (OCc1638). Observations are highly desired																																	
26	Feb	19	1	29	10.1	R	Mercury		-0.6	-0.6		3+ 18	-11	7	263	-79N	248	188	276	-5.7	-1.2	+0.3	-0.3	.481	164.4		23	14	18.8	- 3	50	16	378.2	915.0
Mercury contacts: Bright limb 1 29 3; Terminator 1 29 10.8; Dark limb 1 29 17: diam = 7.0"; %illum = 53.3%; PA bright limb = 244.0																																	
26	Feb	20	1	18	16.4	d	108995	K2	7.9	7.3		7+ 31	-9	22	264	80N	53	347	75	-5.3	-2.7	+0.7	+0.6	.490	4.8		0	4	37.5	2	56	14	373.7	891.5
26	Feb	20	1	38	25.7	d	109002	K2	9.5	8.9		7+ 31		18	266	85N	58	351	80	-5.3	-2.7	+0.5	+0.4	.507	1.4		0	5	14.9	3	0	27	374.1	920.1
26	Feb	21	1	28	26.2	D	109530	DF0	8.2	8.0		14+ 44	-11	33	267	87S	67	358	88	-4.5	-4.2	+1.1	+0.2	.455	-7.1		0	54	45.1	9	25	44	370.3	823.2
109530 is double: AB 8.57 9.60 3.11" 299.9, dT = -4sec																																	
109530 is a close double. Observations are highly desired																																	
26	Feb	23	2	21	35.4	d	75537	A2	7.8	7.7		33+ 71		48	277	65N	45	327	62	-2.6	-6.3	+1.7	+1.3	.375	25.6		2	43	41.1	21	8	50	366.2	738.6
26	Feb	24	0	55	20.9	d	76081	K2	7.5	6.9		44+ 84	-3	80	284	84S	82	342	95	-1.1	-6.7	+2.7	+0.2	.357	-11.8		3	41	18.1	25	0	29	364.1	644.6
26	Feb	24	2	27	36.9	d	76102	A2	7.5	7.5		45+ 84		59	281	66S	101	14	113	-1.4	-6.8	+2.1	-1.2	.356	-23.4		3	43	43.2	25	4	51	364.8	686.6
26	Feb	24	3	51	16.6	d	76161	A0	8.0	7.9		45+ 85		41	284	65N	52	331	64	-1.6	-6.7	+1.7	+0.9	.377	31.2		3	45	59.1	25	23	55	366.1	782.0
26	Feb	24	6	5	1.2	D	569	cA2	5.3			46+ 86		13	293	31N	18	308	30	-1.7	-6.6	+2.0	+3.5	.202	68.9		3	50	18.9	25	34	46	368.8	1004.1
569 is double: AB 5.73 6.52 0.65" 204.0, dT = -3sec																																	
569 is a close double. Observations are highly desired																																	
26	Feb	24	6	14	26	Gr	569	cA2	5.3			46+ 86		10	** GRAZE: CA 9.6N; Dist.123km in az. 27deg. [Lat = 24.36-0.47(E.Long+101.11)]																		
26	Feb	24	6	17	39.8	d	571	pA2	6.8	6.7		46+ 86		10	293	39S	128	59	140	-1.7	-6.6	-0.6	-2.0	.433	-40.9		3	51	25.3	25	9	47	369.1	1026.4
571 is double: ** 7.1 9.1																																	
26	Feb	25	5	44	36.2	D	731	kF2	6.0	5.8		57+ 99		30	290	53N	47	329	54	-0.5	-6.6	+1.7	+1.1	.334	47.8		4	52	47.1	27	53	51	366.9	885.1
26	Feb	26	6	48	15.8	D	77818	K5	6.7	5.8		69+ 112		30	290	84S	98	20	99	+0.6	-6.1	+0.6	-1.0	.511	6.0		6	0	4.9	28	7	33	367.3	915.4
26	Feb	27	1	55	32.7	d	78873	A2	7.8	7.7		78+ 124		72	73	74S	114	214	110	+2.5	-5.7	+2.5	-0.9	.351	-16.3		6	55	48.1	27	14	58	365.2	648.5
26	Feb	27	1	58	7.5	d	1056	B9	7.2	7.3		78+ 124		72	72	83S	106	206	101	+2.5	-5.7	+2.5	-0.4	.362	-7.5		6	55	56.2	27	17	9	365.2	647.3
26	Feb	27	4	53	58.0	d	78957	G8	7.5	7.0		79+ 125		68	285	51S	138	43	133	+1.9	-5.5	+1.3	-2.5	.349	-27.5		7	0	14.8	26	52	42	365.5	697.3
26	Feb	27	5	9	21.2	d	1067	cK2	7.1	6.4		79+ 125		65	285	57N	66	333	61	+1.9	-5.5	+3.1	+0.9	.282	45.5		7	0	58.1	27	9	26	365.7	713.0
1067 is double: ** 8.0 8.0 0.10" 90.0, dT = +0.32sec																																	
1067 has been reported as non-instantaneous (OCc1341). Observations are highly desired																																	
26	Feb	28	4	28	50.1	d	79868	DK0	7.4			87+ 138		87	286	60S	135	31	125	+3.1	-4.5	+1.9	-2.2	.350	-18.8		8	1	30.3	23	54	46	366.5	658.1
79868 is double: AB 7.43 10.98 1.30" 168.9, dT = +3sec																																	
79868 is a close double. Observations are highly desired																																	
26	Mar	1	1	2	39.8	d	1329	pF8	6.8			93+ 150	-4	34	81	48S	152	228	138	+4.6	-3.3	+1.5	-2.2	.318	-44.9		8	53	55.3	19	58	2	371.2	809.3
1329 is double: AB 7.32 7.86 0.15" 72.1, dT = +0.08sec																																	
1329 is a close double. Observations are highly desired																																	
26	Mar	3	11	4	35.1	d	X119629	k	11.5	11.1		0E 179		27	265	38U	96	29	75	+4.1	+1.1	+1.0	-1.1	.418	30.0		10	51	47.3	6	18	53	379.6	888.1
26	Mar	3	11	18	18.7	d	X210181	k	11.7			0E 179		24	266	60U	126	58	105	+4.1	+1.1	+0.5	-1.7	.492	-0.6		10	51	57.8	6	7	28	380.0	906.7
26	Mar	3	11	28	30.9	d	X119641	k	11.3	11.0		0E 179		22	267	75U	147	79	126	+4.1	+1.1	+0.2	-2.1	.462	-22.5		10	51	57.8	6	0	33	380.2	921.1
26	Mar	3	11	32	53	m	X119650	k	11.9	11.4		0E 179		21	268	14U	34	326	13	+4.1	+1.1	+9.9	+9.9	.000	90.0		10	52	6.6	6	25	43	380.3	929.1
26	Mar	3	11	33	43	Gr	X119650	k	11.9	11.4		0E 179		19	** GRAZE: CA 15.4U; Dist. 51km in az. 206deg. [Lat = 22.61-0.44(E.Long+101.11)]																		
26	Mar	3	11	54	48.9	d	X210198	k	11.6			0E 179		16	270	48U	57	349	36	+4.1	+1.2	+1.2	+0.9	.210	66.1		10	53	0.7	6	14	53	380.9	960.2
26	Mar	3	11	59	30.7	r	X119629	k	11.5	11.1		0E 179		15	271	31U	333	265	312	+4.1	+1.2	+0.0	-2.2	.455	150.0		10	51	47.3	6	18	53	381.1	969.8
26	Mar	3	12	19	6.3	r	X210181	k	11.7			14E 179	-11	10	272	53U	301	233	280	+4.1	+1.2	+0.1	-1.5	.540	-179.3		10	51	57.8	6	7	28	381.6	999.7
26	Mar	3	12	19	19.1	r	X210198	k	11.6			14E 179	-11	10	272	46U	8	300	347	+4.1	+1.2	-0.5	-3.9	.218	113.9		10	53	0.7	6	14	53	381.6	998.7
26	Mar	3	12	23	29.3	r	X119641	k	11.3	11.0		20E 179	-10	9	273	69U	279	211	258	+4.1	+1.2	+0.2	-1.0	.502	-157.4		10	51	57.8	6	0	33	381.7	1006.1
26	Mar	3	12	45	58.1	D	118571	pK0	7.4	7.0s		58E 179	-5	4	274	23S	94	26	73	+4.1	+1.3	+0.1	-0.9	.500	26.6		10	54	45.6	5	50	52	382.3	1036.9

Occultation prediction for Museo de Astronomía El Meteorito
E. Longitude -101 6 23.0, Latitude 23 7 11.9, Alt. 2020m; Telescope dia 15cm; dMag 0.0

y	m	day d	h	Time m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon	Sun Alt	Moon Alt	Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	dur sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
							118571 is double: ** 8.0 8.8 0.034" 104.5, dT = +0.07sec																													
							118571 has been reported as non-instantaneous (OCc 585). Observations are highly desired																													
							118571 = NSV 5015, 8.9 to 9.27, pg, Type E:																													
26	Mar	5	11	29	11.6	r	138754	KF8	7.2	6.9		96-	156	35	244	80S	291	234	269	+3.9	+4.1	+1.5	-1.5	.385	-165.1		12	23	27.6	-	6	7	8	387.3	747.4
26	Mar	6	10	40	1.4	r	1885	K2	7.3	6.7		91-	145	47	218	84S	292	256	271	+3.7	+5.2	+2.4	-1.4	.328	-163.6		13	8	27.9	-11	45	46	390.2	648.1
26	Mar	9	10	40	40.5	r	183572	kG0	7.6	7.3		68-	111	41	171	78N	298	307	284	+1.1	+7.4	+2.5	-0.8	.299	-180.0		15	33	54.8	-25	6	38	399.4	579.9
26	Mar	12	8	50	47.6	r	2631	B9	6.5	6.5v		40-	79	4	124	38S	215	276	216	-2.0	+6.8	+2.6	+4.1	.189	-115.9		18	11	58.2	-28	54	6	401.9	846.9
							R2631 = V4045 Sagittarii																												
							2631 = V4045 Sgr, 6.51 to 6.54, V, Type ACV, Period 2.8855 days																												
26	Mar	12	10	34	30.3	r	186512	B8	7.9	8.0		40-	78	22	137	84S	261	307	262	-2.3	+6.9	+1.9	+1.1	.337	-163.9		18	14	33.2	-28	50	20	399.8	680.0
26	Mar	12	10	44	26.4	r	186536	cA3	7.5	7.4		40-	78	23	138	36N	321	5	322	-2.3	+6.9	+0.7	-1.4	.246	135.6		18	15	13.5	-28	36	49	399.6	666.8
							186536 is double: ** 8.8 8.8 0.10" 90.0, dT = +0.26sec																												
							186536 has been reported as non-instantaneous (OCc 151). Observations are highly desired																												
26	Mar	12	11	43	20.6	r	186563	K2	7.8	6.9		39-	78	31	150	71S	247	280	249	-2.5	+6.9	+2.8	+1.5	.279	-154.2		18	16	20.4	-28	55	54	398.7	598.6
26	Mar	12	12	15	45.3	R	2645	A5	6.2	6.1		39-	78	-10	34	157	37N	319	344	321	-2.6	+6.9	+2.1	-1.9	.195	131.1		18	17	24.1	-28	39	7	398.3	572.2
26	Mar	13	10	35	47.7	r	2796	K0	6.9	6.3		30-	67	14	128	18N	333	28	339	-3.3	+6.1	-0.6	-2.8	.170	116.2		19	9	43.8	-27	6	52	397.6	744.0
26	Mar	15	17	7	35.4	r	3078	cA5	4.9			13-	42	54	46	197	46S	206	189	221	-5.9	+3.5	+1.0	+2.0	.315	-153.3		21	4	24.3	-19	51	18	384.6	657.7
							R3078 = Chow = eta Capricorni																												
							3078 is double: AB 5.02 7.39 0.23" 32.2, dT = +0.7sec																												
							3078 is a close double. Observations are highly desired																												
26	Mar	21	2	4	56.3	d	92481	K0	9.1	8.5		5+	26	9	281	81N	51	343	72	-3.8	-5.0	+0.4	+0.5	.534	18.3		1	31	15.2	13	50	29	366.9	999.9
26	Mar	21	2	16	20.8	d	92490	MA	9.3	8.3v		5+	26	7	282	59S	91	23	112	-3.8	-5.0	+0.0	-0.8	.533	-21.3		1	31	54.8	13	42	11	367.1	1018.9
							92490 = ASAS J013155+1342.2, 9.28, range 0.18, V, Type MISC, Period 28.790348 days, Phase 10%																												
26	Mar	22	1	35	52.7	D	92940	cK0	7.9	7.4		11+	39	-10	29	280	59N	34	320	52	-2.5	-6.0	+1.2	+1.5	.382	38.5		2	25	39.8	19	33	16	363.8	861.5
							92940 is double: ** 8.0 10.4 0.040" 69.0, dT = +0.09sec																												
							92940 has been reported as non-instantaneous (OCc1705). Observations are highly desired																												
26	Mar	23	2	40	56.2	D	499	cG5	8.0			20+	53	29	286	82N	64	348	78	-1.1	-6.6	+1.0	+0.1	.472	17.7		3	27	49.6	24	10	58	364.0	875.1
							499 is double: AB 8.04 11.52 0.40" 170.0, dT = -0.23sec																												
							499 is a close double. Observations are highly desired																												
26	Mar	23	3	38	27.6	d	75952	A0	8.2	8.0		21+	54	17	290	86S	76	5	90	-1.1	-6.5	+0.4	-0.3	.545	7.3		3	30	5.4	24	11	25	365.2	972.9
26	Mar	24	2	10	22.9	d	76629	G0	8.7	8.5		30+	67	49	286	66N	55	329	64	+0.4	-6.8	+2.1	+0.9	.355	33.8		4	29	43.1	27	16	37	363.2	751.8
26	Mar	24	2	29	47	M	673	cA0	6.5	6.5		30+	67	45	287	10N	359	276	8	+0.4	-6.7	+9.9	+9.9	.000	90.0		4	29	19.8	27	24	15	363.6	778.9
							673 is double: ** 7.4 7.4 0.10" 286.0																												
							673 has been reported as non-instantaneous (OCc 722). Observations are highly desired																												
26	Mar	24	2	30	6	Gr	673	cA0	6.5	6.5		30+	67	43	** GRAZE: CA 10.5N; Dist. 59km in az. 201deg. [Lat = 22.55-0.35(E.Long+101.11)]																					
26	Mar	24	5	52	13.6	d	701	SF2	6.6	6.4		32+	68	3	298	52S	118	52	126	+0.3	-6.4	-0.6	-1.3	.569	-25.0		4	38	29.5	26	56	23	367.9	1120.7
							701 is triple: 6.6 9.2 3.1" 169.4, dT = +3sec : AB 7.36 7.21 4.48" 187.8, dT = +2.7sec																												
							701 is a close double. Observations are highly desired																												
26	Mar	24	21	50	19	Gr	810	SB7	1.7	1.7		40+	79	42	60	** GRAZE: CA -7.9N; Dist.252km in az. 154deg. [Lat = 20.60+0.44(E.Long+101.11)]																				
26	Mar	24	21	52	37	M	810	SB7	1.7	1.7		40+	79	41	60	72	-8N	348	82	352	+2.6	-6.5	+9.9	+9.9	.000	90.0		5	26	17.5	28	36	27	363.8	713.5
							R810 = El Nath = beta Tauri																												
							810 is multiple: AC 1.9 19.0 8.4" 357.0 : AD 1.9 18.5 9.8" 70.0 : AE 1.9 10.9" 80.0 : AF 1.9 15.8 11.6" 296.0																												
							810 is a close double. Observations are highly desired																												
26	Mar	25	23	24	11.7	d	1008	A0	5.3	5.3s		52+	93	21	66	72	50N	54	150	51	+3.5	-5.9	+2.0	+2.5	.293	38.2		6	35	12.1	28	1	20	365.8	662.0
							R1008 = 49 Aurigae																												
							1008 = NSV 3032, 5.05 to 5.27, V																												
26	Mar	26	1	33	34.8	D	78580	SA2	7.3	7.2		53+	93	-9	83	314	78N	82	310	79	+3.1	-5.9	+2.9	+0.3	.334	21.2		6	38	53.6	27	48	16	365.5	635.5
							78580 is triple: AC 7.3 13.8 26.6" 237.2, dT = -72sec : AB 7.3 10.5 28.6" 130.4, dT = +57sec																												

Occultation prediction for Museo de Astronomía El Meteorito
E. Longitude -101 6 23.0, Latitude 23 7 11.9, Alt. 2020m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon Sun Alt	Moon Alt	Az	CA o	PA o	VA o	AA o	Libration L	B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	Mar	26	4	40	31.3	d	78685	B9	8.0	8.0		54+	94	44	287	65N	70	346	66	+2.6	-5.6	+1.9	+0.1	.353	40.5		6	44	12.0	27	28	48	367.8	826.8
26	Mar	26	7	8	34.0	d	1042	cA2	6.7	6.6		55+	96	13	294	23N	29	318	24	+2.5	-5.2	+3.8	+5.3	.106	79.8		6	49	10.2	27	11	25	371.0	1074.3
	1042 is double: 6.7 9.8 0.10"																																
	1042 is a close double. Observations are highly desired																																
26	Mar	26	7	12	46		Gr	1042	cA2	6.7	6.6	55+	96	11	** GRAZE: CA 12.8N; Dist. 37km in az. 34deg. [Lat = 23.52-0.62(E.Long+101.11)]																				
26	Mar	27	2	14	43.2	d	79610	F8	7.2	7.0		64+	107	88	327	12S	179	33	170	+4.0	-4.8	+0.0	-7.2	.145	-66.2		7	41	3.1	24	57	54	368.1	639.7
26	Mar	27	6	33	16.6	d	1180	F5	7.1	6.8		66+	108	32	285	62N	73	356	64	+3.4	-4.2	+1.3	-0.2	.372	43.7		7	49	18.9	24	29	19	371.6	926.4
26	Mar	27	6	43	0.7	d	79724	K0	7.8	7.0		66+	108	30	286	79S	113	37	103	+3.4	-4.2	+0.4	-1.3	.521	3.7		7	49	36.1	24	16	9	371.8	941.7
26	Mar	27	7	12	46.6	d	79739	F0	7.1	7.0		66+	109	23	287	81S	111	37	102	+3.3	-4.1	+0.2	-1.3	.546	4.7		7	50	39.8	24	9	40	372.5	990.3
26	Mar	28	6	25	49.4	d	80413	F8	7.6	7.3		76+	121	45	276	64N	81	4	67	+4.0	-2.9	+1.9	-0.4	.339	42.9		8	46	21.4	20	24	50	373.3	837.9
26	Mar	28	6	45	16.4	d	1313	kF8	7.6	7.3		76+	121	40	277	20S	177	101	163	+4.0	-2.9	-0.8	-3.5	.280	-54.0		8	45	50.1	20	1	20	373.8	865.3
26	Mar	28	7	19	21.0	d	80426	K0	7.7	7.2		76+	121	32	280	52S	144	70	130	+3.9	-2.8	+0.1	-2.1	.466	-22.4		8	47	26.7	19	55	19	374.5	914.9
26	Mar	30	1	51	19.9	D	1522	K0	6.8	6.2		91+	145	48	100	65N	87	154	67	+5.6	-0.5	+2.2	+1.0	.314	37.3		10	24	19.5	10	35	16	378.7	725.5
26	Mar	30	4	47	42.9	D	1531	wA0	6.0	6.0v		91+	146	77	185	86S	116	111	96	+5.0	-0.1	+2.4	-1.3	.350	17.5		10	27	39.0	9	45	45	377.6	672.5
	R1531 = 45 Leonis (CX)																																
	1531 is double: AB 6.0 12.4 34" 119.5, dT = +97sec																																
	1531 = CX Leo, 6.01 to 6.03, V, Type ACV, Period 3.0525 days, Phase 70%																																
26	Apr	4	3	42	20.5	r	2045	cK0	6.4			95-	155	12	116	84S	293	353	274	+3.3	+6.0	+0.5	+0.0	.457	-169.6		14	17	3.8	-18	35	9	398.7	898.9
	2045 is double: AB 6.40 10.51 0.70" 83.1, dT = +1.3sec																																
	2045 is a close double. Observations are highly desired																																
26	Apr	4	4	33	38.3	R	2051	A*	5.9	5.9v		95-	155	22	123	73N	316	11	298	+3.2	+6.1	+0.4	-0.8	.419	169.0		14	18	38.3	-18	42	57	397.8	823.1
	2051 = CS Vir, 5.84 to 5.95, V, Type ACV, Period 9.2954 days, Phase 55%																																
26	Apr	4	9	17	24.5	r	158538	wK1	7.3	6.8		95-	153	45	200	83S	292	273	274	+2.2	+6.7	+2.7	-1.2	.305	-169.4		14	24	0.4	-19	48	3	396.2	595.3
	158538 is double: AB 7.4 11.6 40" 286.2, dT = -129sec																																
26	Apr	4	10	30	9.2	r	158556	WA2	6.8			95-	153	37	219	88S	297	259	279	+1.9	+6.7	+2.3	-1.6	.322	179.0		14	25	27.7	-19	57	57	397.0	620.5
	158556 is double: BA 7.2 6.6 35" 114.8, dT = +107sec																																
26	Apr	4	10	31	52.5	r	2066	SA1	6.6	6.6		95-	153	36	219	88S	297	259	279	+1.9	+6.7	+2.3	-1.6	.323	178.9		14	25	29.9	-19	58	12	397.0	621.6
	2066 is quadruple: **Aa,Ab 6.8 7.7 0.018" 329.0, dT = -0.05sec : BC 7.16 8.37 1.21" 89.4, dT = +3sec : AB 6.6 7.2 35" 294.8, dT = -107sec																																
	2066 has been reported as non-instantaneous (OCc 204). Observations are highly desired																																
26	Apr	5	8	36	23		m	2174	pB8	6.5	6.5		90-	142	42	171	8S	211	219	196	+1.5	+7.1	+9.9	+9.9	.000	-90.0		15	13	17.4	-24	0	30	398.6	592.8
	2174 is triple: ** 7.1 7.1 0.030" 0.0 : AB 6.4 12.5 8.2" 45.0																																
	2174 has been reported as non-instantaneous (OCc1471). Observations are highly desired																																
	Distance of 2174 to Terminator = 5.3"; to 3km sunlit peak = 0.0"																																
26	Apr	5	11	45	5.5	r	183333	cA2	7.3	7.2		89-	142	-12	29	222	81N	301	259	287	+0.7	+7.3	+2.3	-1.8	.311	164.0		15	16	48.0	-24	0	36	400.0	627.1
	183333 is double: 7.8 8.2																																
26	Apr	6	4	53	52.1	R	2287	SB1	2.9	3.0v		84-	133	4	121	65S	261	323	250	+1.1	+7.0	+0.8	+1.2	.388	-146.6		15	58	51.1	-26	6	51	403.8	910.7
	R2287 = pi Scorpii																																
	2287 is triple: Aa,Ab 5.1 13.4 2.0" 244.0, dT = -5sec : AB 2.9 11.9 50" 128.1, dT = +89sec																																
	2287 is a close double. Observations are highly desired																																
	2287 = pi Sco, 2.88 to 2.91, V, Type ELL, Period 1.570103 days, Phase 64%																																
26	Apr	6	7	14	8		Gr	2297	kF7	7.0	6.7		83-	132	29	** GRAZE: CA 10.8S; Dist. 21km in az. 220deg. [Lat = 22.87-0.78(E.Long+101.11)]																				
26	Apr	6	7	20	24		r	2297	kF7	7.0	6.7		83-	132	28	142	20S	216	255	205	+0.7	+7.2	+9.9	+9.9	.054	-98.9		16	3	16.1	-26	43	2	401.3	686.4
26	Apr	7	10	38	27.9	r	2444	kA0	7.6	7.6		75-	120	38	179	69S	258	260	252	-1.2	+7.4	+3.3	+0.5	.261	-159.0		17	0	28.9	-28	38	4	401.0	542.8
26	Apr	7	11	5	41.7	r	184914	K2	7.5	6.9		75-	120	38	186	88N	281	275	275	-1.3	+7.4	+3.1	-0.5	.277	175.4		17	1	3.3	-28	33	11	401.0	541.2
26	Apr	11	9	56	5.6	r	189425	WF7	7.5	7.2		38-	76	15	123	61N	283	340	297	-5.3	+4.3	+1.0	+0.4	.351	152.9		20	33	30.9	-22	13	55	393.4	751.7
	189425 is double: AB 7.5 11.6 10.3" 21.3, dT = +4sec																																
26	Apr	13	11	1	36.4	r	164945	G8	8.1	7.7		19-	52	15	110	76N	262	324	281	-6.3	+1.5	+0.8	+1.1	.433	162.7		22	14	30.7	-12	15	13	382.4	840.5
26	Apr	14	11	38	23.2	r	146489	kK0	8.5	7.9		11-	39	-11	16	104	62S	219	283	241	-6.1	-0.1	+0.6	+2.1	.456	-159.0		23	4	27.9	-	6	10	46	376.3	892.3

Occultation prediction for Museo de Astronomía El Meteorito
E. Longitude -101 6 23.0, Latitude 23 7 11.9, Alt. 2020m; Telescope dia 15cm; dMag 0.0

day	Time	P	Star	Sp	Mag	Mag	%	Elon	Sun	Moon	CA	PA	VA	AA	Libration		A	B	RV	Cct	durn	R.A. (J2000)			Dec			Mdist	SV
y m d	h m s		No	D	v	r	V	ill	Alt	Alt Az	o	o	o	o	L	B	m/o	m/o	"/s	o	sec	h	m	s	o	m	s	Mm	m/s
26 Apr 15	12 1 19.3	r	128449	M*	7.6	6.8s		5- 26	-6	13 95	85N	254	321	276	-5.5	-1.7	+0.4	+1.2	.519	164.6		23	53	52.1	0	35	46	371.0	968.9
128449 = NSV 26159, 7.58 to 7.67, Hp																													
26 Apr 20	2 12 40.3	D	76472	cG8	7.2	6.5		9+ 36		20 290	41S	121	47	132	-0.2	-6.5	-0.1	-1.7	.473	-32.1		4	8	39.0	25	52	40	359.9	975.3
26 Apr 21	4 45 17.9	d	797	cB9	6.4	6.3e		18+ 51		3 299	33N	25	320	29	+1.6	-6.0	+1.7	+2.9	.199	72.3		5	20	59.3	27	57	26	363.9	1152.1
797 is double: ** 6.5 8.5																													
797 = HR 1750, 6.21, range 0.03, H1, Type EA, Period 3.315 days, Phase 63%																													
26 Apr 22	2 55 26.7	d	78299	A0	8.3	8.3		28+ 63		39 288	80N	80	358	79	+3.1	-5.6	+1.3	-0.4	.439	27.0		6	23	5.8	27	43	53	363.1	868.0
26 Apr 25	2 19 51.2	d	98511	kF2	7.8	7.6		61+ 102		81 227	71S	127	83	111	+6.0	-2.1	+2.0	-1.8	.369	0.6		9	20	38.2	17	7	38	373.0	668.4
26 Apr 25	5 59 41	M	1395	G9	6.3	5.8		62+ 104		33 275	16N	35	322	18	+5.4	-1.5	+9.9	+9.9	.000	90.0		9	25	32.5	16	35	8	376.5	895.1
26 Apr 25	6 2 29	Gr	1395	G9	6.3	5.8		62+ 104		31 ** GRAZE: CA 16.2N; Dist.148km in az. 219deg. [Lat = 21.41-0.75(E.Long+101.11)]																				
26 Apr 26	0 6 55.7	D	1487	SB7	1.4	1.4s		71+ 114	13	52 101	33S	168	235	149	+6.7	-0.8	+1.0	-3.3	.275	-43.8		10	8	22.3	11	58	2	378.1	700.3
R1487 = Regulus = alpha Leonis																													
1487 is triple: AB 1.4 8.2 176" 308.0, dT = -492sec : AD 1.4 12.1 193" 274.0, dT = -197sec																													
1487 = NSV 4750, 1.33 to 1.40, V																													
26 Apr 26	1 10 43.5	R	1487	SB7	1.4	1.4s		71+ 115	-1	66 115	-63S	264	323	245	+6.5	-0.7	+3.3	+0.9	.262	-136.2		10	8	22.3	11	58	2	377.5	665.1
R1487 = Regulus = alpha Leonis																													
1487 is triple: AB 1.4 8.2 176" 308.0, dT = -485sec : AD 1.4 12.1 193" 274.0, dT = -724sec																													
1487 = NSV 4750, 1.33 to 1.40, V																													
26 Apr 26	4 49 12.6	d	1498	cG5	8.0	7.4		72+ 116		57 253	36S	165	101	146	+5.8	-0.2	+0.3	-3.0	.334	-33.8		10	13	50.4	10	50	31	378.6	737.8
1498 is double: ** 8.4 9.4 0.08" 94.4, dT = +0.08sec																													
1498 has been reported as non-instantaneous (OCc 598). Observations are highly desired																													
26 Apr 28	2 11 55.6	d	138388	K0	7.3	6.8		88+ 139		53 126	59S	142	190	120	+6.0	+2.4	+1.3	-1.6	.368	-9.1		11	45	1.4	- 0	31	4	386.2	697.5
26 Apr 29	1 59 50	m	1792	PF2	7.4	7.1S		94+ 151	-12	40 120	23N	41	94	19	+5.6	+3.7	+9.9	+9.9	.000	90.0		12	30	1.9	- 6	1	24	390.7	749.7
1792 is triple: AB 7.4 13.0 3.3" 278.9 : AC 7.4 13.0 18.8" 292.0																													
1792 is a close double. Observations are highly desired																													
1792 = NSV 19406, 7.36, , Type VAR:																													
26 Apr 29	9 50 36.0	D	1815	SK2	4.7	4.0		95+ 153		12 256	55N	71	6	49	+4.0	+4.6	+0.6	-0.2	.308	46.9		12	39	14.8	- 7	59	44	394.5	862.8
R1815 = chi Virginis																													
1815 is multiple: **Aa,Ab 4.8 8.8 0.10" 214.0, dT = -0.26sec : AB 4.8 8.8 177" 135.9, dT = +240sec : AC 4.8 10.6 224" 109.8, dT = +562sec : AD 4.8 9.0 321" 331.1, dT = -170sec																													
1815 has been reported as non-instantaneous (OCc 760). Observations are highly desired																													
26 Apr 30	4 56 54.9	d	157849	KF2	7.3	7.1		98+ 163		53 166	89N	97	111	76	+4.3	+5.3	+3.2	-0.2	.275	35.7		13	18	58.6	-12	38	53	393.1	645.0
26 May 3	5 7 23.9	r	183731	pF0	7.3	7.1		98- 162		28 139	51S	260	302	248	+1.6	+7.0	+2.5	+1.2	.283	-141.3		15	43	11.6	-25	24	56	401.6	706.1
183731 is double: AB 7.3 9.3 5.9" 291.8, dT = -18sec																													
183731 is a close double. Observations are highly desired																													
26 May 3	8 50 48.9	r	2256	PA1	7.0	6.9		97- 161		39 198	33S	242	224	230	+0.7	+7.3	+3.4	+1.0	.204	-134.8		15	47	56.5	-25	59	13	400.8	562.8
2256 is double: ** 7.7 7.7 0.10" 90.0, dT = +0.43sec																													
2256 has been reported as non-instantaneous (OCc1482). Observations are highly desired																													
Distance of 2256 to Terminator = 15.8"; to 3km sunlit peak = 5.5"																													
26 May 3	10 38 41.9	R	2263	cB1	4.6	4.7		97- 161		27 222	46N	343	300	331	+0.3	+7.3	+3.1	-5.2	.138	114.9		15	50	58.7	-25	45	5	402.1	637.8
R2263 = 1 Scorpii																													
2263 is double: ** 5.6 5.6 0.050"																													
2263 has been reported as non-instantaneous (OCc1483). Observations are highly desired																													
26 May 4	9 15 50.5	R	2397	K1	6.5	5.9		93- 150		38 191	61N	316	305	309	-0.5	+7.3	+2.9	-2.1	.224	142.6		16	41	37.6	-27	48	35	401.7	547.9
26 May 8	10 4 26.4	r	2954	G5	7.8	7.3v		64- 106		36 148	67S	235	268	247	-5.3	+4.5	+2.5	+1.8	.300	-165.7		20	16	11.7	-23	30	37	396.0	594.7
2954 = HIP 99903, 7.83, range 0.02, 0V, Type VAR, Period 11.39601 days																													
26 May 9	11 17 50.6	R	3084	K1	6.7	6.2		54- 95	-11	43 152	75N	268	296	284	-6.4	+3.1	+3.0	+0.6	.279	150.6		21	7	29.9	-19	5	18	391.0	607.2
26 May 10	11 23 23.7	r	164750	M2	7.8	6.9v		44- 83	-10	42 137	70N	270	310	289	-7.0	+1.7	+2.7	+0.7	.290	145.8		21	56	7.6	-14	2	8	386.0	655.7

Occultation prediction for Museo de Astronomía El Meteorito
E. Longitude -101 6 23.0, Latitude 23 7 11.9, Alt. 2020m; Telescope dia 15cm; dMag 0.0

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      day  Time     P   Star  Sp  Mag  Mag    % Elon Sun  Moon   CA   PA  VA  AA Libration    A    B   RV    Cct durn  R.A. (J2000)  Dec   Mdist   SV
 y   m  d  h  m    s       No  D    v    r V  ill     Alt Alt Az   o    o   o   o   L    B   m/o m/o  "/s     o  sec  h  m    s    o  m  s   Mm   m/s
    164750 = BU Cap, 7.7 to 7.95, Hp, Type LB
26 May 11 10 41 32.5 r X183491D    7.9  7.8   34-  71     30 115  35N 302 360 323 -7.2 +0.3 +2.4-1.2 .174  114.9     22 43  3.3 - 8 18 40 381.4 767.1
   X183491 is double: BA 7.9 6.8 2.4" 126.8, dT = +14sec
   X183491 is a close double. Observations are highly desired
26 May 11 10 41 48.1 R    3333SA5  6.4        34-  71     30 115  36N 302 359 323 -7.2 +0.3 +2.4-1.2 .176  115.2     22 43  3.4 - 8 18 41 381.4 766.8
      3333 is quadruple: AB 6.79 7.88 2.37" 306.8, dT = -13sec : AC 6.8 11.4 70" 355.8, dT = -235sec : AD 6.8 14.2 75" 278.1, dT = -388sec
      3333 is a close double. Observations are highly desired
26 May 11 11  4 22.8 r  146276 F8  8.2  7.9   34-  71     34 119  80N 258 313 279 -7.2 +0.3 +1.7+1.2 .371  157.5     22 43 26.2 - 8 25  7 380.9 742.3
26 May 19  1  4  1.5 d     890cA0  4.6  4.6s  7+  31   3 34 289  27S 145  65 146 +1.9 -5.8 -0.2-2.5 .396  -41.9      5 53 19.6  27 36 44 356.5 919.5
   R890 = 136 Tauri
      890 is double: ** 4.8 6.3 0.050" 270.0, dT = -0.07sec
      890 has been reported as non-instantaneous (OCc 206). Observations are highly desired
      890 = NSV 2696, 4.50 to 4.61, V
26 May 19  1 48 50.8 D   77724 B1  7.0  7.0    7+  31  -7 24 291  76S  97  21  98 +1.9 -5.7 +0.4-0.9 .571    6.1      5 55 40.3  27 42 56 357.5 995.4
26 May 19  1 48 58.9 R     890cA0  4.6  4.6s  7+  31  -7 24 291 -68S 241 165 242 +1.9 -5.7 +1.0+0.2 .429 -138.2      5 53 19.6  27 36 44 357.6 998.8
   R890 = 136 Tauri
      890 is double: ** 4.8 6.3 0.050" 270.0, dT = -0.1sec
      890 has been reported as non-instantaneous (OCc 206). Observations are highly desired
      890 = NSV 2696, 4.50 to 4.61, V
26 May 19  2 22 20.8 d   77752 K2  8.8  8.3    7+  32     17 293  67S 106  33 107 +1.9 -5.6 +0.0-1.1 .606   -3.1      5 57  5.0  27 36  3 358.31054.0
26 May 19  3  1  2.6 d   77798 B9  8.5  8.5    8+  32     10 296  87S  86  17  86 +1.9 -5.5 +0.0-0.6 .617   16.6      5 58 54.5  27 36 42 359.21122.3
26 May 19  3  4 55.5 D   77804 A0  7.3  7.1    8+  32      9 296  79S  94  26  95 +1.9 -5.5 -0.1-0.7 .642    8.0      5 59  5.6  27 33 43 359.31129.0
26 May 19  3  6 33.7 d   77806 A0  8.6  8.6    8+  32      9 296  82S  91  23  92 +1.9 -5.5 -0.1-0.7 .637   11.2      5 59 10.5  27 34 25 359.31131.9
26 May 19  3 37 42.6 d     906SK1  6.6  6.1    8+  32      2 299  25S 149  84 149 +2.0 -5.4 -1.0-2.0 .461  -47.3      6  0  6.0  27 16 20 360.11186.2
      906 is quadruple: AB 7.3 8.3 0.31"       : AC 7.3 8.3 0.31"       : AD 7.3 10.0 21.4"
      906 is a close double. Observations are highly desired
26 May 19  3 44 56.8 d     909SB9  6.0  5.9s   8+  32      1 300  80N  73   9  74 +2.0 -5.4 -0.1-0.2 .604   28.3      6  1  0.5  27 34 21 360.21198.0
      909 is triple: Aa,Ab 6.1 9.2      194.0, dT = 0.00sec : AB 6.1 12.4 9.5" 242.3, dT = -15sec
      909 is a close double. Observations are highly desired
      909 = NSV 16751, 6.04, range 0.01, 2V, Type VAR, Period 9.26012 days
26 May 20  2 37 42.7 d   79032 G5  8.4  7.9   15+  46     27 289  47N  50 333  44 +3.7 -4.6 +2.0+1.2 .265   61.9      7  4 15.8  26 20 52 360.7 982.9
26 May 20  3 23 19.7 d    1079 K2  8.6  7.9   15+  46     18 291  50S 134  61 128 +3.7 -4.5 -0.3-1.7 .555  -23.2      7  6  4.4  25 49 17 361.81059.4
26 May 20  4 34 58.1 d    1085SG8  7.1  6.7   16+  47      3 297  87S  97  31  91 +3.8 -4.3 -0.3-0.8 .655   11.6      7  9 35.4  25 43 43 363.61179.7
     1085 is triple: AB 7.2 13.0 34"  68.3, dT = +45sec : AC 7.2 7.8 125"  78.4, dT = +180sec
26 May 21  2 31 53.1 D   79951 G5  7.8  7.2   24+  59     41 281  67S 124  45 113 +5.2 -3.4 +0.6-1.7 .497   -4.5      8  6 56.2  22 46 31 364.0 879.8
26 May 21  2 36 59.4 D    1221cM3  6.0  5.1v  24+  59     40 281  20S 171  93 160 +5.1 -3.4 -0.7-3.3 .311  -51.8 .01  8  6 18.4  22 38  8 364.2 888.2
   R1221 = 9 Cancri = BL Cnc.
      1221 is double: AB 6.0 10.1 0.40"
      1221 is a close double. Observations are highly desired
      1221 = BL Cnc, 5.97 to 6.04, V, Type SR
26 May 21  2 54 36.5 d   79962 A0  8.8  8.8   24+  59     36 282  90S 101  24  90 +5.1 -3.4 +0.9-1.1 .492   17.9      8  7 50.8  22 46 58 364.5 913.9
26 May 22  5  2 16.3 d    1362pK3  7.2  6.6   36+  73     19 281  68S 128  58 113 +6.0 -1.6 +0.0-1.6 .555   -8.0      9  9  2.3  17 28 11 372.01012.2
   R1362 = 78 Cancri
      1362 is triple: AB 7.5 9.0            : ** 7.5 9.0 0.005" 341.0, dT = -0.01sec
26 May 23  3 14 16.3 D    1466cB9  5.3  5.3   46+  85     52 260  56S 144  76 126 +6.7 -0.3 +0.8-2.3 .414  -14.5      9 58 13.4  12 26 41 374.2 775.6
   R1466 = nu Leonis
      1466 is double: ** 6.0 6.0 0.050"
      1466 has been reported as non-instantaneous (OCc1407). Observations are highly desired
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Occultation prediction for Museo de Astronomía El Meteorito
E. Longitude -101 6 23.0, Latitude 23 7 11.9, Alt. 2020m; Telescope dia 15cm; dMag 0.0

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      day  Time     P   Star  Sp  Mag  Mag    % Elon Sun  Moon   CA   PA  VA  AA Libration   A    B    RV    Cct durn  R.A. (J2000)  Dec   Mdist   SV
 y   m  d  h  m    s       No  D    v    r V  ill     Alt Alt Az   o    o   o   o   L    B   m/o m/o  "/s     o  sec  h  m    s    o  m  s   Mm   m/s
26 May 24  3 40 52.6 D    1573pA2  7.1  7.0   57+  98     53 248  35S 167 108 146 +6.8 +1.3 +0.4-3.0 .326  -35.3      10 47 19.2   6 20 46 379.6 735.4
   R1573 = 38 (Sextantis)/Leonis
26 May 26  6 54 37.2 d  138754KF8  7.2  6.9   77+ 123     24 251  47N  68   6  46 +5.6 +4.4 +1.6+0.1 .242   54.3      12 23 27.6 - 6  7  8 392.1 788.6
26 May 27  6 53 15.4 d    1885 K2  7.3  6.7   85+ 134     30 240  58N  77  22  55 +4.8 +5.5 +2.0-0.3 .265   44.2      13  8 27.9 -11 45 46 395.1 709.6
26 May 28  7  5 28.6 d    1993cK3  6.6  5.9   91+ 145     32 229  46S 148 100 128 +3.9 +6.3 +1.7-2.7 .293  -30.5      13 54 21.4 -17 10 48 397.9 656.8
26 Jun  2  4 55 32.6 R    2617cK0  4.6  4.1   97- 159     20 135  64S 256 304 257 -1.0 +6.4 +1.9+1.3 .330 -158.3      18  8  5.0 -28 27 26 403.8 695.3
      2617 is double: AB 5.1 5.9 0.26"  12.0, dT = +0.34sec
      2617 is a close double. Observations are highly desired
26 Jun  2  7 49 18.9 r  186461cA2  7.4  7.2v  96- 158     38 173  43N 328 335 328 -1.7 +6.4 +3.3-3.7 .130  117.7      18 12 37.6 -28 14 11 401.9 545.4
    186461 is double: ** 8.2 8.2 0.050"
    186461 has been reported as non-instantaneous (OCc1536). Observations are highly desired
    186461 = V4385 Sgr, 7.42 to 7.46, Hp, Type ELL:, Period 2.62462 days, Phase   9%
26 Jun  2 11 36 35.4 r    2644cF8  6.4  6.1   96- 157  -5 20 225  52S 241 194 243 -2.7 +6.2 +1.0+0.2 .365 -169.9      18 17 23.8 -28 17 20 403.6 725.7
      2644 is double: ** 7.1 7.1 0.10"  90.0, dT = +0.24sec
      2644 has been reported as non-instantaneous (OCc 168). Observations are highly desired
26 Jun  3  9 40 28.1 r  187716SG6  7.2  6.6   92- 147     40 190  84N 275 265 282 -3.4 +5.6 +3.3-0.4 .263  153.8      19  8  8.1 -26 50  5 400.5 570.3
    187716 is triple: **Aa,Ab 7.8 7.8 0.050" 160.0, dT = +0.08sec : AB 7.3 8.6 45" 123.9, dT = +151sec
    187716 has been reported as non-instantaneous (OCc 769). Observations are highly desired
26 Jun  8 12 45 51.6 r    3416cA3  5.6  5.5   49-  89   9 64 176  51N 286 290 307 -7.9 -1.4 +5.1-1.3 .176  119.1      23 15 34.3 - 3 29 47 379.3 666.4
      3416 is double: ** 6.4 6.4 0.050"
      3416 has been reported as non-instantaneous (OCc1638). Observations are highly desired
26 Jun  9 11 29 27.6 R       1SG0  7.2     S  39-  77  -7 53 119  16S 173 226 195 -7.5 -2.6 -0.5+4.0 .230 -124.6       0  2 47.2   2  7 49 374.4 735.1
        1 is triple: AB 7.40 9.36 1.52" 156.4, dT = -6sec : AC 7.4 12.4 47" 328.5, dT = +188sec
        1 is a close double. Observations are highly desired
        1 = NSV 3, 9. to 11., V
26 Jun 11  9  1 22.8 r     244 K0  6.7  6.2   19-  52      5  76  26N 316  23 336 -5.7 -4.7 +1.0-2.3 .165  105.2       1 39 15.4  14 17  8 367.81120.0
   R244 = 104 Piscium
26 Jun 12 10 16 40.2 R   93033SK0  7.2  6.4   10-  38     11  73  68S 236 305 253 -4.2 -5.5 -0.2+1.4 .629 -172.6       2 38 37.3  19 43 40 361.91112.6
     93033 is triple: **Aa,Ab 7.5 8.5 0.30"  70.0, dT = +0.46sec : AB 7.2 14.4 45"  57.7, dT = +72sec
     93033 has been reported as non-instantaneous (OCc 312). Observations are highly desired
26 Jun 12 11 39 32.5 R     399SA0  5.7  5.8   10-  37  -5 29  79  28S 196 270 213 -4.2 -5.7 -0.5+2.6 .402 -135.6       2 42 21.9  20  0 41 359.8 981.6
   R399 = mu Arietis
      399 is multiple: Ba,Bb 12.4 14.5           : B     2.4 0.004" 189.0, dT = -0.01sec : Aa,Ab 5.7 6.2 0.047" 279.1, dT = -0.01sec : AB 5.7 12.2
18.6" 264.9, dT = -16sec
      399 is a close double. Observations are highly desired
26 Jun 13 11 13 17.9 d     539SB6  4.3  4.4s   4-  23 -10 11  68 -72N  69 139  82 -2.3 -6.0 -0.2+1.1 .651   -1.3      3 45 12.5  24 28  2 358.11131.2
   R539 = Taygeta = 19 Tauri
      539 is multiple: Aa,Ab 4.6 6.1           : AB          0.019"  73.4, dT = +0.03sec : AC 4.3 14.0 53"  53.4, dT = +78sec : AB 4.3 11.0 72"
328.8, dT = -21sec
      539 is a close double. Observations are highly desired
      539 = NSV 1264, 4.30, range 0.00, 1Kp, Type SPB, Period 1.5664 days
26 Jun 13 11 20 13   M     537SB6  3.7  3.8s   4-  23  -9 13  69 -20S 158 228 171 -2.2 -6.0 +9.9+9.9 .000  -90.0      3 44 52.5  24  6 48 357.91117.7
   R537 = Electra = 17 Tauri
      537 is multiple: ** 3.9 7.5 0.20" 117.0 : Aa,Ac 3.9 7.5 0.20"       : Aa,Ab 3.9 7.0 26.7"       : AB 3.7 13.0 98" 144.0
      537 has been reported as non-instantaneous (OCc1693). Observations are highly desired
      537 = NSV 15755, 3.70, range 0.00, 1Kp, Type SPB, Period 1.1073 days
26 Jun 13 11 23 12   Gr     537SB6  3.7  3.8s   4-  23  -7 15 ** GRAZE: CA-19.8S; Dist.234km in az. 326deg. [Lat = 25.65+0.61(E.Long+101.11)]
26 Jun 13 11 26 14.4 D     541SB8  3.9  3.9s   4-  23  -7 14  69 -77S 101 172 114 -2.2 -6.0 +0.3+0.4 .533  -33.5      3 45 49.6  24 22  4 357.81109.4
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Occultation prediction for Museo de Astronomía El Meteorito
E. Longitude -101 6 23.0, Latitude 23 7 11.9, Alt. 2020m; Telescope dia 15cm; dMag 0.0

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      day  Time     P   Star  Sp  Mag  Mag    % Elon Sun  Moon   CA   PA  VA  AA Libration   A    B    RV    Cct durn  R.A. (J2000)  Dec   Mdist   SV
 y   m  d  h  m    s       No  D    v    r V  ill     Alt Alt Az   o    o   o   o   L    B   m/o m/o  "/s     o  sec  h  m    s    o  m  s   Mm   m/s
   R541 = Maia = 20 Tauri
       541 is quadruple: Aa,Ab 4.4 5.4           : AB 3.8 13.7 113"  72.6, dT = +186sec : AB 3.8 13.7 113"  72.7, dT = +187sec
       541 = NSV 1279, 3.87, range 0.00, 4Kp, Type ACV, Period 10.288 days
26 Jun 13 11 47 58.6 R     536pB7  5.5  5.5    4-  23  -3 19  71  40S 218 290 230 -2.2 -6.0 -0.4+1.8 .539 -150.9      3 44 48.2  24 17 22 357.21069.5
   R536 = Celaeno = 16 Tauri
       536 is triple: AB 5.4 13.2 89" 264.5, dT = -113sec : AC 5.4 11.5 218" 196.1, dT = -375sec
26 Jun 13 12  6 41.6 r     539SB6  4.3  4.4s   4-  23   1 23  72  67S 245 319 258 -2.2 -6.1 +0.1+1.3 .600 -178.6      3 45 12.5  24 28  2 356.81038.0
   R539 = Taygeta = 19 Tauri
       539 is multiple: Aa,Ab 4.6 6.1           : AB          0.019"  73.4, dT = +0.03sec : AC 4.3 14.0 53"  53.4, dT = +86sec : AB 4.3 11.0 72"
328.8, dT = -13sec
       539 is a close double. Observations are highly desired
       539 = NSV 1264, 4.30, range 0.00, 1Kp, Type SPB, Period 1.5664 days
26 Jun 13 12 10 56.5 r     541SB8  3.9  3.9s   4-  23   2 24  72  34S 213 287 225 -2.2 -6.1 -0.4+2.0 .497 -146.5      3 45 49.6  24 22  4 356.71031.2
   R541 = Maia = 20 Tauri
       541 is quadruple: Aa,Ab 4.4 5.4           : AB 3.8 13.7 113"  72.6, dT = +175sec : AB 3.8 13.7 113"  72.7, dT = +175sec
       541 = NSV 1279, 3.87, range 0.00, 4Kp, Type ACV, Period 10.288 days
26 Jun 17  1 27 38.2 d     1157 A2  6.2  6.2    5+  27   0 26 287  69S 115  40 106 +3.4 -3.7 +0.2-1.3 .581    0.0      7 39 12.0  24 13 21 358.51010.2
26 Jun 17  2 33 32.8 D    79620 A3  8.1  8.0    6+  27     12 291  89N  94  24  85 +3.5 -3.6 +0.0-0.8 .606   18.9      7 42  0.3  24  3  2 360.21119.7
26 Jun 17  2 56 52.9 d    79631 K2  8.8  8.2    6+  28      7 293  50N  55 347  46 +3.5 -3.5 +0.5+0.5 .360   57.0      7 42 48.7  24  7 53 360.81158.9
26 Jun 17  3  8 54.4 d    79644 A0  8.6  8.6    6+  28      5 294  73S 112  45 103 +3.5 -3.5 -0.3-1.1 .672   -0.2      7 43 29.4  23 49 15 361.11177.6
26 Jun 17 19 50  1   GrVenus      -4.0 -4.0   11+  39  75 68 ** GRAZE: CA-12.0S; Dist.397km in az.  14deg. [Lat = 26.81-0.23(E.Long+101.11)]
26 Jun 18  1 53 33.1 d     1302pA9  6.8  6.7   12+  41  -5 32 280  22S 171  96 157 +5.1 -2.2 -0.6-2.9 .348  -49.9      8 40 43.2  19 43 10 362.5 951.7
   R1302 = 42 Cancri
      1302 is double: ** 7.5 7.5 0.050"
      1302 has been reported as non-instantaneous (OCc1393). Observations are highly desired
26 Jun 18  1 59 35.0 D     1305pK0  6.9  6.4   12+  41  -7 31 280  84S 109  35  95 +5.1 -2.2 +0.6-1.2 .534   11.8      8 41 50.1  19 52 27 362.7 960.1
      1305 is double: Ea,Eb 7.2 9.1
26 Jun 18  2 10 33.2 d    98043kK0  8.4  7.9   12+  41  -9 28 281  38S 155  82 142 +5.1 -2.2 -0.3-2.3 .454  -35.2      8 41 35.1  19 39 45 363.0 977.2
26 Jun 18  2 14 21   m    80362pF0  8.5  8.4S  12+  41  -9 27 282  17N  30 317  17 +5.1 -2.2 +9.9+9.9 .000   90.0      8 41 53.1  20  9 34 363.0 984.7
     80362 is double: AB 8.6 11.9 32" 329.0
      80362 = NSV 4200, 8.54,
26 Jun 19  2 12  5.3 D     1420 F2  6.6  6.4   21+  54  -9 38 270  61S 137  66 120 +6.2 -0.6 +0.5-2.0 .483  -11.8      9 38  1.3  14 20 50 367.6 880.3
   R1420 = 11 Leonis
26 Jun 19  2 36 17.5 d    98691CG5  8.6        21+  55     33 273  73N  92  20  74 +6.2 -0.5 +1.1-0.9 .429   33.1      9 39  3.9  14 25 19 368.1 913.7
     98691 is double: BA 11.4 8.7 0.9" 134.0, dT = +1.6sec
      98691 is a close double. Observations are highly desired
26 Jun 19  2 36 17.5 d X115531C    8.6  8.0   21+  55     33 273  73N  92  20  74 +6.2 -0.5 +1.1-0.9 .429   33.1      9 39  3.9  14 25 19 368.1 913.7
   X115531 is double: AB 8.67 11.43 0.90" 314.0, dT = -1.6sec
   X115531 is a close double. Observations are highly desired
26 Jun 21  2 33 49.7 D     1635cM0  5.2  4.4   41+  80     48 245   5S 199 142 177 +7.1 +2.6 -1.7-5.3 .152  -67.7 .02 11 17 17.4   2  0 38 379.0 739.4
   R1635 = 75 Leonis
      1635 is double: ** 5.8 6.6 0.044"   0.0
      1635 has been reported as non-instantaneous (OCc 763). Observations are highly desired
26 Jun 21  2 51 51   Gr    1635cM0  5.2  4.4   41+  80     44 ** GRAZE: CA-16.7S; Dist.167km in az. 221deg. [Lat = 21.11-0.81(E.Long+101.11)]
26 Jun 21  3  1 51.6 r     1635cM0  5.2  4.4   41+  80     42 250 -38S 242 182 220 +7.1 +2.7 +3.8+1.3 .158 -112.3 .02 11 17 17.4   2  0 38 379.6 766.4
   R1635 = 75 Leonis
      1635 is double: ** 5.8 6.6 0.044"   0.0
      1635 has been reported as non-instantaneous (OCc 763). Observations are highly desired
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Occultation prediction for Museo de Astronomía El Meteorito
E. Longitude -101 6 23.0, Latitude 23 7 11.9, Alt. 2020m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon	Sun Alt	Moon Alt	Az	CA o	PA o	VA o	AA o	Libration L	B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	Jun	21	6	5	24.0	d	1652cG8	5.4	4.9		43+	81	2	271	49N	73	6	51	+6.8	+3.0	+0.1	-0.3	.378	45.8		11	24	2.3	1	24	28	384.4	1010.1
	R1652 = 79 Leonis																																	
	1652 is double: ** 5.9 6.5 0.003" 155.0, dT = 0.00sec																																	
26	Jun	23	4	13	32.1	D	1845SG8	6.5	5.9s		62+	104	38	234	22S	180	131	158	+6.2	+5.3	+0.5	-4.1	.205	-55.3		12	51	22.9	-10	20	18	390.9	683.3
	1845 is triple: AB 6.6 9.7 28.8" 296.3, dT = -62sec : AC 6.6 12.5 142" 211.8, dT = +588sec																																	
	1845 = NSV 5994, 6.49, range 0.07, V																																	
26	Jun	25	2	34	6.7	d	158538wK1	7.3	6.8		80+	127	47	172	79N	94	102	76	+5.0	+6.8	+3.3	+0.0	.265	32.4		14	24	0.4	-19	48	3	397.4	603.7
	158538 is double: AB 7.4 11.6 40" 286.2, dT = -146sec																																	
26	Jun	25	3	56	27.1	D	158556WA2	6.8			80+	127	45	199	63N	78	58	59	+4.6	+6.9	+3.8	+0.3	.218	43.9		14	25	27.7	-19	57	57	397.7	584.3
	158556 is double: BA 7.2 6.6 35" 114.8, dT = +126sec																																	
26	Jun	25	3	58	24.6	D	2066SA1	6.6	6.6		80+	127	44	200	63N	77	58	59	+4.6	+6.9	+3.7	+0.3	.218	44.0		14	25	29.9	-19	58	12	397.7	584.4
	2066 is quadruple: **Aa,Ab 6.8 7.7 0.018" 329.0, dT = -0.03sec : BC 7.16 8.37 1.21" 89.4, dT = +5sec : AB 6.6 7.2 35" 294.8, dT = -126sec																																	
	2066 has been reported as non-instantaneous (OCc 204). Observations are highly desired																																	
26	Jun	26	3	22	7.4	D	2174pB8	6.5	6.5		87+	138	43	174	18S	171	177	156	+3.7	+7.2	+0.6	-3.4	.186	-51.5		15	13	17.4	-24	0	30	400.1	581.3
	2174 is triple: ** 7.1 7.1 0.030" 0.0 : AB 6.4 12.5 8.2" 45.0, dT = -26sec																																	
	2174 has been reported as non-instantaneous (OCc1471). Observations are highly desired																																	
26	Jun	26	5	35	7.0	d	183333cA2	7.3	7.2		87+	138	36	211	76N	85	54	70	+3.2	+7.3	+2.8	-0.4	.277	23.1		15	16	48.0	-24	0	36	400.8	584.4
	183333 is double: 7.8 8.2																																	
26	Jun	27	7	2	24.6	d	2318 A*	6.6	6.6v		93+	150	29	218	77S	104	65	93	+1.7	+7.4	+2.4	-1.2	.311	-8.9		16	10	15.9	-26	54	33	402.8	615.4
	2318 = V0952 Sco, 6.57, range 0.04, V, Type ACV, Period 1.4178 days, Phase 68%																																	
26	Jul	2	11	3	4.1	r	3014cK0	7.3	6.8		95-	153	34	221	83S	253	213	267	-4.9	+3.2	+1.8	+0.0	.349	161.1		20	38	25.5	-20	59	39	397.0	711.2
	3014 is double: AB 8.1 8.1 129.2, dT = -0.32sec																																	
26	Jul	6	10	3	48.1	r	146891DF8	7.9	7.6		65-	107	59	133	36S	193	235	215	-6.9	-2.4	+0.6	+3.0	.312	-146.1		23	46	0.1	0	15	43	380.2	692.0
	146891 is double: AB 8.22 9.57 2.68" 220.5, dT = -8sec																																	
	146891 is a close double. Observations are highly desired																																	
26	Jul	6	10	56	55.3	R	3502 G5	7.2	6.7		64-	107	66	156	58S	214	236	236	-7.1	-2.6	+1.4	+2.3	.359	-169.2		23	46	34.6	0	31	48	379.6	672.6
26	Jul	8	9	37	5.7	R	197cK0	7.0	6.5		43-	82	40	93	78N	260	331	281	-6.2	-4.8	+1.3	+1.1	.419	152.6		1	21	58.3	12	36	15	371.4	849.3
26	Jul	9	10	50	1.7	R	336 F0	7.4	7.3v		32-	68	47	87	88N	255	331	273	-5.4	-5.8	+1.3	+1.2	.446	160.5		2	17	45.4	18	27	18	365.6	838.9
	336 = AD Ari, 7.39 to 7.48, V, Type ELL, Period 0.53972 days, Phase 75%																																	
26	Jul	10	9	44	53.6	R	470WK0	6.8	6.2		22-	55	21	73	55N	293	6	308	-4.0	-6.1	+1.0	+0.0	.382	130.8		3	14	17.2	22	57	14	363.6	1029.8
	470 is double: AB 6.9 10.4 42" 33.3, dT = +20sec																																	
26	Jul	10	11	2	15.6	R	75832 K0	7.3	6.6		21-	55	38	78	88N	260	338	275	-4.0	-6.2	+1.0	+1.0	.490	161.5		3	16	57.0	23	7	36	361.7	906.5
26	Jul	11	10	30	58.3	r	76547 A0	8.8	8.7		12-	41	19	69	85N	271	344	281	-2.3	-6.2	+0.3	+0.7	.565	159.4		4	19	24.3	26	14	20	360.0	1053.1
26	Jul	12	10	42	38.4	R	812SF8	8.0			5-	27	9	64	85S	270	339	274	-0.3	-5.8	-0.1	+0.6	.637	168.5		5	27	1.3	27	36	37	358.8	1131.2
	812 is triple: AB 8.71 8.61 0.59" 277.0, dT = -0.9sec : AB,C 7.9 13.2 27.0" 277.8, dT = -42sec																																	
	812 is a close double. Observations are highly desired																																	
26	Jul	16	19	4	4.2	d	1466cB9	5.3	5.3		8+	33	86	59	105	42S	157	223	139	+6.5	-0.3	+1.2	-2.5	.343	-32.7		9	58	13.4	12	26	41	363.7	719.3
	R1466 = nu Leonis																																	
	1466 is double: ** 6.0 6.0 0.050"																																	
	1466 has been reported as non-instantaneous (OCc1407). Observations are highly desired																																	
26	Jul	18	2	16	13.5	d	1597 K5	8.3	7.5		17+	49	-10	26	263	80N	104	38	83	+6.3	+2.4	+0.8	-1.3	.460	20.9		10	59	34.7	4	21	14	373.9	893.1
26	Jul	19	4	5	11.0	d	1711DG0	7.9			27+	62	9	263	72N	97	31	75	+6.5	+4.0	+0.4	-1.0	.471	22.2		11	50	26.4	- 2	25	7	382.3	942.4
	1711 is double: AB 7.96 11.09 1.94" 222.1, dT = -2.4sec																																	
	1711 is a close double. Observations are highly desired																																	
26	Jul	24	1	50	28.3	d	2256PA1	7.0	6.9		74+	119	-5	40	169	81S	108	119	96	+3.7	+7.4	+2.7	-0.5	.295	6.0		15	47	56.5	-25	59	13	400.1	574.7
	2256 is double: ** 7.7 7.7 0.10" 90.0, dT = +0.32sec																																	
	2256 has been reported as non-instantaneous (OCc1482). Observations are highly desired																																	
26	Jul	24	4	11	21.6	D	2261 K3	6.6	5.8		75+	120	35	208	58S	131	102	119	+3.1	+7.5	+2.7	-2.1	.259	-28.8		15	50	34.9	-26	17	23	400.7	574.0

Occultation prediction for Museo de Astronomía El Meteorito
E. Longitude -101 6 23.0, Latitude 23 7 11.9, Alt. 2020m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon Alt	Sun Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	Jul	24	7	14	31.3	d	2276	A3	5.6	5.6		76+	121	6	238	90S	99	38	87	+2.4	+7.4	+0.9	-1.1	.407	-7.8		15	55	30.1	-26	15	58	403.9	804.6
	R2276 = 4 Scorpii																																
26	Jul	25	2	49	58.1	D	2397	K1	6.5	5.9		82+	130	39	173	33N	36	43	28	+2.3	+7.3	+5.1	+4.9	.106	68.1		16	41	37.6	-27	48	35	401.4	552.3
26	Jul	28	8	25	45.2	d	2852	K0	7.3	6.6		98+	165	29	219	45S	112	72	120	-2.5	+4.8	+3.2	-2.0	.230	-50.6		19	31	16.6	-25	44	13	399.5	703.4
	Distance of 2852 to Terminator = 16.4"; to 3km sunlit peak = 6.1"																																
26	Jul	30	11	55	3.9	r	3105	K0	6.1	5.5	S	99-	171	-5	13	244	77S	248	187	264	-5.0	+1.8	+0.5	+0.0	.459	168.5		21	15	6.6	-17	20	43	395.6	898.0
	3105 = NSV 25528, 6.04, , Type VAR:																																
	Distance of 3105 to Terminator = 11.6"; to 3km sunlit peak = 3.0"																																
26	Jul	31	8	12	57.8	r	164780	K0	7.5	6.9		97-	160	54	182	51S	213	211	231	-5.0	+0.8	+1.5	+2.0	.328	-164.9		21	58	29.8	-13	15	8	389.4	640.8
26	Aug	2	6	47	48.3	R	3459	K0	6.4	5.8		87-	137	43	116	76S	231	287	253	-5.4	-2.0	+1.4	+1.9	.397	179.4		23	29	27.0	- 1	47	28	383.5	739.1
	R3459 = 11 Piscium																																
26	Aug	2	9	14	58.0	R	3467	kK1	6.4	5.8		86-	136	66	169	84N	251	262	273	-5.9	-2.3	+2.7	+1.0	.322	153.3		23	31	57.6	- 1	5	9	381.7	668.2
	R3467 = 13 Piscium																																
26	Aug	3	6	30	49.0	r	30	SA0	7.1	7.1		79-	125	33	100	55S	210	276	232	-5.4	-3.3	+0.5	+2.3	.416	-157.3		0	15	57.3	4	15	4	380.7	832.5
	30 is triple: AB 7.0 14.1 0.8" 246.0, dT = -1.6sec : AC 7.0 12.2 5.0" 347.2, dT = +9sec																																
	30 is a close double. Observations are highly desired																																
26	Aug	5	8	40	1	m	92732	wF5	7.8	7.5		58-	99	45	89	15N	324	38	343	-4.9	-5.6	+9.9	+9.9	.000	90.0		1	58	47.5	17	1	33	371.6	831.6
	92732 is double: AB 7.8 17.9 79" 249.5																																
26	Aug	6	11	13	56.2	r	75670	A5	8.2	8.1		46-	85	69	88	44S	208	291	224	-4.3	-6.5	+0.8	+2.8	.348	-149.6		2	58	51.8	22	0	16	366.0	716.0
26	Aug	7	7	34	53.0	r	571	pA2	6.8	6.7		36-	73	10	67	54N	295	4	307	-2.9	-6.2	+0.4	+0.0	.431	133.7		3	51	25.3	25	9	47	368.0	1112.1
	571 is double: ** 7.1 9.1																																
26	Aug	7	7	55	26.9	R	574	pG0	6.8	6.5		35-	73	14	68	72N	278	349	290	-2.9	-6.3	+0.3	+0.5	.526	150.5		3	52	11.4	25	9	47	367.5	1077.2
26	Aug	7	9	48	48.9	r	76345	kG8	7.5	7.0		35-	72	38	75	31S	201	281	213	-2.9	-6.5	-0.4	+2.9	.358	-135.4		3	57	11.8	25	16	58	364.9	890.2
26	Aug	8	9	24	53.8	R	746	WB7	7.0	6.9		24-	59	20	68	62S	239	313	245	-1.5	-6.1	-0.1	+1.4	.557	-164.8		4	59	53.7	27	19	32	363.8	1019.1
	746 is double: AB 7.0 8.7 20.4" 206.1, dT = -31sec																																
26	Aug	8	11	34	46.0	R	756	F0	6.6	6.5		23-	58	-10	48	73	76S	254	340	260	-1.5	-6.3	+1.2	+1.2	.461	-179.5		5	4	38.0	27	41	46	361.1	807.0
26	Aug	9	10	4	2.9	r	927	G0	8.0	7.7		14-	45	15	66	41S	226	297	226	+0.1	-5.5	-0.5	+1.9	.473	-142.7		6	7	59.1	27	25	42	362.4	1043.7
26	Aug	10	10	38	20.1	r	79206	cF8	8.5			7-	31	8	65	60N	313	22	307	+1.8	-4.4	+0.6	-0.6	.457	138.3		7	15	7.9	25	52	49	362.4	1075.0
	79206 is double: AB 9.43 8.84 0.53" 309.1, dT = -1.2sec																																
	79206 is a close double. Observations are highly desired																																
26	Aug	10	11	37	56.8	d	79277	cF0	8.1			7-	30	-10	20	70	-1N	15	89	9	+1.8	-4.4	-2.8	+7.9	.124	77.0		7	18	54.9	25	56	29	361.1	970.0
	79277 is double: AB 8.13 11.07 0.57" 261.2, dT = -1.9sec																																
	79277 is a close double. Observations are highly desired																																
26	Aug	10	11	44	58	Gr	79277	cF0	8.1			7-	30	-8	23	** GRAZE: CA 11.4N; Dist. 46km in az. 335deg. [Lat = 23.58+0.43(E.Long+101.11)]																				
26	Aug	10	11	51	24.7	r	79277	cF0	8.1			7-	30	-7	23	70	24N	350	64	343	+1.8	-4.4	+3.7	-6.9	.122	103.0		7	18	54.9	25	56	29	360.8	945.6
	79277 is double: AB 8.13 11.07 0.57" 261.2, dT = -0.14sec																																
	79277 is a close double. Observations are highly desired																																
26	Aug	16	1	29	7.2	d	1759	pA*	6.6	6.4	v	13+	43	-4	23	252	87N	114	52	92	+5.7	+4.8	+1.0	-1.5	.446	7.5		12	14	15.5	- 5	43	0	380.4	830.5
	1759 is triple: AB 6.6 13.5 10.6" 0.9, dT = -9sec : AC 6.6 11.9 86" 185.9, dT = +61sec																																
	1759 = FG Vir, 6.53 to 6.58, V, Type DSCTC, Period 0.079 days																																
26	Aug	16	2	18	55.7	d	138677	pF2	8.4	8.2		13+	43	12	258	88S	120	55	98	+5.7	+4.8	+0.6	-1.6	.486	-1.4		12	15	33.4	- 5	56	5	381.7	900.0
	138677 is double: ** 9.3 9.3 0.30" 76.0, dT = +0.44sec																																
	138677 has been reported as non-instantaneous (OCc 444). Observations are highly desired																																
26	Aug	16	2	42	45.0	D	138688	K2	7.4	6.7		13+	43	7	260	51N	79	13	57	+5.7	+4.8	+0.4	-0.5	.394	38.6		12	16	22.5	- 5	50	45	382.4	936.6
26	Aug	16	2	48	5.0	d	138680	pG5	7.6		v	14+	43	6	261	48S	159	93	137	+5.7	+4.9	+0.4	-2.6	.376	-42.4		12	15	52.8	- 6	9	38	382.6	945.1
	138680 is double: AB 7.80 9.37 0.38" 105.1, dT = +0.6sec																																
	138680 is a close double. Observations are highly desired																																
	138680 = ASAS J121553-0609.6, 7.46 to 7.55, V, Type RS, Period 83.6 days, Phase 68%																																

Occultation prediction for Museo de Astronomía El Meteorito
E. Longitude -101 6 23.0, Latitude 23 7 11.9, Alt. 2020m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon	Sun Alt	Moon Alt	Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	Aug	22	23	38	32.4	d	2617	cK0	4.6	4.1		76+	122	20	21	136	79N	75	121	75	+1.0	+6.5	+2.0	+1.4	.323	22.8		18	8	5.0	-28	27	26	402.1	683.7
							2617 is double: AB 5.1 5.9 0.26" 12.0, dT = +0.37sec																													
							2617 is a close double. Observations are highly desired																													
26	Aug	23	5	26	43	m	186536	cA3	7.5	7.4		78+	123		27	217	13S	162	123	163	-0.5	+6.3	+9.9	+9.9	.000	-90.0		18	15	13.5	-28	36	49	401.3	660.8
							186536 is double: ** 8.8 8.8 0.10" 90.0																													
							186536 has been reported as non-instantaneous (OCc 151). Observations are highly desired																													
26	Aug	23	6	21	46.0	d	2644	cF8	6.4	6.1		78+	124		19	226	79S	96	47	97	-0.7	+6.2	+1.7	-1.1	.342	-25.3		18	17	23.8	-28	17	20	402.1	737.9
							2644 is double: ** 7.1 7.1 0.10" 90.0, dT = +0.29sec																													
							2644 has been reported as non-instantaneous (OCc 168). Observations are highly desired																													
26	Aug	24	4	14	57.6	d	187716	SG6	7.2	6.6		85+	134		40	189	77N	66	57	72	-1.3	+5.5	+2.6	+0.7	.296	2.9		19	8	8.1	-26	50	5	398.7	572.3
							187716 is triple: **Aa,Ab 7.8 7.8 0.050" 160.0, dT = -0.01sec : AB 7.3 8.6 45" 123.9, dT = +82sec																													
							187716 has been reported as non-instantaneous (OCc 769). Observations are highly desired																													
26	Aug	27	7	30	47.6	D	3181	SA7	6.0	5.8		99+	169		47	210	63S	93	64	110	-4.6	+1.2	+3.3	-0.7	.260	-44.4		21	44	1.0	-14	44	58	388.8	684.8
							R3181 = 45 Capricorni																													
							3181 is triple: ** 6.7 6.7 0.050" : AB 5.4 9.5 4.3" 229.0, dT = -12sec																													
							3181 has been reported as non-instantaneous (OCc1610). Observations are highly desired																													
							Distance of 3181 to Terminator = 12.8"; to 3km sunlit peak = 3.7"																													
26	Aug	28	2	48	33.5	D	X 51928	k	10.2	9.9		87E	180		23	113	86U	90	149	110	-4.0	+0.2	+1.3	+0.9	.365	-29.4		22	25	59.1	-10	12	45	388.1	789.0
26	Aug	28	2	50	28.4	d	X182644	k	10.9	10.4		84E	180		24	113	88S	16	75	35	-4.0	+0.2	+0.9	+3.1	.298	44.6		22	25	16.4	-	9	57	32	388.0	786.2
26	Aug	28	2	54	57	M	165050	K0	9.8	9.3		78E	180		25	114	50N	330	29	350	-4.0	+0.2	+9.9	+9.9	.000	90.0		22	24	31.7	-	9	56	53	387.9	779.4
26	Aug	28	2	57	35.9	R	3286	K0	7.2	6.4		75E	180		25	114	-12N	266	325	286	-4.0	+0.2	+1.4	+1.0	.368	153.5		22	24	7.6	-10	11	52	387.9	774.5
26	Aug	28	3	2	49	m	X 51920	k	11.2	11.0		67E	180		26	115	87U	150	207	169	-4.1	+0.2	+9.9	+9.9	.000	-90.0		22	25	50.8	-10	23	47	387.8	769.8
26	Aug	28	3	6	14.1	r	X182632	k	11.7	11.2		62E	180		27	116	-64S	205	262	225	-4.1	+0.2	+1.0	+2.7	.336	-145.6		22	24	55.9	-10	23	4	387.7	764.3
26	Aug	28	3	10	29.0	R	X 51874		9.8	9.2		56E	180		28	116	-25S	240	297	259	-4.1	+0.2	+1.3	+1.7	.404	179.3		22	24	34.2	-10	16	1	387.6	759.2
26	Aug	28	3	11	55.4	d	X182702	k	11.7	11.5		53E	180		28	116	75U	67	124	87	-4.1	+0.2	+1.4	+1.6	.401	-8.0		22	26	28.0	-10	1	49	387.6	760.8
26	Aug	28	3	12	23.3	D	165076	kG5	9.6	9.0		53E	180		28	116	79U	60	117	79	-4.1	+0.2	+1.3	+1.7	.404	-0.9		22	26	25.0	-10	0	0	387.6	760.3
26	Aug	28	3	18	18.1	r	X242731	k	11.2			44E	180		30	117	-10S	245	301	265	-4.1	+0.2	+1.4	+1.6	.397	173.4		22	24	42.5	-10	13	5	387.4	750.3
26	Aug	28	3	26	37.5	r	X182643	k	11.5	11.2		33E	180		31	119	-27S	217	272	237	-4.1	+0.1	+1.2	+2.3	.369	-159.3		22	25	12.9	-10	17	6	387.2	741.5
26	Aug	28	3	28	2.4	d	X242766	k	11.8			31E	180		31	118	78U	50	105	70	-4.1	+0.1	+1.3	+2.0	.392	7.7		22	26	40.4	-	9	54	33	387.2	743.1
26	Aug	28	3	29	40.1	r	X182649	k	11.2	10.9		29E	180		32	119	98U	213	268	233	-4.1	+0.1	+1.2	+2.4	.357	-155.3		22	25	20.6	-10	17	8	387.2	738.4
26	Aug	28	3	29	41.9	D	X182712	k	10.8	10.3		29E	180		32	119	76U	53	108	73	-4.1	+0.1	+1.4	+1.9	.394	4.2		22	26	45.0	-	9	54	55	387.2	741.3
26	Aug	28	3	31	39.0	r	X182655	k	11.1	10.8		27E	180		32	119	94U	209	263	229	-4.1	+0.1	+1.1	+2.6	.345	-151.5		22	25	27.1	-10	17	16	387.1	736.4
26	Aug	28	3	34	12.5	r	X182637	k	11.1	10.9		24E	180		33	120	14S	247	301	267	-4.1	+0.1	+1.6	+1.6	.385	170.3		22	25	3.2	-10	9	15	387.1	733.5
26	Aug	28	3	35	39.7	D	165087	G5	9.0	8.6		22E	180		33	120	66U	66	120	86	-4.1	+0.1	+1.6	+1.6	.387	-9.0		22	27	0.2	-	9	56	38	387.1	735.2
26	Aug	28	3	37	14.5	d	X242756	k	11.4			20E	180		33	120	46N	2	56	22	-4.1	+0.1	+0.6	+3.8	.226	54.5		22	26	7.4	-	9	47	8	387.0	733.0
26	Aug	28	3	47	11.6	r	X182644	k	10.9	10.4		12E	180		35	122	65S	281	333	301	-4.2	+0.1	+2.3	+0.4	.274	135.3		22	25	16.4	-	9	57	32	386.8	721.5
26	Aug	28	3	54	13.3	R	X 51928	k	10.2	9.9		8E	180		36	123	70U	206	258	226	-4.2	+0.1	+1.2	+2.6	.333	-150.7		22	25	59.1	-10	12	45	386.7	714.9
26	Aug	28	4	11	0.0	d	X242782		11.6			3E	180		40	126	84U	50	99	70	-4.2	+0.1	+1.6	+2.0	.374	4.7		22	27	36.1	-	9	45	16	386.3	703.5
26	Aug	28	4	17	40	m	X 51935		11.2	11.0		4E	180		41	128	43N	324	12	344	-4.3	+0.1	+9.9	+9.9	.000	90.0		22	26	18.0	-	9	40	53	386.2	697.1
26	Aug	28	4	26	37.5	r	X242756	k	11.4			6E	180		43	130	95U	288	334	308	-4.3	+0.1	+3.2	-0.2	.214	125.4		22	26	7.4	-	9	47	8	386.0	690.0
26	Aug	28	4	30	59.0	r	X182702	k	11.7	11.5		7E	180		43	131	58U	225	270	245	-4.3	+0.0	+1.6	+2.1	.363	-172.0		22	26	28.0	-10	1	49	386.0	686.6
26	Aug	28	4	32	51.4	R	165076	kG5	9.6	9.0		8E	180		44	131	62U	232	277	252	-4.3	+0.0	+1.8	+1.9	.366	-179.2		22	26	25.0	-10	0	0	386.0	685.4
26	Aug	28	4	35	59.0	d	X 51982	k	11.1	11.0		10E	180		44	132	70U	106	150	125	-4.3	+0.0	+3.2	-0.1	.221	-52.9		22	28	19.1	-	9	53	55	385.9	685.3
26	Aug	28	4	46	56.2	d	X182760		11.3	10.5		19E	180		46	134	-40N	33	75	53	-4.4	+0.0	+1.4	+2.4	.344	18.9		22	28	5.4	-	9	34	21	385.7	679.4
26	Aug	28	4	48	5.0	D	146104	kG5	10.3	10.0		20E	180		46	134	-35N	27	69	47	-4.4	+0.0	+1.3	+2.5	.331	24.3		22	28	1.5	-	9	33	21	385.7	678.7
26	Aug	28	4	49	55.3	r	X242766	k	11.8			22E	180		47	136	66U	239	280	259	-4.4	+0.0	+2.0	+1.7	.358	172.2		22	26	40.4	-	9	54	33	385.7	675.6
26	Aug	28	4	51	59.7	R	X182712	k	10.8	10.3		24E	180		47	136	64U	236	276	256	-4.4	+0.0	+2.0	+1.7	.360	175.8		22	26	45.0	-	9	54	55	385.7	674.5
26	Aug	28	4	56	44.1	R	165087	G5	9.0	8.6		30E	179		48	137	57U	222	261	242	-4.4	+0.0	+1.7	+2.1	.355	-170.9		22	27	0.2	-	9	56	38	385.6	672.2

Occultation prediction for Museo de Astronomía El Meteorito
E. Longitude -101 6 23.0, Latitude 23 7 11.9, Alt. 2020m; Telescope dia 15cm; dMag 0.0

y	m	day d	h	Time m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon Sun Alt	Moon Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	Aug	28	5	9	43.3	D	X182806		10.6	10.2		47E	179	49	141	-62S	105	141	125	-4.4	+0.0	+3.8	-0.3	.209	-54.2		22	28	58.1	- 9	46	8	385.4	668.1
26	Aug	28	5	11	48.5	d	X182808		11.2	10.6		50E	179	50	141	-79S	87	123	107	-4.4	+0.0	+2.9	+0.7	.285	-37.0		22	29	2.1	- 9	41	2	385.4	667.6
26	Aug	28	5	15	45.0	D	146111	G0	7.7	7.4		56E	179	50	142	-61S	104	138	124	-4.5	+0.0	+3.8	-0.2	.211	-53.7		22	29	4.9	- 9	44	28	385.4	665.8
26	Aug	28	5	26	5.6	d	X182813		11.0	10.4		72E	179	52	146	-75N	58	89	78	-4.5	-0.1	+2.1	+1.6	.351	-8.2		22	29	8.4	- 9	30	8	385.2	662.8
26	Aug	28	5	26	13.7	d	X182828D		11.7			72E	179	52	146	-68S	95	126	115	-4.5	-0.1	+3.4	+0.3	.250	-45.2		22	29	18.0	- 9	39	43	385.2	662.5
		X182828 is double: BA 11.7 8.8 9.3" 111.9, dT = +36sec																															
		X182828 is a close double. Observations are highly desired																															
26	Aug	28	5	26	15.7	r	X 51982k		11.1	11.0		72E	179	52	146	81U	176	208	197	-4.5	-0.1	+0.0	+3.9	.213	-127.1		22	28	19.1	- 9	53	55	385.2	661.4
26	Aug	28	5	26	48.0	D	3301DK0		8.8	8.0		73E	179	52	146	-67S	95	127	115	-4.5	-0.1	+3.4	+0.2	.246	-46.0		22	29	18.6	- 9	39	46	385.2	662.3
		3301 is double: AB 8.8 11.7 9.3" 291.9, dT = -36sec																															
		3301 is a close double. Observations are highly desired																															
26	Aug	28	5	34	53.1	d	X242810		11.7			84E	179	53	149	-65N	46	75	66	-4.5	-0.1	+1.9	+1.9	.353	3.0		22	29	9.9	- 9	25	38	385.1	660.4
26	Aug	28	5	36	37.9	r	X242782		11.6			86E	179	53	150	89U	233	261	253	-4.5	-0.1	+2.1	+1.7	.351	175.5		22	27	36.1	- 9	45	16	385.1	658.4
26	Aug	28	5	38	5.8	d	X182776		11.1	10.7		88E	179	53	150	-23N	3	31	23	-4.5	-0.1	+0.4	+3.4	.249	45.3		22	28	32.0	- 9	20	11	385.1	659.4
26	Aug	29	6	32	3.0	R	3416cA3		5.6	5.5		99-	167	60	149	75S	227	255	248	-4.9	-1.7	+1.8	+1.9	.367	179.1		23	15	34.3	- 3	29	47	381.0	679.1
		3416 is double: ** 6.4 6.4 0.050"																															
		3416 has been reported as non-instantaneous (OCc1638). Observations are highly desired																															
26	Aug	30	9	10	4.6	r	6	G5	6.9	6.3		95-	154	67	216	75N	257	224	279	-5.3	-3.5	+2.7	+0.4	.323	149.6		0	5	22.2	3	36	22	376.8	684.6
26	Sep	1	4	37	41.2	r	244	K0	6.7	6.2		82-	130	18	81	52S	207	277	228	-3.7	-5.2	-0.2	+2.1	.471	-148.9		1	39	15.4	14	17	8	375.3	1001.3
		R244 = 104 Piscium																															
26	Sep	1	11	50	44.9	r	92645	F0	7.6	7.4		80-	127	-9 61	262	58N	278	206	298	-4.7	-6.0	+2.7	-1.2	.295	140.9		1	48	54.6	16	22	39	370.9	683.1
26	Sep	2	7	1	43	m	387cG5		6.9	6.4S		72-	116	40	82	12N	328	44	345	-3.0	-6.1	+9.9	+9.9	.000	90.0		2	37	34.4	20	34	30	370.4	873.4
		387 is double: ** 7.7 7.7 0.10" 90.0																															
		387 has been reported as non-instantaneous (OCc1190). Observations are highly desired																															
		387 = NSV 15555, 6.91, , Type VAR:																															
26	Sep	2	11	23	21.4	r	75537	A2	7.8	7.7		71-	114	81	261	75S	235	158	252	-3.7	-6.6	+2.2	+1.5	.362	-173.7		2	43	41.1	21	8	50	367.8	649.5
26	Sep	2	12	4	5.1	r	75547	G8	7.8	7.3		70-	114	-6 71	270	23N	317	235	334	-3.8	-6.6	+4.8	-7.9	.108	107.2		2	44	48.1	21	36	51	367.9	654.3
26	Sep	3	6	17	42	Gr	518SA3		6.0	s		61-	103	20	** GRAZE: CA 9.9N; Dist.172km in az. 144deg. [Lat = 21.21+0.66(E.Long+101.11)]																				
26	Sep	3	6	20	2	M	518SA3		6.0	s		61-	103	20	71	10N	336	49	349	-2.1	-6.3	+9.9	+9.9	.000	90.0		3	34	26.6	24	27	52	370.2	1023.0
		R518 = 7 Tauri																															
		518 is triple: AB 6.60 6.86 0.79" 348.0 : AB,C 5.9 9.9 22.5" 52.2																															
		518 is a close double. Observations are highly desired																															
		518 = NSV 1192, 5.92 to 5.96, V																															
26	Sep	3	7	44	35.3	r	522	G5	7.8	7.1		61-	102	38	76	25S	191	270	204	-2.1	-6.4	-0.8	+3.4	.300	-127.3		3	37	43.5	24	15	33	368.3	884.7
26	Sep	3	8	59	55.8	R	76046cA0		7.1	7.1		60-	102	55	79	85S	251	336	264	-2.2	-6.6	+1.5	+1.3	.431	171.6		3	39	6.7	24	42	10	366.9	776.2
		76046 is double: AB 7.1 45.0, dT = -21sec																															
26	Sep	3	10	23	15.4	r	76081	K2	7.5	6.9		60-	101	73	79	84N	262	356	275	-2.4	-6.7	+2.4	+0.7	.368	162.2		3	41	18.1	25	0	29	365.9	686.2
26	Sep	3	11	48	54.3	r	76102	A2	7.5	7.5		60-	101	-10 87	315	64S	230	96	243	-2.7	-6.8	+2.2	+1.9	.341	-160.8		3	43	43.2	25	4	51	365.5	640.2
26	Sep	3	15	51	40.1	r	569cA2		5.3			58-	100	46	34	286	73N	274	195	286	-3.3	-6.8	+0.9	-0.9	.460	172.0		3	50	18.9	25	34	46	368.0	828.6
		569 is double: AB 5.73 6.52 0.66" 204.1, dT = -0.49sec																															
		569 is a close double. Observations are highly desired																															
26	Sep	4	7	35	17.6	R	701SF2		6.6	6.4		49-	89	24	69	82S	255	330	263	-1.0	-6.3	+0.3	+1.1	.549	176.9		4	38	29.5	26	56	23	367.9	981.2
		701 is triple: 6.6 9.2 3.1" 169.4, dT = -0.47sec : AB 7.36 7.21 4.48" 187.8, dT = -3sec																															
		701 is a close double. Observations are highly desired																															
26	Sep	4	7	35	19.1	r	X 70481p		7.3	7.2		49-	89	24	69	82S	255	330	263	-1.0	-6.3	+0.3	+1.1	.549	176.8		4	38	29.6	26	56	26	367.9	981.1
		X 70481 is triple: 7.3 9.2 5.8" 174.9, dT = -1.9sec : AC 7.4 12.9 92" 203.6, dT = -105sec																															
		X 70481 is a close double. Observations are highly desired																															
26	Sep	5	8	13	42.9	r	868SA0		7.5	7.5		38-	76	19	67	69S	249	323	251	+0.2	-5.7	+0.0	+1.2	.553	-169.5		5	44	21.2	27	43	53	367.0	1000.7

Occultation prediction for Museo de Astronomía El Meteorito
E. Longitude -101 6 23.0, Latitude 23 7 11.9, Alt. 2020m; Telescope dia 15cm; dMag 0.0

y	m	day d	h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon	Sun Alt	Moon Alt	Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
							868 is triple: AB 7.5 9.8 8.6" 254.1, dT = -16sec : AC 7.5 12.7 47" 40.4, dT = +75sec																															
							868 is a close double. Observations are highly desired																															
26	Sep	5	11	19	8.0	R	885wG7	5.6	5.1		37-	74		58	74	68S	248	339	250	+0.0	-5.9	+1.6	+1.5	.391	-164.8			5	50	58.1	27	58	4	363.5	714.9
							885 is double: AB 5.7 12.5 10.8" 233.1, dT = -27sec																															
26	Sep	5	11	25	42.6	r	77639	K0	8.3	7.7		36-	74		60	74	31S	212	303	213	-0.1	-5.9	+0.9	+4.0	.246	-127.8			5	51	40.2	27	50	31	363.5	708.0
26	Sep	5	11	41	25.8	r	77638	B8	8.2	8.1		36-	74	-11	63	73	89N	272	6	273	-0.1	-5.9	+2.2	+0.5	.390	173.2			5	51	33.0	28	5	32	363.3	691.5
26	Sep	6	10	34	30.9	R	78853	A0	7.7	7.7		26-	61		35	73	49S	237	316	232	+1.4	-4.9	+0.5	+2.1	.398	-146.5			6	54	29.2	26	31	51	364.7	843.5
26	Sep	7	10	16	29.3	R	79804	cG0	7.4			16-	48		18	71	81N	293	5	283	+2.6	-3.6	+0.6	+0.0	.519	164.1			7	56	2.8	23	41	33	366.4	958.6
							79804 is double: AB 7.90 8.57 0.11" 108.1, dT = +0.22sec																															
							79804 is a close double. Observations are highly desired																															
26	Sep	7	10	20	15.9	R	1195	B8	6.8	6.9		16-	48		19	72	85S	279	351	269	+2.6	-3.6	+0.5	+0.5	.535	178.2			7	56	6.5	23	37	26	366.4	952.0
26	Sep	16	1	21	8.3	D	2164dK4	6.6	5.7		24+	59	-9	25	227	59S	141	93	125	+3.5	+7.5	+2.2	-2.6	.274	-37.7			15	9	51.3	-23	59	9	395.7	665.7
							2164 is double: AB 6.7 12.5 9.1" 204.6, dT = +15sec																															
							2164 is a close double. Observations are highly desired																															
26	Sep	16	3	13	25.9	D	2174pB8	6.5	6.5		25+	59		4	241	87S	112	50	97	+3.2	+7.4	+0.9	-1.5	.415	-15.1			15	13	17.4	-24	0	30	398.2	830.9
							2174 is triple: ** 7.1 7.1 0.030" 0.0 : AB 6.4 12.5 8.2" 45.0, dT = +8sec																															
							2174 has been reported as non-instantaneous (OCc1471). Observations are highly desired																															
26	Sep	17	1	46	19.4	D	2297kF7	7.0	6.7		33+	70		27	220	80N	93	51	82	+2.6	+7.5	+2.1	-0.8	.327	2.0			16	3	16.1	-26	43	2	398.7	633.2
26	Sep	17	3	14	12.3	d	2300wK0	7.6	7.1		33+	71		12	233	41S	152	95	140	+2.3	+7.4	+2.7	-4.1	.187	-61.2			16	5	1.4	-26	56	52	400.4	756.1
							2300 is double: AB 7.7 13.7 13.4" 351.6, dT = -67sec																															
26	Sep	20	2	26	56.1	D	2723 K0	6.6	6.1		61+	103		38	194	55N	49	34	53	-1.0	+5.8	+2.2	+1.2	.272	22.4			18	46	3.9	-27	29	56	399.7	570.5
26	Sep	21	5	4	40.9	D	2879kA3	6.7	6.6		71+	115		29	221	70N	58	16	67	-2.8	+4.5	+1.2	+0.4	.366	2.0			19	42	22.6	-24	51	34	398.4	707.5
26	Sep	23	1	16	49	M	3113cB5	5.4	5.5V		86+	137	-9	34	133	7S	153	198	169	-3.7	+2.2	+9.9	+9.9	.000	-90.0			21	17	57.3	-17	59	7	391.7	660.4
							R3113 = 30 Capricorni																															
							3113 is double: ** 6.1 6.1 0.10" 87.0																															
							3113 has been reported as non-instantaneous (OCc1602). Observations are highly desired																															
							3113 = HD 202671, 5.40, , Type ACV, Period 1.9917 days, Phase 10%																															
							Distance of 3113 to Terminator = 6.8"; to 3km sunlit peak = 0.0"																															
26	Sep	23	1	34	38.4	d	3115 F0	7.1	6.9		86+	137		37	136	44N	25	67	41	-3.7	+2.2	+1.6	+2.9	.274	36.5			21	18	15.7	-17	27	44	391.4	647.7
							R3115 = 31 Capricorni																															
26	Sep	23	4	57	39.7	D	3126 G8	4.3	3.8v		87+	138		48	201	55N	35	15	52	-4.5	+1.8	+1.3	+1.7	.335	14.7			21	22	14.8	-16	50	4	389.9	654.7
							R3126 = Tae = iota Capricorni																															
							3126 = iot Cap, 4.27, range 0.06, V, Type BY																															
26	Sep	23	6	18	57.8	r	3126 G8	4.3	3.8v		87+	138		38	224	-85S	245	203	262	-4.8	+1.7	+1.6	+0.3	.373	165.8			21	22	14.8	-16	50	4	390.5	728.5
							R3126 = Tae = iota Capricorni																															
							3126 = iot Cap, 4.27, range 0.06, V, Type BY																															
26	Sep	24	5	2	25.5	D	3253kB5	5.4	5.5V		93+	149		55	188	74N	53	46	72	-5.0	+0.3	+2.1	+1.3	.350	-6.2			22	10	37.5	-11	33	54	385.0	656.8
							R3253 = 38 Aquarii																															
							3253 = HD 210424, 5.44, , Type ACV, Period 3.9613 days, Phase 11%																															
26	Sep	24	6	47	37.3	d	3255 M0	7.3	6.4v		93+	150		45	225	54N	33	352	52	-5.4	+0.1	+0.9	+1.6	.374	15.0			22	12	16.9	-11	3	56	385.5	723.8
							3255 = KR Aqr, 7.25 to 7.36, Hp, Type LB																															
26	Sep	25	8	22	10.2	D	3380cK0	5.9	5.4		98+	163		40	242	54N	36	341	57	-5.8	-1.7	+0.9	+1.4	.406	14.3			23	1	31.7	- 4	42	41	381.1	774.4
							3380 is double: ** 7.0 7.0 0.10" 90.0, dT = +0.14sec																															
							3380 has been reported as non-instantaneous (OCc1633). Observations are highly desired																															
26	Sep	27	10	33	59.3	r	109354kF5	7.3	7.1		99-	171		37	263	86N	228	161	250	-5.3	-4.7	+1.1	+0.9	.435	-170.0			0	39	42.6	8	7	22	372.9	799.3
							Distance of 109354 to Terminator = 12.3"; to 3km sunlit peak = 3.4"																															
26	Sep	28	3	50	13.2	r	197cK0	7.0	6.5		97-	160		35	90	77N	251	321	272	-3.5	-4.9	+0.9	+1.4	.477	163.7			1	21	58.3	12	36	15	370.8	893.7
26	Sep	29	4	50	33.4	r	336 F0	7.4	7.3v		92-	147		38	84	78N	256	331	275	-2.5	-5.8	+1.0	+1.2	.471	160.4			2	17	45.4	18	27	18	367.9	892.1

Occultation prediction for Museo de Astronomía El Meteorito
E. Longitude -101 6 23.0, Latitude 23 7 11.9, Alt. 2020m; Telescope dia 15cm; dMag 0.0

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      day  Time     P   Star  Sp  Mag  Mag    % Elon Sun  Moon   CA   PA  VA  AA Libration   A   B   RV    Cct durn  R.A. (J2000)  Dec   Mdist   SV
 y   m  d  h  m   s       No  D    v    r V  ill     Alt Alt Az   o    o   o   o   L    B   m/o m/o  "/s     o  sec  h  m   s    o  m  s   Mm   m/s
       336 = AD Ari, 7.39 to 7.48, V, Type ELL, Period 0.53972 days, Phase  22%
26 Sep 29 10  5 42.0 r   92940cK0  7.9  7.4   91- 145     70 265  75S 229 152 247 -3.3 -6.4 +2.0+1.5 .370 -167.0      2 25 39.8  19 33 16 365.5 673.4
     92940 is double: ** 8.0 10.4 0.040"  69.0, dT = +0.1sec
     92940 has been reported as non-instantaneous (OCc1705). Observations are highly desired
26 Sep 29 12 27 41   Gr    370 A9  6.1  6.0v  90- 144  -3 37 ** GRAZE: CA  7.8S; Dist.113km in az. 186deg. [Lat = 22.10-0.10(E.Long+101.11)]
   Distance of 370 to Terminator = 8.5"; to 3km sunlit peak = 0.3"
26 Sep 29 12 40 39.9 r     370 A9  6.1  6.0v  90- 144   0 35 279  29S 184 108 201 -3.6 -6.5 +2.0+6.0 .158 -110.4      2 30 38.4  19 51 19 367.6 812.3
   R370 = 26 Arietis (UU)
       370 = UU Ari, 6.10 to 6.15, V, Type DSCTC, Period 0.0676 days
26 Sep 30  4 10 41.5 r     470WK0  6.8  6.2   85- 134     19  72  51N 289   2 304 -1.3 -6.1 +0.7+0.2 .411  135.0      3 14 17.2  22 57 14 368.31039.7
     470 is double: AB 6.9 10.4 42"  33.3, dT = +25sec
26 Sep 30  5 27  0.0 r   75832 K0  7.3  6.6   84- 133     35  77  82N 258 336 273 -1.3 -6.3 +0.8+1.1 .494  163.7      3 16 57.0  23  7 36 366.6 916.0
26 Sep 30  7 20  0.6 r     483SA5  7.5        84- 132     60  82  54N 287  12 301 -1.5 -6.5 +2.8-0.3 .298  133.9      3 20 21.2  23 41 21 364.6 760.1
       483 is quadruple: AB 7.62 9.90 2.77" 315.8, dT = -8sec : AB,D 7.6 14.8 25.8" 251.6, dT = -71sec : AC 7.6 14.0 61" 286.7, dT = -205sec
       483 is a close double. Observations are highly desired
26 Oct  2  9 17  9.9 r   77224cF8  7.4  7.1   63- 105     59  74  44S 220 311 223 +0.9 -6.0 +1.0+3.0 .310 -139.9      5 31 22.8  27 46  9 363.9 715.7
     77224 is double: ** 8.3 8.3 0.10"  90.0, dT = +0.21sec
     77224 has been reported as non-instantaneous (OCc 194). Observations are highly desired
26 Oct  2 11 28 43.1 r   77268 B8  8.2  8.0v  62- 104     85  17  89N 268  70 271 +0.5 -6.1 +2.7+0.1 .359 -178.6      5 34 39.1  28  3  4 363.1 632.5
     77268 = V1371 Tau, 8.02 to 8.20, V, Type GCAS
26 Oct  3  6 17 18.1 r     994cF5  6.6  6.3   53-  93      8  64  63S 246 314 244 +2.2 -5.0 -0.4+1.3 .564 -160.1      6 28 56.4  26 58  3 369.01073.6
       994 is double: ** 6.8 7.7 0.003" 269.0, dT = 0.00sec
26 Oct  3  8 21 46.4 r   78501 K0  7.8  7.3   52-  92     34  72  62S 246 325 243 +2.2 -5.1 +0.5+1.6 .448 -158.6      6 33 58.0  27  2 41 366.4 854.6
26 Oct  3  9 35 58.4 R    1013cG0  7.0        51-  91     50  74  72N 292  17 289 +2.1 -5.1 +1.9-0.2 .390  158.0      6 36 26.3  27 16 42 365.1 744.9
      1013 is double: AB 7.14 8.97 0.68" 270.0, dT = -1.6sec
      1013 is a close double. Observations are highly desired
26 Oct  4  8 58 12.8 R    1155 F0  6.4  6.2   40-  78     28  74  14S 204 280 196 +3.2 -3.9 -1.2+6.5 .155 -108.5      7 38 14.4  24 21 38 368.1 872.0
26 Oct  4 11 23 22.4 D    1170dG8  3.6  3.1   39-  78     59  81 -89N 100 186  91 +3.0 -3.9 +2.1+0.1 .385    4.0      7 44 26.8  24 23 53 365.7 685.3
   R1170 = kappa Geminorum
      1170 is double: AB 3.7 10.0 7.4" 241.1, dT = -15sec
      1170 is a close double. Observations are highly desired
26 Oct  4 12 33 56.6 r    1168 A5  7.1  6.9   39-  77  -2 75  82  63S 254 346 245 +2.8 -3.8 +2.9+1.3 .298 -144.7      7 43 58.0  24 14 38 365.1 646.7
26 Oct  4 12 50 34.4 R    1170dG8  3.6  3.1   39-  77   2 79  81  76N 295  29 286 +2.7 -3.8 +2.5-1.0 .363  176.1      7 44 26.8  24 23 53 365.0 644.1
   R1170 = kappa Geminorum
      1170 is double: AB 3.7 10.0 7.4" 241.1, dT = -12sec
      1170 is a close double. Observations are highly desired
26 Oct  5  9 32 32.2 r   80294kF8  8.0  7.7   29-  65     22  76  72S 268 340 254 +4.1 -2.5 +0.5+0.9 .480 -164.1      8 37 26.4  20 29 14 370.2 895.6
26 Oct  5 11  3  1.6 r   80343kF2  8.2  8.0v  28-  64     42  83  45S 241 318 228 +4.0 -2.4 +1.4+2.6 .291 -133.0      8 40 26.7  20 10 55 368.4 763.3
     80343 = BQ Cnc, 8.19, range 0.02, V, Type DSCTC, Period 0.074 days
26 Oct  5 11 21 57.1 R    1304pA0  6.8        28-  64     46  84  56N 321  38 307 +3.9 -2.4 +1.7-1.6 .356  149.1      8 41 15.3  20 28 37 368.1 740.9
      1304 is double: AB 7.10 8.08 0.29"  70.4, dT = +0.28sec
      1304 is a close double. Observations are highly desired
26 Oct  5 11 23 14.4 r   80349kF0  8.5  8.4v  28-  64     47  84  74S 270 348 257 +3.9 -2.4 +1.7+0.7 .391 -160.5      8 40 52.5  20 15 59 368.1 739.4
     80349 = BW Cnc, 8.48, range 0.01, V, Type DSCTC, Period 0.072 days
26 Oct  5 12  0 52.3 r   80362pF0  8.5  8.4S  28-  64  -9 55  87  71S 267 345 253 +3.8 -2.4 +2.1+0.9 .355 -154.3      8 41 53.1  20  9 34 367.5 702.9
     80362 is double: AB 8.6 11.9 32" 329.0, dT = -42sec
     80362 = NSV 4200, 8.54,
26 Oct  6  8 58 11.9 r Europa      6.1  6.1   20-  52      2  74  56S 254 321 238 +4.8 -0.9 -0.3+1.3 .478 -147.6      9 30 55.2  15 21 19 374.31028.2
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Occultation prediction for Museo de Astronomía El Meteorito
E. Longitude -101 6 23.0, Latitude 23 7 11.9, Alt. 2020m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon	Sun Alt	Moon Alt	Az	CA o	PA o	VA o	AA o	Libration L	B	A m/o	B m/o	RV "/s	Cct	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
	Europa limb contacts offset by ±0.8 secs, at 8 58 11.1 and 8 58 12.7 Both contacts are against the bright limb of Europa																																	
26	Oct	6	9	0	1.3	r	Callisto		6.4	6.4		19-	52		2	74	55S	254	321	238	+4.8	-0.9	-0.3+1.3	.477	-147.3		9	30	58.9	15	20	59	374.2	1028.9
	Callisto limb contacts offset by ±1.2 secs, at 9 0 0.1 and 9 0 2.5 Both contacts are against the bright limb of Callisto																																	
26	Oct	6	9	0	34.4	r	Io		5.8	5.8		19-	52		2	74	55S	253	321	237	+4.8	-0.9	-0.3+1.3	.472	-147.2		9	31	1.2	15	20	47	374.2	1019.7
	Io limb contacts offset by ±0.9 secs, at 9 0 33.5 and 9 0 35.3 Both contacts are against the bright limb of Io																																	
26	Oct	6	9	2	42.4	R	Jupiter		-1.7	-1.7		19-	52		3	75	55S	254	321	237	+4.8	-0.9	-0.3+1.3	.471	-146.8		9	31	5.4	15	20	24	374.2	1020.8
	Jupiter limb contacts offset by ±35.7 secs, at 9 2 7 and 9 3 18 Both contacts are against the bright limb of Jupiter																																	
26	Oct	6	9	4	21.7	R	Ganymede		5.4	5.4		19-	52		3	75	55S	254	321	237	+4.8	-0.9	-0.2+1.3	.470	-146.5		9	31	8.7	15	20	5	374.1	1022.5
	Ganymede limb contacts offset by ±1.3 secs, at 9 4 20.4 and 9 4 23.1 Both contacts are against the bright limb of Ganymede																																	
26	Oct	14	1	19	12.5	D	183731pF0		7.3	7.1		11+	39		10	236	37N	57	359	44	+2.4	+7.3	+0.4+0.3	.324	36.5		15	43	11.6	-25	24	56	398.8	780.6
	183731 is double: AB 7.3 9.3 5.9" 291.8, dT = -10sec																																	
	183731 is a close double. Observations are highly desired																																	
26	Oct	19	0	58	25	m	188948	F7	7.5	7.3		53+	94	-10	43	178	16S	151	153	162	-3.2	+3.8	+9.9+9.9	.000	-90.0		20	8	35.9	-23	35	26	397.5	573.6
26	Oct	20	2	4	16.6	D	3069	A*	6.3	6.3v		63+	105		48	185	72N	55	50	70	-4.5	+2.4	+2.3+1.2	.318	-1.8		20	59	36.1	-19	2	7	393.7	607.9
	R3069 = 20 Capricorni (AO)																																	
	3069 = AO Cap, 6.25 to 6.30, V, Type ACV, Period 2.2411 days, Phase 83%																																	
26	Oct	21	1	34	8.7	d	164647	F3	7.7	7.4		72+	117		50	157	51S	109	131	127	-5.2	+1.0	+4.5-0.9	.179	-57.1		21	47	10.3	-14	30	50	389.4	623.2
26	Oct	22	5	24	22.8	D	3322cG1		6.4			82+	129		47	228	80S	79	35	99	-6.5	-1.0	+2.3-0.1	.332	-31.1		22	38	22.1	-	7	53	51	383.7	721.2
	3322 is double: AB 6.64 8.11 0.08" 296.3, dT = -0.2sec																																	
	3322 is a close double. Observations are highly desired																																	
26	Oct	22	6	22	13.1	d	146225	K0	7.7	7.1		82+	130		37	241	89S	70	16	90	-6.7	-1.1	+1.5+0.1	.393	-19.6		22	39	30.4	-	7	36	17	384.3	777.3
26	Oct	23	5	0	6.1	d	146693	G5	7.5	7.1		89+	142		62	211	56N	35	7	57	-6.4	-2.4	+1.4+1.9	.370	10.7		23	24	39.0	-	1	44	29	377.3	688.8
26	Oct	23	8	26	11.6	d	3460kG0		6.9	6.6		90+	143		23	259	73S	87	22	109	-7.0	-2.8	+1.0-0.8	.407	-30.8		23	29	30.3	-	1	2	9	379.7	872.4
	R3460 = 12 Piscium																																	
26	Oct	24	3	12	51.2	d	109052	G5	7.4	6.9		95+	153		61	126	57N	38	87	61	-5.7	-3.5	+1.3+2.2	.397	8.7		0	11	5.7	4	7	59	372.4	725.4
26	Oct	25	7	29	44.6	d	163pF2		7.3	7.1		99+	167		61	252	49N	44	341	66	-5.5	-5.2	+1.7+1.5	.394	9.9		1	7	4.0	11	33	8	366.7	710.9
	163 is double: AB 7.3 10.5 8.3" 201.5, dT = -19sec																																	
	163 is a close double. Observations are highly desired																																	
	Distance of 163 to Terminator = 12.7"; to 3km sunlit peak = 3.7"																																	
26	Oct	28	4	54	37.8	r	76345kG8		7.5	7.0		94-	151		44	76	89N	251	333	263	-0.5	-6.3	+1.0+1.3	.491	174.9		3	57	11.8	25	16	58	360.2	861.9
26	Oct	28	10	1	24.2	r	603	F8	7.6	7.3		93-	149		68	284	41N	300	206	310	-1.2	-6.6	+2.3-2.2	.304	140.9		4	6	4.6	26	12	42	358.6	681.2
26	Oct	28	11	8	2.7	r	76472cG8		7.2	6.5		93-	149		53	283	43S	204	118	215	-1.4	-6.5	+2.7+4.0	.204	-118.8		4	8	39.0	25	52	40	359.3	739.0
26	Oct	29	5	23	44	m	756	F0	6.6	6.5		87-	137		37	72	5N	345	65	350	+1.2	-5.9	+9.9+9.9	.000	90.0		5	4	38.0	27	41	46	360.7	888.8
	Distance of 756 to Terminator = 3.3"; to 3km sunlit peak = 0.0"																																	
26	Oct	29	8	35	17.7	R	773wF8		7.0	6.7		86-	136		78	65	68S	238	348	243	+0.8	-6.1	+2.2+1.8	.351	-156.6		5	10	3.9	27	33	23	358.4	665.4
	773 is double: AB 7.0 9.3 315" 353.1, dT = +377sec																																	
26	Oct	30	9	9	29.3	R	958cK1		6.7	6.1		77-	122		71	73	30S	210	308	209	+2.4	-5.2	+1.8+5.6	.175	-117.3		6	18	20.8	27	12	37	359.9	665.8
	958 is double: ** 7.5 7.5 0.050"																																	
	958 has been reported as non-instantaneous (OCc1307). Observations are highly desired																																	
26	Oct	30	12	31	42.3	r	78309dA0		7.4	7.4		76-	121	-5	63	285	66S	247	154	245	+1.8	-5.0	+2.7+0.7	.317	-140.2		6	23	30.2	27	7	5	360.6	721.1
	78309 is double: AB 7.4 1.3" 304.0, dT = -2.2sec																																	
	78309 is a close double. Observations are highly desired																																	
26	Oct	31	8	46	33.7	d	1117cG8		5.0	4.6		66-	109		53	78	-39S	149	233	142	+3.9	-4.1	+2.3-2.7	.264	-50.1		7	23	28.5	25	3	2	363.1	724.2
	R1117 = 57 Geminorum																																	
	1117 is double: ** 5.9 5.9 0.10" 90.0, dT = +0.2sec																																	
	1117 has been reported as non-instantaneous (OCc1358). Observations are highly desired																																	
26	Oct	31	9	41	50.6	R	1117cG8		5.0	4.6		66-	109		65	80	45S	232	321	225	+3.8	-4.0	+2.3+3.2	.245	-129.7		7	23	28.5	25	3	2	362.5	673.7
	R1117 = 57 Geminorum																																	

Occultation prediction for Museo de Astronomía El Meteorito
E. Longitude -101 6 23.0, Latitude 23 7 11.9, Alt. 2020m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon	Sun Alt	Moon Alt	Az	CA o	PA o	VA o	AA o	Libration L	B	A m/o	B m/o	RV "/s	Cct o	dur sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
							1117 is double: ** 5.9 5.9 0.10" 90.0, dT = +0.32sec																													
							1117 has been reported as non-instantaneous (OCc1358). Observations are highly desired																													
26	Nov	1	12	30	55.1	R	1269	kG5	6.9	6.3		54-	94	-5	88	180	63N	311	311	298	+4.4	-2.4	+2.0	-1.9	.368	169.5		8	28	7.2	21	8	55	365.2	662.2
26	Nov	1	15	38	15.6	r	1277	wK3	5.3	4.7		53-	93	34	47	276	65N	309	231	296	+3.9	-1.9	+0.8	-1.8	.463	173.9		8	32	42.5	20	26	28	367.3	829.6
							R1277 = eta Cancri																											
							1277 is double: AB 5.3 20.0 164" 280.0, dT = -310sec																													
26	Nov	2	10	20	18.4	R	1387	cA5	7.0	6.8		43-	82	47	90	32N	346	60	330	+5.7	-1.0	+1.3	-3.4	.261	129.7		9	21	25.5	16	35	54	369.9	733.4
							1387 is double: ** 7.6 7.6 0.10" 90.0, dT = +0.09sec																													
							1387 has been reported as non-instantaneous (OCc1402). Observations are highly desired																													
26	Nov	3	10	28	39.6	r	1498	cG5	8.0	7.4		32-	69	36	93	13N	8	77	348	+6.2	+0.6	+0.4	-6.2	.162	111.8		10	13	50.4	10	50	31	374.3	787.9
							1498 is double: ** 8.4 9.4 0.08" 94.4, dT = -0.03sec																													
							1498 has been reported as non-instantaneous (OCc 598). Observations are highly desired																													
26	Nov	6	11	19	52.3	r X	35200	K2	9.4	8.8		8-	32	11	103	67N	310	15	288	+6.4	+4.7	+0.2	-0.6	.498	172.6		12	36	48.9	- 7	44	55	387.5	944.5
26	Nov	6	11	41	27.5	d	1815	SK2	4.7	4.0		8-	32	15	106	-69N	86	150	64	+6.4	+4.8	+0.8	+1.1	.386	37.6		12	39	14.8	- 7	59	44	387.1	915.4
							R1815 = chi Virginis																											
							1815 is multiple: **Aa,Ab 4.8 8.8 0.10" 214.0, dT = -0.16sec : AB 4.8 8.8 177" 135.9, dT = +297sec : AC 4.8 10.6 224" 109.8, dT = +531sec : AD 4.8 9.0 321" 331.1, dT = -353sec																													
							1815 has been reported as non-instantaneous (OCc 760). Observations are highly desired																													
26	Nov	6	12	32	39.2	R	1815	SK2	4.7	4.0		7-	32	-5	26	112	33N	344	44	322	+6.3	+4.8	+0.1	-2.1	.356	142.4		12	39	14.8	- 7	59	44	386.1	842.1
							R1815 = chi Virginis																											
							1815 is multiple: **Aa,Ab 4.8 8.8 0.10" 214.0, dT = +0.18sec : AB 4.8 8.8 177" 135.9, dT = +437sec : AC 4.8 10.6 224" 109.8, dT = +364sec : AD 4.8 9.0 321" 331.1, dT = -877sec																													
							1815 has been reported as non-instantaneous (OCc 760). Observations are highly desired																													
26	Nov	13	0	32	19.4	d	186250	K5	7.7	6.8		12+	41	-8	22	224	35N	39	353	39	-0.5	+5.9	+0.5	+1.1	.303	33.5		18	5	20.8	-27	50	3	403.0	709.2
26	Nov	13	2	10	26.6	d X	150546	MG8	7.2	7.2		13+	42	5	237	86S	98	37	98	-0.8	+5.7	+0.8	-1.1	.401	-24.9		18	8	34.8	-27	51	51	404.9	867.8
							X150546 is triple: Ba,Bb 9.1 11.1 0.10" 146.0, dT = +0.17sec : AB 7.6 9.1 2.2" 270.1, dT = -5sec																													
							X150546 is a close double. Observations are highly desired																													
26	Nov	14	0	58	39.5	d	187541	G5	8.3	7.7		19+	52	26	221	63N	60	17	65	-1.9	+4.9	+1.2	+0.3	.354	5.4		18	59	26.2	-26	29	49	402.7	695.4
26	Nov	16	20	6	15.8	d	3126	G8	4.3	3.8v		44+	83	42	15	116	87S	75	135	92	-4.4	+1.6	+1.1	+1.3	.393	-6.0		21	22	14.8	-16	50	4	398.4	764.4
							R3126 = Tae = iota Capricorni																												
							3126 = iot Cap, 4.27, range 0.06, V, Type BY																													
26	Nov	19	2	18	46.4	D	3380	cK0	5.9	5.4		66+	108	62	193	77N	55	43	76	-7.2	-1.8	+2.1	+1.4	.348	-9.9		23	1	31.7	- 4	42	41	383.7	658.4
							3380 is double: ** 7.0 7.0 0.10" 90.0, dT = +0.23sec																													
							3380 has been reported as non-instantaneous (OCc1633). Observations are highly desired																													
26	Nov	20	5	17	59.5	D	128417	cG5	7.0	6.4		76+	121	47	248	48N	26	328	48	-7.9	-3.6	+0.9	+2.0	.365	25.1		23	51	6.8	2	14	16	377.9	739.0
							128417 is double: ** 6.9 0.001" 333.1, dT = 0.00sec																													
26	Nov	20	6	36	20	M	3515	cA1	6.3	6.3		76+	122	30	259	12S	146	81	168	-8.1	-3.7	+9.9	+9.9	.000	-90.0		23	53	4.8	2	5	26	379.1	824.3
							R3515 = 25 Piscium																													
							3515 is double: ** 7.0 7.0 0.050"																													
							3515 has been reported as non-instantaneous (OCc1650). Observations are highly desired																													
26	Nov	20	6	37	10	Gr	3515	cA1	6.3	6.3		76+	122	28	** GRAZE: CA 12.0S; Dist.165km in az. 345deg. [Lat = 24.66+0.24(E.Long+101.11)]																					
26	Nov	21	1	38	40.3	d	109306	F5	7.8	7.5		84+	132	61	118	40S	120	175	142	-6.8	-4.3	+6.0	-2.7	.127	-71.7		0	36	3.7	7	9	22	371.8	731.5
26	Nov	21	4	41	20.5	d	109354	kF5	7.3	7.1		84+	133	66	234	79S	81	32	103	-7.3	-4.7	+2.7	+0.1	.328	-31.2		0	39	42.6	8	7	22	370.7	689.9
26	Nov	22	7	30	20.5	D	233	cB9	6.2	6.3		92+	147	44	269	58S	108	36	129	-6.8	-5.9	+1.8	-2.0	.309	-44.6		1	35	46.4	14	39	41	365.6	769.9
							R233 = 101 Piscium																											
26	Nov	23	6	8	23.4	D	370	A9	6.1	6.0v		97+	160	76	261	74S	102	26	120	-5.1	-6.4	+3.0	-1.1	.301	-39.7		2	30	38.4	19	51	19	359.2	682.4
							R370 = 26 Arietis (UU)																											
							370 = UU Ari, 6.10 to 6.15, V, Type DSCTC, Period 0.0676 days																											

Occultation prediction for Museo de Astronomía El Meteorito
E. Longitude -101 6 23.0, Latitude 23 7 11.9, Alt. 2020m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon Sun Alt	Moon Alt	Az	CA o	PA o	VA o	AA o	Libration L	B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	Nov	23	10	5	9.9	d	387	cG5	6.9	6.4	S	97+	162	23	284	75N	72	359	90	-5.5	-6.4	+0.7	-0.2	.520	5.0		2	37	34.4	20	34	30	362.1	917.6
							387 is double: ** 7.7 7.7 0.10" 90.0, dT = +0.18sec																												
							387 has been reported as non-instantaneous (OCc1190). Observations are highly desired																												
							387 = NSV 15555, 6.91, , Type VAR:																												
26	Nov	24	7	12	10.4	d	518	SA3	6.0		s	100+	173	75	279	41N	74	342	88	-3.3	-6.6	+2.4	+0.4	.394	-1.8		3	34	26.6	24	27	52	355.4	679.4
		R518 = 7 Tauri																																
							518 is triple: AB 6.60 6.86 0.79" 348.0, dT = +0.12sec : AB,C 5.9 9.9 22.5" 52.2, dT = +53sec																												
							518 is a close double. Observations are highly desired																												
							518 = NSV 1192, 5.92 to 5.96, V																												
		Distance of 518 to Terminator = 3.0"; to 3km sunlit peak = 0.0"																																
26	Nov	25	7	1	22.7	R	701	SF2	6.6	6.4		99-	169	86	19	73N	252	52	260	-1.1	-6.3	+2.4	+0.9	.389	-173.0		4	38	29.5	26	56	23	353.3	672.1
							701 is triple: 6.6 9.2 3.1" 169.4, dT = -1sec : AB 7.36 7.21 4.49" 187.7, dT = -5sec																												
							701 is a close double. Observations are highly desired																												
		Distance of 701 to Terminator = 14.8"; to 3km sunlit peak = 5.0"																																
26	Nov	25	7	1	25.0	r	X 70481	p	7.3	7.2		99-	169	86	19	73N	253	53	261	-1.1	-6.3	+2.4	+0.9	.389	-173.1		4	38	29.6	26	56	26	353.3	672.1
		X 70481 is triple: 7.3 9.2 5.8" 174.9, dT = -3sec : AC 7.4 12.9 92" 203.6, dT = -155sec																																
		X 70481 is a close double. Observations are highly desired																																
		Distance of X 70481 to Terminator = 14.8"; to 3km sunlit peak = 5.0"																																
26	Nov	26	5	17	15.6	r	868	SA0	7.5	7.5		96-	156	51	74	47N	302	29	304	+1.3	-5.4	+2.2	-0.9	.350	139.7		5	44	21.2	27	43	53	354.5	789.8
							868 is triple: AB 7.5 9.8 8.6" 254.1, dT = -16sec : AC 7.5 12.7 47" 40.5, dT = +19sec																												
							868 is a close double. Observations are highly desired																												
26	Nov	26	8	11	14.4	r	77604	K0	7.0	6.2		95-	155	85	9	79S	249	59	250	+0.9	-5.5	+2.6	+1.1	.355	-155.9		5	49	38.1	27	33	3	353.2	666.4
26	Nov	26	8	44	9.1	r	77619	F2	7.1	6.9		95-	155	82	307	72S	242	119	244	+0.8	-5.5	+2.8	+1.4	.328	-146.7		5	50	39.7	27	30	18	353.2	671.7
26	Nov	26	8	53	9.6	r	77621	M3	7.5	6.6	s	95-	155	80	301	69N	281	164	283	+0.8	-5.4	+2.4	-0.7	.392	174.9		5	50	48.2	27	41	9	353.3	674.9
		77621 = NSV 16688, 7.47, range 0.02, 6V, Type VAR, Period 4.88496 days																																
26	Nov	26	8	53	20.1	d	890	cA0	4.6	4.6	s	95-	155	81	302	-76S	94	336	96	+0.8	-5.4	+2.5	-0.4	.393	2.3		5	53	19.6	27	36	44	353.3	674.3
		R890 = 136 Tauri																																
							890 is double: ** 4.8 6.3 0.050" 270.0, dT = -0.13sec																												
							890 has been reported as non-instantaneous (OCc 206). Observations are highly desired																												
							890 = NSV 2696, 4.50 to 4.61, V																												
26	Nov	26	10	15	53.0	R	890	cA0	4.6	4.6	s	95-	155	63	286	67N	284	191	285	+0.6	-5.3	+1.8	-1.1	.427	177.2		5	53	19.6	27	36	44	353.9	734.3
		R890 = 136 Tauri																																
							890 is double: ** 4.8 6.3 0.050" 270.0, dT = -0.11sec																												
							890 has been reported as non-instantaneous (OCc 206). Observations are highly desired																												
							890 = NSV 2696, 4.50 to 4.61, V																												
26	Nov	26	11	7	12.9	r	77724	B1	7.0	7.0		95-	154	52	286	18N	334	246	335	+0.5	-5.3	+0.2	-3.5	.294	129.6		5	55	40.3	27	42	56	354.6	794.6
		Distance of 77724 to Terminator = 9.6"; to 3km sunlit peak = 1.4"																																
26	Nov	26	12	6	48.7	r	77753	G2	7.2	6.7		95-	154	39	287	89N	264	182	264	+0.4	-5.1	+1.2	-0.5	.478	-159.2		5	57	5.6	27	19	0	355.7	882.1
26	Nov	27	8	51	4.8	R	1061	SF8	6.2	5.9	s	89-	141	83	63	85N	277	30	272	+2.9	-4.3	+2.6	-0.2	.384	-172.5		6	58	47.4	26	4	52	354.9	666.7
		R1061 = 39 Geminorum																																
							1061 is triple: Aa,Ab 6.1 0.50" 158.0, dT = +0.6sec : AB 6.1 12.1 35" 69.2, dT = +80sec																												
							1061 is a close double. Observations are highly desired																												
							1061 = NSV 17256, 6.1, range 0.02, V, Type VAR:																												
26	Nov	27	9	12	53.4	R	1062	cB8	6.4	6.5		89-	141	87	30	67S	249	38	244	+2.8	-4.3	+3.0	+1.3	.312	-143.5		6	59	27.9	25	54	51	354.9	668.1
		R1062 = 40 Geminorum																																
							1062 is double: AB 6.4 0.10" 160.5, dT = -0.01sec																												
							1062 is a close double. Observations are highly desired																												
26	Nov	28	6	20	22.6	r	1200	K0	6.9	6.4		81-	128	36	77	12N	358	76	348	+5.0	-2.9	+3.3	-9.3	.104	102.7		7	59	42.6	23	10	58	360.2	829.5

Occultation prediction for Museo de Astronomía El Meteorito
E. Longitude -101 6 23.0, Latitude 23 7 11.9, Alt. 2020m; Telescope dia 15cm; dMag 0.0

y	m	day d	h	Time m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon Sun Alt	Moon Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	Nov	28	10	27	2.1	R	1221cM3		6.0	5.1	v	80-	127	89	246	28N	342	277	332	+4.4	-2.7	+1.0	-3.7	.276	135.0	.01	8	6	18.4	22	38	8	358.2	678.3
	R1221 = 9 Cancri = BL Cnc.																																
	1221 is double: AB 6.0 10.1 0.40"																																
	1221 is a close double. Observations are highly desired																																
	1221 = BL Cnc, 5.97 to 6.04, V, Type SR																																
26	Nov	28	10	58	56.0	r	1222cG5		7.2	6.8		80-	127	82	268	59N	312	228	301	+4.3	-2.6	+1.8	-1.9	.389	167.3		8	6	34.4	22	27	24	358.4	693.3
	1222 is double: ** 7.2 0.017" 254.2, dT = -0.02sec																																
	1222 has been reported as non-instantaneous (OCc1381). Observations are highly desired																																
26	Nov	29	6	35	5.2	R	1340kA0		6.6	6.6		71-	115	26	80	81N	295	7	280	+6.3	-1.3	+0.9	-0.1	.491	172.5		8	58	18.3	18	18	30	365.3	877.6
26	Nov	29	7	5	27.2	R	1343 M4		6.3	5.5	v	71-	114	32	83	77S	273	347	258	+6.3	-1.3	+1.0	+0.7	.453	-164.5		8	59	10.7	18	8	6	364.8	832.3
	1343 = FZ Cnc, 6.28 to 6.38, Hp, Type SRB, Period 17.6 days																																
26	Nov	29	11	23	52.8	r	1353kA2		8.1	8.0		69-	113	84	193	89S	286	273	270	+5.7	-1.0	+2.5	-0.8	.366	-160.3		9	5	45.5	17	23	24	362.7	684.3
	R1353 = 71 Cancri																																
26	Nov	29	11	41	31.1	r	1355 G5		7.6	7.0		69-	113	82	223	44S	240	199	225	+5.6	-0.9	+5.3	+3.0	.160	-114.1		9	6	15.6	17	6	43	362.8	691.3
26	Nov	30	17	13	45.2	r	1486dK4		4.4	3.6		56-	97	41	18	273	66S	267	198	248	+5.8	+1.5	+0.6	-0.8	.439	-144.4	.01	10	7	54.3	9	59	51	373.1	977.7
	R1486 = 31 Leonis = A Leonis																																
	1486 is double: AB 4.4 13.6 8.1" 40.9, dT = +13sec																																
	1486 is a close double. Observations are highly desired																																
26	Dec	1	8	18	34.9	R	1567kK1		6.4	5.8		48-	88	23	93	70N	312	20	292	+7.7	+1.9	+0.7	-0.8	.466	167.0		10	46	5.7	6	22	23	375.8	871.9
	R1567 = 37 (Sextantis)/Leonis																																
26	Dec	1	8	45	8.8	r	1573pA2		7.1	7.0		48-	88	28	95	38N	344	52	324	+7.7	+2.0	+0.6	-2.5	.333	136.6		10	47	19.2	6	20	46	375.3	835.6
	R1573 = 38 (Sextantis)/Leonis																																
26	Dec	1	11	41	45.1	r	118529kF8		8.2	8.0		47-	87	65	132	58N	324	7	303	+7.2	+2.3	+1.5	-1.9	.371	168.0		10	50	53.1	5	35	9	373.1	686.7
26	Dec	2	10	47	40.1	r	138302 K0		7.7	7.1		37-	75	42	114	77S	280	337	258	+7.6	+3.6	+1.9	+0.3	.360	-151.1		11	37	16.8	- 0	34	41	379.4	756.4
26	Dec	2	10	54	36.1	r	138307 K5		8.4	7.6		37-	75	44	115	89N	294	350	272	+7.6	+3.6	+1.6	-0.4	.393	-164.5		11	37	30.1	- 0	32	51	379.3	749.7
26	Dec	3	9	44	7.6	r	138754KF8		7.2	6.9		27-	63	17	104	20N	2	65	339	+7.6	+4.6	-0.4	-3.5	.255	122.2		12	23	27.6	- 6	7	8	386.2	898.3
26	Dec	3	12	30	11	m	138778KF8		8.3	8.0		27-	62	-9	49	135	21S	223	264	200	+7.2	+5.0	+9.9	+9.9	.000	-90.0		12	26	19.1	- 7	19	48	383.8	709.6
26	Dec	4	11	40	2.6	r	1895pG5		8.6	8.2		18-	51		29	120	82N	296	351	275	+7.1	+5.8	+1.1	-0.2	.418	-168.6		13	12	1.8	-12	24	10	389.5	806.3
	1895 is double: AB 8.7 13.0 0.9" 33.0, dT = +0.25sec																																
	1895 is a close double. Observations are highly desired																																
26	Dec	6	11	53	18.3	r	182912 G5		8.9	8.6		6-	28		8	118	22N	346	47	329	+5.7	+6.8	-0.7	-2.0	.327	133.7		14	50	13.2	-21	31	36	398.3	913.5
26	Dec	12	0	53	0.3	d	188313 K0		9.0	8.4		8+	32	16	234	79N	75	20	83	-2.5	+3.8	+0.9	-0.3	.405	-12.7		19	35	26.1	-24	32	21	404.4	813.9
26	Dec	12	0	59	14.0	d	188305 G5		9.2	8.7		8+	32	15	235	31N	27	331	34	-2.5	+3.8	-0.3	+1.5	.341	35.8		19	35	2.5	-24	21	48	404.6	823.8
26	Dec	12	1	17	22.9	d	188323 F7		9.1	8.8		8+	32	11	237	57N	53	355	61	-2.5	+3.7	+0.2	+0.4	.427	10.1		19	35	55.4	-24	22	30	404.9	852.5
26	Dec	12	1	32	4	M	2861cA1		5.6	5.5	v	8+	32		8	239	22S	153	93	161	-2.6	+3.7	+9.9	+9.9	.000	-90.0		19	36	1.7	-24	43	9	405.2	877.8
	R2861 = 51 Sagittarii																																
	2861 is double: ** 5.9 7.9																																
	2861 = V5548 Sgr, 5.82, range 0.04, B, Type DSCTC:, Period 0.11340 days																																
26	Dec	12	1	34	39.0	d	188336 K5		8.5	7.6		8+	32		8	239	65S	110	50	118	-2.6	+3.7	+1.3	-1.9	.305	-47.2		19	36	34.5	-24	33	8	405.3	881.1
26	Dec	13	1	12	8.2	d	189267 K1		9.0	8.4		13+	43	23	233	79N	68	16	80	-3.9	+2.5	+1.0	+0.0	.394	-10.8		20	25	27.8	-21	9	26	402.6	783.7
26	Dec	15	0	52	41.9	d	3219 K1		8.3	7.6		29+	65	-12	47	219	71N	50	14	69	-6.2	-0.2	+1.6	+1.1	.352	-2.7		21	58	17.7	-12	6	8	395.5	675.5
26	Dec	16	0	39	25.9	D	3334 A0		6.4	6.4		38+	76	-9	58	203	49S	108	87	129	-7.1	-1.6	+5.5	-2.2	.154	-63.3		22	43	14.3	- 6	57	47	390.7	649.6
	R3334 = 67 Aquarii																																
26	Dec	16	0	55	41	Gr	3334 A0		6.4	6.4		38+	76	-11	57	** GRAZE: CA 22.6S; Dist.188km in az. 135deg. [Lat = 20.71+0.93(E.Long+101.11)]																				
26	Dec	16	1	35	20.1	d	146275kK0		8.1	7.6		38+	76		51	224	31N	8	328	29	-7.3	-1.7	+0.2	+2.9	.281	38.5		22	43	21.3	- 6	24	3	391.0	681.5
26	Dec	17	1	11	51.0	d	146725pF8		7.8			48+	88		64	204	90S	67	45	89	-7.8	-3.0	+2.5	+0.9	.325	-22.0		23	28	46.2	- 0	50	8	385.3	655.6
	146725 is double: AB 7.98 10.59 1.38" 62.1, dT = +4sec																																
	146725 is a close double. Observations are highly desired																																

Occultation prediction for Museo de Astronomía El Meteorito
E. Longitude -101 6 23.0, Latitude 23 7 11.9, Alt. 2020m; Telescope dia 15cm; dMag 0.0

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      day  Time     P   Star  Sp  Mag  Mag    % Elon Sun  Moon   CA   PA  VA  AA Libration   A    B    RV    Cct durn  R.A. (J2000)  Dec   Mdist   SV
 y   m  d  h  m    s       No  D    v    r V  ill     Alt Alt Az   o    o   o   o   L    B   m/o m/o  "/s     o  sec  h  m   s    o  m  s   Mm   m/s
26 Dec 18  5 32 52.7 D  109145SK0  6.8  6.0s  59+ 101     27 266  68N  46 338  68 -8.8 -4.7 +0.8+0.9 .435   14.1       0 20  5.1   6 17 34 381.2 828.4
    109145 is triple: AB 7.0 12.9 41"  63.9, dT = +89sec : AC 7.0 13.7 61"  10.1, dT = +114sec
    109145 = NSV 15073, 6.91 to 6.97, Hp
26 Dec 19  2 21 37.9 d   92234kF5  8.1  7.9   69+ 112     77 205  65S  94  70 115 -8.0 -5.4 +3.5-0.4 .265  -44.1       1  5  9.6  11 18 57 372.4 666.8
26 Dec 19  4 19 25   m     163pF2  7.3  7.1   69+ 113     55 257  13S 146  80 168 -8.3 -5.6 +9.9+9.9 .000  -90.0       1  7  4.0  11 33  8 372.9 700.8
      163 is double: AB 7.3 10.5 8.3" 201.5
      163 is a close double. Observations are highly desired
26 Dec 19  4 19 45   Gr    163pF2  7.3  7.1   69+ 113     54 ** GRAZE: CA 13.1S; Dist. 34km in az. 339deg. [Lat = 23.45+0.35(E.Long+101.11)]
26 Dec 19  5 31 43.4 d   92279 F2  7.9  7.7   70+ 113     40 267  69S  90  20 112 -8.5 -5.7 +1.6-0.9 .371  -28.8       1  9 14.7  12  1 44 373.8 766.9
26 Dec 19  7 22 18.0 d     177 F5  6.9  6.6   70+ 114     15 277  46S 114  45 136 -8.7 -5.7 +0.2-2.1 .352  -46.1       1 12 19.1  12 16 55 375.7 924.4
26 Dec 20  3  5 21.3 d   92732wF5  7.8  7.5   79+ 125     83 213  51S 112  80 132 -7.2 -6.2 +4.3-2.0 .208  -56.6       1 58 47.5  17  1 33 365.8 669.9
    92732 is double: AB 7.8 17.9 79" 249.5, dT = -282sec
26 Dec 20  8 30 54.3 d    311cA3  6.6  6.5e  80+ 127     13 284  69S  95  26 115 -7.9 -6.4 +0.2-1.0 .506  -20.3       2  7 46.0  18  1 46 369.3 967.1
      311 is double:  6.7 9.1
      311 = HIP 9924, 6.612, range 0.04, 7w, Type E, Period 2.575 days, Phase  32%
26 Dec 22  1 26  3.4 d   76345kG8  7.5  7.0   94+ 152     46  77  86S  91 174 103 -3.8 -6.3 +1.5+0.7 .449  -24.5       3 57 11.8  25 16 58 357.2 855.4
26 Dec 22  6 48 19.2 d     603 F8  7.6  7.3   95+ 154     63 283  35N  35 304  46 -4.6 -6.5 +2.4+2.7 .274   48.1       4  6  4.6  26 12 42 355.2 708.1
26 Dec 22  7 58 15.0 d   76472cG8  7.2  6.5   95+ 154     48 284  58S 122  39 133 -4.7 -6.5 +1.1-2.2 .370  -35.2       4  8 39.0  25 52 40 356.0 783.0
26 Dec 23  4  4 57.6 d     773wF8  7.0  6.7   99+ 167     66  73  63N  78 174  84 -1.9 -5.9 +2.0+0.9 .425    0.8       5 10  3.9  27 33 23 352.2 726.2
      773 is double: AB 7.0 9.3 315" 353.1, dT = +58sec
   Distance of 773 to Terminator = 19.5"; to 3km sunlit peak = 8.4"
26 Dec 25  5 41  6.6 r   79416SF8  7.6  7.4   98- 162     58  80  75N 286  11 278 +2.6 -3.5 +2.0-0.1 .430  176.4       7 28 40.6  24 38 55 352.0 734.8
    79416 is triple: AC 7.7 11.8 29.0" 124.2, dT = +64sec : AB 7.7 8.9 65"  19.4, dT = +11sec
26 Dec 25  9 15 18.2 r   79523wM5  7.7  6.8s  97- 161     74 278  54N 309 218 300 +2.1 -3.2 +1.6-1.8 .418  167.0       7 34 59.3  24 15 56 351.6 731.3
    79523 is double: AB 7.8 11.1 92" 180.0, dT = +137sec
    79523 = NSV 17512, 7.69 to 7.78, Hp
26 Dec 26  5 42 16.8 R    1277wK3  5.3  4.7   93- 148     44  83  62N 310  27 297 +4.7 -1.9 +1.6-1.0 .425  158.1       8 32 42.5  20 26 28 355.7 790.4
   R1277 = eta Cancri
     1277 is double: AB 5.3 20.0 164" 280.0, dT = -334sec
26 Dec 26  7 13 51   Gr  97941 A*  7.5  7.4   92- 148     66 ** GRAZE: CA 12.5S; Dist. 40km in az. 194deg. [Lat = 22.75-0.24(E.Long+101.11)]
   Distance of 97941 to Terminator = 12.8"; to 3km sunlit peak = 2.9"
26 Dec 26  7 22 29   r   97941 A*  7.5  7.4   92- 148     66  93  25S 217 295 204 +4.5 -1.8 +9.9+9.9 .085 -102.0       8 35 45.1  19 46 16 354.5 707.8
26 Dec 26  8 54 19.2 r   97973 A0  7.7  7.6   92- 147     86 145  84S 277 311 264 +4.2 -1.6 +2.7-0.3 .371 -155.9       8 37 37.0  19 43 59 354.2 698.8
26 Dec 26  9 45 30.9 r   97999pF0  7.4  7.3S  92- 147     80 252  67N 306 238 293 +4.1 -1.5 +1.8-1.7 .419  177.0       8 39  6.1  19 40 37 354.4 720.8
    97999 is triple: AB 7.5 9.6 57"  84.0, dT = +101sec : AC 7.5 9.4 179" 345.0, dT = -333sec
    97999 = NSV 4163, 7.45,
26 Dec 26  9 45 34.2 R    1292kF0  6.7  6.5v  92- 147     80 252  31N 343 274 329 +4.1 -1.5 +0.7-3.2 .324  140.6       8 39 42.7  19 46 42 354.4 720.7
   R1292 = 38 Cancri (BT)
     1292 = BT Cnc, 6.66, range 0.06, V, Type DSCTC, Period 0.10228 days
26 Dec 26 10  9 37.4 r   98020pA0  7.6  7.5e  92- 147     75 260  29N 344 270 331 +4.0 -1.4 +0.5-3.3 .326  139.6       8 40 20.7  19 41 12 354.6 736.8
    98020 is quadruple: ** 9.1 9.1 0.050"       : CA 7.6 6.5 64" 163.1, dT = +196sec : CD 7.6 9.2 76"  91.1, dT = +67sec
    98020 has been reported as non-instantaneous (OCc1392). Observations are highly desired
    98020 = HD 73709, 7.69 to 7.76, V, Type EA, Period 7.22015 days, Phase  26%
26 Dec 26 10 12 51.3 R    1298pK0  6.4  5.9E  92- 147     74 261  32N 341 267 328 +4.0 -1.4 +0.6-3.1 .341  142.5       8 40 22.1  19 40 12 354.7 739.2
     1298 is multiple: AE 6.5 12.5 15.7" 154.8, dT = +46sec : AB 6.4 10.4 20.8"  55.1, dT = -17sec : AC 6.5 7.6 64" 343.1, dT = -188sec : AD 6.5 9.2
84"  44.0, dT = -113sec
     1298 = HD 73710, 6.42, , Type EA, Period 7.22030 days, Phase  93%
26 Dec 26 10 15 53.9 r   98009kA7  7.6  7.6v  92- 147     73 260  52S 246 172 232 +4.0 -1.4 +4.0+1.4 .227 -121.7       8 39 44.7  19 16 31 354.7 741.4
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Occultation prediction for Museo de Astronomía El Meteorito
E. Longitude -101 6 23.0, Latitude 23 7 11.9, Alt. 2020m; Telescope dia 15cm; dMag 0.0

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      day  Time     P   Star  Sp  Mag  Mag    % Elon Sun  Moon   CA   PA  VA  AA Libration   A    B    RV    Cct durn  R.A. (J2000)  Dec   Mdist   SV
 y   m  d  h  m   s       No  D     v    r V  ill     Alt Alt Az   o    o   o   o   L    B   m/o m/o  "/s     o  sec  h  m   s    o  m  s   Mm   m/s
     98009 = BU Cnc, 7.67, range 0.03, V, Type DSCTC, Period 0.071 days
26 Dec 26 10 16 43.6 R    1293pK0  6.8     s  92- 147     73 261  71N 303 228 289 +4.0 -1.4 +1.7-1.6 .431 -179.0      8 39 50.7  19 32 27 354.7 742.3
      1293 is multiple: Da,Db 6.67 9.87 0.50" 252.6, dT = -0.7sec : DE 6.7 11.8 35"   3.1, dT = -41sec : DA 6.7 7.3 92"  61.0, dT = +100sec : DC 6.7
7.5 100"  89.1, dT = +192sec
      1293 has been reported as non-instantaneous (S   571). Observations are highly desired
      1293 = NSV 4171, 6.52 to 6.61, V
26 Dec 26 10 18 19.9 r    1294pA0  7.3  7.2S  92- 147     73 262  66N 308 233 294 +4.0 -1.4 +1.6-1.7 .431  176.4      8 39 56.5  19 33 11 354.7 743.6
      1294 is quadruple: AB 7.3 12.3 0.8" 289.8, dT = -1.7sec : AC 7.3 7.5 46" 157.0, dT = +92sec : AD 7.3 6.7 92" 241.0, dT = -85sec
      1294 has been reported as non-instantaneous (S   571). Observations are highly desired
      1294 = NSV 4175, 7.32,
26 Dec 26 10 19 51.5 r   98014pA0  7.5  7.3s  92- 147     72 262  67N 306 231 293 +4.0 -1.4 +1.6-1.7 .433  177.8      8 39 57.8  19 32 29 354.7 744.8
     98014 is quadruple: ** 8.8 8.8            : CA 7.5 7.3 46" 337.0, dT = -91sec : CD 7.5 6.7 100" 269.1, dT = -184sec
     98014 = NSV 4174, 7.53, range 0.01, V
26 Dec 26 10 29 11.3 r   98018pA0  7.5  7.4   92- 147     70 263  60N 314 238 300 +4.0 -1.4 +1.4-2.0 .431  170.4      8 40 18.1  19 31 55 354.8 752.5
     98018 is double: BA 7.5 6.3 134"  70.1, dT = +138sec
26 Dec 26 10 31 15.0 R    1299pA*  6.3  6.2   92- 147     70 264  53N 320 244 306 +4.0 -1.4 +1.2-2.2 .421  164.1      8 40 27.0  19 32 41 354.9 754.2
   R1299 = epsilon Cancri
      1299 is double: AB 6.3 7.5 134" 250.1, dT = -109sec
26 Dec 26 10 35  2.4 R    1303kA6  6.8  6.7v  92- 147     69 264  32N 342 265 328 +4.0 -1.4 +0.5-3.0 .349  142.6      8 40 56.3  19 34 49 354.9 757.4
      1303 = EP Cnc, 6.76, range 0.03, V, Type DSCTC
26 Dec 26 10 42  2.9 R    1297pA9  6.8  6.6S  92- 147     67 265  90S 283 207 270 +3.9 -1.3 +2.1-1.0 .414 -159.0      8 40 20.1  19 20 56 355.0 763.7
      1297 is double: AB 6.8 8.5 0.016" 342.8, dT = -0.02sec
      1297 is a close double. Observations are highly desired
      1297 = NSV 17953, 6.78, , Type DSCT:
26 Dec 26 10 55 24.4 r   98027kA8  7.8  7.7v  92- 146     64 266  76S 270 193 256 +3.9 -1.3 +2.4-0.5 .372 -145.6      8 40 39.2  19 13 42 355.2 776.3
     98027 = BN Cnc, 7.8, range 0.03, V, Type DSCTC, Period 0.0388205 days
26 Dec 26 13 19 29.7 r    1312pF2  6.8  6.6   91- 145  -2 32 278  44N 330 256 316 +3.7 -0.9 +0.0-2.2 .485  151.3      8 45 29.6  18 49  3 357.9 959.5
      1312 is double: AB 6.8 13.0 8.8" 298.0, dT = -15sec
      1312 is a close double. Observations are highly desired
26 Dec 27  8 14 10.8 r   98654WB9  7.9  7.9   84- 134     64 106  38S 237 303 219 +6.1 +0.1 +4.2+4.5 .162 -113.4      9 35  9.5  14  4 32 359.1 713.6
     98654 is double: AB 7.8 9.1 45"  48.5, dT = +271sec
26 Dec 27  8 33 20.0 R    1415WA1  6.3  6.3   84- 133     68 110  55N 324  27 306 +6.0 +0.1 +1.6-2.0 .383  160.7      9 35 52.9  14 22 47 359.0 706.1
   R1415 = 7 Leonis
      1415 is double: AB 6.3 9.4 41"  90.5, dT = +64sec
26 Dec 27 11 20 14.3 r    1425SF7  7.0  6.8   84- 132     69 246  39S 238 179 221 +5.6 +0.5 +6.0+3.1 .138 -108.8      9 39 17.2  13 18 45 359.6 744.9
      1425 is quadruple: Aa,Ab 7.7 7.7           : ** 7.7 7.7 0.006"  90.0, dT = +0.04sec : AB 7.1 15.1 51" 131.0, dT = +108sec
26 Dec 27 12 15  5.8 r    1427 F8  7.0  6.7   84- 132     57 258  37S 237 169 219 +5.4 +0.7 +5.3+2.7 .140 -108.1      9 40 35.2  13  3 14 360.4 791.7
26 Dec 28  5 50 30.5 R    1525 M2  5.6  4.8v  76- 121     19  88  56N 326  34 306 +7.6 +1.5 +0.6-1.3 .449  150.5     10 25 15.2   8 47  5 367.7 921.3
   R1525 = 44 Leonis (DE)
      1525 = DE Leo, 5.6, range 0.07, V, Type SRB:
26 Dec 28 12 55 18.1 R    1549cG8  5.1  4.6v  74- 118  -7 56 246  64N 318 260 298 +6.5 +2.4 +1.2-2.1 .425  172.7     10 34 48.0   6 57 14 366.1 760.8
   R1549 = 48 Leonis
      1549 is double: ** 6.0 6.0 0.10"  90.0, dT = +0.16sec
      1549 has been reported as non-instantaneous (OCc 197). Observations are highly desired
      1549 = HIP 51775, 5.07, range 0.00, 4V, Type VAR, Period 0.09302 days
26 Dec 29  7  7 11.5 R    1635cM0  5.2  4.4   65- 108     23  98  80N 303   9 282 +8.2 +3.2 +0.7-0.4 .487  178.7     11 17 17.4   2  0 38 373.6 882.7
   R1635 = 75 Leonis
      1635 is double: ** 5.8 6.6 0.044"   0.0
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Occultation prediction for Museo de Astronomía El Meteorito
E. Longitude -101 6 23.0, Latitude 23 7 11.9, Alt. 2020m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon	Sun Alt	Moon Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
							1635 has been reported as non-instantaneous (OCc 763). Observations are highly desired																														
26	Dec	29	8	15	27.6	R	1637	K0	5.9	5.4		65-	107	37	107	84S	288	350	266	+8.1	+3.3	+1.4	+0.0	.419	-161.8		11	18	55.0	1	39	1	372.4	797.3
		R1637 = 76 Leonis																																	
26	Dec	30	10	23	56.8	R	138617	KF2	7.2	7.0		53-	94	50	131	77S	280	324	258	+8.2	+4.8	+2.4	+0.1	.334	-148.1		12	9	47.8	- 5	13	33	378.0	720.9

Lunar Occultation predictions
Observatorio Ricardo Sanchez
Argentina

Occultation prediction for Ricardo Sanchez Observatorio
E. Longitude - 58 27 33.2, Latitude -34 38 32.3, Alt. 2m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon Alt	Sun Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	Jan	1	2	2	13.1	d	76557WF8		7.4	7.0		92+	147	28	353	67S	112	299	122	-1.1	-7.4	+2.4	-0.4	.334	-35.6		4	20	17.7	27	20	51	357.9	712.4
	76557 is double: BA 7.5 5.1 48" 79.8, dT = +122sec																																
26	Jan	1	2	4	14.6	D	638SK1		5.0	4.4		92+	147	28	352	67S	112	300	122	-1.1	-7.4	+2.3	-0.4	.334	-35.6		4	20	21.2	27	21	3	357.9	712.5
	R638 = phi Tauri																																
	638 is triple: AB 5.1 7.5 48" 259.8, dT = -122sec : AC 5.1 12.3 117" 22.8, dT = +1.7sec																																
26	Jan	1	2	37	55.5	d	76563	K5	7.2	6.2		92+	147	26	344	56S	124	319	133	-1.2	-7.4	+2.2	-0.5	.294	-44.7	.01	4	21	15.3	27	21	1	358.1	718.6
26	Jan	2	2	38	23.3	D	824	F6	6.2	6.0		97+	161	26	360	57N	71	251	74	+0.9	-7.3	+2.1	+0.4	.393	16.2		5	29	40.7	29	11	11	357.6	709.6
26	Jan	3	3	31	30.2	d	1022CB7		6.0	s		100+	173	27	3	86S	152	330	149	+2.8	-6.7	+1.7	-1.8	.244	-53.3		6	39	33.1	28	15	47	358.8	708.9
	R1022 = 54 Aurigae																																
	1022 is double: AB 6.21 7.85 0.81" 34.3, dT = -1.6sec																																
	1022 is a close double. Observations are highly desired																																
	1022 = NSV 3065, 6.03, range 0.02, V, Type EA, Period 1.8797 days, Phase 49%																																
	Distance of 1022 to Terminator = 6.1"; to 3km sunlit peak = 0.0"																																
26	Jan	4	3	39	1.4	R	1169	K5	5.3	4.5s		99-	169	28	17	82S	249	53	239	+4.5	-5.7	+2.3	+0.1	.318	-141.4	.01	7	44	6.9	25	47	3	361.7	713.5
	R1169 = 76 Geminorum																																
	1169 = NSV 3703, 5.28 to 5.32, V																																
	Distance of 1169 to Terminator = 17.3"; to 3km sunlit peak = 6.8"																																
26	Jan	8	8	21	50.2	R	1657cA2		6.7	6.6		72-	117	-6	52	59N	324	148	302	+6.6	+0.8	+1.3	-1.7	.369	169.3		11	25	39.5	3	18	4	382.7	697.6
	R1657 = 82 Leonis																																
	1657 is double: ** 7.5 7.5 1.0, dT = 0.00sec																																
26	Jan	8	10	11	16.6	r	1663pG8		5.0	4.4		72-	116	14	43	317	46N	338	192	316	+6.2	+1.1	+0.7	-1.8	.356	153.5		11	27	56.2	2	51	23	383.8	739.5
	R1663 = tau Leonis																																
	1663 is triple: AB 5.1 7.5 88" 182.7, dT = +225sec : AD 5.1 9.5 758" 92.0, dT = +879sec																																
26	Jan	9	8	9	46.3	R	1753 K0		6.7	6.2		63-	105	-8	57	19	23N	1	165	339	+6.2	+2.2	-0.1	-3.4	.247	132.6		12	11	22.0	- 2	41	57	387.9	687.4
26	Jan	10	4	21	23.3	r	1843KF5		7.0	6.8		54-	95		16	89	74N	309	73	288	+6.1	+3.1	+0.2	-1.9	.480	173.0		12	50	5.1	- 7	37	56	395.5	928.7
26	Jan	11	4	33	57.9	R	1949pA0		5.9			44-	84		13	97	66S	266	29	246	+5.0	+4.2	+0.2	-1.2	.416	-145.9		13	34	40.4	-13	12	52	399.7	974.5
	1949 is triple: AB 6.30 7.29 0.43" 69.7, dT = +1sec : AB,C 5.9 12.4 27.5" 143.6, dT = +36sec																																
	1949 is a close double. Observations are highly desired																																
26	Jan	11	6	44	22.8	r	158057KF3		8.0	7.8		44-	83		39	79	60N	321	84	301	+4.8	+4.4	+0.5	-2.3	.404	165.7		13	38	27.8	-13	33	22	397.4	802.6
26	Jan	13	6	1	39.9	r	183245pF2		8.5			26-	61		17	105	62N	311	72	296	+2.5	+5.7	-0.3	-1.8	.483	164.9		15	11	4.8	-22	4	40	403.3	978.0
	183245 is double: AB 8.49 12.22 3.74" 56.7, dT = +2.1sec																																
	183245 is a close double. Observations are highly desired																																
26	Jan	14	6	14	30.5	R	184032kA2		7.8	7.6		18-	50		13	112	82N	285	48	275	+1.2	+6.1	-0.2	-1.3	.521	-174.8		16	1	26.6	-25	11	55	404.0	1025.4
26	Jan	14	7	25	47.5	r	184081kA2		8.2	8.1		18-	50		26	104	40N	327	85	317	+1.2	+6.2	-0.4	-2.4	.386	145.1		16	4	20.1	-25	16	27	402.5	917.3
26	Jan	15	7	59	6.1	r	184855KF0		8.6	8.4		11-	39	-11	24	108	15N	345	103	339	-0.1	+6.2	-1.2	-3.5	.248	121.2		16	58	30.6	-27	6	45	401.8	932.4
26	Jan	16	7	37	56.3	R	185840cB9		8.6	8.6		6-	28		11	117	89N	263	26	262	-1.1	+5.9	-0.1	-0.9	.510	-163.8		17	51	9.8	-27	49	46	401.3	1034.5
	185840 is double: ** 9.2 9.2 0.10" 90.0, dT = +0.19sec																																
	185840 has been reported as non-instantaneous (OCc 122). Observations are highly desired																																
26	Jan	16	7	44	29.9	r	185856 M0		9.7	8.8		6-	28		11	116	22N	330	93	329	-1.1	+5.9	-1.1	-2.6	.331	128.9		17	51	58.8	-27	35	34	401.2	1024.6
26	Jan	16	7	46	3.6	R	X145167 M0		8.6	6.9V		6-	28		12	116	39S	211	334	210	-1.1	+5.9	+1.4	+1.5	.198	-112.1	.08	17	52	0.7	-28	1	21	401.2	1022.7
	X145167 = KW Sgr, 11.0 to 13.2, pg, Type SRC, Period 670. days																																
26	Jan	16	7	46	18.3	r	X145090		9.5	9.5		6-	28		12	116	60S	233	355	232	-1.1	+5.9	+0.5	+0.0	.361	-133.5		17	51	42.8	-27	57	40	401.1	1021.7
26	Jan	16	8	5	5.4	r	185868 K7		9.5	8.6		6-	28	-10	15	113	79N	273	35	272	-1.1	+5.9	+0.0	-1.1	.507	-174.0		17	52	12.7	-27	49	20	400.8	991.3
26	Jan	16	8	16	39.4	r	185892 A2		7.9	7.8		6-	28	-8	17	112	18N	334	94	333	-1.1	+6.0	-1.1	-3.0	.290	125.3		17	53	16.8	-27	37	44	400.5	973.4
26	Jan	16	8	24	33.9	r	185893 A0		8.3	8.3		6-	27	-7	19	111	47S	219	338	218	-1.2	+6.0	+1.4	+0.9	.241	-119.2		17	53	21.2	-28	3	26	400.3	961.0
26	Jan	23	0	25	6.4	d	146715kA0		8.5	8.4		17+	49		11	276	43S	112	347	133	-5.9	-2.2	+0.5	+0.7	.317	-52.7		23	28	2.2	- 1	28	6	380.4	963.5
26	Jan	25	1	39	4.1	d	163pF2		7.3	7.1		37+	75		6	289	49S	107	340	129	-5.2	-5.2	+0.5	+0.8	.370	-42.7		1	7	4.0	11	33	8	374.4	913.9
	163 is double: AB 7.3 10.5 8.3" 201.5, dT = -1.6sec																																

Occultation prediction for Ricardo Sanchez Observatorio
E. Longitude - 58 27 33.2, Latitude -34 38 32.3, Alt. 2m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon Alt	Sun Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
							163 is a close double. Observations are highly desired																											
26	Jan	31	1	24	29.7	d	1093SF8	6.6	s			95+	155	27	16	41S	157	323	151	+2.5	-6.2	+1.8	-2.3	.228	-55.0		7	12	49.0	27	13	30	363.8	703.1
							1093 is triple: AB 7.24 7.27 0.67" 296.4, dT = -2.2sec : AC 7.2 12.8 13.6" 73.9, dT = +7sec																											
							1093 is a close double. Observations are highly desired																											
							1093 = NSV 3453, 6.43 to 6.46, V																											
26	Jan	31	1	24	29.7	d X	99111S	7.2	7.0s			95+	155	27	16	41S	157	323	151	+2.5	-6.2	+1.8	-2.3	.228	-55.0		7	12	49.0	27	13	30	363.8	703.1
							X 99111 is triple: BA 7.3 7.2 0.67" 116.4, dT = +2.2sec : BC 7.3 12.7 14.0" 67.3, dT = +0.09sec																											
							X 99111 is a close double. Observations are highly desired																											
							X 99111 = NSV 3453, 6.43 to 6.46, V																											
26	Jan	31	4	58	31.0	d	1108cG8	7.0	6.5			96+	156	20	326	65S	134	345	127	+2.0	-5.9	+0.8	-0.3	.425	-21.4		7	19	30.8	26	49	23	364.7	807.2
							1108 is double: ** 7.7 7.7 0.10" 90.0, dT = +0.17sec																											
							1108 has been reported as non-instantaneous (OCc1353). Observations are highly desired																											
26	Feb	3	8	15	12.1	r	1501 G5	7.2	6.7			98-	162	27	309	45S	243	104	224	+4.7	-1.1	+3.0	+3.5	.199	-115.4		10	15	9.7	11	40	27	374.5	841.4
26	Feb	5	6	28	33.2	R	1708wF7	6.2	5.9			87-	138	56	6	53S	258	73	236	+5.4	+1.8	+3.7	+0.6	.216	-124.8		11	49	1.3	- 0	19	7	382.2	702.0
							1708 is double: AB 6.2 13.1 27.4" 128.3, dT = +82sec																											
26	Feb	7	4	11	14.2	R	1907kA2	6.6	6.5			72-	116	33	81	64S	267	31	246	+4.9	+4.1	+1.2	-1.2	.345	-141.2		13	17	22.0	-11	29	1	393.2	845.4
26	Feb	7	5	42	21.5	r	1913pA2	7.3	7.2			71-	115	50	64	67N	317	88	296	+4.7	+4.2	+1.0	-2.2	.390	172.6		13	19	44.1	-11	40	23	392.0	746.9
							1913 is double: AB 7.3 11.4 4.1" 273.0, dT = -8sec																											
							1913 is a close double. Observations are highly desired																											
26	Feb	7	7	49	44	M	1919 K5	6.9	6.0s			71-	114	68	12	17S	220	31	200	+4.3	+4.5	+9.9	+9.9	.000	-90.0		13	22	8.3	-12	34	46	391.4	665.5
							1919 = NSV 19751, 6.98 to 7.03, Hp																											
26	Feb	9	7	49	23.2	r	183039SK5	8.2				52-	92	63	68	23N	354	119	338	+2.4	+6.1	-0.2	-4.2	.221	128.6		14	57	26.5	-21	24	42	397.6	683.0
							183039 is multiple: BC 8.2 9.5 0.016" 57.8, dT = -0.03sec : Ba,Bb 8.2 9.8 0.23" 189.4, dT = +1sec : BA 8.2 5.9 26.4" 127.8, dT = +83sec : BG 8.2 18.0 234" 317.0, dT = -847sec																											
							183039 is a close double. Observations are highly desired																											
26	Feb	9	7	50	41.7	R	2134SK4	5.9	5.2v			52-	92	64	67	23N	354	119	338	+2.4	+6.1	-0.2	-4.2	.221	128.6		14	57	28.0	-21	24	56	397.6	681.8
							2134 is multiple: AB 5.9 8.2 26.4" 307.8, dT = -83sec : AE 5.9 13.1 156" 350.9, dT = -705sec : AC 5.9 14.0 229" 355.5, dT = -1039sec : AG 5.9 18.0 258" 316.0, dT = -924sec																											
							2134 = KX Lib, 5.72, range 0.04, V, Type BY																											
26	Feb	10	4	53	39.4	r	183713 A5	7.4	7.2			43-	82	21	106	71N	302	61	289	+1.7	+6.2	-0.1	-1.7	.486	172.2		15	41	57.8	-24	18	0	402.1	957.1
26	Feb	10	5	52	33.3	r	2248 A2	7.6	7.4S			43-	82	32	99	36N	336	93	324	+1.6	+6.3	-0.4	-2.8	.337	138.9		15	44	17.7	-24	23	44	401.0	869.4
							2248 = NSV 20388, 7.59, , Type VAR:																											
26	Feb	10	7	5	36.9	r	2251KK0	7.5	7.0			42-	81	47	90	70N	302	57	290	+1.4	+6.4	+0.8	-2.0	.394	174.5		15	45	49.8	-24	43	1	399.8	767.3
26	Feb	10	8	40	51.9	R	183802pA0	7.2				42-	81	-9	66	74	54S	245	4	233	+1.1	+6.5	+3.3	+0.8	.217	-129.4		15	48	3.3	-25	12	56	398.7	660.6
							183802 is double: AB 7.60 8.49 0.10" 95.9, dT = +0.4sec																											
							183802 is a close double. Observations are highly desired																											
26	Feb	10	12	37	16.6	r	2268MB2	4.5				41-	80	39	60	279	46N	325	209	313	+0.2	+6.7	+2.3	-2.4	.237	136.4		15	53	36.7	-25	19	38	399.0	631.8
							R2268 = 2 Scorpii																											
							2268 is triple: Aa,Ab 5.6 5.6 0.10" : AB 4.69 6.98 2.39" 267.4, dT = -5sec																											
							2268 is a close double. Observations are highly desired																											
26	Feb	11	3	58	58.8	r	2373 K1	6.1	5.5			34-	72	3	120	89N	278	45	270	+0.4	+6.2	-0.5	-1.1	.557	-172.0		16	31	22.8	-26	32	16	404.1	1103.3
26	Feb	11	7	25	56.7	r	2389kB9	8.4	8.4			33-	70	42	97	69N	297	50	289	+0.2	+6.5	+0.6	-1.9	.404	173.0		16	38	36.3	-26	59	22	400.1	790.3
26	Feb	12	16	24	23	Gr	2554cF7	4.5	4.2V			22-	56	67	35	** GRAZE: CA 9.8N; Dist.107km in az. 145deg. [Lat =-35.82+0.57(E.Long+58.46)]																							
26	Feb	12	16	26	18	m	2554cF7	4.5	4.2V			22-	56	69	36	258	10N	348	234	346	-2.7	+6.2	+9.9	+9.9	.000	90.0		17	47	33.6	-27	49	51	398.4	821.4
							R2554 = X Sagittarii																											
							2554 is double: AB 2.5 8.1 132.0																											
							2554 = X Sgr, 4.22 to 4.86, V, Type DCEP, Period 7.012770 days, Phase 83%																											
26	Feb	13	8	45	0	m	186903 K4	7.7	6.8			16-	48	-9	37	101	12S	184	298	187	-2.1	+5.8	+9.9	+9.9	.000	-90.0		18	30	53.7	-27	57	6	396.5	798.0

Occultation prediction for Ricardo Sanchez Observatorio
E. Longitude - 58 27 33.2, Latitude -34 38 32.3, Alt. 2m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon	Sun Alt	Moon Alt	Az	CA o	PA o	VA o	AA o	Libration L	B	A m/o	B m/o	RV "/s	Cct o	dur sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	Feb	13	17	28	41.5	d	2721cB8	3.2	3.2			15-	45	62	34	258	-62N	53	298	57	-3.8	+5.5	+0.2	+2.1	.430	17.7		18	45	39.4	-26	59	27	395.7	866.0
	R2721 = phi Sagittarii																																		
	2721 is double: 3.1 0.8" 270.5, dT = -1.5sec																																		
	2721 is a close double. Observations are highly desired																																		
26	Feb	13	18	28	51.2	R	2721cB8	3.2	3.2			14-	44	52	22	252	82N	269	151	273	-3.9	+5.4	+0.3	+1.1	.476	162.4		18	45	39.4	-26	59	27	396.7	961.5
	R2721 = phi Sagittarii																																		
	2721 is double: 3.1 0.8" 270.5, dT = -1.6sec																																		
	2721 is a close double. Observations are highly desired																																		
26	Feb	14	16	10	37	Gr	2864dB8	4.6	4.6			8-	34	66	57	** GRAZE: CA 10.7N; Dist.183km in az. 141deg. [Lat =-36.76+0.66(E.Long+58.46)]																				
26	Feb	14	16	14	46	m	2864dB8	4.6	4.6			8-	34	68	58	278	11N	334	218	343	-4.3	+4.7	+9.9	+9.9	.000	90.0		19	36	42.4	-24	53	1	390.5	729.1
	R2864 = 52 Sagittarii																																		
	2864 is double: AB 4.7 9.2 2.3" 175.7																																		
	2864 is a close double. Observations are highly desired																																		
26	Feb	21	23	31	31.5	d	251	K0	7.6	7.0		22+	56	-11	14	301	55S	101	329	121	-3.4	-6.1	+1.0	+0.9	.384	-35.1		1	42	26.9	15	46	43	370.7	844.2
26	Feb	25	1	8	24.2	D	707SA2	5.7	5.7			56+	96		15	322	24N	17	233	25	-0.3	-7.6	+3.4	+4.8	.132	72.2		4	41	19.8	28	36	54	368.5	768.4
	707 is triple: AB 5.7 10.7 44" 55.0, dT = +264sec : AC 5.7 12.0 90" 303.0, dT = +185sec																																		
26	Feb	25	1	20	35	Gr	707SA2	5.7	5.7			56+	97		13	** GRAZE: CA 7.0N; Dist.126km in az. 33deg. [Lat =-33.29-0.53(E.Long+58.46)]																				
26	Feb	25	23	8	25.6	D	864	K1	6.6	6.1		66+	109	-7	26	2	69S	111	290	114	+1.1	-7.3	+2.3	-0.5	.352	-21.8		5	43	22.8	29	12	1	367.6	675.1
26	Feb	26	0	19	17.0	d	77506	F5	7.4	7.1		67+	109		25	345	86N	87	281	89	+0.9	-7.3	+2.2	+0.5	.384	7.7		5	45	31.8	29	17	55	367.8	691.0
26	Mar	4	3	0	50.2	r	1657cA2	6.7	6.6			100-	172		47	35	67N	320	112	298	+4.8	+0.9	+1.3	-1.9	.390	171.3		11	25	39.5	3	18	4	380.6	728.7
	R1657 = 82 Leonis																																		
	1657 is double: ** 7.5 7.5 1.0, dT = 0.00sec																																		
	Distance of 1657 to Terminator = 7.5"; to 3km sunlit peak = 0.6"																																		
26	Mar	4	4	1	27.4	r	1660SK0	6.6	6.1			99-	172		52	13	75N	313	122	291	+4.6	+1.0	+1.6	-1.6	.386	-179.7		11	26	45.3	3	0	47	380.4	712.1
	R1660 = 83 Leonis																																		
	1660 is triple: AB 6.6 7.5 36" 238.3, dT = -25sec : AC 6.6 11.1 220" 191.0, dT = +298sec																																		
	Distance of 1660 to Terminator = 9.0"; to 3km sunlit peak = 1.4"																																		
26	Mar	4	4	50	4.9	R	1663pG8	5.0	4.4			99-	172		53	354	55N	333	158	311	+4.5	+1.1	+1.0	-1.9	.364	160.6		11	27	56.2	2	51	23	380.4	712.3
	R1663 = tau Leonis																																		
	1663 is triple: AB 5.1 7.5 88" 182.7, dT = +210sec : AD 5.1 9.5 758" 92.0, dT = +1021sec																																		
	Distance of 1663 to Terminator = 7.0"; to 3km sunlit peak = 0.3"																																		
26	Mar	5	2	11	58.1	r	1753	K0	6.7	6.2		97-	160		37	64	43N	345	117	323	+4.9	+2.3	+0.4	-2.7	.343	143.6		12	11	22.0	- 2	41	57	385.4	796.2
26	Mar	5	3	25	0.9	r	138647pG4	7.4	7.1			97-	160		49	46	71N	317	100	295	+4.7	+2.4	+1.2	-2.0	.394	174.9		12	12	28.8	- 3	5	4	384.6	738.2
	138647 is double: AB 7.5 13.0 1.8" 71.0, dT = +1.9sec																																		
	138647 is a close double. Observations are highly desired																																		
26	Mar	5	9	23	17.6	r	138724cK0	7.2	6.6			96-	158	-5	27	284	33N	356	230	334	+3.6	+3.1	+0.3	-3.1	.261	126.1		12	20	16.9	- 4	30	37	387.6	831.4
	138724 is double: ** 7.9 7.9 0.040" 350.0, dT = -0.15sec																																		
	138724 has been reported as non-instantaneous (OCc1083). Observations are highly desired																																		
26	Mar	6	2	43	58.8	r	1859	B9	6.9	6.9		92-	148		39	72	82N	304	72	283	+4.4	+3.6	+0.9	-1.9	.427	-176.6		12	57	19.0	- 8	54	39	389.6	808.2
26	Mar	7	3	20	43.7	r	158128	K5	7.5	6.6		86-	136		41	79	41S	246	9	226	+3.7	+4.8	+2.6	-0.1	.210	-119.5		13	44	22.0	-14	45	38	393.4	811.9
26	Mar	7	3	58	4.5	r	158141	M1	7.7	6.8		86-	136		49	72	76S	280	46	260	+3.6	+4.9	+1.6	-1.4	.359	-152.7		13	45	8.7	-14	46	1	392.9	770.2
26	Mar	8	4	43	18.9	r	2083	K0	7.9	7.3		78-	125		51	78	67N	314	75	297	+2.7	+5.7	+0.8	-2.3	.388	169.9		14	34	9.7	-19	31	9	396.0	756.3
26	Mar	8	8	59	2.7	r	182736	K2	8.1	7.4		77-	123	-11	66	300	79N	301	171	284	+1.7	+6.1	+2.1	-0.9	.327	175.2		14	39	17.8	-20	21	27	395.6	630.2
26	Mar	9	9	20	47.8	r	183520kA5	8.2	8.0			69-	112	-6	73	302	64N	312	182	298	+0.7	+6.6	+2.1	-1.8	.292	158.2		15	29	53.1	-24	2	41	397.4	605.3
26	Mar	11	5	51	20.0	r	185097pF2	7.9	7.7			51-	91		39	100	79N	286	39	281	-0.8	+6.4	+0.7	-1.6	.413	179.8		17	10	9.1	-27	46	24	400.1	801.3
	185097 is double: AB 7.9 11.4 1.8" 61.8, dT = +3sec																																		
	185097 is a close double. Observations are highly desired																																		
26	Mar	11	6	57	44.7	R	2470kB9	6.1	6.2			51-	91		52	92	43N	322	73	317	-1.0	+6.5	+0.5	-3.1	.294	143.2		17	12	25.1	-27	45	44	399.0	711.3

Occultation prediction for Ricardo Sanchez Observatorio
E. Longitude - 58 27 33.2, Latitude -34 38 32.3, Alt. 2m; Telescope dia 15cm; dMag 0.0

day	Time	P	Star	Sp	Mag	Mag	%	Elon	Sun	Moon	CA	PA	VA	AA	Libration		A	B	RV	Cct	durn	R.A. (J2000)	Dec	Mdist	SV
y m d	h m s		No	D	v	r	V	ill		Alt	Alt	Az	o	o	o	o	L	B	m/o	m/o	"/s	o	sec	h m s	o m s	Mm	m/s
26 Mar 11	7 47 57.9	R	2474	kF2	6.7	6.4		50-	90	62	85	24N	340	92	335	-1.1	+6.6	+0.3	-5.2	.185	123.1		17 14 2.0	-27 47 48	398.4	655.4
26 Mar 11	14 24 41.1	r	2505	K4	5.3	4.5		49-	89	51 34	257	61S	245	130	241	-2.6	+6.4	+0.4	+1.9	.405	-163.7		17 23 21.6	-28 8 34	400.1	818.7
R2505 = 43 Ophiuchi																										
26 Mar 12	5 5 47.7	R	2601	SK4	6.8			42-	80	20	110	64N	294	54	295	-1.8	+6.0	-0.1	-1.7	.462	163.8		18 2 54.3	-27 49 36	400.4	934.8
R2601 = 7 Sagittarii																										
2601 is triple: Aa,Ab 6.90 9.37 0.34" 336.5, dT = -0.5sec : AB 6.9 13.0 9.7" 48.0, dT = +8sec																										
2601 is a close double. Observations are highly desired																										
26 Mar 12	6 11 46.3	r	186250	K5	7.7	6.8		41-	80	33	103	46N	313	68	313	-2.0	+6.0	+0.0	-2.6	.353	145.4		18 5 20.8	-27 50 3	399.1	830.7
26 Mar 12	7 50 21.8	R	X150546	MG8	7.2	7.2		41-	79	53	92	25N	333	85	334	-2.2	+6.1	+0.2	-4.9	.194	122.5		18 8 34.8	-27 51 51	397.3	695.0
X150546 is triple: Ba,Bb 9.1 11.1 0.10" 146.0, dT = +0.5sec : AB 7.6 9.1 2.2" 270.0, dT = -5sec																										
X150546 is a close double. Observations are highly desired																										
26 Mar 12	9 32 14.3	r	186400	G5	7.8	7.3		40-	79	-5 73	73	85S	263	19	263	-2.6	+6.2	+2.4	-0.2	.313	-172.7		18 10 32.2	-28 9 13	396.1	606.2
26 Mar 14	8 4 9.0	r	188744	A7	8.5	8.3		23-	57	33	98	47S	213	330	223	-4.0	+4.4	+1.6	+1.5	.281	-131.6		19 57 2.0	-24 20 14	392.1	803.3
26 Mar 16	7 42 37.7	r	164542	G5	8.9	8.6		8-	33	6	105	69S	228	353	246	-4.8	+1.8	+0.2	+0.2	.494	-156.4		21 38 34.9	-15 35 59	385.4	1007.1
26 Mar 16	8 0 31.9	r	164545	dG0	8.6	8.3		8-	33	9	102	86N	253	16	271	-4.9	+1.8	+0.1	-0.6	.524	178.3		21 38 59.5	-15 27 9	385.0	979.5
164545 is double: AB 8.7 11.7 1.5" 106.3, dT = +2.4sec																										
164545 is a close double. Observations are highly desired																										
26 Mar 16	8 36 0.5	r	164564	K0	9.6	8.9		8-	33	16	98	66S	224	347	242	-4.9	+1.8	+0.5	+0.4	.449	-154.5		21 40 26.7	-15 27 45	384.1	926.7
26 Mar 16	17 29 37.9	r	3206	F3	5.1	4.9s		7-	30	51 41	283	53S	212	88	231	-6.2	+0.9	+0.4	+2.3	.427	-158.6		21 53 17.8	-13 33 6	379.8	844.8
R3206 = Kuh = mu Capricorni																										
3206 = NSV 25781, 5.07, range 0.03, V, Type VAR:																										
26 Mar 22	23 35 39.1	d	75876	K0	7.3	6.7		19+	52	4	304	85N	66	295	80	-0.9	-7.3	+1.0	+1.6	.480	14.4		3 20 26.8	24 32 36	366.5	881.8
26 Mar 23	22 43 36	m	638	SK1	5.0	4.4		29+	65	-10 18	324	-7S	175	27	184	+0.5	-7.6	+9.9	+9.9	.000	-90.0		4 20 21.2	27 21 3	365.8	753.6
R638 = phi Tauri																										
638 is triple: AB 5.1 7.5 48" 259.8 : AC 5.1 12.3 117" 22.8																										
26 Mar 25	0 28 33.2	D	824	F6	6.2	6.0		41+	79	12	318	70N	66	285	69	+1.6	-7.3	+1.7	+1.6	.385	32.2		5 29 40.7	29 11 11	368.3	812.2
26 Mar 29	0 37 48.0	d	1402	K0	7.3	6.5		83+	131	38	6	31N	52	226	35	+4.7	-2.9	+5.9	+3.2	.109	73.3	.01	9 29 32.9	17 39 7	376.2	694.1
26 Mar 30	1 24 31.8	d	1510	pK0	7.7	7.1		90+	144	44	7	32S	170	344	151	+4.8	-1.2	+0.5	-2.4	.290	-40.5		10 20 26.4	11 21 10	378.9	701.6
1510 is double: AB 7.8 12.2 43" 6.5, dT = -142sec																										
26 Mar 30	2 11 10.2	d	99084	kG5	7.8	7.4		90+	144	44	352	88S	115	302	95	+4.6	-1.1	+2.0	-0.7	.372	15.9		10 22 9.5	11 18 37	379.0	711.5
26 Mar 30	4 23 57.4	d	1522	K0	6.8	6.2		91+	145	32	314	41S	161	19	141	+4.3	-0.8	+0.3	-1.6	.366	-32.1		10 24 19.5	10 35 16	380.4	797.2
26 Mar 30	5 23 33.6	d	99120	K0	7.2	6.5		91+	145	23	302	81N	103	329	83	+4.2	-0.7	+1.1	+0.6	.425	23.7		10 26 26.6	10 30 10	381.4	858.8
26 Apr 1	5 26 44.9	d	138521	K0	7.1	6.6		99+	169	46	310	58S	136	356	114	+3.9	+2.4	+1.2	-1.0	.391	-6.6		11 59 34.0	- 1 55 7	386.1	737.7
Distance of 138521 to Terminator = 12.1"; to 3km sunlit peak = 3.3"																										
26 Apr 3	2 52 47.6	R	1930	pK5	5.3	4.5s		99-	168	58	54	65S	282	59	261	+3.5	+4.5	+2.1	-1.3	.336	-152.3		13 26 43.2	-12 42 28	391.6	721.4
R1930 = 68 Virginis																										
1930 is double: ** 6.4 6.4 0.10" 90.0, dT = +0.29sec																										
1930 has been reported as non-instantaneous (OCc 164). Observations are highly desired																										
1930 = NSV 6244, 5.20 to 5.28, V																										
Distance of 1930 to Terminator = 18.3"; to 3km sunlit peak = 7.4"																										
26 Apr 3	6 38 57.5	r	1940	kF0	6.9	6.8		99-	166	56	300	88S	304	171	284	+2.7	+4.9	+1.8	-0.8	.358	178.9		13 31 13.2	-13 26 56	392.2	680.4
26 Apr 4	7 16 42.2	r	158495	SA3	7.3	7.1		95-	155	60	295	88S	297	169	278	+1.9	+5.8	+2.0	-0.5	.341	-178.8		14 19 25.8	-18 31 25	394.9	653.0
158495 is triple: AB 7.3 10.7 3.6" 354.7, dT = -6sec : AC 7.3 12.7 132" 339.3, dT = -285sec																										
158495 is a close double. Observations are highly desired																										
26 Apr 5	4 28 46.5	R	2157	K0	6.1	5.6s		91-	144	65	67	13N	10	135	354	+1.6	+6.2	-1.9	-6.7	.130	111.4		15 6 27.1	-22 1 55	396.8	682.9
2157 = NSV 6931, 6.17, range 0.09, V																										
Distance of 2157 to Terminator = 11.2"; to 3km sunlit peak = 1.7"																										
26 Apr 5	5 9 16.8	r	183168	kK1	7.1	6.5		91-	144	73	51	67S	269	45	254	+1.5	+6.2	+2.7	-0.4	.289	-148.5		15 6 3.1	-22 24 14	396.5	651.1

Occultation prediction for Ricardo Sanchez Observatorio
E. Longitude - 58 27 33.2, Latitude -34 38 32.3, Alt. 2m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon Alt	Sun Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	Apr	6	3	22	16.8	R	2273	B8	5.9	5.9	v	85-	134	44	93	68S	265	19	253	+0.8	+6.3	+1.4	-1.0	.352	-149.4		15	54	39.5	-25	14	37	399.7	791.9
	R2273 = 3 Scorpii (V927)																																
	2273 = V0927 Sco, 5.8, range 0.03, V, Type SXARI, Period 1.45937 days, Phase 70%																																
26	Apr	6	9	34	6.0	R	2298	kK3	5.0	4.3		83-	132	-8	56	274	87S	283	169	272	-0.5	+6.6	+1.9	+0.4	.338	174.7		16	3	20.6	-25	51	55	399.2	657.6
26	Apr	7	1	34	26.8	r	2404	pG2	6.7	6.4		78-	124	14	113	68N	303	65	295	-0.2	+6.2	-0.4	-1.7	.495	163.9		16	43	51.4	-26	48	32	403.4	1009.1
	2404 is double: AB 6.7 17.0 26.7" 255.3, dT = -36sec																																
26	Apr	7	8	18	22.9	r	184783	G6	7.9	7.4		76-	121	81	313	61S	250	112	243	-1.3	+6.6	+2.7	+1.5	.271	-152.9		16	54	49.6	-27	44	55	398.7	587.4
26	Apr	8	4	29	3.3	R	2545	cF0	6.4	6.2		68-	111	38	100	66N	298	51	296	-1.6	+6.1	+0.5	-2.0	.393	163.5		17	43	17.7	-27	53	2	400.6	796.3
	2545 is double: ** 6.6 8.5 0.09" 200.4, dT = +0.03sec																																
	2545 has been reported as non-instantaneous (OCc 113). Observations are highly desired																																
26	Apr	8	6	20	16	m	2554	cF7	4.5	4.2	V	68-	111	60	87	-5N	8	119	6	-2.0	+6.2	+9.9	+9.9	.000	90.0		17	47	33.6	-27	49	51	399.0	656.3
	R2554 = X Sagittarii																																
	2554 is double: AB 2.5 8.1 132.0																																
	2554 = X Sgr, 4.22 to 4.86, V, Type DCEP, Period 7.012770 days, Phase 63%																																
26	Apr	9	9	15	5	Gr	2721	cB8	3.2	3.2		58-	99	80	** GRAZE: CA 6.9N; Dist.321km in az. 170deg. [Lat =-37.57+0.14(E.Long+58.46)]																		
26	Apr	9	9	16	47	M	2721	cB8	3.2	3.2		58-	99	82	23	7N	349	148	353	-3.7	+5.6	+9.9	+9.9	.000	90.0		18	45	39.4	-26	59	27	396.2	591.5
	R2721 = phi Sagittarii																																
	2721 is double: 3.1 0.8" 270.3																																
	2721 is a close double. Observations are highly desired																																
26	Apr	9	9	38	36.2	R	2723	K0	6.6	6.1		58-	99	-8	83	346	22S	197	30	201	-3.8	+5.6	+1.5	+5.9	.157	-120.4		18	46	3.9	-27	29	56	396.1	594.5
26	Apr	9	15	12	10	Gr	2750	SB2	2.1	2.1		56-	97	44	19	** GRAZE: CA 13.4N; Dist.210km in az. 140deg. [Lat =-37.13+0.70(E.Long+58.46)]																		
26	Apr	9	15	16	2	M	2750	SB2	2.1	2.1		56-	97	47	19	251	14N	341	221	346	-4.8	+5.0	+9.9	+9.9	.000	90.0		18	55	15.9	-26	17	48	399.8	974.0
	R2750 = Nunki = sigma Sagittarii																																
	2750 is triple: Aa,Ab 2.0 202.0 : AB 2.0 9.9 356" 238.2																																
26	Apr	10	8	17	49.5	r	188347	KF6	8.4	8.1		48-	88	62	78	60N	290	48	299	-4.5	+4.7	+2.1	-2.1	.278	146.5		19	37	2.0	-25	4	49	393.9	636.4
26	Apr	11	7	33	24.1	r	189313	A2	8.2	8.1		39-	77	42	89	68S	233	350	246	-5.1	+3.6	+1.5	+0.5	.360	-158.6		20	28	5.3	-22	1	24	391.3	734.3
26	Apr	12	7	33	51.7	R	3115	F0	7.1	6.9		29-	65	31	91	75N	266	26	283	-5.7	+2.3	+0.9	-1.1	.414	163.5		21	18	15.7	-17	27	44	387.3	810.5
	R3115 = 31 Capricorni																																
26	Apr	12	9	51	28	Gr	3126	G8	4.3	3.8	v	28-	64	-6	58	** GRAZE: CA 10.4N; Dist. 80km in az. 163deg. [Lat =-35.40+0.26(E.Long+58.46)]																		
26	Apr	12	9	51	57	M	3126	G8	4.3	3.8	v	28-	64	-5	57	65	10N	331	99	347	-6.1	+2.2	+9.9	+9.9	.000	90.0		21	22	14.8	-16	50	4	384.7	682.8
	R3126 = Tae = iota Capricorni																																
	3126 = iot Cap, 4.27, range 0.06, V, Type BY																																
26	Apr	13	9	3	39.4	d	3253	kB5	5.4	5.5	V	20-	53	36	78	-8N	346	111	6	-6.1	+0.8	+0.1	+8.4	.114	74.5		22	10	37.5	-11	33	54	380.8	791.8
	R3253 = 38 Aquarii																																
	3253 = HD 210424, 5.44, , Type ACV, Period 3.9613 days, Phase 76%																																
26	Apr	13	9	13	58	Gr	3253	kB5	5.4	5.5	V	20-	53	39	** GRAZE: CA 8.5N; Dist. 65km in az. 349deg. [Lat =-34.04+0.15(E.Long+58.46)]																		
26	Apr	13	9	24	0.1	R	3253	kB5	5.4	5.5	V	20-	53	-11	40	75	25N	314	80	334	-6.2	+0.7	+2.7	-8.3	.111	105.4		22	10	37.5	-11	33	54	380.3	770.6
	R3253 = 38 Aquarii																																
	3253 = HD 210424, 5.44, , Type ACV, Period 3.9613 days, Phase 76%																																
26	Apr	14	8	51	56.1	r	3369	kF0	8.4	8.3		12-	40	21	82	46N	292	57	313	-5.9	-0.8	+0.9	-2.7	.302	128.0		22	58	9.6	-	5	41	8	376.4	894.3
26	Apr	14	9	9	41.7	r	146419	SK5	8.4	7.7		12-	40	25	79	60N	278	44	299	-5.9	-0.8	+1.0	-1.7	.371	140.9		22	58	35.6	-	5	40	26	376.0	872.3
	146419 is triple: 8.2 8.4 : AB 9.3 9.5 0.040" 69.0, dT = +0.09sec																																
	146419 is a close double. Observations are highly desired																																
26	Apr	15	8	34	54.8	R	3502	G5	7.2	6.7		6-	28	5	86	82S	242	7	264	-5.3	-2.3	+0.1	-0.2	.562	178.1		23	46	34.6	0	31	48	372.6	1017.0
26	Apr	15	9	17	30.2	d	3508	cA5	5.8	5.7		6-	27	13	79	-54N	34	160	56	-5.4	-2.4	+0.3	+0.8	.487	24.4		23	49	27.5	1	4	34	371.6	963.7
	R3508 = 21 Piscium																																
	3508 is double: ** 6.6 6.6 0.050"																																
	3508 has been reported as non-instantaneous (OCc1648). Observations are highly desired																																

Occultation prediction for Ricardo Sanchez Observatorio
E. Longitude - 58 27 33.2, Latitude -34 38 32.3, Alt. 2m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon	Sun Alt	Moon Alt	Az	CA o	PA o	VA o	AA o	Libration L	B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	Apr	15	10	15	5.3	R	3508	cA5	5.8	5.7		5-	27	-1	25	70	81N	260	29	282	-5.4	-2.5	+1.0	-0.8	.451	155.5		23	49	27.5	1	4	34	370.2	889.8
	R3508 = 21 Piscium																																	
	3508 is double: ** 6.6 6.6 0.050"																																	
	3508 has been reported as non-instantaneous (OCc1648). Observations are highly desired																																	
26	Apr	21	21	54	2.1	d	933	B8	7.8	7.8v		26+	61	-7	22	335	82N	80	284	80	+3.2	-6.8	+2.0	+0.9	.392	21.1		6	11	14.9	28	54	27	364.0	740.9
	933 = V0451 Aur, 7.74 to 7.8, Hp, Type SPB, Period 2.63323 days, Phase 40%																																	
26	Apr	22	23	0	51.8	D	1105	cG7	6.5			37+	75		23	333	22S	165	10	158	+4.3	-5.7	+0.1	-1.7	.258	-52.5		7	17	3.4	26	41	22	367.7	755.4
	1105 is double: AB 7.00 7.70 0.20" 236.6, dT = +0.24sec																																	
	1105 is a close double. Observations are highly desired																																	
26	Apr	22	23	52	54.0	D	1108	cG8	7.0	6.5		37+	75		18	322	80N	86	301	79	+4.2	-5.6	+1.6	+1.0	.405	26.9		7	19	30.8	26	49	23	368.4	811.0
	1108 is double: ** 7.7 7.7 0.10" 90.0, dT = +0.25sec																																	
	1108 has been reported as non-instantaneous (OCc1353). Observations are highly desired																																	
26	Apr	25	2	48	52.6	d	1383	cF5	6.6	6.4		60+	102		15	304	47S	151	17	135	+5.3	-2.6	+0.1	-0.9	.432	-27.5		9	18	58.9	17	42	19	377.7	891.9
	R1383 = 83 Cancri																																	
	1383 is double: AB 6.6 0.30" 328.1, dT = -0.7sec																																	
	1383 is a close double. Observations are highly desired																																	
26	Apr	25	22	16	51.2	d	98932	K2	7.8	7.0		69+	113		38	27	64N	85	242	66	+6.2	-1.7	+2.7	-0.5	.288	40.8		10	4	26.4	13	35	42	378.9	698.8
26	Apr	26	0	35	52.2	d	1481	A5	7.4	7.3		70+	114		41	344	44S	157	351	138	+5.8	-1.4	+0.8	-1.7	.347	-27.1		10	6	37.2	12	46	55	379.0	715.7
26	Apr	27	5	9	55	M	1600	wA5	5.0	4.9		80+	127		14	287	12N	34	266	13	+5.0	+0.7	+9.9	+9.9	.000	90.0		11	0	44.8	6	6	5	386.5	911.3
	R1600 = 59 Leonis																																	
	1600 is double: AB 5.0 12.6 40" 217.4																																	
26	Apr	27	5	9	55	Gr	1600	wA5	5.0	4.9		80+	127		13	** GRAZE: CA 11.5N; Dist. 13km in az. 196deg. [Lat =-34.77-0.24(E.Long+58.46)]																					
26	Apr	28	0	4	4.8	d	1692	cA3	6.9			87+	138		51	28	69S	134	291	112	+5.6	+1.6	+1.5	-1.8	.375	-1.1		11	40	24.1	0	57	8	386.1	702.8
	1692 is double: AB 7.00 10.04 0.18" 124.3, dT = +0.46sec																																	
	1692 is a close double. Observations are highly desired																																	
26	Apr	28	2	55	46.3	d	1697	kA2	7.8	7.8		87+	138		48	320	54S	148	0	126	+5.0	+1.9	+1.1	-1.5	.367	-16.8		11	43	19.9	0	11	7	386.7	718.7
26	Apr	29	1	53	2.4	d	138781	cF2	7.7			93+	150		61	0	20S	180	359	158	+4.7	+3.1	+0.0	-3.5	.247	-46.9		12	26	47.7	- 5	35	32	389.2	682.1
	138781 is double: AB 8.11 8.79 0.37" 85.9, dT = -0.1sec																																	
	138781 is a close double. Observations are highly desired																																	
	Distance of 138781 to Terminator = 17.5"; to 3km sunlit peak = 6.0"																																	
26	Apr	29	4	5	19.1	d	1792	PF2	7.4	7.1S		93+	150		49	306	70S	129	351	107	+4.3	+3.4	+1.5	-0.8	.376	-1.0		12	30	1.9	- 6	1	24	390.2	711.8
	1792 is triple: AB 7.4 13.0 3.3" 278.9, dT = -8sec : AC 7.4 13.0 18.8" 292.0, dT = -48sec																																	
	1792 is a close double. Observations are highly desired																																	
	1792 = NSV 19406, 7.36, , Type VAR:																																	
26	Apr	29	23	2	20.2	D	1888	K5	6.0	5.2		97+	160		36	77	76N	90	216	69	+4.6	+3.9	+1.4	-1.3	.347	36.3		13	9	45.3	-10	19	46	393.7	821.9
	R1888 = 50 Virginis																																	
26	Apr	30	0	33	21	Gr	157779	cMB	7.5	6.7V		97+	161		54	** GRAZE: CA 26.2N; Dist. 13km in az. 231deg. [Lat =-34.82-1.02(E.Long+58.46)]																					
	Distance of 157779 to Terminator = 13.1"; to 3km sunlit peak = 3.7"																																	
26	Apr	30	3	24	48.8	d	1901	PG0	7.2			97+	162		65	332	76N	88	291	67	+3.8	+4.5	+3.0	+0.5	.266	40.3		13	14	55.7	-11	22	10	392.2	663.5
	1901 is triple: Aa,Ab 7.35 9.14 0.48" 186.2, dT = -0.25sec : AB 7.1 8.2 116" 43.8, dT = +312sec																																	
	1901 is a close double. Observations are highly desired																																	
26	May	2	9	16	54	Gr	2134	SK4	5.9	5.2v		100-	172		22	** GRAZE: CA 40.3N; Dist. 32km in az. 341deg. [Lat =-34.34+0.28(E.Long+58.46)]																					
	Distance of 2134 to Terminator = 4.3"; to 3km sunlit peak = 0.0"																																	
26	May	2	9	22	53	r	2134	SK4	5.9	5.2v		100-	172		22	258	51N	0	241	344	+1.1	+6.1	+3.4	-9.4	.082	100.7	.02	14	57	28.0	-21	24	56	401.0	866.2
	2134 is multiple: AB 5.9 8.2 26.4" 307.8, dT = -195sec : AE 5.9 13.1 156" 351.2, dT = -1866sec : AC 5.9 14.0 230" 355.8, dT = -2779sec : AG 5.9 18.0 258" 316.0, dT = -2241sec																																	
	2134 = KX Lib, 5.72, range 0.04, V, Type BY																																	
	Distance of 2134 to Terminator = 5.6"; to 3km sunlit peak = 0.0"																																	

Occultation prediction for Ricardo Sanchez Observatorio
E. Longitude - 58 27 33.2, Latitude -34 38 32.3, Alt. 2m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon Sun Alt	Moon Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	May	3	8	33	5.6	r	2251KK0	7.5	7.0			98-	162	42	266	73N	315	200	302	+0.1	+6.5	+1.7	-1.0	.298	142.4		15	45	49.8	-24	43	1	400.5	730.7
26	May	4	1	11	8.7	D	2366dM1	1.1	0.1v			95-	153	33	101	-74N	92	207	83	+0.6	+6.2	+0.7	-1.2	.420	18.2	.10	16	29	24.5	-26	25	55	402.0	861.7
	R2366 = Antares = alpha Scorpii																																	
	2366 is double: AB 1.0 5.4 2.5" 277.9, dT = -6sec																																	
	2366 is a close double. Observations are highly desired																																	
	2366 = alf Sco, 0.75 to 1.21, V, Type SRC, Period 2180. days, Phase 80%																																	
26	May	4	2	18	49.9	R	2366dM1	1.1	0.1v			95-	153	47	93	69N	309	62	300	+0.4	+6.3	+0.6	-2.3	.372	161.6	.12	16	29	24.5	-26	25	55	400.9	762.5
	R2366 = Antares = alpha Scorpii																																	
	2366 is double: AB 1.0 5.4 2.5" 277.9, dT = -6sec																																	
	2366 is a close double. Observations are highly desired																																	
	2366 = alf Sco, 0.75 to 1.21, V, Type SRC, Period 2180. days, Phase 80%																																	
26	May	4	3	27	19.8	R	2373 K1	6.1	5.5			94-	153	61	83	54N	323	77	315	+0.2	+6.4	+0.8	-3.1	.292	146.3		16	31	22.8	-26	32	16	400.0	680.2
26	May	5	1	17	46.8	r	185295 G8	7.4	6.8			90-	142	25	107	52N	318	75	314	-0.6	+6.0	-0.4	-2.4	.384	145.9		17	21	5.6	-27	25	5	403.1	905.9
26	May	5	3	49	23.8	r	2512pB9	7.5	7.5			89-	142	55	90	23N	346	97	342	-1.0	+6.2	-0.5	-6.1	.156	116.1		17	26	5.9	-27	35	59	400.6	690.4
	2512 is double: AB 7.5 11.3 5.8" 347.8, dT = -37sec																																	
	2512 is a close double. Observations are highly desired																																	
26	May	6	2	16	44.3	r	2643 K1	6.7	6.0			83-	131	27	106	31S	213	330	214	-2.0	+5.5	+2.0	+1.8	.198	-116.3		18	16	57.5	-27	42	57	402.3	872.6
26	May	6	2	49	15.7	r	186606 M1	7.2	6.3v			83-	131	33	103	45N	317	72	318	-2.0	+5.6	-0.1	-2.9	.320	139.4		18	17	51.6	-27	21	17	401.7	821.4
	186606 = V4389 Sgr, 7.16 to 7.26, Hp, Type SRB:																																	
26	May	6	4	14	33.9	r	186671kK1	7.3	6.5			82-	130	50	93	45N	317	69	318	-2.2	+5.6	+0.7	-3.4	.267	137.4		18	20	21.2	-27	24	28	400.2	702.7
26	May	7	4	7	54.4	R	2804dK2	5.8	5.1			75-	120	38	98	62N	292	47	299	-3.4	+4.8	+0.7	-2.1	.357	154.9		19	13	13.7	-25	54	24	399.5	764.6
	2804 is double: AB 10.8 12.0 2.6" 69.4, dT = +5sec																																	
	2804 is a close double. Observations are highly desired																																	
26	May	8	8	49	59.7	r	189031 G8	7.9	7.5			65-	107	78	15	15S	183	350	195	-5.4	+3.7	+0.4	+5.9	.160	-119.7		20	12	53.7	-22	59	27	393.7	617.7
26	May	9	6	58	36.0	R	3069 A*	6.3	6.3v			55-	96	50	78	87N	257	18	272	-5.8	+2.6	+1.7	-0.4	.359	170.2		20	59	36.1	-19	2	7	391.3	691.1
	R3069 = 20 Capricorni (AO)																																	
	3069 = AO Cap, 6.25 to 6.30, V, Type ACV, Period 2.2411 days, Phase 74%																																	
26	May	10	4	19	58.7	r	3181SA7	6.0	5.8			46-	86	7	103	49S	210	334	228	-6.2	+1.3	+0.4	+1.0	.386	-138.8		21	44	1.0	-14	44	58	391.1	973.6
	R3181 = 45 Capricorni																																	
	3181 is triple: ** 6.7 6.7 0.050" : AB 5.4 9.5 4.3" 229.0, dT = -11sec																																	
	3181 has been reported as non-instantaneous (OCc1610). Observations are highly desired																																	
26	May	10	5	53	39.8	r	164647 F3	7.7	7.4			46-	85	25	91	34S	194	316	212	-6.3	+1.2	+0.9	+2.5	.268	-127.0		21	47	10.3	-14	30	50	388.8	837.9
26	May	10	9	19	18.8	d	3206 F3	5.1	4.9s			45-	84	63	44	-85S	75	219	93	-6.9	+1.0	+2.3	+0.2	.336	-20.8		21	53	17.8	-13	33	6	385.0	671.7
	R3206 = Kuh = mu Capricorni																																	
	3206 = NSV 25781, 5.07, range 0.03, V, Type VAR:																																	
26	May	10	10	39	18.6	R	3206 F3	5.1	4.9s			44-	83	0	69	357	50S	210	32	228	-7.2	+0.8	+1.2	+2.4	.337	-158.8		21	53	17.8	-13	33	6	384.5	673.6
	R3206 = Kuh = mu Capricorni																																	
	3206 = NSV 25781, 5.07, range 0.03, V, Type VAR:																																	
26	May	11	8	30	10	Gr	3322cG1	6.4				35-	72	45	** GRAZE: CA 12.9N; Dist.109km in az. 339deg. [Lat =-33.59+0.32(E.Long+58.46)]																					
26	May	11	8	43	0.8	R	3322cG1	6.4				35-	72	46	62	34N	305	77	325	-7.0	-0.5	+3.6	-5.8	.137	110.0		22	38	22.1	-	7	53	51	380.5	741.7
	3322 is double: AB 6.64 8.11 0.09" 294.4, dT = -0.6sec																																	
	3322 is a close double. Observations are highly desired																																	
26	May	14	9	30	1.8	r	92258kF8	9.2	8.8			8-	33	16	63	90N	254	25	275	-5.2	-4.8	+0.7	-0.6	.506	161.5		1	7	40.8	11	20	3	365.2	944.3
26	May	18	13	46	54.8	r	810SB7	1.7	1.7			5+	26	28	7	48	-86S	252	27	255	+2.5	-6.9	+0.6	-0.6	.519	-173.2		5	26	17.5	28	36	27	358.3	907.9
	R810 = El Nath = beta Tauri																																	
	810 is multiple: AC 1.9 19.0 8.4" 357.0, dT = +4sec : AD 1.9 18.5 9.8" 70.0, dT = +19sec : AE 1.9 10.9" 80.0, dT = +21sec : AF 1.9 15.8 11.6" 296.0, dT = -16sec																																	
	810 is a close double. Observations are highly desired																																	

Occultation prediction for Ricardo Sanchez Observatorio
E. Longitude - 58 27 33.2, Latitude -34 38 32.3, Alt. 2m; Telescope dia 15cm; dMag 0.0

y	m	day d	h	Time m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon Alt	Sun Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	May	18	22	0	42.7	d	77509	B9	8.5	8.5		6+ 29	4	309	72S	97	323	99	+1.7	-6.7	+0.7	+0.8	.530	4.0		5	45	36.6	28	41	40	359.3	926.4
26	May	18	22	1	21	m	77483	DB5	8.0	8.0		6+ 29	4	309	22N	11	238	13	+1.7	-6.7	+9.9	+9.9	.000	90.0		5	44	37.7	29	1	0	359.3	928.9
							77483 is double: AB 8.1 9.7 8.2" 0.1																											
							77483 is a close double. Observations are highly desired																											
26	May	19	23	16	22.7	d	1056	B9	7.2	7.3		14+ 44	4	307	69S	111	339	107	+3.5	-5.7	+0.4	+0.5	.543	-1.6		6	55	56.2	27	17	9	362.7	955.9
26	May	21	0	23	43.0	d	79868	DK0	7.4			23+ 58	5	303	62S	128	357	118	+4.9	-4.3	+0.2	+0.0	.532	-11.5		8	1	30.3	23	54	46	367.2	967.2
							79868 is double: AB 7.43 10.98 1.30" 168.9, dT = +1.8sec																											
							79868 is a close double. Observations are highly desired																											
26	May	22	21	38	27.8	d	1445	A2	8.3	8.2		44+ 83	-9 41	1	65N	84	263	66	+6.9	-1.8	+3.0	+0.2	.282	43.4		9	49	12.7	14	57	27	373.7	703.9
26	May	22	22	0	45.8	d	98784	A0	8.1	8.0		44+ 83	41	354	47S	152	337	134	+6.8	-1.7	+1.1	-1.6	.358	-24.0		9	49	6.5	14	36	21	373.8	710.4
26	May	23	22	19	56.0	d	118418	PF5	7.6			55+ 95	47	3	74N	96	274	76	+7.0	-0.1	+2.6	-0.3	.312	34.9		10	39	42.1	8	50	35	378.9	699.0
							118418 is triple: AB 7.84 8.98 0.44" 117.6, dT = +1.3sec : AC 7.8 2.1" 37.0, dT = +3sec																											
							118418 is a close double. Observations are highly desired																											
26	May	23	23	48	17.6	d	1560	M*	7.7	7.4v		55+ 96	43	333	53N	75	277	55	+6.7	+0.1	+3.5	+1.7	.219	56.5		10	41	23.5	8	33	45	379.5	728.9
							1560 = EU Leo, 7.59 to 7.71, Hp, Type LB																											
26	May	27	0	47	42.8	d	139081	cK0	7.5	7.1		83+ 132	65	353	47S	153	339	132	+5.3	+4.2	+1.1	-2.4	.323	-22.5		12	59	1.6	- 9	50	3	391.7	664.3
							139081 is double: AB 7.6 12.6 0.32" 66.3, dT = +0.05sec																											
							139081 is a close double. Observations are highly desired																											
26	May	27	23	52	44.5	d	158128	K5	7.5	6.6		90+ 143	63	50	87S	109	249	89	+4.7	+5.0	+2.0	-1.4	.341	19.3		13	44	22.0	-14	45	38	394.8	692.1
26	May	28	0	31	31.0	d	158141	M1	7.7	6.8		90+ 143	68	31	62N	78	232	58	+4.6	+5.1	+3.5	+0.4	.221	50.6		13	45	8.7	-14	46	1	394.7	668.1
26	May	29	21	6	32.1	D	2183	K2	5.5	4.8		98+ 164	-3 17	106	65N	66	186	51	+3.1	+5.8	+0.6	-0.5	.330	49.2		15	16	23.0	-22	23	58	402.7	987.4
26	May	30	7	42	0.4	d	183548	M4	6.8	6.0v		99+ 167	28	259	77N	70	312	57	+1.2	+6.4	+0.3	+2.0	.380	26.4		15	32	15.1	-23	52	49	402.2	827.0
							183548 = GG Lib, 6.868, range 0.23, 6w, Type SR:, Period 35.65 days, Phase 87%																											
26	May	31	10	18	8.0	D	2366	dM1	1.1	0.1v		100+ 175	-7	9	244	2S	99	334	89	-0.2	+6.2	-0.1	+0.8	.506	-10.2	.09	16	29	24.5	-26	25	55	405.2	1011.2
							R2366 = Antares = alpha Scorpii																											
							2366 is double: AB 1.0 5.4 2.5" 277.9, dT = -5sec																											
							2366 is a close double. Observations are highly desired																											
							2366 = alf Sco, 0.75 to 1.21, V, Type SRC, Period 2180. days, Phase 81%																											
							Distance of 2366 to Terminator = 0.0"; to 3km sunlit peak = 0.0"																											
26	Jun	1	5	43	2.0	r	2470	kB9	6.1	6.2		99- 170	73	288	44S	255	138	251	-0.7	+6.2	+2.3	+1.3	.303	-165.7		17	12	25.1	-27	45	44	400.3	606.6
							Distance of 2470 to Terminator = 7.6"; to 3km sunlit peak = 0.6"																											
26	Jun	2	2	58	28.5	r	2601	SK4	6.8			97- 160	60	87	51S	242	354	242	-1.1	+5.7	+2.4	+0.5	.285	-147.4		18	2	54.3	-27	49	36	400.5	656.2
							R2601 = 7 Sagittarii																											
							2601 is triple: Aa,Ab 6.90 9.37 0.34" 335.0, dT = +0.06sec : AB 6.9 13.0 9.7" 48.1, dT = +33sec																											
							2601 is a close double. Observations are highly desired																											
26	Jun	2	4	41	3.2	r	186250	K5	7.7	6.8		97- 159	80	53	53S	244	16	244	-1.5	+5.7	+2.6	+1.2	.280	-156.3		18	5	20.8	-27	50	3	399.7	592.3
26	Jun	2	4	54	25.1	r	186271	G1	7.3	7.0		97- 159	81	39	34N	337	121	337	-1.6	+5.7	+2.6	-8.7	.103	109.7		18	6	13.8	-27	29	34	399.7	589.9
							Distance of 186271 to Terminator = 19.7"; to 3km sunlit peak = 8.1"																											
26	Jun	2	7	7	44.5	r	2621	K0	7.5	6.9		97- 159	66	279	40S	230	117	230	-2.1	+5.6	+1.5	+2.7	.293	-152.3		18	8	54.2	-27	47	1	400.1	642.1
26	Jun	2	7	26	15.2	r	186361	K5	7.2	6.3		97- 159	63	276	47S	237	125	238	-2.2	+5.6	+1.4	+2.3	.320	-160.5		18	9	16.4	-27	44	5	400.3	659.3
26	Jun	2	10	12	8.4	r	2634	dB8	7.2	7.2s		96- 158	-8 30	255	33S	221	106	222	-2.6	+5.3	-0.2	+2.4	.378	-147.2		18	14	10.8	-27	30	10	402.7	879.8
							2634 is double: AB 7.2 13.7 6.8" 338.9, dT = +8sec																											
							2634 is a close double. Observations are highly desired																											
							2634 = NSV 24338, 7.15 to 7.17, V																											
26	Jun	3	0	37	42.3	r	2740	kG8	6.3	5.8		93- 150	22	108	47S	228	347	232	-1.9	+4.9	+1.0	+0.3	.334	-136.3		18	52	28.3	-26	39	3	402.8	902.4
26	Jun	3	1	16	37.9	D	2750	SB2	2.1	2.1		93- 150	29	104	-37N	38	154	42	-2.0	+4.9	+1.6	+1.2	.258	53.3		18	55	15.9	-26	17	48	402.1	842.6
							R2750 = Nunki = sigma Sagittarii																											
							2750 is triple: Aa,Ab 2.0 202.0, dT = 0.00sec : AB 2.0 9.9 356" 238.2, dT = -1290sec																											

Occultation prediction for Ricardo Sanchez Observatorio
E. Longitude - 58 27 33.2, Latitude -34 38 32.3, Alt. 2m; Telescope dia 15cm; dMag 0.0

y	m	day d	h	Time m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon	Sun Alt	Moon Alt	Az	CA o	PA o	VA o	AA o	Libration L	B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	Jun	3	1	33	5	Gr	2750SB2		2.1	2.1		93-	150	32	**	GRAZE: CA -0.4N; Dist.368km in az. 27deg. [Lat =-30.92-0.42(E.Long+58.46)]																			
	Distance of 2750 to Terminator = 0.3"; to 3km sunlit peak = 0.0"																																	
26	Jun	3	1	59	42.0	R	2750SB2		2.1	2.1		93-	149	37	99	37N	323	78	328	-2.1	+4.9	-0.1	-4.0	.238	126.6		18	55	15.9	-26	17	48	401.2	776.3
	R2750 = Nunki = sigma Sagittarii																																	
	2750 is triple: Aa,Ab 2.0 202.0, dT = 0.00sec : AB 2.0 9.9 356" 238.2, dT = -124sec																																	
26	Jun	3	9	1	23.2	r	2781	K4	7.4	6.6		92-	147	53	271	61S	240	127	246	-3.6	+4.6	+1.0	+2.0	.373	-172.6		19	5	11.4	-26	8	20	399.5	729.4
26	Jun	4	6	29	34.1	R	2907SK3		6.2	5.7v		87-	137	78	33	38S	210	0	220	-4.1	+3.9	+1.7	+3.1	.251	-142.3		19	54	17.7	-23	56	28	396.6	608.8
	2907 is triple: AC 6.3 16.0 42" 108.0, dT = +33sec : AB 6.3 10.7 48" 23.7, dT = +189sec																																	
	2907 = V4200 Sgr, 6.18, range 0.07, V, Type BY, Period 3.24738 days, Phase 2%																																	
26	Jun	4	6	58	41.3	r	188713	K2	7.9	7.3		87-	137	79	1	22S	194	13	204	-4.3	+3.8	+1.0	+4.6	.200	-128.8		19	55	10.8	-23	54	27	396.5	613.9
26	Jun	5	9	33	57	M	3035	F3	6.8	6.6		79-	125	62	296	20N	326	197	340	-5.8	+2.3	+9.9	+9.9	.000	90.0		20	48	13.7	-19	15	37	394.0	699.6
26	Jun	8	5	1	4.6	r	3385	F8	6.7	6.4		51-	92	17	84	57S	215	339	236	-6.8	-1.5	+0.4	+0.9	.432	-154.0		23	3	57.3	- 4	47	42	385.0	897.9
26	Jun	9	6	45	28.3	R	3515cA1		6.3	6.3		40-	79	24	69	60N	278	47	300	-7.0	-3.1	+1.3	-1.7	.346	137.4		23	53	4.8	2	5	26	378.0	861.2
	R3515 = 25 Piscium																																	
	3515 is double: ** 7.0 7.0 0.050"																																	
	3515 has been reported as non-instantaneous (OCc1650). Observations are highly desired																																	
26	Jun	9	7	25	27	m	128456DA2		7.6			40-	78	31	61	14N	323	97	345	-7.0	-3.2	+9.9	+9.9	.000	90.0		23	54	25.5	2	27	50	377.1	820.1
	128456 is double: AB 7.97 9.31 1.82" 272.8																																	
	128456 is a close double. Observations are highly desired																																	
26	Jun	9	9	31	33	M	128489	K2	7.2	6.4		39-	78	49	27	19N	318	116	340	-7.3	-3.4	+9.9	+9.9	.000	90.0		23	57	2.6	3	1	34	375.1	731.3
26	Jun	9	10	0	36.0	r	128494	F0	7.6	7.4		39-	77	-11 51	16	50N	287	93	309	-7.4	-3.5	+3.9	-1.6	.203	120.7		23	57	24.3	3	0	36	374.8	721.2
26	Jun	11	7	51	9.9	R	233cB9		6.2	6.3		19-	52	11	63	74S	236	6	256	-5.6	-5.6	+0.3	+0.0	.542	-179.1		1	35	46.4	14	39	41	367.4	965.4
	R233 = 101 Piscium																																	
26	Jun	11	10	9	34.3	r	92560SM0		8.5	7.7		19-	51	-10 32	37	54S	217	7	237	-5.8	-5.9	+0.8	+0.8	.440	-164.0		1	39	54.9	15	15	24	364.7	809.4
	92560 is triple: AB 8.9 9.2 23.1" 75.0, dT = +41sec : AC 8.9 12.8 101" 182.0, dT = -188sec																																	
26	Jun	11	10	10	18.1	r	92561WK0		8.7	7.7		19-	51	-10 32	36	54S	217	6	237	-5.8	-5.9	+0.8	+0.9	.439	-163.7		1	39	56.1	15	15	34	364.7	808.7
	92561 is double: BA 9.2 8.9 23.1" 255.0, dT = -41sec																																	
26	Jun	12	8	31	41.6	r	75439	G5	8.1	7.4		11-	39	5	61	88S	256	26	274	-4.2	-6.5	+0.4	-0.7	.550	164.3		2	33	29.4	20	26	16	362.9	1005.2
26	Jun	12	9	54	2.4	r	75463	M0	9.0	8.1		11-	38	18	47	77N	272	51	289	-4.2	-6.6	+1.4	-1.1	.429	147.1		2	36	11.6	20	53	9	361.2	896.2
26	Jun	12	9	59	16.6	r	383	A5	8.6	8.4		11-	38	-12 19	47	54S	223	3	241	-4.2	-6.7	+0.5	+0.4	.490	-164.6		2	36	43.6	20	42	2	361.1	889.6
26	Jun	17	22	50	48.9	d	80262kF8		8.1	7.8		11+	39	9	304	80N	91	319	78	+4.8	-3.3	+0.9	+1.1	.478	28.2		8	34	39.2	21	29	35	364.2	958.4
26	Jun	18	23	38	49.7	d	1407	K0	7.7	7.1		20+	53	14	301	14S	183	51	166	+5.9	-1.6	-0.9	-2.9	.261	-59.9		9	31	39.0	15	46	12	369.3	932.4
26	Jun	19	21	34	30.1	d	1515kF8		7.8	7.5		29+	65	-9 42	337	68N	89	288	69	+6.9	-0.3	+2.6	+0.6	.308	41.6		10	21	52.9	10	41	59	372.1	744.5
26	Jun	19	23	52	23.4	d	99106	K0	8.2	7.4		29+	66	24	302	86N	107	332	87	+6.6	+0.0	+1.1	+0.5	.446	19.8		10	25	2.0	9	58	56	374.3	860.5
26	Jun	20	1	35	17.2	D	1531wA0		6.0	6.0v		30+	67	6	286	22N	43	277	23	+6.5	+0.3	+2.2	+9.2	.105	78.8		10	27	39.0	9	45	45	376.8	989.4
	R1531 = 45 Leonis (CX)																																	
	1531 is double: AB 6.0 12.4 34" 119.5, dT = +77sec																																	
	1531 = CX Leo, 6.01 to 6.03, V, Type ACV, Period 3.0525 days, Phase 50%																																	
26	Jun	20	1	41	0	Gr	1531wA0		6.0	6.0v		30+	67	4	**	GRAZE: CA 10.4N; Dist. 34km in az. 14deg. [Lat =-34.33-0.21(E.Long+58.46)]																			
26	Jun	23	0	15	43.9	d	138948pK0		7.6	7.0		61+	102	55	312	29S	174	32	152	+6.2	+4.2	+0.5	-3.3	.254	-45.6		12	44	59.7	- 8	31	55	388.9	684.7
	138948 is double: AB 7.7 11.2 7.6" 96.1, dT = +6sec																																	
	138948 is a close double. Observations are highly desired																																	
26	Jun	23	19	57	48.6	d	1930pK5		5.3	4.5s		69+	112	9 41	76	65N	85	210	64	+6.4	+4.7	+1.7	-1.1	.314	41.3	.01	13	26	43.2	-12	42	28	393.5	799.2
	R1930 = 68 Virginis																																	
	1930 is double: ** 6.4 6.4 0.10" 90.0, dT = +0.32sec																																	
	1930 has been reported as non-instantaneous (OCc 164). Observations are highly desired																																	
	1930 = NSV 6244, 5.20 to 5.28, V																																	
26	Jun	23	21	18	53.3	d	157944kK0		7.8	7.2		70+	113	-6 57	58	12S	188	322	168	+6.2	+4.9	-1.0	-4.4	.193	-59.3		13	27	15.8	-13	18	38	392.6	718.9

Occultation prediction for Ricardo Sanchez Observatorio
E. Longitude - 58 27 33.2, Latitude -34 38 32.3, Alt. 2m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon Alt	Sun Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	dur sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	Jun	24	0	4	20	M	1940kF0		6.9	6.8		70+	114	67	330	17N	37	242	16	+5.6	+5.2	+9.9	+9.9	.000	90.0		13	31	13.2	-13	26	56	392.5	648.6
26	Jun	24	21	43	6.5	D	2039 A0		5.5	5.5		78+	124	-10	56	71	51S	145	270	127	+5.2	+5.7	+0.7	-2.6	.356	-19.7		14	15	24.1	-18	12	2	396.2	726.2
26	Jun	24	23	23	5.6	D	2045cK0		6.4			79+	125		72	30	29S	167	322	149	+4.9	+5.8	+0.5	-3.7	.251	-42.2		14	17	3.8	-18	35	9	395.6	649.1
		2045 is double: AB 6.40 10.51 0.70" 83.0, dT = +0.29sec																															
		2045 is a close double. Observations are highly desired																															
26	Jun	25	0	21	41.3	D	2051 A*		5.9	5.9v		79+	125		74	342	56S	141	336	122	+4.7	+5.9	+1.7	-2.2	.312	-17.8		14	18	38.3	-18	42	57	395.7	628.6
		2051 = CS Vir, 5.84 to 5.95, V, Type ACV, Period 9.2954 days, Phase 35%																															
26	Jun	25	0	44	22.1	d	158495SA3		7.3	7.1		79+	125		72	327	59N	75	284	57	+4.6	+6.0	+3.3	+1.5	.225	46.3		14	19	25.8	-18	31	25	395.8	626.5
		158495 is triple: AB 7.3 10.7 3.6" 354.7, dT = +2.7sec : AC 7.3 12.7 132" 339.3, dT = -60sec																															
		158495 is a close double. Observations are highly desired																															
26	Jun	25	2	15	32.1	d	158504 M1		7.9	7.0v		79+	126		57	289	65S	131	6	112	+4.2	+6.1	+1.8	-1.1	.327	-15.4		14	21	4.1	-18	59	32	396.7	653.0
		158504 = EZ Vir, 7.77 to 7.97, V, Type SRB, Period 39. days, Phase 81%																															
26	Jun	25	22	57	34.4	d	183168kK1		7.1	6.5		86+	136		64	70	66S	126	248	110	+4.0	+6.2	+1.4	-2.1	.352	-4.9		15	6	3.1	-22	24	14	398.3	683.4
26	Jun	26	1	57	9.2	d	183234pF5		8.0			86+	137		71	303	82N	92	321	77	+3.3	+6.4	+2.6	+0.4	.297	20.0		15	10	0.2	-22	43	15	398.3	611.4
		183234 is double: AB 8.15 10.27 2.16" 135.9, dT = +5sec																															
		183234 is a close double. Observations are highly desired																															
26	Jun	26	21	38	3.2	D	2273 B8		5.9	5.9v		92+	146	-9	40	96	42S	143	257	131	+3.1	+6.3	+0.1	-2.5	.371	-28.3		15	54	39.5	-25	14	37	401.4	819.1
		R2273 = 3 Scorpii (V927)																															
		2273 = V0927 Sco, 5.8, range 0.03, V, Type SXARI, Period 1.45937 days, Phase 75%																															
26	Jun	26	21	43	39	m	2268MB2		4.5			92+	146	-10	41	95	-20S	204	319	193	+3.1	+6.3	+9.9	+9.9	.000	-90.0		15	53	36.7	-25	19	38	401.3	810.3
		R2268 = 2 Scorpii																															
		2268 is triple: Aa,Ab 5.6 5.6 0.10" : AB 4.69 6.98 2.39" 267.3																															
		2268 is a close double. Observations are highly desired																															
26	Jun	27	3	35	55.5	D	2298kK3		5.0	4.3		92+	148		63	280	66S	118	2	106	+1.9	+6.6	+2.2	-0.6	.307	-18.3		16	3	20.6	-25	51	55	400.1	627.7
26	Jun	29	1	16	4.9	D	2554cF7		4.5	4.2V		99+	169		64	83	65S	92	204	90	+0.2	+5.9	+2.1	-0.9	.330	4.0		17	47	33.6	-27	49	51	400.3	642.3
		R2554 = X Sagittarii																															
		2554 is double: AB 2.5 8.1 132.0, dT = 0.00sec																															
		2554 = X Sgr, 4.22 to 4.86, V, Type DCEP, Period 7.012770 days, Phase 29%																															
		Distance of 2554 to Terminator = 14.0"; to 3km sunlit peak = 4.5"																															
26	Jun	30	4	11	10.8	D	2721cB8		3.2	3.2		100-	176		82	355	-60N	119	303	122	-1.6	+5.1	+3.0	-1.9	.231	-41.8		18	45	39.4	-26	59	27	398.7	598.3
		R2721 = phi Sagittarii																															
		2721 is double: 3.1 0.8" 270.0, dT = -3sec																															
		2721 is a close double. Observations are highly desired																															
26	Jun	30	5	19	24.9	R	2721cB8		3.2	3.2		100-	176		73	291	-24S	211	90	214	-1.9	+5.0	+1.2	+3.7	.242	-137.9		18	45	39.4	-26	59	27	398.9	629.5
		R2721 = phi Sagittarii																															
		2721 is double: 3.1 0.8" 270.0, dT = -1.7sec																															
		2721 is a close double. Observations are highly desired																															
26	Jun	30	10	9	13.9	D	2750SB2		2.1	2.1		100-	175	-11	16	249	-74S	140	19	144	-2.6	+4.5	+1.5	-1.0	.189	-68.4		18	55	15.9	-26	17	48	403.0	1003.9
		R2750 = Nunki = sigma Sagittarii																															
		2750 is triple: Aa,Ab 2.0 202.0, dT = 0.00sec : AB 2.0 9.9 356" 238.2, dT = -277sec																															
26	Jun	30	10	16	55	Gr	2750SB2		2.1	2.1		100-	175	-10	14	** GRAZE: CA-51.0S; Dist.188km in az. 140deg. [Lat =-36.84+0.68(E.Long+58.46)]																				
26	Jun	30	10	30	32.0	R	2750SB2		2.1	2.1		100-	175	-7	12	246	-29S	183	61	188	-2.6	+4.4	-1.8	+3.7	.195	-111.6		18	55	15.9	-26	17	48	403.4	1037.4
		R2750 = Nunki = sigma Sagittarii																															
		2750 is triple: Aa,Ab 2.0 202.0, dT = 0.00sec : AB 2.0 9.9 356" 238.2, dT = -1056sec																															
26	Jul	1	3	46	35.7	R	2861cA1		5.6	5.5v		99-	167		72	61	76S	259	27	268	-2.6	+4.1	+2.4	+0.1	.316	173.5		19	36	1.7	-24	43	9	397.4	612.1
		R2861 = 51 Sagittarii																															
		2861 is double: ** 5.9 7.9																															
		2861 = V5548 Sgr, 5.82, range 0.04, B, Type DSCTC:, Period 0.11340 days																															

Occultation prediction for Ricardo Sanchez Observatorio
E. Longitude - 58 27 33.2, Latitude -34 38 32.3, Alt. 2m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V ill	% Elon	Sun Alt	Moon Alt	Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	Jul	1	3	52	31.8	R	2864	dB8	4.6	4.6	99-	167	73	59	25S	209	338	217	-2.6	+4.1	+1.9	+3.3	.229	-136.3			19	36	42.4	-24	53	1	397.4	610.9
	R2864 = 52 Sagittarii																																	
	2864 is double: AB 4.7 9.2 2.3" 175.7, dT = -8sec																																	
	2864 is a close double. Observations are highly desired																																	
	Distance of 2864 to Terminator = 4.8"; to 3km sunlit peak = 0.0"																																	
26	Jul	2	6	12	39	Gr	189370	K2	7.1	6.4	95-	155	74	** GRAZE: CA 21.1N; Dist. 49km in az. 145deg. [Lat =-35.18+0.58(E.Long+58.46)]																					
	Distance of 189370 to Terminator = 16.4"; to 3km sunlit peak = 5.6"																																	
26	Jul	2	6	13	39	m	189370	K2	7.1	6.4	95-	155	75	333	21N	329	172	342	-4.1	+2.7	+9.9	+9.9	.000	90.0			20	30	41.0	-20	42	35	394.9	643.5
	Distance of 189370 to Terminator = 13.0"; to 3km sunlit peak = 3.4"																																	
26	Jul	3	2	43	38.1	R	3105	K0	6.1	5.5S	91-	145	38	86	44S	208	329	224	-4.3	+1.6	+1.3	+1.8	.301	-140.2			21	15	6.6	-17	20	43	394.8	751.3
	3105 = NSV 25528, 6.04, , Type VAR:																																	
26	Jul	3	8	16	40.7	r	164338	G2	7.5	7.1	90-	143	60	301	59S	222	89	239	-5.4	+1.1	+1.1	+2.3	.368	-169.5			21	21	51.1	-16	16	26	392.5	712.7
26	Jul	4	9	28	13.8	R	3252	K0	6.6	6.1	83-	131	52	300	47S	206	72	225	-6.4	-0.5	+0.6	+2.6	.359	-155.5			22	10	31.8	-10	49	13	389.4	744.1
	R3252 = 37 Aquarii																																	
26	Jul	5	8	47	17.0	R	3362	cK0	5.9	S	75-	120	58	336	64N	272	112	293	-6.7	-1.9	+3.0	+0.3	.265	135.1			22	55	11.0	-	4	59	16	385.0	698.8
	3362 is double: AB 6.03 7.75 0.47" 325.0, dT = -1.1sec																																	
	3362 is a close double. Observations are highly desired																																	
	3362 = NSV 14360, 7.6,																																	
26	Jul	5	10	17	23.2	R	3367	G9	6.3	5.8	74-	119	-9	46	305	65S	221	84	242	-7.0	-2.1	+1.0	+2.1	.397	-171.1			22	57	17.2	-	4	48	36	385.5	750.6
26	Jul	6	7	6	46.0	r	3489	SK3	7.4	6.8	66-	108	49	36	12S	168	319	190	-6.6	-3.1	-0.8	+4.4	.192	-119.4			23	40	40.2		0	24	58	381.4	722.9
	3489 is triple: AB 7.6 10.1 3.8" 164.6, dT = -20sec : AC 8.8 14.4 75" 336.7, dT = +381sec																																	
	3489 is a close double. Observations are highly desired																																	
26	Jul	9	6	3	23.9	r	311	cA3	6.6	6.5e	33-	71	3	65	50S	212	340	231	-5.2	-6.3	-0.2	+0.7	.494	-152.4			2	7	46.0	18	1	46	370.9	1002.6
	311 is double: 6.7 9.1																																	
	311 = HIP 9924, 6.612, range 0.04, 7w, Type E, Period 2.575 days, Phase 62%																																	
26	Jul	11	10	41	58.5	d	638	SK1	5.0	4.4	13-	41	-4	20	32	-86S	91	241	101	-2.5	-7.3	+1.7	-0.8	.430	-20.2			4	20	21.2	27	21	3	359.9	800.0
	R638 = phi Tauri																																	
	638 is triple: AB 5.1 7.5 48" 259.9, dT = -110sec : AC 5.1 12.3 117" 22.8, dT = +102sec																																	
26	Jul	12	9	53	59.6	D	810	SB7	1.7	1.7	6-	28	4	51	-86S	101	234	105	-0.5	-6.8	+1.0	-1.3	.492	-22.6			5	26	17.5	28	36	27	359.4	929.1
	R810 = El Nath = beta Tauri																																	
	810 is multiple: AC 1.9 19.0 8.4" 357.0, dT = -4sec : AD 1.9 18.5 9.8" 70.0, dT = +17sec : AE 1.9 10.9" 80.0, dT = +21sec : AF 1.9 15.8 11.6" 296.0, dT = -23sec																																	
	810 is a close double. Observations are highly desired																																	
26	Jul	12	10	54	30.2	R	810	SB7	1.7	1.7	6-	27	-2	13	41	49S	237	19	240	-0.6	-6.9	+0.8	-0.1	.448	-157.2			5	26	17.5	28	36	27	358.3	843.5
	R810 = El Nath = beta Tauri																																	
	810 is multiple: AC 1.9 19.0 8.4" 357.0, dT = +10sec : AD 1.9 18.5 9.8" 70.0, dT = +21sec : AE 1.9 10.9" 80.0, dT = +22sec : AF 1.9 15.8 11.6" 296.0, dT = -13sec																																	
	810 is a close double. Observations are highly desired																																	
26	Jul	16	23	2	48.4	d	98906	K0	7.8	7.3	9+	34	8	291	43S	156	28	138	+5.3	-0.4	-0.1	-1.1	.460	-33.8			10	1	55.9	12	14	45	369.2	991.2
26	Jul	17	21	48	8	Gr	1579	kA0	8.3	8.2	16+	47	-9	33	** GRAZE: CA 15.7N; Dist. 59km in az. 32deg. [Lat =-34.01-0.52(E.Long+58.46)]																					
26	Jul	17	23	51	55.1	D	118571	pK0	7.4	7.0s	16+	47	12	286	85S	119	352	98	+6.0	+1.3	+0.4	+0.2	.524	4.2			10	54	45.6	5	50	52	374.7	955.6
	118571 is double: ** 8.0 8.8 0.034" 104.5, dT = +0.06sec																																	
	118571 has been reported as non-instantaneous (OCc 585). Observations are highly desired																																	
	118571 = NSV 5015, 8.9 to 9.27, pg, Type E:																																	
26	Jul	19	23	23	4.3	d	138811	cK2	8.2	7.4	35+	72	42	295	86S	118	346	96	+6.3	+4.1	+1.4	-0.2	.400	7.3			12	28	51.7	-	6	31	49	383.8	750.5
26	Jul	20	17	11	52.2	d	1884	K2	5.2	4.6	43+	82	32	31	81	85N	108	231	86	+7.1	+4.5	+0.8	-1.6	.434	17.7			13	7	53.8	-10	44	25	388.8	858.4
	R1884 = 49 Virginis																																	
26	Jul	20	23	49	0.0	D	157822	kK2	7.3	6.6	45+	84	49	293	81S	122	353	101	+5.9	+5.2	+1.6	-0.5	.373	0.4			13	15	54.0	-12	21	0	388.7	704.0

Occultation prediction for Ricardo Sanchez Observatorio
E. Longitude - 58 27 33.2, Latitude -34 38 32.3, Alt. 2m; Telescope dia 15cm; dMag 0.0

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      day  Time     P   Star  Sp  Mag  Mag    % Elon Sun  Moon   CA   PA  VA  AA Libration   A   B   RV    Cct durn  R.A. (J2000)  Dec   Mdist   SV
 y   m  d  h  m   s       No  D    v    r V  ill     Alt Alt Az   o    o   o   o   L    B   m/o m/o "/s     o  sec  h  m   s    o  m  s   Mm   m/s
26 Jul 21  0 36 10.8 d  157826kK0  8.2  7.6   45+  84     40 283  31S 171  47 150 +5.8 +5.3 +0.9-3.3 .239  -52.6      13 16 13.7 -12 37 16 389.6 744.0
26 Jul 21  0 45 32.0 d  157834PF5  8.1  7.9   45+  84     38 282  82S 120 356  99 +5.7 +5.3 +1.3-0.1 .398   -1.8      13 17 12.2 -12 31 33 389.8 752.6
    157834 is triple: ** 8.7 8.7 0.050"       : AB 7.8 16.7 48" 341.6, dT = -91sec
    157834 has been reported as non-instantaneous (OCc1448). Observations are highly desired
26 Jul 21  1 50 26.1 d  157849KF2  7.3  7.1   45+  85     25 272  79N 101 339  80 +5.6 +5.3 +0.8+0.8 .425   13.3      13 18 58.6 -12 38 53 391.2 828.4
26 Jul 21 23 40 22.5 D    2011 K2  6.3  5.6   55+  96     62 301  87S 113 341  94 +5.3 +6.0 +2.1-0.4 .338    6.7      14  3  4.1 -17 22  1 392.5 647.9
26 Jul 24  3 29 53.8 d  183802pA0  7.2        74+ 119     39 264  75S 115   0 103 +2.6 +6.7 +1.4+0.2 .363  -19.9      15 48  3.3 -25 12 56 400.3 749.3
    183802 is double: AB 7.60 8.49 0.10"  96.5, dT = +0.26sec
    183802 is a close double. Observations are highly desired
26 Jul 24  6 20 43.6 D    2268MB2  4.5        75+ 120      7 244  63S 126   1 114 +2.3 +6.4 +0.2+0.1 .430  -33.9      15 53 36.7 -25 19 38 403.81014.9
   R2268 = 2 Scorpii
      2268 is triple: Aa,Ab 5.6 5.6 0.10"       : AB 4.69 6.98 2.39" 267.3, dT = -4sec
      2268 is a close double. Observations are highly desired
26 Jul 24 19 57  3.2 D    2366dM1  1.1  0.1v  81+ 128  12 35 100  53N  58 173  49 +3.1 +6.3 +1.7+0.0 .270   51.5 .16 16 29 24.5 -26 25 55 401.5 843.0
   R2366 = Antares = alpha Scorpii
      2366 is double: AB 1.0 5.4 2.5" 277.9, dT = -7sec
      2366 is a close double. Observations are highly desired
      2366 = alf Sco, 0.75 to 1.21, V, Type SRC, Period 2180. days, Phase  84%
26 Jul 24 20 41 18.3 R    2366dM1  1.1  0.1v  81+ 128   4 44  95 -23N 342  95 333 +3.0 +6.4 -0.5-3.8 .249  128.5 .18 16 29 24.5 -26 25 55 400.8 777.6
   R2366 = Antares = alpha Scorpii
      2366 is double: AB 1.0 5.4 2.5" 277.9, dT = -4sec
      2366 is a close double. Observations are highly desired
      2366 = alf Sco, 0.75 to 1.21, V, Type SRC, Period 2180. days, Phase  84%
26 Jul 24 21 27 35   Gr   2373 K1  6.1  5.5   81+ 128  -5 54 ** GRAZE: CA 15.1N; Dist.  6km in az.  36deg. [Lat =-34.57-0.59(E.Long+58.46)]
26 Jul 24 21 27 43   Gr   2373 K1  6.1  5.5   81+ 128  -5 53  89  15N  20 133  11 +2.8 +6.4 +9.9+9.9 .000   90.0      16 31 22.8 -26 32 16 400.1 717.7
26 Jul 24 23 24 24.4 d X 41147 K0  8.0  7.3   81+ 129     76  62  63S 122 247 113 +2.4 +6.5 +2.0-2.0 .303  -16.1      16 34 45.8 -27  6 37 399.1 610.3
26 Jul 25 21 52 43.1 d    2512pB9  7.5  7.5   88+ 140  -9 48  94  44N  42 154  38 +1.6 +6.1 +2.9+2.0 .187   60.2      17 26  5.9 -27 35 59 400.8 732.0
      2512 is double: AB 7.5 11.3 5.8" 347.8, dT = +18sec
      2512 is a close double. Observations are highly desired
26 Jul 26 21 46 31.4 d  186671kK1  7.3  6.5   94+ 150  -8 37 101  84S  87 201  88 +0.5 +5.4 +0.9-1.1 .405    8.6      18 20 21.2 -27 24 28 401.1 796.3
26 Jul 27 21 38 11.9 D    2804dK2  5.8  5.1   97+ 161  -6 24 106  38S 125 243 131 -0.6 +4.5 -0.1-2.4 .363  -36.2      19 13 13.7 -25 54 24 400.8 873.7
      2804 is double: AB 10.8 12.0 2.6"  69.4, dT = +4sec
      2804 is a close double. Observations are highly desired
   Distance of 2804 to Terminator = 19.4"; to 3km sunlit peak = 8.1"
26 Jul 27 23  9 46.1 d  187898 K0  7.1  6.5   98+ 162     42  95  88S  74 188  80 -0.9 +4.5 +1.4-0.5 .375   11.7      19 16 11.4 -25 40  0 399.0 740.3
26 Jul 30  7 41 33.9 r    3086 B9  6.2  6.2  100- 172     44 280  62S 231 109 246 -4.4 +1.3 +0.7+2.1 .420 -175.4      21  7 44.7 -17 27 21 393.2 803.9
   Distance of 3086 to Terminator = 6.5"; to 3km sunlit peak = 0.0"
26 Aug  1  3  0 48.5 r  146188 F0  7.0  6.8   94- 150     42  66  63N 273  44 294 -4.6 -1.1 +1.9-1.4 .313  142.1      22 36 17.1 - 7 39 52 387.6 746.6
26 Aug  1  3 35  6.3 r  146201 F0  7.5  7.3v  93- 150     48  58  70N 266  41 286 -4.7 -1.2 +2.1-0.8 .324  147.5      22 37  0.9 - 7 34  0 387.1 721.7
    146201 = LO Aqr, 7.44 to 7.59, Hp, Type IB:
26 Aug  3  8 33 29.3 R      29 K0  7.0  6.4   78- 124     46 334  86N 248  89 270 -6.0 -4.6 +2.0+1.2 .367  161.6       0 15 38.6   5 50 38 379.3 711.1
26 Aug  5  8 16 28.7 d     288cK1  5.1  4.6   58-  99     37  12 -71N  50 220  70 -5.0 -6.7 +1.5+0.8 .398    4.0       1 57 21.1  17 49  3 372.4 719.9
   R288 = iota Arietis
26 Aug  5  9 38 26.6 R     288cK1  5.1  4.6   58-  99     37 348  82S 241  71 260 -5.3 -6.8 +1.9+1.0 .385  176.5       1 57 21.1  17 49  3 372.2 696.4
   R288 = iota Arietis
26 Aug  5 10 28 43   m   92735 G5  6.8  6.2   57-  99  -4 33 334   9N 330 172 349 -5.4 -6.9 +9.9+9.9 .000   90.0       1 58 54.5  18 21 29 372.4 703.0
26 Aug  7  8 11 56.3 r   76279 A0  7.7  7.6   35-  73     20  36  25S 195 343 207 -3.0 -7.4 -0.2+1.6 .283 -128.8       3 51 57.4  25 59 56 366.9 804.4
26 Aug  7  8 19 43.8 r   76270SF8  8.0  7.7   35-  73     20  34  65N 285  74 297 -3.0 -7.4 +2.1-1.4 .349  141.4       3 51 20.3  26 21 14 366.8 795.4
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Occultation prediction for Ricardo Sanchez Observatorio
E. Longitude - 58 27 33.2, Latitude -34 38 32.3, Alt. 2m; Telescope dia 15cm; dMag 0.0

y	m	day d	h	Time m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon Alt	Sun Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
							76270 is triple: AB 8.0 8.0 0.51" 193.9, dT = +0.02sec : AC 8.0 11.1 61" 330.2, dT = -122sec																													
							76270 is a close double. Observations are highly desired																													
26	Aug	7	8	44	19.0	r	76284	WA2	8.1	7.9		35-	73	23	29	73S	243	36	255	-3.1	-7.5	+1.3	+0.0	.432	-175.9		3	52	10.4	26	13	53	366.4	769.3
							76284 is double: AB 8.1 9.7 32" 73.0, dT = +73sec																											
26	Aug	9	8	42	41.7	r	77883	B2	7.6	7.6		15-	46	4	50	89S	274	48	274	-0.2	-6.5	+0.9	-1.1	.500	169.3		6	2	59.4	28	40	37	363.6	897.3
26	Aug	9	9	54	17.8	r	77949	B2	7.5	7.3	S	15-	45	-10 14	39	42N	324	108	324	-0.2	-6.6	+2.5	-2.9	.240	121.7		6	6	6.6	28	56	5	362.5	803.1
							77949 = NSV 16772, 7.46,																											
26	Aug	10	9	41	12.1	R	1088	A4	5.8	5.7	S	7-	32	5	53	78S	272	45	266	+1.4	-5.4	+0.8	-1.1	.504	-178.7		7	11	23.1	26	51	24	362.8	887.7
							R1088 = 47 Geminorum																											
							1088 = NSV 17371, 5.77, , Type DSCT:																											
26	Aug	14	22	35	11.6	D	1642	KF2	7.6	7.4		6+	28	12	282	71N	98	332	76	+5.1	+2.3	+0.5	+0.9	.479	24.2		11	20	56.0	2	25	21	375.3	956.0
26	Aug	16	21	14	40.3	D	1853	cM3	4.8	3.9	v	20+	53	1 52	303	29N	55	279	33	+5.7	+4.8	+4.2	+6.0	.126	71.0	.04	12	54	21.2	- 9	32	20	382.5	714.1
							R1853 = psi Virginis																											
							1853 is double: ** 5.0 8.3 0.040" 110.0, dT = +0.18sec																											
							1853 has been reported as non-instantaneous (OCc 387). Observations are highly desired																											
							1853 = psi Vir, 4.73 to 4.96, V, Type SR																											
26	Aug	16	21	27	37	Gr	1853	cM3	4.8	3.9	v	20+	53	-1 49	** GRAZE: CA 9.5N; Dist.100km in az. 23deg. [Lat =-33.67-0.35(E.Long+58.46)]																				
26	Aug	16	21	41	48.7	r	1853	cM3	4.8	3.9	v	20+	53	-4 47	296	-11N	15	244	353	+5.6	+4.9	-0.7	-7.4	.128	109.0	.04	12	54	21.2	- 9	32	20	382.9	731.9
							R1853 = psi Virginis																											
							1853 is double: ** 5.0 8.3 0.040" 110.0, dT = +0.03sec																											
							1853 has been reported as non-instantaneous (OCc 387). Observations are highly desired																											
							1853 = psi Vir, 4.73 to 4.96, V, Type SR																											
26	Aug	17	23	41	11.0	D	1970	SA0	6.2	6.2		29+	65	36	275	82S	121	360	101	+5.0	+5.9	+1.2	-0.1	.402	-7.6		13	45	35.1	-15	46	3	389.5	766.5
							R1970 = 85 Virginis																											
							1970 is multiple: Aa,Ab 6.5 8.2 : Aa,Ac 6.5 8.4 0.10" : AB 6.2 12.8 44" 312.7, dT = -107sec : AB 6.2 12.8 44" 312.5, dT = -108sec																											
							1970 is a close double. Observations are highly desired																											
26	Aug	18	1	12	58.1	d	1977	K2	8.0	7.2		30+	66	18	262	65S	138	16	118	+4.9	+5.9	+0.7	-0.6	.410	-28.7		13	47	58.5	-16	3	54	391.6	888.0
26	Aug	18	23	57	2.6	D	2084	A3	6.5	6.4		39+	77	45	275	78S	122	3	104	+4.4	+6.5	+1.5	-0.3	.364	-13.0		14	34	50.7	-20	26	22	393.3	712.6
26	Aug	21	22	51	52.2	d	185097	pF2	7.9	7.7		67+	110	83	23	76N	79	238	74	+1.7	+6.4	+2.7	+0.5	.291	16.8		17	10	9.1	-27	46	24	398.2	586.3
							185097 is double: AB 7.9 11.4 1.8" 61.9, dT = +6sec																											
							185097 is a close double. Observations are highly desired																											
26	Aug	22	0	31	50.0	D	2470	kB9	6.1	6.2		68+	111	71	284	69N	72	316	67	+1.3	+6.4	+2.2	+1.6	.302	16.6		17	12	25.1	-27	45	44	398.6	609.3
26	Aug	22	1	35	17.2	D	2474	kF2	6.7	6.4		68+	111	58	272	82N	85	333	80	+1.1	+6.3	+1.8	+1.2	.342	-0.2		17	14	2.0	-27	47	48	399.2	662.5
26	Aug	22	3	36	28.4	d	185228	SB0	7.9	7.6		68+	112	34	257	82S	101	346	96	+0.7	+6.1	+0.9	+0.9	.399	-19.5		17	17	27.6	-27	46	1	401.1	822.6
							185228 is triple: AB 7.9 16.0 4.0" 204.0, dT = -2.3sec : AC 7.9 15.0 7.8" 146.3, dT = +14sec																											
							185228 is a close double. Observations are highly desired																											
26	Aug	22	21	44	31.2	D	2601	SK4	6.8			76+	121	-4 62	85	89S	88	200	88	+0.8	+5.8	+2.0	-0.8	.332	5.4		18	2	54.3	-27	49	36	398.8	644.6
							R2601 = 7 Sagittarii																											
							2601 is triple: Aa,Ab 6.90 9.37 0.34" 333.5, dT = -0.43sec : AB 6.9 13.0 9.7" 48.1, dT = +22sec																											
							2601 is a close double. Observations are highly desired																											
26	Aug	22	23	27	11.3	d	186250	K5	7.7	6.8		76+	121	81	45	88S	89	228	88	+0.5	+5.8	+2.6	-0.2	.304	-2.3		18	5	20.8	-27	50	3	398.1	588.2
26	Aug	23	1	43	3.2	d	186339	K0	7.9	7.3		76+	122	67	280	72N	69	315	69	-0.1	+5.7	+1.8	+1.7	.327	8.4		18	8	25.6	-27	38	45	398.5	639.4
26	Aug	23	1	54	23.2	d	X150546	MG8	7.2	7.2		76+	122	64	277	52S	125	12	125	-0.1	+5.7	+3.0	-1.4	.225	-48.1		18	8	34.8	-27	51	51	398.6	649.9
							X150546 is triple: Ba,Bb 9.1 11.1 0.10" 146.0, dT = +0.41sec : AB 7.6 9.1 2.2" 270.1, dT = -8sec																											
							X150546 is a close double. Observations are highly desired																											
26	Aug	23	2	1	17.3	d	2621	K0	7.5	6.9		77+	122	63	276	70S	106	354	106	-0.2	+5.6	+2.4	+0.0	.294	-30.0		18	8	54.2	-27	47	1	398.6	656.3
26	Aug	23	2	14	45.1	d	186361	K5	7.2	6.3		77+	122	60	274	77S	99	347	99	-0.2	+5.6	+2.1	+0.5	.318	-23.4		18	9	16.4	-27	44	5	398.8	669.9

Occultation prediction for Ricardo Sanchez Observatorio
E. Longitude - 58 27 33.2, Latitude -34 38 32.3, Alt. 2m; Telescope dia 15cm; dMag 0.0

y	m	day d	h	Time m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon Sun Alt	Moon Alt	Az	CA o	PA o	VA o	AA o	Libration L	B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	Aug	23	5	7	10.5	d	2634	dB8	7.2	7.2	s	77+	123	26	253	58S	118	1	119	-0.7	+5.3	+1.0	+0.3	.335	-44.1		18	14	10.8	-27	30	10	401.4	907.8
							2634 is double: AB 7.2 13.7 6.9" 338.9, dT = -16sec																													
							2634 is a close double. Observations are highly desired																													
							2634 = NSV 24338, 7.15 to 7.17, V																													
26	Aug	23	6	52	25.7	D	2650	K3	4.7	3.8		78+	124	6	242	66N	61	296	62	-0.8	+5.1	-0.6	+1.5	.529	15.0	.01	18	18	3.2	-27	2	34	403.4	1072.1
26	Aug	23	21	31	6	M	2750	SB2	2.1	2.1		83+	132	-1 48	92	6N	358	111	2	-0.2	+4.9	+9.9	+9.9	.000	90.0		18	55	15.9	-26	17	48	398.5	703.9
							R2750 = Nunki = sigma Sagittarii																												
							2750 is triple: Aa,Ab 2.0 202.0 : AB 2.0 9.9 356" 238.1																												
							Distance of 2750 to Terminator = 7.3"; to 3km sunlit peak = 0.0"																												
26	Aug	23	21	33	15	Gr	2750	SB2	2.1	2.1		83+	132	-2 50	** GRAZE: CA 6.1N; Dist.201km in az. 197deg. [Lat =-36.53-0.25(E.Long+58.46)]																				
							Distance of 2750 to Terminator = 14.1"; to 3km sunlit peak = 2.1"																												
26	Aug	24	3	40	21.2	d	2781	K4	7.4	6.6		85+	134	53	271	66S	104	351	109	-1.6	+4.6	+2.1	+0.5	.304	-37.1		19	5	11.4	-26	8	20	397.8	734.8
26	Aug	24	5	19	16.9	d	187710	G8	7.4	6.9		85+	134	33	259	73N	63	307	69	-1.8	+4.4	+0.3	+1.8	.449	4.4		19	7	54.7	-25	42	8	399.2	871.4
26	Aug	25	1	34	29	m	2907	SK3	6.2	5.7	v	91+	144	79	2	10S	155	333	165	-2.1	+3.7	+9.9	+9.9	.000	-90.0		19	54	17.7	-23	56	28	394.5	620.8
							2907 is triple: AC 6.3 16.0 42" 108.0 : AB 6.3 10.7 48" 23.6																												
							2907 = V4200 Sgr, 6.18, range 0.07, V, Type BY, Period 3.24738 days, Phase 21%																												
							Distance of 2907 to Terminator = 7.1"; to 3km sunlit peak = 0.0"																												
26	Aug	25	6	8	47.7	D	2921	K0	6.0	5.5		91+	146	31	263	76N	61	304	71	-3.0	+3.1	+0.3	+1.8	.463	1.4		20	1	23.8	-22	44	14	396.9	891.5
26	Aug	25	7	18	23.8	d	2928	cF7	6.4	6.2		92+	146	18	254	78S	87	326	98	-3.1	+3.0	+0.2	+1.2	.476	-22.3		20	3	44.3	-22	35	44	398.2	994.4
							2928 is double: ** 7.3 7.3 0.10" 90.0, dT = +0.21sec																												
							2928 has been reported as non-instantaneous (OCc1590). Observations are highly desired																												
26	Aug	26	2	47	35.4	d	163869	F0	7.6	7.4		96+	156	74	340	46N	27	224	40	-3.2	+2.2	+1.1	+2.9	.298	30.3		20	46	38.4	-19	26	17	391.5	654.9
26	Aug	26	3	52	44.3	D	3035	F3	6.8	6.6		96+	156	65	303	60N	41	268	55	-3.4	+2.1	+1.2	+2.3	.355	14.1		20	48	13.7	-19	15	37	391.7	695.5
26	Aug	28	2	49	40.3	r	X182487	k	11.3	11.2		85E	179	61	33	-27S	247	39	266	-4.2	-0.8	+2.1	+0.6	.356	164.3		22	21	52.1	-	9	28	10	385.0	689.7
26	Aug	28	2	52	15.4	d	X242694	k	11.5			82E	179	61	32	-47N	353	147	13	-4.2	-0.8	-0.3	+4.5	.199	57.4		22	22	45.5	-	9	6	1	385.0	690.2
26	Aug	28	2	53	18.5	r	X 51806	k	11.1	11.0		81E	179	61	31	-52S	273	67	293	-4.2	-0.8	+2.9	-0.7	.274	137.9		22	21	51.2	-	9	20	24	385.0	689.3
26	Aug	28	2	57	39.6	d	X182582	k	11.0	10.5		75E	179	62	30	87U	64	220	84	-4.3	-0.8	+2.0	+0.7	.359	-13.8		22	23	55.9	-	9	13	27	385.0	689.7
26	Aug	28	3	0	11.1	d	X242715	k	11.5			71E	179	62	29	88U	59	215	78	-4.3	-0.8	+1.9	+1.0	.366	-8.1		22	23	55.7	-	9	11	28	385.0	689.3
26	Aug	28	3	2	44.6	r	X182535	k	11.7	11.6		67E	179	62	28	32S	193	350	213	-4.3	-0.8	+0.7	+2.9	.292	-142.5		22	22	50.9	-	9	34	6	384.9	688.1
26	Aug	28	3	4	45.6	d	X242718	k	11.8			64E	179	62	27	87U	55	213	75	-4.3	-0.8	+1.8	+1.1	.368	-4.6		22	23	58.8	-	9	9	34	384.9	688.9
26	Aug	28	3	14	40.6	R	X 51827	k	10.4	9.9		49E	179	63	21	17S	212	14	232	-4.3	-0.8	+1.3	+2.0	.350	-162.0		22	22	45.3	-	9	29	18	384.9	687.3
26	Aug	28	3	27	37.0	r	X242705	k	11.4			32E	179	64	15	87U	190	358	210	-4.4	-0.9	+0.6	+3.1	.285	-140.6		22	23	22.2	-	9	28	22	384.8	687.5
26	Aug	28	3	28	7.3	r	X242688	k	11.0			31E	179	64	14	-50S	285	94	305	-4.4	-0.9	+3.7	-1.4	.209	124.6		22	22	33.2	-	9	8	56	384.8	687.6
26	Aug	28	3	38	33	d	X182547	k	11.1	10.7		19E	179	64	8	-88N	330	144	350	-4.4	-0.9	+9.9	+9.9	.072	78.8		22	23	14.8	-	8	56	57	384.8	688.5
26	Aug	28	3	38	35.2	r	X242694	k	11.5			19E	179	64	8	-48S	287	100	306	-4.4	-0.9	+3.9	-1.4	.199	122.7		22	22	45.5	-	9	6	1	384.8	688.3
26	Aug	28	3	47	33	Gr	X182547	k	11.1	10.7		12E	179	66	** GRAZE: CA-76.8S; Dist. 35km in az. 316deg. [Lat =-34.20+0.80(E.Long+58.46)]																				
26	Aug	28	3	50	31.4	d	X182625	k	10.9	10.6		10E	179	64	2	78U	51	229	70	-4.4	-0.9	+1.7	+1.5	.370	-1.5		22	24	48.0	-	8	57	42	384.7	690.2
26	Aug	28	3	54	5	M	X242735		10.8			8E	179	65	0	32U	139	319	159	-4.5	-0.9	+9.9	+9.9	.000	-90.0		22	24	49.2	-	9	19	41	384.7	690.6
26	Aug	28	3	54	28	r	X182547	k	11.1	10.7		7E	179	64	359	-63S	308	129	328	-4.5	-0.9	+9.0	-7.5	.072	101.2		22	23	14.8	-	8	56	57	384.7	690.8
26	Aug	28	3	55	33	M	X 51881		10.4	9.7		7E	179	65	359	33U	139	319	159	-4.5	-0.9	+9.9	+9.9	.000	-90.0		22	24	48.4	-	9	18	37	384.7	690.9
26	Aug	28	4	3	0.1	r	X242712	k	11.7		v	5E	179	65	354	63U	206	31	226	-4.5	-0.9	+1.0	+2.4	.343	-157.4		22	23	45.6	-	9	18	27	384.7	692.3
							X242712 = ASASSN-V J222345.63-091826.8, 12.03 to 12.39, V, Type VAR																												
26	Aug	28	4	5	44.0	d	X242744	k	11.2			4E	179	64	354	67U	76	261	96	-4.5	-0.9	+2.4	+0.7	.330	-27.4		22	25	17.7	-	9	0	8	384.7	693.1
26	Aug	28	4	18	48.4	r	X182582	k	11.0	10.5		4E	179	64	346	57U	214	46	234	-4.5	-1.0	+1.2	+2.1	.362	-165.7		22	23	55.9	-	9	13	27	384.7	696.6
26	Aug	28	4	23	3.7	r	X242715	k	11.5			5E	179	64	343	59U	220	54	240	-4.6	-1.0	+1.4	+2.0	.370	-171.5		22	23	55.7	-	9	11	28	384.7	698.0
26	Aug	28	4	28	12.5	r	X242718	k	11.8			6E	179	63	341	59U	223	60	243	-4.6	-1.0	+1.5	+1.9	.374	-174.9		22	23	58.8	-	9	9	34	384.7	699.8
26	Aug	28	4	36	6.7	D	146082	kG0	9.0	8.7		10E	179	63	338	79U	94	293	114	-4.6	-1.0	+3.1	+0.1	.263	-45.7		22	25	53.8	-	8	57	34	384.7	702.5
26	Aug	28	5	12	57.5	r	X182625	k	10.9	10.6		52E	179	59	320	70U	227	79	247	-4.7	-1.1	+1.4	+1.9	.386	-178.0		22	24	48.0	-	8	57	42	384.8	720.7

Occultation prediction for Ricardo Sanchez Observatorio
E. Longitude - 58 27 33.2, Latitude -34 38 32.3, Alt. 2m; Telescope dia 15cm; dMag 0.0

y	m	day d	h	Time m	s	P	Star No	Sp	Mag D	Mag v	r V	% ill	Elon Sun Alt	Moon Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	dur sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	Aug	28	5	18	31.5	r	X242744k		11.2			60E	179	58	318	68U	201	55	221	-4.7	-1.1	+0.7	+2.6	.343	-152.3		22	25	17.7	- 9	0	8	384.8	724.0
26	Aug	28	5	32	46.1	R	146082kG0		9.0	8.7		81E	179	56	313	87U	183	41	203	-4.8	-1.1	+0.0	+3.3	.273	-134.1		22	25	53.8	- 8	57	34	384.9	732.9
26	Aug	30	0	40	41.8	r	3515cA1		6.3	6.3		96-	157	16	76	53S	203	330	226	-4.1	-3.5	+0.2	+1.3	.411	-146.4		23	53	4.8	2	5	26	382.1	914.4
R3515 = 25 Piscium																																	
3515 is double: ** 7.0 7.0 0.050"																																	
3515 has been reported as non-instantaneous (OCc1650). Observations are highly desired																																	
26	Aug	30	3	49	8.5	r	128489	K2	7.2	6.4		95-	155	47	34	86S	236	28	258	-4.5	-3.9	+1.6	+0.7	.400	172.9		23	57	2.6	3	1	34	378.8	740.1
26	Aug	30	3	54	17.9	r	3525	K5	7.6	6.9		95-	155	47	32	89N	241	35	263	-4.5	-3.9	+1.7	+0.5	.392	167.2		23	57	5.8	3	4	16	378.7	737.5
26	Aug	30	3	57	24.2	r	128494	F0	7.6	7.4		95-	155	48	31	70S	220	14	242	-4.5	-3.9	+1.2	+1.2	.396	-171.6		23	57	24.3	3	0	36	378.7	736.0
26	Sep	2	9	43	12.9	R	390	A7	5.5	5.4		71-	115	-7	27	330	32N	308	154	325	-3.7	-7.4	+2.6	-0.7	.192	119.2		2	38	49.0	21	57	41	371.3	709.4
R390 = nu Arietis																																	
26	Sep	3	9	6	57	m	76031cG2		7.3	6.9v		61-	102	29	354	5N	341	166	354	-2.6	-7.6	+9.9	+9.9	.000	90.0		3	37	11.0	25	59	28	369.0	681.9
76031 is double: ** 8.9 8.9 0.050"																																	
76031 has been reported as non-instantaneous (OCc1206). Observations are highly desired																																	
76031 = V0837 Tau, 8.2, range 0.09, V, Type BY:, Period 24.53 days, Phase 48%																																	
26	Sep	4	7	52	16.9	r	696	A0	7.5	7.4		50-	90	23	25	60S	232	29	240	-1.3	-7.4	+1.3	+0.3	.384	-158.5		4	37	9.1	27	55	33	368.0	736.7
26	Sep	5	7	14	22.2	r	77381	K0	7.0	6.4		38-	76	10	44	57N	302	82	305	-0.1	-6.8	+1.8	-2.0	.349	138.5		5	40	35.8	28	58	37	368.0	831.0
26	Sep	5	8	11	27	m	864	K1	6.6	6.1		38-	76	17	34	7N	353	141	355	-0.2	-6.8	+9.9	+9.9	.000	90.0		5	43	22.8	29	12	1	367.2	763.1
26	Sep	5	9	24	7.8	r	77483DB5		8.0	8.0		38-	76	-10	24	19	75N	286	88	288	-0.3	-6.9	+2.2	-0.9	.373	160.8		5	44	37.7	29	1	0	366.5	701.5
77483 is double: AB 8.1 9.7 8.2" 0.1, dT = -6sec																																	
77483 is a close double. Observations are highly desired																																	
26	Sep	6	7	22	25.1	r	1035cK3		6.7	6.0		27-	63	3	53	64S	251	23	247	+1.1	-5.8	+0.5	-0.6	.472	-161.6		6	45	35.1	27	40	24	368.0	887.5
1035 is double: ** 7.6 7.6 0.12" 90.0, dT = +0.24sec																																	
1035 has been reported as non-instantaneous (OCc 233). Observations are highly desired																																	
26	Sep	7	9	1	35.2	r	79753	K1	7.8	7.2		17-	49	11	49	85S	280	56	270	+2.1	-4.6	+1.2	-1.3	.462	-179.3		7	51	47.9	24	49	15	367.1	822.3
26	Sep	13	22	34	5.5	D	157922	K2	8.3	7.6		8+	34	-11	23	269	54N	82	320	61	+4.4	+5.5	+0.6	+1.6	.393	31.5		13	25	10.9	-13	19	2	386.8	864.7
26	Sep	14	22	58	26.3	d	158446	F3	8.3	8.0		15+	46		30	267	60N	84	324	65	+4.0	+6.2	+0.8	+1.5	.392	23.8		14	14	46.1	-18	25	49	390.8	812.9
26	Sep	15	0	13	6.8	D	2045cK0		6.4			15+	46		15	257	59N	83	321	64	+3.9	+6.2	+0.1	+1.4	.449	21.9		14	17	3.8	-18	35	9	392.6	921.5
2045 is double: AB 6.40 10.51 0.70" 82.9, dT = +1.6sec																																	
2045 is a close double. Observations are highly desired																																	
26	Sep	15	0	58	49.3	D	2051	A*	5.9	5.9v		16+	47		6	252	68N	91	327	73	+3.9	+6.2	-0.1	+1.0	.508	12.4		14	18	38.3	-18	42	57	393.6	992.7
2051 = CS Vir, 5.84 to 5.95, V, Type ACV, Period 9.2954 days, Phase 17%																																	
26	Sep	16	1	32	5.6	d	183234pF5		8.0			24+	58		11	250	61N	79	316	64	+3.1	+6.5	-0.2	+1.4	.475	18.3		15	10	0.2	-22	43	15	397.2	964.1
183234 is double: AB 8.15 10.27 2.16" 135.9, dT = +2.5sec																																	
183234 is a close double. Observations are highly desired																																	
26	Sep	16	20	25	0.9	d	2268MB2		4.5			31+	68	16	80	334	51N	65	269	53	+3.1	+6.7	+3.1	+1.9	.232	42.5		15	53	36.7	-25	19	38	394.7	602.7
R2268 = 2 Scorpii																																	
2268 is triple: Aa,Ab 5.6 5.6 0.10" : AB 4.69 6.98 2.39" 267.3, dT = -10sec																																	
2268 is a close double. Observations are highly desired																																	
26	Sep	16	21	38	16.6	r	2268MB2		4.5			31+	68	1	68	288	-49N	325	205	313	+2.8	+6.7	+2.2	-2.7	.237	137.4		15	53	36.7	-25	19	38	395.2	617.8
R2268 = 2 Scorpii																																	
2268 is triple: Aa,Ab 5.6 5.6 0.10" : AB 4.69 6.98 2.39" 267.3, dT = -5sec																																	
2268 is a close double. Observations are highly desired																																	
26	Sep	16	21	56	57.1	d	183923	K0	7.8	7.1		32+	68	-3	65	283	42S	152	36	140	+2.8	+6.7	+2.3	-3.5	.204	-51.5		15	55	12.3	-25	46	43	395.3	627.1
26	Sep	16	22	35	21.7	d	183947pA2		8.6	8.5		32+	69	-11	57	275	46S	148	34	136	+2.6	+6.7	+2.3	-2.7	.220	-49.8		15	56	12.9	-25	48	17	395.8	656.0
183947 is double: AB 8.6 12.8 4.0" 340.1, dT = -18sec																																	
183947 is a close double. Observations are highly desired																																	
26	Sep	17	2	23	11.0	D	2298kK3		5.0	4.3		33+	70		13	247	55S	138	15	126	+2.1	+6.5	+0.7	-0.4	.342	-46.9		16	3	20.6	-25	51	55	400.2	971.9

Occultation prediction for Ricardo Sanchez Observatorio
E. Longitude - 58 27 33.2, Latitude -34 38 32.3, Alt. 2m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon	Sun Alt	Moon Alt	Az	CA o	PA o	VA o	AA o	Libration L	B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	Sep	18	21	38	56.3	d	2545cF0		6.4	6.2		50+	90	1	83	16	75N	77	242	74	+0.8	+6.0	+2.6	+0.7	.295	12.5		17	43	17.7	-27	53	2	397.9	583.7
							2545 is double: ** 6.6 8.5 0.09" 200.4, dT = -0.16sec																													
							2545 has been reported as non-instantaneous (OCc 113). Observations are highly desired																													
26	Sep	19	0	35	33.1	D	2554cF7		4.5	4.2V		51+	91	54	269	89	91N	91	339	89	+0.1	+5.8	+1.7	+1.0	.349	-12.3		17	47	33.6	-27	49	51	399.0	691.9
R2554 = X Sagittarii																																		
							2554 is double: AB 2.5 8.1 132.0, dT = 0.00sec																													
							2554 = X Sgr, 4.22 to 4.86, V, Type DCEP, Period 7.012770 days, Phase 98%																													
26	Sep	19	1	51	38.8	r	2554cF7		4.5	4.2V		51+	92	39	260	-64S	244	131	243	-0.1	+5.7	+0.5	+1.9	.400	-167.3		17	47	33.6	-27	49	51	400.2	795.7
R2554 = X Sagittarii																																		
							2554 is double: AB 2.5 8.1 132.0, dT = 0.00sec																													
							2554 = X Sgr, 4.22 to 4.86, V, Type DCEP, Period 7.012770 days, Phase 98%																													
26	Sep	19	4	3	50.3	d	2575pA3		6.9	6.8		52+	93	14	246	28N	28	266	27	-0.3	+5.5	-1.0	+2.6	.331	49.7		17	53	34.2	-27	16	58	402.7	1000.1
							2575 is double: AB 7.4 8.0 0.10" 198.0, dT = -0.3sec																													
							2575 is a close double. Observations are highly desired																													
26	Sep	21	2	1	24.0	D	2861cA1		5.6	5.5v		70+	114	56	277	35S	135	19	143	-2.4	+3.8	+5.0	-3.4	.118	-71.6		19	36	1.7	-24	43	9	396.5	720.7
R2861 = 51 Sagittarii																																		
							2861 is double: ** 5.9 7.9																													
							2861 = V5548 Sgr, 5.82, range 0.04, B, Type DSCTC:, Period 0.11340 days																													
26	Sep	21	2	11	50	Gr	2861cA1		5.6	5.5v		70+	114	53	** GRAZE: CA 16.0S; Dist.101km in az. 138deg. [Lat =-35.86+0.73(E.Long+58.46)]																					
26	Sep	21	22	4	17.8	d	189202	A2	7.4	7.3		78+	124	-4	59	75	31S	134	255	146	-2.5	+3.0	+2.6	-5.7	.148	-64.3		20	22	6.7	-21	57	23	394.0	651.4
26	Sep	22	3	8	45.8	d	2988	A1	7.1	7.0		79+	125	51	279	81S	83	324	96	-3.6	+2.4	+1.6	+1.3	.361	-25.6		20	29	0.3	-20	54	5	393.8	764.7
26	Sep	22	4	14	13.0	d	189370	K2	7.1	6.4		79+	126	37	269	71S	94	336	107	-3.8	+2.3	+1.2	+1.1	.363	-34.9		20	30	41.0	-20	42	35	394.7	847.4
26	Sep	23	3	57	3.0	d	3118	K0	6.9	6.4		87+	137	48	285	76N	58	294	74	-4.5	+0.9	+1.0	+1.9	.413	-3.8		21	19	14.9	-16	10	46	390.1	783.6
26	Sep	25	4	24	53.6	D	3362cK0		5.9	S		97+	161	51	313	82S	81	298	102	-5.2	-2.2	+2.1	+1.2	.345	-31.6		22	55	11.0	-	4	59	16	380.9	747.7
							3362 is double: AB 6.03 7.75 0.47" 325.0, dT = -0.6sec																													
							3362 is a close double. Observations are highly desired																													
							3362 = NSV 14360, 7.6,																													
26	Sep	29	6	47	47.5	R	337cA1		5.6	5.6		92-	146	33	341	66N	267	103	285	-3.0	-7.1	+2.3	+0.6	.358	154.5		2	18	7.5	19	54	4	368.2	709.2
R337 = theta Arietis																																		
							337 is double: ** 6.5 6.5 0.050"																													
							337 has been reported as non-instantaneous (OCc1181). Observations are highly desired																													
26	Sep	29	6	56	40.5	r	341	F8	6.8	6.5		92-	146	33	339	45S	198	36	216	-3.0	-7.1	+1.2	+2.3	.286	-135.9		2	19	8.7	19	41	16	368.2	710.7
R341 = 23 Arietis																																		
26	Sep	30	8	59	0.0	r	75876	K0	7.3	6.7		84-	132	-8	22	326	76S	236	86	250	-2.1	-7.5	+1.8	+1.6	.388	-160.4		3	20	26.8	24	32	36	367.7	734.4
26	Oct	1	7	24	28.6	r	76557	WF8	7.4	7.0		75-	119	28	3	59S	227	44	236	-0.6	-7.4	+1.8	+0.9	.338	-150.9		4	20	17.7	27	20	51	366.4	688.2
							76557 is double: BA 7.5 5.1 48" 79.9, dT = +119sec																													
26	Oct	1	7	26	28.3	R	638SK1		5.0	4.4		75-	119	28	2	59S	227	44	236	-0.6	-7.4	+1.8	+1.0	.337	-150.6		4	20	21.2	27	21	3	366.4	687.7
R638 = phi Tauri																																		
							638 is triple: AB 5.1 7.5 48" 259.9, dT = -120sec : AC 5.1 12.3 117" 22.7, dT = +319sec																													
26	Oct	1	7	51	27.9	r	76563	K5	7.2	6.2		74-	119	28	356	47S	214	38	224	-0.7	-7.4	+1.8	+1.5	.280	-136.8	.01	4	21	15.3	27	21	1	366.4	683.7
26	Oct	2	6	29	33.8	R	801	B9	6.5	6.5		64-	106	20	29	42N	313	106	317	+0.7	-6.9	+2.7	-2.2	.254	127.5		5	23	22.9	28	56	12	367.2	743.5
R801 = 22 Aurigae																																		
26	Oct	2	7	4	44.2	D	810SB7		1.7	1.7		64-	106	23	22	-43S	132	292	136	+0.7	-6.9	+2.7	-2.0	.259	-49.9		5	26	17.5	28	36	27	366.9	714.5
R810 = El Nath = beta Tauri																																		
							810 is multiple: AC 1.9 19.0 8.4" 357.0, dT = -23sec : AD 1.9 18.5 9.8" 70.0, dT = +18sec : AE 1.9 10.9" 80.0, dT = +26sec : AF 1.9 15.8 11.6" 296.0, dT = -43sec																													
							810 is a close double. Observations are highly desired																													
26	Oct	2	8	0	3.9	R	810SB7		1.7	1.7		64-	106	26	9	41S	216	27	220	+0.5	-6.9	+1.8	+1.3	.247	-130.0		5	26	17.5	28	36	27	366.6	684.3

Occultation prediction for Ricardo Sanchez Observatorio
E. Longitude - 58 27 33.2, Latitude -34 38 32.3, Alt. 2m; Telescope dia 15cm; dMag 0.0

y	m	day d	h	Time m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon	Sun Alt	Moon Alt	Az	CA o	PA o	VA o	AA o	Libration L	B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
R810 = El Nath = beta Tauri																																		
810 is multiple: AC 1.9 19.0 8.4" 357.0, dT = +26sec : AD 1.9 18.5 9.8" 70.0, dT = +33sec : AE 1.9 10.9" 80.0, dT = +32sec : AF 1.9 15.8 11.6" 296.0, dT = -8sec																																		
810 is a close double. Observations are highly desired																																		
26	Oct	3	7	46	4.8	r	996cA2		6.9	6.8		52-	93	22	26	86N	278	73	275	+1.7	-6.1	+1.9	-0.9	.399	175.1	6	30	22.0	28	12	44	367.6	714.1
996 is double: 7.6 7.6																																		
26	Oct	7	8	17	2.4	r	99071	K0	8.5	8.0		12-	41	7	72	86N	296	63	276	+4.9	-0.2	+0.6	-1.7	.503	-180.0	10	20	17.9	10	52	8	376.0	916.8
26	Oct	12	22	49	22.0	D	2108cG2		6.6			5+	26	-10	17	256	69S	138	17	121	+3.1	+6.3	+0.7	-0.5	.385	-36.5	14	46	10.9	-21	10	33	394.5	917.3
2108 is double: AB 7.30 7.30 0.29" 132.4, dT = +0.7sec																																		
2108 is a close double. Observations are highly desired																																		
26	Oct	12	22	50	25.7	d	182859	K5	9.0	8.2		5+	26	-10	17	255	80S	127	6	110	+3.1	+6.3	+0.6	-0.1	.432	-25.8	14	46	21.2	-21	8	36	394.5	918.8
26	Oct	12	23	45	5	M	2109	K4	6.1	5.2		5+	27	6	248	17S	190	65	173	+3.0	+6.3	+9.9	+9.9	.000	-90.0	14	47	13.7	-21	19	30	395.8	1006.9
26	Oct	12	23	45	8	Gr	2109	K4	6.1	5.2		5+	27	5	** GRAZE: CA 16.7S; Dist. 9km in az. 335deg. [Lat =-34.56+0.38(E.Long+58.46)]																					
26	Oct	13	23	13	1.7	D	2229cA0		8.0			11+	38	24	255	50S	150	31	137	+2.3	+6.5	+1.4	-1.6	.258	-55.5	15	38	22.1	-24	39	18	397.1	876.9
2229 is double: AB 8.05 11.00 0.70" 82.0, dT = +1sec																																		
2229 is a close double. Observations are highly desired																																		
26	Oct	14	0	21	12.9	d	183700	F2	8.0	7.8		11+	38	11	248	52N	71	308	58	+2.2	+6.4	-0.3	+1.6	.472	22.2	15	41	15.8	-24	23	55	398.7	985.4
26	Oct	14	0	23	36.4	d	183704	K2	8.8	8.3		11+	38	10	247	61N	81	317	67	+2.2	+6.4	-0.2	+1.3	.498	13.1	15	41	23.8	-24	26	19	398.7	989.3
26	Oct	14	0	48	35.1	d	183713	A5	7.4	7.2		11+	39	6	244	20N	39	274	26	+2.2	+6.3	-1.1	+2.8	.310	54.4	15	41	57.8	-24	18	0	399.3	1029.9
26	Oct	14	22	13	7	D	2366dM1		1.1	0.1v		17+	49	-2	46	266	-1N	12	259	3	+1.6	+6.4	+9.9	+9.9	.079	77.8	.55	16	29	24.5	-26	25	55	397.6	723.7
R2366 = Antares = alpha Scorpii																																		
2366 is double: AB 1.0 5.4 2.5" 277.9, dT = -2.3sec																																		
2366 is a close double. Observations are highly desired																																		
2366 = alf Sco, 0.75 to 1.21, V, Type SRC, Period 2180. days, Phase 88%																																		
26	Oct	14	22	22	13	Gr	2366dM1		1.1	0.1v		17+	49	-4	43	** GRAZE: CA-13.5N; Dist. 42km in az. 337deg. [Lat =-34.23+0.34(E.Long+58.46)]																					
26	Oct	14	22	30	6	R	2366dM1		1.1	0.1v		17+	49	-5	43	264	-26N	347	233	338	+1.5	+6.4	+4.7	-8.9	.082	102.2	.53	16	29	24.5	-26	25	55	397.9	746.4
R2366 = Antares = alpha Scorpii																																		
2366 is double: AB 1.0 5.4 2.5" 277.9, dT = -11sec																																		
2366 is a close double. Observations are highly desired																																		
2366 = alf Sco, 0.75 to 1.21, V, Type SRC, Period 2180. days, Phase 88%																																		
26	Oct	14	22	56	36.2	D	2373	K1	6.1	5.5		17+	49	-11	38	261	44N	57	303	48	+1.4	+6.3	+0.4	+2.4	.347	31.1	16	31	22.8	-26	32	16	398.4	781.8
26	Oct	15	0	54	11.4	d	184475cB8		8.6			18+	50	15	248	39N	51	290	43	+1.2	+6.2	-0.5	+2.1	.403	35.8	16	35	15.2	-26	28	42	400.8	965.6
184475 is double: AB 8.88 9.89 0.65" 309.5, dT = -0.33sec																																		
184475 is a close double. Observations are highly desired																																		
26	Oct	15	23	13	25.1	D	2512pB9		7.5	7.5		25+	60	45	264	81N	87	334	83	+0.3	+5.9	+1.2	+1.3	.383	-6.1	17	26	5.9	-27	35	59	399.5	745.9
2512 is double: AB 7.5 11.3 5.8" 347.8, dT = -2.3sec																																		
2512 is a close double. Observations are highly desired																																		
26	Oct	16	22	38	17	d	2650	K3	4.7	3.8		34+	71	-7	62	277	0N	359	246	0	-0.7	+5.2	+9.9	+9.9	.087	75.2	.06	18	18	3.2	-27	2	34	399.0	660.3
26	Oct	16	22	50	44	Gr	2650	K3	4.7	3.8		34+	71	-9	58	** GRAZE: CA-15.3N; Dist. 62km in az. 329deg. [Lat =-34.00+0.49(E.Long+58.46)]																					
26	Oct	16	23	0	34	r	2650	K3	4.7	3.8		34+	71	-11	57	273	-30N	329	217	330	-0.8	+5.2	+5.6	-6.7	.090	104.8	.06	18	18	3.2	-27	2	34	399.3	684.6
26	Oct	16	23	53	7	M	186671kK1		7.3	6.5		34+	71	47	265	16S	163	50	164	-1.0	+5.1	+9.9	+9.9	.000	-90.0	18	20	21.2	-27	24	28	400.0	749.1
26	Oct	16	23	53	50	Gr	186671kK1		7.3	6.5		34+	71	46	** GRAZE: CA 16.5S; Dist. 42km in az. 324deg. [Lat =-34.17+0.61(E.Long+58.46)]																					
26	Oct	17	3	15	3.2	D	2669CA7		6.4			35+	73	8	243	70N	68	303	70	-1.3	+4.7	-0.4	+1.4	.534	7.0	18	27	43.7	-26	38	6	403.7	1053.8
2669 is double: AB 6.59 8.48 0.72" 230.2, dT = -1.3sec																																		
2669 is a close double. Observations are highly desired																																		
26	Oct	17	3	23	11.9	D	2673SA3		6.3			35+	73	7	242	77S	101	336	103	-1.3	+4.7	-0.1	+0.8	.489	-26.1	18	28	6.2	-26	45	26	403.9	1066.2
2673 is triple: AB 6.4 9.3 0.51" 179.7, dT = +0.21sec : AC 6.3 8.7 54" 134.6, dT = +93sec																																		
2673 is a close double. Observations are highly desired																																		

Occultation prediction for Ricardo Sanchez Observatorio
E. Longitude - 58 27 33.2, Latitude -34 38 32.3, Alt. 2m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon	Sun Alt	Moon Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	Oct	17	3	45	20.2	d	2676	WA3	6.7	6.6s		35+	73	3	239	74N	72	304	74	-1.3	+4.6	-0.5	+1.2	.559	3.9		18	28	57.4	-26	34	55	404.3	1098.9
							2676 is double: AB 6.7 8.0 42" 181.9, dT = -26sec																													
							2676 = NSV 10864, 6.68 to 6.69, V																													
26	Oct	18	0	53	22.4	D	2809	cK0	4.9	4.6		43+	83	44	267	81N	74	320	81	-2.3	+4.0	+1.0	+1.6	.399	-8.5		19	15	32.4	-25	15	24	399.4	781.6
							R2809 = psi Sagittarii																													
							2809 is double: AB 5.5 5.7 0.18" 108.0, dT = +0.38sec																													
							2809 is a close double. Observations are highly desired																													
26	Oct	18	2	2	24.0	r	2809	cK0	4.9	4.6		44+	83	30	259	-66S	238	122	245	-2.5	+3.9	+0.2	+1.9	.449	-171.3		19	15	32.4	-25	15	24	400.6	883.2
							R2809 = psi Sagittarii																													
							2809 is double: AB 5.5 5.7 0.18" 108.0, dT = +0.26sec																													
							2809 is a close double. Observations are highly desired																													
26	Oct	18	22	33	44.2	d	188858	G8	8.0	7.4		52+	93	-5	77	333	48S	120	323	130	-3.0	+3.1	+4.0	-2.4	.175	-57.3		20	3	29.3	-22	57	21	395.9	622.7
26	Oct	18	22	54	59.3	D	2928	cF7	6.4	6.2		53+	93	-10	74	317	56N	44	261	54	-3.1	+3.1	+1.6	+2.4	.314	17.8		20	3	44.3	-22	35	44	395.9	633.7
							2928 is double: ** 7.3 7.3 0.10" 90.0, dT = +0.22sec																													
							2928 has been reported as non-instantaneous (OCc1590). Observations are highly desired																													
26	Oct	19	23	35	22	m	163965	G0	7.5	7.2		62+	104	72	328	18S	145	353	160	-4.3	+1.7	+9.9	+9.9	.000	-90.0		20	54	5.7	-18	59	49	392.8	653.7
26	Oct	19	23	53	13.0	D	3057	F0	6.7	6.5		62+	104	70	318	54S	110	326	125	-4.3	+1.7	+3.8	-1.0	.200	-55.0		20	54	46.9	-18	47	34	392.8	664.1
26	Oct	20	0	37	1.2	d	163987	A0	8.1	8.0		63+	105	63	299	68S	96	325	110	-4.5	+1.6	+2.7	+0.5	.276	-40.9		20	55	44.3	-18	34	53	393.0	696.3
26	Oct	20	4	14	16.2	D	3071	cK3	6.1	5.4		64+	106	19	262	59N	42	281	57	-5.0	+1.1	-0.1	+2.0	.473	18.6		21	0	51.8	-17	31	51	396.0	959.0
							R3071 = 21 Capricorni																													
							3071 is double: ** 6.8 8.2 0.43" 77.0, dT = +0.7sec																													
							3071 has been reported as non-instantaneous (OCc 607). Observations are highly desired																													
26	Oct	20	22	48	4.3	D	3173	cG2	5.2	4.8v		72+	116	-8	66	32	89N	70	222	87	-4.9	+0.4	+2.3	+0.6	.335	-15.7		21	41	32.9	-14	2	51	388.9	656.9
							R3173 = 42 Capricorni																													
							3173 is double: ** 5.5 7.5																													
							3173 = BY Cap, 5.13 to 5.18, V, Type RS																													
26	Oct	21	4	52	41.9	D	3196	A1	6.3	6.2		73+	118	18	267	62S	98	336	116	-5.9	-0.4	+0.5	+1.1	.386	-39.9		21	49	41.0	-12	43	22	391.6	954.4
26	Oct	22	0	32	29.5	d	3306	pF0	7.8	7.6		81+	128	63	355	82N	61	245	81	-5.7	-1.3	+2.0	+1.2	.361	-12.6		22	30	32.8	-	8	6	53	383.7	688.6
							3306 is double: AB 7.8 8.6 8.1" 328.4, dT = -1.1sec																													
							3306 is a close double. Observations are highly desired																													
26	Oct	28	2	0	42.8	R	569	cA2	5.3			94-	153	14	45	23S	179	319	192	-0.6	-7.1	-1.5	+3.2	.193	-112.7		3	50	18.9	25	34	46	363.2	881.2
							569 is double: AB 5.73 6.52 0.66" 204.1, dT = -3sec																													
							569 is a close double. Observations are highly desired																													
							Distance of 569 to Terminator = 17.7"; to 3km sunlit peak = 6.3"																													
26	Oct	31	7	49	51.4	r	79243	K1	7.3	6.7		67-	110	28	11	85N	282	91	275	+3.3	-5.0	+2.2	-0.6	.389	-176.2		7	17	15.6	26	21	49	365.0	690.9
26	Oct	31	8	12	45.2	r	79253	cK1	7.6	7.1		67-	110	-9	29	6	83N	284	99	277	+3.3	-4.9	+2.2	-0.5	.389	-176.9		7	17	54.5	26	19	59	365.0	690.3
							79253 is double: ** 8.7 8.7 0.050"																													
							79253 has been reported as non-instantaneous (OCc1350). Observations are highly desired																													
26	Nov	2	6	21	5.8	r	1370	WA0	6.9	6.8		45-	84	13	58	72S	269	42	253	+5.4	-2.1	+1.0	-1.2	.428	-158.5		9	11	56.9	18	2	39	372.6	830.6
							R1370 = 80 Cancri																													
							1370 is double: AB 6.9 9.5 128" 253.1, dT = -287sec																													
26	Nov	3	7	45	26.4	D	1487	SB7	1.4	1.4s		34-	71	22	57	-64S	137	272	117	+5.8	-0.4	+1.1	-2.0	.419	-17.5		10	8	22.3	11	58	2	375.2	798.5
							R1487 = Regulus = alpha Leonis																													
							1487 is triple: AB 1.4 8.2 176" 308.0, dT = -416sec : AD 1.4 12.1 192" 274.0, dT = -339sec																													
							1487 = NSV 4750, 1.33 to 1.40, V																													
26	Nov	3	8	58	32.8	R	1487	SB7	1.4	1.4s		33-	70	1	34	41	85S	286	73	267	+5.6	-0.3	+1.8	-1.3	.387	-162.5		10	8	22.3	11	58	2	374.3	737.2
							R1487 = Regulus = alpha Leonis																													
							1487 is triple: AB 1.4 8.2 176" 308.0, dT = -421sec : AD 1.4 12.1 192" 274.0, dT = -486sec																													

Occultation prediction for Ricardo Sanchez Observatorio
E. Longitude - 58 27 33.2, Latitude -34 38 32.3, Alt. 2m; Telescope dia 15cm; dMag 0.0

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       day  Time     P   Star  Sp  Mag  Mag    % Elon Sun  Moon   CA   PA  VA  AA Libration   A   B   RV    Cct durn  R.A. (J2000)  Dec   Mdist   SV
 y   m  d  h  m   s       No  D    v    r V  ill     Alt Alt Az   o    o   o   o   L   B   m/o m/o "/s     o  sec  h  m   s    o  m  s   Mm   m/s
      1487 = NSV 4750, 1.33 to 1.40, V
26 Nov  4  7 53 58.7 R    1589pM5  5.9  5.3v  24-  58 -11 20  67  83N 300  70 278 +6.1 +1.1 +0.8-1.8 .461 -178.5     10 56  1.5   6 11  7 379.0 848.2
   R1589 = 56 Leonis (VY)
      1589 is double:  6.2 7.1
      1589 = VY Leo, 5.69 to 6.03, V, Type SR, Period 46.34 days, Phase  28%
26 Nov  5  7 37  4.1 r    1697kA2  7.8  7.8   15-  46     12  82  42N 340 105 318 +6.2 +2.5 +0.2-2.5 .391  140.7     11 43 19.9   0 11  7 383.4 939.2
26 Nov  6  7 58 40.1 r    1792PF2  7.4  7.1S   9-  34 -10 11  90  70N 309  73 287 +6.0 +3.8 +0.1-1.8 .517  171.2     12 30  1.9 - 6  1 24 387.0 981.7
      1792 is triple: AB 7.4 13.0 3.3" 278.9, dT = -5sec : AC 7.4 13.0 18.8" 292.0, dT = -35sec
      1792 is a close double. Observations are highly desired
      1792 = NSV 19406, 7.36, , Type VAR:
26 Nov  6 15  5 55.7 r    1815SK2  4.7  4.0    7-  32  70 56 315  74S 271 128 249 +5.0 +4.6 +2.5+0.7 .303 -143.5     12 39 14.8 - 7 59 44 383.9 702.8
   R1815 = chi Virginis
      1815 is multiple: **Aa,Ab 4.8 8.8 0.10" 214.0, dT = -0.18sec : AB 4.8 8.8 177" 135.9, dT = +417sec : AC 4.8 10.6 224" 109.8, dT = +699sec : AD
4.8 9.0 321" 331.1, dT = -533sec
      1815 has been reported as non-instantaneous (OCc 760). Observations are highly desired
26 Nov  7  9 51  0   M Venus      -4.5 -4.5    4-  22  12 28  86 -21N  34 157  13 +5.6 +4.9 +9.9+9.9 .000   90.0     13 21 36.7 -12  6 49 388.9 933.0
26 Nov  7  9 51 49   GrVenus     -4.5 -4.5    4-  22  12 29 ** GRAZE: CA-20.7N; Dist. 36km in az. 224deg. [Lat =-35.10-0.81(E.Long+58.46)]
26 Nov 12  0  8 23.1 d  185106 K5  8.6  7.4    7+  30     10 244  62N  74 310  68 +0.6 +5.6 -0.4+1.3 .518    9.0     17 10 37.6 -27  0 19 403.11026.2
26 Nov 12  0 46  2.0 D    2468pG8  6.8         7+  30      3 239  80N  92 324  86 +0.6 +5.5 -0.4+0.9 .548   -8.4     17 12 10.9 -27  2 32 403.81084.8
      2468 is triple: AB 6.92 9.65 1.82"  64.2, dT = +2.9sec : AC 6.9 13.9 83"  81.2, dT = +148sec
      2468 is a close double. Observations are highly desired
26 Nov 12 23 23 53.9 d X 43245S    8.4  8.1   12+  40 -10 28 255  74N  79 322  78 -0.6 +5.0 +0.3+1.4 .455   -3.0     18  2 45.0 -27  4 42 402.4 888.2
   X 43245 is triple: AB 8.4 9.4 5.4" 100.9, dT = +11sec : AC 8.4 11.5 41"  66.7, dT = +89sec
   X 43245 is a close double. Observations are highly desired
26 Nov 12 23 46 30.5 d  186181 K0  9.0  8.4   12+  40     23 252  60N  64 306  63 -0.6 +5.0 +0.0+1.7 .463   11.7     18  3 25.3 -26 58 35 402.8 923.8
26 Nov 12 23 51 11.0 d  186190 K2  8.6  7.7   12+  40     23 252  89S  95 337  95 -0.6 +4.9 +0.4+1.0 .449  -19.4     18  3 41.4 -27  5 53 402.9 931.3
26 Nov 13  0  1 35.3 d  186189kB5  8.0  8.0   12+  41     20 251  37N  41 281  40 -0.6 +4.9 -0.5+2.3 .396   35.3     18  3 40.3 -26 52  6 403.1 947.9
26 Nov 13  0 22  5.7 D  186222 F5  7.5  7.2   12+  41     17 248  44N  48 287  47 -0.6 +4.9 -0.5+2.0 .439   28.7     18  4 30.2 -26 50 58 403.5 980.3
26 Nov 13  0 31  3.0 d  186241cA2  9.0  8.9   12+  41     15 247  73S 111 349 111 -0.6 +4.9 +0.3+0.6 .418  -34.5     18  5  2.7 -27  5 11 403.7 994.5
    186241 is double: ** 9.8 9.8 0.10"  90.0, dT = +0.22sec
    186241 has been reported as non-instantaneous (OCc  89). Observations are highly desired
26 Nov 13  0 34 54.5 d  186243cK2  8.2  7.5   12+  41     14 247  61S 123   1 122 -0.6 +4.9 +0.5+0.2 .352  -46.4     18  5  5.1 -27  7 28 403.81000.8
    186243 is double: ** 9.2 9.2 0.10"  90.0, dT = +0.24sec
    186243 has been reported as non-instantaneous (OCc  90). Observations are highly desired
26 Nov 13  0 53 42.7 d  186264dB3  8.5  8.5   12+  41     11 245  89S  95 332  95 -0.7 +4.8 -0.1+0.9 .499  -18.1     18  5 58.2 -26 58 31 404.21029.9
    186264 is double: AB 8.5 11.3 2.3"  85.3, dT = +4sec
    186264 is a close double. Observations are highly desired
26 Nov 13  1  6 44.0 d  186273 F5  8.4  8.2   12+  41      8 243  52N  56 291  55 -0.7 +4.8 -0.6+1.6 .498   21.6     18  6 16.9 -26 47 20 404.41050.0
26 Nov 14  0 28 28.4 d  187490 K2  8.3  7.4   19+  52     24 255  32N  28 270  33 -1.9 +4.0 -0.6+2.6 .354   41.5     18 57  9.4 -25 27 54 403.0 925.2
26 Nov 14 23 27 53.1 d  188562 A2  8.8  8.7e  27+  62 -10 45 270  81S  90 334  99 -3.1 +3.0 +1.4+1.2 .355  -28.0     19 47 10.8 -23 22 52 400.3 780.8
    188562 = HD 186753, 8.82, range 0.02, 5V, Type EA, Period 1.9193851 days, Phase  31%
26 Nov 15  1 30  3.8 d    2895 B8  7.8  7.9   27+  63     20 256  46N  36 276  45 -3.4 +2.7 -0.4+2.2 .426   29.5     19 50 16.3 -22 46 48 402.4 955.6
26 Nov 16  1 24 51.3 d  163770 K4  7.9  7.1   36+  74     29 266  64N  50 290  63 -4.6 +1.5 +0.2+2.0 .450   10.5     20 39 15.7 -19 16 43 399.5 887.3
26 Nov 17  1 27  0   m    3136 K1  8.0  7.4   45+  85     35 276  16S 146  24 162 -5.8 +0.1 +9.9+9.9 .000  -90.0     21 26 27.0 -15 14 43 395.6 836.9
26 Nov 17  3 47 25.2 d    3152 K2  6.6  6.0   46+  86      7 257  78N  60 296  76 -6.0 -0.2 -0.2+1.6 .533    2.3     21 30 40.4 -14 17 28 398.21029.2
26 Nov 18  4  5 28.1 d    3270 K3  5.8  5.2   56+  97      9 265  79N  58 294  77 -6.9 -1.6 +0.0+1.7 .519    2.1     22 16 52.6 - 9  2 24 393.4 991.8
26 Nov 18 22 31 29.6 d    3362cK0  5.9     S  64+ 107   1 60  13  44S 114 283 135 -6.6 -2.4 +4.9-2.8 .149  -65.9     22 55 11.0 - 4 59 16 384.7 683.9
      3362 is double: AB 6.03 7.75 0.46" 325.0, dT = -2.7sec
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Occultation prediction for Ricardo Sanchez Observatorio
E. Longitude - 58 27 33.2, Latitude -34 38 32.3, Alt. 2m; Telescope dia 15cm; dMag 0.0

y	m	day d	h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon Alt	Sun Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	dur sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
							3362 is a close double. Observations are highly desired																											
							3362 = NSV 14360, 7.6,																											
26	Nov	18	22	46	3	Gr	3362cK0	5.9	S			64+	107	-1	59	** GRAZE: CA 19.6S; Dist.160km in az. 135deg. [Lat =-36.68+0.82(E.Long+58.46)]																			
26	Nov	19	23	50	28.6	D	3494 A7	4.5	4.4			74+	119		54	356	17N	355	178	17	-7.0	-3.9	-0.3	+3.5	.233	52.6		23	42	2.8	1	46	48	378.9	703.5
							R3494 = lambda Piscium																											
26	Nov	20	0	39	57.3	r	3494 A7	4.5	4.4			75+	119		51	336	-58N	281	120	303	-7.2	-4.0	+3.3	+0.0	.236	127.6		23	42	2.8	1	46	48	378.8	710.9
							R3494 = lambda Piscium																											
26	Nov	20	1	34	25.8	d	128361 G5	7.6	7.2			75+	120		45	319	82N	60	273	82	-7.4	-4.2	+1.6	+1.6	.393	-10.0		23	45	4.3	2	5	29	379.0	733.1
26	Nov	22	5	47	27.8	D	221cG8	3.8	s			92+	147		10	296	66N	52	282	73	-6.6	-6.6	+0.8	+1.9	.475	15.4		1	31	29.0	15	20	45	369.3	883.0
							R221 = Kullat Nunu = eta Piscium																											
							221 is double: AB 3.83 7.51 0.40" 86.9, dT = +0.7sec																											
							221 is a close double. Observations are highly desired																											
							221 = NSV 532, 3.59 to 3.65, V																											
26	Nov	23	0	22	46.0	d	341 F8	6.8	6.5			96+	158		30	29	67N	61	217	80	-4.6	-6.9	+1.4	+0.2	.447	-4.3		2	19	8.7	19	41	16	363.2	790.6
							R341 = 23 Arietis																											
26	Nov	24	2	52	58.4	d	490 K4	5.5	4.9			99+	171		31	4	36N	62	239	77	-3.1	-7.3	+1.8	+0.5	.416	5.0		3	24	18.5	24	43	27	358.9	727.6
							R490 = 64 Arietis																											
							Distance of 490 to Terminator = 3.9"; to 3km sunlit peak = 0.0"																											
26	Nov	25	3	28	44.2	r	673cA0	6.5	6.5			99-	170		27	10	83N	232	42	241	-1.2	-7.1	+1.7	+0.6	.382	-155.2		4	29	19.8	27	24	15	356.9	728.4
							673 is double: ** 7.4 7.4 0.10" 286.0, dT = -0.15sec																											
							673 has been reported as non-instantaneous (OCc 722). Observations are highly desired																											
							Distance of 673 to Terminator = 12.7"; to 3km sunlit peak = 3.7"																											
26	Nov	27	5	5	29.6	r	1042cA2	6.7	6.6			90-	143		26	18	80S	260	62	255	+2.7	-5.3	+2.0	-0.2	.392	-160.6		6	49	10.2	27	11	25	358.1	721.6
							1042 is double: 6.7 9.8 0.10"																											
							1042 is a close double. Observations are highly desired																											
26	Nov	28	5	52	13	m	79804cG0	7.4				82-	129		28	24	10S	199	358	189	+4.3	-3.9	+9.9	+9.9	.000	-90.0		7	56	2.8	23	41	33	360.9	722.5
							79804 is double: AB 7.90 8.57 0.11" 110.6																											
							79804 is a close double. Observations are highly desired																											
26	Dec	3	6	27	45.5	r	138684kK0	8.1	7.6			29-	65		16	85	58N	324	88	302	+7.3	+3.7	+0.2	-2.1	.462	158.0		12	16	16.1	- 4	27	7	385.7	932.0
26	Dec	6	7	40	57.7	R	2095 K0	7.0	6.5			7-	30	-10	12	106	19N	352	114	334	+5.6	+5.8	-0.9	-2.7	.298	124.0		14	41	25.4	-19	55	41	397.4	1029.5
26	Dec	11	12	54	6	d	2809cK0	4.9	4.6			6+	28	51	27	104	11S	167	285	173	-0.3	+3.7	+9.9	+9.9	.077	-79.7	.01	19	15	32.4	-25	15	24	403.5	844.8
							R2809 = psi Sagittarii																											
							2809 is double: AB 5.5 5.7 0.18" 108.2, dT = +1.2sec																											
							2809 is a close double. Observations are highly desired																											
26	Dec	11	13	0	26	Gr	2809cK0	4.9	4.6			6+	28	52	29	** GRAZE: CA 0.4S; Dist. 30km in az. 205deg. [Lat =-34.94-0.38(E.Long+58.46)]																			
26	Dec	11	19	0	44.9	d	2834cA4	5.0	4.9			7+	30	46	73	302	72N	68	298	75	-1.5	+3.5	+2.1	+1.5	.325	-2.2		19	25	16.5	-24	30	31	400.2	630.9
							R2834 = chi Sagittarii																											
							2834 is double: AB 5.8 5.8 0.12" 78.1, dT = +0.35sec																											
							2834 is a close double. Observations are highly desired																											
26	Dec	12	0	47	59	M	2857 K4	6.5	5.6s			8+	32		5	245	14S	159	34	167	-2.4	+2.8	+9.9	+9.9	.000	-90.0		19	34	33.9	-23	51	32	405.6	1079.4
							2857 = NSV 12153, 6.51, range 0.00, 6V, Type VAR, Period 0.09059 days																											
26	Dec	13	0	25	19.5	d	189224 K5	8.4	7.5			13+	43		17	256	49S	118	357	130	-3.7	+1.6	+0.7	+0.4	.289	-54.8		20	23	30.2	-20	31	46	403.3	979.5
26	Dec	13	21	12	24	M	3079 A1	4.1	4.1			19+	52	20	61	301	20S	144	11	159	-4.5	+0.6	+9.9	+9.9	.000	-90.0		21	5	56.8	-17	13	58	397.9	690.9
							R3079 = Tsin = theta Capricorni																											
26	Dec	13	21	18	1	Gr	3079 A1	4.1	4.1			19+	52	18	61	** GRAZE: CA 20.6S; Dist.225km in az. 312deg. [Lat =-31.63+0.90(E.Long+58.46)]																			
26	Dec	13	23	43	14	D	3091 K4	6.7	5.9			20+	53	-8	32	271	27S	136	15	151	-4.9	+0.3	+4.5	-2.9	.089	-78.4	.02	21	9	25.1	-16	36	57	399.9	858.6
26	Dec	13	23	49	18	Gr	3091 K4	6.7	5.9			20+	53	-9	29	** GRAZE: CA 15.2S; Dist. 57km in az. 135deg. [Lat =-35.37+0.82(E.Long+58.46)]																			
26	Dec	13	23	57	20	r	3091 K4	6.7	5.9			20+	53	-10	29	269	3S	160	39	175	-5.0	+0.3	-3.3	+6.5	.091	-101.6	.02	21	9	25.1	-16	36	57	400.2	877.5

Occultation prediction for Ricardo Sanchez Observatorio
E. Longitude - 58 27 33.2, Latitude -34 38 32.3, Alt. 2m; Telescope dia 15cm; dMag 0.0

	day	Time	P	Star	Sp	Mag	Mag	%	Elon	Sun	Moon	CA	PA	VA	AA	Libration		A	B	RV	Cct	durn	R.A. (J2000)			Dec			Mdist	SV
y	m d	h m s		No	D	v	r	V	ill		Alt	Alt	Az	o	o	o	o	L	B	m/o	m/o	"/s	o	sec	h	m	s	o	m	s	Mm	m/s
26	Dec 14	0 50 1.9	d	164201	G6	8.7	8.3		20+	54	18	263	71N	54	293	70	-5.1	+0.2	+0.0	+1.8	.485	5.9			21	11	22.3	-16	1	36	401.2	949.2
26	Dec 20	3 46 42.3	D	288	cK1	5.1	4.6		79+	125	14	304	19S	145	11	165	-7.5	-7.1	+0.7	-2.7	.110	-76.1	.01		1	57	21.1	17	49	3	370.4	823.2
R288 = iota Arietis																															
26	Dec 20	3 53 34	Gr	288	cK1	5.1	4.6		79+	125	12	** GRAZE: CA 4.4S; Dist.111km in az. 189deg. [Lat =-35.66-0.13(E.Long+58.46)]																			
Distance of 288 to Terminator = 14.4"; to 3km sunlit peak = 1.3"																															
26	Dec 23	4 51 43.8	d	768	A2	7.0	6.7S		99+	166	22	333	86N	104	309	110	-2.6	-6.8	+1.6	+0.4	.434	-11.3			5	8	35.3	28	16	24	355.6	762.7
768 = NSV 16250, 7., , Type VAR:																															
26	Dec 27	3 9 4.5	r	1395	G9	6.3	5.8		86-	136	15	57	17N	360	134	343	+5.8	-1.2	+1.1	-3.8	.195	113.7			9	25	32.5	16	35	8	362.1	851.9
26	Dec 30	6 57 28.0	r	138553	kK2	7.5	6.9		55-	96	44	56	80S	284	61	262	+7.8	+3.8	+1.7	-1.4	.382	-155.2			12	3	13.2	- 3	23	44	377.6	771.3
26	Dec 31	5 49 9.0	r	138978	K2	7.6	7.0		45-	84	27	83	40S	242	6	220	+8.0	+4.7	+1.6	-0.2	.226	-118.2			12	49	0.6	- 9	13	13	384.7	890.5
26	Dec 31	8 24 38	m	1853	cM3	4.8	3.9v		44-	83	-4 55	51	-17N	40	179	18	+7.6	+5.0	+9.9	+9.9	.000	90.0			12	54	21.2	- 9	32	20	382.9	731.1
R1853 = psi Virginis																															
1853 is double: ** 5.0 8.3 0.040" 110.0																															
1853 has been reported as non-instantaneous (OCc 387). Observations are highly desired																															
1853 = psi Vir, 4.73 to 4.96, V, Type SR																															

Lunar Occultation predictions
Chicago Astronomer Observatory
Chicago
USA

Occultation prediction for Chicago Astronomer Observatory
E. Longitude - 87 40 16.3, Latitude 41 51 8.6, Alt. 182m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon Sun Alt	Moon Alt	Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	Jan	1	9	51	34.8	d	701SF2		6.6	6.4		94+	151	17	292	30N	30	339	38	-1.3	-6.1	+1.0	+0.8	.312	60.0		4	38	29.5	26	56	23	358.7	1088.5
							701 is triple: 6.6 9.2 3.1" 169.4, dT = -7sec : AB 7.36 7.21 4.48" 187.8, dT = -13sec																														
							701 is a close double. Observations are highly desired																														
26	Jan	2	2	40	45.8	d	77224cF8		7.4	7.1		97+	162	63	111	72S	120	172	123	+1.2	-6.1	+1.9	-0.5	.367	-37.4		5	31	22.8	27	46	9	354.7	795.7
							77224 is double: ** 8.3 8.3 0.10" 90.0, dT = +0.24sec																														
							77224 has been reported as non-instantaneous (OCc 194). Observations are highly desired																														
26	Jan	2	8	51	56.4	d	868SA0		7.5	7.5		98+	164	39	275	83S	111	54	113	+0.7	-5.9	+0.5	-1.7	.528	-12.3		5	44	21.2	27	43	53	356.5	933.9
							868 is triple: AB 7.5 9.8 8.6" 254.1, dT = -13sec : AC 7.5 12.7 47" 40.4, dT = +30sec																														
							868 is a close double. Observations are highly desired																														
26	Jan	2	12	6	58.8	d	890cA0		4.6	4.6s		98+	166	6	302	57N	73	27	74	+0.9	-5.5	-0.2	-0.7	.626	25.2		5	53	19.6	27	36	44	360.0	1208.6
							R890 = 136 Tauri																												
							890 is double: ** 4.8 6.3 0.050" 270.0, dT = -0.08sec																														
							890 has been reported as non-instantaneous (OCc 206). Observations are highly desired																														
							890 = NSV 2696, 4.50 to 4.61, V																														
							Distance of 890 to Terminator = 19.9"; to 3km sunlit peak = 8.7"																														
26	Jan	4	2	43	51	M	1170dG8		3.6	3.1		99-	169	38	90	16S	189	244	179	+5.1	-4.5	+9.9	+9.9	.000	-90.0		7	44	26.8	24	23	53	360.5	883.2
							R1170 = kappa Geminorum																												
							1170 is double: AB 3.7 10.0 7.3" 241.1																														
							1170 is a close double. Observations are highly desired																														
							Distance of 1170 to Terminator = 1.4"; to 3km sunlit peak = 0.0"																														
26	Jan	4	2	46	59	Gr	1170dG8		3.6	3.1		99-	169	40	** GRAZE: CA 16.7S; Dist.322km in az. 344deg. [Lat = 44.87+0.21(E.Long+87.67)]																														
							Distance of 1170 to Terminator = 1.9"; to 3km sunlit peak = 0.0"																														
26	Jan	4	5	41	38.1	r	1180 F5		7.1	6.8		99-	168	68	137	71N	284	318	274	+4.8	-4.4	+1.8	-0.1	.428	-176.3		7	49	18.9	24	29	19	359.0	747.6
							Distance of 1180 to Terminator = 18.3"; to 3km sunlit peak = 7.4"																														
26	Jan	4	6	18	55.7	r	79739 F0		7.1	7.0		99-	168	71	159	55S	231	248	221	+4.8	-4.4	+2.7	+3.2	.220	-120.9		7	50	39.8	24	9	40	359.0	744.2
							Distance of 79739 to Terminator = 14.3"; to 3km sunlit peak = 4.8"																														
26	Jan	4	9	19	9.2	r	1195 B8		6.8	6.9		99-	167	55	251	50S	228	178	218	+4.4	-4.1	+3.2	+1.7	.188	-113.0		7	56	6.5	23	37	26	360.4	844.0
							Distance of 1195 to Terminator = 14.8"; to 3km sunlit peak = 5.0"																														
26	Jan	4	9	24	11.6	r	79804cG0		7.4			99-	167	54	252	71S	249	198	239	+4.4	-4.1	+1.9	-0.2	.336	-133.8		7	56	2.8	23	41	33	360.4	849.5
							79804 is double: AB 7.90 8.57 0.11" 100.4, dT = +0.29sec																														
							79804 is a close double. Observations are highly desired																														
26	Jan	5	3	31	42.1	r	1315 A2		7.1	7.1		96-	156	34	92	51N	319	12	305	+6.5	-3.2	+1.0	-0.6	.417	147.5		8	46	20.2	20	37	0	365.4	877.3
26	Jan	5	3	44	4.3	r	80413 F8		7.6	7.3		96-	156	36	94	87S	277	330	263	+6.5	-3.2	+0.9	+1.0	.479	-169.9		8	46	21.4	20	24	50	365.3	862.9
26	Jan	5	7	37	42.5	R	1329pF8		6.8			95-	154	68	175	26N	345	350	331	+6.0	-2.9	+0.7	-3.2	.294	134.0		8	53	55.3	19	58	2	363.9	746.4
							1329 is double: AB 7.32 7.86 0.15" 71.9, dT = -0.03sec																														
							1329 is a close double. Observations are highly desired																														
26	Jan	7	3	51	31.5	R	1547cB1		3.8	3.9v		82-	130	12	89	71N	311	360	290	+7.9	-0.1	+0.3	+0.0	.503	164.6		10	32	48.7	9	18	24	379.1	960.0
							R1547 = rho Leonis																												
							1547 is double: AB 3.8 4.8 105.1, dT = -0.04sec																														
							1547 = rho Leo, 3.83 to 3.9, V, Type ACYG, Period 3.4271 days, Phase 53%																														
26	Jan	7	4	55	53	m	1550DA2		5.6	5.6e		82-	129	23	100	6S	208	256	188	+7.8	-0.1	+9.9	+9.9	.000	-90.0		10	35	2.2	8	39	2	378.2	881.8
							R1550 = TX Leonis = 49 Leonis																												
							1550 is double: AB 5.80 7.90 2.19" 155.8																														
							1550 is a close double. Observations are highly desired																														
							1550 = TX Leo, 5.66 to 5.75, V, Type EA/DM, Period 2.4450566 days, Phase 95%																														
							Distance of 1550 to Terminator = 8.6"; to 3km sunlit peak = 0.0"																														
26	Jan	7	4	56	11	Gr	1550DA2		5.6	5.6e		82-	129	24	** GRAZE: CA 6.5S; Dist. 90km in az. 5deg. [Lat = 42.67-0.06(E.Long+87.67)]																														
							Distance of 1550 to Terminator = 17.8"; to 3km sunlit peak = 3.7"																														

Occultation prediction for Chicago Astronomer Observatory
E. Longitude - 87 40 16.3, Latitude 41 51 8.6, Alt. 182m; Telescope dia 15cm; dMag 0.0

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      day  Time     P   Star  Sp  Mag  Mag    % Elon Sun  Moon   CA   PA  VA  AA Libration   A   B   RV    Cct durn  R.A. (J2000)  Dec   Mdist   SV
 y   m  d  h  m   s       No  D    v    r V  ill     Alt Alt Az   o    o   o   o   L    B   m/o m/o "/s     o  sec  h  m   s    o  m  s   Mm   m/s
26 Jan  9  7 42 54.0 r    1754KF5  7.0  6.7   62- 104     28 125  62N 322 360 300 +7.0 +3.1 +0.7-0.6 .409  165.4      12 11 21.8 - 3 46 44 390.1 800.1
26 Jan 10  7  2 58.2 R    1853cM3  4.8  3.9v  53-  93     11 113  71S 274 318 252 +6.3 +4.3 +0.7+1.4 .397 -149.5 .01 12 54 21.2 - 9 32 20 396.6 886.4
   R1853 = psi Virginis
      1853 is double: ** 5.0 8.3 0.040" 110.0, dT = +0.1sec
      1853 has been reported as non-instantaneous (OCc 387). Observations are highly desired
      1853 = psi Vir, 4.73 to 4.96, V, Type SR
26 Jan 10  8 47 13.0 r  139061DF5  7.3        52-  93     26 134  43N 340  13 318 +6.1 +4.5 +0.3-1.3 .346  148.5      12 57 28.6 - 9 45 41 395.2 778.2
    139061 is double: AB 7.31 10.77 1.66" 276.0, dT = -2.1sec
    139061 is a close double. Observations are highly desired
26 Jan 11 11 41 21.7 R    1970SA0  6.2  6.2   42-  81     32 171  70N 310 317 290 +4.5 +5.8 +1.5-0.7 .352  177.5      13 45 35.1 -15 46  3 398.7 680.6
   R1970 = 85 Virginis
      1970 is multiple: Aa,Ab 6.5 8.2           : Aa,Ac 6.5 8.4 0.10"       : AB 6.2 12.8 44" 312.7, dT = -125sec : AB 6.2 12.8 44" 312.6, dT = -
125sec
      1970 is a close double. Observations are highly desired
26 Jan 13 10 20 27   m    2188SA2  7.5  7.3   24-  59      9 135  17S 208 244 194 +2.3 +7.0 +9.9+9.9 .000  -90.0      15 19  9.2 -24 15 54 404.3 799.4
      2188 is triple: AB 7.5 8.6 2.0" 161.5 : AC 7.5 11.2 46"  84.0
      2188 is a close double. Observations are highly desired
26 Jan 13 10 51 44.3 r  183377cF2  7.4        24-  59     13 141  41S 233 264 218 +2.3 +7.1 +3.4+3.8 .159 -114.1      15 19 40.4 -24 16 12 403.9 763.3
    183377 is double: AB 7.90 8.27 0.65" 227.9, dT = -4sec
    183377 is a close double. Observations are highly desired
26 Jan 14 10 45 52.5 R    2318 A*  6.6  6.6v  17-  48      4 133  81S 266 304 256 +1.0 +7.3 +1.1+1.5 .372 -153.5      16 10 15.9 -26 54 33 404.8 815.2
      2318 = V0952 Sco, 6.57, range 0.04, V, Type ACV, Period 1.4178 days, Phase  15%
26 Jan 14 11 22  8.2 R    2320 B9  7.0  6.9   17-  48      9 139  43S 228 261 218 +0.9 +7.4 +3.1+3.7 .168 -115.4      16 11 33.5 -27  9  3 404.3 771.4
26 Jan 14 11 33  5.2 r  184208cG3  8.1  7.8   17-  48     10 141  70S 255 286 245 +0.9 +7.4 +1.8+1.7 .306 -142.2      16 11 36.4 -27  4 41 404.1 758.4
    184208 is double: ** 8.9 8.9 0.10"  63.0, dT = +0.32sec
    184208 has been reported as non-instantaneous (OCc 764). Observations are highly desired
26 Jan 22  1 26 41.0 d X183491D    7.9  7.8   10+  37      6 253  65N  43 357  64 -6.2 +0.4 +0.1+0.2 .502   14.3      22 43  3.3 - 8 18 40 384.0 964.8
   X183491 is double: BA 7.9 6.8 2.4" 126.8, dT = +0.5sec
   X183491 is a close double. Observations are highly desired
26 Jan 22  1 26 41.7 D    3333SA5  6.4        10+  37      6 253  65N  44 357  64 -6.2 +0.4 +0.1+0.2 .502   14.2      22 43  3.4 - 8 18 41 384.0 964.8
      3333 is quadruple: AB 6.79 7.88 2.37" 306.8, dT = -0.5sec : AC 6.8 11.4 70" 355.8, dT = +94sec : AD 6.8 14.2 75" 278.1, dT = -86sec
      3333 is a close double. Observations are highly desired
26 Jan 22  1 29 37.0 d  146276 F8  8.2  7.9   10+  37      6 254  83S  75  28  95 -6.2 +0.4 +0.3-0.9 .497  -17.2      22 43 26.2 - 8 25  7 384.1 968.4
26 Jan 22 23 24 13.1 d    3454 K0  7.6  7.1   17+  49  -6 36 223  64N  40   9  62 -6.0 -0.9 +0.9+0.8 .423   11.4      23 27 14.7 - 2 38 13 377.9 791.4
26 Jan 23  0  0 11.2 D  146720 K5  8.1  7.4   17+  49     32 232  71S  85  49 106 -6.1 -1.0 +1.5-1.0 .377  -32.2      23 28 27.0 - 2 39 13 378.3 818.2
26 Jan 23  0  2 22.7 d  146716pG0  8.4  8.2   17+  49     31 233  62N  38   1  59 -6.1 -1.0 +0.7+0.7 .432   15.1      23 28  5.7 - 2 27 33 378.3 819.9
    146716 is triple: AB 9.2 9.2 0.20"  79.7, dT = +0.34sec : AC 8.5 8.1 57"  45.9, dT = +132sec
    146716 is a close double. Observations are highly desired
26 Jan 23  0  4 33.8 D  146717PF2  8.1  7.9   17+  49     31 233  61N  37   0  59 -6.1 -1.0 +0.7+0.7 .431   15.5      23 28  8.5 - 2 26 53 378.3 821.7
    146717 is double: AB 8.1 8.5 57" 225.9, dT = -131sec
26 Jan 24  3  1 38.5 d      41 G5  7.7  7.2   27+  63     14 264  44N  19 331  41 -6.0 -2.8 +0.3+1.3 .385   42.1       0 20 21.6   4 46 44 376.5 947.7
26 Jan 26  2  0 43.8 d     296cF2  7.7        48+  88     49 243  84S  75  31  95 -4.5 -5.2 +1.5-0.4 .425  -12.4       2  1  9.8  16 33 55 367.3 775.4
       296 is double: AB 7.70 11.23 0.32" 278.3, dT = -0.7sec
       296 is a close double. Observations are highly desired
26 Jan 26  6 10 29.2 d     317 F5  6.4  6.2   50+  90      6 288  67S  93  45 112 -4.7 -5.2 -0.2-1.3 .555  -19.9       2  9 23.1  17 13 27 371.11062.7
   R317 = 20 H1. Arietis
26 Jan 27  2 46  1.3 D     438cA3  6.8        60+ 101     54 247  52S 112  65 128 -3.5 -6.0 +1.6-2.3 .323  -41.9       2 58 53.1  21 37  4 364.4 766.8
       438 is double: AB 7.47 7.45 0.54" 279.1, dT = -1.6sec
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Occultation prediction for Chicago Astronomer Observatory
E. Longitude - 87 40 16.3, Latitude 41 51 8.6, Alt. 182m; Telescope dia 15cm; dMag 0.0

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      day  Time     P   Star  Sp  Mag  Mag    % Elon Sun  Moon   CA   PA  VA  AA Libration   A    B    RV    Cct durn  R.A. (J2000)  Dec   Mdist   SV
 y   m  d  h  m   s       No  D    v    r V  ill     Alt Alt Az   o    o   o   o   L    B   m/o m/o  "/s     o  sec  h  m   s    o  m  s   Mm   m/s
       438 is a close double. Observations are highly desired
26 Jan 27 19 13 22.6 d     537SB6  3.7  3.8s  68+ 112  28 17  72  49S 120 171 132 -1.6 -5.8 +0.4+0.6 .392  -50.8      3 44 52.5  24  6 48 366.31099.9
   R537 = Electra = 17 Tauri
       537 is multiple: ** 3.9 7.5 0.20" 117.0, dT = +0.5sec : Aa,Ac 3.9 7.5 0.20"       : Aa,Ab 3.9 7.0 26.5"       : AB 3.7 13.0 98" 144.0, dT =
+229sec
       537 has been reported as non-instantaneous (OCc1693). Observations are highly desired
       537 = NSV 15755, 3.70, range 0.00, 1Kp, Type SPB, Period 1.1073 days
26 Jan 27 19 24 29.9 d     539SB6  4.3  4.4s  69+ 112  27 19  73  60N  49 101  62 -1.6 -5.9 -0.3+1.7 .576   19.5      3 45 12.5  24 28  2 366.01085.3
   R539 = Taygeta = 19 Tauri
       539 is multiple: Aa,Ab 4.6 6.1           : AB          0.032" 259.2, dT = -0.05sec : AC 4.3 14.0 53"  53.4, dT = +92sec : AB 4.3 11.0 72"
328.8, dT = +21sec
       539 is a close double. Observations are highly desired
       539 = NSV 1264, 4.30, range 0.00, 1Kp, Type SPB, Period 1.5664 days
26 Jan 27 19 32 47.6 d     541SB8  3.9  3.9s  69+ 112  27 20  75  89S  80 132  93 -1.6 -5.9 +0.0+1.4 .593  -11.5      3 45 49.6  24 22  4 365.91073.9
   R541 = Maia = 20 Tauri
       541 is quadruple: Aa,Ab 4.4 5.4           : AB 3.8 13.7 113"  72.6, dT = +189sec : AB 3.8 13.7 113"  72.7, dT = +190sec
       541 = NSV 1279, 3.87, range 0.00, 4Kp, Type ACV, Period 10.288 days
26 Jan 28  1 12 53.3 d   76345kG8  7.5  7.0   71+ 114     74 174  59S 112 117 123 -1.9 -6.4 +2.3-1.1 .320  -40.1      3 57 11.8  25 16 58 361.5 732.3
26 Jan 28  6 52 28.4 d   76472cG8  7.2  6.5   72+ 117     24 284  83N  75  21  85 -2.4 -6.3 +0.4-0.8 .548   12.1      4  8 39.0  25 52 40 364.7 991.7
26 Jan 29  0 28 24   d     746WB7  7.0  6.9   81+ 128     63 113  21S 157 207 163 -0.2 -6.3 +5.2-9.4 .083  -79.3      4 59 53.7  27 19 32 360.6 778.8
       746 is double: AB 7.0 8.7 20.4" 206.1, dT = +160sec
26 Jan 29  0 34 55   Gr    746WB7  7.0  6.9   81+ 128     65 ** GRAZE: CA 10.4S; Dist. 33km in az. 156deg. [Lat = 41.52+0.33(E.Long+87.67)]
26 Jan 29  2 34 47.0 D     756 F0  6.6  6.5   81+ 128     76 190  81S  98  89 104 -0.5 -6.4 +1.9-0.4 .404  -13.9      5  4 38.0  27 41 46 360.0 726.1
26 Jan 29  5 32 53.7 d     773wF8  7.0  6.7   82+ 130     50 264  41S 138  81 144 -0.8 -6.3 +0.5-3.1 .332  -45.5      5 10  3.9  27 33 23 361.2 830.5
       773 is double: AB 7.0 9.3 315" 353.1, dT = -778sec
26 Jan 29  5 41 36   D     771SA5  6.1  5.9e  82+ 130     49 267  10N   9 312  14 -0.8 -6.3 +9.9+9.9 .050   84.0      5  9 45.1  28  1 50 361.3 840.8
       771 is triple: Aa,Ab 6.0      0.20" 351.0 : A,BC 6.0 9.1 11.2"  29.1
       771 is a close double. Observations are highly desired
       771 = V1156 Tau, 6. to 6.1, Hp, Type E:, Period 1.40266 days, Phase  13%
   Distance of 771 to Terminator = 19.7"; to 3km sunlit peak = 4.9"
26 Jan 29  5 45  4   Gr    771SA5  6.1  5.9e  82+ 130     47 ** GRAZE: CA  4.2N; Dist. 10km in az.  26deg. [Lat = 41.95-0.36(E.Long+87.67)]
   Distance of 771 to Terminator = 10.3"; to 3km sunlit peak = 0.0"
26 Jan 30 23 52 35.7 d    1089 K0  6.7  6.1   95+ 155  -9 33  83  54N  69 125  63 +3.0 -5.0 +0.3+1.9 .482   23.6      7 11 30.0  26 24 21 363.1 925.6
26 Jan 31  2 46 10.3 d   79243 K1  7.3  6.7   96+ 156     64 118  28N  45  92  38 +2.8 -5.0 +1.6+3.8 .242   55.8      7 17 15.6  26 21 49 361.0 753.9
26 Jan 31  3  6 32.7 d   79253cK1  7.6  7.1   96+ 156     67 126  29N  46  88  39 +2.7 -5.0 +1.9+3.7 .237   56.1      7 17 54.5  26 19 59 360.9 744.7
     79253 is double: ** 8.7 8.7 0.050"
     79253 has been reported as non-instantaneous (OCc1350). Observations are highly desired
26 Feb  3  1 45  0.8 D    1487SB7  1.4  1.4s  98- 164     15  87 -60S 139 189 120 +6.2 -0.8 +0.4-0.3 .480  -25.4     10  8 22.3  11 58  2 374.6 965.8
   R1487 = Regulus = alpha Leonis
      1487 is triple: AB 1.4 8.2 176" 308.0, dT = -360sec : AD 1.4 12.1 193" 274.0, dT = -284sec
      1487 = NSV 4750, 1.33 to 1.40, V
26 Feb  3  2 41 53.8 R    1487SB7  1.4  1.4s  98- 164     25  97  72S 270 320 251 +6.2 -0.8 +0.7+1.4 .445 -154.5     10  8 22.3  11 58  2 373.6 893.0
   R1487 = Regulus = alpha Leonis
      1487 is triple: AB 1.4 8.2 176" 308.0, dT = -313sec : AD 1.4 12.1 193" 274.0, dT = -432sec
      1487 = NSV 4750, 1.33 to 1.40, V
26 Feb  6  7 42 59.6 d    1815SK2  4.7  4.0   79- 125     35 149 -68S 137 160 115 +5.6 +4.2 +1.1-0.7 .393   -7.1     12 39 14.8 - 7 59 44 389.2 747.1
   R1815 = chi Virginis
```

Occultation prediction for Chicago Astronomer Observatory

E. Longitude - 87 40 16.3, Latitude 41 51 8.6, Alt. 182m; Telescope dia 15cm; dMag 0.0

day Time	P	Star	Sp	Mag	Mag	% Elon	Sun	Moon	CA	PA	VA	AA	Libration		A	B	RV	Cct	durn	R.A. (J2000)	Dec	Mdist	SV
y m d h m s		No	D	v	r	V ill	Alt	Alt Az	o	o	o	o	L	B	m/o	m/o	"/s	o	sec	h m s	o m s	Mm	m/s
1815 is multiple: **Aa,Ab 4.8 8.8 0.10" 214.0, dT = +0.06sec : AB 4.8 8.8 177" 135.9, dT = +451sec : AC 4.8 10.6 224" 109.8, dT = +506sec : AD 4.8 9.0 321" 331.1, dT = -793sec																							
1815 has been reported as non-instantaneous (OCc 760). Observations are highly desired																							
26 Feb 6 9 2 10.2 R	1815	SK2	4.7	4.0	78-	125	40	173	82N	304	310	282	+5.4	+4.4	+1.6	-0.8	.375	-173.3		12 39 14.8	- 7 59 44	389.0	711.9
R1815 = chi Virginis																							
1815 is multiple: **Aa,Ab 4.8 8.8 0.10" 214.0, dT = 0.00sec : AB 4.8 8.8 177" 135.9, dT = +463sec : AC 4.8 10.6 224" 109.8, dT = +578sec : AD 4.8 9.0 321" 331.1, dT = -762sec																							
1815 has been reported as non-instantaneous (OCc 760). Observations are highly desired																							
26 Feb 6 10 25 24.3 r	138905	F8	7.3	7.0	78-	124	38	199	70S	275	261	254	+5.1	+4.6	+2.3	-0.7	.311	-146.2		12 40 40.7	- 8 26 54	389.4	706.9
26 Feb 9 9 44 49.1 r	183079	M2	7.7	6.8s	51-	91	21	153	72N	304	326	288	+2.5	+7.1	+1.2	+0.0	.365	176.6		15 0 30.4	-22 50 58	401.2	711.2
183079 = NSV 20220, 7.67 to 7.75, Hp																							
26 Feb 10 9 32 27.5 r	2261	K3	6.6	5.8	41-	80	12	142	43S	234	265	222	+1.4	+7.4	+2.9	+3.2	.186	-118.8	.01	15 50 34.9	-26 17 23	403.2	754.5
26 Feb 10 10 17 36 m	183872	kF0	7.2	7.0v	41-	80	16	151	13S	204	228	193	+1.2	+7.5	+9.9	+9.9	.000	-90.0		15 52 4.5	-26 31 23	402.8	708.6
183872 = HD 141831, 7.223, range 0.03, 2w, Type PULS, Period 0.07958 days, Phase 91%																							
26 Feb 11 10 42 51.2 R	2406	pA3	6.0	5.9s	32-	69	12	147	48S	232	260	225	-0.1	+7.6	+2.7	+2.5	.211	-125.1		16 45 0.2	-28 30 35	402.9	716.9
2406 is double: AB 6.0 13.8 5.5" 221.0, dT = -26sec																							
2406 is a close double. Observations are highly desired																							
2406 = NSV 7944, 6.7, range 0.4, pg																							
26 Feb 12 11 4 34.5 r	2540	B3	7.2	7.1e	23-	58	8	142	21N	337	9	335	-1.3	+7.3	-0.1	-1.0	.201	122.2		17 40 23.9	-28 55 24	401.7	735.9
2540 = V2382 Oph, 7.26 to 7.29, Hp, Type E+BE, Period 0.9215 days, Phase 40%																							
26 Feb 19 23 54 13.2 d		1SG0	7.2	S	7+	30	-5	24	251	64S	89	45	111	-5.2	-2.3	+0.9	-1.4	.415	-32.3		0 2 47.2	2 7 49	373.7	890.1
1 is triple: AB 7.40 9.36 1.52" 156.5, dT = +1.4sec : AC 7.4 12.4 47" 328.5, dT = -59sec																							
1 is a close double. Observations are highly desired																							
1 = NSV 3, 9. to 11., V																							
26 Feb 20 0 59 21.7 d	108994	K5	8.5	7.7	7+	31	12	262	30S	124	76	146	-5.3	-2.4	+0.6	-4.2	.234	-63.8		0 4 30.1	2 16 3	374.8	964.9
26 Feb 20 1 17 22.6 d	109001	G5	8.7	8.4	7+	31	9	265	42S	112	64	134	-5.3	-2.4	+0.3	-2.6	.343	-50.8		0 5 10.2	2 23 50	375.1	986.9
26 Feb 21 2 12 54.4 D	124	K0	7.8	7.2	14+	44	12	272	72S	82	33	103	-4.6	-3.9	+0.2	-1.1	.521	-16.9		0 56 32.9	9 13 45	372.4	984.1
26 Feb 23 3 11 27.4 d	75558	A0	7.7	7.6	34+	71	27	274	65S	96	43	113	-2.7	-5.9	+0.5	-1.5	.479	-21.1		2 45 47.8	20 41 34	368.0	915.9
26 Feb 24 0 8 41.3 D	76046	cA0	7.1	7.1	44+	83	-7	70	217	65N	51	22	64	-1.2	-6.4	+1.7	+1.3	.383	20.6		3 39 6.7	24 42 10	364.4	723.3
76046 is double: AB 7.1 45.0, dT = -26sec																							
26 Feb 24 2 1 56 Gr	76081	K2	7.5	6.9	45+	84	51	** GRAZE: CA 1.9N; Dist. 35km in az. 188deg. [Lat = 41.54-0.10(E.Long+87.67)]																
26 Feb 24 2 59 33.3 d	76102	A2	7.5	7.5	45+	84	42	268	26N	13	318	26	-1.6	-6.4	+2.1	+4.1	.176	68.1		3 43 43.2	25 4 51	366.0	837.8
26 Feb 24 3 14 17.5 D	538	pB8	5.7	5.7	45+	84	40	270	78S	89	34	101	-1.6	-6.4	+0.9	-1.2	.477	-7.2		3 45 9.7	24 50 21	366.2	854.3
R538 = 18 Tauri																							
538 is quadruple: Aa,Ab 6.4 6.4 0.10" : AB 5.6 14.0 72" 128.9, dT = +116sec : AC 5.6 14.8 151" 175.1, dT = +21sec																							
538 is a close double. Observations are highly desired																							
26 Feb 24 4 34 40.6 D	555	K5	6.4	5.6s	46+	85	25	282	88N	75	21	87	-1.6	-6.3	+0.5	-0.9	.532	9.0		3 48 6.5	24 59 18	367.6	960.3
555 = NSV 1316, 6.44, range 0.02, 0V, Type VAR, Period 1.48987 days																							
26 Feb 24 5 59 8.5 d	571	pA2	6.8	6.7	46+	86	11	294	64N	51	2	63	-1.6	-6.2	+0.2	-0.2	.502	34.0		3 51 25.3	25 9 47	369.0	1082.8
571 is double: ** 7.1 9.1																							
26 Feb 24 6 15 4.6 d	574	pG0	6.8	6.5	46+	86	8	296	68N	55	8	67	-1.6	-6.2	+0.1	-0.4	.534	30.1		3 52 11.4	25 9 47	369.3	1105.9
26 Feb 25 6 33 52.3 d	76841	cK1	7.3	6.7	58+	99	17	292	54S	121	70	127	-0.5	-6.2	-0.4	-1.8	.528	-27.7		4 55 34.6	27 12 9	368.3	1064.5
76841 is double: ** 7.6 10.1 0.08" 82.0, dT = +0.12sec																							
76841 has been reported as non-instantaneous (OCc 753). Observations are highly desired																							
26 Feb 26 2 28 34.0 D	885	wG7	5.6	5.1	68+	111	70	231	47S	134	93	135	+1.0	-6.1	+1.4	-2.6	.322	-38.6		5 50 58.1	27 58 4	364.5	729.6
885 is double: AB 5.7 12.5 10.8" 233.1, dT = -5sec																							
26 Feb 26 2 37 10.8 d	77638	B8	8.2	8.1	68+	111	69	235	78S	103	59	104	+1.0	-6.1	+1.7	-1.1	.412	-7.0		5 51 33.0	28 5 32	364.5	734.0
26 Feb 26 5 8 12.7 d	77724	B1	7.0	7.0	68+	112	43	272	13S	169	111	169	+0.7	-5.9	-1.1	-5.2	.187	-67.9		5 55 40.3	27 42 56	366.2	879.3
26 Feb 26 6 38 33.8 d	77804	A0	7.3	7.1	69+	112	26	284	8S	174	119	174	+0.7	-5.8	-2.0	-4.9	.167	-72.8		5 59 5.6	27 33 43	367.7	1003.4

Occultation prediction for Chicago Astronomer Observatory
E. Longitude - 87 40 16.3, Latitude 41 51 8.6, Alt. 182m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon Sun Alt	Moon Alt	Az	CA o	PA o	VA o	AA o	Libration L	B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	Feb	26	7	7	58.7	D	909	SB9	6.0	5.9s		69+	113	22	288	42S	139	86	140	+0.7	-5.7	-0.5	-2.2	.458	-38.5		6	1	0.5	27	34	21	368.2	1045.1
							909 is triple: Aa,Ab 6.1 9.2 194.0, dT = 0.00sec : AB 6.1 12.4 9.5" 242.3, dT = -5sec																												
							909 is a close double. Observations are highly desired																												
							909 = NSV 16751, 6.04, range 0.01, 2V, Type VAR, Period 9.26012 days																										
26	Feb	27	5	0	33.9	d	78957	G8	7.5	7.0		79+	125	55	258	43N	52	357	46	+1.9	-5.2	+2.5	+1.0	.249	57.3		7	0	14.8	26	52	42	366.2	818.6
26	Feb	28	4	33	47.0	D	1208	DK1	6.4			87+	138	66	226	65S	131	95	120	+3.0	-4.1	+1.2	-1.9	.412	-15.0		8	1	0.8	23	34	59	367.1	760.1
							1208 is double: AB 6.48 9.95 1.95" 325.2, dT = -5sec																										
							1208 is a close double. Observations are highly desired																										
26	Feb	28	5	4	8	m	79868	DK0	7.4			87+	138	62	238	11N	26	342	16	+3.0	-4.0	+9.9	+9.9	.000	90.0		8	1	30.3	23	54	46	367.3	783.2
							79868 is double: AB 7.43 10.98 1.30" 168.9																										
							79868 is a close double. Observations are highly desired																										
							Distance of 79868 to Terminator = 13.5"; to 3km sunlit peak = 2.4"																										
26	Feb	28	5	4	50	Gr	79868	DK0	7.4			87+	138	62	** GRAZE: CA 11.2N; Dist. 42km in az. 219deg. [Lat = 41.36-0.61(E.Long+87.67)]																		
26	Mar	1	1	18	46.4	d	1329	pF8	6.8			93+	150	48	108	62N	81	131	67	+4.4	-3.0	+1.4	+1.6	.378	30.2		8	53	55.3	19	58	2	370.1	784.7
							1329 is double: AB 7.32 7.86 0.15" 72.1, dT = +0.4sec																										
							1329 is a close double. Observations are highly desired																										
26	Mar	2	8	59	18.2	D	1466	cB9	5.3	5.3		98+	166	32	257	26S	175	127	157	+4.1	-0.5	-0.3	-2.8	.313	-51.3		9	58	13.4	12	26	41	375.2	910.3
							R1466 = nu Leonis																										
							1466 is double: ** 6.0 6.0 0.050"																										
							1466 has been reported as non-instantaneous (OCc1407). Observations are highly desired																										
							Distance of 1466 to Terminator = 5.7"; to 3km sunlit peak = 0.0"																										
26	Mar	3	10	58	29.4	d	X210181	k	11.7				3E	179	15	264	32U	81	33	60	+4.3	+1.3	+0.5	-1.3	.398	40.8		10	51	57.8	6	7	28	380.8	970.7
26	Mar	3	10	59	18.3	d	X119641	k	11.3	11.0			2E	179	15	264	44U	106	57	85	+4.3	+1.3	+0.3	-1.6	.505	16.2		10	51	57.8	6	0	33	380.9	971.4
26	Mar	3	11	5	27	m	X119629	k	11.5	11.1			0E	179	14	266	33U	32	343	11	+4.3	+1.3	+9.9	+9.9	.000	90.0		10	51	47.3	6	18	53	381.0	980.5
26	Mar	3	11	42	59.7	r	X210181	k	11.7				0E	179	-8	7	272	31U	341	292	320	+4.3	+1.4	-0.1	-2.2	.420	139.2		10	51	57.8	6	7	28	381.9	1028.3
26	Mar	3	11	54	51.7	r	X119641	k	11.3	11.0			0E	179	-6	5	274	41U	316	267	295	+4.3	+1.4	-0.1	-1.8	.541	163.9		10	51	57.8	6	0	33	382.1	1043.6
26	Mar	6	10	24	2.4	r	1885	K2	7.3	6.7		91-	145	27	219	47N	341	312	320	+3.7	+5.4	+0.9	-2.3	.302	142.0		13	8	27.9	-11	45	46	391.9	729.2
26	Mar	7	10	20	17.7	r	1993	cK3	6.6	5.9		84-	133	27	205	82S	287	267	267	+3.0	+6.4	+1.9	-1.1	.345	-165.8		13	54	21.4	-17	10	48	395.7	683.1
26	Mar	11	11	2	47	gr	2496	kA1	7.0	6.9		49-	89	18	168	4S	188	198	183	-1.5	+7.5	+9.9	+9.9	.000	-90.0		17	20	27.6	-29	21	54	401.9	634.1
26	Mar	11	11	2	50	Gr	2496	kA1	7.0	6.9		49-	89	18	** GRAZE: CA 3.9S; Dist. 16km in az. 34deg. [Lat = 42.02-0.50(E.Long+87.67)]																		
26	Mar	12	9	37	58.5	r	2631	B9	6.5	6.5v		40-	79	7	140	66N	291	324	292	-2.3	+7.0	+1.0	+0.8	.361	163.5		18	11	58.2	-28	54	6	401.4	733.7
							R2631 = V4045 Sagittarii																										
							2631 = V4045 Sgr, 6.51 to 6.54, V, Type ACV, Period 2.8855 days																										
26	Mar	13	9	55	58.9	R	2784	cK1	3.3	2.7		31-	67	4	133	81S	252	290	258	-3.4	+6.3	+1.2	+1.7	.383	-165.1	.01	19	6	56.4	-27	40	14	398.8	766.2
							R2784 = tau Sagittarii																										
							2784 is double: AB 4.2 4.2 0.008" 319.3, dT = -0.01sec																										
26	Mar	21	1	40	2.6	d	92476	G0	9.2	8.9		5+	26	7	282	81N	52	3	73	-3.8	-4.7	+0.1	-0.2	.565	17.3		1	31	2.5	13	26	35	367.2	1054.3
26	Mar	22	1	26	13.6	d	357	F7	8.2	7.9		11+	39	22	276	53S	103	51	121	-2.5	-5.7	+0.3	-1.8	.472	-29.6		2	26	14.1	18	54	18	364.5	959.4
26	Mar	23	4	4	32.9	d	512	cF5	8.1	7.8		21+	54	8	295	31S	132	84	145	-1.0	-6.1	-0.8	-2.3	.411	-48.7		3	31	42.4	23	38	58	366.2	1106.9
							512 is double: ** 9.0 9.0 0.10" 104.0, dT = +0.22sec																										
							512 has been reported as non-instantaneous (OCc 761). Observations are highly desired																										
26	Mar	23	4	12	25.3	d	513	cK0	7.3	6.7		21+	54	7	296	27S	135	88	149	-1.0	-6.1	-0.9	-2.5	.383	-52.5		3	32	0.6	23	38	50	366.3	1118.3
							513 is double: ** 8.7 8.7 0.10" 90.0, dT = +0.18sec																										
							513 has been reported as non-instantaneous (OCc1204). Observations are highly desired																										
26	Mar	24	5	35	48.5	D	701	SF2	6.6	6.4		32+	68	6	302	58N	49	3	57	+0.5	-6.1	+0.1	-0.2	.486	41.8		4	38	29.5	26	56	23	367.6	1162.1
							701 is triple: 6.6 9.2 3.1" 169.4, dT = -3sec : AB 7.36 7.21 4.48" 187.8, dT = -7sec																										
							701 is a close double. Observations are highly desired																										
26	Mar	24	5	35	52.2	d	X 70481	p	7.3	7.2		32+	68	6	302	58N	48	3	57	+0.5	-6.1	+0.1	-0.2	.484	42.0		4	38	29.6	26	56	26	367.6	1162.1

Occultation prediction for Chicago Astronomer Observatory
E. Longitude - 87 40 16.3, Latitude 41 51 8.6, Alt. 182m; Telescope dia 15cm; dMag 0.0

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      day  Time     P   Star  Sp  Mag  Mag    % Elon Sun  Moon   CA   PA  VA  AA Libration   A   B   RV    Cct durn  R.A. (J2000)  Dec   Mdist   SV
 y   m  d  h  m   s       No  D     v    r V  ill     Alt Alt Az   o    o   o   o   L    B   m/o m/o  "/s     o  sec  h  m   s    o  m  s   Mm   m/s
   X 70481 is triple:  7.3 9.2 5.8" 174.9, dT = -7sec : AC 7.4 12.9 92" 203.6, dT = -171sec
   X 70481 is a close double. Observations are highly desired
26 Mar 25  2  5 36.7 d   77268 B8  8.2  8.0v  41+  80     53 262  87N  84  27  87 +1.7 -6.1 +1.4-0.8 .445   12.8      5 34 39.1  28  3  4 364.6 807.3
     77268 = V1371 Tau, 8.02 to 8.20, V, Type GCAS
26 Mar 25  2  8 49.3 d   77267cK2  8.3  7.6   41+  80     52 262  60S 117  60 120 +1.7 -6.1 +0.9-2.0 .430  -20.1      5 34 38.4  27 53 45 364.7 810.7
     77267 is double: ** 8.9 8.9 0.10" 311.0, dT = -0.23sec
     77267 has been reported as non-instantaneous (OCc 711). Observations are highly desired
26 Mar 25  3  2 44.2 d   77314 B8  8.2  8.1   42+  80     43 272  76S 101  44 104 +1.7 -6.1 +0.7-1.5 .492   -3.4      5 36 39.8  27 54 42 365.5 873.5
26 Mar 26  0 49  6.0 D    1013cG0  7.0        53+  93  -8 74 209  43S 140 117 138 +3.1 -5.6 +1.4-2.7 .313  -39.2      6 36 26.3  27 16 42 365.7 717.1
      1013 is double: AB 7.14 8.97 0.69" 270.6, dT = -1.4sec
      1013 is a close double. Observations are highly desired
26 Mar 26  3 26 50.0 d    1028 G8  7.5  7.1   53+  94     49 264  67S 117  61 114 +2.8 -5.3 +0.8-1.9 .465  -10.3      6 41 42.7  27  4 54 367.2 842.7
26 Mar 27  1 58 56.8 D   79610 F8  7.2  7.0   64+ 106     71 212  75N  86  60  77 +3.9 -4.5 +2.1-0.2 .367   25.9      7 41  3.1  24 57 54 368.4 729.2
26 Mar 27  4  6  4.9 D    1170dG8  3.6  3.1   65+ 107     51 257  59S 132  80 123 +3.6 -4.2 +0.6-2.2 .442  -17.9      7 44 26.8  24 23 53 369.7 832.7
   R1170 = kappa Geminorum
      1170 is double: AB 3.7 10.0 7.3" 241.1, dT = -5sec
      1170 is a close double. Observations are highly desired
26 Mar 27  5  9 26.1 R    1170dG8  3.6  3.1   65+ 108     39 269 -85S 277 221 267 +3.6 -4.1 +0.8-1.4 .482 -162.3      7 44 26.8  24 23 53 370.8 909.9
   R1170 = kappa Geminorum
      1170 is double: AB 3.7 10.0 7.3" 241.1, dT = -12sec
      1170 is a close double. Observations are highly desired
26 Mar 27  7  9 16.9 d   79739 F0  7.1  7.0   66+ 109     18 286  21N  33 341  23 +3.5 -3.8 +2.6+2.1 .111   79.1      7 50 39.8  24  9 40 373.01068.4
26 Mar 27  7 13 18   Gr  79739 F0  7.1  7.0   66+ 109     17 ** GRAZE: CA 10.3N; Dist. 58km in az.  45deg. [Lat = 42.59-0.76(E.Long+87.67)]
26 Mar 28  3 38 10.7 D    1304pA0  6.8        75+ 120     62 228  52S 144 108 130 +4.4 -3.0 +0.9-2.3 .390  -23.2      8 41 15.3  20 28 37 371.9 765.2
      1304 is double: AB 7.10 8.08 0.29"  70.6, dT = +0.21sec
      1304 is a close double. Observations are highly desired
26 Mar 28  6  6 29.4 d    1313kF8  7.6  7.3   76+ 121     37 264  86S 110  58  96 +4.1 -2.7 +0.6-1.7 .496    9.4      8 45 50.1  20  1 20 373.9 912.5
26 Mar 29  8 57 15.2 D    1434wM2  5.4  4.5s  85+ 135     11 279  52S 147  98 130 +4.4 -0.8 -0.3-2.0 .502  -28.5      9 43 43.9  14  1 18 379.91053.3
   R1434 = psi Leonis
      1434 is double: AB 5.5 11.6 283" 138.9, dT = +558sec
      1434 = NSV 4594, 5.35 to 5.39, V, Type LB
26 Apr  1  7  2 17.7 d  138553kK2  7.5  6.9   99+ 170     39 215  75S 112  87  90 +4.4 +3.5 +1.6-1.4 .380   16.6     12  3 13.2 - 3 23 44 386.9 744.4
   Distance of 138553 to Terminator = 12.6"; to 3km sunlit peak = 3.6"
26 Apr  4 10 14 25.4 r  158556WA2  6.8        95- 153     17 221  51N 338 307 320 +2.0 +6.9 +1.4-2.4 .258  134.4     14 25 27.7 -19 57 57 398.9 714.2
    158556 is double: BA 7.2 6.6 35" 114.8, dT = +97sec
26 Apr  4 10 16  1.2 r    2066SA1  6.6  6.6   95- 153     17 221  52N 338 306 320 +2.0 +6.9 +1.4-2.4 .259  134.5     14 25 29.9 -19 58 12 398.9 715.4
      2066 is quadruple: **Aa,Ab 6.8 7.7 0.018" 329.0, dT = -0.07sec : BC 7.16 8.37 1.21"  89.4, dT = +1.7sec : AB 6.6 7.2 35" 294.8, dT = -97sec
      2066 has been reported as non-instantaneous (OCc 204). Observations are highly desired
26 Apr  5  9 31  4.7 r    2174pB8  6.5  6.5   90- 142     22 200  76S 278 262 264 +1.1 +7.4 +2.1-0.8 .328 -167.7     15 13 17.4 -24  0 30 400.6 651.8
      2174 is triple: ** 7.1 7.1 0.030"   0.0 : AB 6.4 12.5 8.2"  45.0, dT = +15sec
      2174 has been reported as non-instantaneous (OCc1471). Observations are highly desired
26 Apr  6  4 57 47.2 R    2287SB1  2.9  3.0v  84- 133      3 130  30N 347  27 336 +0.9 +7.3 -0.7-1.4 .254  126.4     15 58 51.1 -26  6 51 403.9 839.0
   R2287 = pi Scorpii
      2287 is triple: Aa,Ab 5.1 13.4 2.0" 244.0, dT = +1.8sec : AB 2.9 11.9 50" 128.1, dT = +155sec
      2287 is a close double. Observations are highly desired
      2287 = pi Sco, 2.88 to 2.91, V, Type ELL, Period 1.570103 days, Phase  64%
26 Apr  6  8 18  4.9 r    2297kF7  7.0  6.7   83- 132     21 171  78N 298 306 288 +0.3 +7.5 +1.8-0.2 .328  171.3     16  3 16.1 -26 43  2 402.1 647.6
26 Apr  9 10  6 57.3 r    2727kA*  7.4  7.4v  57-  98     18 161  69S 245 261 249 -3.6 +6.5 +2.1+1.1 .313 -161.2     18 47 37.1 -28 16 47 400.5 641.3
```

Occultation prediction for Chicago Astronomer Observatory
E. Longitude - 87 40 16.3, Latitude 41 51 8.6, Alt. 182m; Telescope dia 15cm; dMag 0.0

```
      day  Time     P   Star  Sp  Mag  Mag    % Elon Sun  Moon   CA   PA  VA  AA Libration   A   B   RV    Cct durn  R.A. (J2000)  Dec   Mdist   SV
 y   m  d  h  m   s       No  D    v    r V  ill     Alt Alt Az   o    o   o   o   L    B   m/o m/o  "/s     o  sec  h  m   s    o  m  s   Mm   m/s
     2727 = HIP 92215, 7.45 to 7.48, V, Type ACV, Period 1.93789 days, Phase  95%
26 Apr 19 14 36  6.8 d     537SB6  3.7  3.8s   7+  30  38 25  79  48S 112 165 124 +0.5 -5.8 +0.6+0.8 .441  -43.5      3 44 52.5  24  6 48 359.01057.6
   R537 = Electra = 17 Tauri
      537 is multiple: ** 3.9 7.5 0.20" 117.0, dT = +0.44sec : Aa,Ac 3.9 7.5 0.20"       : Aa,Ab 3.9 7.0 26.6"       : AB 3.7 13.0 98" 144.0, dT =
+189sec
      537 has been reported as non-instantaneous (OCc1693). Observations are highly desired
      537 = NSV 15755, 3.70, range 0.00, 1Kp, Type SPB, Period 1.1073 days
26 Apr 19 14 50 54.3 d     539SB6  4.3  4.4s   7+  30  41 28  81  65N  45  99  58 +0.5 -5.9 -0.1+1.9 .550   22.7      3 45 12.5  24 28  2 358.81037.6
   R539 = Taygeta = 19 Tauri
      539 is multiple: Aa,Ab 4.6 6.1           : AB          0.018" 273.2, dT = -0.02sec : AC 4.3 14.0 53"  53.4, dT = +95sec : AB 4.3 11.0 72"
328.8, dT = +31sec
      539 is a close double. Observations are highly desired
      539 = NSV 1264, 4.30, range 0.00, 1Kp, Type SPB, Period 1.5664 days
26 Apr 19 14 58 21.3 d     541SB8  3.9  3.9s   7+  30  42 29  82  84S  76 130  88 +0.5 -5.9 +0.3+1.5 .585   -8.0      3 45 49.6  24 22  4 358.61027.5
   R541 = Maia = 20 Tauri
      541 is quadruple: Aa,Ab 4.4 5.4           : AB 3.8 13.7 113"  72.6, dT = +193sec : AB 3.8 13.7 113"  72.7, dT = +194sec
      541 = NSV 1279, 3.87, range 0.00, 4Kp, Type ACV, Period 10.288 days
26 Apr 19 15 16 42.9 r     537SB6  3.7  3.8s   7+  31  45 32  85 -44S 204 259 216 +0.5 -5.9 -0.4+2.5 .417 -136.5      3 44 52.5  24  6 48 358.31000.4
   R537 = Electra = 17 Tauri
      537 is multiple: ** 3.9 7.5 0.20" 117.0, dT = -0.02sec : Aa,Ac 3.9 7.5 0.20"       : Aa,Ab 3.9 7.0 26.6"       : AB 3.7 13.0 98" 144.0, dT = -
118sec
      537 has been reported as non-instantaneous (OCc1693). Observations are highly desired
      537 = NSV 15755, 3.70, range 0.00, 1Kp, Type SPB, Period 1.1073 days
26 Apr 19 15 56 24.8 r     541SB8  3.9  3.9s   7+  31  51 40  91 -79S 239 294 251 +0.5 -6.0 +0.4+1.8 .541 -171.9      3 45 49.6  24 22  4 357.7 948.1
   R541 = Maia = 20 Tauri
      541 is quadruple: Aa,Ab 4.4 5.4           : AB 3.8 13.7 113"  72.6, dT = +203sec : AB 3.8 13.7 113"  72.7, dT = +203sec
      541 = NSV 1279, 3.87, range 0.00, 4Kp, Type ACV, Period 10.288 days
26 Apr 20  2  2 37.8 D   76472cG8  7.2  6.5    9+  35     18 289  59N  42 350  52 -0.1 -6.1 +0.6+0.2 .426   45.4      4  8 39.0  25 52 40 360.21059.1
26 Apr 22  1 30 21.9 d   78234 A0  8.2  8.2   27+  63 -10 47 267  65S 115  58 114 +3.2 -5.4 +0.7-1.8 .483  -11.3      6 20  4.5  27 23  6 362.2 864.8
26 Apr 22  1 42 36.9 d   78242 K0  8.8  8.4   27+  63 -12 45 269  57N  57 360  56 +3.2 -5.4 +1.6+0.1 .343   46.8      6 20 26.0  27 37 36 362.4 879.9
26 Apr 22  2 47  8.6 d   78295 A3  8.8  8.6   28+  63     34 279  68N  68  12  67 +3.2 -5.3 +0.9-0.7 .443   36.0      6 23  0.3  27 26 37 363.5 964.5
26 Apr 22  2 53  0.0 d   78300 B9  8.3  8.3   28+  63     32 279  60S 121  65 119 +3.2 -5.3 +0.1-1.8 .529  -16.5      6 23  9.6  27 11 22 363.7 972.4
26 Apr 22  3  5  6.6 D   78309dA0  7.4  7.4   28+  63     30 281  48S 132  77 131 +3.2 -5.3 -0.1-2.1 .494  -28.1      6 23 30.2  27  7  5 363.9 989.4
    78309 is double: AB 7.4      1.3" 304.0, dT = -2.6sec
    78309 is a close double. Observations are highly desired
26 Apr 22  5  1 56.9 D     994cF5  6.6  6.3   28+  65     10 297  78S 103  55 101 +3.3 -5.0 -0.3-1.2 .649   -0.4      6 28 56.4  26 58  3 366.21153.6
      994 is double: ** 6.8 7.7 0.003" 269.0, dT = 0.00sec
26 Apr 24  4  5 23.8 D    1269kG5  6.9  6.3   50+  90     37 266  56S 138  85 125 +5.2 -2.9 +0.2-2.1 .479  -19.8      8 28  7.2  21  8 55 371.4 917.4
26 Apr 25  3 15  5.9 D    1387cA5  7.0  6.8   61+ 103     52 239  74S 124  83 108 +5.8 -1.6 +1.0-1.8 .442   -0.1      9 21 25.5  16 35 54 374.5 802.1
     1387 is double: ** 7.6 7.6 0.10"  90.0, dT = +0.19sec
     1387 has been reported as non-instantaneous (OCc1402). Observations are highly desired
26 Apr 26  0 15  9.8 D    1487SB7  1.4  1.4s  70+ 114   4 54 140  60N  81 110  62 +6.6 -0.4 +2.4+1.3 .287   43.8     10  8 22.3  11 58  2 378.0 729.8
   R1487 = Regulus = alpha Leonis
     1487 is triple: AB 1.4 8.2 176" 308.0, dT = -417sec : AD 1.4 12.1 193" 274.0, dT = -653sec
     1487 = NSV 4750, 1.33 to 1.40, V
26 Apr 26  1 11 42.3 R    1487SB7  1.4  1.4s  71+ 114  -6 59 164 -30N 351   3 332 +6.4 -0.3 +0.5-3.0 .284  136.1     10  8 22.3  11 58  2 377.9 721.6
   R1487 = Regulus = alpha Leonis
     1487 is triple: AB 1.4 8.2 176" 308.0, dT = -455sec : AD 1.4 12.1 193" 274.0, dT = -155sec
```

Occultation prediction for Chicago Astronomer Observatory
E. Longitude - 87 40 16.3, Latitude 41 51 8.6, Alt. 182m; Telescope dia 15cm; dMag 0.0

```
      day  Time     P   Star  Sp  Mag  Mag    % Elon Sun  Moon   CA   PA  VA  AA Libration    A    B    RV    Cct durn  R.A. (J2000)  Dec   Mdist   SV
 y   m  d  h  m    s       No  D    v    r V  ill     Alt Alt Az   o    o   o   o   L    B   m/o m/o  "/s     o  sec  h  m   s    o  m  s   Mm   m/s
      1487 = NSV 4750, 1.33 to 1.40, V
26 Apr 26  4 24 55.6 d    1498cG5  8.0  7.4   72+ 116     44 239  82N 102  62  83 +5.9 +0.1 +1.4-1.5 .401   24.4      10 13 50.4  10 50 31 379.5 810.5
      1498 is double: ** 8.4 9.4 0.08"  94.4, dT = +0.2sec
      1498 has been reported as non-instantaneous (OCc 598). Observations are highly desired
26 Apr 28  2 52  2   m  138388 K0  7.3  6.8   88+ 139     47 172  21N  41  47  19 +5.8 +2.9 +9.9+9.9 .000   90.0      11 45  1.4 - 0 31  4 386.8 718.6
26 Apr 30  3  0 19.7 d  157822kK2  7.3  6.6   98+ 162     32 152  74N  83 104  62 +4.6 +5.3 +2.5+1.2 .270   45.3      13 15 54.0 -12 21  0 394.6 736.4
26 May  9  9 14 23.3 R    3078cA5  4.9        55-  95     19 142  43S 206 236 222 -6.3 +3.4 +1.4+2.2 .285 -140.3      21  4 24.3 -19 51 18 393.7 707.9
   R3078 = Chow = eta Capricorni
      3078 is double: AB 5.02 7.39 0.23"  30.0, dT = +0.8sec
      3078 is a close double. Observations are highly desired
26 May 11  8 58  7.5 r    3325PG0  6.9  6.6   35-  72     12 114  33S 190 234 211 -7.3 +0.6 +0.6+2.7 .290 -129.0      22 40  8.0 - 9 21 33 383.7 859.3
      3325 is double: ** 7.5 7.5 0.004"
26 May 14  9 32 30.7 R     166kM*  6.7  5.8S   8-  34 -10  7  83  50S 212 260 233 -5.6 -3.6 -0.2+1.9 .536 -150.3       1  8 21.8   9 54 30 366.21097.5
      166 = NSV 15246, 6.73, , Type VAR:
26 May 19  0 43 29.7 d     890cA0  4.6  4.6s  7+  31   3 31 281  77N  69  13  70 +1.9 -5.4 +0.7-0.7 .492   31.3       5 53 19.6  27 36 44 356.7 996.1
   R890 = 136 Tauri
      890 is double: ** 4.8 6.3 0.050" 270.0, dT = -0.1sec
      890 has been reported as non-instantaneous (OCc 206). Observations are highly desired
      890 = NSV 2696, 4.50 to 4.61, V
26 May 19  1 31 33.3 R     890cA0  4.6  4.6s  7+  31  -5 23 287 -41N 312 258 313 +2.0 -5.4 -0.3-1.9 .525  148.6       5 53 19.6  27 36 44 357.61067.1
   R890 = 136 Tauri
      890 is double: ** 4.8 6.3 0.050" 270.0, dT = -0.07sec
      890 has been reported as non-instantaneous (OCc 206). Observations are highly desired
      890 = NSV 2696, 4.50 to 4.61, V
26 May 19  2  5 47.5 D    77753 G2  7.2  6.7    7+  32 -10 17 292  73S 100  49 101 +2.0 -5.3 -0.1-1.3 .641   -0.2       5 57  5.6  27 19  0 358.31113.3
26 May 19  2 26 49   Gr  77752 K2  8.8  8.3    7+  32     13 ** GRAZE: CA 16.4N; Dist.  0km in az.  41deg. [Lat = 41.85-0.65(E.Long+87.67)]
26 May 19  2 26 49   gr  77752 K2  8.8  8.3    7+  32     14 295  16N  10 320  11 +2.0 -5.2 +9.9+9.9 .000   90.0       5 57  5.0  27 36  3 358.71144.8
26 May 19  2 27 47.4 d X 80513     9.2  8.6    7+  32     13 295  38S 135  86 136 +2.0 -5.2 -0.6-1.8 .535  -35.6       5 57 47.9  27  7 42 358.71144.9
26 May 19  3  6 37.8 D     906SK1  6.6  6.1    8+  32      7 300  87S  86  40  87 +2.1 -5.2 -0.3-1.0 .670   12.9       6  0  6.0  27 16 20 359.51198.2
      906 is quadruple: AB 7.3 8.3 0.31"       : AC 7.3 8.3 0.31"       : AD 7.3 10.0 21.4"
      906 is a close double. Observations are highly desired
26 May 19  3  6 52   M    77804 A0  7.3  7.1    8+  32      7 301  15N   9 323  10 +2.1 -5.2 +9.9+9.9 .000   90.0       5 59  5.6  27 33 43 359.51200.0
26 May 19  3  8 16   m    77806 A0  8.6  8.6    8+  32      7 301  15N   9 323  10 +2.1 -5.2 +9.9+9.9 .000   90.0       5 59 10.5  27 34 25 359.51201.9
26 May 20  3  0 39.9 d     1079 K2  8.6  7.9   15+  46     18 289  71N  74  22  69 +3.9 -4.3 +0.2-0.9 .525   33.6       7  6  4.4  25 49 17 361.81105.3
26 May 20  3 10  8.9 d    79052 A2  8.8  8.7   15+  46     16 290  43S 141  90 135 +3.9 -4.2 -0.5-1.9 .532  -33.4       7  6  6.0  25 30 10 362.01118.4
26 May 20 15 30 47   Gr   1170dG8  3.6  3.1   21+  54  52 16 ** GRAZE: CA -1.5N; Dist.347km in az. 331deg. [Lat = 45.43+0.41(E.Long+87.67)]
26 May 21  2  2 27.8 D    1221cM3  6.0  5.1v  24+  59  -9 37 268  89S 102  48  91 +5.3 -3.2 +0.6-1.5 .517   14.3       8  6 18.4  22 38  8 364.3 942.0
   R1221 = 9 Cancri = BL Cnc.
      1221 is double: AB 6.0 10.1 0.40"
      1221 is a close double. Observations are highly desired
      1221 = BL Cnc, 5.97 to 6.04, V, Type SR
26 May 21  2 17 15.6 D    1222cG5  7.2  6.8   24+  59 -11 34 271  60S 130  76 119 +5.3 -3.1 +0.2-1.9 .526  -14.7       8  6 34.4  22 27 24 364.6 960.8
      1222 is double: ** 7.2      0.013" 234.6, dT = -0.01sec
      1222 has been reported as non-instantaneous (OCc1381). Observations are highly desired
26 May 21  2 28 46.4 d   79951 G5  7.8  7.2   24+  59     32 273  36N  47 353  36 +5.3 -3.1 +2.1+0.5 .200   68.7       8  6 56.2  22 46 31 364.8 976.6
26 May 22  4 39 35.0 d    1362pK3  7.2  6.6   36+  73     16 280  63N  79  29  64 +6.2 -1.4 +0.2-1.1 .461   38.2       9  9  2.3  17 28 11 372.31058.6
   R1362 = 78 Cancri
      1362 is triple: AB 7.5 9.0           : ** 7.5 9.0 0.005" 341.0, dT = 0.00sec
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Occultation prediction for Chicago Astronomer Observatory
E. Longitude - 87 40 16.3, Latitude 41 51 8.6, Alt. 182m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon	Sun Alt	Moon Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	May	23	3	0	8.5	D	1466cB9		5.3	5.3		46+	85	39	249	62N	82	37	64	+6.8	-0.1	+1.5	-1.1	.347	42.6		9	58	13.4	12	26	41	375.1	858.0
	R1466 = nu Leonis																																	
	1466 is double: ** 6.0 6.0 0.050"																																	
	1466 has been reported as non-instantaneous (OCc1407). Observations are highly desired																																	
26	May	24	2	38	25.5	D	1567kK1		6.4	5.8		57+	98	45	228	57S	145	112	125	+7.0	+1.4	+0.8	-2.1	.404	-17.0		10	46	5.7	6	22	23	380.0	778.6
	R1567 = 37 (Sextantis)/Leonis																																	
26	May	24	3	14	39.1	D	1573pA2		7.1	7.0		57+	98	39	237	87N	109	70	88	+6.9	+1.5	+1.3	-1.6	.414	18.7		10	47	19.2	6	20	46	380.5	805.9
	R1573 = 38 (Sextantis)/Leonis																																	
26	May	28	6	48	28.7	d	1993cK3		6.6	5.9		91+	145	14	230	83S	110	73	91	+4.0	+6.5	+1.2	-1.7	.386	3.5		13	54	21.4	-17	10	48	399.7	749.7
26	May	29	1	30	2.1	d	2084 A3		6.5	6.4		95+	155	19	143	40N	47	76	30	+4.1	+6.7	+5.1	+6.1	.101	75.0		14	34	50.7	-20	26	22	401.1	761.7
26	May	29	1	40	11	Gr	2084 A3		6.5	6.4		95+	155	20	** GRAZE: CA 25.3N; Dist. 67km in az. 44deg. [Lat = 42.69-0.72(E.Long+87.67)]																					
26	Jun	2	5	26	23.8	R	2617cK0		4.6	4.1		97-	159	15	155	60N	313	334	313	-1.4	+6.6	+1.4	-0.1	.254	138.8		18	8	5.0	-28	27	26	404.3	663.0
	2617 is double: AB 5.1 5.9 0.26" 12.0, dT = -0.5sec																																	
	2617 is a close double. Observations are highly desired																																	
26	Jun	10	8	40	41.6	r	109437kG5		7.8	7.3		29-	65	20	97	30N	308	357	330	-7.0	-3.4	+1.5	+0.1	.178	109.4		0	45	40.4	7	50	42	372.0	967.7
26	Jun	11	9	10	49.3	r	92548 A3		8.1	7.9		19-	52	-10 20	89	69N	273	323	293	-6.0	-4.5	+0.4	+1.3	.483	147.0		1	38	27.6	13	55	42	366.1	1022.5
26	Jun	12	8	18	52.3	R	375cA5		6.8	6.7		11-	39	5	69	31S	198	245	215	-4.6	-5.2	-0.6	+2.0	.443	-131.2		2	33	36.5	18	52	48	363.0	1183.1
	375 is double: ** 7.6 7.6 0.10" 90.0, dT = +0.07sec																																	
	375 has been reported as non-instantaneous (OCc1189). Observations are highly desired																																	
26	Jun	13	8	53	34	GrX	66511p		8.7	8.3		5-	25	5	** GRAZE: CA 14.4N; Dist. 12km in az. 322deg. [Lat = 41.99+0.58(E.Long+87.67)]																					
26	Jun	13	12	6	46.7	R	537SB6		3.7	3.8s		4-	23	18	37	89	21S	199	254	211	-2.5	-5.9	-0.4	+2.8	.370	-131.1		3	44	52.5	24	6	48	355.4	970.2
	R537 = Electra = 17 Tauri																																	
	537 is multiple: ** 3.9 7.5 0.20" 117.0, dT = -0.08sec : Aa,Ac 3.9 7.5 0.20" : Aa,Ab 3.9 7.0 26.7" : AB 3.7 13.0 98" 144.0, dT = -153sec																																	
	537 has been reported as non-instantaneous (OCc1693). Observations are highly desired																																	
	537 = NSV 15755, 3.70, range 0.00, 1Kp, Type SPB, Period 1.1073 days																																	
26	Jun	13	12	38	3.3	r	539SB6		4.3	4.4s		4-	23	24	43	94	87S	266	321	278	-2.5	-6.0	+0.9	+1.2	.514	161.8		3	45	12.5	24	28	2	354.8	930.5
	R539 = Taygeta = 19 Tauri																																	
	539 is multiple: Aa,Ab 4.6 6.1 : AB 0.019" 73.4, dT = +0.04sec : AC 4.3 14.0 53" 53.4, dT = +87sec : AB 4.3 11.0 72" 328.8, dT = -63sec																																	
	539 is a close double. Observations are highly desired																																	
	539 = NSV 1264, 4.30, range 0.00, 1Kp, Type SPB, Period 1.5664 days																																	
26	Jun	13	12	49	8.7	r	541SB8		3.9	3.9s		4-	23	26	45	96	57S	235	290	248	-2.5	-6.0	+0.5	+1.9	.522	-168.0		3	45	49.6	24	22	4	354.7	917.1
	R541 = Maia = 20 Tauri																																	
	541 is quadruple: Aa,Ab 4.4 5.4 : AB 3.8 13.7 113" 72.6, dT = +207sec : AB 3.8 13.7 113" 72.7, dT = +207sec																																	
	541 = NSV 1279, 3.87, range 0.00, 4Kp, Type ACV, Period 10.288 days																																	
26	Jun	16	17	48	55.5	d	1117cG8		5.0	4.6		4+	24	71	62	119	26S	155	201	148	+4.1	-4.2	+1.6	-2.9	.270	-53.2		7	23	28.5	25	3	2	354.5	774.3
	R1117 = 57 Geminorum																																	
	1117 is double: ** 5.9 5.9 0.10" 90.0, dT = +0.16sec																																	
	1117 has been reported as non-instantaneous (OCc1358). Observations are highly desired																																	
26	Jun	17	1	39	16.0	r	1157 A2		6.2	6.2		5+	27	-3	18	287	-4N	1	310	353	+3.6	-3.4	-1.5	-3.4	.214	109.6		7	39	12.0	24	13	21	359.4	1114.8
26	Jun	17	2	26	0.9	d	79618 F5		7.7	7.4		6+	28	-9	9	293	28S	157	109	148	+3.7	-3.3	-0.7	-2.0	.455	-47.4		7	41	44.7	23	30	52	360.4	1175.7
26	Jun	17	2	31	37	m	79620 A3		8.1	8.0		6+	28	-10	9	294	14N	20	332	11	+3.7	-3.3	+9.9	+9.9	.000	90.0		7	42	0.3	24	3	2	360.5	1184.1
26	Jun	17	2	45	29.7	d	79637 K0		9.0	8.5		6+	28	-12	6	296	62S	123	76	115	+3.8	-3.2	-0.5	-1.4	.666	-14.0		7	43	11.4	23	32	40	360.8	1200.4
26	Jun	17	2	51	41.0	d	79644 A0		8.6	8.6		6+	28	6	297	52N	58	11	49	+3.8	-3.2	+0.0	-0.5	.428	51.7		7	43	29.4	23	49	15	360.9	1208.8
26	Jun	17	19	24	44.4	D	Venus		-4.0	-4.0		11+	38	63	64	138	83S	108	142	96	+5.8	-2.7	+1.9	-0.3	.385	6.0		8	30	20.8	21	2	26	358.8	674.2
	Venus contacts: Bright limb 19 24 25; Terminator 19 24 54; Dark limb 19 25 3: diam = 14.7"; %illum = 74.0%; PA bright limb = 281.5																																	
26	Jun	17	20	50	7.9	R	Venus		-4.0	-4.0		11+	39	49	69	188	-66N	303	299	293	+5.6	-2.6	+1.6	-1.6	.388	173.7		8	30	20.8	21	2	26	358.9	679.5

Occultation prediction for Chicago Astronomer Observatory
E. Longitude - 87 40 16.3, Latitude 41 51 8.6, Alt. 182m; Telescope dia 15cm; dMag 0.0

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      day  Time     P   Star  Sp  Mag  Mag    % Elon Sun  Moon   CA   PA  VA  AA Libration   A   B   RV    Cct durn  R.A. (J2000)  Dec   Mdist   SV
 y   m  d  h  m   s       No  D    v    r V  ill     Alt Alt Az   o    o   o   o   L    B   m/o m/o  "/s     o  sec  h  m   s    o  m  s   Mm   m/s
   Venus contacts: Bright limb 20 49 49; Terminator 20 50 19; Dark limb 20 50 27: diam = 14.7"; %illum = 74.0%; PA bright limb = 281.5
26 Jun 18  2  2 22   m    1305pK0  6.9  6.4   12+  41  -6 21 278  13N  27 335  13 +5.2 -1.9 +9.9+9.9 .000   90.0      8 41 50.1  19 52 27 363.61054.3
      1305 is double: Ea,Eb 7.2 9.1
26 Jun 18  3 31 21.7 d   98100kA*  8.0  7.9   13+  42      6 291  67S 127  79 113 +5.3 -1.7 -0.4-1.5 .643  -12.5      8 45 46.5  19  2 58 365.61167.9
26 Jun 19  1 53 34.8 d    1420 F2  6.6  6.4   21+  54  -5 29 263  63N  82  32  64 +6.4 -0.3 +0.9-1.2 .408   40.1      9 38  1.3  14 20 50 368.3 952.1
   R1420 = 11 Leonis
26 Jun 21  1 49 30.0 D    1635cM0  5.2  4.4   41+  80  -4 37 232  73S 131  94 109 +7.3 +2.8 +1.0-1.9 .431   -3.3     11 17 17.4   2  0 38 379.7 795.8
   R1635 = 75 Leonis
      1635 is double: ** 5.8 6.6 0.044"   0.0
      1635 has been reported as non-instantaneous (OCc 763). Observations are highly desired
26 Jun 21  3  3  6.0 D    1637 K0  5.9  5.4   42+  80     25 248  61S 143  99 121 +7.2 +2.9 +0.5-2.1 .441  -18.8     11 18 55.0   1 39  1 381.2 861.5
   R1637 = 76 Leonis
26 Jun 23  3 40 26.2 D    1845SG8  6.5  5.9s  62+ 104     23 230  72S 129  94 108 +6.4 +5.5 +1.2-1.9 .394   -7.9     12 51 22.9 -10 20 18 392.3 755.8
      1845 is triple: AB 6.6 9.7 28.8" 296.3, dT = -71sec : AC 6.6 12.5 142" 211.8, dT = +48sec
      1845 = NSV 5994, 6.49, range 0.07, V
26 Jun 26  3 18 29.0 d    2174pB8  6.5  6.5   87+ 138     24 188  77S 112 106  97 +3.6 +7.4 +2.0-0.7 .329    1.3     15 13 17.4 -24  0 30 401.8 640.5
      2174 is triple: ** 7.1 7.1 0.030"   0.0 : AB 6.4 12.5 8.2"  45.0, dT = +10sec
      2174 has been reported as non-instantaneous (OCc1471). Observations are highly desired
26 Jun 27  2 21  2.9 d    2297kF7  7.0  6.7   92+ 148  -9 19 163  71S 110 125  99 +2.7 +7.4 +1.7+0.2 .340    0.0     16  3 16.1 -26 43  2 403.6 665.3
26 Jul  2  4 21 58.9 r    2991 K5  6.1  5.3   95- 155     11 134  37S 209 245 222 -3.6 +3.9 +1.5+2.5 .274 -136.2     20 29 31.3 -22 23 30 400.0 738.0
26 Jul  3  4 25 40.7 r    3113cB5  5.4  5.5V  91- 144      9 124  71S 236 277 253 -4.7 +2.6 +1.0+2.0 .401 -167.8     21 17 57.3 -17 59  7 397.5 791.6
   R3113 = 30 Capricorni
      3113 is double: ** 6.1 6.1 0.10"  87.0, dT = +0.21sec
      3113 has been reported as non-instantaneous (OCc1602). Observations are highly desired
      3113 = HD 202671, 5.40, , Type ACV, Period 1.9917 days, Phase  99%
26 Jul  8  8 51  9.9 r     194cF5  8.2        44-  83     38 110  76N 262 308 283 -6.5 -4.6 +1.1+1.4 .429  152.8      1 19 42.8  12  8 45 371.8 870.0
       194 is double: AB 8.67 9.25 0.11" 323.2, dT = -0.12sec
       194 is a close double. Observations are highly desired
26 Jul  8 10 20  1.7 r     197cK0  7.0  6.5   43-  82  -2 53 133  64N 275 309 296 -6.6 -4.7 +2.1+0.7 .330  138.3      1 21 58.3  12 36 15 370.3 793.0
26 Jul  9  7  3 55.6 R     317 F5  6.4  6.2   33-  71     13  79  80N 262 312 281 -5.6 -5.2 +0.0+1.4 .571  161.0      2  9 23.1  17 13 27 369.51082.0
   R317 = 20 H1. Arietis
26 Jul 10  8 42 10.8 R   75777 B9  7.6  7.5   22-  56     24  81  49S 217 270 232 -4.3 -5.8 -0.2+2.0 .518 -151.2      3 11 19.5  22 10 14 363.51041.9
26 Jul 10  8 52  0.2 r   75775SG5  8.5  8.1v  22-  56     26  82  81N 267 320 282 -4.3 -5.8 +0.4+1.3 .543  158.4      3 11 13.8  22 24 57 363.31028.6
     75775 is triple: AC 8.6 13.3 24.1" 301.1, dT = -37sec : AB 8.6 10.6 33" 321.1, dT = -36sec
     75775 = BD+21 418, 8.49 to 8.54, V, Type WTTS
26 Jul 10  9 58  1   M     470WK0  6.8  6.2   22-  56  -5 38  92  14N 334  29 349 -4.3 -6.0 +9.9+9.9 .000   90.0      3 14 17.2  22 57 14 361.9 944.3
       470 is double: AB 6.9 10.4 42"  33.3
26 Jul 12  9  2 11.7 r   77125 M0  9.1  8.1    6-  28      9  61  57N 307 354 311 -0.7 -5.5 +0.2+0.4 .472  134.0      5 21 38.5  27 25 55 358.91183.4
26 Jul 16 19 21 14.7 d    1466cB9  5.3  5.3    8+  33  63 59 156  48N  68  86  49 +6.3 +0.1 +3.0+2.1 .233   57.3      9 58 13.4  12 26 41 363.8 761.8
   R1466 = nu Leonis
      1466 is double: ** 6.0 6.0 0.050"
      1466 has been reported as non-instantaneous (OCc1407). Observations are highly desired
26 Jul 18  2 52 23.5 d  118612kA0  7.8  7.7   18+  50      5 270  55S 150 101 129 +6.5 +2.6 +0.0-2.0 .487  -30.4     11  0 37.4   3 44 22 376.21029.1
26 Jul 18  3 11 52.4 d    1599cK1  4.8  4.2   18+  50      2 273  15S 190 141 168 +6.5 +2.7 -0.2-3.4 .188  -71.0 .01 11  0 33.6   3 37  3 376.71054.5
   R1599 = 58 Leonis
      1599 is double: AB 4.8      0.20"  33.0, dT = -1sec
      1599 is a close double. Observations are highly desired
26 Jul 24  2 32 36.2 d    2256PA1  7.0  6.9   74+ 119     21 194  45N  54  42  42 +3.4 +7.7 +2.5+0.4 .204   51.2     15 47 56.5 -25 59 13 402.0 633.8
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Occultation prediction for Chicago Astronomer Observatory
E. Longitude - 87 40 16.3, Latitude 41 51 8.6, Alt. 182m; Telescope dia 15cm; dMag 0.0

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      day  Time     P   Star  Sp  Mag  Mag    % Elon Sun  Moon   CA   PA  VA  AA Libration   A   B   RV    Cct durn  R.A. (J2000)  Dec   Mdist   SV
 y   m  d  h  m    s       No  D     v    r V  ill     Alt Alt Az   o    o   o   o   L   B  m/o m/o "/s     o  sec  h  m   s    o  m  s   Mm   m/s
      2256 is double: ** 7.7 7.7 0.10"  90.0, dT = +0.4sec
      2256 has been reported as non-instantaneous (OCc1482). Observations are highly desired
26 Jul 24  4 12 49.5 d    2261 K3  6.6  5.8   75+ 120     13 216  90S  99  70  87 +3.0 +7.6 +1.6-1.3 .352   -0.4     15 50 34.9 -26 17 23 402.9 687.2
26 Jul 25  0  8 59   m    2383cB0  2.8  2.9   82+ 130  11 14 151 -14S 197 221 189 +2.7 +7.4 +9.9+9.9 .000  -90.0     16 35 53.0 -28 12 58 403.8 697.7
   R2383 = tau Scorpii
      2383 is double: AB 2.9 5.8       71.0
26 Aug  2  7 40 35.5 R    3459 K0  6.4  5.8   87- 137     45 160  85S 241 256 262 -5.9 -1.9 +1.6+1.3 .387  169.0     23 29 27.0 - 1 47 28 383.2 732.6
   R3459 = 11 Piscium
26 Aug  2  9 53 43.7 R    3467kK1  6.4  5.8   86- 136  -9 44 206  63N 272 253 294 -6.3 -2.2 +2.4-0.8 .296  138.0     23 31 57.6 - 1  5  9 382.9 741.2
   R3467 = 13 Piscium
26 Aug  3  7 22 25.8 r      30SA0  7.1  7.1   79- 125     44 137  67S 222 253 244 -5.9 -3.3 +1.0+2.0 .416 -170.8      0 15 57.3   4 15  4 379.6 775.1
       30 is triple: AB 7.0 14.1 0.8" 246.0, dT = -1.8sec : AC 7.0 12.2 5.0" 347.2, dT = +7sec
       30 is a close double. Observations are highly desired
26 Aug  7  5  8 26.8 R     537SB6  3.7  3.8s  37-  75      1  58  31S 200 244 212 -3.3 -5.9 -0.9+1.9 .408 -126.9      3 44 52.5  24  6 48 369.31217.0
   R537 = Electra = 17 Tauri
      537 is multiple: ** 3.9 7.5 0.20" 117.0, dT = -0.06sec : Aa,Ac 3.9 7.5 0.20"       : Aa,Ab 3.9 7.0 26.8"       : AB 3.7 13.0 98" 144.0, dT = -
136sec
      537 has been reported as non-instantaneous (OCc1693). Observations are highly desired
      537 = NSV 15755, 3.70, range 0.00, 1Kp, Type SPB, Period 1.1073 days
26 Aug  7  5 20 59.4 R     536pB7  5.5  5.5   37-  75      3  60  75S 243 289 256 -3.3 -5.9 -0.5+1.3 .663 -171.2      3 44 48.2  24 17 22 369.01201.0
   R536 = Celaeno = 16 Tauri
      536 is triple: AB 5.4 13.2 89" 264.5, dT = -125sec : AC 5.4 11.5 218" 196.1, dT = -223sec
26 Aug  7  5 32 23.1 R     539SB6  4.3  4.4s  37-  75      5  62  75N 274 320 286 -3.3 -5.9 -0.3+1.0 .616  158.1      3 45 12.5  24 28  2 368.81186.7
   R539 = Taygeta = 19 Tauri
      539 is multiple: Aa,Ab 4.6 6.1           : AB          0.047"  81.7, dT = +0.07sec : AC 4.3 14.0 53"  53.4, dT = +66sec : AB 4.3 11.0 72"
328.8, dT = -67sec
      539 is a close double. Observations are highly desired
      539 = NSV 1264, 4.30, range 0.00, 1Kp, Type SPB, Period 1.5664 days
26 Aug  7  5 38 11.9 r   76152pB9  7.2  7.1S  37-  75      6  63  71S 240 287 253 -3.3 -5.9 -0.5+1.4 .646 -168.5      3 45 37.8  24 20  8 368.71179.2
     76152 is triple: Aa,Ab 7.4 9.0 0.002" 349.1, dT = 0.00sec : AB 7.2 9.9 177" 164.1, dT = -66sec
     76152 = NSV 15762, 7.17, , Type VAR:
26 Aug  7  5 43 13.5 R     541SB8  3.9  3.9s  37-  74      7  63  75S 244 291 256 -3.2 -5.9 -0.5+1.4 .650 -172.1      3 45 49.6  24 22  4 368.51172.7
   R541 = Maia = 20 Tauri
      541 is quadruple: Aa,Ab 4.4 5.4           : AB 3.8 13.7 113"  72.6, dT = +172sec : AB 3.8 13.7 113"  72.7, dT = +172sec
      541 = NSV 1279, 3.87, range 0.00, 4Kp, Type ACV, Period 10.288 days
26 Aug  7  5 47 15.2 R     542pB8  5.8  5.8   37-  74      8  64  67N 281 329 294 -3.2 -6.0 -0.2+0.9 .566  150.1      3 45 54.5  24 33 16 368.51167.7
   R542 = Asterope = 21 Tauri
      542 is triple: AB 5.8 6.4 150" 130.1, dT = +231sec : AD 5.8 12.7 170"  74.1, dT = +268sec
26 Aug  7  5 50 48.3 R     543pA0  6.4  6.4   37-  74      8  64  76N 273 321 285 -3.2 -6.0 -0.2+1.1 .605  158.4      3 46  2.9  24 31 40 368.41162.9
   R543 = 22 Tauri
      543 is triple: BC 6.4 15.1 52" 267.9, dT = -85sec : BA 6.4 5.8 150" 310.1, dT = -197sec
26 Aug  7  6  2  2.1 r     553pA0  6.8  6.8e  36-  74     10  66  23S 192 241 205 -3.2 -6.0 -1.0+2.4 .330 -120.8      3 47 29.5  24 17 18 368.21148.9
      553 is double: AB 6.8 15.5 95"  16.7, dT = +288sec
      553 = V1229 Tau, 6.83 to 6.94, V, Type EA, Period 2.46113408 days, Phase  26%
26 Aug  7  6 11  7.3 R     548pB9  6.8  6.8   36-  74     12  67  87S 256 306 269 -3.2 -6.0 -0.2+1.3 .634  174.7      3 46 59.4  24 31 12 368.01135.9
      548 is quadruple: Aa,Ab 6.8 6.9 0.011" 249.1, dT = -0.02sec : AB 6.8 14.8 102" 299.3, dT = -117sec : AC 6.8 13.0 123" 190.1, dT = -78sec
      548 is a close double. Observations are highly desired
26 Aug  7  6 20 13.3 r     557pA1  7.0  6.9   36-  74     13  69  13S 182 232 194 -3.2 -6.0 -1.4+3.1 .227 -111.1      3 48 30.1  24 20 44 367.81124.9
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Occultation prediction for Chicago Astronomer Observatory
E. Longitude - 87 40 16.3, Latitude 41 51 8.6, Alt. 182m; Telescope dia 15cm; dMag 0.0

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      day  Time     P   Star  Sp  Mag  Mag    % Elon Sun  Moon   CA   PA  VA  AA Libration   A    B    RV    Cct durn  R.A. (J2000)  Dec   Mdist   SV
 y   m  d  h  m    s       No  D     v    r V  ill     Alt Alt Az   o    o   o   o   L    B   m/o m/o  "/s     o  sec  h  m    s    o  m  s   Mm   m/s
       557 is quadruple: Aa,Ab 7.2 8.5 0.20" 239.0, dT = -0.48sec : Aa,Ab 7.2 8.5 0.20" 239.0, dT = -0.48sec : AB 7.0 15.0 72" 217.0, dT = -258sec
       557 is a close double. Observations are highly desired
26 Aug  7  6 21 10.2 r   76194PA0  7.7  7.6v  36-  74     13  69  85N 264 313 276 -3.2 -6.0 -0.1+1.2 .614  167.2      3 47 24.1  24 35 19 367.81122.5
     76194 is quadruple: ** 7.7      0.050" 298.0, dT = -0.07sec : AB 7.7 14.6 32"  94.3, dT = +52sec : AC 7.7 14.4 130"  62.8, dT = +198sec
     76194 has been reported as non-instantaneous (OCc1829). Observations are highly desired
     76194 = V1228 Tau, 7.71, range 0.02, v, Type DSCTC, Period 0.0603 days
26 Aug  7  7  3 10.9 r   76259cA2  7.4  7.4   36-  74     20  75   7S 176 228 188 -3.1 -6.0 -2.0+4.2 .162 -105.7      3 50 28.1  24 29 44 366.91066.0
     76259 is double: ** 7.6 8.8 0.015" 114.0, dT = -0.04sec
     76259 has been reported as non-instantaneous (OCc 252). Observations are highly desired
26 Aug  7  7 40 39   M     571pA2  6.8  6.7   36-  73     27  79  10N 339  33 351 -3.1 -6.1 +9.9+9.9 .000   90.0      3 51 25.3  25  9 47 366.11015.0
       571 is double: ** 7.1 9.1
26 Aug  7  8 14 39.5 R     574pG0  6.8  6.5   35-  73     33  85  45N 304 360 316 -3.1 -6.2 +1.4+0.2 .308  124.3      3 52 11.4  25  9 47 365.5 968.0
26 Aug  7  9 36 42.1 r   76319kA2  8.4  8.3   35-  72     48  98  63S 233 288 245 -3.2 -6.3 +0.6+2.0 .472 -164.6      3 55  7.6  25  6 21 364.1 864.2
26 Aug  7 10 40 12.2 r   76345kG8  7.5  7.0   35-  72  -3 59 112  61S 232 281 243 -3.2 -6.4 +1.0+2.1 .432 -162.4      3 57 11.8  25 16 58 363.2 798.2
26 Aug  8  7  4 50.2 r     732pK3  7.5  6.8   25-  60     12  64  52S 228 277 235 -1.8 -5.8 -0.6+1.7 .563 -150.5      4 52 58.2  26 46 39 364.91143.9
       732 is double: ** 7.9 10.2 0.040"  69.0, dT = +0.07sec
       732 has been reported as non-instantaneous (OCc 778). Observations are highly desired
26 Aug  8  8  7 35.7 R   76841cK1  7.3  6.7   25-  60     22  73  66N 290 344 297 -1.7 -5.9 +0.4+0.8 .497  146.2      4 55 34.6  27 12  9 363.71055.4
     76841 is double: ** 7.6 10.1 0.08"  82.0, dT = +0.15sec
     76841 has been reported as non-instantaneous (OCc 753). Observations are highly desired
26 Aug  8  9 55 31.9 r X  6391WA0  8.7  8.5   24-  59 -10 42  88  88S 265 322 271 -1.7 -6.0 +0.8+1.3 .511  171.5      4 59 53.1  27 19 14 361.7 906.2
   X  6391 is double: BA 8.7 7.0 20.4"  26.1, dT = +21sec
26 Aug  8  9 55 52.2 R     746WB7  7.0  6.9   24-  59 -10 42  88  89S 266 323 272 -1.7 -6.0 +0.8+1.3 .509  170.6      4 59 53.7  27 19 32 361.7 905.8
       746 is double: AB 7.0 8.7 20.4" 206.1, dT = -20sec
26 Aug  9  7 36 35   Gr    909SB9  6.0  5.9s  15-  46      9 ** GRAZE: CA  8.6N; Dist.100km in az. 321deg. [Lat = 43.02+0.61(E.Long+87.67)]
26 Aug  9  7 39 33.5 R     906SK1  6.6  6.1   15-  46      7  60  77S 261 308 262 -0.2 -5.2 -0.4+1.1 .664 -176.1      6  0  6.0  27 16 20 363.31173.4
       906 is quadruple: AB 7.3 8.3 0.31"       : AC 7.3 8.3 0.31"       : AD 7.3 10.0 21.5"
       906 is a close double. Observations are highly desired
26 Aug  9  7 42  7.0 R     909SB9  6.0  5.9s  15-  46      8  60  25N 339  26 340 -0.2 -5.2 +1.4-1.9 .181  105.8      6  1  0.5  27 34 21 363.31170.9
       909 is triple: Aa,Ab 6.1 9.2      194.0, dT = 0.00sec : AB 6.1 12.4 9.5" 242.4, dT = +6sec
       909 is a close double. Observations are highly desired
       909 = NSV 16751, 6.04, range 0.01, 2V, Type VAR, Period 9.26012 days
26 Aug  9  8 55 29.1 R   77909wA0  7.6  7.6   15-  45     20  70  52N 312   5 312 -0.1 -5.2 +0.7+0.1 .411  132.6      6  4  1.0  27 34 14 361.91065.3
     77909 is double: AB 7.6 10.8 21.6" 132.5, dT = +53sec
26 Aug 10  8 56 39.0 R    1085SG8  7.1  6.7    7-  32      8  63  69N 303 351 297 +1.5 -4.1 +0.1+0.4 .560  149.7      7  9 35.4  25 43 43 362.41139.7
      1085 is triple: AB 7.2 13.0 34"  68.2, dT = +35sec : AC 7.2 7.8 125"  78.3, dT = +158sec
26 Aug 10  8 59 13.4 R   79124WF0  7.8  7.6    7-  32      9  63  67N 305 353 299 +1.5 -4.1 +0.1+0.3 .545  147.5      7  9 44.2  25 44  5 362.31136.0
     79124 is double: CA 7.8 7.2 125" 258.3, dT = -156sec
26 Aug 10  9  4 27.0 r   79125 K2  8.4  7.7    7-  32      9  64  87N 285 333 279 +1.5 -4.1 -0.1+0.8 .628  167.8      7  9 48.2  25 38 40 362.21128.3
26 Aug 10  9 18 47.4 r   79137 A0  8.6  8.5    7-  31     11  66  17S 209 259 203 +1.5 -4.1 -1.2+3.3 .280 -116.4      7 11  3.6  25 19 33 362.01108.4
26 Aug 10  9 39 14.8 r   79159 A5  9.3  9.1    7-  31     15  69  25N 347  38 341 +1.5 -4.2 +2.0-3.2 .166  105.7      7 12 19.6  25 49 25 361.61078.9
26 Aug 10 10  2 25.1 R    1094 A0  7.1  7.1    7-  31  -9 19  72  54N 319  11 312 +1.6 -4.2 +0.7-0.2 .419  134.7      7 12 49.4  25 44 55 361.21044.4
   R1094 = 49 Geminorum
26 Aug 10 14 59 55.2 r    1117cG8  5.0  4.6    6-  29  44 69 139  38S 232 265 225 +1.3 -4.1 +2.1+3.0 .258 -126.8      7 23 28.5  25  3  2 357.3 748.1
   R1117 = 57 Geminorum
      1117 is double: ** 5.9 5.9 0.10"  90.0, dT = +0.3sec
      1117 has been reported as non-instantaneous (OCc1358). Observations are highly desired
26 Aug 14 19 15 20.1 d    1635cM0  5.2  4.4    6+  28  57 50 172  79S 129 135 107 +6.2 +2.9 +1.4-1.1 .421    1.3     11 17 17.4   2  0 38 371.1 757.6
```

Occultation prediction for Chicago Astronomer Observatory
E. Longitude - 87 40 16.3, Latitude 41 51 8.6, Alt. 182m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon	Sun Alt	Moon Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct durn o	Cct durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
	R1635 = 75 Leonis																																	
	1635 is double: ** 5.8 6.6 0.044" 0.0																																	
	1635 has been reported as non-instantaneous (OCc 763). Observations are highly desired																																	
26	Aug	17	1	59	5.4	d	1872	K0	7.3	6.7	21+	55	5	249	53S	153	107	131	+5.8	+6.1	+0.6	-2.4	.370	-37.7	13	2	12.8	-12	6	32	388.0	880.2	
26	Aug	23	3	32	48	m	2631	B9	6.5	6.5v	77+	123	16	201	7S	168	150	168	-0.1	+6.6	+9.9	+9.9	.000	-90.0	18	11	58.2	-28	54	6	402.5	663.4	
	R2631 = V4045 Sagittarii																																	
	2631 = V4045 Sgr, 6.51 to 6.54, V, Type ACV, Period 2.8855 days																																	
	Distance of 2631 to Terminator = 17.2"; to 3km sunlit peak = 2.1"																																	
26	Aug	27	7	49	46.5	D	3181SA	7	6.0	5.8	99+	169	23	222	88S	67	36	85	-4.8	+1.3	+1.2	-0.4	.409	-13.5	21	44	1.0	-14	44	58	391.0	797.0	
	R3181 = 45 Capricorni																																	
	3181 is triple: ** 6.7 6.7 0.050" : AB 5.4 9.5 4.3" 229.0, dT = -10sec																																	
	3181 has been reported as non-instantaneous (OCc1610). Observations are highly desired																																	
	Distance of 3181 to Terminator = 16.2"; to 3km sunlit peak = 6.0"																																	
26	Aug	28	2	48	14.3	d	X182632k		11.7	11.2	87E	179	23	130	91U	69	105	89	-4.3	+0.4	+1.3	+1.6	.406	-11.0	22	24	55.9	-10	23	4	388.1	778.1	
26	Aug	28	2	48	23.5	D	X 51874		9.8	9.2	87E	179	23	130	83S	36	72	56	-4.3	+0.4	+1.0	+2.1	.382	22.4	22	24	34.2	-10	16	1	388.1	777.9	
26	Aug	28	2	50	0.8	r	X242698k		11.8		85E	179	24	131	-46N	253	288	273	-4.3	+0.4	+1.3	+1.6	.398	165.2	22	23	0.0	-10	32	36	388.1	774.2	
26	Aug	28	2	51	44.9	D	X 51850k		10.6	10.4	83E	179	24	131	47N	345	20	5	-4.3	+0.4	-0.4	+4.2	.120	73.0	22	23	46.0	-10	12	53	388.0	774.6	
26	Aug	28	2	53	57.7	D	3286	K0	7.2	6.4	80E	179	24	131	64N	2	37	22	-4.3	+0.4	+0.5	+2.9	.229	56.1	22	24	7.6	-10	11	52	388.0	773.2	
26	Aug	28	2	57	56.1	d	X242731k		11.2		74E	179	25	132	86S	30	65	50	-4.4	+0.3	+0.9	+2.1	.363	27.6	22	24	42.5	-10	13	5	387.9	770.5	
26	Aug	28	2	58	18	m	X242734k		11.8		74E	179	24	132	91U	148	182	168	-4.4	+0.3	+9.9	+9.9	.000	-90.0	22	24	48.2	-10	40	41	388.0	769.2	
26	Aug	28	3	3	48.6	r	X182570k		11.7	11.2	66E	179	25	134	-86N	209	242	228	-4.4	+0.3	+1.0	+2.2	.355	-151.0	22	23	49.2	-10	38	38	387.9	764.1	
26	Aug	28	3	3	51.0	d	X182643k		11.5	11.2	65E	179	25	133	84U	59	92	79	-4.4	+0.3	+1.3	+1.7	.407	-1.3	22	25	12.9	-10	17	6	387.9	766.3	
26	Aug	28	3	4	33.8	r	X242703k		11.7		64E	179	26	134	-43N	252	285	272	-4.4	+0.3	+1.4	+1.5	.393	165.4	22	23	20.8	-10	29	40	387.8	763.4	
26	Aug	28	3	7	57.4	d	X182649k		11.2	10.9	59E	179	26	134	79U	63	96	82	-4.4	+0.3	+1.3	+1.7	.404	-5.4	22	25	20.6	-10	17	8	387.8	763.4	
26	Aug	28	3	11	20.3	d	X182655k		11.1	10.8	54E	179	26	135	75U	66	99	86	-4.4	+0.3	+1.4	+1.6	.400	-9.1	22	25	27.1	-10	17	16	387.7	761.1	
26	Aug	28	3	14	12.1	d	X182637k		11.1	10.9	50E	179	27	135	98U	28	60	48	-4.4	+0.3	+1.0	+2.1	.354	28.7	22	25	3.2	-10	9	15	387.7	759.1	
26	Aug	28	3	14	12.8	R	X 51850k		10.6	10.4	50E	179	27	136	19N	310	342	330	-4.4	+0.3	+3.3	-0.8	.118	107.0	22	23	46.0	-10	12	53	387.7	757.5	
26	Aug	28	3	14	40.4	r	X242709k		11.5		49E	179	27	136	-39N	252	284	272	-4.4	+0.3	+1.5	+1.5	.388	164.9	22	23	34.8	-10	27	28	387.7	756.6	
26	Aug	28	3	23	38.7	r	X182578k		11.1	10.4	37E	179	28	138	-51N	237	267	257	-4.4	+0.3	+1.3	+1.7	.399	179.6	22	23	54.0	-10	29	12	387.5	750.9	
26	Aug	28	3	25	58.4	d	X 51920k		11.2	11.0	34E	180	28	138	52U	103	134	123	-4.4	+0.3	+2.0	+0.9	.273	-46.9	22	25	50.8	-10	23	47	387.5	751.4	
26	Aug	28	3	34	9.4	D	X 51928k		10.2	9.9	24E	180	29	140	65U	68	97	88	-4.5	+0.3	+1.5	+1.5	.388	-12.6	22	25	59.1	-10	12	45	387.4	746.9	
26	Aug	28	3	37	58.3	R	3286	K0	7.2	6.4	20E	180	30	141	10N	292	320	312	-4.5	+0.3	+2.5	+0.5	.221	123.9	22	24	7.6	-10	11	52	387.3	743.3	
26	Aug	28	4	0	29.4	R	X 51874		9.8	9.2	5E	180	32	147	92U	257	281	277	-4.5	+0.2	+1.8	+1.2	.361	157.7	22	24	34.2	-10	16	1	387.0	732.2	
26	Aug	28	4	2	49.3	d	X182644k		10.9	10.4	5E	180	33	147	75S	340	4	359	-4.5	+0.2	-1.7	+4.7	.102	74.8	22	25	16.4	-	9	57	32	387.0	732.3	
26	Aug	28	4	3	21.2	r	X182632k		11.7	11.2	4E	180	32	148	73U	223	247	243	-4.5	+0.2	+1.3	+1.7	.382	-169.0	22	24	55.9	-10	23	4	387.0	730.9	
26	Aug	28	4	3	57.6	d	X182702k		11.7	11.5	4E	180	33	148	80U	50	74	70	-4.5	+0.2	+1.4	+1.6	.389	4.3	22	26	28.0	-10	1	49	387.0	732.5	
26	Aug	28	4	5	52.4	D	165076kG5		9.6	9.0	4E	180	33	148	84U	43	67	63	-4.5	+0.2	+1.3	+1.7	.382	11.3	22	26	25.0	-10	0	0	387.0	731.7	
26	Aug	28	4	7	41.0	r	X242731k		11.2		4E	180	33	149	90U	262	285	282	-4.5	+0.2	+1.9	+1.1	.345	152.5	22	24	42.5	-10	13	5	387.0	729.3	
26	Aug	28	4	18	20.7	r	X 51920k		11.2	11.0	4E	180	34	152	39U	187	208	207	-4.6	+0.2	+0.5	+2.4	.264	-133.0	22	25	50.8	-10	23	47	386.9	725.8	
26	Aug	28	4	21	47.8	r	X182643k		11.5	11.2	4E	180	34	153	66U	232	252	252	-4.6	+0.2	+1.5	+1.5	.386	-178.6	22	25	12.9	-10	17	6	386.8	724.5	
26	Aug	28	4	23	32.5	d	X242766k		11.8		5E	180	35	153	97U	35	55	55	-4.6	+0.2	+1.2	+1.8	.366	18.8	22	26	40.4	-	9	54	33	386.8	725.5	
26	Aug	28	4	23	51.8	r	X182644k		10.9	10.4	5E	180	35	153	102U	308	328	328	-4.6	+0.2	+5.0	-1.9	.101	105.2	22	25	16.4	-	9	57	32	386.8	724.3	
26	Aug	28	4	24	2.8	r	X182637k		11.1	10.9	5E	180	35	154	83U	262	282	282	-4.6	+0.2	+2.0	+1.0	.339	151.4	22	25	3.2	-10	9	15	386.8	723.9	
26	Aug	28	4	24	33.3	D	X182712k		10.8	10.3	5E	180	35	153	96U	38	58	58	-4.6	+0.2	+1.2	+1.7	.373	15.0	22	26	45.0	-	9	54	55	386.8	725.2	
26	Aug	28	4	25	34.4	r	X182649k		11.2	10.9	5E	180	35	154	62U	228	247	248	-4.6	+0.2	+1.4	+1.5	.384	-174.5	22	25	20.6	-10	17	8	386.8	723.4	
26	Aug	28	4	28	16.6	D	165087	G5	9.0	8.6	6E	180	35	154	93U	52	71	72	-4.6	+0.2	+1.5	+1.5	.386	1.4	22	27	0.2	-	9	56	38	386.7	724.1	
26	Aug	28	4	28	20.0	r	X182655k		11.1	10.8	6E	180	35	155	58U	224	243	244	-4.6	+0.2	+1.3	+1.6	.380	-170.8	22	25	27.1	-10	17	16	386.7	722.6	
26	Aug	28	4	51	8.8	R	X 51928k		10.2	9.9	23E	180	36	161	54U	220	234	240	-4.7	+0.2	+1.3	+1.6	.374	-167.3	22	25	59.1	-10	12	45	386.5	717.9	

Occultation prediction for Chicago Astronomer Observatory
E. Longitude - 87 40 16.3, Latitude 41 51 8.6, Alt. 182m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon Alt	Sun Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	Aug	28	4	56	21		GrX242756k		11.4			29E	180		37	** GRAZE: CA 65.4N; Dist. 32km in az. 125deg. [Lat = 41.35+1.06(E.Long+87.67)]																			
26	Aug	28	4	56	57	m	X242756k		11.4			30E	180		37	163	66N	322	335	342	-4.7	+0.1	+9.9	+9.9	.000	90.0		22	26	7.4	- 9	47	8	386.5	717.7
26	Aug	28	5	5	47.3	d	X242782		11.6			42E	180		38	165	-19N	38	49	58	-4.7	+0.1	+1.3	+1.5	.372	13.7		22	27	36.1	- 9	45	16	386.4	717.3
26	Aug	28	5	21	33.1	d	X 51982k		11.1	11.0		65E	180		38	170	-82N	91	99	111	-4.8	+0.1	+2.5	+0.3	.296	-39.3		22	28	19.1	- 9	53	55	386.3	716.6
26	Aug	28	5	24	11.2	r	X182702k		11.7	11.5		69E	180		38	171	79U	235	242	255	-4.8	+0.1	+1.6	+1.1	.381	176.0		22	26	28.0	-10	1	49	386.3	715.9
26	Aug	28	5	25	3.9	R	165076kG5		9.6	9.0		70E	180		38	171	83U	242	249	262	-4.8	+0.1	+1.8	+0.9	.375	169.0		22	26	25.0	-10	0	0	386.3	715.9
26	Aug	29	7	20	20.6	R	3416cA3		5.6	5.5		99-	167		44	195	87S	239	228	261	-5.3	-1.7	+1.6	+0.7	.393	170.2		23	15	34.3	- 3	29	47	381.9	739.7
							3416 is double: ** 6.4 6.4 0.050"																												
							3416 has been reported as non-instantaneous (OCc1638). Observations are highly desired																												
26	Aug	30	9	22	57.6	r	6	G5	6.9	6.3		95-	154		44	224	24N	308	276	330	-5.5	-3.4	+4.7	-6.9	.108	104.9		0	5	22.2	3	36	22	378.3	769.6
							Distance of 6 to Terminator = 17.9"; to 3km sunlit peak = 6.6"																												
26	Sep	1	5	18	16.7	R	244	K0	6.7	6.2		82-	130		37	105	68S	224	272	244	-4.0	-5.1	+0.4	+2.1	.479	-167.2		1	39	15.4	14	17	8	373.3	890.3
							R244 = 104 Piscium																												
26	Sep	3	5	43	20.2	r	513cK0		7.3	6.7		62-	104		28	82	48S	213	267	227	-2.3	-6.1	-0.3	+2.2	.462	-146.1		3	32	0.6	23	38	50	369.4	997.1
							513 is double: ** 8.7 8.7 0.10" 90.0, dT = +0.12sec																												
							513 has been reported as non-instantaneous (OCc1204). Observations are highly desired																												
26	Sep	3	6	34	41.3	r	75990cK0		7.5	6.9		61-	103		37	90	48S	214	268	227	-2.3	-6.2	+0.0	+2.4	.437	-147.2		3	33	51.4	23	49	52	368.5	929.1
							75990 is double: ** 8.4 8.4 0.10" 85.0, dT = +0.14sec																												
							75990 has been reported as non-instantaneous (OCc 773). Observations are highly desired																												
26	Sep	3	8	39	18.5	r	522	G5	7.8	7.1		61-	102		60	115	55S	221	269	234	-2.5	-6.4	+0.8	+2.4	.401	-154.7		3	37	43.5	24	15	33	366.7	789.8
26	Sep	3	9	23	13.5	r	76041	F0	8.2	8.0		60-	102		67	130	73N	273	311	286	-2.6	-6.4	+1.9	+0.5	.384	154.7		3	38	35.9	24	36	6	366.2	755.2
26	Sep	3	9	39	53.2	R	76046cA0		7.1	7.1		60-	102		69	138	61N	285	318	298	-2.6	-6.4	+2.2	-0.2	.336	143.2		3	39	6.7	24	42	10	366.1	744.6
							76046 is double: AB 7.1 45.0, dT = -15sec																												
26	Sep	3	10	30	55	Gr	76081 K2		7.5	6.9		60-	102	-9	73	** GRAZE: CA 5.8N; Dist. 48km in az. 338deg. [Lat = 42.32+0.29(E.Long+87.67)]																			
26	Sep	3	10	39	28	r	76081 K2		7.5	6.9		60-	102	-8	73	177	19N	327	330	340	-2.7	-6.5	+4.6	-8.9	.094	103.4		3	41	18.1	25	0	29	365.9	720.0
26	Sep	4	8	5	1.1	r	X 70481p		7.3	7.2		49-	89		45	91	72N	281	337	289	-1.3	-6.1	+1.2	+0.9	.440	153.0		4	38	29.6	26	56	26	365.9	877.1
							X 70481 is triple: 7.3 9.2 5.8" 174.9, dT = +4sec : AC 7.4 12.9 92" 203.6, dT = -47sec																												
							X 70481 is a close double. Observations are highly desired																												
26	Sep	4	8	5	1.6	R	701SF2		6.6	6.4		49-	89		45	91	72N	281	337	288	-1.3	-6.1	+1.2	+0.9	.441	153.1		4	38	29.5	26	56	23	365.9	877.1
							701 is triple: 6.6 9.2 3.1" 169.4, dT = +2.5sec : AB 7.36 7.21 4.48" 187.8, dT = +0.47sec																												
							701 is a close double. Observations are highly desired																												
26	Sep	5	8	41	23.3	r	868SA0		7.5	7.5		38-	76		40	86	79N	281	338	283	-0.1	-5.6	+0.9	+0.9	.479	161.7		5	44	21.2	27	43	53	365.0	892.4
							868 is triple: AB 7.5 9.8 8.6" 254.1, dT = -16sec : AC 7.5 12.7 47" 40.4, dT = +49sec																												
							868 is a close double. Observations are highly desired																												
26	Sep	5	10	13	40.6	r	77563 A3		8.2	8.0		37-	75		57	103	61S	242	297	243	-0.2	-5.7	+1.1	+2.0	.410	-156.7		5	47	45.2	27	38	9	363.7	787.6
26	Sep	5	10	56	12.6	R	77604 K0		7.0	6.2		37-	75	-5	64	114	29S	209	259	211	-0.3	-5.7	+0.9	+4.4	.229	-122.4		5	49	38.1	27	33	3	363.3	753.0
26	Sep	5	11	50	54.1	r	885wG7		5.6	5.1		37-	74	5	72	137	54N	307	342	308	-0.4	-5.7	+2.0	-1.5	.327	142.6		5	50	58.1	27	58	4	362.9	723.9
							885 is double: AB 5.7 12.5 10.8" 233.1, dT = -9sec																												
26	Sep	5	13	6	26.4	r	890cA0		4.6	4.6s		36-	74	19	75	197	50S	231	216	232	-0.5	-5.6	+2.1	+2.0	.296	-136.5		5	53	19.6	27	36	44	362.7	717.4
							R890 = 136 Tauri																												
							890 is double: ** 4.8 6.3 0.050" 270.0, dT = -0.13sec																												
							890 has been reported as non-instantaneous (OCc 206). Observations are highly desired																												
							890 = NSV 2696, 4.50 to 4.61, V																												
26	Sep	6	9	20	53.6	r	78792 K0		8.3	7.7		26-	62		35	84	40S	227	283	223	+1.2	-4.6	+0.1	+2.8	.367	-135.7		6	50	47.9	26	17	58	364.7	906.4
26	Sep	6	9	57	46.5	r	78810 A3		8.0	7.8		26-	62		42	90	67S	254	310	250	+1.2	-4.7	+0.7	+1.7	.462	-161.5		6	51	53.4	26	24	1	364.1	859.3
26	Sep	7	7	51	54.2	r	79717 S*		8.0		V	17-	49		8	65	70N	303	351	294	+2.4	-3.3	+0.1	+0.4	.557	154.1		7	49	18.2	23	44	4	367.5	1104.9
							79717 = T Gem, 7.98 to 15.0, V, Type M, Period 289. days, Phase 60%																												
26	Sep	7	8	16	31.5	r	79740cF2		8.5	8.3		17-	49		12	69	45N	328	17	318	+2.4	-3.3	+0.6	-0.6	.385	129.8		7	50	44.7	23	47	1	367.0	1069.6

Occultation prediction for Chicago Astronomer Observatory
E. Longitude - 87 40 16.3, Latitude 41 51 8.6, Alt. 182m; Telescope dia 15cm; dMag 0.0

y	m	day d	h	Time m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon	Sun Alt	Moon Alt	Az	CA o	PA o	VA o	AA o	Libration L	B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
							79740 is double: ** 9.2 9.2 0.10" 143.0, dT = +0.26sec																													
							79740 has been reported as non-instantaneous (OCc 683). Observations are highly desired																													
26	Sep	7	9	19	39.0	r	79765	F8	8.9	8.7		17-	48	23	78	83S	276	329	266	+2.4	-3.3	+0.3+1.1	.551	-177.6			7	52	49.4	23	29	58	365.9	978.2
26	Sep	7	9	54	59.5	r	79781	K2	8.8	8.2		17-	48	29	83	86N	288	342	278	+2.4	-3.4	+0.6+0.7	.519	171.6			7	54	14.3	23	30	14	365.3	929.5
26	Sep	7	10	7	7	m	79804	cG0	7.4			17-	48	31	85	4N	10	64	0	+2.4	-3.4	+9.9+9.9	.000	90.0			7	56	2.8	23	41	33	365.1	914.8
							79804 is double: AB 7.90 8.57 0.11" 108.1																													
							79804 is a close double. Observations are highly desired																													
26	Sep	7	10	27	23.2	R	1195	B8	6.8	6.9		16-	48	-11	35	88	36N	338	32	327	+2.4	-3.4	+1.4-2.0	.275	123.2			7	56	6.5	23	37	26	364.8	888.0
26	Sep	8	8	39	32	Gr	1322kA2		6.4	6.4		9-	35		4	** GRAZE: CA -3.7S; Dist. 13km in az. 156deg. [Lat = 41.73+0.34(E.Long+87.67)]																					
26	Sep	8	8	42	19	r	1322kA2		6.4	6.4		9-	35		3	68	3S	200	247	186	+3.5	-1.8	+9.9+9.9	.069	-96.4			8	50	45.1	18	49	56	368.9	1105.4
26	Sep	8	9	31	49.3	r	98182	K0	8.6	7.9		9-	35		12	75	57S	255	305	241	+3.6	-1.8	-0.1+1.7	.503	-150.3			8	52	3.6	18	53	39	368.0	1034.6
26	Sep	8	10	20	35.6	r	98205		8.6	7.8		9-	35		20	83	66S	264	315	249	+3.6	-1.8	+0.2+1.5	.502	-157.6			8	53	53.2	18	48	43	367.1	966.7
26	Sep	8	18	50	41.5	D	Jupiter		-1.7	-1.7		7-	31	51	44	251	-56S	143	95	127	+2.7	-1.0	+0.5-2.2	.460	-19.4			9	10	15.8	16	52	26	365.4	864.2
							Jupiter limb contacts offset by ±34.9 secs, at 18 50 7 and 18 51 16 Both contacts are against the bright limb of Jupiter																													
26	Sep	8	19	51	19.0	R	Jupiter		-1.7	-1.7		7-	31	45	33	263	84S	282	231	266	+2.7	-0.9	+0.7-1.5	.496	-160.6			9	10	15.8	16	52	26	366.5	934.3
							Jupiter limb contacts offset by ±32.3 secs, at 19 50 47 and 19 51 51 Both contacts are against the bright limb of Jupiter																													
26	Sep	16	1	6	22.5	D	2164dK4		6.6	5.7		24+	59		6	230	90N	109	70	94	+3.6	+7.6	+1.2-1.7	.395	-7.2			15	9	51.3	-23	59	9	397.7	767.0
							2164 is double: AB 6.7 12.5 9.1" 204.6, dT = -2.3sec																													
							2164 is a close double. Observations are highly desired																													
26	Sep	17	1	50	45.9	d	2297kF7		7.0	6.7		33+	70		5	227	52N	65	27	54	+2.6	+7.6	+0.8-0.8	.342	28.8			16	3	16.1	-26	43	2	401.0	759.3
26	Sep	20	3	1	17.2	d	2723 K0		6.6	6.1		61+	103		14	211	32N	26	360	30	-1.2	+5.9	+0.3+0.8	.256	45.4			18	46	3.9	-27	29	56	402.1	711.3
26	Sep	23	1	40	33.0	D	3113cB5		5.4	5.5V		86+	136		28	158	51S	109	126	125	-4.0	+2.4	+2.7+0.2	.233	-49.8			21	17	57.3	-17	59	7	392.3	686.1
							R3113 = 30 Capricorni																													
							3113 is double: ** 6.1 6.1 0.10" 87.0, dT = +0.4sec																													
							3113 has been reported as non-instantaneous (OCc1602). Observations are highly desired																													
							3113 = HD 202671, 5.40, , Type ACV, Period 1.9917 days, Phase 10%																													
26	Sep	23	2	39	11.7	d	3115 F0		7.1	6.9		86+	137		31	173	23N	3	8	19	-4.2	+2.3	+0.3+2.4	.214	53.5			21	18	15.7	-17	27	44	391.8	683.5
							R3115 = 31 Capricorni																													
26	Sep	23	5	34	9.4	D	3126 G8		4.3	3.8v		87+	138		22	219	33N	13	344	30	-4.8	+1.9	+0.0+1.4	.308	41.5			21	22	14.8	-16	50	4	392.1	781.7
							R3126 = Tae = iota Capricorni																													
							3126 = iot Cap, 4.27, range 0.06, V, Type BY																													
26	Sep	24	5	41	12.2	D	3253kB5		5.4	5.5V		93+	149		31	212	58N	36	12	55	-5.3	+0.4	+0.8+0.8	.393	15.4			22	10	37.5	-11	33	54	386.9	764.1
							R3253 = 38 Aquarii																													
							3253 = HD 210424, 5.44, , Type ACV, Period 3.9613 days, Phase 11%																													
26	Sep	26	8	24	36.1	d	3508cA5		5.8	5.7		100+	174		32	238	80S	100	60	122	-5.7	-2.9	+1.6-1.9	.319	-45.1			23	49	27.5	1	4	34	377.4	827.1
							R3508 = 21 Piscium																													
							3508 is double: ** 6.6 6.6 0.050"																													
							3508 has been reported as non-instantaneous (OCc1648). Observations are highly desired																													
							Distance of 3508 to Terminator = 4.2"; to 3km sunlit peak = 0.0"																													
26	Sep	28	4	32	23.2	r	197cK0		7.0	6.5		97-	160		49	125	64N	264	303	285	-3.8	-4.8	+1.6+1.2	.397	149.7			1	21	58.3	12	36	15	369.5	823.8
26	Sep	29	5	30	20.3	r	336 F0		7.4	7.3v		92-	147		54	121	60N	274	317	292	-2.9	-5.7	+1.8+0.8	.373	144.0			2	17	45.4	18	27	18	366.7	820.2
							336 = AD Ari, 7.39 to 7.48, V, Type ELL, Period 0.53972 days, Phase 22%																													
26	Sep	30	4	20	42	Gr	470WK0		6.8	6.2		85-	134		36	** GRAZE: CA 5.9N; Dist. 29km in az. 133deg. [Lat = 41.47+0.81(E.Long+87.67)]																					
							Distance of 470 to Terminator = 11.5"; to 3km sunlit peak = 1.0"																													
26	Sep	30	6	2	40.8	r	75832 K0		7.3	6.6		84-	133		54	109	60N	281	331	295	-1.7	-6.2	+1.7+0.7	.378	143.4			3	16	57.0	23	7	36	365.1	833.4
26	Sep	30	6	6	13.2	r	75845 A3		7.6	7.5		84-	133		54	110	39S	200	249	214	-1.7	-6.2	+0.1+3.1	.335	-135.5			3	17	49.8	22	49	56	365.1	829.9
26	Oct	2	7	51	56.1	r	812SF8		8.0			64-	106		54	100	89N	267	323	270	+0.8	-5.7	+1.3+1.1	.455	174.4			5	27	1.3	27	36	37	364.2	807.3
							812 is triple: AB 8.71 8.61 0.59" 277.1, dT = -1.3sec : AB,C 7.9 13.2 27.0" 277.8, dT = -58sec																													

Occultation prediction for Chicago Astronomer Observatory
E. Longitude - 87 40 16.3, Latitude 41 51 8.6, Alt. 182m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon	Sun Alt	Moon Alt	Az	CA o	PA o	VA o	AA o	Libration L	B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
							812 is a close double. Observations are highly desired																													
26	Oct	2	10	7	55.8	r	77224cF8	7.4	7.1			63-	105	75	153	78N	279	301	282	+0.5	-5.8	+1.9	-0.1	.400	169.0		5	31	22.8	27	46	9	363.3	717.3
							77224 is double: ** 8.3 8.3 0.10" 90.0, dT = +0.25sec																												
							77224 has been reported as non-instantaneous (OCc 194). Observations are highly desired																												
26	Oct	3	6	40	3.1	R	994cF5	6.6	6.3			53-	93	29	79	84N	279	334	277	+2.1	-4.8	+0.5	+1.0	.526	169.0		6	28	56.4	26	58	3	366.8	953.3
							994 is double: ** 6.8 7.7 0.003" 269.0, dT = -0.01sec																												
26	Oct	3	8	55	34.9	r	78501 K0	7.8	7.3			52-	92	54	101	71N	293	348	290	+1.9	-4.9	+1.5	+0.1	.415	158.8		6	33	58.0	27	2	41	364.8	787.7
26	Oct	4	8	6	32.3	r	79523wM5	7.7	6.8s			40-	79	32	85	36S	226	280	217	+3.1	-3.7	+0.0	+3.3	.313	-128.3		7	34	59.3	24	15	56	367.6	899.0
							79523 is double: AB 7.8 11.1 92" 180.0, dT = -205sec																												
							79523 = NSV 17512, 7.69 to 7.78, Hp																												
26	Oct	4	9	51	57.4	R	1155 F0	6.4	6.2			40-	78	52	104	88S	278	331	269	+2.9	-3.6	+1.4	+0.7	.439	-176.4		7	38	14.4	24	21	38	366.1	781.1
26	Oct	4	10	22	36.1	R	1157 A2	6.2	6.2			40-	78	57	111	68S	259	309	250	+2.9	-3.6	+1.5	+1.5	.389	-155.5		7	39	12.0	24	13	21	365.8	757.3
26	Oct	5	7	45	42.7	R	1277wK3	5.3	4.7			30-	66	16	77	59S	254	305	241	+4.0	-2.2	+0.0	+1.8	.485	-151.2		8	32	42.5	20	26	28	370.7	994.5
							R1277 = eta Cancri																												
							1277 is double: AB 5.3 20.0 164" 280.0, dT = -305sec																												
26	Oct	5	8	49	7.4	r	80269kF0	8.4	8.3			29-	66	28	87	62N	313	6	300	+4.0	-2.2	+0.8	-0.2	.446	151.7		8	35	17.8	20	33	53	369.6	907.9
26	Oct	5	9	10	39.3	r	80274 A0	8.3	8.2			29-	65	32	90	74S	270	322	256	+4.0	-2.2	+0.7	+1.3	.472	-163.7		8	35	43.3	20	19	49	369.2	880.7
26	Oct	5	9	27	15.2	R	80278kA*	7.5	7.4			29-	65	35	93	84S	280	333	267	+3.9	-2.2	+0.9	+0.9	.478	-173.4		8	36	17.4	20	20	29	369.0	860.8
26	Oct	5	9	45	33.4	r	80294kF8	8.0	7.7			29-	65	38	96	45N	330	23	317	+3.9	-2.2	+1.2	-1.3	.345	137.2		8	37	26.4	20	29	14	368.7	840.4
26	Oct	5	10	33	36.4	R	1288kF5	7.8	7.6			29-	65	46	105	89S	285	335	272	+3.8	-2.2	+1.3	+0.5	.443	-175.4		8	38	23.1	20	12	26	368.0	793.0
26	Oct	5	10	37	51.6	r	80309kF0	8.1	8.0v			29-	65	47	107	44S	240	289	226	+3.8	-2.2	+1.4	+3.1	.283	-129.7		8	38	37.9	19	59	23	368.0	789.7
							80309 = CY Cnc, 8.14, range 0.02, V, Type DSCTC, Period 0.1 days																												
26	Oct	5	10	56	12.7	r	80317pA2	8.3	8.2s			29-	65	-11	50	111	57S	253	301	239	+3.8	-2.1	+1.5	+2.0	.342	-141.9		8	39	3.6	19	59	59	367.8	775.2
							80317 is double: ** 8.3 10.6 0.044" 98.7, dT = +0.12sec																												
							80317 has been reported as non-instantaneous (OCc 637). Observations are highly desired																												
							80317 = NSV 4162, 8.32, range 0.02, V																												
26	Oct	5	10	57	33	M	1292kF0	6.7	6.5v			29-	65	-11	50	111	5S	201	249	188	+3.8	-2.1	+9.9	+9.9	.000	-90.0		8	39	42.7	19	46	42	367.8	774.8
							R1292 = 38 Cancri (BT)																												
							1292 = BT Cnc, 6.66, range 0.06, V, Type DSCTC, Period 0.10228 days																												
26	Oct	5	11	19	40.4	r	80327pA3	7.8	7.6			28-	65	-7	54	117	89S	285	330	271	+3.8	-2.1	+1.6	+0.3	.422	-172.5		8	39	42.8	20	5	10	367.6	759.3
							80327 is double: AB 7.9 9.6 0.64" 136.2, dT = +1.3sec																												
							80327 is a close double. Observations are highly desired																												
26	Oct	5	11	32	54	M	1302pA9	6.8	6.7			28-	64	-4	56	121	7S	203	246	190	+3.7	-2.1	+9.9	+9.9	.000	-90.0		8	40	43.2	19	43	10	367.5	752.6
							R1302 = 42 Cancri																												
							1302 is double: ** 7.5 7.5 0.050"																												
							1302 has been reported as non-instantaneous (OCc1393). Observations are highly desired																												
26	Oct	5	11	34	57.0	R	1295pK0	6.4	5.9s			28-	64	-4	56	121	81S	277	320	263	+3.7	-2.1	+1.7	+0.6	.404	-163.7		8	40	6.4	20	0	28	367.4	750.9
							R1295 = 39 Cancri																												
							1295 is multiple: AC 6.5 9.0 134" 309.0, dT = -281sec : AD 6.5 8.8 135" 111.0, dT = +324sec : AB 6.5 6.6 152" 149.9, dT = +226sec : AS 6.5 10.1																												
262" 325.7, dT = -427sec																																		
							1295 = NSV 4179, 6.39, range 0.04, V																												
26	Oct	5	11	38	20.6	R	1296pA1	6.6	6.6			28-	64	-3	57	122	75S	271	313	258	+3.7	-2.1	+1.7	+0.8	.389	-157.7		8	40	11.5	19	58	16	367.4	749.3
							R1296 = 40 Cancri																												
							1296 is quadruple: Ba,Bb 6.6 0.40" 128.0, dT = +0.8sec : BR 6.6 11.6 140" 146.9, dT = +203sec : BA 6.6 6.5 152" 329.9, dT = -202sec																												
							1296 is a close double. Observations are highly desired																												
26	Oct	6	8	22	11.6	D	Jupiter	-1.7	-1.7			20-	53	10	78	-68N	87	136	70	+4.7	-0.7	+0.0	+1.4	.512	22.4		9	31	5.4	15	20	24	373.3	1003.7
							Jupiter limb contacts offset by ±32.8 secs, at 8 21 39 and 8 22 44 Both contacts are against the bright limb of Jupiter																												
26	Oct	6	9	10	16.8	r	98613cF8	8.4	8.0			20-	52	19	86	88S	287	338	270	+4.7	-0.6	+0.4	+0.8	.524	-176.9		9	30	35.2	15	15	36	372.4	948.4

Occultation prediction for Chicago Astronomer Observatory
E. Longitude - 87 40 16.3, Latitude 41 51 8.6, Alt. 182m; Telescope dia 15cm; dMag 0.0

y	m	day d	h	Time m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon	Sun Alt	Moon Alt	Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
							98613 is double: ** 8.9 8.9 0.10" 120.0, dT = +0.19sec																													
							98613 has been reported as non-instantaneous (OCc 609). Observations are highly desired																													
26	Oct	6	9	12	13.6	R	Europa		6.1	6.1		19-	52		19	86	66N	314	4	296	+4.7	-0.6	+0.5	-0.1	.477	157.5		9	30	55.2	15	21	19	372.4	933.0
Europa limb contacts offset by ±0.8 secs, at 9 12 12.8 and 9 12 14.3 Both contacts are against the bright limb of Europa																																			
26	Oct	6	9	14	14.4	R	Callisto		6.4	6.4		19-	52		20	87	66N	313	4	296	+4.7	-0.6	+0.5	-0.1	.478	157.6		9	30	58.9	15	20	59	372.4	934.3
Callisto limb contacts offset by ±1.2 secs, at 9 14 13.2 and 9 14 15.6 Both contacts are against the bright limb of Callisto																																			
26	Oct	6	9	15	0.3	R	Io		5.8	5.8		19-	52		20	87	66N	314	4	296	+4.7	-0.6	+0.5	-0.1	.473	157.6		9	31	1.2	15	20	47	372.4	924.8
Io limb contacts offset by ±0.9 secs, at 9 14 59.4 and 9 15 1.2 Both contacts are against the bright limb of Io																																			
26	Oct	6	9	17	21.6	R	Jupiter		-1.7	-1.7		19-	52		20	87	66N	314	4	296	+4.7	-0.6	+0.6	-0.1	.475	157.7		9	31	5.4	15	20	24	372.3	926.8
Jupiter limb contacts offset by ±35.4 secs, at 9 16 46 and 9 17 57 Both contacts are against the bright limb of Jupiter																																			
26	Oct	6	9	19	12.0	R	Ganymede		5.4	5.4		19-	52		20	88	66N	313	4	296	+4.7	-0.6	+0.6	-0.1	.476	157.8		9	31	8.7	15	20	5	372.3	928.9
Ganymede limb contacts offset by ±1.3 secs, at 9 19 10.7 and 9 19 13.3 Both contacts are against the bright limb of Ganymede																																			
26	Oct	6	11	52	18	m	1415WA1		6.3	6.3		19-	51	-1	47	118	9S	208	251	191	+4.5	-0.5	+9.9	+9.9	.000	-90.0		9	35	52.9	14	22	47	370.1	781.2
R1415 = 7 Leonis																																			
							1415 is double: AB 6.3 9.4 41" 90.5																													
26	Oct	7	10	34	27	Gr	1525 M2		5.6	4.8v		11-	39		22	** GRAZE: CA 6.7S; Dist.191km in az. 182deg. [Lat = 40.13-0.03(E.Long+87.67)]																				
26	Oct	7	10	49	45.0	R	1525 M2		5.6	4.8v		11-	39		24	100	34S	234	282	214	+5.2	+1.1	+0.9	+4.4	.219	-116.5	.02	10	25	15.2	8	47	5	374.5	894.7
R1525 = 44 Leonis (DE)																																			
							1525 = DE Leo, 5.6, range 0.07, V, Type SRB:																													
26	Oct	7	11	5	9.1	R	118292DF0		7.7	7.6S		11-	39	-10	26	103	47S	247	295	227	+5.2	+1.1	+1.0	+2.9	.300	-128.4		10	25	35.1	8	46	35	374.2	877.3
118292 is double: AB 7.8 9.1 3.6" 74.4, dT = +12sec																																			
118292 is a close double. Observations are highly desired																																			
118292 = NSV 4851, 7.7,																																			
26	Oct	8	10	37	37.3	r	118728 F5		9.2	9.0		5-	26		9	95	80S	279	327	257	+5.7	+2.6	+0.3	+1.1	.499	-160.0		11	13	35.6	2	46	7	378.9	976.1
26	Oct	8	12	32	58	Gr	1635cM0		5.2	4.4		5-	26		6	30	** GRAZE: CA 15.4S; Dist. 53km in az. 20deg. [Lat = 42.36-0.27(E.Long+87.67)]																				
26	Oct	8	12	32	59	m	1635cM0		5.2	4.4		5-	26		6	29	116	15S	214	256	192	+5.5	+2.8	+9.9	+9.9	.000	-90.0		11	17	17.4	2	0	38	377.1	847.9
R1635 = 75 Leonis																																			
							1635 is double: ** 5.8 6.6 0.044" 0.0																													
							1635 has been reported as non-instantaneous (OCc 763). Observations are highly desired																													
26	Oct	16	23	44	14.1	D	2660 A3		6.2	6.0		34+	72	-8	18	197	39S	141	127	142	-0.6	+6.2	+3.4	-2.6	.148	-63.5		18	22	0.1	-28	25	48	402.7	647.9
26	Oct	19	1	19	18.8	d	188948 F7		7.5	7.3		53+	94		23	197	40S	128	114	139	-3.5	+3.9	+4.1	-2.8	.143	-66.0		20	8	35.9	-23	35	26	399.3	680.0
26	Oct	20	2	41	55.0	D	3069 A*		6.3	6.3v		63+	105		25	207	57N	40	19	55	-4.8	+2.5	+0.9	+0.5	.364	15.8		20	59	36.1	-19	2	7	395.7	726.5
R3069 = 20 Capricorni (AO)																																			
							3069 = AO Cap, 6.25 to 6.30, V, Type ACV, Period 2.2411 days, Phase 83%																													
26	Oct	21	0	2	15.1	D	3181SA7		6.0	5.8		72+	116		29	153	54N	34	54	51	-5.1	+1.3	+1.3	+1.8	.336	23.7		21	44	1.0	-14	44	58	391.4	695.8
R3181 = 45 Capricorni																																			
							3181 is triple: ** 6.7 6.7 0.050" : AB 5.4 9.5 4.3" 229.0, dT = -12sec																													
							3181 has been reported as non-instantaneous (OCc1610). Observations are highly desired																													
26	Oct	21	2	13	20.4	d	164647 F3		7.7	7.4		72+	117		33	189	68S	93	85	110	-5.6	+1.1	+2.5	-0.4	.285	-39.7		21	47	10.3	-14	30	50	390.6	702.7
26	Oct	22	5	44	48.8	D	3322cG1		6.4			82+	129		23	235	66N	44	6	64	-6.7	-0.8	+0.6	+0.3	.440	9.8		22	38	22.1	- 7	53	51	385.7	834.8
							3322 is double: AB 6.64 8.11 0.08" 296.3, dT = -0.06sec																													
							3322 is a close double. Observations are highly desired																													
26	Oct	22	22	58	31.5	d	3416cA3		5.6	5.5		88+	139	-1	19	113	18N	356	40	18	-5.7	-1.5	+0.1	+3.1	.221	61.8		23	15	34.3	- 3	29	47	382.3	867.1
							3416 is double: ** 6.4 6.4 0.050"																													
							3416 has been reported as non-instantaneous (OCc1638). Observations are highly desired																													
26	Oct	23	5	47	56.7	d	146693 G5		7.5	7.1		89+	142		34	230	21N	360	325	21	-6.7	-2.3	-0.1	+2.8	.262	53.1		23	24	39.0	- 1	44	29	379.2	802.8
26	Oct	24	4	6	59.3	d	109052 G5		7.4	6.9		95+	153		52	186	42N	24	20	46	-6.1	-3.4	+0.8	+1.9	.372	26.3		0	11	5.7	4	7	59	372.7	750.8
26	Oct	27	7	32	16.1	r	438cA3		6.8			98-	164		66	219	43S	190	159	206	-2.8	-6.2	+0.9	+4.2	.226	-121.7		2	58	53.1	21	37	4	360.0	750.6

Occultation prediction for Chicago Astronomer Observatory
E. Longitude - 87 40 16.3, Latitude 41 51 8.6, Alt. 182m; Telescope dia 15cm; dMag 0.0

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      day  Time     P   Star  Sp  Mag  Mag    % Elon Sun  Moon   CA   PA  VA  AA Libration   A   B   RV    Cct durn  R.A. (J2000)  Dec   Mdist   SV
 y   m  d  h  m   s       No  D    v    r V  ill     Alt Alt Az   o    o   o   o   L    B   m/o m/o  "/s     o  sec  h  m   s    o  m  s   Mm   m/s
       438 is double: AB 7.47 7.45 0.54" 279.5, dT = -0.01sec
       438 is a close double. Observations are highly desired
   Distance of 438 to Terminator = 16.9"; to 3km sunlit peak = 6.4"
26 Oct 28  0 13 46.4 R     537SB6  3.7  3.8s  95- 154      6  63  85N 254 300 266 -0.9 -5.7 -0.4+1.2 .679  178.2      3 44 52.5  24  6 48 364.11199.4
   R537 = Electra = 17 Tauri
       537 is multiple: ** 3.9 7.5 0.20" 117.0, dT = +0.21sec : Aa,Ac 3.9 7.5 0.20"       : Aa,Ab 3.9 7.0 26.9"       : AB 3.7 13.0 98" 144.0, dT =
+49sec
       537 has been reported as non-instantaneous (OCc1693). Observations are highly desired
       537 = NSV 15755, 3.70, range 0.00, 1Kp, Type SPB, Period 1.1073 days
26 Oct 28  0 21 28.7 d     552SB7  2.9  2.9s  95- 154      7  63 -44S 114 161 127 -0.9 -5.7 -0.1+0.7 .500  -42.2      3 47 29.1  24  6 18 364.01192.0
   R552 = Alcyone = eta Tauri
       552 is multiple: Aa,Ab 3.0 4.6           : AB     1.6 0.031" 207.1, dT = 0.00sec : AE 2.8 15.0 78" 232.5, dT = -74sec : AB 2.8 6.3 118"
291.1, dT = -235sec
       552 is a close double. Observations are highly desired
       552 = NSV 15775, 2.87, range 0.00, 1Kp, Type ROT+SPB, Period 2.2925 days
26 Oct 28  0 22 36.6 R     545SB6  4.1  4.2v  95- 154      7  64  27S 186 233 198 -0.9 -5.7 -1.2+2.7 .270 -113.6      3 46 19.6  23 56 54 364.01188.9
   R545 = Merope = 23 Tauri
       545 is quadruple: Aa,Ab 4.1 8.1 0.30" 111.0, dT = -0.3sec : AB 4.2 14.4 110" 180.3, dT = -406sec : AC 4.2 12.9 147" 336.0, dT = +475sec
       545 is a close double. Observations are highly desired
       545 = V0971 Tau, 4.18, range 0.01, 1Kp, Type SPB|LERI, Period 0.4881 days
26 Oct 28  0 33  4.7 R     541SB8  3.9  3.9s  95- 154      9  65  45N 294 342 306 -0.9 -5.7 +0.0+0.7 .492  137.7      3 45 49.6  24 22  4 363.81174.7
   R541 = Maia = 20 Tauri
       541 is quadruple: Aa,Ab 4.4 5.4           : AB 3.8 13.7 113"  72.6, dT = +173sec : AB 3.8 13.7 113"  72.7, dT = +174sec
       541 = NSV 1279, 3.87, range 0.00, 4Kp, Type ACV, Period 10.288 days
26 Oct 28  0 57 14.1 r     549SA0  6.3  6.3   95- 154     13  69  56S 215 264 227 -0.8 -5.8 -0.6+1.9 .520 -143.3      3 47 21.0  24  6 59 363.31142.1
   R549 = 24 Tauri
       549 is multiple: AB              109.9, dT = -5sec :  6.7 7.8           : BD 6.3 8.7 75" 305.1, dT = +1.6sec : BC 6.3 8.2 86" 345.1, dT =
+108sec
26 Oct 28  0 58  1.5 R     552SB7  2.9  2.9s  95- 154     13  69  50S 209 259 221 -0.8 -5.8 -0.6+2.0 .480 -137.8      3 47 29.1  24  6 18 363.31141.2
   R552 = Alcyone = eta Tauri
       552 is multiple: Aa,Ab 3.0 4.6           : AB     1.6 0.031" 207.1, dT = -0.06sec : AE 2.8 15.0 78" 232.5, dT = -150sec : AB 2.8 6.3 118"
291.1, dT = -33sec
       552 is a close double. Observations are highly desired
       552 = NSV 15775, 2.87, range 0.00, 1Kp, Type ROT+SPB, Period 2.2925 days
26 Oct 28  1 32 37.2 r     557pA1  7.0  6.9   95- 153     19  74  85S 244 296 256 -0.8 -5.8 -0.1+1.5 .618 -173.5      3 48 30.1  24 20 44 362.61093.3
       557 is quadruple: Aa,Ab 7.2 8.5 0.20" 239.0, dT = -0.32sec : Aa,Ab 7.2 8.5 0.20" 239.0, dT = -0.32sec : AB 7.0 15.0 72" 217.0, dT = -103sec
       557 is a close double. Observations are highly desired
26 Oct 28  1 51 13.4 r     562pB9  6.6  6.6   95- 153     22  76  78S 237 290 249 -0.8 -5.8 -0.1+1.7 .591 -166.8      3 49 21.8  24 22 51 362.31067.6
       562 is multiple: Aa,Ab 7.3 7.4 5.3"       : AB 6.6 7.5 87" 309.1, dT = -45sec : AE 6.6 13.8 115"  82.8, dT = +175sec : AG 6.6 15.1 158" 212.2,
dT = -243sec
       562 is a close double. Observations are highly desired
26 Oct 28  5 32  3.4 r   76345kG8  7.5  7.0   94- 151     62 117  59N 281 329 293 -0.8 -6.1 +1.8+0.3 .393  148.5      3 57 11.8  25 16 58 359.0 802.0
26 Oct 28 11 26 25.3 r   76472cG8  7.2  6.5   93- 149 -10 40 271  50N 292 235 302 -1.4 -6.1 +0.6-1.9 .457  154.8      4  8 39.0  25 52 40 360.3 882.3
26 Oct 29  9  4 39.7 R     773wF8  7.0  6.7   86- 136     74 208  45N 306 282 311 +0.5 -5.8 +1.8-2.0 .333  142.1      5 10  3.9  27 33 23 358.5 733.4
       773 is double: AB 7.0 9.3 315" 353.1, dT = -637sec
26 Oct 30  5 34 22.8 r   78041cG5  7.8  7.3   78- 124     41  88  79N 280 337 279 +2.5 -4.9 +0.9+0.9 .493  166.5      6  9 26.6  27 11 38 361.6 889.6
     78041 is double: ** 8.6 8.6 0.040" 237.0, dT = -0.06sec
     78041 has been reported as non-instantaneous (OCc1052). Observations are highly desired
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Occultation prediction for Chicago Astronomer Observatory
E. Longitude - 87 40 16.3, Latitude 41 51 8.6, Alt. 182m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon Sun Alt	Moon Alt	Az	CA o	PA o	VA o	AA o	Libration L	B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	Oct	30	10	0	20.3	R	958	cK1	6.7	6.1		77-	122	75	201	66N	293	276	292	+2.1	-4.9	+1.7	-1.2	.405	165.5		6	18	20.8	27	12	37	359.9	730.9
							958 is double: ** 7.5 7.5 0.050"																												
							958 has been reported as non-instantaneous (OCc1307). Observations are highly desired																												
26	Oct	31	9	6	16.6	d	1117	cG8	5.0	4.6		66-	109	65	124	-70N	77	120	70	+3.7	-3.8	+1.8	+1.3	.378	25.9		7	23	28.5	25	3	2	362.4	738.6
							R1117 = 57 Geminorum																											
							1117 is double: ** 5.9 5.9 0.10" 90.0, dT = +0.26sec																											
							1117 has been reported as non-instantaneous (OCc1358). Observations are highly desired																											
26	Oct	31	10	16	32.2	R	1117	cG8	5.0	4.6		66-	109	73	164	54N	313	326	306	+3.5	-3.7	+1.6	-1.7	.371	154.0		7	23	28.5	25	3	2	362.3	725.4
							R1117 = 57 Geminorum																											
							1117 is double: ** 5.9 5.9 0.10" 90.0, dT = +0.2sec																											
							1117 has been reported as non-instantaneous (OCc1358). Observations are highly desired																											
26	Nov	1	7	39	19.2	r	80087	K0	7.9	7.2		55-	96	38	94	88N	285	338	273	+5.0	-2.4	+1.0	+0.7	.475	-179.8		8	18	54.5	21	29	39	367.0	845.1
26	Nov	1	7	49	46.9	r	80094	K2	8.0	7.4		55-	96	40	97	44S	237	290	225	+4.9	-2.4	+0.8	+3.0	.313	-131.9		8	19	24.0	21	15	26	366.8	833.9
26	Nov	4	9	53	10.0	r	1597	K5	8.3	7.5		23-	57	24	107	67S	268	314	247	+6.4	+2.4	+0.9	+1.5	.398	-147.2		10	59	34.7	4	21	14	378.9	869.9
26	Nov	5	9	53	5.7	r	138402	F2	8.7	8.5		15-	45	12	104	66N	314	1	292	+6.5	+3.8	+0.3	-0.1	.488	167.1		11	47	0.0	- 1	37	46	383.7	931.2
26	Nov	6	12	19	1.3	r	1809	cA0	7.0	7.0		8-	32	-3	24	128	72N	304	341	282	+6.2	+5.2	+0.8	+0.0	.442	-178.1		12	37	21.2	- 8	18	1	386.2	829.1
							1809 is double: ** 7.5 8.1 0.014" 122.8, dT = +0.03sec																											
							1809 has been reported as non-instantaneous (OCc1673). Observations are highly desired																											
26	Nov	15	23	48	4.1	d	3014	cK0	7.3	6.8		35+	73	26	195	52S	114	101	127	-4.3	+2.8	+3.3	-1.6	.200	-55.1		20	38	25.5	-20	59	39	400.0	679.1
							3014 is double: AB 8.1 8.1 129.4, dT = -1sec																											
26	Nov	16	20	59	20.2	d	3126	G8	4.3	3.8v		44+	83	13	22	141	62N	44	73	60	-4.9	+1.7	+1.4	+1.9	.344	19.0		21	22	14.8	-16	50	4	397.6	702.2
							R3126 = Tae = iota Capricorni																											
							3126 = iot Cap, 4.27, range 0.06, V, Type BY																											
26	Nov	16	22	20	42.0	r	3126	G8	4.3	3.8v		45+	84	1	29	161	-85N	257	272	274	-5.1	+1.6	+2.1	+0.9	.328	161.0		21	22	14.8	-16	50	4	396.7	667.9
							R3126 = Tae = iota Capricorni																											
							3126 = iot Cap, 4.27, range 0.06, V, Type BY																											
26	Nov	17	22	27	13.5	D	3253	kB5	5.4	5.5V		54+	95	-1	31	149	85N	64	87	83	-6.1	+0.2	+1.7	+1.4	.366	-8.3		22	10	37.5	-11	33	54	392.2	703.4
							R3253 = 38 Aquarii																											
							3253 = HD 210424, 5.44, , Type ACV, Period 3.9613 days, Phase 93%																											
26	Nov	18	0	13	27.2	d	3255	M0	7.3	6.4v		55+	96	37	179	48N	27	28	46	-6.5	+0.0	+1.0	+1.6	.332	24.5		22	12	16.9	-11	3	56	391.3	692.1
							3255 = KR Aqr, 7.25 to 7.36, Hp, Type LB																											
26	Nov	19	3	0	16.9	D	3380	cK0	5.9	5.4		66+	108	36	218	56N	33	6	55	-7.6	-1.7	+0.9	+1.0	.386	17.7		23	1	31.7	- 4	42	41	385.4	758.2
							3380 is double: ** 7.0 7.0 0.10" 90.0, dT = +0.14sec																											
							3380 has been reported as non-instantaneous (OCc1633). Observations are highly desired																											
26	Nov	20	6	15	41.8	D	3515	cA1	6.3	6.3		76+	121	19	256	85N	63	16	85	-8.1	-3.4	+0.6	-0.4	.486	-3.6		23	53	4.8	2	5	26	380.3	898.6
							R3515 = 25 Piscium																											
							3515 is double: ** 7.0 7.0 0.050"																											
							3515 has been reported as non-instantaneous (OCc1650). Observations are highly desired																											
26	Nov	21	0	26	58.5	D	68	SB9	5.8		S	83+	132	47	135	12N	351	23	13	-6.9	-4.0	-0.7	+3.6	.213	60.9		0	32	23.8	6	57	20	373.0	793.1
							R68 = 51 Piscium																											
							68 is multiple: Aa,Ac 5.8 9.5 0.20" : Aa,Ab 5.8 8.0 0.28" 283.8, dT = +0.5sec : AB 5.7 9.5 28.5" 81.5, dT = -0.9sec : AD 5.7 13.1 82" 307.6, dT = +279sec																											
							68 is a close double. Observations are highly desired																											
							68 = NSV 15113, 5.67 to 9.0, V, Type E:																											
26	Nov	21	2	15	44.0	d	109306	F5	7.8	7.5		84+	132	56	175	66S	93	97	116	-7.2	-4.2	+2.5	+0.0	.308	-42.1		0	36	3.7	7	9	22	371.9	747.6
26	Nov	21	5	13	57.2	d	109354	kF5	7.3	7.1		84+	133	41	239	58N	38	358	60	-7.6	-4.5	+1.0	+0.9	.417	19.0		0	39	42.6	8	7	22	372.2	796.7
26	Nov	21	23	2	40.0	d	197	cK0	7.0	6.5		90+	144	-7	29	99	46N	29	78	50	-6.0	-4.8	+0.1	+2.2	.463	28.7		1	21	58.3	12	36	15	368.9	944.5
26	Nov	22	7	38	52.4	D	233	cB9	6.2	6.3		92+	147	29	264	52N	37	347	57	-6.9	-5.5	+0.8	+0.7	.432	30.4		1	35	46.4	14	39	41	366.9	890.7

Occultation prediction for Chicago Astronomer Observatory
E. Longitude - 87 40 16.3, Latitude 41 51 8.6, Alt. 182m; Telescope dia 15cm; dMag 0.0

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      day  Time     P   Star  Sp  Mag  Mag    % Elon Sun  Moon   CA   PA  VA  AA Libration   A   B   RV    Cct durn  R.A. (J2000)  Dec   Mdist   SV
 y   m  d  h  m    s       No  D    v    r V  ill     Alt Alt Az   o    o   o   o   L    B   m/o m/o  "/s     o  sec  h  m   s    o  m  s   Mm   m/s
   R233 = 101 Piscium
26 Nov 23  6 37 36.2 D     370 A9  6.1  6.0v  97+ 160     53 246  48N  43 356  61 -5.3 -6.1 +1.4+1.0 .407   25.9      2 30 38.4  19 51 19 360.2 789.6
   R370 = 26 Arietis (UU)
       370 = UU Ari, 6.10 to 6.15, V, Type DSCTC, Period 0.0676 days
26 Nov 24 12 16 59   Gr    537SB6  3.7  3.8s 100+ 175  -7  6 ** GRAZE: CA 53.7S; Dist. 25km in az.  32deg. [Lat = 42.11-0.47(E.Long+87.67)]
   Distance of 537 to Terminator = 2.6"; to 3km sunlit peak = 0.0"
26 Nov 24 12 17 15   m     537SB6  3.7  3.8s 100+ 175  -6  7 297  54S 175 128 188 -3.5 -6.0 +9.9+9.9 .000  -90.0      3 44 52.5  24  6 48 360.31150.5
   R537 = Electra = 17 Tauri
       537 is multiple: ** 3.9 7.5 0.20" 117.0 : Aa,Ac 3.9 7.5 0.20"       : Aa,Ab 3.9 7.0 27.0"       : AB 3.7 13.0 98" 144.0
       537 has been reported as non-instantaneous (OCc1693). Observations are highly desired
       537 = NSV 15755, 3.70, range 0.00, 1Kp, Type SPB, Period 1.1073 days
   Distance of 537 to Terminator = 2.4"; to 3km sunlit peak = 0.0"
26 Nov 25  0  4  1.8 r     647WB9  5.4  5.4s 100- 173     18  71  82N 234 285 243 -1.1 -5.6 -0.3+1.7 .604 -159.7      4 22 34.9  25 37 46 358.11117.9
   R647 = chi Tauri
       647 is double: AB 5.4 8.5 19.4"  24.9, dT = +28sec
       647 = NSV 15957, 5.34 to 5.39, Hp
   Distance of 647 to Terminator = 7.5"; to 3km sunlit peak = 0.5"
26 Nov 26  2 30 43.9 r X 75950     6.6  6.6S  96- 158     32  81  47S 215 271 218 +1.1 -5.1 -0.3+2.7 .391 -133.3      5 37  8.9  26 55 27 356.0 984.0
   X 75950 = NSV 2426, 3.5 to 5.78, B
26 Nov 26  2 30 44.5 R     844SB9  5.8     S  96- 158     32  81  47S 215 271 218 +1.1 -5.1 -0.3+2.7 .391 -133.4      5 37  8.8  26 55 28 356.0 984.0
       844 is triple: AB 6.54 6.55 1.19" 317.4, dT = +0.6sec : AC 6.5 10.5 182" 298.4, dT = -56sec
       844 is a close double. Observations are highly desired
       844 = NSV 2426, 3.5 to 5.78, B
26 Nov 26  8 12 59.1 r   77588cB8  7.7  7.7   96- 156     72 221  69N 282 248 283 +0.7 -5.1 +1.7-0.8 .441  174.0      5 48 49.0  27 21 50 353.5 759.3
     77588 is double:  8.1 9.1
26 Nov 26  8 18 46.2 r   77604 K0  7.0  6.2   96- 156     72 225  20N 331 295 333 +0.7 -5.1 +1.2-3.9 .253  124.8      5 49 38.1  27 33  3 353.5 761.6
   Distance of 77604 to Terminator = 10.6"; to 3km sunlit peak = 1.9"
26 Nov 26  8 52 50.0 r   77619 F2  7.1  6.9   95- 155     67 240  26N 325 278 326 +0.7 -5.1 +1.0-3.2 .309  132.7      5 50 39.7  27 30 18 353.7 780.2
   Distance of 77619 to Terminator = 18.4"; to 3km sunlit peak = 7.0"
26 Nov 27  5  4 58.7 r    1046cF8  7.0  6.7   90- 143     47  96  34S 215 270 211 +3.1 -4.1 +0.4+4.2 .253 -121.0      6 51  0.4  25 45 37 356.2 847.1
      1046 is double: ** 7.8 7.8 0.10"  57.0, dT = +0.37sec
      1046 has been reported as non-instantaneous (OCc 780). Observations are highly desired
26 Nov 27  9 19 10.9 R    1062cB8  6.4  6.5   89- 141     71 219  28N 334 303 329 +2.7 -3.9 +0.9-3.3 .302  132.7      6 59 27.9  25 54 51 355.3 765.9
   R1062 = 40 Geminorum
       1062 is double: AB 6.4      0.10" 160.5, dT = +0.33sec
       1062 is a close double. Observations are highly desired
26 Nov 27 11  1 55.2 r    1068 A2  7.1  7.0   89- 140     55 255  90S 273 220 268 +2.5 -3.7 +1.3-1.0 .469 -163.2      7  2  7.2  25 25 32 356.3 846.2
26 Nov 27 11  8 12.6 r   78995 A3  7.4  7.2   89- 140     53 256  81S 264 210 258 +2.5 -3.7 +1.4-0.8 .444 -154.1      7  2 20.5  25 21 52 356.4 852.6
26 Nov 27 12 33 30   m   79054dK8  6.9  6.1   88- 140  -4 38 271  16S 200 145 194 +2.4 -3.5 +9.9+9.9 .000  -90.0      7  6 11.6  24 51 37 357.7 952.6
     79054 is double: AB 7.1 11.7 7.2"  79.0
     79054 is a close double. Observations are highly desired
26 Nov 28  5 40 25.5 r   79810 K0  7.6  7.0   81- 129     41  95  42S 232 286 222 +4.8 -2.7 +0.7+3.2 .313 -129.5      7 56 19.7  22 34 18 359.7 857.4
26 Nov 28  9 54 47.7 R    1215 K0  6.8  6.2   80- 127     69 199  65S 256 241 245 +4.4 -2.4 +2.3+0.5 .339 -140.9      8  3 50.5  22  4 15 358.6 758.5
   R1215 = 7 Cancri
26 Nov 28 12  5 34.3 R    1224cG2  5.3  5.0   80- 126  -9 52 250  56S 247 198 236 +4.1 -2.1 +2.1-0.1 .312 -129.6      8  7 45.9  21 34 55 359.9 853.3
   R1224 = mu Cancri
      1224 is double: ** 5.4 7.8 0.53" 301.8, dT = -1sec
      1224 has been reported as non-instantaneous (OCc1849). Observations are highly desired
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Occultation prediction for Chicago Astronomer Observatory
E. Longitude - 87 40 16.3, Latitude 41 51 8.6, Alt. 182m; Telescope dia 15cm; dMag 0.0

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      day  Time     P   Star  Sp  Mag  Mag    % Elon Sun  Moon   CA   PA  VA  AA Libration   A   B   RV    Cct durn  R.A. (J2000)  Dec   Mdist   SV
 y   m  d  h  m   s       No  D    v    r V  ill     Alt Alt Az   o    o   o   o   L    B   m/o m/o "/s     o  sec  h  m   s    o  m  s   Mm   m/s
26 Nov 29  7  9 16.1 R    1343 M4  6.3  5.5v  71- 115     43 106  26N 350  39 335 +6.1 -1.0 +1.1-3.3 .244  121.9      8 59 10.7  18  8  6 363.8 815.1
      1343 = FZ Cnc, 6.28 to 6.38, Hp, Type SRB, Period 17.6 days
26 Nov 29 11 51 51.3 r    1355 G5  7.6  7.0   69- 113 -12 59 224  49N 327 295 312 +5.5 -0.5 +0.8-2.3 .409  155.8      9  6 15.6  17  6 43 363.6 790.9
26 Dec  2  9 54 55.2 d    1685cG9  4.3  3.8   37-  75     33 127 -74S 129 165 106 +7.6 +3.8 +1.0-0.3 .435   -2.1     11 36 56.9 - 0 49 25 380.0 802.6
   R1685 = upsilon Leonis
      1685 is double: ** 4.5 9.0 0.10" 195.0, dT = +0.09sec
      1685 has been reported as non-instantaneous (OCc1427). Observations are highly desired
26 Dec  2 10 35 11.0 r  138302 K0  7.7  7.1   37-  75     39 137   9N  13  44 351 +7.5 +3.9 -0.8-4.6 .176  114.9     11 37 16.8 - 0 34 41 379.7 772.7
26 Dec  2 11  9 37.6 R    1685cG9  4.3  3.8   37-  75     42 147  75N 307 331 285 +7.4 +4.0 +1.3-0.6 .409 -178.0     11 36 56.9 - 0 49 25 379.4 753.4
   R1685 = upsilon Leonis
      1685 is double: ** 4.5 9.0 0.10" 195.0, dT = +0.09sec
      1685 has been reported as non-instantaneous (OCc1427). Observations are highly desired
26 Dec  2 12  4 24.3 r  138311 K2  8.2  7.7   36-  74 -10 46 165  82S 285 295 263 +7.3 +4.1 +2.0-0.2 .360 -154.4     11 37 54.3 - 1  9  4 379.3 734.3
26 Dec 12 22 52 35.8 d  189202 A2  7.4  7.3   13+  42  -6 20 211  59S 110  86 122 -3.5 +2.9 +2.6-2.0 .234  -51.0     20 22  6.7 -21 57 23 403.1 725.8
26 Dec 13  0 15 21.4 d  189226 F7  8.7  8.4   13+  42     11 228  38N  27 351  39 -3.7 +2.8 +0.1+0.7 .348   32.8     20 23 35.8 -21 22 14 404.0 812.4
26 Dec 13 23 38 57.1 d  164194wF3  9.0  8.8   20+  53     24 213  78N  62  36  77 -5.0 +1.5 +1.3-0.1 .377   -6.8     21 10 43.8 -17 28 33 400.7 737.3
    164194 is double: AB 8.9 12.5 20.9" 299.7, dT = -30sec
26 Dec 15  1 23 31.8 d    3219 K1  8.3  7.6   29+  65     21 230  41N  21 345  40 -6.4 -0.1 +0.2+1.2 .347   33.1     21 58 17.7 -12  6  8 397.8 799.7
26 Dec 16  1  1 54.2 D    3334 A0  6.4  6.4   38+  76     34 218  80S  77  49  98 -7.3 -1.5 +1.7-0.5 .353  -26.0     22 43 14.3 - 6 57 47 392.5 747.7
   R3334 = 67 Aquarii
26 Dec 16  1 12 11   m  146272 G5  7.7  7.2   38+  76     32 221  16S 141 112 162 -7.4 -1.5 +9.9+9.9 .000  -90.0     22 43 12.9 - 7 12 54 392.6 755.5
26 Dec 17  1 50 39.6 d  146725pF8  7.8        48+  88     38 224  64N  40   9  62 -8.1 -2.9 +1.0+0.8 .394   11.7     23 28 46.2 - 0 50  8 386.9 754.8
    146725 is double: AB 7.98 10.59 1.38"  62.1, dT = +3sec
    146725 is a close double. Observations are highly desired
26 Dec 17  2 10 59.9 D    3460kG0  6.9  6.6   48+  88     35 229  47S 110  76 132 -8.2 -3.0 +2.5-2.8 .222  -57.2     23 29 30.3 - 1  2  9 387.1 769.2
   R3460 = 12 Piscium
26 Dec 17 22 29 50.0 d  109052 G5  7.4  6.9   57+  98  -2 46 140  72S  85 114 107 -7.8 -3.7 +1.9+1.1 .340  -33.8      0 11  5.7   4  7 59 381.4 757.5
26 Dec 19  2 56 44.6 d   92234kF5  8.1  7.9   69+ 112     51 227  76N  55  21  77 -8.3 -5.2 +1.4+0.6 .413    1.9      1  5  9.6  11 18 57 373.5 747.9
26 Dec 19  4 10 41.7 d     163pF2  7.3  7.1   69+ 113     40 247  84N  64  19  85 -8.4 -5.3 +1.2-0.1 .437   -2.9      1  7  4.0  11 33  8 374.1 794.6
      163 is double: AB 7.3 10.5 8.3" 201.5, dT = -14sec
      163 is a close double. Observations are highly desired
26 Dec 20  3 33 21.6 d   92732wF5  7.8  7.5   79+ 125     58 228  79N  62  27  82 -7.6 -6.0 +1.6+0.4 .420    0.2      1 58 47.5  17  1 33 366.6 747.5
     92732 is double: AB 7.8 17.9 79" 249.5, dT = -187sec
26 Dec 21 22  1 23   M     552SB7  2.9  2.9s  93+ 150   3 20  75  14S 161 213 173 -4.1 -5.8 +9.9+9.9 .000  -90.0      3 47 29.1  24  6 18 360.21088.3
   R552 = Alcyone = eta Tauri
      552 is multiple: Aa,Ab 3.0 4.6           : AB     1.6 0.031" 207.1 : AE 2.8 15.0 78" 232.5 : AB 2.8 6.3 118" 291.1
      552 is a close double. Observations are highly desired
      552 = NSV 15775, 2.87, range 0.00, 1Kp, Type ROT+SPB, Period 2.2925 days
   Distance of 552 to Terminator = 9.4"; to 3km sunlit peak = 1.1"
26 Dec 21 22  3  4   Gr    552SB7  2.9  2.9s  93+ 150   2 22 ** GRAZE: CA 14.3S; Dist. 89km in az. 316deg. [Lat = 42.97+0.71(E.Long+87.67)]
   Distance of 552 to Terminator = 13.5"; to 3km sunlit peak = 3.4"
26 Dec 21 22 28 20.1 d     562pB9  6.6  6.6   93+ 150  -2 25  78  67S 108 162 121 -4.1 -5.9 +0.5+0.9 .474  -38.2      3 49 21.8  24 22 51 359.61052.4
      562 is multiple: Aa,Ab 7.3 7.4 5.3"       : AB 6.6 7.5 87" 309.1, dT = -173sec : AE 6.6 13.8 115"  82.8, dT = +219sec : AG 6.6 15.1 158"
212.2, dT = -79sec
      562 is a close double. Observations are highly desired
26 Dec 21 22 54 40.8 d   76259cA2  7.4  7.4   94+ 150  -6 29  82  72S 103 158 116 -4.1 -5.9 +0.7+1.0 .487  -33.4      3 50 28.1  24 29 44 359.11016.4
     76259 is double: ** 7.6 8.8 0.015" 114.0, dT = +0.03sec
     76259 has been reported as non-instantaneous (OCc 252). Observations are highly desired
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Occultation prediction for Chicago Astronomer Observatory
E. Longitude - 87 40 16.3, Latitude 41 51 8.6, Alt. 182m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon Sun Alt	Moon Alt	Az	CA o	PA o	VA o	AA o	Libration L	B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	Dec	22	2	7	1.4	d	76345kG8		7.5	7.0		94+	152	64	120	63N	60	106	72	-4.2	-6.1	+1.2	+1.7	.455	10.4		3	57	11.8	25	16	58	355.9	798.6
26	Dec	22	8	2	34.8	d	76472cG8		7.2	6.5		95+	154	38	273	40N	39	343	50	-4.7	-6.1	+1.4	+0.8	.349	48.4		4	8	39.0	25	52	40	356.8	909.5
26	Dec	23	3	14	49.1	d	76965cG		7.6	7.2		99+	166	65	118	70S	122	170	128	-2.1	-5.6	+2.0	-0.9	.349	-41.1		5	7	5.1	26	59	45	352.4	790.7
	76965 is double: ** 9.1 9.1 0.050"																																
	76965 has been reported as non-instantaneous (OCc1253). Observations are highly desired																																
26	Dec	25	7	54	11.2	r	79470	K0	7.6	7.1		98-	162	70	212	87N	275	250	267	+2.1	-3.0	+1.8	-0.5	.441	-163.9		7	31	39.2	23	59	59	351.6	783.2
26	Dec	25	8	6	25.0	r	79477	K2	7.8	7.2		97-	162	69	218	88N	275	244	267	+2.1	-3.0	+1.8	-0.6	.442	-162.8		7	32	2.1	23	57	43	351.7	789.6
26	Dec	25	12	18	40.4	R	1161	K5	5.9	5.1		97-	160	-10 26	279	76S	261	208	252	+1.9	-2.4	+0.5	-1.1	.524	-148.6		7	40	58.5	23	1	7	355.2	1057.3
26	Dec	26	8	0	55.0	R	1282	G0	6.6	6.2		92-	148	68	175	83S	276	279	263	+4.2	-1.3	+1.9	-0.2	.415	-157.8		8	35	19.4	19	35	24	354.6	770.2
	R1282 = 35 Cancri																																
26	Dec	26	8	1	46.3	r	97941	A*	7.5	7.4		92-	148	68	176	54N	319	322	306	+4.2	-1.3	+1.3	-1.8	.418	159.0		8	35	45.1	19	46	16	354.5	770.4
26	Dec	26	9	27	57.2	R	1287kA5		6.7	6.6		92-	147	62	222	82S	276	244	262	+4.1	-1.1	+1.7	-0.8	.427	-155.7		8	37	46.8	19	16	2	355.0	807.4
26	Dec	26	10	17	7.0	r	98009kA7		7.6	7.6v		92-	147	55	239	47N	327	284	313	+4.0	-1.0	+0.6	-2.3	.439	153.7		8	39	44.7	19	16	31	355.6	844.7
	98009 = BU Cnc, 7.67, range 0.03, V, Type DSCTC, Period 0.071 days																																
26	Dec	26	10	36	30.6	r	98027kA8		7.8	7.7v		92-	147	52	245	30N	344	299	331	+4.0	-1.0	+0.1	-2.8	.362	136.5		8	40	39.2	19	13	42	355.8	862.1
	98027 = BN Cnc, 7.8, range 0.03, V, Type DSCTC, Period 0.0388205 days																																
26	Dec	26	12	38	7.4	d	1310SK0		3.9	3.4		91-	146	-7 30	268	-1S	194	142	180	+3.9	-0.7	-2.0	-4.6	.147	-75.2	.02	8	44	41.1	18	9	16	358.0	996.0
	R1310 = Asellus Australis = Delta Cancri																																
	1310 is triple: Aa,Ab 3.9 4.9 0.10" 194.0, dT = +0.7sec : AB 3.9 12.2 42" 66.4, dT = -172sec																																
	1310 is a close double. Observations are highly desired																																
26	Dec	26	12	47	39	Gr	1310SK0		3.9	3.4		91-	146	-5 27	** GRAZE: CA 13.6S; Dist. 96km in az. 226deg. [Lat = 40.60-0.78(E.Long+87.67)]																				
	Distance of 1310 to Terminator = 17.2"; to 3km sunlit peak = 5.5"																																
26	Dec	26	12	52	48.9	R	1310SK0		3.9	3.4		91-	146	-5 27	270	28S	223	171	209	+3.9	-0.7	+2.4	+1.1	.149	-104.8	.02	8	44	41.1	18	9	16	358.3	1015.1
	R1310 = Asellus Australis = Delta Cancri																																
	1310 is triple: Aa,Ab 3.9 4.9 0.10" 194.0, dT = -0.6sec : AB 3.9 12.2 42" 66.4, dT = +255sec																																
	1310 is a close double. Observations are highly desired																																
26	Dec	27	8	38	46.3	r	98654WB9		7.9	7.9		84-	134	62	167	49N	330	340	313	+5.9	+0.5	+1.0	-2.0	.393	153.4		9	35	9.5	14	4	32	359.3	767.0
	98654 is double: AB 7.8 9.1 45" 48.5, dT = -23sec																																
26	Dec	27	11	26	43.7	r	1425SF7		7.0	6.8		84-	132	48	237	60N	320	280	302	+5.5	+0.9	+0.7	-2.0	.468	165.3		9	39	17.2	13	18	45	360.8	846.4
	1425 is quadruple: Aa,Ab 7.7 7.7 : ** 7.7 7.7 0.006" 90.0, dT = +0.01sec : AB 7.1 15.1 51" 131.0, dT = +107sec																																
26	Dec	27	12	16	57.4	r	1427	F8	7.0	6.7		83-	132	-11 40	249	68N	312	266	294	+5.5	+1.0	+0.6	-1.9	.504	171.7		9	40	35.2	13	3	14	361.6	892.9
26	Dec	28	10	9	45.2	r	1539pG5		7.3	6.8		75-	119	55	186	34S	236	232	216	+6.9	+2.4	+4.9	+3.3	.133	-107.9		10	30	27.4	7	3	33	365.6	763.5
	1539 is double: ** 8.2 8.2 0.10" 90.0, dT = +0.6sec																																
	1539 has been reported as non-instantaneous (OCc 200). Observations are highly desired																																
26	Dec	29	5	27	19.3	r	1624PF2		6.8	6.5		66-	108	11	97	51N	333	21	312	+8.2	+3.4	+0.2	-0.9	.440	145.8		11	13	53.0	2	16	7	374.4	965.2
	1624 is double: AB 6.8 16.2 85.0, dT = 0.00sec																																
26	Dec	29	12	24	16.3	R	1649	K3	6.1	5.3		63-	106	-10 42	215	52S	256	230	234	+7.4	+4.1	+2.6	-0.4	.260	-127.5		11	23	18.0	0	7	55	373.1	771.5
26	Dec	30	10	14	17.7	r	138617KF2		7.2	7.0		53-	94	40	156	17N	6	24	344	+8.1	+5.1	-0.4	-3.2	.223	123.3		12	9	47.8	- 5	13	33	378.7	748.2
26	Dec	31	7	0	42.8	r	1845SG8		6.5	5.9s		44-	83	3	107	74N	308	355	287	+8.4	+5.8	+0.1	+0.1	.508	172.8		12	51	22.9	-10	20	18	387.4	961.9
	1845 is triple: AB 6.6 9.7 28.8" 296.2, dT = -55sec : AC 6.6 12.5 142" 211.8, dT = +33sec																																
	1845 = NSV 5994, 6.49, range 0.07, V																																

Lunar Occultation predictions
Varney Observatory
Pembroke Pines
Florida
USA

Occultation prediction for Varney Observatory
E. Longitude - 80 30 0.0, Latitude 26 0 0.0, Alt. 2m; Telescope dia 15cm; dMag 0.0

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      day  Time     P   Star  Sp  Mag  Mag    % Elon Sun  Moon   CA   PA  VA  AA Libration   A   B   RV    Cct durn  R.A. (J2000)  Dec   Mdist   SV
 y   m  d  h  m    s       No  D    v    r V  ill     Alt Alt Az   o    o   o   o   L    B   m/o m/o  "/s     o  sec  h  m   s    o  m  s   Mm   m/s
26 Jan  4  1 26  1.6 r   79610 F8  7.2  7.0   99- 170     27  74  77S 247 319 238 +5.2 -4.8 +0.3+1.7 .462 -151.8      7 41  3.1  24 57 54 361.4 918.9
   Distance of 79610 to Terminator = 14.6"; to 3km sunlit peak = 4.9"
26 Jan  4 11 58 39.3 r    1208DK1  6.4        98- 166  -3 16 289  46N 314 246 303 +4.1 -3.9 -0.3-1.6 .578  160.5      8  1  0.8  23 34 59 364.21083.0
      1208 is double: AB 6.48 9.95 1.95" 325.2, dT = -3sec
      1208 is a close double. Observations are highly desired
   Distance of 1208 to Terminator = 15.4"; to 3km sunlit peak = 5.4"
26 Jan  5  3 33 15.4 r    1315 A2  7.1  7.1   96- 156     40  84  67S 257 330 243 +6.5 -3.5 +1.2+1.5 .387 -149.2      8 46 20.2  20 37  0 364.9 796.9
26 Jan  5  8 23 30.7 R    1329pF8  6.8        95- 154     74 252  63N 308 243 294 +5.7 -3.0 +1.6-1.8 .409  176.3      8 53 55.3  19 58  2 363.9 723.9
      1329 is double: AB 7.32 7.86 0.15"  71.9, dT = +0.21sec
      1329 is a close double. Observations are highly desired
26 Jan  7  3 40 20.7 R    1547cB1  3.8  3.9v  82- 130     15  87  45S 246 312 226 +7.9 -0.4 +0.4+2.4 .323 -130.2     10 32 48.7   9 18 24 378.8 917.9
   R1547 = rho Leonis
      1547 is double: AB 3.8 4.8      105.1, dT = -0.06sec
      1547 = rho Leo, 3.83 to 3.9, V, Type ACYG, Period 3.4271 days, Phase  53%
26 Jan  9  7 56 28.8 R    1754KF5  7.0  6.7   62- 104     44 125  79S 283 330 261 +6.9 +3.0 +2.1+0.2 .335 -150.9     12 11 21.8 - 3 46 44 388.7 722.9
26 Jan 10  6 16  1.6 r  139025 K2  7.2  6.5   53-  94     13 107  89N 294 354 272 +6.4 +4.0 +0.5+0.1 .456 -169.1     12 53 37.0 - 9  3 52 396.2 893.1
26 Jan 10  9 10  8.4 r  139061DF5  7.3        52-  93     45 139  75N 307 344 286 +5.9 +4.4 +1.6-0.9 .361 -174.2     12 57 28.6 - 9 45 41 393.6 693.4
    139061 is double: AB 7.31 10.77 1.66" 276.0, dT = -4sec
    139061 is a close double. Observations are highly desired
26 Jan 10  9 51 36.3 r  139081cK0  7.5  7.1   52-  92     50 152  24N 359  25 338 +5.8 +4.5 -0.1-3.2 .246  134.8     12 59  1.6 - 9 50  3 393.3 664.5
    139081 is double: AB 7.6 12.6 0.33"  65.8, dT = -0.5sec
    139081 is a close double. Observations are highly desired
26 Jan 11 12 11  3.8 r    1970SA0  6.2  6.2   42-  81  -1 48 189  87N 293 284 273 +4.2 +5.8 +2.6-1.1 .303 -164.0     13 45 35.1 -15 46  3 397.4 607.6
   R1970 = 85 Virginis
      1970 is multiple: Aa,Ab 6.5 8.2           : Aa,Ac 6.5 8.4 0.10"       : AB 6.2 12.8 44" 312.7, dT = -137sec : AB 6.2 12.8 44" 312.6, dT = -
137sec
      1970 is a close double. Observations are highly desired
26 Jan 12 10 47 35.9 r  158609dG1  8.1  7.8   33-  70     38 150  48N 328 357 311 +3.5 +6.4 +1.0-1.5 .318  159.0     14 31 12.3 -19 58 40 400.3 661.2
    158609 is double: AB 8.2 10.6 4.2" 286.0, dT = -10sec
    158609 is a close double. Observations are highly desired
26 Jan 14  9 10 44.4 R    2312 M2  5.4  4.5s  17-  49      4 122  51N 315  14 304 +1.3 +7.0 -0.1-0.5 .425  159.1     16  8  7.6 -26 19 36 404.9 893.4
      2312 = NSV 20513, 5.35, range 0.00, 8V, Type VAR, Period 7.61267 days
26 Jan 14  9 59 36.8 r  184177kA0  8.2  8.1   17-  49     12 128  38N 327  20 317 +1.2 +7.1 -0.1-1.1 .351  147.5     16  9 45.8 -26 26 24 403.9 815.0
26 Jan 14 10  8 11   D    2318 A*  6.6  6.6v  17-  48     14 129  12S 198 249 187 +1.2 +7.1 +9.9+9.9 .054  -82.5     16 10 15.9 -26 54 33 403.8 802.4
      2318 = V0952 Sco, 6.57, range 0.04, V, Type ACV, Period 1.4178 days, Phase  15%
26 Jan 14 10 13 22   Gr   2318 A*  6.6  6.6v  17-  48     16 ** GRAZE: CA 19.8S; Dist. 16km in az. 217deg. [Lat = 25.82-0.68(E.Long+80.50)]
26 Jan 14 10 18 12   R    2318 A*  6.6  6.6v  17-  48     15 131  27S 213 263 203 +1.1 +7.1 +9.9+9.9 .053  -97.5     16 10 15.9 -26 54 33 403.6 787.2
      2318 = V0952 Sco, 6.57, range 0.04, V, Type ACV, Period 1.4178 days, Phase  15%
26 Jan 14 11  6 56   m  184208cG3  8.1  7.8   17-  48     23 139  20S 206 247 195 +1.0 +7.2 +9.9+9.9 .000  -90.0     16 11 36.4 -27  4 41 402.8 717.0
    184208 is double: ** 8.9 8.9 0.10"  63.0
    184208 has been reported as non-instantaneous (OCc 764). Observations are highly desired
26 Jan 15 10 45  6.5 R  184978 B9  7.7  7.7   10-  37     10 129  51N 307   0 302 -0.1 +7.1 +0.3-0.3 .390  161.1     17  3 59.1 -28 15 23 403.0 806.0
26 Jan 15 11  2 37.1 R    2453 K1  6.6  6.2   10-  37     13 131  57S 235 285 230 -0.2 +7.2 +2.4+2.7 .238 -126.7     17  4 27.8 -28 34 58 402.7 778.8
26 Jan 16 10 51 20.6 R    2586cB3  6.0  6.0    5-  26      2 124  85N 264 323 264 -1.2 +6.8 +0.7+1.1 .426 -163.9     17 58 39.0 -28 45 33 402.0 864.2
      2586 is double: ** 6.3 7.3 0.30" 276.0, dT = -0.7sec
      2586 has been reported as non-instantaneous (OCc1519). Observations are highly desired
26 Jan 20 15 15 24   gr   3171cA7  3.7  3.5v   4+  22  33 20 121  11S 156 209 174 -4.5 +2.9 +9.9+9.9 .000  -90.0     21 40  5.5 -16 39 44 387.2 764.6
   R3171 = Nashira = gamma Capricorni
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Occultation prediction for Varney Observatory
E. Longitude - 80 30 0.0, Latitude 26 0 0.0, Alt. 2m; Telescope dia 15cm; dMag 0.0

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      day  Time     P   Star  Sp  Mag  Mag    % Elon Sun  Moon   CA   PA  VA  AA Libration   A   B   RV    Cct durn  R.A. (J2000)  Dec   Mdist   SV
 y   m  d  h  m   s       No  D    v    r V  ill     Alt Alt Az   o    o   o   o   L    B   m/o m/o  "/s     o  sec  h  m   s    o  m  s   Mm   m/s
      3171 is double: AB 4.6 4.6 0.013" 239.0
      3171 is a close double. Observations are highly desired
      3171 = gam Cap, 3.2, range 0.03, J, Type ACV
26 Jan 20 15 15 26   Gr   3171cA7  3.7  3.5v   4+  22  33 21 ** GRAZE: CA 10.8S; Dist.  2km in az. 359deg. [Lat = 26.02+0.02(E.Long+80.50)]
26 Jan 22 23 40 40.4 D    3454 K0  7.6  7.1   17+  49 -10 38 244  46S 110  56 132 -6.1 -1.2 +2.8-2.7 .219  -59.5     23 27 14.7 - 2 38 13 377.7 788.6
26 Jan 23  0 16 32.5 d  146716pG0  8.4  8.2   17+  49     31 250  49S 107  49 128 -6.2 -1.3 +2.0-2.3 .265  -53.9     23 28  5.7 - 2 27 33 378.3 827.3
    146716 is triple: AB 9.2 9.2 0.20"  79.7, dT = +0.7sec : AC 8.5 8.1 57"  45.9, dT = +106sec
    146716 is a close double. Observations are highly desired
26 Jan 23  0 18 20.9 D  146717PF2  8.1  7.9   17+  49     31 250  50S 106  48 128 -6.2 -1.3 +1.9-2.2 .271  -53.2     23 28  8.5 - 2 26 53 378.3 829.4
    146717 is double: AB 8.1 8.5 57" 225.9, dT = -105sec
26 Jan 23  1 32 59.3 D    3459 K0  6.4  5.8   17+  49     15 261  45N  21 318  42 -6.3 -1.4 +0.2+1.7 .403   36.8     23 29 27.0 - 1 47 28 379.8 926.3
   R3459 = 11 Piscium
26 Jan 24  0 24 36.5 D      30SA0  7.1  7.1   26+  61     42 251  76N  52 353  74 -5.9 -2.8 +1.3+0.8 .426    1.3      0 15 57.3   4 15  4 374.1 772.2
       30 is triple: AB 7.0 14.1 0.8" 246.0, dT = -1.8sec : AC 7.0 12.2 5.0" 347.3, dT = +5sec
       30 is a close double. Observations are highly desired
26 Jan 24  3  0 18.5 d      41 G5  7.7  7.2   27+  63      9 271  74S  81  17 103 -6.1 -3.0 +0.3-0.6 .504  -18.7      0 20 21.6   4 46 44 377.1 972.3
26 Jan 27 19  2 14.3 d     539SB6  4.3  4.4s  69+ 112  41 15  70  81S  88 156 101 -1.4 -6.0 +0.1+0.8 .566  -21.4      3 45 12.5  24 28  2 366.41081.0
   R539 = Taygeta = 19 Tauri
      539 is multiple: Aa,Ab 4.6 6.1           : AB          0.032" 259.2, dT = -0.06sec : AC 4.3 14.0 53"  53.4, dT = +76sec : AB 4.3 11.0 72"
328.8, dT = -63sec
      539 is a close double. Observations are highly desired
      539 = NSV 1264, 4.30, range 0.00, 1Kp, Type SPB, Period 1.5664 days
26 Jan 27 19 25 21.7 d     541SB8  3.9  3.9s  69+ 112  38 20  72  37S 132 202 145 -1.4 -6.1 +1.6-1.1 .238  -66.1      3 45 49.6  24 22  4 365.91042.2
   R541 = Maia = 20 Tauri
      541 is quadruple: Aa,Ab 4.4 5.4           : AB 3.8 13.7 113"  72.6, dT = +239sec : AB 3.8 13.7 113"  72.7, dT = +240sec
      541 = NSV 1279, 3.87, range 0.00, 4Kp, Type ACV, Period 10.288 days
26 Jan 27 19 33 46   Gr    541SB8  3.9  3.9s  69+ 112  39 22 ** GRAZE: CA 13.3S; Dist.189km in az. 143deg. [Lat = 23.88+0.67(E.Long+80.50)]
26 Jan 27 23 38 22.0 D     579kA2  6.4  6.3S  70+ 114  -9 74  86  34N  24 110  36 -1.7 -6.5 +0.9+3.4 .300   41.5      3 53 34.5  25 40 58 361.6 702.3
      579 = NSV 1391, 6.33,
26 Jan 27 23 48 10.1 d   76303kA2  7.8  7.7   70+ 114 -11 77  87  19N   9  96  21 -1.7 -6.6 +0.2+4.9 .216   56.9      3 53 32.0  25 43 48 361.5 694.7
26 Jan 29  5 36 44.6 D     771SA5  6.1  5.9e  82+ 129     42 286  79N  78 359  83 -1.0 -6.5 +1.4-0.4 .450   18.1      5  9 45.1  28  1 50 361.9 830.4
      771 is triple: Aa,Ab 6.0      0.20" 351.0, dT = +0.02sec : A,BC 6.0 9.1 11.2"  29.1, dT = +16sec
      771 is a close double. Observations are highly desired
      771 = V1156 Tau, 6. to 6.1, Hp, Type E:, Period 1.40266 days, Phase  13%
26 Jan 30  6 23 22.6 d   78191 A0  7.7  7.7   90+ 143     46 284  69N  77 356  76 +0.5 -5.9 +1.6-0.3 .418   28.8      6 17 59.9  28  0 24 361.4 834.8
26 Jan 30 23 47 22.3 d    1089 K0  6.7  6.1   95+ 155 -10 35  75  64S 132 207 125 +3.1 -5.3 +1.6-0.9 .375  -39.7      7 11 30.0  26 24 21 362.9 858.6
26 Jan 31  0  7 27.0 d   79164cG8  7.4  6.9   95+ 155     39  76  78N  94 171  88 +3.0 -5.3 +1.1+0.7 .471   -1.3      7 12 31.2  26 33 52 362.5 828.7
     79164 is double: ** 8.1 8.5 0.10"  21.0, dT = +0.06sec
     79164 has been reported as non-instantaneous (OCc 237). Observations are highly desired
26 Jan 31  2 42  5.8 d   79243 K1  7.3  6.7   96+ 156     73  84  86S 111 198 104 +2.7 -5.3 +2.3-0.6 .382   -8.5      7 17 15.6  26 21 49 360.7 674.9
26 Jan 31  3  5 14.7 d   79253cK1  7.6  7.1   96+ 156     78  85  87S 110 199 103 +2.6 -5.3 +2.4-0.7 .380   -6.1      7 17 54.5  26 19 59 360.5 667.5
     79253 is double: ** 8.7 8.7 0.050"
     79253 has been reported as non-instantaneous (OCc1350). Observations are highly desired
26 Jan 31  5 15 54.3 d   79316 G2  7.5  7.1v  96+ 157     74 275  73N  91   4  84 +2.3 -5.1 +2.4-0.4 .376   21.7      7 21 32.8  26  9 33 360.8 708.5
     79316 = V0340 Gem, 7.37 to 7.71, V, Type RS, Period 35.37 days, Phase  86%
26 Jan 31 23 34 16.6 d    1239 A4  6.6  6.5   99+ 168  -7 19  73  79N 107 176  96 +4.4 -4.1 +0.5+0.3 .534   -8.2      8 13 41.7  23  8 16 366.4 958.8
   Distance of 1239 to Terminator = 19.6"; to 3km sunlit peak = 8.4"
26 Feb  2  9 31 17.7 r    1395 G9  6.3  5.8  100- 174     40 270  54N 312 242 295 +4.3 -1.8 +0.6-1.9 .490  173.3      9 25 32.5  16 35  8 369.1 883.6
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Occultation prediction for Varney Observatory
E. Longitude - 80 30 0.0, Latitude 26 0 0.0, Alt. 2m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	% V	Elon ill	Sun Alt	Moon Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
	Distance of 1395 to Terminator = 3.0"; to 3km sunlit peak = 0.0"																																	
26	Feb	4	6	51	14.3	r	1606	M*	7.8	7.0v	93	- 150	67	154	50N	335	358	313	+6.0	+1.0	+1.1	-2.3	.353	159.3		11	4	19.1	5	13	30	376.4	688.4
	1606 = FG Leo, 7.84 to 8.01, Hp, Type SRB, Period 24.962161 days, Phase 38%																																	
26	Feb	6	8	14	15.3	d	1815SK2		4.7	4.0	79	- 125	54	162	-43S	163	179	141	+5.4	+4.1	+0.8	-2.4	.314	-27.7		12	39	14.8	- 7	59	44	387.7	667.5
	R1815 = chi Virginis																																	
	1815 is multiple: **Aa,Ab 4.8 8.8 0.10" 214.0, dT = +0.2sec : AB 4.8 8.8 177" 135.9, dT = +504sec : AC 4.8 10.6 224" 109.8, dT = +431sec : AD 4.8 9.0 321" 331.1, dT = -1001sec																																	
	1815 has been reported as non-instantaneous (OCc 760). Observations are highly desired																																	
26	Feb	6	9	32	14.2	R	1815SK2		4.7	4.0	79	- 125	55	196	81S	286	272	265	+5.1	+4.3	+2.7	-1.0	.308	-152.8		12	39	14.8	- 7	59	44	388.0	652.0
	R1815 = chi Virginis																																	
	1815 is multiple: **Aa,Ab 4.8 8.8 0.10" 214.0, dT = -0.1sec : AB 4.8 8.8 177" 135.9, dT = +501sec : AC 4.8 10.6 224" 109.8, dT = +724sec : AD 4.8 9.0 321" 331.1, dT = -741sec																																	
	1815 has been reported as non-instantaneous (OCc 760). Observations are highly desired																																	
26	Feb	6	10	54	23.8	r	138905	F8	7.3	7.0	78	- 124	45	223	51S	256	217	234	+4.8	+4.5	+3.4	+0.0	.213	-126.6		12	40	40.7	- 8	26	54	388.9	673.0
26	Feb	7	6	5	41.7	r	1919	K5	6.9	6.0s	71	- 114	26	120	18N	5	58	344	+5.2	+5.0	-0.9	-3.6	.230	123.0		13	22	8.3	-12	34	46	394.2	806.6
	1919 = NSV 19751, 6.98 to 7.03, Hp																																	
26	Feb	7	7	30	12.3	r	157895	pA2	7.8	7.7	70	- 114	40	138	67S	271	309	250	+4.9	+5.2	+2.6	+0.7	.284	-139.4		13	22	45.6	-13	11	11	393.1	713.0
	157895 is double: AB 7.8 10.8 19.4" 311.2, dT = -52sec																																	
26	Feb	9	8	17	55.8	r	2138	WF6	7.9	7.6	51	- 91	27	136	62N	314	356	298	+2.8	+6.8	+0.8	-0.7	.371	170.0		14	58	40.7	-22	24	5	400.5	731.5
	2138 is double: AB 7.9 9.6 12.0" 95.0, dT = +25sec																																	
26	Feb	9	9	59	22.3	r	183079	M2	7.7	6.8s	51	- 91	39	160	87S	283	302	267	+2.4	+7.0	+2.6	-0.1	.301	-159.3		15	0	30.4	-22	50	58	399.5	624.2
	183079 = NSV 20220, 7.67 to 7.75, Hp																																	
26	Feb	10	8	27	18.0	d	2263cB1		4.6	4.7	42	- 80	18	132	-57N	69	116	56	+1.6	+7.2	+2.3	+2.1	.257	49.2		15	50	58.7	-25	45	5	402.5	768.3
	R2263 = 1 Scorpii																																	
	2263 is double: ** 5.6 5.6 0.050"																																	
	2263 has been reported as non-instantaneous (OCc1483). Observations are highly desired																																	
26	Feb	10	9	18	40.7	R	2263cB1		4.6	4.7	41	- 80	26	141	24N	348	26	336	+1.4	+7.3	-0.4	-2.4	.233	130.6		15	50	58.7	-25	45	5	401.7	696.3
	R2263 = 1 Scorpii																																	
	2263 is double: ** 5.6 5.6 0.050"																																	
	2263 has been reported as non-instantaneous (OCc1483). Observations are highly desired																																	
26	Feb	11	8	32	15.8	R	2397	K1	6.5	5.9	32	- 69	10	128	56N	310	3	302	+0.3	+7.3	+0.2	-0.4	.395	161.2		16	41	37.6	-27	48	35	403.2	816.6
26	Feb	12	11	20	28.4	R	2540	B3	7.2	7.1e	23	- 58	-9	27	147	52N	305	339	303	-1.3	+7.2	+1.5	-0.5	.296	154.9		17	40	23.9	-28	55	24	399.8	634.4
	2540 = V2382 Oph, 7.26 to 7.29, Hp, Type E+BE, Period 0.9215 days, Phase 40%																																	
26	Feb	13	10	34	46.5	r	186988	A0	8.5	8.3	16	- 47	13	131	62N	289	340	292	-2.2	+6.6	+0.9	+0.3	.377	165.7		18	34	12.8	-28	20	45	398.7	752.4
26	Feb	13	11	22	7.6	r	187016	G5	8.3	7.7	16	- 47	-9	20	138	52N	299	343	303	-2.3	+6.7	+1.2	-0.1	.318	153.5		18	35	37.8	-28	19	31	397.8	684.9
26	Feb	19	0	32	14.1	D	Mercury		-0.6	-0.6	2	+ 18		1	266	67N	37	338	63	-5.8	-1.1	+0.0	+0.8	.492	18.9		23	14	18.8	- 3	50	16	379.0	955.8
	Mercury contacts: Bright limb 0 32 7; Terminator 0 32 17.3; Dark limb 0 32 21: diam = 7.0"; %illum = 53.3%; PA bright limb = 244.0																																	
26	Feb	21	1	43	22.2	d	109530DF0		8.2	8.0	14	+ 44	11	275	84N	57	352	79	-4.7	-4.1	+0.3	+0.2	.532	7.7		0	54	45.1	9	25	44	372.6	971.0
	109530 is double: AB 8.57 9.60 3.11" 299.9, dT = -2.7sec																																	
	109530 is a close double. Observations are highly desired																																	
26	Feb	23	2	57	46.1	d	75537	A2	7.8	7.7	34	+ 71	21	284	33N	14	304	31	-2.8	-6.2	+1.6	+3.4	.231	63.2		2	43	41.1	21	8	50	368.6	915.2
26	Feb	24	0	18	10.3	d	76041	F0	8.2	8.0	44	+ 83	69	272	28S	138	56	151	-1.4	-6.7	+2.9	-5.6	.160	-64.9		3	38	35.9	24	36	6	364.4	667.7
26	Feb	24	0	26	49.9	D	76046	cA0	7.1	7.1	44	+ 83	67	273	50S	116	34	129	-1.4	-6.7	+2.5	-2.2	.284	-41.7		3	39	6.7	24	42	10	364.5	671.8
	76046 is double: AB 7.1 45.0, dT = -12sec																																	
26	Feb	24	1	41	47.9	d	76081	K2	7.5	6.9	44	+ 83	51	279	88N	74	355	87	-1.6	-6.7	+1.8	-0.1	.412	5.3		3	41	18.1	25	0	29	365.4	733.4
26	Feb	24	2	57	3.6	d	76102	A2	7.5	7.5	45	+ 84	35	284	90N	76	1	89	-1.7	-6.7	+1.1	-0.4	.465	7.3		3	43	43.2	25	4	51	366.6	832.8
26	Feb	24	3	50	3.2	D	538	pB8	5.7	5.7	45	+ 84	24	287	22S	144	73	157	-1.7	-6.6	-0.6	-3.7	.264	-59.1		3	45	9.7	24	50	21	367.7	918.6
	R538 = 18 Tauri																																	

Occultation prediction for Varney Observatory
E. Longitude - 80 30 0.0, Latitude 26 0 0.0, Alt. 2m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon Alt	Sun Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	dur sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
							538 is quadruple: Aa,Ab 6.4 6.4 0.10" : AB 5.6 14.0 72" 128.9, dT = +263sec : AC 5.6 14.8 151" 175.1, dT = +491sec																											
							538 is a close double. Observations are highly desired																											
26	Feb	24	4	53	57.9	d	555	K5	6.4	5.6s		46+	85	11	293	52S	115	49	127	-1.8	-6.5	-0.3	-1.5	.505	-28.6		3	48	6.5	24	59	18	369.1	1029.1
							555 = NSV 1316, 6.44, range 0.02, 0V, Type VAR, Period 1.48987 days																										
26	Feb	25	1	21	3.3	d	715cK5	8.0	7.5			56+	97	69	280	77N	70	341	78	-0.2	-6.8	+2.4	+0.5	.365	15.1		4	43	35.4	27	41	15	364.2	668.1
							715 is double: ** 8.8 8.8 0.10" 90.0, dT = +0.26sec																										
							715 has been reported as non-instantaneous (OCc 130). Observations are highly desired																										
26	Feb	26	7	0	15.7	d	77818	K5	6.7	5.8		69+	112	12	296	47N	49	342	49	+0.5	-5.9	+0.8	+0.6	.358	53.7		6	0	4.9	28	7	33	369.3	1085.1
26	Feb	26	23	31	16	gr	1042cA2	6.7	6.6			77+	123	-3	60	80	5S	183	268	179	+2.6	-5.7	+9.9	+9.9	.000	-90.0		6	49	10.2	27	11	25	365.6	699.7
							1042 is double: 6.7 9.8 0.10"																										
							1042 is a close double. Observations are highly desired																										
							Distance of 1042 to Terminator = 7.5"; to 3km sunlit peak = 0.0"																										
26	Feb	26	23	31	17	Gr	1042cA2	6.7	6.6			77+	123	-3	61	** GRAZE: CA 4.8S; Dist. 5km in az. 349deg. [Lat = 26.04+0.18(E.Long+80.50)]																				
							Distance of 1042 to Terminator = 18.9"; to 3km sunlit peak = 3.0"																										
26	Feb	27	2	46	2.5	d	78873	A2	7.8	7.7		78+	124	78	279	82N	90	357	85	+2.0	-5.6	+2.5	-0.3	.361	17.5		6	55	48.1	27	14	58	365.1	670.2
26	Feb	27	2	51	39.9	d	1056	B9	7.2	7.3		78+	124	77	279	72N	80	348	75	+2.0	-5.6	+2.7	+0.2	.337	27.8		6	55	56.2	27	17	9	365.1	674.0
26	Feb	27	5	17	14.7	d	78957	G8	7.5	7.0		79+	125	45	283	82N	91	12	86	+1.7	-5.3	+1.3	-0.8	.440	20.9		7	0	14.8	26	52	42	366.9	837.7
26	Feb	28	1	44	51.1	d	1194SK0	7.8	7.2			86+	137	76	92	29N	44	126	34	+3.3	-4.6	+3.7	+5.6	.148	66.3		7	56	1.5	24	39	57	366.5	656.7
							1194 is triple: AB 7.8 10.1 18.9" 160.1, dT = -56sec : AB 9.5 11.5 34" 194.1, dT = -201sec																										
26	Feb	28	5	6	37.8	d	79868	DK0	7.4			87+	138	60	274	71N	86	7	76	+2.7	-4.2	+2.2	-0.5	.360	33.1		8	1	30.3	23	54	46	367.5	766.4
							79868 is double: AB 7.43 10.98 1.30" 168.9, dT = +0.48sec																										
							79868 is a close double. Observations are highly desired																										
26	Feb	28	5	20	42.7	D	1208DK1	6.4				87+	138	56	274	30S	165	87	155	+2.7	-4.2	-0.1	-3.4	.305	-46.0		8	1	0.8	23	34	59	367.7	783.3
							1208 is double: AB 6.48 9.95 1.95" 325.2, dT = -6sec																										
							1208 is a close double. Observations are highly desired																										
26	Mar	1	1	30	35.2	D	1329pF8	6.8				93+	150	59	94	62S	138	211	124	+4.3	-3.2	+1.8	-1.7	.356	-23.5		8	53	55.3	19	58	2	369.3	696.4
							1329 is double: AB 7.32 7.86 0.15" 72.1, dT = +0.17sec																										
							1329 is a close double. Observations are highly desired																										
26	Mar	3	11	16	3.1	d	X119629k	11.5	11.1			0E	179	-7	6	274	23U	67	2	46	+4.1	+1.2	+0.3	-0.1	.328	53.9		10	51	47.3	6	18	53	381.9	1031.5
26	Mar	3	11	19	57.4	d	X210181k	11.7				0E	179	-6	5	274	47U	105	41	84	+4.1	+1.2	+0.0	-1.2	.541	15.0		10	51	57.8	6	7	28	382.0	1036.6
26	Mar	3	11	25	22.1	d	X119641k	11.3	11.0			0E	179	-5	4	275	63U	127	63	107	+4.1	+1.2	-0.1	-1.6	.559	-7.4		10	51	57.8	6	0	33	382.2	1044.8
26	Mar	6	11	9	45.2	r	1885	K2	7.3	6.7		91-	145	-8	26	241	69N	320	266	299	+3.4	+5.4	+1.2	-2.3	.368	160.0		13	8	27.9	-11	45	46	392.2	745.0
26	Mar	7	10	53	3.3	R	1993cK3	6.6	5.9			84-	133	-11	33	225	62S	267	225	248	+2.7	+6.3	+2.3	-0.8	.293	-148.7		13	54	21.4	-17	10	48	395.2	658.4
26	Mar	8	4	41	25.9	r	2084	A3	6.5	6.4		78-	124	13	121	79S	280	336	263	+3.1	+6.4	+0.8	+0.6	.413	-157.2		14	34	50.7	-20	26	22	399.5	867.6
26	Mar	12	9	36	8.5	R	2631	B9	6.5	6.5v		40-	79	23	142	90S	267	306	268	-2.3	+6.9	+2.0	+0.9	.332	-171.0		18	11	58.2	-28	54	6	399.7	652.1
							R2631 = V4045 Sagittarii																										
							2631 = V4045 Sgr, 6.51 to 6.54, V, Type ACV, Period 2.8855 days																										
26	Mar	13	8	43	38.3	d	2784cK1	3.3	2.7			31-	68	7	125	-35S	137	193	143	-3.2	+6.2	-0.1	-0.8	.284	-46.1	.02	19	6	56.4	-27	40	14	398.6	793.4
							R2784 = tau Sagittarii																										
							2784 is double: AB 4.2 4.2 0.008" 319.3, dT = -0.03sec																										
26	Mar	13	9	10	30.0	r	187672kA*	7.4	7.4			31-	68	12	129	27N	324	16	330	-3.2	+6.2	-0.1	-1.5	.225	125.4		19	6	19.2	-27	17	14	398.0	749.1
26	Mar	13	9	36	17.3	R	2784cK1	3.3	2.7			31-	68	16	133	52S	223	271	229	-3.3	+6.2	+2.3	+2.7	.257	-134.1	.02	19	6	56.4	-27	40	14	397.5	711.1
							R2784 = tau Sagittarii																										
							2784 is double: AB 4.2 4.2 0.008" 319.3, dT = 0.00sec																										
26	Mar	15	10	46	32.1	r	189827	A3	8.0	7.9		14-	44	-11	15	123	54S	215	269	230	-4.9	+4.0	+1.5	+2.6	.320	-142.1		20	54	43.6	-20	56	58	388.7	765.4
26	Mar	16	10	24	1.8	R	3182	A2	7.5	7.4		8-	32	4	110	75S	232	293	250	-5.1	+2.6	+0.7	+1.9	.454	-162.2		21	44	18.9	-15	58	18	385.0	890.8
26	Mar	22	0	33	24.8	d	X 3230	M2	9.1	8.1v		11+	39	25	280	52S	103	34	122	-2.6	-5.9	+0.5	-1.5	.441	-30.3		2	23	36.5	18	57	54	364.3	901.3
							X 3230 = ASAS J022337+1857.9, 9., range 0.3, V, Type MISC, Period 62.5 days, Phase 62%																										

Occultation prediction for Varney Observatory
E. Longitude - 80 30 0.0, Latitude 26 0 0.0, Alt. 2m; Telescope dia 15cm; dMag 0.0

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      day  Time     P   Star  Sp  Mag  Mag    % Elon Sun  Moon   CA   PA  VA  AA Libration   A   B   RV    Cct durn  R.A. (J2000)  Dec   Mdist   SV
 y   m  d  h  m    s       No  D     v    r V  ill     Alt Alt Az   o    o   o   o   L    B   m/o m/o  "/s     o  sec  h  m    s    o  m  s   Mm   m/s
26 Mar 23  3  5 14.8 d     499cG5  8.0        20+  54      7 294  30N  12 308  26 -1.1 -6.4 +1.9+3.9 .188   71.8      3 27 49.6  24 10 58 366.31066.9
       499 is double: AB 8.04 11.52 0.40" 170.0, dT = -2sec
       499 is a close double. Observations are highly desired
26 Mar 24 22 35 51   Gr    810SB7  1.7  1.7   40+  79  12 87  19   1N 357 157   0 +2.1 -6.5 +9.9+9.9 .000   90.0      5 26 17.5  28 36 27 363.1 642.3
   R810 = El Nath = beta Tauri
       810 is multiple: AC 1.9 19.0 8.4" 357.0 : AD 1.9 18.5 9.8"  70.0 : AE 1.9      10.9"  80.0 : AF 1.9 15.8 11.6" 296.0
       810 is a close double. Observations are highly desired
   Distance of 810 to Terminator = 11.7"; to 3km sunlit peak = 0.0"
26 Mar 24 22 35 51   Gr    810SB7  1.7  1.7   40+  79  12 87 ** GRAZE: CA  0.7N; Dist.  1km in az. 357deg. [Lat = 26.01+0.05(E.Long+80.50)]
26 Mar 25  2 34 59.6 d   77268 B8  8.2  8.0v  41+  80     40 286  54S 123  44 126 +1.5 -6.3 +0.5-1.9 .438  -22.9      5 34 39.1  28  3  4 365.7 842.7
     77268 = V1371 Tau, 8.02 to 8.20, V, Type GCAS
26 Mar 26  0 43 31   M    1008 A0  5.3  5.3s  52+  93     77 283  10N  14 278  11 +3.0 -5.8 +9.9+9.9 .000   90.0      6 35 12.1  28  1 20 365.6 662.7
   R1008 = 49 Aurigae
      1008 = NSV 3032, 5.05 to 5.27, V
26 Mar 26  0 43 37   Gr   1008 A0  5.3  5.3s  52+  93     75 ** GRAZE: CA 10.5N; Dist. 11km in az. 201deg. [Lat = 25.89-0.35(E.Long+80.50)]
26 Mar 26  2 45 26   m   78580SA2  7.3  7.2   53+  93     51 283  15N  19 297  16 +2.7 -5.6 +9.9+9.9 .000   90.0      6 38 53.6  27 48 16 367.1 789.5
     78580 is triple: AC 7.3 13.8 26.6" 237.2 : AB 7.3 10.5 28.6" 130.4
26 Mar 26  4  3 47.9 d    1028 G8  7.5  7.1   53+  94     34 286  35S 149  74 146 +2.5 -5.5 -0.3-2.6 .387  -40.3      6 41 42.7  27  4 54 368.6 906.4
26 Mar 27  2 29 44.7 D   79610 F8  7.2  7.0   64+ 106     67 273  68S 123  41 115 +3.7 -4.6 +1.5-1.8 .398   -6.6      7 41  3.1  24 57 54 368.7 716.8
26 Mar 27  4 46 21.4 D   1170dG8  3.6  3.1   65+ 107     37 282  30S 161  86 152 +3.4 -4.3 -0.4-2.8 .356  -44.2      7 44 26.8  24 23 53 371.0 895.2
   R1170 = kappa Geminorum
      1170 is double: AB 3.7 10.0 7.3" 241.1, dT = +3sec
      1170 is a close double. Observations are highly desired
26 Mar 27  5 30 38.0 R    1170dG8  3.6  3.1   65+ 108     27 285 -60S 251 179 242 +3.3 -4.2 +1.1-0.3 .384 -135.8      7 44 26.8  24 23 53 372.0 967.0
   R1170 = kappa Geminorum
      1170 is double: AB 3.7 10.0 7.3" 241.1, dT = -19sec
      1170 is a close double. Observations are highly desired
26 Mar 28  4 26 29.1 D    1304pA0  6.8        75+ 120     52 270  22S 174 100 160 +4.1 -3.1 -0.5-3.6 .282  -50.4      8 41 15.3  20 28 37 372.5 798.2
      1304 is double: AB 7.10 8.08 0.29"  70.6, dT = -0.24sec
      1304 is a close double. Observations are highly desired
26 Mar 30  0 50 13.3 d    1515kF8  7.8  7.5   91+ 144     52 107  88N 110 171  90 +5.5 -0.5 +1.9-0.2 .375   15.3     10 21 52.9  10 41 59 378.2 712.9
26 Apr  4  3 47 54.7 r    2045cK0  6.4        95- 155     27 130  49N 341  27 322 +3.2 +6.2 +0.0-1.8 .333  146.0     14 17  3.8 -18 35  9 397.2 774.7
      2045 is double: AB 6.40 10.51 0.70"  83.1, dT = +0.46sec
      2045 is a close double. Observations are highly desired
26 Apr  4  9 57 57.6 r  158538wK1  7.3  6.8   95- 153     26 228  75N 314 269 296 +1.8 +6.8 +1.8-2.2 .323  157.8     14 24  0.4 -19 48  3 397.9 673.0
    158538 is double: AB 7.4 11.6 40" 286.2, dT = -108sec
26 Apr  5  9 58 16.2 R    2174pB8  6.5  6.5   90- 142     30 216  51S 253 218 238 +0.9 +7.3 +2.4-0.1 .264 -145.9     15 13 17.4 -24  0 30 399.8 616.8
      2174 is triple: ** 7.1 7.1 0.030"   0.0 : AB 6.4 12.5 8.2"  45.0, dT = +27sec
      2174 has been reported as non-instantaneous (OCc1471). Observations are highly desired
26 Apr  6  4  0 34.3 d    2287SB1  2.9  3.0v  84- 133      8 124 -85N 102 158  90 +1.1 +7.1 +0.6+0.5 .429   13.4     15 58 51.1 -26  6 51 403.3 863.1
   R2287 = pi Scorpii
      2287 is triple: Aa,Ab 5.1 13.4 2.0" 244.0, dT = -4sec : AB 2.9 11.9 50" 128.1, dT = +106sec
      2287 is a close double. Observations are highly desired
      2287 = pi Sco, 2.88 to 2.91, V, Type ELL, Period 1.570103 days, Phase  64%
26 Apr  6  5 10  8.9 R    2287SB1  2.9  3.0v  84- 133     20 134  66N 310 356 299 +0.9 +7.2 +0.7-0.5 .376  166.4     15 58 51.1 -26  6 51 402.1 754.0
   R2287 = pi Scorpii
      2287 is triple: Aa,Ab 5.1 13.4 2.0" 244.0, dT = -2.1sec : AB 2.9 11.9 50" 128.1, dT = +134sec
      2287 is a close double. Observations are highly desired
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Occultation prediction for Varney Observatory
E. Longitude - 80 30 0.0, Latitude 26 0 0.0, Alt. 2m; Telescope dia 15cm; dMag 0.0

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      day  Time     P   Star  Sp  Mag  Mag    % Elon Sun  Moon   CA   PA  VA  AA Libration   A   B   RV    Cct durn  R.A. (J2000)  Dec   Mdist   SV
 y   m  d  h  m   s       No  D    v    r V  ill     Alt Alt Az   o    o   o   o   L    B   m/o m/o  "/s     o  sec  h  m   s    o  m  s   Mm   m/s
      2287 = pi Sco, 2.88 to 2.91, V, Type ELL, Period 1.570103 days, Phase  64%
26 Apr  6  8 41  4.3 r    2297kF7  7.0  6.7   83- 132     37 184  83S 279 275 268 +0.1 +7.5 +3.0-0.4 .286 -170.0     16  3 16.1 -26 43  2 400.6 563.9
26 Apr  6 10  1 54.8 r    2300wK0  7.6  7.1   83- 131     33 204  53S 249 224 238 -0.2 +7.5 +2.7+0.2 .251 -147.6     16  5  1.4 -26 56 52 401.0 578.4
     2300 is double: AB 7.7 13.7 13.4" 351.6, dT = +12sec
26 Apr  9  9 58 50.6 r    2727kA*  7.4  7.4v  57-  98     34 164  38S 213 230 218 -3.6 +6.4 +2.9+2.8 .193 -131.3     18 47 37.1 -28 16 47 398.9 564.2
      2727 = HIP 92215, 7.45 to 7.48, V, Type ACV, Period 1.93789 days, Phase  95%
26 Apr 11 10 31 41.9 r  189425WF7  7.5  7.2   38-  76  -8 33 145  48N 296 331 309 -5.6 +4.4 +2.7-0.5 .220  131.7     20 33 30.9 -22 13 55 391.5 626.8
    189425 is double: AB 7.5 11.6 10.3"  21.3, dT = -4sec
26 Apr 14 10 32 39.6 R    3383 M2  6.2  5.4s  12-  40  -7 19 107  34S 191 251 212 -6.2 +0.0 +0.5+3.0 .315 -131.6     23  2 32.6 - 6 34 26 376.3 867.2
   R3383 = 82 Aquarii
      3383 = NSV 25999, 6.24 to 6.29, Hp
26 Apr 19 14 28 54.6 d     539SB6  4.3  4.4s   7+  30  47 25  74  71S  88 160 101 +0.6 -6.1 +0.5+0.9 .541  -22.4      3 45 12.5  24 28  2 359.01019.3
   R539 = Taygeta = 19 Tauri
      539 is multiple: Aa,Ab 4.6 6.1           : AB          0.018" 273.2, dT = -0.03sec : AC 4.3 14.0 53"  53.4, dT = +80sec : AB 4.3 11.0 72"
328.8, dT = -66sec
      539 is a close double. Observations are highly desired
      539 = NSV 1264, 4.30, range 0.00, 1Kp, Type SPB, Period 1.5664 days
26 Apr 19 14 53 28.0 D     541SB8  3.9  3.9s   7+  31  52 31  76  27S 133 206 145 +0.6 -6.1 +2.5-1.6 .216  -67.5      3 45 49.6  24 22  4 358.5 978.8
   R541 = Maia = 20 Tauri
      541 is quadruple: Aa,Ab 4.4 5.4           : AB 3.8 13.7 113"  72.6, dT = +261sec : AB 3.8 13.7 113"  72.7, dT = +262sec
      541 = NSV 1279, 3.87, range 0.00, 4Kp, Type ACV, Period 10.288 days
26 Apr 19 15  2 14   Gr    541SB8  3.9  3.9s   7+  31  55 34 ** GRAZE: CA  4.6S; Dist.155km in az. 141deg. [Lat = 24.20+0.73(E.Long+80.50)]
26 Apr 19 15 16 16.4 r     541SB8  3.9  3.9s   7+  31  57 36  77 -18S 177 252 190 +0.6 -6.1 -1.8+4.6 .208 -112.5      3 45 49.6  24 22  4 358.0 941.7
   R541 = Maia = 20 Tauri
      541 is quadruple: Aa,Ab 4.4 5.4           : AB 3.8 13.7 113"  72.6, dT = +138sec : AB 3.8 13.7 113"  72.7, dT = +138sec
      541 = NSV 1279, 3.87, range 0.00, 4Kp, Type ACV, Period 10.288 days
26 Apr 20  1 27  6.5 d   76460 A0  8.0  7.9    9+  35     13 293  51S 111  44 122 -0.3 -6.4 -0.2-1.3 .553  -22.5      4  6 41.4  25 43 20 360.61046.8
26 Apr 20  2  8 30.1 D   76472cG8  7.2  6.5    9+  35      5 296  82S  80  17  91 -0.2 -6.3 -0.1-0.5 .632    8.3      4  8 39.0  25 52 40 361.61119.4
26 Apr 21  0 16 23.5 D     771SA5  6.1  5.9e  17+  48  -7 41 286  55N  46 327  51 +1.5 -6.4 +2.1+1.3 .310   50.0      5  9 45.1  28  1 50 359.6 840.5
      771 is triple: Aa,Ab 6.0      0.20" 351.0, dT = +0.37sec : A,BC 6.0 9.1 11.2"  29.1, dT = +35sec
      771 is a close double. Observations are highly desired
      771 = V1156 Tau, 6. to 6.1, Hp, Type E:, Period 1.40266 days, Phase  44%
26 Apr 21  0 38 31.3 D     773wF8  7.0  6.7   17+  48 -12 37 286   9S 162  85 167 +1.5 -6.3 -1.0-4.9 .210  -65.2      5 10  3.9  27 33 23 360.0 874.9
      773 is double: AB 7.0 9.3 315" 353.1, dT = -1465sec
26 Apr 21  1 26 53.1 d   77030 K0  8.6  7.9   17+  49     27 289  44S 127  54 132 +1.5 -6.2 +0.0-1.9 .473  -29.7      5 12 34.1  27 36 15 361.0 953.6
26 Apr 22  1 17 22    m   78191 A0  7.7  7.7   27+  62     42 285  17N  16 297  15 +3.1 -5.7 +9.9+9.9 .000   90.0      6 17 59.9  28  0 24 362.6 853.9
26 Apr 22  1 17 57   Gr   78191 A0  7.7  7.7   27+  62     40 ** GRAZE: CA 16.6N; Dist. 44km in az. 215deg. [Lat = 25.52-0.62(E.Long+80.50)]
26 Apr 22  1 59 51.0 d   78242 K0  8.8  8.4   27+  63     33 287  87S  92  17  91 +3.0 -5.6 +0.8-0.9 .507   13.7      6 20 26.0  27 37 36 363.4 919.2
26 Apr 22  2  6 34.9 d   78234 A0  8.2  8.2   27+  63     32 287  30S 150  75 149 +3.0 -5.6 -0.4-2.7 .381  -43.8      6 20  4.5  27 23  6 363.6 930.7
26 Apr 23  0 30 58.1 d   79319 K2  7.9  7.3   38+  76 -10 65 276  86S 100  17  94 +4.5 -4.8 +2.0-1.0 .400   13.3      7 21 39.7  25 51 44 364.7 726.8
26 Apr 23  0 48 13    m   79316 G2  7.5  7.1v  38+  76     61 278  17N  24 301  17 +4.4 -4.8 +9.9+9.9 .000   90.0      7 21 32.8  26  9 33 364.9 746.6
     79316 = V0340 Gem, 7.37 to 7.71, V, Type RS, Period 35.37 days, Phase  17%
26 Apr 24  0 52 47.6 d   80119 G5  8.1  7.7   49+  89     72 261   7S 186 113 174 +5.4 -3.5 -1.3-6.0 .166  -65.0      8 21  4.9  22  1 54 368.6 703.4
26 Apr 24  4 39 51.5 d    1269kG5  6.9  6.3   50+  90     23 283  34S 160  91 148 +5.0 -3.0 -0.5-2.4 .408  -42.2      8 28  7.2  21  8 55 372.9 995.5
26 Apr 25  3  9 35.1 d   98511kF2  7.8  7.6   61+ 102     52 265  44N  62 352  46 +5.6 -1.8 +3.9+1.1 .183   65.1      9 20 38.2  17  7 38 374.4 788.7
26 Apr 25  3 53  3.6 D    1387cA5  7.0  6.8   61+ 103     42 269  55S 143  73 127 +5.5 -1.7 +0.4-2.2 .441  -17.3      9 21 25.5  16 35 54 375.3 840.9
     1387 is double: ** 7.6 7.6 0.10"  90.0, dT = +0.14sec
     1387 has been reported as non-instantaneous (OCc1402). Observations are highly desired
```

Occultation prediction for Varney Observatory
E. Longitude - 80 30 0.0, Latitude 26 0 0.0, Alt. 2m; Telescope dia 15cm; dMag 0.0

y	m	day d	h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon Alt	Sun Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	dur sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	Apr	26	0	25	0.0	d	98966SG	8.2	7.7			70+	114	-8	72	137	78S	123	161	104	+6.4	-0.6	+2.1	-1.2	.361	7.0		10	8	12.8	11	59	49	377.2	665.3
							98966 is quadruple: BC 8.2 13.2 0.9" 82.7, dT = +1.8sec : BD 8.2 12.1 108" 210.0, dT = +14sec : BA 8.2 1.4 176" 128.0, dT = +485sec																															
							98966 is a close double. Observations are highly desired																															
26	Apr	26	0	33	6.0	D	1487SB7	1.4	1.4s			70+	114	-10	73	142	79S	122	156	103	+6.4	-0.6	+2.2	-1.3	.360	7.8		10	8	22.3	11	58	2	377.2	665.0
							R1487 = Regulus = alpha Leonis																													
							1487 is triple: AB 1.4 8.2 176" 308.0, dT = -486sec : AD 1.4 12.1 193" 274.0, dT = -471sec																													
							1487 = NSV 4750, 1.33 to 1.40, V																													
26	Apr	26	1	58	17.7	R	1487SB7	1.4	1.4s			71+	115		73	218	-60N	320	286	301	+6.1	-0.4	+1.5	-2.2	.371	171.7		10	8	22.3	11	58	2	377.4	686.0
							R1487 = Regulus = alpha Leonis																													
							1487 is triple: AB 1.4 8.2 176" 308.0, dT = -463sec : AD 1.4 12.1 193" 274.0, dT = -358sec																													
							1487 = NSV 4750, 1.33 to 1.40, V																													
26	Apr	27	0	8	45.8	D	1589pM5	5.9	5.3v			80+	126	-5	57	122	83N	105	155	84	+6.5	+0.9	+2.3	-0.1	.337	25.4		10	56	1.5	6	11	7	381.9	691.9
							R1589 = 56 Leonis (VY)																													
							1589 is double: 6.2 7.1																													
							1589 = VY Leo, 5.69 to 6.03, V, Type SR, Period 46.34 days, Phase 16%																													
26	Apr	28	3	0	40.3	d	138388 K0	7.3	6.8			88+	139		63	189	59N	80	71	58	+5.6	+2.7	+4.3	+0.6	.201	55.5		11	45	1.4	- 0	31	4	385.8	666.0
26	Apr	30	3	13	11.5	d	157822kK2	7.3	6.6			98+	162		49	160	79S	111	130	90	+4.5	+5.2	+2.4	-0.6	.322	21.9		13	15	54.0	-12	21	0	393.1	662.5
26	May	1	3	40	10.0	d	2011 K2	6.3	5.6			100+	172		43	157	84N	65	87	46	+3.6	+6.1	+5.2	+2.7	.151	63.9	.01	14	3	4.1	-17	22	1	396.3	658.9
							Distance of 2011 to Terminator = 8.1"; to 3km sunlit peak = 0.9"																													
26	May	3	5	53	57.6	r	183731pF0	7.3	7.1			98-	162		38	172	81N	309	317	297	+1.2	+7.3	+2.2	-1.2	.293	165.8		15	43	11.6	-25	24	56	400.7	588.2
							183731 is double: AB 7.3 9.3 5.9" 291.8, dT = -19sec																													
							183731 is a close double. Observations are highly desired																													
26	May	3	9	39	6.6	r	2256PA1	7.0	6.9			97-	161		20	226	36S	245	200	233	+0.3	+7.3	+1.4	+0.0	.295	-148.4		15	47	56.5	-25	59	13	402.7	675.7
							2256 is double: ** 7.7 7.7 0.10" 90.0, dT = +0.31sec																													
							2256 has been reported as non-instantaneous (OCc1482). Observations are highly desired																													
							Distance of 2256 to Terminator = 18.4"; to 3km sunlit peak = 7.3"																													
26	May	4	10	9	38.1	r	2397 K1	6.5	5.9			93-	150	-8	22	221	67N	311	269	303	-1.0	+7.3	+2.6	-2.5	.250	137.9		16	41	37.6	-27	48	35	403.3	659.8
26	May	6	4	44	4.8	r	2660 A3	6.2	6.0			82-	130		10	128	61S	242	296	244	-2.1	+6.4	+1.6	+1.9	.324	-145.6		18	22	0.1	-28	25	48	404.0	770.5
26	May	9	8	29	44	m	3078cA5	4.9				55-	96		29	134	-7S	157	200	172	-6.1	+3.4	+9.9	+9.9	.000	-90.0		21	4	24.3	-19	51	18	392.9	665.0
							R3078 = Chow = eta Capricorni																													
							3078 is double: AB 5.02 7.39 0.23" 30.0																													
							3078 is a close double. Observations are highly desired																													
26	May	12	8	56	37.6	r	3454 K0	7.6	7.1			25-	60		18	102	47N	290	352	312	-7.0	-1.0	+1.0	+0.2	.300	128.0		23	27	14.7	- 2	38	13	376.9	891.4
26	May	12	9	22	31.2	r	146716pG0	8.4	8.2			25-	59		24	105	31N	307	7	328	-7.1	-1.1	+2.0	-1.4	.161	110.0		23	28	5.7	- 2	27	33	376.2	857.4
							146716 is triple: AB 9.2 9.2 0.20" 79.6, dT = +0.8sec : AC 8.5 8.1 57" 45.9, dT = +57sec																													
							146716 is a close double. Observations are highly desired																													
26	May	12	9	23	28.1	r	146717PF2	8.1	7.9			25-	59		24	105	29N	309	9	330	-7.1	-1.1	+2.2	-1.8	.146	108.1		23	28	8.5	- 2	26	53	376.1	856.3
							146717 is double: AB 8.1 8.5 57" 225.9, dT = -50sec																													
26	May	12	9	40	36.3	r	146720 K5	8.1	7.4			25-	59		28	108	87S	245	304	266	-7.1	-1.1	+1.0	+1.6	.452	171.1		23	28	27.0	- 2	39	13	375.7	834.1
26	May	13	9	53	25.4	R	109127 F0	7.2	7.0			16-	46	-10	23	97	56S	215	278	237	-6.5	-2.6	+0.4	+2.1	.478	-158.8		0	18	7.9	3	47	48	369.9	919.5
26	May	19	0	13	21.9	d	77619 F2	7.1	6.9			7+	30	-3	27	289	20S	151	78	153	+1.8	-5.7	-0.6	-2.8	.368	-49.4		5	50	39.7	27	30	18	357.1	980.9
26	May	19	0	17	39.5	D	885wG7	5.6	5.1			7+	30	-4	26	290	44N	36	323	37	+1.8	-5.7	+2.3	+2.1	.229	66.4		5	50	58.1	27	58	4	357.1	988.4
							885 is double: AB 5.7 12.5 10.8" 233.1, dT = -45sec																													
26	May	19	0	27	22	Gr	885wG7	5.6	5.1			7+	31	-5	24	** GRAZE: CA 20.1N; Dist.166km in az. 34deg. [Lat = 27.80-0.61(E.Long+80.50)]																													
26	May	19	0	40	40.8	R	885wG7	5.6	5.1			7+	31	-9	21	292	-4N	349	277	350	+1.8	-5.6	-1.7	-4.1	.238	113.6		5	50	58.1	27	58	4	357.7	1029.3
							885 is double: AB 5.7 12.5 10.8" 233.1, dT = +20sec																													
26	May	19	0	56	41.0	d	77671 F5	9.2	9.0			7+	31	-12	18	292	74S	98	28	99	+1.8	-5.6	+0.1	-1.0	.606	3.9		5	53	10.4	27	37	27	358.0	1054.3
26	May	19	1	0	9.5	D	890cA0	4.6	4.6s			7+	31		18	293	73S	99	30	100	+1.8	-5.6	+0.1	-1.0	.610	2.9		5	53	19.6	27	36	44	358.1	1060.3

Occultation prediction for Varney Observatory
E. Longitude - 80 30 0.0, Latitude 26 0 0.0, Alt. 2m; Telescope dia 15cm; dMag 0.0

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      day  Time     P   Star  Sp  Mag  Mag    % Elon Sun  Moon   CA   PA  VA  AA Libration   A   B   RV    Cct durn  R.A. (J2000)  Dec   Mdist   SV
 y   m  d  h  m   s       No  D    v    r V  ill     Alt Alt Az   o    o   o   o   L    B   m/o m/o "/s     o  sec  h  m   s    o  m  s   Mm   m/s
   R890 = 136 Tauri
      890 is double: ** 4.8 6.3 0.050" 270.0, dT = -0.08sec
      890 has been reported as non-instantaneous (OCc 206). Observations are highly desired
      890 = NSV 2696, 4.50 to 4.61, V
26 May 19  1  9 39.1 d   77686 F5  9.2  8.7    7+  31     16 293  60S 113  44 114 +1.8 -5.6 -0.1-1.3 .609  -10.8      5 53 40.6  27 31 45 358.31076.7
26 May 19  1 46 55.9 D   77711 F5  7.9  7.6    7+  31      8 296  32S 141  76 142 +1.8 -5.5 -0.8-1.9 .505  -39.6      5 55  3.7  27 20 32 359.21141.0
26 May 19  1 55 58.3 D   77724 B1  7.0  7.0    7+  31      7 297  57N  50 346  51 +1.9 -5.5 +0.5+0.4 .417   51.0      5 55 40.3  27 42 56 359.41156.6
26 May 20  0 46  7.4 D    1061SF8  6.2  5.9s  14+  45 -10 33 285  13S 170  95 165 +3.6 -4.7 -1.1-3.6 .278  -59.0      6 58 47.4  26  4 52 359.8 942.5
   R1061 = 39 Geminorum
      1061 is triple: Aa,Ab 6.1      0.50" 158.0, dT = +1.8sec : AB 6.1 12.1 35"  69.0, dT = -23sec
      1061 is a close double. Observations are highly desired
      1061 = NSV 17256, 6.1, range 0.02, V, Type VAR:
26 May 20  1 23 28.3 d   78973 A2  8.8  8.6   15+  45     26 288  82S 100  28  95 +3.6 -4.6 +0.4-1.1 .564   10.4      7  1 13.7  26 11  6 360.71002.5
26 May 20  1 27 57.4 D   78979 G5  8.1  7.6   15+  45     25 288  84N  86  14  81 +3.6 -4.6 +0.6-0.7 .528   23.9      7  1 25.4  26 14  7 360.81010.0
26 May 20  2  6 33.5 d   78998 G5  8.0  7.7e  15+  45     17 291  31S 152  83 146 +3.6 -4.5 -0.7-2.2 .453  -42.2      7  2 23.3  25 50 46 361.71074.7
     78998 = V0369 Gem, 7.95 to 8.12, V, Type EB, Period 0.423061 days, Phase  26%
26 May 21  2 28 57.5 D    1221cM3  6.0  5.1v  24+  59     24 285  68S 122  52 111 +5.1 -3.3 +0.1-1.5 .567   -5.7      8  6 18.4  22 38  8 365.61009.7
   R1221 = 9 Cancri = BL Cnc.
      1221 is double: AB 6.0 10.1 0.40"
      1221 is a close double. Observations are highly desired
      1221 = BL Cnc, 5.97 to 6.04, V, Type SR
26 May 21  2 41 32.2 d   79951 G5  7.8  7.2   24+  59     21 286  69N  80  10  69 +5.1 -3.2 +0.6-0.6 .468   36.3      8  6 56.2  22 46 31 365.91030.1
26 May 21  2 48 14.7 D    1222cG5  7.2  6.8   24+  59     20 286  38S 153  84 142 +5.1 -3.2 -0.5-2.2 .468  -37.1      8  6 34.4  22 27 24 366.11040.8
      1222 is double: ** 7.2      0.013" 234.6, dT = 0.00sec
      1222 has been reported as non-instantaneous (OCc1381). Observations are highly desired
26 May 23  3 27 52.1 D    1466cB9  5.3  5.3   46+  85     30 270  82N 102  35  83 +6.5 -0.2 +0.8-1.3 .455   23.1      9 58 13.4  12 26 41 376.0 902.0
   R1466 = nu Leonis
      1466 is double: ** 6.0 6.0 0.050"
      1466 has been reported as non-instantaneous (OCc1407). Observations are highly desired
26 May 24  2 11 13.5 d  118476PF8  8.2  7.9   56+  97     54 244  63N  85  30  64 +6.8 +1.2 +2.8-0.5 .274   47.0     10 45 18.9   6 57 39 379.2 738.5
    118476 is double: ** 8.9 8.9 0.10"  90.0, dT = +0.36sec
    118476 has been reported as non-instantaneous (OCc1419). Observations are highly desired
26 May 24  3 21  4.9 D    1567kK1  6.4  5.8   57+  98     39 256  40S 162 100 141 +6.7 +1.4 +0.3-2.7 .363  -33.9     10 46  5.7   6 22 23 380.6 806.7
   R1567 = 37 (Sextantis)/Leonis
26 May 24  3 49 40.0 d    1573pA2  7.1  7.0   57+  98     33 260  78S 124  61 104 +6.6 +1.4 +0.8-1.8 .454    2.5     10 47 19.2   6 20 46 381.3 840.1
   R1573 = 38 (Sextantis)/Leonis
26 May 28  0  4 38.9 d    1970SA0  6.2  6.2   90+ 143   0 33 132  60S 135 179 115 +5.3 +5.8 +0.9-0.9 .385   -6.2     13 45 35.1 -15 46  3 397.1 746.2
   R1970 = 85 Virginis
      1970 is multiple: Aa,Ab 6.5 8.2           : Aa,Ac 6.5 8.4 0.10"       : AB 6.2 12.8 44" 312.7, dT = -114sec : AB 6.2 12.8 44" 312.5, dT = -
115sec
      1970 is a close double. Observations are highly desired
26 May 29  1 16 24.3 D    2084 A3  6.5  6.4   95+ 155     33 141  86N  94 130  76 +4.1 +6.6 +2.3+0.6 .307   32.5     14 34 50.7 -20 26 22 399.6 705.7
26 Jun  2  4 38 38.1 r  186286 B7  7.1  7.1   97- 159     28 148  67N 306 339 306 -1.2 +6.5 +1.7-0.6 .271  148.9     18  6 45.8 -28 21 50 403.1 618.3
26 Jun  2  5 43 48.9 R    2617cK0  4.6  4.1   97- 159     33 163  87N 285 303 286 -1.5 +6.5 +2.7-0.1 .280  164.4     18  8  5.0 -28 27 26 402.5 568.0
      2617 is double: AB 5.1 5.9 0.26"  12.0, dT = -0.06sec
      2617 is a close double. Observations are highly desired
26 Jun  6  6 29 32.5 r    3157cF6  7.3       71- 115     24 124  50N 292 343 309 -6.0 +2.2 +1.7+0.1 .255  132.9     21 33 40.2 -16 12  4 393.7 716.7
      3157 is double: AB 7.33 10.00 0.90"   2.6, dT = -1.2sec
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Occultation prediction for Varney Observatory
E. Longitude - 80 30 0.0, Latitude 26 0 0.0, Alt. 2m; Telescope dia 15cm; dMag 0.0

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      day  Time     P   Star  Sp  Mag  Mag    % Elon Sun  Moon   CA   PA  VA  AA Libration   A   B   RV    Cct durn  R.A. (J2000)  Dec   Mdist   SV
 y   m  d  h  m    s       No  D    v    r V  ill     Alt Alt Az   o    o   o   o   L    B   m/o m/o  "/s     o  sec  h  m   s    o  m  s   Mm   m/s
      3157 is a close double. Observations are highly desired
26 Jun  7  7 42  1.3 r    3282kK0  7.8  7.0   61- 103     33 124  89S 248 298 268 -6.9 +0.7 +1.7+1.6 .373  169.1     22 22 11.6 -10 50 53 388.1 714.5
26 Jun 10  7 34 48.8 r  109413 K2  8.0  7.3   30-  66     13  88  78N 260 325 282 -6.8 -3.5 +0.3+1.2 .517  158.6      0 43 53.0   7 33 19 373.01005.2
26 Jun 10  8 34 18.6 r  109437kG5  7.8  7.3   29-  65     26  94  78N 260 325 282 -6.8 -3.6 +0.8+1.2 .464  155.2      0 45 40.4   7 50 42 371.4 920.4
26 Jun 11  8 51  6.1 r   92548 A3  8.1  7.9   19-  52     21  84  76S 238 305 258 -5.8 -4.7 +0.2+1.5 .564 -179.7      1 38 27.6  13 55 42 366.11001.5
26 Jun 11  9 20 32.5 R     244 K0  6.7  6.2   19-  52     28  87  58N 284 352 304 -5.8 -4.8 +1.2+0.5 .368  132.8      1 39 15.4  14 17  8 365.3 959.3
   R244 = 104 Piscium
26 Jun 13 12 15 46.0 r     539SB6  4.3  4.4s   4-  23  21 44  80  36S 215 292 227 -2.3 -6.2 +0.2+2.3 .448 -149.9      3 45 12.5  24 28  2 354.8 891.3
   R539 = Taygeta = 19 Tauri
      539 is multiple: Aa,Ab 4.6 6.1           : AB          0.019"  73.4, dT = +0.03sec : AC 4.3 14.0 53"  53.4, dT = +112sec : AB 4.3 11.0 72"
328.8, dT = +66sec
      539 is a close double. Observations are highly desired
      539 = NSV 1264, 4.30, range 0.00, 1Kp, Type SPB, Period 1.5664 days
26 Jun 17  1  9 20.6 D    1155 F0  6.4  6.2    5+  27 -11 13 291  59N  63 356  55 +3.4 -3.6 +0.5+0.0 .418   49.4      7 38 14.4  24 21 38 359.91121.9
26 Jun 17  1 28 51.4 D    1157 A2  6.2  6.2    5+  27      9 293  72N  76  11  68 +3.4 -3.5 +0.1-0.5 .536   35.7      7 39 12.0  24 13 21 360.41153.2
26 Jun 17  1 31 17.2 d   79578cA0  8.8  8.8    5+  27      8 293  48N  53 347  44 +3.4 -3.5 +0.6+0.5 .340   59.1      7 39  5.6  24 18 51 360.41157.7
     79578 is double: ** 9.6 9.6 0.10"  92.0, dT = +0.23sec
     79578 has been reported as non-instantaneous (OCc 762). Observations are highly desired
26 Jun 17 20  5 24.5 D Venus      -4.0 -4.0   11+  38  53 85 169  37S 155 165 142 +5.5 -2.9 +1.4-3.2 .297  -32.8      8 30 20.8  21  2 26 358.3 613.2
   Venus contacts: Bright limb 20  5  0; Terminator 20  5 46; Dark limb 20  5 49: diam = 14.7"; %illum = 74.0%; PA bright limb = 281.5
26 Jun 17 21 24  0.0 R Venus      -4.0 -4.0   11+  39  36 72 258 -80S 275 202 259 +5.3 -2.7 +2.8-0.6 .320 -147.8      8 30 20.8  21  2 26 358.9 658.7
   Venus contacts: Bright limb 21 23 37; Terminator 21 24 11; Dark limb 21 24 23: diam = 14.7"; %illum = 74.0%; PA bright limb = 281.5
26 Jun 18  1  9 10.1 D   80327pA3  7.8  7.6   12+  40 -11 24 282  69N  82  12  68 +5.0 -2.2 +0.7-0.7 .460   37.2      8 39 42.8  20  5 10 363.21016.7
     80327 is double: AB 7.9 9.6 0.64" 136.3, dT = +0.8sec
     80327 is a close double. Observations are highly desired
26 Jun 18  1 16 24.9 d   80331pF0  9.0  8.8   12+  40     22 282  73N  86  17  73 +5.0 -2.1 +0.6-0.8 .492   32.5      8 39 59.1  20  1 53 363.41027.9
     80331 is multiple: AB                  : Ca,Cb 9.2      0.30"  22.0, dT = +0.26sec : CA 9.0 6.5 134" 129.0, dT = +200sec : CS 9.0 10.1 138"
341.1, dT = -74sec
     80331 is a close double. Observations are highly desired
26 Jun 18  1 19 42.8 D    1295pK0  6.4  5.9s  12+  40     21 283  75N  88  19  75 +5.0 -2.1 +0.5-0.8 .504   30.7      8 40  6.4  20  0 28 363.41033.0
   R1295 = 39 Cancri
     1295 is multiple: AC 6.5 9.0 134" 309.0, dT = -201sec : AD 6.5 8.8 135" 111.0, dT = +247sec : AB 6.5 6.6 152" 149.9, dT = +142sec : AS 6.5 10.1
262" 325.7, dT = -278sec
     1295 = NSV 4179, 6.39, range 0.04, V
26 Jun 18  1 20 47.8 D    1292kF0  6.7  6.5v  12+  40     21 282  52S 141  73 128 +5.0 -2.1 -0.2-1.9 .540  -22.9      8 39 42.7  19 46 42 363.51034.6
   R1292 = 38 Cancri (BT)
     1292 = BT Cnc, 6.66, range 0.06, V, Type DSCTC, Period 0.10228 days
26 Jun 18  1 22  4.3 D    1296pA1  6.6  6.6   12+  40     21 283  80N  93  24  80 +5.0 -2.1 +0.4-0.9 .532   25.2      8 40 11.5  19 58 16 363.51036.5
   R1296 = 40 Cancri
     1296 is quadruple: Ba,Bb 6.6      0.40" 128.0, dT = +0.6sec : BR 6.6 11.6 140" 146.9, dT = +157sec : BA 6.6 6.5 152" 329.9, dT = -158sec
     1296 is a close double. Observations are highly desired
26 Jun 18  1 23 48.7 d   80338pF5  8.8  8.6S  12+  41     20 283  74N  87  18  73 +5.0 -2.1 +0.5-0.8 .501   31.7      8 40 15.3  19 59 39 363.61039.4
     80338 is double: DA 8.8 6.5 135" 291.0, dT = -246sec
     80338 = NSV 17951, 8.81, , Type VAR:
26 Jun 18  1 23 50.5 d   80330pA5  8.9  8.7   12+  41     20 283  36N  49 340  36 +5.0 -2.1 +1.8+1.3 .207   69.5      8 39 58.4  20  9 30 363.61040.4
     80330 is double: AB 8.9 9.7 91" 153.0, dT = -106sec
26 Jun 18  1 30 15.1 D   80340pA0  7.9  7.8S  12+  41     19 283  79S 115  46 101 +5.0 -2.1 +0.1-1.3 .593    3.7      8 40 23.5  19 50  6 363.71049.1
     80340 is double: ** 8.8 8.8 0.050" 111.0, dT = +0.08sec
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Occultation prediction for Varney Observatory
E. Longitude - 80 30 0.0, Latitude 26 0 0.0, Alt. 2m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon	Sun Alt	Moon Alt	Az	CA o	PA o	VA o	AA o	Libration L	B	A m/o	B m/o	RV "/s	Cct o	dur sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
							80340 has been reported as non-instantaneous (OCc1074). Observations are highly desired																														
							80340 = NSV 4183, 8.01,																														
26	Jun	18	1	38	55.8	D	98020pA0		7.6	7.5e	12+	41		17	284	49S	144	76	130	+5.0	-2.1	-0.3	-1.9	.541	-26.1			8	40	20.7	19	41	12	364.0	1062.9
							98020 is quadruple: ** 9.1 9.1 0.050" : CA 7.6 6.5 64" 163.1, dT = +112sec : CD 7.6 9.2 76" 91.1, dT = +85sec																														
							98020 has been reported as non-instantaneous (OCc1392). Observations are highly desired																														
							98020 = HD 73709, 7.69 to 7.76, V, Type EA, Period 7.22015 days, Phase 75%																														
26	Jun	18	1	40	51.6	D	1298pK0		6.4	5.9E	12+	41		17	284	46S	147	79	133	+5.0	-2.1	-0.3	-1.9	.528	-29.1			8	40	22.1	19	40	12	364.0	1065.9
							1298 is multiple: AE 6.5 12.5 15.7" 154.8, dT = +29sec : AB 6.4 10.4 20.8" 55.1, dT = -1.2sec : AC 6.5 7.6 64" 343.1, dT = -117sec : AD 6.5 9.2 84" 44.0, dT = -35sec																														
							1298 = HD 73710, 6.42, , Type EA, Period 7.22030 days, Phase 42%																														
26	Jun	18	1	42	45.1	d	80351kA2		8.7	8.5	12+	41		16	285	68N	81	13	67	+5.0	-2.1	+0.4	-0.6	.482	37.2			8	40	56.9	19	56	5	364.0	1069.0
26	Jun	18	1	42	56.3	D	1302pA9		6.8	6.7	12+	41		16	284	65S	128	61	115	+5.0	-2.1	-0.1	-1.6	.595	-10.7			8	40	43.2	19	43	10	364.1	1068.9
							R1302 = 42 Cancri																														
							1302 is double: ** 7.5 7.5 0.050"																														
							1302 has been reported as non-instantaneous (OCc1393). Observations are highly desired																														
26	Jun	18	1	48	33.7	d	80352kF0		9.0	8.8	12+	41		15	285	84N	97	30	84	+5.0	-2.1	+0.2	-1.0	.571	20.5			8	41	10.7	19	49	46	364.2	1077.8
26	Jun	18	1	50	39.4	d	80353kA3		8.3	8.2S	12+	41		15	285	62N	75	8	62	+5.0	-2.1	+0.4	-0.5	.454	42.1			8	41	13.8	19	55	19	364.3	1081.5
							80353 = NSV 17956, 8.33, , Type DSCT:																														
26	Jun	18	1	57	41.6	D	1303kA6		6.8	6.7v	12+	41		13	286	42S	151	84	138	+5.0	-2.0	-0.5	-2.0	.511	-34.2			8	40	56.3	19	34	49	364.5	1092.4
							1303 = EP Cnc, 6.76, range 0.03, V, Type DSCTC																														
26	Jun	18	1	58	5.9	D	1299pA*		6.3	6.2	12+	41		13	286	16S	177	111	164	+5.0	-2.0	-1.0	-3.0	.306	-60.4			8	40	27.0	19	32	41	364.5	1093.7
							R1299 = epsilon Cancri																														
							1299 is double: AB 6.3 7.5 134" 250.1, dT = +131sec																														
26	Jun	18	2	2	38.9	d	98043kK0		8.4	7.9	12+	41		12	286	74S	119	53	106	+5.0	-2.0	-0.2	-1.4	.621	-2.5			8	41	35.1	19	39	45	364.6	1099.8
26	Jun	18	2	7	14.1	D	1305pK0		6.9	6.4	12+	41		11	287	56N	69	3	55	+5.0	-2.0	+0.4	-0.2	.418	48.1			8	41	50.1	19	52	27	364.7	1107.5
							1305 is double: Ea,Eb 7.2 9.1																														
26	Jun	18	2	30	29.2	d	98053kA7		7.9	7.8v	12+	41		6	289	34S	159	94	146	+5.1	-2.0	-0.7	-2.1	.470	-43.3			8	42	6.5	19	24	41	365.3	1143.6
							98053 = BX Cnc, 7.96, range 0.02, V, Type DSCTC, Period 0.04412 days																														
26	Jun	19	1	20	46.1	d	98665w		8.8	8.4	21+	54		31	272	89N	108	39	90	+6.2	-0.6	+0.7	-1.3	.501	16.3			9	36	13.3	14	35	48	368.0	931.2
							98665 is double: AB 8.8 9.1 82" 111.0, dT = +163sec																														
26	Jun	19	1	23	28.6	d	98667		9.0	8.7	21+	54		30	272	88N	106	38	89	+6.2	-0.5	+0.7	-1.3	.500	17.3			9	36	18.5	14	35	18	368.1	935.0
26	Jun	19	1	30	35.0	D	1415WA1		6.3	6.3	21+	54		28	273	41S	158	90	140	+6.2	-0.5	-0.1	-2.4	.436	-34.4			9	35	52.9	14	22	47	368.3	945.4
							R1415 = 7 Leonis																														
							1415 is double: AB 6.3 9.4 41" 90.5, dT = +36sec																														
26	Jun	19	2	16	51.8	D	1420 F2		6.6	6.4	21+	54		18	277	84N	102	35	85	+6.1	-0.4	+0.3	-1.2	.534	19.0			9	38	1.3	14	20	50	369.5	1012.8
							R1420 = 11 Leonis																														
26	Jun	20	0	10	30.4	d	1525 M2		5.6	4.8v	30+	66	0	54	248	24S	177	120	157	+7.0	+0.9	-0.1	-3.4	.291	-46.7	.01	10	25	15.2	8	47	5	371.9	765.0
							R1525 = 44 Leonis (DE)																														
							1525 = DE Leo, 5.6, range 0.07, V, Type SRB:																														
26	Jun	20	1	53	20.4	d	118317 K2		8.2	7.5	31+	67		32	264	37S	165	100	145	+6.8	+1.1	+0.0	-2.7	.375	-39.2			10	27	56.5	8	18	52	374.1	877.4
26	Jun	21	2	28	41.2	D	1635cM0		5.2	4.4	41+	80		31	256	57S	147	86	125	+7.0	+2.7	+0.6	-2.3	.420	-20.5			11	17	17.4	2	0	38	380.5	827.5
							R1635 = 75 Leonis																														
							1635 is double: ** 5.8 6.6 0.044" 0.0																														
							1635 has been reported as non-instantaneous (OCc 763). Observations are highly desired																														
26	Jun	21	3	42	40.3	D	1637 K0		5.9	5.4	42+	80		15	264	38S	166	102	144	+6.9	+2.8	+0.1	-2.7	.359	-44.1			11	18	55.0	1	39	1	382.4	926.1
							R1637 = 76 Leonis																														
26	Jun	23	4	23	11.0	d	1845SG8		6.5	5.9s	62+	104		18	248	49S	153	94	131	+6.0	+5.4	+0.9	-2.6	.343	-34.5			12	51	22.9	-10	20	18	392.9	793.0
							1845 is triple: AB 6.6 9.7 28.8" 296.3, dT = -68sec : AC 6.6 12.5 142" 211.8, dT = +211sec																														

Occultation prediction for Varney Observatory
E. Longitude - 80 30 0.0, Latitude 26 0 0.0, Alt. 2m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon Alt	Sun Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	dur sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
							1845 = NSV 5994, 6.49, range 0.07, V																											
26	Jun	25	1	8	57	m	158499	F2	7.7	7.5		79+	126	-11	44	173	21N	36	43	18	+5.0	+6.8	+9.9	+9.9	.000	90.0		14	20	50.3	-19	19	56	397.4	612.8
26	Jun	25	4	8	57	m	158538	wK1	7.3	6.8		80+	127		31	223	9N	23	342	5	+4.3	+7.0	+9.9	+9.9	.000	90.0		14	24	0.4	-19	48	3	398.9	638.9
							158538 is double: AB 7.4 11.6 40" 286.2																											
							Distance of 158538 to Terminator = 18.1"; to 3km sunlit peak = 3.4"																											
26	Jun	25	4	59	4.7	d	158556	WA2	6.8			80+	127		23	232	31N	45	356	27	+4.2	+7.0	+1.4	+1.8	.155	64.1		14	25	27.7	-19	57	57	399.9	688.9
							158556 is double: BA 7.2 6.6 35" 114.8, dT = +78sec																											
26	Jun	25	5	0	12.7	d	2066	SA1	6.6	6.6		80+	127		22	232	31N	46	357	28	+4.1	+7.0	+1.4	+1.7	.159	63.4		14	25	29.9	-19	58	12	399.9	690.3
							2066 is quadruple: **Aa,Ab 6.8 7.7 0.018" 329.0, dT = +0.03sec : BC 7.16 8.37 1.21" 89.4, dT = +6sec : AB 6.6 7.2 35" 294.8, dT = -78sec																											
							2066 has been reported as non-instantaneous (OCc 204). Observations are highly desired																											
26	Jun	26	3	54	25.8	D	2174	pB8	6.5	6.5		87+	138		35	207	57S	132	106	117	+3.3	+7.3	+2.4	-2.0	.279	-22.4		15	13	17.4	-24	0	30	400.8	585.9
							2174 is triple: ** 7.1 7.1 0.030" 0.0 : AB 6.4 12.5 8.2" 45.0, dT = +1.3sec																											
							2174 has been reported as non-instantaneous (OCc1471). Observations are highly desired																											
26	Jun	26	23	19	27.1	D	2287	SB1	2.9	3.0v		92+	147	11	15	130	83S	100	151	89	+3.2	+7.1	+1.1	+0.6	.390	15.5		15	58	51.1	-26	6	51	403.9	793.1
							R2287 = pi Scorpii																											
							2287 is triple: Aa,Ab 5.1 13.4 2.0" 244.0, dT = -4sec : AB 2.9 11.9 50" 128.1, dT = +114sec																											
							2287 is a close double. Observations are highly desired																											
							2287 = pi Sco, 2.88 to 2.91, V, Type ELL, Period 1.570103 days, Phase 76%																											
26	Jun	27	0	35	3.0	R	2287	SB1	2.9	3.0v		92+	148	-4	27	143	-51N	312	349	300	+3.0	+7.2	+1.1	-0.7	.338	164.2		15	58	51.1	-26	6	51	402.7	685.5
							R2287 = pi Scorpii																											
							2287 is triple: Aa,Ab 5.1 13.4 2.0" 244.0, dT = -2.2sec : AB 2.9 11.9 50" 128.1, dT = +149sec																											
							2287 is a close double. Observations are highly desired																											
							2287 = pi Sco, 2.88 to 2.91, V, Type ELL, Period 1.570103 days, Phase 76%																											
26	Jun	27	2	42	25.8	d	2297	kF7	7.0	6.7		93+	148		37	173	51S	131	137	119	+2.5	+7.4	+2.2	-1.2	.276	-20.0		16	3	16.1	-26	43	2	401.9	573.4
26	Jul	1	7	20	23	m	2879	kA3	6.7	6.6		98-	165		38	195	32N	333	318	342	-3.3	+4.8	+9.9	+9.9	.000	90.0		19	42	22.6	-24	51	34	399.3	608.4
							Distance of 2879 to Terminator = 8.5"; to 3km sunlit peak = 1.0"																											
26	Jul	3	3	57	59.5	R	3113	cB5	5.4	5.5V		91-	144		17	121	41S	206	261	223	-4.5	+2.4	+1.4	+2.9	.287	-137.5		21	17	57.3	-17	59	7	396.6	750.1
							R3113 = 30 Capricorni																											
							3113 is double: ** 6.1 6.1 0.10" 87.0, dT = +0.17sec																											
							3113 has been reported as non-instantaneous (OCc1602). Observations are highly desired																											
							3113 = HD 202671, 5.40, , Type ACV, Period 1.9917 days, Phase 99%																											
26	Jul	4	9	3	23.8	R	3253	kB5	5.4	5.5V		83-	131		52	188	51N	288	281	307	-6.3	+0.5	+5.0	-1.7	.167	119.1		22	10	37.5	-11	33	54	389.4	650.7
							R3253 = 38 Aquarii																											
							3253 = HD 210424, 5.44, , Type ACV, Period 3.9613 days, Phase 44%																											
26	Jul	6	10	11	28	m	128354	F8	8.0	7.7		65-	107	-6	65	181	21N	315	314	337	-7.3	-2.5	+9.9	+9.9	.000	90.0		23	44	18.2	0	42	44	379.8	674.6
26	Jul	8	8	30	54.8	r	194	cF5	8.2			44-	83		44	98	64S	222	288	243	-6.3	-4.7	+0.7	+2.1	.453	-170.0		1	19	42.8	12	8	45	371.4	828.4
							194 is double: AB 8.67 9.25 0.11" 323.2, dT = +0.04sec																											
							194 is a close double. Observations are highly desired																											
26	Jul	8	10	10	30.8	R	197	cK0	7.0	6.5		43-	82	-6	65	118	65S	224	279	245	-6.5	-5.0	+1.3	+2.1	.406	-174.2		1	21	58.3	12	36	15	369.6	732.0
26	Jul	9	6	40	31.0	R	317	F5	6.4	6.2		33-	71		11	76	67S	229	295	248	-5.4	-5.4	-0.2	+1.6	.588	-167.5		2	9	23.1	17	13	27	369.9	1080.3
							R317 = 20 H1. Arietis																											
26	Jul	10	8	29	48.9	r	75775	SG5	8.5	8.1v		22-	56		24	76	59S	227	297	242	-4.1	-6.0	-0.1	+1.7	.549	-163.1		3	11	13.8	22	24	57	363.5	1012.1
							75775 is triple: AC 8.6 13.3 24.1" 301.1, dT = -12sec : AB 8.6 10.6 33" 321.1, dT = +5sec																											
							75775 = BD+21 418, 8.49 to 8.54, V, Type WTTS																											
26	Jul	10	9	9	3.8	r	75790	G0	8.8	8.5		22-	56		33	78	54N	294	7	309	-4.1	-6.1	+1.6	+0.0	.336	128.4		3	12	24.7	22	52	50	362.6	951.4
26	Jul	10	9	27	49.8	r	75796	K0	9.0	8.5		22-	56		37	80	86S	254	328	269	-4.1	-6.1	+0.7	+1.3	.514	168.2		3	13	0.1	22	46	14	362.1	922.2
26	Jul	10	10	8	15.2	R	470	WK0	6.8	6.2		22-	55	-7	46	83	90S	258	334	273	-4.1	-6.2	+1.2	+1.2	.472	163.4		3	14	17.2	22	57	14	361.3	863.8
							470 is double: AB 6.9 10.4 42" 33.3, dT = +63sec																											

Occultation prediction for Varney Observatory
E. Longitude - 80 30 0.0, Latitude 26 0 0.0, Alt. 2m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon	Sun Alt	Moon Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	Jul	11	9	17	0	m	76530	K3	7.8	7.0		13-	42	22	70	15N	340	51	350	-2.4	-6.2	+9.9	+9.9	.000	90.0		4	16	41.6	26	21	29	359.9	1035.3
26	Jul	12	8	51	10.4	r	77125	M0	9.1	8.1		6-	28	5	62	75S	259	322	263	-0.5	-5.7	-0.3	+0.9	.673	179.9		5	21	38.5	27	25	55	359.4	1173.7
26	Jul	16	19	35	41.0	d	1466	cB9	5.3	5.3		8+	33	60	76	172	90S	110	117	92	+6.1	-0.1	+2.4	-0.9	.378	19.5		9	58	13.4	12	26	41	363.1	706.7
R1466 = nu Leonis																																			
1466 is double: ** 6.0 6.0 0.050"																																			
1466 has been reported as non-instantaneous (OCc1407). Observations are highly desired																																			
26	Jul	24	2	31	2.6	d	183789	kA2	7.8	7.7		74+	119	34	204	52N	61	37	49	+3.2	+7.5	+2.9	+0.7	.216	43.1		15	47	23.3	-25	52	4	400.7	575.3
26	Jul	24	2	50	41.2	d	2256	PA1	7.0	6.9		74+	119	32	208	75N	85	56	72	+3.1	+7.5	+2.6	-0.4	.287	17.9		15	47	56.5	-25	59	13	400.9	586.0
2256 is double: ** 7.7 7.7 0.10" 90.0, dT = +0.35sec																																			
2256 has been reported as non-instantaneous (OCc1482). Observations are highly desired																																			
26	Jul	24	4	54	36.8	d	2261	K3	6.6	5.8		75+	120	14	231	50S	139	88	127	+2.7	+7.5	+2.1	-2.8	.258	-45.6		15	50	34.9	-26	17	23	402.8	721.3
26	Jul	25	4	5	40	d	2397	K1	6.5	5.9		82+	130	28	213	12N	15	341	7	+1.7	+7.4	-0.4	+6.5	.079	75.4	.01	16	41	37.6	-27	48	35	402.5	611.1
26	Jul	28	2	16	34.8	d	2824	K4	7.3	6.5		98+	163	30	147	58N	36	69	43	-1.3	+5.3	+2.6	+2.7	.228	43.4		19	21	44.2	-26	9	59	399.9	610.0
26	Jul	31	9	31	40.0	r	164779	KG5	7.2	6.8		97-	160	34	232	56N	285	239	304	-5.5	+0.6	+2.9	-2.0	.234	125.3		21	58	24.3	-12	39	53	390.7	765.7
26	Aug	2	7	19	42.7	R	3459	K0	6.4	5.8		87-	137	60	155	40S	195	218	217	-5.8	-2.1	+0.7	+2.8	.315	-149.2		23	29	27.0	-	1	47	28	382.3	679.0
R3459 = 11 Piscium																																			
26	Aug	2	9	57	27.2	R	3467	kK1	6.4	5.8		86-	136	-11	53	228	56S	210	169	232	-6.3	-2.5	+1.1	+1.8	.366	-163.1		23	31	57.6	-	1	5	9	382.3	708.3
R3467 = 13 Piscium																																			
26	Aug	3	6	44	36.8	r	30	SA0	7.1	7.1		79-	125	53	120	18S	173	225	195	-5.7	-3.4	-0.6	+3.9	.229	-124.8		0	15	57.3	4	15	4	379.1	736.8
30 is triple: AB 7.0 14.1 0.8" 246.0, dT = -1sec : AC 7.0 12.2 5.0" 347.2, dT = +22sec																																			
30 is a close double. Observations are highly desired																																			
26	Aug	4	9	28	59	d	163	pF2	7.3	7.1		68-	112	76	170	7N	329	338	350	-5.9	-4.9	+9.9	+9.9	.068	79.7		1	7	4.0	11	33	8	373.7	681.9
163 is double: AB 7.3 10.5 8.3" 201.5, dT = -74sec																																			
163 is a close double. Observations are highly desired																																			
26	Aug	4	9	36	57	Gr	163	pF2	7.3	7.1		68-	112	75	** GRAZE: CA 17.3N; Dist. 29km in az. 318deg. [Lat = 26.35+0.81(E.Long+80.50)]																						
26	Aug	4	9	43	42	r	163	pF2	7.3	7.1		68-	112	76	185	28N	309	304	330	-5.9	-5.0	+9.9	+9.9	.067	100.4		1	7	4.0	11	33	8	373.7	678.0
163 is double: AB 7.3 10.5 8.3" 201.5, dT = +36sec																																			
163 is a close double. Observations are highly desired																																			
26	Aug	5	9	47	57.2	r	92732	wF5	7.8	7.5		58-	99	78	132	78N	261	305	280	-5.3	-5.9	+2.7	+0.7	.339	151.7		1	58	47.5	17	1	33	369.7	690.8
92732 is double: AB 7.8 17.9 79" 249.5, dT = -229sec																																			
26	Aug	7	5	28	53.9	r	542	pB8	5.8	5.8		37-	74	3	64	76S	245	307	257	-3.1	-6.1	-0.5	+1.2	.653	-174.6		3	45	54.5	24	33	16	369.1	1174.3
R542 = Asterope = 21 Tauri																																			
542 is triple: AB 5.8 6.4 150" 130.1, dT = +95sec : AD 5.8 12.7 170" 74.1, dT = +257sec																																			
26	Aug	7	5	30	16.1	r	543	pA0	6.4	6.4		37-	74	3	64	68S	237	300	249	-3.1	-6.1	-0.5	+1.3	.638	-166.8		3	46	2.9	24	31	40	369.0	1172.2
R543 = 22 Tauri																																			
543 is triple: BC 6.4 15.1 52" 267.9, dT = -69sec : BA 6.4 5.8 150" 310.1, dT = -67sec																																			
26	Aug	7	5	45	25.9	r	548	pB9	6.8	6.8		36-	74	6	65	49S	218	282	230	-3.0	-6.1	-0.7	+1.7	.547	-148.5		3	46	59.4	24	31	12	368.7	1148.3
548 is quadruple: Aa,Ab 6.8 6.9 0.011" 249.1, dT = -0.02sec : AB 6.8 14.8 102" 299.3, dT = -28sec : AC 6.8 13.0 123" 190.1, dT = -198sec																																			
548 is a close double. Observations are highly desired																																			
26	Aug	7	6	18	45.9	R	555	K5	6.4	5.6s		36-	74	13	68	50N	299	6	311	-3.0	-6.2	+0.6	+0.0	.392	129.7		3	48	6.5	24	59	18	367.8	1094.6
555 = NSV 1316, 6.44, range 0.02, 0V, Type VAR, Period 1.48987 days																																			
26	Aug	7	7	47	28.9	R	571	pA2	6.8	6.7		36-	73	31	75	85N	265	339	277	-3.0	-6.4	+0.7	+1.0	.507	161.3		3	51	25.3	25	9	47	365.8	949.0
571 is double: ** 7.1 9.1																																			
26	Aug	7	8	1	47.5	r	76281	K0	8.0	7.4		35-	73	34	76	57N	292	7	304	-3.0	-6.4	+1.5	+0.0	.360	133.6		3	52	0.9	25	20	30	365.4	926.8
26	Aug	7	8	7	1.2	R	574	pG0	6.8	6.5		35-	73	35	76	80S	250	325	262	-3.0	-6.4	+0.6	+1.4	.517	176.3		3	52	11.4	25	9	47	365.3	918.0
26	Aug	7	9	12	11.4	r	76313	K0	8.3	7.8		35-	73	49	80	31N	319	39	331	-3.0	-6.5	+5.0	-4.1	.130	106.2		3	54	40.6	25	41	9	364.0	822.6
26	Aug	8	7	51	46.0	R	76841	cK1	7.3	6.7		25-	60	20	69	66S	243	313	249	-1.6	-6.1	-0.1	+1.4	.572	-168.0		4	55	34.6	27	12	9	364.0	1032.6
76841 is double: ** 7.6 10.1 0.08" 82.0, dT = +0.14sec																																			

Occultation prediction for Varney Observatory
E. Longitude - 80 30 0.0, Latitude 26 0 0.0, Alt. 2m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon Alt	Sun Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	dur sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
							76841 has been reported as non-instantaneous (OCc 753). Observations are highly desired																												
26	Aug	8	9	28	44.9	R	746WB7		7.0	6.9		24-	59	40	75	30S	207	285	213	-1.6	-6.2	-0.3	+3.0	.339	-133.0			4	59	53.7	27	19	32	361.9	873.1
							746 is double: AB 7.0 8.7 20.4" 206.1, dT = -60sec																												
26	Aug	9	7	42	32.3	R	909SB9		6.0	5.9s		15-	46	5	62	90S	274	338	274	-0.1	-5.4	-0.2	+0.6	.635	169.0			6	1	0.5	27	34	21	363.6	1141.1
							909 is triple: Aa,Ab 6.1 9.2 194.0, dT = 0.00sec : AB 6.1 12.4 9.5" 242.4, dT = -13sec																												
							909 is a close double. Observations are highly desired																												
							909 = NSV 16751, 6.04, range 0.01, 2V, Type VAR, Period 9.26012 days																												
26	Aug	9	8	34	55.6	r	77894SF2		8.8	8.4		15-	46	16	66	90S	275	343	275	+0.0	-5.5	+0.2	+0.7	.585	168.1			6	3	26.6	27	38	33	362.4	1050.0
							77894 is triple: AB 8.9 9.6 11.5" 263.5, dT = -19sec : AC 8.9 11.1 25.6" 189.6, dT = -4sec																												
26	Aug	9	8	47	14.8	R	77909wA0		7.6	7.6		15-	45	18	67	71S	256	326	256	+0.0	-5.5	+0.0	+1.1	.582	-173.5			6	4	1.0	27	34	14	362.1	1028.5
							77909 is double: AB 7.6 10.8 21.6" 132.5, dT = +21sec																												
26	Aug	9	9	15	39	Gr	77957 B9		8.7	8.6		15-	45	25	**	GRAZE: CA 12.1N; Dist. 55km in az. 328deg. [Lat = 26.58+0.55(E.Long+80.50)]																			
26	Aug	9	9	22	8.0	r	77957 B9		8.7	8.6		15-	45	25	70	26N	339	52	339	+0.0	-5.5	+3.7	-5.2	.132	103.8			6	6	15.6	27	56	5	361.4	969.3
26	Aug	9	10	14	24.4	r	77987 B9		8.5	8.5V		14-	45	-9	36	73	68N	297	14	297	+0.0	-5.6	+1.4	-0.2	.419	146.1			6	7	39.9	27	51	36	360.3	881.7
							77987 = HD 41639, 8.44, , Type VAR																												
26	Aug	10	8	43	20.8	R	1085SG8		7.1	6.7		7-	32	4	63	57S	250	313	244	+1.6	-4.4	-0.5	+1.2	.597	-158.8			7	9	35.4	25	43	43	362.9	1126.4
							1085 is triple: AB 7.2 13.0 34" 68.2, dT = +56sec : AC 7.2 7.8 125" 78.3, dT = +207sec																												
26	Aug	10	8	46	46.4	r	79124WF0		7.8	7.6		7-	32	5	64	59S	252	315	246	+1.6	-4.4	-0.4	+1.2	.600	-160.6			7	9	44.2	25	44	5	362.8	1120.3
							79124 is double: CA 7.8 7.2 125" 258.3, dT = -206sec																												
26	Aug	10	9	10	31	GrX	98986		9.1	8.6		7-	31	10	**	GRAZE: CA 11.5N; Dist. 14km in az. 151deg. [Lat = 25.86+0.49(E.Long+80.50)]																			
26	Aug	10	9	32	21.5	r	79168 K2		8.7	8.1		7-	31	13	68	1S	194	261	188	+1.7	-4.4	-3.0	+7.5	.127	-102.3			7	12	41.4	25	32	39	361.8	1041.2
							Distance of 79168 to Terminator = 16.2"; to 3km sunlit peak = 0.0"																												
26	Aug	10	9	45	35.3	r	79159 A5		9.3	9.1		7-	31	16	69	80S	274	342	267	+1.7	-4.4	+0.2	+0.7	.580	178.1			7	12	19.6	25	49	25	361.5	1016.9
26	Aug	10	9	56	42.7	R	1094 A0		7.1	7.1		7-	31	18	70	65S	258	328	252	+1.7	-4.4	+0.1	+1.1	.554	-166.6			7	12	49.4	25	44	55	361.3	997.5
							R1094 = 49 Geminorum																												
26	Aug	14	19	51	38.8	d	1635cM0		5.2	4.4		6+	28	54	64	206	57S	150	127	128	+5.9	+2.8	+1.2	-2.3	.381	-16.1			11	17	17.4	2	0	38	370.4	711.8
							R1635 = 75 Leonis																												
							1635 is double: ** 5.8 6.6 0.044" 0.0																												
							1635 has been reported as non-instantaneous (OCc 763). Observations are highly desired																												
26	Aug	16	1	37	9.5	d	1759pA*		6.6	6.4v		13+	43	2	262	76N	104	40	82	+5.7	+4.8	+0.2	-1.2	.510	12.4			12	14	15.5	- 5	43	0	382.6	969.7
							1759 is triple: AB 6.6 13.5 10.6" 0.9, dT = -5sec : AC 6.6 11.9 86" 185.9, dT = +24sec																												
							1759 = FG Vir, 6.53 to 6.58, V, Type DSCTC, Period 0.079 days																												
26	Aug	20	1	5	54.7	d	183485 *		7.5	6.9v		49+	89	30	214	63S	132	98	118	+3.7	+7.6	+2.4	-2.1	.278	-27.6			15	27	48.3	-25	10	10	398.2	606.4
							183485 = HM Lib, 7.42 to 7.63, V, Type PVTELIII																												
26	Aug	23	0	43	10.4	D	2617cK0		4.6	4.1		76+	122	35	168	47N	43	55	43	+0.4	+6.6	+3.1	+2.3	.205	44.2			18	8	5.0	-28	27	26	400.7	556.8
							2617 is double: AB 5.1 5.9 0.26" 12.0, dT = +1.1sec																												
							2617 is a close double. Observations are highly desired																												
26	Aug	23	1	10	7.9	d	186346 F5		7.6	7.4		77+	122	35	175	56S	120	125	120	+0.3	+6.6	+3.1	-1.1	.232	-35.4			18	8	52.1	-28	45	19	400.7	552.1
26	Aug	23	2	2	31.5	r	2617cK0		4.6	4.1		77+	122	35	190	-51N	304	294	305	+0.1	+6.5	+3.5	-1.8	.208	135.9			18	8	5.0	-28	27	26	400.7	562.2
							2617 is double: AB 5.1 5.9 0.26" 12.0, dT = -0.47sec																												
							2617 is a close double. Observations are highly desired																												
26	Aug	23	4	9	52.6	d	186461cA2		7.4	7.2v		77+	123	24	218	41N	36	357	37	-0.4	+6.4	+0.6	+1.2	.279	36.5			18	12	37.6	-28	14	11	401.7	675.9
							186461 is double: ** 8.2 8.2 0.050"																												
							186461 has been reported as non-instantaneous (OCc1536). Observations are highly desired																												
							186461 = V4385 Sgr, 7.42 to 7.46, Hp, Type ELL:, Period 2.62462 days, Phase 27%																												
26	Aug	24	5	3	50.7	d	187716SG6		7.2	6.6		85+	134	24	220	72S	97	57	103	-1.8	+5.4	+2.2	-1.1	.307	-32.6			19	8	8.1	-26	50	5	400.1	708.2
							187716 is triple: **Aa,Ab 7.8 7.8 0.050" 160.0, dT = +0.07sec : AB 7.3 8.6 45" 123.9, dT = +132sec																												
							187716 has been reported as non-instantaneous (OCc 769). Observations are highly desired																												

Occultation prediction for Varney Observatory
E. Longitude - 80 30 0.0, Latitude 26 0 0.0, Alt. 2m; Telescope dia 15cm; dMag 0.0

	day	Time	P	Star	Sp	Mag	Mag	%	Elon	Sun	Moon	CA	PA	VA	AA	Libration		A	B	RV	Cct	durn	R.A. (J2000)			Dec			Mdist	SV
y	m d	h m s		No	D	v	r	V	ill	Alt	Alt Az	o	o	o	o	L	B	m/o	m/o	"/s	o	sec	h	m	s	o	m	s	Mm	m/s
26	Aug 26	6 21 40.1	d	3049	B9	7.3	7.3		96+	157	33 221	52N	31	352	45	-3.9	+2.7	+0.6	+1.4	.354	22.7		20	52	16.1	-19	38	37	393.7	732.4
26	Aug 27	6 27 58.9	d	164579	SF3	7.2	7.0		99+	169	42 215	77N	53	21	71	-4.6	+1.3	+1.5	+0.8	.374	-3.7		21	41	28.1	-14	50	29	389.4	708.4
	164579 is triple: AB 7.2 12.0 17.8" 104.2, dT = +30sec : AC 7.2 12.6 119" 257.0, dT = -290sec																													
	Distance of 164579 to Terminator = 17.1"; to 3km sunlit peak = 6.6"																													
26	Aug 27	7 57 28.2	D	3177	cA9	5.9	5.7		99+	169	28 235	55N	31	341	49	-4.9	+1.0	+0.4	+1.3	.396	20.9		21	43	4.4	-14	23	59	390.5	803.3
	R3177 = 44 Capricorni																													
	3177 is double: ** 6.8 6.8 0.10" 90.0, dT = +0.13sec																													
	3177 has been reported as non-instantaneous (OCc1608). Observations are highly desired																													
	Distance of 3177 to Terminator = 11.0"; to 3km sunlit peak = 2.6"																													
26	Aug 28	2 46 54.5	r	X242703k		11.7			89E	179	38 129	-86N	220	266	240	-4.2	+0.2	+1.4	+2.2	.364	-165.5		22	23	20.8	-10	29	40	386.7	705.1
26	Aug 28	2 52 17.5	d	X182637k		11.1	10.9		82E	180	39 129	92U	61	106	81	-4.3	+0.2	+1.8	+1.7	.373	-6.5		22	25	3.2	-10	9	15	386.6	703.7
26	Aug 28	2 53 50.5	d	X182643k		11.5	11.2		80E	180	39 130	81U	92	137	112	-4.3	+0.2	+2.4	+0.8	.295	-38.0		22	25	12.9	-10	17	6	386.6	702.4
26	Aug 28	2 57 42.0	r	X242709k		11.5			75E	180	40 131	-85N	220	263	240	-4.3	+0.2	+1.5	+2.2	.360	-165.6		22	23	34.8	-10	27	28	386.5	697.4
26	Aug 28	3 0 29.3	d	X182649k		11.2	10.9		70E	180	40 131	74U	98	141	118	-4.3	+0.2	+2.6	+0.5	.268	-44.0		22	25	20.6	-10	17	8	386.5	697.6
26	Aug 28	3 0 37.1	r	X182578k		11.1	10.4		70E	180	40 132	-79S	203	246	223	-4.3	+0.2	+1.2	+2.7	.318	-148.9		22	23	54.0	-10	29	12	386.5	695.5
26	Aug 28	3 5 1.5	d	X242722		11.5			64E	180	41 132	51N	354	36	14	-4.3	+0.2	+0.0	+4.2	.188	59.6		22	24	17.5	-	9	58	386.4	694.3
26	Aug 28	3 6 39.6	d	X182655k		11.1	10.8		61E	180	41 133	68U	104	146	123	-4.3	+0.2	+2.9	+0.2	.238	-50.0		22	25	27.1	-10	17	16	386.4	693.4
26	Aug 28	3 12 24.1	D	165050	K0	9.8	9.3		53E	180	42 134	58N	359	40	19	-4.3	+0.2	+0.3	+3.8	.216	54.1		22	24	31.7	-	9	56	386.3	689.8
26	Aug 28	3 20 31.2	d	X182644k		10.9	10.4		41E	180	43 136	92U	33	72	52	-4.4	+0.1	+1.4	+2.3	.344	19.9		22	25	16.4	-	9	57	386.2	685.5
26	Aug 28	3 24 43.7	R	X 51850k		10.6	10.4		35E	180	44 138	-39N	258	296	278	-4.4	+0.1	+2.4	+1.2	.328	154.5		22	23	46.0	-10	12	53	386.1	681.2
26	Aug 28	3 33 52.7	r	X182632k		11.7	11.2		24E	180	45 140	75U	182	218	202	-4.4	+0.1	+0.4	+3.5	.233	-130.1		22	24	55.9	-10	23	4	386.0	677.1
26	Aug 28	3 35 50.1	D	X 51928k		10.2	9.9		22E	180	45 140	45U	111	147	131	-4.4	+0.1	+3.9	-0.6	.183	-59.7		22	25	59.1	-10	12	45	386.0	677.4
26	Aug 28	3 40 29.3	R	3286	K0	7.2	6.4		17E	180	46 142	-42N	248	282	268	-4.4	+0.1	+2.2	+1.4	.345	163.3		22	24	7.6	-10	11	52	385.9	673.9
26	Aug 28	3 48 44.4	R	X 51874		9.8	9.2		11E	180	47 145	84U	220	252	240	-4.5	+0.1	+1.6	+2.1	.353	-169.6		22	24	34.2	-10	16	1	385.8	670.8
26	Aug 28	3 49 56.8	r	X242722		11.5			10E	180	48 145	7N	290	322	310	-4.5	+0.1	+4.1	-0.7	.182	120.5		22	24	17.5	-	9	58	36	385.7	670.8
26	Aug 28	3 55 49.4	D	165076kG5		9.6	9.0		7E	180	48 146	58U	80	111	100	-4.5	+0.1	+2.7	+1.0	.311	-29.8		22	26	25.0	-10	0	0	385.7	670.0
26	Aug 28	3 57 42.5	d	X182702k		11.7	11.5		6E	180	48 147	54U	89	119	108	-4.5	+0.1	+3.0	+0.6	.281	-38.2		22	26	28.0	-10	1	49	385.7	669.4
26	Aug 28	3 58 37.8	r	X182643k		11.5	11.2		6E	180	49 148	57U	192	221	212	-4.5	+0.1	+0.8	+2.9	.281	-141.9		22	25	12.9	-10	17	6	385.7	667.7
26	Aug 28	3 58 45.3	r	X242731k		11.2			6E	180	49 148	77U	224	253	244	-4.5	+0.1	+1.7	+1.9	.355	-173.8		22	24	42.5	-10	13	5	385.7	667.5
26	Aug 28	3 59 38.3	r	X182655k		11.1	10.8		5E	180	49 148	48U	180	209	200	-4.5	+0.1	+0.3	+3.5	.229	-129.9		22	25	27.1	-10	17	16	385.7	667.6
26	Aug 28	3 59 44.2	r	X182649k		11.2	10.9		5E	180	49 148	52U	186	215	206	-4.5	+0.1	+0.6	+3.2	.256	-135.9		22	25	20.6	-10	17	8	385.7	667.4
26	Aug 28	4 4 32.3	R	165050	K0	9.8	9.3		4E	180	50 150	100U	284	311	304	-4.5	+0.1	+3.8	-0.3	.209	126.0		22	24	31.7	-	9	56	53	385.6	666.2
26	Aug 28	4 5 54.1	d	X242756k		11.4			4E	180	50 149	90U	32	59	52	-4.5	+0.1	+1.4	+2.3	.339	18.1		22	26	7.4	-	9	47	8	385.6	667.1
26	Aug 28	4 11 14.4	d	X242766k		11.8			3E	180	50 151	70U	73	99	93	-4.5	+0.0	+2.5	+1.1	.327	-23.5		22	26	40.4	-	9	54	33	385.5	665.8
26	Aug 28	4 14 24.7	D	X182712k		10.8	10.3		3E	180	50 152	70U	77	102	97	-4.5	+0.0	+2.7	+1.0	.315	-27.8		22	26	45.0	-	9	54	55	385.5	665.1
26	Aug 28	4 16 32.3	r	X182637k		11.1	10.9		4E	180	51 154	63U	223	247	243	-4.6	+0.0	+1.7	+1.9	.352	-173.3		22	25	3.2	-10	9	15	385.5	663.3
26	Aug 28	4 18 9.8	R	X 51928k		10.2	9.9		4E	180	51 154	32U	169	193	189	-4.6	+0.0	-0.6	+4.3	.179	-120.3		22	25	59.1	-10	12	45	385.5	663.4
26	Aug 28	4 26 40.3	d	X 51935		11.2	11.0		6E	180	52 157	103U	19	41	39	-4.6	+0.0	+1.0	+2.6	.309	29.3		22	26	18.0	-	9	40	53	385.4	663.0
26	Aug 28	4 27 4.8	D	165087	G5	9.0	8.6		6E	180	52 157	68U	94	116	114	-4.6	+0.0	+3.5	+0.2	.248	-45.6		22	27	0.2	-	9	56	38	385.4	662.8
26	Aug 28	4 42 56.4	r	X182644k		10.9	10.4		15E	180	53 163	71U	248	263	268	-4.6	+0.0	+2.5	+1.1	.333	160.4		22	25	16.4	-	9	57	32	385.2	660.7
26	Aug 28	4 55 39	m	X182667		11.0	10.5		28E	180	54 168	33N	318	328	338	-4.7	-0.1	+9.9	+9.9	.000	90.0		22	25	38.6	-	9	35	17	385.1	661.3
26	Aug 28	5 0 49.4	d	X242782		11.6			35E	180	54 170	-85S	82	91	102	-4.7	-0.1	+3.0	+0.5	.292	-34.6		22	27	36.1	-	9	45	16	385.1	662.0
26	Aug 28	5 4 42.8	r	X182702k		11.7	11.5		40E	180	54 172	55U	189	196	209	-4.7	-0.1	+0.5	+2.9	.277	-141.5		22	26	28.0	-10	1	49	385.1	661.7
26	Aug 28	5 10 14.0	R	165076kG5		9.6	9.0		48E	180	54 174	59U	197	202	217	-4.7	-0.1	+0.9	+2.5	.306	-149.8		22	26	25.0	-10	0	0	385.1	662.3
26	Aug 28	5 26 59.0	R	165087	G5	9.0	8.6		73E	180	54 181	80U	181	180	201	-4.8	-0.1	+0.1	+3.3	.248	-134.1		22	27	0.2	-	9	56	38	385.0	665.5
26	Aug 28	5 29 41.4	r	X242756k		11.4			77E	180	54 183	88U	244	242	264	-4.8	-0.1	+2.4	+1.0	.340	162.4		22	26	7.4	-	9	47	8	385.0	666.1
26	Aug 28	5 30 27.6	r	X242766k		11.8			78E	180	54 183	78U	203	200	223	-4.8	-0.1	+1.0	+2.3	.326	-156.0		22	26	40.4	-	9	54	33	385.0	666.3
26	Aug 28	5 30 31.4	D	146104kG5		10.3	10.0		78E	180	55 182	-90N	64	62	84	-4.8	-0.1	+2.3	+1.0	.342	-16.9		22	28	1.5	-	9	33	21	385.0	666.6

Occultation prediction for Varney Observatory
E. Longitude - 80 30 0.0, Latitude 26 0 0.0, Alt. 2m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon Alt	Sun Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	Aug	28	5	30	36.2	R	X182712k		10.8	10.3		78E	180	54	183	79U	198	196	219	-4.8	-0.1	+0.9	+2.4	.314	-151.8		22	26	45.0	- 9	54	55	385.0	666.3
26	Aug	28	5	30	39.2	d	X242774		11.7			78E	180	55	182	-37N	11	9	31	-4.8	-0.1	+0.6	+2.7	.290	35.8		22	27	17.2	- 9	24	58	385.0	666.6
26	Aug	28	5	31	58.6	d	X182760		11.3	10.5		80E	180	55	183	-85S	69	67	89	-4.8	-0.1	+2.5	+0.8	.330	-22.4		22	28	5.4	- 9	34	21	385.0	666.9
26	Aug	29	7	1	5.5	R	3416cA3		5.6	5.5		99-	167	58	205	30S	181	159	203	-5.3	-1.9	+0.0	+3.3	.268	-135.7		23	15	34.3	- 3	29	47	381.0	691.8
							3416 is double: ** 6.4 6.4 0.050"																											
							3416 has been reported as non-instantaneous (OCc1638). Observations are highly desired																											
							Distance of 3416 to Terminator = 6.3"; to 3km sunlit peak = 0.0"																											
26	Aug	30	5	43	38.9	r	128524	K2	7.6	6.9		95-	155	62	143	70N	261	294	283	-4.9	-3.1	+2.7	+0.9	.315	145.1		0	0	23.5	2	40	32	377.5	704.1
26	Aug	30	9	50	45.9	r	6	G5	6.9	6.3		95-	154	42	250	76S	227	169	249	-5.7	-3.7	+1.2	+1.0	.415	-174.1		0	5	22.2	3	36	22	378.3	764.9
26	Sep	1	4	37	58.6	r	244	K0	6.7	6.2		82-	130	37	91	19S	175	243	195	-3.8	-5.2	-1.0	+3.8	.244	-120.2		1	39	15.4	14	17	8	373.4	879.0
							R244 = 104 Piscium																											
26	Sep	2	5	56	35.4	r	93005	K0	7.9	7.3		72-	117	45	87	86S	246	319	263	-3.1	-6.1	+1.0	+1.5	.467	171.7		2	34	23.5	19	59	5	370.1	847.0
26	Sep	2	8	5	11.8	R	387cG5		6.9	6.4S		72-	116	73	104	77N	263	332	280	-3.4	-6.3	+2.5	+0.7	.355	153.7		2	37	34.4	20	34	30	368.3	707.3
							387 is double: ** 7.7 7.7 0.10" 90.0, dT = +0.28sec																											
							387 has been reported as non-instantaneous (OCc1190). Observations are highly desired																											
							387 = NSV 15555, 6.91, , Type VAR:																											
26	Sep	2	9	48	30	Gr	75509	M*	7.9	7.1v		71-	115	80	** GRAZE: CA 9.1N; Dist. 10km in az. 334deg. [Lat = 26.10+0.43(E.Long+80.50)]																		
26	Sep	2	9	52	58	r	75509	M*	7.9	7.1v		71-	115	81	242	15N	325	266	342	-3.7	-6.5	+9.9	+9.9	.040	96.3	.03	2	40	31.7	21	11	16	367.9	659.2
							75509 = AK Ari, 7.94, range 0.07, 8w, Type LB:, Period 19.3 days, Phase 22%																											
26	Sep	3	7	0	35.1	R	518SA3		6.0	s		61-	103	48	81	67N	278	356	292	-2.2	-6.5	+1.8	+0.5	.378	144.6		3	34	26.6	24	27	52	367.6	827.5
							R518 = 7 Tauri																											
							518 is triple: AB 6.60 6.86 0.79" 348.0, dT = -0.7sec : AB,C 5.9 9.9 22.5" 52.2, dT = +41sec																											
							518 is a close double. Observations are highly desired																											
							518 = NSV 1192, 5.92 to 5.96, V																											
26	Sep	3	9	10	26.1	r	76041	F0	8.2	8.0		61-	102	76	91	45S	211	293	224	-2.5	-6.7	+1.2	+3.0	.320	-146.0		3	38	35.9	24	36	6	365.9	685.0
26	Sep	3	9	37	36.6	R	76046cA0		7.1	7.1		60-	102	82	96	56S	222	302	235	-2.6	-6.7	+1.7	+2.4	.342	-155.3		3	39	6.7	24	42	10	365.8	667.4
							76046 is double: AB 7.1 45.0, dT = -29sec																											
26	Sep	3	10	31	24	M	529SA2		6.1	6.1		60-	102	-8	86	265	6N	340	257	353	-2.8	-6.8	+9.9	+9.9	.000	90.0		3	40	46.3	25	19	46	365.6	648.7
							R529 = 11 Tauri																											
							529 is triple: **Aa,Ab 6.3 8.3 : AB 6.1 10.9 74" 357.0																											
26	Sep	4	7	6	4.8	r	694SK2		8.1	7.5v		50-	90	37	74	58N	294	11	302	-1.1	-6.3	+1.6	-0.1	.365	136.8		4	36	48.2	27	7	56	366.7	890.7
							694 is quadruple: AC 5.4 7.7" 176.0, dT = +10sec : AD 5.4 19.3 12.7" 104.0, dT = +34sec : AB 8.4 16.0 130" 338.0, dT = -257sec																											
							694 is a close double. Observations are highly desired																											
							694 = V0833 Tau, 8.02 to 8.40, V, Type BY+UV, Period 1.7916 days																											
26	Sep	4	7	47	54.4	R	701SF2		6.6	6.4		49-	89	45	77	53S	225	305	233	-1.2	-6.4	+0.5	+2.2	.419	-154.2		4	38	29.5	26	56	23	365.9	826.5
							701 is triple: 6.6 9.2 3.1" 169.4, dT = -4sec : AB 7.36 7.21 4.48" 187.8, dT = -8sec																											
							701 is a close double. Observations are highly desired																											
26	Sep	4	7	47	58.6	r	X 70481p		7.3	7.2		49-	89	45	77	53S	225	305	233	-1.2	-6.4	+0.5	+2.2	.420	-154.3		4	38	29.6	26	56	26	365.9	826.4
							X 70481 is triple: 7.3 9.2 5.8" 174.9, dT = -9sec : AC 7.4 12.9 92" 203.6, dT = -203sec																											
							X 70481 is a close double. Observations are highly desired																											
26	Sep	4	10	36	42.8	r	715cK5		8.0	7.5		49-	88	-7	82	75	30N	323	64	330	-1.5	-6.6	+4.0	-5.1	.154	114.6		4	43	35.4	27	41	15	364.0	654.2
							715 is double: ** 8.8 8.8 0.10" 90.0, dT = +0.39sec																											
							715 has been reported as non-instantaneous (OCc 130). Observations are highly desired																											
26	Sep	5	8	21	5.5	r	868SA0		7.5	7.5		38-	76	39	74	41S	221	299	223	+0.0	-5.9	+0.2	+2.6	.373	-141.2		5	44	21.2	27	43	53	365.1	847.5
							868 is triple: AB 7.5 9.8 8.6" 254.1, dT = -19sec : AC 7.5 12.7 47" 40.4, dT = +127sec																											
							868 is a close double. Observations are highly desired																											
26	Sep	5	8	31	47.0	r	77495cA0		8.1	8.1		38-	76	42	74	27N	333	52	335	+0.0	-5.9	+4.1	-4.9	.139	107.2		5	44	59.0	28	11	40	364.9	831.6
							77495 is double: AB 8.0 8.0 0.20" 42.2, dT = -0.5sec																											

Occultation prediction for Varney Observatory
E. Longitude - 80 30 0.0, Latitude 26 0 0.0, Alt. 2m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon Alt	Sun Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	dur sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
							77495 is a close double. Observations are highly desired																											
26	Sep	5	10	19	49	r	77582	B3	8.4	8.3		37-	75 -11	65	78	16N	345	73	346	-0.2	-5.9	+9.9	+9.9	.068	99.9		5	48	41.3	28	19	29	363.3	697.0
26	Sep	6	8	40	10.4	r	78784	A0	8.3	8.2		27-	62	30	72	34N	333	47	329	+1.3	-4.9	+2.3	-2.9	.220	115.8		6	50	2.5	27	0	13	365.2	895.1
26	Sep	7	8	13	24.0	r	79740	cF2	8.5	8.3		17-	49	11	69	72S	266	332	256	+2.5	-3.6	+0.0	+0.9	.566	-169.3		7	50	44.7	23	47	1	367.1	1026.3
							79740 is double: ** 9.2 9.2 0.10" 143.0, dT = +0.09sec																											
							79740 has been reported as non-instantaneous (OCc 683). Observations are highly desired																											
26	Sep	7	9	30	54.6	r	79781	K2	8.8	8.2		17-	48	27	76	24S	218	289	208	+2.5	-3.6	-0.3	+4.0	.247	-119.3		7	54	14.3	23	30	14	365.5	895.2
26	Sep	7	10	36	20.3	r	79804	cG0	7.4			16-	48	-7 41	80	88S	282	358	272	+2.4	-3.6	+1.3	+0.4	.451	179.0		7	56	2.8	23	41	33	364.2	797.0
							79804 is double: AB 7.90 8.57 0.11" 108.1, dT = +0.25sec																											
							79804 is a close double. Observations are highly desired																											
26	Sep	7	10	39	14.0	R	1195	B8	6.8	6.9		16-	48	-6 42	81	75S	269	344	258	+2.4	-3.6	+1.3	+0.9	.438	-167.4		7	56	6.5	23	37	26	364.2	793.3
26	Sep	8	9	20	58.0	r	98186	kB5	8.5	8.6		9-	35	11	74	84N	295	1	280	+3.7	-2.1	+0.3	+0.1	.549	169.3		8	52	20.0	19	21	3	368.0	997.8
26	Sep	8	9	46	12.4	R	98198	K5	7.6	6.8		9-	35	17	76	77N	302	9	287	+3.7	-2.1	+0.6	-0.2	.513	163.3		8	53	20.6	19	19	20	367.5	955.5
26	Sep	8	19	29	7.1	D	Jupiter		-1.7	-1.7		7-	31	53 32	274	-36S	165	93	147	+2.4	-1.1	-0.2	-2.6	.400	-39.6		9	10	15.8	16	52	26	366.5	923.4
							Jupiter limb contacts offset by ±40.1 secs, at 19 28 27 and 19 29 47 Both contacts are against the bright limb of Jupiter																											
26	Sep	8	20	15	5.5	R	Jupiter		-1.7	-1.7		7-	31	43 22	279	63S	263	193	246	+2.4	-1.0	+0.7	-0.7	.429	-140.4		9	10	15.8	16	52	26	367.6	993.9
							Jupiter limb contacts offset by ±37.3 secs, at 20 14 28 and 20 15 43 Both contacts are against the bright limb of Jupiter																											
26	Sep	9	10	3	54.9	r	98781	**	8.3	8.1s		3-	21	7	78	69N	311	16	293	+4.7	-0.4	+0.3	-0.5	.526	158.7		9	48	56.1	13	44	39	370.4	1014.4
							98781 = NSV 18274, 8.3 to 8.35, V																											
26	Sep	17	2	14	30.2	d	2297kF7		7.0	6.7		33+	70	6	236	84S	109	52	98	+2.3	+7.4	+1.1	-1.5	.389	-19.0		16	3	16.1	-26	43	2	400.9	800.3
26	Sep	20	3	5	50.1	D	2723	K0	6.6	6.1		61+	103	22	221	84N	78	36	81	-1.4	+5.7	+1.6	-0.4	.357	-10.3		18	46	3.9	-27	29	56	401.1	706.4
26	Sep	23	2	18	37.4	d	3115	F0	7.1	6.9		86+	137	47	175	70N	50	55	66	-4.2	+2.1	+2.1	+1.5	.330	3.0		21	18	15.7	-17	27	44	390.5	625.7
							R3115 = 31 Capricorni																											
26	Sep	23	5	30	28.0	D	3126	G8	4.3	3.8v		87+	138	30	229	87S	74	28	90	-4.9	+1.7	+1.5	-0.2	.379	-21.3		21	22	14.8	-16	50	4	391.3	772.9
							R3126 = Tae = iota Capricorni																											
							3126 = iot Cap, 4.27, range 0.06, V, Type BY																											
26	Sep	24	4	37	30.3	d	3244	K0	7.3	6.7		93+	149	48	209	47N	26	359	45	-5.2	+0.3	+0.9	+1.9	.344	21.9		22	8	34.1	-11	36	49	385.6	693.8
26	Sep	24	5	52	11.8	D	3253	kB5	5.4	5.5V		93+	149	38	229	61S	98	54	117	-5.5	+0.1	+2.7	-1.4	.266	-48.8		22	10	37.5	-11	33	54	386.2	757.3
							R3253 = 38 Aquarii																											
							3253 = HD 210424, 5.44, , Type ACV, Period 3.9613 days, Phase 11%																											
26	Sep	24	7	9	50.0	d	3255	M0	7.3	6.4v		93+	150	24	244	84N	63	8	82	-5.6	+0.0	+0.8	+0.1	.444	-10.0		22	12	16.9	-11	3	56	387.3	847.3
							3255 = KR Aqr, 7.25 to 7.36, Hp, Type LB																											
26	Sep	25	8	39	21.8	d	3380	cK0	5.9	5.4		98+	162	18	256	72N	53	352	74	-6.0	-1.7	+0.5	+0.4	.486	2.7		23	1	31.7	- 4	42	41	383.2	903.3
							3380 is double: ** 7.0 7.0 0.10" 90.0, dT = +0.16sec																											
							3380 has been reported as non-instantaneous (OCc1633). Observations are highly desired																											
26	Sep	27	5	50	20.0	r	68	SB9	5.8		S	100-	173	71	194	65N	247	234	269	-4.9	-4.2	+2.3	+1.0	.366	160.9		0	32	23.8	6	57	20	371.4	697.3
							R68 = 51 Piscium																											
							68 is multiple: Aa,Ac 5.8 9.5 0.20" : Aa,Ab 5.8 8.0 0.27" 283.9, dT = -0.6sec : AB 5.7 9.5 28.5" 81.5, dT = +75sec : AD 5.7 13.1 82" 307.6, dT = -109sec																											
							68 is a close double. Observations are highly desired																											
							68 = NSV 15113, 5.67 to 9.0, V, Type E:																											
							Distance of 68 to Terminator = 6.4"; to 3km sunlit peak = 0.0"																											
26	Sep	28	4	15	58.6	r	197	cK0	7.0	6.5		97-	160	59	109	71S	218	279	239	-3.7	-5.1	+1.0	+2.2	.420	-167.3		1	21	58.3	12	36	15	368.9	770.2
26	Sep	29	5	17	36.5	r	336	F0	7.4	7.3v		92-	147	63	100	68S	222	291	240	-2.8	-6.0	+1.1	+2.2	.417	-166.9		2	17	45.4	18	27	18	366.2	760.0
							336 = AD Ari, 7.39 to 7.48, V, Type ELL, Period 0.53972 days, Phase 22%																											
26	Sep	30	4	30	41.8	R	470	WK0	6.8	6.2		85-	134	42	81	84N	257	332	271	-1.5	-6.3	+1.0	+1.2	.476	164.9		3	14	17.2	22	57	14	366.0	875.6
							470 is double: AB 6.9 10.4 42" 33.3, dT = +64sec																											
26	Sep	30	5	50	49.8	r	75832	K0	7.3	6.6		84-	133	60	88	65S	225	303	240	-1.6	-6.4	+1.0	+2.1	.420	-164.5		3	16	57.0	23	7	36	364.7	770.9

Occultation prediction for Varney Observatory
E. Longitude - 80 30 0.0, Latitude 26 0 0.0, Alt. 2m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon Sun Alt	Moon Alt	Az	CA o	PA o	VA o	AA o	Libration L	B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	Sep	30	8	14	20.2	r	483	SA5	7.5			84-	132	87	218	86N	255	218	269	-2.0	-6.6	+2.5	+0.7	.372	170.8		3	20	21.2	23	41	21	363.8	664.9
							483 is quadruple: AB 7.62 9.90 2.77" 315.8, dT = -4sec : AB,D 7.6 14.8 25.8" 251.6, dT = -69sec : AC 7.6 14.0 61" 286.7, dT = -139sec																													
							483 is a close double. Observations are highly desired																													
26	Oct	2	7	21	8.6	r	812	SF8	8.0			64-	106	53	78	20S	195	278	199	+0.9	-6.0	-0.5	+5.5	.191	-116.3		5	27	1.3	27	36	37	364.3	760.8
							812 is triple: AB 8.71 8.61 0.59" 277.1, dT = -0.43sec : AB,C 7.9 13.2 27.0" 277.8, dT = -18sec																													
							812 is a close double. Observations are highly desired																													
26	Oct	2	10	1	21.0	r	77224	cF8	7.4	7.1		63-	105	87	46	34S	210	343	214	+0.5	-6.1	+2.4	+4.7	.193	-121.9		5	31	22.8	27	46	9	363.1	642.7
							77224 is double: ** 8.3 8.3 0.10" 90.0, dT = +0.26sec																													
							77224 has been reported as non-instantaneous (OCc 194). Observations are highly desired																													
26	Oct	3	6	15	29.0	R	994	cF5	6.6	6.3		53-	93	26	71	35S	218	291	216	+2.2	-5.1	-0.4	+2.8	.349	-132.1		6	28	56.4	26	58	3	367.1	927.5
							994 is double: ** 6.8 7.7 0.003" 269.0, dT = -0.01sec																													
26	Oct	3	8	46	42.8	r	78501	K0	7.8	7.3		52-	92	58	80	44S	228	312	225	+1.9	-5.1	+1.4	+3.0	.293	-136.8		6	33	58.0	27	2	41	364.6	711.1
26	Oct	3	10	21	58.6	R	1013	cG0	7.0			51-	91	79	80	74N	290	25	287	+1.7	-5.1	+2.5	-0.8	.359	167.6		6	36	26.3	27	16	42	363.8	647.7
							1013 is double: AB 7.14 8.97 0.68" 270.0, dT = -1.8sec																													
							1013 is a close double. Observations are highly desired																													
26	Oct	4	7	48	10.8	r	79521	cG2	7.4	7.0		41-	79	32	76	50N	321	34	312	+3.2	-3.9	+1.6	-1.3	.340	135.4		7	34	50.4	24	57	16	367.6	851.1
							79521 is double: ** 8.8 8.8 0.050"																													
							79521 has been reported as non-instantaneous (OCc1366). Observations are highly desired																													
26	Oct	4	9	17	17	m	1155	F0	6.4	6.2		40-	79	51	83	0S	191	269	182	+3.0	-3.9	+9.9	+9.9	.000	-90.0		7	38	14.4	24	21	38	366.1	731.6
							Distance of 1155 to Terminator = 4.6"; to 3km sunlit peak = 0.0"																													
26	Oct	4	9	17	49	Gr	1155	F0	6.4	6.2		40-	79	53	**	GRAZE: CA 0.4S; Dist.163km in az. 353deg. [Lat = 27.48+0.12(E.Long+80.50)]																							
26	Oct	4	12	18	23.6	d	1170	dG8	3.6	3.1		39-	78	13	88	205	-63N	74	49	65	+2.5	-3.8	+3.2	+1.0	.286	39.9		7	44	26.8	24	23	53	364.9	659.4
							R1170 = kappa Geminorum																													
							1170 is double: AB 3.7 10.0 7.4" 241.1, dT = -25sec																													
							1170 is a close double. Observations are highly desired																													
26	Oct	4	13	22	25.7	R	1170	dG8	3.6	3.1		39-	77	27	75	268	34N	337	256	328	+2.3	-3.6	+0.8	-3.4	.300	139.8		7	44	26.8	24	23	53	365.1	696.0
							R1170 = kappa Geminorum																													
							1170 is double: AB 3.7 10.0 7.4" 241.1, dT = +2.5sec																													
							1170 is a close double. Observations are highly desired																													
26	Oct	5	8	43	29.2	r	80269	kF0	8.4	8.3		29-	66	31	81	55S	250	322	237	+4.0	-2.5	+0.7	+1.8	.387	-145.3		8	35	17.8	20	33	53	369.3	842.7
26	Oct	5	9	56	44.3	r	80294	kF8	8.0	7.7		29-	65	47	87	72S	267	341	254	+3.9	-2.5	+1.6	+1.0	.389	-158.2		8	37	26.4	20	29	14	368.0	747.5
26	Oct	5	10	56	52	m	80327	pA3	7.8	7.6		29-	65	-5	60	94	8S	204	276	190	+3.7	-2.4	+9.9	+9.9	.000	-90.0		8	39	42.8	20	5	10	367.2	695.3
							80327 is double: AB 7.9 9.6 0.64" 136.2																													
							80327 is a close double. Observations are highly desired																													
26	Oct	5	11	16	4	m	1295	pK0	6.4	5.9s		29-	65	-1	64	97	9S	205	277	191	+3.7	-2.4	+9.9	+9.9	.000	-90.0		8	40	6.4	20	0	28	367.0	683.9
							R1295 = 39 Cancri																													
							1295 is multiple: AC 6.5 9.0 134" 309.0 : AD 6.5 8.8 135" 111.0 : AB 6.5 6.6 152" 149.9 : AS 6.5 10.1 262" 325.7																													
							1295 = NSV 4179, 6.39, range 0.04, V																													
26	Oct	6	8	20	50.8	D	Jupiter		-1.7	-1.7		20-	53	12	79	-49S	148	216	133	+4.8	-0.9	+0.7	-1.4	.395	-41.2		9	31	5.4	15	20	24	373.1	950.9
							Jupiter limb contacts offset by ±42.5 secs, at 8 20 8 and 8 21 33 Both contacts are against the bright limb of Jupiter																													
26	Oct	6	9	4	1.7	R	Europa		6.1	6.1		20-	52	22	83	50S	249	317	233	+4.8	-0.9	+0.5	+2.0	.367	-138.9		9	30	55.2	15	21	19	372.1	879.4
							Europa limb contacts offset by ±1.0 secs, at 9 4 0.7 and 9 4 2.7 Both contacts are against the bright limb of Europa																													
26	Oct	6	9	6	12.0	R	Callisto		6.4	6.4		20-	52	23	83	50S	249	318	233	+4.8	-0.9	+0.5	+2.0	.367	-138.8		9	30	58.9	15	20	59	372.0	879.9
							Callisto limb contacts offset by ±1.5 secs, at 9 6 10.5 and 9 6 13.6 Both contacts are against the bright limb of Callisto																													
26	Oct	6	9	6	57.7	R	Io		5.8	5.8		20-	52	23	83	50S	249	318	233	+4.8	-0.9	+0.5	+2.0	.363	-138.7		9	31	1.2	15	20	47	372.0	870.5
							Io limb contacts offset by ±1.2 secs, at 9 6 56.5 and 9 6 58.9 Both contacts are against the bright limb of Io																													
26	Oct	6	9	9	29.9	R	Jupiter		-1.7	-1.7		19-	52	23	84	50S	249	318	233	+4.8	-0.9	+0.6	+2.0	.363	-138.6		9	31	5.4	15	20	24	372.0	871.5
							Jupiter limb contacts offset by ±46.4 secs, at 9 8 44 and 9 10 16 Both contacts are against the bright limb of Jupiter																													

Occultation prediction for Varney Observatory
E. Longitude - 80 30 0.0, Latitude 26 0 0.0, Alt. 2m; Telescope dia 15cm; dMag 0.0

	day	Time	P	Star	Sp	Mag	Mag	%	Elon	Sun	Moon	CA	PA	VA	AA	Libration		A	B	RV	Cct	durn	R.A. (J2000)			Dec			Mdist	SV
y	m d	h m s		No	D	v	r	V	ill	Alt	Alt Az	o	o	o	o	L	B	m/o	m/o	"/s	o	sec	h	m	s	o	m	s	Mm	m/s
26	Oct 6	9 11 28.5	R	Ganymede		5.4	5.4		19- 52	24	84	50S	249	318	233	+4.8	-0.9	+0.6	+2.0	.363	-138.5		9	31	8.7	15	20	5	371.9	873.0
	Ganymede limb contacts offset by ±1.7 secs, at 9 11 26.8 and 9 11 30.2 Both contacts are against the bright limb of Ganymede																													
26	Oct 8	10 21 19.0	r	X 16891kG0		9.7	9.1		5- 26	13	93	56N	324	28	302	+5.7	+2.3	+0.3	-1.0	.468	155.6		11	14	0.7	3	14	9	378.4	943.5
26	Oct 14	0 11 34.1	d	2238	F0	8.0	7.8		11+ 39	6	238	71S	129	72	116	+2.5	+7.3	+1.3	-2.2	.341	-35.8		15	40	37.8	-25	35	33	399.2	813.1
26	Oct 15	23 56 42.4	d	185420	B8	8.1	8.0		25+ 61	23	219	48N	55	15	51	+0.4	+6.7	+1.2	+0.4	.307	25.5		17	27	45.7	-28	21	32	401.6	662.8
26	Oct 16	0 4 48	m	185410kA0		7.8	7.7		25+ 61	22	220	16S	170	128	166	+0.4	+6.7	+9.9	+9.9	.000	-90.0		17	27	16.5	-28	46	13	401.8	674.2
26	Oct 20	2 55 12.1	D	3069	A*	6.3	6.3v		63+ 105	33	222	66S	97	58	112	-5.0	+2.2	+2.6	-1.3	.270	-44.5		20	59	36.1	-19	2	7	394.9	724.9
	R3069 = 20 Capricorni (AO)																													
	3069 = AO Cap, 6.25 to 6.30, V, Type ACV, Period 2.2411 days, Phase 83%																													
26	Oct 20	23 49 27.7	D	3181SA7		6.0	5.8		72+ 116	45	152	89N	69	95	87	-5.1	+1.2	+2.5	+1.2	.322	-15.5		21	44	1.0	-14	44	58	390.1	632.7
	R3181 = 45 Capricorni																													
	3181 is triple: ** 6.7 6.7 0.050" : AB 5.4 9.5 4.3" 229.0, dT = -13sec																													
	3181 has been reported as non-instantaneous (OCc1610). Observations are highly desired																													
26	Oct 22	6 5 23.2	d	3322cG1		6.4			82+ 130	21	249	41S	118	59	138	-6.8	-1.1	+2.1	-3.5	.207	-63.5		22	38	22.1	- 7	53	51	385.8	865.2
	3322 is double: AB 6.64 8.11 0.08" 296.3, dT = -0.41sec																													
	3322 is a close double. Observations are highly desired																													
26	Oct 22	6 19 45	Gr	3322cG1		6.4			82+ 130	18	** GRAZE: CA 14.0S; Dist.190km in az. 160deg. [Lat = 24.18+0.33(E.Long+80.50)]																			
26	Oct 23	5 35 5.4	d	146693	G5	7.5	7.1		89+ 141	40	244	88N	68	14	89	-6.8	-2.5	+1.5	+0.2	.405	-16.4		23	24	39.0	- 1	44	29	378.7	775.6
26	Oct 24	3 59 19.4	d	109052	G5	7.4	6.9		95+ 153	67	203	82S	81	60	103	-6.1	-3.7	+2.8	+0.3	.323	-33.5		0	11	5.7	4	7	59	371.9	698.3
26	Oct 25	8 2 22.6	d	163pF2		7.3	7.1		99+ 167	35	266	57N	53	347	75	-5.8	-5.2	+1.1	+0.6	.454	9.0		1	7	4.0	11	33	8	368.5	821.6
	163 is double: AB 7.3 10.5 8.3" 201.5, dT = -16sec																													
	163 is a close double. Observations are highly desired																													
	Distance of 163 to Terminator = 15.9"; to 3km sunlit peak = 5.8"																													
26	Oct 28	0 18 14.2	R	541SB8		3.9	3.9s		95- 154	5	65	85N	254	318	266	-0.7	-5.9	-0.3	+1.0	.662	176.3		3	45	49.6	24	22	4	364.2	1172.7
	R541 = Maia = 20 Tauri																													
	541 is quadruple: Aa,Ab 4.4 5.4 : AB 3.8 13.7 113" 72.6, dT = +171sec : AB 3.8 13.7 113" 72.7, dT = +171sec																													
	541 = NSV 1279, 3.87, range 0.00, 4Kp, Type ACV, Period 10.288 days																													
26	Oct 28	1 13 29.6	r	562pB9		6.6	6.6		95- 153	16	70	23S	182	250	194	-0.6	-6.0	-1.6	+3.7	.243	-113.3		3	49	21.8	24	22	51	363.0	1083.6
	562 is multiple: Aa,Ab 7.3 7.4 5.3" : AB 6.6 7.5 87" 309.1, dT = +217sec : AE 6.6 13.8 115" 82.8, dT = +74sec : AG 6.6 15.1 158" 212.2, dT = -561sec																													
	562 is a close double. Observations are highly desired																													
	Distance of 562 to Terminator = 17.6"; to 3km sunlit peak = 6.3"																													
26	Oct 28	2 52 24.6	r	574pG0		6.8	6.5		94- 152	37	77	38N	301	17	313	-0.6	-6.2	+2.0	-0.5	.304	125.2		3	52	11.4	25	9	47	360.8	922.5
26	Oct 28	5 22 44.4	r	76345kG8		7.5	7.0		94- 151	69	86	61S	221	304	232	-0.8	-6.4	+1.2	+2.4	.374	-153.1		3	57	11.8	25	16	58	358.6	729.3
26	Oct 29	4 0 45.7	r	746WB7		7.0	6.9		87- 138	38	74	70N	280	357	286	+1.1	-5.9	+1.2	+0.5	.459	154.7		4	59	53.7	27	19	32	360.6	887.9
	746 is double: AB 7.0 8.7 20.4" 206.1, dT = -13sec																													
26	Oct 29	6 18 9.8	R	756 F0		6.6	6.5		87- 137	68	80	45N	305	33	310	+0.9	-6.1	+2.9	-1.5	.282	133.6		5	4	38.0	27	41	46	358.7	712.1
26	Oct 29	9 30 10.9	R	773wF8		7.0	6.7		86- 136	70	280	78S	248	158	253	+0.4	-6.1	+2.4	+0.6	.363	-156.6		5	10	3.9	27	33	23	358.7	687.9
	773 is double: AB 7.0 9.3 315" 353.1, dT = +225sec																													
26	Oct 30	5 12 9.0	r	78041cG5		7.8	7.3		78- 124	40	75	38S	216	294	216	+2.6	-5.2	+0.1	+3.1	.323	-132.1		6	9	26.6	27	11	38	361.6	844.5
	78041 is double: ** 8.6 8.6 0.040" 237.0, dT = -0.12sec																													
	78041 has been reported as non-instantaneous (OCc1052). Observations are highly desired																													
26	Oct 30	10 18 57.2	R	958cK1		6.7	6.1		77- 122	74	279	62S	242	151	240	+1.9	-5.1	+2.9	+1.3	.295	-138.5		6	18	20.8	27	12	37	359.9	686.8
	958 is double: ** 7.5 7.5 0.050"																													
	958 has been reported as non-instantaneous (OCc1307). Observations are highly desired																													
26	Oct 31	4 36 28.6	r	1094 A0		7.1	7.1		68- 111	19	70	29N	337	47	331	+4.0	-4.0	+1.9	-2.8	.230	114.7		7	12	49.4	25	44	55	365.7	975.7
	R1094 = 49 Geminorum																													
26	Oct 31	9 25 42.1	d	1117cG8		5.0	4.6		66- 109	80	93	-53S	134	216	127	+3.5	-4.0	+2.2	-2.0	.335	-26.5		7	23	28.5	25	3	2	362.0	657.1

Occultation prediction for Varney Observatory
E. Longitude - 80 30 0.0, Latitude 26 0 0.0, Alt. 2m; Telescope dia 15cm; dMag 0.0

y	m	day d	h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon Alt	Sun Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
							R1117 = 57 Geminorum																											
							1117 is double: ** 5.9 5.9 0.10" 90.0, dT = +0.22sec																											
							1117 has been reported as non-instantaneous (OCc1358). Observations are highly desired																											
26	Oct	31	10	45	50.4	R	1117	cG8	5.0	4.6		66-	109	-10	81	266	79S	266	184	259	+3.3	-3.9	+2.7	+0.0	.346	-153.8		7	23	28.5	25	3	2	362.1	676.3
							R1117 = 57 Geminorum																											
							1117 is double: ** 5.9 5.9 0.10" 90.0, dT = +0.29sec																											
							1117 has been reported as non-instantaneous (OCc1358). Observations are highly desired																											
26	Nov	4	7	44	52.9	r	118579	kA2	7.8	7.7		23-	58		7	87	72N	310	14	289	+6.6	+2.0	+0.2	-0.5	.517	166.7		10	56	30.9	5	16	24	380.5	980.2
26	Nov	5	9	48	20.6	r	138402	F2	8.7	8.5		15-	45		21	103	58S	258	320	236	+6.5	+3.5	+1.1	+1.7	.334	-134.8		11	47	0.0	- 1	37	46	382.7	878.9
26	Nov	7	10	43	33.3	r	157895	pA2	7.8	7.7		3-	21	-12	8	109	37N	333	34	312	+6.0	+5.7	-0.1	-1.3	.430	149.4		13	22	45.6	-13	11	11	391.1	948.6
							157895 is double: AB 7.8 10.8 19.4" 311.2, dT = -42sec																											
26	Nov	11	23	24	37.4	d	185071	G8	8.8	8.2		7+	30	-12	8	233	66S	128	73	122	+0.7	+6.6	+1.8	-2.5	.280	-46.9		17	8	49.4	-28	13	1	403.2	801.6
26	Nov	11	23	33	31.4	d	185075	K0	8.3	7.7		7+	30		7	235	35N	49	353	44	+0.7	+6.6	+0.1	+0.4	.355	31.7		17	9	3.8	-27	53	41	403.4	816.0
26	Nov	12	23	37	49.6	D	2601	SK4	6.8			12+	41		15	228	23N	28	338	27	-0.5	+5.9	-0.2	+1.5	.272	45.5		18	2	54.3	-27	49	36	403.7	759.3
							R2601 = 7 Sagittarii																											
							2601 is triple: Aa,Ab 6.90 9.37 0.34" 332.0, dT = +0.7sec : AB 6.9 13.0 9.7" 48.2, dT = +34sec																											
							2601 is a close double. Observations are highly desired																											
26	Nov	12	23	43	39.9	d	186184	K0	8.9	8.0		12+	41		14	229	55N	60	10	60	-0.5	+5.9	+0.6	+0.1	.382	12.9		18	3	31.1	-27	54	45	403.8	768.0
26	Nov	13	0	21	41.8	d	186228	K5	8.4	7.5		12+	41		7	234	62N	67	11	66	-0.6	+5.8	+0.4	-0.2	.420	6.4		18	4	41.7	-27	51	51	404.5	829.2
26	Nov	13	0	41	56.5	d	186250	K5	7.7	6.8		12+	41		4	237	65N	70	11	69	-0.7	+5.8	+0.3	-0.3	.438	3.9		18	5	20.8	-27	50	3	405.0	863.0
26	Nov	13	23	24	19.3	d	187471	G0	9.0	8.4v		19+	51	-12	25	219	72N	70	31	74	-1.7	+5.0	+1.5	-0.1	.352	-3.3		18	56	17.0	-26	42	15	402.9	688.0
							187471 = ASAS J185616-2642.1, 9.086, range 0.04, 3V, Type ROT, Period 97.44 days																											
26	Nov	14	1	19	3.6	d	187541	G5	8.3	7.7		19+	52		7	236	86S	91	35	96	-2.1	+4.8	+0.8	-1.0	.399	-24.3		18	59	26.2	-26	29	49	404.8	858.9
26	Nov	15	23	17	37.2	D	3007	K2	7.2	6.5		35+	73	-10	42	198	22N	8	350	21	-4.3	+2.7	+0.2	+2.9	.220	46.9		20	36	26.5	-20	35	8	398.6	623.7
26	Nov	16	20	44	44.9	d	3126	G8	4.3	3.8v		44+	83	21	36	138	88S	74	113	91	-4.8	+1.6	+2.3	+1.3	.322	-13.7		21	22	14.8	-16	50	4	396.3	636.1
							R3126 = Tae = iota Capricorni																											
							3126 = iot Cap, 4.27, range 0.06, V, Type BY																											
26	Nov	16	22	14	48.3	r	3126	G8	4.3	3.8v		45+	84		3	46	164	-58S	220	235	237	-5.1	+1.5	+1.9	+2.0	.307	-166.1		21	22	14.8	-16	50	4	395.2	605.7
							R3126 = Tae = iota Capricorni																											
							3126 = iot Cap, 4.27, range 0.06, V, Type BY																											
26	Nov	17	22	31	17.2	D	3253	kB5	5.4	5.5V		54+	95	-1	49	152	51S	108	134	127	-6.1	+0.0	+4.2	-0.6	.183	-57.0		22	10	37.5	-11	33	54	390.7	636.6
							R3253 = 38 Aquarii																											
							3253 = HD 210424, 5.44, , Type ACV, Period 3.9613 days, Phase 93%																											
26	Nov	18	0	7	3.7	D	3255	M0	7.3	6.4v		55+	96		53	188	85S	75	67	94	-6.5	-0.2	+2.8	+0.6	.302	-27.3		22	12	16.9	-11	3	56	390.1	644.0
							3255 = KR Aqr, 7.25 to 7.36, Hp, Type LB																											
26	Nov	19	3	9	43.8	D	3380	cK0	5.9	5.4		66+	108		41	237	60S	98	49	119	-7.7	-2.0	+2.6	-1.5	.266	-48.3		23	1	31.7	- 4	42	41	384.9	745.7
							3380 is double: ** 7.0 7.0 0.10" 90.0, dT = +0.37sec																											
							3380 has been reported as non-instantaneous (OCc1633). Observations are highly desired																											
26	Nov	19	23	51	37.6	d	128354	F8	8.0	7.7		74+	119		58	139	76N	54	90	76	-7.1	-2.9	+1.8	+1.8	.377	-6.7		23	44	18.2	0	42	44	378.5	697.3
26	Nov	20	5	38	58.6	d	128417	cG5	7.0	6.4		76+	121		23	261	61N	39	337	62	-8.1	-3.6	+0.6	+1.0	.444	18.5		23	51	6.8	2	14	16	380.0	863.7
							128417 is double: ** 6.9 0.001" 333.1, dT = 0.00sec																											
26	Nov	20	23	48	19.0	D	68	SB9	5.8		S	83+	132		54	116	64N	43	98	65	-6.8	-4.1	+1.2	+2.1	.416	6.1		0	32	23.8	6	57	20	372.6	756.2
							R68 = 51 Piscium																											
							68 is multiple: Aa,Ac 5.8 9.5 0.20" : Aa,Ab 5.8 8.0 0.28" 283.8, dT = -0.32sec : AB 5.7 9.5 28.5" 81.5, dT = +54sec : AD 5.7 13.1 82" 307.6, dT = -19sec																											
							68 is a close double. Observations are highly desired																											
							68 = NSV 15113, 5.67 to 9.0, V, Type E:																											
26	Nov	21	5	27	40.4	d	109354	kF5	7.3	7.1		84+	133		38	260	55S	105	42	127	-7.7	-4.8	+1.8	-2.0	.298	-47.0		0	39	42.6	8	7	22	372.4	790.5

Occultation prediction for Varney Observatory
E. Longitude - 80 30 0.0, Latitude 26 0 0.0, Alt. 2m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon Sun Alt	Moon Alt	Az	CA o	PA o	VA o	AA o	Libration L	B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	Nov	22	7	47	53.8	d	233	cB9	6.2	6.3		92+	147	21	277	71S	94	27	115	-7.0	-5.8	+0.5	-1.1	.464	-25.0		1	35	46.4	14	39	41	367.7	913.0
	R233 = 101 Piscium																																
26	Nov 23		6	51	54.8	D	370	A9	6.1	6.0v		97+	160	47	272	71S	104	31	122	-5.5	-6.4	+1.6	-1.6	.369	-33.4		2	30	38.4	19	51	19	360.6	772.1
	R370 = 26 Arietis (UU)																																
	370 = UU Ari, 6.10 to 6.15, V, Type DSCTC, Period 0.0676 days																																
26	Nov 25		7	50	35.1	R	701	SF2	6.6	6.4		99-	169	62	279	62N	264	179	272	-1.6	-6.2	+2.0	-0.3	.425	-175.5		4	38	29.5	26	56	23	354.0	731.5
	701 is triple: 6.6 9.2 3.1" 169.4, dT = +0.6sec : AB 7.36 7.21 4.49" 187.7, dT = -2.5sec																																
	701 is a close double. Observations are highly desired																																
	Distance of 701 to Terminator = 12.5"; to 3km sunlit peak = 3.5"																																
26	Nov 25		7	50	36.3	r	X 70481p		7.3	7.2		99-	169	62	279	62N	264	179	272	-1.6	-6.2	+2.0	-0.3	.425	-175.7		4	38	29.6	26	56	26	354.0	731.5
	X 70481 is triple: 7.3 9.2 5.8" 174.9, dT = -0.21sec : AC 7.4 12.9 92" 203.6, dT = -106sec																																
	X 70481 is a close double. Observations are highly desired																																
	Distance of X 70481 to Terminator = 12.4"; to 3km sunlit peak = 3.5"																																
26	Nov 26		6	4	29.8	r	868	SA0	7.5	7.5		96-	156	80	76	58N	291	30	293	+0.9	-5.5	+2.5	-0.8	.370	158.0		5	44	21.2	27	43	53	353.2	683.3
	868 is triple: AB 7.5 9.8 8.6" 254.1, dT = -19sec : AC 7.5 12.7 47" 40.5, dT = +42sec																																
	868 is a close double. Observations are highly desired																																
26	Nov 26		8	23	27.6	r	77588	cB8	7.7	7.7		96-	156	69	279	55S	225	136	227	+0.6	-5.4	+3.1	+2.5	.248	-126.4		5	48	49.0	27	21	50	353.6	717.2
	77588 is double: 8.1 9.1																																
26	Nov 26		9	0	39.0	r	77604	K0	7.0	6.2		95-	155	61	281	73N	277	191	278	+0.5	-5.3	+1.8	-0.9	.437	-176.2		5	49	38.1	27	33	3	354.0	752.4
26	Nov 26		9	24	35.9	r	77621	M3	7.5	6.6s		95-	155	56	282	34N	316	232	318	+0.4	-5.3	+0.9	-2.5	.374	145.5		5	50	48.2	27	41	9	354.3	779.4
	77621 = NSV 16688, 7.47, range 0.02, 6V, Type VAR, Period 4.88496 days																																
26	Nov 26		9	31	42.0	r	77619	F2	7.1	6.9		95-	155	55	282	74N	277	193	278	+0.4	-5.3	+1.5	-0.9	.457	-174.9		5	50	39.7	27	30	18	354.4	788.3
26	Nov 26		10	29	43.0	R	890	cA0	4.6	4.6s		95-	155	42	285	21N	330	251	331	+0.4	-5.2	-0.1	-3.0	.347	133.5		5	53	19.6	27	36	44	355.3	868.1
	R890 = 136 Tauri																																
	890 is double: ** 4.8 6.3 0.050" 270.0, dT = -0.07sec																																
	890 has been reported as non-instantaneous (OCc 206). Observations are highly desired																																
	890 = NSV 2696, 4.50 to 4.61, V																																
	Distance of 890 to Terminator = 13.2"; to 3km sunlit peak = 3.5"																																
26	Nov 27		9	31	31.3	R	1061	SF8	6.2	5.9s		89-	141	69	276	50N	312	226	307	+2.5	-4.1	+1.4	-2.1	.398	158.9		6	58	47.4	26	4	52	355.4	735.0
	R1061 = 39 Geminorum																																
	1061 is triple: Aa,Ab 6.1 0.50" 158.0, dT = +1.1sec : AB 6.1 12.1 35" 69.2, dT = +40sec																																
	1061 is a close double. Observations are highly desired																																
	1061 = NSV 17256, 6.1, range 0.02, V, Type VAR:																																
26	Nov 27		10	1	55.5	R	1062	cB8	6.4	6.5		89-	141	62	277	72N	291	207	285	+2.4	-4.1	+1.6	-1.3	.444	-179.0		6	59	27.9	25	54	51	355.7	765.8
	R1062 = 40 Geminorum																																
	1062 is double: AB 6.4 0.10" 160.5, dT = +0.14sec																																
	1062 is a close double. Observations are highly desired																																
26	Nov 27		11	10	10	Gr	78995	A3	7.4	7.2		89-	141	-9	46	** GRAZE: CA 19.7S; Dist. 25km in az. 217deg. [Lat = 25.72-0.67(E.Long+80.50)]																				
26	Nov 27		11	15	11	r	78995	A3	7.4	7.2		89-	141	-8	46	280	29S	212	133	207	+2.3	-3.9	+7.4	+8.3	.081	-99.3		7	2	20.5	25	21	52	356.9	858.0
26	Nov 27		11	19	7.2	r	1068	A2	7.1	7.0		89-	141	-7	45	281	51S	234	156	229	+2.3	-3.9	+2.6	+1.1	.263	-121.8		7	2	7.2	25	25	32	357.0	864.1
26	Nov 28		12	18	23	m	1224	cG2	5.3	5.0		80-	126	5	45	275	18S	210	135	199	+3.9	-2.3	+9.9	+9.9	.000	-90.0		8	7	45.9	21	34	55	360.4	867.8
	R1224 = mu Cancri																																
	1224 is double: ** 5.4 7.8 0.53" 301.8																																
	1224 has been reported as non-instantaneous (OCc1849). Observations are highly desired																																
26	Nov 29		7	0	58.5	R	1340	kA0	6.6	6.6		71-	115	50	92	74N	302	13	287	+6.1	-1.3	+1.7	-0.7	.417	171.5		8	58	18.3	18	18	30	363.3	742.4
26	Nov 29		7	38	56.2	R	1343	M4	6.3	5.5v		71-	114	59	98	89N	288	357	273	+6.0	-1.3	+2.0	-0.2	.400	-171.1		8	59	10.7	18	8	6	362.8	712.3
	1343 = FZ Cnc, 6.28 to 6.38, Hp, Type SRB, Period 17.6 days																																
26	Nov 30		5	42	51.0	R	1449	M0	6.5	5.6s		60-	102	20	85	39N	340	47	322	+7.2	+0.3	+0.8	-2.2	.339	132.3		9	51	2.0	13	3	58	370.5	905.5

Occultation prediction for Varney Observatory
E. Longitude - 80 30 0.0, Latitude 26 0 0.0, Alt. 2m; Telescope dia 15cm; dMag 0.0

y	m	day d	h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon	Sun Alt	Moon Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct	dur sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
	R1449 = 23 Leonis																																		
	1449 = NSV 18283, 6.45, range 0.00, 6V, Type VAR, Period 2.82446 days																																		
26	Dec	1	8	32	23.1	R	1567	kK1	6.4	5.8		48-	88	44	107	42N	340	40	319	+7.5	+2.0	+0.8	-2.3	.343	145.0		10	46	5.7	6	22	23	373.9	758.7
	R1567 = 37 (Sextantis)/Leonis																																		
26	Dec	2	10	23	17.3	D	1685	cG9	4.3	3.8		37-	75	52	130	-34S	169	212	147	+7.4	+3.7	+0.5	-2.7	.310	-37.2		11	36	56.9	- 0	49	25	378.6	714.8
	R1685 = upsilon Leonis																																		
	1685 is double: ** 4.5 9.0 0.10" 195.0, dT = +0.29sec																																		
	1685 has been reported as non-instantaneous (OCc1427). Observations are highly desired																																		
26	Dec	2	11	19	27.8	r	138302	K0	7.7	7.1		37-	75	-8	60	151	52N	331	357	+7.3	+3.8	+1.2	-2.1	.358	163.0		11	37	16.8	- 0	34	41	378.2	686.8
26	Dec	2	11	30	39.8	R	1685	cG9	4.3	3.8		37-	75	-5	61	156	74S	277	298	+7.2	+3.8	+3.0	-0.1	.298	-143.0		11	36	56.9	- 0	49	25	378.2	683.5
	R1685 = upsilon Leonis																																		
	1685 is double: ** 4.5 9.0 0.10" 195.0, dT = -0.05sec																																		
	1685 has been reported as non-instantaneous (OCc1427). Observations are highly desired																																		
26	Dec	4	9	21	47.2	R	1885	K2	7.3	6.7		19-	52	17	113	40N	339	37	318	+7.2	+5.7	+0.0	-1.7	.384	145.5		13	8	27.9	-11	45	46	390.3	881.2
26	Dec	6	10	25	55.7	R	2109	K4	6.1	5.2		6-	28	7	118	16N	351	50	335	+5.8	+6.8	-0.9	-2.4	.290	127.6	.01	14	47	13.7	-21	19	30	398.3	918.9
26	Dec	11	23	49	0	d	188260	K0	8.7	8.0		7+	31	10	236	34S	142	87	150	-2.4	+3.8	+5.7	-9.1	.085	-78.7		19	32	44.8	-24	55	39	405.1	850.5
26	Dec	11	23	56	8	Gr	188260	K0	8.7	8.0		7+	31	8	** GRAZE: CA 22.3S; Dist. 35km in az. 148deg. [Lat = 25.63+0.56(E.Long+80.50)]																						
26	Dec	11	23	57	7	m	188262	K0	8.5	8.0		7+	31	9	237	22S	153	97	161	-2.5	+3.8	+9.9	+9.9	.000	-90.0		19	32	48.9	-24	56	36	405.3	863.0
26	Dec	12	0	2	46	r	188260	K0	8.7	8.0		7+	31	8	238	11S	165	108	173	-2.5	+3.8	-4.6	+8.9	.087	-101.3		19	32	44.8	-24	55	39	405.4	872.4
26	Dec	12	23	14	45.6	d	189195	F0	7.8	7.6		13+	42	-10	26	226	46N	34	350	46	-3.7	+2.7	+0.5	+1.1	.353	22.1		20	21	32.8	-21	25	8	402.4	743.1
26	Dec	13	0	20	55.0	d	189226	F7	8.7	8.4		13+	42	15	237	80S	88	34	100	-3.9	+2.5	+1.1	-0.9	.370	-29.9		20	23	35.8	-21	22	14	403.5	835.6
26	Dec	13	0	44	21.4	d	189240	A7	8.6	8.4		13+	42	11	240	71N	59	2	71	-3.9	+2.5	+0.3	+0.1	.444	0.1		20	24	5.6	-21	10	18	404.0	870.8
26	Dec	14	0	31	25.8	d	3095	F0	8.4	8.2		20+	53	24	236	21N	4	313	20	-5.2	+1.1	-0.6	+2.8	.262	50.1		21	10	22.5	-16	57	31	400.6	792.4
26	Dec	15	1	25	10.4	d	3219	K1	8.3	7.6		29+	65	25	241	76S	84	30	103	-6.5	-0.4	+1.4	-0.7	.357	-31.4		21	58	17.7	-12	6	8	397.4	805.9
26	Dec	16	1	54	22.5	d	146275	kK0	8.1	7.6		38+	76	30	245	63N	41	346	62	-7.6	-1.8	+0.7	+1.0	.405	11.0		22	43	21.3	- 6	24	3	392.6	785.6
26	Dec	17	2	8	12.3	d	146725	pF8	7.8			48+	88	39	246	46S	111	56	133	-8.3	-3.2	+2.9	-2.9	.205	-59.2		23	28	46.2	- 0	50	8	386.8	750.4
	146725 is double: AB 7.98 10.59 1.38" 62.1, dT = +4sec																																		
	146725 is a close double. Observations are highly desired																																		
26	Dec	18	3	34	38.2	d	29	K0	7.0	6.4		59+	100	33	260	14N	351	288	13	-8.7	-4.6	+0.0	+5.6	.172	66.3		0	15	38.6	5	50	38	381.1	791.9
26	Dec	19	0	51	25.5	d	139	cG5	8.1	7.6		68+	111	75	197	31N	10	355	32	-8.0	-5.3	+0.6	+3.4	.288	39.5		1	1	13.9	11	10	50	372.9	674.7
26	Dec	19	23	8	59.5	d	92663	K0	7.9	7.1		78+	124	-8	58	100	44N	26	94	46	-6.9	-5.8	+0.6	+2.6	.387	26.9		1	51	38.2	16	23	56	367.8	774.4
26	Dec	20	4	20	50	Gr	92732	wF5	7.8	7.5		79+	125	47	** GRAZE: CA 7.7S; Dist. 57km in az. 354deg. [Lat = 26.52+0.10(E.Long+80.50)]																						
26	Dec	21	23	22	14.4	d	571	pA2	6.8	6.7		94+	151	-10	38	77	38N	34	110	46	-3.9	-6.2	+0.0	+2.3	.444	32.6		3	51	25.3	25	9	47	358.2	916.0
	571 is double: ** 7.1 9.1																																		
26	Dec	21	23	36	46.1	d	574	pG0	6.8	6.5		94+	151	41	78	54N	50	127	62	-4.0	-6.2	+0.4	+1.9	.494	16.6		3	52	11.4	25	9	47	357.9	894.3
26	Dec	22	2	17	41.4	d	76345	kG8	7.5	7.0		94+	152	76	89	48S	129	214	142	-4.2	-6.4	+3.8	-2.9	.206	-60.0		3	57	11.8	25	16	58	355.4	709.2
26	Dec	22	8	11	50.0	d	76472	cG8	7.2	6.5		95+	154	27	287	87N	86	13	97	-4.9	-6.3	+0.6	-0.7	.539	3.7		4	8	39.0	25	52	40	357.7	937.4
26	Dec	23	4	54	23.5	d	773	wF8	7.0	6.7		99+	167	84	287	66N	81	337	87	-2.4	-5.9	+2.4	+0.3	.398	6.9		5	10	3.9	27	33	23	351.7	683.5
	773 is double: AB 7.0 9.3 315" 353.1, dT = +27sec																																		
26	Dec	25	3	17	26.3	R	1117	cG8	5.0	4.6		98-	164	46	80	25N	334	52	327	+2.5	-3.6	+2.1	-2.9	.263	124.0		7	23	28.5	25	3	2	352.7	805.7
	R1117 = 57 Geminorum																																		
	1117 is double: ** 5.9 5.9 0.10" 90.0, dT = +0.17sec																																		
	1117 has been reported as non-instantaneous (OCc1358). Observations are highly desired																																		
	Distance of 1117 to Terminator = 7.1"; to 3km sunlit peak = 0.2"																																		
26	Dec	25	6	24	2.3	r	79416	SF8	7.6	7.4		98-	163	87	112	56N	305	11	297	+2.2	-3.4	+2.1	-1.5	.396	165.2		7	28	40.6	24	38	55	351.1	697.0
	79416 is triple: AC 7.7 11.8 29.0" 124.2, dT = +73sec : AB 7.7 8.9 65" 19.4, dT = -44sec																																		
26	Dec	25	7	58	57	r	79470	K0	7.6	7.1		98-	162	72	268	35S	216	137	209	+1.9	-3.2	+7.5	+8.9	.087	-101.5		7	31	39.2	23	59	59	351.5	745.4
	Distance of 79470 to Terminator = 15.6"; to 3km sunlit peak = 5.4"																																		

Occultation prediction for Varney Observatory
E. Longitude - 80 30 0.0, Latitude 26 0 0.0, Alt. 2m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon Alt	Sun Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	Dec	26	6	13	5.0	R	1277	wK3	5.3	4.7		93-	148	70	102	41N	331	42	318	+4.3	-1.8	+1.6	-2.5	.336	144.4		8	32	42.5	20	26	28	354.2	709.6
	R1277 = eta Cancri																																	
	1277 is double: AB 5.3 20.0 164" 280.0, dT = -305sec																																	
26	Dec	26	7	58	44	M	1282	G0	6.6	6.2		92-	148	82	216	19S	212	178	198	+4.0	-1.6	+9.9	+9.9	.000	-90.0		8	35	19.4	19	35	24	354.1	717.0
	R1282 = 35 Cancri																																	
	Distance of 1282 to Terminator = 18.6"; to 3km sunlit peak = 6.6"																																	
26	Dec	26	8	35	17.6	r	97941	A*	7.5	7.4		92-	148	76	247	89N	284	222	270	+4.0	-1.5	+2.2	-0.9	.405	-160.7		8	35	45.1	19	46	16	354.4	737.9
26	Dec	26	9	27	14.0	r	97973	A0	7.7	7.6		92-	147	65	261	46N	327	256	314	+3.8	-1.4	+0.8	-2.4	.416	156.5		8	37	37.0	19	43	59	354.9	780.3
26	Dec	26	9	46	9.4	R	1287	kA5	6.7	6.6		92-	147	61	263	44S	238	166	224	+3.8	-1.3	+4.1	+1.9	.190	-114.2		8	37	46.8	19	16	2	355.2	798.7
26	Dec	26	10	22	25.7	r	1293	pK0	6.8	s		92-	147	53	268	11N	2	290	349	+3.7	-1.2	-1.0	-4.1	.249	120.8		8	39	50.7	19	32	27	355.7	839.3
	1293 is multiple: Da,Db 6.67 9.87 0.50" 252.6, dT = +0.7sec : DE 6.7 11.8 35" 3.1, dT = -142sec : DA 6.7 7.3 92" 61.0, dT = -192sec : DC 6.7 7.5 100" 89.1, dT = -23sec																																	
	1293 has been reported as non-instantaneous (S 571). Observations are highly desired																																	
	1293 = NSV 4171, 6.52 to 6.61, V																																	
	Distance of 1293 to Terminator = 7.3"; to 3km sunlit peak = 0.0"																																	
26	Dec	26	10	53	56.8	r	98009	kA7	7.6	7.6v		92-	147	46	271	70N	304	232	290	+3.7	-1.1	+0.8	-1.7	.509	178.6		8	39	44.7	19	16	31	356.3	879.4
	98009 = BU Cnc, 7.67, range 0.03, V, Type DSCTC, Period 0.071 days																																	
26	Dec	26	10	58	29.0	r	1297	pA9	6.8	6.6S		92-	147	45	272	40N	334	261	320	+3.7	-1.1	+0.2	-2.4	.439	149.0		8	40	20.1	19	20	56	356.4	885.2
	1297 is double: AB 6.8 8.5 0.016" 342.8, dT = -0.04sec																																	
	1297 is a close double. Observations are highly desired																																	
	1297 = NSV 17953, 6.78, , Type DSCT:																																	
26	Dec	27	9	15	58.6	r	98654	WB9	7.9	7.9		84-	133	75	221	80N	300	262	282	+5.6	+0.3	+1.9	-1.4	.413	-170.9		9	35	9.5	14	4	32	358.9	729.0
	98654 is double: AB 7.8 9.1 45" 48.5, dT = +35sec																																	
26	Dec	27	12	2	15.9	r	1425	SF7	7.0	6.8		84-	132	-2	41	265	78N	302	235	284	+5.3	+0.8	+0.8	-1.6	.501	-175.9		9	39	17.2	13	18	45	361.5	880.2
	1425 is quadruple: Aa,Ab 7.7 7.7 : ** 7.7 7.7 0.006" 90.0, dT = +0.01sec : AB 7.1 15.1 51" 131.0, dT = +100sec																																	
26	Dec	28	4	39	52.7	r	1516	K5	6.6	5.8s		76-	122	22	91	83N	299	5	279	+7.5	+1.5	+0.7	-0.2	.507	177.7		10	22	14.2	8	57	52	367.1	902.8
	1516 = NSV 18388, 6.72 to 6.81, Hp, Type IB																																	
26	Dec	28	6	0	21.6	R	1525	M2	5.6	4.8v		76-	121	39	100	33N	349	53	329	+7.4	+1.6	+0.7	-2.9	.306	132.7	.01	10	25	15.2	8	47	5	365.7	801.1
	R1525 = 44 Leonis (DE)																																	
	1525 = DE Leo, 5.6, range 0.07, V, Type SRB:																																	
26	Dec	28	6	3	34.5	r	118292	DF0	7.7	7.6S		76-	121	40	101	20N	2	66	342	+7.4	+1.6	+0.4	-4.4	.224	119.9		10	25	35.1	8	46	35	365.7	797.9
	118292 is double: AB 7.8 9.1 3.6" 74.4, dT = -5sec																																	
	118292 is a close double. Observations are highly desired																																	
	118292 = NSV 4851, 7.7,																																	
26	Dec	28	12	52	43.5	r	1549	cG8	5.1	4.6v		74-	119	8	38	258	9N	14	312	354	+6.4	+2.6	-1.2	-4.6	.185	112.8		10	34	48.0	6	57	14	367.5	848.6
	R1549 = 48 Leonis																																	
	1549 is double: ** 6.0 6.0 0.10" 90.0, dT = -0.13sec																																	
	1549 has been reported as non-instantaneous (OCc 197). Observations are highly desired																																	
	1549 = HIP 51775, 5.07, range 0.00, 4V, Type VAR, Period 0.09302 days																																	
26	Dec	29	5	31	39.4	r	1624	PF2	6.8	6.5		66-	108	20	98	72S	276	339	254	+8.2	+3.1	+0.7	+0.7	.450	-154.9		11	13	53.0	2	16	7	373.4	900.6
	1624 is double: AB 6.8 16.2 85.0, dT = 0.00sec																																	
26	Dec	29	7	21	15.8	R	1635	cM0	5.2	4.4		65-	108	43	114	48N	336	32	314	+8.0	+3.3	+0.8	-2.0	.376	151.5		11	17	17.4	2	0	38	371.7	771.6
	R1635 = 75 Leonis																																	
	1635 is double: ** 5.8 6.6 0.044" 0.0																																	
	1635 has been reported as non-instantaneous (OCc 763). Observations are highly desired																																	
26	Dec	29	8	41	20.1	R	1637	K0	5.9	5.4		65-	107	57	135	52N	332	12	311	+7.8	+3.5	+1.1	-2.0	.372	159.4		11	18	55.0	1	39	1	371.0	715.5
	R1637 = 76 Leonis																																	
26	Dec	30	10	28	55.6	r	138612	cK5	8.3	7.5		53-	94	58	167	65N	318	330	296	+7.9	+5.0	+1.6	-1.7	.371	175.3		12	8	59.9	- 5	8	57	377.5	681.2

Occultation prediction for Varney Observatory
E. Longitude - 80 30 0.0, Latitude 26 0 0.0, Alt. 2m; Telescope dia 15cm; dMag 0.0

y	m	day d	h	Time m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon Alt	Sun Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
							138612 is double: ** 8.3 0.09" 281.0, dT = -0.2sec																												
							138612 has been reported as non-instantaneous (OCc1769). Observations are highly desired																												
26	Dec	30	10	57	23.8	R	138617	KF2	7.2	7.0		53-	94	59	180	47N	337	337	314	+7.8	+5.1	+1.1	-2.3	.339	156.9		12	9	47.8	- 5	13	33	377.6	675.4
26	Dec	31	6	51	35.3	r	1845	SG8	6.5	5.9s		44-	83	12	108	52S	255	315	233	+8.4	+5.6	+1.0	+1.9	.324	-131.2		12	51	22.9	-10	20	18	386.4	924.1
							1845 is triple: AB 6.6 9.7 28.8" 296.2, dT = -66sec : AC 6.6 12.5 142" 211.8, dT = -320sec																												
							1845 = NSV 5994, 6.49, range 0.07, V																												

Lunar Occultation predictions
Santiago de Cuba
Cuba

Occultation prediction for Santiago de Cuba
E. Longitude - 75 5 13.9, Latitude 20 1 0.9, Alt. 800m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon Alt	Sun Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	Jan	5	3	23	41.2	r	1315	A2	7.1	7.1		96-	156	42	80	32S	221	302	207	+6.5	-3.6	+1.2	+5.6	.167	-112.5		8	46	20.2	20	37	0	364.7	768.8
26	Jan	5	8	42	31.4	R	1329	pF8	6.8			95-	154	65	275	67N	304	219	289	+5.6	-3.1	+1.5	-1.7	.423	-178.3		8	53	55.3	19	58	2	364.3	747.6

1329 is double: AB 7.32 7.86 0.15" 71.9, dT = +0.22sec
1329 is a close double. Observations are highly desired

26 Jan 7 3 23 0 Gr 1547cB1 3.8 3.9v 82- 130 17 ** GRAZE: CA 4.6S; Dist.274km in az. 358deg. [Lat = 22.49+0.03(E.Long+75.09)]
Distance of 1547 to Terminator = 11.2"; to 3km sunlit peak = 0.4"

26	Jan	7	3	23	28	M	1547cB1		3.8	3.9v		82-	130	16	86	5S	206	278	186	+7.9	-0.5	+9.9	+9.9	.000	-90.0		10	32	48.7	9	18	24	378.6	905.1

R1547 = rho Leonis
1547 is double: AB 3.8 4.8 105.1
1547 = rho Leo, 3.83 to 3.9, V, Type ACYG, Period 3.4271 days, Phase 53%
Distance of 1547 to Terminator = 4.2"; to 3km sunlit peak = 0.0"

26	Jan	9	8	8	38.1	R	1754KF5		7.0	6.7		62-	104	54	129	72S	276	323	254	+6.8	+2.9	+2.9	+0.2	.283	-141.0		12	11	21.8	- 3	46	44	388.0	685.2
26	Jan	10	6	18	24.1	r	139025	K2	7.2	6.5		53-	94	20	108	76S	279	344	257	+6.4	+3.9	+0.9	+0.4	.394	-152.4		12	53	37.0	- 9	3	52	395.4	853.6
26	Jan	10	9	26	2.5	R	139061	DF5	7.3			52-	93	55	147	78N	304	336	283	+5.8	+4.4	+2.0	-1.2	.337	-169.2		12	57	28.6	- 9	45	41	392.9	654.4

139061 is double: AB 7.31 10.77 1.66" 276.0, dT = -4sec
139061 is a close double. Observations are highly desired

26	Jan	10	10	11	5.3	r	139081	cK0	7.5	7.1		52-	92	59	166	25N	357	11	336	+5.6	+4.5	+0.1	-3.4	.246	138.0		12	59	1.6	- 9	50	3	392.8	630.9

139081 is double: AB 7.6 12.6 0.33" 65.8, dT = -0.49sec
139081 is a close double. Observations are highly desired

26	Jan	12	11	3	50.4	r	158609	dG1	8.1	7.8		33-	70	-8	47	159	50N	326	348	309	+3.3	+6.4	+1.4	-1.9	.302	162.2		14	31	12.3	-19	58	40	399.6	615.3

158609 is double: AB 8.2 10.6 4.2" 286.0, dT = -11sec
158609 is a close double. Observations are highly desired

26	Jan	14	9	13	40.1	R	2312	M2	5.4	4.5s		17-	49	12	124	60N	306	6	295	+1.3	+7.0	+0.2	-0.5	.426	169.5		16	8	7.6	-26	19	36	404.0	848.3

2312 = NSV 20513, 5.35, range 0.00, 8V, Type VAR, Period 7.61267 days

26	Jan	14	10	6	13.2	r	184177	kA0	8.2	8.1		17-	49	21	130	46N	320	13	309	+1.1	+7.1	+0.3	-1.1	.358	156.5		16	9	45.8	-26	26	24	403.0	763.3
26	Jan	14	10	19	17	M	2318	A*	6.6	6.6v		17-	48	23	133	21S	206	257	196	+1.1	+7.1	+9.9	+9.9	.000	-90.0		16	10	15.9	-26	54	33	402.8	744.5

2318 = V0952 Sco, 6.57, range 0.04, V, Type ACV, Period 1.4178 days, Phase 15%

26	Jan	15	10	49	36.8	R	184978	B9	7.7	7.7		10-	37	-11	19	131	58N	300	354	294	-0.1	+7.1	+0.7	-0.3	.381	169.2		17	3	59.1	-28	15	23	402.1	755.9
26	Jan	15	10	59	6.5	R	2453	K1	6.6	6.2		10-	37	-9	20	133	44S	222	274	216	-0.2	+7.1	+4.2	+4.6	.147	-112.7		17	4	27.8	-28	34	58	401.9	741.6
26	Jan	16	10	20	22.9	r	185993	K5	8.7	7.8		5-	27		4	122	59N	290	355	290	-1.2	+6.7	+0.2	+0.1	.444	171.0		17	57	44.5	-28	34	13	401.8	875.8
26	Jan	16	10	25	16.8	r	185996	B9	9.0	9.0		5-	27		5	123	74N	276	340	275	-1.2	+6.7	+0.5	+0.5	.443	-174.4		17	57	50.4	-28	38	20	401.7	867.0
26	Jan	16	10	43	45.4	R	186031	K0	8.4	7.8		5-	27		8	125	43S	212	274	212	-1.2	+6.8	+3.4	+5.2	.151	-110.6		17	58	57.8	-28	54	4	401.3	835.3
26	Jan	16	10	49	32.9	R	2586	cB3	6.0	6.0		5-	26	-12	9	125	87S	256	317	256	-1.2	+6.8	+1.1	+1.2	.382	-154.5		17	58	39.0	-28	45	33	401.2	824.2

2586 is double: ** 6.3 7.3 0.30" 276.0, dT = -0.7sec
2586 has been reported as non-instantaneous (OCc1519). Observations are highly desired

26	Jan	23	1	27	17.9	D	3459	K0	6.4	5.8		17+	49	12	264	72N	47	338	69	-6.3	-1.5	+0.3	+0.8	.505	10.6		23	29	27.0	- 1	47	28	380.1	946.7

R3459 = 11 Piscium

26	Jan	24	0	30	26.1	D	30	SA0	7.1	7.1		26+	61	38	260	76S	79	11	101	-5.9	-3.0	+1.5	-0.2	.395	-24.8		0	15	57.3	4	15	4	374.5	790.6

30 is triple: AB 7.0 14.1 0.8" 246.0, dT = -2sec : AC 7.0 12.2 5.0" 347.3, dT = -0.41sec
30 is a close double. Observations are highly desired

26	Jan	26	1	45	33.8	d	92732	wF5	7.8	7.5		48+	88	46	274	33N	12	294	32	-4.7	-5.6	+1.4	+3.6	.256	51.8		1	58	47.5	17	1	33	367.6	738.8

92732 is double: AB 7.8 17.9 79" 249.6, dT = -168sec

26	Jan	27	19	1	58.6	d	539	SB6	4.3	4.4s		69+	112	43	18	70	54S	115	191	128	-1.3	-6.1	+0.9	-0.2	.382	-49.5		3	45	12.5	24	28	2	366.2	1044.4

R539 = Taygeta = 19 Tauri
539 is multiple: Aa,Ab 4.6 6.1 : AB 0.032" 259.2, dT = -0.07sec : AC 4.3 14.0 53" 53.4, dT = +65sec : AB 4.3 11.0 72" 328.8, dT = -158sec
539 is a close double. Observations are highly desired
539 = NSV 1264, 4.30, range 0.00, 1Kp, Type SPB, Period 1.5664 days

Occultation prediction for Santiago de Cuba
E. Longitude - 75 5 13.9, Latitude 20 1 0.9, Alt. 800m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon Alt	Sun Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	Jan	27	22	55	23	m	574pG0		6.8	6.5		70+	113	-2	69	71	16S	154	254	166	-1.6	-6.6	+9.9	+9.9	.000	-90.0		3	52	11.4	25	9	47	361.9	705.2
26	Jan	27	23	31	31.2	D	579kA2		6.4	6.3S		70+	114	-10	76	63	66N	56	168	68	-1.7	-6.7	+2.0	+1.7	.379	9.9		3	53	34.5	25	40	58	361.6	675.0
							579 = NSV 1391, 6.33,																												
26	Jan	27	23	35	12.4	d	76303kA2		7.8	7.7		70+	114	-11	77	61	55N	46	160	57	-1.7	-6.7	+1.7	+2.2	.360	20.2		3	53	32.0	25	43	48	361.5	672.4
26	Jan	29	5	30	57.9	d	768 A2		7.0	6.7S		82+	129		36	291	32N	31	306	36	-1.1	-6.6	+3.1	+3.4	.196	66.0		5	8	35.3	28	16	24	362.3	847.7
							768 = NSV 16250, 7., , Type VAR:																												
26	Jan	29	5	46	1.8	D	771SA5		6.1	5.9e		82+	129		33	291	89N	89	5	94	-1.1	-6.6	+1.0	-0.6	.490	8.5		5	9	45.1	28	1	50	362.6	871.8
							771 is triple: Aa,Ab 6.0 0.20" 351.0, dT = -0.05sec : A,BC 6.0 9.1 11.2" 29.1, dT = +12sec																												
							771 is a close double. Observations are highly desired																												
							771 = V1156 Tau, 6. to 6.1, Hp, Type E:, Period 1.40266 days, Phase 13%																												
26	Jan	30	23	41	27.8	D	1088 A4		5.8	5.7S		95+	155		37	71	44N	60	144	54	+3.0	-5.4	+0.7	+1.9	.398	31.8		7	11	23.1	26	51	24	362.7	823.8
							R1088 = 47 Geminorum																												
							1088 = NSV 17371, 5.77, , Type DSCT:																												
26	Jan	31	0	15	19.3	d	79164cG8		7.4	6.9		95+	155		44	72	75S	122	209	115	+3.0	-5.5	+1.9	-0.7	.388	-28.2		7	12	31.2	26	33	52	362.1	773.8
							79164 is double: ** 8.1 8.5 0.10" 21.0, dT = -0.05sec																												
							79164 has been reported as non-instantaneous (OCc 237). Observations are highly desired																												
26	Jan	31	2	48	40.8	D	1105cG7		6.5			96+	156		77	57	47N	64	182	57	+2.6	-5.4	+3.0	+1.9	.281	40.7		7	17	3.4	26	41	22	360.5	647.8
							1105 is double: AB 7.00 7.70 0.20" 236.6, dT = -0.7sec																												
							1105 is a close double. Observations are highly desired																												
26	Jan	31	3	2	29.8	d	79243 K1		7.3	6.7		96+	156		80	50	66S	131	257	124	+2.6	-5.4	+2.4	-1.9	.335	-25.2		7	17	15.6	26	21	49	360.5	646.3
26	Jan	31	3	25	43.2	d	79253cK1		7.6	7.1		96+	156		83	24	69S	128	283	121	+2.5	-5.4	+2.3	-1.8	.346	-20.7		7	17	54.5	26	19	59	360.5	647.5
							79253 is double: ** 8.7 8.7 0.050"																												
							79253 has been reported as non-instantaneous (OCc1350). Observations are highly desired																												
26	Jan	31	5	32	0.5	d	79316 G2		7.5	7.1v		96+	157		64	289	83N	100	2	93	+2.1	-5.2	+2.1	-0.9	.404	14.4		7	21	32.8	26	9	33	361.2	730.3
							79316 = V0340 Gem, 7.37 to 7.71, V, Type RS, Period 35.37 days, Phase 86%																												
26	Jan	31	23	40	23.6	d	1239 A4		6.6	6.5		99+	168	-12	23	73	72S	136	213	125	+4.4	-4.3	+1.1	-1.1	.408	-36.8		8	13	41.7	23	8	16	366.0	904.3
							Distance of 1239 to Terminator = 18.5"; to 3km sunlit peak = 7.6"																												
26	Feb	2	9	44	26.6	r	1395 G9		6.3	5.8		100-	174		31	278	57N	308	232	292	+4.2	-1.8	+0.4	-1.6	.516	176.0		9	25	32.5	16	35	8	369.9	928.5
							Distance of 1395 to Terminator = 3.3"; to 3km sunlit peak = 0.0"																												
26	Feb	3	4	41	8.3	r	98990 K5		7.8	6.9		98-	163		65	105	74N	304	12	285	+5.8	-0.9	+2.0	-1.2	.381	-176.2		10	11	35.3	12	2	11	371.0	686.9
26	Feb	4	3	51	34.9	R	1600wA5		5.0	4.9		94-	151		41	100	36N	347	56	326	+6.4	+0.6	+0.7	-2.9	.313	138.4		11	0	44.8	6	6	5	377.4	765.7
							R1600 = 59 Leonis																												
							1600 is double: AB 5.0 12.6 40" 217.4, dT = +83sec																												
26	Feb	4	7	11	58.7	r	1606 M*		7.8	7.0v		93-	150		75	184	52N	332	328	311	+5.8	+1.0	+1.3	-2.4	.356	163.8		11	4	19.1	5	13	30	376.2	675.6
							1606 = FG Leo, 7.84 to 8.01, Hp, Type SRB, Period 24.962161 days, Phase 38%																												
26	Feb	6	8	34	5.0	d	1815SK2		4.7	4.0		79-	125		62	180	-42S	163	164	141	+5.2	+4.1	+0.9	-2.8	.303	-27.4		12	39	14.8	- 7	59	44	387.3	641.6
							R1815 = chi Virginis																												
							1815 is multiple: **Aa,Ab 4.8 8.8 0.10" 214.0, dT = +0.21sec : AB 4.8 8.8 177" 135.9, dT = +520sec : AC 4.8 10.6 224" 109.8, dT = +440sec : AD 4.8 9.0 321" 331.1, dT = -1035sec																												
							1815 has been reported as non-instantaneous (OCc 760). Observations are highly desired																												
26	Feb	6	9	53	38.2	R	1815SK2		4.7	4.0		79-	125		56	217	80S	286	251	264	+4.9	+4.3	+2.8	-1.1	.306	-153.1		12	39	14.8	- 7	59	44	388.0	645.1
							R1815 = chi Virginis																												
							1815 is multiple: **Aa,Ab 4.8 8.8 0.10" 214.0, dT = -0.1sec : AB 4.8 8.8 177" 135.9, dT = +502sec : AC 4.8 10.6 224" 109.8, dT = +730sec : AD 4.8 9.0 321" 331.1, dT = -740sec																												
							1815 has been reported as non-instantaneous (OCc 760). Observations are highly desired																												
26	Feb	6	11	11	37.2	r	138905 F8		7.3	7.0		78-	124	-6	42	237	44S	250	197	228	+4.6	+4.5	+3.3	+0.5	.195	-122.4		12	40	40.7	- 8	26	54	389.2	685.9
26	Feb	7	6	21	1.0	r	1919 K5		6.9	6.0s		71-	114		36	124	31N	353	46	332	+5.1	+5.0	-0.2	-2.7	.294	138.1		13	22	8.3	-12	34	46	393.3	752.6
							1919 = NSV 19751, 6.98 to 7.03, Hp																												

Occultation prediction for Santiago de Cuba
E. Longitude - 75 5 13.9, Latitude 20 1 0.9, Alt. 800m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon Sun Alt	Moon Alt	Az	CA o	PA o	VA o	AA o	Libration L	B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	Feb	7	7	42	18.8	r	157895	pA2	7.8	7.7		70-	114	50	144	63S	266	301	246	+4.8	+5.2	+3.5	+0.8	.240	-132.8		13	22	45.6	-13	11	11	392.4	672.0
	157895 is double: AB 7.8 10.8 19.4" 311.2, dT = -57sec																																
26	Feb	9	8	28	31.7	r	2138	WF6	7.9	7.6		51-	91	36	141	67N	310	350	294	+2.7	+6.8	+1.3	-0.9	.351	175.8		14	58	40.7	-22	24	5	399.6	681.1
	2138 is double: AB 7.9 9.6 12.0" 95.0, dT = +28sec																																
26	Feb	9	10	16	6.1	r	183079	M2	7.7	6.8s		51-	91	47	171	84S	280	290	265	+2.3	+7.0	+3.2	-0.3	.277	-156.9		15	0	30.4	-22	50	58	398.9	582.2
	183079 = NSV 20220, 7.67 to 7.75, Hp																																
26	Feb	10	8	29	50.2	d	2263	cB1	4.6	4.7		42-	80	27	134	-65N	77	125	65	+1.5	+7.2	+2.5	+1.4	.276	42.2		15	50	58.7	-25	45	5	401.6	724.3
	R2263 = 1 Scorpii																																
	2263 is double: ** 5.6 5.6 0.050"																																
	2263 has been reported as non-instantaneous (OCc1483). Observations are highly desired																																
26	Feb	10	9	32	43.0	R	2263	cB1	4.6	4.7		41-	80	36	147	30N	341	16	329	+1.3	+7.3	+0.3	-2.5	.243	137.5		15	50	58.7	-25	45	5	400.8	640.5
	R2263 = 1 Scorpii																																
	2263 is double: ** 5.6 5.6 0.050"																																
	2263 has been reported as non-instantaneous (OCc1483). Observations are highly desired																																
26	Feb	11	8	36	41.8	R	2397	K1	6.5	5.9		32-	69	18	130	63N	302	357	295	+0.3	+7.2	+0.6	-0.4	.387	169.5		16	41	37.6	-27	48	35	402.3	767.2
26	Feb	13	10	38	51.8	r	186988	A0	8.5	8.3		16-	47	21	133	70N	281	332	284	-2.2	+6.6	+1.4	+0.3	.362	173.6		18	34	12.8	-28	20	45	397.8	702.0
26	Feb	19	23	48	23.5	D	128524	K2	7.6	6.9		7+	30	-12	18	266	17N	350	280	12	-5.3	-2.7	+0.0	+5.4	.185	68.5		0	0	23.5	2	40	32	374.2	915.9
26	Feb	21	0	4	6.6	d	109503	kK2	9.0	8.4		14+	43		28	270	52N	26	314	48	-4.6	-4.1	+0.8	+1.9	.388	34.9		0	51	2.1	9	13	44	371.0	850.6
26	Feb	21	1	44	47.3	d	109530	DF0	8.2	8.0		14+	44		5	278	77S	77	6	99	-4.7	-4.2	+0.1	-0.2	.547	-10.7		0	54	45.1	9	25	44	373.2	1007.2
	109530 is double: AB 8.57 9.60 3.11" 299.9, dT = -4sec																																
	109530 is a close double. Observations are highly desired																																
26	Feb	22	23	16	0.6	D	387	cG5	6.9	6.4S		32+	69	-4	65	277	82N	62	335	80	-2.5	-6.2	+2.2	+0.9	.378	1.8		2	37	34.4	20	34	30	365.3	669.7
	387 is double: ** 7.7 7.7 0.10" 90.0, dT = +0.23sec																																
	387 has been reported as non-instantaneous (OCc1190). Observations are highly desired																																
	387 = NSV 15555, 6.91, , Type VAR:																																
26	Feb	23	2	52	17.6	d	75537	A2	7.8	7.7		33+	71		16	287	58N	38	324	55	-2.9	-6.3	+0.9	+1.3	.405	39.5		2	43	41.1	21	8	50	369.1	938.1
26	Feb	24	1	53	13.9	d	76081	K2	7.5	6.9		44+	83		42	286	74S	92	7	105	-1.7	-6.8	+1.4	-0.7	.422	-10.4		3	41	18.1	25	0	29	366.0	761.7
26	Feb	24	2	18	57	M	529	SA2	6.1	6.1		44+	84		37	287	7N	353	270	6	-1.7	-6.8	+9.9	+9.9	.000	90.0		3	40	46.3	25	19	46	366.5	800.3
	R529 = 11 Tauri																																
	529 is triple: **Aa,Ab 6.3 8.3 : AB 6.1 10.9 74" 357.0																																
26	Feb	24	2	19	17	Gr	529	SA2	6.1	6.1		44+	84		35	** GRAZE: CA 6.8N; Dist.107km in az. 198deg. [Lat = 19.00-0.30(E.Long+75.09)]																		
26	Feb	24	3	5	19.1	d	76102	A2	7.5	7.5		45+	84		27	289	76S	90	11	103	-1.8	-6.7	+0.7	-0.7	.488	-5.5		3	43	43.2	25	4	51	367.4	873.5
26	Feb	25	1	33	45.6	d	715	cK5	8.0	7.5		56+	97		60	291	84S	89	351	97	-0.4	-6.9	+2.2	-0.5	.384	-0.9		4	43	35.4	27	41	15	364.6	679.6
	715 is double: ** 8.8 8.8 0.10" 90.0, dT = +0.26sec																																
	715 has been reported as non-instantaneous (OCc 130). Observations are highly desired																																
26	Feb	26	0	43	14.0	d	77551	cB9	8.3	8.2		67+	110		80	336	76N	77	282	79	+1.1	-6.6	+2.8	+0.6	.340	15.6		5	47	14.3	28	37	26	364.1	622.5
	77551 is double: AB 8.4 10.7 0.8" 197.5, dT = -1.2sec																																
	77551 is a close double. Observations are highly desired																																
26	Feb	27	3	2	50.3	d	78873	A2	7.8	7.7		78+	124		68	293	87S	102	358	97	+1.9	-5.7	+2.2	-0.9	.383	8.4		6	55	48.1	27	14	58	365.4	685.7
26	Feb	27	3	6	49.7	d	1056	B9	7.2	7.3		78+	124		67	293	84N	92	349	88	+1.9	-5.7	+2.4	-0.5	.370	18.2		6	55	56.2	27	17	9	365.5	689.7
26	Feb	27	5	28	40.2	d	78957	G8	7.5	7.0		79+	125		36	289	88N	97	13	92	+1.6	-5.4	+1.0	-0.9	.478	15.2		7	0	14.8	26	52	42	367.7	882.9
26	Feb	28	1	46	2.0	d	1194	SK0	7.8	7.2		86+	137		80	61	56N	71	186	61	+3.2	-4.7	+3.3	+1.4	.269	41.2		7	56	1.5	24	39	57	366.4	636.4
	1194 is triple: AB 7.8 10.1 18.9" 160.1, dT = +1.6sec : AB 9.5 11.5 34" 194.1, dT = -69sec																																
26	Feb	28	5	21	14.1	d	79868	DK0	7.4			87+	138		50	284	76N	92	5	81	+2.6	-4.3	+1.8	-0.7	.395	28.6		8	1	30.3	23	54	46	368.1	802.7
	79868 is double: AB 7.43 10.98 1.30" 168.9, dT = +0.7sec																																
	79868 is a close double. Observations are highly desired																																
26	Feb	28	5	39	33.5	D	1208	DK1	6.4			87+	138		46	284	23S	172	87	162	+2.6	-4.2	-0.7	-3.6	.284	-52.3		8	1	0.8	23	34	59	368.4	828.6
	1208 is double: AB 6.48 9.95 1.95" 325.2, dT = -6sec																																

Occultation prediction for Santiago de Cuba
E. Longitude - 75 5 13.9, Latitude 20 1 0.9, Alt. 800m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon Alt	Sun Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
							1208 is a close double. Observations are highly desired																											
26	Mar	1	1	54	22.9	D	1329pF8	6.8				93+	150	70	86	43S	157	244	143	+4.2	-3.3	+1.6	-3.1	.287	-38.6		8	53	55.3	19	58	2	368.8	657.2
							1329 is double: AB 7.32 7.86 0.15" 72.1, dT = +0.04sec																											
							1329 is a close double. Observations are highly desired																											
26	Mar	5	2	5	9.0	r	1754KF5	7.0	6.7			97-	160	23	103	58S	267	333	245	+5.4	+3.0	+1.1	+1.0	.359	-141.2		12	11	21.8	- 3	46	44	386.8	864.6
26	Mar	7	11	7	38.3	r	1993cK3	6.6	5.9			84-	133	-3 30	235	50S	255	201	235	+2.5	+6.3	+2.0	-0.1	.267	-139.0		13	54	21.4	-17	10	48	395.5	679.3
26	Mar	8	4	43	11.3	r	2084 A3	6.5	6.4			78-	124	21	122	69S	270	328	253	+3.1	+6.4	+1.4	+0.8	.352	-145.3		14	34	50.7	-20	26	22	398.7	827.2
26	Mar	9	7	16	53.9	r	183513 K0	7.8	7.2			69-	112	36	144	18N	358	35	344	+1.6	+7.2	-0.9	-3.7	.190	123.8		15	29	9.9	-24	27	5	399.6	662.4
26	Mar	12	6	55	32.6	R	2617cK0	4.6	4.1			41-	80	4	122	14N	344	48	344	-1.9	+6.7	-1.7	-3.2	.195	116.2		18	8	5.0	-28	27	26	402.0	859.7
							2617 is double: AB 5.1 5.9 0.26" 12.0, dT = -1.2sec																											
							2617 is a close double. Observations are highly desired																											
26	Mar	12	7	46	39.6	r	186346 F5	7.6	7.4			41-	79	14	128	87N	270	328	271	-2.0	+6.8	+1.1	+0.7	.390	-170.6		18	8	52.1	-28	45	19	400.9	769.3
26	Mar	12	9	43	19.2	R	2631 B9	6.5	6.5v			40-	79	32	146	81S	259	296	260	-2.4	+6.9	+2.6	+1.0	.300	-163.7		18	11	58.2	-28	54	6	398.8	604.0
							R2631 = V4045 Sagittarii																											
							2631 = V4045 Sgr, 6.51 to 6.54, V, Type ACV, Period 2.8855 days																											
26	Mar	13	8	51	45.5	D	2784cK1	3.3	2.7			31-	68	16	128	-20S	151	207	157	-3.2	+6.2	-0.4	-2.6	.187	-60.6	.03	19	6	56.4	-27	40	14	397.6	735.3
							R2784 = tau Sagittarii																											
							2784 is double: AB 4.2 4.2 0.008" 319.3, dT = -0.04sec																											
26	Mar	13	9	9	35	Gr	2784cK1	3.3	2.7			31-	68	22	** GRAZE: CA 8.6S; Dist.261km in az. 206deg. [Lat = 17.39-0.46(E.Long+75.09)]																		
26	Mar	13	9	19	53.9	r	187672kA*	7.4	7.4			31-	68	22	132	40N	311	3	317	-3.3	+6.2	+0.8	-1.0	.267	138.0		19	6	19.2	-27	17	14	397.0	691.0
26	Mar	13	9	31	10.3	R	2784cK1	3.3	2.7			31-	68	23	134	37S	208	258	214	-3.3	+6.2	+3.2	+4.2	.173	-119.5	.03	19	6	56.4	-27	40	14	396.8	675.3
							R2784 = tau Sagittarii																											
							2784 is double: AB 4.2 4.2 0.008" 319.3, dT = +0.02sec																											
26	Mar	16	10	16	13.9	R	3182 A2	7.5	7.4			8-	32	9	111	62S	219	285	237	-5.1	+2.5	+0.9	+2.2	.399	-149.8		21	44	18.9	-15	58	18	384.4	861.8
26	Mar	22	0	13	54.9	d	92907 F8	9.1	8.9			11+	39	23	283	68S	87	11	105	-2.6	-6.0	+0.7	-0.6	.495	-13.1		2	22	41.0	19	3	51	364.5	898.4
26	Mar	22	23	22	56.2	d	483SA5	7.5				19+	52	-3 48	284	69S	92	6	106	-1.0	-6.6	+1.7	-0.7	.408	-14.8		3	20	21.2	23	41	21	362.3	742.0
							483 is quadruple: AB 7.62 9.90 2.77" 315.8, dT = -5sec : AB,D 7.6 14.8 25.8" 251.5, dT = -59sec : AC 7.6 14.0 61" 286.7, dT = -144sec																											
							483 is a close double. Observations are highly desired																											
26	Mar	24	22	12	36.5	D	810SB7	1.7	1.7			40+	78	13 81	9	54N	50	220	53	+2.1	-6.7	+2.6	+2.4	.284	36.5		5	26	17.5	28	36	27	363.1	623.6
							R810 = El Nath = beta Tauri																											
							810 is multiple: AC 1.9 19.0 8.4" 357.0, dT = +18sec : AD 1.9 18.5 9.8" 70.0, dT = +32sec : AE 1.9 10.9" 80.0, dT = +33sec : AF 1.9 15.8 11.6" 296.0, dT = -16sec																											
							810 is a close double. Observations are highly desired																											
26	Mar	24	23	23	45.0	R	810SB7	1.7	1.7			40+	79	-3 73	304	-47N	309	192	312	+1.9	-6.6	+2.3	-2.5	.291	143.3		5	26	17.5	28	36	27	363.4	640.0
							R810 = El Nath = beta Tauri																											
							810 is multiple: AC 1.9 19.0 8.4" 357.0, dT = -19sec : AD 1.9 18.5 9.8" 70.0, dT = +17sec : AE 1.9 10.9" 80.0, dT = +25sec : AF 1.9 15.8 11.6" 296.0, dT = -39sec																											
							810 is a close double. Observations are highly desired																											
26	Mar	25	23	27	38.7	d	78496 K0	7.5	6.9			52+	92	-4 82	351	81N	84	274	82	+3.1	-6.0	+2.9	+0.3	.336	16.5		6	33	41.4	27	58	49	365.3	621.1
26	Mar	26	0	33	45.3	D	1008 A0	5.3	5.3s			52+	93	72	300	51N	54	301	52	+2.9	-5.9	+3.7	+2.2	.231	51.2		6	35	12.1	28	1	20	365.7	654.2
							R1008 = 49 Aurigae																											
							1008 = NSV 3032, 5.05 to 5.27, V																											
26	Mar	26	1	25	32.0	r	1008 A0	5.3	5.3s			52+	93	61	292	-24N	340	240	337	+2.7	-5.8	+0.3	-4.1	.247	128.5		6	35	12.1	28	1	20	366.3	705.3
							R1008 = 49 Aurigae																											
							1008 = NSV 3032, 5.05 to 5.27, V																											
26	Mar	26	2	58	36	Gr	78580SA2	7.3	7.2			53+	93	40	** GRAZE: CA 15.7N; Dist. 1km in az. 36deg. [Lat = 20.03-0.68(E.Long+75.09)]																		
26	Mar	26	2	58	37	gr	78580SA2	7.3	7.2			53+	93	41	290	16N	20	293	17	+2.5	-5.7	+9.9	+9.9	.000	90.0		6	38	53.6	27	48	16	367.8	832.6
							78580 is triple: AC 7.3 13.8 26.6" 237.2 : AB 7.3 10.5 28.6" 130.4																											

Occultation prediction for Santiago de Cuba
E. Longitude - 75 5 13.9, Latitude 20 1 0.9, Alt. 800m; Telescope dia 15cm; dMag 0.0

y	m	day d	h	Time m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon	Sun Alt	Moon Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	Mar	26	4	16	37.4	d	1028	G8	7.5	7.1		54+	94		25	292	26S	158	79	155	+2.5	-5.5	-0.8	-2.8	.353	-48.8		6	41	42.7	27	4	54	369.5	962.2
26	Mar	27	2	48	10.5	d	79610	F8	7.2	7.0		64+	106		57	285	61S	129	38	121	+3.5	-4.7	+1.1	-1.9	.411	-11.4		7	41	3.1	24	57	54	369.2	750.8
26	Mar	27	5	0	9.8	D	1170	dG8	3.6	3.1		65+	107		27	288	23S	168	89	159	+3.3	-4.3	-0.9	-3.0	.326	-51.7		7	44	26.8	24	23	53	371.9	949.3
R1170 = kappa Geminorum																																			
1170 is double: AB 3.7 10.0 7.3" 241.1, dT = +7sec																																			
1170 is a close double. Observations are highly desired																																			
26	Mar	27	5	24	37	Gr	1170	dG8	3.6	3.1		65+	108		19	** GRAZE: CA-14.4S; Dist.442km in az. 214deg. [Lat = 15.18-0.64(E.Long+75.09)]																				
26	Mar	27	5	36	22.6	R	1170	dG8	3.6	3.1		65+	108		19	290	-52S	243	167	234	+3.3	-4.2	+1.1	+0.3	.347	-128.3		7	44	26.8	24	23	53	372.8	1012.4
R1170 = kappa Geminorum																																			
1170 is double: AB 3.7 10.0 7.3" 241.1, dT = -21sec																																			
1170 is a close double. Observations are highly desired																																			
26	Mar	27	23	55	26.1	d	80262	kF8	8.1	7.8		74+	118	-11	71	82	24S	172	263	159	+4.8	-3.7	+1.2	-5.0	.198	-56.0		8	34	39.2	21	29	35	371.0	638.5
26	Mar	28	4	44	29.9	D	1304	pA0	6.8			75+	120		42	280	17S	179	98	166	+3.9	-3.1	-1.0	-3.8	.262	-55.9		8	41	15.3	20	28	37	373.3	844.0
1304 is double: AB 7.10 8.08 0.29" 70.6, dT = -0.35sec																																			
1304 is a close double. Observations are highly desired																																			
26	Mar	30	1	4	58.4	d	1515	kF8	7.8	7.5		91+	144		62	106	80S	122	189	102	+5.4	-0.6	+2.1	-1.1	.367	6.5		10	21	52.9	10	41	59	377.7	676.7
26	Mar	30	6	11	55	M	1531	wA0	6.0	6.0v		91+	146		42	265	18N	39	328	20	+4.4	+0.2	+9.9	+9.9	.000	90.0		10	27	39.0	9	45	45	379.7	810.5
R1531 = 45 Leonis (CX)																																			
1531 is double: AB 6.0 12.4 34" 119.5																																			
1531 = CX Leo, 6.01 to 6.03, V, Type ACV, Period 3.0525 days, Phase 70%																																			
26	Apr	4	2	30	55.1	R	2039	A0	5.5	5.5		96-	156		21	120	35N	355	54	336	+3.3	+6.0	-0.7	-2.7	.283	130.4		14	15	24.1	-18	12	2	397.7	843.7
26	Apr	4	3	59	43.3	R	2045	cK0	6.4			95-	155		37	134	55N	334	20	316	+3.1	+6.2	+0.5	-1.8	.339	154.2		14	17	3.8	-18	35	9	396.3	724.0
2045 is double: AB 6.40 10.51 0.70" 83.1, dT = +0.7sec																																			
2045 is a close double. Observations are highly desired																																			
26	Apr	4	7	33	41.0	r	158499	F2	7.7	7.5		95-	154		48	202	66N	323	302	305	+2.3	+6.6	+2.0	-2.3	.288	159.4		14	20	50.3	-19	19	56	395.8	589.7
26	Apr	5	10	7	54.2	R	2174	pB8	6.5	6.5		90-	142	-11	30	225	32S	234	188	220	+0.7	+7.2	+1.9	+1.2	.207	-129.6		15	13	17.4	-24	0	30	399.8	630.5
2174 is triple: ** 7.1 7.1 0.030" 0.0 : AB 6.4 12.5 8.2" 45.0, dT = +39sec																																			
2174 has been reported as non-instantaneous (OCc1471). Observations are highly desired																																			
26	Apr	6	4	2	29.3	D	2287	SB1	2.9	3.0v		84-	133		16	126	-87S	110	168	98	+1.1	+7.0	+0.7	+0.0	.417	6.7		15	58	51.1	-26	6	51	402.5	819.5
R2287 = pi Scorpii																																			
2287 is triple: Aa,Ab 5.1 13.4 2.0" 244.0, dT = -3sec : AB 2.9 11.9 50" 128.1, dT = +115sec																																			
2287 is a close double. Observations are highly desired																																			
2287 = pi Sco, 2.88 to 2.91, V, Type ELL, Period 1.570103 days, Phase 64%																																			
26	Apr	6	5	18	10.7	R	2287	SB1	2.9	3.0v		84-	133		29	138	72N	305	350	294	+0.9	+7.2	+1.1	-0.6	.358	173.0		15	58	51.1	-26	6	51	401.2	702.1
R2287 = pi Scorpii																																			
2287 is triple: Aa,Ab 5.1 13.4 2.0" 244.0, dT = -2.7sec : AB 2.9 11.9 50" 128.1, dT = +141sec																																			
2287 is a close double. Observations are highly desired																																			
2287 = pi Sco, 2.88 to 2.91, V, Type ELL, Period 1.570103 days, Phase 64%																																			
26	Apr	6	9	0	16.4	r	2297	kF7	7.0	6.7		83-	132		42	196	73S	270	253	259	-0.1	+7.4	+3.2	-0.3	.271	-164.0		16	3	16.1	-26	43	2	400.2	546.2
26	Apr	6	10	11	15.3	r	2300	wK0	7.6	7.1		83-	131	-10	34	214	34S	230	194	219	-0.4	+7.4	+2.3	+1.5	.198	-131.4		16	5	1.4	-26	56	52	400.9	582.8
2300 is double: AB 7.7 13.7 13.4" 351.6, dT = +35sec																																			
26	Apr	9	9	45	38	r	2727	kA*	7.4	7.4v		57-	99		40	164	5S	181	198	185	-3.6	+6.4	+9.9	+9.9	.049	-100.0		18	47	37.1	-28	16	47	398.3	543.0
2727 = HIP 92215, 7.45 to 7.48, V, Type ACV, Period 1.93789 days, Phase 95%																																			
26	Apr	11	7	48	7.3	R	2991	K5	6.1	5.3		39-	77		13	120	30N	315	17	328	-5.1	+4.4	+0.1	-1.6	.220	122.7	.01	20	29	31.3	-22	23	30	394.1	778.4
26	Apr	14	9	14	17.2	r	146428	kA2	8.4	8.3		12-	40		8	100	81N	256	325	277	-6.1	+0.0	+0.4	+1.1	.500	166.3		22	59	29.2	- 6	36	27	377.8	942.2
26	Apr	19	14	31	53.5	d	539	SB6	4.3	4.4s		7+	30	54	29	72	41S	118	199	131	+0.7	-6.2	+1.6	-0.5	.330	-53.9		3	45	12.5	24	28	2	358.6	974.4
R539 = Taygeta = 19 Tauri																																			

Occultation prediction for Santiago de Cuba

E. Longitude - 75 5 13.9, Latitude 20 1 0.9, Alt. 800m; Telescope dia 15cm; dMag 0.0

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      day  Time     P   Star  Sp  Mag  Mag    % Elon Sun  Moon   CA   PA  VA  AA Libration   A    B    RV    Cct durn  R.A. (J2000)  Dec   Mdist   SV
 y   m  d  h  m    s       No  D    v    r V  ill     Alt Alt Az   o    o   o   o   L    B   m/o m/o  "/s     o  sec  h  m    s    o  m  s    Mm   m/s
       539 is multiple: Aa,Ab 4.6 6.1           : AB          0.018" 273.2, dT = -0.05sec : AC 4.3 14.0 53"  53.4, dT = +67sec : AB 4.3 11.0 72"
328.8, dT = -189sec
       539 is a close double. Observations are highly desired
       539 = NSV 1264, 4.30, range 0.00, 1Kp, Type SPB, Period 1.5664 days
26 Apr 19 14 44 12   Gr    539SB6  4.3  4.4s   7+  31  57 32 ** GRAZE: CA  5.2S; Dist.370km in az. 143deg. [Lat = 15.84+0.71(E.Long+75.09)]
26 Apr 19 17 49 27.6 d     569cA2  5.3         8+  32  75 73  67  19N 358 104  10 +0.4 -6.6 -1.0+6.5 .162   66.9      3 50 18.9  25 34 46 355.7 709.7
       569 is double: AB 5.73 6.52 0.65" 204.0, dT = -4sec
       569 is a close double. Observations are highly desired
26 Apr 19 18  6 49   Gr    569cA2  5.3         8+  32  71 78 ** GRAZE: CA -3.6N; Dist.137km in az. 331deg. [Lat = 21.43+0.51(E.Long+75.09)]
26 Apr 19 23 56 50.7 d   76407 A0  8.2  8.1    9+  34  -9 25 290  87S  74 355  85 -0.4 -6.6 +0.8-0.1 .515   13.7      4  2 41.8  25 55 17 359.3 923.8
26 Apr 20  1 33 29.5 d   76460 A0  8.0  7.9    9+  35   5 296  39S 123  53 134 -0.3 -6.4 -0.6-1.5 .521  -33.7      4  6 41.4  25 43 20 361.61099.2
26 Apr 21  0 21 15.3 D     771SA5  6.1  5.9e  17+  48  34 291  70N  60 337  66 +1.4 -6.4 +1.5+0.5 .402   36.6      5  9 45.1  28  1 50 360.3 874.7
       771 is triple: Aa,Ab 6.0      0.20" 351.0, dT = +0.17sec : A,BC 6.0 9.1 11.2"  29.1, dT = +24sec
       771 is a close double. Observations are highly desired
       771 = V1156 Tau, 6. to 6.1, Hp, Type E:, Period 1.40266 days, Phase  44%
26 Apr 21  0 21 45.8 d   76991MA3  8.6        17+  48  34 291  69N  59 336  65 +1.4 -6.4 +1.6+0.5 .397   37.7      5  9 45.5  28  2  2 360.3 875.6
     76991 is triple: BC 9.11 9.71 0.26"  63.3, dT = +0.7sec : BC,A 9.1 6.0 11.2" 209.1, dT = -24sec
     76991 is a close double. Observations are highly desired
26 Apr 21  1 37 18.7 d   77030 K0  8.6  7.9   17+  49  18 294  34S 137  61 143 +1.4 -6.3 -0.5-2.1 .440  -39.9      5 12 34.1  27 36 15 362.01008.5
26 Apr 22  0  2 57.8 d     952 K2  8.0  7.2   26+  62 -10 52 290  68S 111  19 110 +3.1 -5.9 +1.3-1.3 .435   -5.3      6 15 54.8  27 51 42 361.7 767.2
26 Apr 22  1 14  5.1 d   78191 A0  7.7  7.7   27+  62  36 291  44N  43 318  42 +3.0 -5.7 +2.9+2.3 .219   63.9      6 17 59.9  28  0 24 363.1 875.7
26 Apr 23  0 47 15.7 d   79319 K2  7.9  7.3   38+  76  55 287  79S 108  16 101 +4.3 -4.8 +1.6-1.2 .425    7.6      7 21 39.7  25 51 44 365.2 759.4
26 Apr 23  1  3 44   m   79316 G2  7.5  7.1v  38+  76  52 287  18N  25 295  18 +4.3 -4.8 +9.9+9.9 .000   90.0      7 21 32.8  26  9 33 365.5 782.6
     79316 = V0340 Gem, 7.37 to 7.71, V, Type RS, Period 35.37 days, Phase  17%
26 Apr 24  4 51 11.6 d    1269kG5  6.9  6.3   50+  90  14 288  25S 169  95 156 +4.9 -3.0 -0.9-2.7 .360  -51.6      8 28  7.2  21  8 55 373.91050.7
26 Apr 25  3 22 48.2 d   98511kF2  7.8  7.6   61+ 102  44 275  49N  67 349  51 +5.5 -1.8 +2.9+0.6 .229   59.6      9 20 38.2  17  7 38 375.0 824.5
26 Apr 25  4  7 36.8 d    1387cA5  7.0  6.8   61+ 103  34 277  52S 146  70 130 +5.4 -1.7 +0.2-2.1 .451  -21.7      9 21 25.5  16 35 54 376.1 886.2
      1387 is double: ** 7.6 7.6 0.10"  90.0, dT = +0.12sec
      1387 has been reported as non-instantaneous (OCc1402). Observations are highly desired
26 Apr 26  0 45 26.0 d   98966SG   8.2  7.7   70+ 114  82 166  73S 128 142 109 +6.2 -0.7 +2.1-1.7 .357    4.3     10  8 12.8  11 59 49 377.0 653.8
     98966 is quadruple: BC 8.2 13.2 0.9"  82.7, dT = +1.7sec : BD 8.2 12.1 108" 210.0, dT = +42sec : BA 8.2 1.4 176" 128.0, dT = +493sec
      98966 is a close double. Observations are highly desired
26 Apr 26  0 53 38.8 D    1487SB7  1.4  1.4s  70+ 114  82 180  74S 127 128 108 +6.2 -0.6 +2.1-1.7 .357    5.4     10  8 22.3  11 58  2 377.0 655.7
   R1487 = Regulus = alpha Leonis
      1487 is triple: AB 1.4 8.2 176" 308.0, dT = -492sec : AD 1.4 12.1 193" 274.0, dT = -452sec
      1487 = NSV 4750, 1.33 to 1.40, V
26 Apr 26  2 19  9.5 R    1487SB7  1.4  1.4s  71+ 115  68 252 -62N 319 253 300 +5.9 -0.4 +1.4-2.2 .380  174.0     10  8 22.3  11 58  2 377.6 700.1
   R1487 = Regulus = alpha Leonis
      1487 is triple: AB 1.4 8.2 176" 308.0, dT = -454sec : AD 1.4 12.1 193" 274.0, dT = -359sec
      1487 = NSV 4750, 1.33 to 1.40, V
26 Apr 27  0 24 44.5 D    1589pM5  5.9  5.3v  80+ 126  68 126  89S 113 163  92 +6.3 +0.8 +2.5-0.8 .335   20.7     10 56  1.5   6 11  7 381.4 662.6
   R1589 = 56 Leonis (VY)
      1589 is double:  6.2 7.1
      1589 = VY Leo, 5.69 to 6.03, V, Type SR, Period 46.34 days, Phase  16%
26 Apr 28  3 21 46.7 d  138388 K0  7.3  6.8   88+ 139  65 217  59N  80  46  58 +5.4 +2.7 +4.4+0.4 .200   55.5     11 45  1.4 - 0 31  4 385.8 661.6
26 Apr 29  0 18 23   Gr 138781cF2  7.7        93+ 150  44 ** GRAZE: CA 23.1N; Dist.  9km in az. 214deg. [Lat = 19.92-0.65(E.Long+75.09)]
26 Apr 29 23 50 23.6 d  157785kK0  6.9  6.3   97+ 161  -7 25 114  51N  63 124  42 +5.0 +4.7 +2.7+3.4 .187   64.5     13 11 40.6 -11 13 18 394.9 830.7
26 Apr 30  3 31 41.6 d  157822kK2  7.3  6.6   98+ 162  57 174  78S 112 118  91 +4.3 +5.2 +2.7-0.9 .308   21.6     13 15 54.0 -12 21  0 392.6 630.3
26 May  1  3 54 51.9 d    2011 K2  6.3  5.6  100+ 172  52 167  87N  69  82  50 +3.4 +6.1 +5.4+2.0 .158   60.7 .01 14  3  4.1 -17 22  1 395.7 621.1
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Occultation prediction for Santiago de Cuba
E. Longitude - 75 5 13.9, Latitude 20 1 0.9, Alt. 800m; Telescope dia 15cm; dMag 0.0

y	m	day d	h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon	Sun Alt	Moon Alt	Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
							Distance of 2011 to Terminator = 8.2"; to 3km sunlit peak = 1.0"																														
26	May	2	1	59	21.2	r	2109	K4	6.1	5.2		100-	173	28	129	48S	291	343	274	+3.0	+6.5	+1.2	-0.1	.385	-166.4			14	47	13.7	-21	19	30	399.8	767.2
							Distance of 2109 to Terminator = 3.7"; to 3km sunlit peak = 0.0"																														
26	May	3	6	14	43.9	r	183731	pF0	7.3	7.1		98-	162	44	185	87N	303	299	291	+1.0	+7.2	+2.7	-1.4	.281	169.3			15	43	11.6	-25	24	56	400.2	555.1
							183731 is double: AB 7.3 9.3 5.9" 291.8, dT = -21sec																														
							183731 is a close double. Observations are highly desired																														
26	May	6	4	41	49.7	r	2660	A3	6.2	6.0		82-	130	17	130	51S	232	288	234	-2.1	+6.3	+2.3	+2.4	.264	-135.1			18	22	0.1	-28	25	48	403.2	729.9
26	May	12	8	58	57.0	R	3454	K0	7.6	7.1		25-	60	25	103	69N	268	335	290	-7.0	-1.1	+1.1	+0.8	.396	148.1			23	27	14.7	- 2	38	13	376.2	850.5
26	May	12	9	32	37.8	r	146716	pG0	8.4	8.2		25-	59	32	106	62N	276	340	297	-7.1	-1.2	+1.7	+0.6	.333	138.6			23	28	5.7	- 2	27	33	375.3	808.4
							146716 is triple: AB 9.2 9.2 0.20" 79.6, dT = +0.6sec : AC 8.5 8.1 57" 45.9, dT = +111sec																														
							146716 is a close double. Observations are highly desired																														
26	May	12	9	34	29.4	r	146717	PF2	8.1	7.9		25-	59	-12	33	107	61N	276	341	298	-7.1	-1.2	+1.7	+0.5	.328	137.8			23	28	8.5	- 2	26	53	375.2	806.2
							146717 is double: AB 8.1 8.5 57" 225.9, dT = -111sec																														
26	May	12	9	35	39.2	r	146720	K5	8.1	7.4		25-	59	-12	33	107	70S	227	291	249	-7.1	-1.2	+1.0	+1.9	.438	-172.7			23	28	27.0	- 2	39	13	375.2	804.4
26	May	13	9	40	50.3	R	109127	F0	7.2	7.0		16-	46	-11	26	96	36S	194	264	216	-6.5	-2.6	+0.1	+2.7	.379	-138.9			0	18	7.9	3	47	48	369.7	900.7
26	May	19	0	3	41.2	D	77604	K0	7.0	6.2		7+	30	-8	22	293	5S	167	89	168	+1.7	-5.8	-1.5	-4.0	.249	-64.4			5	49	38.1	27	33	3	357.5	1000.1
26	May	19	0	11	8.4	D	77621	M3	7.5	6.6s		7+	30	-10	21	293	56S	116	38	117	+1.7	-5.8	+0.0	-1.3	.568	-13.3			5	50	48.2	27	41	9	357.7	1012.5
							77621 = NSV 16688, 7.47, range 0.02, 6V, Type VAR, Period 4.88496 days																														
26	May	19	0	18	51.3	D	885	wG7	5.6	5.1		7+	30	-11	19	294	59N	50	333	52	+1.7	-5.7	+1.2	+0.9	.363	52.1			5	50	58.1	27	58	4	357.9	1026.9
							885 is double: AB 5.7 12.5 10.8" 233.1, dT = -30sec																														
26	May	19	0	23	17.3	d X	7730	B5	9.4	9.3		7+	30		18	294	59S	112	36	114	+1.7	-5.7	+0.0	-1.2	.587	-9.8			5	51	21.6	27	40	35	358.0	1034.2
26	May	19	0	26	31.7	D	77619	F2	7.1	6.9		7+	30		17	294	6S	165	89	167	+1.7	-5.7	-1.5	-3.6	.272	-63.1			5	50	39.7	27	30	18	358.1	1041.2
26	May	19	0	29	10.4	D	77639	K0	8.3	7.7		7+	30		17	294	83N	75	359	76	+1.7	-5.7	+0.5	-0.2	.533	27.6			5	51	40.2	27	50	31	358.1	1045.0
26	May	19	1	2	17.5	d	77671	F5	9.2	9.0		7+	31		10	296	67S	105	33	107	+1.7	-5.6	-0.2	-0.9	.633	-3.4			5	53	10.4	27	37	27	358.9	1104.4
26	May	19	1	5	40.1	D	890	cA0	4.6	4.6s		7+	31		10	296	66S	106	34	108	+1.7	-5.6	-0.2	-0.9	.636	-4.5			5	53	19.6	27	36	44	359.0	1110.5
							R890 = 136 Tauri																														
							890 is double: ** 4.8 6.3 0.050" 270.0, dT = -0.08sec																														
							890 has been reported as non-instantaneous (OCc 206). Observations are highly desired																														
							890 = NSV 2696, 4.50 to 4.61, V																														
26	May	19	1	15	29.9	d	77686	F5	9.2	8.7		7+	31		8	297	52S	120	49	122	+1.8	-5.6	-0.4	-1.2	.614	-18.5			5	53	40.6	27	31	45	359.2	1128.3
26	May	20	0	39	56.3	d	78940	K8	8.9	8.0		14+	44		28	290	86S	96	16	92	+3.6	-4.8	+0.6	-0.8	.534	14.7			6	59	13.5	26	24	6	360.3	964.5
26	May	20	0	48	1.1	d	78933	K2	8.7	8.2		14+	44		26	290	33S	149	70	144	+3.5	-4.8	-0.4	-2.3	.439	-38.4			6	58	56.5	26	10	6	360.5	978.6
26	May	20	1	30	51.4	d	78973	A2	8.8	8.6		15+	45		18	292	76S	106	30	101	+3.6	-4.7	+0.1	-1.0	.599	4.2			7	1	13.7	26	11	6	361.5	1052.3
26	May	20	1	34	24.3	d	78979	G5	8.1	7.6		15+	45		17	292	90S	93	17	88	+3.6	-4.7	+0.2	-0.7	.576	17.3			7	1	25.4	26	14	7	361.6	1058.6
26	May	20	2	15	31.9	d	78998	G5	8.0	7.7e		15+	45		8	295	21S	161	90	156	+3.6	-4.6	-1.1	-2.5	.391	-52.5			7	2	23.3	25	50	46	362.7	1130.7
							78998 = V0369 Gem, 7.95 to 8.12, V, Type EB, Period 0.423061 days, Phase 26%																														
26	May	20	23	56	3.6	D	1208	DK1	6.4			23+	58	-6	51	283	56N	65	338	55	+5.1	-3.7	+2.9	+0.8	.266	54.6			8	1	0.8	23	34	59	362.7	809.4
							1208 is double: AB 6.48 9.95 1.95" 325.2, dT = -1.3sec																														
							1208 is a close double. Observations are highly desired																														
26	May	21	0	50	12.1	d	79882	K5	8.7	7.9		24+	58		39	284	43S	147	65	137	+5.0	-3.6	+0.1	-2.2	.443	-28.1			8	2	13.6	23	1	29	363.9	887.0
26	May	21	2	37	26.5	D	1221	cM3	6.0	5.1v		24+	59		15	289	63S	128	54	117	+5.0	-3.3	-0.2	-1.5	.583	-12.1			8	6	18.4	22	38	8	366.5	1060.5
							R1221 = 9 Cancri = BL Cnc.																														
							1221 is double: AB 6.0 10.1 0.40"																														
							1221 is a close double. Observations are highly desired																														
							1221 = BL Cnc, 5.97 to 6.04, V, Type SR																														
26	May	21	2	47	17.5	d	79951	G5	7.8	7.2		24+	59		13	290	76N	87	13	76	+5.0	-3.3	+0.3	-0.6	.531	28.7			8	6	56.2	22	46	31	366.8	1077.1
26	May	21	2	57	55.8	d	1222	cG5	7.2	6.8		24+	59		11	290	29S	161	89	150	+5.0	-3.2	-0.8	-2.3	.425	-46.2			8	6	34.4	22	27	24	367.1	1095.4
							1222 is double: ** 7.2 0.013" 234.6, dT = +0.01sec																														

Occultation prediction for Santiago de Cuba
E. Longitude - 75 5 13.9, Latitude 20 1 0.9, Alt. 800m; Telescope dia 15cm; dMag 0.0

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      day  Time     P   Star  Sp  Mag  Mag    % Elon Sun  Moon   CA   PA  VA  AA Libration   A   B   RV    Cct durn  R.A. (J2000)  Dec   Mdist   SV
 y   m  d  h  m    s       No  D    v    r V  ill     Alt Alt Az   o    o   o   o   L    B   m/o m/o  "/s     o  sec  h  m   s    o  m  s   Mm   m/s
      1222 has been reported as non-instantaneous (OCc1381). Observations are highly desired
26 May 23  3 38 49.2 D    1466cB9  5.3  5.3   46+  85     22 276  87N 107  34  89 +6.4 -0.2 +0.5-1.2 .497   16.2      9 58 13.4  12 26 41 376.9 946.8
   R1466 = nu Leonis
      1466 is double: ** 6.0 6.0 0.050"
      1466 has been reported as non-instantaneous (OCc1407). Observations are highly desired
26 May 24  2 28 40.0 d  118476PF8  8.2  7.9   56+  97     47 258  65N  87  19  66 +6.7 +1.2 +2.3-0.6 .301   43.7     10 45 18.9   6 57 39 379.8 765.8
    118476 is double: ** 8.9 8.9 0.10"  90.0, dT = +0.33sec
    118476 has been reported as non-instantaneous (OCc1419). Observations are highly desired
26 May 24  3 38 39.6 D    1567kK1  6.4  5.8   57+  98     31 265  34S 168  97 147 +6.5 +1.3 +0.0-2.9 .346  -41.1     10 46  5.7   6 22 23 381.4 849.2
   R1567 = 37 (Sextantis)/Leonis
26 May 24  4  3 53.6 d    1573pA2  7.1  7.0   57+  98     25 268  72S 130  59 109 +6.5 +1.4 +0.5-1.8 .475   -4.7     10 47 19.2   6 20 46 382.1 883.3
   R1573 = 38 (Sextantis)/Leonis
26 May 25  0 11 37.1 d  118884 K0  7.9  7.3   66+ 109  -9 71 174  42S 161 167 139 +7.0 +2.3 +1.0-2.8 .320  -24.5     11 28 47.1   1 12 14 383.0 652.5
26 May 28  0 16 45.2 D    1970SA0  6.2  6.2   90+ 143 -10 42 136  55S 140 182 120 +5.2 +5.8 +1.1-1.4 .359   -9.2     13 45 35.1 -15 46  3 396.3 698.9
   R1970 = 85 Virginis
      1970 is multiple: Aa,Ab 6.5 8.2           : Aa,Ac 6.5 8.4 0.10"       : AB 6.2 12.8 44" 312.7, dT = -122sec : AB 6.2 12.8 44" 312.5, dT = -
122sec
      1970 is a close double. Observations are highly desired
26 May 29  1 27 28.4 D    2084 A3  6.5  6.4   95+ 155     42 147  90S  98 131  80 +4.0 +6.6 +2.7+0.1 .296   29.6     14 34 50.7 -20 26 22 398.8 659.1
26 Jun  2  4 53 33.1 r  186286 B7  7.1  7.1   97- 159     37 154  77N 295 323 296 -1.3 +6.5 +2.5-0.6 .269  157.2     18  6 45.8 -28 21 50 402.2 568.3
26 Jun  2  6  0 25.2 R    2617cK0  4.6  4.1   97- 159     41 172  81S 273 281 273 -1.6 +6.5 +3.2+0.0 .274  173.7     18  8  5.0 -28 27 26 401.8 536.3
      2617 is double: AB 5.1 5.9 0.26"  12.0, dT = +0.15sec
      2617 is a close double. Observations are highly desired
26 Jun  5  6 13 29.5 r  189638DK0  7.7        79- 126     34 134  85N 261 308 275 -5.0 +3.5 +2.3+1.0 .319  166.7     20 44 49.2 -20 53 34 396.5 630.2
    189638 is double: AB 7.95 9.63 2.05"  97.4, dT = +6sec
    189638 is a close double. Observations are highly desired
26 Jun  6  6 37 29.4 r    3157cF6  7.3        71- 114     33 126  69N 273 325 290 -6.0 +2.1 +2.1+0.6 .304  149.7     21 33 40.2 -16 12  4 392.8 671.1
      3157 is double: AB 7.33 10.00 0.90"   2.6, dT = -0.01sec
      3157 is a close double. Observations are highly desired
26 Jun  7  7 40 46.3 r    3282kK0  7.8  7.0   61- 103     40 124  71S 230 283 250 -6.9 +0.6 +1.7+2.0 .362 -175.1     22 22 11.6 -10 50 53 387.4 683.1
26 Jun  7  9 38  4.5 R    3286 K0  7.2  6.4   60- 102 -10 58 159  56N 283 303 303 -7.3 +0.4 +4.6-0.7 .191  124.3     22 24  7.6 -10 11 52 385.7 633.9
26 Jun 10  7 28 49.4 r  109413 K2  8.0  7.3   30-  66     16  88  84S 243 314 264 -6.7 -3.6 +0.3+1.4 .539  174.8      0 43 53.0   7 33 19 372.7 978.4
26 Jun 10  8 30 19.4 r  109437kG5  7.8  7.3   29-  65     30  92  82S 240 312 262 -6.7 -3.7 +0.7+1.5 .491  173.6      0 45 40.4   7 50 42 371.0 889.6
26 Jun 11  8 41 45.2 r   92548 A3  8.1  7.9   19-  52     23  83  56S 218 292 238 -5.8 -4.8 +0.1+1.9 .522 -161.0      1 38 27.6  13 55 42 365.9 979.5
26 Jun 11  9 21 19.1 R     244 K0  6.7  6.2   19-  52     33  85  83N 258 334 279 -5.8 -4.9 +0.9+1.1 .478  156.7      1 39 15.4  14 17  8 364.8 921.1
   R244 = 104 Piscium
26 Jun 12 10  2 14.4 r   93033SK0  7.2  6.4   10-  38  -5 30  78  15S 182 260 200 -4.3 -5.7 -0.9+3.3 .302 -123.2      2 38 37.3  19 43 40 359.9 962.5
     93033 is triple: **Aa,Ab 7.5 8.5 0.30"  70.0, dT = +0.38sec : AB 7.2 14.4 45"  57.7, dT = +85sec
     93033 has been reported as non-instantaneous (OCc 312). Observations are highly desired
26 Jun 13  9 10 47.3 R     522 G5  7.8  7.1    4-  24      8  67  48N 309  20 322 -2.4 -6.0 +0.8-0.9 .320  118.8      3 37 43.5  24 15 33 358.81153.1
26 Jun 13 11 53 41.0 r     539SB6  4.3  4.4s   4-  23  19 42  74  -6S 173 258 186 -2.3 -6.3 -2.4+5.8 .168 -109.1      3 45 12.5  24 28  2 355.0 883.8
   R539 = Taygeta = 19 Tauri
      539 is multiple: Aa,Ab 4.6 6.1           : AB          0.019"  73.4, dT = +0.02sec : AC 4.3 14.0 53"  53.4, dT = +157sec : AB 4.3 11.0 72"
328.8, dT = +394sec
      539 is a close double. Observations are highly desired
      539 = NSV 1264, 4.30, range 0.00, 1Kp, Type SPB, Period 1.5664 days
26 Jun 17  0 12  1.1 d   79523wM5  7.7  6.8s   5+  26  -7 18 290  27S 157  81 149 +3.3 -3.8 -0.7-2.3 .445  -43.2      7 34 59.3  24 15 56 359.21065.5
     79523 is double: AB 7.8 11.1 92" 180.0, dT = +189sec
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Occultation prediction for Santiago de Cuba
E. Longitude - 75 5 13.9, Latitude 20 1 0.9, Alt. 800m; Telescope dia 15cm; dMag 0.0

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      day  Time     P   Star  Sp  Mag  Mag    % Elon Sun  Moon   CA   PA  VA  AA Libration   A   B   RV    Cct durn  R.A. (J2000)  Dec   Mdist   SV
 y   m  d  h  m   s       No  D    v    r V  ill     Alt Alt Az   o    o   o   o   L    B   m/o m/o  "/s     o  sec  h  m   s    o  m  s   Mm   m/s
     79523 = NSV 17512, 7.69 to 7.78, Hp
26 Jun 17  0 53 39.2 d X103290     9.7  9.5    5+  26      9 293  49N  53 341  45 +3.3 -3.7 +0.8+0.8 .335   59.0      7 37 15.1  24 30 57 360.21136.6
26 Jun 17  1 11 40.0 D    1155 F0  6.4  6.2    5+  27      5 294  68N  72   2  64 +3.4 -3.6 +0.1-0.1 .515   39.4      7 38 14.4  24 21 38 360.71166.4
26 Jun 17  1 31 22.7 d    1157 A2  6.2  6.2    5+  27      1 295  80N  85  16  76 +3.4 -3.6 -0.2-0.4 .612   26.6      7 39 12.0  24 13 21 361.21198.8
26 Jun 17 20 32 11.4 D Venus      -4.0 -4.0   11+  38  41 80 278  28S 168  70 151 +5.3 -2.9 +0.8-3.7 .279  -38.8      8 30 20.8  21  2 26 358.5 622.0
   Venus contacts: Bright limb 20 31 45; Terminator 20 32 36; Dark limb 20 32 38: diam = 14.7"; %illum = 74.0%; PA bright limb = 281.5
26 Jun 17 21 42 33.2 R Venus      -4.0 -4.0   11+  39  25 63 277 -76S 271 180 254 +5.1 -2.8 +2.9-0.4 .308 -141.7      8 30 20.8  21  2 26 359.3 684.7
   Venus contacts: Bright limb 21 42  9; Terminator 21 42 45; Dark limb 21 42 57: diam = 14.7"; %illum = 74.0%; PA bright limb = 281.5
26 Jun 18  0 15 43.9 d   80294kF8  8.0  7.7   12+  40  -8 29 283  51N  63 345  50 +4.9 -2.3 +1.7+0.5 .296   57.5      8 37 26.4  20 29 14 362.4 967.0
26 Jun 18  0 36 18.2 d   80297kF0  8.7  8.5   12+  40     24 284  36S 157  81 144 +4.9 -2.3 -0.4-2.3 .450  -37.5      8 37 33.8  20  0 49 363.0 999.2
26 Jun 18  0 39 49.9 D    1288kF5  7.8  7.6   12+  40     24 284  86N  99  23  86 +4.9 -2.3 +0.5-0.9 .534   20.7      8 38 23.1  20 12 26 363.11004.5
26 Jun 18  0 55  9.9 d   80309kF0  8.1  8.0v  12+  40     20 285  59S 133  58 120 +4.9 -2.2 -0.1-1.6 .566  -14.4      8 38 37.9  19 59 23 363.51029.1
     80309 = CY Cnc, 8.14, range 0.02, V, Type DSCTC, Period 0.1 days
26 Jun 18  1  2 47.5 d   80317pA2  8.3  8.2s  12+  40     19 285  72S 121  46 108 +4.9 -2.2 +0.0-1.3 .590   -2.5      8 39  3.6  19 59 59 363.71041.5
     80317 is double: ** 8.3 10.6 0.044"  98.7, dT = +0.07sec
     80317 has been reported as non-instantaneous (OCc 637). Observations are highly desired
     80317 = NSV 4162, 8.32, range 0.02, V
26 Jun 18  1 15 49.2 D   80327pA3  7.8  7.6   12+  40     16 286  76N  89  15  75 +4.9 -2.2 +0.3-0.6 .524   29.6      8 39 42.8  20  5 10 364.01062.9
     80327 is double: AB 7.9 9.6 0.64" 136.3, dT = +0.8sec
     80327 is a close double. Observations are highly desired
26 Jun 18  1 23  3.4 d   80331pF0  9.0  8.8   12+  40     14 286  80N  93  20  80 +4.9 -2.2 +0.2-0.7 .552   24.9      8 39 59.1  20  1 53 364.21074.6
     80331 is multiple: AB                    : Ca,Cb 9.2      0.30"  22.0, dT = +0.18sec : CA 9.0 6.5 134" 129.0, dT = +197sec : CS 9.0 10.1 138"
341.1, dT = -94sec
     80331 is a close double. Observations are highly desired
26 Jun 18  1 26 14.4 d   80330pA5  8.9  8.7   12+  40     14 287  49N  62 349  49 +4.9 -2.2 +0.8+0.4 .345   55.7      8 39 58.4  20  9 30 364.31080.5
     80330 is double: AB 8.9 9.7 91" 153.0, dT = -2.9sec
26 Jun 18  1 26 18.8 D    1295pK0  6.4  5.9s  12+  40     13 287  82N  95  21  81 +4.9 -2.2 +0.2-0.8 .562   23.1      8 40  6.4  20  0 28 364.31079.9
   R1295 = 39 Cancri
      1295 is multiple: AC 6.5 9.0 134" 309.0, dT = -197sec : AD 6.5 8.8 135" 111.0, dT = +231sec : AB 6.5 6.6 152" 149.9, dT = +155sec : AS 6.5 10.1
262" 325.7, dT = -294sec
      1295 = NSV 4179, 6.39, range 0.04, V
26 Jun 18  1 28 49.1 D    1296pA1  6.6  6.6   12+  40     13 287  87N 100  27  87 +4.9 -2.2 +0.1-0.9 .584   17.8      8 40 11.5  19 58 16 364.41084.0
   R1296 = 40 Cancri
      1296 is quadruple: Ba,Bb 6.6      0.40" 128.0, dT = +0.6sec : BR 6.6 11.6 140" 146.9, dT = +164sec : BA 6.6 6.5 152" 329.9, dT = -168sec
      1296 is a close double. Observations are highly desired
26 Jun 18  1 30  8.8 d   80338pF5  8.8  8.6S  12+  40     13 287  81N  94  21  80 +4.9 -2.2 +0.2-0.7 .562   23.9      8 40 15.3  19 59 39 364.41086.2
     80338 is double: DA 8.8 6.5 135" 291.0, dT = -230sec
     80338 = NSV 17951, 8.81, , Type VAR:
26 Jun 18  1 30 16.5 D    1292kF0  6.7  6.5v  12+  41     12 287  45S 148  75 135 +4.9 -2.2 -0.4-1.9 .528  -30.9      8 39 42.7  19 46 42 364.41086.6
   R1292 = 38 Cancri (BT)
      1292 = BT Cnc, 6.66, range 0.06, V, Type DSCTC, Period 0.10228 days
26 Jun 18  1 37 47.8 d   80340pA0  7.9  7.8S  12+  41     11 287  72S 121  49 108 +5.0 -2.1 -0.2-1.3 .620   -3.7      8 40 23.5  19 50  6 364.61098.5
     80340 is double: ** 8.8 8.8 0.050" 111.0, dT = +0.08sec
     80340 has been reported as non-instantaneous (OCc1074). Observations are highly desired
     80340 = NSV 4183, 8.01,
26 Jun 18  1 47 43.5 d   80351kA2  8.7  8.5   12+  41      9 288  76N  89  17  75 +5.0 -2.1 +0.1-0.6 .555   28.3      8 40 56.9  19 56  5 364.91115.0
26 Jun 18  1 47 58.0 D   98020pA0  7.6  7.5e  12+  41      9 288  41S 152  80 138 +5.0 -2.1 -0.5-1.9 .516  -35.0      8 40 20.7  19 41 12 364.91115.5
     98020 is quadruple: ** 9.1 9.1 0.050"       : CA 7.6 6.5 64" 163.1, dT = +122sec : CD 7.6 9.2 76"  91.1, dT = +72sec
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Occultation prediction for Santiago de Cuba
E. Longitude - 75 5 13.9, Latitude 20 1 0.9, Alt. 800m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon	Sun Alt	Moon Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
							98020 has been reported as non-instantaneous (OCc1392). Observations are highly desired																														
							98020 = HD 73709, 7.69 to 7.76, V, Type EA, Period 7.22015 days, Phase 75%																														
26	Jun	18	1	49	56	m	80343kF2	8.2	8.0v	12+	41		8	288	14N	27	315	13	+5.0	-2.1	+9.9	+9.9	.000		90.0			8	40	26.7	20	10	55	364.9	1120.4
							80343 = BQ Cnc, 8.19, range 0.02, V, Type DSCTC, Period 0.074 days																														
26	Jun	18	1	50	2.3	D	1298pK0	6.4	5.9E	12+	41		8	288	38S	155	84	142	+5.0	-2.1	-0.6	-2.0	.495		-38.4			8	40	22.1	19	40	12	365.0	1118.9
							1298 is multiple: AE 6.5 12.5 15.7" 154.8, dT = +32sec : AB 6.4 10.4 20.8" 55.1, dT = -7sec : AC 6.5 7.6 64" 343.1, dT = -128sec : AD 6.5 9.2 84" 44.0, dT = -61sec																														
							1298 = HD 73710, 6.42, , Type EA, Period 7.22030 days, Phase 42%																														
26	Jun	18	1	50	43.4	D	1302pA9	6.8	6.7	12+	41		8	288	57S	136	64	122	+5.0	-2.1	-0.4	-1.5	.599		-18.8			8	40	43.2	19	43	10	365.0	1119.7
							R1302 = 42 Cancri																														
							1302 is double: ** 7.5 7.5 0.050"																														
							1302 has been reported as non-instantaneous (OCc1393). Observations are highly desired																														
26	Jun	18	1	54	53.3	d	80353kA3	8.3	8.2S	12+	41		7	289	71N	84	13	71	+5.0	-2.1	+0.1	-0.5	.537		32.5			8	41	13.8	19	55	19	365.1	1126.6
							80353 = NSV 17956, 8.33, , Type DSCT:																														
26	Jun	18	2	6	44.7	D	1303kA6	6.8	6.7v	12+	41		4	289	32S	161	91	148	+5.0	-2.1	-0.7	-2.2	.458		-44.9			8	40	56.3	19	34	49	365.4	1146.2
							1303 = EP Cnc, 6.76, range 0.03, V, Type DSCTC																														
26	Jun	18	2	10	6.4	d	1305pK0	6.9	6.4	12+	41		4	290	66N	79	9	66	+5.0	-2.1	+0.0	-0.3	.518		37.1			8	41	50.1	19	52	27	365.5	1151.3
							1305 is double: Ea,Eb 7.2 9.1																														
26	Jun	19	1	6	16.7	d	98659	8.8	8.5	20+	54		29	276	72N	90	15	73	+6.1	-0.6	+1.0	-0.7	.436		33.9			9	35	32.2	14	49	30	368.2	939.3
26	Jun	19	1	31	29.8	d	98665w	8.8	8.4	21+	54		23	278	86S	113	39	96	+6.1	-0.6	+0.4	-1.3	.538		10.0			9	36	13.3	14	35	48	368.9	977.0
							98665 is double: AB 8.8 9.1 82" 111.0, dT = +152sec																														
26	Jun	19	1	43	47.0	D	1415WA1	6.3	6.3	21+	54		20	279	34S	165	91	148	+6.1	-0.5	-0.4	-2.5	.407		-43.0			9	35	52.9	14	22	47	369.2	996.4
							R1415 = 7 Leonis																														
							1415 is double: AB 6.3 9.4 41" 90.5, dT = +27sec																														
26	Jun	19	2	24	39.4	D	1420 F2	6.6	6.4	21+	54		11	281	89S	110	38	93	+6.1	-0.5	+0.0	-1.1	.581		10.3			9	38	1.3	14	20	50	370.4	1059.9
							R1420 = 11 Leonis																														
26	Jun	20	0	29	45.0	D	1525 M2	5.6	4.8v	30+	66	-11	46	262	21S	180	110	160	+6.9	+0.9	-0.4	-3.5	.279		-50.8	.01	10	25	15.2	8	47	5	372.5	797.2
							R1525 = 44 Leonis (DE)																														
							1525 = DE Leo, 5.6, range 0.07, V, Type SRB:																														
26	Jun	20	0	33	3.0	d	118292DF0	7.7	7.6S	30+	66	-11	45	262	35S	167	96	147	+6.9	+0.9	+0.2	-2.9	.353		-37.2			10	25	35.1	8	46	35	372.6	800.6
							118292 is double: AB 7.8 9.1 3.6" 74.4, dT = -0.4sec																														
							118292 is a close double. Observations are highly desired																														
							118292 = NSV 4851, 7.7,																														
26	Jun	21	2	45	16.2	D	1635cM0	5.2	4.4	41+	80		23	263	49S	154	85	132	+6.9	+2.7	+0.4	-2.4	.409		-30.0			11	17	17.4	2	0	38	381.3	872.1
							R1635 = 75 Leonis																														
							1635 is double: ** 5.8 6.6 0.044" 0.0																														
							1635 has been reported as non-instantaneous (OCc 763). Observations are highly desired																														
26	Jun	21	4	1	25.4	d	1637 K0	5.9	5.4	42+	80		6	270	19S	185	115	163	+6.8	+2.8	-0.1	-4.1	.223		-65.2			11	18	55.0	1	39	1	383.5	987.4
							R1637 = 76 Leonis																														
26	Jun	23	0	3	26.8	d	138958 G5	8.1	7.7	61+	103	-5	60	190	54S	148	138	126	+6.8	+5.0	+1.5	-2.3	.324		-14.0			12	46	1.2	- 9	18	48	388.5	628.9
26	Jun	23	0	39	36.2	d	1835 K2	7.6	6.9	61+	103		58	206	63N	85	60	63	+6.6	+5.0	+4.0	+0.0	.225		47.6			12	47	6.3	- 9	12	52	388.8	629.3
26	Jun	23	4	45	40.9	d	1845SG8	6.5	5.9s	62+	104		11	255	30S	172	105	150	+5.9	+5.3	+0.8	-3.7	.247		-56.4			12	51	22.9	-10	20	18	393.8	851.9
							1845 is triple: AB 6.6 9.7 28.8" 296.3, dT = -66sec : AC 6.6 12.5 142" 211.8, dT = +440sec																														
							1845 = NSV 5994, 6.49, range 0.07, V																														
26	Jun	25	1	30	23	m	158499 F2	7.7	7.5	79+	126		50	188	20N	35	27	17	+4.9	+6.7	+9.9	+9.9	.000		90.0			14	20	50.3	-19	19	56	397.0	581.6
26	Jun	25	4	4	19.0	d	158538wK1	7.3	6.8	80+	127		32	229	42N	57	8	39	+4.2	+6.9	+2.3	+1.2	.190		54.9			14	24	0.4	-19	48	3	398.8	640.0
							158538 is double: AB 7.4 11.6 40" 286.2, dT = -137sec																														
26	Jun	25	5	2	34.2	d	158556WA2	6.8		80+	127		21	238	55N	70	12	52	+4.0	+6.9	+1.3	+0.0	.290		37.6			14	25	27.7	-19	57	57	400.0	709.7

Occultation prediction for Santiago de Cuba
E. Longitude - 75 5 13.9, Latitude 20 1 0.9, Alt. 800m; Telescope dia 15cm; dMag 0.0

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      day  Time     P   Star  Sp  Mag  Mag    % Elon Sun  Moon   CA   PA  VA  AA Libration   A   B   RV    Cct durn  R.A. (J2000)  Dec   Mdist   SV
 y   m  d  h  m   s       No  D    v    r V  ill     Alt Alt Az   o    o   o   o   L    B   m/o m/o  "/s     o  sec  h  m   s    o  m  s   Mm   m/s
    158556 is double: BA 7.2 6.6 35" 114.8, dT = +85sec
26 Jun 25  5  3 52.6 d    2066SA1  6.6  6.6   80+ 127     21 238  56N  71  12  52 +4.0 +6.9 +1.3+0.0 .293   37.1     14 25 29.9 -19 58 12 400.0 711.5
      2066 is quadruple: **Aa,Ab 6.8 7.7 0.018" 329.0, dT = -0.01sec : BC 7.16 8.37 1.21"  89.4, dT = +4sec : AB 6.6 7.2 35" 294.8, dT = -84sec
      2066 has been reported as non-instantaneous (OCc 204). Observations are highly desired
26 Jun 26  4 21 56.3 D    2174pB8  6.5  6.5   87+ 138     34 220  43S 147 105 131 +3.1 +7.3 +2.5-3.0 .235  -40.7     15 13 17.4 -24  0 30 400.9 602.7
      2174 is triple: ** 7.1 7.1 0.030"   0.0 : AB 6.4 12.5 8.2"  45.0, dT = -7sec
      2174 has been reported as non-instantaneous (OCc1471). Observations are highly desired
26 Jun 26 23 23 45.8 D    2287SB1  2.9  3.0v  92+ 147   3 24 132  76S 107 158  95 +3.2 +7.1 +1.3+0.1 .375   10.1     15 58 51.1 -26  6 51 403.0 745.4
   R2287 = pi Scorpii
      2287 is triple: Aa,Ab 5.1 13.4 2.0" 244.0, dT = -4sec : AB 2.9 11.9 50" 128.1, dT = +125sec
      2287 is a close double. Observations are highly desired
      2287 = pi Sco, 2.88 to 2.91, V, Type ELL, Period 1.570103 days, Phase  76%
26 Jun 27  0 46 51.5 R    2287SB1  2.9  3.0v  92+ 148     36 148 -55N 307 341 296 +2.9 +7.2 +1.6-0.9 .319  169.4     15 58 51.1 -26  6 51 401.9 632.8
   R2287 = pi Scorpii
      2287 is triple: Aa,Ab 5.1 13.4 2.0" 244.0, dT = -2.8sec : AB 2.9 11.9 50" 128.1, dT = +158sec
      2287 is a close double. Observations are highly desired
      2287 = pi Sco, 2.88 to 2.91, V, Type ELL, Period 1.570103 days, Phase  76%
26 Jun 27  3  5 22.4 d    2297kF7  7.0  6.7   93+ 148     43 186  43S 139 132 127 +2.3 +7.3 +2.6-2.1 .239  -31.0     16  3 16.1 -26 43  2 401.4 543.0
26 Jul  1  8  1 57.7 r    2879kA3  6.7  6.6   98- 165     37 213  78N 286 251 295 -3.5 +4.6 +3.4-1.5 .235  134.1     19 42 22.6 -24 51 34 399.3 653.3
26 Jul  3  3 44 30.4 R    3113cB5  5.4  5.5V  91- 144     22 120  20S 185 244 201 -4.4 +2.4 +1.6+4.9 .168 -116.4     21 17 57.3 -17 59  7 396.2 728.0
   R3113 = 30 Capricorni
      3113 is double: ** 6.1 6.1 0.10"  87.0, dT = +0.08sec
      3113 has been reported as non-instantaneous (OCc1602). Observations are highly desired
      3113 = HD 202671, 5.40, , Type ACV, Period 1.9917 days, Phase  99%
26 Jul  3  4 26  9.6 r    3115 F0  7.1  6.9   91- 144     31 126  32N 313   6 329 -4.6 +2.4 +2.4-2.8 .133  112.1     21 18 15.7 -17 27 44 395.3 677.1
   R3115 = 31 Capricorni
26 Jul  3  7 51 22   Gr   3126 G8  4.3  3.8v  90- 143     52 ** GRAZE: CA 23.9N; Dist. 23km in az. 134deg. [Lat = 19.72+0.98(E.Long+75.09)]
26 Jul  3  7 51 47   M    3126 G8  4.3  3.8v  90- 143     53 185  24N 320 315 337 -5.4 +2.0 +9.9+9.9 .000   90.0     21 22 14.8 -16 50  4 392.9 615.1
   R3126 = Tae = iota Capricorni
      3126 = iot Cap, 4.27, range 0.06, V, Type BY
26 Jul  4  9 23 40.7 R    3253kB5  5.4  5.5V  83- 131     55 207  89N 251 225 270 -6.5 +0.4 +2.6+0.6 .316  155.2     22 10 37.5 -11 33 54 389.1 658.0
   R3253 = 38 Aquarii
      3253 = HD 210424, 5.44, , Type ACV, Period 3.9613 days, Phase  44%
26 Jul  8  8 19 31.7 r     194cF5  8.2        44-  83     47  93  39S 198 272 219 -6.3 -4.8 +0.2+2.7 .374 -146.4      1 19 42.8  12  8 45 371.2 807.3
       194 is double: AB 8.67 9.25 0.11" 323.2, dT = +0.16sec
       194 is a close double. Observations are highly desired
26 Jul  8 10  1  0.7 R     197cK0  7.0  6.5   43-  82  -6 70 108  37S 196 262 216 -6.5 -5.1 +0.5+3.1 .333 -147.0      1 21 58.3  12 36 15 369.5 710.5
26 Jul  9  6 28 31.3 R     317 F5  6.4  6.2   33-  71     12  76  47S 209 282 228 -5.3 -5.4 -0.4+2.0 .505 -148.1      2  9 23.1  17 13 27 369.81065.5
   R317 = 20 H1. Arietis
26 Jul 10  8 16 26.3 r   75775SG5  8.5  8.1v  22-  56     24  74  33S 201 278 216 -4.0 -6.1 -0.5+2.4 .421 -138.1      3 11 13.8  22 24 57 363.5 996.1
     75775 is triple: AC 8.6 13.3 24.1" 301.1, dT = +10sec : AB 8.6 10.6 33" 321.1, dT = +40sec
     75775 = BD+21 418, 8.49 to 8.54, V, Type WTTS
26 Jul 10  9 12 50.5 r   75790 G0  8.8  8.5   22-  56     37  76  85N 264 345 278 -4.1 -6.2 +1.0+0.9 .476  157.4      3 12 24.7  22 52 50 362.1 905.5
26 Jul 10  9 22 15.5 r   75796 K0  9.0  8.5   22-  56     39  76  61S 229 311 244 -4.1 -6.3 +0.5+1.8 .497 -168.2      3 13  0.1  22 46 14 361.9 891.0
26 Jul 10 10  5  5.8 R     470WK0  6.8  6.2   22-  55  -6 49  77  63S 232 317 247 -4.1 -6.4 +0.8+1.8 .468 -171.7      3 14 17.2  22 57 14 361.1 828.8
       470 is double: AB 6.9 10.4 42"  33.3, dT = +84sec
26 Jul 11  8 33 15.2 R   76514 G5  7.2  6.9   13-  42     16  67  41N 315  30 325 -2.4 -6.2 +1.6-1.5 .260  115.2      4 14 32.2  26 15 21 360.61070.5
26 Jul 11  9 33 52.5 R   76530 K3  7.8  7.0   13-  42     29  70  67N 288   9 298 -2.4 -6.3 +1.2+0.0 .426  140.3      4 16 41.6  26 21 29 359.2 965.2
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Occultation prediction for Santiago de Cuba
E. Longitude - 75 5 13.9, Latitude 20 1 0.9, Alt. 800m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon Alt	Sun Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	Jul	12	8	42	25.4	r	77125	M0	9.1	8.1		6-	28	5	63	51S	235	305	239	-0.5	-5.8	-0.5	+1.3	.610	-157.0		5	21	38.5	27	25	55	359.4	1154.4
26	Jul	16	19	54	48.5	d	1466	cB9	5.3	5.3		8+	33	51	79	228	86S	114	69	96	+6.0	-0.1	+2.3	-1.2	.383	17.1		9	58	13.4	12	26	41	363.1	706.4
R1466 = nu Leonis																																	
1466 is double: ** 6.0 6.0 0.050"																																	
1466 has been reported as non-instantaneous (OCc1407). Observations are highly desired																																	
26	Jul	17	0	54	19.8	d	98941	K0	8.7	7.8	v	9+	35	11	277	59S	142	70	123	+5.5	+0.6	-0.1	-1.8	.545	-20.8		10	5	37.1	10	53	58	369.2	1043.1
98941 = ASAS J100537+1054.0, 8.61, range 0.07, V, Type MISC, Period 14.24 days, Phase 29%																																	
26	Jul	21	0	4	58.1	d	1906	pK0	7.8	7.2		45+	85	-6	48	219	70N	93	55	71	+6.3	+6.0	+3.0	-0.7	.276	34.4		13	16	58.4	-13	9	32	388.8	630.0
1906 is double: AB 7.9 13.0 48" 101.4, dT = +174sec																																	
26	Jul	24	2	44	3.5	d	183789	kA2	7.8	7.7		74+	119	35	214	68N	77	41	65	+3.1	+7.5	+2.6	+0.0	.273	23.9		15	47	23.3	-25	52	4	400.6	580.3
26	Jul	24	3	8	29.3	d	2256	PA1	7.0	6.9		74+	119	32	219	90S	100	58	87	+3.0	+7.5	+2.4	-1.0	.310	-0.8		15	47	56.5	-25	59	13	400.9	602.2
2256 is double: ** 7.7 7.7 0.10" 90.0, dT = +0.32sec																																	
2256 has been reported as non-instantaneous (OCc1482). Observations are highly desired																																	
26	Jul	25	3	57	21.2	D	2397	K1	6.5	5.9		82+	130	31	218	48N	51	10	43	+1.6	+7.3	+1.6	+1.1	.247	37.9		16	41	37.6	-27	48	35	402.1	609.9
26	Jul	28	2	17	6.9	d	2824	K4	7.3	6.5		98+	163	38	150	74N	52	83	59	-1.3	+5.2	+2.8	+2.0	.268	25.8		19	21	44.2	-26	9	59	399.2	576.6
26	Jul	31	4	50	51	Gr	3206	F3	5.1	4.9s		97-	162	49	** GRAZE: CA 20.4N; Dist.100km in az. 319deg. [Lat = 21.22+0.82(E.Long+75.09)]																				
Distance of 3206 to Terminator = 7.9"; to 3km sunlit peak = 0.6"																																	
26	Jul	31	5	2	25	R	3206	F3	5.1	4.9s		97-	162	52	149	38N	305	335	323	-4.6	+1.1	+7.1	-4.0	.095	106.6		21	53	17.8	-13	33	6	389.9	627.7
R3206 = Kuh = mu Capricorni																																	
3206 = NSV 25781, 5.07, range 0.03, V, Type VAR:																																	
Distance of 3206 to Terminator = 18.7"; to 3km sunlit peak = 7.5"																																	
26	Jul	31	9	45	53.6	r	164779	KG5	7.2	6.8		97-	160	-12	31	241	89S	249	192	268	-5.6	+0.4	+1.2	+0.2	.402	161.9		21	58	24.3	-12	39	53	391.0	801.1
26	Aug	1	8	23	5.1	r	146272	G5	7.7	7.2		93-	149	57	217	60N	277	242	298	-5.8	-0.9	+3.9	-1.0	.224	128.1		22	43	12.9	- 7	12	54	385.8	679.9
26	Aug	2	8	12	16	M	3460	kG0	6.9	6.6		87-	137	68	197	21N	314	298	336	-6.0	-2.4	+9.9	+9.9	.000	90.0		23	29	30.3	- 1	2	9	381.7	663.3
R3460 = 12 Piscium																																	
26	Aug	2	9	44	27.7	R	3467	kK1	6.4	5.8		86-	137	55	237	21S	176	124	197	-6.4	-2.6	-0.3	+4.0	.237	-128.8		23	31	57.6	- 1	5	9	382.2	701.7
R3467 = 13 Piscium																																	
26	Aug	4	8	14	21	Gr	92234	kF5	8.1	7.9		69-	112	75	** GRAZE: CA 19.1N; Dist. 54km in az. 133deg. [Lat = 19.30+0.99(E.Long+75.09)]																				
26	Aug	4	8	15	40	m	92234	kF5	8.1	7.9		69-	112	73	118	19N	317	15	338	-5.7	-4.9	+9.9	+9.9	.000	90.0		1	5	9.6	11	18	57	374.0	691.3
26	Aug	4	10	14	23.6	r	163	pF2	7.3	7.1		68-	112	-6	74	242	78N	258	201	280	-6.1	-5.2	+2.9	+0.4	.320	151.4		1	7	4.0	11	33	8	373.6	660.9
163 is double: AB 7.3 10.5 8.3" 201.5, dT = -14sec																																	
163 is a close double. Observations are highly desired																																	
26	Aug	5	9	53	16.2	r	92732	wF5	7.8	7.5		58-	99	-11	86	135	73S	232	276	251	-5.4	-6.0	+2.0	+1.8	.370	-179.3		1	58	47.5	17	1	33	369.6	663.0
92732 is double: AB 7.8 17.9 79" 249.5, dT = -204sec																																	
26	Aug	7	5	18	12.2	r	542	pB8	5.8	5.8		37-	74	2	65	55S	224	293	236	-3.0	-6.2	-0.6	+1.5	.586	-154.5		3	45	54.5	24	33	16	369.1	1160.9
R542 = Asterope = 21 Tauri																																	
542 is triple: AB 5.8 6.4 150" 130.1, dT = +16sec : AD 5.8 12.7 170" 74.1, dT = +251sec																																	
26	Aug	7	6	18	49.6	R	555	K5	6.4	5.6s		36-	74	15	68	78N	271	346	283	-2.9	-6.3	+0.3	+0.6	.542	156.0		3	48	6.5	24	59	18	367.6	1058.0
555 = NSV 1316, 6.44, range 0.02, 0V, Type VAR, Period 1.48987 days																																	
26	Aug	7	7	43	18.0	R	571	pA2	6.8	6.7		36-	73	33	72	71S	240	322	252	-2.9	-6.5	+0.4	+1.5	.514	-174.8		3	51	25.3	25	9	47	365.6	915.3
571 is double: ** 7.1 9.1																																	
26	Aug	7	7	59	37.3	R	574	pG0	6.8	6.5		35-	73	37	73	54S	224	307	236	-2.9	-6.5	+0.2	+1.9	.469	-159.1		3	52	11.4	25	9	47	365.2	888.9
26	Aug	7	8	5	16.6	r	76281	K0	8.0	7.4		35-	73	38	73	87N	262	346	274	-2.9	-6.5	+1.0	+0.9	.474	162.4		3	52	0.9	25	20	30	365.1	879.9
26	Aug	7	8	32	9	m	76303	kA2	7.8	7.7		35-	73	44	73	15N	335	61	346	-3.0	-6.6	+9.9	+9.9	.000	90.0		3	53	32.0	25	43	48	364.5	840.0
26	Aug	7	8	39	47.0	r	76296	kA0	8.5	8.4e		35-	73	46	73	72N	278	5	290	-3.0	-6.6	+1.8	+0.3	.390	146.4		3	53	7.4	25	32	7	364.4	827.3
76296 = V1287 Tau, 8.53 to 8.87, V, Type EA, Period 13.0620 days, Phase 20%																																	
26	Aug	7	8	47	26.2	R	579	kA2	6.4	6.3S		35-	73	47	73	44N	306	34	318	-3.0	-6.6	+3.3	-1.7	.221	118.6		3	53	34.5	25	40	58	364.2	816.7
579 = NSV 1391, 6.33,																																	

Occultation prediction for Santiago de Cuba
E. Longitude - 75 5 13.9, Latitude 20 1 0.9, Alt. 800m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon Alt	Sun Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	Aug	7	9	32	6.3	r	76313	K0	8.3	7.8		35-	72	57	73	76N	274	7	286	-3.1	-6.7	+2.2	+0.4	.373	150.5		3	54	40.6	25	41	9	363.5	755.6
26	Aug	8	7	40	6.9	R	76841	cK1	7.3	6.7		25-	60	20	67	38S	215	292	222	-1.5	-6.2	-0.5	+2.1	.448	-141.4		4	55	34.6	27	12	9	364.0	1013.3
							76841 is double: ** 7.6 10.1 0.08" 82.0, dT = +0.12sec																												
							76841 has been reported as non-instantaneous (OCc 753). Observations are highly desired																												
26	Aug	9	7	36	22.1	R	909	SB9	6.0	5.9	s	15-	46	6	63	65S	250	320	250	+0.0	-5.5	-0.4	+1.0	.617	-167.1		6	1	0.5	27	34	21	363.5	1115.9
							909 is triple: Aa,Ab 6.1 9.2 194.0, dT = 0.00sec : AB 6.1 12.4 9.5" 242.4, dT = -15sec																												
							909 is a close double. Observations are highly desired																												
							909 = NSV 16751, 6.04, range 0.01, 2V, Type VAR, Period 9.26012 days																												
26	Aug	9	8	30	3.9	r	77894	SF2	8.8	8.4		15-	46	17	66	64S	249	325	249	+0.0	-5.6	+0.0	+1.2	.564	-166.7		6	3	26.6	27	38	33	362.3	1018.0
							77894 is triple: AB 8.9 9.6 11.5" 263.5, dT = -20sec : AC 8.9 11.1 25.6" 189.6, dT = -23sec																												
26	Aug	9	8	38	6.2	R	77909	wA0	7.6	7.6		15-	45	18	67	44S	229	305	229	+0.0	-5.6	-0.3	+1.8	.476	-146.3		6	4	1.0	27	34	14	362.1	1003.6
							77909 is double: AB 7.6 10.8 21.6" 132.5, dT = +5sec																												
26	Aug	9	9	38	56.0	r	77957	B9	8.7	8.6		15-	45	31	69	72N	293	16	293	+0.0	-5.7	+1.3	-0.2	.441	149.5		6	6	15.6	27	56	5	360.7	895.7
26	Aug	10	8	29	46.0	r	1085	SG8	7.1	6.7		7-	32	3	64	25S	217	287	211	+1.6	-4.5	-1.1	+2.4	.377	-126.5		7	9	35.4	25	43	43	363.0	1113.8
							1085 is triple: AB 7.2 13.0 34" 68.2, dT = +77sec : AC 7.2 7.8 125" 78.3, dT = +250sec																												
26	Aug	10	8	33	56.5	r	79124	WF0	7.8	7.6		7-	32	4	64	27S	220	290	214	+1.6	-4.5	-1.0	+2.3	.397	-129.2		7	9	44.2	25	44	5	362.9	1106.1
							79124 is double: CA 7.8 7.2 125" 258.3, dT = -246sec																												
26	Aug	10	9	30	30.1	r	X 98986		9.1	8.6		7-	31	15	67	69N	304	19	298	+1.7	-4.5	+0.7	-0.5	.478	146.7		7	12	1.4	26	5	34	361.6	1001.7
26	Aug	10	9	40	11.6	r	79159	A5	9.3	9.1		7-	31	17	68	53S	246	322	240	+1.7	-4.6	+0.0	+1.4	.508	-154.7		7	12	19.6	25	49	25	361.4	984.0
26	Aug	10	9	46	59.5	R	1094	A0	7.1	7.1		7-	31	19	69	34S	228	304	221	+1.7	-4.6	-0.3	+2.2	.400	-136.2		7	12	49.4	25	44	55	361.2	972.1
							R1094 = 49 Geminorum																												
26	Aug	14	20	11	53.5	d	1635	cM0	5.2	4.4		6+	28	45	62	232	57S	151	103	129	+5.8	+2.8	+1.1	-2.4	.381	-16.9		11	17	17.4	2	0	38	370.5	716.3
							R1635 = 75 Leonis																												
							1635 is double: ** 5.8 6.6 0.044" 0.0																												
							1635 has been reported as non-instantaneous (OCc 763). Observations are highly desired																												
26	Aug	20	1	35	30.4	d	183485	*	7.5	6.9	v	49+	89	27	226	42S	152	104	138	+3.5	+7.5	+2.6	-3.7	.203	-52.4		15	27	48.3	-25	10	10	398.5	642.5
							183485 = HM Lib, 7.42 to 7.63, V, Type PVTELIII																												
26	Aug	23	0	11	24.9	d	186286	B7	7.1	7.1		76+	122	-12	40	165	28N	24	40	24	+0.5	+6.5	+3.7	+5.2	.118	64.9		18	6	45.8	-28	21	50	400.3	541.3
26	Aug	23	0	49	21.5	D	2617	cK0	4.6	4.1		76+	122		42	175	64N	60	65	60	+0.3	+6.5	+3.2	+1.4	.249	24.9		18	8	5.0	-28	27	26	400.1	533.1
							2617 is double: AB 5.1 5.9 0.26" 12.0, dT = +0.7sec																												
							2617 is a close double. Observations are highly desired																												
26	Aug	23	1	44	12.5	d	186346	F5	7.6	7.4		77+	122		40	191	29S	147	135	147	+0.1	+6.5	+5.1	-5.1	.109	-67.3		18	8	52.1	-28	45	19	400.2	545.5
26	Aug	23	2	28	44.0	r	2617	cK0	4.6	4.1		77+	122		38	204	-75N	280	255	281	-0.1	+6.4	+3.1	-0.8	.271	155.8		18	8	5.0	-28	27	26	400.4	576.1
							2617 is double: AB 5.1 5.9 0.26" 12.0, dT = +0.03sec																												
							2617 is a close double. Observations are highly desired																												
26	Aug	23	4	11	8.4	d	186461	cA2	7.4	7.2	v	77+	123		25	224	69N	64	16	65	-0.5	+6.3	+1.2	+0.3	.355	7.5		18	12	37.6	-28	14	11	401.6	696.7
							186461 is double: ** 8.2 8.2 0.050"																												
							186461 has been reported as non-instantaneous (OCc1536). Observations are highly desired																												
							186461 = V4385 Sgr, 7.42 to 7.46, Hp, Type ELL:, Period 2.62462 days, Phase 27%																												
26	Aug	26	6	21	16.3	d	3049	B9	7.3	7.3		96+	157		33	228	80N	60	11	74	-4.0	+2.6	+1.3	+0.5	.390	-6.5		20	52	16.1	-19	38	37	393.6	749.0
26	Aug	27	6	36	21.6	d	164579	SF3	7.2	7.0		99+	169		42	226	73S	83	38	101	-4.7	+1.1	+2.3	-0.3	.319	-34.1		21	41	28.1	-14	50	29	389.4	726.8
							164579 is triple: AB 7.2 12.0 17.8" 104.2, dT = +52sec : AC 7.2 12.6 119" 257.0, dT = -371sec																												
							Distance of 164579 to Terminator = 16.4"; to 3km sunlit peak = 6.2"																												
26	Aug	27	7	56	6.8	D	3177	cA9	5.9	5.7		99+	169		27	241	83N	60	2	78	-4.9	+0.9	+0.9	+0.4	.431	-7.6		21	43	4.4	-14	23	59	390.5	822.8
							R3177 = 44 Capricorni																												
							3177 is double: ** 6.8 6.8 0.10" 90.0, dT = +0.2sec																												
							3177 has been reported as non-instantaneous (OCc1608). Observations are highly desired																												
							Distance of 3177 to Terminator = 16.2"; to 3km sunlit peak = 6.0"																												

Occultation prediction for Santiago de Cuba
E. Longitude - 75 5 13.9, Latitude 20 1 0.9, Alt. 800m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% Ill	Elon Alt	Sun Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	Aug	28	2	49	12.1	d	X242722		11.5			86E	180	46	130	66N	22	70	42	-4.3	+0.1	+1.2	+2.8	.312	30.3		22	24	17.5	- 9	58	36	386.0	676.8
26	Aug	28	2	49	53.3	r	X242709k		11.5			85E	180	46	130	-63S	198	245	218	-4.3	+0.1	+1.1	+3.0	.297	-145.7		22	23	34.8	-10	27	28	386.0	674.3
26	Aug	28	2	55	33.3	d	X182637k		11.1	10.9		78E	180	47	131	81U	82	127	101	-4.3	+0.1	+2.6	+1.0	.313	-29.5		22	25	3.2	-10	9	15	385.9	672.9
26	Aug	28	2	58	35.8	D	165050	K0	9.8	9.3		73E	180	48	132	70N	26	71	45	-4.3	+0.1	+1.3	+2.7	.322	26.2		22	24	31.7	- 9	56	53	385.9	671.2
26	Aug	28	3	5	3	m	X182632k		11.7	11.2		64E	180	48	134	79U	141	185	161	-4.3	+0.1	+9.9	+9.9	.000	-90.0		22	24	55.9	-10	23	4	385.8	666.8
26	Aug	28	3	17	16.3	d	X182644k		10.9	10.4		46E	180	51	137	80U	54	94	74	-4.4	+0.1	+2.0	+1.8	.353	-3.2		22	25	16.4	- 9	57	32	385.6	662.0
26	Aug	28	3	23	40	Gr	X182643k		11.5	11.2		37E	180	52	** GRAZE: CA 60.6U; Dist. 5km in az. 137deg. [Lat = 19.95+0.88(E.Long+75.09)]																				
26	Aug	28	3	23	47	gr	X182643k		11.5	11.2		37E	180	52	139	61U	140	179	160	-4.4	+0.0	+9.9	+9.9	.000	-90.0		22	25	12.9	-10	17	6	385.5	658.3
26	Aug	28	3	27	45	m	X182649k		11.2	10.9		31E	180	52	140	54U	140	177	160	-4.4	+0.0	+9.9	+9.9	.000	-90.0		22	25	20.6	-10	17	8	385.5	656.8
26	Aug	28	3	28	34.4	R	X 51850k		10.6	10.4		30E	180	53	141	-77N	236	273	256	-4.4	+0.0	+2.1	+1.7	.349	174.2		22	23	46.0	-10	12	53	385.5	655.6
26	Aug	28	3	30	48	m	X182655k		11.1	10.8		28E	180	53	141	49U	140	176	160	-4.4	+0.0	+9.9	+9.9	.000	-90.0		22	25	27.1	-10	17	16	385.5	655.7
26	Aug	28	3	33	13.8	D	165046	K0	8.5	7.8		25E	180	53	142	33N	347	23	7	-4.4	+0.0	-0.9	+5.1	.161	62.8		22	24	28.6	- 9	48	1	385.4	655.4
26	Aug	28	3	41	47.3	R	X 51874		9.8	9.2		16E	180	54	145	76U	197	230	216	-4.5	+0.0	+1.0	+2.9	.294	-147.5		22	24	34.2	-10	16	1	385.3	651.7
26	Aug	28	3	42	7.6	R	3286	K0	7.2	6.4		16E	180	54	146	93U	226	258	246	-4.5	+0.0	+1.9	+2.0	.348	-176.7		22	24	7.6	-10	11	52	385.3	651.5
26	Aug	28	3	53	7.5	r	X242731k		11.2			8E	180	56	149	67U	200	229	220	-4.5	+0.0	+1.2	+2.8	.306	-151.8		22	24	42.5	-10	13	5	385.2	649.1
26	Aug	28	4	1	53.9	d	X242737		11.7			5E	180	57	152	36N	345	11	5	-4.5	+0.0	-1.2	+5.1	.159	62.8		22	24	57.4	- 9	41	31	385.1	648.6
26	Aug	28	4	3	57.1	d	X242756k		11.4			4E	180	57	153	77U	55	81	75	-4.5	+0.0	+2.2	+1.6	.345	-7.2		22	26	7.4	- 9	47	8	385.1	648.7
26	Aug	28	4	7	3.0	r	X242722		11.5			4E	180	57	155	89U	258	281	278	-4.6	+0.0	+3.0	+0.9	.300	150.0		22	24	17.5	- 9	58	36	385.0	647.1
26	Aug	28	4	7	3	Gr	X242729		11.4			4E	180	58	** GRAZE: CA 7.9N; Dist. 25km in az. 133deg. [Lat = 19.68+1.01(E.Long+75.09)]																				
26	Aug	28	4	7	39	m	X242729		11.4			4E	180	58	155	10N	318	341	337	-4.6	+0.0	+9.9	+9.9	.000	90.0		22	24	36.6	- 9	43	33	385.0	647.6
26	Aug	28	4	10	31.4	r	X182637k		11.1	10.9		3E	180	58	156	51U	198	220	218	-4.6	-0.1	+1.0	+2.8	.301	-150.2		22	25	3.2	-10	9	15	385.0	646.8
26	Aug	28	4	15	34.7	R	165046	K0	8.5	7.8		3E	180	58	158	98U	290	310	310	-4.6	-0.1	+5.3	-1.5	.159	117.4		22	24	28.6	- 9	48	1	385.0	646.7
26	Aug	28	4	16	10.4	D	165076k	G5	9.6	9.0		4E	180	58	158	46U	116	137	136	-4.6	-0.1	+6.5	-2.6	.125	-68.9		22	26	25.0	-10	0	0	385.0	647.2
26	Aug	28	4	19	31.5	R	165050	K0	9.8	9.3		4E	180	59	160	80U	253	272	273	-4.6	-0.1	+2.8	+1.0	.312	154.2		22	24	31.7	- 9	56	53	385.0	646.3
26	Aug	28	4	21	21.9	d	X 51935		11.2	11.0		4E	180	59	160	92U	45	63	64	-4.6	-0.1	+1.9	+1.9	.346	2.5		22	26	18.0	- 9	40	53	384.9	647.3
26	Aug	28	4	26	8.5	d	X182667		11.0	10.5		5E	180	59	163	-17N	360	16	20	-4.6	-0.1	+0.1	+3.7	.237	46.9		22	25	38.6	- 9	35	17	384.9	647.1
26	Aug	28	4	26	47.3	d	X242766k		11.8			6E	180	59	163	62U	105	121	124	-4.6	-0.1	+4.8	-0.9	.185	-57.8		22	26	40.4	- 9	54	33	384.9	647.1
26	Aug	28	4	29	53	m	X182702k		11.7	11.5		7E	180	59	164	43U	137	152	157	-4.6	-0.1	+9.9	+9.9	.000	-90.0		22	26	28.0	-10	1	49	384.9	646.9
26	Aug	28	4	34	7.4	D	X182712k		10.8	10.3		9E	180	60	166	63U	113	126	133	-4.7	-0.1	+6.1	-2.1	.140	-66.2		22	26	45.0	- 9	54	55	384.9	647.3
26	Aug	28	4	44	4.8	r	X242737		11.7			16E	180	60	172	96U	289	297	309	-4.7	-0.1	+5.5	-1.6	.160	117.4		22	24	57.4	- 9	41	31	384.8	647.8
26	Aug	28	4	45	58.4	r	X182644k		10.9	10.4		18E	180	60	172	55U	222	230	242	-4.7	-0.1	+1.8	+1.9	.346	-176.3		22	25	16.4	- 9	57	32	384.8	647.9
26	Aug	28	4	47	25.8	R	165076k	G5	9.6	9.0		19E	180	60	173	49U	157	164	177	-4.7	-0.1	-2.8	+6.3	.125	-111.0		22	26	25.0	-10	0	0	384.8	648.3
26	Aug	28	4	56	2	M	165087	G5	9.0	8.6		29E	180	60	177	70U	136	139	156	-4.7	-0.2	+9.9	+9.9	.000	-90.0		22	27	0.2	- 9	56	38	384.8	649.8
26	Aug	28	5	9	28.6	R	X182712k		10.8	10.3		47E	180	60	183	71U	159	156	179	-4.8	-0.2	-2.4	+5.8	.140	-113.7		22	26	45.0	- 9	54	55	384.7	652.8
26	Aug	28	5	13	39.3	r	X242766k		11.8			53E	180	60	185	71U	168	162	188	-4.8	-0.2	-1.1	+4.6	.186	-122.1		22	26	40.4	- 9	54	33	384.7	654.0
26	Aug	28	5	22	47	m	X182672		11.5	10.8		67E	180	60	191	-1N	315	305	335	-4.8	-0.2	+9.9	+9.9	.000	90.0		22	25	45.0	- 9	24	13	384.7	657.0
26	Aug	28	5	23	25.8	d	X242774		11.7			68E	180	60	190	-84N	39	30	59	-4.8	-0.2	+1.7	+1.9	.350	5.9		22	27	17.2	- 9	24	58	384.7	657.2
26	Aug	28	5	27	52.3	r	X182667		11.0	10.5		74E	180	60	193	43N	272	260	292	-4.9	-0.2	+3.8	-0.3	.243	133.4		22	25	38.6	- 9	35	17	384.7	658.8
26	Aug	28	5	32	0.2	r	X242756k		11.4			80E	180	60	195	81U	217	204	237	-4.9	-0.2	+1.6	+1.9	.351	-172.1		22	26	7.4	- 9	47	8	384.7	660.4
26	Aug	28	5	36	10	m	X242782		11.6			85E	180	59	196	0S	135	120	155	-4.9	-0.3	+9.9	+9.9	.000	-90.0		22	27	36.1	- 9	45	16	384.7	662.0
26	Aug	30	5	48	46.7	r	128524	K2	7.6	6.9		95-	155	70	149	82S	233	262	255	-4.9	-3.3	+2.0	+1.7	.368	171.6		0	0	23.5	2	40	32	377.1	681.3
26	Aug	30	9	46	15.5	r	6	G5	6.9	6.3		95-	154	40	258	47S	198	131	220	-5.7	-3.8	+0.7	+2.5	.342	-144.4		0	5	22.2	3	36	22	378.5	771.4
26	Sep	2	3	41	6	Gr	370	A9	6.1	6.0v		73-	118	20	** GRAZE: CA 9.0N; Dist. 73km in az. 147deg. [Lat = 19.23+0.61(E.Long+75.09)]																				
26	Sep	2	3	42	9	M	370	A9	6.1	6.0v		73-	118	19	75	9N	330	45	348	-3.0	-5.9	+9.9	+9.9	.000	90.0		2	30	38.4	19	51	19	372.7	1013.4
R370 = 26 Arietis (UU)																																	
370 = UU Ari, 6.10 to 6.15, V, Type DSCTC, Period 0.0676 days																																	
26	Sep	2	5	50	19.1	r	93005	K0	7.9	7.3		72-	117	48	82	61S	221	303	238	-3.1	-6.2	+0.6	+2.1	.439	-164.6		2	34	23.5	19	59	5	369.9	817.7
26	Sep	2	8	9	40.2	R	387c	G5	6.9	6.4S		72-	116	80	84	74S	234	326	251	-3.5	-6.5	+1.9	+1.8	.377	-177.7		2	37	34.4	20	34	30	368.1	673.8

Occultation prediction for Santiago de Cuba
E. Longitude - 75 5 13.9, Latitude 20 1 0.9, Alt. 800m; Telescope dia 15cm; dMag 0.0

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      day  Time     P   Star  Sp  Mag  Mag    % Elon Sun  Moon   CA   PA  VA  AA Libration   A    B    RV    Cct durn  R.A. (J2000)  Dec   Mdist   SV
 y   m  d  h  m    s       No  D    v    r V  ill     Alt Alt Az   o    o   o   o   L    B   m/o m/o  "/s     o  sec  h  m   s    o  m  s   Mm   m/s
       387 is double: ** 7.7 7.7 0.10"  90.0, dT = +0.21sec
       387 has been reported as non-instantaneous (OCc1190). Observations are highly desired
       387 = NSV 15555, 6.91, , Type VAR:
26 Sep  2 10 31 13.8 r   75509 M*  7.9  7.1v  71- 115  -4 68 278  66N 275 185 292 -3.9 -6.7 +2.8-0.7 .318  150.4      2 40 31.7  21 11 16 368.2 652.4
     75509 = AK Ari, 7.94, range 0.07, 8w, Type LB:, Period 19.3 days, Phase  22%
26 Sep  3  7  3 32.4 R     518SA3  6.0     s  61- 103     52  75  84S 250 338 263 -2.2 -6.6 +1.4+1.3 .436  172.3      3 34 26.6  24 27 52 367.3 783.3
   R518 = 7 Tauri
       518 is triple: AB 6.60 6.86 0.79" 348.0, dT = +0.27sec : AB,C 5.9 9.9 22.5"  52.2, dT = +49sec
       518 is a close double. Observations are highly desired
       518 = NSV 1192, 5.92 to 5.96, V
26 Sep  3  9 21 44.8 R   76046cA0  7.1  7.1   61- 102     82  53  16S 182 307 195 -2.6 -6.8 -0.1+6.4 .162 -116.3      3 39  6.7  24 42 10 365.8 647.6
     76046 is double: AB 7.1            45.0, dT = -45sec
26 Sep  4  7 10 37.9 r     694SK2  8.1  7.5v  50-  90     41  71  88N 264 350 272 -1.1 -6.5 +1.2+0.9 .460  166.3      4 36 48.2  27  7 56 366.3 840.6
       694 is quadruple: AC 5.4      7.7" 176.0, dT = -0.7sec : AD 5.4 19.3 12.7" 104.0, dT = +26sec : AB 8.4 16.0 130" 338.0, dT = -77sec
       694 is a close double. Observations are highly desired
       694 = V0833 Tau, 8.02 to 8.40, V, Type BY+UV, Period 1.7916 days
26 Sep  4  7 29  2.9 R     701SF2  6.6  6.4   50-  90     44  71  14S 186 274 195 -1.1 -6.5 -1.3+5.0 .201 -116.1      4 38 29.5  26 56 23 366.0 813.1
       701 is triple:  6.6 9.2 3.1" 169.4, dT = -15sec : AB 7.36 7.21 4.48" 187.8, dT = -22sec
       701 is a close double. Observations are highly desired
26 Sep  4  7 29 14.0 r X 70481p    7.3  7.2   50-  90     44  71  14S 187 275 195 -1.1 -6.5 -1.3+5.0 .203 -116.3      4 38 29.6  26 56 26 366.0 812.8
   X 70481 is triple:  7.3 9.2 5.8" 174.9, dT = -28sec : AC 7.4 12.9 92" 203.6, dT = -432sec
   X 70481 is a close double. Observations are highly desired
26 Sep  5  8 53 42.3 r   77495cA0  8.1  8.1   38-  76     49  70  71N 289  21 291 +0.0 -6.0 +2.1-0.2 .377  151.8      5 44 59.0  28 11 40 364.2 756.0
     77495 is double: AB 8.0 8.0 0.20"  42.2, dT = +0.21sec
     77495 is a close double. Observations are highly desired
26 Sep  6  8  3 26   M    1042cA2  6.7  6.6   27-  62     25  68   9N 358  77 354 +1.3 -5.0 +9.9+9.9 .000   90.0      6 49 10.2  27 11 25 365.7 914.5
      1042 is double:  6.7 9.8 0.10"
      1042 is a close double. Observations are highly desired
26 Sep  6  8 56 10.5 r   78784 A0  8.3  8.2   27-  62     36  71  73N 295  19 290 +1.3 -5.0 +1.5-0.3 .422  154.9      6 50  2.5  27  0 13 364.6 824.1
26 Sep  7  7 56 13.8 R   79739 F0  7.1  7.0   17-  49     10  68  50N 323  36 313 +2.5 -3.7 +0.9-1.3 .386  132.6      7 50 39.8  24  9 40 367.21016.3
26 Sep  7  8  4 39.2 r   79740cF2  8.5  8.3   17-  49     12  69  42S 236 309 226 +2.5 -3.7 -0.4+1.9 .429 -139.8      7 50 44.7  23 47  1 367.11000.7
     79740 is double: ** 9.2 9.2 0.10" 143.0, dT = +0.01sec
     79740 has been reported as non-instantaneous (OCc 683). Observations are highly desired
26 Sep  7 10 37 28.6 r    1195 B8  6.8  6.9   16-  48  -3 45  76  46S 241 325 230 +2.4 -3.8 +1.3+2.3 .320 -138.5      7 56  6.5  23 37 26 363.9 754.0
26 Sep  8  9 20 23.3 r   98186kB5  8.5  8.6    9-  35     15  74  70S 268 342 254 +3.7 -2.2 +0.3+0.7 .516 -164.1      8 52 20.0  19 21  3 367.7 956.9
26 Sep  8  9 44 22.6 r   98212cM0  8.4         9-  35     20  76  24N 355  70 341 +3.6 -2.2 +1.9-5.2 .177  110.1      8 54 14.8  19 34 32 367.1 916.7
     98212 is double: AB 8.47 12.18 0.90" 351.0, dT = -5sec
     98212 is a close double. Observations are highly desired
26 Sep  8  9 48 28.4 R   98198 K5  7.6  6.8    9-  35     21  76  77S 276 351 261 +3.6 -2.2 +0.6+0.5 .503 -170.2      8 53 20.6  19 19 20 367.0 908.8
26 Sep  8 19 42 48.4 D Jupiter    -1.7 -1.7    7-  31  47 23 280 -29S 172  94 154 +2.3 -1.1 -0.5-2.7 .371  -47.3      9 10 15.8  16 52 26 367.4 974.6
   Jupiter limb contacts offset by ±43.2 secs, at 19 42  5 and 19 43 32  Both contacts are against the bright limb of Jupiter
26 Sep  8 20 21 14.9 R Jupiter    -1.7 -1.7    7-  31  39 15 283  55S 255 180 237 +2.3 -1.0 +0.6-0.1 .394 -132.7      9 10 15.8  16 52 26 368.41038.0
   Jupiter limb contacts offset by ±40.7 secs, at 20 20 34 and 20 21 56  Both contacts are against the bright limb of Jupiter
26 Sep 15 23 38 39.9 D  183171kF3  7.2  7.0s  23+  58  -9 27 229  25N  45 354  29 +3.6 +7.4 +1.3+2.0 .181   58.6     15  6 11.4 -23 19 23 395.3 666.2
    183171 = NSV 6927, 7.1, range 0.01, V
26 Sep 15 23 45 58   m  183157 K0  8.0  7.4   23+  58 -11 25 230   7S 193 141 177 +3.6 +7.4 +9.9+9.9 .000  -90.0     15  5 20.1 -23 46 35 395.5 676.1
26 Sep 16 17 39 17.6 d    2263cB1  4.6  4.7   31+  68  69 21 130  66N  81 134  68 +4.1 +7.2 +1.8+1.2 .322   36.6     15 50 58.7 -25 45  5 398.3 775.6
   R2263 = 1 Scorpii
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Occultation prediction for Santiago de Cuba
E. Longitude - 75 5 13.9, Latitude 20 1 0.9, Alt. 800m; Telescope dia 15cm; dMag 0.0

y	m	day d	h	Time m	s	P No	Star D	Sp	Mag v	Mag r	V	% ill	Elon	Sun Alt	Moon Alt	Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
						2263 is double: ** 5.6 5.6 0.050"																														
						2263 has been reported as non-instantaneous (OCc1483). Observations are highly desired																														
26	Sep	16	23	57	28.5	d 183993	pA2		8.1	8.0		32+	69		29	221	84S	110	66	98	+2.6	+7.5	+2.4	-1.4	.314	-14.1		15	59	11.9	-26	35	1	398.2	624.8
						183993 is double: AB 7.7 10.1 0.70" 192.0, dT = +0.3sec																														
						183993 is a close double. Observations are highly desired																														
26	Sep	20	3	21	7.8	D 2723	K0		6.6	6.1		61+	103		21	229	66S	108	56	112	-1.5	+5.6	+2.1	-1.6	.290	-41.4		18	46	3.9	-27	29	56	401.3	752.3
26	Sep	23	2	25	34.2	d 3115	F0		7.1	6.9		86+	137		53	185	86S	75	70	91	-4.3	+2.0	+3.0	+0.6	.299	-24.2		21	18	15.7	-17	27	44	390.0	620.5
						R3115 = 31 Capricorni																														
26	Sep	23	5	46	27.7	D 3126	G8		4.3	3.8v		87+	138		27	238	50S	111	54	127	-5.0	+1.5	+2.6	-2.4	.227	-58.1		21	22	14.8	-16	50	4	391.6	815.1
						R3126 = Tae = iota Capricorni																														
						3126 = iot Cap, 4.27, range 0.06, V, Type BY																														
26	Sep	23	6	3	30	Gr 3126	G8		4.3	3.8v		87+	138		23	** GRAZE: CA 17.2S; Dist.271km in az. 148deg. [Lat = 17.15+0.58(E.Long+75.09)]																			
26	Sep	23	6	23	52.8	r 3126	G8		4.3	3.8v		87+	138		19	243	-16S	177	115	193	-5.0	+1.4	-1.1	+3.5	.242	-121.9		21	22	14.8	-16	50	4	392.3	870.1
						R3126 = Tae = iota Capricorni																														
						3126 = iot Cap, 4.27, range 0.06, V, Type BY																														
26	Sep	24	4	36	2.4	d 3244	K0		7.3	6.7		93+	149		50	220	75N	54	17	73	-5.3	+0.2	+1.7	+1.0	.370	-7.3		22	8	34.1	-11	36	49	385.5	697.0
26	Sep	25	4	22	23.4	d 146389	K5		7.2	6.3s		97+	161		63	203	47N	27	5	48	-5.4	-1.3	+1.2	+2.2	.348	18.0		22	55	21.2	- 5	41	23	380.2	675.7
						146389 = NSV 25974, 7.27 to 7.31, Hp																														
26	Sep	25	8	41	48.1	d 3380	cK0		5.9	5.4		98+	162		14	260	83S	79	11	100	-6.0	-1.9	+0.5	-0.3	.465	-22.2		23	1	31.7	- 4	42	41	383.6	935.0
						3380 is double: ** 7.0 7.0 0.10" 90.0, dT = +0.21sec																														
						3380 has been reported as non-instantaneous (OCc1633). Observations are highly desired																														
26	Sep	27	5	52	15.4	R 68	SB9		5.8	S		100-	173		74	220	87S	218	180	240	-4.9	-4.3	+1.6	+2.0	.375	-170.9		0	32	23.8	6	57	20	371.3	684.0
						R68 = 51 Piscium																														
						68 is multiple: Aa,Ac 5.8 9.5 0.20" : Aa,Ab 5.8 8.0 0.27" 283.9, dT = -0.3sec : AB 5.7 9.5 28.5" 81.5, dT = +55sec : AD 5.7 13.1 82" 307.6, dT = -1.2sec																														
						68 is a close double. Observations are highly desired																														
						68 = NSV 15113, 5.67 to 9.0, V, Type E:																														
						Distance of 68 to Terminator = 7.8"; to 3km sunlit peak = 0.7"																														
26	Sep	28	4	3	40.1	r 197	cK0		7.0	6.5		97-	161		62	101	42S	189	261	210	-3.7	-5.2	+0.1	+3.2	.320	-139.8		1	21	58.3	12	36	15	368.8	750.2
26	Sep	29	5	5	18.2	r 336	F0		7.4	7.3v		92-	147		66	89	37S	191	273	209	-2.8	-6.1	+0.1	+3.4	.305	-137.1		2	17	45.4	18	27	18	366.0	738.8
						336 = AD Ari, 7.39 to 7.48, V, Type ELL, Period 0.53972 days, Phase 22%																														
26	Sep	30	4	26	35.6	R 470	WK0		6.8	6.2		85-	134		45	77	71S	231	315	246	-1.4	-6.4	+0.7	+1.8	.468	-170.6		3	14	17.2	22	57	14	365.8	841.9
						470 is double: AB 6.9 10.4 42" 33.3, dT = +85sec																														
26	Sep	30	5	37	55.0	r 75832	K0		7.3	6.6		84-	133		61	78	33S	193	284	208	-1.6	-6.5	+0.0	+3.6	.289	-133.0		3	16	57.0	23	7	36	364.7	748.8
26	Sep	30	8	19	24.7	r 483	SA5		7.5			84-	133		81	298	67S	228	113	242	-2.0	-6.7	+2.2	+1.9	.344	-160.7		3	20	21.2	23	41	21	363.8	643.4
						483 is quadruple: AB 7.62 9.90 2.77" 315.8, dT = -0.25sec : AB,D 7.6 14.8 25.8" 251.6, dT = -69sec : AC 7.6 14.0 61" 286.7, dT = -91sec																														
						483 is a close double. Observations are highly desired																														
26	Oct	1	3	51	31.3	r 76514	G5		7.2	6.9		76-	121		25	69	55N	292	11	302	-0.2	-6.3	+1.1	-0.1	.399	136.7		4	14	32.2	26	15	21	366.8	975.5
26	Oct	1	4	54	12.3	r 76530	K3		7.8	7.0		75-	120		38	72	77N	270	355	280	-0.2	-6.4	+1.2	+0.6	.453	157.5		4	16	41.6	26	21	29	365.5	870.1
26	Oct	2	4	33	24	Gr 797	cB9		6.4	6.3e		65-	107		21	67	8N	346	64	351	+1.1	-5.9	+9.9	+9.9	.000	90.0		5	20	59.3	27	57	26	367.1	985.6
						797 is double: ** 6.5 8.5																														
						797 = HR 1750, 6.21, range 0.03, H1, Type EA, Period 3.315 days, Phase 13%																														
26	Oct	2	4	33	27	Gr 797	cB9		6.4	6.3e		65-	107		22	** GRAZE: CA 8.4N; Dist. 3km in az. 327deg. [Lat = 20.05+0.62(E.Long+75.09)]																			
26	Oct	3	10	38	29.9	R 1013	cG0		7.0			51-	91	-4	82	19	87S	271	71	268	+1.5	-5.2	+2.8	+0.0	.348	-169.3		6	36	26.3	27	16	42	363.7	625.1
						1013 is double: AB 7.14 8.97 0.68" 270.0, dT = -2sec																														
						1013 is a close double. Observations are highly desired																														
26	Oct	4	7	59	53.5	r 79521	cG2		7.4	7.0		41-	79		38	73	80N	290	14	282	+3.1	-4.1	+1.5	-0.1	.431	166.8		7	34	50.4	24	57	16	367.0	788.6
						79521 is double: ** 8.8 8.8 0.050"																														

Occultation prediction for Santiago de Cuba
E. Longitude - 75 5 13.9, Latitude 20 1 0.9, Alt. 800m; Telescope dia 15cm; dMag 0.0

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      day  Time     P   Star  Sp  Mag  Mag    % Elon Sun  Moon   CA   PA  VA  AA Libration   A   B   RV    Cct durn  R.A. (J2000)  Dec   Mdist   SV
 y   m  d  h  m   s       No  D    v    r V  ill     Alt Alt Az   o    o   o   o   L    B   m/o m/o  "/s     o  sec  h  m   s    o  m  s   Mm   m/s
     79521 has been reported as non-instantaneous (OCc1366). Observations are highly desired
26 Oct  4  8 34 38.6 r   79535 K0  8.3  7.8   40-  79     46  74  83N 287  14 279 +3.0 -4.1 +1.7-0.1 .412  171.4      7 35 54.9  24 54 24 366.4 740.4
26 Oct  4  8 55 26.4 r   79544 F0  8.4  8.2   40-  79     50  75  48N 322  50 313 +3.0 -4.1 +2.2-2.1 .300  138.2      7 36 56.0  25  1  1 366.1 715.5
26 Oct  4 12 32 34.4 d    1170dG8  3.6  3.1   39-  78  22 80 298 -77N  87 333  78 +2.3 -3.8 +3.0+0.0 .326   29.2      7 44 26.8  24 23 53 365.0 659.9
   R1170 = kappa Geminorum
      1170 is double: AB 3.7 10.0 7.4" 241.1, dT = -20sec
      1170 is a close double. Observations are highly desired
26 Oct  4 13 44 56.9 R    1170dG8  3.6  3.1   39-  77  39 64 285  43N 328 234 319 +2.1 -3.7 +0.8-2.7 .355  150.4      7 44 26.8  24 23 53 365.6 724.3
   R1170 = kappa Geminorum
      1170 is double: AB 3.7 10.0 7.4" 241.1, dT = -1sec
      1170 is a close double. Observations are highly desired
26 Oct  5  9 56 33.3 r   80294kF8  8.0  7.7   29-  65     51  82  45S 241 324 227 +3.8 -2.6 +2.1+2.7 .256 -129.9      8 37 26.4  20 29 14 367.7 710.2
26 Oct  6  8 42 39   M Europa      6.1  6.1   20-  53     21  81   1S 199 275 184 +4.8 -1.0 +9.9+9.9 .000  -90.0      9 30 55.2  15 21 19 372.1 872.2
26 Oct  6  8 42 39   GrEuropa      6.1  6.1   20-  53     23 ** GRAZE: CA -0.5S; Dist.132km in az. 353deg. [Lat = 21.22+0.12(E.Long+75.09)]
26 Oct  6  8 45  0   GrCallisto    6.4  6.4   20-  53     23 ** GRAZE: CA  0.2S; Dist.132km in az. 353deg. [Lat = 21.21+0.11(E.Long+75.09)]
26 Oct  6  8 45  1   m Callisto    6.4  6.4   20-  53     22  81   1S 200 275 184 +4.8 -1.0 +9.9+9.9 .000  -90.0      9 30 58.9  15 20 59 372.1 872.1
26 Oct  6  8 45 34   GrIo          5.8  5.8   20-  53     23 ** GRAZE: CA -1.0S; Dist.132km in az. 353deg. [Lat = 21.21+0.11(E.Long+75.09)]
26 Oct  6  8 45 35   M Io          5.8  5.8   20-  53     22  81   1S 198 275 184 +4.8 -1.0 +9.9+9.9 .000  -90.0      9 31  1.2  15 20 47 372.1 863.2
26 Oct  6  8 48 20   GrJupiter    -1.7 -1.7   20-  53     24 ** GRAZE: CA  0.0S; Dist.131km in az. 354deg. [Lat = 21.21+0.10(E.Long+75.09)]
26 Oct  6  8 48 22   M Jupiter    -1.7 -1.7   20-  53     23  81   2S 199 275 184 +4.8 -1.0 +9.9+9.9 .000  -90.0      9 31  5.4  15 20 24 372.0 863.4
26 Oct  6  8 50 31   GrGanymede    5.4  5.4   20-  53     24 ** GRAZE: CA  0.8S; Dist.132km in az. 354deg. [Lat = 21.21+0.10(E.Long+75.09)]
26 Oct  6  8 50 33   M Ganymede    5.4  5.4   20-  53     23  81   2S 200 276 184 +4.8 -1.0 +9.9+9.9 .000  -90.0      9 31  8.7  15 20  5 372.0 864.4
26 Oct  6  9 12 42.5 R    1407 K0  7.7  7.1   19-  52     28  82  51N 329  44 312 +4.7 -1.0 +1.1-1.8 .373  143.3      9 31 39.0  15 46 12 371.5 837.2
26 Oct  8 10  6 20.1 r  118733 F5  9.5  9.2    5-  27 -12 15  92  44N 336  46 315 +5.7 +2.2 +0.4-1.8 .407  143.7     11 13 50.1   3 25 28 378.2 927.8
26 Oct 15 22 58 37.1 d  185394pG8  7.8  7.3   25+  60  -6 32 214  79S 108  71 104 +0.5 +6.7 +2.8-1.3 .279  -26.6     17 26  6.8 -28 32 37 400.6 606.1
    185394 is double: AB 7.9 14.2 7.0" 338.2, dT = -16sec
    185394 is a close double. Observations are highly desired
26 Oct 15 23  3 38.8 d  185400 F5  7.2  7.0   25+  60  -7 32 215  73N  79  41  75 +0.5 +6.7 +2.2-0.2 .315    2.0     17 26 15.7 -28 25  0 400.7 611.6
26 Oct 16  0  3 48.9 d  185420 B8  8.1  8.0   25+  60     23 225  73N  79  30  75 +0.3 +6.6 +1.5-0.3 .355   -1.0     17 27 45.7 -28 21 32 401.6 691.1
26 Oct 16 23 25 23.5 d  186680 A0  8.0  7.9   34+  71     36 209  74S 106  75 107 -0.8 +6.0 +3.2-1.2 .256  -33.5     18 20 55.7 -28  7  8 400.9 597.3
26 Oct 20  3 24 54   M    3069 A*  6.3  6.3v  63+ 105     28 234  20S 144  90 159 -5.1 +2.0 +9.9+9.9 .000  -90.0     20 59 36.1 -19  2  7 395.2 782.4
   R3069 = 20 Capricorni (AO)
      3069 = AO Cap, 6.25 to 6.30, V, Type ACV, Period 2.2411 days, Phase  83%
26 Oct 21  0  1 42.5 D    3181SA7  6.0  5.8   72+ 116     54 161  65S  95 114 113 -5.2 +1.1 +3.8+0.0 .233  -44.1     21 44  1.0 -14 44 58 389.4 613.3
   R3181 = 45 Capricorni
      3181 is triple: ** 6.7 6.7 0.050"       : AB 5.4 9.5 4.3" 229.0, dT = -13sec
      3181 has been reported as non-instantaneous (OCc1610). Observations are highly desired
26 Oct 21  0 25  8.3 D    3177cA9  5.9  5.7   72+ 116     55 171   4N 344 353   2 -5.3 +1.0 -1.8+5.8 .134   65.8     21 43  4.4 -14 23 59 389.2 615.4
   R3177 = 44 Capricorni
      3177 is double: ** 6.8 6.8 0.10"  90.0, dT = -0.21sec
      3177 has been reported as non-instantaneous (OCc1608). Observations are highly desired
   Distance of 3177 to Terminator = 7.1"; to 3km sunlit peak = 0.0"
26 Oct 22  5 15 15.4 d  146188 F0  7.0  6.8   82+ 129     29 249  42N  20 318  41 -6.7 -1.1 +0.2+2.0 .373   31.8     22 36 17.1 - 7 39 52 385.2 821.4
26 Oct 23  5 47 28.1 d  146693 G5  7.5  7.1   89+ 141     35 253  59S 100  36 122 -6.9 -2.6 +2.0-1.5 .294  -47.8     23 24 39.0 - 1 44 29 379.1 803.6
26 Oct 24  4 35 24   m  109052 G5  7.4  6.9   95+ 154     62 238  24S 138  85 160 -6.3 -3.9 +9.9+9.9 .000  -90.0      0 11  5.7   4  7 59 372.0 701.5
   Distance of 109052 to Terminator = 18.9"; to 3km sunlit peak = 7.3"
26 Oct 25  8  6 56.5 d     163pF2  7.3  7.1   99+ 167     29 273  80N  76   3  98 -5.9 -5.3 +1.0-0.2 .462  -12.6      1  7  4.0  11 33  8 369.1 847.1
      163 is double: AB 7.3 10.5 8.3" 201.5, dT = -10sec
```

Occultation prediction for Santiago de Cuba
E. Longitude - 75 5 13.9, Latitude 20 1 0.9, Alt. 800m; Telescope dia 15cm; dMag 0.0

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       day  Time     P   Star  Sp  Mag  Mag    % Elon Sun  Moon   CA   PA  VA  AA Libration   A   B   RV    Cct durn  R.A. (J2000)  Dec   Mdist   SV
 y   m  d  h  m   s       No  D    v    r V  ill     Alt Alt Az   o    o   o   o   L    B   m/o m/o "/s     o  sec  h  m   s    o  m  s   Mm   m/s
       163 is a close double. Observations are highly desired
26 Oct 28  0  9 21.6 R     541SB8  3.9  3.9s  95- 154      5  66  75S 233 304 246 -0.6 -6.0 -0.5+1.3 .628 -163.9      3 45 49.6  24 22  4 364.21155.1
   R541 = Maia = 20 Tauri
       541 is quadruple: Aa,Ab 4.4 5.4           : AB 3.8 13.7 113"  72.6, dT = +170sec : AB 3.8 13.7 113"  72.7, dT = +170sec
       541 = NSV 1279, 3.87, range 0.00, 4Kp, Type ACV, Period 10.288 days
26 Oct 28  2 35 36.7 r     571pA2  6.8  6.7   94- 153     37  73  53N 286   9 298 -0.6 -6.3 +1.5+0.1 .396  139.7      3 51 25.3  25  9 47 360.9 907.6
       571 is double: ** 7.1 9.1
26 Oct 28  2 59 23.9 r     574pG0  6.8  6.5   94- 152     42  73  71N 268 353 280 -0.6 -6.3 +1.3+0.7 .460  157.4      3 52 11.4  25  9 47 360.4 870.0
26 Oct 28  5  3 10.7 r   76345kG8  7.5  7.0   94- 152     69  71  19S 178 278 190 -0.8 -6.5 -1.3+7.0 .148 -111.3      3 57 11.8  25 16 58 358.7 712.4
   Distance of 76345 to Terminator = 14.2"; to 3km sunlit peak = 4.0"
26 Oct 29  4  1 35.9 r     746WB7  7.0  6.9   87- 138     42  71  83S 252 339 258 +1.1 -6.0 +1.0+1.2 .482 -178.2      4 59 53.7  27 19 32 360.3 843.4
       746 is double: AB 7.0 8.7 20.4" 206.1, dT = -29sec
26 Oct 29  6 36 15.2 R     756 F0  6.6  6.5   87- 137     74  57  76N 273  30 279 +0.8 -6.2 +2.6+0.1 .372  166.5      5  4 38.0  27 41 46 358.4 664.1
26 Oct 29  9 36 50.4 R     773wF8  7.0  6.7   86- 136     62 292  57S 228 128 233 +0.3 -6.1 +2.9+2.1 .276 -133.8      5 10  3.9  27 33 23 359.0 694.7
       773 is double: AB 7.0 9.3 315" 353.1, dT = +664sec
26 Oct 30 10 23 28.8 R     958cK1  6.7  6.1   77- 122  -9 66 293  40S 219 116 218 +1.8 -5.2 +4.4+4.3 .163 -114.3      6 18 20.8  27 12 37 360.2 692.6
       958 is double: ** 7.5 7.5 0.050"
       958 has been reported as non-instantaneous (OCc1307). Observations are highly desired
26 Oct 31  4 49 40.8 r    1094 A0  7.1  7.1   68- 111     24  70  68N 298  16 292 +4.0 -4.2 +1.0-0.3 .460  153.8      7 12 49.4  25 44 55 365.1 908.3
   R1094 = 49 Geminorum
26 Oct 31  9 52 29.8 d    1117cG8  5.0  4.6   66- 109     85 345 -35S 152 348 145 +3.3 -4.1 +1.6-3.4 .276  -41.4      7 23 28.5  25  3  2 361.9 644.7
   R1117 = 57 Geminorum
      1117 is double: ** 5.9 5.9 0.10"  90.0, dT = +0.17sec
      1117 has been reported as non-instantaneous (OCc1358). Observations are highly desired
26 Oct 31 11  0  1.4 R    1117cG8  5.0  4.6   66- 109  -1 72 290  66S 254 151 246 +3.1 -4.0 +3.2+0.6 .294 -139.0      7 23 28.5  25  3  2 362.3 685.9
   R1117 = 57 Geminorum
      1117 is double: ** 5.9 5.9 0.10"  90.0, dT = +0.33sec
      1117 has been reported as non-instantaneous (OCc1358). Observations are highly desired
26 Nov  1  8 49 34.8 r    1253cK0  7.3  6.8   55-  96     64  81  42N 331  60 319 +4.7 -2.7 +2.0-2.8 .293  141.3      8 21 28.1  21 54 34 365.3 665.1
       1253 is double: ** 8.2 8.2 0.10"  90.0, dT = +0.17sec
       1253 has been reported as non-instantaneous (OCc 236). Observations are highly desired
26 Nov  2  9 12 46.8 r    1379 A0  8.4  8.3e  44-  83     57  90  80S 278 357 262 +5.5 -1.1 +2.3+0.2 .361 -159.1      9 17 38.1  16 42 18 369.1 690.8
       1379 = GO Cnc, 8.4 to 8.66, Hp, Type EA, Period 3.6502 days, Phase  27%
26 Nov  4  7 47 37.7 r  118579kA2  7.8  7.7   23-  58     12  89  86S 287 358 266 +6.6 +1.9 +0.4+0.1 .501 -169.8     10 56 30.9   5 16 24 379.9 937.2
26 Nov  5  9 31 35   Gr 138402 F2  8.7  8.5   15-  45     24 ** GRAZE: CA 13.3S; Dist.  8km in az. 196deg. [Lat = 19.95-0.27(E.Long+75.09)]
26 Nov  5  9 34 53    r 138402 F2  8.7  8.5   15-  45     24 101  19S 220 287 197 +6.5 +3.4 +9.9+9.9 .042  -95.2     11 47  0.0 - 1 37 46 382.4 861.4
26 Nov  6  9 27 21.7 r  138841 F8  9.3  9.0    8-  33     10 102  75N 303  11 281 +6.4 +4.6 +0.2-0.4 .506  179.6     12 33 11.9 - 7 16  5 387.3 950.2
26 Nov  6 10 32 24.6 r    1804 F0  8.1  7.9    8-  33  -8 24 109  21N 357  61 335 +6.3 +4.7 -0.3-3.0 .291  129.6     12 35 44.9 - 7 26 49 385.9 855.6
26 Nov 11 23 15 31.8 d  185040 G8  8.5  7.9    7+  30      9 236  -1N  13 311   7 +0.7 +6.5 -1.9+4.1 .158   67.8     17  7 36.5 -27 43 52 403.1 818.2
26 Nov 11 23 15 44.4 d  185058 K2  8.6  7.7    7+  30      9 236  72S 122  60 116 +0.7 +6.5 +1.6-2.0 .313  -41.7     17  8 19.1 -28  6 10 403.1 818.1
26 Nov 11 23 34 42.2 d  185075 K0  8.3  7.7    7+  30      6 238  63N  77  13  71 +0.6 +6.5 +0.4-0.3 .434    3.1     17  9  3.8 -27 53 41 403.5 851.3
26 Nov 12 23 13 23.0 d X148353     8.8  8.3   12+  40     19 229  75N  80  26  79 -0.5 +5.9 +1.2-0.4 .379   -7.1     18  2 27.6 -27 56 59 403.2 747.2
26 Nov 12 23 34 13.3 D    2601SK4  6.8        12+  40     15 232  54N  59   2  58 -0.6 +5.8 +0.5+0.3 .388   13.6     18  2 54.3 -27 49 36 403.6 781.2
   R2601 = 7 Sagittarii
      2601 is triple: Aa,Ab 6.90 9.37 0.34" 332.0, dT = +0.05sec : AB 6.9 13.0 9.7"  48.2, dT = +25sec
      2601 is a close double. Observations are highly desired
26 Nov 12 23 46 37.5 d X 43260dS*  8.9  8.0   12+  40     13 234  76N  81  22  81 -0.6 +5.8 +0.9-0.4 .405   -8.5     18  3 24.8 -27 53 28 403.9 802.2
   X 43260 is double: AB 11.7 12.4 4.5" 170.3, dT = +0.15sec
```

Occultation prediction for Santiago de Cuba
E. Longitude - 75 5 13.9, Latitude 20 1 0.9, Alt. 800m; Telescope dia 15cm; dMag 0.0

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      day  Time     P   Star  Sp  Mag  Mag    % Elon Sun  Moon   CA   PA  VA  AA Libration   A   B   RV    Cct durn  R.A. (J2000)  Dec   Mdist   SV
 y   m  d  h  m   s       No  D    v    r V  ill     Alt Alt Az   o    o   o   o   L    B   m/o m/o  "/s     o  sec  h  m   s    o  m  s   Mm   m/s
   X 43260 is a close double. Observations are highly desired
26 Nov 12 23 49 46.9 d  186184 K0  8.9  8.0   12+  41     12 234  83N  88  28  87 -0.6 +5.8 +1.0-0.6 .398  -14.9     18  3 31.1 -27 54 45 404.0 807.6
26 Nov 13 15 57 46.7 d    2721cB8  3.2  3.2   17+  49  50 12 125  53N  52 112  55 +0.0 +5.2 +1.8+2.3 .295   41.5     18 45 39.4 -26 59 27 404.3 771.6
   R2721 = phi Sagittarii
      2721 is double:  3.1      0.8" 269.5, dT = -2.1sec
      2721 is a close double. Observations are highly desired
26 Nov 13 16 58 48.4 r    2721cB8  3.2  3.2   18+  50  52 23 133 -46N 313   4 316 -0.2 +5.3 +0.8-1.1 .257  138.2     18 45 39.4 -26 59 27 403.1 673.0
   R2721 = phi Sagittarii
      2721 is double:  3.1      0.8" 269.5, dT = -2.2sec
      2721 is a close double. Observations are highly desired
26 Nov 13 23 36 58.6 d  187471 G0  9.0  8.4v  19+  51     24 227  79S  98  48 103 -1.9 +4.9 +2.0-1.1 .312  -32.8     18 56 17.0 -26 42 15 403.0 726.6
    187471 = ASAS J185616-2642.1, 9.086, range 0.04, 3V, Type ROT, Period 97.44 days
26 Nov 15  1 16 11.4 d X 46972dA0  8.4  8.4   27+  63     17 236  58N  48 350  58 -3.5 +3.6 +0.3+0.7 .411   12.3     19 49 56.2 -23 43  6 402.8 822.5
   X 46972 is double: AB 8.4 10.4 6.8" 271.0, dT = -12sec
   X 46972 is a close double. Observations are highly desired
26 Nov 15 23  9 38.3 D    3007 K2  7.2  6.5   35+  73 -12 46 204  53N  39  14  52 -4.3 +2.6 +1.5+1.7 .311   14.8     20 36 26.5 -20 35  8 398.2 620.8
26 Nov 16 20 53 56.1 D    3126 G8  4.3  3.8v  44+  83  18 45 143  68S  95 131 111 -4.8 +1.5 +3.2+0.3 .251  -37.1     21 22 14.8 -16 50  4 395.5 603.2
   R3126 = Tae = iota Capricorni
      3126 = iot Cap, 4.27, range 0.06, V, Type BY
26 Nov 16 22  8 41.3 r    3126 G8  4.3  3.8v  44+  84   2 53 168 -33S 195 207 211 -5.2 +1.4 +1.1+3.1 .245 -142.6     21 22 14.8 -16 50  4 394.7 591.2
   R3126 = Tae = iota Capricorni
      3126 = iot Cap, 4.27, range 0.06, V, Type BY
26 Nov 18  0  4 40.2 d    3252 K0  6.6  6.1   55+  95     58 199   1N 340 322 359 -6.5 -0.3 -2.5+5.9 .137   66.0     22 10 31.8 -10 49 13 389.8 638.6
   R3252 = 37 Aquarii
   Distance of 3252 to Terminator = 5.1"; to 3km sunlit peak = 0.0"
26 Nov 18  0 32 28.5 d    3255 M0  7.3  6.4v  55+  96     55 210  42S 117  89 136 -6.6 -0.3 +7.1-4.1 .114  -70.8 .01 22 12 16.9 -11  3 56 389.8 654.2
      3255 = KR Aqr, 7.25 to 7.36, Hp, Type LB
26 Nov 19 23 56 23.8 d  128354 F8  8.0  7.7   74+ 119     67 144  77S  81 115 103 -7.2 -3.0 +3.1+0.8 .298  -35.7     23 44 18.2   0 42 44 378.1 673.6
26 Nov 20  5 38 39.4 d  128417cG5  7.0  6.4   76+ 121     19 266  86N  64 354  86 -8.1 -3.7 +0.6+0.3 .480   -5.1     23 51  6.8   2 14 16 380.4 888.5
    128417 is double: ** 6.9      0.001" 333.1, dT = 0.00sec
26 Nov 20 23 46 17.0 D      68SB9  5.8     S  83+ 132     61 112  88N  68 129  90 -6.8 -4.2 +2.0+1.4 .379  -20.1      0 32 23.8   6 57 20 372.2 728.4
   R68 = 51 Piscium
       68 is multiple: Aa,Ac 5.8 9.5 0.20"       : Aa,Ab 5.8 8.0 0.28" 283.8, dT = -0.6sec : AB 5.7 9.5 28.5"  81.5, dT = +73sec : AD 5.7 13.1 82"
307.6, dT = -109sec
       68 is a close double. Observations are highly desired
       68 = NSV 15113, 5.67 to 9.0, V, Type E:
26 Nov 20 23 46 18.2 d  109263MB9  8.0     S  83+ 132     61 112  88N  68 129  90 -6.8 -4.2 +2.0+1.4 .379  -20.1      0 32 23.8   6 57 20 372.2 728.4
    109263 is quadruple: Ac,Aa 9.5 5.8 0.20" 170.0, dT = -0.11sec : DA 13.1 5.7 82" 127.6, dT = +109sec : CA 9.9 5.7 175"  45.9, dT = +429sec
    109263 is a close double. Observations are highly desired
    109263 = NSV 15113, 5.67 to 9.0, V, Type E:
26 Nov 21 22 33  7.2 d     197cK0  7.0  6.5   90+ 144  -4 35  88  75S  88 163 109 -5.8 -5.1 +1.3+0.8 .413  -33.9      1 21 58.3  12 36 15 368.4 888.4
26 Nov 22  7 58 34.6 d     233cB9  6.2  6.3   92+ 147     13 281  48S 117  45 138 -7.0 -5.9 +0.0-2.0 .371  -46.4      1 35 46.4  14 39 41 368.5 961.7
   R233 = 101 Piscium
26 Nov 22 22 59 20.6 d     336 F0  7.4  7.3v  96+ 157 -10 31  80  62N  53 131  72 -4.5 -5.8 +0.4+1.6 .537    4.8      2 17 45.4  18 27 18 363.5 950.3
      336 = AD Ari, 7.39 to 7.48, V, Type ELL, Period 0.53972 days, Phase  74%
26 Nov 23  7 13 52.0 D     370 A9  6.1  6.0v  97+ 160     36 281  41S 135  55 153 -5.6 -6.5 +0.8-4.1 .224  -61.2      2 30 38.4  19 51 19 361.4 815.5
   R370 = 26 Arietis (UU)
      370 = UU Ari, 6.10 to 6.15, V, Type DSCTC, Period 0.0676 days
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Occultation prediction for Santiago de Cuba
E. Longitude - 75 5 13.9, Latitude 20 1 0.9, Alt. 800m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon Sun Alt	Moon Alt	Az	CA o	PA o	VA o	AA o	Libration L	B	A m/o	B m/o	RV "/s	Cct durn o	sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	Nov	24	8	3	7.0	d	518	SA3	6.0	s		100+	173	39	286	46N	79	356	93	-3.8	-6.6	+1.3	-0.2	.470	3.3		3	34	26.6	24	27	52	357.4	815.6
	R518 = 7 Tauri																																
	518 is triple: AB 6.60 6.86 0.79" 348.0, dT = -0.04sec : AB,C 5.9 9.9 22.5" 52.2, dT = +43sec																																
	518 is a close double. Observations are highly desired																																
	518 = NSV 1192, 5.92 to 5.96, V																																
	Distance of 518 to Terminator = 3.7"; to 3km sunlit peak = 0.0"																																
26	Nov	25	8	1	18.4	R	701	SF2	6.6	6.4		99-	169	53	289	78N	247	154	255	-1.7	-6.3	+2.1	+0.5	.400	-156.4		4	38	29.5	26	56	23	354.5	750.7
	701 is triple: 6.6 9.2 3.1" 169.4, dT = -1.7sec : AB 7.36 7.21 4.49" 187.7, dT = -6sec																																
	701 is a close double. Observations are highly desired																																
	Distance of 701 to Terminator = 15.3"; to 3km sunlit peak = 5.4"																																
26	Nov	25	8	1	20.4	r X	70481	p	7.3	7.2		99-	169	53	289	78N	247	155	255	-1.7	-6.3	+2.1	+0.5	.401	-156.5		4	38	29.6	26	56	26	354.5	750.8
	X 70481 is triple: 7.3 9.2 5.8" 174.9, dT = -4sec : AC 7.4 12.9 92" 203.6, dT = -166sec																																
	X 70481 is a close double. Observations are highly desired																																
	Distance of X 70481 to Terminator = 15.3"; to 3km sunlit peak = 5.4"																																
26	Nov	26	1	57	10.2	R	840	cK0	6.3	5.5		96-	158	30	69	45N	303	25	305	+1.3	-5.5	+1.5	-0.6	.389	136.4		5	35	55.5	27	39	44	356.1	928.6
	840 is double: ** 7.3 7.3 0.050"																																
	840 has been reported as non-instantaneous (OCc1267). Observations are highly desired																																
26	Nov	26	6	20	20.5	r	868	SA0	7.5	7.5		96-	156	82	8	81N	268	79	270	+0.8	-5.6	+2.7	+0.1	.383	-176.3		5	44	21.2	27	43	53	353.2	657.4
	868 is triple: AB 7.5 9.8 8.6" 254.1, dT = -22sec : AC 7.5 12.7 47" 40.5, dT = +83sec																																
	868 is a close double. Observations are highly desired																																
26	Nov	26	9	14	2.5	r	77604	K0	7.0	6.2		95-	155	52	290	85N	265	173	267	+0.4	-5.4	+1.8	-0.3	.434	-162.5		5	49	38.1	27	33	3	354.6	781.7
26	Nov	26	9	41	59.9	r	77621	M3	7.5	6.6s		95-	155	46	290	46N	305	215	306	+0.3	-5.3	+0.8	-1.8	.445	158.8		5	50	48.2	27	41	9	355.0	820.8
	77621 = NSV 16688, 7.47, range 0.02, 6V, Type VAR, Period 4.88496 days																																
26	Nov	26	9	44	7.0	r	77619	F2	7.1	6.9		95-	155	45	289	84N	267	177	268	+0.3	-5.3	+1.5	-0.5	.458	-163.1		5	50	39.7	27	30	18	355.0	824.1
26	Nov	26	10	44	46.6	R	890	cA0	4.6	4.6s		95-	155	-8	33	291	32N	319	236	320	+0.3	-5.2	+0.0	-2.2	.438	145.2		5	53	19.6	27	36	44	356.2	920.6
	R890 = 136 Tauri																																
	890 is double: ** 4.8 6.3 0.050" 270.0, dT = -0.08sec																																
	890 has been reported as non-instantaneous (OCc 206). Observations are highly desired																																
	890 = NSV 2696, 4.50 to 4.61, V																																
26	Nov	27	5	53	19.6	r	78810	A3	8.0	7.8		90-	143	67	69	85N	276	17	271	+3.0	-4.5	+2.4	+0.1	.395	-177.6		6	51	53.4	26	24	1	355.1	681.6
26	Nov	27	7	3	55.8	r	78853	A0	7.7	7.7		89-	142	81	43	32N	329	104	324	+2.8	-4.4	+2.1	-3.3	.268	134.6		6	54	29.2	26	31	51	354.8	657.6
26	Nov	27	9	50	9.5	R	1061	SF8	6.2	5.9s		89-	141	58	288	60N	303	208	298	+2.3	-4.2	+1.3	-1.7	.436	169.9		6	58	47.4	26	4	52	355.9	765.1
	R1061 = 39 Geminorum																																
	1061 is triple: Aa,Ab 6.1 0.50" 158.0, dT = +0.9sec : AB 6.1 12.1 35" 69.2, dT = +48sec																																
	1061 is a close double. Observations are highly desired																																
	1061 = NSV 17256, 6.1, range 0.02, V, Type VAR:																																
26	Nov	27	10	17	17.7	R	1062	cB8	6.4	6.5		89-	141	53	287	80N	283	192	278	+2.3	-4.1	+1.5	-1.0	.456	-169.9		6	59	27.9	25	54	51	356.3	800.0
	R1062 = 40 Geminorum																																
	1062 is double: AB 6.4 0.10" 160.5, dT = +0.12sec																																
	1062 is a close double. Observations are highly desired																																
26	Nov	28	7	25	42.9	R	1200	K0	6.9	6.4		81-	128	74	75	37N	333	71	322	+4.5	-3.0	+1.9	-3.1	.291	139.5		7	59	42.6	23	10	58	358.0	664.5
26	Nov	29	7	13	43.0	R	1340	kA0	6.6	6.6		71-	115	58	87	88S	284	5	269	+6.0	-1.4	+2.2	-0.1	.387	-167.2		8	58	18.3	18	18	30	362.8	698.5
26	Nov	29	7	51	2.6	R	1343	M4	6.3	5.5v		71-	114	67	91	75S	271	352	256	+5.9	-1.3	+2.7	+0.4	.339	-151.6		8	59	10.7	18	8	6	362.5	677.8
	1343 = FZ Cnc, 6.28 to 6.38, Hp, Type SRB, Period 17.6 days																																
26	Nov	30	5	56	10.6	R	1449	M0	6.5	5.6s		60-	102	28	85	67N	313	27	295	+7.2	+0.2	+1.0	-1.0	.446	161.5		9	51	2.0	13	3	58	369.8	843.9
	R1449 = 23 Leonis																																
	1449 = NSV 18283, 6.45, range 0.00, 6V, Type VAR, Period 2.82446 days																																
26	Dec	1	8	50	31.0	R	1567	kK1	6.4	5.8		48-	88	54	108	56N	326	31	306	+7.4	+2.0	+1.3	-1.9	.374	162.0		10	46	5.7	6	22	23	373.2	712.5

Occultation prediction for Santiago de Cuba
E. Longitude - 75 5 13.9, Latitude 20 1 0.9, Alt. 800m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon	Sun Alt	Moon Alt	Az	CA o	PA o	VA o	AA o	Libration L	B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
R1567 = 37 (Sextantis)/Leonis																																		
26	Dec	1	9	4	33.0	r	1573pA2		7.1	7.0		48-	88		57	110	4N	19	81	358	+7.3	+2.0	-1.6	-7.2	.137	110.7		10	47	19.2	6	20	46	373.0	703.6
R1573 = 38 (Sextantis)/Leonis																																		
26	Dec	2	10	43	22.9	D	1685cG9		4.3	3.8		37-	75	-9	63	139	-27S	176	214	154	+7.3	+3.6	+0.2	-3.4	.278	-41.4		11	36	56.9	- 0	49	25	378.0	679.4
R1685 = upsilon Leonis																																		
1685 is double: ** 4.5 9.0 0.10" 195.0, dT = +0.34sec																																		
1685 has been reported as non-instantaneous (OCc1427). Observations are highly desired																																		
26	Dec	2	11	49	4.7	R	1685cG9		4.3	3.8		37-	75	6	69	177	72S	274	277	252	+7.1	+3.8	+3.5	-0.2	.273	-138.9		11	36	56.9	- 0	49	25	377.9	663.7
R1685 = upsilon Leonis																																		
1685 is double: ** 4.5 9.0 0.10" 195.0, dT = -0.07sec																																		
1685 has been reported as non-instantaneous (OCc1427). Observations are highly desired																																		
26	Dec	4	9	31	23.3	R	1885 K2		7.3	6.7		19-	52		26	115	53N	326	27	305	+7.2	+5.6	+0.4	-1.4	.416	160.8		13	8	27.9	-11	45	46	389.4	831.0
26	Dec	5	10	20	15.0	r	158255 F0		9.1	8.9		12-	40		24	120	56N	319	17	299	+6.5	+6.4	+0.4	-1.0	.421	166.6		13	57	13.4	-17	3	24	393.3	825.2
26	Dec	6	9	52	46.0	r	182859 K5		9.0	8.2		6-	29		7	116	13N	355	61	338	+5.8	+6.7	-1.1	-2.9	.269	123.8		14	46	21.2	-21	8	36	398.2	934.7
26	Dec	6	9	57	8.8	R	2108cG2		6.6			6-	29		8	116	29N	339	44	322	+5.8	+6.7	-0.5	-1.7	.372	140.7		14	46	10.9	-21	10	33	398.1	927.2
2108 is double: AB 7.30 7.30 0.29" 133.5, dT = +0.7sec																																		
2108 is a close double. Observations are highly desired																																		
26	Dec	6	10	34	26.9	R	2109 K4		6.1	5.2		6-	28	-11	15	120	30N	337	38	320	+5.8	+6.7	-0.3	-1.7	.363	143.7		14	47	13.7	-21	19	30	397.4	866.9
26	Dec	11	23	31	49	m	188242 G5		9.2	8.6		7+	31		12	237	23S	153	92	160	-2.5	+3.8	+9.9	+9.9	.000	-90.0		19	31	50.6	-24	56	10	404.9	854.4
26	Dec	12	23	14	43.7	D	189195 F0		7.8	7.6		13+	42		26	232	74N	63	10	75	-3.8	+2.6	+1.0	+0.3	.389	-6.9		20	21	32.8	-21	25	8	402.4	765.2
26	Dec	13	0	48	36.6	d	189240 A7		8.6	8.4		13+	42		8	244	80S	88	23	100	-4.0	+2.3	+0.6	-0.7	.409	-28.4		20	24	5.6	-21	10	18	404.2	910.2
26	Dec	14	0	20	47.8	d	3095 F0		8.4	8.2		20+	53		25	240	55N	38	340	54	-5.2	+1.1	+0.4	+1.2	.397	15.7		21	10	22.5	-16	57	31	400.5	801.2
26	Dec	16	1	55	44.3	d	146275kK0		8.1	7.6		38+	76		28	251	89S	69	5	89	-7.6	-2.0	+1.1	+0.2	.408	-15.9		22	43	21.3	- 6	24	3	392.9	807.4
26	Dec	17	23	3	17.3	d	17 G5		7.8	7.1		57+	99	-9	74	159	7N	344	3	6	-7.9	-4.2	-1.6	+5.3	.173	61.1		0	9	55.0	4	49	57	379.6	659.0
26	Dec	18	3	19	57.4	d	29 K0		7.0	6.4		59+	100		33	264	52N	29	319	51	-8.7	-4.6	+0.8	+1.9	.376	28.6		0	15	38.6	5	50	38	381.2	790.9
26	Dec	19	0	42	38.5	d	139cG5		8.1	7.6		68+	111		79	221	62N	41	2	63	-8.0	-5.4	+1.8	+2.0	.361	7.6		1	1	13.9	11	10	50	372.8	658.9
26	Dec	19	23	1	12.5	d	92663 K0		7.9	7.1		78+	124	-9	62	92	71N	53	132	73	-6.9	-5.9	+1.4	+1.8	.420	-1.0		1	51	38.2	16	23	56	367.6	748.7
26	Dec	20	4	2	36.3	d	92727cF8		8.0	7.7		79+	125		48	275	49N	33	313	52	-7.8	-6.4	+1.6	+2.1	.343	33.1		1	58	3.8	17	32	21	367.2	728.9
26	Dec	21	23	12	56.6	d	571pA2		6.8	6.7		94+	151	-11	40	73	65N	61	146	74	-3.9	-6.3	+0.7	+1.4	.510	4.5		3	51	25.3	25	9	47	358.1	889.3
571 is double: ** 7.1 9.1																																		
26	Dec	21	23	32	7.0	d	574pG0		6.8	6.5		94+	151		44	74	80N	76	162	89	-3.9	-6.3	+1.1	+1.0	.487	-10.6		3	52	11.4	25	9	47	357.7	859.9
26	Dec	22	23	52	2.8	d	746WB7		7.0	6.9		98+	165		34	70	53N	64	148	71	-1.9	-5.9	+0.5	+1.4	.524	10.2		4	59	53.7	27	19	32	354.9	916.4
746 is double: AB 7.0 8.7 20.4" 206.1, dT = -31sec																																		
26	Dec	23	2	18	13.7	d	756 F0		6.6	6.5		98+	166		65	66	30N	44	147	50	-2.1	-6.0	+1.4	+2.5	.346	34.6		5	4	38.0	27	41	46	352.4	717.4
Distance of 756 to Terminator = 7.4"; to 3km sunlit peak = 0.4"																																		
26	Dec	23	5	9	25.9	d	773wF8		7.0	6.7		99+	167		73	301	86N	101	347	107	-2.5	-6.0	+2.4	-0.8	.391	-10.7		5	10	3.9	27	33	23	351.8	678.3
773 is double: AB 7.0 9.3 315" 353.1, dT = -254sec																																		
26	Dec	25	3	38	2.1	R	1117cG8		5.0	4.6		98-	164		54	75	57N	302	32	294	+2.5	-3.7	+2.0	-0.9	.403	158.3		7	23	28.5	25	3	2	352.1	741.7
R1117 = 57 Geminorum																																		
1117 is double: ** 5.9 5.9 0.10" 90.0, dT = +0.21sec																																		
1117 has been reported as non-instantaneous (OCc1358). Observations are highly desired																																		
26	Dec	25	6	43	25.8	r	79416SF8		7.6	7.4		98-	163		82	307	69N	292	167	284	+2.0	-3.5	+2.3	-1.1	.407	-178.5		7	28	40.6	24	38	55	351.2	693.7
79416 is triple: AC 7.7 11.8 29.0" 124.2, dT = +70sec : AB 7.7 8.9 65" 19.4, dT = -6sec																																		
26	Dec	26	6	35	37.9	R	1277wK3		5.3	4.7		93-	148		81	86	56N	316	47	303	+4.2	-1.8	+1.9	-1.9	.382	163.1		8	32	42.5	20	26	28	353.9	685.8
R1277 = eta Cancri																																		
1277 is double: AB 5.3 20.0 164" 280.0, dT = -347sec																																		
26	Dec	26	8	19	37	M	1282 G0		6.6	6.2		92-	148		75	271	21S	214	128	201	+3.9	-1.6	+9.9	+9.9	.000	-90.0		8	35	19.4	19	35	24	354.3	727.7
R1282 = 35 Cancri																																		

Occultation prediction for Santiago de Cuba
E. Longitude - 75 5 13.9, Latitude 20 1 0.9, Alt. 800m; Telescope dia 15cm; dMag 0.0

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      day  Time     P   Star  Sp  Mag  Mag    % Elon Sun  Moon   CA   PA  VA  AA Libration   A   B   RV    Cct durn  R.A. (J2000)  Dec   Mdist   SV
 y   m  d  h  m   s       No  D    v    r V  ill     Alt Alt Az   o    o   o   o   L    B   m/o m/o "/s     o  sec  h  m   s    o  m  s   Mm   m/s
26 Dec 26  8 52 26.2 r   97941 A*  7.5  7.4   92- 148     68 273  85S 278 192 264 +3.8 -1.5 +2.3-0.7 .394 -153.5      8 35 45.1  19 46 16 354.7 756.2
26 Dec 26  9 41 38   d    1287kA5  6.7  6.6   92- 147     57 275  10S 203 120 190 +3.7 -1.4 +9.9+9.9 .088  -79.2      8 37 46.8  19 16  2 355.4 807.0
   Distance of 1287 to Terminator = 5.6"; to 3km sunlit peak = 0.0"
26 Dec 26  9 45 12.5 r   97973 A0  7.7  7.6   92- 147     56 276  51N 323 239 309 +3.7 -1.4 +0.7-2.2 .446  161.3      8 37 37.0  19 43 59 355.4 812.5
26 Dec 26  9 49  5   Gr   1287kA5  6.7  6.6   92- 147     53 ** GRAZE: CA 20.7S; Dist. 33km in az. 221deg. [Lat = 19.62-0.83(E.Long+75.09)]
26 Dec 26  9 55  3   R    1287kA5  6.7  6.6   92- 147     54 276  31S 225 142 211 +3.7 -1.4 +7.8+6.5 .090 -100.8      8 37 46.8  19 16  2 355.6 823.3
26 Dec 26 10 40 14.4 r    1293pK0  6.8    s   92- 147     43 278  18N 356 275 343 +3.6 -1.2 -0.7-3.4 .308  127.0      8 39 50.7  19 32 27 356.5 883.3
      1293 is multiple: Da,Db 6.67 9.87 0.50" 252.6, dT = +0.38sec : DE 6.7 11.8 35"   3.1, dT = -114sec : DA 6.7 7.3 92"  61.0, dT = -126sec : DC
6.7 7.5 100"  89.1, dT = +17sec
      1293 has been reported as non-instantaneous (S   571). Observations are highly desired
      1293 = NSV 4171, 6.52 to 6.61, V
   Distance of 1293 to Terminator = 17.5"; to 3km sunlit peak = 5.8"
26 Dec 26 11  7 15.3 r   98009kA7  7.6  7.6v  92- 147  -6 37 279  74N 300 221 286 +3.6 -1.1 +0.6-1.4 .532 -177.9      8 39 44.7  19 16 31 357.1 922.7
     98009 = BU Cnc, 7.67, range 0.03, V, Type DSCTC, Period 0.071 days
26 Dec 26 11 12 48.7 r    1297pA9  6.8  6.6S  92- 147  -5 36 280  45N 329 250 315 +3.6 -1.1 +0.1-2.1 .479  153.0      8 40 20.1  19 20 56 357.2 930.7
      1297 is double: AB 6.8 8.5 0.016" 342.8, dT = -0.03sec
      1297 is a close double. Observations are highly desired
      1297 = NSV 17953, 6.78, , Type DSCT:
26 Dec 27  9 34 57.4 r   98654WB9  7.9  7.9   84- 133     70 256  83N 296 226 279 +5.4 +0.3 +1.9-1.4 .414 -166.6      9 35  9.5  14  4 32 359.2 742.2
     98654 is double: AB 7.8 9.1 45"  48.5, dT = +41sec
26 Dec 28  4 43 54.5 R    1516 K5  6.6  5.8s  76- 122     28  90  76S 278 350 259 +7.5 +1.4 +1.0+0.4 .453 -159.8     10 22 14.2   8 57 52 366.5 857.4
      1516 = NSV 18388, 6.72 to 6.81, Hp, Type IB
26 Dec 28  6 19 35.1 R    1525 M2  5.6  4.8v  76- 121     50 100  52N 330  40 310 +7.3 +1.6 +1.2-2.0 .382  154.8     10 25 15.2   8 47  5 365.0 748.2
   R1525 = 44 Leonis (DE)
      1525 = DE Leo, 5.6, range 0.07, V, Type SRB:
26 Dec 28  6 26 28.6 r  118292DF0  7.7  7.6S  76- 121     51 101  42N 340  49 320 +7.3 +1.6 +1.0-2.5 .345  145.4     10 25 35.1   8 46 35 364.9 742.5
    118292 is double: AB 7.8 9.1 3.6"  74.4, dT = +0.8sec
    118292 is a close double. Observations are highly desired
    118292 = NSV 4851, 7.7,
26 Dec 29  5 29 53.1 r    1624PF2  6.8  6.5   66- 108     25  97  50S 254 322 232 +8.2 +3.0 +1.3+1.8 .313 -130.9     11 13 53.0   2 16  7 372.9 865.2
      1624 is double: AB 6.8 16.2       85.0, dT = 0.00sec
26 Dec 29  7 37 40.7 R    1635cM0  5.2  4.4   65- 108     53 115  59N 325  23 304 +7.9 +3.3 +1.2-1.8 .391  165.3     11 17 17.4   2  0 38 371.0 727.5
   R1635 = 75 Leonis
      1635 is double: ** 5.8 6.6 0.044"   0.0
      1635 has been reported as non-instantaneous (OCc 763). Observations are highly desired
26 Dec 29  9  0 20.2 R    1637 K0  5.9  5.4   65- 107     68 145  57N 327 360 306 +7.7 +3.5 +1.4-2.1 .372  166.8     11 18 55.0   1 39  1 370.6 687.0
   R1637 = 76 Leonis
26 Dec 30 10 48 44.9 r  138612cK5  8.3  7.5   53-  94 -11 65 188  66N 317 310 295 +7.7 +5.0 +1.8-1.9 .361  177.3     12  8 59.9 - 5  8 57 377.2 661.0
    138612 is double: ** 8.3      0.09" 281.0, dT = -0.21sec
    138612 has been reported as non-instantaneous (OCc1769). Observations are highly desired
26 Dec 30 11 18  8.2 r  138617KF2  7.2  7.0   53-  94  -4 63 203  48N 336 314 314 +7.6 +5.1 +1.2-2.6 .335  158.0     12  9 47.8 - 5 13 33 377.4 661.9
26 Dec 31  6 35 11   Gr   1845SG8  6.5  5.9s  44-  83     16 ** GRAZE: CA 11.8S; Dist. 16km in az.  20deg. [Lat = 20.17-0.35(E.Long+75.09)]
26 Dec 31  6 35 14   m    1845SG8  6.5  5.9s  44-  83     15 107  12S 214 280 192 +8.4 +5.5 +9.9+9.9 .000  -90.0     12 51 22.9 -10 20 18 386.0 912.6
      1845 is triple: AB 6.6 9.7 28.8" 296.2 : AC 6.6 12.5 142" 211.8
      1845 = NSV 5994, 6.49, range 0.07, V
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Lunar Occultation predictions
Observatorio Ofiuco
Santiago del Estero
Argentina

Occultation prediction for Observatorio Ofiuco,Argentina
E. Longitude - 63 57 0.0, Latitude -28 15 0.0, Alt. 128m; Telescope dia 15cm; dMag 0.0

	day	Time	P	Star	Sp	Mag	Mag	%	Elon	Sun	Moon	CA	PA	VA	AA	Libration		A	B	RV	Cct	durn	R.A. (J2000)			Dec			Mdist	SV
y	m d	h m s		No	D	v	r	V	ill	Alt	Alt Az	o	o	o	o	L	B	m/o	m/o	"/s	o	sec	h	m	s	o	m	s	Mm	m/s
26	Jan 1	1 46 53.0	d	76557WF8		7.4	7.0		92+	147	34 2	85S	95	273	104	-1.0	-7.4	+2.5	-0.2	.373	-20.8		4	20	17.7	27	20	51	357.3	690.9
	76557 is double: BA 7.5 5.1 48" 79.8, dT = +125sec																													
26	Jan 1	1 48 57.5	D	638SK1		5.0	4.4		92+	147	34 2	84S	95	273	105	-1.0	-7.4	+2.5	-0.2	.372	-21.0		4	20	21.2	27	21	3	357.3	690.3
	R638 = phi Tauri																													
	638 is triple: AB 5.1 7.5 48" 259.8, dT = -125sec : AC 5.1 12.3 117" 22.8, dT = +96sec																													
26	Jan 1	2 21 57.1	d	76563 K5		7.2	6.2		92+	147	34 353	73S	107	294	116	-1.1	-7.4	+2.6	-0.4	.341	-30.5		4	21	15.3	27	21	1	357.3	685.9
26	Jan 2	2 29 54.9	D	824 F6		6.2	6.0		97+	161	32 8	43N	57	229	60	+1.0	-7.2	+2.1	+0.7	.350	28.2		5	29	40.7	29	11	11	357.0	688.0
26	Jan 3	3 8 37.8	d	1022CB7		6.0	s		100+	173	32 15	79N	137	302	134	+2.9	-6.6	+2.3	-1.7	.300	-40.9		6	39	33.1	28	15	47	358.3	689.1
	R1022 = 54 Aurigae																													
	1022 is double: AB 6.21 7.85 0.81" 34.3, dT = -0.6sec																													
	1022 is a close double. Observations are highly desired																													
	1022 = NSV 3065, 6.03, range 0.02, V, Type EA, Period 1.8797 days, Phase 49%																													
	Distance of 1022 to Terminator = 5.9"; to 3km sunlit peak = 0.0"																													
26	Jan 4	3 26 8.3	R	1169 K5		5.3	4.5s		99-	169	31 26	87N	260	54	250	+4.7	-5.6	+2.2	-0.3	.362	-154.6		7	44	6.9	25	47	3	361.3	701.9
	R1169 = 76 Geminorum																													
	1169 = NSV 3703, 5.28 to 5.32, V																													
	Distance of 1169 to Terminator = 17.6"; to 3km sunlit peak = 7.0"																													
26	Jan 8	8 2 26.9	R	1657cA2		6.7	6.6		72-	117	58 14	58N	326	134	304	+6.8	+0.8	+1.4	-2.1	.358	168.8		11	25	39.5	3	18	4	382.2	677.4
	R1657 = 82 Leonis																													
	1657 is double: ** 7.5 7.5 1.0, dT = 0.00sec																													
26	Jan 8	8 41 43.3	d	1663pG8		5.0	4.4		72-	116	-10 59 356	-80N	104	287	82	+6.6	+0.9	+2.7	-0.6	.312	31.4		11	27	56.2	2	51	23	382.3	677.0
	R1663 = tau Leonis																													
	1663 is triple: AB 5.1 7.5 88" 182.7, dT = +53sec : AD 5.1 9.5 758" 92.0, dT = +2384sec																													
26	Jan 8	9 7 14.3	R	1660SK0		6.6	6.1		72-	116	-5 58 343	61N	323	157	301	+6.5	+1.0	+1.4	-1.8	.364	172.1		11	26	45.3	3	0	47	382.5	682.1
	R1660 = 83 Leonis																													
	1660 is triple: AB 6.6 7.5 36" 238.4, dT = -10sec : AC 6.6 11.1 219" 191.0, dT = +401sec																													
26	Jan 8	9 8 30.1	r	118865WK2		7.7			72-	116	-5 58 343	61N	322	158	301	+6.5	+1.0	+1.4	-1.7	.365	172.5		11	26	46.3	3	0	23	382.5	682.4
	118865 is double: BA 7.5 6.6 36" 58.4, dT = +10sec																													
26	Jan 8	9 54 4.3	r	1663pG8		5.0	4.4		72-	116	4 54 324	38N	346	197	324	+6.4	+1.1	+0.6	-2.5	.320	148.2		11	27	56.2	2	51	23	382.9	698.9
	R1663 = tau Leonis																													
	1663 is triple: AB 5.1 7.5 88" 182.7, dT = +264sec : AD 5.1 9.5 758" 92.0, dT = +666sec																													
26	Jan 9	7 48 9.0	R	1753 K0		6.7	6.2		63-	105	58 43	22N	2	146	340	+6.4	+2.2	-0.2	-3.6	.243	131.8		12	11	22.0	- 2	41	57	387.7	686.3
26	Jan 9	9 15 48.1	r	138647pG4		7.4	7.1		63-	104	-3 65 359	43N	340	161	318	+6.1	+2.4	+0.9	-2.6	.318	154.7		12	12	28.8	- 3	5	4	387.7	660.5
	138647 is double: AB 7.5 13.0 1.8" 71.0, dT = +0.06sec																													
	138647 is a close double. Observations are highly desired																													
26	Jan 10	9 24 57.9	r	1859 B9		6.9	6.9		53-	93	-2 70 22	39N	343	144	322	+5.4	+3.7	+0.8	-3.0	.297	150.4		12	57	19.0	- 8	54	39	392.2	650.2
26	Jan 11	4 26 19.8	R	1949pA0		5.9			44-	84	6 102	74S	274	32	254	+5.1	+4.2	-0.1	-1.1	.476	-154.9		13	34	40.4	-13	12	52	400.5	1021.0
	1949 is triple: AB 6.30 7.29 0.43" 69.7, dT = +0.8sec : AB,C 5.9 12.4 27.5" 143.6, dT = +38sec																													
	1949 is a close double. Observations are highly desired																													
26	Jan 11	6 27 48.5	r	158057KF3		8.0	7.8		44-	83	32 89	57N	323	78	303	+5.0	+4.4	+0.2	-2.3	.416	162.1		13	38	27.8	-13	33	22	398.0	843.7
26	Jan 13	8 10 54.3	r	183307 K5		8.4	7.5		25-	60	38 98	40S	233	341	218	+2.4	+6.0	+3.3	+1.4	.160	-112.4		15	15	8.4	-22	55	2	401.3	817.0
26	Jan 14	6 8 10.0	r	184032kA2		7.8	7.6		18-	50	4 116	76N	291	50	280	+1.3	+6.1	-0.5	-1.2	.548	178.8		16	1	26.6	-25	11	55	404.9	1076.8
26	Jan 14	7 13 40.5	r	184081kA2		8.2	8.1		18-	50	17 110	33N	334	87	323	+1.2	+6.2	-0.7	-2.4	.371	138.3		16	4	20.1	-25	16	27	403.5	972.2
26	Jan 15	7 36 32	m	2437pA0		7.9	7.8		11-	39	13 115	16S	196	311	190	+0.0	+6.2	+9.9	+9.9	.000	-90.0		16	57	53.9	-27	36	39	402.9	1007.9
	2437 is double: AB 7.9 9.3 11.2" 29.9																													
26	Jan 16	7 46 47.0	r	X145167 M0		8.6	6.9V		6-	28	5 119	54S	226	345	225	-1.1	+6.0	+0.5	+0.5	.325	-126.5	.05	17	52	0.7	-28	1	21	401.9	1063.6
	X145167 = KW Sgr, 11.0 to 13.2, pg, Type SRC, Period 670. days																													
26	Jan 16	7 59 4.1	r	185868 K7		9.5	8.6		6-	28	7 118	71N	281	39	280	-1.1	+6.0	-0.3	-1.1	.535	178.9		17	52	12.7	-27	49	20	401.6	1042.4

Occultation prediction for Observatorio Ofiuco,Argentina
E. Longitude - 63 57 0.0, Latitude -28 15 0.0, Alt. 128m; Telescope dia 15cm; dMag 0.0

y	m	day d	h	Time m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon	Sun Alt	Moon Alt	Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	Jan	16	8	2	44.4	R	185892	A2	7.9	7.8		6-	28		8	117	1N	351	108	350	-1.1	+6.0	-2.3	-4.6	.172	108.8		17	53	16.8	-27	37	44	401.6	1037.3
26	Jan	16	8	22	37.0	R	185893	A0	8.3	8.3		6-	27		12	116	60S	231	347	231	-1.1	+6.0	+0.7	+0.3	.342	-131.6		17	53	21.2	-28	3	26	401.1	1003.1
26	Jan	16	9	1	26.6	d	2583	cA7	5.8	5.7		6-	27	-7	19	112	-57S	115	227	114	-1.1	+6.1	-0.1	-1.6	.468	-14.7		17	56	41.8	-28	3	55	400.3	939.2
26	Jan	21	23	56	43.7	d	146225	K0	7.7	7.1		10+	37	-9	15	270	61N	38	281	59	-6.0	-0.6	+0.1	+2.0	.491	19.0		22	39	30.4	- 7	36	17	383.2	964.4
26	Jan	23	0	27	18.7	d	146715	kA0	8.5	8.4		17+	49		16	277	62S	93	334	115	-6.0	-2.2	+0.6	+1.0	.412	-35.2		23	28	2.2	- 1	28	6	379.8	929.7
26	Jan	23	1	23	47.7	d	3460	kG0	6.9	6.6		18+	50		3	271	76N	51	293	72	-6.0	-2.3	+0.1	+1.7	.539	10.0		23	29	30.3	- 1	2	9	381.1	1011.9
R3460 = 12 Piscium																																			
26	Jan	25	0	31	53.7	d	92234	kF5	8.1	7.9		37+	74		26	301	66S	90	321	111	-5.1	-5.1	+1.5	+1.0	.376	-30.5		1	5	9.6	11	18	57	372.4	789.4
26	Jan	25	1	41	16.4	d	163	pF2	7.3	7.1		37+	75		13	291	63S	93	331	115	-5.3	-5.1	+0.8	+0.9	.420	-29.6		1	7	4.0	11	33	8	373.7	875.5
163 is double: AB 7.3 10.5 8.3" 201.5, dT = -6sec																																			
163 is a close double. Observations are highly desired																																			
26	Jan	30	0	30	3.0	d	77956	K2	7.5	6.8		89+	141		30	19	79N	87	247	87	+1.2	-7.0	+2.2	-0.3	.390	2.1		6	6	17.0	29	5	49	362.7	686.2
26	Jan	30	0	30	29.8	d	77949	B2	7.5	7.3S		89+	141		30	19	66S	122	283	122	+1.2	-7.0	+2.5	-1.4	.326	-33.2		6	6	6.6	28	56	5	362.7	685.8
77949 = NSV 16772, 7.46,																																			
26	Jan	31	0	58	54.0	d	1093	SF8	6.6	s		95+	155		29	28	58S	140	292	134	+2.6	-6.2	+2.3	-2.1	.299	-41.1		7	12	49.0	27	13	30	363.6	701.1
1093 is triple: AB 7.24 7.27 0.67" 296.4, dT = -2.1sec : AC 7.2 12.8 13.6" 73.9, dT = +18sec																																			
1093 is a close double. Observations are highly desired																																			
1093 = NSV 3453, 6.43 to 6.46, V																																			
26	Jan	31	0	58	54.0	d	X 99111	S	7.2	7.0s		95+	155		29	28	58S	140	292	134	+2.6	-6.2	+2.3	-2.1	.299	-41.1		7	12	49.0	27	13	30	363.6	701.1
X 99111 is triple: BA 7.3 7.2 0.67" 116.4, dT = +2.1sec : BC 7.3 12.7 14.0" 67.3, dT = +14sec																																			
X 99111 is a close double. Observations are highly desired																																			
X 99111 = NSV 3453, 6.43 to 6.46, V																																			
26	Jan	31	4	50	28.5	d	1108	cG8	7.0	6.5		96+	156		29	331	70S	128	338	122	+2.0	-5.9	+1.2	-0.5	.413	-15.3		7	19	30.8	26	49	23	363.8	755.4
1108 is double: ** 7.7 7.7 0.10" 90.0, dT = +0.19sec																																			
1108 has been reported as non-instantaneous (OCc1353). Observations are highly desired																																			
26	Feb	3	8	15	49.4	r	1501	G5	7.2	6.7		98-	162		35	311	62S	260	123	241	+4.8	-1.1	+2.5	+1.5	.288	-130.5		10	15	9.7	11	40	27	373.8	805.3
26	Feb	5	6	10	4.3	R	1708	wF7	6.2	5.9		87-	138		59	28	56S	261	57	239	+5.6	+1.8	+3.8	+0.2	.220	-126.2		11	49	1.3	- 0	19	7	381.9	690.8
1708 is double: AB 6.2 13.1 27.4" 128.3, dT = +84sec																																			
26	Feb	7	3	57	54.0	R	1907	kA2	6.6	6.5		72-	116		26	90	68S	271	27	251	+5.0	+4.1	+0.9	-1.1	.387	-146.5		13	17	22.0	-11	29	1	393.9	885.6
26	Feb	7	5	23	25.4	r	1913	pA2	7.3	7.2		71-	115		44	79	65N	318	76	298	+4.8	+4.3	+0.8	-2.2	.402	170.6		13	19	44.1	-11	40	23	392.5	776.3
1913 is double: AB 7.3 11.4 4.1" 273.0, dT = -7sec																																			
1913 is a close double. Observations are highly desired																																			
26	Feb	7	7	29	40	M	1919	K5	6.9	6.0s		71-	114		69	45	19S	222	2	202	+4.4	+4.5	+9.9	+9.9	.000	-90.0		13	22	8.3	-12	34	46	391.3	666.0
1919 = NSV 19751, 6.98 to 7.03, Hp																																			
26	Feb	9	7	25	56.5	R	2134	SK4	5.9	5.2v		52-	92		55	88	15N	1	110	346	+2.6	+6.1	-1.0	-4.6	.198	122.2		14	57	28.0	-21	24	56	398.1	715.1
2134 is multiple: AB 5.9 8.2 26.4" 307.8, dT = -79sec : AE 5.9 13.1 156" 350.9, dT = -775sec : AC 5.9 14.0 229" 355.5, dT = -1155sec : AG 5.9 18.0 258" 316.0, dT = -917sec																																			
2134 = KX Lib, 5.72, range 0.04, V, Type BY																																			
26	Feb	10	4	44	18.9	r	183713	A5	7.4	7.2		43-	82		12	111	65N	307	62	294	+1.7	+6.2	-0.4	-1.6	.502	166.6		15	41	57.8	-24	18	0	403.0	1009.5
26	Feb	10	5	38	7.6	r	2248	A2	7.6	7.4S		43-	82		23	106	29N	343	94	330	+1.7	+6.3	-0.8	-2.8	.319	132.4		15	44	17.7	-24	23	44	401.9	923.3
2248 = NSV 20388, 7.59, , Type VAR:																																			
26	Feb	10	6	49	19.7	r	2251	KK0	7.5	7.0		42-	81		38	101	65N	307	54	295	+1.5	+6.4	+0.4	-2.0	.412	170.3		15	45	49.8	-24	43	1	400.5	811.9
26	Feb	10	8	26	7.4	R	183802	pA0	7.2			42-	81		59	93	64S	256	359	244	+1.3	+6.6	+2.8	-0.1	.262	-138.0		15	48	3.3	-25	12	56	399.0	681.3
183802 is double: AB 7.60 8.49 0.10" 95.9, dT = +0.36sec																																			
183802 is a close double. Observations are highly desired																																			
26	Feb	11	7	11	11.5	r	2389	kB9	8.4	8.4		33-	70		33	105	63N	303	51	296	+0.3	+6.5	+0.3	-1.9	.421	167.3		16	38	36.3	-26	59	22	400.9	838.1
26	Feb	11	9	24	8.9	r	184563	pM0	7.9	7.0		32-	69	-7	61	96	22N	343	83	336	-0.1	+6.7	+0.0	-4.8	.200	126.3		16	42	47.0	-27	11	16	398.7	652.5
184563 is double: AB 8.8 15.9 10.8" 123.3, dT = +41sec																																			

Occultation prediction for Observatorio Ofiuco,Argentina
E. Longitude - 63 57 0.0, Latitude -28 15 0.0, Alt. 128m; Telescope dia 15cm; dMag 0.0

y	m	day d	h	Time m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon	Sun Alt	Moon Alt	Az	CA o	PA o	VA o	AA o	Libration L	B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	Feb	12	8	42	19.2	r	185524	kK1	8.5	7.8		24-	59	42	104		87N	272	15	269	-1.0	+6.4	+1.2	-1.0	.384	-168.5		17	35	10.4	-28	12	13	398.6	758.2
26	Feb	13	8	43	26.4	R	186903	K4	7.7	6.8		16-	48	31	107		29S	201	309	204	-2.0	+5.9	+4.0	+5.3	.116	-105.7	.02	18	30	53.7	-27	57	6	397.1	825.0
26	Feb	13	17	44	56.1	d	2721	cB8	3.2	3.2		14-	45	67	34	255	-33N	24	277	28	-3.8	+5.6	-0.5	+3.0	.311	45.4		18	45	39.4	-26	59	27	395.7	850.0
R2721 = phi Sagittarii																																		
2721 is double: 3.1 0.8" 270.5, dT = -1sec																																		
2721 is a close double. Observations are highly desired																																		
26	Feb	13	18	30	22.9	R	2721	cB8	3.2	3.2		14-	44	58	24	251	55N	296	185	300	-3.9	+5.5	+1.0	+0.1	.338	134.7		18	45	39.4	-26	59	27	396.5	926.3
R2721 = phi Sagittarii																																		
2721 is double: 3.1 0.8" 270.5, dT = -2.1sec																																		
2721 is a close double. Observations are highly desired																																		
26	Feb	21	23	31	42.3	d	251	K0	7.6	7.0		22+	56	-9	21	303	68S	88	318	108	-3.4	-6.0	+1.3	+1.0	.411	-23.0		1	42	26.9	15	46	43	370.0	801.7
26	Feb	25	1	16	50	M	707	SA2	5.7	5.7		56+	97		22	323	6N	359	217	7	-0.3	-7.5	+9.9	+9.9	.000	90.0		4	41	19.8	28	36	54	367.8	732.9
707 is triple: AB 5.7 10.7 44" 55.0 : AC 5.7 12.0 90" 303.0																																		
26	Feb	25	22	51	42.4	d	864	K1	6.6	6.1		66+	109	-1	32	12	82S	98	266	100	+1.3	-7.3	+2.5	-0.5	.362	-11.2		5	43	22.8	29	12	1	367.0	657.1
26	Feb	26	0	9	19.4	d	77506	F5	7.4	7.1		67+	109		32	352	77N	78	266	80	+1.0	-7.3	+2.6	+0.5	.354	15.0		5	45	31.8	29	17	55	367.0	652.2
26	Mar	4	3	41	43.9	r	1660	SK0	6.6	6.1		99-	172		54	33	74N	314	105	292	+4.8	+1.0	+1.6	-1.8	.381	179.6		11	26	45.3	3	0	47	380.1	702.7
R1660 = 83 Leonis																																		
1660 is triple: AB 6.6 7.5 36" 238.3, dT = -24sec : AC 6.6 11.1 220" 191.0, dT = +310sec																																		
Distance of 1660 to Terminator = 8.9"; to 3km sunlit peak = 1.4"																																		
26	Mar	4	4	30	53.2	R	1663	pG8	5.0	4.4		99-	171		59	13	54N	335	143	313	+4.7	+1.1	+1.1	-2.3	.353	159.9		11	27	56.2	2	51	23	380.0	691.9
R1663 = tau Leonis																																		
1663 is triple: AB 5.1 7.5 88" 182.7, dT = +221sec : AD 5.1 9.5 758" 92.0, dT = +991sec																																		
Distance of 1663 to Terminator = 6.7"; to 3km sunlit peak = 0.1"																																		
26	Mar	5	1	52	51.1	r	1753	K0	6.7	6.2		97-	160		31	75	39N	349	110	327	+5.0	+2.3	+0.2	-2.9	.329	138.0		12	11	22.0	- 2	41	57	385.9	828.6
26	Mar	5	3	5	17.7	r	138647	pG4	7.4	7.1		97-	160		46	63	70N	318	86	296	+4.8	+2.4	+1.1	-2.1	.401	173.1		12	12	28.8	- 3	5	4	384.8	753.6
138647 is double: AB 7.5 13.0 1.8" 71.0, dT = +1.8sec																																		
138647 is a close double. Observations are highly desired																																		
26	Mar	6	2	27	21.7	r	1859	B9	6.9	6.9		92-	148		32	83	80N	307	65	286	+4.6	+3.7	+0.7	-1.9	.446	179.6		12	57	19.0	- 8	54	39	390.1	843.7
26	Mar	7	3	6	57.6	r	158128	K5	7.5	6.6		86-	136		34	89	46S	250	5	231	+3.8	+4.8	+1.9	-0.3	.253	-124.7		13	44	22.0	-14	45	38	393.9	848.5
26	Mar	7	3	40	55.9	r	158141	M1	7.7	6.8		86-	136		42	85	78S	282	37	263	+3.8	+4.9	+1.3	-1.4	.382	-155.2		13	45	8.7	-14	46	1	393.4	804.0
26	Mar	8	4	25	21.2	r	2083	K0	7.9	7.3		78-	125		43	91	64N	317	68	300	+2.8	+5.8	+0.5	-2.2	.403	167.2		14	34	9.7	-19	31	9	396.5	794.4
26	Mar	8	8	37	42.5	r	182736	K2	8.1	7.4		77-	123		77	304	64N	317	189	300	+1.9	+6.2	+2.0	-2.1	.300	163.5		14	39	17.8	-20	21	27	395.2	599.4
26	Mar	9	8	19	54	m	183513	K0	7.8	7.2		69-	112		85	50	11S	207	339	193	+1.0	+6.6	+9.9	+9.9	.000	-90.0		15	29	9.9	-24	27	5	397.1	591.2
26	Mar	9	8	53	8.0	r	183520	kA5	8.2	8.0		69-	112		85	320	45N	331	189	318	+0.9	+6.7	+1.8	-3.4	.242	143.3		15	29	53.1	-24	2	41	397.1	580.0
26	Mar	11	5	38	2.0	r	185097	pF2	7.9	7.7		51-	91		30	107	72N	293	41	288	-0.7	+6.5	+0.3	-1.6	.434	173.3		17	10	9.1	-27	46	24	400.9	849.4
185097 is double: AB 7.9 11.4 1.8" 61.8, dT = +2.6sec																																		
185097 is a close double. Observations are highly desired																																		
26	Mar	11	6	35	33.6	R	2470	kB9	6.1	6.2		51-	91		42	103	30N	334	78	329	-0.8	+6.5	-0.3	-3.6	.264	132.4		17	12	25.1	-27	45	44	399.8	758.7
26	Mar	11	14	30	10.9	r	2505	K4	5.3	4.5		49-	89	53	36	254	88S	271	166	268	-2.6	+6.5	+1.0	+0.9	.396	168.8		17	23	21.6	-28	8	34	399.9	782.8
R2505 = 43 Ophiuchi																																		
26	Mar	12	4	56	44.1	r	2601	SK4	6.8			42-	80		12	115	56N	303	59	303	-1.8	+6.0	-0.5	-1.7	.463	155.8		18	2	54.3	-27	49	36	401.3	988.5
R2601 = 7 Sagittarii																																		
2601 is triple: Aa,Ab 6.90 9.37 0.34" 336.5, dT = -0.6sec : AB 6.9 13.0 9.7" 48.0, dT = +5sec																																		
2601 is a close double. Observations are highly desired																																		
26	Mar	12	5	56	22.1	r	186250	K5	7.7	6.8		41-	80		24	110	34N	325	75	325	-1.9	+6.1	-0.6	-2.8	.320	134.4		18	5	20.8	-27	50	3	400.0	886.4
26	Mar	12	6	26	1	m	186286	B7	7.1	7.1		41-	80		30	108	11S	189	297	189	-1.9	+6.1	+9.9	+9.9	.000	-90.0		18	6	45.8	-28	21	50	399.4	837.6
26	Mar	12	9	14	30.2	r	186400	G5	7.8	7.3		40-	79		65	97	76N	282	18	282	-2.4	+6.3	+2.2	-1.3	.314	171.5		18	10	32.2	-28	9	13	396.5	609.8
26	Mar	12	9	52	33.0	r	186434	K5	7.5	6.6		40-	79	-6	73	94	42N	315	50	316	-2.6	+6.3	+2.2	-3.7	.214	134.9		18	11	44.7	-28	1	56	396.1	582.3

Occultation prediction for Observatorio Ofiuco,Argentina
E. Longitude - 63 57 0.0, Latitude -28 15 0.0, Alt. 128m; Telescope dia 15cm; dMag 0.0

y	m	day d	h	Time m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon	Sun Alt	Moon Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	Mar	14	8	2	16.2	r	188744	A7	8.5	8.3		23-	57	27	105	67S	233	344	244	-3.9	+4.5	+1.1+0.4	.379	-150.5		19	57	2.0	-24	20	14	392.7	829.0
26	Mar	15	7	35	58	Gr	3040	G3	8.1	7.8		15-	45	11	** GRAZE: CA 5.9S; Dist. 31km in az. 21deg. [Lat =-27.95-0.33(E.Long+63.95)]																				
26	Mar	16	17	39	37.3	r	3206	F3	5.1	4.9s		7-	30	58	44	279	74S	233	117	252	-6.3	+1.0	+0.9+1.9	.445	178.7		21	53	17.8	-13	33	6	379.5	819.0
R3206 = Kuh = mu Capricorni																																		
3206 = NSV 25781, 5.07, range 0.03, V, Type VAR:																																		
26	Mar	22	22	45	42.5	d	75850	K0	7.3	6.6		19+	52	-6	20	314	14S	146	11	161	-0.9	-7.3	+0.7-2.5	.153	-69.5		3	18	19.9	24	4	55	364.8	772.4
26	Mar	22	23	40	12.2	D	75876	K0	7.3	6.7		19+	52		11	306	76N	56	288	71	-0.9	-7.3	+1.3+1.8	.435	23.5		3	20	26.8	24	32	36	365.8	842.6
26	Mar	23	22	22	9.1	D	638	SK1	5.0	4.4		29+	65	-1	29	332	17S	150	358	160	+0.6	-7.5	+1.6-2.9	.148	-67.9	.01	4	20	21.2	27	21	3	364.8	693.1
R638 = phi Tauri																																		
638 is triple: AB 5.1 7.5 48" 259.8, dT = -109sec : AC 5.1 12.3 117" 22.8, dT = -484sec																																		
26	Mar	23	22	54	30.2	r	638	SK1	5.0	4.4		29+	65	-8	25	325	-29S	197	51	206	+0.5	-7.5	+3.0+4.5	.154	-112.2	.01	4	20	21.2	27	21	3	365.2	720.6
R638 = phi Tauri																																		
638 is triple: AB 5.1 7.5 48" 259.8, dT = -143sec : AC 5.1 12.3 117" 22.8, dT = +759sec																																		
26	Mar	25	0	29	0.0	D	824	F6	6.2	6.0		41+	79		19	321	61N	57	277	61	+1.6	-7.2	+2.2+1.9	.326	40.8		5	29	40.7	29	11	11	367.5	766.8
26	Mar	26	1	12	20.5	d	78530	cB9	7.8	7.8		52+	93		23	324	54S	130	346	127	+2.6	-6.5	+1.0-0.4	.395	-21.8		6	35	40.3	28	15	51	369.4	762.4
78530 is double: AB 8.6 8.9 0.19" 39.8, dT = 0.00sec																																		
78530 is a close double. Observations are highly desired																																		
26	Mar	26	3	2	23.9	d	1022	CB7	6.0		s	53+	93		6	307	64N	69	302	65	+2.5	-6.3	+1.3+1.7	.390	40.3		6	39	33.1	28	15	47	371.3	921.4
R1022 = 54 Aurigae																																		
1022 is double: AB 6.21 7.85 0.81" 34.3, dT = +1.7sec																																		
1022 is a close double. Observations are highly desired																																		
1022 = NSV 3065, 6.03, range 0.02, V, Type EA, Period 1.8797 days, Phase 10%																																		
26	Mar	29	0	31	42	Gr	1402	K0	7.3	6.5		83+	131		42	** GRAZE: CA 14.5N; Dist. 3km in az. 45deg. [Lat =-28.22-0.89(E.Long+63.95)]																				
26	Mar	29	0	31	45	gr	1402	K0	7.3	6.5		83+	131		43	16	15N	35	200	18	+4.8	-2.9	+9.9+9.9	.000	90.0		9	29	32.9	17	39	7	375.8	669.5
26	Mar	30	1	4	34.3	d	1510	pK0	7.7	7.1		90+	144		48	23	34S	168	328	149	+5.0	-1.2	+0.8-2.7	.289	-38.8		10	20	26.4	11	21	10	378.6	682.0
1510 is double: AB 7.8 12.2 43" 6.5, dT = -141sec																																		
26	Mar	30	1	54	7.1	d	99084	kG5	7.8	7.4		90+	144		51	6	89S	113	288	94	+4.8	-1.1	+2.3-1.0	.353	18.3		10	22	9.5	11	18	37	378.5	681.8
26	Mar	30	4	11	2.7	d	1522	K0	6.8	6.2		91+	145		42	319	50S	153	9	133	+4.4	-0.8	+0.7-1.6	.380	-21.4		10	24	19.5	10	35	16	379.5	750.3
26	Mar	30	5	21	6.0	d	99120	K0	7.2	6.5		91+	145		30	303	67N	90	318	70	+4.2	-0.6	+1.8+1.0	.344	39.2		10	26	26.6	10	30	10	380.7	818.9
26	Apr	1	5	12	4.8	d	138521	K0	7.1	6.6		99+	169		56	315	67S	127	345	105	+4.0	+2.4	+1.7-1.0	.372	5.6		11	59	34.0	- 1	55	7	385.3	698.5
Distance of 138521 to Terminator = 14.3"; to 3km sunlit peak = 4.7"																																		
26	Apr	3	2	33	23.7	R	1930	pK5	5.3	4.5s		99-	168		53	73	67S	284	44	263	+3.7	+4.5	+1.8-1.4	.351	-153.9		13	26	43.2	-12	42	28	391.8	742.7
R1930 = 68 Virginis																																		
1930 is double: ** 6.4 6.4 0.10" 90.0, dT = +0.28sec																																		
1930 has been reported as non-instantaneous (OCc 164). Observations are highly desired																																		
1930 = NSV 6244, 5.20 to 5.28, V																																		
Distance of 1930 to Terminator = 18.8"; to 3km sunlit peak = 7.8"																																		
26	Apr	3	6	20	58.2	r	1940	kF0	6.9	6.8		99-	166		67	304	79N	318	186	297	+2.9	+5.0	+1.8-1.8	.333	169.1		13	31	13.2	-13	26	56	391.6	643.8
26	Apr	4	3	20	15	Gr	2039	A0	5.5	5.5		96-	156		58	** GRAZE: CA 9.2S; Dist.174km in az. 47deg. [Lat =-25.94-0.95(E.Long+63.95)]																				
Distance of 2039 to Terminator = 4.1"; to 3km sunlit peak = 0.0"																																		
26	Apr	4	3	24	41	m	2039	A0	5.5	5.5		96-	156		57	80	9S	217	331	199	+2.8	+5.5	+9.9+9.9	.000	-90.0		14	15	24.1	-18	12	2	394.7	725.5
Distance of 2039 to Terminator = 2.2"; to 3km sunlit peak = 0.0"																																		
26	Apr	4	6	25	13.9	R	2051	A*	5.9	5.9v		95-	155		77	313	34S	242	105	224	+2.2	+5.8	+4.7+3.3	.155	-118.9		14	18	38.3	-18	42	57	394.1	614.2
2051 = CS Vir, 5.84 to 5.95, V, Type ACV, Period 9.2954 days, Phase 55%																																		
26	Apr	4	6	58	15.4	r	158495	SA3	7.3	7.1		95-	155		71	296	76N	313	190	294	+2.0	+5.9	+2.1-1.7	.316	168.8		14	19	25.8	-18	31	25	394.4	616.2
158495 is triple: AB 7.3 10.7 3.6" 354.7, dT = -8sec : AC 7.3 12.7 132" 339.3, dT = -374sec																																		
158495 is a close double. Observations are highly desired																																		
26	Apr	5	4	50	41.7	r	183168	kK1	7.1	6.5		91-	144		67	82	75S	277	26	262	+1.7	+6.3	+2.4-1.0	.311	-154.3		15	6	3.1	-22	24	14	396.7	664.6

Occultation prediction for Observatorio Ofiuco,Argentina
E. Longitude - 63 57 0.0, Latitude -28 15 0.0, Alt. 128m; Telescope dia 15cm; dMag 0.0

y	m	day d	h	Time m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon Sun Alt	Moon Alt	Az	CA o	PA o	VA o	AA o	Libration L	B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	Apr	6	2	14	47	M	2268	MB2	4.5			85-	134	24	107	8S	204	315	193	+1.1	+6.3	+9.9	+9.9	.000	-90.0		15	53	36.7	-25	19	38	401.5	922.2
	R2268 = 2 Scorpii																																
	2268 is triple: Aa,Ab 5.6 5.6 0.10" : AB 4.69 6.98 2.39" 267.4																																
	2268 is a close double. Observations are highly desired																																
	Distance of 2268 to Terminator = 9.2"; to 3km sunlit peak = 0.0"																																
26	Apr	6	3	8	56.5	R	2273	B8	5.9	5.9v		85-	134	36	102	74S	270	18	259	+1.0	+6.4	+1.0	-1.0	.388	-154.5		15	54	39.5	-25	14	37	400.4	835.2
	R2273 = 3 Scorpii (V927)																																
	2273 = V0927 Sco, 5.8, range 0.03, V, Type SXARI, Period 1.45937 days, Phase 70%																																
26	Apr	6	8	39	20.7	r	184047	pM2	7.5	6.7v		84-	132	73	272	33S	229	128	218	-0.2	+6.8	+3.0	+4.2	.175	-125.6		16	2	29.1	-26	8	53	398.3	580.2
	184047 is double: AB 7.6 10.0" 1.1, dT = +38sec																																
	184047 is a close double. Observations are highly desired																																
	184047 = V1043 Sco, 7.45 to 7.58, Hp, Type SRB																																
26	Apr	6	9	18	41.3	R	2298	kK3	5.0	4.3		83-	132	64	268	66N	309	208	299	-0.4	+6.8	+2.5	-1.6	.271	150.6		16	3	20.6	-25	51	55	398.7	602.5
26	Apr	7	8	6	47.8	r	184783	G6	7.9	7.4		76-	121	89	65	83S	272	27	266	-1.2	+6.7	+2.9	-0.1	.288	-172.2		16	54	49.6	-27	44	55	398.6	561.2
26	Apr	7	10	6	23.5	r	2437	pA0	7.9	7.8		76-	121	-6	65	264	48N	321	223	315	-1.7	+6.7	+3.1	-3.0	.194	128.6		16	57	53.9	-27	36	39	399.2	602.7
	2437 is double: AB 7.9 9.3 11.2" 29.9, dT = -21sec																																
26	Apr	8	4	14	29.7	R	2545	cF0	6.4	6.2		68-	111	29	108	56N	307	55	305	-1.5	+6.2	+0.0	-2.1	.395	155.2		17	43	17.7	-27	53	2	401.5	846.6
	2545 is double: ** 6.6 8.5 0.09" 200.4, dT = +0.06sec																																
	2545 has been reported as non-instantaneous (OCc 113). Observations are highly desired																																
26	Apr	9	9	49	2.1	R	2723	K0	6.6	6.1		58-	99	-10	89	54	58S	234	0	238	-3.8	+5.7	+2.6	+2.1	.270	-156.3		18	46	3.9	-27	29	56	396.1	566.1
26	Apr	9	10	8	26.8	r	187251	pG2	8.3			58-	99	-6	86	282	90S	265	162	270	-3.9	+5.7	+2.9	+0.4	.293	170.2		18	46	16.3	-27	20	48	396.0	570.7
	187251 is double: AB 8.66 9.30 0.45" 129.4, dT = +1.1sec																																
	187251 is a close double. Observations are highly desired																																
26	Apr	11	7	26	0.5	r	189313	A2	8.2	8.1		39-	77	36	98	88S	254	3	266	-5.0	+3.7	+1.2	-0.3	.397	-177.2		20	28	5.3	-22	1	24	391.9	756.2
26	Apr	12	7	20	34.5	R	3115	F0	7.1	6.9		29-	65	23	98	52N	289	43	306	-5.6	+2.4	+0.4	-2.0	.358	142.3		21	18	15.7	-17	27	44	388.2	850.4
	R3115 = 31 Capricorni																																
26	Apr	14	9	36	46.9	r	146433	G5	8.8	8.3		12-	40	27	82	87S	245	4	266	-5.9	-0.7	+0.9	+0.0	.466	173.3		22	59	45.8	-	5	47	55	375.7	855.3
26	Apr	15	9	4	29.3	r	128394	G5	8.9	8.5		6-	27	7	86	8S	168	286	190	-5.3	-2.3	-0.2	+5.7	.172	-108.0		23	48	57.9		0	26	15	372.3	1006.6
26	Apr	15	9	20	13	Gr	128391	cA3	9.1	9.0		6-	27	11	** GRAZE: CA 11.1N; Dist. 27km in az. 172deg. [Lat =-28.49+0.12(E.Long+63.95)]																						
26	Apr	15	9	20	14	m	128391	cA3	9.1	9.0		6-	27	10	83	11N	329	88	351	-5.3	-2.3	+9.9	+9.9	.000	90.0		23	48	41.1		1	0	18	371.9	984.3
	128391 is double: ** 9.7 10.0 0.024" 228.0																																
	128391 has been reported as non-instantaneous (OCc 947). Observations are highly desired																																
26	Apr	15	9	28	0.4	d	3508	cA5	5.8	5.7		6-	27	12	82	-18N	358	118	20	-5.3	-2.3	-0.1	+3.4	.270	60.1		23	49	27.5		1	4	34	371.7	974.3
	R3508 = 21 Piscium																																
	3508 is double: ** 6.6 6.6 0.050"																																
	3508 has been reported as non-instantaneous (OCc1648). Observations are highly desired																																
26	Apr	15	9	49	16.1	r	X 31954	G0	9.5	9.3		5-	27	-10	16	80	88N	252	11	274	-5.3	-2.3	+0.6	-0.3	.507	165.7		23	49	6.5		0	49	27	371.1	941.6
26	Apr	15	9	59	2.1	R	3508	cA5	5.8	5.7		5-	27	-8	18	78	43N	297	57	319	-5.3	-2.3	+1.2	-3.2	.258	119.9		23	49	27.5		1	4	34	370.9	929.3
	R3508 = 21 Piscium																																
	3508 is double: ** 6.6 6.6 0.050"																																
	3508 has been reported as non-instantaneous (OCc1648). Observations are highly desired																																
26	Apr	22	22	47	29.8	D	1105	cG7	6.5			37+	75	32	340	29S	157	357	150	+4.4	-5.7	+0.8	-1.8	.279	-45.0		7	17	3.4	26	41	22	366.8	702.2
	1105 is double: AB 7.00 7.70 0.20" 236.6, dT = +0.13sec																																
	1105 is a close double. Observations are highly desired																																
26	Apr	22	23	18	49	m	79256	K0	7.8	7.3		37+	75	29	333	17N	23	230	17	+4.4	-5.7	+9.9	+9.9	.000	90.0		7	17	59.4	27	8	31	367.2	731.2
26	Apr	22	23	49	1.4	D	1108	cG8	7.0	6.5		37+	75	26	326	73N	80	293	73	+4.3	-5.6	+2.2	+1.1	.354	34.1		7	19	30.8	26	49	23	367.5	763.1
	1108 is double: ** 7.7 7.7 0.10" 90.0, dT = +0.28sec																																
	1108 has been reported as non-instantaneous (OCc1353). Observations are highly desired																																

Occultation prediction for Observatorio Ofiuco,Argentina
E. Longitude - 63 57 0.0, Latitude -28 15 0.0, Alt. 128m; Telescope dia 15cm; dMag 0.0

y	m	day d	h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon	Sun Alt	Moon Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	Apr	23	0	34	40.2	d	79304	K2	8.1	7.3		37+	75	20	317	86N	93	315	86	+4.2	-5.5	+1.5	+0.7	.427	21.5		7	20	54.5	26	37	27	368.3	820.4
26	Apr	25	1	11	53.3	d	98471	cG5	8.0	7.6		60+	101	37	327	69S	129	340	113	+5.5	-2.8	+1.3	-0.7	.409	-1.9		9	16	54.9	18	7	45	375.3	744.2
		98471 is double: ** 9.0 9.0 0.10" 146.0, dT = +0.23sec																																
		98471 has been reported as non-instantaneous (OCc 740). Observations are highly desired																																
26	Apr	25	2	42	10.7	D	1383	cF5	6.6	6.4		60+	102	24	307	58S	140	7	124	+5.3	-2.6	+0.5	-0.8	.447	-14.7		9	18	58.9	17	42	19	376.8	844.5
R1383 = 83 Cancri																																		
		1383 is double: AB 6.6 0.30" 328.1, dT = -0.7sec																																
		1383 is a close double. Observations are highly desired																																
26	Apr	26	0	18	51.7	d	1481	A5	7.4	7.3		70+	114	49	356	47S	155	338	136	+5.9	-1.4	+1.1	-2.0	.340	-23.5		10	6	37.2	12	46	55	378.4	679.6
26	Apr	27	23	43	33.2	d	1692	cA3	6.9			87+	138	51	47	70S	133	272	111	+5.7	+1.6	+1.5	-2.0	.376	-0.5		11	40	24.1	0	57	8	386.0	704.2
		1692 is double: AB 7.00 10.04 0.18" 124.3, dT = +0.46sec																																
		1692 is a close double. Observations are highly desired																																
26	Apr	28	2	38	44.2	d	1697	kA2	7.8	7.8		87+	138	58	329	60S	141	348	119	+5.1	+2.0	+1.5	-1.7	.362	-7.3		11	43	19.9	0	11	7	386.0	682.8
26	Apr	29	1	30	34.3	d	138781	cF2	7.7			93+	150	65	28	23S	176	332	154	+4.9	+3.1	+0.2	-3.4	.266	-41.8		12	26	47.7	- 5	35	32	388.9	673.7
		138781 is double: AB 8.11 8.79 0.37" 85.9, dT = -0.01sec																																
		138781 is a close double. Observations are highly desired																																
26	Apr	29	3	50	32.3	d	1792	PF2	7.4	7.1S		93+	150	59	311	80S	118	340	96	+4.4	+3.4	+2.1	-0.8	.348	12.8		12	30	1.9	- 6	1	24	389.5	673.8
		1792 is triple: AB 7.4 13.0 3.3" 278.9, dT = -9sec : AC 7.4 13.0 18.8" 292.0, dT = -54sec																																
		1792 is a close double. Observations are highly desired																																
		1792 = NSV 19406, 7.36, , Type VAR:																																
26	Apr	29	22	47	54.5	D	1888	K5	6.0	5.2		97+	160	30	86	72N	86	203	65	+4.8	+4.0	+1.2	-1.0	.347	39.4		13	9	45.3	-10	19	46	394.3	859.1
R1888 = 50 Virginis																																		
26	Apr	30	3	10	26.2	d	1901	PG0	7.2			97+	162	73	351	66N	78	266	57	+4.0	+4.5	+4.2	+1.1	.201	53.6		13	14	55.7	-11	22	10	391.9	644.6
		1901 is triple: Aa,Ab 7.35 9.14 0.48" 186.2, dT = -0.7sec : AB 7.1 8.2 116" 43.8, dT = +479sec																																
		1901 is a close double. Observations are highly desired																																
26	May	4	1	0	42.2	D	2366	dM1	1.1	0.1v		95-	153	25	108	-68N	86	196	77	+0.7	+6.2	+0.6	-0.9	.424	24.5	.10	16	29	24.5	-26	25	55	402.8	909.6
R2366 = Antares = alpha Scorpii																																		
		2366 is double: AB 1.0 5.4 2.5" 277.9, dT = -6sec																																
		2366 is a close double. Observations are highly desired																																
		2366 = alf Sco, 0.75 to 1.21, V, Type SRC, Period 2180. days, Phase 80%																																
26	May	4	2	1	48.5	R	2366	dM1	1.1	0.1v		95-	153	38	103	62N	316	62	308	+0.5	+6.3	+0.2	-2.3	.378	155.4	.12	16	29	24.5	-26	25	55	401.6	808.9
R2366 = Antares = alpha Scorpii																																		
		2366 is double: AB 1.0 5.4 2.5" 277.9, dT = -5sec																																
		2366 is a close double. Observations are highly desired																																
		2366 = alf Sco, 0.75 to 1.21, V, Type SRC, Period 2180. days, Phase 80%																																
26	May	4	3	3	37.6	R	2373	K1	6.1	5.5		94-	153	51	99	43N	335	77	326	+0.4	+6.4	+0.1	-3.5	.271	137.1		16	31	22.8	-26	32	16	400.6	719.0
26	May	6	2	14	50.6	r	2643	K1	6.7	6.0		83-	131	20	111	47S	229	341	230	-1.9	+5.6	+1.1	+0.6	.310	-131.8		18	16	57.5	-27	42	57	403.0	909.0
26	May	6	2	32	0.0	r	186606	M1	7.2	6.3v		83-	131	23	110	30N	331	82	333	-1.9	+5.6	-0.9	-3.4	.263	125.8		18	17	51.6	-27	21	17	402.7	879.6
		186606 = V4389 Sgr, 7.16 to 7.26, Hp, Type SRB:																																
26	May	6	3	48	9.1	r	186671	kK1	7.3	6.5		82-	131	39	104	24N	338	83	339	-2.1	+5.7	-0.7	-5.0	.185	118.5		18	20	21.2	-27	24	28	401.1	755.3
26	May	7	3	50	50.7	R	2804	dK2	5.8	5.1		75-	120	29	106	46N	309	58	315	-3.3	+4.9	+0.0	-2.6	.322	140.1		19	13	13.7	-25	54	24	400.4	813.9
		2804 is double: AB 10.8 12.0 2.6" 69.4, dT = +4sec																																
		2804 is a close double. Observations are highly desired																																
26	May	8	9	5	22.7	r	189031	G8	7.9	7.5		65-	107	83	42	53S	221	1	233	-5.4	+3.8	+2.0	+2.4	.289	-158.5		20	12	53.7	-22	59	27	393.6	592.1
26	May	9	6	42	40.9	R	3069	A*	6.3	6.3v		55-	96	42	91	61N	283	34	298	-5.7	+2.7	+1.5	-1.8	.312	146.7		20	59	36.1	-19	2	7	392.0	710.5
R3069 = 20 Capricorni (AO)																																		
		3069 = AO Cap, 6.25 to 6.30, V, Type ACV, Period 2.2411 days, Phase 74%																																
26	May	9	10	25	21.1	r	164113	F0	8.2	8.0s		54-	95	-5	80	342	80N	263	99	278	-6.5	+2.4	+2.9	+0.5	.292	151.3		21	4	13.6	-18	31	24	389.3	628.8

Occultation prediction for Observatorio Ofiuco,Argentina
E. Longitude - 63 57 0.0, Latitude -28 15 0.0, Alt. 128m; Telescope dia 15cm; dMag 0.0

y	m	day d	h	Time m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon	Sun Alt	Moon Alt	Az	CA o	PA o	VA o	AA o	Libration L	B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
							164113 = NSV 25446, 8.23 to 8.33, Hp																													
26	May	10	5	58	30.3	r	164647	F3	7.7	7.4		46-	85	21	95	62S	222	337	240	-6.3	+1.3	+0.8	+0.9	.406	-154.1			21	47	10.3	-14	30	50	389.2	852.6
26	May	10	9	13	22.7	d	3206	F3	5.1	4.9s		45-	84	62	64	-66N	46	171	64	-6.8	+1.1	+1.8	+1.5	.349	8.8			21	53	17.8	-13	33	6	385.1	659.2
							R3206 = Kuh = mu Capricorni																													
							3206 = NSV 25781, 5.07, range 0.03, V, Type VAR:																													
26	May	10	10	42	6.2	R	3206	F3	5.1	4.9s		44-	83	-2 75	15	79S	239	46	257	-7.1	+0.9	+2.2	+1.4	.344	171.6			21	53	17.8	-13	33	6	384.2	648.4
							R3206 = Kuh = mu Capricorni																													
							3206 = NSV 25781, 5.07, range 0.03, V, Type VAR:																													
26	May	12	9	39	46	Gr	146715kA0		8.5	8.4		24-	59	44	** GRAZE: CA 16.3N; Dist. 57km in az. 332deg. [Lat =-27.67+0.47(E.Long+63.95)]																					
26	May	12	9	48	37.5	r	146715kA0		8.5	8.4		24-	59	44	61	31N	307	76	328	-7.0	-2.0	+5.3	-7.5	.105	104.5			23	28	2.2	- 1	28	6	374.2	764.1
26	May	12	10	11	58.7	R	3459	K0	6.4	5.8		24-	59	-8 49	56	19S	176	309	198	-7.0	-2.0	-0.1	+3.8	.245	-126.5			23	29	27.0	- 1	47	28	373.8	746.4
							R3459 = 11 Piscium																													
26	May	13	8	28	35.8	R	30	SA0	7.1	7.1		16-	47	15	76	15S	174	295	196	-6.2	-3.3	-0.4	+3.9	.242	-117.4			0	15	57.3	4	15	4	371.1	946.8
							30 is triple: AB 7.0 14.1 0.8" 246.0, dT = -1sec : AC 7.0 12.2 5.0" 347.3, dT = +21sec																													
							30 is a close double. Observations are highly desired																													
26	May	14	9	17	54.8	r	92258	kF8	9.2	8.8		8-	33	12	70	54N	289	51	310	-5.1	-4.7	+1.1	-2.1	.337	127.3			1	7	40.8	11	20	3	365.7	984.8
26	May	18	22	42	57.1	d	77551	cB9	8.3	8.2		7+	30	5	306	81S	89	323	91	+1.7	-6.6	+0.7	+0.9	.530	13.1			5	47	14.3	28	37	26	359.2	947.4
							77551 is double: AB 8.4 10.7 0.8" 197.5, dT = -0.48sec																													
							77551 is a close double. Observations are highly desired																													
26	May	19	22	33	26.7	d	78848	A0	8.9	8.9		14+	43	18	316	87S	93	317	89	+3.6	-5.8	+1.3	+0.7	.463	17.7			6	54	27.1	27	27	30	361.0	850.5
26	May	19	22	56	22.6	d	78862	CF0	8.6			14+	44	14	312	79S	101	328	97	+3.5	-5.7	+1.0	+0.5	.497	9.6			6	55	13.7	27	21	11	361.4	883.4
							78862 is double: BA 10.9 8.7 0.9" 78.8, dT = +1.7sec																													
							78862 is a close double. Observations are highly desired																													
26	May	19	22	56	22.6	d	X 95186	C	8.6	8.5		14+	44	14	312	79S	101	328	97	+3.5	-5.7	+1.0	+0.5	.497	9.6			6	55	13.7	27	21	11	361.4	883.4
							X 95186 is double: AB 8.66 10.93 0.94" 258.8, dT = -1.7sec																													
							X 95186 is a close double. Observations are highly desired																													
26	May	19	23	14	15.6	D	78873	A2	7.8	7.7		14+	44	12	310	69S	112	342	108	+3.5	-5.7	+0.6	+0.2	.518	-1.4			6	55	48.1	27	14	58	361.8	910.1
26	May	19	23	16	17.2	D	1056	B9	7.2	7.3		14+	44	11	309	78S	103	333	98	+3.5	-5.7	+0.8	+0.5	.515	7.9			6	55	56.2	27	17	9	361.8	913.2
26	May	21	0	22	10.4	D	79868	DK0	7.4			23+	58	13	306	72S	118	349	107	+4.9	-4.3	+0.5	+0.1	.521	0.0			8	1	30.3	23	54	46	366.4	925.0
							79868 is double: AB 7.43 10.98 1.30" 168.9, dT = +1.6sec																													
							79868 is a close double. Observations are highly desired																													
26	May	21	22	48	44	m	80527	pF5	8.2	7.9		33+	70	37	332	20N	35	241	21	+6.1	-3.1	+9.9	+9.9	.000	90.0			8	56	57.2	20	11	59	368.8	742.0
							80527 is double: AB 8.2 9.1																													
26	May	22	23	32	27.6	d	98805	G5	8.2	7.6		44+	83	43	331	22S	178	24	160	+6.6	-1.5	-0.2	-2.8	.270	-47.9			9	50	50.5	14	7	15	374.0	729.1
26	May	23	22	1	34.4	d	118418	PF5	7.6			55+	95	-7 51	20	73N	95	257	74	+7.1	-0.1	+2.9	-0.6	.296	36.9			10	39	42.1	8	50	35	378.5	678.4
							118418 is triple: AB 7.84 8.98 0.44" 117.6, dT = +1.4sec : AC 7.8 2.1" 37.0, dT = +4sec																													
							118418 is a close double. Observations are highly desired																													
26	May	23	23	38	0.1	d	1560	M*	7.7	7.4v		55+	96	52	341	45N	67	263	47	+6.8	+0.1	+5.4	+2.7	.152	66.3			10	41	23.5	8	33	45	378.8	694.1
							1560 = EU Leo, 7.59 to 7.71, Hp, Type LB																													
26	May	24	2	52	30.9	d	118479	kK0	7.6	7.0		56+	97	23	292	85N	107	342	86	+6.3	+0.6	+0.9	+0.3	.438	19.7			10	45	33.7	7	30	51	382.0	862.0
26	May	27	0	25	29.7	d	139081	cK0	7.5	7.1		83+	132	70	24	51S	149	307	127	+5.5	+4.2	+1.3	-2.5	.332	-15.8			12	59	1.6	- 9	50	3	391.4	655.9
							139081 is double: AB 7.6 12.6 0.32" 66.3, dT = +0.12sec																													
							139081 is a close double. Observations are highly desired																													
26	May	27	23	32	38.8	d	158128	K5	7.5	6.6		90+	143	58	72	89S	107	226	86	+4.9	+5.0	+1.9	-1.4	.342	22.8			13	44	22.0	-14	45	38	395.1	711.0
26	May	28	0	13	48.3	d	158141	M1	7.7	6.8		90+	143	66	61	56N	71	198	51	+4.8	+5.1	+4.2	+0.8	.184	58.5			13	45	8.7	-14	46	1	394.7	675.3
26	May	30	8	0	56.3	d	183548	M4	6.8	6.0v		99+	167	27	256	39N	31	280	17	+1.2	+6.5	-0.8	+5.3	.175	65.1			15	32	15.1	-23	52	49	402.3	812.3
							183548 = GG Lib, 6.868, range 0.23, 6w, Type SR:, Period 35.65 days, Phase 87%																													
							Distance of 183548 to Terminator = 9.6"; to 3km sunlit peak = 1.7"																													

Occultation prediction for Observatorio Ofiuco,Argentina
E. Longitude - 63 57 0.0, Latitude -28 15 0.0, Alt. 128m; Telescope dia 15cm; dMag 0.0

y	m	day d	h	Time m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon Alt	Sun Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	May	31	10	25	57.5	D	2366dM1		1.1	0.1v	100+	175	-8	9	245	26S	74	317	65	-0.2	+6.3	-0.3	+1.3	.490	13.6	.09	16	29	24.5	-26	25	55	405.2	989.9
	R2366 = Antares = alpha Scorpii																																
	2366 is double: AB 1.0 5.4 2.5" 277.9, dT = -5sec																																
	2366 is a close double. Observations are highly desired																																
	2366 = alf Sco, 0.75 to 1.21, V, Type SRC, Period 2180. days, Phase 81%																																
	Distance of 2366 to Terminator = 0.6"; to 3km sunlit peak = 0.0"																																
26	Jun	1	5	31	59.5	R	2470kB9		6.1	6.2		99-	170		81	269	69S	280	186	276	-0.5	+6.3	+2.9	-0.3	.289	171.4		17	12	25.1	-27	45	44	400.1	566.7
	Distance of 2470 to Terminator = 13.6"; to 3km sunlit peak = 4.3"																																
26	Jun	1	6	44	3.3	R	2474kF2		6.7	6.4		99-	169		65	264	61S	271	174	266	-0.8	+6.3	+2.4	+0.6	.312	175.1		17	14	2.0	-27	47	48	400.6	609.0
	Distance of 2474 to Terminator = 12.6"; to 3km sunlit peak = 3.6"																																
26	Jun	2	2	46	36.2	r	2601SK4		6.8			97-	160		52	100	67S	258	359	258	-1.0	+5.8	+2.0	-0.4	.329	-161.5		18	2	54.3	-27	49	36	401.0	674.7
	R2601 = 7 Sagittarii																																
	2601 is triple: Aa,Ab 6.90 9.37 0.34" 335.0, dT = -0.24sec : AB 6.9 13.0 9.7" 48.1, dT = +25sec																																
	2601 is a close double. Observations are highly desired																																
26	Jun	2	4	28	56.6	r	186250	K5	7.7	6.8		97-	159		74	93	75S	266	1	266	-1.4	+5.8	+2.7	-0.3	.298	-175.7		18	5	20.8	-27	50	3	399.9	579.5
26	Jun	2	6	50	45.0	r	X150546MG8		7.2	7.2		97-	159		75	267	53S	244	149	244	-2.0	+5.8	+2.3	+1.8	.293	-164.8		18	8	34.8	-27	51	51	399.8	588.4
	X150546 is triple: Ba,Bb 9.1 11.1 0.10" 146.0, dT = +0.05sec : AB 7.6 9.1 2.2" 270.1, dT = -7sec																																
	X150546 is a close double. Observations are highly desired																																
26	Jun	2	7	9	12.0	r	2621	K0	7.5	6.9		97-	159		71	266	69S	258	163	259	-2.1	+5.7	+2.4	+1.1	.310	179.0		18	8	54.2	-27	47	1	399.9	601.8
26	Jun	2	7	25	53.2	r	186361	K5	7.2	6.3		97-	159		67	265	76S	265	168	266	-2.1	+5.7	+2.4	+0.9	.314	171.2		18	9	16.4	-27	44	5	400.0	616.2
26	Jun	2	10	24	39.4	r	2634dB8		7.2	7.2s		96-	158	-8	30	253	59S	247	139	248	-2.7	+5.4	+0.3	+1.6	.438	-174.2		18	14	10.8	-27	30	10	402.7	858.9
	2634 is double: AB 7.2 13.7 6.8" 338.9, dT = +0.36sec																																
	2634 is a close double. Observations are highly desired																																
	2634 = NSV 24338, 7.15 to 7.17, V																																
26	Jun	3	0	34	14.4	r	2740kG8		6.3	5.8		93-	150		14	113	60S	241	355	245	-1.9	+4.9	+0.5	+0.0	.411	-148.4		18	52	28.3	-26	39	3	403.6	944.0
26	Jun	3	1	26	29	M	2750SB2		2.1	2.1		93-	150		24	108	-1N	2	112	6	-2.0	+5.0	+9.9	+9.9	.000	90.0		18	55	15.9	-26	17	48	402.5	855.3
	R2750 = Nunki = sigma Sagittarii																																
	2750 is triple: Aa,Ab 2.0 202.0 : AB 2.0 9.9 356" 238.2																																
26	Jun	3	1	26	44	Gr	2750SB2		2.1	2.1		93-	150		26	** GRAZE: CA -1.0N; Dist. 22km in az. 208deg. [Lat =-28.47-0.46(E.Long+63.95)]																				
	Distance of 2750 to Terminator = 0.2"; to 3km sunlit peak = 0.0"																																
26	Jun	3	9	2	57.2	r	2781	K4	7.4	6.6		92-	147		57	265	88S	267	165	273	-3.6	+4.8	+2.0	+0.9	.332	159.1		19	5	11.4	-26	8	20	399.3	688.0
26	Jun	3	10	23	0	Gr	187710	G8	7.4	6.9		92-	147	-8	39	** GRAZE: CA 22.2N; Dist. 51km in az. 320deg. [Lat =-27.66+0.73(E.Long+63.95)]																				
26	Jun	3	10	29	51	r	187710	G8	7.4	6.9		92-	147	-7	39	258	35N	323	217	329	-3.9	+4.6	+5.5	-4.9	.094	103.1		19	7	54.7	-25	42	8	400.5	807.8
26	Jun	4	6	31	35.5	R	2907SK3		6.2	5.7v		87-	137		78	72	68S	240	353	250	-4.1	+4.0	+2.5	+1.3	.300	-171.9		19	54	17.7	-23	56	28	396.6	583.7
	2907 is triple: AC 6.3 16.0 42" 108.0, dT = +92sec : AB 6.3 10.7 48" 23.7, dT = +128sec																																
	2907 = V4200 Sgr, 6.18, range 0.07, V, Type BY, Period 3.24738 days, Phase 2%																																
26	Jun	4	7	9	13.7	r	188713	K2	7.9	7.3		86-	137		85	34	57S	229	16	239	-4.2	+3.9	+2.2	+2.1	.293	-163.6		19	55	10.8	-23	54	27	396.4	586.4
26	Jun	6	10	39	5.3	r	3167	K0	7.2	6.7		70-	113	-5	63	294	39S	200	77	217	-6.9	+0.9	+0.5	+3.0	.318	-149.8		21	38	14.0	-14	54	36	389.9	696.9
26	Jun	8	5	1	39.7	r	3385	F8	6.7	6.4		51-	92		13	89	83S	240	358	261	-6.8	-1.4	+0.4	+0.1	.493	-178.1		23	3	57.3	-	4	47	42	385.4	922.1
26	Jun	9	6	18	7	M	3515cA1		6.3	6.3		40-	79		16	78	10N	327	87	349	-6.9	-2.9	+9.9	+9.9	.000	90.0		23	53	4.8		2	5	26	379.0	916.5
	R3515 = 25 Piscium																																
	3515 is double: ** 7.0 7.0 0.050"																																
	3515 has been reported as non-instantaneous (OCc1650). Observations are highly desired																																
26	Jun	11	7	46	14.8	R	233cB9		6.2	6.3		19-	52		8	68	77N	265	27	286	-5.6	-5.5	+0.5	-0.8	.496	152.2		1	35	46.4		14	39	41	367.7	999.4
	R233 = 101 Piscium																																
26	Jun	11	10	1	44.7	r	246cK2		9.0	8.3		19-	51		32	46	56N	286	65	307	-5.7	-5.8	+2.7	-1.9	.275	126.1		1	39	43.7		15	25	26	364.7	825.2
	246 is double: ** 9.7 9.7 0.10" 90.0, dT = +0.35sec																																
	246 has been reported as non-instantaneous (OCc1163). Observations are highly desired																																

Occultation prediction for Observatorio Ofiuco,Argentina
E. Longitude - 63 57 0.0, Latitude -28 15 0.0, Alt. 128m; Telescope dia 15cm; dMag 0.0

day	Time	P	Star	Sp	Mag	Mag	%	Elon	Sun	Moon	CA	PA	VA	AA	Libration		A	B	RV	Cct	durn	R.A. (J2000)			Dec			Mdist	SV
y m d	h m s		No	D	v	r	V	ill		Alt	Alt	Az	o	o	o	o	L	B	m/o	m/o	"/s	o	sec	h	m	s	o	m	s	Mm	m/s
26 Jun 11	10 6 45.2	r	92560	SM0	8.5	7.7		19-	51	33	45	83S	245	25	266	-5.7	-5.8	+1.3	+0.1	.452	167.1		1	39	54.9	15	15	24	364.6	819.3
92560 is triple: AB 8.9 9.2 23.1" 75.0, dT = +50sec : AC 8.9 12.8 101" 182.0, dT = -100sec																													
26 Jun 11	10 7 35.9	r	92561	WK0	8.7	7.7		19-	51	33	45	82S	245	25	265	-5.7	-5.8	+1.3	+0.1	.452	167.4		1	39	56.1	15	15	34	364.6	818.4
92561 is double: BA 9.2 8.9 23.1" 255.0, dT = -50sec																													
26 Jun 12	9 55 49.6	r	383	A5	8.6	8.4		11-	38	19	53	83S	252	23	269	-4.1	-6.5	+0.9	-0.3	.507	166.6		2	36	43.6	20	42	2	361.2	913.0
26 Jun 12	10 3 39.4	R	387	cG5	6.9	6.4S		10-	38	20	52	37S	206	338	223	-4.1	-6.5	+0.0	+1.2	.437	-147.9		2	37	34.4	20	34	30	361.0	902.6
387 is double: ** 7.7 7.7 0.10" 90.0, dT = +0.1sec																													
387 has been reported as non-instantaneous (OCc1190). Observations are highly desired																													
387 = NSV 15555, 6.91, , Type VAR:																													
26 Jun 13	10 45 24.9	r	529	SA2	6.1	6.1		4-	24	-5 14	51	80N	279	50	292	-2.3	-7.0	+1.3	-1.2	.439	145.2		3	40	46.3	25	19	46	357.9	928.1
R529 = 11 Tauri																													
529 is triple: **Aa,Ab 6.3 8.3 : AB 6.1 10.9 74" 357.0, dT = -36sec																													
26 Jun 16	22 47 48	m	79469	K0	8.7	8.2		5+	25	4	302	23N	24	260	16	+3.2	-4.7	+9.9	+9.9	.000	90.0		7	31	41.4	25	47	26	360.5	1008.6
26 Jun 17	22 52 26.0	D	80262	kF8	8.1	7.8		11+	39	16	306	68N	79	309	66	+4.8	-3.2	+1.4	+1.4	.388	42.1		8	34	39.2	21	29	35	363.4	921.3
26 Jun 17	22 59 49.9	d	80265	K0	9.0	8.4		11+	39	15	305	60N	72	303	59	+4.8	-3.2	+1.6	+1.9	.345	49.2		8	34	51.2	21	29	37	363.6	931.9
26 Jun 18	23 27 12.2	D	1407	K0	7.7	7.1		20+	53	23	304	32S	165	35	148	+5.9	-1.6	-0.1	-1.8	.377	-39.9		9	31	39.0	15	46	12	368.3	878.7
26 Jun 19	23 48 45.2	d	99106	K0	8.2	7.4		29+	66	32	305	73N	94	322	75	+6.6	+0.1	+1.7	+0.7	.373	34.4		10	25	2.0	9	58	56	373.5	819.2
26 Jun 22	2 58 32.8	d	138553	kK2	7.5	6.9		51+	92	19	277	28S	176	57	154	+6.3	+3.4	+0.3	-3.2	.266	-54.9		12	3	13.2	- 3	23	44	387.5	869.1
26 Jun 22	23 52 21.5	d	138948	pK0	7.6	7.0		61+	102	67	324	40S	162	14	140	+6.4	+4.3	+1.0	-2.8	.299	-30.3		12	44	59.7	- 8	31	55	388.2	651.5
138948 is double: AB 7.7 11.2 7.6" 96.1, dT = +10sec																													
138948 is a close double. Observations are highly desired																													
26 Jun 23	3 6 0.5	d	138978	K2	7.6	7.0		62+	103	30	275	45S	157	40	136	+5.8	+4.6	+0.8	-2.0	.327	-38.1		12	49	0.6	- 9	13	13	391.5	789.5
26 Jun 24	21 23 32.1	D	2039	A0	5.5	5.5		78+	124	0	48	86	54S	142	254	124	+5.4	+5.7	+0.6	-2.4	.378	-16.5		14	15	24.1	-18	12	2	396.6	759.3
26 Jun 24	22 57 49.1	D	2045	cK0	6.4			79+	125	69	69	36S	160	280	142	+5.1	+5.9	+0.6	-3.3	.289	-33.1		14	17	3.8	-18	35	9	395.7	661.5
2045 is double: AB 6.40 10.51 0.70" 83.0, dT = +0.5sec																													
2045 is a close double. Observations are highly desired																													
26 Jun 24	23 58 16.7	D	2051	A*	5.9	5.9v		79+	125	79	33	65S	131	281	113	+4.9	+6.0	+1.9	-2.1	.323	-5.3		14	18	38.3	-18	42	57	395.5	621.4
2051 = CS Vir, 5.84 to 5.95, V, Type ACV, Period 9.2954 days, Phase 35%																													
26 Jun 25	0 38 19.1	d	158495	SA3	7.3	7.1		79+	125	80	340	38N	53	252	35	+4.7	+6.0	+6.5	+5.7	.104	70.8		14	19	25.8	-18	31	25	395.5	606.8
158495 is triple: AB 7.3 10.7 3.6" 354.7, dT = +18sec : AC 7.3 12.7 132" 339.3, dT = +347sec																													
158495 is a close double. Observations are highly desired																													
26 Jun 25	1 58 33.6	d	158504	M1	7.9	7.0v		79+	126	67	288	83S	113	355	94	+4.4	+6.1	+2.4	-0.6	.316	6.3		14	21	4.1	-18	59	32	396.1	610.5
158504 = EZ Vir, 7.77 to 7.97, V, Type SRB, Period 39. days, Phase 81%																													
26 Jun 25	22 37 19.7	d	183168	kK1	7.1	6.5		86+	136	56	89	71S	120	227	105	+4.2	+6.3	+1.3	-1.9	.368	1.7		15	6	3.1	-22	24	14	398.7	712.2
26 Jun 26	1 46 42.8	d	183234	pF5	8.0			86+	137	80	301	62N	72	308	57	+3.4	+6.5	+3.5	+1.6	.221	42.9		15	10	0.2	-22	43	15	398.0	583.3
183234 is double: AB 8.15 10.27 2.16" 135.9, dT = +4sec																													
183234 is a close double. Observations are highly desired																													
26 Jun 26	21 23 1.7	d	2273	B8	5.9	5.9v		92+	146	0	31	104	48S	137	246	125	+3.2	+6.3	-0.1	-2.2	.411	-22.6		15	54	39.5	-25	14	37	402.2	869.0
R2273 = 3 Scorpii (V927)																													
2273 = V0927 Sco, 5.8, range 0.03, V, Type SXARI, Period 1.45937 days, Phase 75%																													
26 Jun 27	3 21 38.0	D	2298	kK3	5.0	4.3		92+	148	72	272	89S	94	352	82	+2.0	+6.7	+2.7	+0.3	.297	8.3		16	3	20.6	-25	51	55	399.7	581.3
26 Jun 29	1 0 44.9	D	2554	cF7	4.5	4.2V		99+	169	56	99	80S	77	177	75	+0.3	+5.9	+2.2	-0.2	.315	22.0		17	47	33.6	-27	49	51	400.8	660.5
R2554 = X Sagittarii																													
2554 is double: AB 2.5 8.1 132.0, dT = 0.00sec																													
2554 = X Sgr, 4.22 to 4.86, V, Type DCEP, Period 7.012770 days, Phase 29%																													
Distance of 2554 to Terminator = 16.4"; to 3km sunlit peak = 6.2"																													
26 Jun 30	3 48 54.9	D	2721	cB8	3.2	3.2		100-	176	81	85	-30N	90	189	93	-1.4	+5.2	+2.9	-0.3	.291	-9.8		18	45	39.4	-26	59	27	398.8	571.1
R2721 = phi Sagittarii																													

Occultation prediction for Observatorio Ofiuco,Argentina
E. Longitude - 63 57 0.0, Latitude -28 15 0.0, Alt. 128m; Telescope dia 15cm; dMag 0.0

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      day  Time     P   Star  Sp  Mag  Mag    % Elon Sun  Moon   CA   PA  VA  AA Libration   A   B   RV    Cct durn  R.A. (J2000)  Dec   Mdist   SV
 y   m  d  h  m   s       No  D    v    r V  ill     Alt Alt Az   o    o   o   o   L    B   m/o m/o  "/s     o  sec  h  m   s    o  m  s   Mm   m/s
      2721 is double:  3.1      0.8" 270.0, dT = -2.7sec
      2721 is a close double. Observations are highly desired
26 Jun 30  5 26 38.9 R    2721cB8  3.2  3.2  100- 175     77 272   8S 242 144 246 -1.9 +5.1 +2.2+1.8 .303 -169.8     18 45 39.4 -26 59 27 398.8 595.8
   R2721 = phi Sagittarii
      2721 is double:  3.1      0.8" 270.0, dT = -2.3sec
      2721 is a close double. Observations are highly desired
   Distance of 2721 to Terminator = 0.1"; to 3km sunlit peak = 0.0"
26 Jun 30 10  5 11.9 D    2750SB2  2.1  2.1  100- 175     19 250 -70N 105 353 110 -2.7 +4.6 +0.5+0.6 .401  -35.5     18 55 15.9 -26 17 48 402.6 962.6
   R2750 = Nunki = sigma Sagittarii
      2750 is triple: Aa,Ab 2.0          202.0, dT = 0.00sec : AB 2.0 9.9 356" 238.2, dT = -603sec
26 Jun 30 10 52 38.2 R    2750SB2  2.1  2.1  100- 175  -4  9 245   4S 216  99 221 -2.7 +4.5 -0.8+2.0 .434 -144.5     18 55 15.9 -26 17 48 403.61043.1
   R2750 = Nunki = sigma Sagittarii
      2750 is triple: Aa,Ab 2.0          202.0, dT = 0.00sec : AB 2.0 9.9 356" 238.2, dT = -759sec
   Distance of 2750 to Terminator = 0.0"; to 3km sunlit peak = 0.0"
26 Jul  1  3 27 57.4 R    2861cA1  5.6  5.5v  99- 167     65  88  78N 286  30 294 -2.4 +4.2 +2.5-1.7 .271  149.9     19 36  1.7 -24 43  9 397.7 605.1
   R2861 = 51 Sagittarii
      2861 is double: ** 5.9 7.9
      2861 = V5548 Sgr, 5.82, range 0.04, B, Type DSCTC:, Period 0.11340 days
26 Jul  1  3 53 33.5 R    2864dB8  4.6  4.6   99- 167     71  85  55S 238 343 247 -2.5 +4.2 +2.5+1.2 .296 -164.9     19 36 42.4 -24 53  1 397.5 592.1
   R2864 = 52 Sagittarii
      2864 is double: AB 4.7 9.2 2.3" 175.7, dT = -4sec
      2864 is a close double. Observations are highly desired
   Distance of 2864 to Terminator = 17.3"; to 3km sunlit peak = 6.8"
26 Jul  3  2 43 33.0 R    3105 K0  6.1  5.5S  91- 145     33  93  69S 234 346 250 -4.2 +1.7 +1.2+0.5 .384 -164.5     21 15  6.6 -17 20 43 395.2 763.7
      3105 = NSV 25528, 6.04, , Type VAR:
26 Jul  3  8 20 17.5 r  164338 G2  7.5  7.1   90- 143     67 296  85S 248 123 265 -5.4 +1.2 +2.1+1.5 .342  163.0     21 21 51.1 -16 16 26 392.1 680.2
26 Jul  4  7 44 21.6 r  164891 K0  7.9  7.2   83- 132     73 354  19S 178   3 197 -6.0 -0.2 -0.2+4.2 .222 -129.8     22  9 18.1 -11 21 58 388.5 652.7
26 Jul  4  9 37 33.8 R    3252 K0  6.6  6.1   83- 131     57 296  71S 230 104 249 -6.4 -0.4 +1.4+2.0 .380  179.1     22 10 31.8 -10 49 13 389.0 717.4
   R3252 = 37 Aquarii
26 Jul  5  6  9 26.9 R    3357 A2  6.9  6.8   75- 120     52  60  35S 192 322 213 -6.1 -1.4 +0.7+2.9 .291 -141.1     22 53 27.6 - 5 59 17 385.8 698.8
26 Jul  5  8 20 32   M    3362cK0  5.9     S  75- 120     67 359  21N 316 137 337 -6.6 -1.7 +9.9+9.9 .000   90.0     22 55 11.0 - 4 59 16 384.6 667.9
      3362 is double: AB 6.03 7.75 0.47" 325.0
      3362 is a close double. Observations are highly desired
      3362 = NSV 14360, 7.6,
26 Jul  5 10 22  9.3 R    3367 G9  6.3  5.8   74- 119 -10 53 303  86S 243 110 264 -7.0 -2.0 +1.8+1.7 .374  165.4     22 57 17.2 - 4 48 36 385.1 720.9
26 Jul  6  7 22 40.0 r    3489SK3  7.4  6.8   65- 108     53  43  51S 206 349 228 -6.6 -3.0 +1.0+2.0 .357 -159.0     23 40 40.2   0 24 58 381.1 707.8
      3489 is triple: AB 7.6 10.1 3.8" 164.6, dT = -8sec : AC 8.8 14.4 75" 336.7, dT = +135sec
      3489 is a close double. Observations are highly desired
26 Jul 10  9 27 37.7 r   75792 K0  8.7  8.2   22-  56     24  42  52S 220 360 235 -4.0 -7.1 +0.6+0.7 .443 -159.6      3 12 35.1  23 33  3 363.3 832.4
26 Jul 11 10 31 14.8 d     638SK1  5.0  4.4   13-  41  -8 21  40 -69N  66 206  76 -2.4 -7.2 +1.1-0.1 .471    3.0      4 20 21.2  27 21  3 359.8 822.6
   R638 = phi Tauri
      638 is triple: AB 5.1 7.5 48" 259.9, dT = -100sec : AC 5.1 12.3 117"  22.8, dT = +181sec
26 Jul 12  9 44 35.5 D     810SB7  1.7  1.7    6-  28      3  55 -68N  75 199  79 -0.5 -6.7 +0.4-0.5 .556    3.0      5 26 17.5  28 36 27 359.6 971.1
   R810 = El Nath = beta Tauri
      810 is multiple: AC 1.9 19.0 8.4" 357.0, dT = +3sec : AD 1.9 18.5 9.8"  70.0, dT = +18sec : AE 1.9      10.9"  80.0, dT = +20sec : AF 1.9 15.8
11.6" 296.0, dT = -16sec
      810 is a close double. Observations are highly desired
26 Jul 12 10 47 29.0 R     810SB7  1.7  1.7    6-  27  -5 13  47  73S 261  34 264 -0.5 -6.8 +1.0-0.6 .500  177.2      5 26 17.5  28 36 27 358.3 869.2
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Occultation prediction for Observatorio Ofiuco,Argentina
E. Longitude - 63 57 0.0, Latitude -28 15 0.0, Alt. 128m; Telescope dia 15cm; dMag 0.0

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      day  Time     P   Star  Sp  Mag  Mag    % Elon Sun  Moon   CA   PA  VA  AA Libration   A   B   RV    Cct durn  R.A. (J2000)  Dec   Mdist   SV
 y   m  d  h  m    s       No  D    v    r V  ill     Alt Alt Az   o    o   o   o   L    B   m/o m/o  "/s     o  sec  h  m   s    o  m  s   Mm   m/s
   R810 = El Nath = beta Tauri
      810 is multiple: AC 1.9 19.0 8.4" 357.0, dT = +1.8sec : AD 1.9 18.5 9.8"  70.0, dT = +19sec : AE 1.9      10.9"  80.0, dT = +22sec : AF 1.9
15.8 11.6" 296.0, dT = -19sec
      810 is a close double. Observations are highly desired
26 Jul 16 22 56 54.5 D   98906 K0  7.8  7.3    9+  34     16 294  60S 139  15 121 +5.3 -0.3 +0.2-0.7 .512  -15.1     10  1 55.9  12 14 45 368.3 946.3
26 Jul 16 23 45 22.3 d   98928 K5  7.9  7.1v   9+  34      6 287  89N 109 348  90 +5.2 -0.2 +0.3+0.3 .550   13.6     10  3 46.5  12  7 20 369.51014.4
     98928 = EP Leo, 8.01 to 8.08, Hp, Type SRD:
26 Jul 17 23 51 16.3 D  118571pK0  7.4  7.0s  16+  47     18 287  77N 100 338  80 +6.0 +1.4 +0.8+0.6 .462   24.0     10 54 45.6   5 50 52 374.0 917.6
    118571 is double: ** 8.0 8.8 0.034" 104.5, dT = +0.07sec
    118571 has been reported as non-instantaneous (OCc 585). Observations are highly desired
    118571 = NSV 5015, 8.9 to 9.27, pg, Type E:
26 Jul 19 23 13 36.2 d  138811cK2  8.2  7.4   35+  72     51 297  79N 103 336  81 +6.4 +4.2 +2.1+0.2 .345   25.0     12 28 51.7 - 6 31 49 383.0 708.1
26 Jul 20 23 36 42.7 D  157822kK2  7.3  6.6   45+  84     58 293  83N 106 342  85 +6.0 +5.3 +2.3-0.1 .332   19.2     13 15 54.0 -12 21  0 388.1 661.9
26 Jul 21  0 14 41.1 d  157826kK0  8.2  7.6   45+  84     50 285  55S 147  28 126 +5.9 +5.3 +1.4-1.9 .330  -24.9     13 16 13.7 -12 37 16 388.7 685.9
26 Jul 21  0 38 16.2 d  157834PF5  8.1  7.9   45+  84     46 281  77N 100 343  79 +5.8 +5.4 +1.8+0.5 .350   20.7     13 17 12.2 -12 31 33 389.2 705.5
    157834 is triple: ** 8.7 8.7 0.050"       : AB 7.8 16.7 48" 341.6, dT = -66sec
    157834 has been reported as non-instantaneous (OCc1448). Observations are highly desired
26 Jul 21  1 53 51.0 d  157849KF2  7.3  7.1   45+  85     29 271  52N  75 319  54 +5.6 +5.4 +1.0+2.0 .315   40.9     13 18 58.6 -12 38 53 390.9 790.8
26 Jul 21 23 25 33.7 D    2011 K2  6.3  5.6   55+  96     72 302  78N  98 329  79 +5.4 +6.1 +2.8+0.0 .292   25.3     14  3  4.1 -17 22  1 392.0 615.2
26 Jul 24  3 26 17.7 d  183802pA0  7.2       74+ 119     44 261  78N  88 342  75 +2.7 +6.8 +1.4+1.1 .356    7.9     15 48  3.3 -25 12 56 399.9 697.9
    183802 is double: AB 7.60 8.49 0.10"  96.5, dT = +0.28sec
    183802 is a close double. Observations are highly desired
26 Jul 24  6 22 49.0 D    2268MB2  4.5       75+ 120      8 245  90N  99 341  87 +2.3 +6.6 +0.0+0.7 .498   -7.6     15 53 36.7 -25 19 38 403.6 983.9
   R2268 = 2 Scorpii
      2268 is triple: Aa,Ab 5.6 5.6 0.10"       : AB 4.69 6.98 2.39" 267.3, dT = -5sec
      2268 is a close double. Observations are highly desired
26 Jul 24 19 50  9.2 D    2366dM1  1.1  0.1v  81+ 128  21 27 107  42N  47 157  38 +3.2 +6.3 +2.1+1.2 .207   62.8 .21 16 29 24.5 -26 25 55 402.2 883.7
   R2366 = Antares = alpha Scorpii
      2366 is double: AB 1.0 5.4 2.5" 277.9, dT = -8sec
      2366 is a close double. Observations are highly desired
      2366 = alf Sco, 0.75 to 1.21, V, Type SRC, Period 2180. days, Phase  84%
26 Jul 24 20  1 12   Gr   2366dM1  1.1  0.1v  81+ 128  20 30 ** GRAZE: CA 15.8N; Dist.224km in az.  38deg. [Lat =-25.69-0.69(E.Long+63.95)]
26 Jul 24 20 20 39.2 R    2366dM1  1.1  0.1v  81+ 128  15 34 105 -11N 354 101 345 +3.1 +6.4 -1.5-4.5 .195  117.2 .22 16 29 24.5 -26 25 55 401.6 833.2
   R2366 = Antares = alpha Scorpii
      2366 is double: AB 1.0 5.4 2.5" 277.9, dT = -3sec
      2366 is a close double. Observations are highly desired
      2366 = alf Sco, 0.75 to 1.21, V, Type SRC, Period 2180. days, Phase  84%
26 Jul 24 23  2  5.7 d X 41147 K0  8.0  7.3   81+ 129     68  93  76S 108 206  99 +2.6 +6.6 +2.1-1.5 .321    0.9     16 34 45.8 -27  6 37 399.4 621.1
26 Jul 25  6  3 45   m    2405SA2  6.6     s  83+ 131     22 250   8S 175  63 167 +1.1 +6.4 +9.9+9.9 .000  -90.0     16 44 17.4 -27 27 22 403.1 884.6
      2405 is triple: AB 6.58 10.15 2.45"  21.7 : AC 6.6 14.0 24.3" 195.9
      2405 is a close double. Observations are highly desired
      2405 = NSV 7935, 6.58, range 0.03, V, Type E:
   Distance of 2405 to Terminator = 12.8"; to 3km sunlit peak = 1.3"
26 Jul 25 21 55 31   m    2512pB9  7.5  7.5   88+ 140  -3 43 103  16N  13 117  10 +1.7 +6.1 +9.9+9.9 .000   90.0     17 26  5.9 -27 35 59 401.2 744.8
      2512 is double: AB 7.5 11.3 5.8" 347.8
      2512 is a close double. Observations are highly desired
26 Jul 26  5 56 42.9 d  185573 K5  6.8  5.8s  89+ 142     34 254  28S 149  42 146 -0.1 +6.0 +3.7-3.7 .134  -71.2 .02 17 38 12.0 -28  2 48 401.8 811.5
    185573 = NSV 23046, 6.83, range 0.01, 8V, Type VAR, Period 1.18268 days
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Occultation prediction for Observatorio Ofiuco,Argentina
E. Longitude - 63 57 0.0, Latitude -28 15 0.0, Alt. 128m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon	Sun Alt	Moon Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	Jul	27	23	1	30.0	d	187898	K0	7.1	6.5		98+	162	35	103	75N	57	165	63	-0.8	+4.6	+1.5+0.4	.343	30.2		19	16	11.4	-25	40	0	399.7	769.5
26	Jul	29	6	17	34.6	d	2961	G8	5.9	5.3		100+	175	60	275	84S	56	307	68	-3.3	+3.0	+1.4+2.0	.368	0.8		20	18	1.4	-21	48	36	395.0	705.5
	R2961 = 4 Capricorni																																	
	Distance of 2961 to Terminator = 3.2"; to 3km sunlit peak = 0.0"																																	
26	Jul	30	7	47	11.4	r	3086	B9	6.2	6.2		100-	172	49	275	84S	253	141	269	-4.4	+1.4	+1.4+1.5	.381	160.1		21	7	44.7	-17	27	21	392.8	772.2
	Distance of 3086 to Terminator = 8.3"; to 3km sunlit peak = 1.0"																																	
26	Aug	1	3	34	28.7	R	3322cG1		6.4			93-	150	47	70	26S	183	306	203	-4.7	-1.0	+0.5+3.7	.240	-128.7		22	38	22.1	-	7	53	51	387.2	720.3
	3322 is double: AB 6.64 8.11 0.09" 295.3, dT = +0.14sec																																	
	3322 is a close double. Observations are highly desired																																	
26	Aug	1	4	47	15.3	r	146225	K0	7.7	7.1		93-	150	60	50	43S	199	336	220	-4.9	-1.2	+1.0+2.6	.313	-149.7		22	39	30.4	-	7	36	17	386.1	677.6
26	Aug	2	4	4	12.7	r	146693	G5	7.5	7.1		87-	138	41	65	50S	205	331	226	-5.1	-2.6	+0.8+1.9	.362	-152.7		23	24	39.0	-	1	44	29	384.1	759.2
26	Aug	2	7	39	25.7	r	146725pF8		7.8			87-	137	61	340	44S	198	35	219	-5.8	-3.1	+0.8+2.7	.326	-152.0		23	28	46.2	-	0	50	8	382.1	684.6
	146725 is double: AB 7.98 10.59 1.37" 62.2, dT = +3sec																																	
	146725 is a close double. Observations are highly desired																																	
26	Aug	3	8	23	59.2	R	29	K0	7.0	6.4		78-	124	55	343	59N	275	110	297	-5.9	-4.5	+3.5+0.0	.248	131.6		0	15	38.6		5	50	38	378.7	685.3
26	Aug	5	8	17	31.8	d	288cK1		5.1	4.6		58-	99	42	20	-45N	24	186	44	-5.0	-6.6	+0.8+1.7	.348	28.3		1	57	21.1		17	49	3	372.0	712.8
	R288 = iota Arietis																																	
26	Aug	5	9	17	35.8	r	92727cF8		8.0	7.7		58-	99	44	1	27S	186	6	206	-5.2	-6.7	+0.4+2.8	.255	-132.3		1	58	3.8		17	32	21	371.6	681.5
26	Aug	5	9	30	33.7	R	288cK1		5.1	4.6		58-	99	44	356	77N	262	86	282	-5.2	-6.7	+2.7+0.4	.332	152.1		1	57	21.1		17	49	3	371.6	677.7
	R288 = iota Arietis																																	
26	Aug	7	8	15	52.9	r	76279	A0	7.7	7.6		35-	73	22	41	57S	227	7	239	-3.0	-7.3	+0.7+0.5	.433	-161.6		3	51	57.4		25	59	56	366.6	811.4
26	Aug	7	8	33	51.2	r	76284WA2		8.1	7.9		35-	73	24	37	82N	268	51	280	-3.0	-7.3	+1.7-0.7	.410	157.3		3	52	10.4		26	13	53	366.3	788.6
	76284 is double: AB 8.1 9.7 32" 73.0, dT = +75sec																																	
26	Aug	10	9	28	19.0	R	1088	A4	5.8	5.7S		7-	32	2	58	80N	295	58	288	+1.5	-5.3	+0.9-1.5	.488	157.3		7	11	23.1		26	51	24	363.0	931.4
	R1088 = 47 Geminorum																																	
	1088 = NSV 17371, 5.77, , Type DSCT:																																	
26	Aug	10	9	53	46.5	R	79164cG8		7.4	6.9		7-	31	7	55	37S	232	358	226	+1.5	-5.4	+0.2+0.3	.384	-139.2		7	12	31.2		26	33	52	362.5	891.0
	79164 is double: ** 8.1 8.5 0.10" 21.0, dT = +0.22sec																																	
	79164 has been reported as non-instantaneous (OCc 237). Observations are highly desired																																	
26	Aug	14	22	40	13.5	D	1642KF2		7.6	7.4		6+	28	-11	17	282	47N	73	313	52	+5.1	+2.4	+1.0+2.1	.329	49.8		11	20	56.0		2	25	21	374.8	925.5
26	Aug	15	22	35	38.0	D	1747kK0		7.5	7.0		12+	41	-10	31	283	44S	162	42	140	+5.5	+3.8	+0.6-2.1	.348	-39.0		12	8	12.5	-	4	17	13	378.9	821.9
26	Aug	15	22	47	21.7	d	138604	K0	8.3	7.7		12+	41		29	281	42S	165	45	143	+5.5	+3.8	+0.5-2.3	.337	-42.1		12	8	27.8	-	4	20	17	379.2	835.9
26	Aug	16	0	36	46.7	d	1756	K2	7.9	7.1		13+	42		5	268	34N	61	303	39	+5.4	+4.0	+0.1+2.8	.300	55.8		12	12	14.2	-	4	24	7	382.1	988.4
26	Aug	16	21	10	58	m	1853cM3		4.8	3.9v		20+	53	8	60	303	13N	38	267	16	+5.8	+4.9	+9.9+9.9	.000	90.0		12	54	21.2	-	9	32	20	381.9	681.0
	R1853 = psi Virginis																																	
	1853 is double: ** 5.0 8.3 0.040" 110.0																																	
	1853 has been reported as non-instantaneous (OCc 387). Observations are highly desired																																	
	1853 = psi Vir, 4.73 to 4.96, V, Type SR																																	
26	Aug	17	23	34	13.6	d	158142	A3	8.6	8.4		29+	65	43	274	63S	140	27	120	+5.1	+6.0	+1.4-1.4	.345	-24.7		13	45	11.6	-15	55	26	388.9	716.7
26	Aug	17	23	34	56.1	D	1970SA0		6.2	6.2		29+	65	43	274	76N	99	345	79	+5.1	+6.0	+1.6+0.6	.364	16.9		13	45	35.1	-15	46	3	388.9	717.3
	R1970 = 85 Virginis																																	
	1970 is multiple: Aa,Ab 6.5 8.2 : Aa,Ac 6.5 8.4 0.10" : AB 6.2 12.8 44" 312.7, dT = -100sec : AB 6.2 12.8 44" 312.5, dT = -101sec																																	
	1970 is a close double. Observations are highly desired																																	
26	Aug	18	1	8	23.0	d	1977	K2	8.0	7.2		30+	66	23	263	88N	111	357	91	+4.9	+6.0	+0.7+0.2	.442	-1.0		13	47	58.5	-16	3	54	391.1	838.2
26	Aug	18	23	48	11.6	D	2084	A3	6.5	6.4		39+	77	52	272	79N	98	349	81	+4.4	+6.6	+2.0+0.5	.339	12.5		14	34	50.7	-20	26	22	392.7	661.3
26	Aug	20	2	27	58.5	d	183513	K0	7.8	7.2		49+	89	29	256	50S	145	35	130	+3.1	+6.8	+1.6-1.6	.274	-48.5		15	29	9.9	-24	27	5	398.4	799.1
26	Aug	21	22	43	2.3	d	185097pF2		7.9	7.7		67+	110	-11	80	91	53N	56	151	51	+1.8	+6.5	+3.4+2.1	.218	42.4		17	10	9.1	-27	46	24	398.3	569.6

Occultation prediction for Observatorio Ofiuco,Argentina
E. Longitude - 63 57 0.0, Latitude -28 15 0.0, Alt. 128m; Telescope dia 15cm; dMag 0.0

y	m	day d	h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon Alt	Sun Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	dur sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
							185097 is double: AB 7.9 11.4 1.8" 61.9, dT = +8sec																												
							185097 is a close double. Observations are highly desired																												
26	Aug	22	0	35	56.3	D	2470kB9		6.1	6.2		68+	111	75	267	38N	41	306	35	+1.4	+6.5	+2.2	+4.1	.197	48.5		17	12	25.1	-27	45	44	398.4	573.5
26	Aug	22	1	36	59.7	D	2474kF2		6.7	6.4		68+	111	62	263	53N	56	318	51	+1.1	+6.4	+1.7	+2.5	.281	28.6		17	14	2.0	-27	47	48	399.0	620.1
26	Aug	22	3	39	28.9	d	185228SB0		7.9	7.6		68+	112	36	255	72N	74	328	69	+0.7	+6.3	+0.7	+1.5	.400	6.5		17	17	27.6	-27	46	1	400.9	782.6
							185228 is triple: AB 7.9 16.0 4.0" 204.0, dT = -6sec : AC 7.9 15.0 7.8" 146.3, dT = +6sec																												
							185228 is a close double. Observations are highly desired																												
26	Aug	22	23	14	48.9	d	186250	K5	7.7	6.8		76+	121	76	93	69N	66	161	66	+0.6	+5.9	+2.9	+1.0	.272	23.5		18	5	20.8	-27	50	3	398.2	572.5
26	Aug	23	1	37	2.9	d	X150546MG8		7.2	7.2		76+	122	73	266	85S	92	356	92	+0.0	+5.8	+2.7	+0.4	.298	-14.1		18	8	34.8	-27	51	51	398.2	593.6
							X150546 is triple: Ba,Bb 9.1 11.1 0.10" 146.0, dT = +0.2sec : AB 7.6 9.1 2.2" 270.1, dT = -7sec																												
							X150546 is a close double. Observations are highly desired																												
26	Aug	23	1	49	17.3	d	186339	K0	7.9	7.3		77+	122	70	266	42N	38	301	38	-0.1	+5.8	+1.5	+3.5	.243	38.9		18	8	25.6	-27	38	45	398.3	603.2
26	Aug	23	1	52	27.6	d	2621	K0	7.5	6.9		77+	122	70	265	81N	77	341	77	-0.1	+5.8	+2.3	+1.2	.314	-0.4		18	8	54.2	-27	47	1	398.4	605.8
26	Aug	23	2	9	51.8	d	186361	K5	7.2	6.3		77+	122	66	264	74N	71	333	71	-0.2	+5.7	+2.0	+1.6	.320	5.2		18	9	16.4	-27	44	5	398.5	621.5
26	Aug	23	5	7	6.9	d	2634dB8		7.2	7.2s		77+	123	29	252	86S	90	342	91	-0.7	+5.4	+0.7	+1.0	.426	-17.3		18	14	10.8	-27	30	10	401.1	867.2
							2634 is double: AB 7.2 13.7 6.9" 338.9, dT = -6sec																												
							2634 is a close double. Observations are highly desired																												
							2634 = NSV 24338, 7.15 to 7.17, V																												
26	Aug	23	7	6	43.6	d	2650	K3	4.7	3.8		78+	124	5	242	43N	39	280	40	-0.8	+5.2	-0.9	+1.9	.438	36.6	.01	18	18	3.2	-27	2	34	403.6	1067.4
26	Aug	24	3	36	9.6	d	2781	K4	7.4	6.6		85+	134	58	265	84N	75	333	80	-1.6	+4.7	+1.7	+1.4	.352	-8.6		19	5	11.4	-26	8	20	397.4	686.4
26	Aug	24	5	31	28.5	d	187710	G8	7.4	6.9		85+	134	33	256	49N	39	291	45	-1.9	+4.5	-0.1	+2.3	.389	27.6		19	7	54.7	-25	42	8	399.2	849.9
26	Aug	25	0	53	41.1	D	2907SK3		6.2	5.7v		91+	144	75	78	56S	109	219	119	-1.9	+3.8	+3.2	-1.9	.235	-40.8		19	54	17.7	-23	56	28	394.7	593.1
							2907 is triple: AC 6.3 16.0 42" 108.0, dT = +177sec : AB 6.3 10.7 48" 23.6, dT = +15sec																												
							2907 = V4200 Sgr, 6.18, range 0.07, V, Type BY, Period 3.24738 days, Phase 21%																												
26	Aug	25	1	43	58.4	d	188713	K2	7.9	7.3		91+	144	85	40	39S	126	268	136	-2.1	+3.8	+4.6	-4.0	.148	-61.6		19	55	10.8	-23	54	27	394.4	593.4
26	Aug	25	6	20	26.0	D	2921	K0	6.0	5.5		91+	146	33	260	54N	39	289	49	-3.0	+3.2	+0.0	+2.2	.419	22.3		20	1	23.8	-22	44	14	396.8	870.4
26	Aug	25	7	26	15.8	d	2928cF7		6.4	6.2		92+	146	19	254	83N	68	314	78	-3.1	+3.0	+0.0	+1.4	.503	-4.0		20	3	44.3	-22	35	44	398.0	973.1
							2928 is double: ** 7.3 7.3 0.10" 90.0, dT = +0.18sec																												
							2928 has been reported as non-instantaneous (OCc1590). Observations are highly desired																												
26	Aug	26	4	7	6.4	d	3035	F3	6.8	6.6		96+	156	70	292	30N	10	250	24	-3.5	+2.2	+0.2	+3.8	.255	43.7		20	48	13.7	-19	15	37	391.5	670.6
26	Aug	27	6	56	17.3	D	3173cG2		5.2	4.8v		99+	169	42	276	62S	99	343	116	-4.6	+0.3	+1.9	+0.7	.301	-45.7		21	41	32.9	-14	2	51	389.4	813.1
							R3173 = 42 Capricorni																												
							3173 is double: ** 5.5 7.5																												
							3173 = BY Cap, 5.13 to 5.18, V, Type RS																												
							Distance of 3173 to Terminator = 13.2"; to 3km sunlit peak = 4.0"																												
26	Aug	28	2	56	18.5	d	X182582k		11.0	10.5		77E	179	63	48	-6N	35	173	55	-4.2	-0.7	+1.5	+1.9	.349	14.9		22	23	55.9	-	9	13	27	384.9	674.2
26	Aug	28	3	0	53.6	d	X182602		11.3	10.5		70E	179	64	47	75U	115	254	134	-4.2	-0.7	+4.7	-3.4	.155	-64.5		22	24	21.9	-	9	31	30	384.9	672.6
26	Aug	28	3	1	4.8	d	X242715k		11.5			70E	179	64	46	-15N	29	169	49	-4.2	-0.7	+1.3	+2.2	.337	20.6		22	23	55.7	-	9	11	28	384.9	672.9
26	Aug	28	3	7	12.4	d	X242718k		11.8			60E	179	65	44	-21N	26	168	45	-4.2	-0.7	+1.2	+2.4	.328	24.2		22	23	58.8	-	9	9	34	384.8	671.5
26	Aug	28	3	9	59.1	r	X182535k		11.7	11.6		56E	179	66	42	3S	224	7	244	-4.3	-0.7	+1.7	+1.6	.357	-174.4		22	22	50.9	-	9	34	6	384.8	669.6
26	Aug	28	3	15	4.6	R	X 51827k		10.4	9.9		49E	179	67	40	-11S	241	26	261	-4.3	-0.7	+2.2	+1.0	.351	168.5		22	22	45.3	-	9	29	18	384.7	668.8
26	Aug	28	3	17	32.4	D	146076	K0	8.6	8.0		45E	179	67	39	59U	107	253	127	-4.3	-0.7	+4.2	-2.0	.190	-57.9		22	24	43.4	-	9	25	44	384.7	669.4
26	Aug	28	3	20	5.0	D	X 51881		10.4	9.7		42E	179	67	38	63U	83	229	102	-4.3	-0.7	+2.8	+0.0	.299	-33.5		22	24	48.4	-	9	18	37	384.7	669.2
26	Aug	28	3	20	33.1	D	X242735		10.8			41E	179	67	38	61U	87	234	107	-4.3	-0.7	+3.0	-0.2	.283	-37.8		22	24	49.2	-	9	19	41	384.7	669.1
26	Aug	28	3	36	32.5	r	X242705k		11.4			21E	179	69	28	97U	221	17	241	-4.3	-0.8	+1.7	+1.8	.355	-172.8		22	23	22.2	-	9	28	22	384.5	666.9
26	Aug	28	3	37	9.7	r	X182602		11.3	10.5		21E	179	69	28	60U	164	319	184	-4.3	-0.8	-1.4	+6.0	.153	-115.4		22	24	21.9	-	9	31	30	384.5	667.2
26	Aug	28	3	51	6	m	X 51895		10.9	10.6		9E	179	70	19	34U	138	301	158	-4.4	-0.8	+9.9	+9.9	.000	-90.0		22	25	4.7	-	9	25	38	384.5	667.6
26	Aug	28	3	55	42.8	d	X182625k		10.9	10.6		7E	179	70	15	95U	22	188	42	-4.4	-0.8	+1.0	+2.7	.322	26.1		22	24	48.0	-	8	57	42	384.5	668.2

Occultation prediction for Observatorio Ofiuco,Argentina
E. Longitude - 63 57 0.0, Latitude -28 15 0.0, Alt. 128m; Telescope dia 15cm; dMag 0.0

	day	Time	P	Star	Sp	Mag	Mag	%	Elon	Sun	Moon	CA	PA	VA	AA	Libration		A	B	RV	Cct	durn	R.A. (J2000)		Dec		Mdist	SV
y	m d	h m s		No	D	v	r V	ill		Alt	Alt Az	o	o	o	o	L	B	m/o	m/o	"/s	o	sec	h m s		o m s		Mm	m/s
26	Aug 28	4 1 52.6	d	X242744k		11.2		5E	179		70 11	83U	47	217	67	-4.4	-0.8	+1.8	+1.7	.359	0.2		22 25 17.7	-	9 0 8		384.4	668.8
26	Aug 28	4 2 48.8	R	146076	K0	8.6	8.0	5E	179		71 10	40U	170	340	190	-4.4	-0.8	-0.8	+4.9	.190	-121.9		22 24 43.4	-	9 25 44		384.4	668.4
26	Aug 28	4 3 40	m	X242743		11.9		4E	179		71 10	31U	138	309	158	-4.4	-0.8	+9.9	+9.9	.000	-90.0		22 25 17.3	-	9 22 11		384.4	668.7
26	Aug 28	4 7 2.5	r	X242712k		11.7	v	4E	179		71 6	77U	234	49	254	-4.5	-0.8	+2.0	+1.5	.356	173.3		22 23 45.6	-	9 18 27		384.4	668.9
X242712 = ASASSN-V J222345.63-091826.8, 12.03 to 12.39, V, Type VAR																												
26	Aug 28	4 20 35.2	r	X182582k		11.0	10.5	4E	179		71 356	74U	242	65	262	-4.5	-0.9	+2.2	+1.3	.349	165.6		22 23 55.9	-	9 13 27		384.4	671.4
26	Aug 28	4 22 51.2	r	X242715k		11.5		5E	179		71 354	77U	247	73	267	-4.5	-0.9	+2.4	+1.1	.338	159.8		22 23 55.7	-	9 11 28		384.4	672.0
26	Aug 28	4 26 30.9	D	146082kG0		9.0	8.7	6E	179		71 353	88U	63	249	83	-4.5	-0.9	+2.2	+1.3	.348	-15.6		22 25 53.8	-	8 57 34		384.4	673.1
26	Aug 28	4 26 58.3	r	X242718k		11.8		6E	179		71 351	77U	251	79	271	-4.5	-0.9	+2.5	+1.0	.331	156.3		22 23 58.8	-	9 9 34		384.4	673.0
26	Aug 28	4 27 49.1	R	X242735		10.8		6E	179		71 351	39U	189	17	209	-4.5	-0.9	+0.5	+3.3	.284	-141.8		22 24 49.2	-	9 19 41		384.4	673.2
26	Aug 28	4 31 18.0	R	X 51881		10.4	9.7	7E	179		71 349	41U	193	23	213	-4.5	-0.9	+0.6	+3.1	.300	-146.1		22 24 48.4	-	9 18 37		384.3	674.2
26	Aug 28	4 52 0	d	X182695		11.5	11.0	24E	179		69 335	72U	130	332	150	-4.6	-0.9	+9.9	+9.9	.044	-83.0		22 26 13.7	-	9 8 18		384.4	681.2
26	Aug 28	4 57 10		GrX182695		11.5	11.0	30E	179		69 ** GRAZE: CA 72.5U; Dist. 14km in az. 132deg. [Lat =-28.43+0.98(E.Long+63.95)]																	
26	Aug 28	5 2 45	r	X182695		11.5	11.0	37E	179		68 329	74U	144	352	164	-4.7	-1.0	+9.9	+9.9	.045	-97.0		22 26 13.7	-	9 8 18		384.4	685.4
26	Aug 28	5 12 54.1	r	X182625k		10.9	10.6	52E	179		67 322	84U	253	106	273	-4.7	-1.0	+2.4	+1.2	.334	154.3		22 24 48.0	-	8 57 42		384.4	690.5
26	Aug 28	5 27 4.9	r	X242744k		11.2		73E	179		65 316	80U	227	85	247	-4.7	-1.0	+1.6	+2.0	.374	-179.7		22 25 17.7	-	9 0 8		384.5	698.0
26	Aug 29	6 52 52.5	r	3411pA2		7.2		99-	167		53 309	58S	205	68	226	-5.1	-2.8	+0.9	+2.5	.362	-156.9		23 14 6.4	-	2 38 6		381.3	726.8
3411 is double: AB 7.41 9.20 0.49" 100.1, dT = +0.34sec																												
3411 is a close double. Observations are highly desired																												
Distance of 3411 to Terminator = 17.7"; to 3km sunlit peak = 7.1"																												
26	Aug 30	0 44 1.9	r	3515cA1		6.3	6.3	96-	157		14 80	81S	232	351	254	-4.1	-3.4	+0.4	+0.4	.501	-174.0		23 53 4.8		2 5 26		382.4	933.5
R3515 = 25 Piscium																												
3515 is double: ** 7.0 7.0 0.050"																												
3515 has been reported as non-instantaneous (OCc1650). Observations are highly desired																												
26	Aug 30	3 39 11.7	r	128489	K2	7.2	6.4	95-	155		47 48	63N	267	46	289	-4.4	-3.7	+2.4	-0.6	.316	141.3		23 57 2.6		3 1 34		378.8	742.7
26	Aug 30	3 41 42.2	r	3525	K5	7.6	6.9	95-	155		48 47	56N	274	54	296	-4.4	-3.7	+2.8	-1.1	.280	133.9		23 57 5.8		3 4 16		378.7	741.0
26	Aug 30	3 53 40.1	r	128494	F0	7.6	7.4	95-	155		49 44	81N	249	31	271	-4.4	-3.8	+2.0	+0.3	.373	159.0		23 57 24.3		3 0 36		378.6	732.8
26	Sep 2	9 21 39	M	390	A7	5.5	5.4	71-	115		37 339	6N	334	173	351	-3.6	-7.3	+9.9	+9.9	.000	90.0		2 38 49.0		21 57 41		370.4	669.0
R390 = nu Arietis																												
Distance of 390 to Terminator = 19.6"; to 3km sunlit peak = 1.3"																												
26	Sep 4	7 44 26.9	r	696	A0	7.5	7.4	50-	89		25 33	83S	255	42	263	-1.2	-7.3	+1.6	-0.2	.418	176.9		4 37 9.1		27 55 33		367.7	747.5
26	Sep 5	9 2 59.5	r	77483DB5		8.0	8.0	38-	76		26 29	54N	306	96	308	-0.2	-6.8	+2.6	-1.9	.295	137.5		5 44 37.7		29 1 0		366.3	711.9
77483 is double: AB 8.1 9.7 8.2" 0.1, dT = -16sec																												
77483 is a close double. Observations are highly desired																												
26	Sep 7	8 46 12.5	r	79753	K1	7.8	7.2	17-	49		9 56	76N	299	65	289	+2.3	-4.5	+1.1	-1.6	.454	160.0		7 51 47.9		24 49 15		367.4	860.0
26	Sep 12	23 39 54.9	D	1815SK2		4.7	4.0	4+	22		1 261	69N	100	342	78	+4.4	+4.6	+0.0	+0.6	.532	13.1		12 39 14.8	-	7 59 44		384.6	1018.4
R1815 = chi Virginis																												
1815 is multiple: **Aa,Ab 4.8 8.8 0.10" 214.0, dT = -0.08sec : AB 4.8 8.8 177" 135.9, dT = +271sec : AC 4.8 10.6 224" 109.8, dT = +415sec : AD 4.8 9.0 321" 331.1, dT = -382sec																												
1815 has been reported as non-instantaneous (OCc 760). Observations are highly desired																												
26	Sep 13	22 49 55.8	d	157922	K2	8.3	7.6	9+	34	-10	24 267	13N	41	286	20	+4.4	+5.6	+0.4	+6.8	.140	71.9		13 25 10.9	-13	19 2		386.8	845.2
26	Sep 14	23 9 37.6	d	158446	F3	8.3	8.0	15+	46		32 265	26N	50	298	31	+4.0	+6.3	+0.6	+4.1	.218	58.2		14 14 46.1	-18	25 49		390.7	784.3
26	Sep 15	0 26 57.5	D	2045cK0		6.4		16+	46		15 257	24N	48	293	30	+3.9	+6.3	-0.4	+3.4	.263	56.4		14 17 3.8	-18	35 9		392.6	902.9
2045 is double: AB 6.40 10.51 0.70" 82.9, dT = +2.2sec																												
2045 is a close double. Observations are highly desired																												
26	Sep 15	1 9 40.8	D	2051 A*		5.9	5.9v	16+	47		7 252	37N	61	303	42	+3.8	+6.3	-0.4	+2.1	.377	42.4		14 18 38.3	-18	42 57		393.6	973.8
2051 = CS Vir, 5.84 to 5.95, V, Type ACV, Period 9.2954 days, Phase 17%																												
26	Sep 15	23 41 8.6	d	183164	K0	8.1	7.5	23+	58		37 261	49S	150	42	135	+3.3	+6.7	+1.8	-2.2	.255	-49.3		15 5 47.8	-22	58 14		394.3	748.8

Occultation prediction for Observatorio Ofiuco,Argentina
E. Longitude - 63 57 0.0, Latitude -28 15 0.0, Alt. 128m; Telescope dia 15cm; dMag 0.0

day	Time	P	Star	Sp	Mag	Mag	%	Elon	Sun	Moon	CA	PA	VA	AA	Libration		A	B	RV	Cct	durn	R.A. (J2000)			Dec			Mdist	SV
y m d	h m s		No	D	v	r V	ill		Alt	Alt Az	o	o	o	o	L	B	m/o	m/o	"/s	o	sec	h	m	s	o	m	s	Mm	m/s
26 Sep 15	23 49 29	m	2152kA0		7.5	7.5	23+	58		35 260	8S	191	82	175	+3.3	+6.7	+9.9	+9.9	.000	-90.0		15	5	16.8	-23	0	48	394.5	761.6
26 Sep 15	23 49 38	Gr	2152kA0		7.5	7.5	23+	58		33 ** GRAZE: CA 8.5S; Dist. 29km in az. 345deg. [Lat =-27.98+0.24(E.Long+63.95)]																			
26 Sep 16	1 18 28.5	d	2163 M1		7.9	7.0v	24+	58		16 252	55S	144	30	129	+3.1	+6.6	+1.0	-1.2	.322	-46.6		15	8	52.9	-23	3	58	396.6	902.3
	2163 = IK Lib, 7.91 to 8.02, Hp, Type LB:																												
26 Sep 16	1 46 21.7	d	183234pF5		8.0		24+	58		11 250	28N	47	291	32	+3.1	+6.6	-0.7	+2.7	.317	50.0		15	10	0.2	-22	43	15	397.3	949.9
	183234 is double: AB 8.15 10.27 2.16" 135.9, dT = +0.14sec																												
	183234 is a close double. Observations are highly desired																												
26 Sep 16	20 32 21	d	2268MB2		4.5		31+	68	20	87 339	15N	29	229	17	+3.2	+6.8	+9.9	+9.9	.047	81.0		15	53	36.7	-25	19	38	394.6	579.2
R2268 = 2 Scorpii																													
	2268 is triple: Aa,Ab 5.6 5.6 0.10" : AB 4.69 6.98 2.39" 267.3																												
	2268 is a close double. Observations are highly desired																												
26 Sep 16	20 40 24	Gr	2268MB2		4.5		31+	68	19	85 ** GRAZE: CA 5.0N; Dist. 23km in az. 17deg. [Lat =-28.03-0.27(E.Long+63.95)]																			
26 Sep 16	22 30 40.8	d	183942pA2		7.6	7.5	32+	69	-6	63 267	36S	157	56	146	+2.7	+6.8	+2.7	-4.6	.170	-57.7		15	56	5.1	-25	56	9	395.5	610.3
	183942 is double: AB 8.1 13.8 2.3" 40.0, dT = -6sec																												
	183942 is a close double. Observations are highly desired																												
26 Sep 17	2 20 56.8	D	2298kK3		5.0	4.3	33+	70		15 248	86S	107	353	96	+2.1	+6.6	+0.4	+0.4	.458	-17.0		16	3	20.6	-25	51	55	399.9	929.5
26 Sep 18	1 55 35	m	184783 G6		7.9	7.4	42+	81		31 253	14S	173	65	166	+1.1	+6.4	+9.9	+9.9	.000	-90.0		16	54	49.6	-27	44	55	400.2	816.1
26 Sep 19	0 36 1.1	D	2554cF7		4.5	4.2V	51+	91		59 262	62N	63	324	61	+0.1	+5.9	+1.6	+2.0	.323	15.4		17	47	33.6	-27	49	51	398.8	647.4
R2554 = X Sagittarii																													
	2554 is double: AB 2.5 8.1 132.0, dT = 0.00sec																												
	2554 = X Sgr, 4.22 to 4.86, V, Type DCEP, Period 7.012770 days, Phase 98%																												
26 Sep 19	1 56 8.7	r	2554cF7		4.5	4.2V	51+	92		41 256	-90N	271	167	269	-0.1	+5.8	+1.3	+0.9	.377	165.1		17	47	33.6	-27	49	51	400.0	757.7
R2554 = X Sagittarii																													
	2554 is double: AB 2.5 8.1 132.0, dT = 0.00sec																												
	2554 = X Sgr, 4.22 to 4.86, V, Type DCEP, Period 7.012770 days, Phase 98%																												
26 Sep 21	1 41 0.3	D	2861cA1		5.6	5.5v	70+	114		66 272	78S	91	347	99	-2.3	+4.0	+2.6	+0.6	.299	-29.1		19	36	1.7	-24	43	9	396.0	656.8
R2861 = 51 Sagittarii																													
	2861 is double: ** 5.9 7.9																												
	2861 = V5548 Sgr, 5.82, range 0.04, B, Type DSCTC:, Period 0.11340 days																												
26 Sep 22	3 11 11.0	d	2988 A1		7.1	7.0	79+	125		55 274	73N	58	308	70	-3.6	+2.6	+1.3	+1.9	.381	-1.6		20	29	0.3	-20	54	5	393.5	727.6
26 Sep 22	4 16 44.6	d	189370 K2		7.1	6.4	79+	126		41 266	85N	70	320	83	-3.8	+2.4	+1.0	+1.6	.414	-12.4		20	30	41.0	-20	42	35	394.4	811.6
26 Sep 23	0 22 59.4	D	3105 K0		6.1	5.5S	86+	136		72 56	34S	127	257	143	-3.7	+1.5	+5.8	-6.3	.108	-71.0		21	15	6.6	-17	20	43	389.4	628.4
	3105 = NSV 25528, 6.04, , Type VAR:																												
26 Sep 23	0 36 10	Gr	3105 K0		6.1	5.5S	86+	136		75 ** GRAZE: CA 15.7S; Dist. 90km in az. 149deg. [Lat =-29.19+0.52(E.Long+63.95)]																			
26 Sep 23	4 6 2.4	d	3118 K0		6.9	6.4	87+	137		52 280	53N	35	279	51	-4.6	+1.0	+0.7	+2.4	.380	17.9		21	19	14.9	-16	10	46	389.8	755.6
26 Sep 25	4 23 30.6	D	3362cK0		5.9	S	97+	161		59 314	74N	56	275	77	-5.2	-2.1	+1.7	+1.7	.383	-9.0		22	55	11.0	- 4	59	16	380.4	715.4
	3362 is double: AB 6.03 7.75 0.47" 325.0, dT = -0.02sec																												
	3362 is a close double. Observations are highly desired																												
	3362 = NSV 14360, 7.6,																												
26 Sep 25	6 2 9.0	D	3367 G9		6.3	5.8	97+	162		40 290	47S	116	352	137	-5.5	-2.3	+3.1	-0.5	.184	-64.7		22	57	17.2	- 4	48	36	381.4	796.0
26 Sep 29	6 32 39.9	R	337cA1		5.6	5.6	92-	146		41 351	41N	291	120	310	-2.9	-7.0	+3.6	-0.8	.232	127.1		2	18	7.5	19	54	4	367.5	684.9
R337 = theta Arietis																													
	337 is double: ** 6.5 6.5 0.050"																												
	337 has been reported as non-instantaneous (OCc1181). Observations are highly desired																												
26 Sep 29	7 1 16.3	r	341 F8		6.8	6.5	92-	146		40 342	66S	219	56	238	-3.0	-7.0	+1.7	+1.7	.358	-159.0		2	19	8.7	19	41	16	367.6	684.2
R341 = 23 Arietis																													
26 Sep 30	6 47 44.8	r	75850 K0		7.3	6.6	84-	133		38 3	14S	174	350	188	-1.8	-7.4	-1.0	+5.1	.124	-109.0		3	18	19.9	24	4	55	366.3	679.1
26 Sep 30	8 57 10.1	r	75876 K0		7.3	6.7	84-	132		30 329	88S	248	98	262	-2.1	-7.5	+2.1	+1.2	.388	-174.2		3	20	26.8	24	32	36	366.9	693.8

Occultation prediction for Observatorio Ofiuco,Argentina
E. Longitude - 63 57 0.0, Latitude -28 15 0.0, Alt. 128m; Telescope dia 15cm; dMag 0.0

y	m	day d	h	Time m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon Sun Alt	Moon Alt	Az	CA o	PA o	VA o	AA o	Libration L	B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	Oct	1	7	18	20.5	r	76557WF8		7.4	7.0		75-	119	34	10	78S	245	55	255	-0.5	-7.3	+2.1	+0.5	.376	-171.7		4	20	17.7	27	20	51	365.9	673.9
		76557 is double: BA 7.5 5.1 48" 79.9, dT = +124sec																															
26	Oct	1	7	20	24.5	R	638SK1		5.0	4.4		75-	119	34	10	78S	245	55	255	-0.6	-7.3	+2.1	+0.5	.375	-171.3		4	20	21.2	27	21	3	365.9	672.8
		R638 = phi Tauri																															
		638 is triple: AB 5.1 7.5 48" 259.9, dT = -124sec : AC 5.1 12.3 117" 22.7, dT = +232sec																															
26	Oct	1	7	48	43.4	r	76563	K5	7.2	6.2		74-	119	34	3	66S	233	50	243	-0.6	-7.4	+2.1	+1.0	.345	-157.6		4	21	15.3	27	21	1	365.8	661.7
26	Oct	2	5	56	49	m	801	B9	6.5	6.5		64-	107	18	41	7N	348	127	352	+0.9	-6.8	+9.9	+9.9	.000	90.0		5	23	22.9	28	56	12	367.4	788.5
		R801 = 22 Aurigae																															
26	Oct	2	6	41	18.5	D	810SB7		1.7	1.7		64-	106	24	33	-68S	107	254	111	+0.8	-6.8	+2.2	-1.2	.366	-27.6		5	26	17.5	28	36	27	366.8	734.9
		R810 = El Nath = beta Tauri																															
		810 is multiple: AC 1.9 19.0 8.4" 357.0, dT = -8sec : AD 1.9 18.5 9.8" 70.0, dT = +21sec : AE 1.9 10.9" 80.0, dT = +26sec : AF 1.9 15.8 11.6" 296.0, dT = -31sec																															
		810 is a close double. Observations are highly desired																															
26	Oct	2	7	55	48.1	R	810SB7		1.7	1.7		64-	106	31	16	60S	236	39	239	+0.6	-6.9	+2.0	+0.7	.333	-152.0		5	26	17.5	28	36	27	366.1	670.3
		R810 = El Nath = beta Tauri																															
		810 is multiple: AC 1.9 19.0 8.4" 357.0, dT = +13sec : AD 1.9 18.5 9.8" 70.0, dT = +28sec : AE 1.9 10.9" 80.0, dT = +30sec : AF 1.9 15.8 11.6" 296.0, dT = -17sec																															
		810 is a close double. Observations are highly desired																															
26	Oct	3	7	27	58.8	r	996cA2		6.9	6.8		52-	93	23	36	68N	295	79	293	+1.9	-6.0	+2.1	-1.4	.371	155.0		6	30	22.0	28	12	44	367.4	728.5
		996 is double: 7.6 7.6																															
26	Oct	3	8	32	31	r	78480cK5		7.5	6.7		52-	92	30	23	14S	197	354	195	+1.7	-6.0	+1.1	+6.1	.084	-102.9	.02	6	33	2.1	27	49	31	366.8	674.1
		78480 is double: ** 8.3 8.3 0.10" 63.0, dT = +0.8sec																															
		78480 has been reported as non-instantaneous (OCc 720). Observations are highly desired																															
26	Oct	3	9	4	51.0	r	78483	A2	8.0	7.9		52-	92	-11	32	15	90S	273	78	271	+1.6	-6.0	+2.4	-0.4	.370	-176.7		6	33	4.9	28	4	55	366.6	658.2
26	Oct	3	9	25	33.7	r	78496	K0	7.5	6.9		52-	92	-7	33	10	72S	255	65	253	+1.6	-6.0	+2.5	+0.2	.338	-157.0		6	33	41.4	27	58	49	366.5	653.0
26	Oct	3	10	21	55.2	r	1008	A0	5.3	5.3s		52-	92	6	34	355	86N	278	102	275	+1.4	-5.9	+2.5	-0.1	.368	-174.9		6	35	12.1	28	1	20	366.5	657.4
		R1008 = 49 Aurigae																															
		1008 = NSV 3032, 5.05 to 5.27, V																															
26	Oct	5	8	45	40.7	r	80262kF8		8.1	7.8		30-	66	22	48	60S	256	31	242	+3.7	-3.3	+1.5	-0.5	.354	-147.3		8	34	39.2	21	29	35	370.1	754.7
26	Oct	7	8	53	11.9	R	1515kF8		7.8	7.5		12-	40	12	71	70N	312	74	292	+5.0	-0.1	+0.7	-1.9	.470	164.5		10	21	52.9	10	41	59	375.5	889.3
26	Oct	12	22	45	34.3	D	2108cG2		6.6			5+	26	-6	21	256	81N	109	355	91	+3.1	+6.5	+0.6	+0.4	.451	-7.2		14	46	10.9	-21	10	33	394.1	868.4
		2108 is double: AB 7.30 7.30 0.29" 132.4, dT = +0.6sec																															
		2108 is a close double. Observations are highly desired																															
26	Oct	12	23	24	17.8	D	2109 K4		6.1	5.2		5+	27	13	252	74S	133	17	116	+3.0	+6.4	+0.6	-0.5	.410	-32.7		14	47	13.7	-21	19	30	395.0	933.2
26	Oct	13	23	3	14.7	d	2229cA0		8.0			11+	38	-9	29	256	84S	115	5	102	+2.3	+6.6	+1.0	+0.1	.397	-20.7		15	38	22.1	-24	39	18	396.6	816.4
		2229 is double: AB 8.05 11.00 0.70" 82.0, dT = +1.5sec																															
		2229 is a close double. Observations are highly desired																															
26	Oct	14	0	37	46.5	d	183700 F2		8.0	7.8		11+	39	9	247	19N	38	281	25	+2.2	+6.5	-1.0	+3.0	.290	54.9		15	41	15.8	-24	23	55	398.8	976.9
26	Oct	15	23	18	4.0	D	2512pB9		7.5	7.5		25+	60	48	259	53N	59	316	55	+0.3	+6.0	+1.0	+2.2	.340	21.1		17	26	5.9	-27	35	59	399.3	706.4
		2512 is double: AB 7.5 11.3 5.8" 347.8, dT = +6sec																															
		2512 is a close double. Observations are highly desired																															
26	Oct	16	23	0	41.5	d	186653 A2		8.1	7.9		34+	71	-9	62	264	57S	122	23	123	-0.8	+5.3	+3.3	-1.3	.218	-48.8		18	19	43.3	-27	30	22	399.0	639.9
26	Oct	16	23	21	39.5	D	186671kK1		7.3	6.5		34+	71	58	262	74S	106	6	107	-0.8	+5.2	+2.5	+0.0	.286	-33.3		18	20	21.2	-27	24	28	399.2	663.4
26	Oct	17	3	27	49.6	D	2669CA7		6.4			35+	73	7	244	49N	47	289	49	-1.4	+4.7	-0.7	+1.7	.475	27.2		18	27	43.7	-26	38	6	403.8	1045.5
		2669 is double: AB 6.59 8.48 0.72" 230.2, dT = -1.5sec																															
		2669 is a close double. Observations are highly desired																															
26	Oct	17	3	30	17.0	D	2673SA3		6.3			35+	73	7	243	82N	81	322	82	-1.4	+4.7	-0.3	+1.0	.532	-6.4		18	28	6.2	-26	45	26	403.9	1049.3
		2673 is triple: AB 6.4 9.3 0.51" 179.7, dT = -0.15sec : AC 6.3 8.7 54" 134.6, dT = +60sec																															

Occultation prediction for Observatorio Ofiuco,Argentina
E. Longitude - 63 57 0.0, Latitude -28 15 0.0, Alt. 128m; Telescope dia 15cm; dMag 0.0

y	m	day d	h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon	Sun Alt	Moon Alt	Moon Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	dur sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
							2673 is a close double. Observations are highly desired																													
26	Oct	17	23	36	31	M	2804dK2		5.8	5.1		43+	82		65	269	18S	155	54	161	-2.1	+4.3	+9.9	+9.9	.000	-90.0		19	13	13.7	-25	54	24	398.2	646.1
							2804 is double: AB 10.8 12.0 2.6" 69.5																													
							2804 is a close double. Observations are highly desired																													
26	Oct	18	1	0	59.2	D	2809cK0		4.9	4.6		44+	83		47	262	56N	49	304	55	-2.4	+4.1	+0.7	+2.3	.373	15.6		19	15	32.4	-25	15	24	399.2	749.4
							R2809 = psi Sagittarii																													
							2809 is double: AB 5.5 5.7 0.18" 108.0, dT = +0.25sec																													
							2809 is a close double. Observations are highly desired																													
26	Oct	18	2	10	18.7	r	2809cK0		4.9	4.6		44+	83		32	256	-88S	261	152	268	-2.6	+4.0	+0.7	+1.3	.425	164.6		19	15	32.4	-25	15	24	400.5	856.0
							R2809 = psi Sagittarii																													
							2809 is double: AB 5.5 5.7 0.18" 108.0, dT = +0.38sec																													
							2809 is a close double. Observations are highly desired																													
26	Oct	18	23	10	5.4	D	2928cF7		6.4	6.2		53+	93	-10	80	300	21N	9	244	19	-3.1	+3.2	+0.4	+4.9	.197	51.6		20	3	44.3	-22	35	44	395.8	607.5
							2928 is double: ** 7.3 7.3 0.10" 90.0, dT = +0.08sec																													
							2928 has been reported as non-instantaneous (OCc1590). Observations are highly desired																													
26	Oct	19	22	30	31.6	d	3055 K0		6.8	6.3		62+	104	-2	76	52	62S	102	234	116	-4.0	+1.9	+3.5	-1.3	.229	-44.0		20	53	32.2	-19	6	49	392.8	606.5
26	Oct	19	22	59	5.0	d	163965 G0		7.5	7.2		62+	104	-8	80	26	70S	94	250	108	-4.1	+1.9	+3.4	-0.4	.253	-37.7		20	54	5.7	-18	59	49	392.7	609.6
26	Oct	19	23	37	38.2	D	3057 F0		6.7	6.5		62+	104		80	334	89S	74	279	89	-4.2	+1.8	+2.7	+1.0	.308	-19.8		20	54	46.9	-18	47	34	392.6	622.6
26	Oct	20	0	30	43.1	d	163987 A0		8.1	8.0		63+	105		71	296	82N	66	302	80	-4.4	+1.7	+2.1	+1.6	.336	-12.2		20	55	44.3	-18	34	53	392.7	655.1
26	Oct	20	4	29	30.2	D	3071cK3		6.1	5.4		64+	106		20	260	39N	22	268	37	-5.1	+1.1	-0.4	+2.4	.391	37.6		21	0	51.8	-17	31	51	395.9	947.6
							R3071 = 21 Capricorni																													
							3071 is double: ** 6.8 8.2 0.43" 77.0, dT = +0.6sec																													
							3071 has been reported as non-instantaneous (OCc 607). Observations are highly desired																													
26	Oct	20	22	44	50.1	D	3173cG2		5.2	4.8v		72+	116	-5	67	55	60N	41	172	58	-4.8	+0.5	+1.8	+1.9	.329	13.4		21	41	32.9	-14	2	51	388.9	638.7
							R3173 = 42 Capricorni																													
							3173 is double: ** 5.5 7.5																													
							3173 = BY Cap, 5.13 to 5.18, V, Type RS																													
26	Oct	21	4	57	27.1	D	3196 A1		6.3	6.2		73+	118		21	267	81S	79	324	97	-6.0	-0.3	+0.5	+1.3	.452	-22.1		21	49	41.0	-12	43	22	391.2	926.1
26	Oct	22	0	33	51.5	d	3306pF0		7.8	7.6		81+	128		70	9	54N	34	206	54	-5.7	-1.2	+1.4	+2.2	.347	13.9		22	30	32.8	- 8	6	53	383.4	665.4
							3306 is double: AB 7.8 8.6 8.1" 328.4, dT = +10sec																													
							3306 is a close double. Observations are highly desired																													
26	Oct	28	2	11	18.5	R	569cA2		5.3			94-	153		16	48	62S	220	353	232	-0.5	-7.0	+0.2	+0.7	.451	-153.7		3	50	18.9	25	34	46	362.9	885.7
							569 is double: AB 5.73 6.52 0.66" 204.1, dT = -1.4sec																													
							569 is a close double. Observations are highly desired																													
26	Oct	29	9	12	19.2	r	768 A2		7.0	6.7S		86-	136	-4	25	327	70S	240	93	245	+0.2	-6.8	+2.3	+1.6	.348	-145.8		5	8	35.3	28	16	24	362.0	738.9
							768 = NSV 16250, 7., , Type VAR:																													
26	Oct	31	7	32	41.1	r	79243 K1		7.3	6.7		67-	110		32	22	75N	291	89	284	+3.5	-4.9	+2.3	-1.0	.378	171.9		7	17	15.6	26	21	49	364.7	676.2
26	Oct	31	7	56	2.3	r	79253cK1		7.6	7.1		67-	110		34	16	74N	292	96	285	+3.4	-4.9	+2.3	-0.9	.375	172.6		7	17	54.5	26	19	59	364.5	668.0
							79253 is double: ** 8.7 8.7 0.050"																													
							79253 has been reported as non-instantaneous (OCc1350). Observations are highly desired																													
26	Nov	2	6	8	18.3	r	1370WA0		6.9	6.8		45-	84		9	64	87S	284	48	268	+5.6	-2.0	+0.8	-1.3	.477	-175.4		9	11	56.9	18	2	39	372.9	865.4
							R1370 = 80 Cancri																													
							1370 is double: AB 6.9 9.5 128" 253.1, dT = -229sec																													
26	Nov	3	7	27	8.0	D	1487SB7		1.4	1.4s		34-	71		18	65	-74S	127	252	108	+5.9	-0.4	+1.0	-1.9	.449	-9.9		10	8	22.3	11	58	2	375.6	831.3
							R1487 = Regulus = alpha Leonis																													
							1487 is triple: AB 1.4 8.2 176" 308.0, dT = -391sec : AD 1.4 12.1 192" 274.0, dT = -360sec																													
							1487 = NSV 4750, 1.33 to 1.40, V																													
26	Nov	3	8	33	11.3	r	98966SG		8.2	7.7		33-	71	-11	31	54	88N	293	66	273	+5.8	-0.3	+1.5	-1.5	.411	-171.5		10	8	12.8	11	59	49	374.5	754.8

Occultation prediction for Observatorio Ofiuco,Argentina
E. Longitude - 63 57 0.0, Latitude -28 15 0.0, Alt. 128m; Telescope dia 15cm; dMag 0.0

y	m	day d	h	Time m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon	Sun Alt	Moon Alt	Az	CA o	PA o	VA o	AA o	Libration L	Libration B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
							98966 is quadruple: BC 8.2 13.2 0.8" 82.7, dT = +1.8sec : BD 8.2 12.1 108" 209.9, dT = -33sec : BA 8.2 1.4 176" 128.0, dT = +412sec																												
							98966 is a close double. Observations are highly desired																												
26	Nov	3	8	40	6.0	R	1487	SB7	1.4	1.4s	33-	70	-10	32	53	89N	292	66	272	+5.8	-0.3	+1.6	-1.5	.406	-169.9		10	8	22.3	11	58	2	374.4	748.5
							R1487 = Regulus = alpha Leonis																												
							1487 is triple: AB 1.4 8.2 176" 308.0, dT = -415sec : AD 1.4 12.1 192" 274.0, dT = -453sec																												
							1487 = NSV 4750, 1.33 to 1.40, V																												
26	Nov	4	7	38	18.5	R	1589	pM5	5.9	5.3v	24-	58		14	75	74N	309	70	287	+6.2	+1.2	+0.6	-1.9	.475	170.7		10	56	1.5	6	11	7	379.6	887.0
							R1589 = 56 Leonis (VY)																												
							1589 is double: 6.2 7.1																												
							1589 = VY Leo, 5.69 to 6.03, V, Type SR, Period 46.34 days, Phase 28%																												
26	Nov	5	8	51	7.6	r	138388	K0	7.3	6.8	15-	46	-7	24	77	57S	259	19	237	+6.2	+2.7	+1.2	-0.7	.329	-134.9		11	45	1.4	-	0	31	4	382.3	863.7
26	Nov	6	7	47	8.6	r	1792	PF2	7.4	7.1S	9-	34		3	95	61N	319	77	296	+6.1	+3.8	-0.1	-1.8	.517	160.6		12	30	1.9	-	6	1	24	387.8	1031.5
							1792 is triple: AB 7.4 13.0 3.3" 278.9, dT = -5sec : AC 7.4 13.0 18.8" 292.0, dT = -33sec																												
							1792 is a close double. Observations are highly desired																												
							1792 = NSV 19406, 7.36, , Type VAR:																												
26	Nov	6	14	53	7.3	r	1815	SK2	4.7	4.0	7-	32		70	66	322	85S	283	136	261	+5.1	+4.6	+2.6	-0.3	.319	-151.9		12	39	14.8	-	7	59	44	383.4	672.0
							R1815 = chi Virginis																												
							1815 is multiple: **Aa,Ab 4.8 8.8 0.10" 214.0, dT = -0.11sec : AB 4.8 8.8 177" 135.9, dT = +465sec : AC 4.8 10.6 224" 109.8, dT = +696sec : AD 4.8 9.0 321" 331.1, dT = -667sec																												
							1815 has been reported as non-instantaneous (OCc 760). Observations are highly desired																												
26	Nov	7	9	38	52	M	Venus		-4.5	-4.5	3-	22		3	20	93	-20N	32	149	12	+5.7	+4.9	+9.9	+9.9	.000	90.0		13	21	36.7	-12	6	49	389.6	976.4
26	Nov	7	9	43	47	Gr	Venus		-4.5	-4.5	3-	22		5	23	** GRAZE: CA-19.2N; Dist.265km in az. 216deg. [Lat =-31.20-0.64(E.Long+63.95)]																												
26	Nov	11	23	43	5.2	d	185076	K5	9.2	8.4	7+	30		16	247	54S	139	25	133	+0.6	+5.8	+1.3	-1.1	.263	-57.3		17	9	5.7	-27	23	51	402.4	950.0
26	Nov	12	0	21	8.6	d	185106	K5	8.6	7.4	7+	30		9	244	37N	49	292	44	+0.5	+5.7	-0.7	+1.9	.435	33.0		17	10	37.6	-27	0	19	403.2	1014.8
26	Nov	12	0	55	15.9	d	2468	pG8	6.8		7+	30		2	240	58N	70	309	65	+0.5	+5.6	-0.6	+1.2	.534	12.7		17	12	10.9	-27	2	32	404.0	1071.9
							2468 is triple: AB 6.92 9.65 1.82" 64.2, dT = +3sec : AC 6.9 13.9 83" 81.2, dT = +152sec																												
							2468 is a close double. Observations are highly desired																												
26	Nov	12	23	28	46	m	X 43226	SB8	8.5	8.6	12+	40	-10	29	253	20S	164	56	164	-0.6	+5.1	+9.9	+9.9	.000	-90.0		18	2	2.9	-27	30	54	402.2	856.3
							X 43226 is triple: AB 8.5 9.3 2.3" 160.5 : AC 8.5 14.1 5.8" 48.1																												
							X 43226 is a close double. Observations are highly desired																												
26	Nov	12	23	33	41.0	d	X 43245	S	8.4	8.1	12+	40	-11	28	253	49N	54	305	53	-0.6	+5.1	+0.0	+2.0	.414	20.8		18	2	45.0	-27	4	42	402.3	863.0
							X 43245 is triple: AB 8.4 9.4 5.4" 100.9, dT = +9sec : AC 8.4 11.5 41" 66.7, dT = +98sec																												
							X 43245 is a close double. Observations are highly desired																												
26	Nov	12	23	57	36.8	d	186190	K2	8.6	7.7	12+	40		24	251	67N	71	321	71	-0.6	+5.0	+0.1	+1.4	.461	3.4		18	3	41.4	-27	5	53	402.8	903.0
26	Nov	13	0	0	32.7	d	186181	K0	9.0	8.4	12+	41		23	251	34N	38	287	37	-0.6	+5.0	-0.5	+2.4	.372	36.8		18	3	25.3	-26	58	35	402.9	908.2
26	Nov	13	0	35	9.2	d	186241	cA2	9.0	8.9	12+	41		16	248	83N	87	333	86	-0.7	+5.0	+0.1	+1.0	.484	-11.4		18	5	2.7	-27	5	11	403.6	966.4
							186241 is double: ** 9.8 9.8 0.10" 90.0, dT = +0.21sec																												
							186241 has been reported as non-instantaneous (OCc 89). Observations are highly desired																												
26	Nov	13	0	36	22.7	d	186243	cK2	8.2	7.5	12+	41		16	247	88S	96	342	96	-0.7	+5.0	+0.2	+0.8	.462	-20.8		18	5	5.1	-27	7	28	403.6	968.6
							186243 is double: ** 9.2 9.2 0.10" 90.0, dT = +0.22sec																												
							186243 has been reported as non-instantaneous (OCc 90). Observations are highly desired																												
26	Nov	13	0	42	6.9	D	186222	F5	7.5	7.2	12+	41		15	247	13N	16	262	16	-0.7	+5.0	-1.4	+3.3	.256	59.1		18	4	30.2	-26	50	58	403.8	978.8
26	Nov	13	1	1	35.3	d	186264	dB3	8.5	8.5	12+	41		11	245	70N	73	317	73	-0.7	+4.9	-0.3	+1.2	.515	2.5		18	5	58.2	-26	58	31	404.2	1010.9
							186264 is double: AB 8.5 11.3 2.3" 85.3, dT = +4sec																												
							186264 is a close double. Observations are highly desired																												
26	Nov	14	23	30	16.1	d	188562	A2	8.8	8.7e	27+	62	-10	49	266	74N	65	318	74	-3.1	+3.1	+1.1	+1.8	.382	-3.8		19	47	10.8	-23	22	52	400.0	742.3
							188562 = HD 186753, 8.82, range 0.02, 5V, Type EA, Period 1.9193851 days, Phase 31%																												
26	Nov	15	1	49	37.9	d	2895	B8	7.8	7.9	27+	63		19	254	19N	9	256	19	-3.4	+2.8	-1.0	+3.1	.277	55.4		19	50	16.3	-22	46	48	402.5	951.9

Occultation prediction for Observatorio Ofiuco,Argentina
E. Longitude - 63 57 0.0, Latitude -28 15 0.0, Alt. 128m; Telescope dia 15cm; dMag 0.0

	day	Time	P	Star	Sp	Mag	Mag	%	Elon	Sun	Moon		CA	PA	VA	AA	Libration		A	B	RV	Cct	durn	R.A. (J2000)			Dec			Mdist	SV
y	m d	h m s		No	D	v	r V	ill		Alt	Alt	Az	o	o	o	o	L	B	m/o	m/o	"/s	o	sec	h	m	s	o	m	s	Mm	m/s
26	Nov 16	1 38 48.9	d	163770	K4	7.9	7.1	36+	74		30	263	43N	28	276	42	-4.7	+1.5	-0.2+2.5		.387	30.6		20	39	15.7	-19	16	43	399.4	870.4
26	Nov 17	1 14 1.6	d	3136	K1	8.0	7.4	45+	85		43	275	52S	109	355	126	-5.8	+0.2	+2.6+0.1		.228	-56.1		21	26	27.0	-15	14	43	395.0	782.3
26	Nov 17	3 59 31.5	d	3152	K2	6.6	6.0	46+	86		7	258	63N	45	287	61	-6.0	-0.1	-0.3+1.8		.505	16.6		21	30	40.4	-14	17	28	398.1	1017.6
26	Nov 18	4 17 2.4	D	3270	K3	5.8	5.2	56+	97		10	265	64N	44	286	63	-7.0	-1.6	+0.0+1.9		.493	15.7		22	16	52.6	- 9	2	24	393.2	976.0
26	Nov 20	1 37 41.8	d	128361	G5	7.6	7.2	75+	120		52	320	60N	39	253	61	-7.4	-4.1	+1.4+2.1		.379	9.4		23	45	4.3	2	5	29	378.5	704.6
26	Nov 22	5 55 3.0	D	221cG8	3.8		s	92+	147		15	297	54N	40	275	61	-6.7	-6.6	+1.0+2.1		.425	26.7		1	31	29.0	15	20	45	368.7	850.2
R221 = Kullat Nunu = eta Piscium																															
221 is double: AB 3.83 7.51 0.40" 86.9, dT = +0.6sec																															
221 is a close double. Observations are highly desired																															
221 = NSV 532, 3.59 to 3.65, V																															
26	Nov 23	0 20 37.4	d	341	F8	6.8	6.5	96+	158		33	36	40N	34	180	53	-4.5	-6.8	+0.7+1.1		.421	21.6		2	19	8.7	19	41	16	363.0	797.1
R341 = 23 Arietis																															
26	Nov 25	3 21 19.1	r	673cA0	6.5	6.5	99-	171			32	18	65N	251	53	260	-1.1	-7.0	+1.9+0.1		.416	-176.7		4	29	19.8	27	24	15	356.5	721.2
673 is double: ** 7.4 7.4 0.10" 286.0, dT = -0.2sec																															
673 has been reported as non-instantaneous (OCc 722). Observations are highly desired																															
Distance of 673 to Terminator = 10.5"; to 3km sunlit peak = 2.3"																															
26	Nov 27	4 51 31.5	r	1042cA2	6.7	6.6	90-	143			29	28	87N	273	65	268	+2.9	-5.2	+2.0-0.6		.412	-176.2		6	49	10.2	27	11	25	357.8	717.3
1042 is double: 6.7 9.8 0.10"																															
1042 is a close double. Observations are highly desired																															
26	Nov 28	5 37 59	m	1195	B8	6.8	6.9	82-	129		30	34	8S	197	344	187	+4.5	-3.8	+9.9+9.9		.000	-90.0		7	56	6.5	23	37	26	360.7	718.8
Distance of 1195 to Terminator = 13.0"; to 3km sunlit peak = 1.2"																															
26	Nov 28	5 45 24.2	r	79804cG0	7.4			81-	129		31	32	26S	215	4	205	+4.5	-3.8	+2.5+3.5		.122	-107.3		7	56	2.8	23	41	33	360.6	713.5
79804 is double: AB 7.90 8.57 0.11" 110.6, dT = +0.22sec																															
79804 is a close double. Observations are highly desired																															
26	Nov 28	9 0 9.1	R	1208DK1	6.4			81-	128	-3	36	340	58N	312	151	301	+4.0	-3.5	+1.4-0.8		.408	167.0		8	1	0.8	23	34	59	360.7	732.6
1208 is double: AB 6.48 9.95 1.95" 325.2, dT = -5sec																															
1208 is a close double. Observations are highly desired																															
26	Nov 30	11 48 10.1	r	1466cB9	5.3	5.3	59-	100		32	39	318	76N	304	162	286	+5.8	+0.2	+1.3-0.6		.432	-175.1		9	58	13.4	12	26	41	369.9	777.3
R1466 = nu Leonis																															
1466 is double: ** 6.0 6.0 0.050"																															
1466 has been reported as non-instantaneous (OCc1407). Observations are highly desired																															
26	Dec 3	7 50 10.3	r	138705wF5	8.7	8.4	28-	64			29	79	85S	287	46	265	+7.3	+3.9	+1.0-1.5		.430	-161.4		12	18	24.0	- 5	1	54	384.6	846.6
138705 is double: AB 8.7 11.5 53" 281.0, dT = -122sec																															
26	Dec 5	8 16 2.1	r	158219	K2	8.7	8.1	12-	41	-11	21	97	28N	348	102	328	+6.4	+5.6	-0.5-2.8		.338	133.1		13	53	51.0	-15	47	19	393.4	944.4
26	Dec 5	8 21 2.6	r	1990	F6	8.0	7.7	12-	41	-11	22	97	88S	283	38	263	+6.4	+5.6	+0.4-1.3		.467	-162.0		13	53	11.8	-15	59	54	393.3	936.6
26	Dec 6	7 26 55.2	r	2095	K0	7.0	6.5	7-	30		3	111	3N	7	126	350	+5.6	+5.9	-1.6-4.2		.168	107.3		14	41	25.4	-19	55	41	398.4	1090.6
26	Dec 6	8 5 46.4	r	158735	K0	9.1	8.6	7-	30		11	107	70N	299	55	282	+5.6	+5.9	-0.2-1.5		.533	176.8		14	41	43.7	-20	12	20	397.6	1029.6
26	Dec 11	19 3 35.4	d	2834cA4	5.0	4.9	7+	30	50	80	288		43N	39	286	46	-1.5	+3.6	+1.7+2.9		.275	26.6		19	25	16.5	-24	30	31	400.0	595.6
R2834 = chi Sagittarii																															
2834 is double: AB 5.8 5.8 0.12" 78.1, dT = +0.33sec																															
2834 is a close double. Observations are highly desired																															
26	Dec 12	0 42 53.9	D	2857	K4	6.5	5.6s	8+	32		8	247	49S	125	8	133	-2.4	+2.9	+0.5-0.2		.289	-57.0		19	34	33.9	-23	51	32	405.3	1044.0
2857 = NSV 12153, 6.51, range 0.00, 6V, Type VAR, Period 0.09059 days																															
26	Dec 13	0 26 56.9	d	189224	K5	8.4	7.5	13+	42		19	257	75S	93	339	105	-3.8	+1.7	+0.4+0.9		.415	-31.2		20	23	30.2	-20	31	46	403.0	948.0
26	Dec 13	20 42 24.5	D	3079	A1	4.1	4.1	19+	52	29	74	311	70S	94	317	109	-4.4	+0.8	+3.4+0.2		.247	-41.4		21	5	56.8	-17	13	58	397.4	633.9
R3079 = Tsin = theta Capricorni																															
26	Dec 13	23 32 20.6	D	3091	K4	6.7	5.9	20+	53	-6	39	271	68S	96	342	111	-5.0	+0.4	+1.6+0.9		.316	-40.4		21	9	25.1	-16	36	57	399.3	804.7
26	Dec 14	1 2 47.1	d	164201	G6	8.7	8.3	20+	54		19	262	54N	37	282	52	-5.1	+0.2	-0.1+2.1		.443	22.5		21	11	22.3	-16	1	36	401.0	933.8

Occultation prediction for Observatorio Ofiuco,Argentina
E. Longitude - 63 57 0.0, Latitude -28 15 0.0, Alt. 128m; Telescope dia 15cm; dMag 0.0

y	m	day d	Time h	m	s	P	Star No	Sp D	Mag v	Mag r	V	% ill	Elon Sun Alt	Moon Alt	Az	CA o	PA o	VA o	AA o	Libration L	B	A m/o	B m/o	RV "/s	Cct o	durn sec	R.A. (J2000) h	m	s	Dec o	m	s	Mdist Mm	SV m/s
26	Dec	19	0	33	33.3	d	92193	pA5	8.1	7.8	v	68+	111	47	336	50N	29	231	51	-7.8	-6.1	+1.3	+2.2	.346	23.0		1	0	13.2	11	56	7	374.5	682.5
	92193 is double: AB 8.3 9.8 127.0, dT = 0.00sec																																
	92193 = HD 5843, 8.02 to 8.05, V, Type DSCT, Period 0.07902951 days, Phase 84%																																
26	Dec	19	1	5	5.1	d	92207	pF5	8.0			68+	112	43	326	89S	70	280	92	-7.9	-6.2	+2.2	+1.2	.365	-16.5		1	1	21.8	11	54	46	374.6	691.4
	92207 is double: AB 8.23 9.34 0.51" 347.2, dT = +0.17sec																																
	92207 is a close double. Observations are highly desired																																
26	Dec	20	3	33	51.8	D	288	cK1	5.1	4.6		79+	125	24	309	45S	118	345	138	-7.5	-7.1	+1.6	-0.2	.267	-51.3		1	57	21.1	17	49	3	369.4	765.6
	R288 = iota Arietis																																
26	Dec	21	23	19	10		Gr		569	cA2	5.3		94+	151	-2	24	** GRAZE: CA 21.6S; Dist. 22km in az. 321deg. [Lat =-27.99+0.70(E.Long+63.95)]																				
26	Dec	21	23	19	12		M		569	cA2	5.3		94+	151	-2	23	41	22S	156	297	169	-3.9	-7.1	+9.9	+9.9	.000	-90.0		3	50	18.9	25	34	46	359.7	827.3
	569 is double: AB 5.73 6.52 0.66" 204.2																																
	569 is a close double. Observations are highly desired																																
	Distance of 569 to Terminator = 19.1"; to 3km sunlit peak = 7.2"																																
26	Dec	23	4	43	29.8	d	768	A2	7.0	6.7	S	99+	166	30	339	78N	95	297	101	-2.5	-6.7	+2.1	+0.3	.415	-3.9		5	8	35.3	28	16	24	354.8	715.8
	768 = NSV 16250, 7., , Type VAR:																																
26	Dec	23	5	40	9.4	D	771	SA5	6.1	5.9	e	99+	167	25	326	46S	152	6	158	-2.6	-6.7	+0.6	-1.8	.238	-57.6		5	9	45.1	28	1	50	355.3	765.1
	771 is triple: Aa,Ab 6.0 0.20" 351.0, dT = -0.8sec : A,BC 6.0 9.1 11.2" 29.1, dT = -26sec																																
	771 is a close double. Observations are highly desired																																
	771 = V1156 Tau, 6. to 6.1, Hp, Type E:, Period 1.40266 days, Phase 0%																																
	Distance of 771 to Terminator = 13.2"; to 3km sunlit peak = 4.0"																																
26	Dec	30	6	39	34.6	r	138553	kK2	7.5	6.9		55-	96	39	70	83S	287	51	264	+8.0	+3.8	+1.4	-1.5	.404	-158.7		12	3	13.2	- 3	23	44	377.9	794.0
26	Dec	31	5	39	44.5	r	138978	K2	7.6	7.0		45-	84	20	90	49S	251	8	230	+8.1	+4.8	+1.0	-0.4	.309	-128.5		12	49	0.6	- 9	13	13	385.3	928.1

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