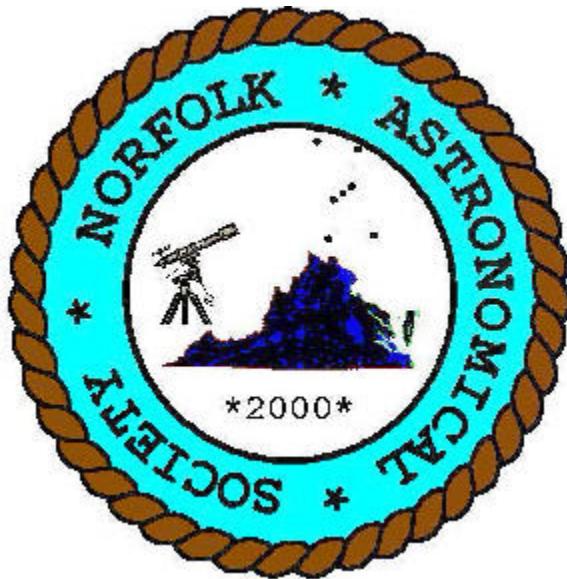


Norfolk Astronomical Society



<http://norfolkastro.org>

February 2014

Monthly Sky Calendar
Prepared Specifically For
The Hampton Roads Area

Upcoming Regular Meetings

DATE	Monday, Feb. 10, 2014
TIME	6 - 8 PM EST
WHERE	Chesapeake Public Library, Major Hillard branch Conf. Room
TOPIC	Our Moon

DATE	Monday, March 10, 2014
TIME	6 - 8 PM EST
WHERE	Chesapeake Public Library, Major Hillard branch Conf. Room
TOPIC	The Planet Jupiter

Orion Rises

Photo By Glendon L. Howell



On December 27, 2013, Glen Howell took the above unaltered 2.5-minute image of the constellation of Orion using his Canon Digital Rebel XTI set to ISO-1600, tracking on an iOptron Skytracker. His Canon EFS 18-55mm lens was set to 38mm at f/5.6. Look for more of Glen's work on his website <http://www.freewebs.com/howellgl>

Astronomical Highlights For 2014

Prepared by Glendon L. Howell, NAS

DATE	DOW	TIME	EVENT
2014/04/15	TUE	01:58-05:33EDT	Total Lunar Eclipse (sunrise 6:31 EDT)
2014/05/24	SAT	03:00-04:00EDT	Potential Meteor Storm from Comet 209P/Linear
2014/08/31	SUN	13:16-14:04EDT	Moon occults Saturn (daytime)
2014/10/08	WED	05:14-08:34EDT	Total Lunar Eclipse (sunrise 7:07 EDT)
2014/10/21	TUE	13:00 EDT	ORIONID Meteor Shower (zhr = 25)
2014/10/23	THU	15:37-19:51EDT	Partial Solar Eclipse (sunset 18:19 EDT)
2014/12/14	SUN	07:00 EST	GEMINID Meteor Shower (zhr = 120)

Total Lunar Eclipse - Tuesday, April 15, 2014

The partial phase of this total lunar eclipse begins at 1:58 AM EDT. Totality begins at 3:06 and ends at 4:24 AM. Partial phases end at 5:33 AM. Moonset is at 6:39 AM. Sunrise is at 6:31 AM.

Potential Meteor Storm - Saturday, May 24, 2014

There is the potential for a meteor storm caused by the Earth passing through the debris of Comet 209P/Linear. The peak is expected to occur between 3 to 4 AM EDT. The radiant is in the constellation Camelopardalis.

Moon Occults Saturn - Sunday, August 31, 2014 (daytime)

The near First Quarter moon occults Saturn in the daytime. Dark-limb disappearance occurs at 1:12 PM and bright-limb reappearance occurs at 2:07 PM EDT. A telescope will be required to see this event.

Total Lunar Eclipse - Wednesday, October 8, 2014

The partial phase of this total lunar eclipse begins at 5:14 AM EDT. Totality begins at 6:25 and ends at 7:24 AM. Moonset is at 7:12 AM, just prior to the end of totality. Sunrise is at 7:07 AM.

Orionid Meteor Shower - Tuesday, October 21, 2014

With the zhr of 25 peak occurring at 1 PM Oct. 21, either night before or after this date should be good. The radiant is highest about 4:30 AM EDT and the waning crescent moon rising before dawn should not seriously interfere with observation.

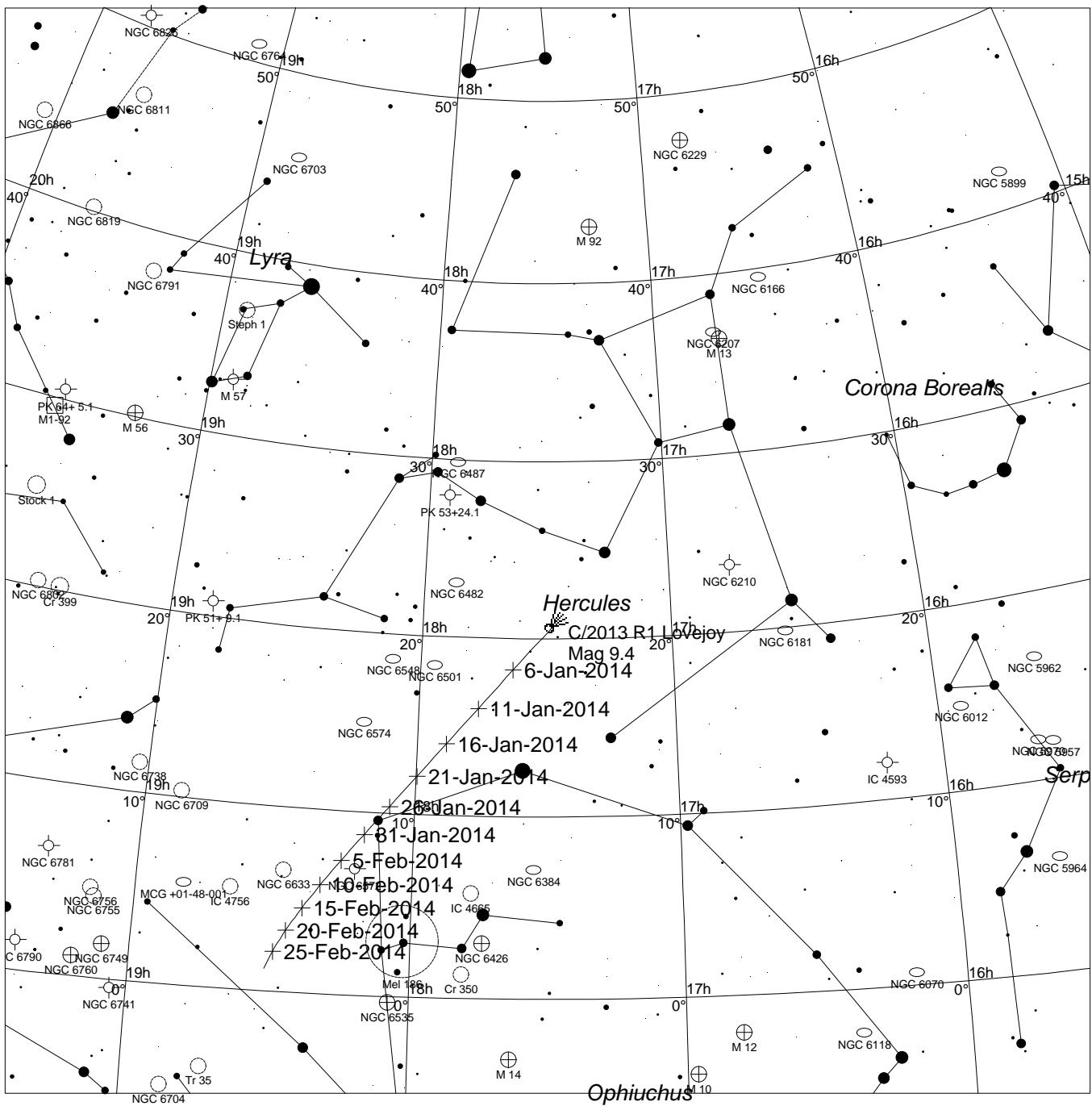
Partial Solar Eclipse - Thursday, October 23, 2014

Partial phases of a partial solar eclipse occur near sunset for Hampton Roads. The eclipse begins locally at 5:58 PM EDT, with the sun only 3.4° above the horizon (azimuth 253°). By sunset at 6:23 PM, only 41% of the sun's diameter is covered. This may be a great sunset photo opportunity.

Geminid Meteor Shower - Sunday, December 14, 2014

While the moon interferes this year, this meteor shower may still be the best of this year for the public. The actual peak occurs near sunrise this year for Hampton Roads with a zhr of 120 meteors per hour. The Last Quarter moon will rise at 11:42 PM Saturday night to hamper the best viewing which comes after midnight. Still there should be plenty to see prior to moon rise Saturday night Dec. 13.

Comet C/2013 R1 Lovejoy In JAN/FEB 2014



STARS	SYMBOLS	
● <2	• 4.5	Comet
● 2.5	• 5	⊕ Globular Cluster
● 3	• 5.5	◊ Asteroid
● 3.5	>6	○ Planetary Nebula
● 4		○ Galaxy
		○ Open Cluster
		□ Quasar
		□ Bright Nebula
		○ Other Object

The comet, visible in the morning sky, moves slowly south-eastward, from Hercules into Ophiuchus while continuing to climb in altitude.

Local Time: 06:00:00 1-Jan-2014 UTC: 11:00:00 1-Jan-2014 Sidereal Time: 12:38:58
 Location: 36° 49' 48" N 76° 16' 48" W 17h30m00s Dec: +25° 00' Field: 60.0°
 Julian Day: 2456658.9583

Norfolk Astronomical Society Astronomical Calendar

January 2014							February 2014							March 2014						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
				1	2	3	4				1				1					
5	6	7	8	9	10	11	2	3	4	5	6	7	8	2	3	4	5	6	7	8
12	13	14	15	16	17	18	9	10	11	12	13	14	15	9	10	11	12	13	14	15
19	20	21	22	23	24	25	16	17	18	19	20	21	22	16	17	18	19	20	21	22
26	27	28	29	30	31		23	24	25	26	27	28	29	23	24	25	26	27	28	29
							30	31												

Calendar

	Start	End	Category	Description
1 Feb 2014	12:00 AM	12:00 AM	Diary	Mercury 3.9S of Moon
	3:57 AM	3:57 AM	Jup GRS	GRS Transit (CML=207)
	5:31 AM	5:31 AM	Jupiter	Jupiter sets
	5:35 AM	5:35 AM	Sat Pass (ISS)	CHES:ISS Passes NW to S (Azm 198.3 Alt 12)
	5:40 AM	5:40 AM	Twilight	Astronomical Twilight begins
	6:00 AM	6:00 AM	Diary	Neptune 4.9S of Moon
	6:17 AM	6:17 AM	Iridium Flare	CHES:Iridium 76 Flares at mag. 1.7 (Azm 160 Alt 29)
	7:09 AM	7:09 AM	Sun	Sunrise
	8:02 AM	8:02 AM	Moon	Moonrise
	1:53 PM	1:53 PM	Jup GRS	GRS Transit (CML=207)
	2:56 PM	2:56 PM	Jupiter	Jupiter rises
	5:33 PM	5:33 PM	Sun	Sunset
	6:36 PM	6:36 PM	Iridium Flare	CHES:Iridium 26 Flares at mag.-1.7 (Azm 032 Alt 53)
	7:01 PM	7:01 PM	Twilight	Astronomical Twilight ends
	8:01 PM	8:01 PM	Moon	Moonset
	8:20 PM	8:20 PM	Jup Sats	III.Sh.E
	11:48 PM	11:48 PM	Jup GRS	GRS Transit (CML=207)
2 Feb 2014	5:10 AM	5:10 AM	Jup Sats	I.Tr.I
	5:26 AM	5:26 AM	Jupiter	Jupiter sets
	5:40 AM	5:40 AM	Twilight	Astronomical Twilight begins
	6:11 AM	6:11 AM	Iridium Flare	CHES:Iridium 46 Flares at mag.-6.4 (Azm 158 Alt 27)
	7:08 AM	7:08 AM	Sun	Sunrise
	8:40 AM	8:40 AM	Moon	Moonrise
	9:44 AM	9:44 AM	Jup GRS	GRS Transit (CML=207)
	2:51 PM	2:51 PM	Jupiter	Jupiter rises
	5:34 PM	5:34 PM	Sun	Sunset
	6:47 PM	6:47 PM	Jup Sats	II.Sh.E
	7:02 PM	7:02 PM	Twilight	Astronomical Twilight ends
	7:39 PM	7:39 PM	Jup GRS	GRS Transit (CML=207)
	9:09 PM	9:09 PM	Moon	Moonset
3 Feb 2014	2:30 AM	2:30 AM	Jup Sats	I.Oc.D
	5:22 AM	5:22 AM	Jupiter	Jupiter sets
	5:35 AM	5:35 AM	Jup GRS	GRS Transit (CML=207)
	5:39 AM	5:39 AM	Twilight	Astronomical Twilight begins
	6:05 AM	6:05 AM	Iridium Flare	CHES:Iridium 49 Flares at mag.-1.3 (Azm 160 Alt 27)
	7:07 AM	7:07 AM	Sun	Sunrise
	9:17 AM	9:17 AM	Moon	Moonrise
	12:38 PM	12:38 PM	Algol Minima	Algol at mag. +3.4 minimum (+/-5 hours)
	2:47 PM	2:47 PM	Jupiter	Jupiter rises
	3:31 PM	3:31 PM	Jup GRS	GRS Transit (CML=207)

Norfolk Astronomical Society Astronomical Calendar

January 2014						
S	M	T	W	T	F	S
		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 2014						
S	M	T	W	T	F	S
		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					

March 2014						
S	M	T	W	T	F	S
		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					

Calendar

	Start	End	Category	Description
3 Feb 2014	5:00 PM	5:00 PM	Diary	Uranus 2.6S of Moon
	5:35 PM	5:35 PM	Sun	Sunset
	6:30 PM	6:30 PM	Iridium Flare	CHES:Iridium 46 Flares at mag.-1.3 (Azm 028 Alt 58)
	7:03 PM	7:03 PM	Twilight	Astronomical Twilight ends
	10:14 PM	10:14 PM	Moon	Moonset
	11:37 PM	11:37 PM	Jup Sats	I.Tr.I
4 Feb 2014	12:19 AM	12:19 AM	Jup Sats	I.Sh.I
	1:26 AM	1:26 AM	Jup GRS	GRS Transit (CML=207)
	1:52 AM	1:52 AM	Jup Sats	I.Tr.E
	2:35 AM	2:35 AM	Jup Sats	I.Sh.E
	4:00 AM	4:00 AM	Diary	Mars 4.6N of Spica
	5:18 AM	5:18 AM	Jupiter	Jupiter sets
	5:38 AM	5:38 AM	Twilight	Astronomical Twilight begins
	7:06 AM	7:06 AM	Sun	Sunrise
	7:25 AM	7:25 AM	Iridium Flare	CHES:Iridium 28 Flares at mag.-4.2 (Azm 086 Alt 27)
	9:54 AM	9:54 AM	Moon	Moonrise
	11:22 AM	11:22 AM	Jup GRS	GRS Transit (CML=207)
	2:43 PM	2:43 PM	Jupiter	Jupiter rises
	3:07 PM	3:07 PM	Iridium Flare	CHES:Iridium 77 Flares at mag.-5.6 (Azm 235 Alt 36)
	5:37 PM	5:37 PM	Sun	Sunset
	6:24 PM	6:24 PM	Iridium Flare	CHES:Iridium 49 Flares at mag. 0.0 (Azm 026 Alt 61)
	7:03 PM	7:03 PM	Twilight	Astronomical Twilight ends
	7:46 PM	7:46 PM	Sat Pass (ISS)	CHES:ISS Passes SW to NE (Azm 229.1 Alt 20)
	8:56 PM	8:56 PM	Jup Sats	I.Oc.D
	9:18 PM	9:18 PM	Jup GRS	GRS Transit (CML=207)
	11:17 PM	11:17 PM	Moon	Moonset
	11:56 PM	11:56 PM	Jup Sats	I.Ec.R
5 Feb 2014	4:11 AM	4:11 AM	Jup Sats	III.Oc.D
	5:13 AM	5:13 AM	Jupiter	Jupiter sets
	5:38 AM	5:38 AM	Twilight	Astronomical Twilight begins
	6:55 AM	6:55 AM	Sat Pass (HST)	CHES:HST Passes SW to E (Azm 173.0 Alt 15)
	7:05 AM	7:05 AM	Sun	Sunrise
	7:13 AM	7:13 AM	Jup GRS	GRS Transit (CML=207)
	10:31 AM	10:31 AM	Moon	Moonrise
	2:38 PM	2:38 PM	Jupiter	Jupiter rises
	5:09 PM	5:09 PM	Jup GRS	GRS Transit (CML=207)
	5:38 PM	5:38 PM	Sun	Sunset
	6:04 PM	6:04 PM	Jup Sats	I.Tr.I
	6:18 PM	6:18 PM	Iridium Flare	CHES:Iridium 22 Flares at mag. 0.0 (Azm 033 Alt 59)
	6:47 PM	6:47 PM	Jup Sats	I.Sh.I

Norfolk Astronomical Society Astronomical Calendar

January 2014							February 2014							March 2014							
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	
				1	2	3	4				1				1						
5	6	7	8	9	10	11	2	3	4	5	6	7	8	2	3	4	5	6	7	8	
	12	13	14	15	16	17	18	9	10	11	12	13	14	15	9	10	11	12	13	14	15
	19	20	21	22	23	24	25	16	17	18	19	20	21	22	16	17	18	19	20	21	22
	26	27	28	29	30	31	23	24	25	26	27	28	29	23	24	25	26	27	28	29	
															30	31					

Calendar

	Start	End	Category	Description
5 Feb 2014	6:59 PM	6:59 PM	Sat Pass (ISS)	CHES:ISS Passes SW to NE (Azm 134.8 Alt 46)
	7:04 PM	7:04 PM	Twilight	Astronomical Twilight ends
	8:19 PM	8:19 PM	Jup Sats	I.Tr.E
	9:03 PM	9:03 PM	Jup Sats	I.Sh.E
	9:04 PM	9:04 PM	Jup Sats	IV.Tr.I
6 Feb 2014	12:18 AM	12:18 AM	Moon	Moonset
	12:37 AM	12:37 AM	Jup Sats	IV.Tr.E
	2:00 AM	2:00 AM	Diary	Mercury stationary
	3:05 AM	3:05 AM	Jup GRS	GRS Transit (CML=207)
	3:53 AM	3:53 AM	Jup Sats	II.Tr.I
	3:58 AM	3:58 AM	Jup Sats	IV.Sh.I
	5:09 AM	5:09 AM	Jupiter	Jupiter sets
	5:37 AM	5:37 AM	Twilight	Astronomical Twilight begins
	5:56 AM	5:56 AM	Iridium Flare	CHES:Iridium 20 Flares at mag.-0.4 (Azm 169 Alt 31)
	6:50 AM	6:50 AM	Sat Pass (HST)	CHES:HST Passes SW to E (Azm 166.0 Alt 18)
	7:04 AM	7:04 AM	Sun	Sunrise
	9:27 AM	9:27 AM	Algol Minima	Algol at mag. +3.4 minimum (+/-5 hours)
	9:53 AM	9:53 AM	Iridium Flare	CHES:Iridium 19 Flares at mag.-6.5 (Azm 125 Alt 47)
	11:10 AM	11:10 AM	Moon	Moonrise
	1:00 PM	1:00 PM	Jup GRS	GRS Transit (CML=207)
	2:34 PM	2:34 PM	Jupiter	Jupiter rises
	3:00 PM	3:00 PM	Diary	FIRST QUARTER
	5:39 PM	5:39 PM	Sun	Sunset
	6:10 PM	6:10 PM	Sat Pass (ISS)	CHES:ISS Passes S to NE (Azm 131.4 Alt 24)
	6:12 PM	6:12 PM	Iridium Flare	CHES:Iridium 25 Flares at mag.-2.1 (Azm 031 Alt 62)
	6:25 PM	6:25 PM	Jup Sats	IEc.R
7 Feb 2014	7:05 PM	7:05 PM	Twilight	Astronomical Twilight ends
	7:46 PM	7:46 PM	Sat Pass (ISS)	CHES:ISS Passes W to NE (Azm 293.5 Alt 26)
	10:56 PM	10:56 PM	Jup GRS	GRS Transit (CML=207)
	1:16 AM	1:16 AM	Moon	Moonset
	5:05 AM	5:05 AM	Jupiter	Jupiter sets
	5:36 AM	5:36 AM	Twilight	Astronomical Twilight begins
	5:50 AM	5:50 AM	Iridium Flare	CHES:Iridium 3 Flares at mag.-0.9 (Azm 167 Alt 30)
	6:44 AM	6:44 AM	Sat Pass (HST)	CHES:HST Passes SW to E (Azm 169.0 Alt 21)
	6:56 AM	6:56 AM	Iridium Flare	CHES:Iridium 33 Flares at mag.-5.7 (Azm 081 Alt 21)
	7:03 AM	7:03 AM	Sun	Sunrise
	8:52 AM	8:52 AM	Jup GRS	GRS Transit (CML=207)
	9:47 AM	9:47 AM	Iridium Flare	CHES:Iridium 97 Flares at mag.-6.4 (Azm 124 Alt 46)
	11:52 AM	11:52 AM	Moon	Moonrise
	1:11 PM	1:11 PM	Meteor Shower	alpha-Centaurids meteor peak (zhr=10)

Norfolk Astronomical Society Astronomical Calendar

January 2014							February 2014							March 2014						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
				1	2	3	4				1			1						
5	6	7	8	9	10	11	2	3	4	5	6	7	8	2	3	4	5	6	7	8
12	13	14	15	16	17	18	9	10	11	12	13	14	15	9	10	11	12	13	14	15
19	20	21	22	23	24	25	16	17	18	19	20	21	22	16	17	18	19	20	21	22
26	27	28	29	30	31		23	24	25	26	27	28	29	23	24	25	26	27	28	29
							30	31												

Calendar

	Start	End	Category	Description
7 Feb 2014	2:29 PM	2:29 PM	Jupiter	Jupiter rises
	4:10 PM	4:10 PM	Iridium Flare	CHES:Iridium 63 Flares at mag.-8.1 (Azm 197 Alt 80)
	5:40 PM	5:40 PM	Sun	Sunset
	6:47 PM	6:47 PM	Jup GRS	GRS Transit (CML=207)
	6:58 PM	6:58 PM	Sat Pass (ISS)	CHES:ISS Passes SW to NE (Azm 322.4 Alt 53)
	7:06 PM	7:06 PM	Twilight	Astronomical Twilight ends
	9:57 PM	9:57 PM	Jup Sats	II.Oc.D
8 Feb 2014	2:11 AM	2:11 AM	Moon	Moonset
	2:14 AM	2:14 AM	Jup Sats	II.Ec.R
	4:43 AM	4:43 AM	Jup GRS	GRS Transit (CML=207)
	5:01 AM	5:01 AM	Jupiter	Jupiter sets
	5:35 AM	5:35 AM	Twilight	Astronomical Twilight begins
	5:44 AM	5:44 AM	Iridium Flare	CHES:Iridium 76 Flares at mag. 1.5 (Azm 168 Alt 29)
	6:38 AM	6:38 AM	Sat Pass (HST)	CHES:HST Passes SW to E (Azm 171.9 Alt 23)
	7:02 AM	7:02 AM	Sun	Sunrise
	9:40 AM	9:40 AM	Iridium Flare	CHES:Iridium 51 Flares at mag.-6.3 (Azm 122 Alt 45)
	10:00 AM	10:00 AM	Diary	Aldebaran 2.3S of Moon
	12:36 PM	12:36 PM	Moon	Moonrise
	2:25 PM	2:25 PM	Jupiter	Jupiter rises
	2:39 PM	2:39 PM	Jup GRS	GRS Transit (CML=207)
	4:04 PM	4:04 PM	Iridium Flare	CHES:Iridium 66 Flares at mag.-4.4 (Azm 202 Alt 78)
	5:41 PM	5:41 PM	Sun	Sunset
	6:09 PM	6:09 PM	Sat Pass (ISS)	CHES:ISS Passes SW to NE (Azm 136.9 Alt 80)
	7:07 PM	7:07 PM	Twilight	Astronomical Twilight ends
	7:46 PM	7:46 PM	Sat Pass (ISS)	CHES:ISS Passes W to NE (Azm 328.4 Alt 15)
	9:05 PM	9:05 PM	Jup Sats	III.Tr.E
	9:05 PM	9:05 PM	Jup Sats	III.Sh.I
9 Feb 2014	12:20 AM	12:20 AM	Jup Sats	III.Sh.E
	12:34 AM	12:34 AM	Jup GRS	GRS Transit (CML=207)
	1:57 AM	1:57 AM	Lunar Occult	Moon occults 4.9 mag. double star 764(d)
	3:02 AM	3:02 AM	Moon	Moonset
	4:56 AM	4:56 AM	Jupiter	Jupiter sets
	5:34 AM	5:34 AM	Twilight	Astronomical Twilight begins
	6:16 AM	6:16 AM	Algol Minima	Algol at mag. +3.4 minimum (+/-5 hours)
	6:25 AM	6:25 AM	Iridium Flare	CHES:Iridium 55 Flares at mag. 1.3 (Azm 075 Alt 13)
	6:32 AM	6:32 AM	Sat Pass (HST)	CHES:HST Passes SW to E (Azm 174.9 Alt 25)
	7:01 AM	7:01 AM	Sun	Sunrise
	10:30 AM	10:30 AM	Jup GRS	GRS Transit (CML=207)
	1:23 PM	1:23 PM	Moon	Moonrise
	2:21 PM	2:21 PM	Jupiter	Jupiter rises

Norfolk Astronomical Society Astronomical Calendar

January 2014							February 2014							March 2014						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
				1	2	3	4					1		2	3	4	5	6	7	8
5	6	7	8	9	10	11	2	3	4	5	6	7	8	9	10	11	12	13	14	15
12	13	14	15	16	17	18	9	10	11	12	13	14	15	16	17	18	19	20	21	22
19	20	21	22	23	24	25	23	24	25	26	27	28	29	23	24	25	26	27	28	29
26	27	28	29	30	31		30	31												

Calendar

	Start	End	Category	Description
9 Feb 2014	5:42 PM	5:42 PM	Sun	Sunset
	6:40 PM	6:40 PM	Jup Sats	II.Sh.I
	6:57 PM	6:57 PM	Sat Pass (ISS)	CHES:ISS Passes W to NE (Azm 329.9 Alt 22)
	7:08 PM	7:08 PM	Twilight	Astronomical Twilight ends
	7:44 PM	7:44 PM	Jup Sats	II.Tr.E
	8:26 PM	8:26 PM	Jup GRS	GRS Transit (CML=207)
	9:23 PM	9:23 PM	Jup Sats	II.Sh.E
10 Feb 2014	3:49 AM	3:49 AM	Moon	Moonset
	4:16 AM	4:16 AM	Jup Sats	I.Oc.D
	4:45 AM	4:45 AM	Sat Pass (HST)	CHES:HST Passes SW to E (Azm 160.0 Alt 18)
	4:52 AM	4:52 AM	Jupiter	Jupiter sets
	5:33 AM	5:33 AM	Twilight	Astronomical Twilight begins
	5:40 AM	5:40 AM	Iridium Flare	CHES:Iridium 26 Flares at mag. 0.4 (Azm 178 Alt 32)
	5:41 AM	5:41 AM	Iridium Flare	CHES:Iridium 11 Flares at mag. 0.7 (Azm 178 Alt 33)
	6:10 AM	6:10 AM	Iridium Flare	CHES:Iridium 29 Flares at mag. 1.3 (Azm 072 Alt 10)
	6:19 AM	6:19 AM	Iridium Flare	CHES:Iridium 31 Flares at mag.-3.4 (Azm 074 Alt 13)
	6:21 AM	6:21 AM	Jup GRS	GRS Transit (CML=207)
	6:26 AM	6:26 AM	Sat Pass (HST)	CHES:HST Passes SW to E (Azm 178.1 Alt 26)
	6:28 AM	6:28 AM	Iridium Flare	CHES:Iridium 30 Flares at mag. 0.6 (Azm 076 Alt 16)
	7:00 AM	7:00 AM	Sun	Sunrise
	2:13 PM	2:13 PM	Moon	Moonrise
	2:17 PM	2:17 PM	Jupiter	Jupiter rises
	4:17 PM	4:17 PM	Jup GRS	GRS Transit (CML=207)
	5:43 PM	5:43 PM	Sun	Sunset
	6:00 PM	6:00 PM	Meetings	NAS Regular Meeting at Chesapeake Public Library Major Hillard branch
	6:07 PM	6:07 PM	Sat Pass (ISS)	CHES:ISS Passes W to NE (Azm 325.6 Alt 34)
	7:09 PM	7:09 PM	Twilight	Astronomical Twilight ends
11 Feb 2014	1:00 AM	1:00 AM	Diary	Jupiter 4.9N of Moon
	1:24 AM	1:24 AM	Jup Sats	I.Tr.I
	2:12 AM	2:12 AM	Jup GRS	GRS Transit (CML=207)
	2:14 AM	2:14 AM	Jup Sats	I.Sh.I
	3:39 AM	3:39 AM	Jup Sats	I.Tr.E
	4:29 AM	4:29 AM	Jup Sats	I.Sh.E
	4:33 AM	4:33 AM	Moon	Moonset
	4:40 AM	4:40 AM	Sat Pass (HST)	CHES:HST Passes SW to E (Azm 151.8 Alt 19)
	4:48 AM	4:48 AM	Jupiter	Jupiter sets
	5:32 AM	5:32 AM	Twilight	Astronomical Twilight begins
	5:35 AM	5:35 AM	Iridium Flare	CHES:Iridium 94 Flares at mag.-7.1 (Azm 177 Alt 32)
	5:36 AM	5:36 AM	Iridium Flare	CHES:Iridium 23 Flares at mag. 0.3 (Azm 180 Alt 33)
	6:04 AM	6:04 AM	Iridium Flare	CHES:Iridium 32 Flares at mag.-5.1 (Azm 071 Alt 10)

Norfolk Astronomical Society Astronomical Calendar

January 2014							February 2014							March 2014						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
				1	2	3	4					1				1				
5	6	7	8	9	10	11	2	3	4	5	6	7	8	2	3	4	5	6	7	8
12	13	14	15	16	17	18	9	10	11	12	13	14	15	9	10	11	12	13	14	15
19	20	21	22	23	24	25	16	17	18	19	20	21	22	16	17	18	19	20	21	22
26	27	28	29	30	31		23	24	25	26	27	28	29	23	24	25	26	27	28	29
							30	31												

Calendar

	Start	End	Category	Description
11 <small>Feb 2014</small>	6:13 AM	6:13 AM	Iridium Flare	CHES:Iridium 91 Flares at mag.-2.7 (Azm 073 Alt 12)
	6:20 AM	6:20 AM	Sat Pass (HST)	CHES:HST Passes W to E (Azm 180.9 Alt 26)
	6:59 AM	6:59 AM	Sun	Sunrise
	12:08 PM	12:08 PM	Jup GRS	GRS Transit (CML=207)
	2:12 PM	2:12 PM	Jupiter	Jupiter rises
	3:05 PM	3:05 PM	Moon	Moonrise
	5:44 PM	5:44 PM	Sun	Sunset
	7:10 PM	7:10 PM	Twilight	Astronomical Twilight ends
	10:04 PM	10:04 PM	Jup GRS	GRS Transit (CML=207)
	10:43 PM	10:43 PM	Jup Sats	I.Oc.D
	11:00 PM	11:00 PM	Diary	Moon at apogee
12 <small>Feb 2014</small>	1:51 AM	1:51 AM	Jup Sats	I.Ec.R
	3:00 AM	3:00 AM	Algol Minima	Algol at mag. +3.4 minimum (+/-5 hours)
	4:34 AM	4:34 AM	Sat Pass (HST)	CHES:HST Passes SW to E (Azm 144.2 Alt 20)
	4:44 AM	4:44 AM	Jupiter	Jupiter sets
	5:13 AM	5:13 AM	Moon	Moonset
	5:29 AM	5:29 AM	Iridium Flare	CHES:Iridium 45 Flares at mag.-1.1 (Azm 178 Alt 32)
	5:31 AM	5:31 AM	Twilight	Astronomical Twilight begins
	6:14 AM	6:14 AM	Sat Pass (HST)	CHES:HST Passes W to SE (Azm 184.1 Alt 25)
	6:58 AM	6:58 AM	Sun	Sunrise
	7:59 AM	7:59 AM	Jup GRS	GRS Transit (CML=207)
	2:08 PM	2:08 PM	Jupiter	Jupiter rises
	3:58 PM	3:58 PM	Moon	Moonrise
	5:44 PM	5:44 PM	Iridium Flare	CHES:Iridium 22 Flares at mag.-6.8 (Azm 026 Alt 72)
	5:45 PM	5:45 PM	Sun	Sunset
	5:55 PM	5:55 PM	Jup GRS	GRS Transit (CML=207)
	6:05 PM	6:05 PM	Sat Pass (ISS)	CHES:ISS Passes W to NE (Azm 333.5 Alt 16)
	7:11 PM	7:11 PM	Twilight	Astronomical Twilight ends
	7:41 PM	7:41 PM	Iridium Flare	CHES:Iridium 29 Flares at mag. 1.6 (Azm 020 Alt 35)
	7:51 PM	7:51 PM	Jup Sats	I.Tr.I
	8:42 PM	8:42 PM	Jup Sats	I.Sh.I
	10:06 PM	10:06 PM	Jup Sats	I.Tr.E
	10:58 PM	10:58 PM	Jup Sats	I.Sh.E
13 <small>Feb 2014</small>	3:51 AM	3:51 AM	Jup GRS	GRS Transit (CML=207)
	4:29 AM	4:29 AM	Sat Pass (HST)	CHES:HST Passes SW to E (Azm 137.9 Alt 19)
	4:39 AM	4:39 AM	Jupiter	Jupiter sets
	5:23 AM	5:23 AM	Iridium Flare	CHES:Iridium 20 Flares at mag. 2.0 (Azm 177 Alt 32)
	5:31 AM	5:31 AM	Twilight	Astronomical Twilight begins
	5:49 AM	5:49 AM	Moon	Moonset
	6:08 AM	6:08 AM	Sat Pass (HST)	CHES:HST Passes W to SE (Azm 187.0 Alt 24)

Norfolk Astronomical Society Astronomical Calendar

January 2014							February 2014							March 2014						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
				1	2	3	4					1								1
5	6	7	8	9	10	11	2	3	4	5	6	7	8	2	3	4	5	6	7	8
12	13	14	15	16	17	18	9	10	11	12	13	14	15	9	10	11	12	13	14	15
19	20	21	22	23	24	25	16	17	18	19	20	21	22	16	17	18	19	20	21	22
26	27	28	29	30	31		23	24	25	26	27	28	29	23	24	25	26	27	28	29
							30	31												

Calendar

	Start	End	Category	Description
13 <small>Feb 2014</small>	6:57 AM	6:57 AM	Sun	Sunrise
	1:46 PM	1:46 PM	Jup GRS	GRS Transit (CML=207)
	2:04 PM	2:04 PM	Jupiter	Jupiter rises
	4:53 PM	4:53 PM	Moon	Moonrise
	5:46 PM	5:46 PM	Sun	Sunset
	7:12 PM	7:12 PM	Twilight	Astronomical Twilight ends
	7:34 PM	7:34 PM	Iridium Flare	CHES:Iridium 32 Flares at mag.-1.2 (Azm 021 Alt 36)
	8:20 PM	8:20 PM	Jup Sats	I.Ec.R
	11:42 PM	11:42 PM	Jup GRS	GRS Transit (CML=207)
14 <small>Feb 2014</small>	2:46 AM	2:46 AM	Jup Sats	IV.Oc.D
	4:23 AM	4:23 AM	Sat Pass (HST)	CHES:HST Passes SW to E (Azm 133.8 Alt 17)
	4:35 AM	4:35 AM	Jupiter	Jupiter sets
	5:26 AM	5:26 AM	Iridium Flare	CHES:Iridium 22 Flares at mag. 1.4 (Azm 186 Alt 33)
	5:30 AM	5:30 AM	Twilight	Astronomical Twilight begins
	6:02 AM	6:02 AM	Sat Pass (HST)	CHES:HST Passes W to SE (Azm 190.0 Alt 22)
	6:23 AM	6:23 AM	Moon	Moonset
	6:56 AM	6:56 AM	Sun	Sunrise
	9:38 AM	9:38 AM	Jup GRS	GRS Transit (CML=207)
	2:00 PM	2:00 PM	Jupiter	Jupiter rises
	5:32 PM	5:32 PM	Iridium Flare	CHES:Iridium 47 Flares at mag.-8.4 (Azm 022 Alt 76)
	5:47 PM	5:47 PM	Sun	Sunset
	5:48 PM	5:48 PM	Moon	Moonrise
	7:13 PM	7:13 PM	Twilight	Astronomical Twilight ends
	7:28 PM	7:28 PM	Iridium Flare	CHES:Iridium 58 Flares at mag.-0.9 (Azm 023 Alt 36)
	7:28 PM	7:28 PM	Iridium Flare	CHES:Iridium 33 Flares at mag.-4.3 (Azm 022 Alt 37)
	7:33 PM	7:33 PM	Jup GRS	GRS Transit (CML=207)
	8:00 PM	8:00 PM	Diary	FULL MOON
	11:54 PM	11:54 PM	Algol Minima	Algol at mag. +3.4 minimum (+/-5 hours)
15 <small>Feb 2014</small>	12:17 AM	12:17 AM	Jup Sats	II.Oc.D
	3:00 AM	3:00 AM	Diary	Regulus 4.8N of Moon
	4:18 AM	4:18 AM	Sat Pass (HST)	CHES:HST Passes W to E (Azm 131.4 Alt 15)
	4:31 AM	4:31 AM	Jupiter	Jupiter sets
	5:20 AM	5:20 AM	Iridium Flare	CHES:Iridium 25 Flares at mag. 1.0 (Azm 189 Alt 33)
	5:29 AM	5:29 AM	Twilight	Astronomical Twilight begins
	5:29 AM	5:29 AM	Jup GRS	GRS Transit (CML=207)
	5:56 AM	5:56 AM	Sat Pass (HST)	CHES:HST Passes W to SE (Azm 192.9 Alt 19)
	6:55 AM	6:55 AM	Sun	Sunrise
	6:56 AM	6:56 AM	Moon	Moonset
	1:55 PM	1:55 PM	Jupiter	Jupiter rises
	3:25 PM	3:25 PM	Jup GRS	GRS Transit (CML=207)

Norfolk Astronomical Society Astronomical Calendar

January 2014							February 2014							March 2014						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
				1	2	3	4					1				1				
5	6	7	8	9	10	11	2	3	4	5	6	7	8	2	3	4	5	6	7	8
12	13	14	15	16	17	18	9	10	11	12	13	14	15	9	10	11	12	13	14	15
19	20	21	22	23	24	25	16	17	18	19	20	21	22	16	17	18	19	20	21	22
26	27	28	29	30	31		23	24	25	26	27	28	29	23	24	25	26	27	28	29
							30	31												

Calendar

	Start	End	Category	Description
15 Feb 2014	4:00 PM	4:00 PM	Diary	Mercury inferior conjunction
	5:48 PM	5:48 PM	Sun	Sunset
	6:43 PM	6:43 PM	Moon	Moonrise
	7:14 PM	7:14 PM	Twilight	Astronomical Twilight ends
	7:22 PM	7:22 PM	Iridium Flare	CHES:Iridium 55 Flares at mag.-0.5 (Azm 023 Alt 38)
	9:23 PM	9:23 PM	Jup Sats	III.Tr.I
16 Feb 2014	12:34 AM	12:34 AM	Jup Sats	III.Tr.E
	1:05 AM	1:05 AM	Jup Sats	III.Sh.I
	1:21 AM	1:21 AM	Jup GRS	GRS Transit (CML=207)
	4:12 AM	4:12 AM	Sat Pass (HST)	CHES:HST Passes W to SE (Azm 130.5 Alt 12)
	4:27 AM	4:27 AM	Jupiter	Jupiter sets
	5:14 AM	5:14 AM	Iridium Flare	CHES:Iridium 47 Flares at mag.-2.8 (Azm 189 Alt 33)
	5:27 AM	5:27 AM	Twilight	Astronomical Twilight begins
	5:50 AM	5:50 AM	Sat Pass (HST)	CHES:HST Passes W to SE (Azm 195.7 Alt 16)
	6:54 AM	6:54 AM	Sun	Sunrise
	7:27 AM	7:27 AM	Moon	Moonset
	11:16 AM	11:16 AM	Jup GRS	GRS Transit (CML=207)
	1:46 PM	1:46 PM	Iridium Flare	CHES:Iridium 81 Flares at mag.-4.5 (Azm 209 Alt 41)
	1:51 PM	1:51 PM	Jupiter	Jupiter rises
	5:49 PM	5:49 PM	Sun	Sunset
	7:15 PM	7:15 PM	Twilight	Astronomical Twilight ends
	7:24 PM	7:24 PM	Jup Sats	II.Tr.I
	7:40 PM	7:40 PM	Moon	Moonrise
	9:12 PM	9:12 PM	Jup GRS	GRS Transit (CML=207)
	9:16 PM	9:16 PM	Jup Sats	II.Sh.I
17 Feb 2014	10:05 PM	10:05 PM	Jup Sats	II.Tr.E
	11:59 PM	11:59 PM	Jup Sats	II.Sh.E
	12:00 AM	12:00 AM	Public Holiday	President's Day holiday
	4:07 AM	4:07 AM	Sat Pass (HST)	CHES:HST Passes W to SE (Azm 130.7 Alt 9)
	4:23 AM	4:23 AM	Jupiter	Jupiter sets
	5:07 AM	5:07 AM	Iridium Flare	CHES:Iridium 11 Flares at mag. 0.4 (Azm 187 Alt 34)
	5:26 AM	5:26 AM	Twilight	Astronomical Twilight begins
	6:53 AM	6:53 AM	Sun	Sunrise
	7:08 AM	7:08 AM	Jup GRS	GRS Transit (CML=207)
	7:58 AM	7:58 AM	Moon	Moonset
	1:40 PM	1:40 PM	Iridium Flare	CHES:Iridium 43 Flares at mag.-4.4 (Azm 207 Alt 42)
	1:47 PM	1:47 PM	Jupiter	Jupiter rises
	5:03 PM	5:03 PM	Jup GRS	GRS Transit (CML=207)
	5:50 PM	5:50 PM	Sun	Sunset
	7:15 PM	7:15 PM	Twilight	Astronomical Twilight ends

Norfolk Astronomical Society Astronomical Calendar

January 2014						
S	M	T	W	T	F	S
		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 2014						
S	M	T	W	T	F	S
		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					

March 2014						
S	M	T	W	T	F	S
		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					

Calendar

	Start	End	Category	Description
17 Feb 2014	8:37 PM	8:37 PM	Moon	Moonrise
	8:43 PM	8:43 PM	Algol Minima	Algol at mag. +3.4 minimum (+/-5 hours)
18 Feb 2014	2:59 AM	2:59 AM	Jup GRS	GRS Transit (CML=207)
	3:11 AM	3:11 AM	Jup Sats	I.Tr.I
	4:01 AM	4:01 AM	Sat Pass (HST)	CHES:HST Passes W to SE (Azm 131.8 Alt 7)
	4:19 AM	4:19 AM	Jupiter	Jupiter sets
	5:02 AM	5:02 AM	Iridium Flare	CHES:Iridium 23 Flares at mag. 0.6 (Azm 189 Alt 34)
	5:25 AM	5:25 AM	Twilight	Astronomical Twilight begins
	6:52 AM	6:52 AM	Sun	Sunrise
	8:30 AM	8:30 AM	Moon	Moonset
	12:55 PM	12:55 PM	Jup GRS	GRS Transit (CML=207)
	1:43 PM	1:43 PM	Jupiter	Jupiter rises
	5:51 PM	5:51 PM	Sun	Sunset
	7:16 PM	7:16 PM	Twilight	Astronomical Twilight ends
	9:35 PM	9:35 PM	Moon	Moonrise
	10:50 PM	10:50 PM	Jup GRS	GRS Transit (CML=207)
19 Feb 2014	12:31 AM	12:31 AM	Jup Sats	I.Oc.D
	2:16 AM	2:16 AM	Lunar Occult	Moon occults 5.6 mag. double star ZC1886(R)
	3:46 AM	3:46 AM	Jup Sats	I.Ec.R
	4:14 AM	4:14 AM	Jupiter	Jupiter sets
	5:04 AM	5:04 AM	Iridium Flare	CHES:Iridium 46 Flares at mag. 1.4 (Azm 197 Alt 32)
	5:24 AM	5:24 AM	Twilight	Astronomical Twilight begins
	6:50 AM	6:50 AM	Sun	Sunrise
	8:46 AM	8:46 AM	Jup GRS	GRS Transit (CML=207)
	9:04 AM	9:04 AM	Moon	Moonset
	12:00 PM	12:00 PM	Diary	Spica 1.5S of Moon
	1:39 PM	1:39 PM	Jupiter	Jupiter rises
	5:52 PM	5:52 PM	Sun	Sunset
	6:00 PM	6:00 PM	Diary	Mars 3.1N of Moon
	6:25 PM	6:25 PM	Jup Sats	III.Ec.R
	6:42 PM	6:42 PM	Jup GRS	GRS Transit (CML=207)
	7:07 PM	7:07 PM	Iridium Flare	CHES:Iridium 29 Flares at mag. 0.3 (Azm 017 Alt 47)
	7:17 PM	7:17 PM	Twilight	Astronomical Twilight ends
	8:21 PM	8:21 PM	Sat Pass (ISS)	CHES:ISS Passes NW to SE (Azm 322.9 Alt 8)
	9:39 PM	9:39 PM	Jup Sats	I.Tr.I
	10:34 PM	10:34 PM	Moon	Moonrise
	10:37 PM	10:37 PM	Jup Sats	I.Sh.I
	11:54 PM	11:54 PM	Jup Sats	I.Tr.E

Norfolk Astronomical Society Astronomical Calendar

January 2014							February 2014							March 2014						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
				1	2	3	4					1				1				
5	6	7	8	9	10	11	2	3	4	5	6	7	8	2	3	4	5	6	7	8
12	13	14	15	16	17	18	9	10	11	12	13	14	15	9	10	11	12	13	14	15
19	20	21	22	23	24	25	16	17	18	19	20	21	22	16	17	18	19	20	21	22
26	27	28	29	30	31		23	24	25	26	27	28	29	23	24	25	26	27	28	29
							30	31												

Calendar

	Start	End	Category	Description
20 Feb 2014	12:53 AM	12:53 AM	Jup Sats	I.Sh.E
	4:10 AM	4:10 AM	Jupiter	Jupiter sets
	4:37 AM	4:37 AM	Jup GRS	GRS Transit (CML=207)
	4:58 AM	4:58 AM	Iridium Flare	CHES:Iridium 49 Flares at mag. 0.7 (Azm 199 Alt 32)
	5:23 AM	5:23 AM	Twilight	Astronomical Twilight begins
	6:49 AM	6:49 AM	Sun	Sunrise
	8:09 AM	8:09 AM	Iridium Flare	CHES:Iridium 8 Flares at mag.-5.6 (Azm 102 Alt 29)
	9:41 AM	9:41 AM	Moon	Moonset
	1:34 PM	1:34 PM	Jupiter	Jupiter rises
	2:33 PM	2:33 PM	Jup GRS	GRS Transit (CML=207)
	5:32 PM	5:32 PM	Algol Minima	Algol at mag. +3.4 minimum (+/-5 hours)
	5:53 PM	5:53 PM	Sun	Sunset
	6:58 PM	6:58 PM	Jup Sats	I.Oc.D
	7:00 PM	7:00 PM	Iridium Flare	CHES:Iridium 32 Flares at mag.-4.8 (Azm 019 Alt 48)
	7:18 PM	7:18 PM	Twilight	Astronomical Twilight ends
	7:33 PM	7:33 PM	Sat Pass (ISS)	CHES:ISS Passes NW to E (Azm 358.7 Alt 19)
	10:15 PM	10:15 PM	Jup Sats	I.Ec.R
	11:34 PM	11:34 PM	Moon	Moonrise
21 Feb 2014	12:29 AM	12:29 AM	Jup GRS	GRS Transit (CML=207)
	4:06 AM	4:06 AM	Jupiter	Jupiter sets
	4:52 AM	4:52 AM	Iridium Flare	CHES:Iridium 22 Flares at mag.-1.3 (Azm 196 Alt 34)
	5:22 AM	5:22 AM	Twilight	Astronomical Twilight begins
	6:28 AM	6:28 AM	Iridium Flare	CHES:Iridium 55 Flares at mag.-4.1 (Azm 152 Alt 35)
	6:48 AM	6:48 AM	Sun	Sunrise
	10:22 AM	10:22 AM	Moon	Moonset
	10:24 AM	10:24 AM	Jup GRS	GRS Transit (CML=207)
	1:30 PM	1:30 PM	Jupiter	Jupiter rises
	5:54 PM	5:54 PM	Sun	Sunset
	6:00 PM	6:00 PM	Diary	Saturn 0.3N of Moon Occn
	6:21 PM	6:21 PM	Jup Sats	I.Tr.E
	6:44 PM	6:44 PM	Sat Pass (ISS)	CHES:ISS Passes NW to E (Azm 25.4 Alt 15)
	6:54 PM	6:54 PM	Iridium Flare	CHES:Iridium 58 Flares at mag. 0.9 (Azm 022 Alt 48)
	7:19 PM	7:19 PM	Twilight	Astronomical Twilight ends
	7:22 PM	7:22 PM	Jup Sats	I.Sh.E
	8:18 PM	8:18 PM	Sat Pass (ISS)	CHES:ISS Passes NW to SE (Azm 307.1 Alt 13)
	8:20 PM	8:20 PM	Jup GRS	GRS Transit (CML=207)
22 Feb 2014	12:36 AM	12:36 AM	Moon	Moonrise
	2:40 AM	2:40 AM	Jup Sats	II.Oc.D
	4:02 AM	4:02 AM	Jupiter	Jupiter sets
	5:21 AM	5:21 AM	Twilight	Astronomical Twilight begins

Norfolk Astronomical Society Astronomical Calendar

January 2014						
S	M	T	W	T	F	S
		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 2014						
S	M	T	W	T	F	S
		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

March 2014						
S	M	T	W	T	F	S
		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

Calendar

	Start	End	Category	Description
22 Feb 2014	6:16 AM	6:16 AM	Jup GRS	GRS Transit (CML=207)
	6:47 AM	6:47 AM	Sun	Sunrise
	11:08 AM	11:08 AM	Moon	Moonset
	1:00 PM	1:00 PM	Diary	LAST QUARTER
	1:26 PM	1:26 PM	Jupiter	Jupiter rises
	4:11 PM	4:11 PM	Jup GRS	GRS Transit (CML=207)
	4:52 PM	4:52 PM	Iridium Flare	CHES:Iridium 11 Flares at mag.-8.3 (Azm 323 Alt 86)
	5:55 PM	5:55 PM	Sun	Sunset
	6:48 PM	6:48 PM	Iridium Flare	CHES:Iridium 55 Flares at mag. 0.4 (Azm 022 Alt 50)
	7:20 PM	7:20 PM	Twilight	Astronomical Twilight ends
23 Feb 2014	7:30 PM	7:30 PM	Sat Pass (ISS)	CHES:ISS Passes NW to SE (Azm 4.8 Alt 49)
	10:00 PM	10:00 PM	Jup Sats	IV.Sh.I
	12:56 AM	12:56 AM	Jup Sats	III.Tr.I
	1:36 AM	1:36 AM	Moon	Moonrise
	1:54 AM	1:54 AM	Jup Sats	IV.Sh.E
	2:07 AM	2:07 AM	Jup GRS	GRS Transit (CML=207)
	3:58 AM	3:58 AM	Jupiter	Jupiter sets
	5:20 AM	5:20 AM	Twilight	Astronomical Twilight begins
	6:45 AM	6:45 AM	Sun	Sunrise
	7:42 AM	7:42 AM	Iridium Flare	CHES:Iridium 36 Flares at mag.-5.0 (Azm 097 Alt 23)
	12:01 PM	12:01 PM	Moon	Moonset
	12:03 PM	12:03 PM	Jup GRS	GRS Transit (CML=207)
	1:22 PM	1:22 PM	Jupiter	Jupiter rises
	2:00 PM	2:00 PM	Diary	Neptune at conjunction
	2:21 PM	2:21 PM	Algol Minima	Algol at mag. +3.4 minimum (+/-5 hours)
	5:56 PM	5:56 PM	Sun	Sunset
	6:40 PM	6:40 PM	Sat Pass (ISS)	CHES:ISS Passes NW to E (Azm 33.6 Alt 30)
	7:21 PM	7:21 PM	Twilight	Astronomical Twilight ends
	8:15 PM	8:15 PM	Sat Pass (ISS)	CHES:ISS Passes NW to S (Azm 268.0 Alt 17)
24 Feb 2014	9:48 PM	9:48 PM	Jup Sats	II.Tr.I
	9:59 PM	9:59 PM	Jup GRS	GRS Transit (CML=207)
	11:52 PM	11:52 PM	Jup Sats	II.Sh.I
	12:29 AM	12:29 AM	Jup Sats	II.Tr.E
	2:35 AM	2:35 AM	Moon	Moonrise
	2:35 AM	2:35 AM	Jup Sats	II.Sh.E
	3:54 AM	3:54 AM	Jupiter	Jupiter sets
	5:18 AM	5:18 AM	Twilight	Astronomical Twilight begins
	6:44 AM	6:44 AM	Sun	Sunrise
	7:54 AM	7:54 AM	Jup GRS	GRS Transit (CML=207)
	1:00 PM	1:00 PM	Moon	Moonset

Norfolk Astronomical Society Astronomical Calendar

January 2014							February 2014							March 2014						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
				1	2	3	4					1				1				
5	6	7	8	9	10	11	2	3	4	5	6	7	8	2	3	4	5	6	7	8
12	13	14	15	16	17	18	9	10	11	12	13	14	15	9	10	11	12	13	14	15
19	20	21	22	23	24	25	16	17	18	19	20	21	22	16	17	18	19	20	21	22
26	27	28	29	30	31		23	24	25	26	27	28	29	23	24	25	26	27	28	29
							30	31												

Calendar

	Start	End	Category	Description
24 Feb 2014	1:18 PM	1:18 PM	Jupiter	Jupiter rises
	5:50 PM	5:50 PM	Jup GRS	GRS Transit (CML=207)
	5:57 PM	5:57 PM	Sun	Sunset
	7:22 PM	7:22 PM	Twilight	Astronomical Twilight ends
	7:26 PM	7:26 PM	Sat Pass (ISS)	CHES:ISS Passes NW to SE (Azm 225.3 Alt 48)
25 Feb 2014	3:31 AM	3:31 AM	Moon	Moonrise
	3:46 AM	3:46 AM	Jup GRS	GRS Transit (CML=207)
	3:50 AM	3:50 AM	Jupiter	Jupiter sets
	5:17 AM	5:17 AM	Twilight	Astronomical Twilight begins
	5:35 AM	5:35 AM	Lunar Occult	Moon occults 6.8 mag. double star ZC2745(R)
	6:43 AM	6:43 AM	Sun	Sunrise
	7:00 AM	7:00 AM	Diary	Pluto 2.2S of Moon
	7:30 AM	7:30 AM	Iridium Flare	CHES:Iridium 4 Flares at mag.-4.4 (Azm 117 Alt 18)
	1:14 PM	1:14 PM	Jupiter	Jupiter rises
	1:41 PM	1:41 PM	Jup GRS	GRS Transit (CML=207)
	2:05 PM	2:05 PM	Moon	Moonset
	5:58 PM	5:58 PM	Sun	Sunset
	6:34 PM	6:34 PM	Iridium Flare	CHES:Iridium 33 Flares at mag. 1.1 (Azm 021 Alt 54)
	6:36 PM	6:36 PM	Sat Pass (ISS)	CHES:ISS Passes NW to SE (Azm 41.3 Alt 81)
	7:23 PM	7:23 PM	Twilight	Astronomical Twilight ends
	8:46 PM	8:46 PM	Jup Sats	II.Ec.R
	11:37 PM	11:37 PM	Jup GRS	GRS Transit (CML=207)
26 Feb 2014	1:00 AM	1:00 AM	Diary	Venus 0.3S of Moon Occn
	2:20 AM	2:20 AM	Jup Sats	I.Oc.D
	3:46 AM	3:46 AM	Jupiter	Jupiter sets
	4:22 AM	4:22 AM	Moon	Moonrise
	5:16 AM	5:16 AM	Twilight	Astronomical Twilight begins
	6:07 AM	6:07 AM	Iridium Flare	CHES:Iridium 32 Flares at mag.-4.6 (Azm 161 Alt 39)
	6:42 AM	6:42 AM	Sun	Sunrise
	7:14 AM	7:14 AM	Iridium Flare	CHES:Iridium 34 Flares at mag.-4.8 (Azm 092 Alt 18)
	9:33 AM	9:33 AM	Jup GRS	GRS Transit (CML=207)
	11:10 AM	11:10 AM	Algol Minima	Algol at mag. +3.4 minimum (+/-5 hours)
	1:10 PM	1:10 PM	Jupiter	Jupiter rises
	3:13 PM	3:13 PM	Moon	Moonset
	5:59 PM	5:59 PM	Sun	Sunset
	6:33 PM	6:33 PM	Iridium Flare	CHES:Iridium 29 Flares at mag. 1.6 (Azm 008 Alt 58)
	7:07 PM	7:07 PM	Jup Sats	III.Ec.D
	7:21 PM	7:21 PM	Sat Pass (ISS)	CHES:ISS Passes NW to S (Azm 230.9 Alt 17)
	7:24 PM	7:24 PM	Twilight	Astronomical Twilight ends
	7:28 PM	7:28 PM	Jup GRS	GRS Transit (CML=207)

Norfolk Astronomical Society Astronomical Calendar

January 2014							February 2014							March 2014						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
				1	2	3	4					1				1				
5	6	7	8	9	10	11	2	3	4	5	6	7	8	2	3	4	5	6	7	8
12	13	14	15	16	17	18	9	10	11	12	13	14	15	9	10	11	12	13	14	15
19	20	21	22	23	24	25	16	17	18	19	20	21	22	16	17	18	19	20	21	22
26	27	28	29	30	31		23	24	25	26	27	28	29	23	24	25	26	27	28	29
							30	31												

Calendar

	Start	End	Category	Description
26 Feb 2014	8:16 PM	8:16 PM	Sat Pass (HST)	CHES:HST Passes SW to E (Azm 207.9 Alt 10)
	10:26 PM	10:26 PM	Jup Sats	III.Ec.R
	11:28 PM	11:28 PM	Jup Sats	I.Tr.I
27 Feb 2014	12:33 AM	12:33 AM	Jup Sats	I.Sh.I
	1:43 AM	1:43 AM	Jup Sats	I.Tr.E
	2:48 AM	2:48 AM	Jup Sats	I.Sh.E
	3:42 AM	3:42 AM	Jupiter	Jupiter sets
	5:09 AM	5:09 AM	Moon	Moonrise
	5:15 AM	5:15 AM	Twilight	Astronomical Twilight begins
	5:24 AM	5:24 AM	Jup GRS	GRS Transit (CML=207)
	6:04 AM	6:04 AM	Iridium Flare	CHES:Iridium 28 Flares at mag. 0.1 (Azm 166 Alt 40)
	6:40 AM	6:40 AM	Sun	Sunrise
	7:28 AM	7:28 AM	Iridium Flare	CHES:Iridium 51 Flares at mag.-5.0 (Azm 120 Alt 21)
	7:28 AM	7:28 AM	Iridium Flare	CHES:Iridium 7 Flares at mag.-5.0 (Azm 120 Alt 21)
	1:00 PM	1:00 PM	Diary	Moon at perigee
	1:06 PM	1:06 PM	Jupiter	Jupiter rises
	3:20 PM	3:20 PM	Jup GRS	GRS Transit (CML=207)
	4:00 PM	4:00 PM	Diary	Mercury 2.7S of Moon
	4:24 PM	4:24 PM	Moon	Moonset
	6:00 PM	6:00 PM	Sun	Sunset
	6:26 PM	6:26 PM	Iridium Flare	CHES:Iridium 32 Flares at mag.-1.1 (Azm 010 Alt 59)
	6:31 PM	6:31 PM	Sat Pass (ISS)	CHES:ISS Passes NW to SE (Azm 226.7 Alt 32)
	7:00 PM	7:00 PM	Diary	Mercury stationary
	7:25 PM	7:25 PM	Twilight	Astronomical Twilight ends
	8:10 PM	8:10 PM	Sat Pass (HST)	CHES:HST Passes SW to E (Azm 206.0 Alt 14)
	8:47 PM	8:47 PM	Jup Sats	I.Oc.D
28 Feb 2014	12:10 AM	12:10 AM	Jup Sats	I.Ec.R
	1:16 AM	1:16 AM	Jup GRS	GRS Transit (CML=207)
	3:38 AM	3:38 AM	Jupiter	Jupiter sets
	5:13 AM	5:13 AM	Twilight	Astronomical Twilight begins
	5:52 AM	5:52 AM	Moon	Moonrise
	6:39 AM	6:39 AM	Sun	Sunrise
	11:11 AM	11:11 AM	Jup GRS	GRS Transit (CML=207)
	1:02 PM	1:02 PM	Jupiter	Jupiter rises
	5:35 PM	5:35 PM	Moon	Moonset
	6:01 PM	6:01 PM	Sun	Sunset
	7:00 PM	7:00 PM	Meetings	NAS Observing Session (Gates Co., NC)
	7:00 PM	7:00 PM	Diary	Neptune 4.8S of Moon
	7:01 PM	11:59 PM	Jup Sats	I.Sh.I
	7:26 PM	7:26 PM	Twilight	Astronomical Twilight ends

Norfolk Astronomical Society Astronomical Calendar

January 2014							February 2014							March 2014							
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	
							1	2	3	4				1	2	3	4	5	6	7	8
5	6	7	8	9	10	11	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
12	13	14	15	16	17	18	9	10	11	12	13	14	15	16	17	18	19	20	21	22	
19	20	21	22	23	24	25	16	17	18	19	20	21	22	23	24	25	26	27	28	29	
26	27	28	29	30	31		23	24	25	26	27	28	29	30	31						

Calendar

	Start	End	Category	Description
28 Feb 2014	8:05 PM	8:05 PM	Sat Pass (HST)	CHES:HST Passes SW to E (Azm 202.3 Alt 18)
	8:11 PM	11:59 PM	Jup Sats	I.Tr.E
	8:18 PM	8:18 PM	Iridium Flare	CHES:Iridium 37 Flares at mag.-0.7 (Azm 011 Alt 15)
	9:07 PM	9:07 PM	Jup GRS	GRS Transit (CML=207)
	9:17 PM	11:59 PM	Jup Sats	I.Sh.E