

# Norfolk Astronomical Society



*<http://norfolkastronomical.org>*

September 2014

Monthly Sky Calendar  
Prepared Specifically For  
The Hampton Roads Area

## Upcoming Regular Meetings

<b>DATE</b>	Monday, September 8, 2014
<b>TIME</b>	6 - 8 PM EDT
<b>WHERE</b>	Chesapeake Public Library, Major Hillard branch Conf. Room
<b>TOPIC</b>	Image Processing

<b>DATE</b>	Monday, October 6, 2014
<b>TIME</b>	6 - 8 PM EDT
<b>WHERE</b>	Chesapeake Public Library, Major Hillard branch Conf. Room
<b>TOPIC</b>	Galileo

## M95 - Barred Spiral Galaxy in Leo

Photo By Glendon L. Howell



Glen imaged the barred spiral galaxy M96 in Leo on March 10, 2013. 16 each 4-minute images were acquired through an Orion 80ED refractor with his Starlight-Xpress MX-7C ccd camera, and stacked and processed in AstroArt 4.0 software. Look for more of his work on his website Glen's Universe at <http://www.freewebs.com/howellgl/>.

# Norfolk Astronomical Society Astronomical Calendar

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

## Calendar

	Start	End	Category	Description
<b>1</b> Sep 2014	12:00 AM	12:00 AM	Public Holiday	Labor Day holiday
	1:01 AM	1:01 AM	Meteor Shower	alpha-Aurigids meteor peak (zhr=10)
	1:13 AM	1:13 AM	Jup GRS	GRS Transit (CML=212)
	4:18 AM	4:18 AM	Jupiter	Jupiter rises
	5:09 AM	5:09 AM	Twilight	Astronomical Twilight begins
	6:39 AM	6:39 AM	Sun	Sunrise
	11:09 AM	11:09 AM	Jup GRS	GRS Transit (CML=212)
	1:10 PM	1:10 PM	Moon	Moonrise
	6:14 PM	6:14 PM	Jupiter	Jupiter sets
	7:35 PM	7:35 PM	Sun	Sunset
<b>2</b> Sep 2014	9:05 PM	9:05 PM	Jup GRS	GRS Transit (CML=212)
	9:06 PM	9:06 PM	Twilight	Astronomical Twilight ends
	9:07 PM	9:07 PM	Lunar Occult	Moon occults 6.4 mag. star ZC2316(d)
	11:46 PM	11:46 PM	Moon	Moonset
	4:15 AM	4:15 AM	Jupiter	Jupiter rises
	4:26 AM	4:26 AM	Jup Sats	II.Ec.D
	5:10 AM	5:10 AM	Twilight	Astronomical Twilight begins
	6:39 AM	6:39 AM	Sun	Sunrise
	7:01 AM	7:01 AM	Jup GRS	GRS Transit (CML=212)
	8:00 AM	8:00 AM	Diary	FIRST QUARTER
<b>3</b> Sep 2014	2:09 PM	2:09 PM	Moon	Moonrise
	4:56 PM	4:56 PM	Jup GRS	GRS Transit (CML=212)
	6:11 PM	6:11 PM	Jupiter	Jupiter sets
	7:34 PM	7:34 PM	Sun	Sunset
	9:05 PM	9:05 PM	Twilight	Astronomical Twilight ends
	12:37 AM	12:37 AM	Moon	Moonset
	2:52 AM	2:52 AM	Jup GRS	GRS Transit (CML=212)
	4:12 AM	4:12 AM	Jupiter	Jupiter rises
	5:11 AM	5:11 AM	Twilight	Astronomical Twilight begins
	6:40 AM	6:40 AM	Sun	Sunrise
<b>4</b> Sep 2014	12:48 PM	12:48 PM	Jup GRS	GRS Transit (CML=212)
	3:06 PM	3:06 PM	Moon	Moonrise
	6:00 PM	6:00 PM	Algol Minima	Algol at mag. +3.4 minimum (+/-5 hours)
	6:07 PM	6:07 PM	Jupiter	Jupiter sets
	7:32 PM	7:32 PM	Sun	Sunset
	9:03 PM	9:03 PM	Twilight	Astronomical Twilight ends
	10:44 PM	10:44 PM	Jup GRS	GRS Transit (CML=212)
	1:35 AM	1:35 AM	Moon	Moonset
	4:09 AM	4:09 AM	Jupiter	Jupiter rises

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

## Calendar

	Start	End	Category	Description
<b>4</b> Sep 2014	5:12 AM	5:12 AM	Twilight	Astronomical Twilight begins
	6:41 AM	6:41 AM	Sun	Sunrise
	8:40 AM	8:40 AM	Jup GRS	GRS Transit (CML=212)
	1:00 PM	1:00 PM	Diary	Pluto 2.6S of Moon
	4:01 PM	4:01 PM	Moon	Moonrise
	6:04 PM	6:04 PM	Jupiter	Jupiter sets
	6:35 PM	6:35 PM	Jup GRS	GRS Transit (CML=212)
	7:31 PM	7:31 PM	Sun	Sunset
9:01 PM	9:01 PM	Twilight	Astronomical Twilight ends	
<b>5</b> Sep 2014	2:38 AM	2:38 AM	Moon	Moonsset
	4:06 AM	4:06 AM	Jupiter	Jupiter rises
	4:31 AM	4:31 AM	Jup GRS	GRS Transit (CML=212)
	5:13 AM	5:13 AM	Twilight	Astronomical Twilight begins
	6:42 AM	6:42 AM	Sun	Sunrise
	2:00 PM	2:00 PM	Diary	Venus 0.7N of Regulus
	2:27 PM	2:27 PM	Jup GRS	GRS Transit (CML=212)
	4:52 PM	4:52 PM	Moon	Moonrise
	6:01 PM	6:01 PM	Jupiter	Jupiter sets
	7:29 PM	7:29 PM	Sun	Sunset
9:00 PM	9:00 PM	Twilight	Astronomical Twilight ends	
<b>6</b> Sep 2014	12:23 AM	12:23 AM	Jup GRS	GRS Transit (CML=212)
	3:46 AM	3:46 AM	Moon	Moonsset
	4:03 AM	4:03 AM	Jupiter	Jupiter rises
	5:14 AM	5:14 AM	Twilight	Astronomical Twilight begins
	5:18 AM	5:18 AM	Jup Sats	I.Sh.I
	5:59 AM	5:59 AM	Jup Sats	I.Tr.I
	6:42 AM	6:42 AM	Sun	Sunrise
	10:19 AM	10:19 AM	Jup GRS	GRS Transit (CML=212)
	2:54 PM	2:54 PM	Algol Minima	Algol at mag. +3.4 minimum (+/-5 hours)
	5:40 PM	5:40 PM	Moon	Moonrise
	5:57 PM	5:57 PM	Jupiter	Jupiter sets
	7:28 PM	7:28 PM	Sun	Sunset
	8:14 PM	8:14 PM	Jup GRS	GRS Transit (CML=212)
8:58 PM	8:58 PM	Twilight	Astronomical Twilight ends	
<b>7</b> Sep 2014	4:00 AM	4:00 AM	Jupiter	Jupiter rises
	4:56 AM	4:56 AM	Moon	Moonsset
	5:15 AM	5:15 AM	Twilight	Astronomical Twilight begins
	5:25 AM	5:25 AM	Jup Sats	I.Oc.R
	6:10 AM	6:10 AM	Jup GRS	GRS Transit (CML=212)

# Norfolk Astronomical Society Astronomical Calendar

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

## Calendar

	Start	End	Category	Description
<b>7</b> Sep 2014	6:43 AM	6:43 AM	Sun	Sunrise
	4:06 PM	4:06 PM	Jup GRS	GRS Transit (CML=212)
	5:44 PM	5:44 PM	Iridium Flare	CHES:Iridium 56 Flares at mag.-5.5 (Azm 235 Alt 49)
	5:54 PM	5:54 PM	Jupiter	Jupiter sets
	6:24 PM	6:24 PM	Moon	Moonrise
	7:26 PM	7:26 PM	Sun	Sunset
	8:56 PM	8:56 PM	Twilight	Astronomical Twilight ends
<b>8</b> Sep 2014	1:00 AM	1:00 AM	Diary	Moon at perigee
	2:02 AM	2:02 AM	Jup GRS	GRS Transit (CML=212)
	3:57 AM	3:57 AM	Jupiter	Jupiter rises
	5:16 AM	5:16 AM	Twilight	Astronomical Twilight begins
	5:26 AM	5:26 AM	Iridium Flare	CHES:Iridium 90 Flares at mag.-4.4 (Azm 015 Alt 22)
	5:28 AM	5:28 AM	Iridium Flare	CHES:Iridium 84 Flares at mag. 1.0 (Azm 014 Alt 23)
	6:00 AM	6:00 AM	Diary	Neptune 4.3S of Moon
	6:07 AM	6:07 AM	Moon	Moonset
	6:44 AM	6:44 AM	Sun	Sunrise
	8:20 AM	8:20 AM	Iridium Flare	CHES:Iridium 67 Flares at mag.-5.9 (Azm 114 Alt 36)
	11:57 AM	11:57 AM	Jup GRS	GRS Transit (CML=212)
	5:51 PM	5:51 PM	Jupiter	Jupiter sets
	6:00 PM	6:00 PM	Meetings	NAS Regular Meeting at Chesapeake Public Library Major Hillard branch
	7:05 PM	7:05 PM	Moon	Moonrise
	7:25 PM	7:25 PM	Sun	Sunset
	8:55 PM	8:55 PM	Twilight	Astronomical Twilight ends
9:17 PM	9:17 PM	Iridium Flare	CHES:Iridium 67 Flares at mag. 1.3 (Azm 001 Alt 15)	
9:53 PM	9:53 PM	Jup GRS	GRS Transit (CML=212)	
10:00 PM	10:00 PM	Diary	FULL MOON	
<b>9</b> Sep 2014	3:54 AM	3:54 AM	Jupiter	Jupiter rises
	5:17 AM	5:17 AM	Twilight	Astronomical Twilight begins
	5:22 AM	5:22 AM	Iridium Flare	CHES:Iridium 12 Flares at mag. 0.6 (Azm 014 Alt 21)
	6:45 AM	6:45 AM	Sun	Sunrise
	7:18 AM	7:18 AM	Moon	Moonset
	7:49 AM	7:49 AM	Jup GRS	GRS Transit (CML=212)
	11:43 AM	11:43 AM	Algol Minima	Algol at mag. +3.4 minimum (+/-5 hours)
	5:45 PM	5:45 PM	Jup GRS	GRS Transit (CML=212)
	5:48 PM	5:48 PM	Jupiter	Jupiter sets
	7:17 PM	7:17 PM	Iridium Flare	CHES:Iridium 81 Flares at mag.-5.0 (Azm 180 Alt 65)
	7:23 PM	7:23 PM	Sun	Sunset
	7:45 PM	7:45 PM	Moon	Moonrise
8:53 PM	8:53 PM	Twilight	Astronomical Twilight ends	
9:11 PM	9:11 PM	Iridium Flare	CHES:Iridium 72 Flares at mag.-0.6 (Azm 001 Alt 17)	

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

## Calendar

	Start	End	Category	Description
<b>10</b> Sep 2014	3:41 AM	3:41 AM	Jup GRS	GRS Transit (CML=212)
	3:51 AM	3:51 AM	Jupiter	Jupiter rises
	5:16 AM	5:16 AM	Iridium Flare	CHES:Iridium 86 Flares at mag. 1.8 (Azm 013 Alt 19)
	5:18 AM	5:18 AM	Twilight	Astronomical Twilight begins
	6:46 AM	6:46 AM	Sun	Sunrise
	8:28 AM	8:28 AM	Moon	Moonset
	1:36 PM	1:36 PM	Jup GRS	GRS Transit (CML=212)
	5:44 PM	5:44 PM	Jupiter	Jupiter sets
	7:22 PM	7:22 PM	Sun	Sunset
	8:25 PM	8:25 PM	Moon	Moonrise
	8:51 PM	8:51 PM	Twilight	Astronomical Twilight ends
<b>11</b> Sep 2014	9:02 PM	9:02 PM	Iridium Flare	CHES:Iridium 74 Flares at mag. 1.9 (Azm 003 Alt 20)
	9:04 PM	9:04 PM	Iridium Flare	CHES:Iridium 62 Flares at mag.-1.9 (Azm 002 Alt 19)
	10:00 PM	10:00 PM	Diary	Uranus 1.1S of Moon Occn
	11:32 PM	11:32 PM	Jup GRS	GRS Transit (CML=212)
	3:48 AM	3:48 AM	Jupiter	Jupiter rises
	4:01 AM	4:01 AM	Jup Sats	II.Sh.E
	5:02 AM	5:02 AM	Iridium Flare	CHES:Iridium 90 Flares at mag. 1.8 (Azm 014 Alt 11)
	5:02 AM	5:02 AM	Iridium Flare	CHES:Iridium 56 Flares at mag. 1.9 (Azm 015 Alt 10)
	5:10 AM	5:10 AM	Iridium Flare	CHES:Iridium 52 Flares at mag. 0.1 (Azm 013 Alt 16)
	5:18 AM	5:18 AM	Twilight	Astronomical Twilight begins
	5:33 AM	5:33 AM	Jup Sats	II.Tr.E
6:05 AM	6:05 AM	Lunar Occult	Moon occults 5.2 mag. double star 180(R)	
6:06 AM	6:06 AM	Lunar Occult	Moon occults 6.3 mag. double star 181(r)	
6:46 AM	6:46 AM	Sun	Sunrise	
9:28 AM	9:28 AM	Jup GRS	GRS Transit (CML=212)	
9:36 AM	9:36 AM	Moon	Moonset	
5:41 PM	5:41 PM	Jupiter	Jupiter sets	
7:21 PM	7:21 PM	Sun	Sunset	
7:24 PM	7:24 PM	Jup GRS	GRS Transit (CML=212)	
8:50 PM	8:50 PM	Twilight	Astronomical Twilight ends	
8:58 PM	8:58 PM	Iridium Flare	CHES:Iridium 65 Flares at mag.-4.7 (Azm 002 Alt 21)	
9:05 PM	9:05 PM	Moon	Moonrise	
<b>12</b> Sep 2014	3:45 AM	3:45 AM	Jupiter	Jupiter rises
	4:06 AM	4:06 AM	Jup Sats	IV.Sh.E
	4:32 AM	4:32 AM	Jup Sats	III.Tr.E
	5:19 AM	5:19 AM	Twilight	Astronomical Twilight begins
	5:20 AM	5:20 AM	Jup GRS	GRS Transit (CML=212)
	6:47 AM	6:47 AM	Sun	Sunrise
	7:14 AM	7:14 AM	Iridium Flare	CHES:Iridium 82 Flares at mag.-5.4 (Azm 031 Alt 52)



# Norfolk Astronomical Society Astronomical Calendar

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

## Calendar

	Start	End	Category	Description
<b>15</b> Sep 2014	5:22 AM	5:22 AM	Twilight	Astronomical Twilight begins
	6:50 AM	6:50 AM	Sun	Sunrise
	12:46 PM	12:46 PM	Jup GRS	GRS Transit (CML=212)
	1:38 PM	1:38 PM	Moon	Moonset
	5:28 PM	5:28 PM	Jupiter	Jupiter sets
	7:15 PM	7:15 PM	Sun	Sunset
	8:33 PM	8:33 PM	Iridium Flare	CHES:Iridium 66 Flares at mag.-5.0 (Azm 003 Alt 30)
	8:43 PM	8:43 PM	Twilight	Astronomical Twilight ends
	10:41 PM	10:41 PM	Jup GRS	GRS Transit (CML=212)
11:00 PM	11:00 PM	Diary	LAST QUARTER	
<b>16</b> Sep 2014	12:06 AM	12:06 AM	Moon	Moonrise
	3:34 AM	3:34 AM	Jupiter	Jupiter rises
	5:23 AM	5:23 AM	Twilight	Astronomical Twilight begins
	6:50 AM	6:50 AM	Sun	Sunrise
	8:37 AM	8:37 AM	Jup GRS	GRS Transit (CML=212)
	2:28 PM	2:28 PM	Moon	Moonset
	5:24 PM	5:24 PM	Jupiter	Jupiter sets
	6:33 PM	6:33 PM	Jup GRS	GRS Transit (CML=212)
	6:44 PM	6:44 PM	Iridium Flare	CHES:Iridium 81 Flares at mag.-8.0 (Azm 199 Alt 60)
7:13 PM	7:13 PM	Sun	Sunset	
8:27 PM	8:27 PM	Iridium Flare	CHES:Iridium 21 Flares at mag.-0.6 (Azm 005 Alt 32)	
8:42 PM	8:42 PM	Twilight	Astronomical Twilight ends	
<b>17</b> Sep 2014	12:56 AM	12:56 AM	Moon	Moonrise
	1:51 AM	1:51 AM	Lunar Occult	Moon occults 6.3 mag. double star ZC1003(r)
	3:31 AM	3:31 AM	Jupiter	Jupiter rises
	3:52 AM	3:52 AM	Lunar Occult	Moon occults 7.3 mag. star ZC1011(r)
	4:29 AM	4:29 AM	Jup GRS	GRS Transit (CML=212)
	5:24 AM	5:24 AM	Twilight	Astronomical Twilight begins
	6:51 AM	6:51 AM	Sun	Sunrise
	2:25 PM	2:25 PM	Jup GRS	GRS Transit (CML=212)
	3:13 PM	3:13 PM	Moon	Moonset
5:21 PM	5:21 PM	Jupiter	Jupiter sets	
7:12 PM	7:12 PM	Sun	Sunset	
8:21 PM	8:21 PM	Iridium Flare	CHES:Iridium 70 Flares at mag. 1.5 (Azm 007 Alt 34)	
8:40 PM	8:40 PM	Twilight	Astronomical Twilight ends	
<b>18</b> Sep 2014	12:20 AM	12:20 AM	Jup GRS	GRS Transit (CML=212)
	1:48 AM	1:48 AM	Moon	Moonrise
	2:10 AM	2:10 AM	Algol Minima	Algol at mag. +3.4 minimum (+/-5 hours)
3:28 AM	3:28 AM	Jupiter	Jupiter rises	



# Norfolk Astronomical Society Astronomical Calendar

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

## Calendar

	Start	End	Category	Description
<b>18</b> Sep 2014	3:45 AM	3:45 AM	Jup Sats	II.Sh.I
	5:25 AM	5:25 AM	Twilight	Astronomical Twilight begins
	5:27 AM	5:27 AM	Jup Sats	II.Tr.I
	6:52 AM	6:52 AM	Sun	Sunrise
	10:16 AM	10:16 AM	Jup GRS	GRS Transit (CML=212)
	3:54 PM	3:54 PM	Moon	Moonset
	5:18 PM	5:18 PM	Jupiter	Jupiter sets
	7:10 PM	7:10 PM	Sun	Sunset
	8:12 PM	8:12 PM	Jup GRS	GRS Transit (CML=212)
	8:14 PM	8:14 PM	Iridium Flare	CHES:Iridium 64 Flares at mag. 0.8 (Azm 006 Alt 36)
	8:38 PM	8:38 PM	Twilight	Astronomical Twilight ends
<b>19</b> Sep 2014	2:42 AM	2:42 AM	Moon	Moonrise
	3:25 AM	3:25 AM	Jupiter	Jupiter rises
	5:17 AM	5:17 AM	Jup Sats	III.Tr.I
	5:22 AM	5:22 AM	Jup Sats	III.Sh.E
	5:26 AM	5:26 AM	Twilight	Astronomical Twilight begins
	6:08 AM	6:08 AM	Jup GRS	GRS Transit (CML=212)
	6:53 AM	6:53 AM	Sun	Sunrise
	4:03 PM	4:03 PM	Jup GRS	GRS Transit (CML=212)
	4:31 PM	4:31 PM	Moon	Moonset
	4:59 PM	4:59 PM	Iridium Flare	CHES:Iridium 12 Flares at mag.-4.2 (Azm 248 Alt 29)
	5:14 PM	5:14 PM	Jupiter	Jupiter sets
	7:09 PM	7:09 PM	Sun	Sunset
	8:08 PM	8:08 PM	Iridium Flare	CHES:Iridium 67 Flares at mag. 1.2 (Azm 007 Alt 38)
	8:37 PM	8:37 PM	Twilight	Astronomical Twilight ends
<b>20</b> Sep 2014	1:59 AM	1:59 AM	Jup GRS	GRS Transit (CML=212)
	3:22 AM	3:22 AM	Jupiter	Jupiter rises
	3:32 AM	3:32 AM	Jup Sats	II.Oc.R
	3:35 AM	3:35 AM	Moon	Moonrise
	4:00 AM	4:00 AM	Diary	Jupiter 5.2N of Moon
	5:27 AM	5:27 AM	Twilight	Astronomical Twilight begins
	6:53 AM	6:53 AM	Sun	Sunrise
	11:55 AM	11:55 AM	Jup GRS	GRS Transit (CML=212)
	1:00 PM	1:00 PM	Diary	Moon at apogee
	5:06 PM	5:06 PM	Moon	Moonset
	5:11 PM	5:11 PM	Jupiter	Jupiter sets
	6:00 PM	6:00 PM	Diary	Mercury 0.5S of Spica
	7:07 PM	7:07 PM	Sun	Sunset
	8:02 PM	8:02 PM	Iridium Flare	CHES:Iridium 72 Flares at mag. 1.8 (Azm 008 Alt 39)
	8:35 PM	8:35 PM	Twilight	Astronomical Twilight ends

# Norfolk Astronomical Society Astronomical Calendar

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

## Calendar

	Start	End	Category	Description
<b>20</b> Sep 2014	9:51 PM	9:51 PM	Jup GRS	GRS Transit (CML=212)
	10:59 PM	10:59 PM	Algol Minima	Algol at mag. +3.4 minimum (+/-5 hours)
<b>21</b> Sep 2014	3:19 AM	3:19 AM	Jupiter	Jupiter rises
	4:29 AM	4:29 AM	Moon	Moonrise
	5:03 AM	5:03 AM	Lunar Occult	Moon occults 7.7 mag. star SAO117942(r)
	5:28 AM	5:28 AM	Twilight	Astronomical Twilight begins
	6:12 AM	6:12 AM	Jup Sats	I.Ec.D
	6:54 AM	6:54 AM	Sun	Sunrise
	7:47 AM	7:47 AM	Jup GRS	GRS Transit (CML=212)
	12:00 PM	12:00 PM	Diary	Regulus 4.4N of Moon
	2:00 PM	2:00 PM	Diary	Mercury greatest elong E(26)
	5:07 PM	5:07 PM	Jupiter	Jupiter sets
	5:38 PM	5:38 PM	Moon	Moonset
	5:42 PM	5:42 PM	Jup GRS	GRS Transit (CML=212)
<b>22</b> Sep 2014	7:06 PM	7:06 PM	Sun	Sunset
	7:58 PM	7:58 PM	Iridium Flare	CHES:Iridium 74 Flares at mag. 0.1 (Azm 007 Alt 41)
	8:33 PM	8:33 PM	Twilight	Astronomical Twilight ends
	3:16 AM	3:16 AM	Jupiter	Jupiter rises
	3:34 AM	3:34 AM	Jup Sats	I.Sh.I
	3:38 AM	3:38 AM	Jup GRS	GRS Transit (CML=212)
	4:27 AM	4:27 AM	Jup Sats	I.Tr.I
	5:24 AM	5:24 AM	Moon	Moonrise
	5:29 AM	5:29 AM	Twilight	Astronomical Twilight begins
	5:51 AM	5:51 AM	Jup Sats	I.Sh.E
	6:19 AM	6:19 AM	Iridium Flare	CHES:Iridium 17 Flares at mag.-1.5 (Azm 013 Alt 41)
	6:23 AM	6:23 AM	Iridium Flare	CHES:Iridium 15 Flares at mag. 0.3 (Azm 012 Alt 42)
6:55 AM	6:55 AM	Sun	Sunrise	
9:00 AM	9:00 AM	Diary	Pluto stationary	
1:34 PM	1:34 PM	Jup GRS	GRS Transit (CML=212)	
5:04 PM	5:04 PM	Jupiter	Jupiter sets	
6:10 PM	6:10 PM	Moon	Moonset	
6:17 PM	6:17 PM	Iridium Flare	CHES:Iridium 80 Flares at mag.-4.7 (Azm 211 Alt 53)	
7:04 PM	7:04 PM	Sun	Sunset	
8:32 PM	8:32 PM	Twilight	Astronomical Twilight ends	
11:00 PM	11:00 PM	Diary	Equinox	
11:29 PM	11:29 PM	Jup GRS	GRS Transit (CML=212)	
<b>23</b> Sep 2014	3:13 AM	3:13 AM	Jupiter	Jupiter rises
	3:54 AM	3:54 AM	Jup Sats	I.Oc.R
	5:30 AM	5:30 AM	Twilight	Astronomical Twilight begins

# Norfolk Astronomical Society Astronomical Calendar

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

## Calendar

	Start	End	Category	Description
<b>23</b> Sep 2014	6:17 AM	6:17 AM	Iridium Flare	CHES:Iridium 41 Flares at mag.-4.2 (Azm 013 Alt 40)
	6:19 AM	6:19 AM	Moon	Moonrise
	6:56 AM	6:56 AM	Sun	Sunrise
	8:00 AM	8:00 AM	Diary	Venus 3.8N of Moon
	9:25 AM	9:25 AM	Jup GRS	GRS Transit (CML=212)
	5:01 PM	5:01 PM	Jupiter	Jupiter sets
	6:41 PM	6:41 PM	Moon	Moonset
	7:03 PM	7:03 PM	Sun	Sunset
	7:21 PM	7:21 PM	Jup GRS	GRS Transit (CML=212)
	7:48 PM	7:48 PM	Algol Minima	Algol at mag. +3.4 minimum (+/-5 hours)
8:30 PM	8:30 PM	Twilight	Astronomical Twilight ends	
<b>24</b> Sep 2014	2:00 AM	2:00 AM	Diary	NEW MOON
	3:09 AM	3:09 AM	Jupiter	Jupiter rises
	5:17 AM	5:17 AM	Jup GRS	GRS Transit (CML=212)
	5:31 AM	5:31 AM	Twilight	Astronomical Twilight begins
	6:11 AM	6:11 AM	Iridium Flare	CHES:Iridium 42 Flares at mag.-2.0 (Azm 014 Alt 38)
	6:11 AM	6:11 AM	Iridium Flare	CHES:Iridium 98 Flares at mag. 0.1 (Azm 015 Alt 38)
	6:57 AM	6:57 AM	Sun	Sunrise
	7:10 AM	7:10 AM	Iridium Flare	CHES:Iridium 14 Flares at mag.-7.5 (Azm 147 Alt 46)
	7:14 AM	7:14 AM	Moon	Moonrise
	3:13 PM	3:13 PM	Jup GRS	GRS Transit (CML=212)
4:57 PM	4:57 PM	Jupiter	Jupiter sets	
7:01 PM	7:01 PM	Sun	Sunset	
7:12 PM	7:12 PM	Moon	Moonset	
8:29 PM	8:29 PM	Twilight	Astronomical Twilight ends	
<b>25</b> Sep 2014	1:08 AM	1:08 AM	Jup GRS	GRS Transit (CML=212)
	3:06 AM	3:06 AM	Jupiter	Jupiter rises
	5:31 AM	5:31 AM	Twilight	Astronomical Twilight begins
	6:05 AM	6:05 AM	Iridium Flare	CHES:Iridium 80 Flares at mag. 0.1 (Azm 014 Alt 36)
	6:20 AM	6:20 AM	Jup Sats	IL.Sh.I
	6:57 AM	6:57 AM	Sun	Sunrise
	8:11 AM	8:11 AM	Moon	Moonrise
	11:04 AM	11:04 AM	Jup GRS	GRS Transit (CML=212)
	4:54 PM	4:54 PM	Jupiter	Jupiter sets
	7:00 PM	7:00 PM	Sun	Sunset
7:46 PM	7:46 PM	Moon	Moonset	
8:27 PM	8:27 PM	Twilight	Astronomical Twilight ends	
9:00 PM	9:00 PM	Jup GRS	GRS Transit (CML=212)	
11:00 PM	11:00 PM	Diary	Spica 2.4S of Moon	

# Norfolk Astronomical Society Astronomical Calendar

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

## Calendar

	Start	End	Category	Description
<b>26</b> Sep 2014	3:03 AM	3:03 AM	Jupiter	Jupiter rises
	5:32 AM	5:32 AM	Twilight	Astronomical Twilight begins
	5:47 AM	5:47 AM	Jup Sats	III.Sh.I
	5:59 AM	5:59 AM	Iridium Flare	CHES:Iridium 81 Flares at mag.-0.1 (Azm 012 Alt 35)
	6:56 AM	6:56 AM	Jup GRS	GRS Transit (CML=212)
	6:58 AM	6:58 AM	Sun	Sunrise
	8:25 AM	8:25 AM	Iridium Flare	CHES:Iridium 11 Flares at mag.-4.0 (Azm 109 Alt 22)
	9:00 AM	9:00 AM	Diary	Mercury 4.0S of Moon
	9:08 AM	9:08 AM	Moon	Moonrise
	4:37 PM	4:37 PM	Algol Minima	Algol at mag. +3.4 minimum (+/-5 hours)
	4:51 PM	4:51 PM	Jupiter	Jupiter sets
	4:51 PM	4:51 PM	Jup GRS	GRS Transit (CML=212)
	6:58 PM	6:58 PM	Sun	Sunset
	7:00 PM	7:00 PM	Meetings	NAS Observing Session (Gates Co., NC)
	8:21 PM	8:21 PM	Moon	Moonsset
	8:25 PM	8:25 PM	Twilight	Astronomical Twilight ends
<b>27</b> Sep 2014	2:47 AM	2:47 AM	Jup GRS	GRS Transit (CML=212)
	3:00 AM	3:00 AM	Jupiter	Jupiter rises
	5:33 AM	5:33 AM	Twilight	Astronomical Twilight begins
	5:52 AM	5:52 AM	Iridium Flare	CHES:Iridium 38 Flares at mag. 1.9 (Azm 006 Alt 33)
	6:17 AM	6:17 AM	Jup Sats	II.Oc.R
	6:59 AM	6:59 AM	Sun	Sunrise
	10:06 AM	10:06 AM	Moon	Moonrise
	12:43 PM	12:43 PM	Jup GRS	GRS Transit (CML=212)
	4:47 PM	4:47 PM	Jupiter	Jupiter sets
	6:57 PM	6:57 PM	Sun	Sunset
	8:24 PM	8:24 PM	Twilight	Astronomical Twilight ends
	9:01 PM	9:01 PM	Moon	Moonsset
	10:39 PM	10:39 PM	Jup GRS	GRS Transit (CML=212)
<b>28</b> Sep 2014	1:00 AM	1:00 AM	Diary	Saturn 0.7S of Moon Occn
	2:57 AM	2:57 AM	Jupiter	Jupiter rises
	5:34 AM	5:34 AM	Twilight	Astronomical Twilight begins
	7:00 AM	7:00 AM	Sun	Sunrise
	8:35 AM	8:35 AM	Jup GRS	GRS Transit (CML=212)
	9:00 AM	9:00 AM	Diary	Mars 3.1N of Antares
	11:05 AM	11:05 AM	Moon	Moonrise
	4:44 PM	4:44 PM	Jupiter	Jupiter sets
	6:30 PM	6:30 PM	Jup GRS	GRS Transit (CML=212)
	6:55 PM	6:55 PM	Sun	Sunset
	7:22 PM	7:22 PM	Iridium Flare	CHES:Iridium 62 Flares at mag. 1.0 (Azm 359 Alt 53)

# Norfolk Astronomical Society Astronomical Calendar

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

## Calendar

	Start	End	Category	Description
<b>28</b> Sep 2014	8:22 PM	8:22 PM	Twilight	Astronomical Twilight ends
	9:44 PM	9:44 PM	Moon	Moonset
<b>29</b> Sep 2014	2:54 AM	2:54 AM	Jupiter	Jupiter rises
	4:26 AM	4:26 AM	Jup GRS	GRS Transit (CML=212)
	5:27 AM	5:27 AM	Jup Sats	I.Sh.I
	5:35 AM	5:35 AM	Twilight	Astronomical Twilight begins
	6:26 AM	6:26 AM	Jup Sats	I.Tr.I
	7:01 AM	7:01 AM	Sun	Sunrise
	12:03 PM	12:03 PM	Moon	Moonrise
	1:26 PM	1:26 PM	Algol Minima	Algol at mag. +3.4 minimum (+/-5 hours)
	2:22 PM	2:22 PM	Jup GRS	GRS Transit (CML=212)
	3:00 PM	3:00 PM	Diary	Mars 5.6S of Moon
	4:40 PM	4:40 PM	Jupiter	Jupiter sets
	6:54 PM	6:54 PM	Sun	Sunset
	8:21 PM	8:21 PM	Twilight	Astronomical Twilight ends
10:33 PM	10:33 PM	Moon	Moonset	
<b>30</b> Sep 2014	12:18 AM	12:18 AM	Jup GRS	GRS Transit (CML=212)
	2:51 AM	2:51 AM	Jupiter	Jupiter rises
	3:25 AM	3:25 AM	Jup Sats	III.Oc.R
	5:36 AM	5:36 AM	Twilight	Astronomical Twilight begins
	5:52 AM	5:52 AM	Jup Sats	I.Oc.R
	7:02 AM	7:02 AM	Sun	Sunrise
	10:13 AM	10:13 AM	Jup GRS	GRS Transit (CML=212)
	1:00 PM	1:00 PM	Moon	Moonrise
	4:37 PM	4:37 PM	Jupiter	Jupiter sets
	6:52 PM	6:52 PM	Sun	Sunset
	8:09 PM	8:09 PM	Jup GRS	GRS Transit (CML=212)
8:19 PM	8:19 PM	Twilight	Astronomical Twilight ends	
11:27 PM	11:59 PM	Moon	Moonset	