

IO – December 2006

Issue 2006-12

Eugene Astronomical Society,
Annual Club Dues \$25, Board Members:
President: Sam Pitts - 688-7330
Secretary: Jerry Oltion
Jacob Strandlien,

www.eugeneastro.org

EAS is a Proud Member of:



IO editor- sampitts@comcast.net 688-7330
Io (*EYE-oh*) is nearest to Jupiter and fastest orbiting of the four Galilean moons

Monday- December 4th MEETING EUGENE ASTRONOMICAL SOCIETY At The Science Factory Planetarium

The December meeting will host a white elephant/ swap meet sale. It's time to look over your astronomy equipment and bring it to the December meeting to sell or swap it with others. Members are also requested to bring in their Astro-photos, preferably in jpeg, gif or tiff format to share with other with the clubs LCD projector and give a short talk about their endeavors over the past year. After the meeting we can meet at the North Bank Restaurant for a snack and conversation.

The meeting will begin at **7:00 PM** in the Planetarium. It is time to pay your Membership Dues. Special raffle for EAS Members for an 8" telescope, raffle will continue until 100 tickets are sold to EAS members. Tickets are \$ 5.00 each or 5 tickets for \$20.00 for a chance for club members to win and Orion 8" Dobsonian Telescope. Come on out and visit with fellow astronomers and discuss and plan future events and star parties.

EAS & its members are dedicated to having fun while pursuing the hobby of Astronomy, so come on out and have some fun visiting with others who share a passion for the night skies.

Come early and help others learn about their scopes. Individuals who are new to the hobby or not sure about your equipment should show up early; EAS members will assist you in understanding your equipment better. If you are planning on purchasing a scope in the near future, please come to a meeting and learn more about astronomical equipment. EAS has knowledgeable members with first hand experience regarding all types of telescopes & mounts. They would be glad to assist you in making a good solid choice to maximize your viewing pleasure.

The Science Factory is at 2300 Leo Harris Parkway, behind Autzen Stadium.

Check EAS WEB site for up to the minute Information

www.eugeneastro.org

"Be sure to bring items to sell or swap to our next meeting"

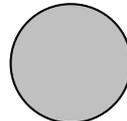
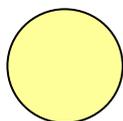
EAS & 2007

We will continue to have our regular meeting on the 1st Monday of the month at the Science Factory Children's Museum & Planetarium, 2300 Leo Harris Parkway, Eugene, OR. The EAS Board will be meeting the 2nd Monday of the month in 2007, at the EWEB North building to conduct club business, 6:30- 8:00 PM. EAS club members are always welcome to attend and listen to the proceedings. The Board is always open to suggestions and opinions from the membership. The Board strives to make decisions and operate the club based on the desires of general membership.

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Observing in December



December 4	December 12	December 20	December 27
Mercury Rise 5:57 AM	Mercury Rise 6:29 AM	Mercury Rise 7:01 AM	Mercury Rise 7:27AM
Venus Set 5:07 PM	Venus Set 5:16 PM	Venus Set 5:30 PM	Venus Set 5:45 PM
Mars Rise 6:24 AM	Mars Rise 6:22 AM	Mars Rise 6:19 AM	Mars Rise 6:17 AM
Jupiter Rise 6:39 AM	Jupiter Rise 6:17 AM	Jupiter Rise 5:54 AM	Jupiter Rise 5:34 AM
Saturn Rise 10:07 PM	Saturn Rise 9:35 PM	Saturn Rise 9:03 PM	Saturn Rise 8:34 PM
Uranus Set 11:38 PM	Uranus Set 11:37 PM	Uranus Set 10:37 PM	Uranus Set 10:10 PM
Neptune Set 9:36 PM	Neptune Set 9:05 PM	Neptune Set 8:35 PM	Neptune Set 8:08 PM
Pluto Set 5:57 PM	Pluto Set 5:27 PM	Pluto Set 4:56 PM	Pluto Set 4:30 PM

All times: U.S. Pacific Daylight Time (May-October) = UT - 7 hours. Pacific Standard Time (Nov.-April) = UT-8

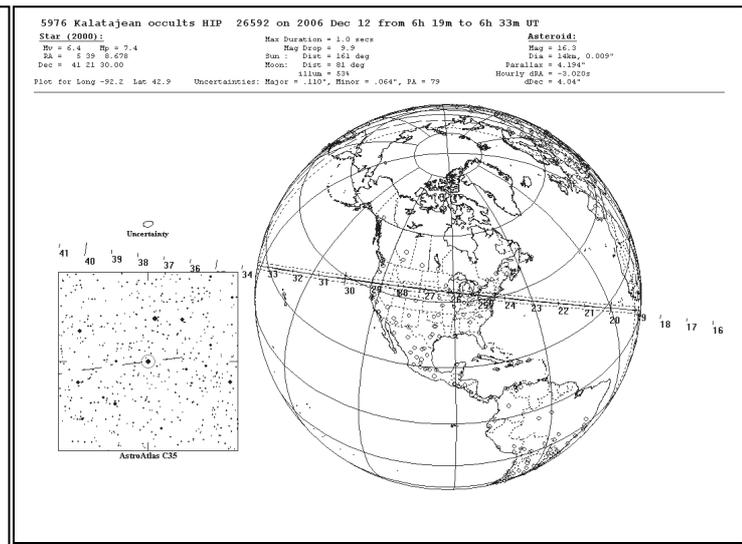
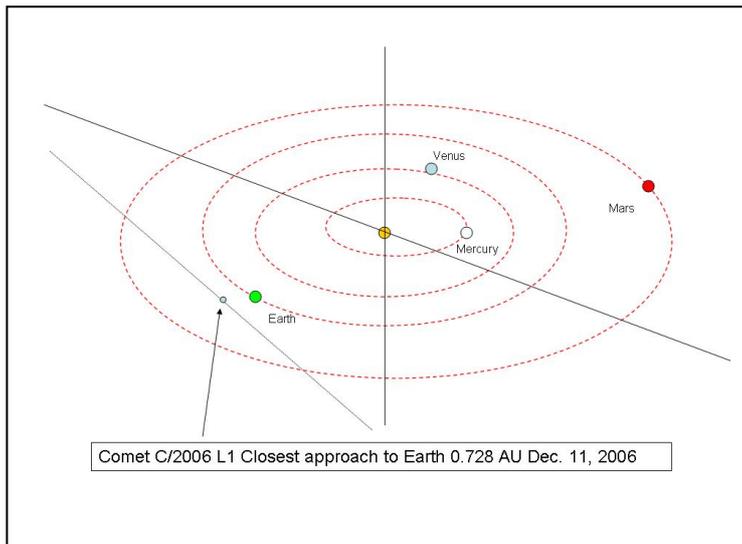
Date	Moonrise	Moonset	Sunrise	Sunset	Twilight	Twilight
12/1/2006	14:16	03:29	07:28	16:35	05:44	18:18
12/2/2006	14:43	04:49	07:29	16:35	05:45	18:18
12/3/2006	15:17	06:11	07:30	16:35	05:46	18:18
12/4/2006	16:01	07:32	07:31	16:34	05:47	18:18
12/5/2006	16:55	08:44	07:32	16:34	05:48	18:18
12/6/2006	18:00	09:45	07:33	16:34	05:49	18:18
12/7/2006	19:11	10:31	07:34	16:34	05:50	18:18
12/8/2006	20:22	11:07	07:35	16:34	05:50	18:18
12/9/2006	21:32	11:34	07:36	16:34	05:51	18:18
12/10/2006	22:37	11:56	07:37	16:34	05:52	18:18
12/11/2006	23:42	12:14	07:37	16:34	05:53	18:18
12/12/2006	-----	12:30	07:38	16:34	05:54	18:19
12/13/2006	00:43	12:47	07:39	16:34	05:54	18:19
12/14/2006	01:46	13:03	07:40	16:34	05:55	18:19
12/15/2006	02:49	13:22	07:41	16:35	05:56	18:19
12/16/2006	03:55	13:44	07:41	16:35	05:56	18:20
12/17/2006	05:03	14:10	07:42	16:35	05:57	18:20
12/18/2006	06:12	14:45	07:43	16:35	05:58	18:20
12/19/2006	07:20	15:31	07:43	16:36	05:58	18:21
12/20/2006	08:22	16:28	07:44	16:36	05:59	18:21
12/21/2006	09:14	17:37	07:44	16:37	05:59	18:22
12/22/2006	09:56	18:52	07:45	16:37	06:00	18:22
12/23/2006	10:29	20:11	07:45	16:38	06:00	18:23
12/24/2006	10:55	21:29	07:46	16:38	06:01	18:23
12/25/2006	11:18	22:44	07:46	16:39	06:01	18:24
12/26/2006	11:38	-----	07:46	16:40	06:01	18:25
12/27/2006	11:58	00:00	07:47	16:40	06:02	18:25
12/28/2006	12:19	01:16	07:47	16:41	06:02	18:26
12/29/2006	12:44	02:33	07:47	16:42	06:02	18:27
12/30/2006	13:14	03:53	07:47	16:43	06:02	18:27
12/31/2006	13:52	05:11	07:47	16:44	06:03	18:28

All times are for Eugene, Oregon Latitude 44° 3' 8" Longitude 123° 5' 8" for listed Date

Events

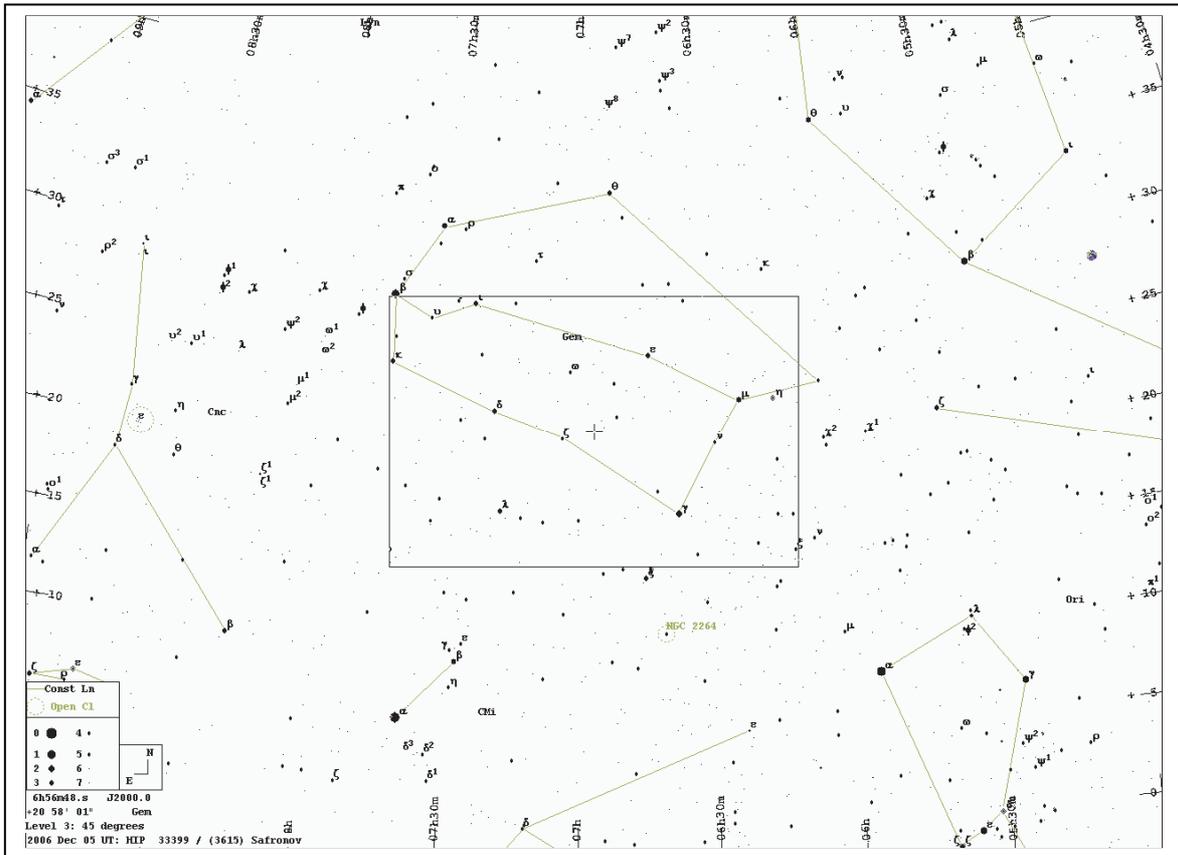
December 2006

2	Comet Shoemaker-Levy 6 Closest Approach To Earth (0.906 AU) ; Asteroid 2006 PA1 Near-Earth Flyby (0.066 AU)
3	Moon Occults Asteroid 7 Iris
4	Asteroid 39 Laetitia At Opposition (9.7 Magnitude); Asteroid 2006 WB Near-Earth Flyby (0.018 AU); 10th Anniversary (1996), Mars Pathfinder Launch; Wilhelm Tempel's 185th Birthday (1821); EAS Meeting
5	Asteroid 3615 Sfronov Occults HIP 33399 (7.4 Magnitude Star)
10	Moon Occults Saturn (Greenland, n.w. Europe); Asteroid 2006 WT1 Near-Earth Flyby (0.085 AU)
11	Comet C/2006 L1 (Garradd) Closest Approach To Earth (0.733 AU); Asteroid 2006 VC Near-Earth Flyby (0.083 AU)
12	Cassini, Titan Flyby; Asteroid 5976 Kalatajean Occults HIP 26592 (6.4 Magnitude Star); Asteroid 2003 SM215 Near-Earth Flyby (0.082 AU)
13	Geminids Meteor Shower Peak
14	Tycho Brahe's 460th Birthday (1546)
15	Asteroid 2006 US216 Near-Earth Flyby (0.067 AU)
20	Asteroid 2004 XL14 Near-Earth Flyby (0.028 AU)
21	Winter Solstice 16:22 PST (4:22 PM)
22	Winter Solstice, 00:22 UT; Ursids Meteor Shower Peak
24	Asteroid 2003 UR12 Near-Vesta Flyby (0.039 AU)
25	Moon Occults Uranus (n.w. Africa, w. Iberia) ; Merry Christmas ;
26	Asteroid 2004 YG1 Near-Earth Flyby (0.099 AU)
27	Asteroid 2006 WH1 Near-Earth Flyby (0.036 AU); Johannes Kepler's 435th Birthday (1571)
28	Cassini, Titan Flyby



Asteroid 5976 Kalatajean Occults HIP 26592 (6.4 Magnitude Star)

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3615 Sfronov occults HIP 33399 on 2006 Dec 05 from 6h 2m to 6h 19m UT

Star (2000):

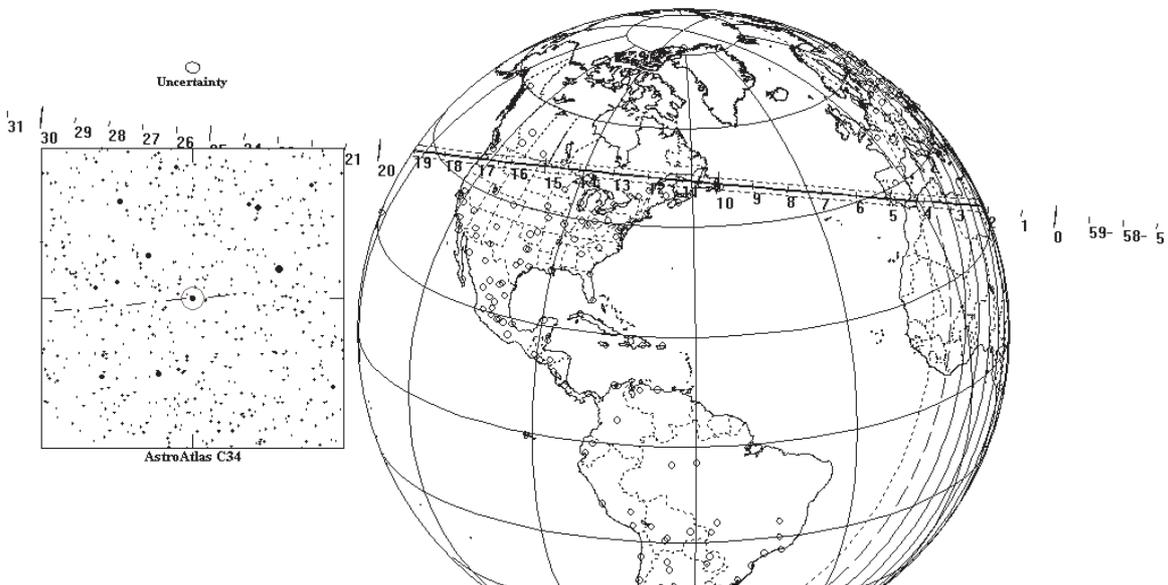
Mv = 7.4 Mp = 7.3
 RA = 6 56 48.568
 Dec = 20 58 1.78

Max Duration = 1.7 secs
 Mag Drop = 9.2
 Sun : Dist = 150 deg
 Moon: Dist = 28 deg
 illum = 100%

Asteroid:

Mag = 16.6
 Dia = 19km, 0.010"
 Parallax = 3.385"
 Hourly dRA = -1.506s
 dDec = 2.08"

Plot for Long -58.2 Lat 48.5 Uncertainties: Major = .074", Minor = .056", PA = 94



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Mercury Transit

Several Eugene astronomical Society members patiently waited for a few "sucker-holes" to steal a glimpse the Mercury Transit from Eugene on November 8, 2006. Below are some very nice images capturing the Mercury transit.

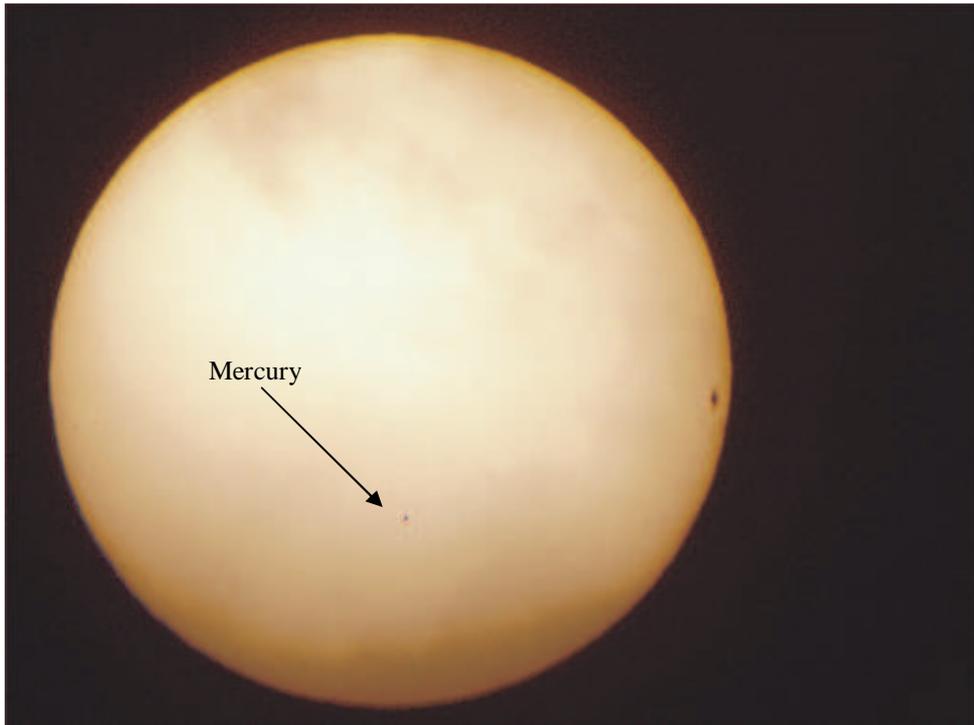


Image by James Jackson ©

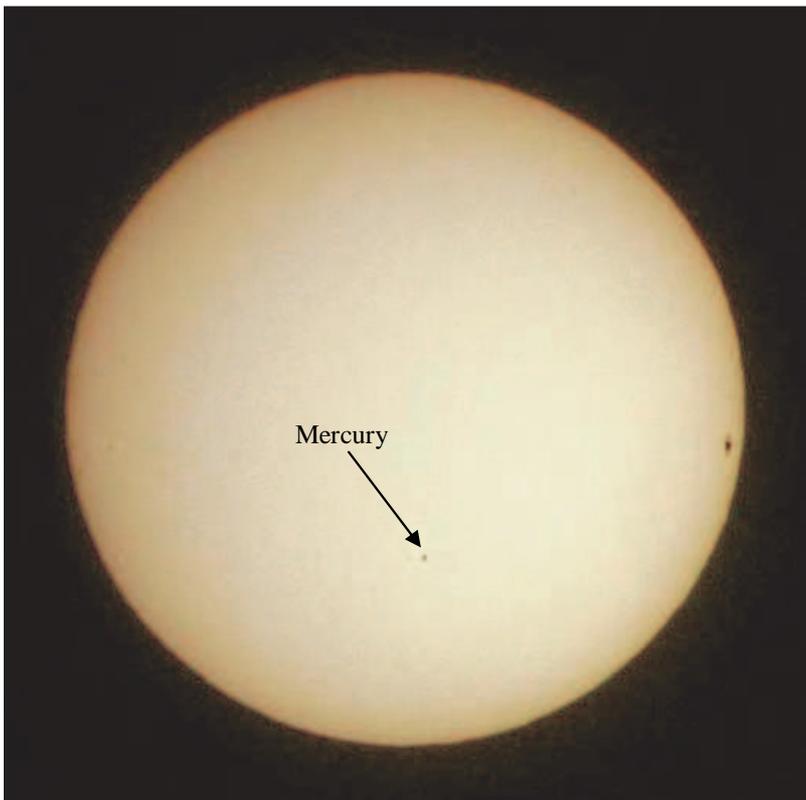


Image by Jerry Oltion ©

"Images modified in PhotoShop for publication"

Orion

Orion is arguably the most recognized constellation in our skies and home of many wonderful sites. Small telescopes reveal the faint nebulae, while larger instruments explore hidden pockets of star formation. It's a true gem for amateur astronomers. The Great Orion Nebula M42 and the Horsehead IC 434 are some of the most photographed objects in the sky.

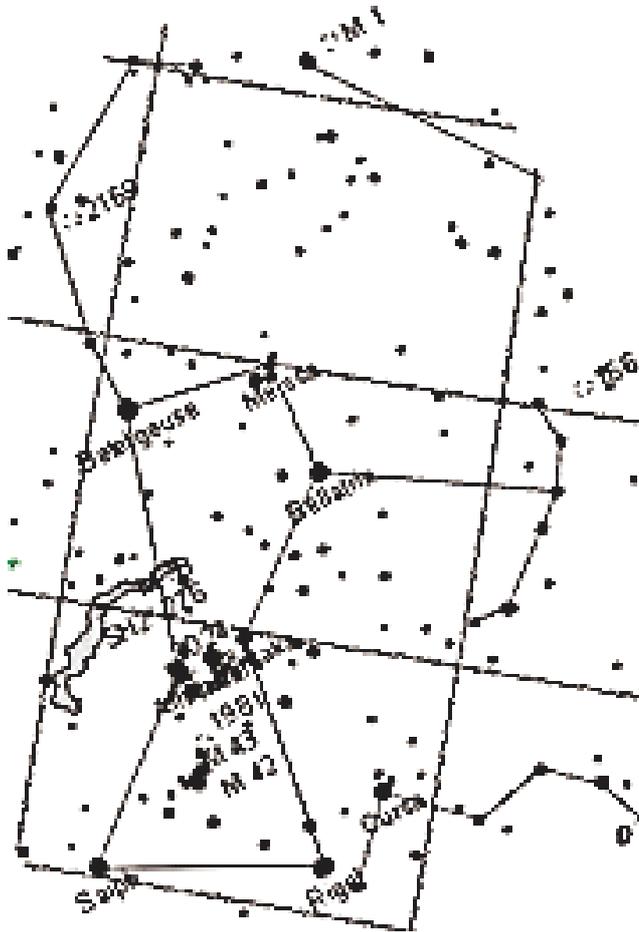
Orion has long been viewed by mankind from all cultures and the stories are rich in lore.

Mesopotamia: Orion is called An or Anu. This name for the constellation of Orion is a variation of the Sumerian Uru-anna, Light of the Sky.

Egypt: solar god Horus. The Pyramids represent the Stars in Orion with the Nile representing the Milky Way.

Greece: The Great Hunter, a son given to Irius by Zeus, Poseidon and Mercury. Orion became a great Hunter, womanizer and friend and lover of the goddess Artemis. Artemis was the sister of Apollo who disapproved of this relationship and placed a scorpion to kill Orion. Orion chased the scorpion into the ocean and swam after it. Apollo tricked Artemis into shooting at Orion and she killed her lover with one arrow. Artemis appealed to Zeus who placed Orion in the sky and the scorpion was placed opposite Orion. When Orion rises, the scorpion sets; the two shall never meet.

Two daughters of Atlas, the Pleiades and the Hyades, were objects of Orion's unwanted affection. The constellation Taurus represents the Ox slain by Irius and served as dinner to Zeus, Poseidon and Mercury.



Three real nice images of our planetary neighbors captured this year by Jeff Phillips using an 8" telescope & webcam.