

IO – January 2005

Issue # 2005-01

www.eugeneastro.org

Eugene Astronomical Society, Annual Club Dues \$25, President: AC Illig, Treasurer: Rossco Wright, Secretary Alicia McGraw
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Io (*EYE-oh*) is nearest to Jupiter and fastest orbiting of the four Galilean moons

EAS is a Proud Member of:

The Astronomical League
The World's Largest Federation of Amateur Astronomers

Monday- January 3rd MEETING EUGENE ASTRONOMICAL SOCIETY At The Science Factory Planetarium

The meeting will begin at **7:00 PM** in the Planetarium. Come early and help others learn about their scopes. Those of you, who are new or not sure about your equipment, show up early and some of our members will assist you in understanding your equipment better. If you are planning on getting a scope please come out and ask questions, we're 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

EAS Picnic & Meeting was a Hugh Success

The Club Meeting and Picnic kicked off around 12: Noon and continued until around 7PM with lots of great food and company. The Swamp Meet table had many desirable items including several Telescopes. A fun time was had by all and some nice Jazz and Blues filled the room in the late hours of the meeting. Some of our club members are quite talented.

If you missed it you sure missed a great meeting and fun get together with fellow club members. Hope there will be more of these in the future.



Magazine subscriptions go to Richard Boyd: checkerkit@aol.com



Join the user List!

Keep in-touch with Members and Events!

<http://lists.cmc.net/cgi-bin/mailman/listinfo/eugeneastro>



What's Out This Month

Comet Machholz continues to move Northward and brighten. Many EAS members have spotted this comet from various locations from within Eugene at College Hill Reservoir and rural dark skies. The observations of this comet have been limited locally due to low clouds, fog and rain. Keep an eye out around the Pleiades on January 8th, it may reach Magnitude 4 or 5 and present a nice photo-op if the skies clear. Early January look for it in Taurus. Refer to last months sky map and page 85 in Sky & Telescope's January 2005 issue.

Saturn is now nice and high early and by midnight it is prime for detailed observing. Get those web cameras out. Try your digital at afocal. EAS member Jerry Oltion has taken some nice shots of Saturn this way. See his images in the IO Gallery this month.

Jupiter is still an early morning object but is climbing rapidly and better view are forthcoming in mid to late January. You can try and view Jupiter in the daytime with success.

The Quadrantid meteor shower will peak on January 3rd, within six hours of 4 AM. The meteors will radiate between the Big Dipper's handle & the head of Draco

Sam

Transits of Jupiter's Moons



01/05	05:00	Io	Transit Begins
	07:11	Io	Transit Ends
01/08	04:04	Europa	Transit Begins
	07:42	Europa	Transit Ends
01/12	06:53	Io	Transit Begins
	09:03	Io	Transit Ends
01/15	06:37	Europa	Transit Begins
	09:13	Europa	Transit Ends
01/21	03:13	Io	Transit Begins
	05:23	Io	Transit Ends
01/22	06:44	Europa	Shadow Begins
	09:07	Europa	Transit Begins
01/23	04:04	Ganymede	Transit Begins
	06:25	Ganymede	Transit Ends
01/28	03:54	Io	Shadow Begins
	05:04	Io	Transit Begins
	07:14	Io	Transit Ends
01-30	03:02	Ganymede	Shadow Begins
	07:50	Ganymede	Transit Begins

Shadows cast on Jupiter's disk by Transit of its moons may Begin and end after transit times. Begin observing before Times listed. Actual times of events will vary depending on your precise location within time zones. Shadows start before transits and usually end before transits are over.

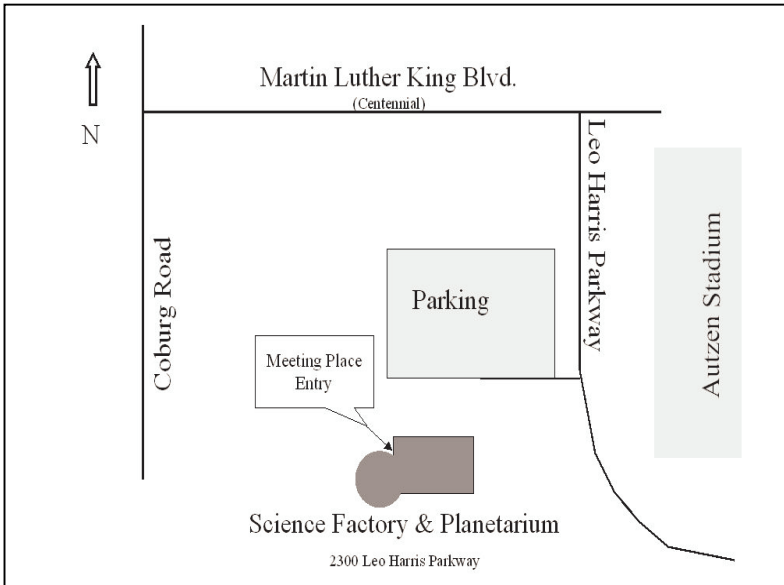
Jupiter's Red Spot Centered PST

01/01	00:00	10:26		01/16	07:50	00:00
01/02	00:00	06:17		01/17	03:42	00:00
01/03	02:09	00:00		01/18	09:29	00:00
01/04	07:56	00:00		01/19	05:20	00:00
01/05	03:47	00:00		01/20	01:11	00:00
01/06	09:34	00:00		01/21	06:58	00:00
01/07	05:26	00:00		01/22	02:49	00:00
01/08	00:00	11:13		01/23	08:36	00:00
01/09	07:04	00:00		01/24	04:28	00:00
01/10	02:55	00:00		01/25	00:19	00:00
01/11	08:42	00:00		01/26	06:06	00:00
01/12	04:34	00:00		01/27	01:57	00:00
01/13	10:21	00:00		01/28	07:54	00:00
01/14	06:12	00:00		01/29	03:35	23:26
01/15	02:03	00:00		01/30	09:22	00:00
				01-31	05:13	00:00



EAS Swap Table at the Picnic in December

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← **EAS Meeting Location**
Meetings 1st Monday of the Month
7:00PM Come Early & Visit

WELCOME TO MARS

Presented by: NOVA

Tuesday, January 4, 2005 at 8 PM ET on PBS
<http://www.pbs.org/nova/mars> Millions of viewers were glued to their sets on January 4, 2004, as NOVA covered the making of the most ambitious robotic space probes ever built, the Mars Exploration Rovers, closing with the spectacularly successful landing of the first of these robots on Mars the previous day. Now, exactly one year later, NOVA presents the startling findings of the two rovers in their nearly year-long investigation of the red planet on Welcome to Mars, airing Tuesday, January 4, 2005, at 8 PM ET on PBS (check local listings).



← EAS members performing Blues/Jazz at the Picnic

Cassini Mission Status Report

The European Space Agency's Huygens probe successfully detached from NASA's Cassini orbiter today to begin a three-week journey to Saturn's moon Titan. NASA's Deep Space Network tracking stations in Madrid, Spain and Goldstone, Calif., received the signal at 7:24 p.m. (PST). All systems performed as expected and there were no problems reported with the Cassini spacecraft.

The Huygens probe, built and managed by the European Space Agency, was bolted to Cassini and has been riding along during the nearly seven-year journey to Saturn largely in a "sleep" mode. Huygens will be the first human-made object to explore on-site the unique environment of Titan, whose chemistry is assumed to be very similar to that of early Earth before life formed. Huygens will tell us whether this assumption is correct.

More information on the Cassini-Huygens mission is available at: <http://saturn.jpl.nasa.gov> and <http://www.nasa.gov/cassini> .

Scopetronix's 5th Annual Scopes for Kids program

You might have seen a recent newsgroup message about the Scopetronix's 5th Annual Scopes for Kids program. (<http://www.scopetronix.com/scopes4kids.htm>)

Several weeks ago, I forwarded the message to a co-worker, Rose Thomas, whose 10 year is really excited about telescopes and astronomy, not only for his own interest but for his Scouting merit badges. She sent submission right away but we didn't think we had a chance.

Well, this morning, Rose came running over to my cubicle and said "We Won!" She just read her e-mail and there was an e-mail from Jordan Blessing, the CEO of Scopetronix.

Here's what Rose wrote:

"Dear Sir or Madam:

I have just learned about your Scopes for Kids Program through my friend and co-worker, Bill Murray, who is an avid astronomer. Bill was nice enough to show us the planets and the stars in the night sky on his own telescope this past July. My son, Kyle Bleisch, is going to be 10 years old this month and really loved the things that we saw.

Kyle is a good student, a Cub Scout working on becoming a Webelo this year, and he is very good at math and science. He's especially interested in science-which his school teacher had said at the parent/teacher conference that he'd like to see Kyle get some enrichment in that area outside of the classroom.

I've looked at some telescopes, but quite frankly, some of the starter scopes that are in my price range are not really as good as they could be for Kyle to really begin learning the skills that will not only allow him to receive his astronomy belt loop for Scouts, but also to gain knowledge that I know would be a lifelong interest for him. Some of the better scopes are just too expensive for me to afford as a single mom.

What I'd hope to pass on to Kyle is us both working together to learn to navigate the night sky and learn constellations (I learned some of them when I was about his age) and a new activity for us to do together. In the meantime, we've been visiting the local planetarium for their star parties, studying a basic field guide and catching a look at the night sky between all the clouds and the rain here in Oregon!

Thank you for all the good things you do for other kids.

Best regards,

Rosella D. Thomas (Kyle's mom)"

The message from Scopetronix was this: "From Santa...Hi Rosella, Thank you for nominating Kyle. He seems like a perfect candidate. Where can we ship it to?"

Jordan Blessing
ScopeTronix Astronomy Products"

The Meade ETX-70 telescope and many accessories arrived on the 20th.
The look on Kyle's face on Christmas morning will be priceless.

Bill Murray

Auroras, Moonscapes and Starry Skies Capturing the Magic of the Night Sky with Photography

Instructor: John Flinn

Sponsored by Dot Dotson's



Gemini Rising Over Cascades by John Flinn

A two-hour slide presentation/workshop covering basic and advanced techniques for successful night and low light photography will be held **January 20, 2005** from **7-9 PM** at the **Veterans' Memorial Building** at 16th and Willamette Streets in Eugene. **Cost: \$10 per person.** Includes instructional materials.

The following topics and techniques will be covered:

- Recommended films and equipment for night photography.
- Preparation for the big event.
- Common pitfalls in night photography.
- The importance of visualization.
- Sources of auroral forecasting, planetary conjunctions and moon rising times on the web and in astronomy magazines.
- How to find an ideal site using available maps and star wheels.
- How to gauge light levels without a light meter.
- Steps to take to improve your chances of successful exposure.
- How to work with moonlight.
- Special effects with double exposures and colored flashlights.

Be prepared for the next Oregon auroral display or other celestial event! Pre-register at Dot Dotson's 1668 Willamette 485-1771 or call John Flinn at 431-7393.

IO Photo/Image Gallery



Image of Jupiter and the Giant Red Spot from Eagles Rest. Image by Dave Cole ©



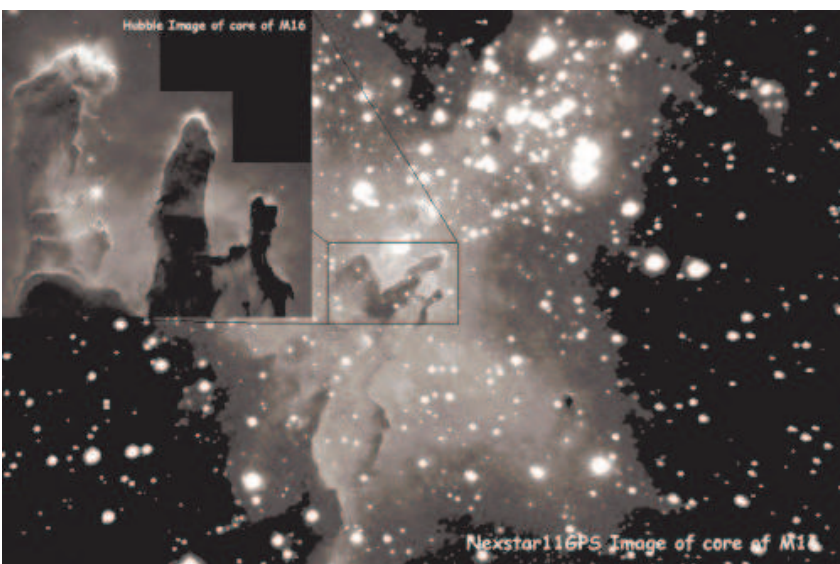
Avid Amateur Astronomer Jerry Oltion took this wonderful image of Saturn and two of its moons through his new Newtonian Reflector. Many of us have tried for years to get an image this good on film. Jerry accomplished it his first night with a digital camera.

Copyright Jerry Oltion ©



Dave Cole took a long exposure near Cygnus to capture the Veil Nebula Complex. Taken from Eagles Rest, Or. Nextstar 11' scope. Canon F1 Camera Kodak E200 film.

Copyright Dave Cole ©



Dave set out to see how well an amateur scope could compare with the Hubble Space Telescope. The results are very evident at the left. The inset is from the Hubble. This shot of M16 was captured with CCD and a Celestron 11" SCT from Eagles Rest, Or.