Issue 2010-03

IO - March 2010

Eugene Astronomical Society
Annual Club Dues $25
President: Sam Pitts - 688-7330
Secretary: Jerry Oltion - 343-4758
Additional Board members:
Jacob Strandlien, Tony Dandurand,
John Loper.

www.eugeneastro.org

EAS is a proud member of:

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

Next Meeting: Thursday, March 25th

Preparing for the Viewing Season by All of Us

The long gray lid of winter is due to roll away soon, leaving clear skies for observing. After all this time, do any of us remember how to set up our scopes? What new equipment did we get over the winter? And what's up there to look at this season, anyway?

Our March meeting will focus on getting ready to view, with demonstrations of star chart programs and a review of what's currently observable, including the Messier objects and the annual March opportunity to do a Messier Marathon. We'll discuss some of the certificates that can be earned from the Astronomical League and how to prepare for them. And we'll have a chance for members to show us any new and/or interesting equipment they find useful.

This is a meeting for audience participation. Bring something for show & tell. Talk about your particular astronomical passion. We're relying on people in the audience to share their experience and to expand on each subject. This is a chance for everyone to get involved and get a lively discussion going.

In addition, Jacob Strandlein will present the astronomy news of the month. The meeting is at 7:00 in EWEB's Community Room, 500 E. 4th in Eugene.

Next First Quarter Friday: March 19th

Our February First Quarter Friday (January 22nd) was a great success. The sky cleared for us and stayed clear all night. About a dozen people showed up with scopes, and maybe five times that many people came to look through them. Many of us were so photon-starved that we stayed until 10:30, long enough to get a look at Saturn rising. Let's do it again in March!

First Quarter Fridays are laid-back opportunities to do some observing and promote astronomy at the same time. Mark your calendar and bring your scope to the College Hill Reservoir (24th and Lawrence in Eugene) and share the view with whoever shows up.

Here are the dates for First Quarter Fridays through December of 2010.

March 19
April 23
May 21
June 18
July 16
August 13
September 17
October 15
November 12
December 10

February Meeting Report

At our February meeting, Sam Pitts talked about “Aperture Fever,” the extremely contagious condition among amateur astronomers that gives them the impulse to buy or build bigger and bigger telescopes to look at fainter and fainter objects. He explained the symptoms of the disease and described its pathology in a typical sufferer. He described several methods for slowing the advance of the condition, but warned that there is no known cure for it.

Jerry Oltion brought examples of both small- and large-aperture scopes to demonstrate the stages a person might experience along the way. Several people who had previously shown little sign of aperture fever went away with a noticeable gleam in their eyes.

After Sam’s talk, Jacob Strandlein presented the astronomy news of the month.

We gained three new members: Ted Drummond, George Lund, and Michael Pyle. Welcome! We hope to see you out under clear skies sometime soon.

Our next meeting will be on Thursday, March 25th, at 7:00 PM in the north building’s Community Room. This is the first room in the semicircular building to the north of the fountain at EWEB’s main campus on the east end of 4th Avenue.

Meeting dates for 2010: (All meetings are at 7:00 in the Community Room)

March 25	June 24	September 23	December 23
April 22	July 22	October 28	
May 27	August 26	November 24	

VLT Rides Out Earthquake

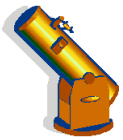
On Saturday, February 27th, an 8.8 magnitude earthquake hit the South American nation of Chile. The European Southern Observatory's (ESO) Very Large Telescope (VLT) on Cerro Paranal, a 2,635 meter (8,645 ft) high mountain in the Atacama desert, felt the quake, but the telescopes survived intact. How?

Each primary mirror rests on 150 actuators that continually push and pull to maintain the mirror’s figure during use. When an earthquake strikes, clamps around the edges lift the entire mirror — all 23 tons of it — off the actuators and secure it to the telescope’s support structure. The entire telescope is designed to swing during an earthquake, and securing the primary mirror prevents it from rattling against the metal tubes that surround it.

The VLT in Chile

Thank You Castle Storage

For nearly two years now, Castle Storage has generously provided EAS a place to store its telescopes and equipment. EAS would like to thank Castle Storage for their generosity and support for our group. Please give them a call if you need a storage space, and tell your friends. They are great people and offer secure and quality storage units.



Observing in March

Last Q New 1st Q Full

March 7	March 15	March 23	March 29
Mercury lost in Sun	Mercury lost in Sun	Mercury Set: 8:17 PM	Mercury Set: 8:56 PM
Venus Set: 7:14 PM	Venus Set: 8:35 PM	Venus Set 8:56 PM	Venus Set: 9:11 PM
Mars Set: 5:10 AM	Mars Set: 5:37 AM	Mars Set: 5:06 AM	Mars Set: 4:38 AM
Jupiter behind Sun	Jupiter behind Sun	Jupiter behind Sun	Jupiter Rise: 6:18 AM
Saturn Rise: 7:14 PM	Saturn Rise: 7:39 PM	Saturn Rise: 7:04 PM	Saturn Rise: 6:38 PM
Uranus Set: 6:51 PM	Uranus behind Sun	Uranus behind Sun	Uranus behind Sun
Neptune Rise: 5:57 AM	Neptune Rise: 6:26 AM	Neptune Rise: 5:55 AM	Neptune Rise: 5:32 AM
Pluto Rise: 2:45 AM	Pluto Rise: 3:14 AM	Pluto Rise: 2:43 AM	Pluto Rise: 2:19 AM

All times: Pacific Standard Time (Nov 1, 2009-March 13, 2010) = UT -8 hours or U.S. Pacific Daylight Time (March 14-November 7, 2010) = UT -7 hours.

Daylight savings time begins March 14

Date	Moonrise	Moonset	Sunrise	Sunset	Twilight Begin	Twilight End
3/1/2010	19:55	06:58	06:20	18:01	05:13	19:37
3/2/2010	21:12	07:24	06:19	18:02	05:12	19:38
3/3/2010	22:29	07:51	06:17	18:03	05:10	19:39
3/4/2010	23:42	08:22	06:15	18:05	05:08	19:41
3/5/2010		08:58	06:13	18:06	05:07	19:42
3/6/2010	00:50	09:40	06:12	18:07	05:05	19:43
3/7/2010	01:51	10:28	06:10	18:09	05:03	19:45
3/8/2010	02:44	11:24	06:08	18:10	05:01	19:46
3/9/2010	03:27	12:23	06:07	18:11	04:59	19:47
3/10/2010	04:03	13:25	06:05	18:12	04:58	19:49
3/11/2010	04:32	14:28	06:03	18:14	04:56	19:50
3/12/2010	04:57	15:30	06:01	18:15	04:54	19:51
3/13/2010	05:19	16:32	05:59	18:16	04:52	19:53
3/14/2010	06:40	18:34	06:58	19:17	05:50	20:54
3/15/2010	07:00	19:36	06:56	19:19	05:48	20:55
3/16/2010	07:20	20:40	06:54	19:20	05:46	20:57
3/17/2010	07:42	21:45	06:52	19:21	05:44	20:58
3/18/2010	08:07	22:52	06:50	19:22	05:42	21:00
3/19/2010	08:36		06:49	19:24	05:40	21:01
3/20/2010	09:12	00:00	06:47	19:25	05:38	21:02
3/21/2010	09:57	01:07	06:45	19:26	05:36	21:04
3/22/2010	10:52	02:09	06:43	19:27	05:34	21:05
3/23/2010	11:58	03:04	06:41	19:29	05:32	21:07
3/24/2010	13:11	03:51	06:39	19:30	05:30	21:08
3/25/2010	14:28	04:29	06:37	19:31	05:28	21:09
3/26/2010	15:47	05:02	06:36	19:32	05:26	21:11
3/27/2010	17:06	05:30	06:34	19:34	05:24	21:12
3/28/2010	18:25	05:56	06:32	19:35	05:22	21:14
3/29/2010	19:43	06:22	06:30	19:36	05:20	21:15
3/30/2010	21:01	06:49	06:28	19:37	05:18	21:17
3/31/2010	22:17	07:18	06:26	19:38	05:16	21:18

All times are for Eugene, Oregon, Latitude 44º 3' Longitude 123º 06' for listed date

Items of Interest This Month

Venus becoming prominent in evening sky
Good shot at Mercury late in the month
3/14 Daylight savings time begins
3/16 Crescent Moon near Venus
3/19 First Quarter Friday Star Party
3/20 Spring begins
3/20 Moon passes Pleiades. Check Derek's site below for occultations.
3/21 Saturn at opposition
3/25 Moon near Mars

For Current Occultation Information

Visit Derek C. Breit's web site

"BREIT IDEAS Observatory"

http://www.poyntsource.com/New/Regions/EAS.htm

Go to Regional Events and click on the Eugene, Oregon section. This will take you to a current list of Lunar & asteroid events for the Eugene area. Breit continues to update and add to his site weekly if not daily. This is a site to place in your favorites list and visit often.

Observing Highlight: A Duo of Triplets

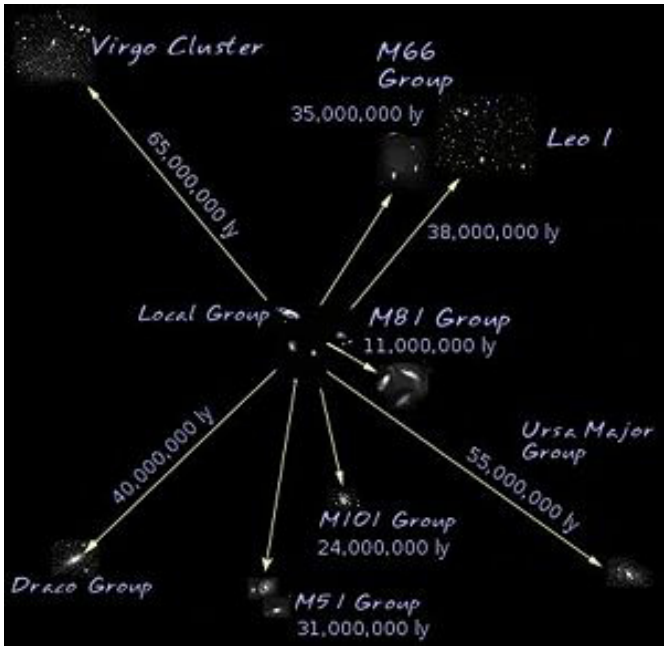
Springtime is galaxy time, and what can be more fun than looking at several galaxies in one field of view? Two of the first groupings to rise in the east this time of year are the two triplets in Leo. Both are easily observable even in small scopes, and both reward larger aperture and higher power with greater detail.

The more famous of the two is simply called the "Leo Triplet." It's also known as the M66 Group, since M66 is its most prominent member. It's a physically related group of galaxies about 35 million light-years away and easily found under the hindquarters of Leo. This group consists of the spiral galaxies M65, M66, and NGC 3628. Their magnitudes are 10.3, 9.7, and 9.4, but M66 is considered the brightest because it is the most concentrated and easiest to see. All three fit nicely in a single low-power field of view.

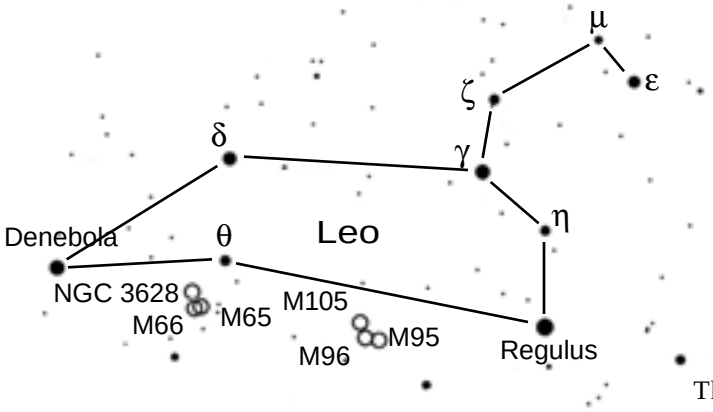
Near Leo's underbelly lies another triplet: the M96 or Leo 1 Group. At 38 million light-years distance, this group is located physically near the Leo Triplet. All three members of this group are Messier objects: M96 (Mag 10.1), M95 (Mag 10.2), and M105 (Mag 11.4). Right next to M105 you'll find another galaxy nearly equal in brightness to the others: NGC 3384 (Mag 10.9).

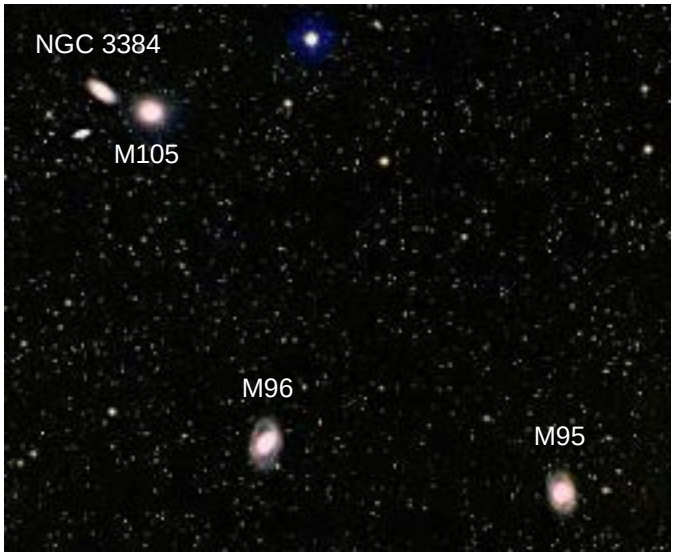
Both galaxy groups are part of the Virgo Supercluster, which includes our own Milky Way.

To find either cluster, simply scan around in their respective areas of Leo. Under a dark sky, they're hard to miss.

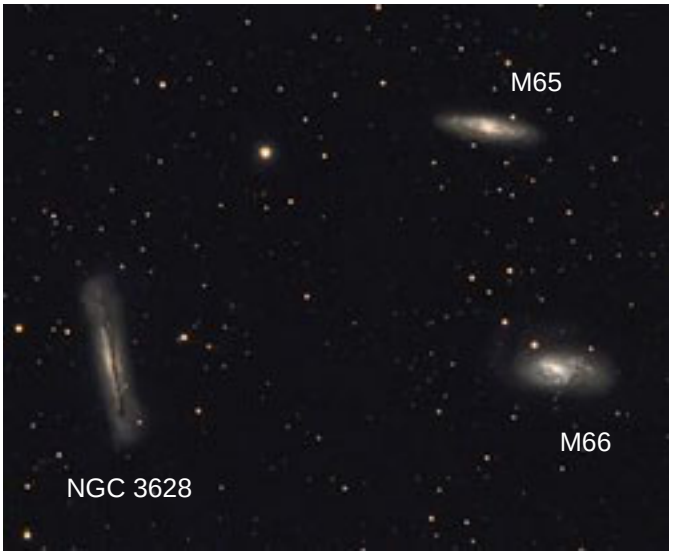


The Virgo Supercluster, courtesy NASA





The M96 Group under Leo's belly, courtesy Scott Anttila.



The M66 Group under Leo's hindquarters, courtesy Hunter Wilson

EAS Telescope Library News

by Tony Dandurand

Last month Mel Bartels donated an old red Coulter 8" dob (with a 12.5 mm ortho eyepiece) to the club that will end up in our Telescope Lending Library. It's a shorty, at F4.5, so a 25mm eyepiece will give a nice wide field view of about 36X. I've added a handle to the tube to make it more convenient to carry. Look for it soon on our scope lending page on our website.

Other recent news: Tom Conlin finished up a set of stout, machined truss brackets for the 18" rebuild, and they're mounted on the mirror box. Truss tubes and upper brackets are in shop, and calculating and construction continues. I'm not sure when first light will be, but it suddenly feels much closer. Looking forward to that first focus.

Truss brackets machined by Tom Conlin for club's 18" scope

8" Coulter dob donated by Mel Bartels

Upcoming Star Party Dates and Links

Star party season will soon be upon us. Get a head start on planning your trips to these regional star parties:

Golden State Star Party, July 10 - 14
http://www.goldenstatestarparty.org/

Mount Bachelor Star Party at Sunriver, July 15 - 18
http://mbsp.org/

Oregon Star Party, Aug 11 - 15
http://www.oregonstarparty.org/

Table Mountain Star Party, Aug 12 - 14
http://www.tmspa.com/

EAS Dark Sky Party

Last year's dark sky star party at Dexter Reservoir was a great success. We're hoping to do it again this year, probably on Saturday, July 10th, although this date hasn't yet been confirmed with the State Park Service.

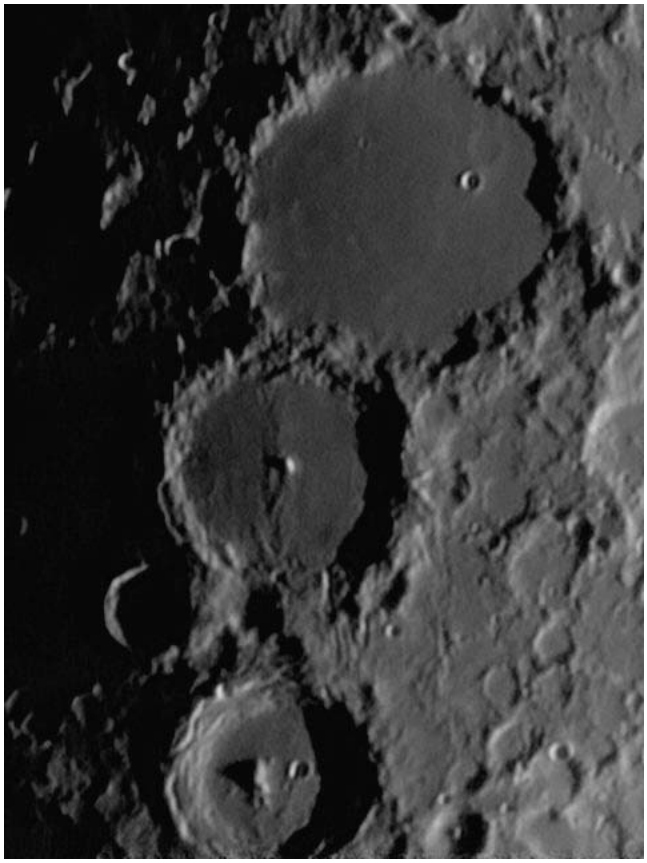
We'll have more on this popular local event as soon as plans are finalized.

Ptolemaeus and Sinus Medii

by Jeff Phillips

The crater Ptolemaeus is one of the highlights of the first quarter Moon. These pictures were taken with a Neximage webcam and a 90mm Maksutov spotting scope. Even a small telescope like this can show very satisfying views of the Moon and planets. The image including Sinus Medii picks up the Hyginus Rilles (top right), while the closeup view of Ptolemaeus picks up some some shallow depressions in the crater floor.

Pictures taken on February 21, 2010, by Jeff Phillips.



Ptolemaeus, Alphonus, and Arzachel

The Sinus Medii region

Source for Manuals

If you've got a scope with no manual, Bill Murray found a good online source that should help you out:

http://safemanuals.com/references.php

This site has manuals for practically everything else you can imagine, too.

Dues are Past Due!

EAS membership runs from October thru September. If you haven't paid already, please mail your dues to the Eugene Astronomical Society, PO Box 7264, Eugene, OR 97401. Dues are $25. Make your checks payable to Eugene Astronomical Society.

If you're unsure whether or not you've paid, email Jerry Oltion at j.oltion@sff.net.