

IO – October 2016

The Newsletter of the Eugene Astronomical Society

PO Box 7264
Springfield, OR 97475

Next Meeting: *Thursday, October 20*

Stacking Video Images

By Jeff Phillips

(Summary by Jeff Phillips)

The process of stacking video images allows amateur astronomers to take lunar and planetary images with small telescopes that rival the best pictures the pros could take just a few years ago. At our club meeting on October 20th I'll share some of my images taken with 8 and 11 inch SCT telescopes, and I'll compare them with amateur images taken with the 42 inch telescope at Pic Du Midi in France.

Stacking video images does not require an expensive setup. Very nice pictures have been taken with dobsonian telescopes. I'll talk about the process of taking pictures and share resources for planetary imaging.

EAS

President

Diane Martin (541-554-8570)

Secretary

Jerry Oltion (541-343-4758)

Additional Board members

Jacob Strandlien,
John Loper,
Mel Bartels

Annual Club Dues \$25

Meetings at 7:00 at the
Science Factory, Eugene.



EAS is a proud member of the
Astronomical League

Next First Quarter Friday: November 4

Our October 7th First Quarter Friday was clouded out, as was its "rain date," October 8th. We'll try again on November 4th!

Fall Creek Dam Star Party

EAS members Bruce Hindrichs, Bob Anderson, Pam Houston, Oggie Golub, and Jerry and Kathy Oltion took telescopes out to Fall Creek Dam on October 8th for a star party that had been "given away" as part of the Science Factory's benefit auction. The weather wasn't great, but there was enough clear sky for everyone present to catch a few objects in the gathered scopes. The auction winner, Vicki, and her guests were enthusiastic about the what they got to see and the discussion they had about those objects. Thanks to all who took part!



Membership Dues are Due!

EAS membership runs from *October* thru *September*. If you haven't renewed already, please bring your payment to the meeting or mail your dues to the Eugene Astronomical Society, PO Box 7264, Springfield, OR 97475. Dues are still the same low \$25 they've been for years. Make your checks payable to Eugene Astronomical Society.

September Meeting Report

Our September 15th meeting featured a talk on light pollution, given by Dave Ingram of the International Dark Sky Association.

Before the meeting, several EAS members had a chance to meet Dave at McMenamin's, where dinner and dark-sky discussion took place.

At the meeting, Jerry helped introduce the topic of the evening by demonstrating a shield he created to keep outdoor lighting directed where it needed to be, rather than shining in all directions indiscriminately. Made from a single sheet of steel and attached by a couple of screws, Jerry's shield can convert a standard wall-mounted outdoor light into one that wastes minimal light.



Jerry's light shield, which keeps all of the light directed downward and allows for a lower-wattage bulb. Materials needed: a piece of sheet steel, some screws, and some black paint. *Photo by Jerry Olton.*

Dave gave a very detailed talk on the many facets and effects of light pollution, first defining the necessary terminology (light pollution, light trespass, glare, etc.) and giving examples of each type. He explained the need for amateur astronomers to take the lead in discussing the issue with city leaders and planners, and the importance of having those of us in the hobby model good lighting practices; he mentioned that Home Depot will stock dark-sky-friendly lighting if there is a demand for it in the community. This is something that *we* can do to make a difference. Fixtures that are approved by the IDSA can be identified by the "dark-sky friendly" logo:



Other aspects of Dave's talk looked at a larger picture: the effects of light pollution on nature and on human health, and how it disrupts the circadian rhythms of human and animals alike. Several of his slides illustrated how overlighting an area can be dangerous, creating too much glare for drivers and making it difficult to see someone illuminated by too much light.

Dave concluded his talk by reviewing several photographs of poor lighting supplied by EAS members; these were taken locally and covered a variety of issues (poor light placement, bad fixture design, etc.). He led the meeting attendees in brainstorming ways to solve the issues that each photo presented.

Thanks, Dave, for the enlightening discussion!



Dave Ingram with an IDSA-approved lighting fixture; these can be ordered from Home Depot (homedepot.com); if enough customers request these, our local Home Depots may carry them in stock. *Photo courtesy of Dave Ingram.*

Note from the EAS Telescope Winner at OSP

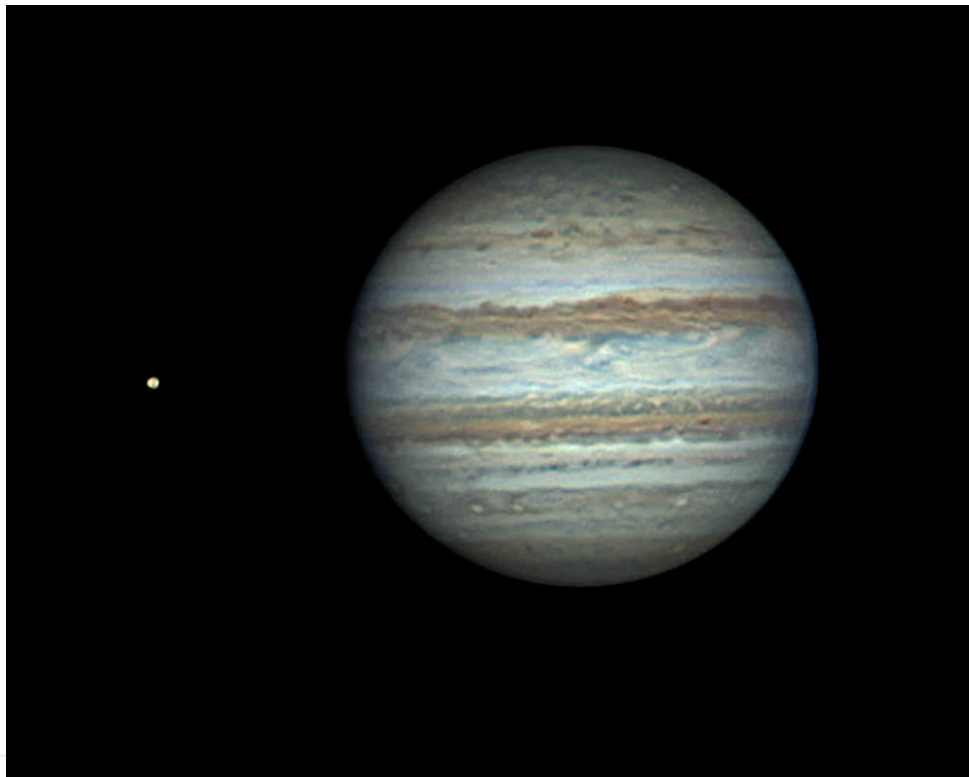
Diane received the following note from the family that won the 8" Dobsonian that EAS donated as a prize at this year's Oregon Star Party:

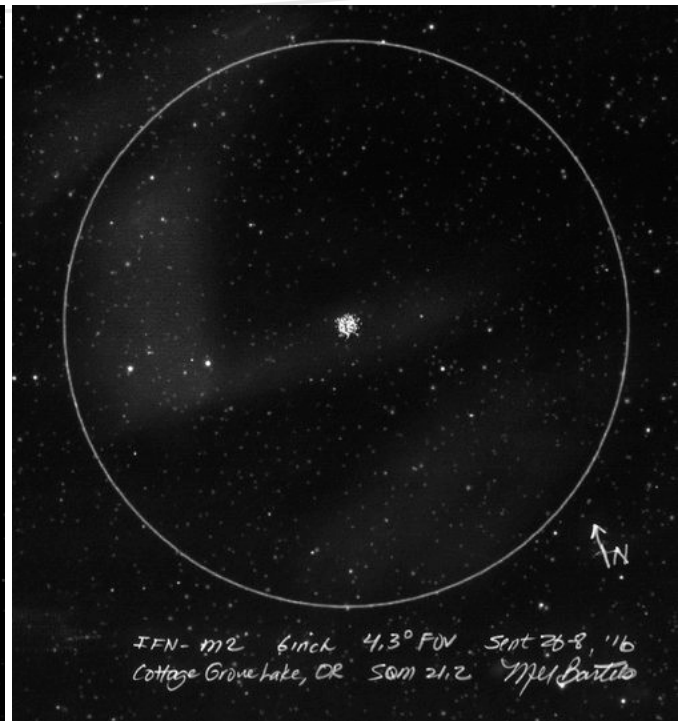
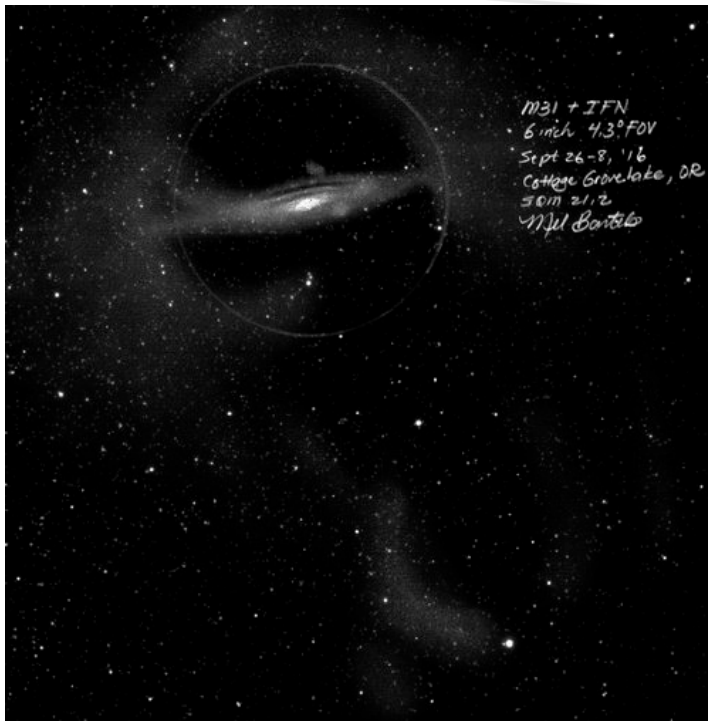
"I wanted to say Thank-you. My family attended the Oregon Star Party this year where we won the 8 inch Dobsonian Telescope that EAS Donated! Thank-you so much--we love it. We have already taken it out many times. We also use it for Outreach and the children and adults who have viewed with it love it also."



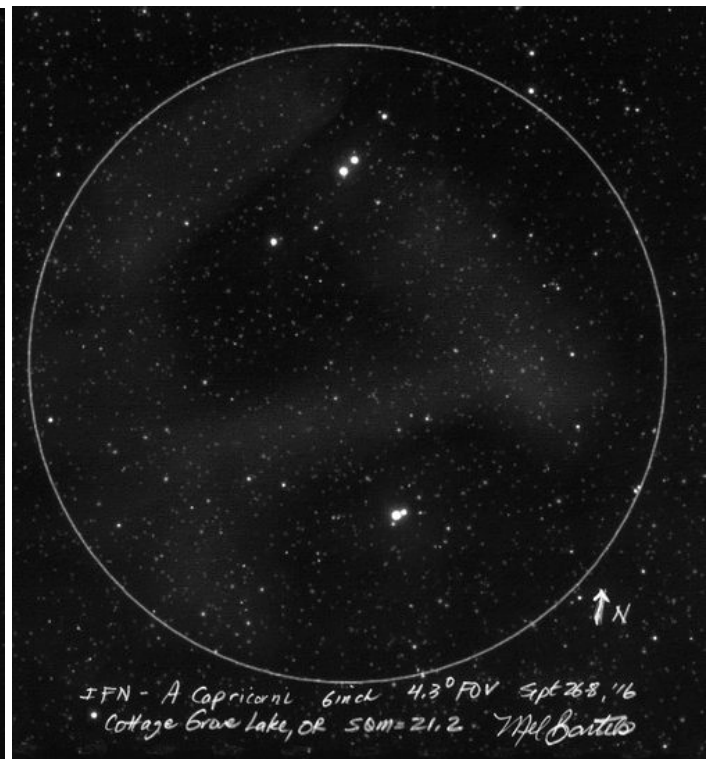
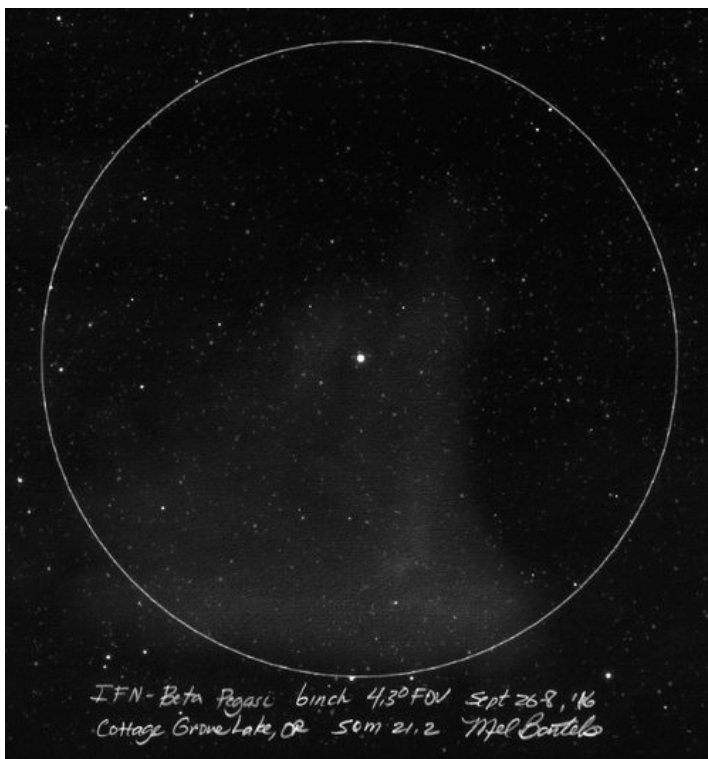
Above: Orion rising over the Three Sisters. *Photo by Alan Gillespie.*

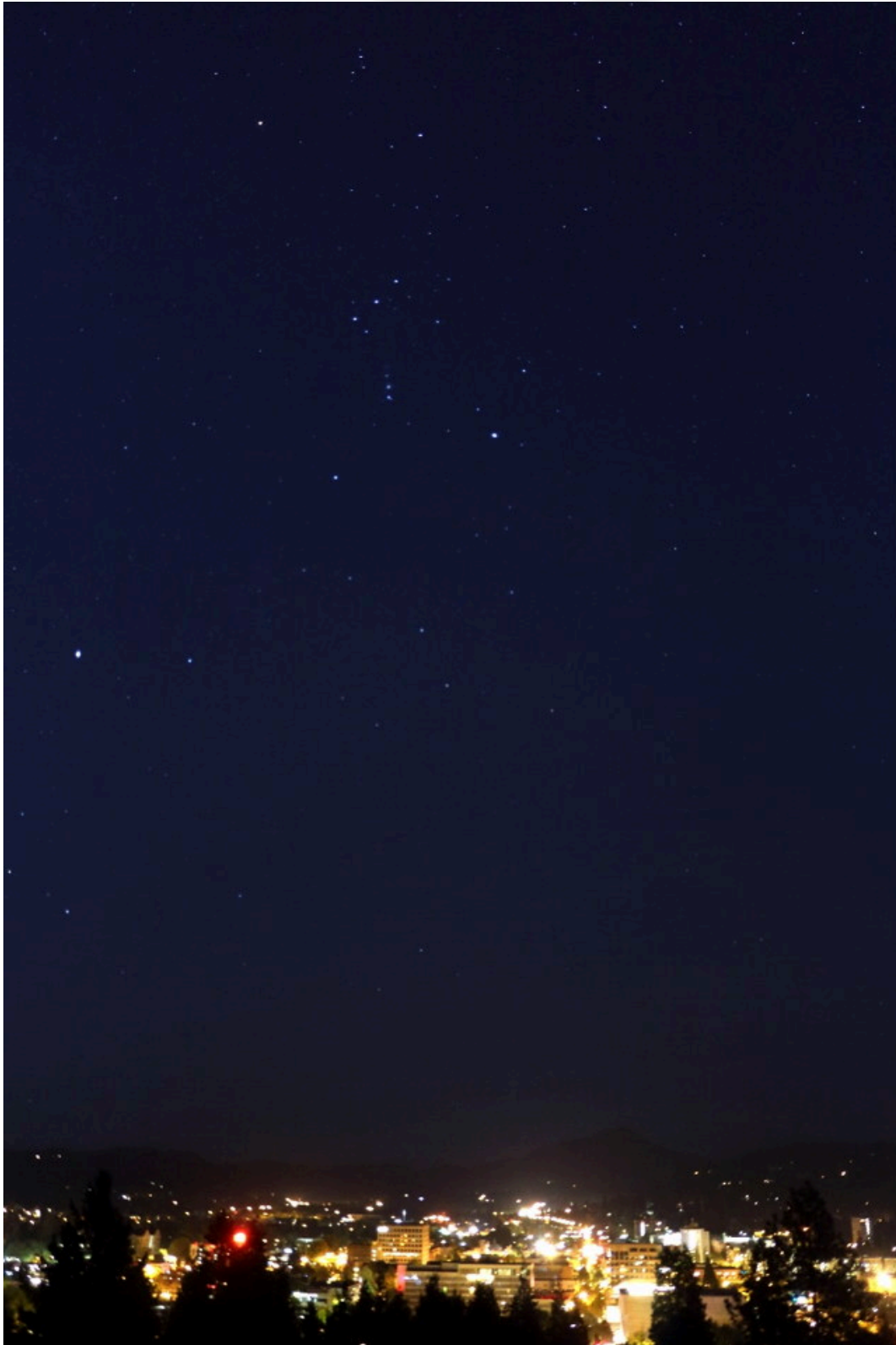
Below: Jupiter and Io. *Photo by Jeff Phillips.*





Four sketches of Integrated Flux Nebulae. Clockwise from upper left: IFN surrounding M31, the Andromeda Galaxy; IFN near M2 in Aquarius; IFN around Alpha Capricorni; IFN in the region of Beta Pegasi. *Sketches by Mel Bartels.*





Orion and Canis Major rising over Eugene. *Photo by Alan Gillespie.*

Sun & Moon rise and set for October

Date	MoonRise	Moon Set	Twilight Begin	Sun Rise	Sun Set	Twilight End
-----	07:45	19:30	05:35	-----	18:52	20:28
10/1/2016	08:44	19:59	05:36	07:11	18:50	20:26
10/2/2016	09:41	20:30	05:37	07:12	18:48	20:24
10/3/2016	10:38	21:03	05:38	07:13	18:47	20:23
10/4/2016	11:34	21:39	05:40	07:14	18:45	20:21
10/5/2016	12:28	22:21	05:41	07:16	18:43	20:19
10/6/2016	13:20	23:07	05:42	07:17	18:41	20:17
10/7/2016	14:09	23:59	05:43	07:18	18:40	20:15
10/8/2016	14:54		05:44	07:19	18:38	20:14
10/9/2016	15:36	00:56	05:46	07:20	18:36	20:12
10/10/2016	16:15	01:58	05:47	07:22	18:34	20:10
10/11/2016	16:51	03:04	05:48	07:23	18:33	20:08
10/12/2016	17:26	04:14	05:49	07:24	18:31	20:07
10/13/2016	18:01	05:26	05:51	07:25	18:29	20:05
10/14/2016	18:37	06:41	05:52	07:27	18:28	20:03
10/15/2016	19:15	07:57	05:53	07:28	18:26	20:02
10/16/2016	19:57	09:13	05:54	07:29	18:24	20:00
10/17/2016	20:44	10:27	05:55	07:30	18:23	19:59
10/18/2016	21:35	11:36	05:57	07:32	18:21	19:57
10/19/2016	22:32	12:39	05:58	07:33	18:19	19:56
10/20/2016	23:32	13:34	05:59	07:34	18:18	19:54
10/21/2016		14:22	06:00	07:35	18:16	19:53
10/22/2016	00:34	15:03	06:01	07:37	18:15	19:51
10/23/2016	01:37	15:38	06:02	07:38	18:13	19:50
10/24/2016	02:38	16:10	06:04	07:39	18:12	19:48
10/25/2016	03:39	16:39	06:05	07:41	18:10	19:47
10/26/2016	04:39	17:06	06:06	07:42	18:09	19:46
10/27/2016	05:38	17:34	06:07	07:43	18:07	19:44
10/28/2016	06:37	18:02	06:08	07:45	18:06	19:43
10/29/2016	07:35	18:31	06:10	07:46	18:04	19:42
10/30/2016	08:32	19:03	06:11	07:47	18:03	19:41
10/31/2016				07:48		



Thank you, Storage Junction

Storage Junction has donated the use of a storage unit for us to hold our loaner telescopes when they're not in use. EAS would like to thank Storage Junction for their generosity and support for our group. Please give them a call if you need a storage space, and tell your friends. Storage Junction is located at 93257 Prairie Road (at the intersection of Hwy 99 and Hwy 36, 3 miles south of Junction City) Phone: 541-998-5177



Observing In October

1st Q

Full



Last Q



New

Oct 8, 9:33 PM	Oct 15, 9:23 PM	Oct 22, 12:14 PM	Oct 30, 10:38 AM
Mercury lost in Sun	Mercury Rise: 6:41 AM	Mercury lost in Sun	Mercury lost in Sun
Venus Set: 7:55 PM	Venus Set: 7:50 PM	Venus Set: 7:48 PM	Venus Set: 7:49 PM
Mars Set: 10:49 PM	Mars Set: 10:45 PM	Mars Set: 10:42 PM	Mars Set: 10:40 PM
Jupiter Rise: 6:29 AM	Jupiter Rise: 6:09 AM	Jupiter Rise: 5:50 AM	Jupiter Rise: 5:27 AM
Saturn Set: 9:21 PM	Saturn Set: 8:55 PM	Saturn Set: 8:30 PM	Saturn Set: 8:01 PM
Uranus Rise: 6:50 PM	Uranus Set: 7:34 AM	Uranus Set: 7:05 AM	Uranus Set: 6:31 AM
Neptune Set: 4:18 AM	Neptune Set: 3:50 AM	Neptune Set: 3:21 AM	Neptune Set: 2:49 AM
Pluto Set: 11:38 PM	Pluto Set: 11:11 PM	Pluto Set: 10:43 PM	Pluto Set: 10:13 PM

Items of Interest This Month

Mars crosses through Sagittarius this month.

10/7: First Quarter Friday star party

10/15: Uranus at opposition

10/18: Moon near-misses Aldebaran 10:00 -11:00 PM (low in east).

Moon occults 6.6 mag. HD 29225 from 10:31 - 10:51. Moon occults 89 Tauri from 11:00 -11:43.

10/20 - 10/22: Orionid meteor shower

10/26: Venus 3° north of Antares

10/27: Saturn, Venus, and Antares are in a straight line just after sunset.
(Antares only 7° high 30 min after sunset.)

