

IO – January 2018

The Newsletter of the Eugene Astronomical Society

PO Box 7264
Springfield, OR 97475

Next Meeting: *Thursday, January 18*

Telescope Workshop

(Summary by Jerry Olton)

Telescope workshop: Got a new telescope for Christmas but the instructions are in Greek? Have an old scope that needs a tune-up? Or maybe you just have some questions about astronomy in general. At our January 18th meeting, the Eugene Astronomical Society will have people on hand to help with just about everything astronomical. This is a very informal meeting, so don't be shy. Just bring your equipment or your questions and come on in for assistance!

EAS

President

Diane Martin (541-554-8570)

Secretary

Jerry Olton (541-343-4758)

Additional Board members

Jim Murray

Oggie Golub

Andy Edelen

Annual Club Dues \$25

Meetings at 7:00 at the
Science Factory, Eugene



EAS is a proud member of the
Astronomical League

First Quarter Friday Report

Our First Quarter Friday star party scheduled for December 29th was rained out, but Saturday the 30th was clear so we held our "emergency backup star party" then. We had half a dozen telescopes on hand, including Emily's new (to her) Christmas present: a vintage Meade 90mm ETX table-mounted Maksutov reminiscent of the old Questar scopes. It's a beauty, and provided a crisp view to anyone willing to kneel down to have a peek through it. Emily is already working on plans to bring it up to standing height.

Emily also got a cool planisphere with her telescope...labeled in Russian! We had a blast puzzling out the Cyrillic letters for the months. (Turns out October is recognizable, and the rest can be figured out from there.)

We had maybe a dozen guests in total. Not a huge crowd, but we all had a fun evening looking at the nearly-full Moon, the M-thirty-something star clusters, and the Orion Nebula. There was just enough turbulence to make the Trapezium twinkle.

Our next First Quarter Friday will be on January 19th.

First Quarter Fridays have been scheduled for 2018. The chosen dates are:

February 23 (49% lit)	March 23 (40% lit)	April 20 (27% lit)	May 18 (15% lit)
June 15 (6% lit)	July 20 (60% lit)	August 17 (45% lit)	September 14 (29% lit)
October 12 (15% lit)	November 9 (5% lit)	December 14 (44% lit)	



January 31st Lunar Eclipse

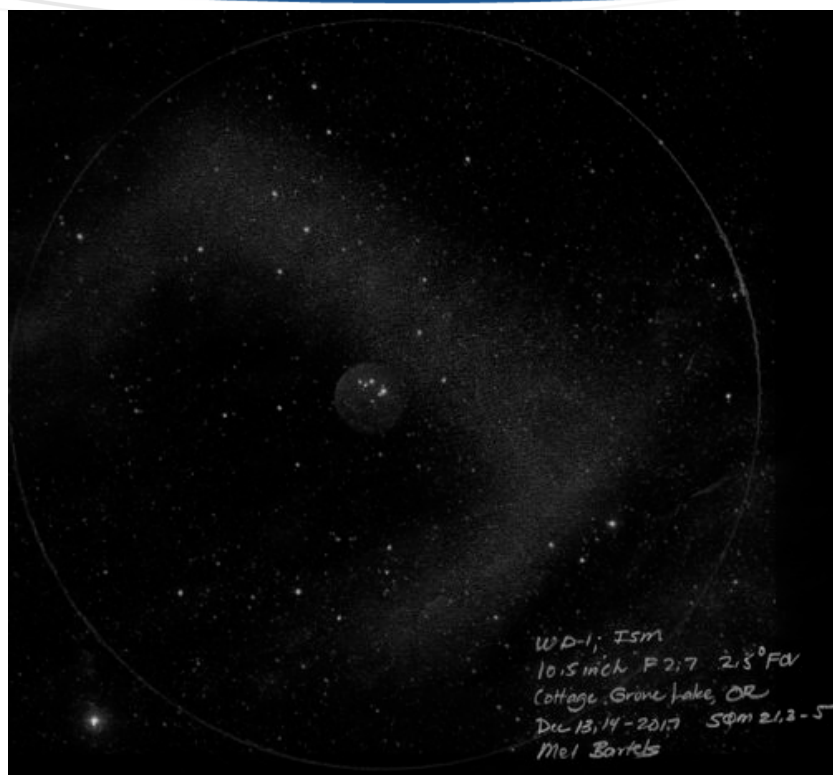
We get two full moons this month, and the second one brings with it a cool bonus: a total lunar eclipse. Unfortunately it'll happen in the wee hours of the morning, but the EAS and the Science Factory are teaming up to throw an eclipse party anyway. We'll gather at the Science Factory at 3:30 a.m. on the morning of the 31st (think of it as the night of the 30th so you won't miss it by a day) and reward the hale and hearty guests who brave the cold and the time of day with telescopic and binocular views of the eclipse. The Science Factory will also have the Most Wanted Espresso food truck on hand that morning to serve hot coffee and breakfast.

The eclipse starts at 3:48, with totality from 4:51 to 6:07. The eclipse ends at 7:11, just before moonset at 7:35. Not coincidentally, that's when the Sun rises.

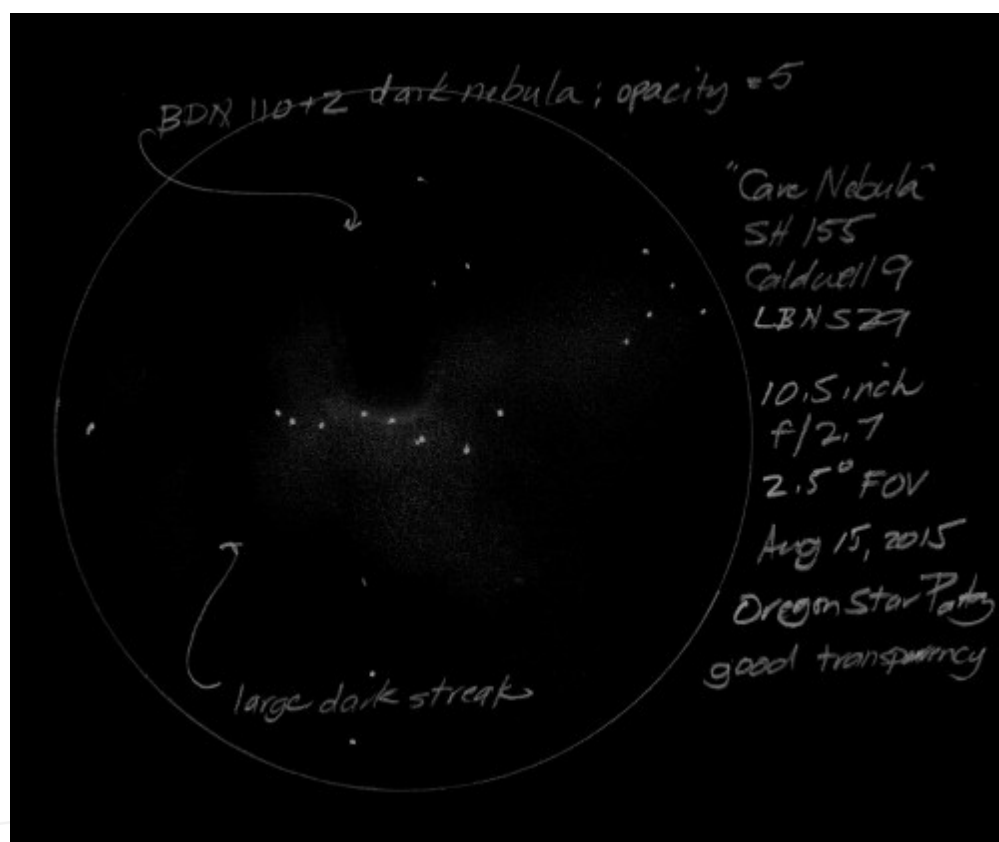
If you can't make it to the Science Factory, do at least set your alarm for sometime during totality and have a peek at the eclipsed moon. It will turn a deep coppery red while it's inside Earth's shadow, lit by a ring of sunsets and sunrises around the perimeter of the Earth. Well worth getting up to see!



The September 29th, 2015 lunar eclipse. *Photo by Bill Basham.*



Above: Newly-discovered nebula Walker-Di Cicco 1 and the interstellar medium.
 Below: The Cave Nebula. *Sketches by Mel Bartels.*





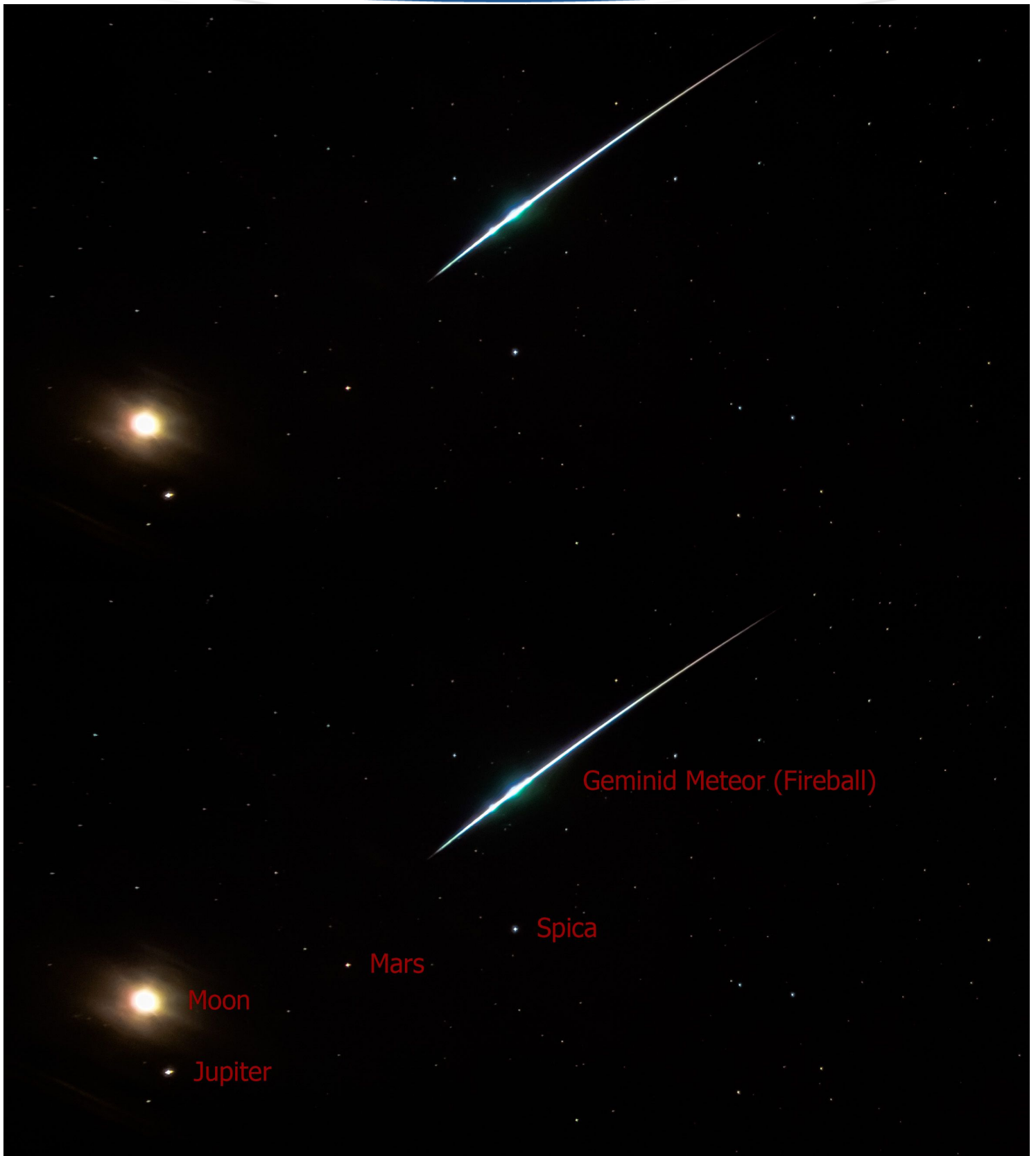
Above: the heart of the Orion Nebula. *Photo by Dan Beacham.*

Below: New Year's Supermoon. *Photo by Jeff Phillips.*





Geminid meteor highlights, December 13th. *Photos by Bill Basham.*



Perspectives in near and deep space. *Photo by Bill Basham.*



Mars, Jupiter, Mercury, Antares on December 30th. *Photo by Alan Gillespie.*



Gemini setting over Willow Creek, December 14th. *Photo by Alan Gillespie.*



The 2017 Geminids. *Photo by Russ Milton.*

Sun & Moon rise and set for January

Date	Moon Rise	Moon Set	Twilight Begin	Sun Rise	Sun Set	Twilight End
1/1/2018	16:50	07:08	06:03	07:47	16:45	18:29
1/2/2018	17:57	08:10	06:03	07:47	16:46	18:30
1/3/2018	19:09	09:04	06:03	07:47	16:47	18:31
1/4/2018	20:23	09:50	06:03	07:47	16:48	18:32
1/5/2018	21:34	10:28	06:03	07:47	16:49	18:33
1/6/2018	22:43	11:01	06:03	07:47	16:50	18:34
1/7/2018	23:49	11:31	06:03	07:47	16:51	18:35
1/8/2018		12:00	06:03	07:47	16:52	18:36
1/9/2018	00:53	12:28	06:03	07:46	16:53	18:37
1/10/2018	01:55	12:56	06:03	07:46	16:54	18:38
1/11/2018	02:55	13:27	06:03	07:46	16:55	18:39
1/12/2018	03:54	14:01	06:02	07:45	16:57	18:40
1/13/2018	04:51	14:38	06:02	07:45	16:58	18:41
1/14/2018	05:45	15:20	06:02	07:44	16:59	18:42
1/15/2018	06:35	16:07	06:02	07:44	17:00	18:43
1/16/2018	07:21	16:59	06:01	07:43	17:02	18:44
1/17/2018	08:03	17:55	06:01	07:43	17:03	18:45
1/18/2018	08:40	18:53	06:00	07:42	17:04	18:46
1/19/2018	09:13	19:53	06:00	07:42	17:05	18:47
1/20/2018	09:44	20:54	05:59	07:41	17:07	18:48
1/21/2018	10:12	21:57	05:59	07:40	17:08	18:49
1/22/2018	10:40	23:01	05:58	07:39	17:09	18:50
1/23/2018	11:08		05:58	07:39	17:11	18:51
1/24/2018	11:38	00:06	05:57	07:38	17:12	18:53
1/25/2018	12:11	01:14	05:56	07:37	17:13	18:54
1/26/2018	12:50	02:24	05:56	07:36	17:15	18:55
1/27/2018	13:35	03:34	05:55	07:35	17:16	18:56
1/28/2018	14:29	04:44	05:54	07:34	17:17	18:57
1/29/2018	15:31	05:49	05:53	07:33	17:19	18:58
1/30/2018	16:41	06:47	05:52	07:32	17:20	19:00
1/31/2018	17:54	07:37	05:52	07:31	17:21	19:01



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 January



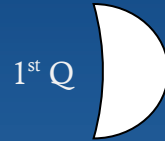
Full



Last Q



New

1st Q

Jan 1, 6:24 PM	Jan 8, 2:25 PM	Jan 16, 6:17 PM	Jan 24, 2:20 PM
Mercury Rise: 6:02 AM	Mercury Rise: 6:16 AM	Mercury Rise: 6:36 AM	Mercury Rise: 6:55 AM
Venus lost in Sun	Venus lost in Sun	Venus lost in Sun	Venus Set: 5:26 PM
Mars Rise: 3:15 AM	Mars Rise: 3:11 AM	Mars Rise: 3:05 AM	Mars Rise: 2:59 AM
Jupiter Rise: 3:28 AM	Jupiter Rise: 3:06 AM	Jupiter Rise: 2:41 AM	Jupiter Rise: 2:15 AM
Saturn Rise: 7:05 AM	Saturn Rise: 6:41 AM	Saturn Rise: 6:13 AM	Saturn Rise: 5:45 AM
Uranus Set: 1:39 AM	Uranus Set: 1:11 AM	Uranus Set: 00:40 AM	Uranus Set: 00:09 AM
Neptune Set: 9:52 PM	Neptune Set: 9:25 PM	Neptune Set: 8:55 PM	Neptune Set: 8:25 PM
Pluto Set: 5:20 PM	Pluto lost in Sun	Pluto lost in Sun	Pluto lost in Sun

Items of Interest This Month

1/1 Mercury at greatest western elongation (visible in morning before sunrise).

1/4 Quadrantid meteor shower

1/4 Moon just misses Regulus as it rises in the east 10:00 – 11:00 PM.

1/19 First Quarter Friday star party

1/24 Moon occults Xi2 Piscium (4.3 mag.) 7:37 PM. Reappearance 8:40 PM. Moon is high in southwest.

1/26 Moon cruises through Hyades late PM – early AM 27th. Occults Aldebaran 3:17 AM, just minutes before Moonset.

1/31 Additional full Moon 5:27 AM. **Total Lunar Eclipse** 3:48 AM – 7:11 AM, max at 5:30 AM. (Moon will be low in west at eclipse end.) **Eclipse party at Science Factory starting 3:45 AM**

