

## Cherry Springs Star Party - June, 2026

With the month of May winding down and June upon us, it was time to prepare for the 2026 edition of the Cherry Springs Star Party, held at Cherry Springs State Park. It was 'iffy' if there would even be a starparty this year, but the Park and ASH worked it out and CSSP was on! The weather and smoke forecasts were looking good for the 2nd week of June. I put together a big observing list of objects for both my 8" SCT and S30-Pro scopes, loaded the camper with provisions and clothes for any type of weather and organized the astronomy equipment for the trip.

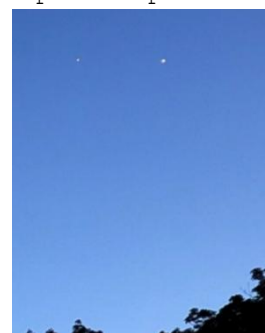
### Sunday 06/7/2026:

Having loaded the car and hooked-up the camper Saturday evening, I was up early Sunday anxious to get on the road northwards to Cherry Springs. Left PGH at 8:30am. The drive to the park was uneventful, under pleasant weather and I arrived at the park at 1pm. After registering with the ranger in the new station on the public side, I drove over to the observing field and setup in my usual location on 'Orion Way'. Only a few others were setup over on the SW field, including Adam T. Within the half hour I was joined by ORAS members Dean S, shortly followed by Dean M. As the three of us busied setting up camp and telescopes, a few more amateurs arrived, including our long-time CS buddy Gordon M from Canada, and later another ORAS member, Dean S's brother, Gary S from Maryland.



It was a beautiful afternoon at the park. Just enough clouds for an occasional shade break from the Sun, a light breeze to keep things cool, with temps in the mid 70's. It would have been nice if the grass at the park was cut a little shorter, but longer grass is to be expected when arriving early.

Spent the afternoon visiting with the group while getting things set for the night. After setting up camp, I assembled my usual scope stuff: main EAA telescope: 8" Celestron SCT optical tube @ f6.3 with a ZWO ASI294MC-Pro camera, ZWO filter wheel & focuser, on an Atlas EQ GEM mount, along with a piggybacked Sky-Watcher EVO50mm refractor with a ASI294MC camera, and a 60mm Antaries refractor guidescope with an ASI120MC camera. Also my AllSky cam, a ZWO ASI224MC camera & fisheye lens in a DIY dome attached to a tripod. And my SeeStar S30-Pro smart telescope and equatorial wedge & field tripod. In addition to the usual astro gear, I also setup my small 90mm refractor for wide-field visual Milky-Way sweeping, hopefully later in the week. Here's my camp & scopes.



At 6pm, I headed indoors for dinner and a phone home. Then got in an hour nap. Headed back outside by 8pm to prep my observing notes and wait for sunset and darkness to fall. (Being close to the Summer Solstice, it was a long wait, LOL!) The early evening was very nice. All the daytime clouds had dissipated leaving a clear sky. Enjoyed the Venus & Jupiter conjunction above the trees before the pair set in the west.

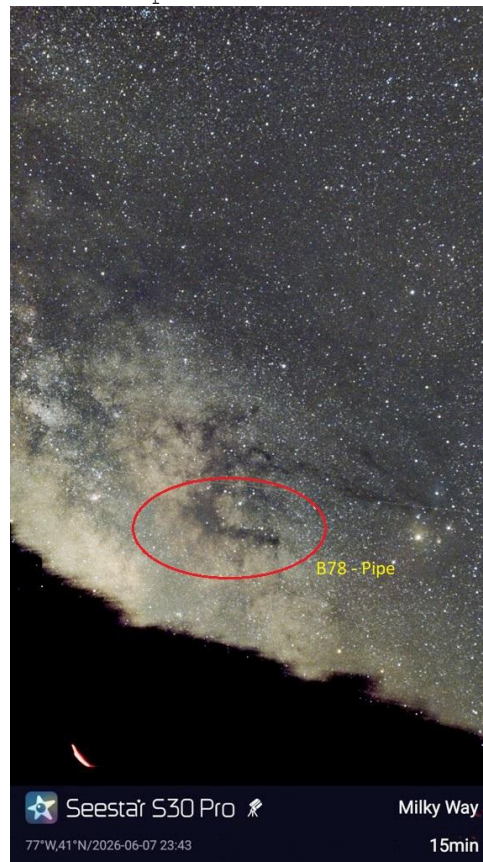
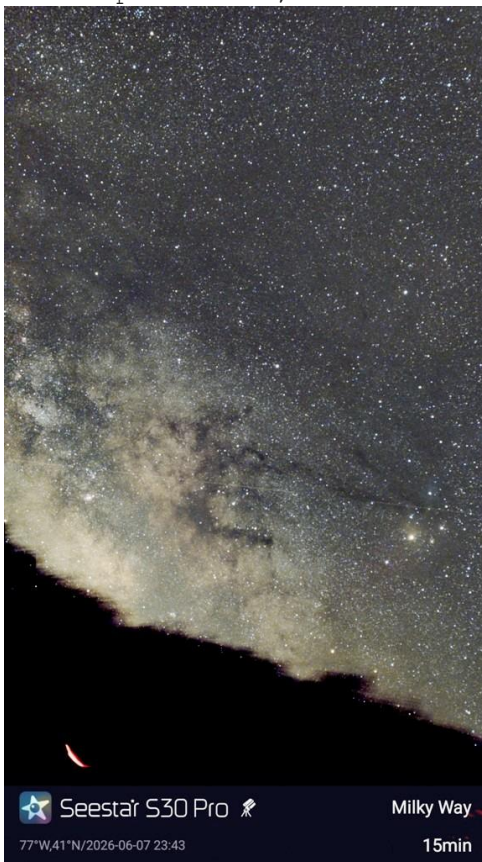
Adam T dropped in to say 'hello' and visit, and we were joined by Dean S and Gordon. The three of us discussed going to the Winter Star Party and Okie-Tex. Adam's enthusiasm of attending the WSP planted a seed that began to sprout later in the week.

Around 9:45pm, Dean M spied Polaris beginning to shine, and as I was still in my daytime clothes, I hurried indoors to change into something heavier.

After working thru various gremlins, (doesn't help when you forget to remove the Polemaster lens caps, lol) I had the main 8" scope polar aligned and focused by 10:45pm. I then moved on to getting the S30-Pro setup, and darn if I didn't forget about its lens cap! Took multiple align tries that kept failing before I finally remembered to remove the cap. I blame all the mistakes on my having a cold. By the time I was ready, Scorpius and the Milky-Way was on the rise!

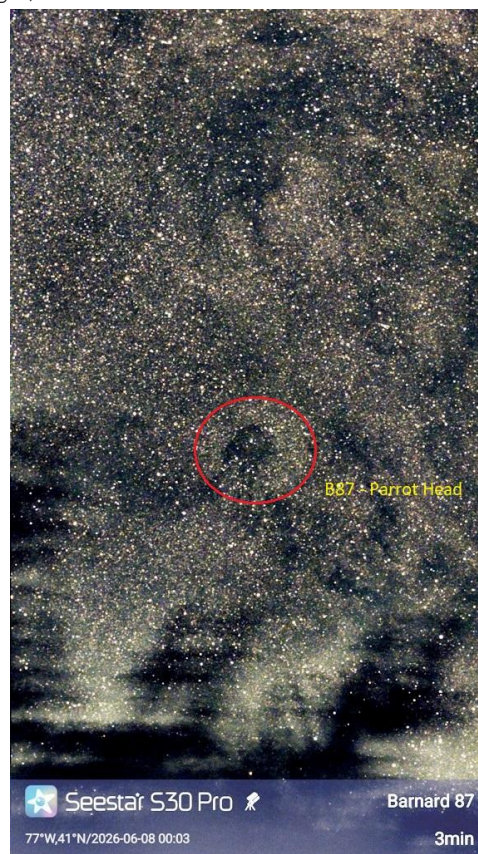


I started off using the S30-Pro to observe the large naked-eye/Binocs dark nebula B78, known as the "Pipe Nebula", in the constellation of Ophiuchus.



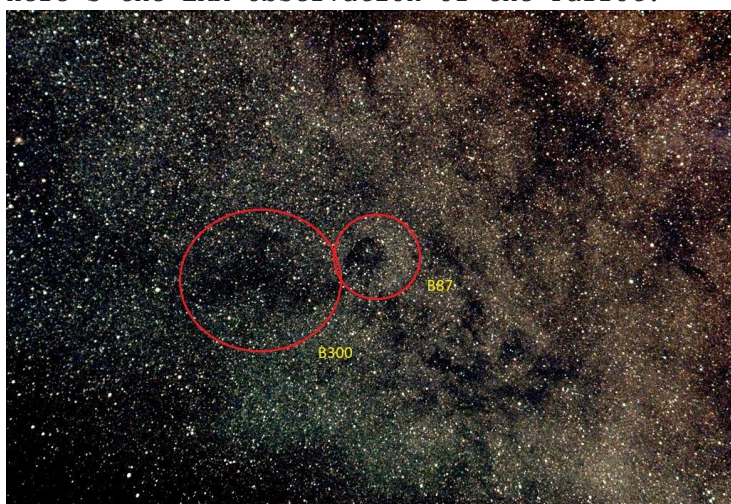
(SeeStar S30-Pro, 60 second exposures in EQ mount mode and 3mm Milky-Way Mode and IR filter, darks & flats applied internally, stacked for 15 minutes, then AI noise reduction applied in-app)

I then switched the S30-Pro to Stargazing Mode and pointed the smart-scope to B87 - the 'Parrot Head Nebula' in Sagittarius, just clearing the southern tree-line. (Which you can see distorting the lower section of the image).



(SeeStar S30-Pro, 60 second exposures in EQ mount mode and 30mm Stargazing Mode and IR filter, darks & flats applied internally, stacked for 3 minutes, then AI noise reduction applied in-app)

The main scope, 8" SCT and piggyback EVO50mm were also busy, doing deeper images of the Parrot Head, and then later the Lobster Nebula - NGC6357 (Wolf-Rayet WR93). Here's the EAA observation of the Parrot:



(EVO50mm @ f4.2 ZWO ASI294MC camera with L-Pro filter, 60 second subs, dark & flat calibration frames pre-applied, PHD guided, livestacked using SharpCap for 21 minutes).

(8" SCT @ f6.3 on an Atlas Gem, ZWO ASI294MC Pro camera with L-Pro filter, 180 second subs, dark & flat calibration frames, PHD guided, livestacked using SharpCap for 21 minutes).

Then the Lobster Nebula - NGC6357 (Wolf-Rayet WR93) in Scorpius.



(EVO50mm @ f4.2 ZWO ASI294MC camera with L-Pro filter, 180 second subs, dark & flat calibration frames pre-applied, PHD guided, livestacked using SharpCap for 30 minutes).

(8" SCT @ f6.3 on an Atlas Gem, ZWO ASI294MC Pro camera with L-Pro filter, 180 second subs, dark & flat calibration frames, PHD guided, livestacked using SharpCap for 30 minutes).

While I was having fun, Dean S spent the evening with his imaging kit pointed at IC68, the Ghost in Cassiopeia. Dean M worked thru guiding issues and then spent time imaging SH2 nebulas in Ophiuchus. Gary S had both his main 12" Meade scope and new widefield refractor going. Gordon M was busy using his 18' visual Dob reflector working on the AL Messier program over in Virgo.

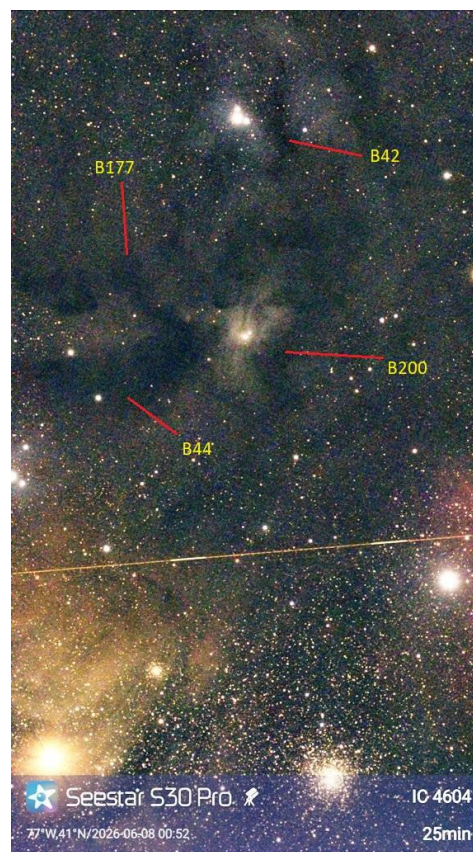
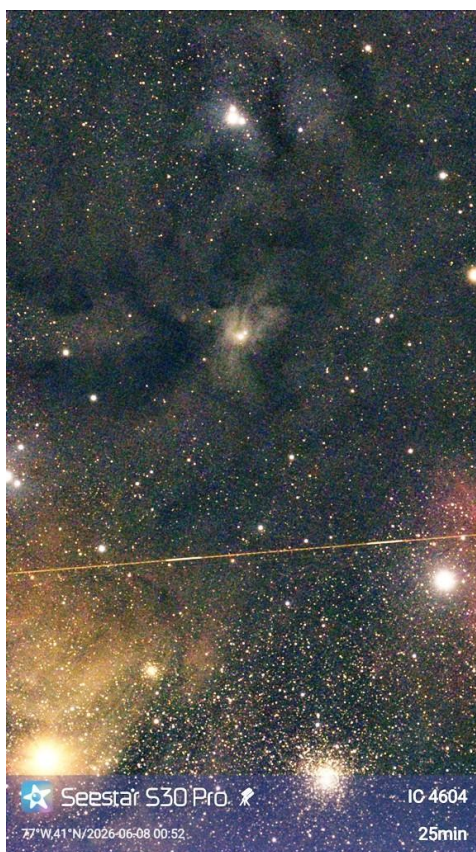
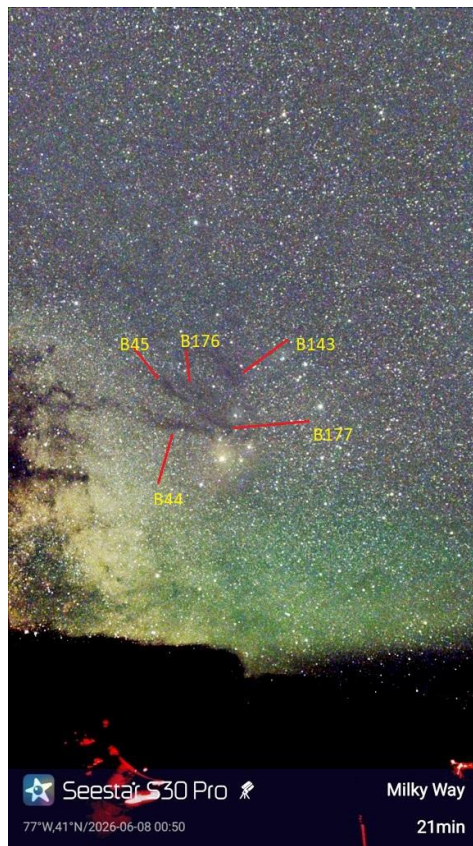


Around 11:30pm, Dean S took an SQM reading and got 21.36. (Borderline Bortle 3 darkness). The sky transparency looked great up to and just past midnight, but around 12:30am, clouds began forming directly overhead, and I had to pause SharpCap from EAA capturing and wait for the clouds to drift off before continuing.

I tried out the new SeeStar software upgrade (where you can now use both the 30mm and widefield 3mm lens/cameras in dual Stargazing/Milky-Way mode at the same time), on Rho Oph. Unfortunately that's about when we lost the sky. Still, it gives you an idea of how it works. Oh, and I learned you can't do mosaics with either lens while in dual mode. I also keep forgetting that the Milky Way 4k mode will only work in alt-az and not in EQ.

Attempted observing the 'False Comet' region of the tail in Scorpius, but it was too low in the southern tree-line. Will have to save that for a more southern observing location.

Here's the Rho Oph observations: (wide-field 3mm first, then with the 30mm)



It was a lot of fun toggling between the two views: wide-field 3mm and 30mm Stargazing.

With the clouds thickening in the eastern sky, I threw in the towel at 1:30am with moonrise lighting up the clouds.



Here's a time-lapse from Sunday night: <https://youtu.be/MtFpj4FKxTA>

### **Monday 06/8/2026:**

Woke a little before 9am to a foggy, chilly morning. Outdoor temp at 58 degrees. Within the hour, the sun began to burn thru the low clouds and the temp rose into the low 60's. The weather forecast showed a beautiful sunny day and clear night ahead. Late morning, Dean S dropped by for a short visit.

Around lunch time, I gave Gordon a hand assembling his large shade canopy, which got a lot of group use later in the week. I then setup my small 90mm visual refractor and the old S30 SeeStar. Afterwards sat and visited awhile. Gordon and I began discussing going to next year's Winter Star Party. Decided we'd wait for Ed to kick around the idea. Headed down to Lyman Park for a shower around 3pm. Once back at camp, hung out with the guys under Gordon's canopy.

Ed just arrived at the park about 5:20pm so we pushed back a group dinner from Gary and Dean S (brats and sauerkraut) to 6pm. Around 7:30pm, an approaching front from the west began to push clouds in. Sky conditions deteriorated and by sunset it wasn't looking good for observing that evening.



Being the optimist, I headed indoors at 8:30 to charge and once back out, I uncovered the scopes, assembled the blackout tent and prepped my observing notes. While standing outside admiring the Venus / Jupiter conjunction, Gary spied two large Elk over along the eastern tree line watching us. Both sported large antlers, still covered in felt.



They were pretty cool looking!

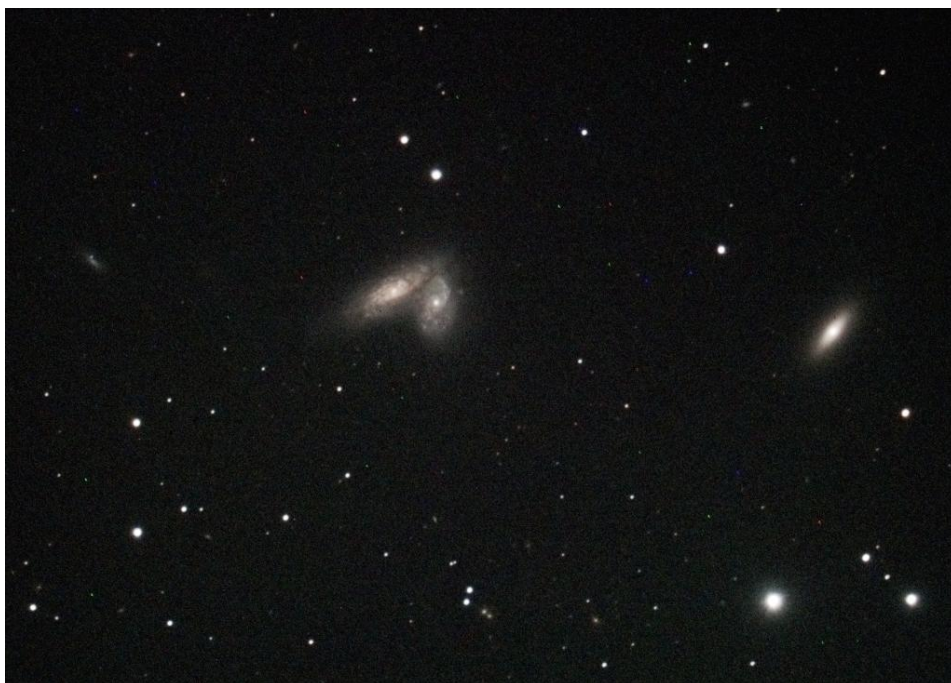
While waiting for darkness to fall, I headed I doors to make coffee. The sky had begun to partly clear, but the transparency was sub-par. Still, the sky looked better than what I had back home in Pittsburgh! I was determined to get in a little EAA observing.



Consulting my observing plan, I decided to go after several bright galaxy pairs in Virgo that I have been saving from the June 2025 Sky & Telescope. First up was the 'Butterfly Galaxies' - NGC4567 & NGC4568, an interacting pair of spiral galaxies in the process of colliding and will eventually merge into one larger galaxy. The +11<sup>th</sup> mag pair is located around 62 million light-years away. Using Sharpcap's 'Livestack' tools, both galaxies displayed a star-like core and spiral arms with dark lanes and mottling.



Four supernovas have been observed in the pair since 1990. Also located nearby in the FOV is NGC4564, a +12<sup>th</sup> mag elliptical galaxy at 57 MLY, and small faint +15<sup>th</sup> mag spiral IC 3578. Here's the EAA observation:



(8" SCT @ f6.3 on an Atlas Gem, ZWO ASI294MC Pro camera with L-Pro filter, 180 second subs, dark & flat calibration frames, PHD guided, livestacked using Sharpcap for 30 minutes).

Next was a trio of spiral galaxies - NGC5560, NGC5566, and NGC5569, also in Virgo. Known as Arp286, the brightest of the three, inclined barred-spiral NGC5566 at +11.5 mag is interacting with +13.9 mag NGC5569 off its NE arm, causing tidal distortions in the primary galaxy, which is located about 66 MLY away. Also close-by is edge-on spiral NGC5560 at +13.2 mag, displaying a pair of warped spiral arms. A pretty FOV!



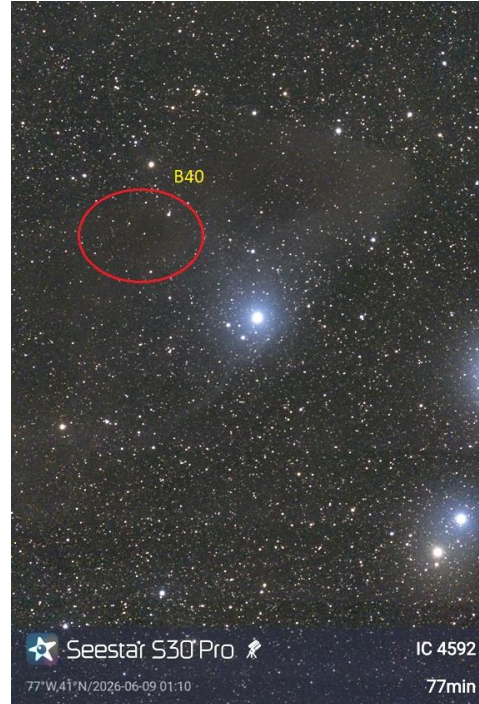
(same telescope & camera details as above).

The third set of galaxies that I observed in Virgo was +10.0 mag elliptical NGC5856 and +10.8 mag barred-spiral NGC5850. While they appear relatively close to one another, the pairing is just a chance line-of-sight illusion, as NGC5856 is only about 80 MLY while its companion NGC5850 is much further away, at around 120 MLY. Below NGC5856, near the edge of the FOV is the much smaller & fainter +12.5 mag elliptical NGC5845. NGC5850 displays a nice bar and bright core, with spiral arms coming off either end of the bar structure. Playing with Sharpcap's Livestack histogram, a fainter outer arm can be traced wrapping around between the inner bar and NGC5856.



(same telescope & camera details as above).

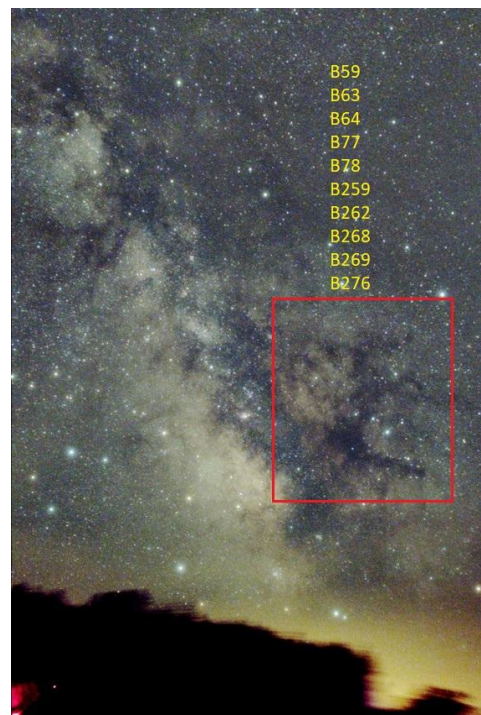
While I was galaxy hunting with the 8" SCT, the S30-Pro was gathering photons from IC4592 - the 'Blue HorseHead Nebula' in Scorpius. Unfortunately, the sky transparency for working reflection nebula wasn't the best, which impacted the observation. I'll have to try this object again on a better night.



(SeeStar S30-Pro, 60 second exposures in EQ mount mode and 30mm Stargazing Mode and IR filter, darks & flats applied internally, stacked for 77 minutes)

During this time, Dean M was back chasing SH2 objects in Ophiuchus. Gordon was working Messier galaxies in Ursa Major region. Ed had his 6" Celestron Origin smart scope imaging M16 - "Eagle Nebula" while he worked with the main scope in the dome. Both Dean M and Gordon dropped by my black-out tent to visit and see what I was EAA observing.

With the not so successful Blue HorseHead observation, I slewed the S30-Pro to a brighter pair of objects - M8 'Lagoon nebula' and M20 'Trifid Nebula' in Sagittarius in the same FOV. Took advantage of Dual mode to also simultaneously observe the 'Galactic Dark Horse' and its many Barnard Dark Nebula.



(SeeStar S30-Pro, 60 second exposures in EQ mount mode / 30mm Stargazing Mode stacked for 20 minutes, and also 60 second exposures in 3mm Milky-Way Mode stacked for 15 minutes, IR filter, darks & flats applied internally then AI noise reduction applied in-app)

Stayed up till 2am. Once the Moon rose, it illuminated all the hazy clouds overhead. Which explained the less than stellar observations that I was getting towards the end.



Here's a time-lapse from Monday night: <https://youtu.be/SdmCpHwojRw>

### **Tuesday 06/9/2026:**

Slept in late till nearly 10am. Lite clouds and a little sun, temps already 65 degrees outside. Forecast shows the temp going up to 80 and possible thunderstorms late this afternoon. After breakfast, I downloaded the subs from the AllSky camera and straightened up the campsite and car. Spent the day hanging out in our field section.

Visited with Gordon and the Dean's. During the day, more amateurs arrived at the park, including Eric L who setup his Tab clamshell camper by the Western field split-rail fence. A little after lunch, a couple of LVAAS members dropped in to visit, Kyle and his friend Jayme.

Around 3pm, I laid down for a several hour nap. At 5:30, I joined the group over at Dean M's camper for grilled beef & pepper burritos. Yum!

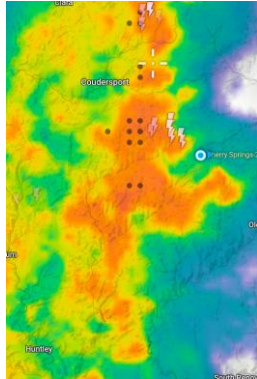


With the sky mostly overcast, we spent the evening under Dean M's trailer canopy, sharing snacks, and stories, while dodging an occasional raindrop. Eric L stopped over to visit and stayed awhile. At dusk, we got in a little naked eye astronomy by observing the Venus Jupiter conjunction and then a few bright stars thru openings in the clouds. Called it a night a little after 11pm. Stayed up reading till midnight.

### **Wednesday 06/10/2026:**

Woke at 7am, looked out the window and the field was socked in with fog, so I went back to sleep till 9am. The field was still foggy with an outdoor temp of 67. In talking with Gordon, a light drizzle had gone over around 5am. The forecast showed more rain on the way. Around 10am, porta-potties were delivered to the field. A bit early for the star party, but we'll take em. Visited with Gordon, and then Dean S stopped by the camp.

At noon, a thunderstorm with heavy rain went over the park. I sat inside and read, listening to the heavy rumbles of thunder and rain hitting the camper roof. At 1pm, another rumble went over the park scattering everyone indoors.



During a long break on the rainy weather, the tent company arrived and setup both the registration and vendors tents. The Sun even made an appearance for awhile and I had to put out the camper window awnings to help keep it cool inside the camper.



About another dozen campers also pulled in and setup their trailers or tents. Probably about 60 some astronomers on the field.

Around 4pm, showers moved back in with a heavy downpour at 4:30pm. Eventually, the rain came to an end and the sky cleared and it became a pleasant late afternoon.

At 6pm, we gathered under Gordon's canopy for a pizza dinner that he provided.



Around 7:45pm, with everyone uncovering their equipment, I went for a walk about the observing field. I first stopped over in the next section to our west and met a group of amateurs from all around the country. Jameson, Kaitlin, Matt, Andrew, Erik, Thorne, Tim. From New Hampshire, Erie Pennsylvania, New York, Michigan, and Ohio, Massachusetts, Chicago, Detroit, DC. Cleveland



They had all met a few years ago during various starparties, and this year organized online to all arrive at CSSP early enough to get a section for their entire group. They were a fun bunch to visit with!

I then dropped in to visit with a number of folks including Roxanne K setting up her DOB visual scope and imaging rig. While there, Adam T stopped over to chat. I then stopped by to see Doug H and Jim D Setting up their scopes, then Kyle and Eric L from LVAAS before heading back to camp.





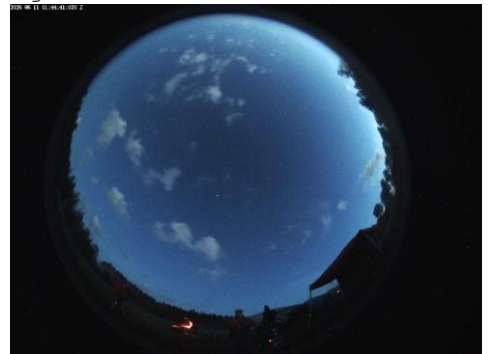
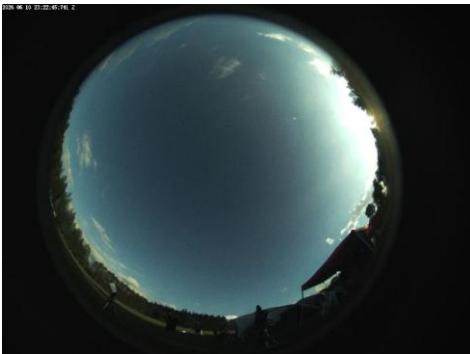
Back with our group, Gary showed me a great pic he got of the Elk, and pointed out it was still there on the hillside, so I walked over and got a picture. Soon joined by others.



Fog had begun forming on the field while I was out walking, and by 9pm it was growing thick with only directly overhead clear. I powered on the telescopes and turned the dew heaters to high, then headed indoors to change and phone home.



Once sufficiently dark enough, I skewed the 8" over to Spica in Virgo to focus and wait till full darkness. By then the fog had thinned, allowing us to do a little deep sky observing if we pointed the scope to higher elevation objects. Got in another visual observation of the Venus / Jupiter conjunction.



Weather wise, it was mild temps all night in the upper 60's. Calm with no breeze. Dean S was imaging the Gamma Cygni "Sadr" region, Dean M was practicing running automated focusing routines, Gordon was back working Messier objects for his AL project, and Ed was working on software issues.

I started off the night with the 8" SCT, continuing galaxy work up high in Coma Berenices and Bootes using the June 2025 Sky & Tel magazine. First up was M85 & its companion NGC4394. +9.1 mag M85 is a giant elliptical galaxy about 60 MLY away. Its companion, barred-spiral NGC4394 shines at +11.9 mag and is 55.6 MLY away. M85 displays a bright core and hints of concentric shells while NGC4394 displays a bright core and central bar along with several outer spiral arms that encircle the bar. Here's the EAA observation:



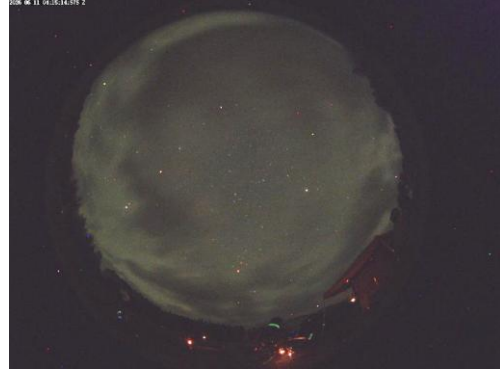
(8" SCT @ f6.3 on an Atlas Gem, ZWO ASI294MC Pro camera with L-Pro filter, 180 second subs, dark & flat calibration frames, PHD guided, livestacked using SharpCap for 30 minutes).

Then on to NGC5529 in Bootes. The +11.9 mag edge-on spiral is about 144 MLY distant. An off centered dark lane cuts along the length of the galaxy revealing a bright core partly peeking out. At one end of the galaxy the dark lane appears to cut diagonally across the width of the spiral. Additionally, several faint dwarf galaxies are visible including PGC50952, and another nearby small companion spiral +15.3 mag NGC5527.



(same telescope & camera details as above, but livestacked for only 21 minutes).

The sky wasn't too bad if you stayed high above the horizon, but around midnight, local clouds began forming directly overhead. I had to pause the livestack several times to let the clouds clear.



Unfortunately, I wasn't quick enough to stop the S30-Pro from stacking compromised images of a widefield mosaic I was doing of the North American and Pelican Nebulas, spoiling the observation.



(SeeStar S30-Pro, 60 second exposures in EQ mount mode and 30mm Stargazing Mode with mosaic, and IR filter, darks & flats applied internally, stacked for 60 minutes)

The evening observing was cut short by an intense lightning storm that slowly moved in after midnight. At first the flashes were annoying, but as the storm approached closer around 1:30am, with the sky clouding over, we closed down and covered up our telescopes. Gordon and I got out our camping chairs to watch the light show pass to the south.





Only as the storm was passing the park to our south, did we hear any thunder. Called it a night around 2am.

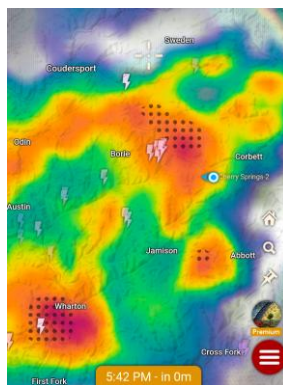
Here's a time-lapse from Wednesday night: <https://youtu.be/iEXKBoeYppA>  
And a time-lapse of the lightning storm: <https://youtu.be/KQBIuvLowFI>

#### **Thursday 06/11/2026:**

Woke around 8:30am. It was a cloudy morning, temps in the upper 60's and a damp field. Ed was cooking omelets for everyone but I had overslept. The Dean's were busy packing up their equipment as they were leaving today. (Dean M was heading home for a family trip and Dean S heading to the eastern side of the state to Lock Haven for an airplane show). Dean S was the first to pull out around 10:30am with Dean M about 20 minutes later. Gary was planning on leaving Friday morning, but Ed, Gordon, and I were staying thru the starparty. Lots of empty space around us now but I'm sure that will fill up. (only took a couple of hours for new campers to began setting up).

Sat around camp enjoying the warm weather. Visited with Gordon, Gary, and Ed, then sat outside and read a book. Mid-afternoon, with the temps pushing 85 under sunny skies, I got out my solar generator and ran my camper AC from it for a couple of hours. Several new neighbors pulled in to the vacated spots in our section, including Raj from near Cincinnati. At 4pm, the four of us gathered at Ed's for a cheeseburger and Mac-n-cheese dinner, with my supplying the burgers and Ed the Mac.

Around 5pm, prior to a thunderstorm that was heading our way, Gordon, Ed, and I walked over to the western field to talk with Adam T and Roxanne K about the Winter Star Party. The three of us are almost certain we'll be going next year. With the western sky darkening and raindrops beginning to fly, we hurried back to camp at 5:45pm, just beating the storm breaking over the field with gusting winds and torrential rain.

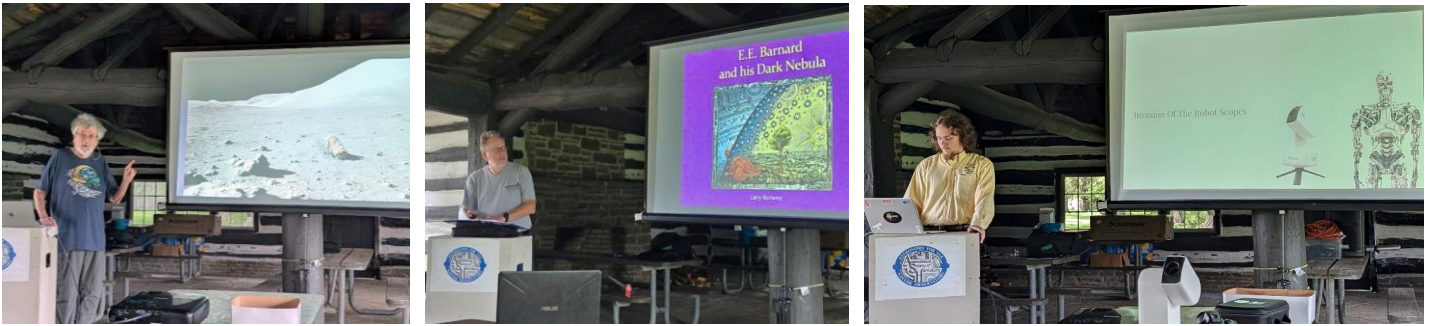


During a break in the storm, Gordon and I headed over to Ed's where we continued our starparty discussion and eating snacks, till nearly 8pm. I then headed back to my camper to phone home and spent the remainder of the evening watching TV.

**Friday 06/12/2026:**

Up at 8am to a dreary day, with low clouds and drizzle. Warm temps, 68 degrees and humid. Gary had already pulled out for home by the time I was up. Fixed breakfast and caught up on the news. Around 9:45am, the drizzle had stopped and the Sun began to break thru, sending the temps into the low 70's. It was going to be a warm day.

At noon, registration for the star party opened. Several astro friends stopped by for a visit: Mike M from Rochester NY, and Mike P from Niagara, Canada. It was good to see them. Headed over to the speaker pavilion at 1pm to catch Bob Y's talk on observing Lunar Libratory Regions, interesting stuff! Got there just in time for a breezy shower to pass over. Rainy for the next hour. Said hello to Tom C there, and met Karrie, a local amateur imager from back home. (Karrie was actually setup in our section near Ed, so we promptly adopted her into our group). At 2pm, I gave my presentation on "E.E. Barnard and His Dark Nebula" to several dozen attendees that braved the rain and chilly temps to sit in on the talk. Gordon and I then stayed for Robotic Scope talk by Colin M.



At 5pm the three of us had dinner at Ed's camp, Ziti and meatballs. Very good! By now, most of the folks attending the starparty had arrived and were setting up for the night. Probably a good 350+ amateurs on the observing field. Still a fair amount of open space left if you weren't too picky on where to setup.

Lots of visitors were out-and-about walking around. I uncovered the telescopes to give them something to look at and ask about, which got the attention of several of my new neighbors. I was happy to answer questions and talk astronomy. Gordon and I then went for a walk to the back field to visit Mike M and Mike P.



(Also stopped by to say hello to Roxanne K and Eric L).

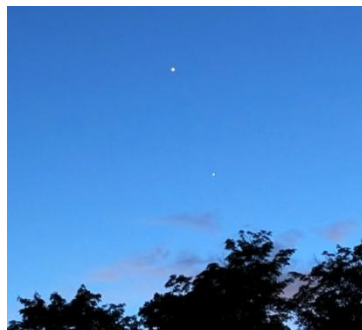
Someone pointed out all the jet contrails circling overhead. It's known that several Air National Guard units like to practice over the PA Wilds region, I'm guessing that's what we're seeing.



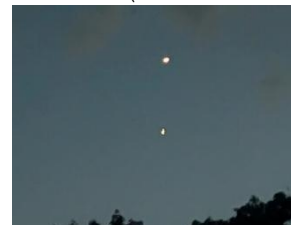
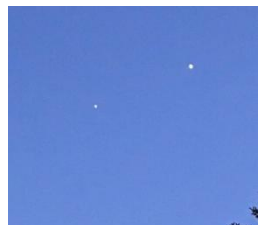
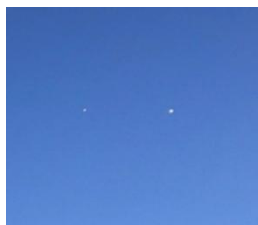
Back at camp, I assembled the blackout canopy and changed into heavier clothes. I then walked around and visited with all the folks in our section. Here's a few photos of my neighbors: Keith, son Evan, Kara, Mattie. Raj. Colin M. Xiao & family. Jarred. Jeff. Karrie (Kiski). Randal and Leeson (Mary). And Phyllis and Cal. Good to meet everyone!



Once back at my camp, I got in another visual observation of the Venus / Jupiter conjunction.



Here's the full series of the Venus / Jupiter Conjunction: (Pixel-8 cellphone)



Sunday 6/7

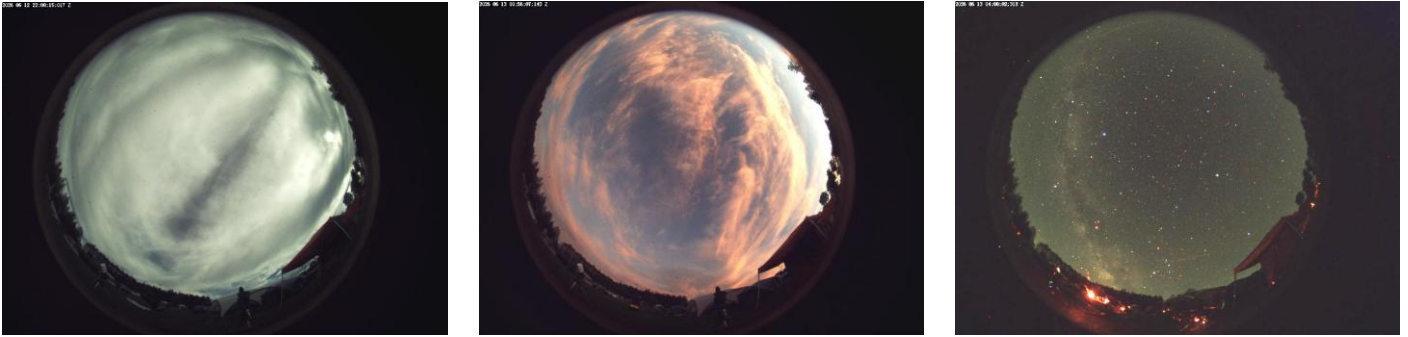
Monday 6/8

Tuesday 6/9

Wednesday 6/10

Friday 6/12

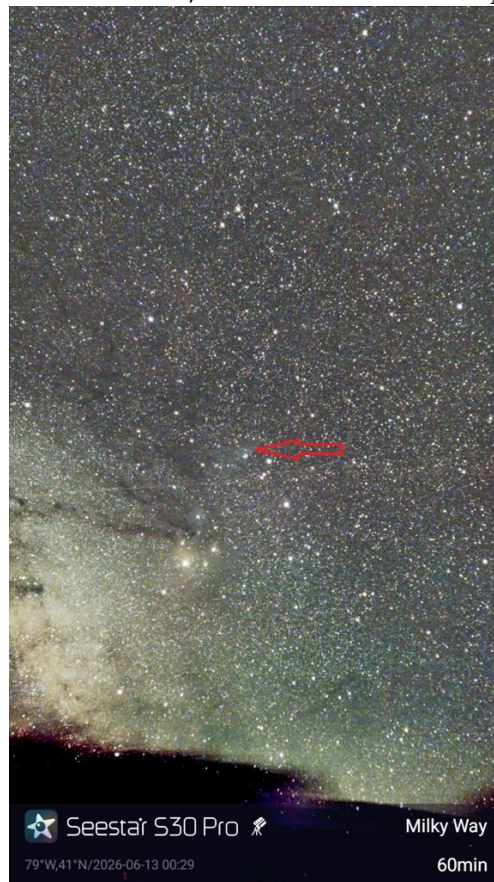
A cloudy, dearlly day turned into a magical Cherry Springs clear night of observing! After dusk, I was able to watch for the Milky-Way rising with first Scorpius and then Sagittarius crossing the meridian, and then the Summer Triangle climbing in the East. Lots of activity both on the ground with people walking around and in the sky!



As soon as it was sufficiently dark, I polar-aligned the S30-Pro sent it over to +4.3 mag Nu Scorpii for another attempt at reflection nebula IC4592 - 'Blue HorseHead Nebula'. Both Gordon and Colin wanted to see the SeeStar S30-Pro EQ polar routine, so I called them over to watch. I then set the SeeStar to Dual mode using the 30mm Stargazing on the primary nebula while the 3mm widefield Milky-Way lens was capturing the general region. I let both soak photons for a good 60 minutes, periodically checking in on each while I got the main 8" SCT main scope up and running.

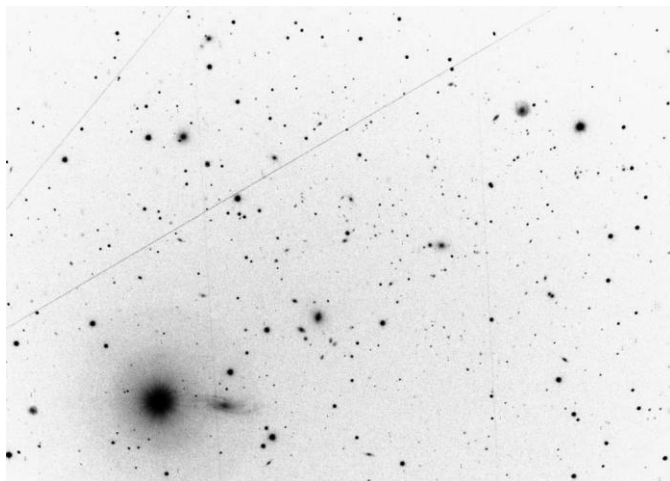
Here are the S30-Pro results: (30mm on the left, 3mm on the right).

The overall reflection/dark nebulosity is very large, and it would have displayed better details if I had done a mosaic for a larger FOV and let the capture run for several hours. (But that would have meant no pretty widefield view that shows the faint reflection nebula along with the more spectacular Rho-Oph and Antaries region). Life is full of compromises! LOL. The 30mm picked-up a grouping of interesting streaks along the bottom of the FOV. Not sure what those were, satellites or airplanes?



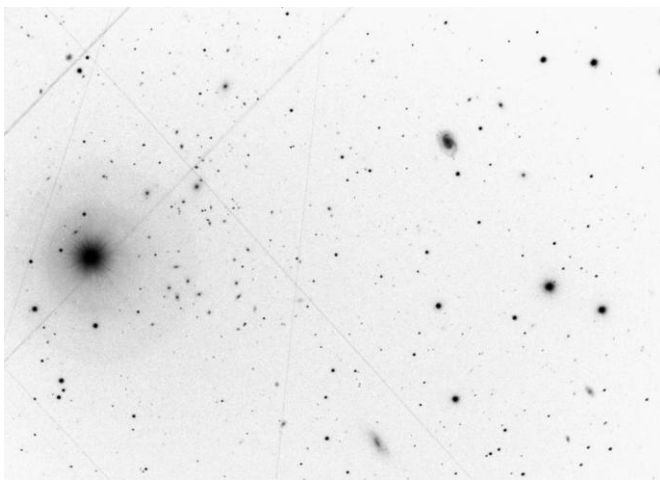
(SeeStar S30-Pro, 60 second exposures in EQ mount mode / 30mm Stargazing Mode stacked for 61 minutes, and also 60 second exposures in 3mm Milky-Way Mode stacked for 60 minutes, IR filter, darks & flats applied internally then AI noise reduction applied in-app)

While the S30 was working on the Blue HorseHead, I went Abell galaxy cluster hunting with the 8" SCT, starting in Ursa Major. The first observation was of Abell-1318, a pretty +15th mag cluster of nearly two dozen galaxies in the bowel of the Big Dipper near the bright +5.7 mag star SAO28064. I let the livestack run for 30 minutes while using my reference book to identify many of the small faint galaxies involved. These included a number of bright NGC galaxies - NGC3733, NGC3737, NGC3759, IC2943, and many PGC galaxies. I always get a kick out of exploring galaxy clusters!  
Here's the EAA observations, both light and negative images:



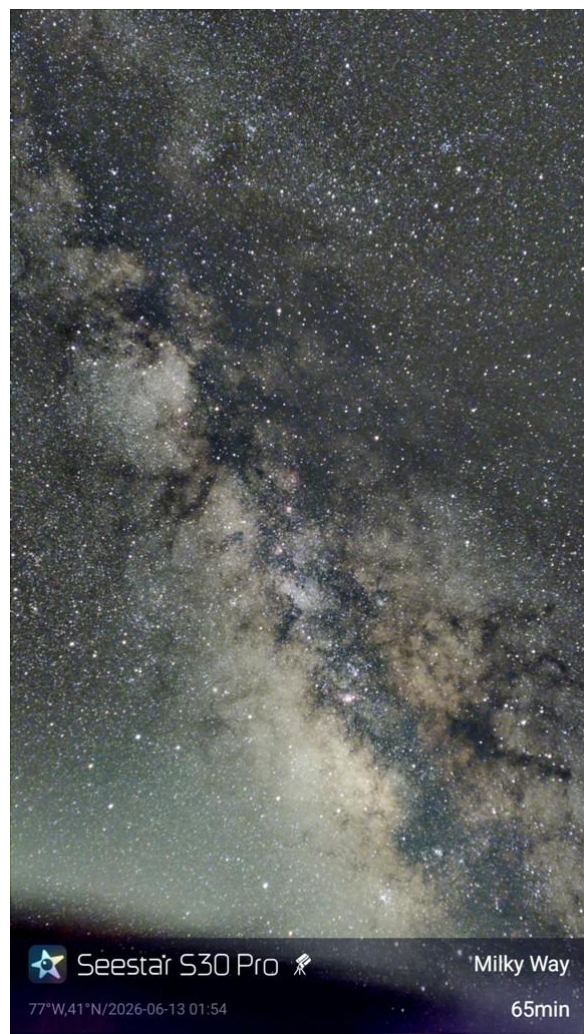
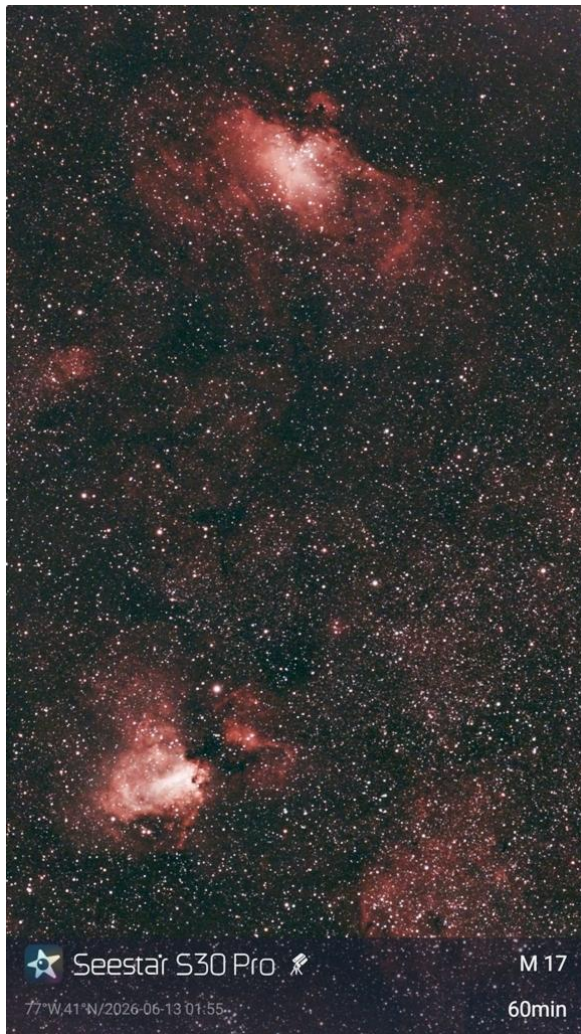
(8" SCT @ f6.3 on an Atlas Gem, ZWO ASI294MC Pro camera with L-Pro filter, 180 second subs, dark & flat calibration frames, PHD guided, livestacked using SharpCap for 30 minutes).

Next was another cluster in the bowel of the Dipper, +15<sup>th</sup> mag Abell-1377, very close to the bright +5.3 mag star SAO28142. While the FOV contained a few moderately bright NGC's - NGC3850, NGC3888 & NGC3889, the galaxy cluster consisted of faint PGC galaxies looking like grains of sand just to the right of the bright field star.



(8" telescope info and camera exposure same as above)

While Abell-1377 was filling the monitor screen, I wrapped up the 'Blue HorseHead' on the S30-Pro and decided to continue in Dual mode with an observation centered on the 'Eagle Nebula' - M16, and the 'Swan' - M17, along with the beautiful starclouds of Sagittarius. The HII nebulas displayed nicely in the 30mm with the internal narrowband filter in use. But it was the 3mm widefield of the Large and Small Sagittarius Starclouds running up to the Scutum Starcloud, along with the various large dark nebulas (Galactic Dark Horse) that stole the show. I'm looking forward to doing a full 4K Milky-Way FOV mosaic of this wonder-filled region! Here's the S30-Pro observations on the next page:



(SeeStar S30-Pro, 60 second exposures in EQ mount mode / 30mm Stargazing Mode, NB filter, stacked for 61 minutes, and also 60 second exposures in 3mm Milky-Way Mode, IR filter, stacked for 65 minutes, darks & flats applied internally then AI noise in-app reduction)

At 1am, I delivered KitKats to folks in our field section.

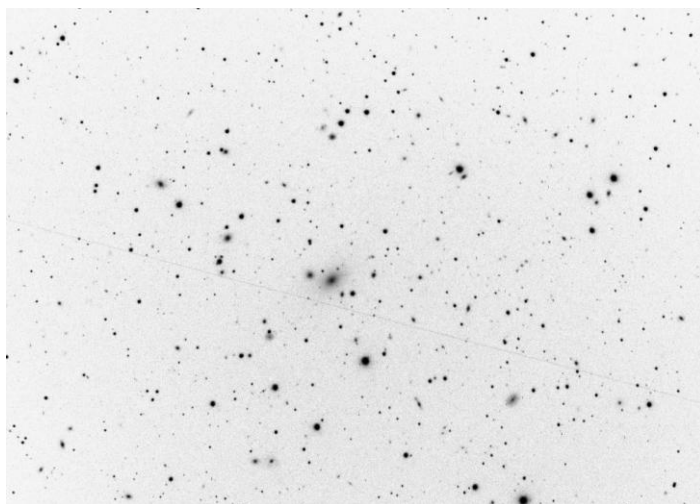
Ed had been imaging the Needle Galaxy - NGC4565 in Coma Berenices and getting ready to shoot the Fireworks Galaxy - NGC6949 in Cepheus.

Gordon was visually working Messiers with his 18" DOB reflector, M95, M96 in Leo, then later M globular objects in Ophiuchus.

The Milky-Way was now on the meridian with the Summer-Triangle approaching the zenith. A beautiful summer evening of observing!



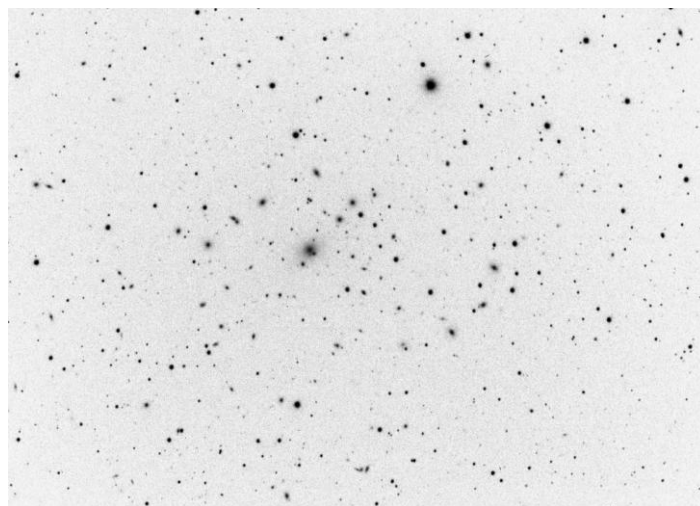
Back at camp, I continued my Abell Galaxy Cluster project, slewing the 8" SCT over to Serpens for +15<sup>th</sup> mag Abell-2052. The galaxy cluster centered on bright +14.7 mag elliptical UGC9799. I was able to identify over two-dozen PGC galaxies in the FOV. Abell-2052 is located about 480 Million Light Years away. Here's the EAA observation:



(8" telescope info and camera exposure same as above)

While hunting the Abell's, both Gordon stopped over to see the clusters, and Colin also dropped by to see what the S30-Pro was doing in Dual mode. Both were very impressed with what the SeeStar could do.

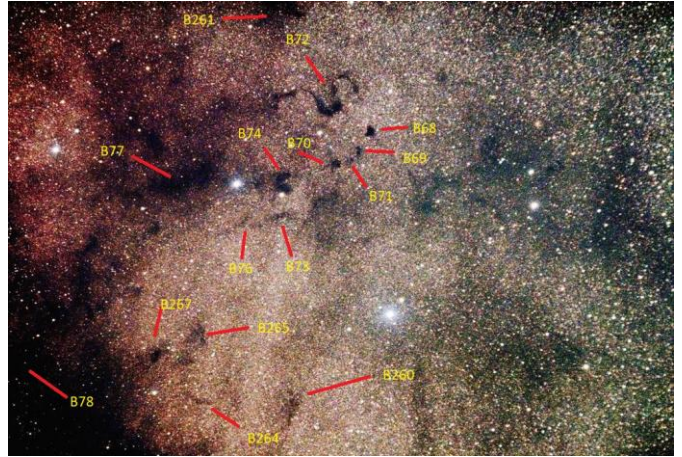
The last Abell object on my list was Abell-2063, another +15<sup>th</sup> mag cluster in Serpens. The principle galaxy of this group is spiral MCG+2-39-20 shining at +14.8 mag. There are many observable PGC galaxies, many showing some detail. Here's the observation:



(8" telescope info and camera exposure same as above)

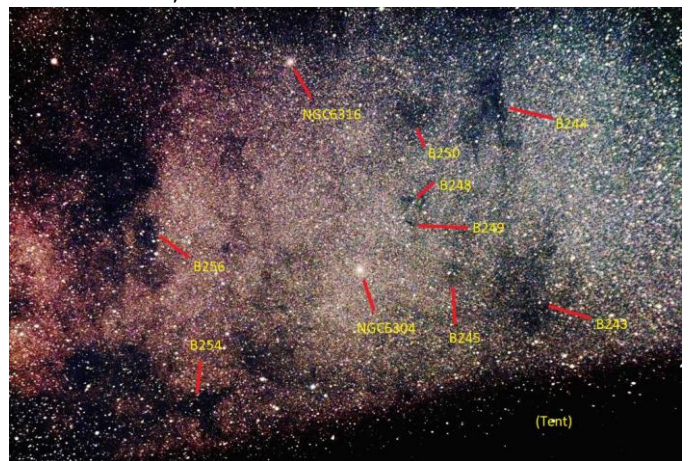
I then put away the Abell Galaxy Cluster book and turned to working my Barnard Dark Nebula project using the EVO50mm and ASI294MC camera riding piggyback on the 8" SCT optical tube on the Atlas Gem mount. These are mostly wide-field objects and not too suitable to the narrow FOV of the 8" SCT, even using the f6.3 reducer. I pulled-out my 2011 reprint of Barnard's atlas of selected regions of the Milky-Way and reviewed my observing list, looking for dark nebula that would be silhouetted in front of bright starclouds. First up was the B72 region in Ophiuchus corresponding to Barnard's Chart-20 from his atlas. The EVO50mm only covers a small portion of chart, so I off-centered the primary target, B72 - 'Snake Nebula', so as to capture more of the surrounding dark nebula.

After just a few minutes of livestacking, and using the book, I was able to identify many Barnard dark nebulae: B72, B68, B69, B70, B71, B73, B74, B76, B77, B78, B260, B261, B264, B265, and B267.



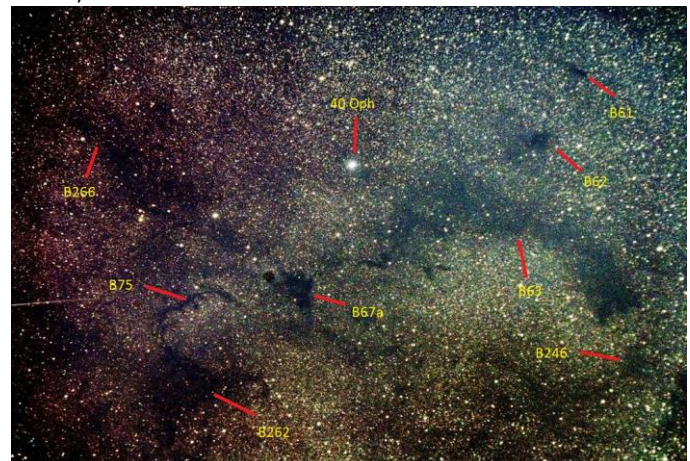
(EVO50mm @ f4.2 ZWO ASI294MC camera with L-Pro filter, 60 second subs, dark & flat calibration frames pre-applied, PHD guided, livestacked using SharpCap for 30 minutes).

Next was the region of chart-18, around the small globular cluster NGC6304. Once again I was able to identify multiple dark nebulae: B243, B244, B245, B248, B249, B250, B254, B256, and another small globular NGC6316. (had to cut the livestack short, as the FOV in the lower right was beginning to set behind Gordon's tent, lol.)



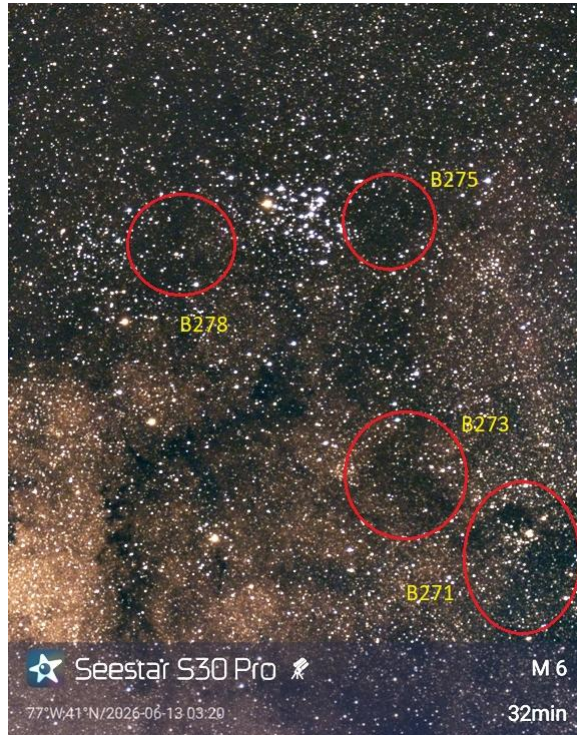
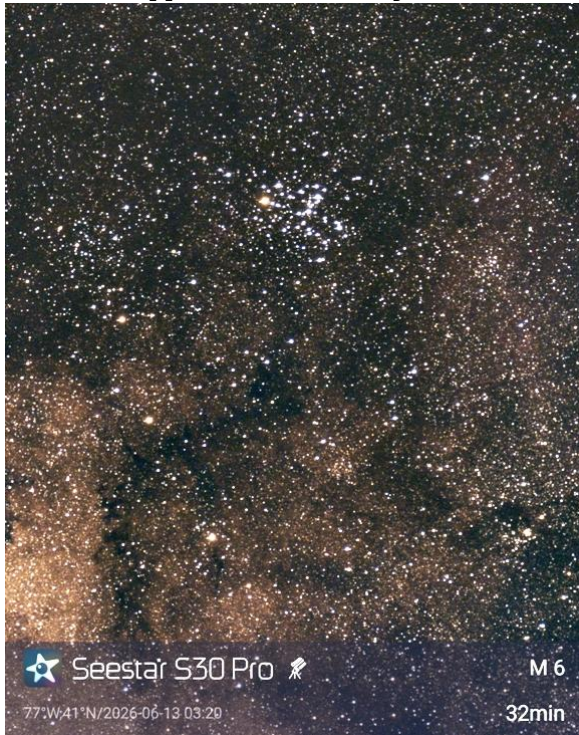
(same EVO50mm telescope and camera info as above, but only livestacked for 5 minutes)

Finally, with the morning growing late, I had time for one more, the region, Chart-19, around the bright star 40-Oph. Another fun region of starclouds and large dark nebulae. Here I counted B61, B62, B63, B67a, B75, B246, B262, and B266.



(same EVO50mm telescope and camera info as above)

While I was exploring dark nebula with the EVO50mm, the SeeStar S30-Pro was hunting dark nebula around the open star clusters M6 and M7 in the scorpion's tail. M6 FOV (cropped) containing B271, B273, B275, and B278:



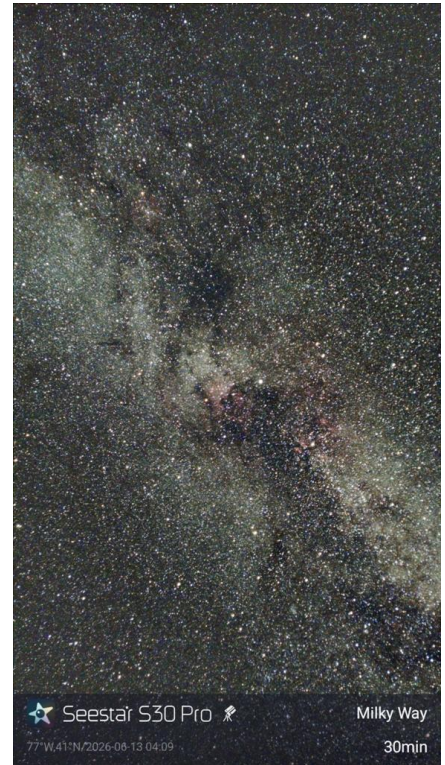
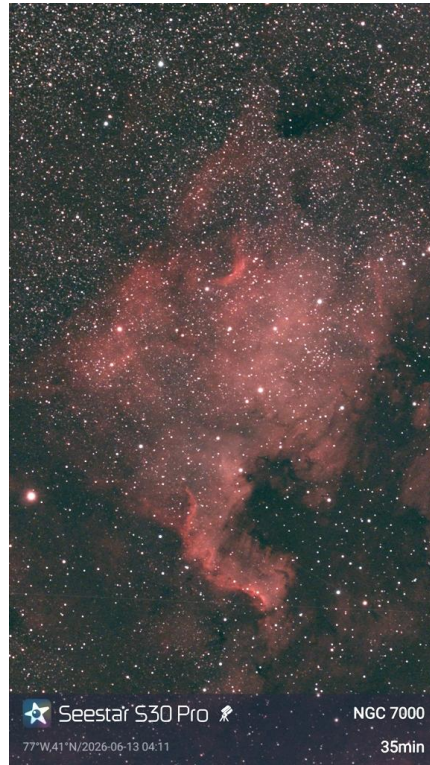
M7 FOV containing B283, B286, and B287:



(SeeStar S30-Pro, 60 second exposures in EQ mount mode / 30mm Stargazing Mode stacked for 32 minutes, and also 60 second exposures in 3mm Milky-Way Mode stacked for 15 minutes, IR filter, darks & flats applied internally then AI noise reduction applied in-app)

And here's the 3mm widefield Milky-Way observation with a lot of blurred foot traffic.

Also, the 'North American Nebula' - NGC7000 and wide-field of Cygnus, centered on Deneb.



(all 60 second exposures)

Finally, a much too soon dawn began breaking in the East. After squeezing in a few more minutes with the S30-Pro on NGC7000, I powered down the telescopes and threw the covers over them and disassembled the blackout tent.

Spent a few minutes watching the fading starlight, then staggered indoors. In bed asleep by 5am.



Here's a time-lapse from Friday night: <https://youtu.be/0V 1VKrQKt4>

**Saturday 06/13/2026:**

Slept in late till 10am. Woke to a sunny, warm day. Just an occasional scattered puffy cloud. Checking the weather forecast showed clear skies for the evening! Yea! Fixed a quick breakfast and then grabbed my box of astro goodies and headed to the swap meet. Afterwards, I drove down to Lyman for a shower, then once back at camp, I decided to skip the afternoon talks and get in a nearly 2 hour nap so I could make it thru the upcoming night observing. (Hindsight - I should have went to the talks,, lol).

All day the sky was beautifully clear. Headed over to the pavilion at 5pm for the door prize raffle and joined Mark M there. No winning tickets for me.

The ASH starparty staff did a great job with the event!



(Doug and ASH members running the raffle, Dave M, Roxanne K, and Bob Y at registration)

I then joined Gordon over at Ed's camper for snacks and clean out the fridge leftovers dinner at 6pm. A little later we were joined by Karrie and shared Snickerdoodle cookies.

Towards sunset I went for a stroll around the now mostly full observing field to see all the telescopes being uncovered and prepped for the night. Met a bunch of folks!

Here's their names and scope photos, somewhat in order: (probably missed a few folks) Chuck and Frances, Ed, Richard and Richard, Mike, Eric, Steve, Chris, John, Bob, Jeff, Nick, Mark, Levi and Jasper, James, Tony, Nick and Jen, Art and crew from Kopernik Observatory, Declan and Matt, John, Andy, Carla and Roger, and Gordon who needed a nap.





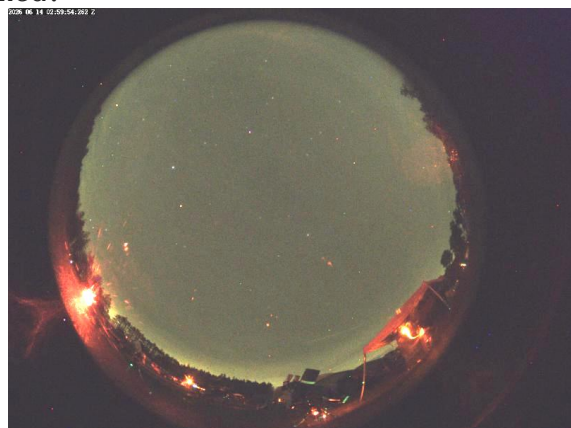
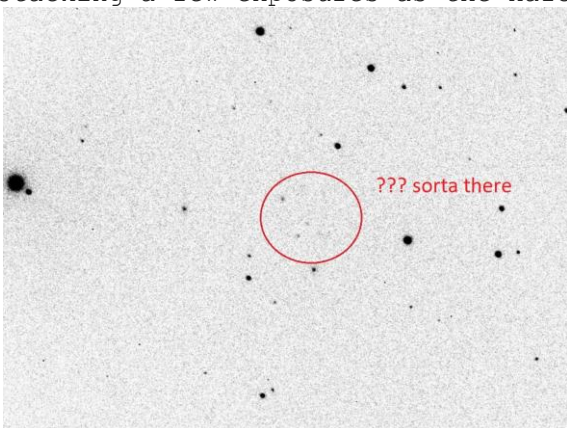




Back at camp, with dusk falling, I powered on the scopes and headed indoors to change. I soon joined Gordon in watching a line of hazy clouds slowly begin creeping in from the west. What the heck happened to the forecast! Shockingly, the weather satellite now showed thin clouds streaming our way from a storm way west of us in Indiana. It was not looking good for the night.



After waking the mount, I skewed the main 8" scope to the Big Dipper stars IN Ursa Major and focused the camera. I then tried to pull in a faint Palomar Galaxy cluster - PGC1221+5548, but finally called it quits around 11pm after only successfully EAA livestacking a few exposures as the haze thickened.



(8" SCT, 180 second subs, livestacked for 6 minutes).

I stepped out from under the blackout canopy to discuss the grim situation with Gordon, and we were soon joined by Karrie. The three of us then walked over to visit with Ed who was standing outside watching the clouds thicken. There was nothing left to do but get out the bag of KitKats to console us. After checking the weather satellite once more, we all headed indoors to snooze till 2am when we 'might' get a clearing line.

Back up at 1:30am, other than a few stars shining dimly thru the haze, there was no improvement. The satellite image showed no hope, so I reluctantly powered down the equipment (the S30-Pro never even got powered on), and covered up and stowed the blackout tent in the car. Disappointedly in bed by 2:30am.



#### **Sunday 06/14/2026:**

Woken at 8am by the sound of folks packing and loading their cars. All around me, most of my neighbors were busy getting ready to head home. After a quick breakfast, I joined in the fun, starting first with the telescopes and AllSky camera. I hadn't yet decided if I was traveling home today or staying overnight and setting the SeeStar back up.

From our group, Karri was the first to leave the park a little after 9am. Gordon was next around 10am, with Ed pulling out close to 11am. Much of my section of the field, along with most of the park was now empty.

By then I had all of my telescope equipment packed and began working on the camping gear. At noon, I had everything packed and after checking the weather forecast one more time, made the call to go home. After changing into a clean shirt I was on the road towards Pittsburgh. Didn't get far from the park when I drove into lite rain showers, and later several heavy downpours. After stopping for a late lunch, I made it back to the Burg by 5:30pm and got everything unloaded prior to severe storms that went thru our area. The next day I learned that Cherry Springs got hit by the storms and a tornado had touched down nearby. Glad I left!

So out of seven nights at Cherry Springs, Two were completely cloudy with rain and one was a disappointing useless hazy mess. Three nights were partially clear with several hours of observing on each before moonrise or incoming storm shut down the sky. But Friday evening turned on the Cherry Springs 'magic' and it was a perfect all-nighter! Tallying-up the hours, (with allowing 5 dark hours per night), that's 35 hours of potential dark sky observing. Adding up the actual hours of observing gives me 14.5 hours, so a little less than 50%, let's say 3 good nights, 4 bad. I did not break even. ☹

Once again, the clear sky odds this year were not in my favor. But as always, regardless of the weather, I enjoyed the time spent at Cherry Springs with all my astronomy friends from near and far. Here's hope for better observing on the next astro-trip outing in July to the Green Bank Star Quest!

Larry McHenry

Astronomical Webportal: <http://www.stellar-journeys.org/>

