

## Okie-Tex Starparty September, 2025

So far, for most of the 2025 observing season here in the northeast, it's been a cloudy and wet experience. Starting with the September New Moon, I was hoping to turn that around with a trip to the Oklahoma panhandle desert for the 2025 "Okie-Tex Star Party"! This spring, a group of us Western Pennsylvania ORAS club "Cherry Springs" regulars decided to make the 1,370+ miles trip in September to Kenton Ok to observe under the Bortle 1 skies at Camp Billy Joe where the 42<sup>nd</sup> annual Okie-Tex starparty was being held. (36° 53.87' N, 102° 57.12' W, Alt. 4,439 ft.)

Mid-September, Ed K, Dean M, and I hitched-up our campers and made our way out west. Our initial destination was the Black Mesa State Park campground, a mere 9 miles from Kenton Ok, where we would spend several days recuperating from the long drive and also explore the Black Mesa area. The park was also a dark-sky park so we hoped to get in a little observing while there.

I left Pittsburgh on Saturday the 13<sup>th</sup> and after spending four days on the road, with overnight stops in Greenfield Indiana; Columbia Missouri; and Great Bend Kansas) arrived Tuesday afternoon (9/16), at the Black Mesa State Park near Kenton, Oklahoma.

As I was just staying at the park for a few days, I only put out my camper visor-awning and chair. I did assemble the SeeStar S30 smart scope and EQ tripod, along with getting out my 80mm visual refractor. After spending a few days there hiking and exploring the nearby dinosaur tracks, Thursday evening it was time to pack-up the few camping items in anticipation of leaving the next morning for the starparty.

For the drive down and stay at the Black Mesa, please see the Black Mesa report:  
<http://stellar-journeys.org/sp-reports/Black-Mesa2025.pdf>

### At the Okie-Tex Star Party:

#### Friday 09/19/2025:

The three of us camping at Black Mesa (and our new friend Nick from St Louis) decided not to try and be lined-up on the road at Camp Billy Joe in Kenton at the crack of dawn, we'd let all the die-hards have that fun. So I slept in till 8am. Packed away the inside of the camper while having breakfast. Then moved outside to disassemble the visual scope and SeeStar tripod. Hooked up the camper and was ready to go. Headed out at 9am while Ed, Dean and Nick had their rigs at the park dump station. (one of the benefits of not having a bathroom in the camper! ☺ )

Arrived at Camp Billy Joe around 9:30am. The northern third of the observing field was already getting full, but I found large open area 4 rows back from the end about midway along the row. I quickly setup camp and met my neighbor across from me in the row, Al, with his large 27" dob. Dean M arrived about a half hour later and setup to my north east, and Ed and Nick both rolled in prior to 10:30am and setup to my north and west.





Later in the afternoon, our good Cherry Springs Canadian friend Gordon M arrived and pitched his tent in a little alcove between Ed, Nick, and myself. We were a tightly packed group. (Gordon was the primary instigator in getting all of us to attend Okie-Tex with his stories from prior years). The mesa views all around us was very scenic!



Assembled my usual EAA telescope equipment: 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 EVO 50mm refractor with a ASI294MC camera (uncooled model), and a 60mm Antaries refractor guidescope with an ASI120MC camera. I also setup my AllSky cam, a ZWO ASI224MC camera & fisheye lens in a DIY dome attached to a tripod. And my SeeStar S30 smart telescope.



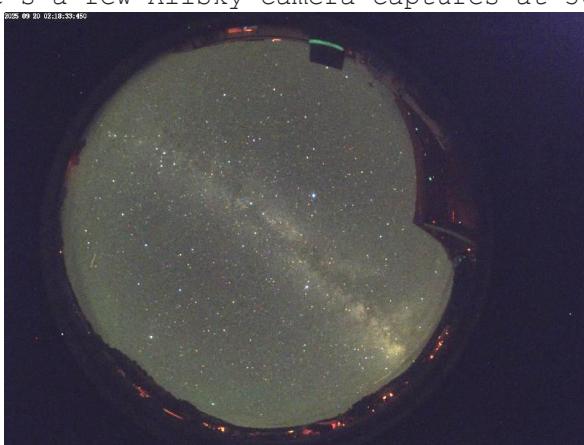
Gordon and I walked up to the main building and registered and bought some swag. At 5pm, while the group began happy hour at our campsite, I walked up to the food building for dinner. Ran into Mark M from the Rochester club who was also here at Okie for his 1st time. Good seeing another Cherry Springs acquaintance.



Back at camp I joined the crew and we all sat out in front of Dean's camper and watched the sky slowly grow hazy. A friend of Gordon's stopped by, Jared from Oklahoma, to visit.



At dusk, I assembled the blackout tent around the camper clamshell hatch, uncovered the scopes and with Polaris visible thru the slight haze, I was able to polar align the Atlas Gem mount and get the 8" SCT optical tube focused. Also polar aligned the SeeStar S30. The Milky-Way was occasionally breaking thru thinning sections of the haze, enticing me, so I decided to make a go of it and attempted observing thru the mucky skies. Here's a few AllSky camera captures at 30 second exposure:



Mr Murphy visited us all with various equipment issues. (I had the wrong timezone entered in the software, lol). After working thru the technical issues, I was able to get an observation of small Galaxy NGC6956 (mag+12.3 barred spiral) and its two small 14<sup>th</sup> +mag nearby companions PGC65281 and PGC65293, in the constellation Delphinus, the "Dolphin". Being close to the Milky-Way, it was a busy FOV with plenty of stars. NGC6956 displayed a nice "S" shape with spiral arms coming off of either end of its central bar structure. Companion galaxy PGC65293 also showed a central bar with spiral arms encircling it. The third smallest galaxy, PGC65281 displayed a bright core with a hint of a dark lane. Here's the EAA observation, full-size and cropped:



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

While galaxy observing, I also had the S30 SeeStar doing a mosaic of the North American Nebula, NGC7000 in Cygnus. But I had got a late start on the image and thicker clouds moved in to spoil the capture before it could finish. Here's the partial mosaic:



(SeeStar S30, 60 second exp in EQ mode with the NB filter, livestacked for 30 minutes)

As it had been a long day of setup, so I called it at night at 1:30am. Except for Nick, most of the others had also already turned in.

#### **saturday 09/20/2025:**

Slept in till 8:30am, woke to a cloudy morning with outdoor temps in the upper 50's. Had breakfast and visited with the group and other passerby's. With the sun finally breaking thru the clouds around 11am, I setup the solar panels and plugged in the solar generator. (600 watts of panels feeding the Anker 2K solar battery, and another 200 watt panel feeding the camper deep-cycle marine house battery). I was easily able to run my microwave, fridge, coffee maker, and camper heater when needed.



Mid-day I walked up to the main buildings to visit with folks there. Guessing there were probably 350 people on the observing field.

Around 4pm, a thunderstorm headed our way, so everyone packed away camping stuff and telescope equipment. Fortunately it went to our south and missed the camp.



Headed up to dinner at 5pm and joined Mark M. The sky remained mostly cloudy. After dinner, walked around for a bit then joined the group for happy hour. One of Gordon's friends, Rich from the Las Cruces NM club stopped by for a chat.

Around 8:15 pm, a large storm went by in the distance to our NE putting on quite a lightening show. We pulled our chairs out in the road for an unobstructed view and watched the fireworks for over an hour.



I stepped inside the camper at 9pm for a phone call home, and rejoined the group at 9:45pm. After a few more minutes, most called it a night. But Gordon and I began watching a storm coming out of the NW, heading directly for us. By 10pm the lightening so intense it looked like a strobe light. Until the storm was upon us, the air was calm and there was little sound to be heard. I kept a close watch on the lower edge of the storm, hoping not to see a funnel cloud drop down.



Shortly after 10:10pm, with the low rumble of the storm now building to a loud roar, the storm finally hit. Gordon and I made a dash for our camps. Within a minute, we were getting hammered by a severe winds and rain. (The next day Jared, who is a storm chaser, estimated that we had 50 to 60 mph straight-line winds with higher velocity gusts). Looking out my camper windows, I could already see tents around me damaged and telescopes down on the ground. Al had his big dob set to weathervane, and the wind was freely moving it around. His observing buddy directly across from me had his large dob pointing straight up. I watched the wind strip the telescope cover off the dob, sending it whirling high into the air, and then slamming it down on the field about a 100 ft away.

With the bare telescope truss tube pointing straight up, the wind then flipped the optical tube over onto the ground rolling it out into the road and destroying the rocker box mount\*. Yikes!!



A number of telescope "sky box" shelters were blown down too, one rolling cross the road crashing into Nick's camper.

By 10:30pm after dumping light hail on us, the storm was done for the night. Our group came thru alright, but many others not so lucky. All of us gathered afterwards to check things out and lend a hand to those who needed it. Once the threat of any additional severe weather had ended, I headed for bed at midnight. (note\* - The next day, the owner of the dob with help from his friends was able to repair the rocker box and put the telescope back into operation. The mirror was unharmed).

#### Sunday 09/21/2025:

Slept in till around 8:30am, woken by the noise of folks cleaning up from last night's storm damage. After a pancake and bacon breakfast made by Dean M, four of us, Gordon, Dean M, Jared, and I went for a late morning hike up to the top of the mesa overlooking the starparty field. (Ed was attending an all day PixInsight imaging course over in Kenton at the senior center hall).



It was a strenuous climb, but the view from the top was great! You can see the entire field below, and far into the plain to the north.



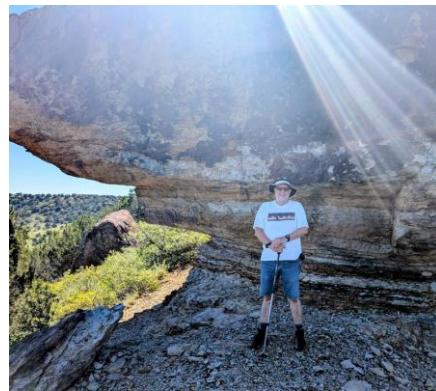
Our biggest worry of the climb was watching out for rattlesnakes. Normally there are two pink flamingos (Okie and Tex) mounted on top of the mesa, but one flew the coop from last night's storm, lol. (we kept an eye out for the missing bird, but didn't find it, eventually another man and his son located it).



The pitted surface of the mesa top held rainwater from the night before.



While Dean and Jared made their way back down, Gordon and I worked our way over to the ledge underneath the mesa overhang. Pretty cool place.



While posing sitting down, I didn't notice that my Vortex 10x32 monocular had popped off my belt onto the ground. Fortunately, some kind souls turned it in at 'lost-n-found'.

After rejoining Dean and Jared, we finished the climb back down and returned to camp at about 11:45am. Then spent the rest of the afternoon recuperating from the hike and staying cool in our camping chairs.

It's been Hot during the last several days, upper 70's to low 80's. At night the temp quickly drops to the mid 50's. When you stand in the sun, it feels hotter, maybe because we're at 4,439 ft elevation, so I'm staying in the shade. (drinking a lot of water too). The dining hall and classroom has AC, so folks hang out there when it gets too warm out.

Met a few amateurs during the day, Rebecca from the Oklahoma club, and Ben, another friend of Gordon's, and also Jana from Simi Valley California. Also met a number of CloudyNights folks.

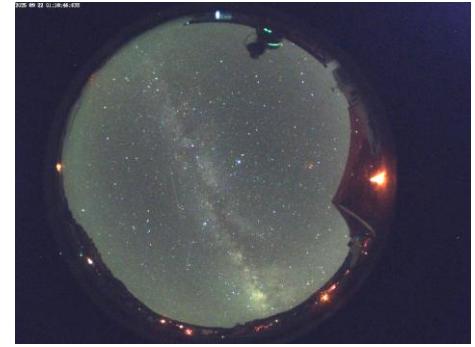


At 5pm, I headed up to the dining hall for dinner. (I think I'm going to put on weight during this starparty, lol).

Back at camp, I prepped my observing notes for the night, uncovered the scopes, and assembled the blackout canopy over the back of the teardrop hatch.

Around 7:30pm, I went for a stroll around the northern section of the observing field to take photos. There were numerous large visual dobs, along with various imaging kits setup for the evening. Met a lot of visual & imager folks during my walkabout. Photos:





Should have started my walk sooner, as some of these came out dark.  
At dusk I hurried back to camp to change into warmer clothes and powered on the Atlas mount and SeeStar telescope.

Once it was sufficiently dark, I sent the S30 SeeStar back up to Cygnus for a second try at a mosaic of NGC7000, Later that evening, I slewed the S30 over to Triangulum for M33, the Triangulum Galaxy, using normal framing, but late clouds moving in limited my livestack exposure. Here are the S30 images on the next page:

(For both images: SeeStar S30 in EQ mode, then AI noise reduction applied in-app).  
NGC7000 = 60 second exposure, NB filter, livestacked for 110 minutes.  
M33 = 60 second exposure, IR filter, livestacked for 15 minutes.



Seestar S30

NGC 7000

102°W, 36°N / 2025-09-22 03:38

110min.



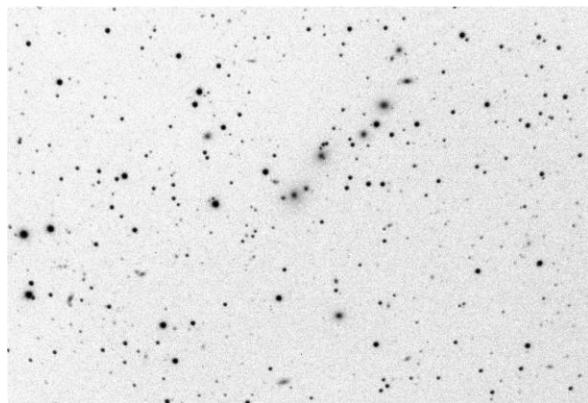
Seestar S30

M 33

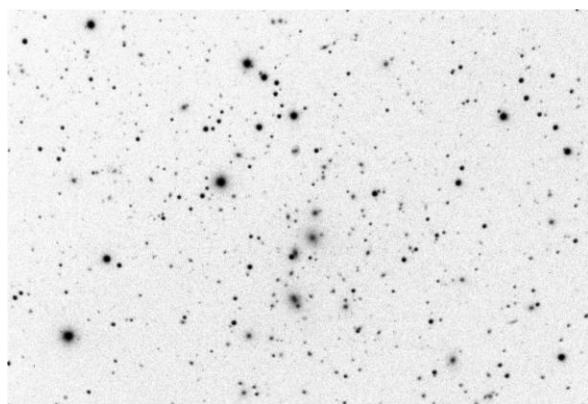
102°W, 36°N / 2025-09-22 04:04

15min

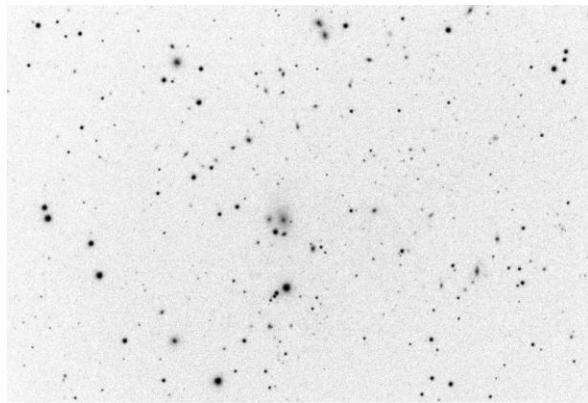
While the S30 was working on NGC7000, I re-did the polar alignment of the C8 & Atlas Mount. The strong winds from Saturday night had slightly shifted the mount. I then went Abell galaxy cluster hunting, starting in Ursa Minor. The first observation was of Abell2247, also known as Shakhbazian-166, a pretty 15<sup>th</sup> +mag chain of over a half-dozen galaxies in the handle of the Little Dipper:



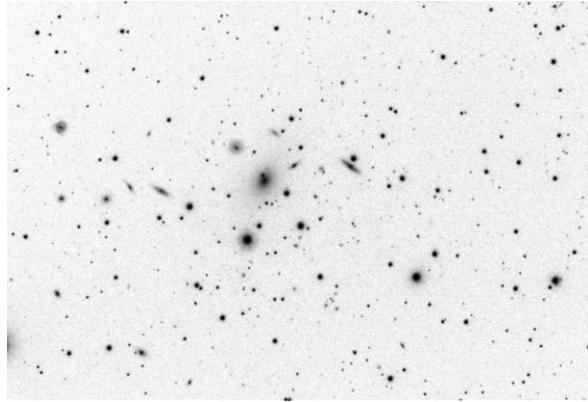
Next was another 15<sup>th</sup> +mag galaxy cluster - Abell2256, located not far from Abell2247. I had previously EAA observed a portion of this cluster, tonight I was after its central region of bright PGC galaxies, containing the bright elliptical galaxy NGC6331 at +14.4, near the clusters core. Here's the observation:



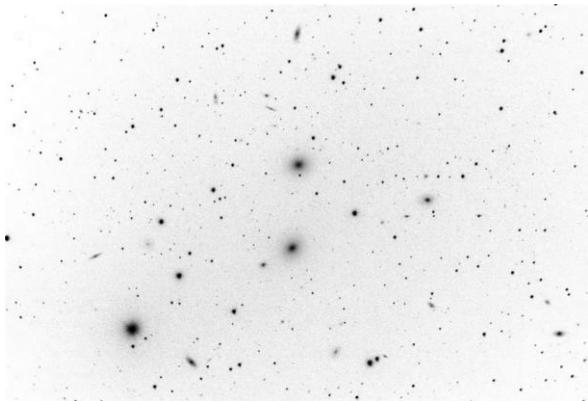
I then slewed the telescope over to Pegasus the "Winged Horse" to continue capturing galaxy clusters. Abell2657, (which is actually near the border of Pegasus close to Pisces 'Circlet'), is a +14 mag cluster of MAC# & PGC# galaxies, with PGC72297 at the core.



Next up was Abell2666, located near Alpheratz (alpha Andromedae) in the NE corner of the "Great Square" of Pegasus - containing bright galaxy NGC7768. This was a fun +13<sup>th</sup> mag galaxy cluster, containing both bright NGC & PGC galaxies, including NGC7765, NGC7766, NGC7767, and PGC72607.



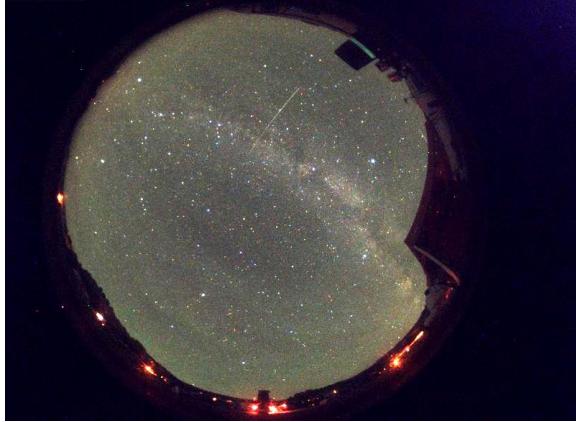
Finished up with the non-Abell galaxy cluster called Pegasus-1, with its bright 12<sup>th</sup> +mag elliptical NGC7619 & NGC7626, along with a number of other bright NGC galaxies including edge-on spiral NGC7631, inclined spirals NGC7611 and NGC7617.



All galaxy cluster EAA observations:

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

During the evening, I would take an occasional break from galaxy cluster hunting, step outside of the blackout tent to admire the view of the Milky-Way, and visit with the group, delivering Snickerdoodle cookies. At times the sky would go a little soft, smearing the Milky-Way. Around midnight, Jared pointed out that it was from bands of bright sky glow moving overhead and around the horizon. Around 2am thick obscuring clouds began to roll in, with the dark unlit clouds eventually shutting down most of the sky by 2:45am.



I decided that was a good time to call it a night. Closed down the scopes and broke down the blackout tent. In bed by 3am.

Here's the AllSky time-lapse from Sunday night:

[https://youtu.be/6wO2DG2Mngg?si=CnVDX8k1nm1R\\_sjW](https://youtu.be/6wO2DG2Mngg?si=CnVDX8k1nm1R_sjW)

#### **Monday 09/22/2025:**

Slept in late till 9:30am. After equipment issues all week, Dean M decided to throw in the towel and pack away his telescope. Looks like he has a bad motherboard in the mount. Dean is going to stay till tomorrow and head home. Had a quick breakfast and headed up early to the shower house. Today was the 1st big swap meet at 1:30pm.

Sat around camp and read while recharging batteries. Our new neighbor, Sam from Mesa NM stopped over for a chat. Around 1:30 Dean, Gordon, and I walked up to the swap meet outside of the bunkhouse. I picked up a book on Clyde Tombaugh written by David Levi. Also got a half-dozen issues of the old "Deep Sky" magazine. Met several folks from CN.

Back at camp, I gathered up my laptop and notes and headed up to the AC in the classroom. Stayed there in the building to get out of the heat till a little after 4pm when I headed back to camp. Clouds had begun moving in, threatening rain.



With the rain holding off, Dean M grilled steaks and potatoes & onions for a group dinner. We then sat around enjoying drinks with Nick and Jared joining in. Nick got out his drone and flew it around the top of the mesa. Pretty cool to watch.

I had to break away from the group for a home phone call, and Dean needed to call it a night as he was leaving at 7am. After my call ended I rejoined Gordon, Ed, and Nick first at Nick's camp, then over at Gordon's where we had a view of a distant storm. Finally with raindrops falling, everyone called it a night and headed back to their camps. I read for awhile till going to bed at midnight.

**Tuesday 09/23/2025:**

Slept in till 8am. Missed Dean M pulling out for Western PA. During the day, a number of other folks packed and left for home. Probably due to the forecast not showing good observing weather till after Wednesday. After breakfast, I walked up to the main buildings to fill a couple of water jugs, and then spent the day back at camp working on notes and photos. It was a pleasant day outside, mostly sunny, temps in the low 70's and an occasional slight breeze. Ed went for a drive to Boise City to go to the store for a few supplies.

At 5pm, I headed up to the cafeteria for dinner. On the walk back I noticed dark clouds moving on from the NW.



Around 6pm, one of the Oklahoma club organizers was going around warning folks of an incoming hail storm. Gordon, Nick, and I scrambled to put away our vulnerable equipment. We texted Ed about the impending storm and he had us move his Origin smart scope inside Nick's camper.

Storm hit around 7pm, and fortunately the hail was very minor. After phoning home I joined Gordon, Ed who was now back, over in Nick's camper for drinks and snacks. Other than a couple of short lived sucker holes, the sky was mostly cloudy with occasional drizzle. Headed back to camp at 11pm and stayed up till midnight.

**Wednesday 09/24/2025:**

Up around 8:30am to a sunny, but chilly morning. After breakfast, I stayed indoors until the outdoor temps warmed into the low 60's. Ed, Gordon, and Rich went for an all day hike up to the top of Black Mesa. (Later that afternoon, once the trio was back in camp, they reported that they had hiked 9 miles to the top of the mesa to the highest point in OK. Tarantula count on the hike: five).

Nick needed to refill his propane tanks, so he drove down to Texas to the nearest station that would do it. I went for a drive over to Kenton to explore the little town.



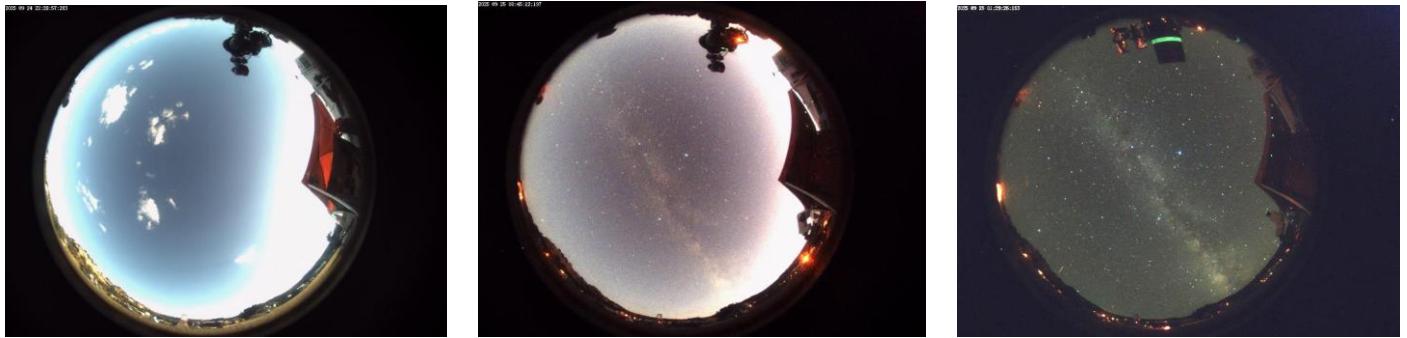
Back at camp I did a practice run of my galaxy cluster presentation for tomorrow. At 2:30pm, I headed up to the classroom to take in the talk on "Easy Way to Find Unknown Nebula" by Vlad S, followed by the "General Geology of the Kenton area" talk by Marvin A. Both interesting presentations!



Afterwards I joined Mark M at dinner. Headed back to camp, prepped my telescope equipment and blackout tent before heading back to the classroom for part 1 of the raffle giveaway. (Unfortunately, I did not win anything). While waiting outdoors for the raffle to start, I walked around, visited with Phil and Lisa from Georgia who I met at Black Mesa, and took a few pics of the scopes on the SW side of the field.



It was another Beautiful night! Soon the sun had set and dusk fallen. The soft glow of the Milky-Way was visible even before the light in the western sky had faded from view. Here are a few images from the AllSky camera:



My EAA observing plans for the night was hunting Abell Planetary Nebula with the 8" SCT!

First up was the +15.4 mag planetary Abell155 in Aquila. Using the L-eNhance narrowband filter, the small oval disk displayed a nice greenish color with a red fringe. While still in Aquila, I dropped in on +14.3 mag Abell170, a little version of the Ring Nebula. The +18.4 mag central star was just visible, along with a small bright galaxy (PMN J2033-0656) impeding on its northern edge, giving the planetary a diamond-ring look.



(8" SCT @ f6.3 on an Atlas Gem, ZWO ASI294MC Pro camera with L-eNhance filter, 180 second subs, dark & flat frames, PHD guided, livestacked using SharpCap for 15 minutes).

I then slewed the telescope over to Delphinus for +14.6 mag Abell172. The large planetary is located next to an 8th mag star which somewhat interferes with the observation. The planetary displays several nice arcs so I let this livestack run a little longer. Also a small galaxy, (MCG+2-53-5) lies just to the south, almost touching the planetary.



(same scope info as above using the L-Pro filter, 180 min subs, stacked for 30 min).

Then I moved the scope up higher to Cygnus for +16 mag Abell178. The planetary displayed an elongated annular disk with a +12<sup>th</sup> mag central star. A secondary ring was faintly visible to the side of the main disk.



(same scope info as above using the L-Pro filter, 180 min subs, stacked for 15 min).

I then moved into Fall Constellation territory starting in Cepheus with the very faint +17<sup>th</sup> mag planetary Abell175. This was an interesting planetary, having a 'keyhole' shape to it. The +17.4 mag central star nearly blended in with the nearby field stars.

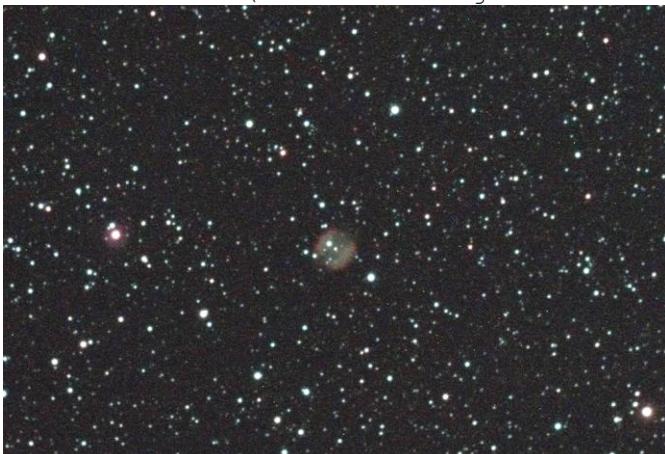
Next was Abell181, also in Cepheus. The bright +14.8 mag ring shaped planetary with its just detectable 18<sup>th</sup> mag central star displayed nicely with a nearby 6<sup>th</sup> mag field star.



(Abell175: same scope info using the L-Pro filter, 180 min subs, stacked for 30 min).

(Abell181: same scope info using the L-eNhance filter, 180 min subs, stacked for 18 min).

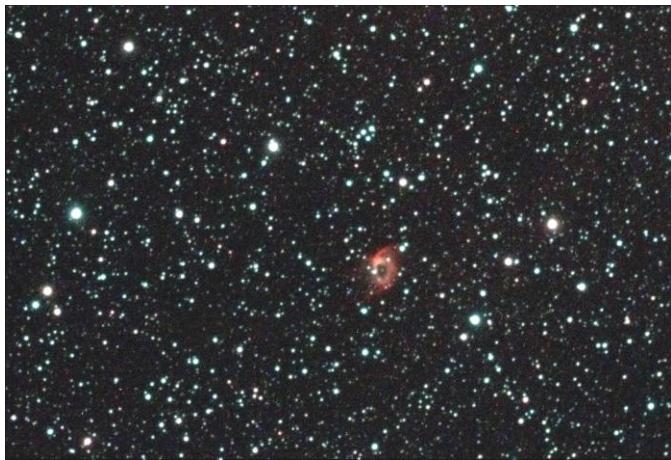
Then on to Cassiopeia. Planetary nebula Abell182 displays a +15.2 mag circular shape with a 14<sup>th</sup> mag central star. Abell184, at +14.4 mag, is also oval shaped with two brighter arcs on its eastern (with a 10<sup>th</sup> mag field star) and western limbs.



(both: same scope info using the L-eNhance filter, 180 min subs, stacked for 15 min).

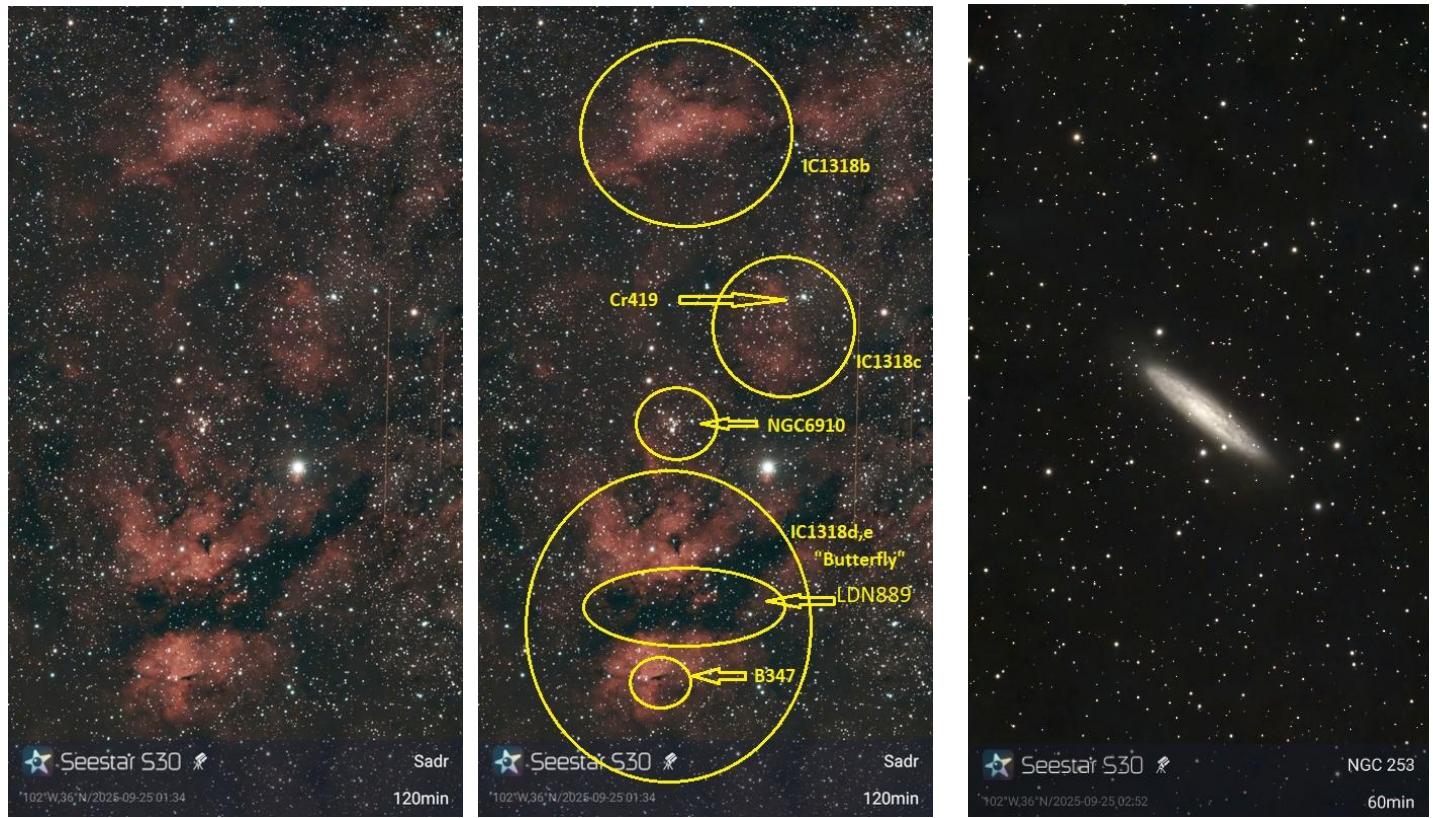


Finally, in the constellation of Lacerta - the "Lizard", the +15.8 mag planetary Abell179, with a central star of 17<sup>th</sup> magnitude, surrounded by a pretty starfield.



(same scope info using the L-eNhance filter, 180 min subs, stacked for 15 min).

During my planetary adventure with the C8, the S30 SeeStar was also purring along, doing a mosaic on the "Butterfly Nebula" - IC1318 and other bright & dark nebulosity's and clusters, surrounding the bright star Sadr in Cygnus. (see annotated image). Also later in the evening, the S30 did a deep dive on NGC253 - "Silver Coin Galaxy" in Sculptor.



(For both images: SeeStar S30 in EQ mode, then AI noise reduction applied in-app).  
 IC1318 = 60 second exposure, NB filter, livestacked for 2 hours.  
 NGC253 = 60 second exposure, IR filter, livestacked for 1 hour.

As the night grew long, it became very dewy, with outdoor temps down to a chilly 47 deg. While I was observing planetaries, Nick, using my presentation handout, was knocking off Abell galaxy clusters with his 24" dob, calling me over to confirm his observations. Gordon was working thru his Astronomical league Messier project and Ed had both his Celestron Origin 6: smart scope and his imaging kit in the dome going.



Called it a night at 3am. Nick called it a night soon after I did. Gordon was down by 2:30am, with Ed earlier, but leaving his dome scope run on auto. Here's the AllSky time-lapse from Wednesday night: <https://youtu.be/B7evM3g6WbU>

#### Thursday 09/25/2025:

Slept in late, till 10am. Fixed a quick breakfast while I uncovered the scopes to let them dry from the dew the night before. Today was my talk, so I packed my laptop and presentation notes and headed up to the classroom around 12:30pm to setup. At 1:30 pm I gave my "Galaxy Clusters: Abell's, Hickson's, Palomar's" presentation to around 70 amateur astronomer attendees. There were a number of good questions afterwards.

Stayed for the next talk on an amateur group in Arkansas restoring a 24" Brashear refractor built in 1911. Interesting stuff.



Spent time in the afternoon visiting with Gordon, Jared, Nick and Ed.

After another great dinner at the dinning hall, I uncovered the scopes, prepped my observing plan for the night and assembled the blackout tent over the camper clamshell. I then went for a walk around the southern end of the observing field. Lots of goods scopes setup, including the "valley of the sky boxes", lol





At dusk, back at camp, I powered on the scopes and waited for full dark to begin my EAA began observations.



Soon the Milky-Way began to glow brightly, stretching from Cassiopeia in the NE, overhead thru the Summer Triangle with its 'Great Rift', down to the SW to the heart of our galaxy in Sagittarius and Scorpius along the mesa top.

My plan for the night was to use the C8 to hunt Wolf-Rayet shells.

Somewhat similar to planetary nebula, Wolf-Rayet shells are rings of dust and gas formed by collisions of stellar winds blowing from binary Wolf-Rayet stars, which form a dust shell around the pair. These massive stars (over 20 solar masses), have begun expanding, shedding their outer layers while on the way to eventually becoming supernova.

Using a list developed by amateur Reiner Vogel [https://www.reinervogel.net/index\\_e.html](https://www.reinervogel.net/index_e.html)

My first target for the night was WR102 (also known as G2.4+1.4), located in Sagittarius the "Archer", off the spout of the Teapot, near the globular cluster Palomar-6. The shell displays a filamentary ring shape with an interesting streak bisecting the center.



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

Next was WR128 in Sagitta the "Arrow", close to the bright center star Delta Sge. The shell displays as a thin, faint, partial arc. Nearby is the bright emission nebula SH2-84 (also known as LBN131) that I initially mistook for the Wolf-Rayet shell.



(same scope info as above using the L-eNhance filter, 180 min subs, stacked for 30 min).

Moving high overhead I slewed the scope to WR134 in Cygnus the "Swan", located along the line about half-way between the bright stars Sadr and Eta Cyg. For some reason, SharpCap had difficulties livestacking the field, as it couldn't align on stars, so I was only able to EAA observe a single exposure. But that was enough to display the partial blue-green crescent shape of the WR shell embedded in a larger red Ha field.

Here's the full view and a cropped image.



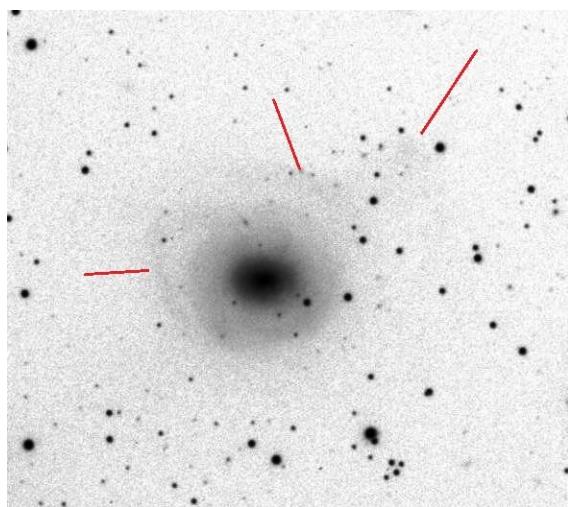
(same scope info as above using the L-eNhance filter, 180 min subs, stacked for 3 min).

I then switched gears and went for an obscure planetary nebula in Cassiopeia the "Queen" named HDW2 (also known as SH2-200, discovered by Austrian astronomers Hartl, Dengel, Weinberger in 1983) located close to the bright star Epsilon Cas and the nearby open cluster Trumpler-3. The very faint annular shaped planetary contains an arc of field stars that somewhat obscures the fainter nebulosity, but helps identify the location. Several faint striations are also visible. After showing the planetary to Nick, he was able to sweep up the FOV visually in his 24" Dob and shared the view.



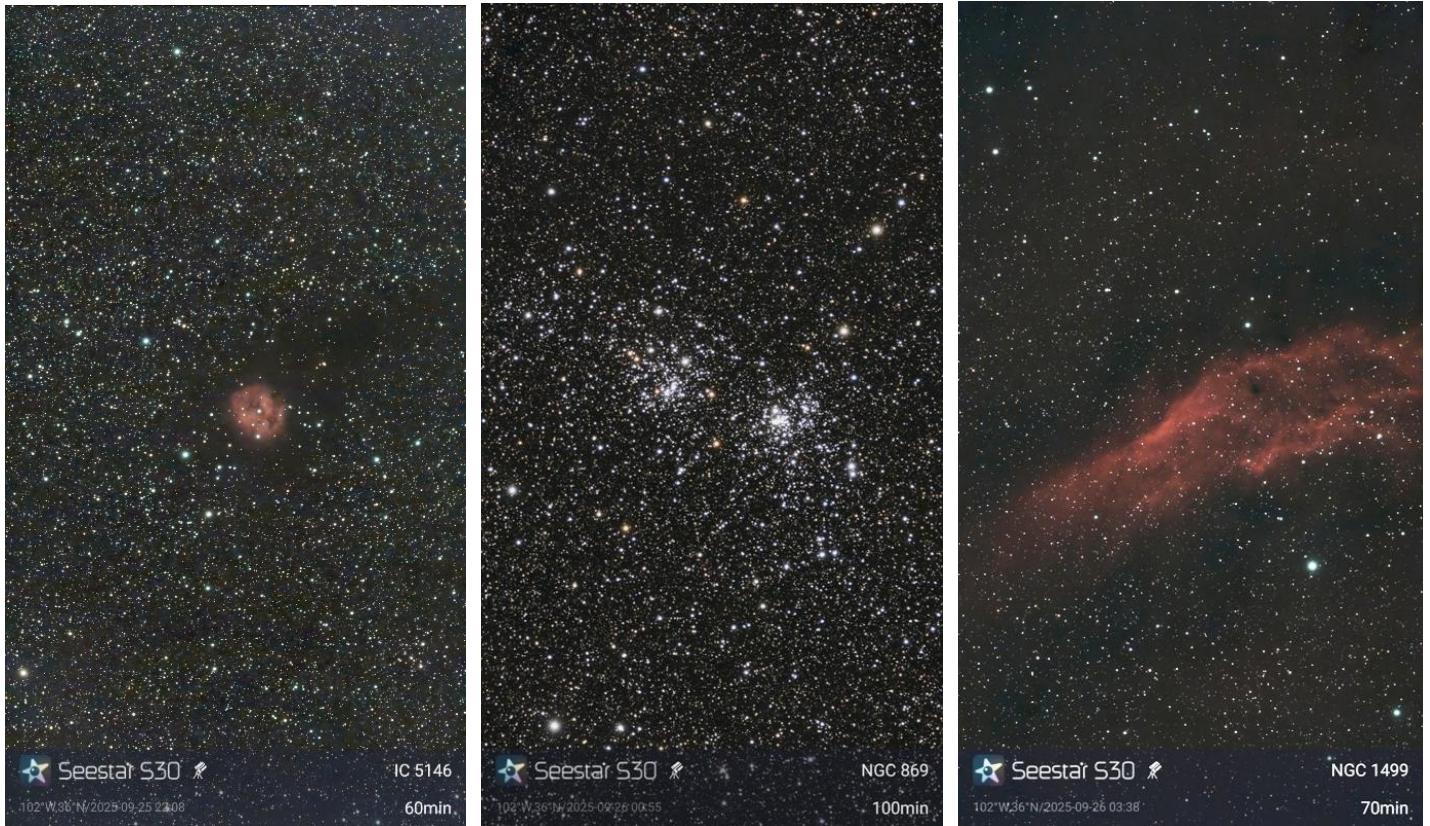
(same scope info as above using the L-eNhance filter, 180 min subs, stacked for 15 min).

My last object for the C8 was Arp peculiar Galaxy NGC2655, (Arp22), located in Camelopardalis the "Giraffe", located only about 12 deg from Polaris. Face on galaxy NGC2655 displays perturbed spiral arms to the NW.



(same scope info as above using the L-Pro filter, 180 min subs, stacked for 30 min).

While I was busy with the C8, the S30 SeeStar was also working on deep-dives of several objects: IC5146 - "Cocoon Nebula" and B168, NGC869 & NGC884 - "Double Cluster", and NGC1499 - "California Nebula".



(SeeStar S30, in EQ mode, livestacked, then AI noise reduction applied in-app)

IC5146 = 60 second exposure, NB filter, livestacked for 60 minutes.

Double-Cluster = 60 second exposure, IR filter, livestacked for 1 hour and 40 minutes.

NGC1499 = 60 second exposure, NB filter, livestacked for 60 minutes.

With the Zodiacal Light beginning to rise along the eastern horizon, along with a space invader that landed on the AllSky cam, I called it a night, in bed by 4am.



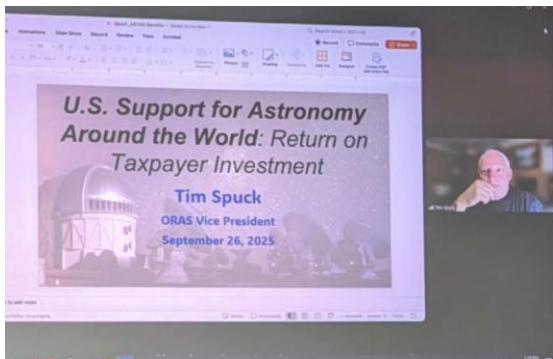
Here's the AllSky time-lapse from Thursday night: <https://youtu.be/dkUB7lnW1WU>

**Friday 09/26/2025:**

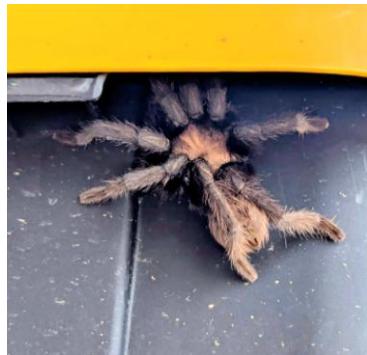
Slept in till 9:30am.

After breakfast, I began the several hours' process of breaking down the 8" SCT telescope and AllSky camera. Next was the easy up canopy and ground matt. (Saved the camper shade visor for after sunset). Took a break to walk up to the 2nd swap meet but didn't see anything I wanted. By noon, I was done and headed up to the shower house to cleanup.

Sat in on ORAS's Vice President Tim S's zoom presentation - "US Support for Astronomy Around the World: Return on Taxpayer Investment", on the benefits of astronomical science. Then stayed for the talk on Kenton's natural wildlife by Joe G.



I then joined the group, (Gordon, Ed, Nick, Jared, Rich and Ben) for an early happy hour. One of our net door neighbors, while packing up, discovered a hitchhiker under a storage container. (my 1<sup>st</sup> tarantula sighting of the star party!)



Then it was time to walk up to the cafeteria for one last Okie-Tex dinner. (The dinners have been excellent all week and the dinning crew has done a great job!)

Back at camp, I finished packing the outside awnings and visor, along with the solar panels, and headed up with the group for the door prize drawings.

Gordon was the only lucky one of our group, winning a software disk on optical design.

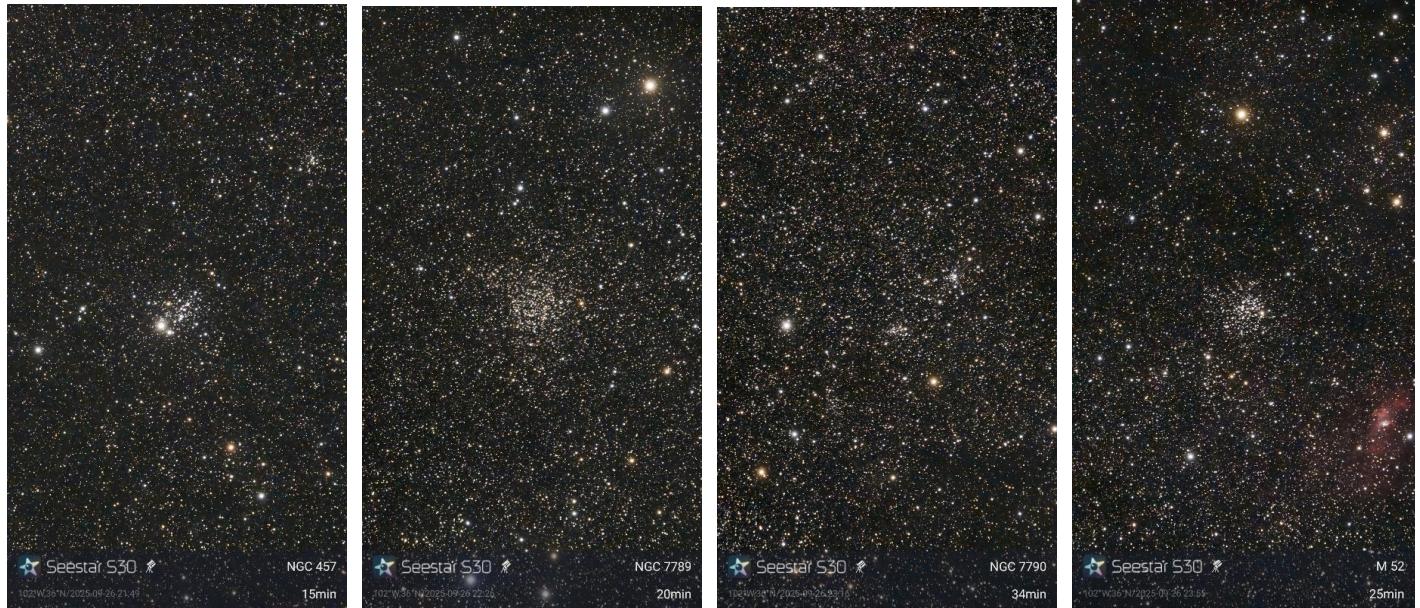


With dusk falling, I quickly headed back to camp. I had left the S30 SeeStar and the 80mm visual refractor setup for the last night. Soon the Milky-Way was shining overhead and after spending several minutes admiring the naked-eye view, I powered-on the S30 and slewed it to the first target of the night, NGC457 - the "Owl Cluster" in Cassiopeia.

It was to be a SeeStar "cluster" night! LOL.

After observing NGC457, I moved on to clusters NGC7789 and NGC7790, then M52 as the last cluster for the last night of Okie-Tex. (added bonus was the "Bubble Nebula").

Here's the EAA observations: (SeeStar S30, in EQ mode, livestacked, then AI de-noised)



NGC457 = 60 second exposure, IR filter, livestacked for 15 minutes.

NGC7789 = 60 second exposure, IR filter, livestacked for 20 minutes.

NGC7790 = 60 second exposure, IR filter, livestacked for 34 minutes.

M52 = 60 second exposure, IR filter, livestacked for 25 minutes.

During the S30 observations, I was sitting out with Gordon, Nick, and Ben, and would occasionally get in a view thru their dobs. Jared and Ed would also occasionally drop in to visit. In between views thru the dobs, I used my little 10x32 monocular for scanning the Milky-Way star clouds. I was also visually observing with my 80mm refractor on its Alt-Az mount: the usual bright Messier objects - M51, M8, M20, M31 & M110, alone with the Double Cluster, and the Pleiades. It was fun going back to my old visual roots from 40 years ago! Having an early morning wakeup, I packed in the S30 at midnight and headed indoors to bed.

#### Saturday 09/27/2025:

Up at 7:30am to a chilly, but clear 47 deg, as we had to be out by 10am.

Ed, Gordon, and Nick were already up, getting ready. Finished packing the inside of the camper while having breakfast. After everyone saying goodbye to one another, Gordon was the first to head out for home, shortly after 8am. Ed was on the road homeward by 8:15am and I was leaving the ranch 5 minutes later. (Nick was out prior to 10am for St Louis). For me, I turned the car westwards to do the touristy thing in New Mexico before attending the October "Enchanted Skies Star Party" down near Magdalena, NM.

So, including my stay at the nearby Black Mesa State Park, I had eleven nights under dark Oklahoma skies. On seven of those I was able to EAA observe. Four nights were clouded/rained out. A good run of dark sky nights under some of the best night skies in the country! The Okie-Tex Star Party is a well run event with a great location and facilities at Camp Billy Joe. And the catered dinners were delicious!

And a bonus, I was not overrun by tarantulas! Hopefully, I can make the long drive back soon to Camp Billy Joe!

Larry McHenry

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