Staunton River Spring Star Party. March, 2026

For the last several years, our Cherry Springs Canadian observing buddy Gordon M has been talking about the Staunton River Star Party that he's attended several times. So This year a group of us from my Western Pa Oil Region Astronomical Society decided to get our campers out of winter hibernation early and make the ~8 hour drive south to the Virginia/North Carolina border to the Staunton River State Park and the Spring edition of the SRSP. As electricity on the park observing field is limited to only powering telescopes and computer equipment, we would have to rely on batteries & solar panels, along with propane to power and heat our campers.

Sunday 03/15/2026:

Having watched the weather anxiously over the past several days, it looked like we would get several decent nights of observing during the week long starparty, though the temps would start off still in winter mode, but end in summer. (made packing clothes fun, lol). Due to planned and unplanned family matters, I did not get started on the drive south from PGH until 1:15pm. Fortunately I had made hotel reservations about halfway there, so I arrived in Waynesboro, VA around 7pm. After checking-in, I walked over to a restaurant for a late dinner, and then parked myself in a chair in my room to watch the tele until falling asleep.

Monday 03/16/2026:

I was on the road by 9am Monday morning to complete the drive to the Staunton River State Park. Dodging a line of thunderstorms, I arrived at the park visitor's center and starparty location just past Noon.

Expecting to find ORAS members Dean M, Dean S, and Ed K already setup, as they all drove straight to the park the day before, I found an empty observing field and all the campers parked over in the large asphalt parking area by the pool. The field was too wet from heavy rains for the park to let campers on too.

We'd all have to stay in the parking lot for at least one night. After greeting the gang, and getting an assist from Dean S & Dean M in backing up my camper, I minimally setup camp for the night.

If it should clear later, which was unlikely, I would get out one of the SeeStars and EAA observe with that. I met several other attendees parked on the lot including Doug, Mike (who also does EAA and had used a photo of my setup in a talk on EAA, lol), and Dave. Also met Jayme H, president of the Chapel Hill Astronomical and Observational Society (CHAOS), the club hosting the event.

Made a quick lunch and I then walked up to the park office and registration where I met Jane H along with Dave who was signing-in.

Also visited the gift shop where they have lots of good astro related items, along with a slew of loaner telescopes in the main office. There's even a small nature center!

By late afternoon, there were about a dozen of us onsite camping in the parking lot. (Talking with Jayme earlier, he said they had around 136 people registered).
Scattered rain showers kept driving everyone back inside their campers, but I did setup my SeeStar tripod and EQ mount, just in case it clears off late.

A little after 5pm, our group, and most of the other parking lot campers headed over to the "Deep Space Diner" for tonight's dinner special - burgers and fries! Yum!
Jayme joined us at our table and filled us in about the park and starparty. They have a great facility and working relationship with the park.

Afterwards we stood outside for a bit chatting, watching the dark rain clouds scurry overhead.



Then a little before 7pm, everyone headed indoors to their campers.
My daughter texted me to say they were having a snow whiteout in PGH! It's 68 deg here in Staunton, Lol. At about 7:05pm, a heavy squall went over the park, dumping rain for close to 20 minutes, re-flooding all the dry spots. Strong wind gusts rocked my camper. (Guess I should have lowered the stabilizer jacks). A strong gust blew over the SeeStar tripod I had setup earlier. The storm didn't let up till nearly 8pm. Once over, the outdoor temp had dropped from 68 down to 48 deg and was heading much lower! Fortunately, the park earlier had allowed us to plug-in our campers into a power pole to run our heaters if we needed too. I pulled on a jacket and headed outside to set the now dripping tripod back upright. The storm also took out the starparty WiFi for a time.

Decided to take a long nap. Once back awake at 10:30pm, I looked out a window and could briefly see Jupiter overhead. The park was right on the edge of the clearing line but it probably wouldn't really clear for another hour.

Killed a little time making hot tea and reading, and then headed outdoors at midnight to look at the sky. It was beautifully clear! Brilliant stars shone from one horizon to the other. But there was a persistent strong breeze so I decided not to setup the SeeStar. On the other side of Dean S, a tiny clamshell camper had pulled in late, and there were three gentlemen out observing with an 8" Celestron reflector. (TJ, Zack, and one other). They were hunting late winter star clusters, along with spring galaxies. Had a nice view of open cluster M48 in Hydra, and galaxy M95 in Leo. With the wind cutting thru my jacket, I called it a night and headed back inside the camper to bed.

Tuesday 03/17/2026:
Woke at 8am to a frigid 29 deg outdoors. (The camper was a cool 56 deg indoors as I had forgotten to adjust the camper heater). Bright sunlight was filtering in around the window blinds from a mostly clear blue sky. The forecast for today was a high temp of 43 deg, partly cloudy in the afternoon, but clearing at sunset, with the low going back down to 27 deg. Another cold night! The important thing though, was no rain and a calmer wind.

Visited with the Dean's and a few of my neighbors.
While getting ready to make breakfast, the power went out, so I pulled out the solar generator to power the microwave and coffee machine. Not knowing how long the electricity would be out, I got out a couple of solar panels to recharge the battery. (A couple of hours later the AC power was restored). A good test for when I setup over on the main observing field.

After breakfast, while Dean S went bird watching down to the river, Dean M and I walked over to the office and the gift shop. We stopped to talk with Jayme and Jane to ask about when the field would open. They said that at noon the park were going to allow tents and small campers/trailers onto the field, but being concerned about tearing up the field, wanted the larger campers to wait till 4pm. Dean and I then walked the partly soggy field and located several good dry spots along the northern section. After bringing the news back to the rest, Ed, Dean S, and I, along with several other campers decided that we were going to wait another day in the parking before moving to the field. (Dean M decided to go for it and move his camper at 4pm). At noon, TJ and Zack moved their little teardrop over to the field, and several other small campers and trailers also moved.

Made lunch and then setup both my S30 SeeStar's in the grass behind my camper. With the outdoor temps now expected to drop to 25 deg overnight, I planned on working from inside the camper. Dean S assembled his imaging kit and Ed K got out his 6” Celestron Origin smart scope and later uncovered his dome and lowered the legs of his main Mac-Newt scope.

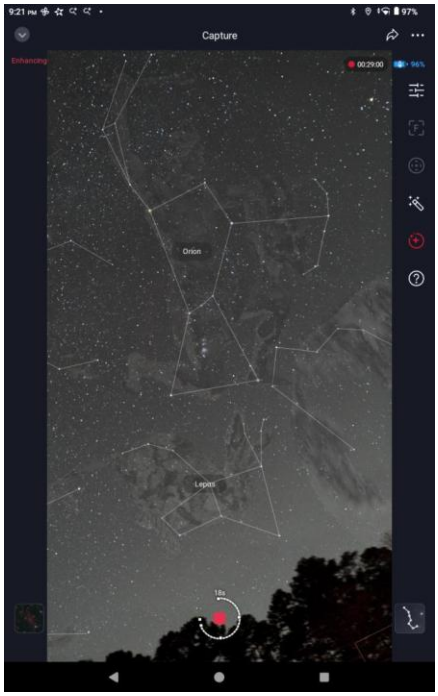
Early afternoon, Mike decided to stay permanently on the parking lot for the event duration and setup his EAA equipment (Celestron 11", Askar refractor, and AllSky cam, along with an observing tent). Doug decided to stay there and also setup his EAA equipment and tent next to Mike. As I was considering doing the same, I setup my 8” scope’s field tripod and Atlas mount, but held off on the optics and cameras.

Around 5pm, Dean S and I walked over to check where Dean M had setup and ran into Gary S who had arrived at the park a little while before, setting up his little camper by Dean M and was walking over to see us! After visiting with everyone, I headed back to my camper. A little before 6pm, Ed and I went over to the diner for their enchiladas dinner special. Another great meal! (prepared by the park staff).

Back at camp, I uncovered both SeeStars and prepped my observing plan and references. Tonight I would be doing widefield constellation shots with the S30-Pro and EAA observing OB Associations, (a very loose form of star clusters), with the older S30.
While waiting for dusk, I visited with Ed and Dean S, dropping off SnickerDoodle cookies, (Gary and Dean M were too far away to walk, sorry guys!) Once sufficiently dark, I powered up both SeeStars and was hit by a firmware update for both! Ugh!!

After I was past that, I polar aligned the S30-Pro and headed back inside the camper to warm up. Under the clear skies the outdoor temperature had fallen into the upper 30’s.

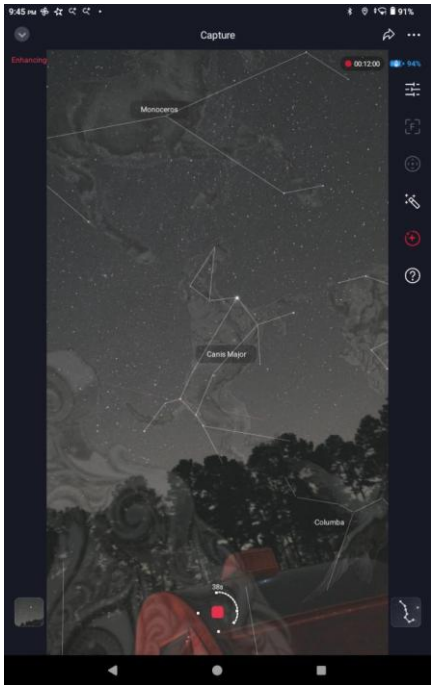
First up was observing the winter constellations with the S30-Pro's Milky-Way mode, starting with Orion, Canis Major, and Auriga. Here's the entire constellation of Orion using the native size FOV with the 3mm widefield lens:



(SeeStar S30-Pro: 60 second exposures in Milky-Way Mode – 3mm lens, native FOV, EQ Mount, IR filter, livestacked for 33 minutes, then AI noise reduction applied in-app)

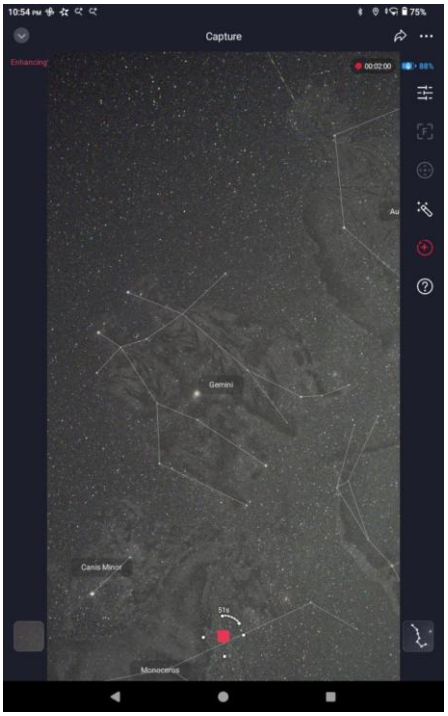
It was nice to hit the 'mark' button to get a screenshot of the constellation outlined. Image was a little bright which I figured was due to Orion setting into the Southwest sky-glow. In an attempt to bring-out the elusive “Barnard’s Loop” Ha nebula, I greatly over-processed the image using both the SeeStar app and my Pixel Phone camera app. You can see part of the loop starting mid-way between Betelgeuse and the “Belt”, curving around beneath the “Sword”. I think this will be a doable observation late this year when Orion is better placed in altitude.

Next up was Canis Major and the “Dog Star” Sirius, skimming the tree-tops above my camper. (the rest of the constellations are 60 second subs livestacked for 15 minutes).



The ‘glow’ above the trees was I believed caused by the “foreground freeze” app setting, which I later turned-off the next night. I then observed Auriga and Taurus, but I have a much better observation of those two on Thursday night so I’ll skip showing these.

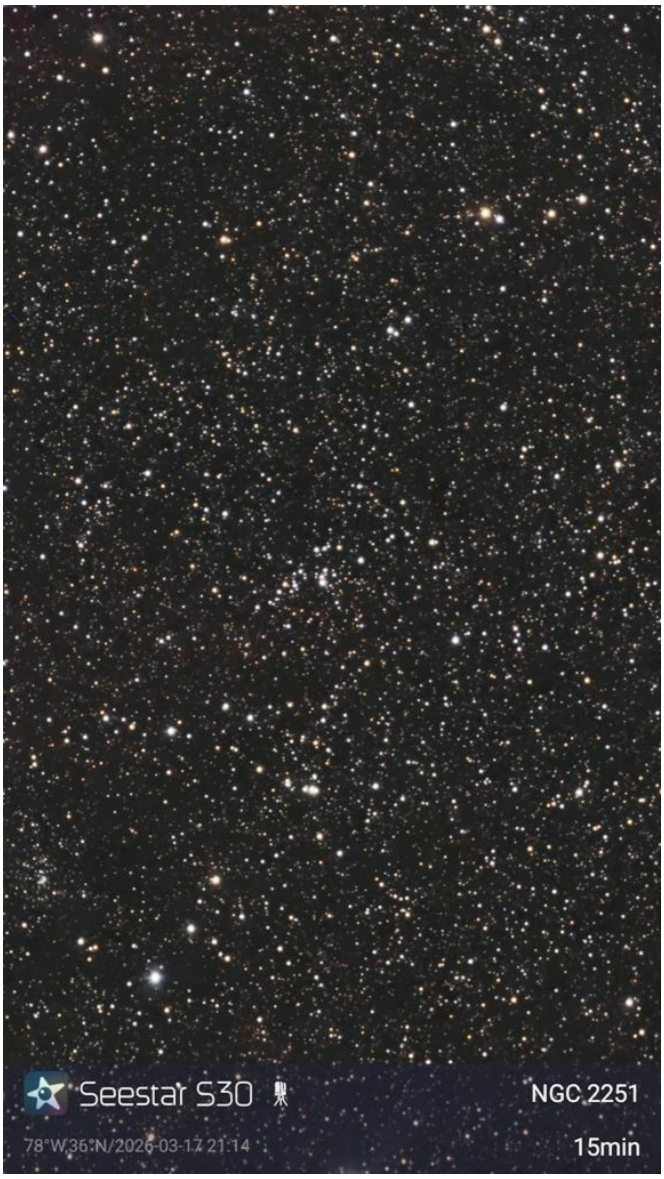
But I do want to show the winter Milky-Way that was visible in both Gemini and Monoceros.



Jupiter currently dominates Gemini, but if you know where to look, you can see open cluster M35. Monoceros contains interesting star clouds, along with the circular “Rosette Nebula” – NGC2244, which you’ll see a better observation of on Thursday.

While I was using the new S30-Pro on the constellations, the old S30 was working on a couple of OB Associations in Monoceros and Puppis. Here's the observations.

Monoceros OB1 Association is centered on open cluster NGC2251, and Puppis OB1 association centered on emission nebula NGC2467 – "Skull & Cross Bones Nebula".
Many OB Associations contain clusters or nebulosity at their cores.

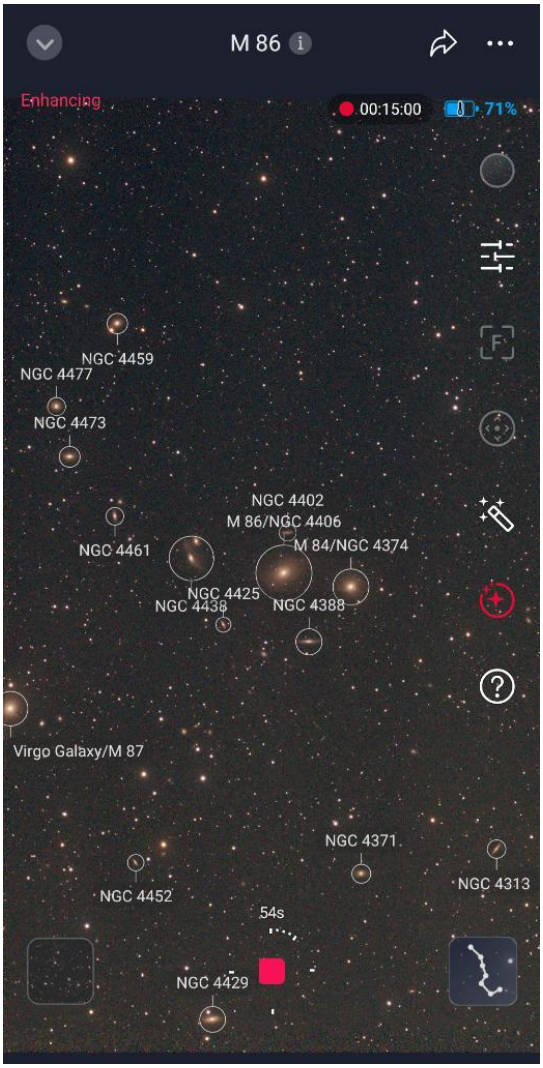


(SeeStar S30: 30 second exposures with 30mm lens, standard FOV, Alt-Az Mount, IR & NB filter, livestacked for 33 minutes, then AI noise reduction applied in-app)

While I was having fun with the SeeStars, Dean S was working on the Cone Nebula / Xmas Tree in Monoceros. Dean M was imaging the SeaGull Nebula in Canis Major. Ed K was shooting the Whirlpool Galaxy in Canes Venatici. Gary, having arrived late, didn't setup his telescope, opting to wait till Wednesday when it would be warmer.

As time flies when you have fun, it was now well past midnight, so I switched the S30-Pro out of "Milky-Way Mode" back to "StarGazing Mode" to utilize its 30mm lens. (which native FOV is as large as the mosaic FOV of the older S30!) I wanted to try the smart scope out on a couple of very large open clusters, M44 in Cancer, and the "Coma Berenices Cluster" known as Melotte-111. Here's both observations on the next page:

The last observation of the night was the core of the Virgo Galaxy Cluster, M84, M86, and M87, also known as “Markarians Chain”:



(SeeStar S30-Pro: 60 second exposures in StarGazer Mode – 30mm lens, native FOV, EQ Mount, IR filter, livestacked, then AI noise reduction applied in-app)

Clouds began rolling in shortly after 3am, and by 3:30am, I had shutdown the SeeStars and called it a night.

Wednesday 03/18/2026:

Slept in late, till 10am. After breakfast, I stepped outside under a partly cloudy sky and visited with the gang. The temps had warmed up into the mid 50's, heading towards the mid 60's by late afternoon. The Sun was nicely drying out the parking lot and grassy area behind our campers. Dean M stopped over for a visit with the group. Then the three of us walked back over to the observing field to visit with Gary and check-out the conditions of the observing field. After walking around the area where Dean M and Gary were parked, Ed, Dean S, and I decided to relocate over by them. Ed was the first to pack up and pull out from the parking lot and setup near Dean M.

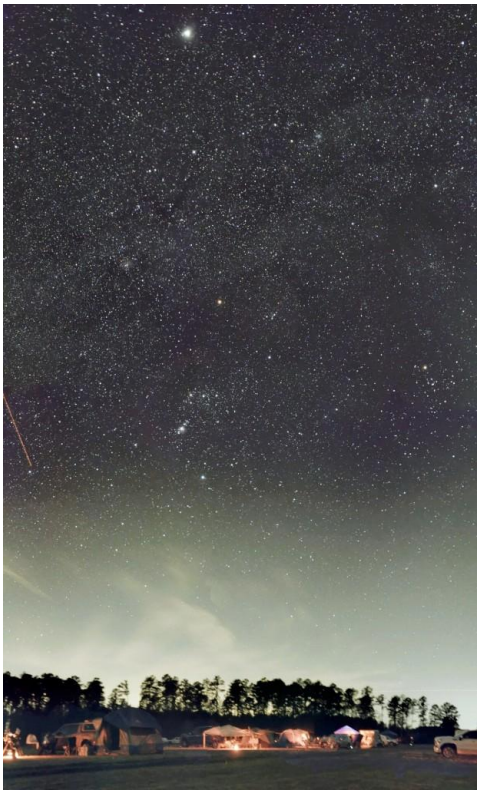
I secured a few items inside the camper, threw things on the bed and inside the car, and drove slowly over to the field. I chose a dry spot to the east side of Gary, while Dean S went to his west.

After positioning the camper, (the field was so level that I didn't need to do anything), I then set the easy-up canopy over the back clamshell and the camper visor on the north. Then the solar panel 'farm' was propped-up along the camper's south with the solar generator under the northern visor where it would be protected from any rain. And I ran a power cord and plugged into the starparty grid, planning on running the main telescope and imaging laptops from their AC.

Then I assembled my usual EAA 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-Pro smart telescope on an equatorial wedge & tripod.

At 5pm, Ed, Dean S, Gary S, and I gathered over by Dean M's camp for a group chili dinner prepared by Dean M and Ed. Dean S provided a veggie tray and I brought desert.

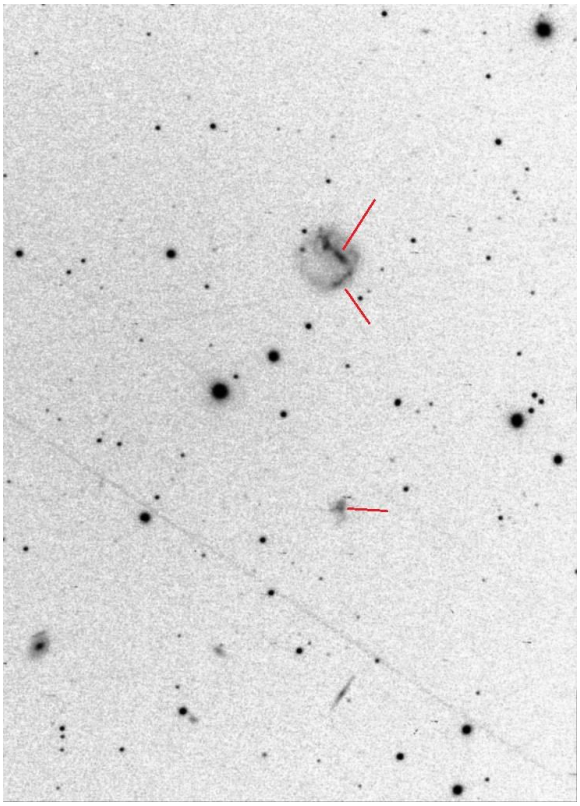
At sunset, I uncovered the telescopes and awaited darkness to fall. The weather satellite showed a mass of clouds to our west heading in our direction, so it became a race to see if we would get in any observing before they arrived overhead. As soon as Polaris was visible, I quickly polar aligned the Atlas Mount using my Polemaster camera & app, then focused the cameras. I then slewed the scope over to Regulus in Leo to wait for the last lingering glow of sunset to disappear. While the 8" was in a holding pattern, I polar aligned the S30-Pro and after going into 'Milky-Way Mode', slewed it over to Orion and selected the 8k horizontal mosaic mode. That's when I learned that you have to have the S30-Pro in Alt-Az mode, not EQ mode, for 8k mosaic function to work. Argh!!!
So I quickly switched the smart scope over to Alt-Az and then executed a horizontal and a vertical 8k mosaic.



(SeeStar S30-Pro: 60 second exposures in Milky-Way Mode – 3mm lens, mosaic FOV, Alt-Az Mount, IR filter, livestacked for Vertical=12 minutes, Horizontal=9 minutes, then AI noise reduction applied in-app, cropped off the SeeStar watermark).

The clouds and other Star Party attendees added a little extra interest to the photos.

While noticing the clouds encroaching from the west using the S3o-Pro, I hurried back to the 8” and quickly slewed the scope to its first target of the night, Arp Peculiar Galaxy NGC3664 (Arp5), in Leo. NGC3664 is a +13.2 mag face-on, low surface brightness spiral with an off-centered bar structure and extended arm containing several bright knots. Nearby is irregular +14.9 mag galaxy NGC3664A, along with several PGC galaxies.



(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).

Shortly after finishing the first EAA observation around 10:30, we were clouded out! The five of us gathered over in Dean S’s camper and socialized till 12:30am, waiting to see if it was going to clear. We finally threw in the towel and headed back to our camps to shutdown our telescope equipment. In bed by 1am, low temp of 34 deg outside.
Never got around to capturing frames with the AllSky camera, so no time-lapse tonight.

Thursday 03/19/2026:

Woke at 6am to a chilly camper. Turned on the electric blanket and rolled back over to sleep. Once up at 9am, with the camper warmed by the rising Sun, I fixed a quick breakfast and visited outside with a few folks.

Dean M and I took in the 11am talk over in the Speakers Tent by John R on observing winter open clusters and a bonus talk on observing Omega Centauri.

I then visited the vendor tent and acquired a pair of new dew heater straps from ‘Southeastern Camera’ for my main scope. They had a nice collection of telescopes, eyepieces, various imaging accessories, and books.

After lunch, I headed back over to the speakers tent at 2pm for a talk by Kristen H on NEO's and impact dangers. Another interesting presentation!

Back at camp, I lounged around for a bit reading. Then I assembled the blackout clamshell tent and prepped my observing notes for the night. Started capturing AllSky subframes prior to sunset. At 5:30pm we gathered over at Dean S's camp for a group dinner.

Afterwards, I went for a stroll around the observing field, met some folks and took a bunch of photos. If I had to guess, I’d say there was a good 100+ amateur astronomer’s setup on the observing field, not counting the small cluster of folks still over by the parking lot.

Even with the field mostly dry, you had to watch for soft spots and ruts while walking about so not to trip.

Here’s a photo of the portable power pedestals that the park setup for the event. And the new large observing pad the park is constructing for big telescopes.

Now for the attendees and their scopes: (my apologies if I didn’t catch everyone)
It was a great mix of equipment on the observing field.





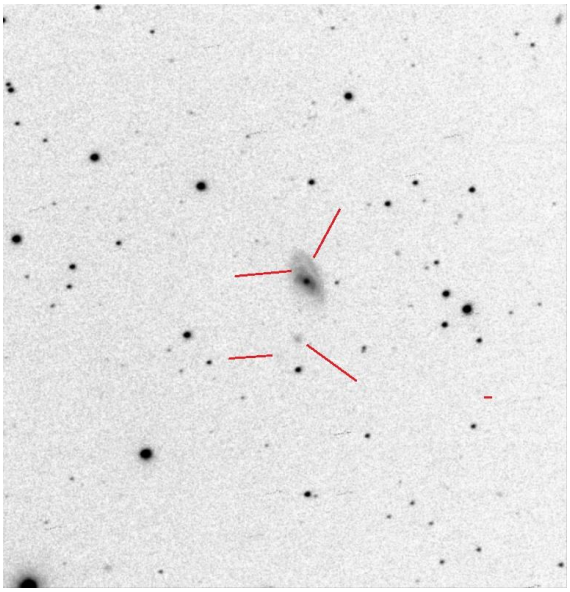



At dusk, the sunny day gave way to a Beautiful Clear Evening! But it was brisk with the outdoor Temps dropping into the low 40's. Underneath my blackout clamshell tent it stayed a pleasant mid 60’s, requiring only a sweatshirt and light jacket at my observing post.

It was a Galaxy Season night! Targeting Arp galaxies with the 8" SCT.
I also put the S30-Pro to work, first with a few more Alt-Az mode widefield Milky-Way captures, then another large OB Association with a nice nebula at its heart, and even a few galaxies. More about the S30 observations later…..

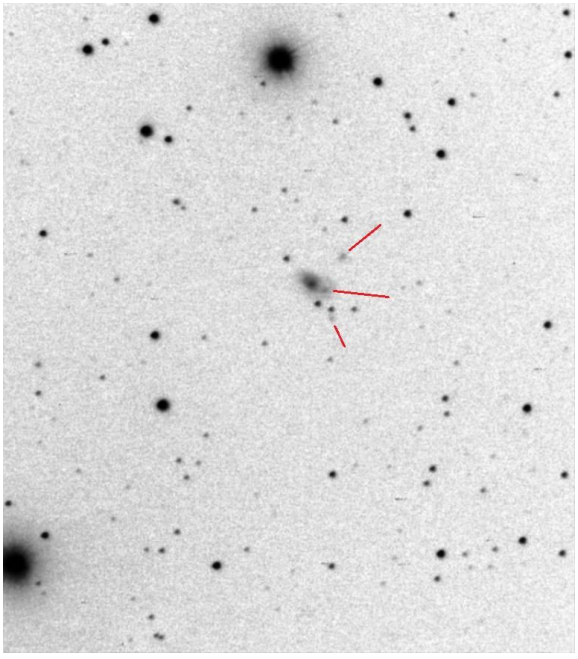
Using the 8” SCT, I started galaxy hunting due south, slowly working my way eastwards as the night progressed with the spring constellations on the rise. My first EAA observation of the night was Arp44, (IC609), a +14.1 mag spiral with a low surface brightness companion, located in the constellation of Sextans.

The main galaxy has a distorted spiral arm on its northern side split by several dark lanes. The fainter +17.9 companion lies to the south, with another +19.5 companion that's barely there.



(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).

The next Arp galaxy was Arp53 – NGC3290, an asymmetrical shaped +14.5 mag spiral galaxy in the constellation of Hydra with several very faint +19th & +20th mag companion galaxies.

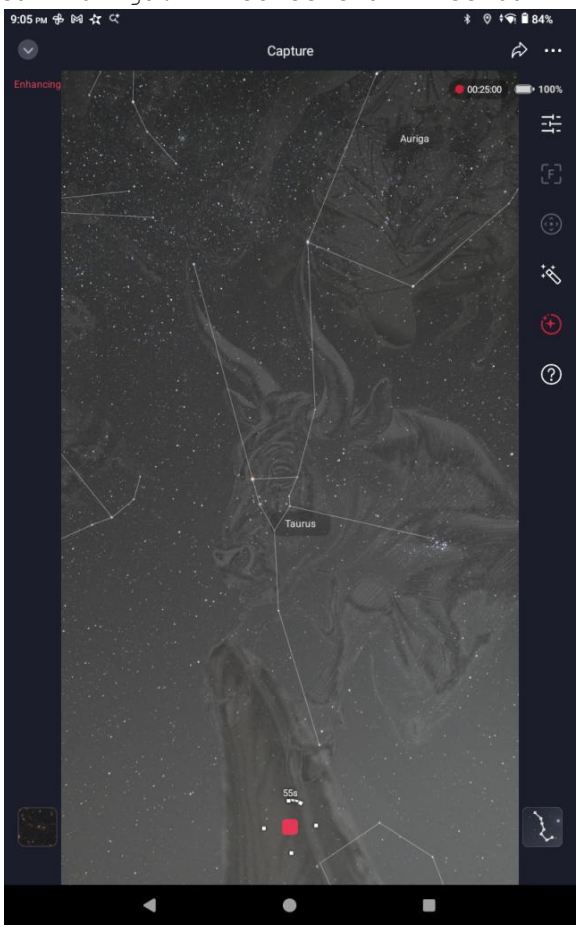


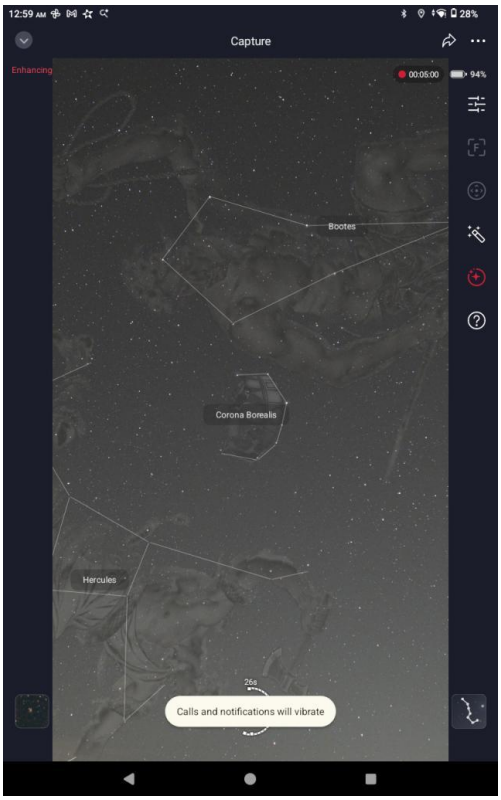
(8" SCT – same scope/camera/capture details as above).

Around 10pm, Ed baked cookies, so we all gathered over in his camper for snacks. I also delivered KitKats while there. Both Ed and Dean S had been out with their sky quality meters measuring Staunton River sky brightness. Ed got a lot of 21.20, 21.25, and several 21.28. Dean took three readings ...average 21.24. Not as dark as Cherry Springs or Calhoun, but not too bad at all!

There were a few light pollution issues with a car driving onto the field with its lights on, and a few others turning around in the visitor's center lot. But nothing that we couldn't live with.

While the 8” was chasing down Arp’s the S30-Pro was working on several widefield constellation shots, including Taurus and the Pleiades star cluster, followed later by Corona Borealis. Caught my first meteor near Auriga! Also several nice dark nebula.





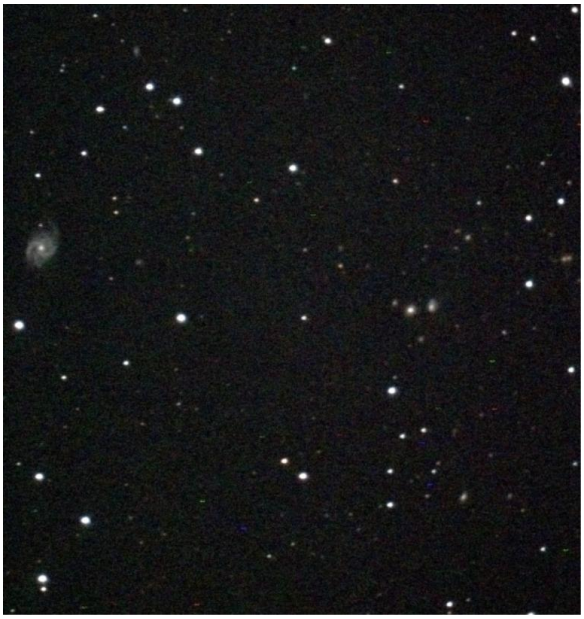
(SeeStar S30-Pro: 60 second exposures in Milky-Way Mode – 3mm lens, native FOV, EQ Mount, IR filter, livestacked, then AI noise reduction applied in-app)

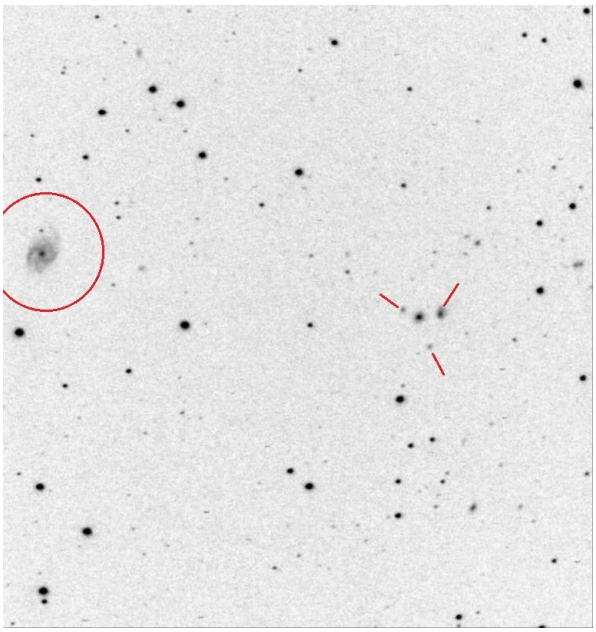
I also got in an 8k landscape mosaic of the Milky-Way: (60 sec stacked for 12 minutes)

Switching back to the 30mm lens and regular “StarGazing Mode”, I captured an observation of the Monoceros OB2 Association with the Rosette Nebula – NGC2244 at its heart. Then an observation of the Ursa Major galaxies M81 & M82, finally back in ‘Milky-Way Mode’, I pointed the S30-Pro to Polaris and did a fun 'star-trail':

(SeeStar S30-Pro: 60 second exposures in StarGazer Mode – 30mm lens or Milky-Way Mode – 3mm lens, native FOV, Alt-Az Mount, NB or IR filter, livestacked, then AI noise reduction applied in-app)

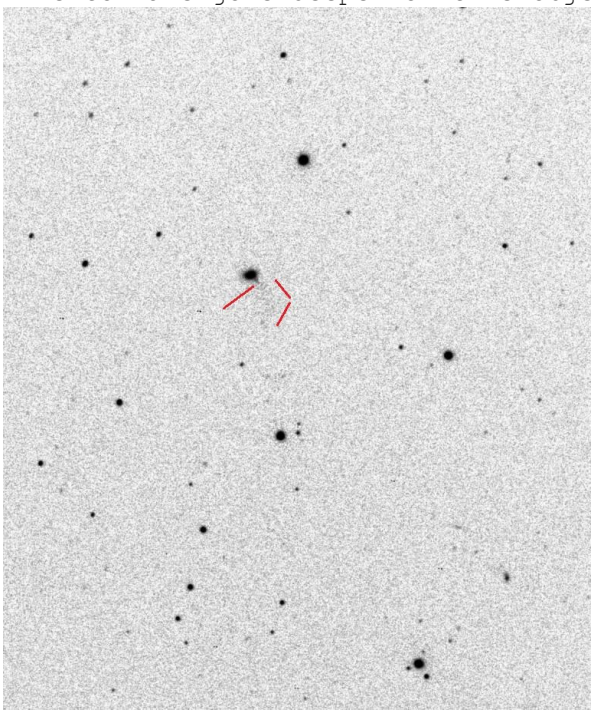
Then it was back to Arp galaxy hunting. Arp132 – galaxy CGCG11-53, a +15th mag pair of tiny elliptical and spiral galaxies in Leo. (The nearby face-on +14.2 mag spiral PGC34689 was much more interesting to view, lol)





(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).

The last Arp galaxy for the night was Arp161 – UGC6665, a +14.7 spiral galaxy displaying a diffuse plume of material and a tiny jet coming off from the galaxy's core. I would like to have gone deeper on this object, but PHD was giving me guiding issues.



(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 9 minutes).

As I had to give a presentation the next day, I called it an early night at 1:30am.

Here's an AllSky time-lapse from Thursday evening:
https://youtu.be/0VD5dpdeM0I?si=pl0Qi_uRrP0R1cdX

Friday 03/20/2026:

Up at 9am, outdoor temp back up to 47 deg, heading to a high of 70! later this afternoon.

Uncovered the telescope to let the dew dry under the sunny sky, and downloaded the AllSky cam pics to the main laptop and generated a time-lapse video. After breakfast, I visited the showers and prepped for my 2pm presentation. At 1:30pm, I headed over to the speakers tent to setup for my talk on "Galaxy Clusters – Abell's, Hickson's, and Palomar's". There was a good size crowd, around 30 amateurs in attendance, including Dean M. Prior to the talk start time, I played the time-lapse video from the night before, and everyone enjoyed it. Several good galaxy cluster questions afterwards.

On the walk back to camp, I met the Chaos club mascot, a pot bellied pig named Pepper!

Afterwards, back at camp, I had a snack, then went for a walk around the observing field, then headed down to the confluence of the Staunton and Dan Rivers where they form the Roanoke River. Along the path thru the woods, the park had rustic markers telling what kind of tree you were looking at. A cool idea!

Also walked past the park cabins with river views that could be rented. They looked nice.

While at the river, the sky darkened and the wind picked-up. A quick check of the weather radar showed a small storm that had developed just west of the park. Having left the rear hatch of my camper open, I texted the group and they took care of closing things up. Fortunately, that little dark blob went to the south, and by the time I was most of the way back to camp, it passed and the winds had died down. But the sky remained overcast.

On the walk back, I stopped in at the cafe to rest and stayed for the Cheesesteak Sub dinner. Another great meal from the park staff! After finishing up the delicious hoagie, I headed back to camp where I had a new neighbor to my east, Devin, a narrowband imager from NC, who recognized me from Cherry Springs Star Party.

I then joined the rest of the gang sitting outdoors enjoying the warm T-shirt weather. We remained outdoors watching the now cloudy sky and visited until it grew dark and raindrops began to fall. As most of the gang was heading home the next day, we called it an early night. I spent time inside the camper reading, then early to bed.

Saturday 03/21/2026:

Up early to see everyone off. Dean M had already left by the time I was out. Spent the morning getting in a few last visits with the gang until all were on the road northward with Gary being the last to drive off around 11:30am. The sky for the day had started clearing at noon and was mostly sunny with just a light haze around the Sun. Jet contrails were very short, indicating good sky higher up.

Visited the vender tent once again and came away with a new field tripod for my SeeStar. Pulled out my camping chair and enjoyed lunch out under the shade of my canopy. A little before 2pm, I walked over to the speakers tent to take in the talk by David S On 3-D CNC machine printing Lunar craters and moonscapes.

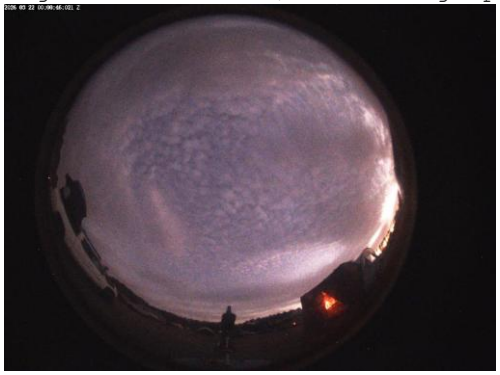
Afterwards was the door prize raffle hosted by Jayme and Jane H at 4pm, but the odds did not favor me today. Lol.

Late afternoon I began tiding up camp, pre-packing a few things and taking down the easy-up canopy and camper visor shade awning. Headed down to the cafe at 6pm for dinner, a great cheeseburger and fries! Towards sunset, with the solar battery fully charged, I packed away the solar panels and moved the generator battery to inside my car.

Visited with Devon and discussed observing plans, (He was hoping to get more data on a widefield view of the "Flaming Star & Tadpoles Nebulas" in Auriga), and invited him to stop over later to see how I did EAA. Walked around, visited a few folks, and met Kendal and his group with his large binoc dob, along with another of his homemade telescopes.

Shortly after sunset, thicker clouds moved in obscuring most of the sky. After phoning home, I sat outside, entertained a few visitors and waited for it to clear. The hosts were getting ready to show movies in the Speakers tent.

At dusk, I uncovered the telescopes and looking to the west caught a glimpse of light. Forgot about this guy (a young crescent Moon) now being up! LOL!

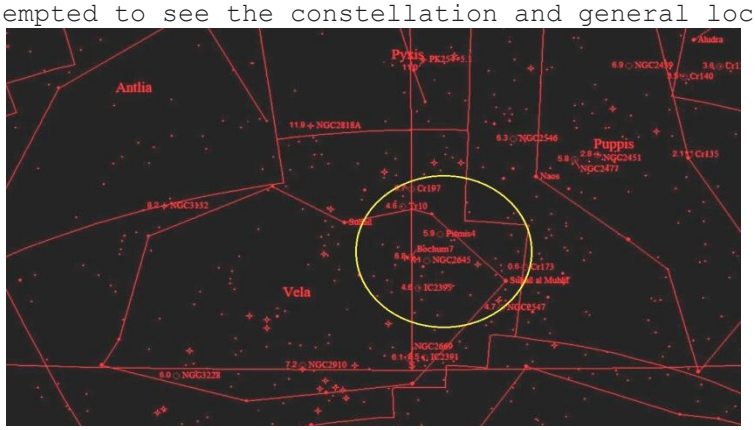


So I grabbed a photo with the S30-Pro. (also had the AllSky cam going)

With growing gaps in the cloud cover, the sky finally cleared at 10pm and I was in astro-observing business!! My plans for the last night at SRSP was to first spend time working with the 8" SCT on an extreme low altitude observation of the Vela Supernova Remnant.

Later in the evening, well after midnight, I would try for another low to the horizon observation of globular cluster Omega Centauri and galaxy NGC5128. In-between, I would continue my Arp Peculiar Galaxy observing project and throw in a few Abell Galaxy Clusters. And the S30-Pro would be in operation capturing widefield of the Vela and Centaurus constellations, and a few galaxy groups.

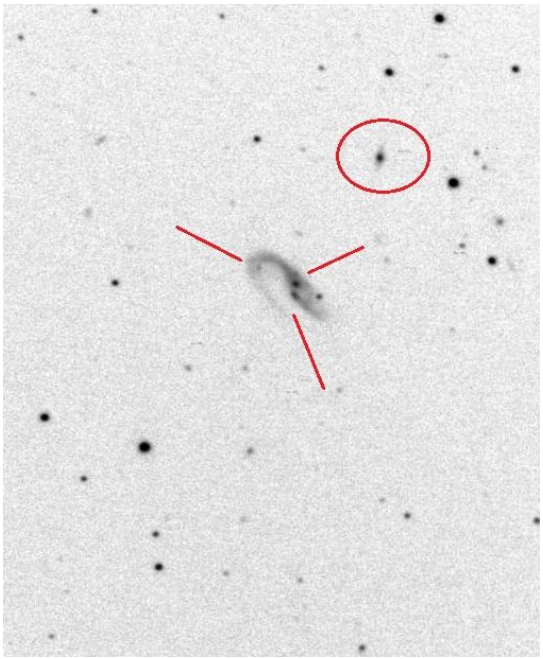
With an occasional lingering haze moving overhead, I began my stellar journey in Vela. My goal was to EAA observe what I could of the various pieces of this large SNR object. All of these objects, including the bright open cluster Pismis-4 and the nebula known as "Herschel's Ray" – NGC2736, would be less than 9 degrees above the horizon.
In some respects, considering the low elevation and less than transparent sky, I was on a fool's errand trying to observe these. But, like the lottery, you gotta play to win.
Using the S30-Pro in "Milky-Way Mode", and my laptop planetarium program - ECU as a guide, I first attempted to see the constellation and general location.



Not a very promising view! So I started off with the open cluster Pismis-4, figuring if I couldn't at least see that then I wouldn't waste any more time there. Much to my surprise, the 8" SCT was able to show both the cluster and bits of details in the Ha nebulosity that the cluster was embedded within. After confirming that observation using my 'Night Sky Observers Guide – Vol3', with little time to spare, as this region of sky had already crossed the meridian and heading downwards towards the trees, I slewed the telescope over to NGC2736 – "Herschel's Ray", a bright finger of the SNR, where I was able to view the ray after heavily tweaking the livestack histogram. While neither of these should be considered an astrophotography 'pretty picture' they are a successful EAA observation of sections of the Vela Supernova Remnant. I'm satisfied!! ☺

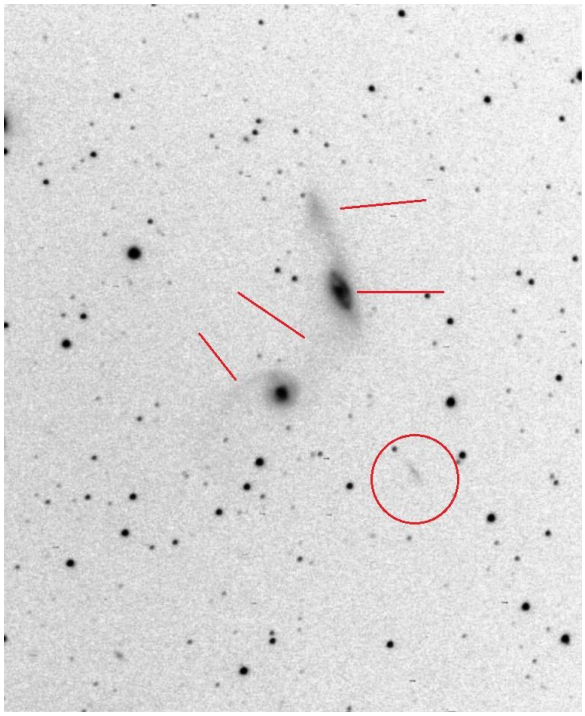
(8" SCT @ f6.3 on an Atlas Gem, ZWO ASI294MC Pro camera with L-Pro filter, 180 second subs, dark & flat frames, PHD guided, 15 minutes for Pismis-4, 9 minutes for NGC2726).

I then pulled out my Arp Peculiar Atlas book and picked-up hunting Arp galaxies. The first observation was Arp335 – NGC3509 in Leo, a +13.5 mag comma shaped spiral galaxy with large curled spiral arm and what looks to be a double nucleus.

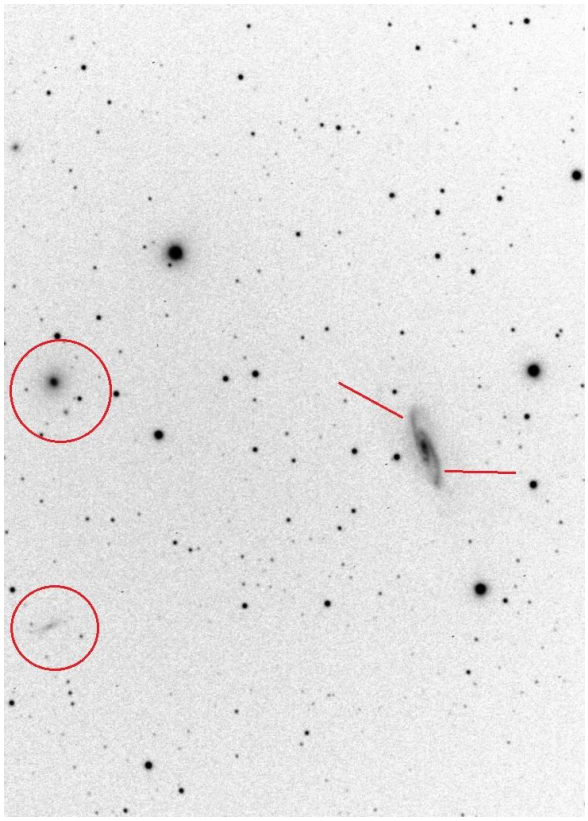


(8" SCT @ f6.3 on an Atlas Gem, ZWO ASI294MC Pro camera with L-Pro filter, 180 second subs, dark & flat frames, PHD guided, livestacked using Sharpcap for 30 minutes).

Next was Arp245 – NGC2992 & NGC2993, a pair of +13th mag spiral galaxies that Arp though showed signs of having once been a single galaxy that fissioned, breaking apart. A large tidal plume extends to the north of NGC2992 (upper galaxy), and another plume extends eastwards of NGC2993 (lower galaxy), with a faint hint of diffuse material connecting the two galaxies together. Also visible is a very faint +16th mag flat galaxy from the RFGC (Revised Flat Galaxy Catalog)



Moving on, I then centered Arp289 – NGC3981, a +12.1 mag inclined spiral in Crater. Arp thought this was a double galaxy with spiral arms showing 'wind effects', but modern sources consider it to be just one galaxy. Several PGC galaxies are to the left.



(8" SCT – same scope/camera/capture details as above).

While the 8” SCT was Arp hunting, I had the S30-Pro also working galaxy groupings. I wanted to get a better deep-dive livestack observation of M81 & M82 than from the other evening, but tonight it seemed the galaxy pair was in the evening jet flight path. The FOV kept getting zinged by airplanes! I finally gave up and pointed the S30 to a different part of the sky.

(SeeStar S30-Pro: 60 second exposures with 30mm lens, standard FOV, EQ Mount, IR filter, livestacked for 12 minutes and 31 minutes, AI noise reduction applied in-app, cropped)

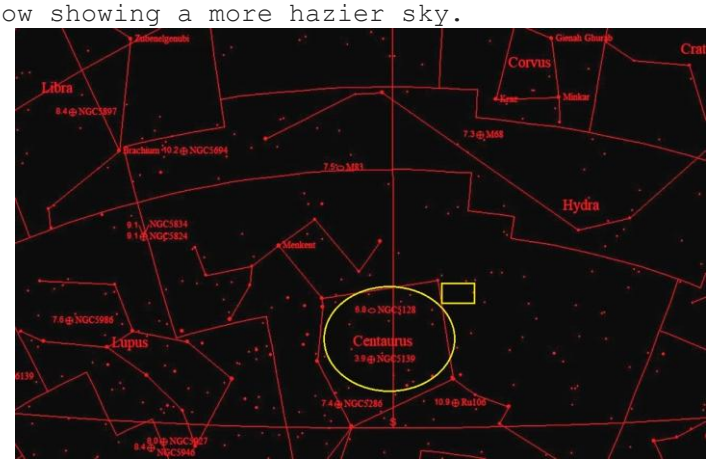
I had much better luck over in Leo in observing both “Leo Triplets”. M65, M66, NGC3628, then M9, M96, and M105 and friends – NGC3384 & NGC3389:

(SeeStar S30-Pro: 60 second exposures with 30mm lens, standard FOV, EQ Mount, IR filter, livestacked for 40 minutes and 30 minutes, AI noise reduction applied in-app)

With the clock now past 1am, I decided to switch to Abell Galaxy Cluster hunting. First up was the +15.4 mag cluster Abell-1631 in the constellation of Corvus. This Abell cluster contains around 34 visible galaxies and falls under class 0, with the bright elliptical galaxy NGC4756 holding the central cluster position. Several dozen PGC galaxies are identifiable within the FOV.

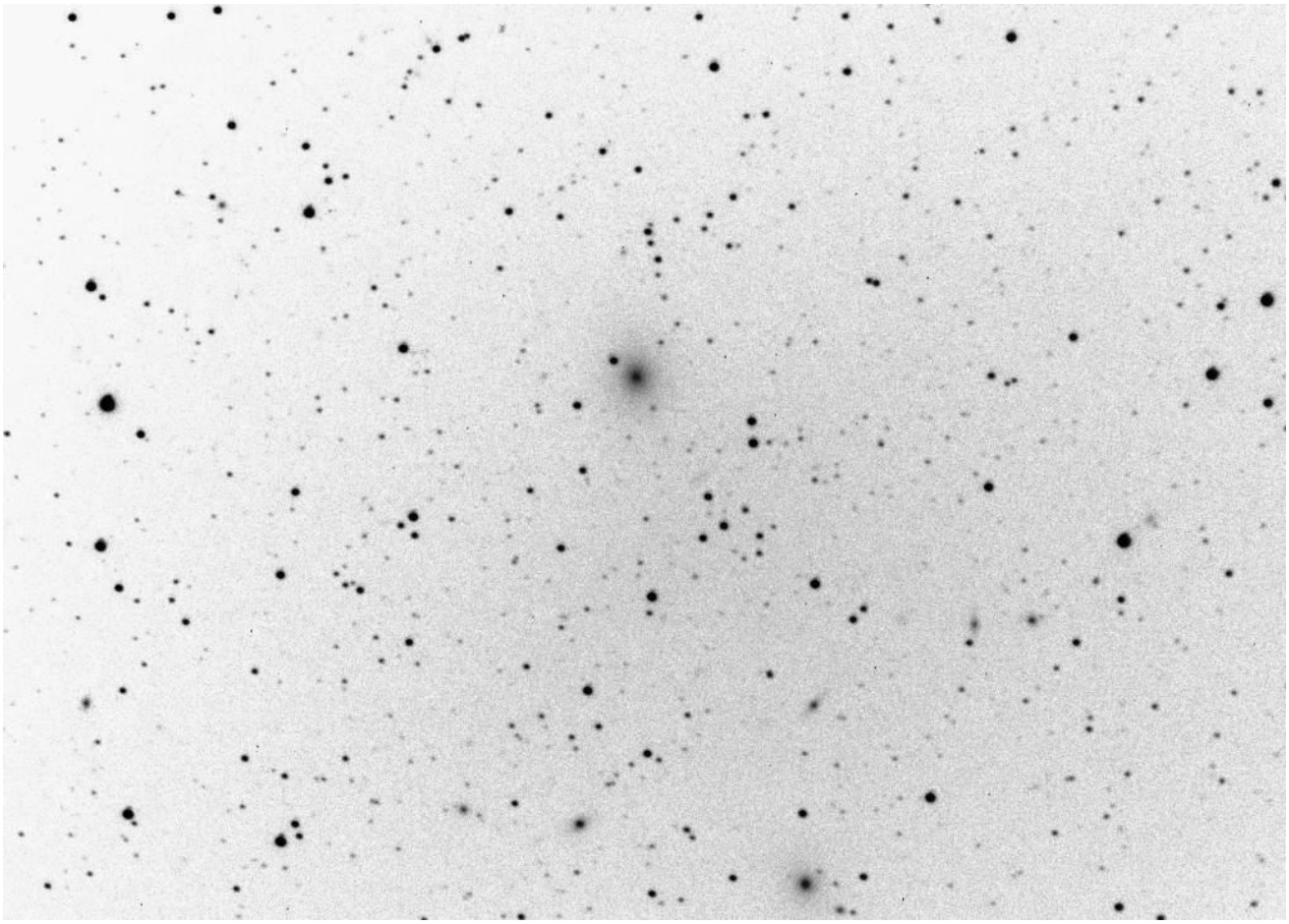
(8" SCT – same scope/camera/capture details as above).

Towards the end of this observation, Devon stopped over to visit and see how I do EAA. He stayed for awhile and enjoyed seeing the galaxy clusters on the display monitors, along with the AllSky cam which was now showing a more hazier sky.



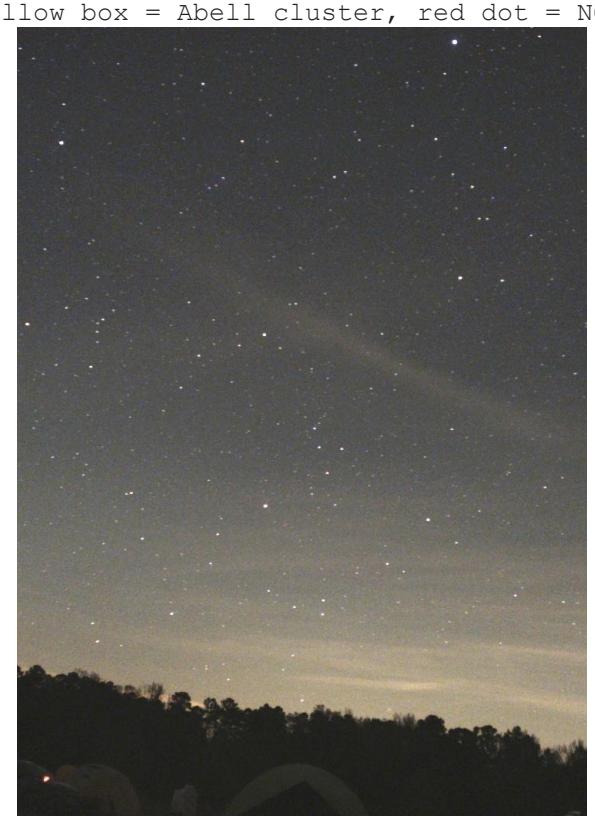
With the southern sky not looking great, and the time for my next low elevation observations in Centaurus shortly coming up, I went for a bright Abell cluster in mid Centaurus (yellow box in chart) to position for the later dive to Omega. So I slewed the telescope to +12.9 mag Abell-3526 – "Centaurus Cluster", at about 11.5 deg above the horizon. The central galaxy, giant elliptical NGC4696 was visible, along with several

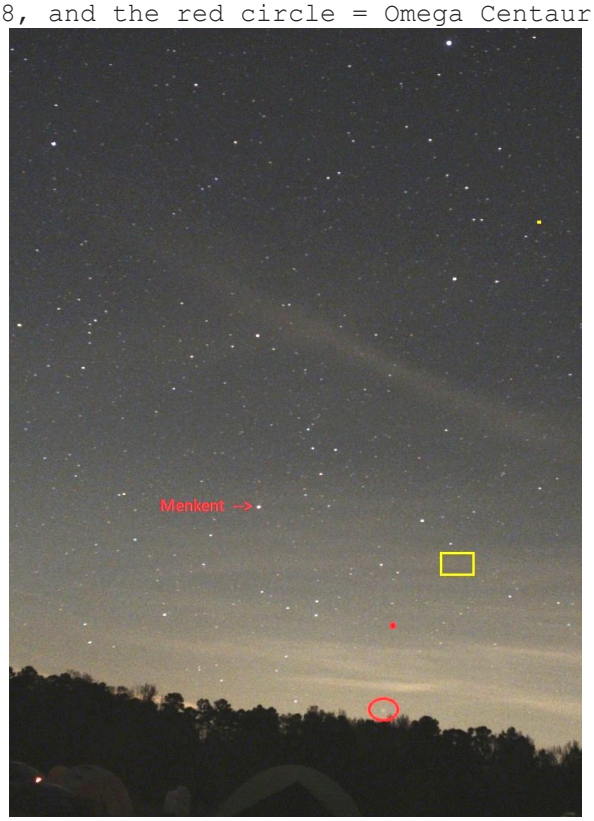
other fainter NGC galaxies – NGC4706 & 4709, along with about a half-dozen PGC galaxies. The observation was definitely obscured by the sky conditions and low elevation.



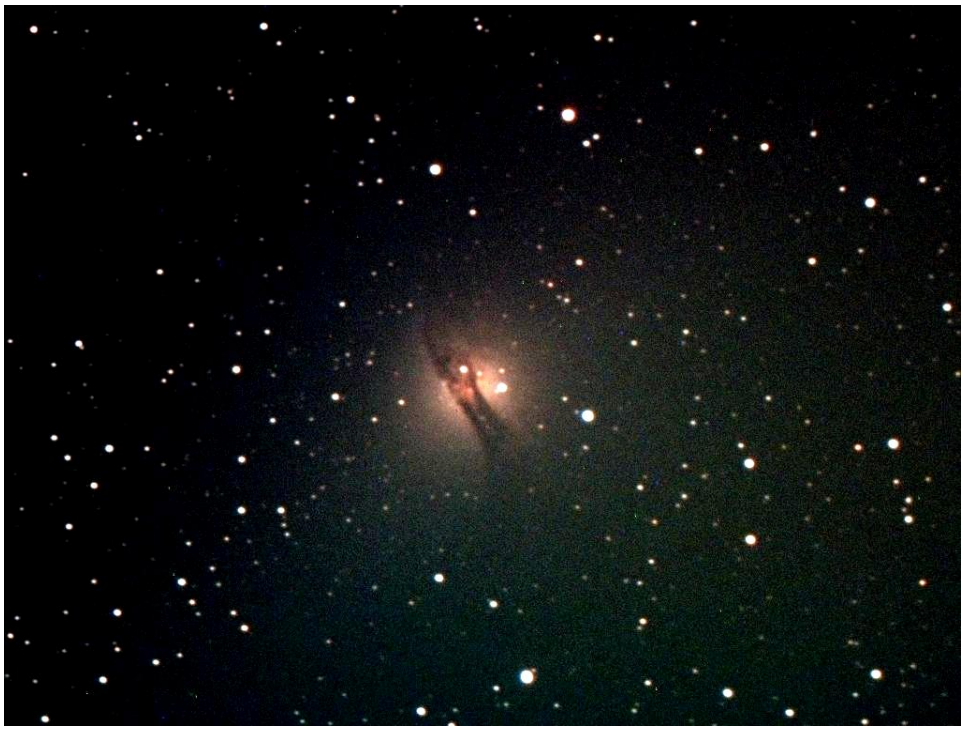
(8" SCT – same scope/camera/capture details as above).

The S30-Pro, pointing to Centaurus along the horizon highlighted the hazy mess. (yellow box = Abell cluster, red dot = NGC5128, and the red circle = Omega Centauri)





I immediately slewed the 8” SCT down to the tree line hoping to catch Omega, but it was to no use, as nothing was visible. So I moved up about 5 degrees in elevation to +6.8 mag elliptical galaxy NGC5128 – “Centaurus A”. The fifth brightest galaxy in the sky was visible thru the haze, making another somewhat successful low-elevation EAA observation!



(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).

And with that observation complete, knowing that I had a long day of packing and driving ahead of me, I called it a night at 3:30am.

Here’s an AllSky time-lapse from Saturday evening:
https://youtu.be/6mEEjuSbLRo?si=QJYLOOCws1RtEDEF

If only I could have stuck it out to see this! The Summer Milky-Way rising!

Sunday 03/22/2026:

Woken at 8:30am by the sound of folks packing. While eating breakfast, I packed away the inside of the camper. Then headed outside to disassemble the telescope. Had the car loaded up and the camper hitched by 10:30am, got in a quick shower, said a few goodbyes and was on the road by 11:52am for the first stop near Cumberland, Md where I was staying overnight. After a long drive in heavy traffic along I81, and stopping for dinner, I made it to the hotel at dusk where I crashed for the night.

Monday 03/23/2026:

Up early to hit the final leg home. Overnight it had stormed, which thankfully cleaned off all the tree pollen on the car and camper. Had to put on a sweater and jacket, going from 85 deg yesterday to 45 today! As I pulled onto I68 heading west, I drove into a cloud and spent the next 30 miles interstate driving with low visibility, ugh!! Finally cleared the cloud and made the northwards turn to PGH. Landed at home by 10:30am and spent the next hour unloading, bringing this trip to a close.

So four nights of EAA observing out of a total of six nights at Staunton River. Not bad! Our buddy Gordon did not lead us astray; both the Staunton River Star Party staff from CHAOS and the state park folks were great. The starparty is definitely worth the drive. Our group plans on returning next March, maybe even talk a few more of our ORAS club members in coming with us. Looking forward to next year!

Larry McHenry
Astronomical Webportal: http://www.stellar-journeys.org/