

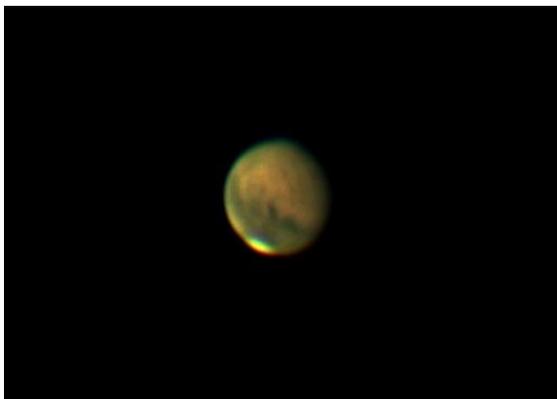
## Black Forest Star Party - September, 2018

### Sunday 09/02/2018:

With the Labor Day Holiday weekend, it was time to pack the camper and load the car and head north to Cherry Springs State Park for the annual Black Forest Star Party. Before making the drive to Cherry Springs, fellow Kiski and ORAS member Denny H and I decided to first head up to the new ORAS observatory to spend an evening doing planetary imaging with the club's 14" SCT's. Left Pittsburgh around noon for the Clarion, PA region. It was hot, in the upper 80's, humid, and partly cloudy conditions, not very enticing for the start of a weeklong camping trip. Arrived at 3pm and was shortly joined by Denny. Neither of us really setup camp, as we were only staying one night. We did some work inside the observatory, installing corner braces on the roof and shelf's for the wifi transmitter. Once the Sun was low enough to no longer shine inside, we opened the observatory roof to let the telescopes begin cooling to ambient.

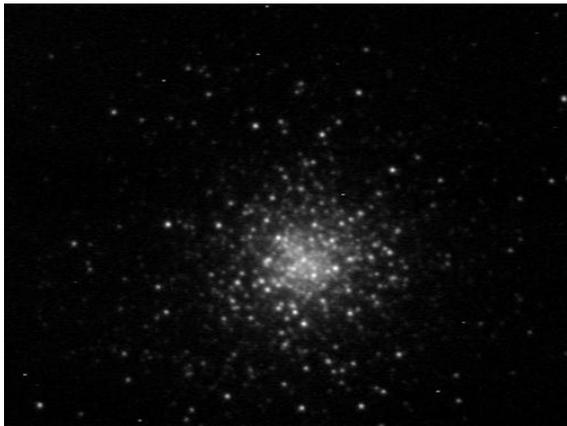


Denny used the Celestron and I took the Meade. It was a really clear night and the Milky-Way stretched glowingly across the sky. Mars and Saturn were well placed in the sky so I used my ZWO ASI120MC 'guider' Vidcam to capture several AVI's of each planet. Mars showed good surface detail with a gibbous phase, even though it is now moving away from the Earth. Here's a processed image of about 1850 frames captured using Sharpcap and stacked with Registax. The Martian South Pole is at the bottom, Solis Lacus (circular area) is faintly visible to the left of center disk, and the markings to the right of center are the Tharsis region. Also, here's an image of Saturn showing Cassini's Division and Saturn's disk shadow on the rings, along with several surface bands on the disk.

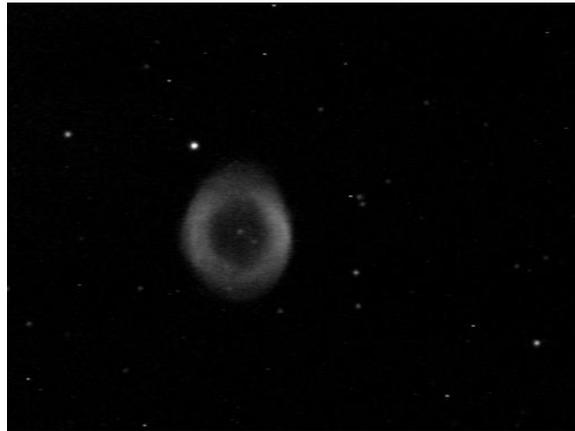


(14" SCT)

I also tried a little deep-sky with the 14" at f10: M2 and M57. The Meade's Alt/Az mount forced me to keep the exposures short, under 30 seconds, to keep the stars nice and round. Next time, I'll put on a f6.3 focal reducer to help with a wider field.



(M2 - 14" SCT)



(M57 - 14" SCT)

At 2am, the waning gibbous moon rose and illuminated the fog building on the observing field. Denny and I decided to call it a night and shutdown the telescopes and closed up the observatory.

**Monday 09/03/2018:**

Up early in anticipation of driving to Cherry Springs, and after a quick breakfast and stowing a few camper items, we were on the road to Potter Cty. The day started off hazy, but soon the clouds began to build. Arrived at the park close to noon to find an already good size group of amateur astronomer's setup. Mike P from Niagara, Nick & Jane, Dennis from York, were already there in our section, along with Tony, Conrad, Elliot, Bob and Phil and others in their usual observing field spots. In between rain showers, Denny and I got our camps squared away. Around 2pm, Tracy N from Delaware arrived, followed an hour later by Bob K from the Kiski club. Bob barely finished setting up camp when the storms around us began moving in. The weather radar showed activity all around us, and at 4pm a heavy thunderstorm with torrential rain hit the field, sending everyone indoors for a good hour. With a deafening clap, a lightning bolt crashed down near the park entrance, rattling everyone! By 5pm, the storm had passed and the rain died down to a drizzle, but the observing field was soaked by nearly an inch of rain from the storm.



After dinner, we all pulled our chairs over under Denny's camper awning and visited. At dusk, Tracy noticed it was clearing to the west, so he and I scrambled to setup our mounts to at least get them polar aligned. But with the darkness falling quickly, we didn't have enough time to finish assembling the telescopes, so we covered up the mounts and joined Mike and Denny for binocular arm-chair Milky-Way observing. Mike did have his 18" Dob setup, so he uncovered that and we visually observed some of the brighter Messier objects scattered around the hazy, partly cloudy sky. The great Hercules Globular cluster - M13 looked very nice. Finally around 11pm, the clouds began to close up, and we called it a night.



**Tuesday 09/04/2018:**

Woke to a foggy, cool morning. After breakfast, I finished assembling my telescope - 8" Celestron SCT optical tube on a CGem mount with a 80mm Kson and a 60mm Antaries refractors piggybacked with StellaCam II & 3 vidcams and my ASI120MC as a guider. Bob, Denny, and Tracy also spent the morning getting their telescopes and cameras ready. We spent the afternoon sitting under awnings and canopies trying to stay cool in the humid and hot weather. The park works crew showed up and began taking down the old split-rail fence that followed along the hiking trail in preparation of the four large pine trees that border the trail to be cut down. Having the trees removed will allow folks who setup in the northern section of the observing field to be able to clearly see Polaris in order to polar align. It will also open up the clearing beyond to being usable for observing, giving it access to the southern sky.

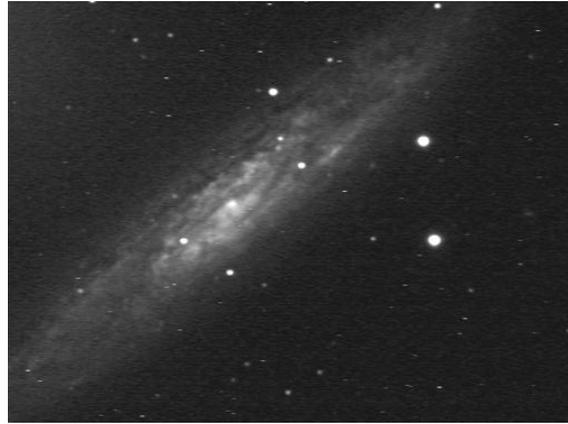


Late in the afternoon, Denny, Bob and I drove down Rt44 to Keeners general store for ice-cream. It was nice to get away from camp and sit in an air-conditioned car!

Afterwards, I took a nap in my camper, using my little swamp-cooler fan, which put out just enough cool air to help me sleep. I got up at sunset and uncovered my telescope and had a quick meal. At dusk, I re-aligned my mount and initialized the GOTO. After spending a few minutes visiting the Whirlpool and Pinwheel galaxies, (M51 & M101), but the light haze somewhat washed both of them out. I then spent the evening in Draco the Dragon hunting faint, fuzzy Herschel Object galaxies: NGC3747, 3752, 3879, 3890, 4034, 4120, 4238, 4332, 4391, and 4441. All little wisps of light.



(M51 - 8" SCT)



(NGC253 - 8" SCT)

During the evening, there were a number of bright meteors streaking overhead that Mike traced back to the Perseid radiant, apparently a few stragglers from the peak a few weeks back. Mike P also had his 18" dob going and I had a great view of the Veil Nebula thru it.

Bob and Denny spent the evening imaging various wide field objects and Tracy experimented with a new QHY camera that he had received right before heading to Cherry Springs.

Around 1am, with Auriga rising over the pines trees to the northeast, Mike showed us how to find Comet Giacobini-Zinner. I then headed over to Sculptor and caught NGC253 - the Silver Coin galaxy on the meridian. By 2:30am, the sky transparency had gone soft and before long the Milky-Way began to fade. Decided to close up and headed to bed.



(Comet Giacobini-Zinner - 8" SCT f6.3)

### Wednesday 09/05/2018:

Would have liked to slept in longer, but the warm camper roused me out by 8:30am to sunny skies and an already warm morning. It was going to be a hot day! Uncovered the telescope to let the previous night's dew dry off in the warm sunshine and pulled out the battery charger for the field battery. After that, the order of the day was to stay cool!!! Spent the afternoon lounging in what shade there was under my tent canopy, reading and visiting. It was a scorcher of a day, with temps in the upper 80's.

I got out the neck coolers that Suzanne had made for us, and soon we all were soaking them in cold water and tying them around our necks. They really did help you to stay cool, from the water evaporation. During the day, the field began to fill with other amateur astronomers, including Eric L from eastern PA, and Mick and Chris from PGH. To cool off, I decided to make a shopping drive down to Galeton for a couple items at the grocery store. The Bank sign there registered 91F! Thank goodness for the car's AC! Back at camp, the temp on the observing field had dropped to around 85F. Interestingly, I noticed on the drive back that in the steep narrow tree shaded valley about a mile from the top of the hill, the car's outdoor temp reading was a cool 77F. Wish it stayed that temp on the field. At sunset, I uncovered the telescope and arranged my observing plans for the night. I decided to hunt faint Abell planetary nebula! With some time to kill, I took a quick walk about the observing field to drop-in and say hello to a few folks.



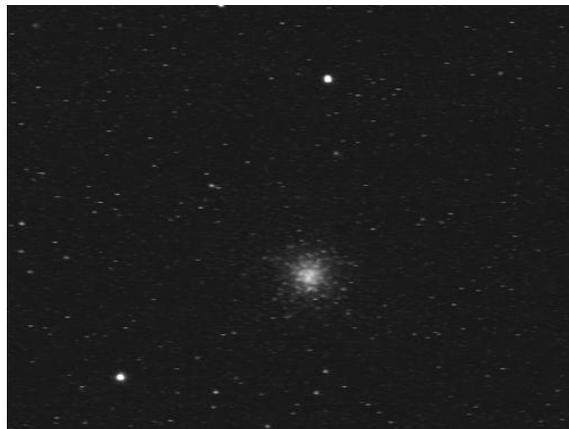
At dusk, I headed back to camp and changed into long jeans and a jacket, mainly to keep the mosquitoes from sucking me dry,,, For most of the day, the sky had been clear and sunny, but now ragged bands of clouds began to obscure the sky from the northwest down thru the southwest horizon. The weather radar showed a front advancing over Lake Erie heading our way, but we should get a few hours of observing in before conditions really went downhill. Overhead and to the east, the light clouds and haze lifted for awhile, and though the sky transparency wasn't the best, it was still a usable night. To our north, there was a strong thunderstorm crossing along the southern border of NY state, giving us a light show as it passed far to the north of us. After using the bright star Altair to focus the cameras, I stopped off at the Wild Duck Cluster in Scutum, one of my favorite open star clusters of summer - M11! I then crossed the meridian to video-observe the Great Hercules Cluster - M13 glowing thru a patch of haze.



(M11 - 8"SCT)



(M13 - 8" SCT)



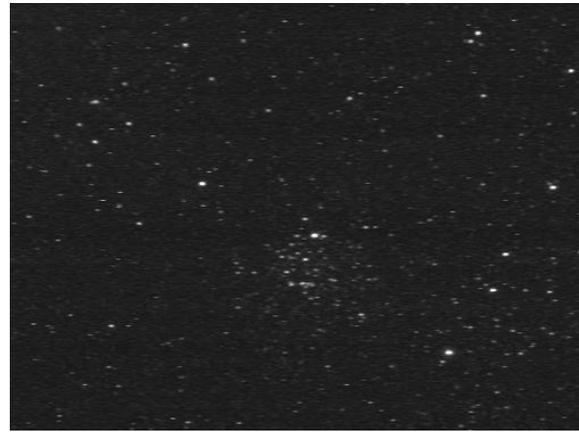
(M13 - 80mm Refractor)

Then taking advantage of my mounts GOTO, I slewed the telescope around the sky hunting Abell planetary nebula in Ophiuchus, Hercules, Sagittarius, and back in Aquila - Abell42, 43, 39, 65 and 70. Even using an OIII filter and two to three minute exposures on the video-camera, these were tough deep-sky objects to pull in! No wonder Abell planetaries are known as being so elusive to observe.

Soon after midnight, the haze and clouds began to once again thicken across the sky, and by 1am the Milky-Way was lost. I finished the night with a quick video observation of open cluster M103 in Cassiopeia, and M52 in Cepheus, peeking thru the clouds. The wide-field 80mm Kson Refractor and StellaCam-II showed them the best. Closed down the telescope and headed for bed.



(M103 - 80mm Refractor)



(M52 - 80mm Refractor)

#### **Thursday 09/06/2018:**

Slept in till mid-morning and woke to a hazy day. The storms had stayed to our north and the camp and field were still dry. Once again uncovered the telescope and re-charged the batteries. The weather radar showed another storm front slowly approaching, sending the humidity up, making any effort sweaty. Mike P, having a family commitment for the weekend, broke camp and pulled out in the morning for home. But more astronomers arrived throughout the day, including Mike M from PGH who took Mike P's spot, and Jeff N of CCTS who setup shop in the vendor's tent.

At noon the clouds began to thicken and by 1pm with thundering skies, it began to lightly rain. We sat under Denny's camper awning and watched the storm go thru. It continued to periodically rain and drizzle for the rest of the afternoon. At 5pm, Bob, Denny, Tracy, and I got a pizza from the food vendor (Foxes), and took it over under the park pavilion for a group dinner. While there, we sat thru the heaviest downpour of the day, which soaked the observing field. Back at Denny's camp, Tracy shared a nut roll danish with everyone as dessert. With a break in the rain around 7pm, Bob and I went for a walk around the field. A number of folks had uncovered their telescopes in hopes of observing, but that was soon cut that short as it began to drizzle again.



Bob and I headed back to camp, and with darkness falling, along with the drizzle, we all headed inside our RV's for the night. I spent the evening processing images on my laptop and watching TV. In bed by 11pm.



### Friday 09/07/2018:

Up at 8am to a cool, dreary morning. The sky was overcast and looked of rain. With the weather forecast going downhill, thanks to Hurricane Gordon, Bob K decided to break camp and head for home. A number of other attendees did the same, though some new folks did arrive. It was still a small crowd for a BFSP! At noon we headed over to the food vendor to have lunch with Bob before he left. Afterwards, Tracy decided to disassemble his telescope and just do wide-field DSLR starscapes if it cleared that evening. Denny and I left our telescopes setup, even though the forecast was 'iffy' at best. Mid-afternoon, the Sun finally began to break thru the clouds, drying out the observing field and giving hope to us optimists that maybe tonight would have a few hours of clear sky. Denny, Tracy, and I visited the vendor's tent and picked up a few small items from Jeff of CCTS. As Tracy hadn't been to CSSP for almost a year, we walked across Rt44 and showed him the new improvements on the public side of the park. We spent the remainder of the afternoon sitting around under the tent canopies, visiting with others such as Eric L who stopped by and checking and double-checking the weather on multiple sites. Finally, after watching PBS's Weather World at 5:30pm on the TV, we lost what little hope that we had and Denny and I packed-up our telescopes and broke down our camp to the point of being ready to hook-up our cars to the campers. There was no hope left of any observing that night or Saturday. We all decided to leave the next day, as none of us wanted to drive home in the severe weather being predicted for Sunday. At sunset, just to spite us, a large clearing went over and persisted in spots after dark. Tracy wasn't going to be suckered-in, so he went inside his camper to watch a soccer match, while Denny and I got out our chairs and spent about a half-hour doing naked-eye stargazing until around 9pm when it finally clouded over for good. Then we both headed indoors to read and watch TV for the evening. In bed by 11pm.

### Saturday 09/08/2018:

Up early to a drizzly sky, it had rained overnight! Glad I packed away everything the day before while it was still dry. I finished packing the inside of the camper and walked down to the swap meet to look for deals. Unfortunately, there was only one person setup and they didn't have anything that I was interested in. Everyone around us was busy packing up in between light rain. Those heading west wanted to get on the road as Pittsburgh was predicted to receive 5 to 8 inches of rain, and even Potter Cty had flood warnings out for later that evening. My plan was to leave as soon as my talk was done, so that I would make it back home before dark. Even though I would have liked to stay for the keynote speaker and door prize raffle, it's no fun towing a camper at night in the rain. Denny and Tracy finished hooking up their campers and both pulled out for home around 11am. At noon, I headed over to the food tent for lunch. Then at 1:15pm, I gave my presentation on 'Halton Arp and his Peculiar Galaxies' to a good size crowd. With the rain showers limiting what people could do, guess I had a captive audience! ☺ The talk was well received, with a number of good questions afterwards. Too bad the weather had gone downhill and that nobody would be able to look for Arp galaxies tonight.

After stowing my laptop and talk notes, I made my 'goodbyes' and headed out for Pittsburgh. The drive home was damp with the occasional shower, but no hard rain until I was nearly home. Right after I backed the camper into the driveway, a torrential downpour began, so out came the poncho and I unpacked in the rain. Lots of fun! ☺

This brings to an end the 2018 Black Forest Star Party. So while this years' BFSP tended to be on the cloudy/wet side, it was still a good time getting together with amateur astronomers from across the region and Canada. We did have a couple of half-decent observing nights earlier in the week, and between that and seeing old friends, it made the trip worthwhile. Hoping to make it back to Cherry Springs one more time this year for better observing weather!

Larry McHenry

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