

Black Forest Star Party - August, 2014

Having missed the new Moon week end in July, I was really looking forward to heading up to Cherry Springs for the August 2014 Black Forest Star Party convention. Several of us from the Kiski astronomers had decided to go early, and I added a couple of days afterwards to maximize my chances of getting in good observing nights. Unfortunately, once again, the wet summer skies looked to be never ending,,,,,

Sunday 8/17/2014:

After a late start, waiting out a rain shower to finish loading the car, I finally hit the road around 1:00pm for Cherry Springs. Soon I left the rainy Pittsburgh area behind, and once I hit I80, the skies began to clear. I arrived about 5:30pm at the park and setup camp across from Bob K from our Kiski Astronomers club and long-time friend Dennis from York, both who had only arrived a few hours beforehand. After my camp was in order and while assembling my 8" SCT telescope on my Celestron CGem mount and StellaCam-II and 3 cameras, I entertained a number of public who were walking around the field. Across the street, the park rangers gave an impromptu program to over 50 visitors. Here are pictures of my new 'Tab' teardrop camper with its front 'porch' and solar panel, and my scope:

<http://home.comcast.net/~lemastro/conventions/bfsp2014-01.jpg>

<http://home.comcast.net/~lemastro/conventions/bfsp2014-02.jpg>

<http://home.comcast.net/~lemastro/conventions/bfsp2014-03.jpg>

At sunset, the sky completely cleared, as we headed into a good night of observing. Soon though, heavy dew began to settle on everything, so you had to be careful of where you sat things, as they were soon damp. I started the night off with constellation survey work, heading to Bootes and Corona Borealis before they slid too far down the western horizon. One of my favorite targets was the bright spindle galaxy NGC -5524. Then I headed over to the North-East sky to hunt open clusters in Cassiopeia, Camelopardalis, and the upper regions of Perseus that were higher up in the sky. Among these were Stock-18, 21, and 23, along with King-5 and 6.

Around 1:00am, I began to notice a decrease in brightness of the clusters I was video-observing. A glance over at the telescope verified that the dew heater controller was set to max, so I went on to the next deep-sky object. A few minutes later, as the object displayed on the video monitors continued to go soft, I decided to check on the telescope optics. Sure enough, both of the finders and the 8" SCT primary had dewed up!!! As I was trying to figure out how my previously dependable controller had failed, I discovered all the heaters unplugged. Apparently, while I was talking with the visitors earlier that evening, I had gotten distracted and forgot to plug them in!!! LOL So I decided that was a good time to pack-in for the night, and after shutting down and covering up the equipment, I spied the waning crescent Moon just rising at 1:30am over the trees in the East.

Monday 8/18/2014:

Slept in. After breakfast, went for a walk on the hiking trail. I always enjoy the section near the small footbridge among the larger trees. After getting back, Bob and I helped Maxine install several new temporary Stop signs.

<http://home.comcast.net/~lemastro/conventions/bfsp2014-04.jpg>

Hopefully, folks will read the info on them and the data that Maxine posted on the display walls about what section of the park the various users should be in. Early afternoon, Denny H from Kiski club arrived, with Mike M from New Jersey right behind him. Denny pulled up next to me, with Mike going over by Dennis. Then around 6:00pm, Don P from the Hamilton Ont club made it to the park and pitched his tent next to Denny.

At sunset the puffy-white cumulus clouds dissipated into a clear calm sky. Within a half-hour, the Milky-Way began to shine thru the still bright sky.

Once fully dark, it stretched spectacularly from Cassiopeia rising in the North-East, overhead thru the Summer Triangle constellations, down to Scorpius setting in the South-Western sky. The star-clouds in Sagittarius and Scutum glowed brilliantly, highlighted by the foreground dark nebula. Through-out the night Bob K would bring out his dark-sky meter and was getting really great readings. It was a very good night for observing!!!

I started the night off by continuing my constellation survey work in Bootes and Hercules, chasing down several dozen nice little galaxies including: NGC-5665, 5707, 5795, 5874, and 5875 in Bootes and planetary nebula NGC-6058 in Hercules.

While in that area, I stopped by to visit an old friend M51 - the Whirlpool Galaxy in Canes Venatici. Around midnight, I moved back over to the NE sky back to Cassiopeia, Camelopardalis, and Cepheus. There I continued working on the various obscure open cluster catalogs as part of my open cluster survey project. I video-observed a number of Berkeley's, Czerniks, and Kings, with my favorites being Czernik-13 and King-1.

For a quick break, I dropped in on Big, bright, splashy M52.

Over the course of the evening, the air temperature dropped quickly into the upper forties, requiring me to head inside my camper a few times to change to a heavier coat and hat. Fortunately, the dew wasn't nearly as bad as the night before.

(It's also a big help to actually have your dew heaters plugged in).

Both Bob K and Mike M headed in early to image from inside their campers, Dennis worked thru a few technical issues he was having with his mount, while Don having got to the park late, only roughly aligned his mount and then headed early to bed, being worn out from his trip across the border. Denny and I stayed up past 2:00am, until the Moon began brightening the Eastern sky. Denny was shooting wide-field dark nebula over in Ophiuchus and Aquila with his small refractor. We both reluctantly packed-in for what had been one of Cherry Springs great nights!

Tuesday 8/19/2014:

Got up after about 6 hours of sleep to grab a quick bite to eat before the Dark-Sky Fund work bee session was to begin. The Astronomical Society of Harrisburg had donated the funds for a stockade fence to go along the main road on either side of the gate.

This would act as a light-shield to help block the glare from headlights of cars leaving the public visitors parking lot shinning across the road and sweeping thru the observing field. A crew of about 15 of us amateur astronomers, led by Conrad from ASH, along with the park maintenance crew spent the entire day, 9 - 5, installing the fence.

After a slow starting in getting the first few posts and panels up, we quickly fell into a routine where everyone had a job and knew what to do. By the end of the day, we had all amazed ourselves by finishing the entire project in a single day.

Here are a few pics of the crew:

<http://home.comcast.net/~lemastro/conventions/bfsp2014-05.jpg>

<http://home.comcast.net/~lemastro/conventions/bfsp2014-06.jpg>

<http://home.comcast.net/~lemastro/conventions/bfsp2014-07.jpg>

<http://home.comcast.net/~lemastro/conventions/bfsp2014-08.jpg>

<http://home.comcast.net/~lemastro/conventions/bfsp2014-09.jpg>

<http://home.comcast.net/~lemastro/conventions/bfsp2014-10.jpg>

<http://home.comcast.net/~lemastro/conventions/bfsp2014-11.jpg>

<http://home.comcast.net/~lemastro/conventions/bfsp2014-12.jpg>

<http://home.comcast.net/~lemastro/conventions/bfsp2014-13.jpg>

<http://home.comcast.net/~lemastro/conventions/bfsp2014-14.jpg>

During the day, the weather went from partly cloudy, to rain, then back to partly sunny. By sunset, the expected rains had all went well to the south of our area, and we had clearing skies.

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<http://home.comcast.net/~lemastro/conventions/bfsp2014-16.jpg>

<http://home.comcast.net/~lemastro/conventions/bfsp2014-17.jpg>

Tired as I was, I determined not to let a partly clear night at Cherry Springs slip away unused! The sky conditions were variable, with occasional haze and light clouds occasionally going over. The ground was damp from the rain earlier in the day, and the dew soon added to that. But even through the local 'milky' conditions, the more distant 'Milky-Way' of our galaxy still managed to shine brighter than anything I could ever see back home in Pittsburgh! With the sky conditions such as they were, along with a rapidly heavy dew coating everything, I still managed to work a number of galaxies high up in Draco, including NGC-2977, 5949, and 6643, along with a nice planetary NGC6742. With the sky gradually getting hazier, I switched over to open cluster observing in nearby Lacerta and Perseus, pulling in King-7 and 9. Finally, around midnight, the sky completely clouded over, so I happily packed in for the night.

Wednesday 8/20/2014:

Rain Day!!! Off-on light showers through-out the day, with one big downpour at 5:30pm. Bob K recorded nearly a ½ inch in his rain gauge. We were all happy it wasn't snow. (that was a running joke all week, as the NOAA radio forecast always included to tal snowfall during the week we were there).

Spent some quality time reading and re-planning my observing lists for later in the week. Our friends Nick and Jane arrived that afternoon and setup next to Mike M. Poor Mike, earlier in the week, after arriving at the park, he discovered that the hitch frame on his popup camper had cracked. He had Nick bring a welding kit, and spent several days welding the frame with new angle-iron. Here are a few pics of Mike at work, with Bob k helping out.

<http://home.comcast.net/~lemastro/conventions/bfsp2014-18.jpg>

<http://home.comcast.net/~lemastro/conventions/bfsp2014-19.jpg>

During the big afternoon storm, the gravel roads briefly turned into small rivulets.

<http://home.comcast.net/~lemastro/conventions/bfsp2014-20.jpg>

<http://home.comcast.net/~lemastro/conventions/bfsp2014-21.jpg>

By 6:30pm, the storm had moved off to clearing skies, but we all knew from weather radio that it wouldn't last thru the night. At 7:00pm, under sunny skies, Bob, Don, Denny and I walked over to Conrad's trailer for a little ice-cream thank-you for the fence crew. While there a thick fog began rolling out of the woods onto the observing field. By sunset, the sky was completely overcast, with us inside a ground cloud. I called it an early night and went inside to read and watch a little TV. (it was 'science' night on PBS!). I went to bed at 11:00pm, but heard a heavy thunderstorm approaching the observing field out of the NW. Soon, a series of loud boomers rolled overhead, with a hard rain hitting the camper. Then right at 11:38pm, there was a huge flash and crack of thunder that rattled the camper!! I was just about ready to grab my wallet and head out to the car, when the storm finally started to settle down. The next morning, that was the talk of the campground. By midnight, all that was left of the earlier violent weather was a gentle rain tapping on the camper ceiling. I fell asleep listening to it and had a good night's rest!

Thursday 8/21/2014:

Woke to a partly cloudy sky, with a fog that soon burned off.

Bob K recorded another ½" of rain from the big storm the night before, bringing the total over the last 12 hours to one inch of rain. Spent the morning re-organizing my observing lists, in case we get lucky with the weather later that evening. For the most part, it was partly-sunny throughout the day, which dried off the observing field nicely.

Bob, Denny, and I went for a drive to see the recently re-opened 'Ice-Mine', down off Rt44 in Sweden Valley. It was a 'cool' place! Here are a few pics:

<http://home.comcast.net/~lemastro/conventions/bfsp2014-22.jpg>

<http://home.comcast.net/~lemastro/conventions/bfsp2014-23.jpg>

<http://home.comcast.net/~lemastro/conventions/bfsp2014-24.jpg>

<http://home.comcast.net/~lemastro/conventions/bfsp2014-25.jpg>

On the way back we detoured onto Chipmunk Drive to see the location of the new Verizon cell-tower. My understanding is that it will be operational sometime in November and will finally give the observing field good cell phone coverage. An added bonus is that the tower will be unlit! ☞

That afternoon, new attendees began flowing into the park, and soon the observing field began to look like a star-party was going to happen. The local tent rental folks showed up and soon the Vendor tent was up, with the vendors, including Jeff of CCTS, setting up and open for business!

<http://home.comcast.net/~lemastro/conventions/bfsp2014-26.jpg>

Don and Bob worked on trying to get the DarkSky internet up and running, with Don climbing onto the roof of the main restroom to work on the repeater. Unfortunately, after trying everything technical that they could think of, they had to give up. Hopefully, the park will be able to get it fixed before the September New Moon.

Around 5:00pm, a line of dark rumbling clouds began moving to the north of us. Shortly thereafter, Bob's weather alert radio went off, with warnings of hail and high winds in nearby Galatin. Everyone quickly secured their campsites, and I headed in for dinner. Fortunately, all the severe stuff stayed to the north of us, and all we got were several short-lived downpours. Just what we needed, after the field had just finally dried out, more rain!

At 7:00pm, Bob, Don, and Denny headed over to the DarkSky Fund board meeting at the park pavilion, and I stayed behind at my camper to practice my presentation for Saturday afternoon - "The Herschel's and their Catalog".

After running thru my notes and making a quick call home, I decided to go for a walk around 8:30pm. Of course, I had to wait a few minutes for the latest downpour to subside. I ended up dropping in on the tail-end of the Darksky meeting, and walked back to camp with the gang. With the sky looking like it could rain at any minute, I headed inside for the evening to watch a movie (Contact).

Around 10:00pm, I heard a tapping at my camper door. It was Bob with the news that the sky had cleared off!! I hurriedly dressed and went out to uncover the telescope. Within 15 minutes I had the scope, cameras, and computer up and running and was making my first observation of the Star Queen - M16. I then proceeded with more constellation survey work over in Cepheus. I mixed things up a bit, going after several galaxies including NGC-6949, Planetary nebula IC-1454, and open clusters NGC-7231 and 7281. Around 11:30pm, the sky began to go 'milky', and by 12:15am had completely closed-up. A thick ground fog rolled over the field, and at that point everyone called it a night. I was in bed by 12:30am, happy to have been able to get in a good hours worth of video - observing!!!

Friday 8/22/2014:

The day dawned cloudy, but soon the Sun burn off the left-over morning fog, and it turned into a fine summer day! After lunch, I visited the vendor's tent and picked up a new dew heater strap for the 8" SCT optical tube from Jeff CCTS. Then stopped over for a nice chat with Kiski Astronomer George Kepple, who was there at a table selling his Night Sky Observer's Guide books. Took a short walk around our camp area, and here's a few pictures of the group.

<http://home.comcast.net/~lemastro/conventions/bfsp2014-27.jpg>

<http://home.comcast.net/~lemastro/conventions/bfsp2014-28.jpg>

<http://home.comcast.net/~lemastro/conventions/bfsp2014-29.jpg>

Nick and Jane had her new Coronado Ha telescope out and were showing good views of the Sun. Mike M had his white-light scope also nearby as a nice comparison. Around 3:00pm, a line of threatening dark storm clouds rolled in from the NW, and within the half-hour there was a prolong downpour. It continued to rain on/off for the next 30 minutes, once again, thoroughly soaking the observing field. After a mid-afternoon nap listening to the rainstorm, we headed over to the food vendor's tent for dinner, under a partly-sunny sky. Denny and I then went for a stroll around the observing field and occasionally stopped to chat with some of the other hopeful attendees. Bob joined us toward the end of our walk. Here are a few pictures:

<http://home.comcast.net/~lemastro/conventions/bfsp2014-30.jpg>

<http://home.comcast.net/~lemastro/conventions/bfsp2014-31.jpg>
<http://home.comcast.net/~lemastro/conventions/bfsp2014-32.jpg>
<http://home.comcast.net/~lemastro/conventions/bfsp2014-33.jpg>
<http://home.comcast.net/~lemastro/conventions/bfsp2014-34.jpg>
<http://home.comcast.net/~lemastro/conventions/bfsp2014-35.jpg>

Around 8:00pm, back at the campsite, we noticed a dark band of clouds fast approaching from the NE; opposite of the direction the weather had been coming from all day. Soon we noticed a chilled downdraft and what appeared to be low clouds rotating over the field, giving us all an uneasy feeling. Within minutes, a huge deluge commenced, sending everyone running for their campers and flooding the field, and turning the roads into rivers that looked like you could fish in them.

<http://home.comcast.net/~lemastro/conventions/bfsp2014-36.jpg>
<http://home.comcast.net/~lemastro/conventions/bfsp2014-37.jpg>
<http://home.comcast.net/~lemastro/conventions/bfsp2014-38.jpg>

The heavy rain continued for a good 20 minutes, bowing my tent canopy from the "pond" water in the canvas top. Bob recorded another ½" of rain. It continued to shower with occasional flashes of lightening, so I settled inside my camper to try and watch the movie from the night before.

Soon, around 9:00pm, Bob came tapping on my camper door. The sky was clearing in the NE. I decided to give it another ½ hour and then went out to observe. By then, the sky had completely cleared off and the Milky-Way glowed brilliantly overhead. I quickly uncovered the telescope, trying not to get wet from the tarps, got everything up and running and quickly re-focused the cameras. Right about then, a heavy ground fog began to form. It was like someone had turned on a smoke machine. Soon you couldn't see the red lights from the food vendor's tent. About all I had time for was a quick hop over to Sagittarius for a short-lived view of the Swan Nebula. The sky then closed up. Several of us hung out for about an hour, hoping for a breeze to lift the fog, but I finally called it quits at 11:30pm. It was a very short-lived evening of observing.

Saturday 8/23/2014:

The conditions overnight continued to go downhill, and I woke to a foggy day with light drizzle. After breakfast, I headed down to Lyman Run Park for a shower, and once I had returned, headed back to the vendor's tent! Spent some time with the campsite group commiserating on the lousy conditions.

<http://home.comcast.net/~lemastro/conventions/bfsp2014-39.jpg>
<http://home.comcast.net/~lemastro/conventions/bfsp2014-40.jpg>

It continued to drizzle off/on pretty much the entire day. I sat in on the 1st two talks - Dave Mitsky on Cosmology 101, and Don's talk on space exploration over the last 40 years. Don did a great job, having spent the last few days holed-up in his tent writing his presentation just before giving it!

<http://home.comcast.net/~lemastro/conventions/bfsp2014-41.jpg>

I was on next, at 2:30pm, with my talk on the Herschel's to nearly 100 attendees! It went very well, with lots of good follow-up questions from the audience. After taking my notes back to my camper, I walked over to the vendor's tent once last time for another visit with George Kepple. He's working on a new book, which I won't spoil the subject, but I'm really looking forward to using when it's done! Then around 5:00pm, we all headed over to the pavilion for the park update by Chip and Maxine, and to hear the keynote presentation by Dr Charles Wood on observing the Moon. It was a very interesting talk about the various features you can observe, using only an average size telescope from your own backyard. Then came the big door prize raffle. Bob K continued the Kiski winning tradition by taking home a year's subscription to Astronomy magazine, and I walked away with a new set of Night Sky Observer's Guide books!! Mike M from our group also won a lens cleaning kit.

Afterwards, Denny, Bob, Don, and I split a pizza from Fox's back at Denny's camp and sat underneath his tent canopy shooting the breeze until dark. With the public lecture across the street having been canceled, and as we were all getting cold and damp, we said our goodnights, and wished Bob a safe trip home on Sunday. The rest of us had decided to stay a few more days, as the weather prediction for Sunday and Monday nights was very good. Watched another movie and read a little before going to bed early.

Sunday 8/24/2014:

The day dawned sunny. Sometime in the wee hours the rain has stopped and clouds lifted. Bob K was the 1st to pull out at 9:00am. Dennis and Nick & Jane followed in the early afternoon. Based on the good weather reports, the rest of us decided to extend our stay a few more days. Spent some time uncovering the telescope and drying things out, along with charging the batteries. Also kicked back a bit and did a little reading. Mike had his Ha solar scope out and there was a very impressive prominence on the limb. I was able to use my point & shoot digital camera to get a few pics.

<http://home.comcast.net/~lemastro/conventions/bfsp2014-42.jpg>

<http://home.comcast.net/~lemastro/conventions/bfsp2014-43.jpg>

<http://home.comcast.net/~lemastro/conventions/bfsp2014-44.jpg>

Around 3:00pm, Bob N from the Kiski Astronomers arrived and setup in the spot vacated earlier by Bob K. He was followed shortly after by Fred K, who setup beside me.

<http://home.comcast.net/~lemastro/conventions/bfsp2014-45.jpg>

<http://home.comcast.net/~lemastro/conventions/bfsp2014-46.jpg>

<http://home.comcast.net/~lemastro/conventions/bfsp2014-47.jpg>

A number of other folks rolled in, replacing those who had left, including a trio of Castia campers from North Carolina. All told, there was still over a 100 astronomers on the observing field. Denny and I took a walk around the field, and a few pictures:

<http://home.comcast.net/~lemastro/conventions/bfsp2014-48.jpg>

<http://home.comcast.net/~lemastro/conventions/bfsp2014-49.jpg>

<http://home.comcast.net/~lemastro/conventions/bfsp2014-50.jpg>

<http://home.comcast.net/~lemastro/conventions/bfsp2014-51.jpg>

<http://home.comcast.net/~lemastro/conventions/bfsp2014-52.jpg>

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<http://home.comcast.net/~lemastro/conventions/bfsp2014-56.jpg>

<http://home.comcast.net/~lemastro/conventions/bfsp2014-57.jpg>

Late afternoon, a heavy bank of clouds passed over, giving everyone some concern, but by sundown they had mostly dissipated and were completely gone by full dark.

There must have still been some high-level haze, as the Milky-Way just wasn't crisp.

After redoing my polar alignment and re-focusing the cameras, I began hunting Local Group galaxies in Ursa Minor, Draco, and Pegasus. Some of these included the elusively faint UGC9749, 10822, 12613, and And-IV. Then around midnight, took a break and along with Denny and Don, went after Comet C/2014 E2 Jacques up in Cassiopeia.

It was a fast moving object, with motion detectable over a few minutes.

I then switched over to a new observing project that I had been saving, video-observing the Arp Atlas of Peculiar Galaxies. These galaxies were collected by Dr Halton Arp of Caltech back in the late 60's, and were galaxies that showed tidal effects of interacting with companions, or galaxies with unusual features. I wanted to see how many I could capture using the 8" SCT optical tube and my StellaCam-3.

I was having no luck getting my Celestron NexGuide autoguider to work, so I had to limit my exposures to 60 seconds, which was about all my alignment & CGem mount would allow. I started off with some of the brighter ones in Camelopardalis, and then moved over to the Pegasus, and Andromeda regions.

I was able to easily see spiral arm features visible on a number of the Arp's, including NGC-1569 (Arp210), 7253A & B (Arp278), and NGC-169 & IC1559 (Arp282).

Around 4:00am, I decided to wrap up the night by observing several open clusters in the constellation of Auriga that I needed to finish off several of the surveys - Melotte-31, King-17, and Stock-10.

Called it quits at 4:30am, and headed in to bed. A very productive night!!!!

Monday 8/25/2014:

After about 5 hours of sleep, the park lawnmowers roused me out of bed. Once breakfast was over, I uncovered the scope to let it dry out, and compared observations with Denny, Bob N, Don, and Fred. Denny and I then headed over to Lyman Run, on the way back stopped in at Keeners for ice-cream. There we ran into Tony D and Dave M stopping in for the same reason. They also had a good night of observing and we compared notes on how quick the comet was moving. Once back to camp, read for a bit, and then went for an early afternoon nap. Later, once I was back up and moving around, Bob n showed me his images of M16 that he had taken the night before. We had a hard time deciding which one had the best detail, a very wide-field image, or a close-up. Either way, they were both beautiful images!

At 5:30pm, Don, Denny, and I gathered round my camper's rear clamshell to watch the 5:30pm WPSU Weather World TV show. We were quite pleased to see that we were in store for a great evening that night, which confirmed what we were seeing up in the nice clear blue sky. After dinner, I decided to pre-pack as much as possible, so it wouldn't take me half the day to get home tomorrow. Down came the tent canopy, and it along with most of the other outdoor camping items went into the car.

At sunset, a few stay lingering clouds evaporated into a beautiful dark sky. I quickly uncovered the telescope and fired up the cameras, and with the dropping air temperature, went in and changed into warmer clothes. After giving Mike a demonstration of how I use the video cameras to do a 'video' polar alignment and while waiting for full darkness, I hopped over to a few favorite Messier in Sagittarius and Scutum - M8, M16, M17, M20, and M22.

Finally, at 10:00pm, I began working thru the Arp galaxy catalog, starting over in Bootes and Serpens, before they got to low in the NW sky. These included the interacting pairs NGC-5829 & IC-4526 (Arp42) in Bootes, and NGC-5953 & 5954, and NGC-5994 & 5996 in Serpens. Around 11:30, I took a short break from video-astronomy, and went old-school with a little naked-eye & binocular viewing of the Milky-Way star clouds.

Then back at the Arp observing work, now over in over in the constellations of Cepheus and Draco for NGC-6946 (Arp29) a beautifully large classic spiral with a companion on one arm, and NGC-6412 (Arp38) among others.

By 1:00am, I was finally getting tired, so I decided to finish the night out with a few more observations over in Andromeda, re-video capturing M32 and M110. Also picked off the nearby Local Group galaxy And-III. At that point, with the long drive home in the morning, I decided to stop for the evening, powered down the cameras and telescope, and packed up everything in the car. (I had left the tailgate open at sunset and the interior red-lights had been off for hours, so no other observer was impacted). In bed by 2:00am, a very happy camper!

Tuesday 8/26/2014:

Awoke early to a clear and cool sunny morning. Finished packing the inside of the camper and hooked up the car. Said my goodbyes to the folks who were staying, and headed for home. Denny was soon behind me, having also packed up, and caught up to me while I was stuck waiting on road construction. Made it back to Pittsburgh by 3:00pm, in time to avoid going thru town at rush-hour. So that concludes the 2014 extended Black Forest Star Party. Though it was damper than I would prefer, I still managed to observe for some amount of time six nights out of nine. Not too bad!

Already looking forward to my next trip to Cherry Springs, the "Astronomers Paradise!"

Larry McHenry

Astronomical Webportal:

<http://home.comcast.net/~lsmch/>