

Cherry Springs Star Party 2011

After the disastrous April new moon Kiski trip, I was looking forward to a week of observing in my repaired camper back at Cherry Springs State Park for the 2011 Cherry Springs Star Party. But, the weather this spring has been so lousy! Near constant clouds and rain. I originally planned on going up to Potter Cty on Tuesday May 24th, along with both Bob K and Denny H. Dave K also had plans to come up later in the week, along with Tony & Roz O. After checking the rainy forecast, I managed to shift most of my vacation to the following week and waited till Friday to go. Bob and Denny stuck with the plan to go on Tuesday, but Dave, Tony & Roz canceled their trip.

Friday 05/27/2011:

Left home around 8:00 am with plans on joining Denny and Bob around noon. They had been up at Cherry Springs since Tuesday, and I was hoping to find a camping spot still open nearby. Normally by this late date in the convention, all of the good camping locations are gone, but with all the rain, I might get lucky and be able to setup nearby. So far they had only had one good night of observing on Tuesday, and had been rained out on Wednesday and Thursday. Friday morning, the weather wasn't looking any better - more clouds and rain scheduled. After working my way thru Pittsburgh's morning rush hour and the Rt 28 road construction, the rest of the drive was mostly uneventful, until I got off the I-80 St Mary's exit. The road was closed due to a huge truck wreck, and I had to detour around it for a good half-hour. Later along Rt555, past Benezette, there was a lot of visible storm damage alongside the road. A tornado had gone thru the previous day and there were still trees and power lines down along the road, with crews working on them. Finally I arrived around 1:30 pm and was able to setup camp directly across from the Kiski group. The observing field was still partly empty from all of the bad weather, which was now forecasted to last thru the weekend. That really kept the usual crowd of astronomers away this year. I heard that overall attendance was only in the mid 200's and several vendors pulled out early or failed to show up.

<http://home.comcast.net/~kiskiastronomers/images/conventions/cssp2011-01.jpg>

<http://home.comcast.net/~kiskiastronomers/images/conventions/cssp2011-02.jpg>

<http://home.comcast.net/~kiskiastronomers/images/conventions/cssp2011-03.jpg>

<http://home.comcast.net/~kiskiastronomers/images/conventions/cssp2011-04.jpg>

<http://home.comcast.net/~kiskiastronomers/images/conventions/cssp2011-05.jpg>

During a lull in the drizzle, I hurriedly setup camp, but didn't bother getting the telescope out. Toward late afternoon, the weather radios went off warning of severe storms with 60 mph winds and signs of rotation activity. Everyone on the field scrambled to stow away everything they could and awaited the storm. Fortunately, the severe weather passed to the south of us, and all we got was a torrential downpour for a good 30 minutes. That pretty much flooded out the observing field, and for a time, the gravel roads all turned into little rivers. What a muddy mess!!!

That killed any idea of observing that evening, so we all just sat around under our tent canopies and visited. Some of the other regulars there included Bob from Hidden Hollow, John O'Hare & his wife from Oil City, the gang from York, and Don, John, Mario, and several others from the Hamilton Ontario club.

Around 9:00 pm, I retired to my teardrop camper for reading and a movie.

Saturday 05/28/2011:

The day dawned foggy and damp, but soon turned to partly cloudy skies. Throughout the day, it occasionally threaten to rain, but other than a few drops, the rain held off. After a late breakfast, we visited the few vendors who showed up, but I didn't see anything that I really needed.

I attended several of the afternoon presentations, which included an interesting talk on the ancient Chinese astronomer Zhang Heng, along with China's historical contributions to astronomy. Park Ranger Chip Harrison's talk on the park plans for the year, along with the local impacts of gas drilling was also well attended. Chip mentioned that when the gas well, (about 5 miles to the S.W), would flare, the glow would extend all the way to the zenith! Also there were several new wells to the north that were visible to about 30 degrees up when they flared. Fortunately, so far, all of the oil/gas companies were working with the park to limit when they flared to either the daytime or during the full moon period. After a break for dinner, we all headed back to the pavilion for the big raffle drawing. The Kiski Club maintained its winning streak with Denny taking home a gift certificate and a nice set of Meade eyepieces!!

<http://home.comcast.net/~kiskiastronomers/images/conventions/cssp2011-11.jpg>

<http://home.comcast.net/~kiskiastronomers/images/conventions/cssp2011-12.jpg>

We then spent the evening sitting around the camp watching the clouds and listening to the weather radio. Real exciting stuff...

Around 10:30 pm, there was a partial clearing that lasted till about midnight, and a few folks got out their telescopes for a quick view of Saturn and a few deep-sky objects thru the thickening sucker holes. I pulled my new 6" Astro Tech RC out and was able to get a basic polar alignment, but didn't really observe anything other than Polaris. Instead I did a little naked-eye viewing, as Cygnus rose above the eastern horizon, the glow from the Milky-Way shone like a white cloud amid a sea of obscuring 'local' dark nebulae. By 1:00 am, the sky had once again closed up, and it was off to bed.

Sunday 05/29/2011:

After listening to a storm blow thru in the wee hours with the pitter-patter of rain, after dawn, the sky gradually cleared and the field began drying out, a little. Throughout the day, there were scattered clouds, warm temperatures, and a steady breeze. I setup my old 8" Celestron SCT for an afternoon of solar observing using the Daystar .7A T-Scanner filter, along with my PST piggybacked. There was a large active region just rotating around the eastern limb, with a complex sunspot group and associated prominences. We also spent some time watching a number of attendees pack up camp and attempt to pull out from the muddy field, getting stuck.

Several had to be towed out and left large ruts that one had to be careful of not stepping in later that evening. (almost twisted my ankle on one).

<http://home.comcast.net/~kiskiastronomers/images/conventions/cssp2011-06.jpg>

<http://home.comcast.net/~kiskiastronomers/images/conventions/cssp2011-07.jpg>

<http://home.comcast.net/~kiskiastronomers/images/conventions/cssp2011-08.jpg>

<http://home.comcast.net/~kiskiastronomers/images/conventions/cssp2011-09.jpg>

<http://home.comcast.net/~kiskiastronomers/images/conventions/cssp2011-10.jpg>

After the solar observing, I went for a walk over across the road by the outdoor planetarium and along the old airfield. That would also make for a great observing location if the park ever opens it up to camping.

During the afternoon, even though the sky looked to be improving, the weather radio and the satellite radar loop on the internet did not look good for that evening. But, by 8:00 pm, it was mostly clear, so we all uncovered our telescopes, attached our cameras, and waited for the first stars to shine. Bob, Denny and I decided to take a stroll around the observing field for a quick look at some of the other telescopes that were being readied.

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<http://home.comcast.net/~kiskiastronomers/images/conventions/cssp2011-14.jpg>

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<http://home.comcast.net/~kiskiastronomers/images/conventions/cssp2011-17.jpg>

<http://home.comcast.net/~kiskiastronomers/images/conventions/cssp2011-18.jpg>

<http://home.comcast.net/~kiskiastronomers/images/conventions/cssp2011-19.jpg>

and of course, my setup;

<http://home.comcast.net/~kiskiastronomers/images/conventions/cssp2011-20.jpg>

<http://home.comcast.net/~kiskiastronomers/images/conventions/cssp2011-21.jpg>

After re-doing my polar alignment and getting the StellaCam-3 focused on the 6" RC, I started work on getting the 80mm Bosma Refractor installed with the StellaCam-II. At that point we began to notice a darkening off to the northwest, soon followed by lightning, rapidly approaching our direction. The weather radio began sounding severe thunderstorm warnings for our area. The scramble was on to take everything down that we just setup and throw covers over everything else. Fortunately the line of severe weather veered northward toward the New York state border and missed us. But it did put on quite the entertainment, with numerous cloud-to-cloud and ground lightning visible for miles. It was very spectacular to watch from a safe distance. Bob, Denny, myself, Carl from Butler, Don from the Hamilton club, along with Mike from Niagara lined up our camp chairs in a row and passed around the chips. Good fun to watch! Around midnight, I got tired of watching the fireworks, so I went to bed. Later at 1:30 am, I was woken up by another storm, this time right over our heads. After several close lightning strikes, the storm proceeded to dump about a 15 minute deluge on the field. Just what we needed, more rain. Looks like another day ahead of slopping thru the mud!

Monday 05/30/2011:

Monday dawned sunny, so the rain from the night before quickly dried out, except for the bigger puddles. A number of attendees packed up and left for home, but during the day, a few newcomers continued to pull in. The air temperature quickly rose and the day became a scorcher!

The plan for the day was to stay out of the Sun and stay cool! That involved sitting under the trees and reading. Unfortunately, the big 'friendly' flies had the same idea, and were quite annoying with wanting to land on you.

After putting up with the heat and insects all day, we were finally rewarded with clear skies for the evening. The humidity was high with a lot of vapor in the air. It wasn't going to be one of those incredible Cherry Springs nights, but still would be better than anything back home.

We all went about the business of uncovering and preparing our telescopes, and everyone quickly became engrossed with their observing projects once darkness fell. Right off the bat, I could tell it was going to be a night of hardware & software issues. From bumping a cable and losing power and polar alignment, to noise on the video feed, to telescope controller software issues, to a sagging optical train, to the camera's CCD chip dewing up, it was one thing after another!!! (Denny was also having problems with some reluctant equipment, and Bob's dew heaters were causing noise interference with his imaging). Still, I did manage to video capture about a dozen new objects in Leo and Bootes. (a bunch of faint galaxies: NGC2903, 3628, and 3640 in Leo, and NGC5434, 5523, 5557, 5600, 5614, 5687, 5899, & 5930 in Bootes). As I couldn't get rid of the noise coming from the StellaCam-3 on the 6" RC, I used the StellaCam-II on the 80mm Bosma Refractor for most of these. Before I knew it, the clock was past 4:30 am and the dawn glow was creeping into the eastern sky. Even a mediocre night at Cherry Springs can still be a good thing!

I finally crawled into bed around 5:00pm a happy camper!

Tuesday 05/31/2011:

After a few short hours of sleep, the Sun was high in the sky, and it quickly became too hot to sleep-in. I was the last to rise, as everyone else in the group was heading home today, except for me. I had decided to stay a few more days as the forecast was looking really good for later in the week.

Denny and Bob, being at the park for a week had had enough of camping.

By 10:00 am, Bob had pulled out, and the rest followed over the next several hours. It was sad to see them all go, including my Canadian friends. I had enjoyed the time spent over the weekend with everyone.

My plan for the afternoon was reading and staying out of the Sun! A heat wave was gripping the entire country east of the Mississippi. I put on an extra layer of bug spray, a neck cooler, and visited the flies under the trees. It stayed mostly sunny all day, and with sunset, the puffy daytime clouds gave way to a clear sky. It was warm and humid, but amazingly the dew was very light throughout the night. I spent the 1st part of the evening redoing my polar alignment, as the telescopes' tripod legs had sunk into the ground, throwing it off. I then proceeded to video image a number of small galaxies in Serpens Caput, (NGC5921, 5962, 5970, 6027 (Seferts Sextet), 6070, 6118, and the globular cluster Palomar-5). Earlier in the afternoon, I had

checked the video feed from the Stellacam-3, found a suspect loose connector, and now the camera was performing noise free. After Serpens, I then moved on into Ophiuchus where I captured several small open and globular clusters. (NGC6366, 6355, and Tr-26), along with the planetary nebula NGC6369, and a small galaxy - NGC6384. Also captured Barnard's Star.

I used either the SC-3 on the 6" RC, or the SC-II on the 80mm depending on which displayed the better image scale on the monitors. Over the course of the weekend, I had discovered that using my new 6" Astro Tech RC was a bit of a learning experience. It has a more stringent focus alignment than my old 8" SCT, and I kept having issues with the flip-mirror and camera assembly slightly sagging during telescope slews, causing the image to look as if the telescope was out-of-collimation. Yet, both visually and using the camera pointed at Polaris, collimation looked to be very good. It was an interesting problem. Another issue was with the RC being an open optical tube, I could not run the SC-3's peltier cooler, as the humid air in contact with the cooled CCD chip caused condensation to form on the chip's glass window. So the end result of all that was noisy slightly out-of-focus video capture images! ☹

I was getting better results from the SC-II on the 80mm refractor. After midnight, the sky transparency went way down with all the humidity in the air. Soon the Milky-Way over in Cygnus and in Sagittarius on the meridian struggled to stand out from the hazy sky. I decided to call it a night around 2:30am and went to bed.

Wednesday 06/01/2011:

The night before, the weather radio had called for storms in the early morning on Wednesday, but I awoke at 9:00 am to a warm camper and sunlight streaming thru the open roof air vent. Later that morning, around 10:30 am. A line of severe storms did make a bee-line toward the park. With high winds forecasted, I hurriedly packed away the outdoor camping gear. Eventually it all blew past to the north of the park, throwing just a few sprinkles. The winds did stay strong and gusty throughout the afternoon, which really helped in keeping the bugs away. After cleaning up, I headed into town and civilization - lunch & wifi at McDonalds! According to Accuweather and the Clearskyclock websites, tonight and Thursday were going to be excellent!!

That afternoon, a number of new campers pulled in, including Mike from NJ, and Tom from Lancaster, both of which setup across the road from me. Ray from Ohio and Alan from NY also setup across the road. Both were minimalist campers, only bringing lawn chairs and sleeping in their cars. At this point there were around 30 astronomers now setup on the observing field.

After the morning storm had passed, the sky turned a clear blue, and the air temps really started to cool off. The breeze continued into the night with occasional strong gusts that made the telescope guiding trickier and limited exposure times to under 30 seconds. I spent the evening observing lots of little faint galaxies back over in Leo, Comma Berenice s, and Canes Venatici.

In Leo: galaxies NGC2916, 2964 & 2968, 3190 & 3193, 3226 & 3227, 3489, and 3593, and Copelands Septet. In Coma Bereneice: galaxies NGC4212, 4293, 4298 & 4302, 4304, 4414, 4494, 4505 and M64. In Canes Venatici: NGC4217, 4214, 4244, 4490, 4618, 4631, 5383 & 5384, 5394 & 5395, and M51 - the Whirlpool. I didn't find out till I got home later in the week, but I was one of the early imagers of the new supernova in M51.

<http://home.comcast.net/~lemastro/vidcap/images/M51-SN-06022011.jpg>

Around 2:00 am, I began feeling a little tired, (and cold as the temp had dropped into the upper 40's), so I shutdown the cameras, covered up the telescope, and grabbed a chair and enjoyed a long naked eye view of the summer Milky-Way, now directly overhead with Sagittarius on the southern meridian. It was a beautiful site, from the dark rift in Cygnus and the bright knots of glowing stardust in Scutum, down thru Sagittarius and the tree line.

Quite spectacular!!! A classic Cherry Springs night sky!!
Called it a night at 3:00 am.

Thursday 06/02/2011:

With the cool temps, I slept in till late morning. The air temp had rebounded into the upper 50's and only rose into the mid 60's for the entire day. The weather radio was calling for a possible frost that night. Made a note to get out the heavier observing clothes for later. Spent time reviewing the video capture/imaging results from the night before and planning out what to try for tonight. Went for a walk around the park and got a little reading in. There was a strong breeze during the day that kept the flies away again, and made for enjoyable weather. In the afternoon, Eric from Reading, and his father pulled in and setup camp at the end of the road. Several others from the eastern end of the state also showed up and setup behind me. At dusk, the air temp quickly dropped back into the 50's and kept heading downward. I pulled on my heavy observing clothes and coat. Only two nights earlier, it was short-sleeve weather, what a big change! By 9:00 pm, I was able to sight Arcturus, re-sync my polar alignment, and focus the video cameras on both telescopes. My plan for the night was hunting faint galaxies in Ursa Major and Virgo, so I had to wait until the lingering twilight faded to begin my observation run. While waiting, I did a little satellite watching over in the south-east and observed three bright satellites all at the same time. Finally at 10:20 pm, the 1st target galaxy was visible in the monitors, so I began observing. Spent the evening 1st over in Ursa Major observing the following galaxies: NGC2681, 2768, 2787, 3359, 3631, 3726, 3893 & 3896, 4051, 4605, M97, M81, and M82.

Then shortly after midnight, I moved on to Virgo before the constellation got too low on the horizon. Observed the following galaxies: NGC4216, 4442, 4517, 4536, 4567 & 4568, 4754, 4866, 5774 & 5775, 4753, 4762, M87, and M104.

Finished my planned observing list by 1:30 am, thought about working on some objects over in Scorpius, but decided they could wait till I came back up in

July. So I went for a walk to visit my friends who had arrived earlier that day, along with a new acquaintance, Matt, who also had a 6" Astro Tech RC. Got back to camp around 2:30 am, decided a week of camping was catching up to me, and I had observed enough and was in bed by 3:00 am.

Friday 06/03/2011:

After 4 great nights of video astronomy observing, I slept in till near 11:00 am. After a quick bite for breakfast, spent the next several hours packing in the telescope and camp. Was on the road back for home by 1:30 pm. On the drive back, I spotted two eagles feasting on road kill, and later passed a fox trotting alongside the creek. There's always something interesting to see when driving thru that part of the country. So this concludes this year's 2011 CSSP adventure!

I'll have my video-observations of the various deep-sky objects that I imaged over the past week processed and online sometime later this summer.

Please visit my Constellation Tour page at:

<http://home.comcast.net/~lsmch/constellationtour1.htm>

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Astronomical Webportal:

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