

## Kiski Astronomers at Cherry Springs: Perseids - August, 2015

After finishing my trip to the Lehigh Valley Amateur Astronomical Society's Pulpit Rock Observatory the weekend of August 7<sup>th</sup> - 9<sup>th</sup>, I headed over to Cherry Springs to take in the annual Perseid Meteor shower with several other members of the Kiski Astronomers.

### Monday 08/10/2015:

Leaving a damp Pulpit Rock behind, I made the 3 hour drive from Eastern PA to the Astronomers Paradise - Cherry Springs State Park.

Arrived late afternoon to find Bob K already there, and setup my camp across from him. Assembled the telescope, but wasn't able to do much more, as clouds rolled in at sunset. Headed inside to read and early to bed.

### Tuesday 08/11/2015:

Spent the day setting up a few more camping items and visiting with Bob N from the Kiski Club and Mike P from Niagara Canada who arrived and setup with us, and planning for the observing that evening.



The sky stayed clear for the afternoon, and once the sun went down, we all got to work. Using my StellaCam-3 videocamera and 8" SCT optical tube on a C-Gem mount, I started working thru my constellation survey, chasing faint galaxies in Ursa Major.

These included NGC-3065 & 3066, 3259, 3348, and 3516.

Would like to have gone after more galaxies in the Great Bear, but he was too low in the tree tops. Have to wait till next year to re-visit that dipper!

I then chased down the faint and elusive globular cluster Palomar -12 in Capricornus. After that, I moved on to Cygnus, where I video-captured several faint open clusters: NGC-7058, 7071, 7127 and 7150. That turned out to be it for the night, as shortly after midnight thick clouds rolled in from the west, shutting down the sky. Off to bed.

### Wednesday 08/12/2015:

Woke to a warm sunny sky, it having cleared off at dawn. During the day, a lot more folks, both astronomers and general public arrived at the observing field, including Denny H from Kiski and Jim and his wife from the Hamilton Ontario club.



I setup my Samsung SDC435 videocamera and fisheye lens on a tripod in anticipation of video-capturing Perseid meteors that night. (see below) I started capturing fisheye images late that afternoon and let the camera run all night. At dusk, I uncovered the telescope and got back to my constellation survey with galaxy hunting in Equuleus the colt. I roped in several IC galaxies including IC-1367, 1375, 1377, and 1379. I then moved over to Perseus, who was well placed in the northeast sky and video-captured the last three Czernik open clusters that I needed to complete that open cluster catalog, Czernick-8, 12, and 16. I also picked off several Basel open star clusters, Basel-10 in Perseus, and Basel-3 in Cepheus, along with Biurakan-4 open cluster in Cassiopeia. I finished off with galaxy NGC-661 in Triangulum around 1:30am, as I finally abandoned the telescope for the meteors.

All thru the evening, the Perseid meteors were putting on a fine show! Even before full dark, with the sky still a bright blue, a brilliant earth skimmer went overhead, and was seen by Denny and several others! All of us would frequently pause from imaging to pull out our lawn chairs to watch the show. One of our friends counted over 89 meteors over a several hour period. Using the Samsung and fisheye lens, I was able to capture quite a few meteors, including a number of nice fireballs with long lasting trains.



Here's a video of the fireballs made with the Samsung SDC435 video camera and an Arecont 1.55MM 1/2- F2.0 Fixed Iris, FishEye Lens. <http://youtu.be/uhmp-SVSWW/>

And here's another video made from combined Time-lapse clips of 1 frame every 30 seconds, and individual meteors extracted from multiple 15 minute video-clips throughout the night. <http://youtu.be/zdPLfUyRxc>

This was undoubtedly the best meteor shower I had ever seen. We all stayed up watching the celestial fireworks till about 3:30am when the pace finally started dropping off. Headed to bed around 4:00am, very, very happy!

**Thursday 08/13/2015:**

As can be expected, slept in very late. After a brunch, we all sat around comparing meteor notes from the night before. Spent the afternoon planning my final night of observing, as I needed to head home Friday to help my son Kyle move to a new apartment. Once the sun had gone down to a beautiful sunset, I uncovered the telescope and spent the deepening twilight video-observing the summer celestial highlights and watching the glowing Milky-Way popping out overhead in Cygnus the swan.

I then started out video-capturing several objects in Lacerta, including the faint galaxies NGC-7250 and 7265, along with planetary nebula IC-5217 and PK102-2.1. Moved over to Cepheus to pick-up planetary nebulas NGC-7027 and PK118+8.1. Then spent the next several hours video-capturing galaxies in constellation of Triangulum, including NGC-670, 684, 735, 761, 959, 973, and 978A & B. I then wrapped up the evening in Pisces with galaxies NGC-7537, 7617 & 7619, 7731 & 7732, and UGC1195. Headed for bed at 3:00am.

**Friday 08/14/2015:**

Woke up mid-morning and began to pack for the long drive back to Pittsburgh. Made my goodbyes to Bob and Denny and headed home. Looking forward to heading back to Cherry Springs for the September Black Forest party!

Larry McHenry

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