

Research Committee report for July 2016

This month the very hot, but there was some relief late at night.

The Moon and Saturn were imaged with a steady hand by Sabian Corrette with a smartphone at the eyepiece of the 24". Glenn Wargo helped him identify some of the craters, and Clif Ashcraft carefully annotated his images. Clif also took mosaics and close-ups, especially a stark sunrise at Mare Imbrium.

Clif imaged Mars and Saturn and tried several ways to take images of Jupiter in twilight and process out the blue from the sky. This was in support of the Juno spacecraft which arrived at Jupiter on July 4.

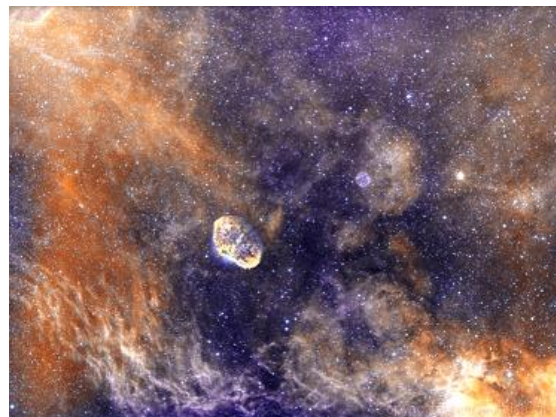
With the planets sinking into the western twilight, Clif again turned his attention to speckle interferometry of close double stars. He did a comparison of two uncooled ZWO cameras, and concluded that the new ZWO ASI-1600MM is at least as good as the ASI224MC and perhaps better because of the absence of the Bayer matrix. It has a very large sensor which is a great help in locating the target and reference stars. Turning on its cooling function should make its performance even better.

Deep sky observations included Helder Jacinto's Western Veil Nebula, sometimes called the Witch's Broom for a total of 2.5 hours. His new guide scope was a big help. Tolga Gumusayak also took views of the Western Veil and processed them in various ways. He took deep images of the three-degree-wide field around the Crescent Nebula which includes the nearby faint Soap Bubble Nebula. This image was featured on Astrobin as the image of the day for August 1 (<http://www.astrobin.com/256710/B/>)

Other activities included a discussion of software to stitch together images into a panorama. Aaron Zuckerman and Tony Sharfman favored Photoshop and Lightroom (a subscription is only \$10/month), and Tolga suggested Image Composite Editor (ICE) from Microsoft (free).

Tolga shared a ten-year animation of the path of Barnard's Star against the Ophiuchus star field by Rick Johnson from Nebraska (<http://www.universetoday.com/121996/amateur-astronomer-chases-down-barnards-star-you-can-too/>). This M4 red dwarf is the star with the highest proper motion (10.3 seconds of arc per year) and is sometimes called Barnard's Runaway Star. Alas, the "fixed stars" are not fixed.

Respectfully submitted, Mary Lou West, Research Committee Chair



Moon and Saturn by Sabian Corrette and Clif Ashcraft Crescent Wide Field by Tolga Gumusayak