

Research Committee report for July 2015

July has been uncomfortably hot this year, but there have been some cloudless nights with steady seeing. Members have used their own scopes as well as the 14" at Jenny Jump, and the 24" at Sperry.

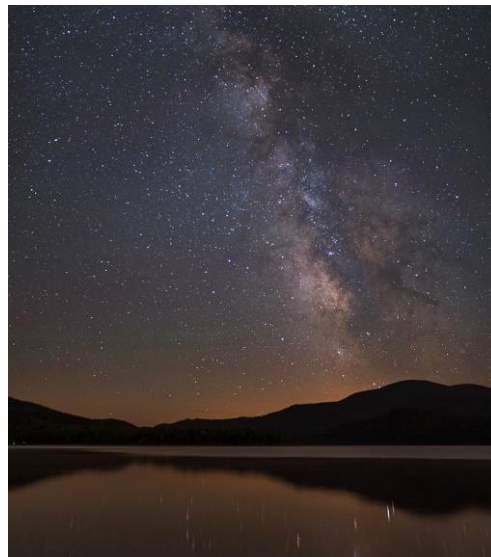
Helder Jacinto imaged the sun in hydrogen alpha on two days, showing granulations, plages, filaments and small sunspots. Clif Ashcraft studied Venus and Jupiter before they disappeared into the sunset, and Tony Sharfman used a monochrome webcam and IR filter to make a mosaic of the first quarter Moon.

Progress on the Pro-Am project to observe cloudiness on Saturn's Titan by photometry has stalled while the Cornell astronomers recalculate parameters and have new narrow IR filters made. Clif has been practicing taking images of Saturn and five bright moons unfiltered, with a wide infrared filter, and with a homemade double prism compensator for atmospheric color dispersion.

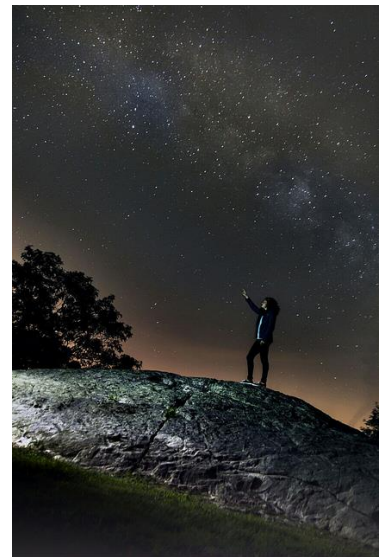
Deep sky observer Helder imaged the young open cluster IC 4665 with bright blue stars in Ophiuchus and also M24, the Sagittarius star patch from Jenny Jump. In Maine Tony Sharfman targeted the colorful nebulosity around Antares in Scorpius, the Sadr region of Cygnus, M8 (Lagoon Nebula), M13 (globular cluster), M16 (Eagle Nebula), M20 (Trifid Nebula), M27 (Dumbbell Nebula), and M57 (Ring Nebula). From JJ Dan Silber shot M8 and Tolga shot M13 with two small galaxies far in the background.

Since the center of the Milky Way is fairly high now, globular clusters were popular targets. Steve Lowe has been taking a series of images of M5 with his DSLR camera to complete an eight week cycle of its Cepheid variables V42 and V84 which he and Mary Lou West studied last summer. He is also experimenting with taking spectra of these stars. Mary Lou took low resolution spectra of Thuban and Albireo from the Adirondacks.

The summer Milky Way is striking and was imaged by Helder and also by Tony where he was experimenting with several Sony cameras and a ZWO webcam from Maine. He concluded that although DSLR cameras are getting better they still have a ways to go to match a CCD. From JJ Tolga's Milky Way features a girl on the rock painted with a cellphone camera flash.



Tony's Milky Way from Maine



Tolga's Milky Way from JJ

Respectfully submitted, Mary Lou West, Research Committee Chair