Research Committee report for October 2016

Solar system Observations: Clif Ashcraft has been pushing his resolution on the Moon down to craterlets only a kilometer or so in diameter. He also imaged contrasty lunar rays, added the Apollo landing sites to his image of a gibbous moon, and finally brought out color details showing the brown rectangular volcanic plateau above the crater Aristarchus.

Deep Sky Observations: Helder Jacinto imaged the open cluster M52 next to the Bubble Nebula in Cassiopeia with nine hours in LRGB and hydrogen alpha. Due to interstellar absorption of light, the distance to M52 (NGC 7654) is uncertain, with estimates ranging from 3,000 to 7,000 light years. The emission nebula (NGC 7635) is somewhat farther away.

Tolga Gumusayak tried a One-Shot Color camera for the first time. At Jenny Jump he imaged the California Nebula (NGC 1499) in Perseus for 3.6 hours. He was pleased with the result after several tries at image processing.

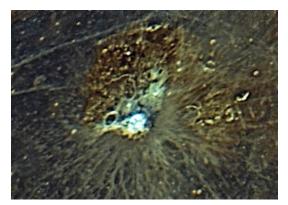
For Halloween Tony Sharfman produced a scary ghost (IC 59) threatening the star Navi in Cassiopeia.

Presentations: Tolga spoke on "Astrophotography: Is It Real?" to the North West Jersey Amateur Astronomers in Blairstown on October 14. (https://www.youtube.com/watch?v=0XfN7UEy02c)

Other activities: Aaron Zuckerman initiated a discussion on proposed grating technology by Canon. Helder wrote a clear and detailed essay on the joys of "Automation and Astrophotography." Tolga used Bob Moore's Unihedron Sky Quality Meter to measure the sky background at the zenith in two locations. He found a difference of 3.3 magnitudes per square arcsecond from West Orange to Jenny Jump, so would need 16 x longer exposure to get same SNR in West Orange! Jim Nordhausen trained Steve Lowe and Mary Ducca in the use of the camera . Unfortunately, his August exoplanet observation has been expired as a blend rather than a real exoplanet. We also discovered that one of Irene Greenstein's cousins is another exoplanet observer. Small world.

Respectfully submitted, Mary Lou West, Research Committee Chair





M52 and Bubble Nebula by Helder Jacinto

Brown volcanic plateau above the crater Aristarchus on the Moon by Clif Ashcraft

IC 59 and Navi by Tony Sharfman, Happy Halloween!

