

Research Committee report for November 2015

**November has been a busy month for observing the solar system, stars, and the deep sky.**

Clif Ashcraft has imaged at f/32 moon features Crater Gassendi with rilles, Crater Plato with dramatic shadows of rim crags, and mountain Pico at its sunset. He has also gotten great detail on Jupiter and Mars even though Mars is still quite distant from Earth. Venus is featureless as usual.

Helder Jacinto showed fine resolution in the open cluster IC 4996 in Cygnus. Clif has continued his speckle interferometry measurements of five more sets of close double stars, and Steve Lowe has taken a clear spectrum of Vega in Lyra. The Rutgers RASKEL project will be starting up again. Asher Wasserman has graduated and been replaced by Joshua Vigoureux who will organize the observational confirmation of exoplanet transits.

This month Tolga Gumusayak's colorful image of the supernova remnant M1, the Crab Nebula, was chosen as the Image Of The Week by Adam Jaffe of the Astro Imaging Channel on YouTube on November 15. In order to show delicate gas details Tolga chose an unusual color palette for the Horsehead Nebula, and clever image processing also revealed the transient "great turkey" in the Orion Nebula on Thanksgiving Day. His image of M76 in Perseus shows that the "Little Dumbbell Nebula" resembles a double-handled German beer stein.

Tolga showed the colliding galaxies in NGC660 very well, and then imaged his own spectacular Deep Field with more than 30 galaxies visible.

Al Witzgall has found some simple old equipment: a barn door tracker, and a Celestron NexImage solar system imager. Who wants to try either of these out for a month?

Respectfully submitted, Mary Lou West, Research Committee Chair



Plato's craggy rim shadow by Clif Ashcraft



M1, the Crab Nebula by Tolga Gumusayak