

Research Committee report for June 2016

This month the seeing has not been very good, but at least it has not been raining. (Clif Ashcraft)

A good resolution image of a sunspot taken by Big Bear Observatory in five colors was processed by Tolga Gumusayak to bring out some of the subtle details in the swirling gas.

Closer to home Tolga was lucky to see a double rainbow, and quick enough to take a panorama of it on his phone on June 6.

Clif took some beautiful images of the desolate Moon, including a lava ridge in Mare Serenitatis near Posidonius and Theophilus craters. One in color showed where unusual orange soil is located.

Clif also collimated his C11 telescope using a diffraction collimation mask and took some very detailed views of Mars, just past its closest point to Earth on May 30. He could pick out Olympus Mons, Valles Marineris, Orson Wells crater, and a growing dust storm coming out of the Hellas basin. Jupiter and its great red spot were visible during a transit of Ganymede on June 25.

Deep sky observations included Helder Jacinto's image of NGC 6888, the Crescent Nebula, when he tried using a hydrogen alpha filter with his DSLR camera for four hours. He also imaged M3, globular cluster NGC 5272, with NGC 5263, a faint galaxy nearby in nearly 3 hours exposure. He has been changing his astrophotography gear with a new hydrogen alpha filter, a new guiding camera and a new off axis guider. Helder has also taken a ten hour exposure of M51, NGC 5194, the Whirlpool galaxy. It is approximately 23 million light years away, has a radius of about 43,000 light-years, and therefore is about 35% the size of the Milky Way. Tolga imaged the globular cluster M3 as well as the Soap Bubble Nebula, the Crescent Nebula, and the spectacular North American Nebula in Cygnus.

Other activities included Dennis Conti's article "Seek Exoplanets from Your Backyard" on page 60 in the July Astronomy magazine where our group picture was included. He also had a short article in the July AAVSO newsletter about his activities at NEAIC and NEAF. Tolga gave a presentation on using his mini PC mounted on the optical tube of his telescope on The Astro Imaging Channel on YouTube (<https://www.youtube.com/watch?v=z9uVgn469As>) on Sunday evening June 5. Also see Jim Nordhausen's report of the Research Committee Exoplanet Project.

Respectfully submitted, Mary Lou West, Research Committee Chair



Double Rainbow by Tolga Gumusayak



M51 by Helder Jacinto

North American Nebula by Tolga Gumusayak

