

Research Committee report for May 2016

The main excitement this month was the transit of Mercury on Monday May 9, and then the monthly meeting on May 20 when members reported on their research projects.

Mercury's slow transit of the sun's face was observed by many club members including Helder Jacinto, Jim Nordhausen (images processed by Tony Sharfman), Tolga Gumusayak, Al Witzgall, Wayne Augenstein, and Mary Lou West. It was surprising to see how tiny Mercury appeared.

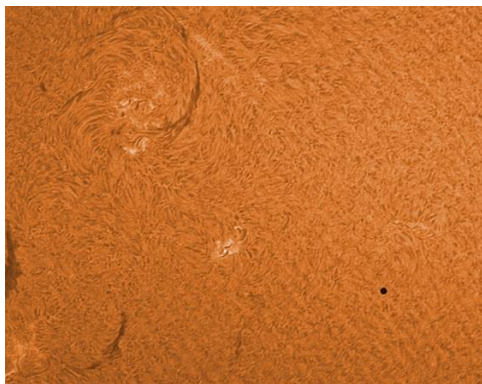
Clif Ashcraft made many observations of the Moon, Mars (near its best opposition in ten years), Jupiter and Saturn. His Australian friend Stewart Beaveridge took even more detailed images of Mars because it was at a very high elevation above his horizon down under.

Deep sky observations included Clif's measurement of the double star Epsilon 1 Lyrae, images of the edge-on spiral galaxy NGC 4565 by Helder and Tolga, and detection of the far edges of the Cat's Eye Nebula by Tolga. M13, the globular cluster in Hercules was imaged by Helder and Tolga, who used PixInsight to make measurements of individual stars for a Hertzsprung-Russell diagram with Mary Lou.

On May 20 Steve Lowe reported on the spectroscopy project he is doing with the Star Analyzer 100 grating on the stars in the globular cluster M5. Tolga considered the question "Is Narrow Band imagery Real?" and Clif explained his impressive work on speckle interferometry of double stars from his backyard observatory. Jim Nordhausen talked about "KELT Methodology: Insights into Exoplanet Search Strategy", and Dennis Conti (in absentia) and Mary Lou presented observations of a white dwarf which has transiting disintegrating fragments, most likely from a close asteroid.

Other activities included two members giving presentations on The Astro Imaging Channel on YouTube on Sunday evenings, Clif on May 8 and Dennis on May 22. Both generated extensive interest by other amateur astronomers. Clif and Tolga have been testing equipment, cameras and telescopes, resulting from discussions at NEAF. Michael LaMonaco has been awarded a summer internship at NASA Goddard Space Flight Center, and Mary Lou has joined the weekly exoplanet discussion group at Princeton U.

Respectfully submitted, Mary Lou West, Research Committee Chair



Mercury Transit by Helder Jacinto



Speakers Tolga (with Bella), Mary Lou, Clif, Jim, and Steve