

Research Committee report for July 2017

We wish everyone good luck in their eclipse planning, and a cloudless day on August 21, wherever they are located.

Solar system Observations: On July 31 Clif Ashcraft imaged the first quarter moon in great detail, and also took his best shot for this year of *Saturn*. He has tried the new TEMP-est air circulation fans for his C11-EdgeHD telescope. He found that they successfully removed the spurious “Mickey Mouse ears” on Io’s shadow which he had thought in May might indicate volcanic eruptions on this moon of Jupiter. It is indeed satisfying to figure things out.

Helder Jacinto imaged the sun’s small active region AR-2556 on the lower right of the *sun* on July 16. There were also some interesting dark filaments to the left of the sunspot region. These indicate cooler denser gas hanging above the photosphere. Lately there have been few sunspots since the sun is at minimum activity for this 11 year cycle.

Milky Way Observations: Tolga Gumusayak took 9.8 hours of integration of *M27, the Dumbbell Nebula* with the Planewave 14” CDK in New Mexico which he controls remotely with Mike Selby in Thailand. These were unguided subs of 5 minutes (RGB) and 15 minutes (OIII). This was first light for this telescope, so we can expect a lot more from it.

After the public night on July 21 Steve Lowe, John Lowe and I took a spectrum on the 24” of Vega through thick haze with my Alpy medium resolution spectroscope.

Other activities: Aaron Zuckerman started a discussion with Helder, Tolga, Al Witzgall, Tony Sharfman, and Stan Honda on solar filters for photographing the eclipse.

Clif explained the “correspondence condition” problem with a spectrohelioscope with an uneven number of reflections which he saw at Stellafane.

I pointed out that July 12 (and May 28) are Manhattanhenge, when the setting sun shines right down the numbered street in NYC.

Respectfully submitted, Mary Lou West, Research Chair

