

Research Committee report for February 2015

Despite it being a cloudy and snowy month, February did have a few clear nights which were seized by several imagers. Other, Pro-Am projects proceeded gradually.

1. RASKEL exoplanet transit project

Clif Ashcraft found that better reduction of last month's transit observations of Qatar-1b with the Rutgers 22" telescope finally yielded a verdict of "observed transit". The key is choosing comparison stars exclusively from the center region of each FITS image, where there is no vignetting.

2. Guided Imaging

Tolga Gumusayak, Adrian Mroczkowski, and I imaged M42 in narrow bands starting on Thursday Feb 5 with the 24" telescope. In each color (hydrogen alpha, sulfur II and oxygen III) we took 16 exposures of duration 5 seconds, 30 seconds, and 180 seconds for a total integration time of about 3 hours. The Trapezium star group is surrounded by dramatic billows of colored gases. Tolga also imaged the California Nebula with his Takahashi 106 in Verona on February 19 for 8 hours total. The image shows tremendous detail of bright festoons and dark knots.

3. On February 7 Helder Jacinto took a very detailed image of the waning gibbous Moon. He stacked the best 2400 images out of 3000 images. On February 28 he took a stunning mosaic of the moon and dedicated it to Leonard Nimoy, Star Trek's Mr. Spock who had just died. See below.

4. Steve Lowe and Mary Ducca have joined a supernova follow-up group called "All Sky Automated Survey for Super Novae (ASAS-SN, pronounced "assassin") through Kris Stanek (Ohio State U) and Ben Shappee, the husband of Jennifer van Saders, the AAI December speaker. This is a very active research field with lots of searches and follow-up observers. ASAS-SN looks for bright (brighter than 17 magnitude) supernovae and last year from May 1 to October 4, 2014 discovered 45 of 100 of these. (Amateurs found 29 and other professional searches found 26.) ASAS-AN runs six telescopes, four in Hawaii and two in Chile.

Respectfully submitted,
Mary Lou West, Research Committee Chair



Dry Alien Moon for Leonard Nimoy by Helder Jacinto, February 28, 2015