Research Committee report for March 2015

March was a much less cloudy month than February had been, and the gradually warming temperatures allowed people to get out and do some imaging.

1.One of the more interesting opportunities was the large libration of the moon on March 30 when we could see 6 degrees 20 seconds further over its north pole than usual. Clif Ashcraft's image of the dark floored Crater Plato on the northern border of Mare Imbrium showed it as considerably more round than we usually see it. Clif has been experimenting with post-processing of video such as high dynamic range processing, dithering, and wavelet sharpening. Helder Jacinto also took a sharp image of the thin crescent moon on March 22.

2. Jupiter also presented a good target high in the spring sky with Clif getting many images including a nice view of the Great Red Spot on March 23.

3. Deep sky object such as the Flaming Star Nebula, spiral galaxy M81, and Orion's emission nebula M42 were also imaged by Tolga Gumusayak and Clif. Tolga took 16 hours of exposure time with narrow band filters hydrogen alpha, sulfur II and oxygen III to produce a stunning image of the Flaming Star Nebula showing the red gas emission but not the blue dust reflection component. The modifications which Jim Nordhausen and Tolga made to Tolga's C11 mount have made really accurate tracking possible. The narrow band image of M42 taken last month by Tolga, Adrian Mroczkowski and me was published in the spring 2015 newsletter of the Vermont Astronomical Society.

4. There was a good discussion of the problems with seeing or twinkling by Clif, Tolga, and Tony Sharfman, ending with the hope that the weather would settle down in New Jersey soon.

5. However, in my opinion the most beautiful images this month were taken by friends of AAI members who saw auroras not visible in New Jersey. Jim's friend Roger Porter from Gloucester, Massachusetts and Clif's friend Judith de la Cour-Wise from the South Island of New Zealand sent these.

Respectfully submitted,
Mary Lou West, Research Committee Chair