

Nov 10, 2014, Research Committee Report for October, 2014, by Mary Lou West

October has been an exciting month with several projects moving forward and a new one beginning.

1. Glenn Wargo and Larry Russo led seven members who stayed up all night and saw the occultation of Jupiter's moon Callisto by Io at 4:24 AM on Oct 24 with the 24" at Sperry, dodging clouds. Good job! Clif Ashcraft in Perrineville recorded video of the event. Both groups found that the timing of the occultation agreed with the prediction by Starry Night better than with the prediction by The Sky (4 minutes later).

2. Steve Lowe and Mary Lou West gave an informal Friday talk on Oct 24 on "Measuring Cepheids in Globular Cluster M5." Several interesting questions from the audience will be followed up with better analysis of the images already in hand. Their handout on using the software ImageJ for measuring the brightness of stars will be posted on our website www.asterism.org under Public Talks/Tutorials/Basic Info.

3. As usual, there is need for developing better expertise in using astronomical equipment. Steve Lowe is learning how to use the electric focuser with his DSLR camera, Clif Ashcraft is having success with his new f7 reducer, and discussions are underway regarding fitting the C-14 and the 24" with off-axis guiding capabilities. Some people recommend a separate guide scope/camera mounted on the side of the main telescope, while others would prefer a small off-axis guider (tiny mirror on a stalk) which attaches to the nose of the camera.

4. In response to one of Aaron Zuckerman's intriguing news posts, Mary Lou did a quick calculation of the falling time for Earth to Jupiter if all the planets were set next to each other between the Earth and the Moon. (We would impact Jupiter in about one hour.)

5. Jim Nordhausen and Clif Ashcraft have begun an exciting new collaboration with the Rutgers Astronomical Society called RAS-KELT Exoplanet Lab. Clif and Jim went to the meeting October 30 at Rutgers to learn how to do follow-up observations for transiting exoplanets on candidates identified by astronomers at Ohio State and Vanderbilt. The first training session will be Thursday November 13. Participants will be expected to attend three training sessions before they can take reliable data on their own, eventually with the Sperry 24".