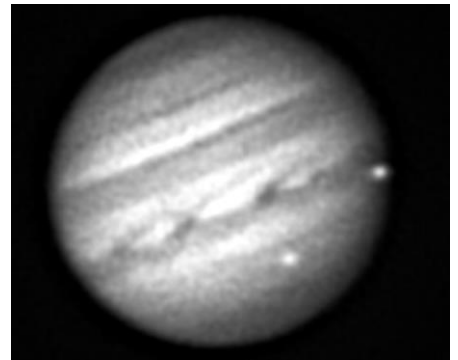


**Many activities happened despite the heat, mosquitoes, and vacations.**

**Solar system:** Helder Jacinto misses the active sun but imaged a coronal hole on the sun on August 5. His new telescope (6" APM Apo) got a nice image of the *nearly full moon* with Crater Aristarchus glinting on the lower right and Crater Tycho showing its dramatic rays near top center.



Jim Nordhausen called attention to a double shadow transit of Io and Europa on Jupiter on August 16. Clif Ashcraft swung into action and captured Io just emerging from the left side of Jupiter. He also found that in the *infrared Io and Europa* show up brighter than Jupiter's cloudtops and the inner ring of Saturn shows up much brighter than Saturn itself.

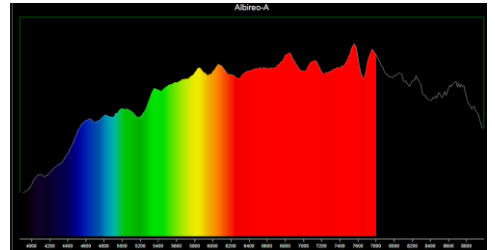


Clif has also imaging the Moon and Mars, where he has seen albedo changes due to the ongoing dust storm, including a darker Gale Crater, home to the Curiosity Rover.

**Stars:** Jack Cleeve continues his project of photometry of several roAp variable stars with Steve Lowe and me. Steve continues his spectroscopy of the roAp stars and the Cepheid variables in globular cluster M5.

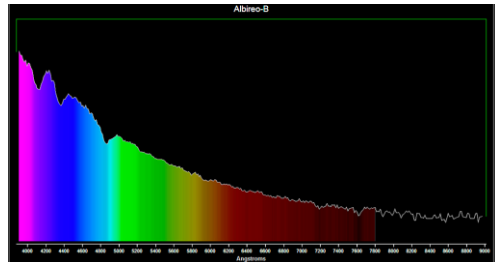
Bob Vanderbei used his SA100 grating to take *spectra of Albireo A (golden yellow star) and Albireo B (blue star)*. They have very different color distributions and absorption lines due to different temperatures.

<http://vanderbei.princeton.edu/images/NJP/spectra.html>



**Presentations:** At Stellafane Clif gave an informal talk on "Through the Dust" on his imaging success on Mars with the IR filter (850 nm cutoff long pass filter).

Also at Stellafane Dennis Conti spoke on "Exoplanet Discoveries: The Role of Amateur Astronomers."



**Other:** Mark Zdziarski, Jan Krakora, and I were part of the group honored on the naming of Asteroid (175166) Adirondack (2005 EZ99) because we attend the Levys' Adirondack Astronomy Retreat. It was discovered by Tom Glinos, David Levy and Wendee Wallach-Levy in 2005 from Jarnac Observatory in Vail, AZ. You can search for information on small bodies in the solar system at <https://ssd.jpl.nasa.gov/sbdb.cgi>

*Respectfully submitted, Mary Lou West, Research Chair*