Observing Report for July 28, 2019, GRS & Io Shadow Reappearance

by Joe Stieber

July 28, 2019

I went out to my back patio on Sunday night, July 28, 2019, at 9:15 pm EDT and set up my 85 mm spotting scope, which literally takes only a minute to do. I acquired Jupiter and was able to see the GRS near the central meridian at 9:18 pm using the maximum 60x (after centering at its lowest 27x, I zoomed up without trying to see the GRS at lower magnification). I watched it until 9:37 pm, then went back inside for a while.

As is usually the case, seeing was a little turbulent for a short while, then steadied nicely after the scope reached thermal equilibrium. I'd probably give the seeing a 4 out of 5 ultimately. It was a typical stagnant summer sky with no breeze. There were no clouds but transparency seemed poor and it felt humid, but never any sign of dew. And no bugs! It didn't feel hot, but when I checked my outdoor thermometer at 11:15 pm, it was still 81°F (I would have guessed 10° cooler).

I was back out at 10:04 pm for the Io reappearance (I left the scope set up). I looked constantly and saw the first pinprick of light in a dark sky east of Jupiter's disc at 10:08 pm and it seemed to reach maximum brightness by 10:00 pm (as gauged by glancing at my wristwatch. I remain fascinated by Jupiter's Galilean satellite movement and the resulting effects, with the emergence of a satellite "out of thin air" being one of the best sights.

I packed up the scope and went back in again about 10:30 pm since in my light-polluted suburban backyard, there's not much to see, especially with poor transparency. However, before packing up, I did glance at Saturn (nice) and Graffias (Beta Scorpii), a nice blue-white double, magnitude 2.6+4.5, 13.6" separation.

I stepped out one last time and with unaided eyes, spotted the ISS (International Space Station) at 11:09 pm as it came out of a low cloud in the NNW, then disappeared into the earth's shadow, about 10-15° below Polaris, at 11:10 pm.

Given the poor transparency, I decided not to head to the Pines with my relatively new 16-inch Dob for further commissioning operation. With new moon on July 31 at 11:12 pm, I'll be on standby for the first clear night. Besides following-up on Pluto and Neptune/Triton, I want to make reference observations for NGC 206 in M31 and NGC 604 in M33 (to compare with historical views in my 12.5-inch Dob). I also want to seek out other NGC objects in M33, and something I haven't seen in the 12.5-inch, Stephan's Quintet of galaxies in Pegasus, near the relatively bright galaxy, NGC 7331.