Observing Report for July 25-26, 2019, Pluto at Carranza

by Joe Stieber

July 25-26, 2019

As I had been anticipating all week, we had a clear sky on Thursday-Friday night, July 25-26, 2019, so I headed to Carranza Field in Wharton State Forest, NJ, for some observing during the nearly three hours between the end of astronomical twilight at 10:10 pm EDT and the rising of the 38% illuminated moon at 1:04 am.

I arrived about 11 pm and temperatures were refreshingly cool, down in the 60's – it's hard to believe we hit 100°F temperatures last weekend. More importantly, there was abundant Milky Way visible, almost billowing, so transparency was pretty good, but not quite excellent.

My 16-inch, f/4.5 Dob was ready to go at 11:40 pm… more-or-less. This is only the second outing for this relatively new scope and I'm still addressing a couple of issues. For this session, I had replaced the OEM red-dot finder with a Rigel QuickFinder (a bulls-eye reflex type), which was a vast improvement. I also thought I had the azimuth clutches modified to my liking, but I need to address them further (there's still a tendency for it to drift in altitude when switching from a heavy 2-inch eyepiece to a lighter, higher-power 1.25-inch eyepiece). This is very frustrating when one is trying to track down a faint object.

My first target was Jupiter and it was pretty much stunning. The Great Red Spot was superb near its central meridian transit at 11:43 pm, even though Jupiter was only about 23.5° altitude at the time. All four Galilean satellites were visible, with Io and Europa close to each other in a vertical alignment not far from the eastern limb of the disc, while Ganymede and Callisto were spaced far apart and far to the west of the disc.

Saturn was superb too with the Cassini Division of the rings easily visible as was the banding on the ball, plus other subtle detail. Mesmerizing!

From Saturn, I star-hopped about 5.6° east to (134340) Pluto, my prime objective for the session. It's been at least several years (perhaps five years?) since I last saw Pluto, and that would have been with my 12.5-inch Dob, which mostly required high power and averted vision to see it (this is one of my excuses for a scope with increased aperture).

S&T's Bob King just posted a nice article about observing Pluto this apparition…

https://www.skyandtelescope.com/observing/lonely-pluto/

In any case, I picked up Pluto at 12:30 am, primarily with averted vision, using an Explore Scientific 82° 11 mm eyepiece (166x, 0.49° TFOV). Switching to an Explore 82° 6.7 mm eyepiece (273x, 0.30° TFOV), I could hold Pluto with direct vision. Pluto was 28° altitude at the time, essentially at its peak after transiting the celestial meridian at 12:18 am. It's listed as magnitude 14.2 now, but atmospheric extinction from the lowish altitude dims it by close to a full magnitude. In any case, I'm quite satisfied it showed with relative ease in the 16-inch.

At 1:15 am, Neptune had a nice disc at 273x (when it was 30.5° altitude in the southeast), but I couldn't see its magnitude 13.5 satellite, Triton, about 10 arc seconds away. By then, the sky was starting to brighten from moonlight. A little later, the dreaded moon's crescent was lovely, shining through the trees in the ENE.

I took a quick look at a few other deep-sky objects, but again the sky was starting to wash out from moonlight. I failed to see the magnitude 15 galaxy IC 1296 near M57 (a challenge posted by Lane Davis), so I'll have to try again in complete darkness. One object that I thought looked striking was M71 in Sagitta. In the past, it was always a vague patch of fuzz, but last night, it really stood out with a number of stars visible in the 16-inch.

Looking at the North America Nebula area with an unfiltered Explore Scientific 82° 30 mm eyepiece (61x, 1.35° TFOV) was amazing, but since it was nearly overhead, in "Dob Hell," I had trouble moving around in the direction desired, so I was getting lost and impatient in the overwhelming welter of Milky Way stars — the latter is sort of a nice problem to have!

Finally, I pulled off the field about 2 am after a short, but productive session!