Observing Report for July 30-31, 2019, Carranza

by Joe Stieber

July 30-31, 2019

I was back out to Carranza Field in Wharton State Forest, NJ, with the 16-inch Dob on Monday night (July 30-31) to follow-up on Pluto and check out a few other things. I had a very efficient day of preparation, making a target list and appropriate charts, getting the equipment ready and loading the car.

When I left the house at 10:40 pm EDT, it was cloudy here in Maple Shade, but I went ahead regardless. By time I got to Medford shortly after 11 pm, it was clearing and when I arrived at Carranza about 11:30 pm, it was mostly clear and 70°F (and somewhat humid feeling). Unlike the past couple of outings to Carranza, mosquitoes were active. But the stars were bright and the Milky was a notch below billowing.

Then things went downhill. Putting the scope together, I installed the top cage rotated 180° from where it should be. For me, that would be the preferred eyepiece position (more like my old 12.5-inch Dob), but that places the Rigel finder on the bottom, which is an extremely awkward location, so I had to reinstall the cage.

Next, I collimated the scope, but after putting in the laser, I started by adjusting the primary mirror. After numerous turns of the various screws and seeing nothing happen… duh, I was doing the wrong mirror! I need to do the secondary first, like I've done a million times in the past.

Then I aimed at Jupiter and it was just too low to look into the eyepiece without kneeling on the ground, which I was reluctant to do (in my advancing years). So, I went to Saturn for a quick check (nice, but the seeing was so-so), and from there, star-hopped east to Pluto. Having "learned" the star field last week, I quickly got to the right spot with the massive, wide-field 30 mm eyepiece. However, I still didn't have the altitude clutch problem solved. When I removed the 30 mm, the front of the scope rose up and was no longer pointing in the Pluto area. Ultimately, I was able to proactively hold the scope in one hand while I switched to a small, high power eyepiece without movement. It worked, but it's hardly an ideal way to do it. I need more work on the clutches.

In any case, I was able to spot Pluto again, at 12:40 am on July 31, about 7 arc minutes west of where it was seen last week (Pluto is currently in retrograde motion). I was able to see it with averted vision at 166x (11 mm eyepiece) and almost continuously with direct vision at 208x (8.8 mm eyepiece). For confirmation, Pluto was also absent at the spot where it was seen on July 26.

Then I heard an animal snorting (at me?). I got out my high-power white LED flashlight and saw a pair of glowing deer eyes about 100 yards to the west, but I couldn't see if it had antlers (doe or buck?). The eyes started to move to the center of the field and then crouched down in the tall grass, so I didn't know if it intended to "visit" me or what. I decided to wait in the car for 5 or 10 minutes. Then I got tired of waiting, got out, swept the flashlight beam around and saw the eyes in the southeast corner of the field, at which time the deer appeared to run off, so I went back to observing.

By 1:15 am, the temperature had increased slightly to 71°F and the humidity was a bit more evident, but there was no significant dew condensation. However, transparency seemed to have dropped off a little.

Next, I looked at my intended galaxies. First was NGC 7331 in Pegasus, but mainly as a guide to finding Stephan's Quintet, about half a degree to the east. I did see a vague, lobed fuzzy patch at the expected position, but hardly a slam-dunk sighting. Then I looked sat M31 in Andromeda, nice in 30 mm but the exit pupil is 6.7 mm, so I'm surely wasting some light with my older eyes, which at best probably open to 5.5 mm. The view with the Explore 18 mm, 82° eyepiece (101x, 0.81° TFOV, 4.0 mm exit pupil) was quite nice, but I can't say I definitively saw NGC 206. The general background of M31's spiral arms was perhaps too "bright" (and even with 16 inches of aperture, fine transparency is needed for NGC 206).

The last galaxy I checked was M33 in Triangulum and NGC 604 (the H-II region in it) was obvious, but I didn't really see any other NGC objects (although I didn't look too hard). I had hoped to look at M13 in Hercules and see the nearby galaxy, NGC 6207. However, there was a tree in the way; besides, it was starting to dip into the Philadelphia sky glow in the northeast.

Next, I put my narrowband filter (passing H-beta and O-III) into my 30 mm eyepiece and looked first at the North America Nebula and the adjoining Pelican Nebula. The NA Nebula was magnificent -- I could see much of the geographical shape seen in photographs. The bright arc of the Pelican was also obvious. I enjoyed seeing the prominent "mini-Orion" asterism off the "Gulf of Mexico."

Next was the Veil Nebula (the Eastern and Western segments as well as Pickering's/Fleming's Triangular Wisp in-between). The East and West segments showed well, and it wasn't difficult to pick out the Wisp. I was surprised about the ease of seeing the Veil components in view of the declining transparency, but the filter may have been circumventing some of it.

Finally, in the scope with the 30 mm and the narrowband filter, I looked at the Helix Nebula in Aquarius. I started by aiming the Rigel finder at the approximate position of Upsilon Aqr, a distinctive row of three stars which is about a degree east of the Helix (I couldn't see Upsilon with unaided eyes, I was aiming at its estimated position 6.5° above Epsilon PsA). To my surprise, the Helix was already in the field of view when I looked into the eyepiece, and with closer inspection, I could see the center was a darkish patch, plus there seemed to be another small darkish patch at one edge.

By then, around 2 am, I was getting tired and disgruntled and didn't feel like taking the effort to get Neptune (in Aquarius) or Uranus (in Aries) in the scope, so I started packing. Everything was packed up by 2:30 am and the last thermometer reading was 72°F. Before I left, I decided to scan around with my 15x56 binoculars. Neptune and Uranus were easily spotted with them.

I pulled off the field at 2:40 am.