February 4th at Big WoodChuck

Hi all,
For the last several days we've had very nice clear skies. Other than visually observing the Sun with a few times with a small refractor, I haven't done any observing since the December trip to Calhoun.

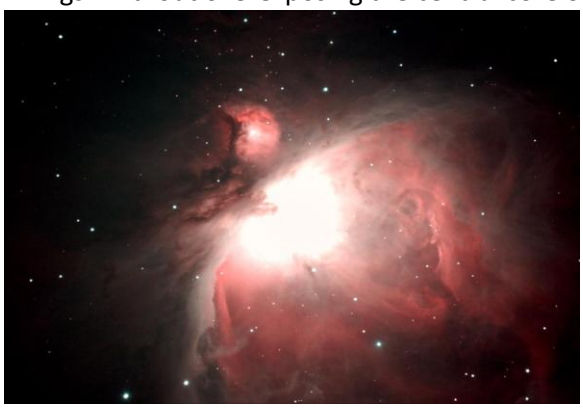
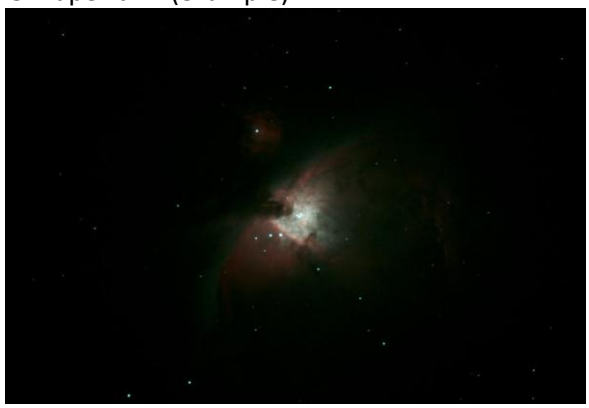
So, while still fighting a lingering head cold, (2nd week), Sunday evening's moderate temps in the mid-40's enticed me out into the night. I dressed in warm clothes, filled my pockets with Kleenex and throat cough drops, and headed outback to the observatory. After first firing up the propane heater, I focused on setting up the laptop and connecting to the telescope and cameras. Took longer than expected to get the scope going as PHD guide software and the Meade Autostar planetarium software didn't want to play nice together. By the time I worked thru the tech issues, the observatory interior was warm and comfortable. I didn't really have an observing plan, just wanted to EAA observe the Great Orion Nebula and maybe a few nearby SH2 nebula, and try out a new software release of Sharpcap.

I think my local sky glow has got worse. The neighborhood backyard landscape & patio lights have increased over the past year, which is the main reason that back in the summer I completely enclosed my outdoor open-air observing pad with a picket fence. My original plan was to setup my travel scope inside the enclosure, but decided not to assemble the scope outback this winter, as I would have to pack it all up in a couple of months to prepare for the April trip for the Solar Eclipse. (have two flights of steps between the house & backyard that I have to lug the heavy mount up & down, so decided it wasn't worth it for only a few winter observing sessions). Instead I thought I'd try attaching the cameras to the 8" Meade SCT that is permanently mounted inside the observatory. Wasn't sure how well this would pan out as I've begun noticing this summer that outdoor light was reflecting off the interior observatory walls when the roof is open.

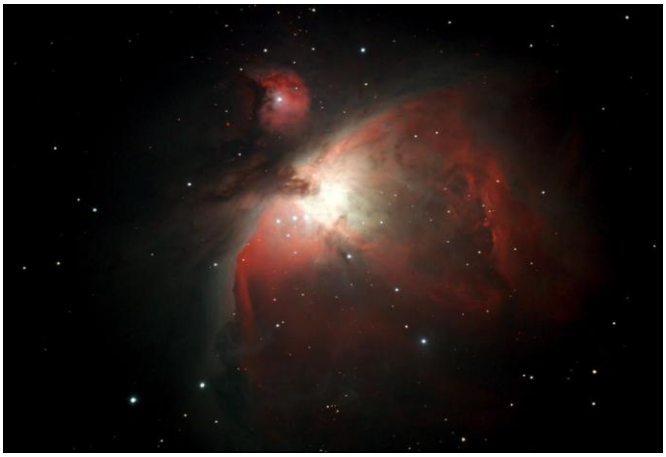



So tonight in the outdoor space, I mounted the AllSky camera on a short tripod. Unfortunately, while keeping the camera better light shielded, it blocks out more of the sky.
Here's the AllSky time-laspe from the evening: https://youtu.be/A1Cku3QsvNQ?si=UREmL_DM2yNvjGHN
(Watch for Airplanes, neighbors lights illuminating the shed roof and trees, LOL, the Winter constellations wheeling overhead, and moonrise over the observatory wall)

I spent about an hour or so EAA observing M42 and its companion M43. Unless you do AP post-processing, it can be difficult to get a single pretty picture of the nebula that captures the full dynamic range of its faint outer "wings" without overexposing the central core of the Trapezium. (example)

After experimenting with both the narrowband L-eNhance and the broadband L-Pro filters, and various exposures running from 2 seconds to 15 seconds and livestacking histogram tweaks in Sharpcap I was able to get a decent view with the 8”.



(L-Pro filter, 15 second exposures, stacked for 15 minutes).

I then tried observing a few small & faint SH2’s around Orion, but I began noticing new gradient issues with the image that was being caused by lights from my neighbor’s house directly to my east. (they had gone out in their car and their garage light had stayed on, shining directly into the opened observatory roof). After trying a few Sharpcap software tricks in attempting to reduce the gradient noise, I decided to give up deep-sky observing and work on getting autofocus in the Sharpcap app to work with my ZWO focuser.
Happy to say that I’ve now mastered that feature. No more running back n forth with the Bhatinov mask.
Sharpcap also has a new planetary livestack feature that I wanted to try on Jupiter, but the planet was now hidden behind the observatory wall. I’ll have to save that training for when the Moon is back in the evening sky, or perhaps on the Sun during the day. So only one deep-sky observation for the night, but after viewing the Orion Nebula, what more does one need!

With the backyard lights issue, I might just stick to solar system observing from Big WoodChuck until I can head out to dark skies later this spring.
Larry