## 2020 November Observations from Big Woodchuck Observatory

----- Original Message -----Subject:[ORAS] Observing therapy
Date:Thu, 05 Nov 2020

hi all,

Decided I needed some telescope-observing therapy yesterday evening, so taking advantage of the early sunset time, I headed outback to the observatory for a few hours of treatment before moonrise.

Got out a little later than I had planned, so there wasn't much time before the waning gibbous moon rose in the northeast. I quickly pulled-out my Sharpless Catalog list and went after several of the larger SH2 wide-field objects using my 60mm f4 refractor and ASI294MC camera piggybacked on the Atlas mount. (my poor 8" SCT optical tube hasn't seen any starlight in months, lol).

All of the below images are using the Optolong L-eNhance narrowband filter and are ROI=4144x2822, 60 second exposure, 30 frames stacked for a 30 minute total image with the more fuzzy corners cropped in post-processing.

NGC6820 (SH2-86) in Vulpecula:



SH2-118 and SH2-119, both in Cygnus:





And once the Moon poked above the horizon, I went for a bright non-Sharpless object, Planetary Nebula NGC7293 (Helix Nebula) in Aquarius:



After finishing the Helix, the Moon was now well up, so I decided to finish the evening by visiting Mars, which was hitting the meridian. With the planet now traveling away from the Earth, the visual diameter of the martian disk has begun to decrease - down to 19.3 arcsec. The planet is also beginning to show a slight gibbous phase (on the left hand side of the below planet photo). Using the observatory 8" LX200GPS SCT and my ZWO ASI120MC camera & IR filter, I captured a 90 second avi clip and processed that with Registax6, stacking around 3100 frames. Here's the result:





The dark surface detail includes Meridiani Sinus and Sabaeus Sinus (right of center disk). Niciacus Lacus and Mare Acidalium towards the northern limb. And Mare Erythraeum covering a large area left of center disk. Also the lighter region of Arabia is visible along the upper right, and the area of Hellas along the lower right limb, along with the South Pole.

So that's it for this outing. Hoping for more opportunity to get outback later this week. Larry

----- Original Message -----

Subject:[ORAS] Always time for Mars

**Date:**Mon, 09 Nov 2020

hi all,

Once again, we had good skies last night in Baldwin. Spent most of the evening doing deep-sky work, but there's always time for Mars! Mars continues to show interesting surface details.

Using the observatory 8" LX200GPS SCT and my ZWO ASI120MC camera & IR filter, I captured a 90 second avi clip and processed that with Registax6, stacking around 3,090 subframes. Here's the result:

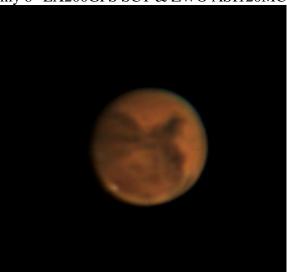


The dark surface detail includes Meridiani Sinus and Sabaeus Sinus (center and left of disk). And Syrtis Major toward the right hand limb. Also the South Pole. Larry

----- Original Message -----Subject:[ORAS] More Mars!
Date:Tue, 10 Nov 2020

hi all, Did someone ask for "More Mars"?

Was out again last night, so here's a processed image of 5,468 subframes from a 3 minute avi clip. Made using my 8" LX200GPS SCT & ZWO ASI120MC camera with IR filter.



I imaged Mars several hours earlier than on Sunday Night, so the prominent dark surface feature Syrtis Major is now on center disk. Syrtis Minor is to the lower right, Sinus Sabaeus to the left. The lighter region below Syrtis Major is called 'Hellas', and there's the South Pole. Larry

----- Original Message -----

Subject:[ORAS] Early November observations from Big Woodchuck

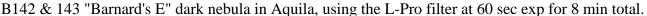
**Date:**Fri, 27 Nov 2020

hi all,

While hiding at home today from all the Black-Friday shoppers, I finally had time to process images taken from my backyard observatory during that warm clear period from the first part of November (8th, 9th, & 10th). I was using my 80mm f4 refractor with the ASI294MC camera piggybacked on the Atlas Mount, working my way thru the wide-field objects list, along with the Sharpless Catalog Objects.

Here's the best of the three nights observing session:

M27, "Dumbbell" planetary nebula in Vulpecula, using the L-eNhance filter at 60 sec expfor 15 min total.







NGC891, "Silver Sliver" galaxy in Andromeda, using the L-Pro filter at 30 sec exp for 45 min total. SH2-129, "Flying Bat" HII emission nebula in Cepheus, using the L-eNhance filter at 60 sec exp for 30 min.





SH2-132, HII emission nebula in Cepheus, using the L-eNhance filter at 60 sec exp for 30 min total. Simeis147, Supernova Remnant in Taurus, using the L-eNhance filter at 180 secexp for 60 min total.



M42, M43, NGC1977 & 1981, "Orion Nebula & Running Man" emission, reflection, & cluster in Orion, using the L-Pro filter at 5 second exposure for 30 minutes total.



And a bunch of open clusters, all using the L-Pro filter at 15 second exposure for 10 minutes total. NGC457, "Owl or ET Cluster" in Andromeda, and M34, in Perseus.



M35, in Gemini, and M36 in Auriga.



And M37, & M38, also in Auriga



So I'm now caught-up on my observations, and pretty far along with the wide-field objects list. and good progress on the Sharpless project.

The weather prediction for Saturday night is clear skies, but with the Moon near Full, I may just try one last time for Mars!

Hopefully, we'll get clear weather around the December dark of the Moon, and I can get a few more deep-sky observations before year-end.

Larry

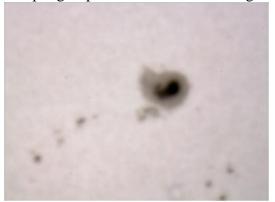
----- Original Message -----

**Subject:**[ORAS] Here Comes the Sun,,,, do-do,,do-do,,,,

**Date:**Sat, 28 Nov 2020

hi all.

While out prepping for imaging Mars tonight, I turned the 8" LX200 SCT toward the Sun.(with a Baader solarfilm filter). Using my ZWO ASI120MC camera I captured a 90 second avi clip in white-light of the large sunspot group AR2786 that's transiting the Sun's disk.



(~1500 frames stacked using Registax, ROI=1280x960, exp=6.5ms, gain=0, brightness=7)

Wasn't enough time to switch over to the Daystar H-alpha filter as the Sun was falling behind the observatory wall. Maybe next time,... Cycle-25 is starting to look up! Larry

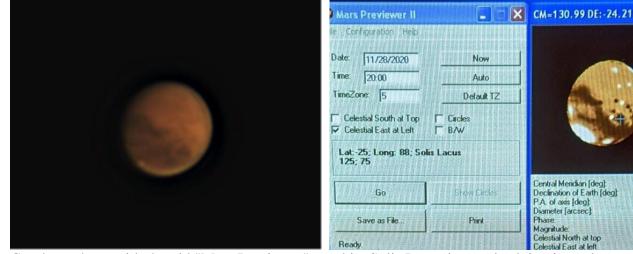
----- Original Message -----Subject: [ORAS] Last call for Mars!

Date:Sun, 29 Nov 2020

Hi all,

Took advantage of the clear moonlit evening for one last look at Mars.

The planet's disk has really dropped in size of around 22.5 arc-seconds back from the October opposition to currently just 14.9 arc-sec. But there's still good detail to be seen. Using my home observatory 8" LX200GPS SCT @ f10, and my ZWO ASI120MC camera & IR filter, I captured a 90 second avi clip and processed that with Registax6, stacking around 2900 frames. Here's the result:



Good match-up with the old "Mars Previewer" graphic. Solis Lacus is now back in view, along with Mare Sirenum. No sign of the dust storm that's kicked-up over the past week.

Central Meridian (deg) Declination of Earth (deg): P.A. of axis [deg]:

326 1000

0.9273 1.1900

This will probably be my last image of Mars for this approach. With Cycle-25 starting to rev-up, time to reconfigure the observatory telescope and dive back into solar observing!