Mars at Opposition - Friday January 17th

hi all,
The sky cleared off Friday afternoon, so I headed outback and shoveled the snow off my observatory flip-roof and brushed the snow from around the tarp covering the outdoor telescope, thinking I was going to get a night of EAA deep-sky observing. But once I headed back out at dusk, by the time I had both telescopes running, I barely got in a half-hour before wispy haze began moving in.


(DIY AllSky cam: ZWO ASI224MC & fisheye lens in a dome. Auto exposure -= ~4 seconds)

Still, I was able to get in one deep-sky observation - globular cluster NGC2419 in Lynx:

(8" SCT @ f6.3 on an Atlas Gem, ZWO ASI294MC camera with L-Pro filter,15 second subs, dark & flat calibration frames, PHD guided, livestacked using Sharpcap for 15 minutes).

While the hazy sky spoiled the deep-sky, it wasn't thick enough to block the planets, so I closed down the outdoor Celestron 8" SCT and went to solar system observing with the observatory Meade 8" SCT, starting with Jupiter. The Great Red Spot was approaching Jupiter's central meridian, so I followed it for about an hour & 40 minutes using Sharpcap's planetary livestack tool for observing. (I took screenshots of the Sharpcap process which I'll put in another note). So here are the three best Jupiter planetary stacks of the evening.



(7:07pm) (8:13pm) (8:40pm)

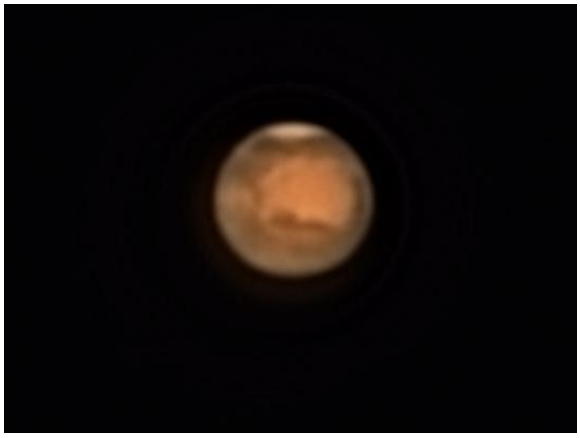
16 millisecond exposure, ~800 frames stacked, Camera ROI = 320x240, cropped. Using my backyard observatory's Meade 8" LX200GPS SCT @ f10 on a fork wedge mount & pier with an ASI290MC camera & IR filter.

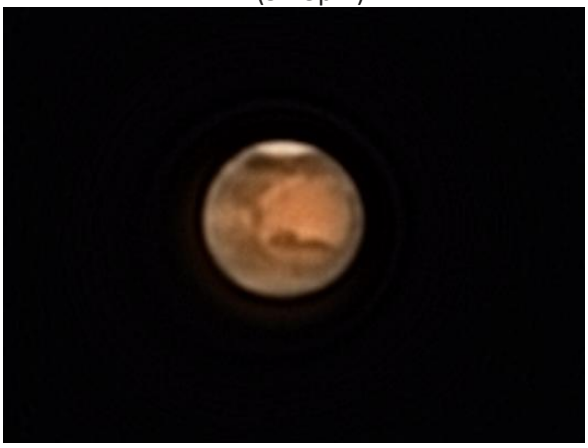
I then moved on to the main event of the evening - Mars at Opposition!
(had to wait for Mars to first clear a couple of trees, lol)

Using Sharpcap's planetary livestack feature, I spent the next 3 hours watching the planet's surface details slowly rotate across the disk. Along with the north polar cap, my favorite dark albedo feature was visible - Syrtis Major, already well past the Martian meridian. Also prominent center disk was Sinus Sabaeus and Sinus Meridiani. And eventually, Mare Acidalium and Niliacus Lacus rotated into view. Here's the best five planetary stacks:

(9:02pm)

(9:43pm)





(10:33pm)

(11:03pm)

(11:45pm)

16 millisecond exposure, ~800 frames stacked, Camera ROI = 320x240, cropped. Meade 8" LX200GPS SCT @ f10 on a fork wedge mount & pier with an ASI290MC camera & IR filter.

So even though my planned deep-sky observing was foiled, It was still a useful evening of Shallow-Sky EAA Mars observing!