2020 July Observations from Big Woodchuck Observatory

-------- Original Message --------
Subject:[ORAS] A Damp Day and a Clear Night
Date: Sun, 12 Jul 2020

hi all,
After an extended period of rainy, damp evenings, Saturday afternoon dried-out and became a decent night of observing. Unfortunately for me, I spent most of the evening fighting various equipment/camera issues, mostly self-inflicted. (such as 'improving' an already decent polar/GOTO alignment to worse,,,,)
But working thru issues is all part of fun, and I was able to come away with a few usable images. I had several goals for the night, based on the observing articles form the July Sky& Tel magazine, along with wanting to make progress on a new observing project. On the list was getting a wide-field image of "Baade's Window", which is a visible section of the interior core of the Milky-Way. Here's the image made with my Canon 100mm zoom lens & ASI290MC camera:

(5 minute exposure, the bright star is in the 'tip' of the Sagittarius teapot and is called 'Nash'. Globular Cluster NGC6522 is the faint fuzzy located in the center of the image)

Also on the night's magazine list was several small planetary nebula in Sagittarius, but with the equipment issues, I missed catching them on the meridian, and were in the weeds by the time I attempted to image. So as a consolation prize, I had been saving a nice planetary in Aquila - NGC6781, so I pointed the telescope higher up for that.
As an example of the 'fun' that I was enjoying, right at the end of nice looking 15 minute imaging stack, a satellite photo-bombed the frame. In a way, it does make for an interesting shot, kinda looks like a glass bead on a string! lol

(8" Celestron SCT f6.3 on Atlas mount & ASI294MC, ROI=1280x1024, stack of 15 subs at 60 seconds for a 15 minute exposure using the narrowband L-enhance filter)

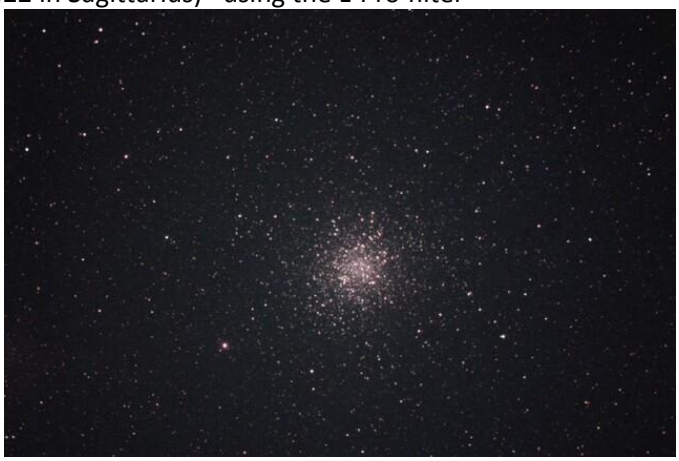
Finally, for my new observing project, I pursued several small Sharpless SH2 emission nebula up overhead in Cygnus, but none of the images really panned-out to be worth displaying here. But, I have started a new webpage for the project: http://www.stellar-journeys.org/sharplesstour.htm Only 300 more objects to go!

I stuck it out to 4:30am in hope of catching a glimpse of Comet Neowise in my binocs. (my imaging setup in the backyard is hopelessly blocked to the NE by trees) So I walked around the front & back of the house looking for a gap, but everywhere was obscured. Maybe I'll have better luck when it moves into the evening sky.
One thing that did go well, the allsky cam video for the evening!
Here's the latest edition titled "Damp Day & Clear Night": https://youtu.be/isNzQljkIhc

Larry

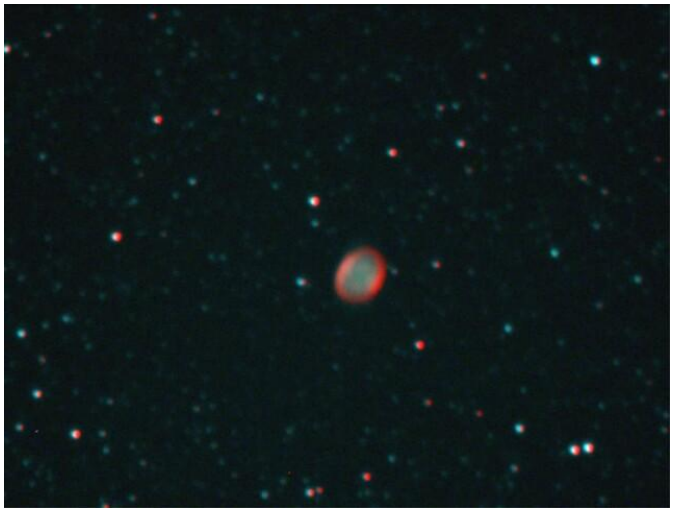
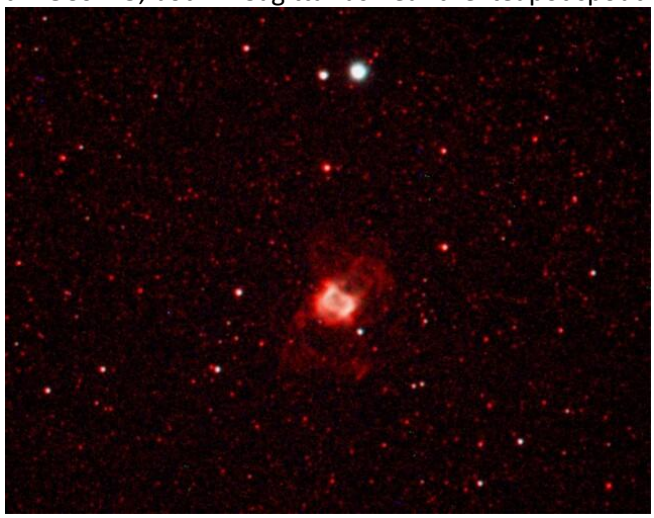
-------- Original Message --------
Subject:[ORAS] Followup Observing report from 7-13
Date: Tue, 14 Jul

hi all,
Got out last night for a short imaging session. (couldn't stay out late, needed to get up early the next day)
I wanted to follow-up on observing the two planetary nebula mentioned in the July Sky&Tel article 'Magical Things', page 54. While waiting for the camera to cool down, and for the sky to get a little darker, I dropped in on a couple of Globular Starclusters:(M3 in Canes Ven and my favorite M22 in Sagittarius) using the L-Pro filter

(8" Celestron SCT f6.3 on Atlas mount & ASI294MC, ROI=4144x2822, stack of 1 subs at 30 secss for a 5 min exposure)

I then moved on to the two planetary nebula, NGC6563 and NGC6445, both in Sagittarius near the 'teapot spout'.

(8" Celestron SCT f6.3 on Atlas mount & ASI294MC, using the narrowband L-enhance filter)
(NGC6563 - ROI=1024x768, stack of 15 subs at 60 secs for a 15 min exposure)
(NGC6445 - ROI=1280x1024, stack of 9 subs at 60 secs for a 9 min exposure)

So that pretty much wraps-up my list of imaging items from the current Sky&Tel.
If you're looking for observing ideas, I find that almost every issue has something interesting in it!
Now, if I can only catch a sight of that darn comet!!!

Larry

-------- Original Message --------
Subject:[ORAS] A comet and a hazy bust
Date: Wed, 15 Jul 2020

hi all,

Yesterday was a beautiful sunny day, holding promise for an all night observing session. After sunset, armed with my 12x50 binoculars and a finder chart, I was determined to break the comet curse. I had thought about driving to a hill-top cemetery located a few miles away that had a good view to the north, but decided to first try from my light-polluted front yard. Using the inside doorframe of my garage and the top of my camper as light-shields, I was able to finally locate Comet Neowise just above the tree line below a cloud bank. I used my SkyWindow Binocviewer/holder to make the observation. The comet displayed well in the binocs, with a star-like nucleus embedded in a bright coma and with a nice short tail extending outwards. While it ain't very pretty, I did (barely) capture the comet with my cell phone:

Within a few minutes, the cloud bank ate the comet, so I closed the garage and headed outback to the observatory. Unfortunately, the clouds kept rolling in from the west and the sky went soft with haze.
So much for that promising forecast.

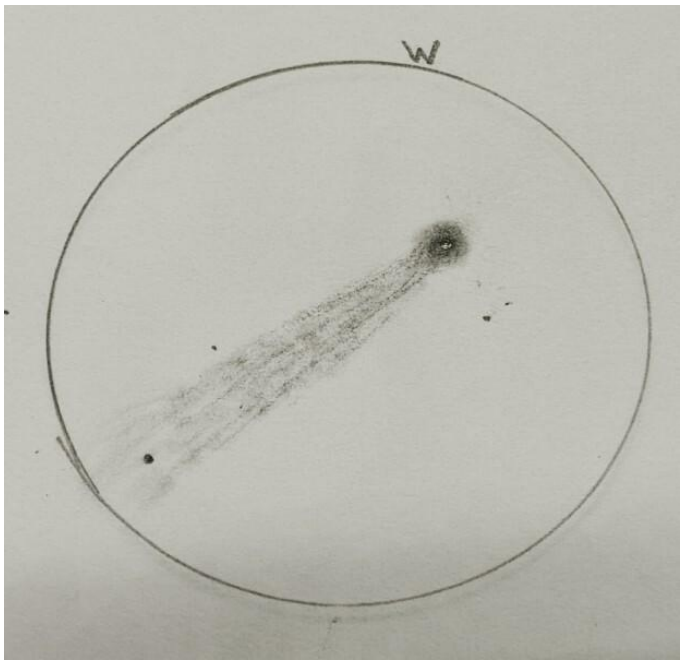
I did make a short video of the hazy mess: "A Hazy Bust": https://youtu.be/O4XgZiEDYC0
Probably could have done some imaging of Jupiter and Saturn, but instead I spent the evening redoing my GOTO mount alignment, trying out a few setting adjustments in the EQMod telescope controller software, and switching my autoguider over from ST4 to Pulse guiding.

So I guess the evening wasn't a total wash,,,,
Have my fingers crossed for tonight!

Larry

-------- Original Message --------
Subject:[ORAS] Ole-School on the Comet
Date: Fri, 17 Jul 2020

hi all,
With four separate weather forecasting apps all aligning on tonight being clear, I was determined to get a good view of Comet Neowise. So at dusk, I wheeled-out of the garage my 10" f4.5 Coulter Dob, (which is still for sale,,,) my 80mm f6.3 refractor, and my 12x50 binoc viewer. Shortly before 10pm, I found the comet in the NW twilight. It was higher than I expected. It looked nice in the Binocs and the small refractor, but the 10" reflector showed it well.
Here's a sketch made using the 10" with a 32mm eyepiece:



Observation notes: 07/17/2020, 10:05pm.
Comet just barely naked-eye. bright star-like nucleus surrounded by a bright coma. Was able to trace the tail to the bright star at the edge of the eyepiece and a little beyond. Hints of striations in the tail. The view would greatly benefit from a dark-sky and no pesky car traffic on the nearby street.
(the next door neighbor noticed that I was out and helpfully turned on his porch light for a few minutes, lol)

So, going old-school can still get the observation done!! Hopefully other club members are out tonight visually observing or imaging. With the comet getting higher in the evening sky, I think I may be able to finally image it from the backyard observatory. We'll see what tomorrow evening brings!
Now, time to head outback and open up the observatory, those nebula won't image themselves! LOL. Larry

-------- Original Message --------
Subject:[ORAS] A Very Good Night!
Date: Sat, 18 Jul 2020

hi all,

After I finished stowing my visual equipment from comet observing in the front of the house, I headed outback to the observatory for an imaging session. With the late start and dawn only five hours off, I focused on hunting SH2 "HII" regions in Cygnus, and later in Cassiopeia and Cepheus. (HII regions are areas of active star formation, with the 'HII' referring to the ionized molecular hydrogen in which the region is embedded in. 'SH2' is the Sharpless catalog)

My first object for the night was SH2-101 in Cygnus, also known as the 'Tulip Nebula':

(8" Celestron SCT f6.3 on Atlas mount & ASI294MC, ROI=4144x2822, stack of 30 subs at 60 seconds for a 30 minute exposure using the narrowband L-eNhance filter)

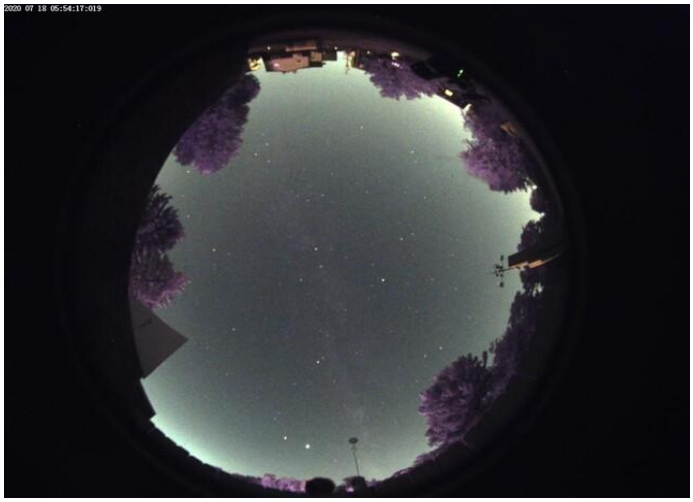
I then moved on to the large HII region in Cassiopeia called SH2-157. I had to take two separate images for the brighter portions of the nebula, and still missed a lot! Gonna have to learn how to do a 'Mosaic'. (or use a wider-field optic)

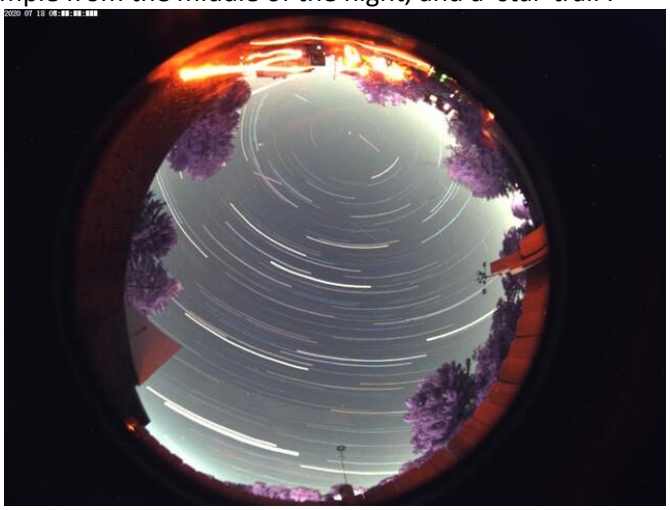
(8" Celestron SCT f6.3 on Atlas mount & ASI294MC, ROI=4144x2822, stack of 30 subs at 60 seconds for a 30 minute exposure using the narrowband L-eNhance filter)

I then headed over the boarder to Cepheus to image SH2-158, also known as NGC7538.

Spent the last half-hour of pre-dawn darkness trying to image SH2-159 back over in Cassiopeia, but ran out of time and ended up with a washed-out image. Will have to try again.
As it was a good night of observing, I saved-off the allsky cam images and made a video:
https://youtu.be/o_w6FBXyOwk (watch for later in the video where the observatory roof closes, Jupiter & Saturn begins to set, and Mars rises in the dawn)

The software that I use to stitch together all the individual allsky cam images into a video is called 'StarTrails".
It's primary purpose, is to create star-trail images from a series of still shots. So I decided today to actually try using the software for its intended purpose. Here's a single image example from the middle of the night, and a 'star-trail':





Kinda cool!
Larry

-------- Original Message --------
Subject:[ORAS] Finally got an image of Comet Neowise
Date: Sat, 25 Jul 2020

hi all,

With three separate weather apps calling for clear skies Friday evening, I had great expectations of finally spending some time on Comet Neowise. I've had to wait till the later half of this week before the comet would be higher than the trees to my NW. So under sunny late afternoon skies, I opened-up my observatory and uncovered the telescope.
But right at sunset, conditions changed…. It was interesting, the weather satellite was showing that clear skies should be overhead, but my eyes kept seeing all these clouds,,,,, Apparently they were forming right over Pittsburgh and the South Hills. They would soon dissipate, only to have new ones quickly develop.
This went on for most of the evening!! But, in-between gaps I was able to get a few quick images of the comet.
Here's the first using my Canon Zoom lens at 25mm & my ASI290MC camera:

(15 second subs for a total of 3 minutes)

After several starts and stops due to clouds barreling thru and ruining the image, I was able to get a hazy shot using the 8" SCT f6.3 on the Atlas CGEM mount & ASI294MC camera:

(ROI=4144x2822, stack of 180 subs at 5 seconds for a 3 minute exposure)

The rest of the evening was spent dodging clouds and fighting with camera issues so nothing useable came from that. Oh well, at least I got the comet!!

Larry

-------- Original Message --------
Subject:[ORAS] One last night with Comet Neowise
Date: Wed, 29 Jul 2020

hi all,
Last evening started-off clear, so I decided to image Comet Neowise, probably for the last time.
With the Comet fading, and a bright Gibbous Moon, the conditions for comet hunting was far from ideal.
But, us amateur-astronomers gotta do what us amateurs do,,,, lol. Here's the results, first a wide-field image:

(Canon Zoom lens at 100mm, f5.6 & my ASI290MC camera with no filter: 5 second exp, 60 subs for 5 minutes)

And here's a shot of the comet coma/nucleus:

(8" SCT f6.3 on Atlas CGEM & ASI294MC camera with IR/UV filter: ROI=4144x2822, stack of 12 subs at 5 seconds for a 1 minute exposure)

Neither image was guided, as I didn't have time to setup PHD,,,, clouds rolled in!
(it's like when I uncover the telescope it creates some vacuum that draws in the clouds!)
But, I still was able to get a couple of images, so I'm happy!!

Larry