

The Objective Lens

University Lowbrow Astronomers Monthly Newsletter Supplement

December 2022

Nebulosity



From **DOUG BOCK**. IC 434, THE HorseHead Nebula_2021-10-07_031126_41 x 300 seconds. Gain_100.



From **JACK SPRAGUE**.



From **GLENN KAATZ**. IC 5070. The Pelican Nebula was imaged using my Explore Scientific 102mm refractor. The final image consists of 4 hours worth of 5 min exposures through Halpha, SII, and OIII filters for a total of 12 hours of integration time.

Mount: Celestron CGX
Main camera: ASI1600 MM Pro
Guide camera: ASI290 MM mini
Guide scope: Orion 60 mm small refractor
Hotech field flattener
ZWO 7nm Halpha, SII, and OIII narrowband filters
ASIAIR Pro microcomputer controlling everything ■



From **DONOVAN DREW**. The Crab Nebula, a 1000 year old supernova remnant.



From **GLENN KAATZ**. IC 1848 The Soul Nebula was imaged with my William Optics Z61-II refractor, and consists of 3+ hours worth of 5 min images through narrow band filters for a total integration time of 10 hours.

Mount: Celestron CGX
Main Camera: ASI1600MM Pro
ZWO off-axis guider with an ASI120MM mini guide camera
William Optics field flattener
Same narrow band filters as used for Pelican Nebula
ASIAIR Pro microcomputer running the imaging sessions



From **JEFF KOPMANIS**. Hazy Moon and Mars.



From **GLENN KAATZ**. NGC7000: This is a wide-field image of the North American and Pelican nebulae, created in the Hubble palette. The North American nebula lies about 2,600 light years away in the constellation Cygnus and is estimated to be 140 by 90 light years in size.

The image was obtained as follows:

William Optics Z6111 refractor
William Optics field flattener
Celestron CGX mount
ASIAir Pro microcomputer
ZWO off-axis guider with ASI120MM mini guide camera
ZWO electronic filter wheel with ZWO Ha, OIII, and SII filters (each 7nm)
Ha: 43x5 min; OIII: 50x5 min; SII: 44x5min (total exposure time 11.4 hours)
Processing: Pixinsight, Photoshop, and Topaz Denoise AI



From **GLENN KAATZ**. Cygnus Wall: this is a higher magnification image of the active star forming region within the North American nebula, created in the Hubble palette. The Cygnus Wall region spans about 20 light years and is the most active star forming region within NGC7000.

This image was obtained as follows:

Explore Scientific ED102 refractor

Hotech field flattener

Celestron CGX mount

ASIAir Pro microcomputer

Orion 60mm guide scope with ASI290MM mini guide camera

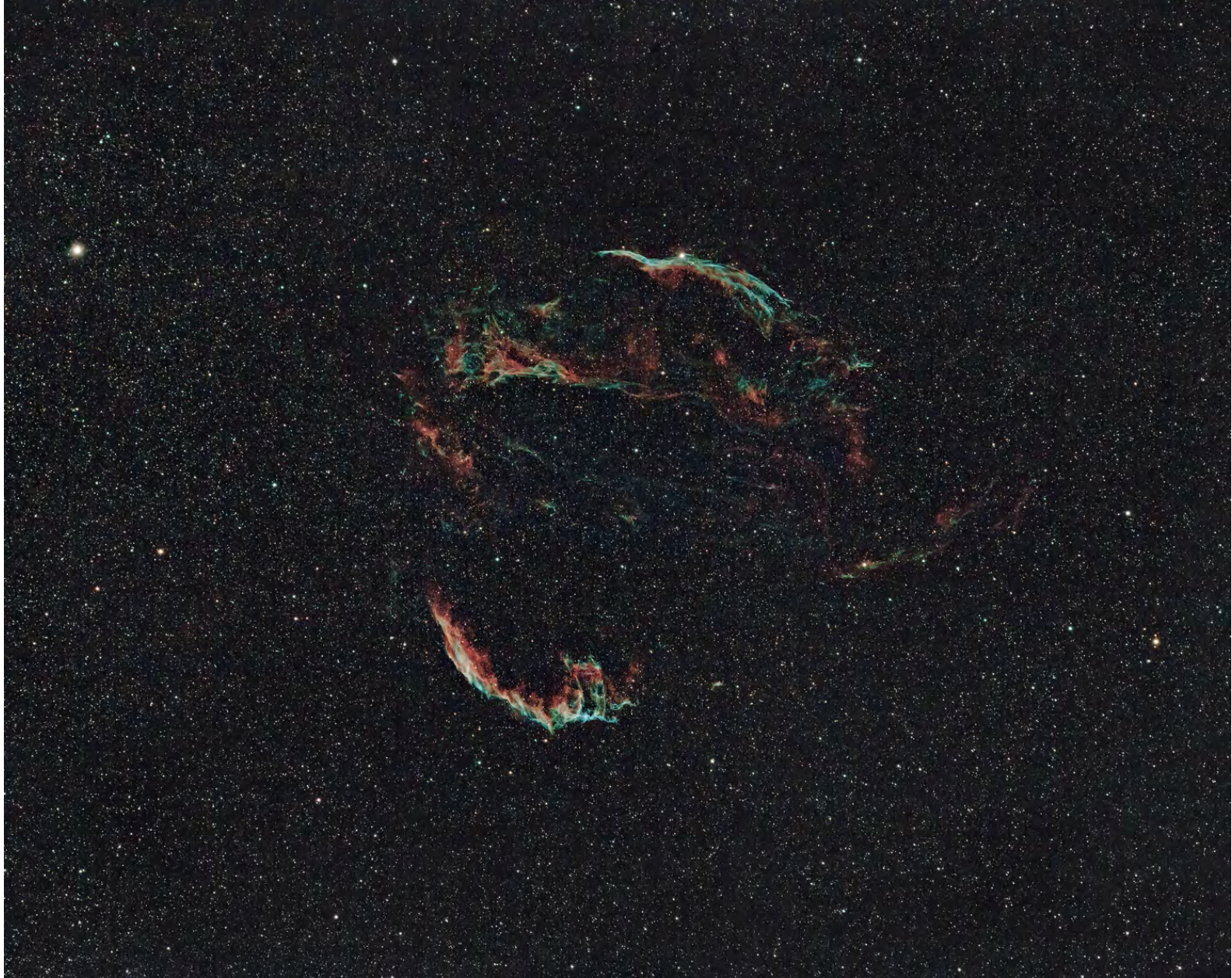
ZWO electronic filter wheel with Ha, OIII, and SII filters as above

Ha: 46x5 min; OIII: 54x5 min; SII: 43x5 min (total exposure time 11.9 hours)

Processing: Pixinsight, Photoshop, Topaz Denoise AI



From **AMY CANTU** The Blue Horsehead Nebula. 3 hrs, 60-sec subs +darks, flats, bias. Redcat51 250mm with 6D Mk II on a SA2i, no guiding.



From **AMY CANTU** The Cygnus Loop. This is my first-ever AP photo made using the ASI Air Plus on a Go-To Mount. Thank you, Jack Sprague!



From **HOWARD RITTER**. Just to show what can be accomplished by a newbie with rudimentary imaging skills, 6" of top-quality apo aperture, unassisted manual focus and seeing that's sub-par even for the Midwest, here's my first-ever effort at imaging Mars. Best 5000 of 10000 7-ms exposures at 142 fps with ASI2600MC, stacked in Autostakkert!, wavelet-processed in Registax, and touched up in Photoshop and DeNoise with final touches by son Phil.

I wonder if the white overlapping the dark shapes at the edge of the cap is a haze coming off the cap.



From **MATTHEW WEST**. Moon.



From **KATHY HILLIG**. Lunar Eclipse. My brother took some eclipse photos from his home in Scottsdale. He used his Nikon 7100, 500 mm Sigma lens, f/18, 8 sec exposure, ISO 100 & 200, mounted on a Star Adventurer GTI.



From **BRIAN WALKOWSKI**. Lunar Eclipse. Just outside of Buffalo. Yesterday's cloud forecast was clear skies for three days except from 4AM-7AM this morning... Fortunately when I got up at 4:30AM clouds were way south of us and I had clear skies to align and view. So here is the moon at totality right at 6AM eastern. Second shot is my setup in the driveway, Tele Vue NP101, 540mm with Nikon D5300.



From **JIM FORRESTER**. Lunar Eclipse. Set up at the Brauer Preserve on Parker Road west of Ann Arbor, I was well into totality when the clouds rolled in at 05:45. I did get some pix of the partial umbral eclipse, but got so caught up in the view I never got around to one at total eclipse.

Here is one of the better efforts. Taken hand held through the eyepiece. iPhone 8+, TMB 105/650 at 22.5x.



From **BRIAN OTTUM**. Lunar Eclipse. I had grand plans to take a sequence showing the eclipsed moon's descent into the trees, but clouds had other plans. Grrr. At about 5:50am in Saline, I got this with Canon 6D, 200mm @ f/4, ISO1600, 1/6second.



From **ADRIAN BRADLEY**. Lunar Eclipse.



From **HOWARD RITTER**. Lunar Eclipse. High haze from earlier in the night cleared and this is how the Moon and a couple of field stars (view large) looked from NW Ohio at mid-eclipse. AP 155EDF, Nikon D810A.



From **HOWARD RITTER**. Jupiter. ...Finally a Jupiter to be happy with from 155mm of aperture in our lousy seeing (on the computer screen, live video from the camera showed the whole scene hopping around by at least 2 arcsec several times per second – I'm amazed that it looks this good, and I can only imagine how it'll look if we ever get a really steady night. Same optics, ASI 2600MC camera, stack of best 1000/10000 frames at 100FPS. Autostakkert!, Registax, DeNoise. I avoided overprocessing this one, and I think it looks very natural in terms of color, saturation, and contrast.



From **ADRIAN BRADLEY**. A picture of the Lunar Eclipse that included the planet Uranus.