

The Objective Lens

University Lowbrow Astronomers Monthly Newsletter Supplement

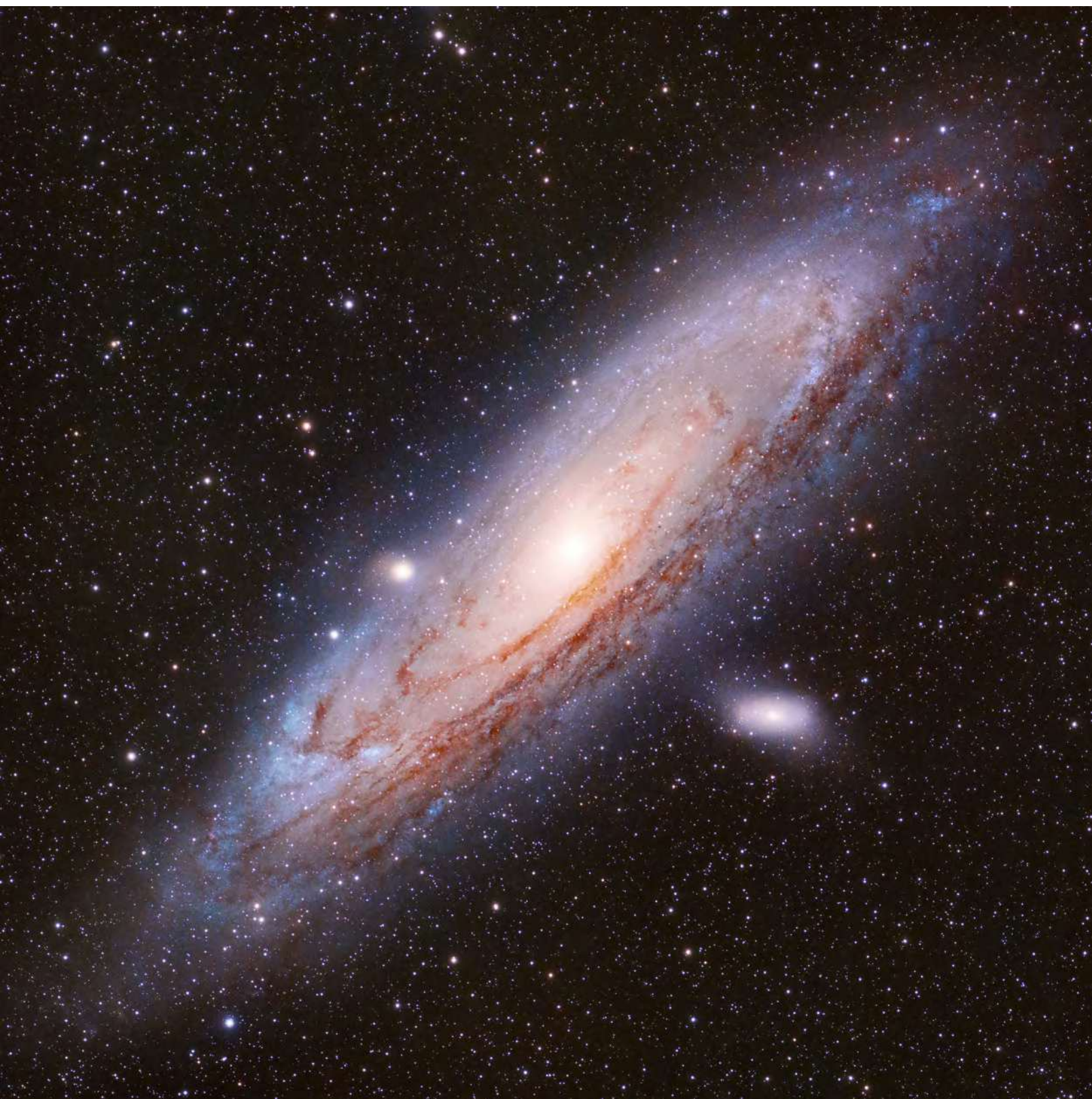
November 2023



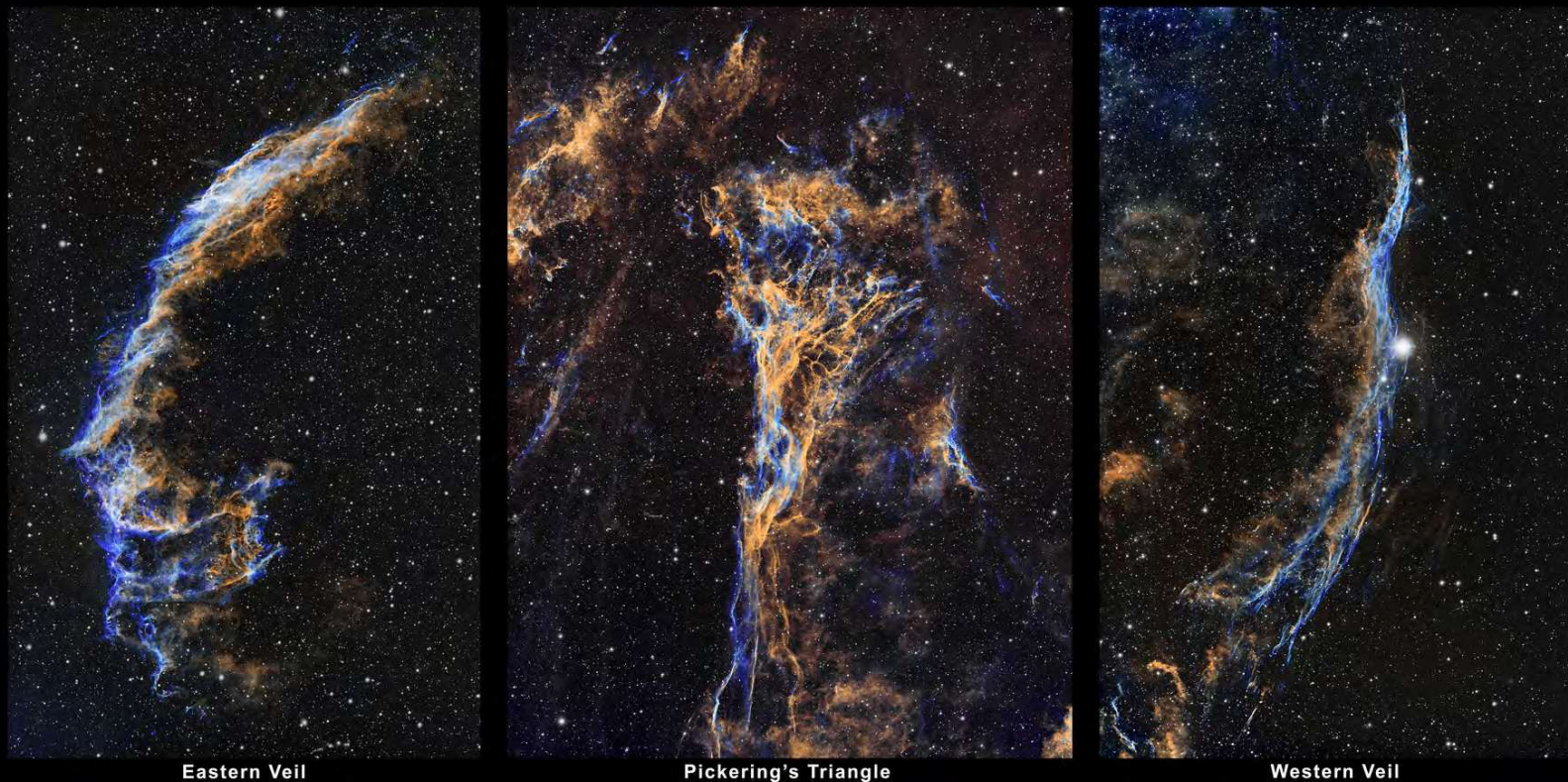
From **DOUG BOCK**. M31.



From **MATTHEW WEST**. M31.



From **AMY CANTU**. M31. ASI533MC Pro, Redcat 51 250mm f/4.9. 30 lights @240 seconds, 100 gain. 30 darks, flats, and dark flats. ZWO 30mm mini guide scope. Optolong UV/IR Cut Filter. Pixinsight and Photoshop.



From **GLENN KAATZ**. A collage of three images that I recently obtained of the Cygnus Loop region. They include the Eastern and Western Veil nebulae as well as Pickering's Triangle. All were obtained with the same set of equipment and consist of 6 hours of exposure time each using Ha, OIII, and SII filters. Here are the particulars:

Explore Scientific ED102 apochromatic refractor with a Hotech field flattener

Celestron CGX mount

ASIAIR Pro

Orion 60mm guide scope with an ASI290 mini guide camera

ASI1600MM Pro main camera

ZWO 8 position electronic filter wheel

Astrodon 5 nm Ha, ZWO 7 nm OIII and SII narrow band filters

2 hours of 5 min exposures through each filter

Processing with Pixinsight, Photoshop, Russell Croman Star, Noise, and Blur Exterminator Pixinsight plug-ins



From **GLENN KAATZ**. This is M33, also known as the Triangulum Galaxy. I highlighted the star-forming regions by collecting H alpha images and then combining those data with the final LRGB image. Overall, the final image was pretty good but would have benefited by more imaging time with LRGB filters to bring out details better.

Object: Triangulum Galaxy (M33)

Telescope: Explore Scientific ED102 refractor with a Hotech field flattener

Mount: Celestron CGX

Imaging camera: ASI1600MM Pro at -15C

Guide scope: Orion 60mm

Guide camera: ASI290MM mini

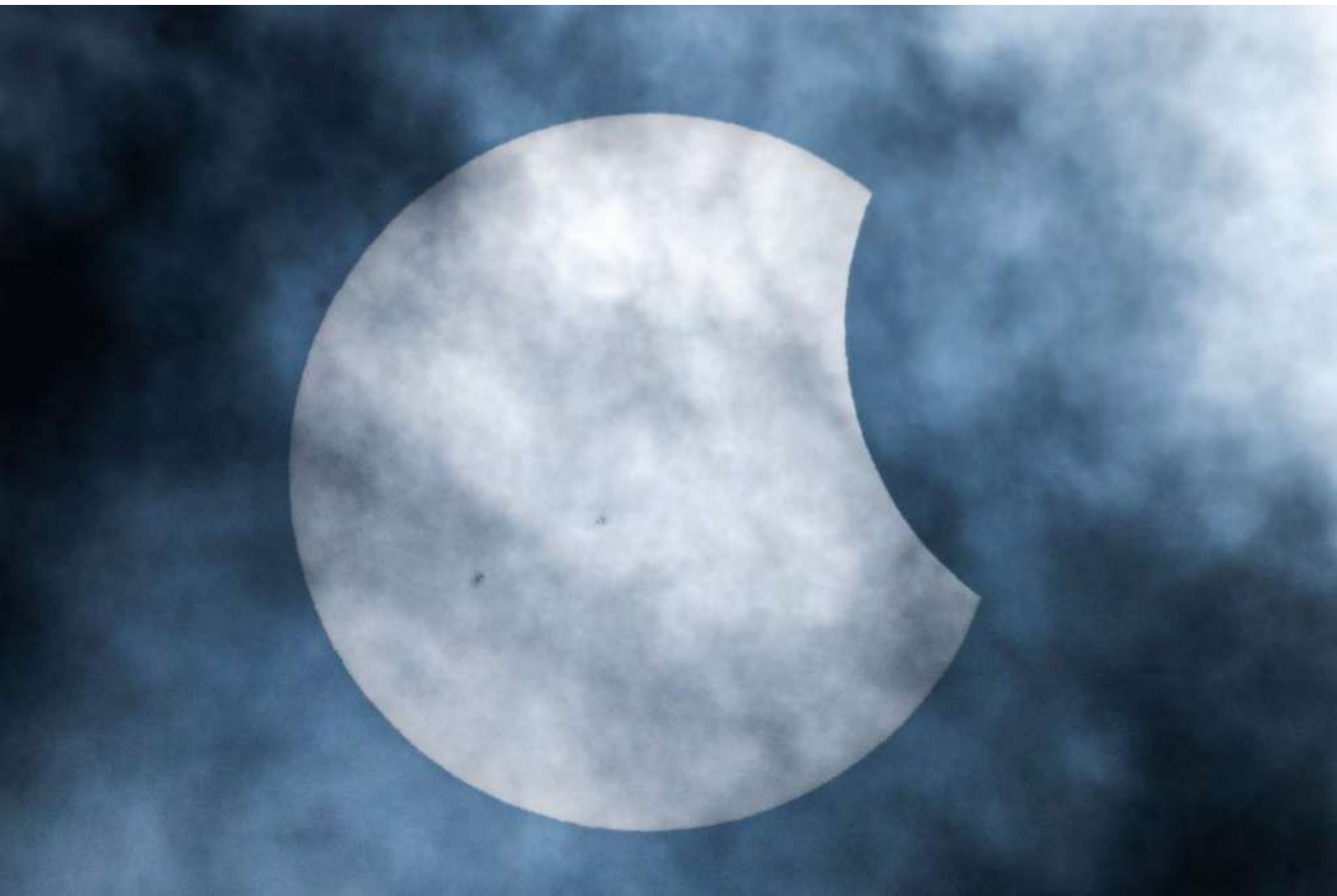
Filters: Astrodon 5nm Ha, Optolong LPro for luminance, ZWO RGB in an 8 position ZWO Electronic Filter Wheel

ASIAir Pro microcomputer controlling all sessions

Integration time: 2 hours of 5 min exposures with each filter for a total of 10 hours



From **ADRIAN BRADLEY**. First bite.



From **ADRIAN BRADLEY**. You can see groups of sunspots in this shot. 1/8000sec, ISO 100, 600mm, f/22.



From **ADRIAN BRADLEY**. The eclipsed sun was bright enough to shine through clouds. 1/8000sec, f/29, 435mm, ISO 100.



From **ADRIAN BRADLEY**. More eclipse!



From **ADRIAN BRADLEY**. Taken with an iPhone.



From **GARY NICHOLS.**



From **GARY NICHOLS**. NGC7000.



From **NATHAN MURPHY**. Set-up for eclipse.



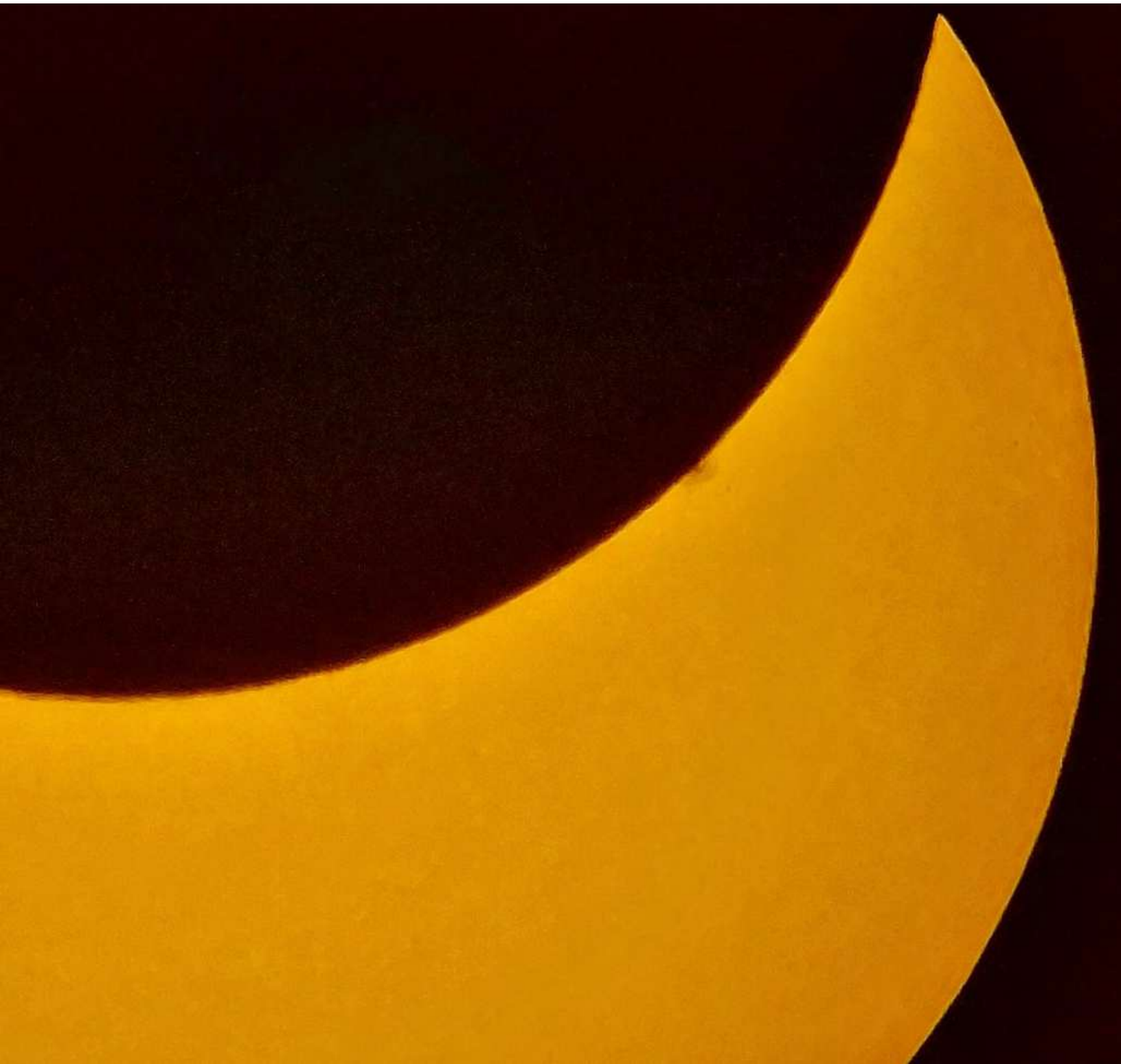
From **DMITRI TSAHELNIK**. . I attended a high-power rocketry event as a videographer today but I also made sure to try to get some photos of the eclipse as well.

I realized I didn't have any useable solar film a week before, and any online order would be a day late so I went to the chair of my university physics and astronomy department to see if he had any, thankfully he did and was kind enough to give it to me (Along with a stack of filter glasses that I was to hand out.) And I was able to throw together a diy filter.

At the event I used my scope to take photos of the launches and got some good photos of the eclipse as well, I was also able to show between 20-30 people views of the eclipse through the eyepiece.



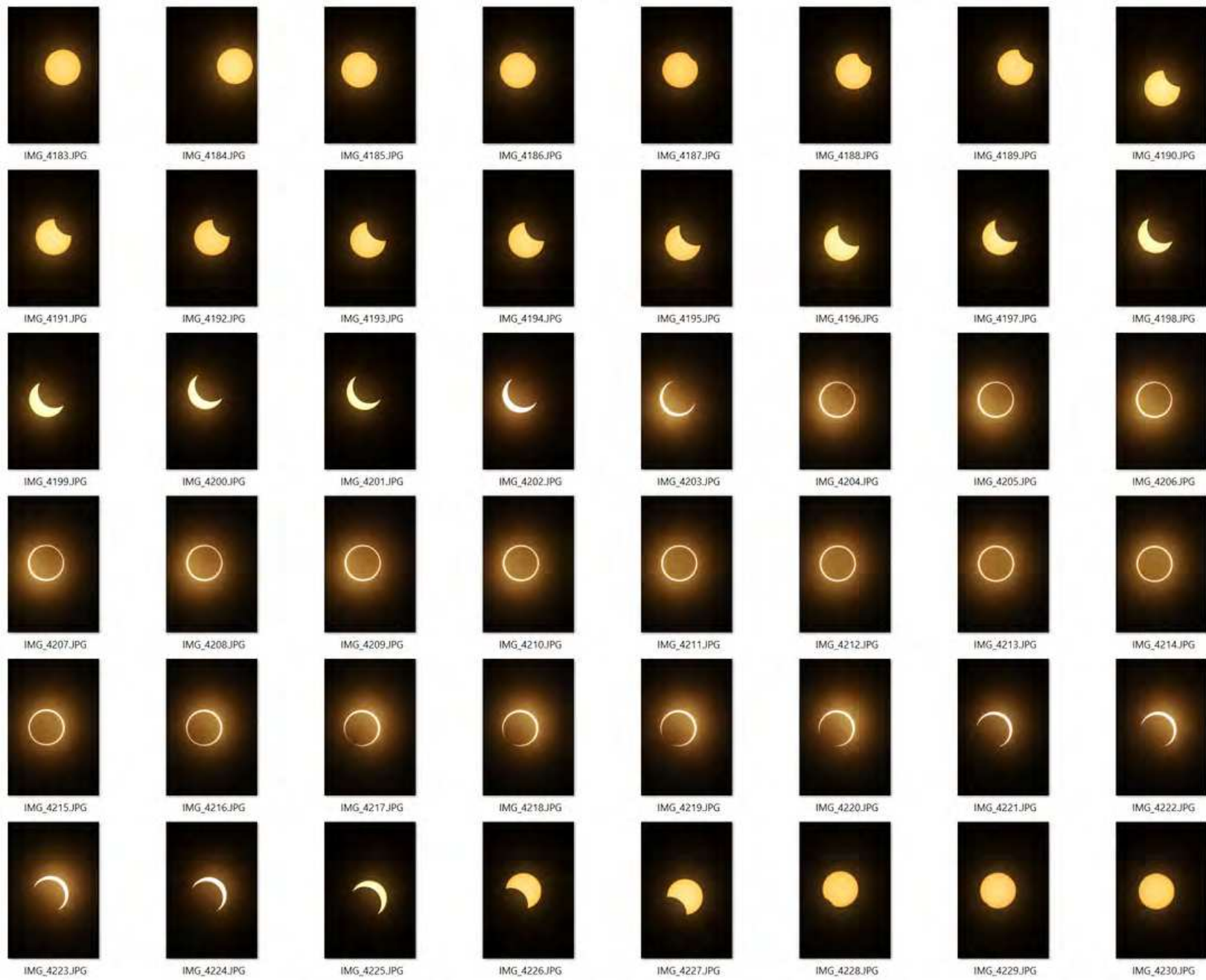
From **DMITRI TSAHELNIK.**



From **DMITRI TSAHELNIK**.



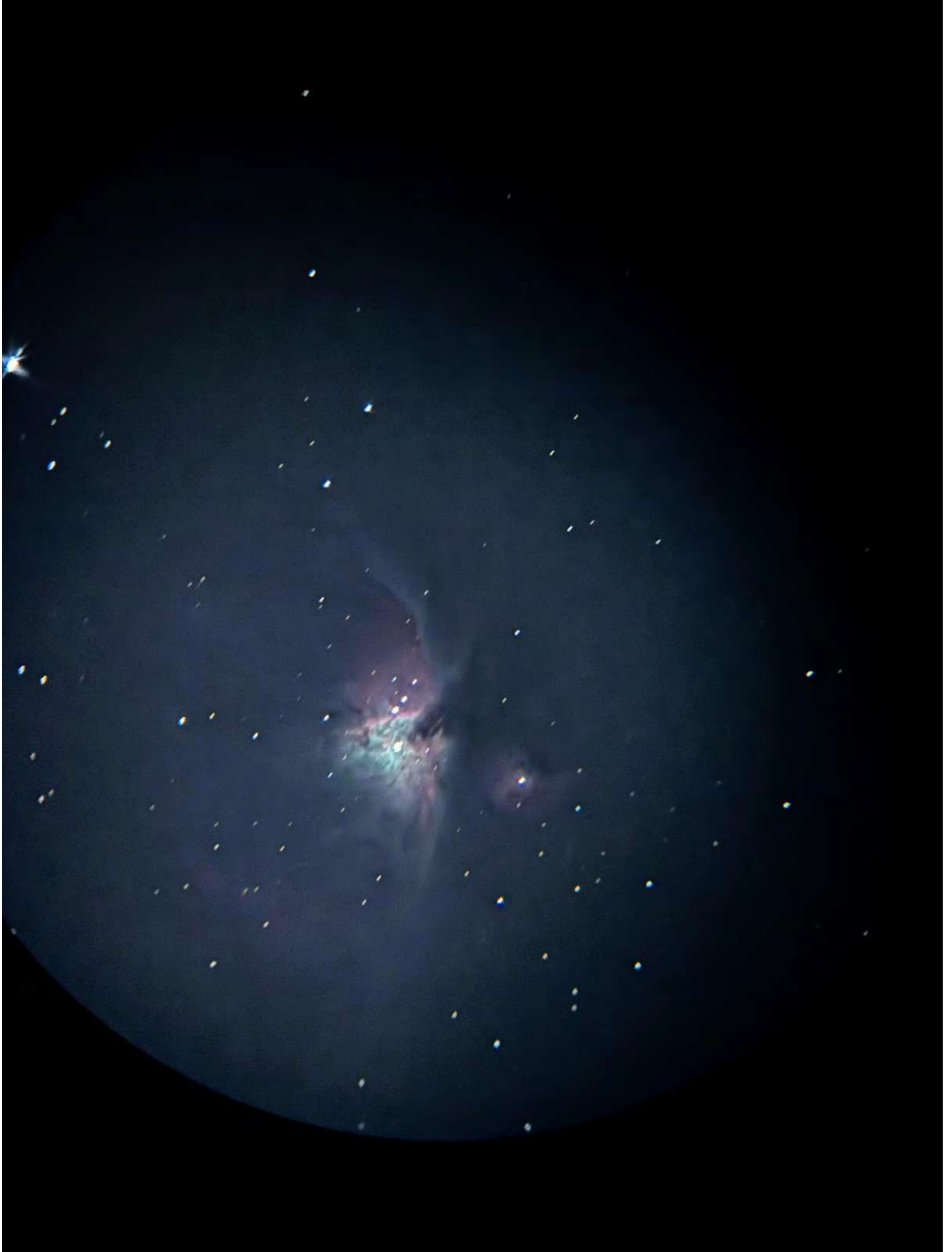
From **BRIAN CLOSE**.



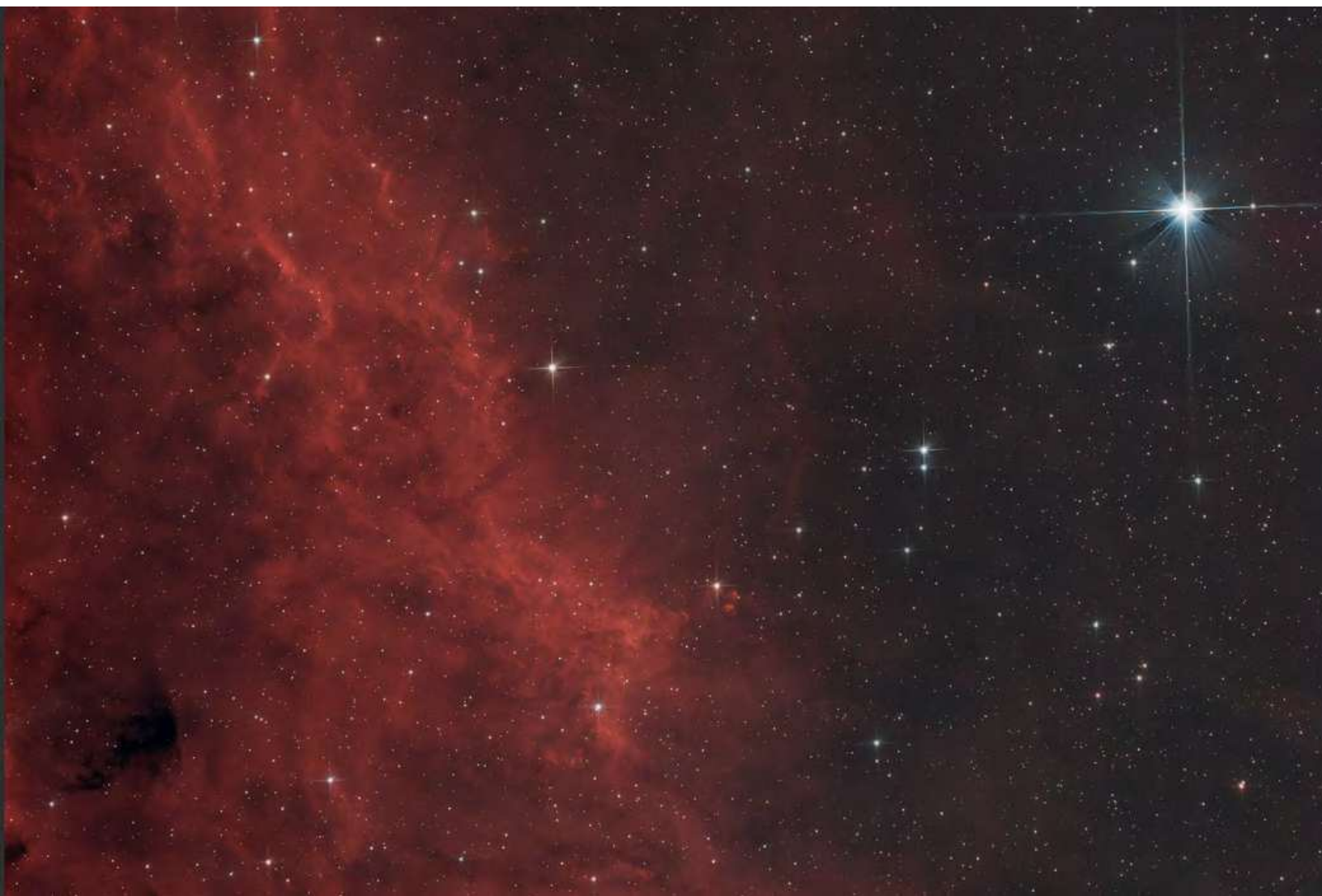
From **BRIAN CLOSE**.



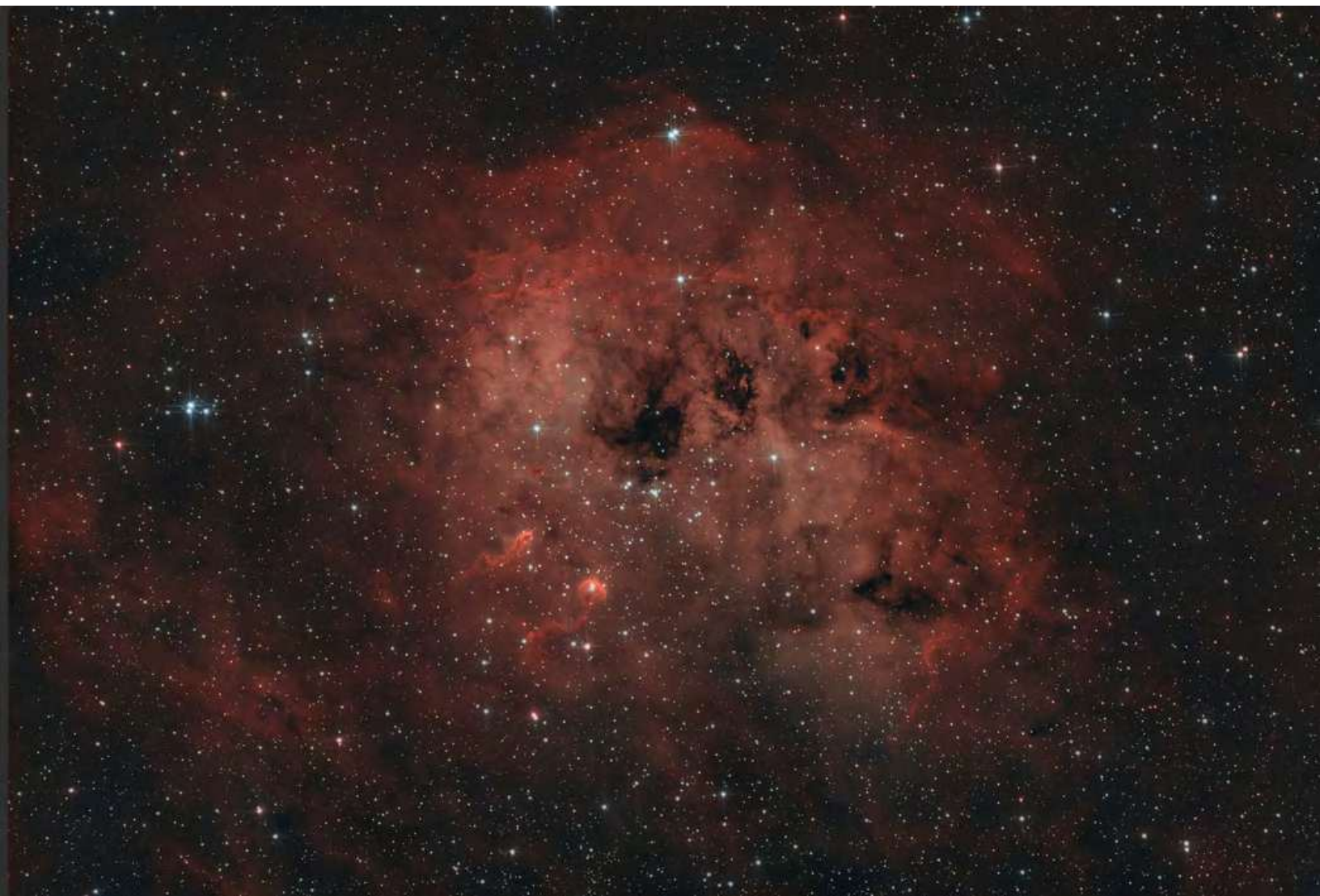
Orion Nebula



From **MATTHEW WEST**. Orion Nebula.



From **DONOVAN DREW**. Close-up of California Nebula. I was able to get some imaging done last night on the California Nebula with the 8" F5 Newtonian. This was captured with an asi294mc-pro and duoband filter. 117, 120 second subframes.



From **DONOVAN DREW**. Tadpole Nebula (IC 410). Located over 12,000 light-years away in the constellation Auriga.



From **AMY CANTU**. Phantom of the Opera Nebula. ASI533MC Pro, Redcat51, Roughly two hours of 240sec subs at 100 gain. L-eXtreme filter. Processed in PixInsight and Photoshop.



From **AMY CANTU**. Partial annual eclipse taken from up north with 300mm lens on Canon 6D Mk II.

