The RASC-Kingston Centre 2024 Member Image Gallery

Member-submitted best imagery of the year



This is the Wizard Nebula, NGC 7380.
This is a narrowband image captured with the following equipment in November 2024:

- Astrotech 12" Ritchey Chretien with a .8 reducer so the system is at f/6 .
- ZWO ASI 6200 full frame mono cooled camera, with Antlia filters. 18 x 600s exposures for each filter, S2, Ha, and O3.

Processed in Pixinsight.

I had lots to choose from this year for my favourite images. Aurora, Eclipse, Travel pics, but I chose this one because it is first light from the 10 year project of fine tuning and upgrading the 12"RC telescope.

I am pleased with how it turned out. The stars are lovely, and the telescope is picking up fine details in the nebula.

Malcolm Park



At the end of August, I was camping with friends near the service centre in Mont Tremblant National Park (an International Dark Sky Preserve). Starting about 8:30 pm on Wednesday, August 28th, 2024, I recorded almost 900 30-second exposures. I put them together in a movie that I was able to post, but I also created this star trail photo from a subset of the images.(removing the dusk and dawn exposures).

Each exposure was 30 seconds long, with a 5 second gap between exposures, so the windows tablet computer could download each image from the camera.

The gaps in the trails are from clouds that passed through. The straight trail, just below Polaris, was a "Starlink train" that had launched the day before. Beneath that, a meteor trail can also be seen.

The camera used was an astro-modified Canon T1i, the lens was an 8mm Rokinon, and the images were 30 seconds long, using ISO 800.

In a year that will probably be dominated by total eclipse pictures, shots of the great aurora we had, or a lovely comet, I thought it would be nice to see something different.

Roger Hill



One of my first attempts trying to image planetary nebulas. This is the Owl Nebula M 97, NGC 3587 taken on March 7 2024. Imaged with a 9.25 Celestron Evolution alt/az mount along with a OSC ZWO 294 camera.

189 individual 8 second frames stacked with SharpCap for a total of 1512 seconds or 25.2 minutes. Some basic processing in Affinity Photo such as cropping, noise reduction and sharpening was applied.

The Owl Nebula is approx 2300 light years distance from Earth and is the result of a sun blowing off its outer shell. I find planetary nebulas are challenging objects to image and as such I have limited experience with my setup photographing them but hope to do more in the future.

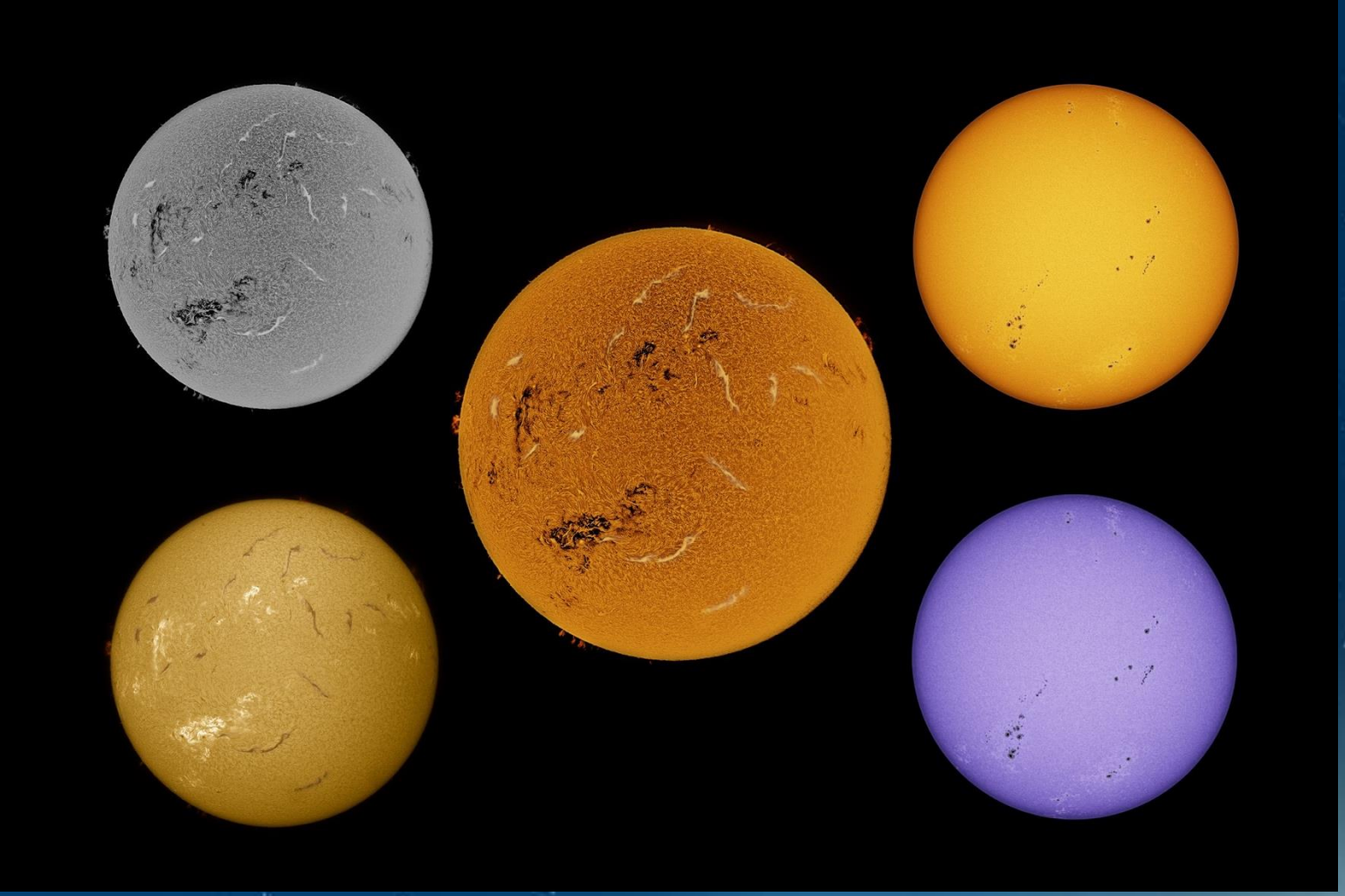
Mark Deslaurier



NGC891

1016mm f8 AP Apo,. 305 minutes at 800iso, Canon 7DMkI.

Mark Kaye



Solar imaging is fairly new to me as I started just over a year ago and I enjoyed the new challenges. This image of the sun is a composite of different processing and capture methods on the same date, April 22, 2024. The sun is a very interesting target and ever changing. This is by far the best of my solar images to date. I also chose this as my best because this picture was chosen as second place in the Solar System category at the Starfest imaging contest. It really is wonderful to have your efforts recognized by other imagers. I never dreamed I'd ever get an awesome, hand crafted StarFest imaging contest trophy.

White light images captured with;
- Askar V @80mm with flattener - FL 495mm
- 50mm guide scope, zwo 120 mono guide camera
- SkyWatcher EQ6-R pro mount
- ZWO ASI183MM CMOS cam
- Pegasus power box with dew control
- Pegasus focus cube
- Pegasus Falcon Auto rotator ZWO EFW
- Filters - Continuum filter in filter wheel and Baader solar film over aperture

Shelley Jackson



Canon 60D camera on tripod
35mm Zoom lens, f/4, ISO 1000, 2.5s



Canon 60D camera on tripod
50mm prime lens, f/4, ISO 2500, 10s

Quest for Comet C/2023 A3 Tsuchinshan-ATLAS

Searching for an accommodating horizon to view Comet C/2023 A3, my wife Janet and I chose Desert Lake, viewing from Snug Harbour resort on Sept. 20th, 2024. Just as Venus was setting and before the waning gibbous Moon rose above the trees in the east, we were suddenly able to see the comet with binoculars for the first time! We immediately started taking photos as it slowly became brighter with dusk settling in. What is so awesome about unique celestial events is that everyone in the world can see and appreciate them at the same time…a sign of hope that links us all together!

Bruce Elliott

Moon 2024-04-20
1 Ms



Though I mainly concentrate on imaging galaxies the Moon intrudes every month. So at least once a month I take an image of the Moon for Donna. My image from April 20 I am particularly happy with. It was taken with my Mallincam Universe on my C11 SCT. It is a composite of 12 panels taken of one millisecond each.

Steve Craig



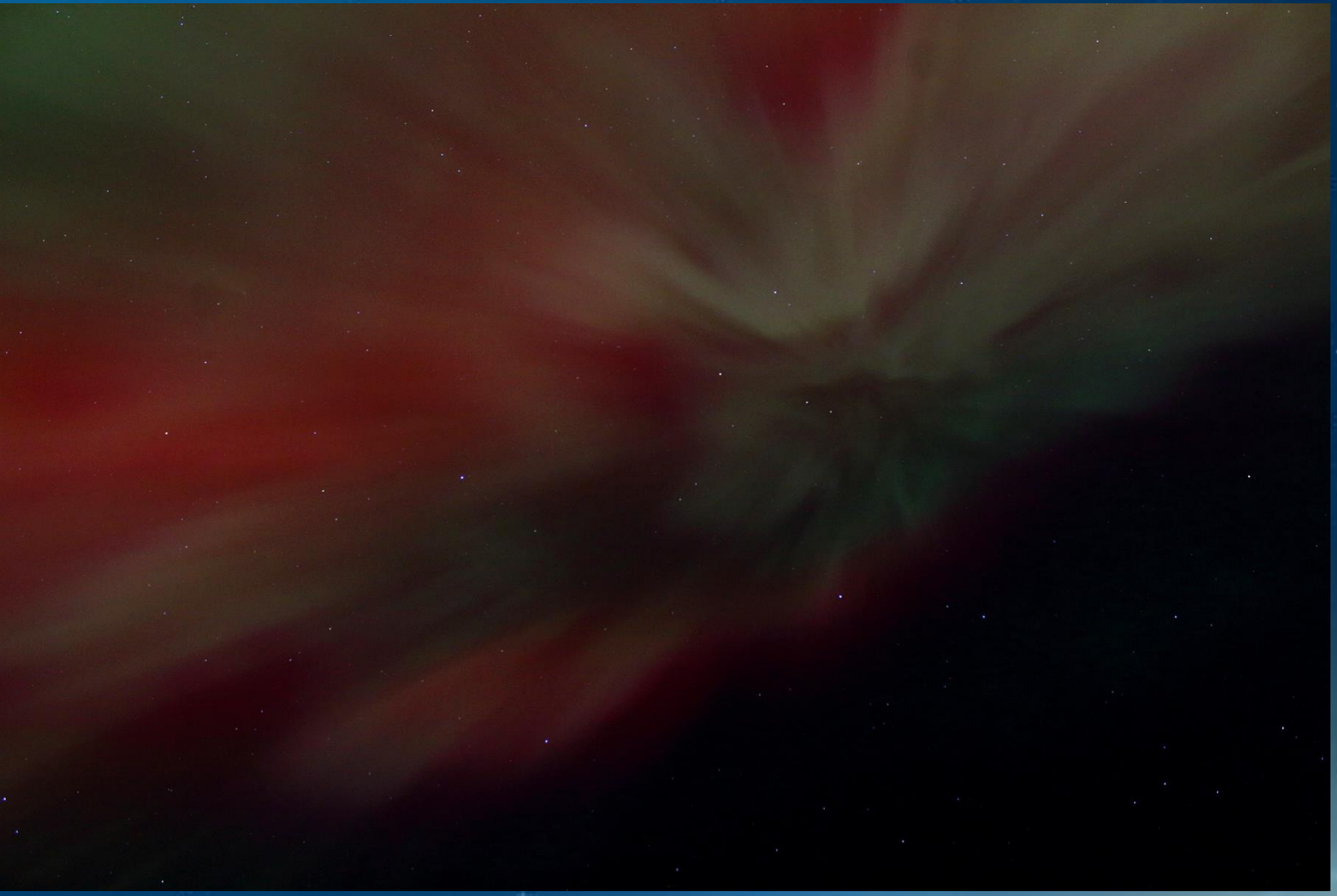
The new-to-us Celestron OTA combined with some new image post processing has started a new era of sharper and larger image scale planetary, with this Jupiter, the Great Red Spot, the moon Io and the shadow transit of Io coming up very nicely. Best of the year!

Equipment:

- Skywatcher AZ-EQ6GT mount,
- Celestron 9.25 SCT, x1.5 barlow,
- ZWO ASI585MC camera.

In addition to the normal processing with autostakkert! v4, registax wavelet and imagemagick annotation, we have added GIMP to the mix with black level reset, increased saturation and some unsharp mask.

Kevin Kell

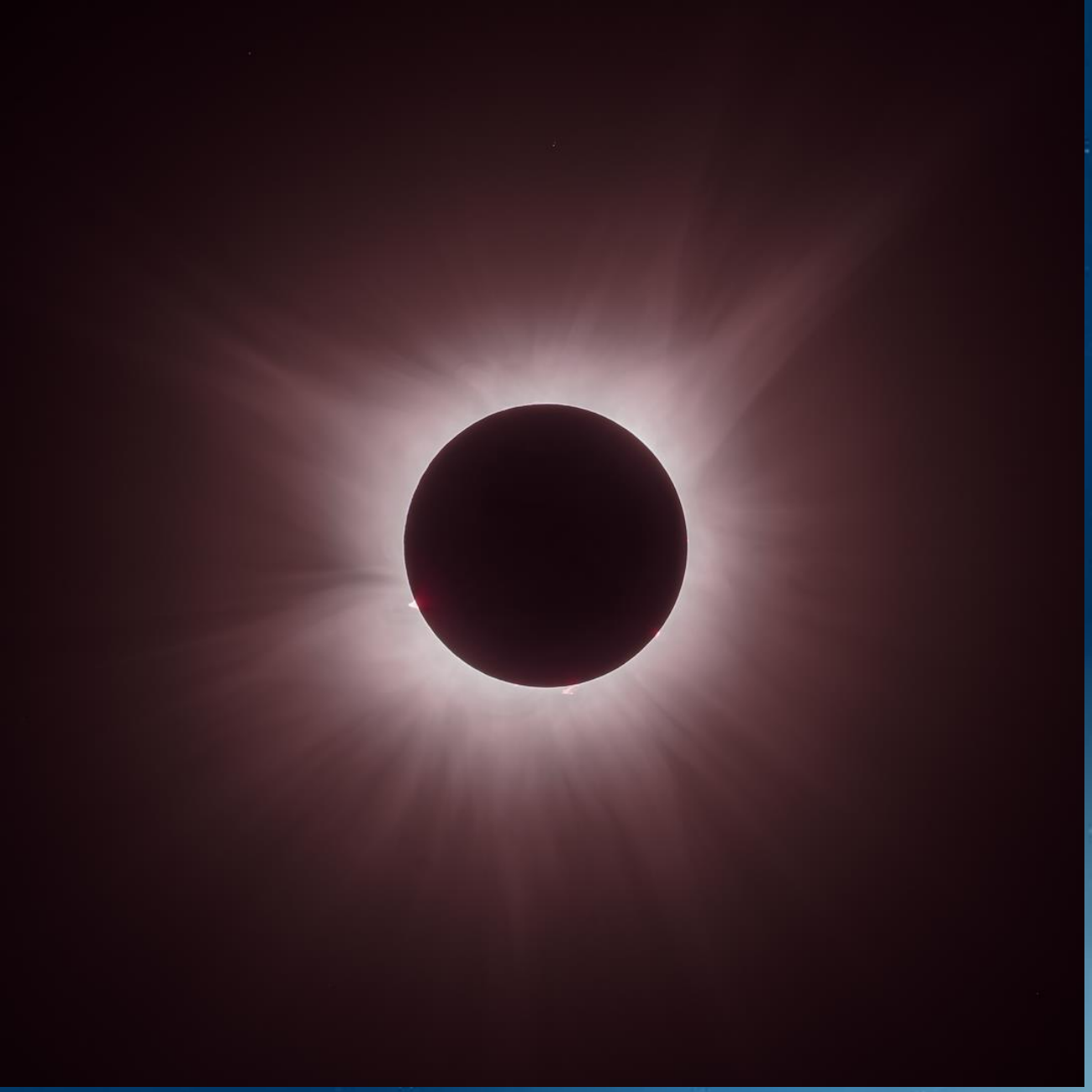


The specs:

- Canon EOS Rebel T5, October 10, 2024, 10:08 p.m.,
- lens 18-55mm set at 18mm,
- 8 second exposure, ISO 1600, aperture 5.0

About the image: This was taken during the "superstorm" auroras on October 10, 2024. This was one of the most spectacular displays I have seen in my lifetime of over 6 decades. It is the only time I can remember seeing the "swirlies" at the zenith as the strong colourful bands of light travelled upwards and met overhead, then spread out like the petals of flowers. Truly a night to remember!

Rose-Marie Burke



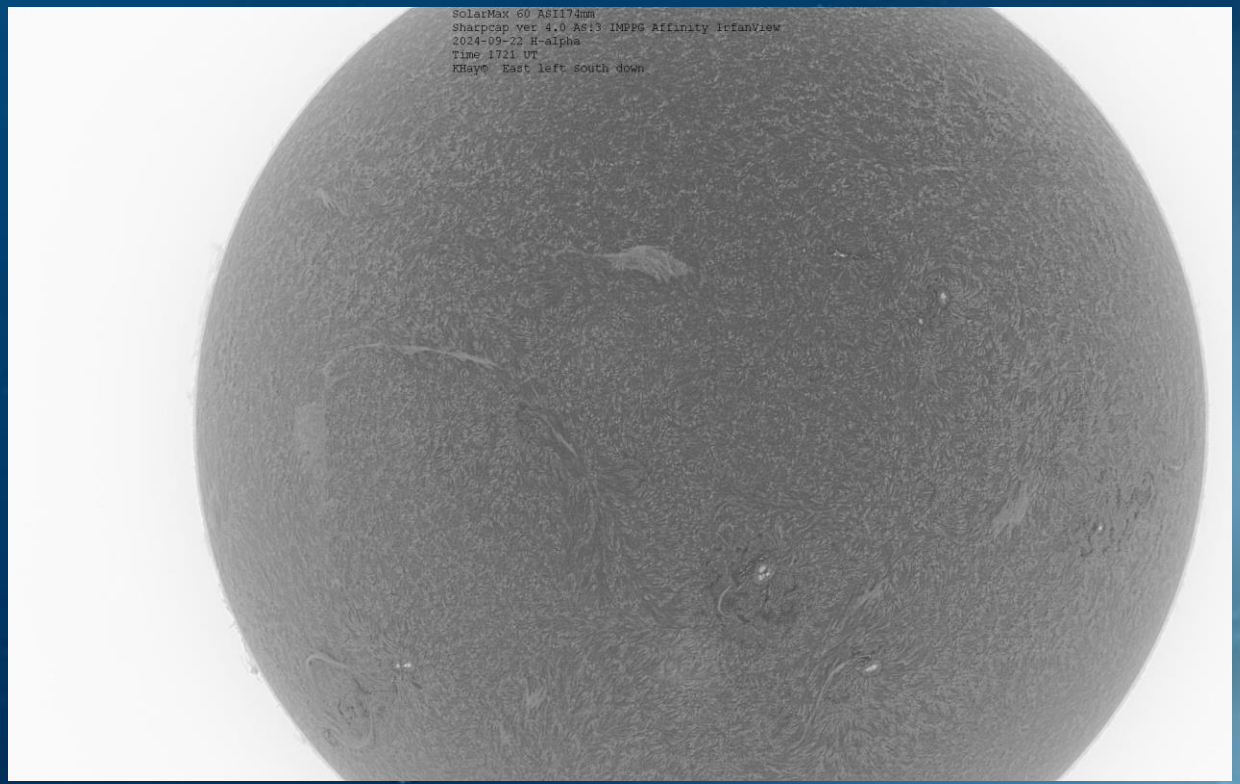
I selected this picture as I experienced my first total solar eclipse on April 8, 2024 in Magog, Quebec and it was simply incredible! I can't believe how fast the 3 minutes and 29 seconds of totality flew by.

I used the SETnC application to automatically take pictures of the eclipse as this allowed me to enjoy the event without having to manage the camera. Photographed with a Canon R6 (modified) camera and a 600mm lens tracked using a Vixen SXD2 mount.

This is an HDR eclipse photo. This photo is a stack of 9 shots of various exposures (0.5 sec down to 0.005 sec) which allows a large portion of the full corona to be shown. They were stacked using Photoshop with some additional processing in Lightroom.

Bruce Murray





Our Sun is currently in Solar Cycle 25 and in Carrington Rotation of CR2289. On this date, September 22, 2024 which is the first day of the fall equinox the sunspot count was at 95. There were 3 groups and 11 spots in the North, and 4 Groups and 14 spots in the South.

The image is taken on the Scope- Coronado Solarmax 60 using the ASI174mm camera and a 2.5 x Powermate using Sharpcap at 1721 UTC. Processed using Autostakart3, IMPPG and Affinity Photo. This is the best 15% of the frames taken.

Both images are the same, but one is inverted to show the prominences and surface detail in a negative fashion.

This processing sequence and the skies cooperated this day, to help produce one of the better Solar images of the 2024 year.

Kim Hay



Comet C/2023 A3 Tsuchinshan-ATLAS was shot on the evening of 2024-10-20 with a 100mm lens at f/2.8 lens on a Canon 30D at ISO1600 mounted on a home-made curved bolt tangential tracker. Sixteen 30s exposures were stacked in Siril and enhanced with GIMP. Because the comet was in the trees from our house the images were taken at the public boat launch at the end of our road. I was really pleased with the sharpness of the stars and how well the anti-tail showed up. On this evening the comet was visible naked eye with a 4deg tail. In binoculars the tail could be followed for 18deg.

Rick Wagner



Dumbbell Nebula M27

While this is the brightest (7.1mag) planetary nebula it is special to me as it is the first time I finally realized the potential of my setup. Shooting from the city in Bortle 8 skies is a bit of a challenge. Guiding was the key and with the Celestron OAG it finally worked. Along with taking the time to learn PixInsight.

Date August 11, 2024 0300 UT Location: Philadelphia, PA, USA 40ºN 75ºW
Celestron 8”SCT - f6.3 reducer - Celestron OAG ASI174mm - ASI585mc - AM5mount

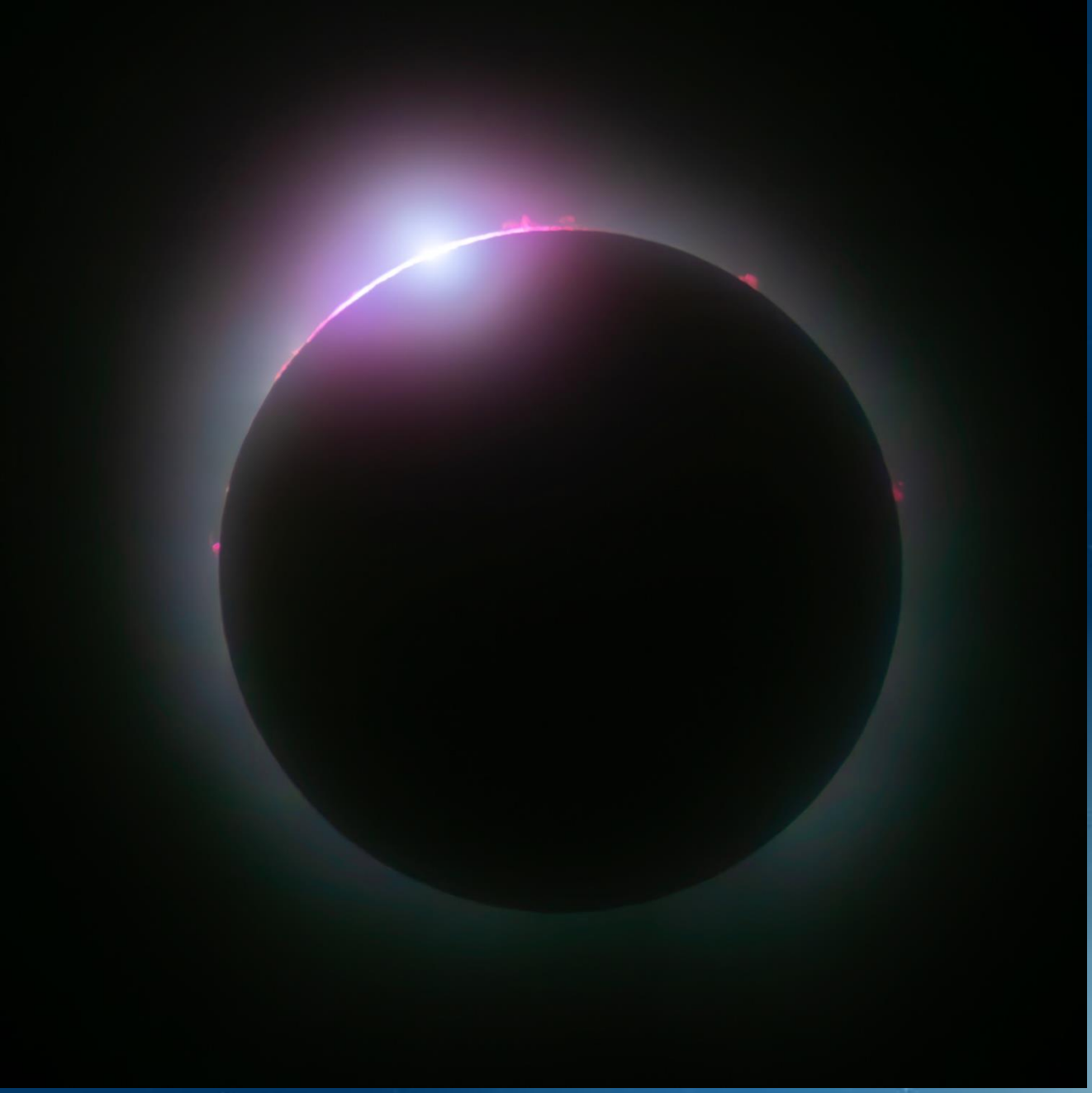
Stan Sienkiewicz



Comet C/2023 A3 (Tsuchinshan–ATLAS) 24mm f/1.78, 1s @ ISO 12500, iPhone 16 Pro Max. 2024 October 19 @ 19:33:50 EDT

I upgraded from an iPhone 8 during this comet's apparition and am impressed at how far phone camera technology has come in the last 7 years. To pick up the comet and so many stars in a one-second exposure is amazing. With the new tech one can even take multi-second exposures hand-held--mind-blown! Wish I'd had this phone for the solar eclipse and aurora earlier in 2024. This is truly the golden age of imaging!

Walter MacDonald



Brian McCracken

I selected this image for the RASC-KC 2024 Annual Image Report as it reminds me of the excitement of my first Total Solar Eclipse. On 8-Apr-2024 Marlene and I were a team. As the eclipse progressed, she provided the appropriate shutter speeds which I dialed into the camera. At Second Contact so much was happening with Diamond Ring and Bailey's Beads occurring. Then totality hit… I looked up at the solar disk in totality and was gob-smacked and forgot all about shutter speeds. I excitedly told Marlene to look up at the sun to take in the spectacle! Cheers went up from us and our neighbours! What an event… never to be forgotten.

Image was taken with a Nikon Z9, 200-500mm Nikon lens and 1.4TC (total 700mm), 1/400sec, f/11, ISO200.

The Royal Astronomical Society of Canada - Kingston Centre
2024 Member Image Gallery

All submissions are copyrighted by their creators.

Submission deadline for the 2025 Gallery is 2025 December 31st for inclusion into the Centre archives.

Edited by Kevin Kell and Brian McCracken