The RASC-Kingston Centre 2022 Member Image Gallery

Member submitted best imagery of the year

Brian McCracken

The 15-May-2022 lunar eclipse was photographed with a Nikon D800 DSLR and Nikon 200-500mm Zoom at 500mm. The 115 images were reduced to these 10 images to represent the stages of the lunar eclipse from the start at 2201 to totality at 2330. The ten images were imported into Photoshop on separate cropped layers to produce this composite.

I selected this image for the RASCKC Annual Report as a lunar eclipse is something that everyone has seen at some point in their life and is something they can relate to. The image demonstrates how the colour of the moon changes from reflecting a very white light throughout much of the eclipse but changes to a somewhat angry red during the totality phases as the shorter wavelength blue sunlight is scattered as it passes through the Earth's atmosphere leaving only the longer wavelength red light hitting the lunar surface.

Planetary Lineup with Moon at predawn over Lake Ontario – June 25, 2022

Like many, I was out about 3:30 am several times in the past week to get this image, taken from the patio of the Isabel Bader Centre. I had to merge two photos together, as the breadth of field of my wide-angle lens was too small to get all the planets in one image. Two marker constellations (Capricornus, and Piscis Austrinus) were visible, confirming Saturn's position. I included the names of the planets, as they are clear but small in the image.

It is a rare event when all the planets line up! With my equipment I could only see the four closest to Earth. Mercury is too near the sun, and Uranus and Neptune, though present, are too far away. Venus was just rising in the east, but not drowned out by the Sun yet.

What a wonderful feeling of our integral connection in the Universe!

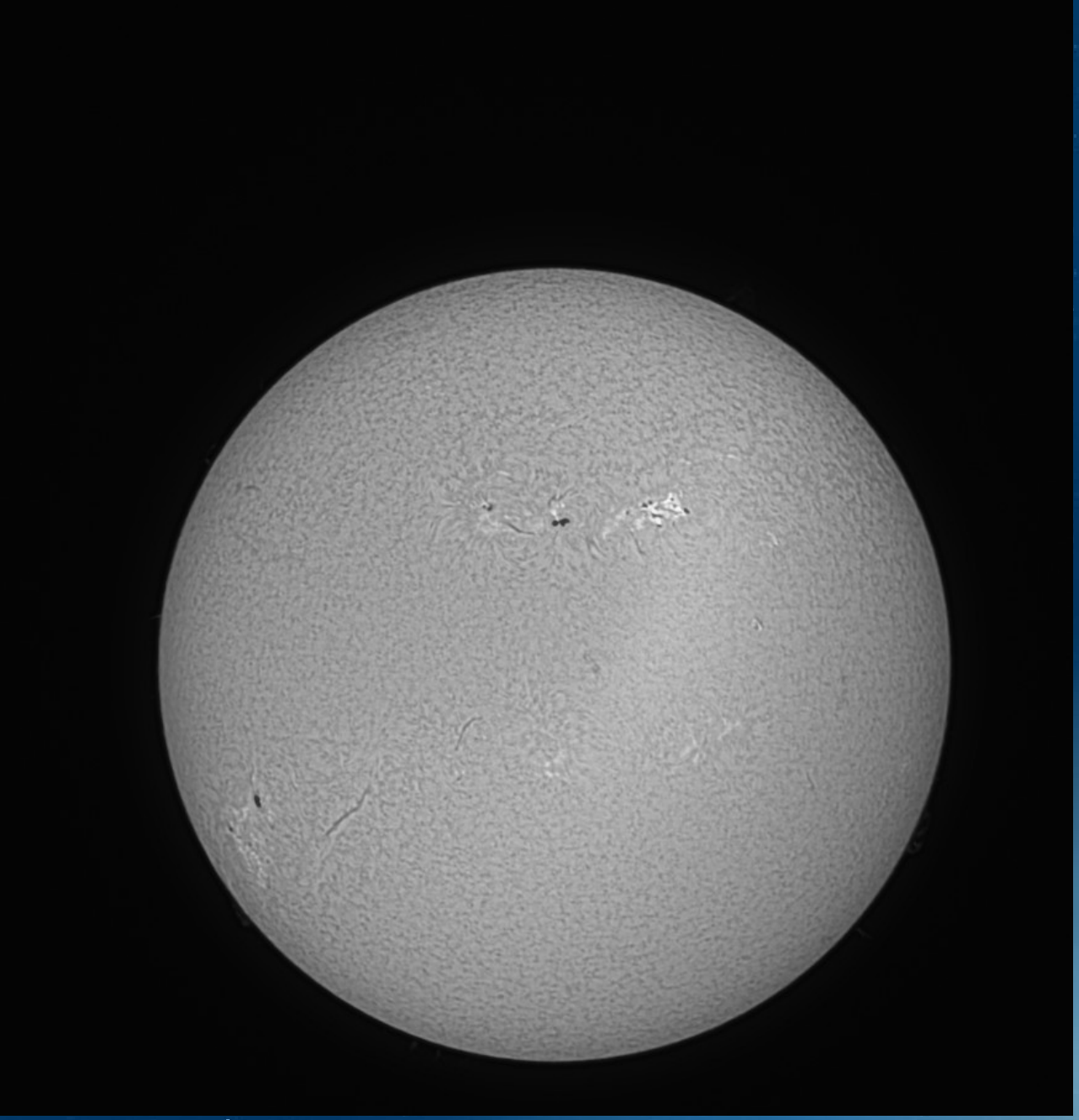
Technical: I used a Rockinin prime lens - 10 mm focal length, f/4, ISO 500, 6s, with tripod. The temperature was 150C, with no clouds and 8km/h wind to keep the mosquitos away!

Bruce Elliott

NGC6823 is the open cluster in the centre of this image, surrounded by the nebulosity NGC6820 from which the cluster was born. It lies about 2600 parsecs distant in the constellation of Vulpecula. The cluster has an integrated magnitude of 7.1 and is about 7' across with about 80 stars. The nebula is about 25' in diameter.

This image is a stack of 24 x 300s images from a ZWO ASI2600MC Pro camera on a Meade 25cm f/4 Schmidt-Newtonian. The images were stacked and histogram enhanced in Siril. Then the stars were removed from the image using StarNet, the nebula further enhanced in Photoshop, and finally the stars added back in much reduced in brightness.

Richard Wagner

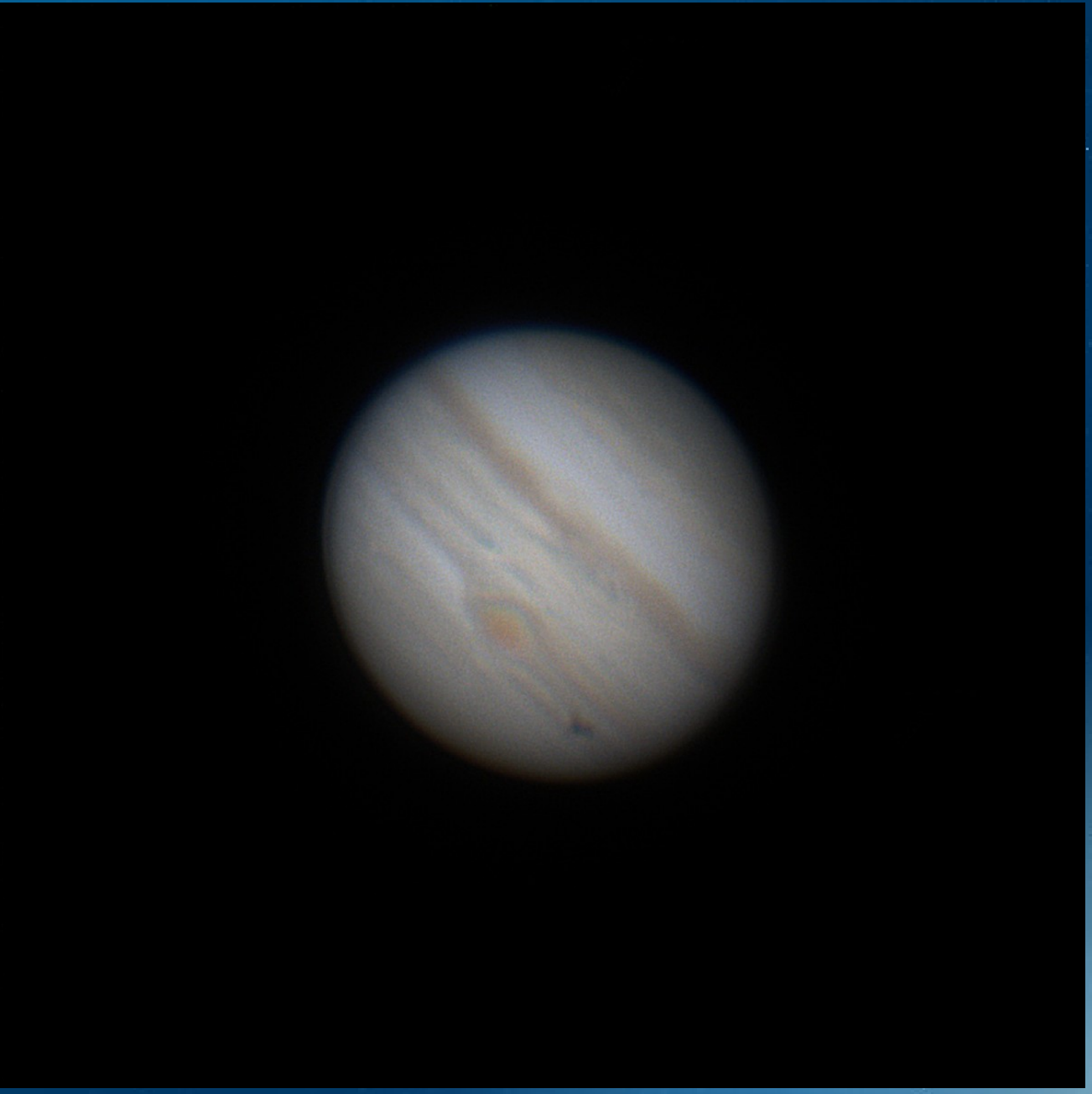


Kim Hay

This is the Sun in H-alpha using
SolarMax 60 ASI174mm
Sharpcap ver 4.0 AS!3 Infinity
IrfanView
2022-03-29 H-alpha
Time 1407 UT
CR2255
East left South down
Best 50%

On this day, the Sunspot group AR12975 released a M2.2 Solar flare. This spot was located at N13W25 on the Sun. It was a Beta Gamma Delta magnetic group which is A sunspot group with a beta-gamma magnetic configuration but contains one (or more) delta sunspots.(from www.spaceweatherlive.com)

We are in Cycle 25 and activity is picking up. .



Kevin Kell

Jupiter 2022 August 20th
I never tire of imaging Jupiter. It is huge, is beautiful and it is constantly changing. This shows the Great Red Spot along with the shadow of the moon Europa. It is the closest I have come to resolution and quality since the peak of the 2015's-2016's.

This is the best 10 % of 8167 frames taken with a Skywatcher AZ-EQ6GT Mount, a Vixen VC200L 200mm F9 scope with a x2 Antares barlow and the ZWO ASI290MC camera for an effective 43600mm Focal Length. In addition Jupiter was at 30 degrees altitude with an airmass of 1.55 and an apparent diameter of 47.5 arc seconds. Exposures were 9ms.

Software processing was : Firecapture, Autostakkert ! V3, Registax v6 and ImageMagick.

NGC 281
I choose this image because after many, many months of disassembly, modification, and collimation of my OTA, this is the "first light" return to active service image.

Astrotech 12" RC ZWO ASI6200 AP Mach-1 mount. 1 hour each LRGBHa

Malcolm Park

The Iris nebula also known as NGC 7023 and Caldwell 4 is a bright reflection nebula. The nebula is magnitude 6.8 and is in the constellation Cepheus.

I imaged this nebula with my Celestron 9.25 SCT using a Celestron 0.63 reducer and ZWO 294 colour non cooled camera. This is 74 frames of 8 seconds each for a total integration time of 592 seconds using Sharp Cap. Basic post processing in Affinity photo.

Mark DesLauriers

Roger Hill

Sun Dogs

However, I have one that is currently my wallpaper, and it was taken with my Google Pixel 6a. It's a single shot of the glorious sun dogs from December 20, 2022.

It was taken from the side of a small country road north of Cardinal as my wife and I were on our way to have breakfast at the truck stop in Johnstown.

What surprised me about this picture is that the incomplete solar halo can be seen against the snow, and the trees in the background. The solar pillar also extends down through the barn, too, which is not an effect I've ever seen before.

This image is as it is straight from the phone's camera.

My favourite night sky shot of 2022 is perhaps not the best technically, but one of my favourites for interest's sake. On the morning of November 11, 2022, BigWetNose (as I refer to my German shepherd Kerrie, as she has a habit of waking me from my warm comfortable sleep during the wee hours to take her outside to answer nature's call) dragged me out in the predawn. While she tends to business I like to look up at the skies, and on this morning before sunrise I noticed a lovely moon halo. I have seen many moon halos in my lifetime but this one had a distinctive additional arc. While I was rounding up the camera and tripod an airplane left a jet trail in the midst of the scene, and the camera picked up a bit of lens flare. Nonetheless I managed to capture some of that extra arc before the sun brightened up the sky. Specs: Canon Rebel T5, 18-55 mm lens set at 18mm, manual focus, ISO 6400, f4.5, 1 second exposure.

Rose-Marie Burke

Andrew Godefroy

Waxing Gibbous Moon - shot 10 May 2022.
Taken in Kingston, Ontario,

This was my favourite shot this year as I'm just beginning to dip my toe into the whole astrophotography thing, and was pleased I could at least capture a half decent shot of the moon with just what I had on hand. I liked this pic in particular because Clavius, Tycho, and Copernicus craters are nicely shadowed, as are Reinhold, Lansberg, and Bullialdus. More broadly, it reminds us just how long the Apennine and Caucasus mountain ranges are heading north around the Mare Imbrium.

Bortle 5-6 skies
Celestron 8 SE SCT, X-Cel LX 18mm eyepiece, ND 0.9 Moon filter
iPhone 14 (mounted), 3s exposure.
Processed in Photos.

The Royal Astronomical Society of Canada - Kingston Centre
2022 Member Image Gallery

Submission deadline for the 2023 Gallery is 2023 December 31st for inclusion into the Centre archives.

Edited by Kevin Kell