



# Newsletter November 2023

Next Meeting: **Monday 27<sup>th</sup> November at 7pm**

Location: **Kyle Academy,  
Overmills Road,  
Ayr KA7 3LR**

**Topic: "Building the ETMO Observatory" by Dr Andrew Conway**

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## Presidents Word

After the success of our beginners night in October we followed with a viewing night centred on the partial eclipse of the moon. As usual the weather was a bit variable and although there appeared to be the possibility of a few clear spells, when we got to Fisherton Parish church, which was the proposed viewing location, we found that the cloud cover was 100%. The weather meant that attendance was disappointing low with only four members turning up, two of which were the organisers. A shame, as the Church had opened up for us and also laid on tea and biscuits. The weather forecast suggested that we might get some clear spells coming from the south, so we hung on for a couple of hours. Eventually we snatched about a minute of viewing time over two clear spells managing to spot Jupiter and it's moons and a quick glimpse of the moon. It wasn't a total loss however as we had a good chat with the church members and were able to show them Jupiter and it's moons. During our conversations they kindly offered us use of the carpark again for a general viewing session. We made a small donation to the church funds as a thank you for the evening.

The next event will be the Christmas meal which will be held on the 11th of December at ,,..... We already have a list circulating and which is showing a good potential attendance. If you are not on the list, and you would like to come along, there is still time to add your name at the meeting. It is always a good night out so don't miss it!

PLEASE NOTE HOWEVER THAT A NON RETURNABLE DEPOSIT OF £5 PER PERSON IS REQUIRED AT THE NOVEMBER MEETING, WE REGRET THAT IN THE CURRENT CLIMATE ONLY THOSE WITH PAID UP DEPOSITS CAN BE GUARANTEED A BOOKING SO PLEASE DON'T FORGET.

IF YOU CANNOT MAKE THE MEETING PLEASE CONTACT STEPHEN OR ME TO ARRANGE TO PAY THE DEPOSIT AT A DIFFERENT TIME.

Looking forward to 2024, we will start the New Year with a talk by Prof Victoria Martin. It is the first time that she has been to the Society and will be travelling over from Edinburgh, so please make sure to come along and enjoy her talk.

We still have several speaker slots available next year so if you would like give a talk or know of a potential speaker please let me or Stephen know. In a similar vein, if you have any subjects or areas that you would like to see covered, again let us know. It would be good to have a couple of viewing sessions in the new year, so again, if you have any ideas on venue/date let us know.



## Alex's Space

### Memorial on the Moon

During the Apollo 15 Moon Mission the crew placed a 12"x12" bronze plaque and a 6" model of an astronaut on the lunar surface in the Hadley Rille. On the plaque are the names of astronauts who had lost their lives advancing manned space flight: Virgil Grissom, Roger Chaffee and Edward White who died on the Apollo 1 launchpad fire and also Robert Lawrence, a NASA engineer who died trying to save the crew.

Russian cosmonauts are also listed: V Komarov was killed when his landing parachute ripped apart as Soyuz 1 entered the Earth's atmosphere, Yuri Gagarin was killed testing a new spacecraft and cosmonauts G Dobrevolski, V Volkov and V Patsayov who died when Soyuz II depressurised during re-entry. For some unknown reason the full facts of these events were not made public until 2021.

### How Cygnus became a Constellation

Cygnus and his mate Phaeton were racing their chariots across the sky when they collided and crashed down to Earth. Cygnus survived and saw Phaeton plunge into a river. Cygnus pleaded with Zeus to help him find his friend. Zeus turned Cygnus into a swan and after a long and agonising search he found Phaeton's body at the bottom of the river and was able to retrieve it. Cygnus buried Phaeton so that his soul would travel to the afterlife. Zeus was very moved by this loyal display of friendship. Many years later when Cygnus died, Zeus placed him in the Heavens with his wings outstretched to welcome his best friend Phaeton.

### Finally....

What does an astronaut use to hold up his trousers in space? .....An asteroid belt!

Alex Baillie



## Gordon Jenkins Monthly Blog

Dear friends,

Unfortunately I've had a bit of a disaster. About 6 weeks ago I came down with very painful sciatica (I had to spend the first four weeks lying on the floor), consequently, I have missed the last 6 weeks of University and still I'm not fit to resume.

After discussions with my director of studies we have agreed that it is best I withdraw from this year. Because I'm withdrawing for health reasons they are willing to let me try again next year.

I am of course very disappointed, but realistically I had missed too many Lab sessions and other formative assessments to be able to catch up, so starting again next year appears to be the best of a bad situation. I'm looking forward to be able to make out Monday night sessions again should my back allow.



## November/December Observing

### General

The summer constellations have finally beginning to slip away in the west, with the winter ones rising early in the east. Andromeda, Cassiopeia, Pegasus and Perseus dominate the early evening sky with late comers Auriga and Orion rising higher as the night moves on. During the night of the 26<sup>th</sup> and 27<sup>th</sup> of November the moon will come to within a degree and a half of the Pleiades (closest at about 1am), and the moon, Uranus and Jupiter will form a line, though given the moon will be almost full it may over power much of the view. There are plenty of deep space objects to see in the coming winter sky, including M33 Andromeda which is well placed for viewing, as are the Pleiades (M45). The Double Cluster in Perseus is a gem, and is visible in binoculars, as well as in a telescope of any size. For a real challenge there is Mirach's Ghost, an 11.7 magnitude galaxy (NGC 404) right next (< 7 arcminutes) to the 2<sup>nd</sup> magnitude star by that name. It might require some serious optics to see, but can be picked up photographically with modest equipment. One other large nebula some of us might want to try to capture is the California Nebula (NGC 1499) in Perseus which is over two degrees in length, equivalent to four lunar diameters!

### Planets

Mercury and Mars remain lost in the suns glare, and Venus will continue to dominate the morning sky as it moves around the sun ahead of the earth . Jupiter reached opposition on the 2<sup>nd</sup> of November and is very well placed for observing, also being high in the sky in Ares. Saturn is further to west and about 18 degrees lower in the sky, but is still readily observable in Aquarius, though best seen in the early evening, if you want to see it soon would be good! Uranus reached opposition on the 13<sup>th</sup> of November and is about 14 degrees or so to the left of Jupiter. Neptune is also well placed almost exactly on the border of Aquarius and Pisces, but is starting to set early.

### Comets

There are no easily observable comets, though Comet 12P/Pons-Brooks (mis-identified as 21P last month), can be seen with sufficiently large optics. It has been flaring up recently and reached magnitude 9.4, but is fading a bit at the moment, that said it flair up at any time. It is currently travelling through Lyra on its way to Cygnus and will pass just over half a degree from Vega on the 5<sup>th</sup> of December. It could brighten to magnitude 4.5 by the spring, so it might be visible to the naked eye in darker skies.

### Meteor Showers

There are two meteor showers of note for December, the first being the Geminids on 14<sup>th</sup> of December, arguably the best of the year. With a new moon, they should be excellent with a ZHR of 120, assuming we are not clouded out, fingers crossed. The second one is the Ursids on the 23<sup>rd</sup> of December which peak early in the morning at 04:00, a waxing gibbous moon may cause some interference as it sets about fifty minutes after that. It only has a ZHR of 10, so it is not nearly as spectacular as the Geminids.

### ISS

Consult <https://www.heavens-above.com> for specific times and location. Check out <https://transit-finder.com/> for details and any possible solar and lunar transits.

### Definitions

ZHR: Zenithal Hourly Rate, the number of meteors an observer in a hour at the peak of the shower, assuming perfect seeing conditions (no moon, cloud or light pollution).



## Member Images

**Marc Charron**

The weather remains unkind for those doing astrophotography, however, I did manage to take a few images, particularly of the Lunar occultation of Venus on the 9<sup>th</sup> of November.

Here is an image of the moon and Venus before sunrise prior to the occultation, taken with Nikon Z7ii and 200-500mm lens.

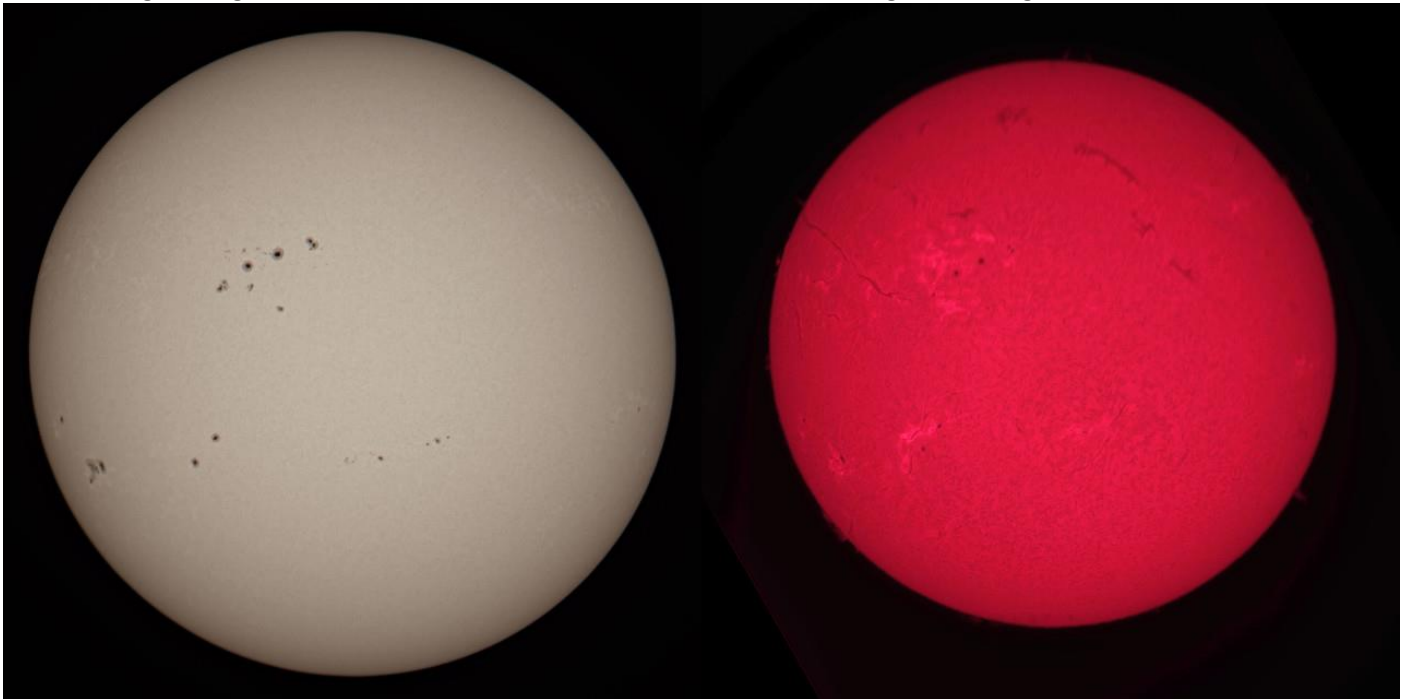


Taken with TMB 130/1200 with a Nikon D5600 on the left and with an Altair GPCAM 178C on the right



The sun has also been quite active, here it is on the 24<sup>th</sup> of November

The white light image taken with a TS86/460SDQ refractor and the Ha image on the right with a PST.



Notice the nice filaments in the Ha image, when they reach the edge of the sun they become prominences.

With the sun so active we have had aurora, however, the cloud hasn't helped see it. The recent heightened solar activity evident in the images above may mean we see some aurora over the next week or so. Stay tuned.

Here is some aurora seen on the 5<sup>th</sup> of November:



The other surprise was Comet C/2023 H2 Lemmon, which made its closest pass to earth on the 10<sup>th</sup> of November, Here I caught with my StellaLyra (SL) 150mm f4 with 0.75x Starizona reducer. A faint hint of a tail can be seen coming off the comet, unfortunately, clouds prevented me from taking more frames that might have revealed it in more detail.



Here it is on the 14<sup>th</sup> of November, this time taken at low power with a Nikon Z7ii with a Samyang 135mm f2 lens.

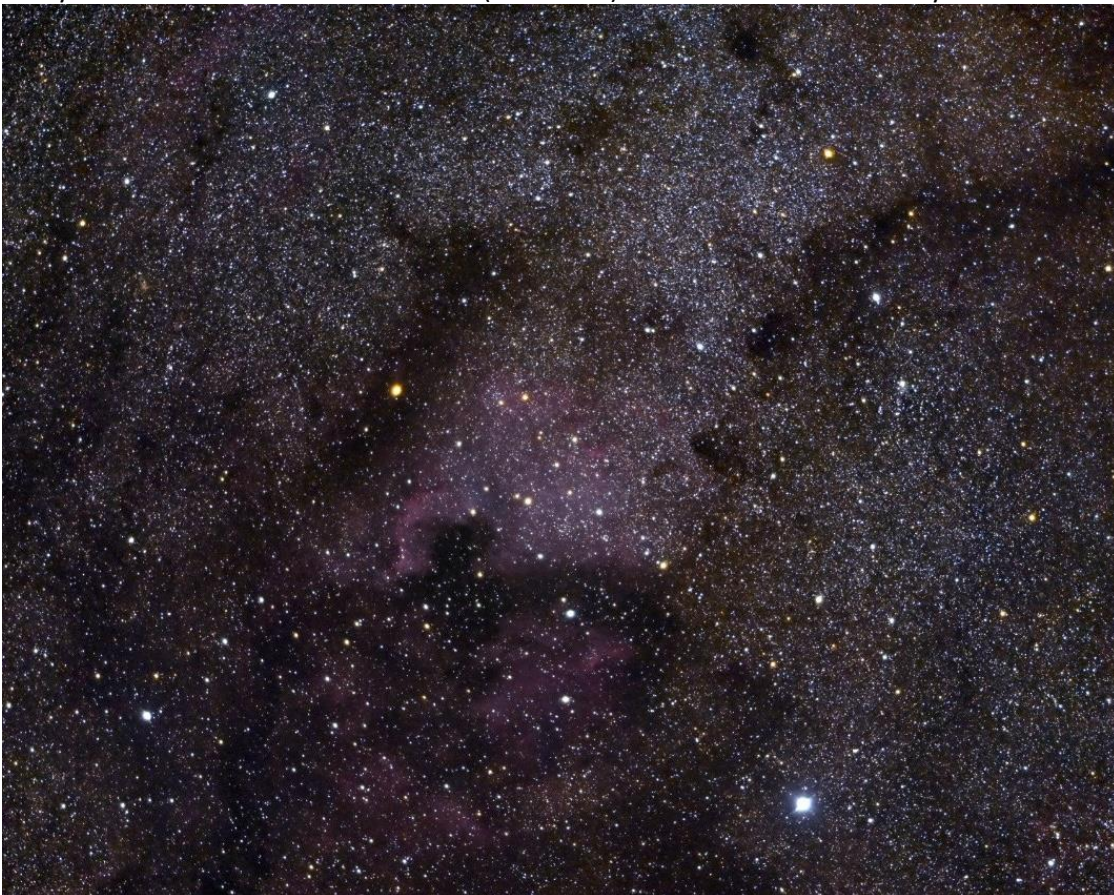




Here is an image of the Pleiades taken with the SL 150, with plenty of diffraction spikes, love'em or hate'em

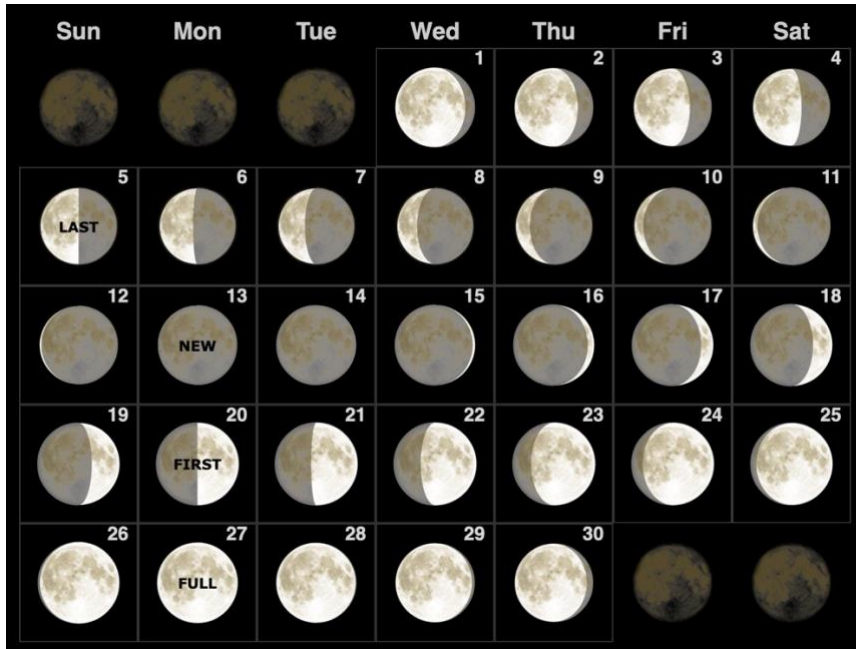


Lastly here is the North America Nebula (NGC 7000) taken with the Z7ii and my 135mm lens.

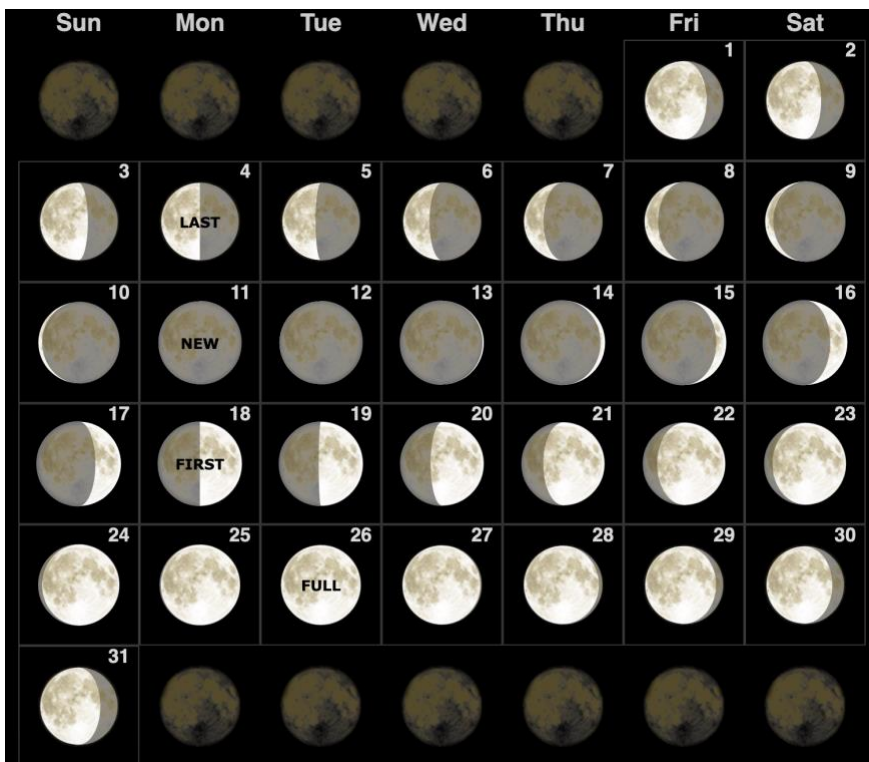


## Moon Phases

### November 2023



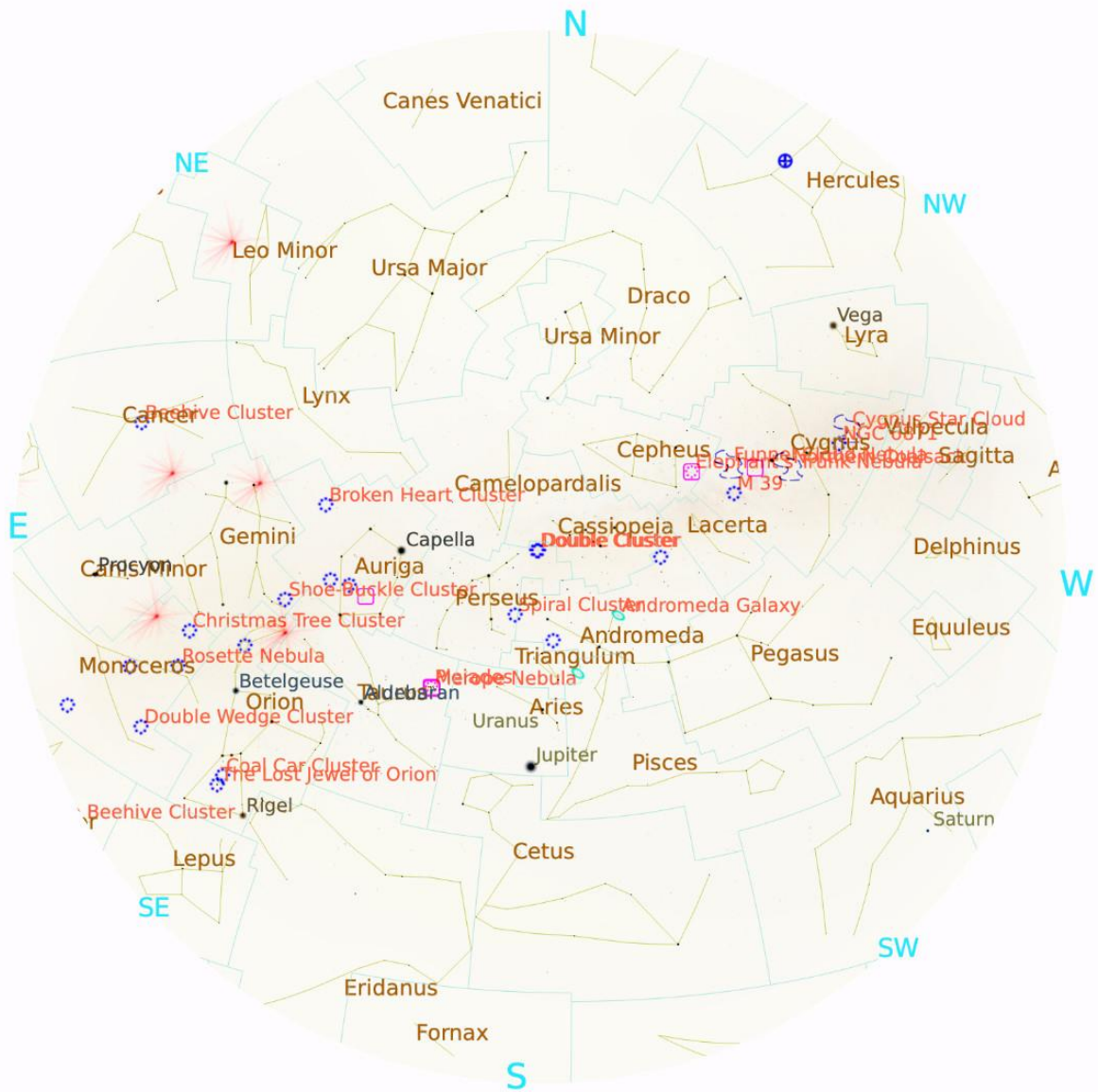
### December 2023



Credit: <https://www.moongiant.com/calendar/>



# December 2023 Sky Chart



FOV 193°    22.9 FPS    2023-12-15 21:00:00 UTC+00:00

Taken from: Stellarium

