



Newsletter December 2021

Next Meeting: **No Meeting in December**

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Presidents Word Christmas 2021

Always a good time to stock up on all those must have items of astronomical and camera equipment, it seems like it might be the only thing that you can do again this year. It's a shame that we didn't book the usual Christmas night out this year for the society but it looks like we might have done the right thing. Hopefull we can get back to normal next year. Still, if you have saved a few quid on Christmas parties and nights out what better to spend it than on more kit?

It was good to get back to real meetings this year. Zoom worked well and, although it allows us to get speakers from far and wide, it's not the same as being in the room with the speaker and other members. Getting back to real meetings was also nice in that it brought in a good number of new members and it was also very refreshing to note the high level of involvement in the meetings themselves. These two aspects are a good indicator of a successful society and are both things that we need to encourage and continue. So well done all and keep it happening.

Looking to important astronomical events, the launch of the James Webb Space telescope is in the offing with the date set at 25th of December. As you will all probably know, this telescope is the big hope for extending deep space investigation going way beyond anything that the Hubble telescope has achieved. It is not an optical telescope and therefore we will not get the fabulous images produced by Hubble, but, because it is infra red, it will penetrate better through the interstellar gas and dust as well as through the radiation. It should allow us to observe areas previously unavailable and hopes are that it will allow astronomers to look further back in time and almost to the “Big Bang” and early galaxy formation. We can also look forward to the developing science of exploration based upon gravitational waves, whatever that might bring. The efforts to get the space based interferometer LISA continue with a “target date” of the early 2030s, not exactly soon but hopefully in our lifetime! All exciting stuff.

So what I am I looking forward to apart from Christmas day? Well my favourite at this time of the year is the winter solstice on the 21st December, after which we can look forward to the spring and less of these short grey days. Of course I am also looking forward to seeing you all again at our January 2022 meeting and hearing about what Santa brought you.

In the meantime:-



December / January Observing

General

We are now well into the winter sky, assuming we can see it, weather permitting, as admittedly, it hasn't been great over the autumn. Maybe we will get a break for the winter, fingers crossed. The Andromeda and Triangulum Galaxies (M31 and M33 respectively) remain well placed for viewing during this period, however, the true stars, pardon the pun, are the open clusters in Perseus (the Double) and M36,37 and 38 in Auriga. All are very well place for viewing in this period. For daytime astronomers the sun as resumed its activity and there have been numerous sunspots on its surface, and perhaps this activity may spark some aurora for night time viewing.

Planets

Jupiter, Saturn and Venus form a nice line visible on western horizon. In nearly January they will be joined by Mercury and from the 4th to the 6th the moon will also make an appearance with this group. As time goes on Venus, Saturn and Jupiter continue to shift along the ecliptic until in late January when Jupiter is the only one left that can be easily seen.

Mars: too close the sun in the sky to be observed early in this period, though it may become visible low in the morning sky before sunrise in late December and early January.

Uranus and Neptune: Uranus is well placed to observe in the lower part of Aries, while Neptune is further south and west in top eastern side of the constellation Aquarius, though it is also well placed for observing in the early evenings, but will become less so as time moves on.

Comets

There are no easily observable comets from our location during this period. 67P/Churyumov–Gerasimenko remains in Cancer and can be seen and photographed with reasonable optics (Mag 9), and not too far from it in the sky is comet C/2019 L3 (ATLAS) (Mag 9.5) which moves from just above Castor to a little more than half way down the twin by the end of January (near ϵ Gem).

Meteor Showers

Often overshadowed by other meteor showers, the Quadrantids peak on the 4th of January. The relatively new moon sets early making for dark skies, so assuming it is clear, this could be a good shower and is definitely worth staying up for.

ISS

The ISS is visible in the mornings until the 5th of January and it returns in the evenings on the 20th of the month. Consult <https://www.heavens-above.com> for specific times and locations. If you are interested in ISS lunar or solar transits here is another site where you can obtain predictions: <https://transit-finder.com/>.



Member Images

Contributions are welcome from all our members, so if you have something you want to show please do send it in so that it can be included in the Newsletter.

Marc Charron

Comet C/2021 A1 Leonard did not disappoint (at least not too much), it passed by Messier 3 on the 3rd of December, which would have made a great image, but the weather was not very favourable for me. It got to perhaps magnitude 5 before it headed south and away from our view.

Comet near the Whale (NGC 4631) and Hockey Stick (NGC 4656) Galaxies on 25 November - 70mm with 0.8x reducer, Nikon D750



Comet approaching M3 on the 2nd of December - - 70mm with 0.8x reducer, Nikon D750



The Horsehead and Flame Nebulae on the left hand side of the Belt of Orion- 70mm with 0.8x reducer, Nikon D750



Pleiades (M45) - 70mm with 0.8x reducer, Nikon D750



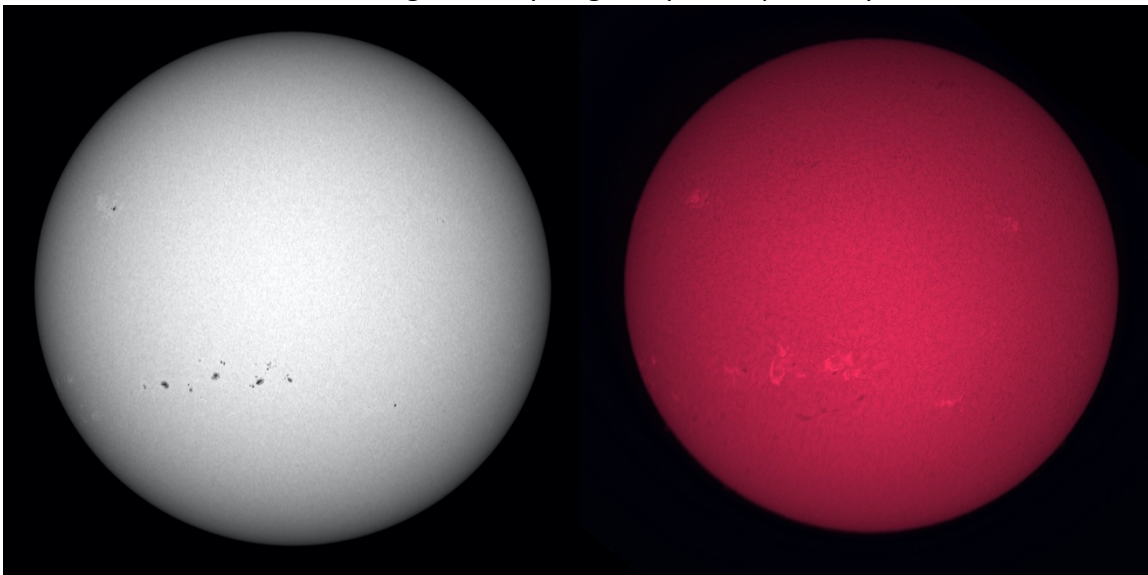
Lone Geminid. It was my first test photo for a long sequence, and it was the only one that caught one! The moon is to the right in the image. Nikon D5300 with 8mm Samyang lens.



Moon on 14 Dec – 70mm f6 with 2x barlow

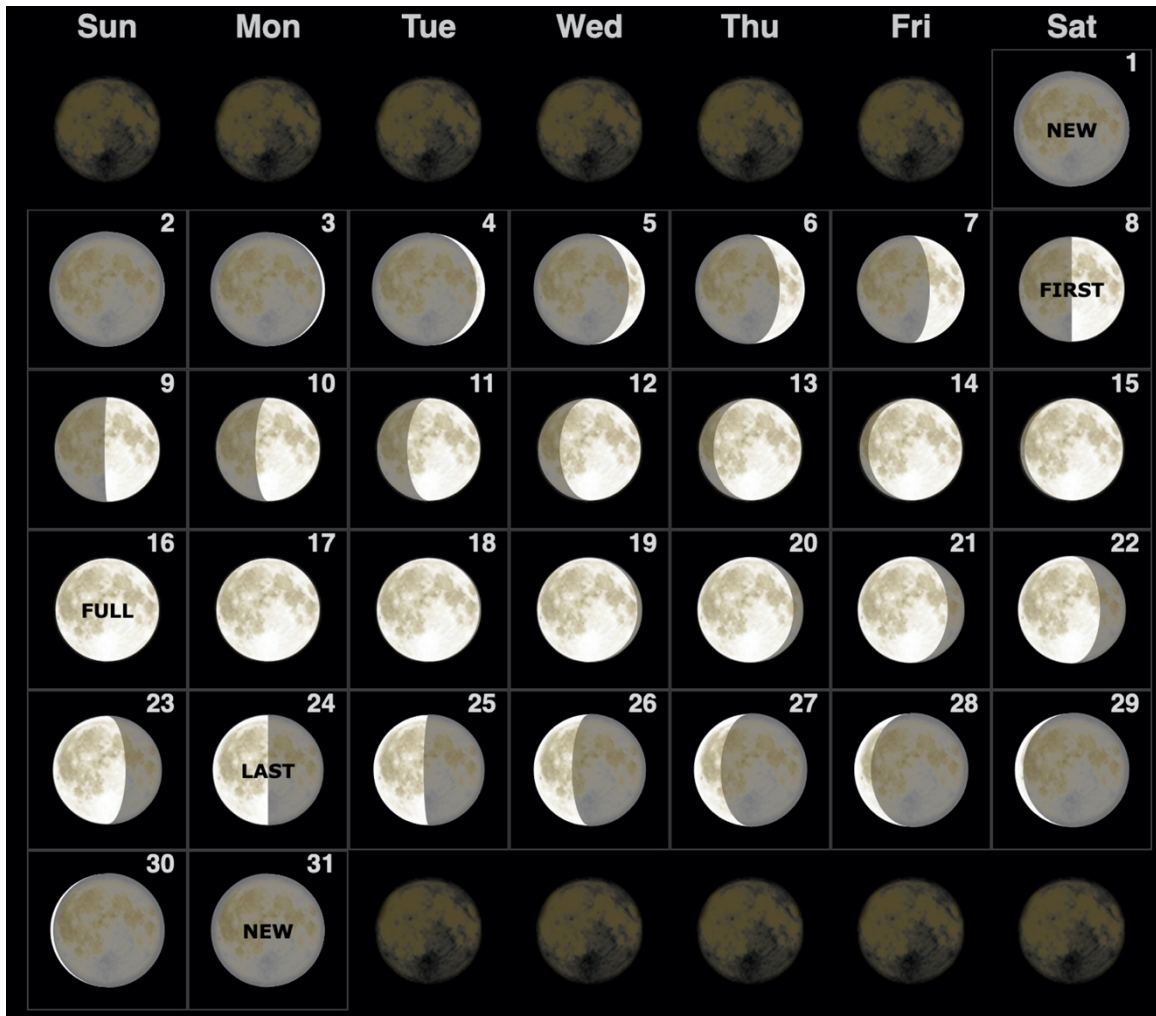


Sun on 18 December in white light and hydrogen alpha respectively. 70mm f6 and PST resp.



Moon Phases

January 2022



January 2022 Sky Chart

