



Newsletter May 2022

Next Meeting: **Monday 23rd May at 7pm**

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

**Topics: James Clark Maxwell by Prof Danny Gorman
Annual General Meeting**

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Presidents Word

At last we are out of all the covid restrictions and hopefully we can get back to normal and see our membership rise to its normal levels. With that in mind, if you have any ideas for activities or talks that we can put in place during the summer or, more particularly, the 2022/23 season, then please let me or any of the committee know. The simplest way to do that is to either speak to them personally at a meeting or email president@ayraastro.com. One of the main difficulties with outings and star camps etc is guaranteeing numbers and then sorting the logistics. We have done it all successfully before but help is always needed and some thoughts on execution along with the idea are always helpful.

To keep in touch over the break period please keep an eye on your emails, as that will be the genreal source of information on any activities that are taking place, for example, details of the Science Day at Dumfries House on the 29th of July. We also plan to keep the newsletter going on the usual monthly basis so if you have any content please send it directly to Marc Charron our newsletter editor.

Looking forward to next year, we are planning to put in place a full programme of speakers and look into the practicalities of using the Zoom platform to access remote speakers. If you know of any speakers or have a topic on which you would like a talk, please email your thoughts to president@ayraastro.com.

The following is a list of provisional meeting dates for the next session. Please put them in your diary but remember to check the website later in the year for the final dates. The dates are provisional because they will depend on room availability, which we only discover once we have submitted our list to the Council. All dates are Mondays as usual.

2022

26 September, 24 October, 28 November, 12 December (potential Christmas Meal rather than a meeting).

2023

23 January, 27 February, 27 March, 24 April, 29 May (AGM and a Bank Holiday so likely to change)

I look forward to seeing you all again in September if not before.



Member Articles

Cars on Campus 2022 By Graham Longbottom

On the 1st May Cars on Campus returned to St Joseph School in Kilmarnock and AAS was present. The weather didn't look promising running up to the date, but on the day it was cloudy and a little wind but most



of all dry and reasonably warm. The Team (Stephen, John, Alex and Graham) arrived at 10:30 and took our usual pitch near the entrance gate setting up several scopes and a small gazebo (just in case). The place was packed with an interesting assortment of vehicles and the sun began threatening to come out.

We had quite a number of visitors to our display where we chatted to them about astronomy and showed them the telescopes. About mid-afternoon the sun made an appearance and Stephen got the solar scope zeroed in. Much to our excitement we could see a couple of prominences' off the side of the sun. This caused quite a stir with those lucky few visitors who were on hand at the time. As usual though the clouds closed in quite quickly. We did however get several other short windows and continued to watch the flares.

With lots of cars and trucks to see, not to mention a visit from some very noisy "Hells Angels" we all had a break to look around and reminisce about our old cars and those that we wished we had been able to have. All in all a pleasant and successful day which might even result in some new members.

Alex's Space

HOME SWEET HOME!

Our home in the universe is planet Earth, one of eight planets in the solar system which lies on the outer edge of a spiral galaxy called the Milky Way. If you could look down on the Milky way from above the view would be rather like flying over a glittering city at night. Our sun is just one of about 200 billion other stars that inhabit this space city. Mingled in with the stars are vast clouds of gas and dust, the material from which future stars will be made. In places the clouds are pierced by brilliant nebulas in which stars have just formed. The Milky Way is a spinning spiral galaxy, it was born just under 14 billion of years ago as a vast cloud of gas and dust that collapsed under the force of its own gravity and then flattened by its rotation into its present shape. If you look into deep space something very odd seems to be happening, in every direction all the other galaxies are rushing away from us, it seems our Milky Way is distinctly unpopular! In fact this expansion is useful to astronomers to help measure the speed and distance of these unsociable galaxies.

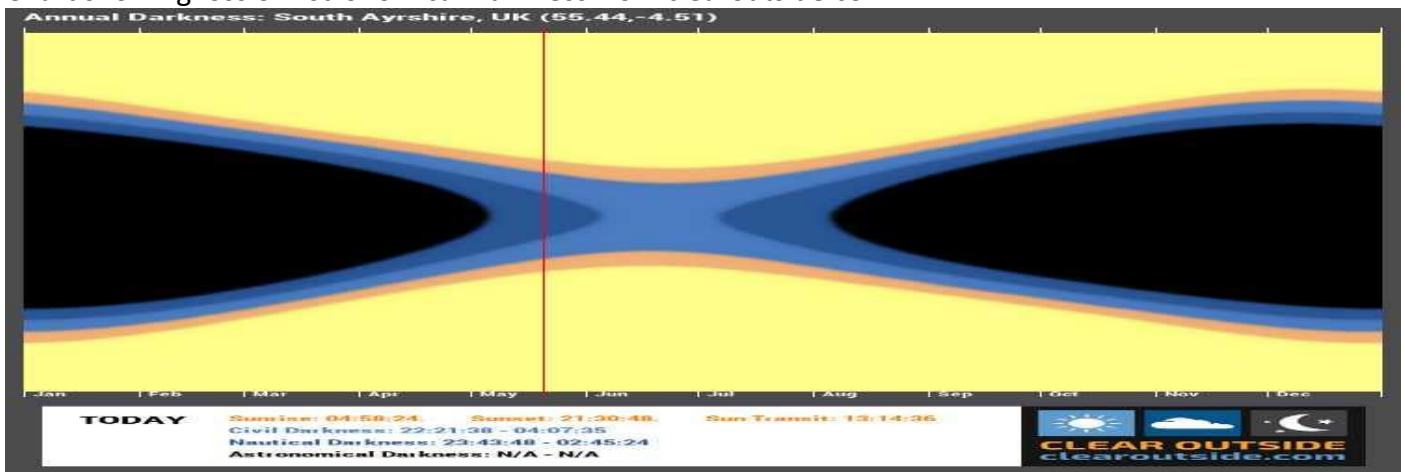


May-August Observing

General

As we move towards the summer solstice in June the truly dark skies are quickly disappearing. The stars can still be seen, but you now have to stay up to see them. Deep sky observing is difficult, but is still possible in the middle of the night, though it is best left to viewing relatively bright objects, such as globular clusters. Three of note are M3 in Canes Venatici, though not too far from Arcturus in Bootes, and M13 and M92 in Hercules. The ring nebula in Lyra should also make for a good target as it should be bright enough to stand out against the lingering twilight. It is also perhaps a good time to check out some double stars like Albireo in Cygnus, ε-Lyrae in Lyra, next to Vega. Aside from this, noctilucent clouds (NLCs) may also be visible from mid-May to early August from our location. They occur between 76-85km in altitude and are thought to be seeded by micrometeorite dust. They are quite distinctive, having a silvery shine.

Chart showing loss of Astronomical Darkness from clearoutside.com.



From it we can see that astronomical darkness disappears around the beginning of May to return about mid-August, and from about the first week of June to mid-July we even lose nautical darkness.

Planets

The planets are still in the morning sky, but are beginning to move deeper into the night. On the 29th of May Jupiter and Mars will be about 40 arc minutes apart, visible above the horizon from about 3:30 in the morning, for keeners only. Jupiter and Saturn will appear deeper into the night, both rising before midnight by the end of July.

Comets

There is no easily observable comets for this period.

Meteor Showers

The peak Perseid Meteor Shower is on the 12th of August, however, there will be a waning gibbous moon which will affect visibility.

ISS

The ISS is only visible late in the evening's until the 29th of May, returning early in the morning on the 29th of June. From then to the end of July it is visible most nights on either side of midnight, before disappearing until late August. Consult <https://www.heavens-above.com> for specific times and location. There is an ISS Lunar transit on the 20th of June, visible from Ayr, at about 9:30, check out <https://transit-finder.com/> for details and any other possible transits.



Member Images

By Marc Charron

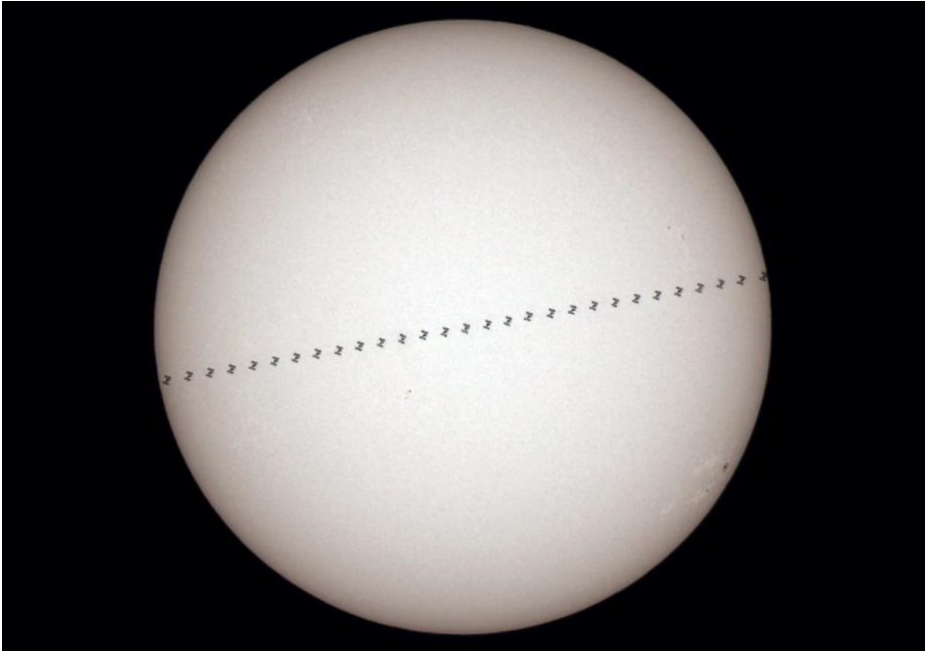
This year I managed to catch a couple of Lyrids early in the morning before sunrise, at 04:10 and 04:18 respectively.



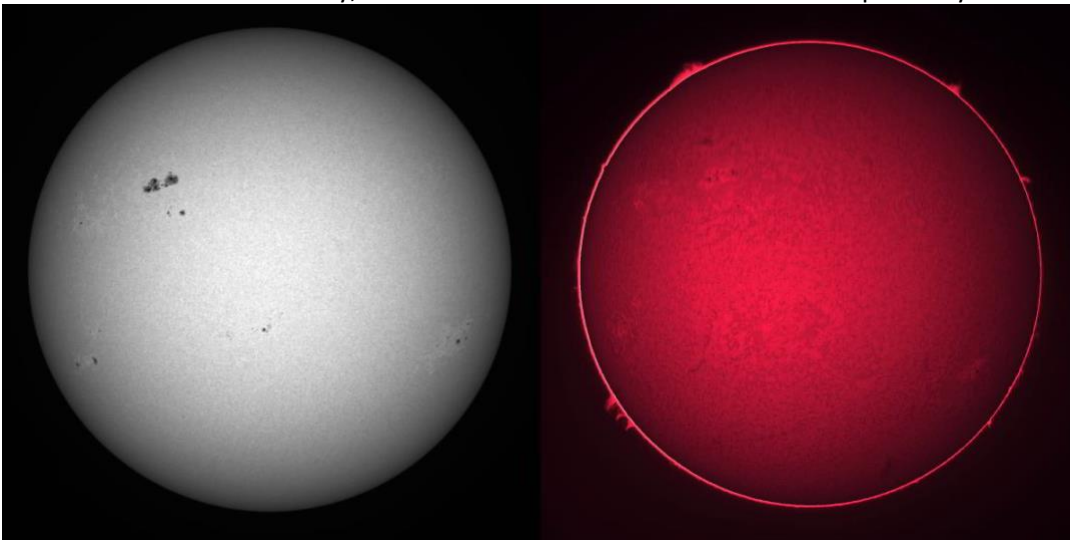
Here is a detail view of the area near Messier A and B on the moon taken with the TMB 130/1200, the crater Theophilus is also prominent on the lower left with its central peaks.



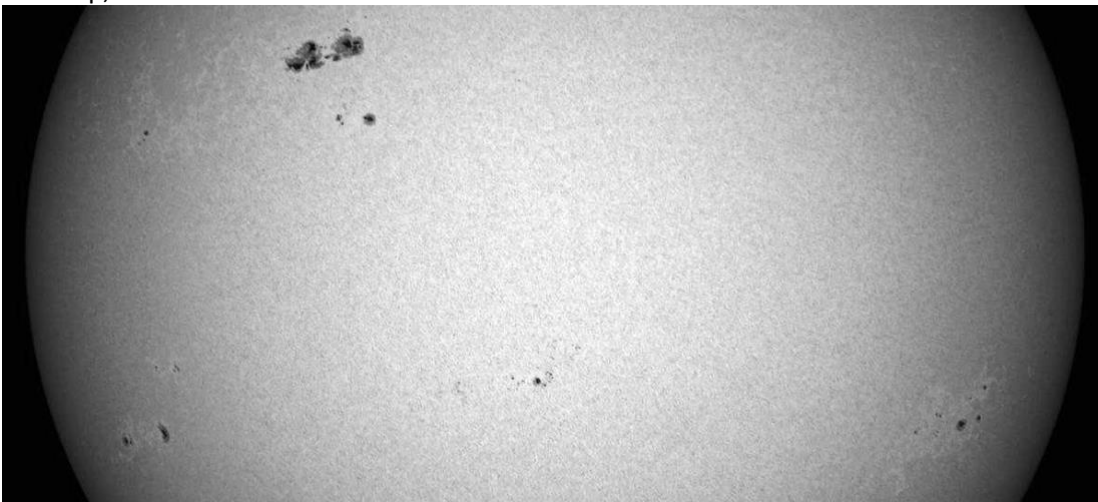
ISS solar transit on the 8th of April, taken from Dunure.



Active sun on the 18th of May, taken with 70mm f6 refractor and PST respectively

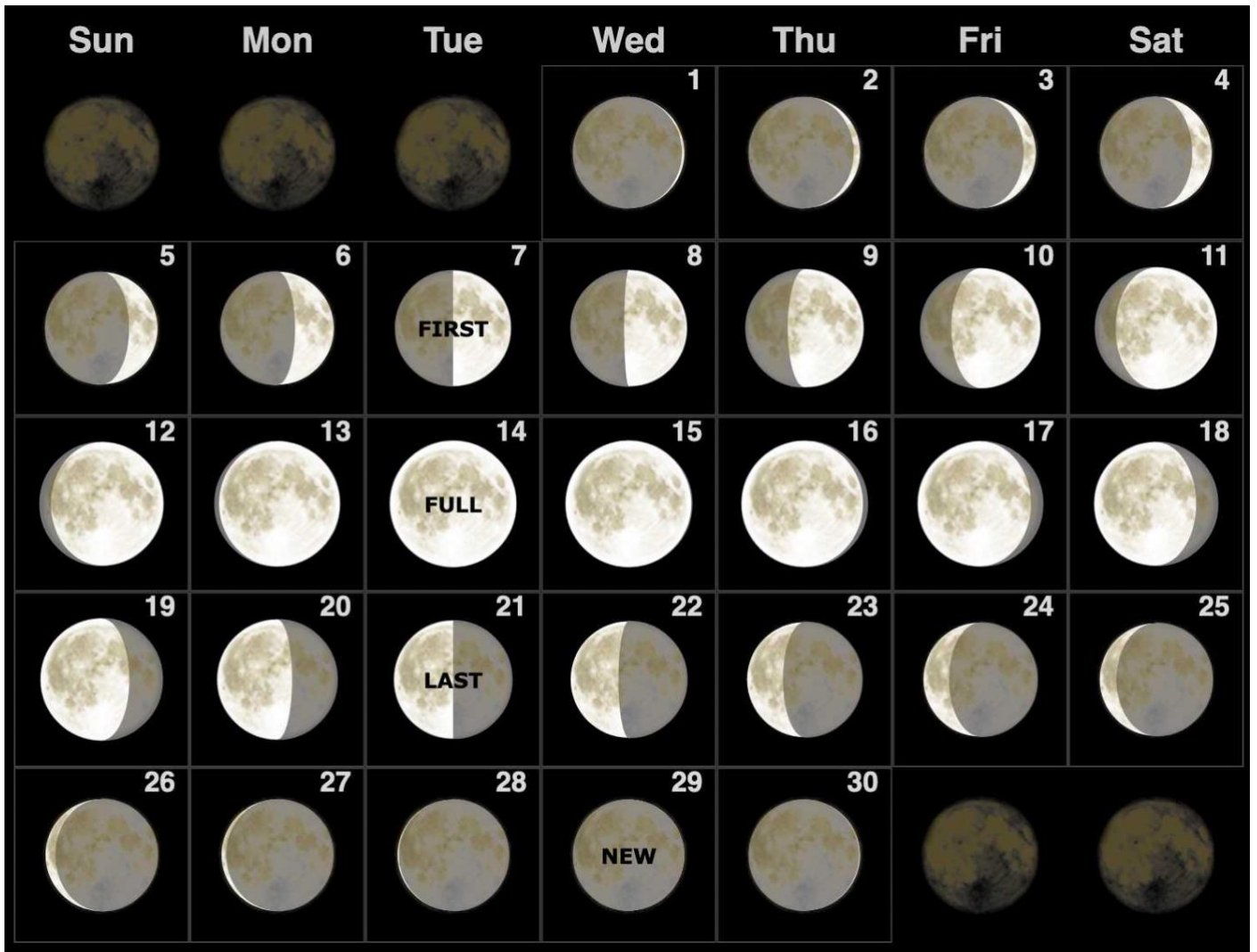


Close up, taken with 70mm f6 refractor and 2x barlow lens.



Moon Phases

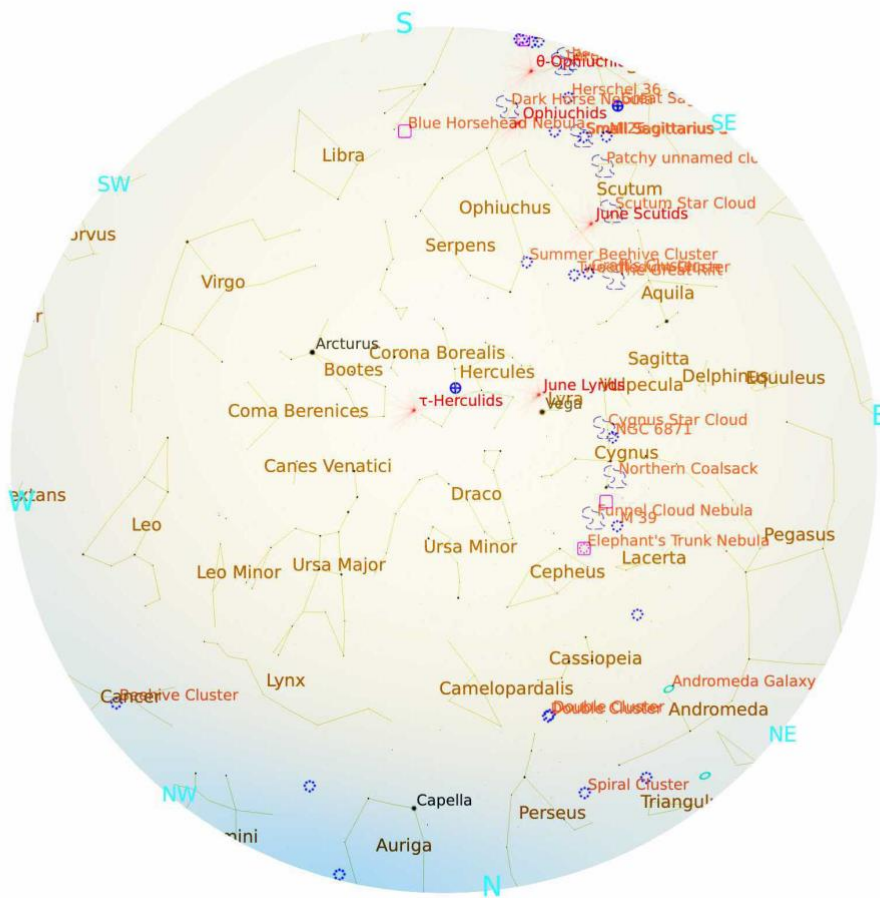
June 2022



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



June 2022 Sky Chart



Earth, Ayr, 13 m FOV 191° 33.7 FPS 2022-06-16 00:00:00 UTC+01:00

Taken from: Stellarium

