



Newsletter February 2022

Next Meeting: **Monday 28th February 7pm**

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

Topics: AAS February Meeting – Graham Longbottom: Stellarium
– Stephen Wolohan: Phone Apps for Astronomy
– Marc Charron: TBD

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Presidents Word

Spring is on its way with the Spring Equinox arriving on the 22 March although, looking at the weather of late you wouldn't think so! Only a few nights this winter have been good observing nights and most of those have been short and for the brave. It's a shame, because I always think that the most interesting sights are those within the late autumn and winter constellations. That's not to say of course that there is nothing worth seeing for the rest of the year. So what do we have to look forward to in the "summer months"? Well if we are lucky we can revert to observing the Sun during the day – using appropriate filters and scopes of course. This can be very interesting, even in white light, and you can video, photograph or draw any sunspots that you see and also send details in to the Solar Observing Group at the BAA to add the official record. Don't forget that the Society has its own Coronado Solar Scope which is in H alpha so you can see the Sun's surface granularity and prominences.

The other fun activity for the Summer months is public outreach. This should be able to start up again this year and we have already been invited to attend an open day at Dumfries House in July. We attended one a few years ago that was a very pleasant day out and attracted a few potential new members. It is surprising how many people have telescopes and an interest in astronomy but have no idea where to begin. This is where outreach events can be helpful and rewarding. You don't need to be an expert to come along and help, all you need is to be able to chat to people. So let me know if you are interested. I don't need a commitment in blood as each event is arranged at the time from who is available. The Society also runs its own outreach events, at a local venue, say on the front at Ayr or within schools. So, don't be shy, put your name down and come along and help or even organise an event. Be sure however, that you let the Committee know if you are going to run an event or attend a school as AAS, as we need to know for safety and insurance purposes.

Changing tack slightly, it is really pleasing to see the high level of member involvement we have had at the Society meeting nights, lots of chat and exchange of information. This is what the Society is about. In view of that, I am wondering about a "Member's Night". This is where we have a series of short talks/ demonstrations/ question and answer sessions run by members rather than the Committee. No big deal, just bring along a piece of kit and talk about it, or ask if anyone knows what it is. Show some of your astronomical images, good or bad, and chat about them, your issues, ask for help. Stand up and say what you want from the Society and discuss how it can be delivered. No need to do an hours Power Point, just a couple of minutes is fine. Let me know what you think about the idea at the next meeting.

Finally a reminder that at the May meeting we will hold our AGM. This is where we elect the Society Officers and Committee. All post are available, there are no "sitting tenants/life appointees" and we do need some new blood, So if you are interested again let me know as soon as possible even if you are only "tentatively thinking about it", it's your Society – help it remain successful!

Graham

Acting President

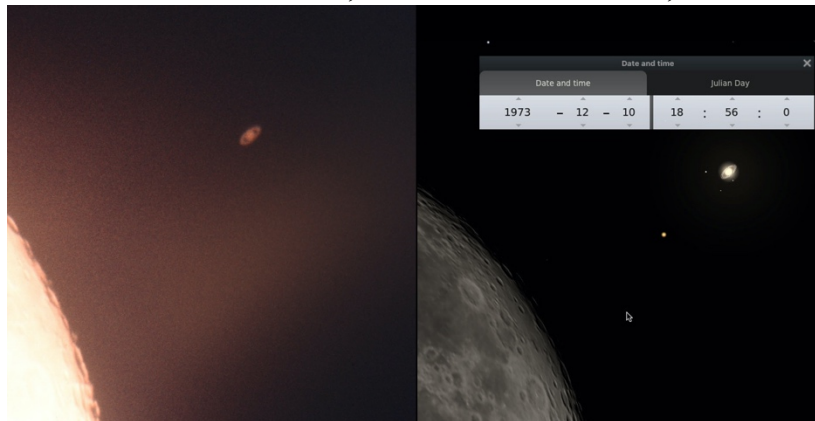


Member Articles

A Tale of Two Images – By Marc Charron

Last August and September I travelled back to Canada to visit my family, where I had left some boxes of slides that never made it to the UK. There I had the chance to scan them with my camera using a specialised adapter for the purpose. As those from the film era will remember, there could be quite a difference in time from when an image was taken until the time it was developed. The photo lab might also only indicate the month and year on the slide, so it could be difficult to remember when a photo was taken. As it turns out I had a few astronomical images that I had taken that I was uncertain of the date. However, for a few of them I was able to determine it fairly precisely due to the position of the Moon, planets and stars using the planetarium software Stellarium.

This was the first, a lunar occultation of Saturn, or just past it, and I had no idea when I took it except that it would have been sometime in late 1973 or early 1974. I remember the telescope a shot it through, a homemade 12 ½ inch reflector that a friend and I were given access to by a local man. After reviewing a number of lunar occultations of Saturn by the moon for the location (Montreal), I was able to show that it was taken on Monday the 10th of December 1973, sometime around 18:56, now how's that for precision?



I was also able to do this for some aurora photographs. On this particular night the aurora was extremely bright it could be seen against the moon, so it was lucky that I took at least one frame with it present. Looking at the image carefully I was able to identify several of the stars around the moon, and from that, to find a best fit using Stellarium for dates near when the roll of film was processed (June 81), which turns out to be the 12th of April 1981.



With planetarium software you can move the solar system clockwork both backwards and forwards to show you the sky for any point in time, well almost, for Stellarium that is -99,999 to +99,999, that is quite a range!



February/March Observing

General

What can one say about the weather except that it has been awful. Assuming clear skies return there is plenty to see in the coming late winter / early spring sky as galaxy season will be upon us, as Leo and Virgo move into view. Orion also remains well placed for viewing in the evening, and there is the possibility of seeing Zodiacal light in the west after dusk from a dark sky (moonless) location. As mentioned before, the winter sky has plenty of open clusters that are amenable to viewing with binoculars, so if, and when, we get a clear night they are worth a glance. M44 in Cancer is a particularly good one in binoculars, one that is a bit harder, is M41 below Sirius which should be visible in the early to late evening given a suitable horizon.

Planet

This period remains dire for the planets. Mercury, Venus, Mars and Saturn are located in the morning sky and do not rise very high before the sun comes up, of the four only Venus is particularly visible. Neptune is also now lost in the glare of the sun, which leaves Uranus as the only planet well placed for observation Ares, at least early in the evenings.

Comets

There are no easily observable comets from our location during this period. 67P/Churyumov–Gerasimenko remains at the top of Cancer and can be seen and photographed with reasonable optics (Mag 10), and not too far from it in the sky, is comet C/2019 L3 (ATLAS) (Mag 9.5+) will remain near the feet of the Gemini twins. Comet 19P/Borrelly will make an appearance, at first low in the sky in the southwest then climbing towards Uranus by the 18th of March (9pm ish) it will pass within 20 arc minutes of the planet. As with the other two comets it is telescope only at magnitude 9-10 during this period.

Meteor Showers

There are no major meteor showers in this period.

ISS

The ISS is visible in the mornings until the 10th of March, returning in the evenings from the 18th 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 a site with predictions that you can make for your location: <https://transit-finder.com/>. Note there is a decent ISS transit of the moon, also on the 18th of March at 23:38:17 visible from Ayr.



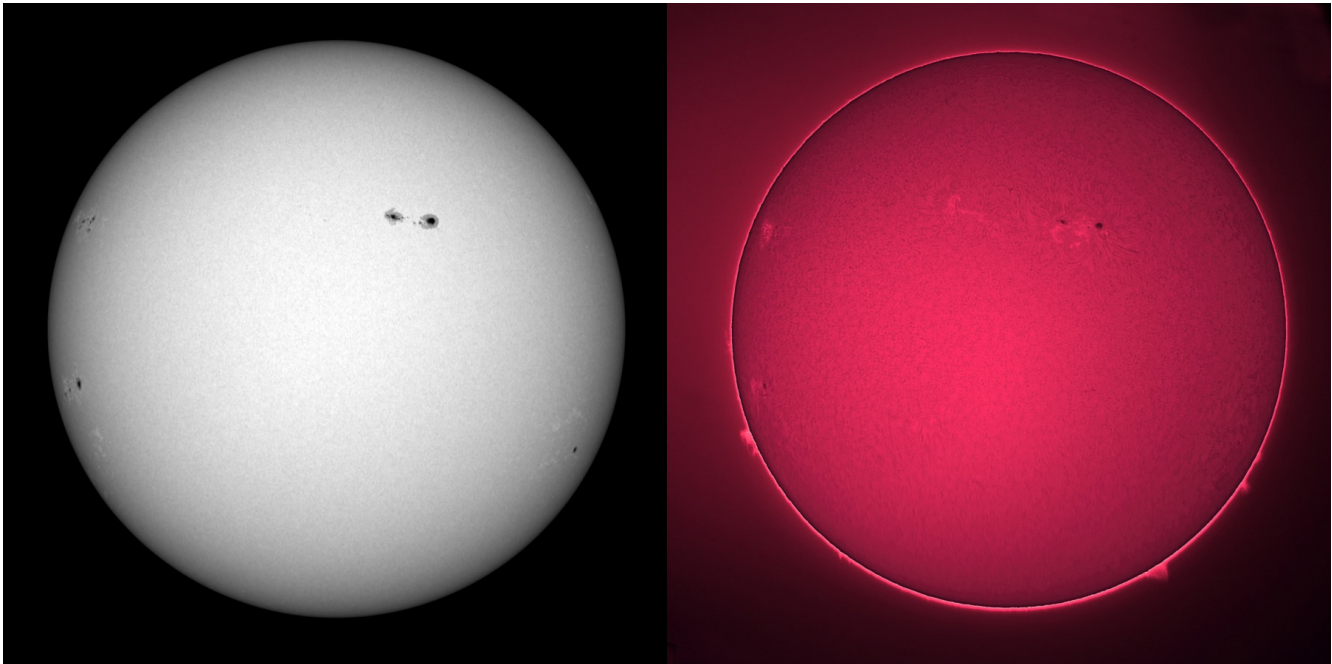
Member Images

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.

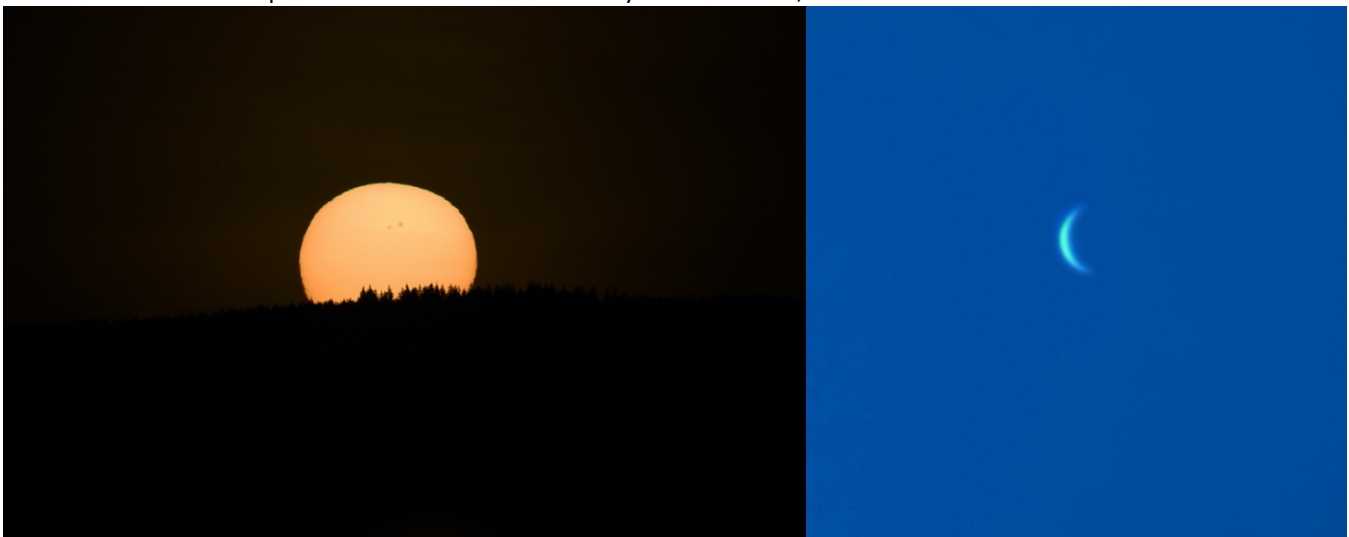
Marc Charron

The weather continues to be uncooperative especially for deep sky imaging. Here are a few images taken over the last month.

Sun on the 31st of January

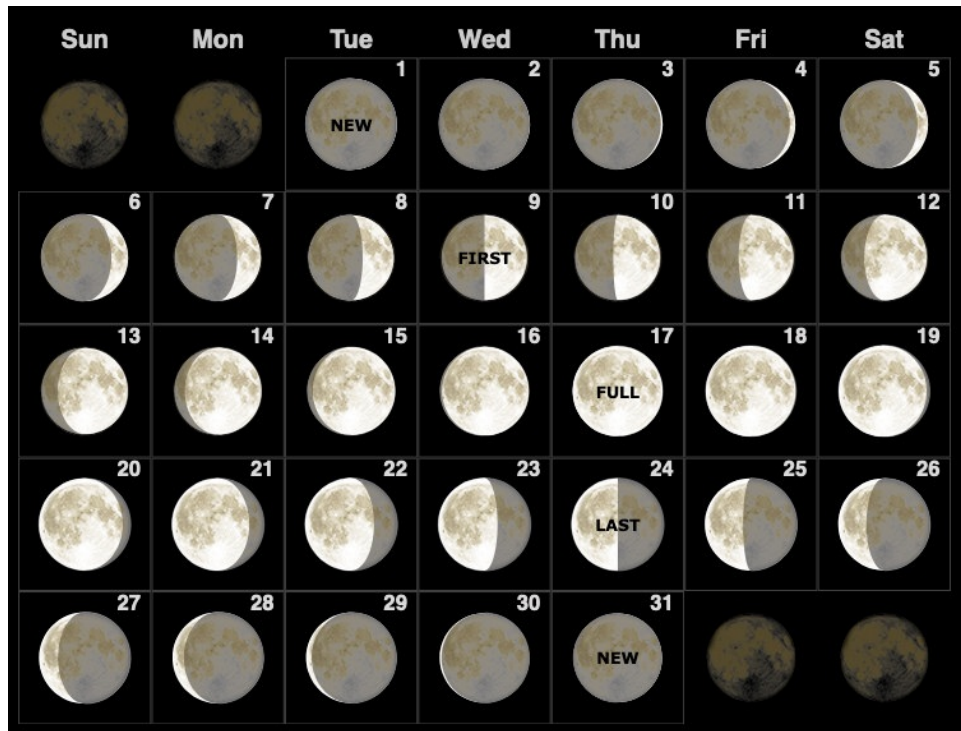


Sunrise taken with a telephoto lens taken on the same day with ND filters, and Venus on the next.



Moon Phases

March 2022



March 2022 Sky Chart

