



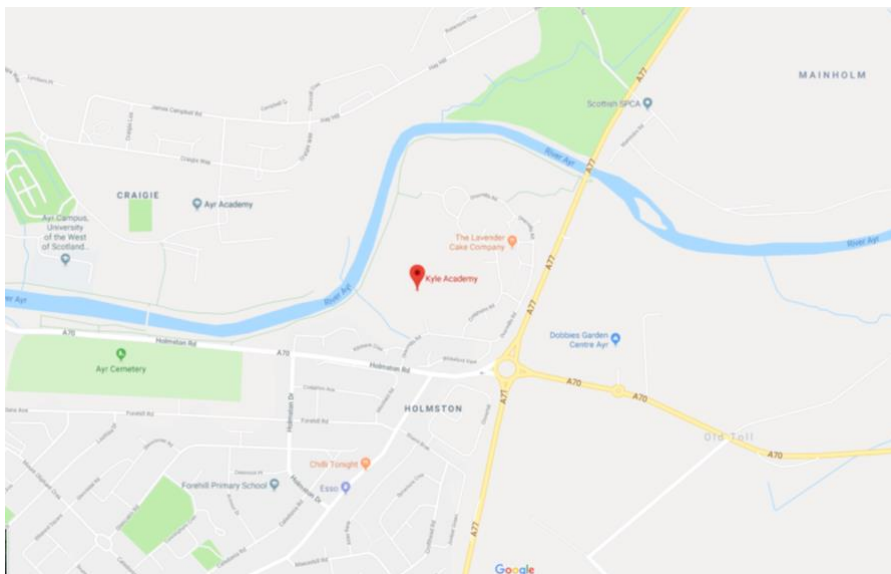
Newsletter March 2020

Next Meeting: **September TBD**

Kyle Academy, Overmills Road, Ayr, KA7 3LR

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President's Word

It seems a shame that our astronomical season has effectively been brought to a close, somewhat abruptly, due to the coronavirus COVID-19 pandemic.

Of course isolating yourself from the virus by self-distancing is exactly the right thing to do, as is washing your hands regularly. However, this does not preclude you from continuing your astronomical activities, albeit in solitude.

It is my intention to use this extra time observing, studying, keeping up to date, and fine tuning my equipment. Doing this in solitude sounds a bit lonely, but in this day and age of the digital revolution, we can keep in touch via Facetime, Skype, Messenger, WhatsApp and numerous other platforms, which allows us to stay in contact safely, without racking up massive bills. In fact, most of these apps are free to use, and you can also share most files, and astrophotos as a bonus. So while we are isolating to stay healthy, we are able to carry on our hobby in much the usual way, and still chat to each other while doing so! Some of these apps even allow video conferencing which can be quite useful if more than two of you are out observing.

I'm quite looking forward to the New Moon Phase this weekend to observe some galaxies and nebulae available to me here. I have a small Newtonian Reflector to use, and will be interested how it compares with my much larger SCT. The one thing that I am enthusiastic about is how quickly it is to set the scope up! My first object will probably be BODES Nebula (actually 2 galaxies) to the North, as my view to the South is obstructed by a large house. I am able to see West and East, so I will see how this affects my viewing. It should be interesting as normally I view objects in the Southern part of the sky.

I hope that you all stay safe and healthy through these trying times, and look forward to seeing you all when the society reconvenes, whenever that is likely to be. We shall have to wait and see!

All the best,

Roger Harman



Member Articles

Alex's Space

2020 is a leap year but what is the point of them – read on and find out!

If Earth's orbit around the Sun took exactly 365 days we would not need them, but when has life been that simple! Our Solar year in fact takes 365 days – 5 hours – 48 minutes and 46 seconds, but that extra time adds up and a few centuries from now we could be celebrating the New Year in our shorts and 'T' shirts! The tradition of a woman proposing to a single man on leap year day (29th of February) comes from Ireland, if the man refused, he had to buy the lady a silk dress!! If you have missed your chance this year ladies 2024 will soon be here!

Is the Earth a special world where life as we know it can exist? Researchers from Glasgow and Dundee Universities used the Hubble space telescope to peer inside the atmosphere of a distant planet known as K218B – perhaps that is the post code! They found signs of water vapour, hydrogen, helium, and carbon. This is a very important find as it helps astronomers to study if liquid water is common throughout the Universe. Water can exist on K218B because it is not too close to its mother star – a red dwarf, if it was closer water would boil away, but freeze solid, if it was further away, as it would on Earth, so perhaps Earth isn't so special a planet. K218B is 8 times the mass of the Earth and astronomers call it – SUPER EARTH.

And finally, since time began there has never been a night without a morning.

Alex Baillie
March 2020

Marc's Setup

At our last meeting I was asked what my setup was. Here is a short list:

Telescope and Optics

70mm f6 triplet from Altair Astro (2017 version)
Planostar 0.8x flattener/reducer with Nikon T-ring
2 inch tube with Nikon T-ring for shooting at f6 no flattening
Diagonal
26mm, 15mm and 6mm eyepieces

Mount

Skywatcher Star Adventurer Pro with tripod
5kg of weights used to give it some heft (strictly optional).

Camera

Nikon 5300
Nikon 2x teleconverter to double the focal length for photographing the moon.

March/April Observing

General

The constellations continue to shift, with Orion sinking lower in the west as then nights march on, by mid-April it will be lost in the twilight. The constellations Gemini, Cancer and Leo now dominate the early evening sky, with Virgo following on a little later on. Spring is galaxy season and there are plenty to see in the Leo – Virgo region. In the Northern sky, Ursa Major (aka: The Sauce Pan, Plough or Big Dipper) rises high, just to the right of the Polaris. The constellation also sports many galaxies offering the keen observer plenty of challenges.

Planets

Mercury – had its inferior conjunction on the 25th of March, moving into the morning sky, it will still be too close the sun to be seen from our location.

Venus – reached its maximum elongation on the 24th of March and will move back towards the sun over the next few months arriving at its inferior conjunction on June the 3rd. As it does, it will become more of a crescent while increasing in angular size.

Mars, Jupiter and Saturn - are remain fairly close together in the morning sky, to right of Sagittarius, however, they will be difficult to see from Scotland as they are very close to the horizon, not rising much above 7 or 8 degrees, before dawn renders them invisible. From the 14th to the 16th of April the moon pass underneath them, which may be seen from somewhere with a very flat horizon.

Uranus – is low on the western sky and will only be visible until about the first week of April when it will get lost at dusk.

Neptune – is in Aquarius close to Pisces and is lost in the dawn sky during this time.

Meteors

The next prominent shower is the Lyrids which takes place on the 22nd of April. If it is clear, the moon will be almost new and won't pose a hindrance to seeing them.

Comets

Comet C/2017/T2 PanSTARRS is still visible in the sky as it moves toward Camelopardalis. It has brightened somewhat, perhaps around 8th magnitude. As that part of the sky gets lower it will become harder to see due to the longer evening dusk and light pollution to the north of most of us. The surprise comet is C/2019 Y4 ATLAS, which is currently in Ursa Major. It has brightened from around 12th magnitude from end of February to about 9th by late March. Some have theorised that it is linked to the Great Comet of 1844, as it has a similar orbit, perhaps coming from the same parent body. If so, it might become visible to the naked eye in May. More on it later in the newsletter.

ISS

The International Space Station will be doing evening passes starting on the 20th of the March and on until the 4th of April. It will then reappear in the morning sky from the 28th of month. It can typically be seen low in the sky moving in an arc from the south west to the south east.



Member Images

Marc Charron

Comet C/2017 T2 PanSTARRS – March 20th

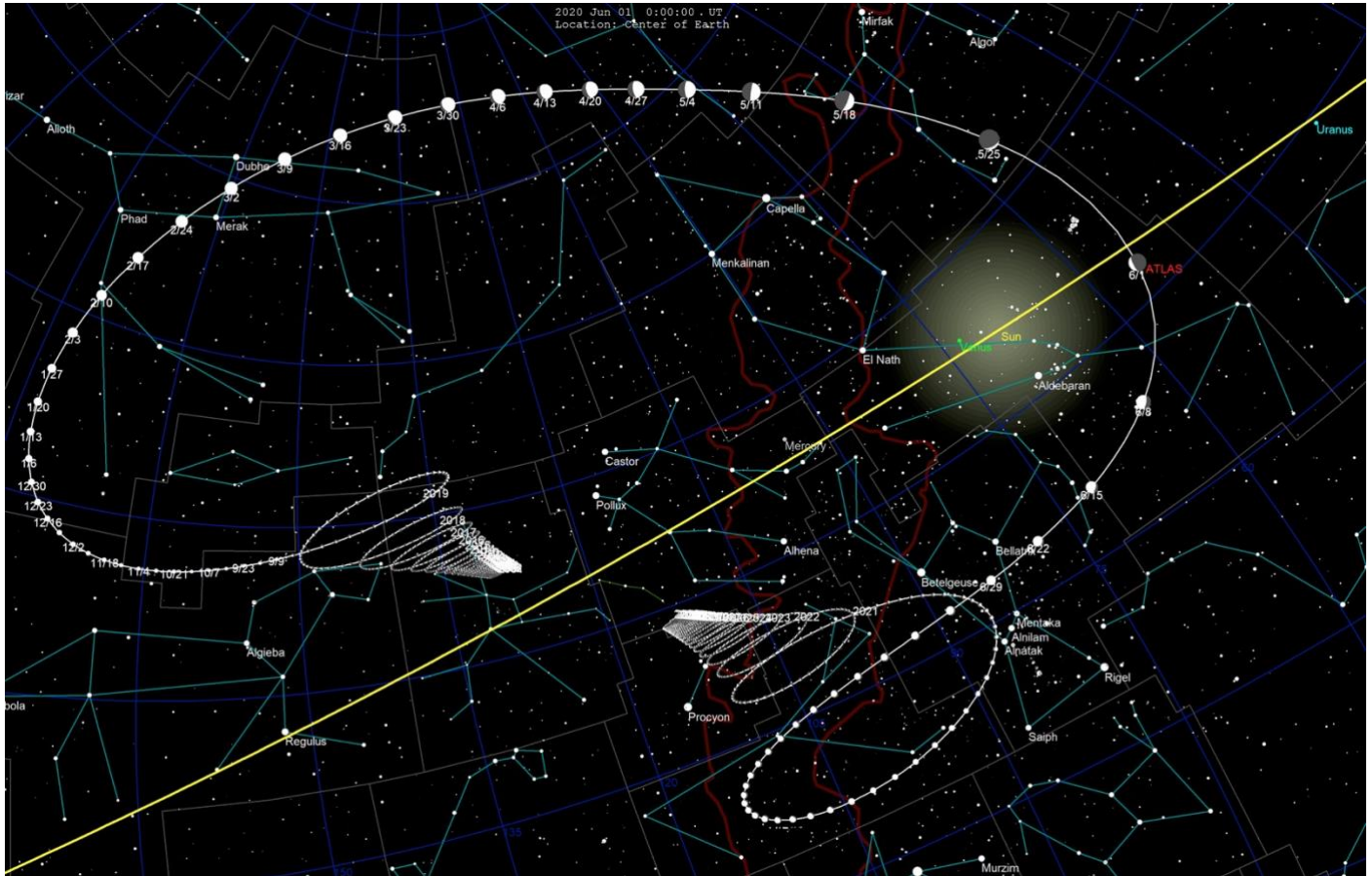


C/2019 Y4 ATLAS passing M81 and M82



COMET C/2019 Y4 ATLAS

Comet Track



Tomruen / CC BY-SA (<https://creativecommons.org/licenses/by-sa/4.0>)

The comet has brightened a lot more than astronomers originally expected. When it was discovered back on the 28th of December 2019 it was magnitude 20. It is now approaching 8th magnitude and could be anywhere from about 2nd magnitude to -12 at perihelion. If it reaches the maximum it could be visible in daylight.

For more information about the comet visit:

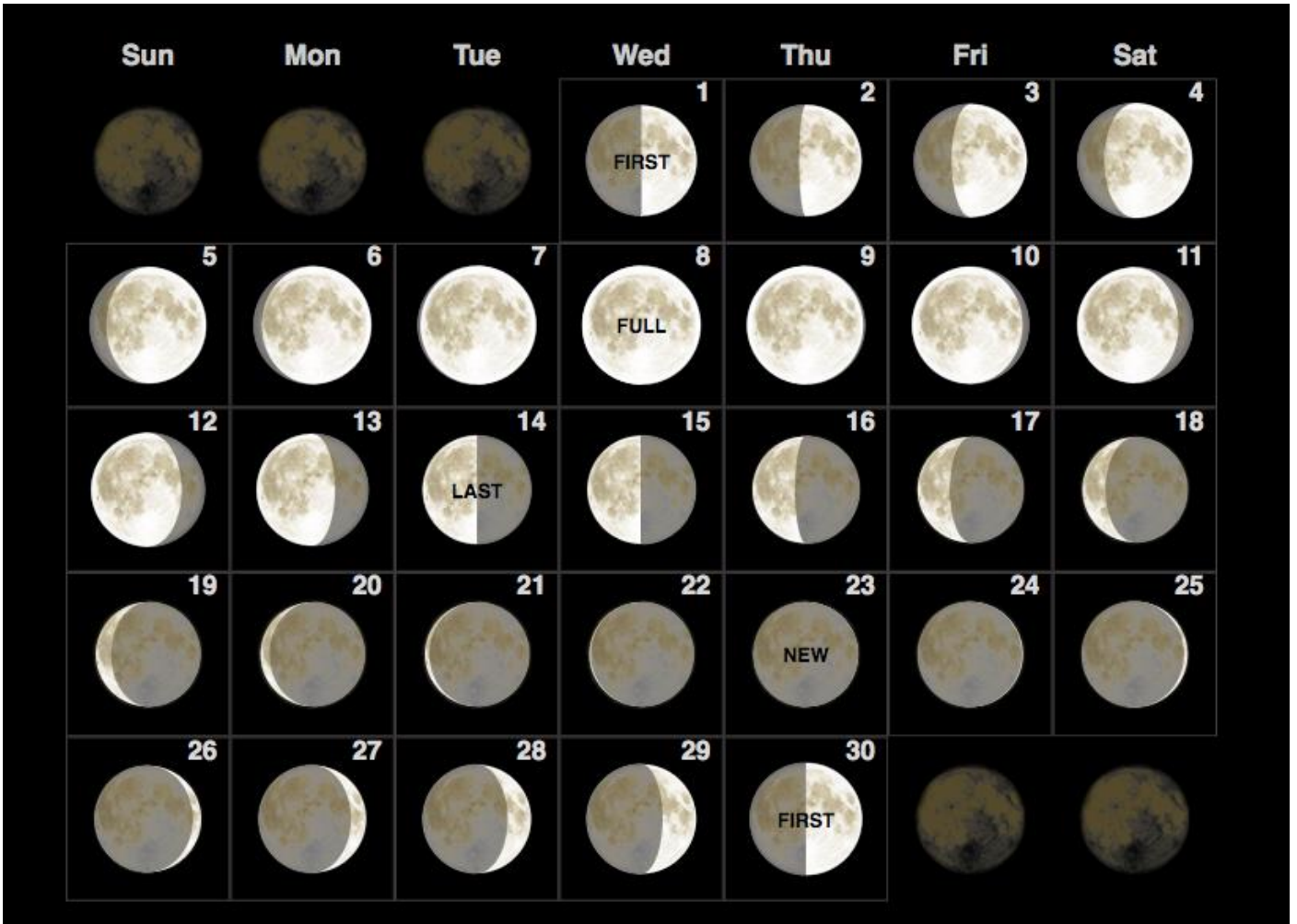
[https://en.wikipedia.org/wiki/C/2019_Y4_\(ATLAS\)](https://en.wikipedia.org/wiki/C/2019_Y4_(ATLAS))

<https://theskylive.com/c2019y4-info>

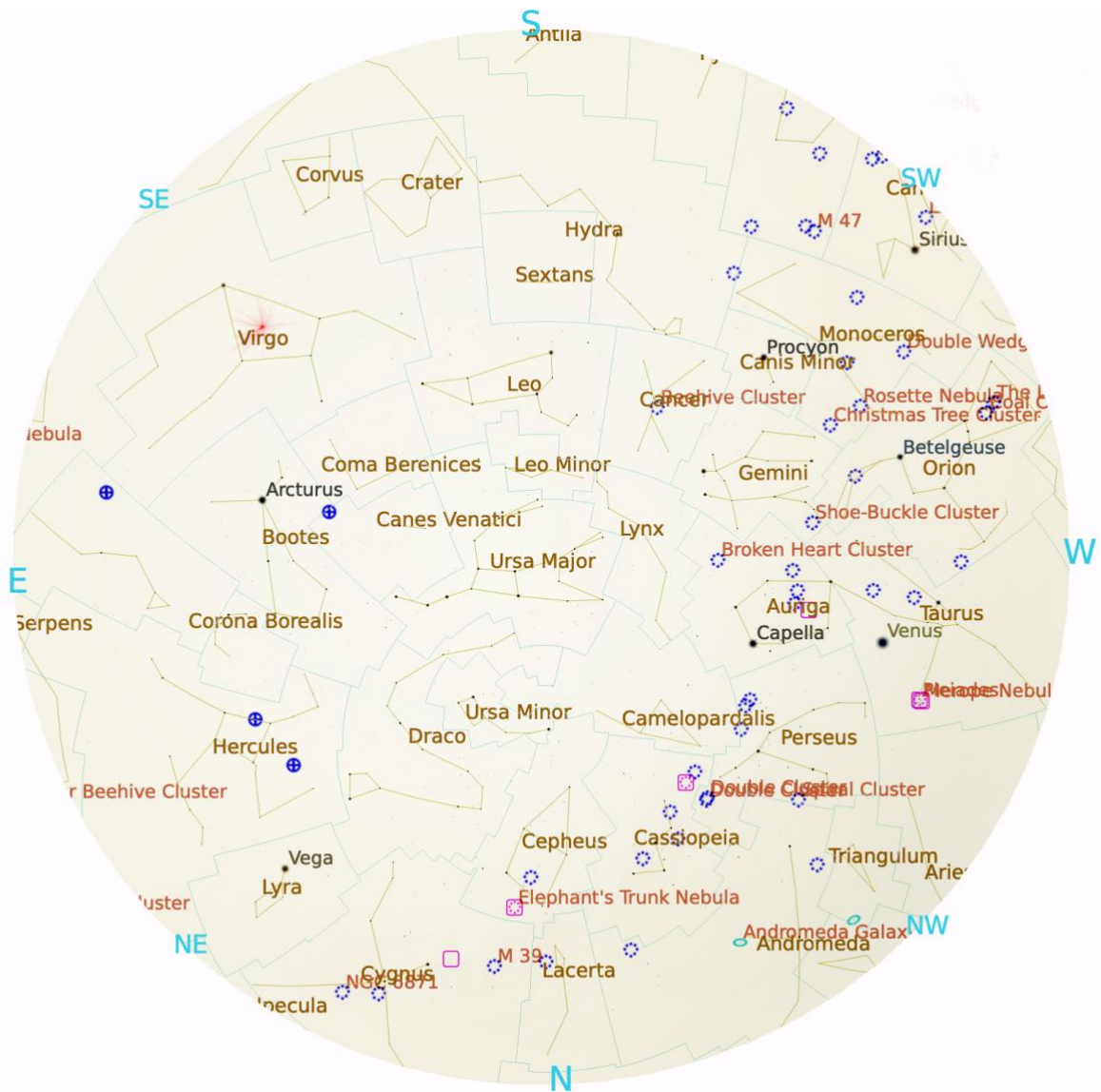
<http://www.cometwatch.co.uk/comet-atlas-could-reach-naked-eye-brightness/>

Moon Phases

April 2020



April Sky Chart



FOV 188° 12.9 FPS 2020-04-15 22:01:21 UTC+01:00

