Island Planetarium

Monthly Sky Guide – July 2024

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Greetings Stargazers,

This month brings exciting news of NLC's, Venus, ISS and a 'Blaze Nova!'

Summer is a really good time to look out for Noctilucent Clouds or NLC's. They are also referred to as Mother of Pearl or Nacreous Clouds. There were several sightings over the UK last month, more are likely this month. What are they? Well, Noctilucent (Latin for night shining) Clouds are extremely rare very high clouds seen on clear nights after Sunset, and are believed to be composed of water droplets, and tiny particles of dust left by Meteors that fall to Earth, leaving a trail of Meteor dust. This dust lingers in the upper atmosphere and is then lit by the Sun after it has long since set. They are usually found an altitude of about 50 miles(80 to 85km) and are usually electric blue in colour. They can easily be confused with Condensation Trails left by aeroplanes that spread out due to the upper winds in the lower atmosphere between 30,000 and 50,000 ft. I have been looking at the the sky for over 50 years and seen only 2 displays from the UK, but they are one of the most striking and beautiful phenomena in our night, or in this case twilight skies. Look at photos on Google or YouTube for what to expect.

It is this month that we welcome back Venus into our evening skies. She has been a morning object for many months, but will shine brightly at Magnitude -3.9 and will be easily visible with the naked eye. When we refer to the brightness of celestial objects,the higher the minus number, the brighter the object shines. Venus can cast a shadow under the right circumstances, and after the Sun and Moon, is the brightest object in the whole sky. The only exception to this is the ISS (International Space Station) that can shine at -5.9 but is

made, and not really classed as a celestial object as such.

This brings me on to the possibility of a Nova outburst or ‘Blaze Star’ in the constellation of Corona Borealis or Northern Crown. It is, as the name suggests shaped like a Crown and can be found between the Constellations of Hercules(Roman hero) and Bootes (Herdsman). The star is called T Coronae which is a recurrent nova, and brightens every 80 years or so and is due anytime now to do just that. It is currently a magnitude 10 star which is visible with strong binoculars, but is expected to brighten to magnitude 2, a similar brightness to Polaris the Pole Star in the Constellation of Ursa Minor or LIttle Bear.

The ISS is visible twixt Midnight and Dawn, but will be seen on the evenings of the 8th at 1003 & 1137pm, on the 9th at 1049pm, and the 10th at 1002 & 1138pm with clear skies. It generally appears from the West or South West and travels East. For more info just Google ISS over UK and look out for it. It’s fun to think it is 248miles(400km) above the Earth travelling at approx 17,500 mph with 7 astronauts who see a sunrise every 90 minutes!

Time now to mention one of our favourite features of a UK sky, The Summer Triangle.This comprises 3 bright magnitude 1 stars which are Vega(in Lyra),Deneb(Cygnus) and Atlair(Aquila). We will be looking for this at our next Stargazing Evening which is scheduled for Tuesday 9th of July. Paul England and I look forward to seeing many of you there.

That’s all for this month, and next month, a further update on the Nova, Comet Atlas due in October, and where to look for the best annual Meteor Shower, the famous Perseids.

Until then I wish you all clear skies, and good luck in your search for those Noctilucent Clouds.

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