

SKY GUIDE

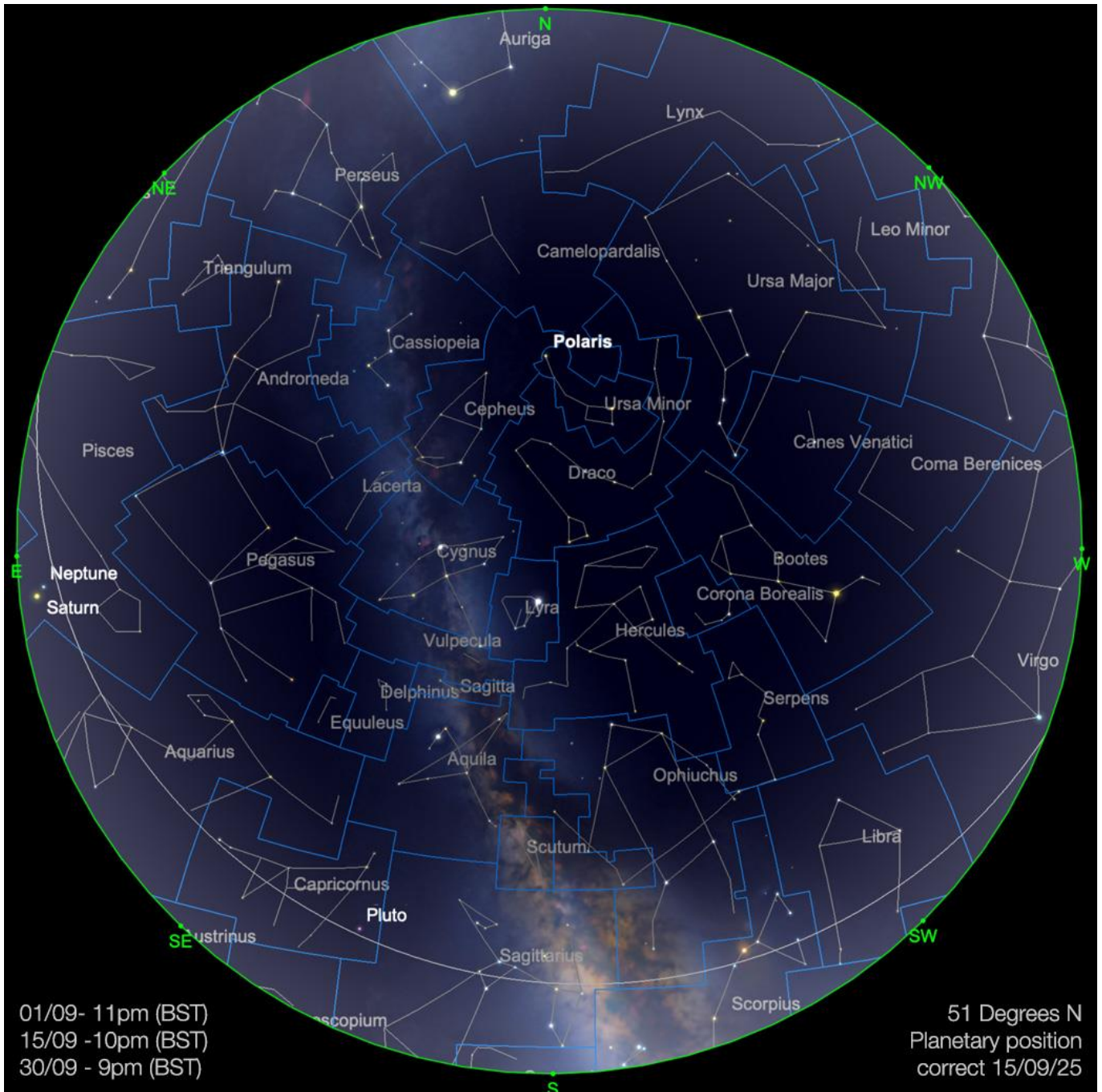
Astronomical guide for September 2025

The most up-to-date guide to planetary and lunar activity,
comet news and space wonders.

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Expand your horizon



September is upon us already and with it darker skies - for those of us in the northern hemisphere. The autumnal equinox falls on Monday, 22nd September, when day and night balance evenly as the Sun crosses from the northern to the southern sky. Around 45 ° latitude, this equality is most exact, but the real effects unfold gradually. In the north, evenings will soon darken earlier, a shift most noticeable by month's end.

After the equinox, the northern hemisphere receives less sunlight each day; the Sun climbs lower, lingers in the sky for fewer hours and temperatures begin their steady decline into autumn and winter. While many lament summer's end, astronomers relish the return of longer nights—at far more civilised hours.

Meanwhile, our readers in the southern hemisphere experience the reverse: the vernal equinox, heralding spring, longer days, shorter nights and with the extra hours of sunlight this brings, rising warmth.

Wherever you find yourself in the world, there's plenty to observe in the skies above us, so let's see what's in store for us - astronomically speaking - this month...

The Solar System

The Sun

The Sun's output of sunspots for July 2025 (the most complete recorded month available to us, at time of writing) was again a touch down on predicted values, according to the US National Oceanic and Atmospheric Administration's Space Weather Prediction Centre. Although the Sun is still very active, 125.6 sunspots were recorded in July, as opposed to a predicted value of just over 135. While this may not seem a huge discrepancy, this is the third month in a row when Sunspot recordings have been lower than their predicted values. This may (and we stress, cautiously) indicate the beginning of the decline from Solar maximum. It will be interesting to see how reality tallies with prediction for the rest of the year. It is not thought that sun spots will top 149 per month for the rest of 2025. During 2026, there will be a predicted tail down to around 100 per month by the end of the year. This still makes the Sun considerably more active than its average during a solar cycle, but a clear indication of gentle decline from its recent peak of 216.

Readers can check out the NOAA cycle progression here: <https://www.swpc.noaa.gov/products/solar-cycle-progression#> and websites such as www.spaceweather.com and Michel Deconinck's monthly newsletter ([Aquarellia Observatory Forecasts](#)) also cover various aspects of solar observations and provide valuable insights into the current state of the Sun.

Signing up for the AuroraWatch app, developed by Lancaster University in the UK, is also highly recommended for those seeking advance warnings of impending auroral events.

There will be a partial solar eclipse, which will occur around the autumnal/vernal equinox on September 21st. The only major densely populated land masses that will be covered by the majority part of the eclipse is New Zealand the scattered Islands of Oceania and part of the Antarctic will also witness it.

The Moon

The Moon begins its journey around the sky on the 1st of September at a nine day old, waxing gibbous phase, illuminated by just under 65%. The Moon will be a resident of Ophiuchus in the early evening. The first week of the month will see the Moon travelling through Sagittarius, into Capricornus and then into Aquarius, where on the evening of the 7th, as the Moon reaches Full, a total lunar eclipse will occur.

For much of Europe, the Moon will rise in the early evening, in a state of total eclipse. So those wishing to witness the darkest part of the event, should avail themselves of an observing position with a suitably clear easterly horizon. The natural spectral shift to the red, caused by foreshortening of shorter green, blue and violet wavelengths, due to the Earth's atmosphere, will make the Moon appear red anyway. And depending on atmospheric conditions from your particular location, it may be very difficult to see the Moon as it rises at all, mid-eclipse. However, as the Moon begins to come out of its Umbral phase of the eclipse, into the lighter Penumbral phase, which will start at around 7:54 pm (BST), it should start getting easier to observe - as long as the sky is clear enough from your particular location. The Umbral phase of the eclipse will completely disappear by a little before 9 pm (BST), when the Moon moves out of the Earth's shadow completely. The Penumbral phase will have disappeared by a little before 10 pm, as the Moon moves out of the shadow of the Earth's atmosphere, signalling the end of the eclipse. Lunar eclipses are great things to record photographically and are relatively easy to photograph. Multiple timelapse shots can record the stages of the eclipse and the Moon's procession through the sky as the event occurs.

The whole eclipse will be visible in its entirety for president of much of Asia, including the Indian subcontinent, eastern Africa and the Indonesian archipelago and the western half of Australia. The eastern half of Australia and New Zealand will witness the event at Moonset, whereas much of Europe and Africa will see the eclipse at Moonrise. Sadly, residents of the vast majority of the Americas, apart from the western tip of Alaska and the eastern part of Brazil, won't see the eclipse at all.

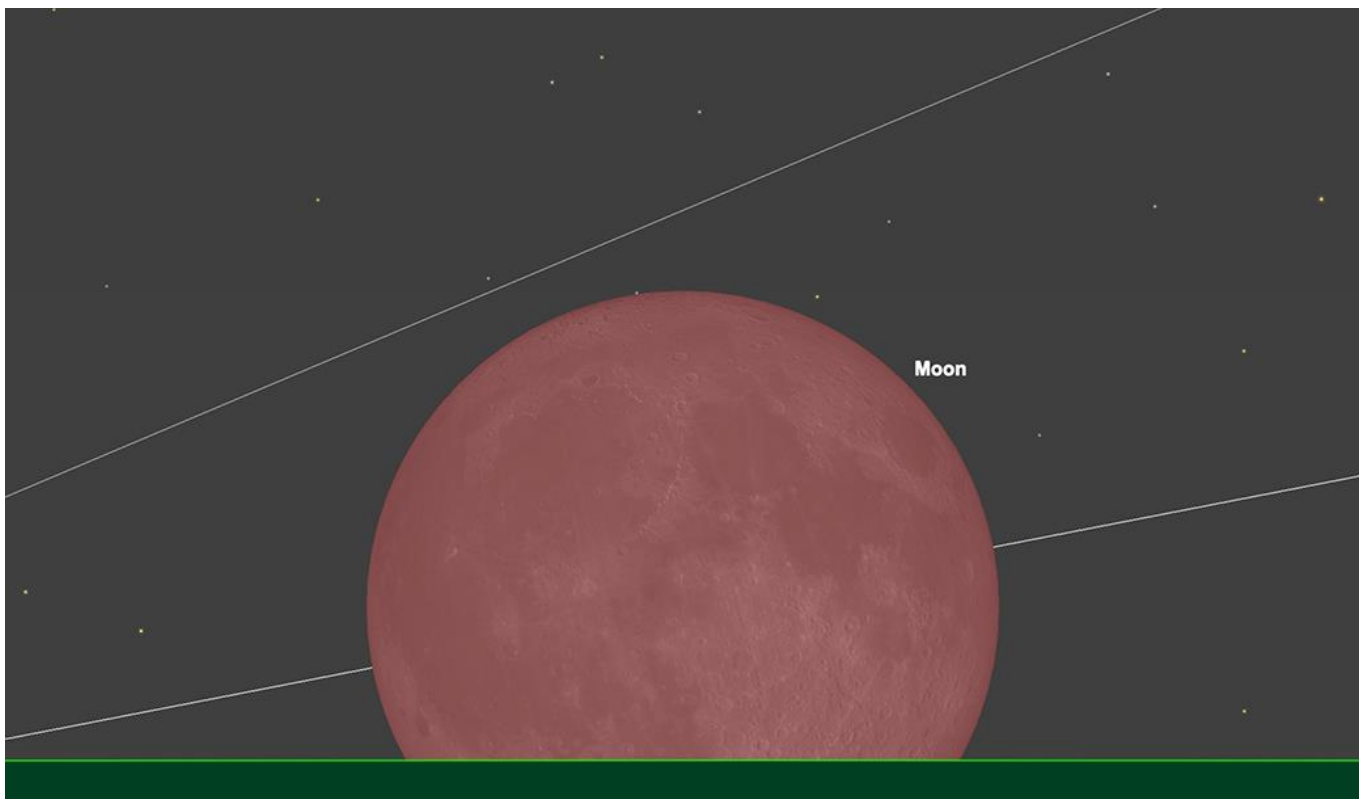
While both solar and lunar eclipses can take place at any time of the year, the periods around the equinoxes give rise to relatively greater opportunity for the circumstances surrounding both solar and lunar eclipses to take place.

After the excitement of the eclipse is out of the way the Moon continues its journey through Aquarius and on into Pisces, where on the evening of the 9th of September the Moon will sit alongside Saturn and Neptune. The Moon continues his journey through Pisces and on into Aries and then Taurus, where it will reach last quarter phase on September 14th.

Due to the nature of how the ecliptic rises at this time of year, we are entering a phase where the Moon will appear very high in the sky, at old Crescent phase in the mornings. This is similar to - indeed, the autumnal equivalent of - the High Spring Crescent Moons of the beginning of the year, for the northern hemisphere. This is a fantastic time to explore the western limb of the Moon and will reward the early riser.

The Moon will join Jupiter as a reasonably close pairing on the 16th of September in the constellation of Gemini. Three days later, the Moon, having crossed over Cancer into Leo will join Venus as the two worlds sit in close proximity to Regulus (Alpha Leonis).

The Moon will become new in neighbouring Virgo when it joins the Sun on the 21st of September. After this point, it will become an evening object again, slowly rising up through Virgo and into Libra over the next few days. Our natural satellite will skirt through the south part of the ecliptic: through Scorpius, Ophiuchus and on into Sagittarius, where it will round the month off, reaching first quarter phase on the evening of September 30th.



Moon, rising mid-eclipse, 7.45pm 7th September. Image created with SkySafari 6 for Mac OS X, ©2010-2024 Simulation Curriculum Corp., skysafariastromy.com.

Mercury

Mercury will start September off in fine fashion, as a morning object. Had a visual magnitude of -1.3 and displaying an apparent size of 5.5 arc seconds diameter. Sitting at a height above the horizon of just over 10° as the Sun rises (as observed for 51° north), Mercury should be a fairly straightforward target to find with binoculars before sunrise.

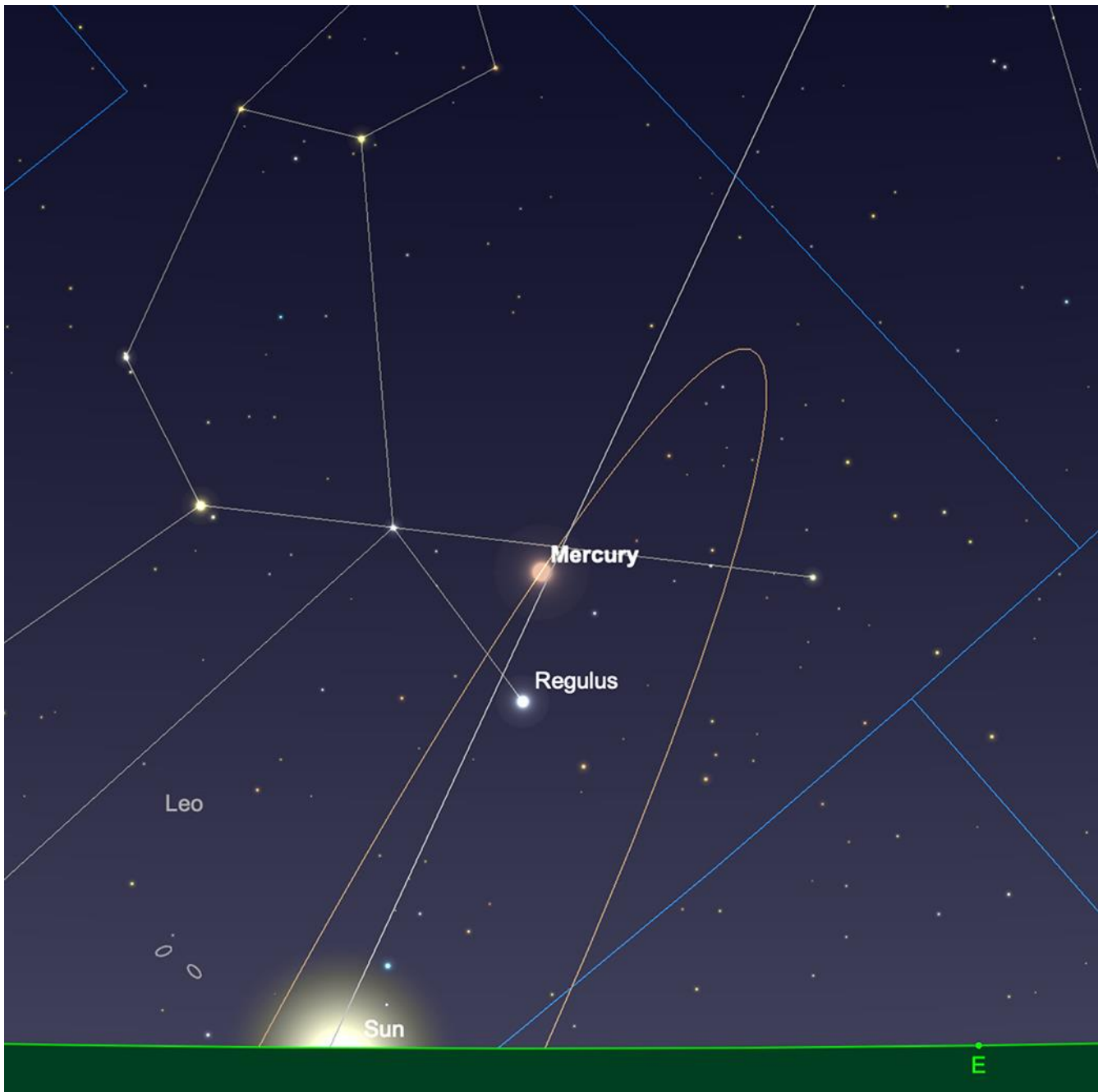
Mercury is heading sunwards during the first part of September and brightens as it does so. By the time we reach the 8th of September, Mercury is shining at -1.6 magnitude, and displaying a five arc second diameter disc. The reason for the increase in its brightness from the month's beginning, considering it is shrinking in size, is the planet's increase of phase. On the morning of the 8th, Mercury is illuminated by over 98%. Sadly, this increase in phase comes at a cost - namely, proximity to the Sun from our perspective here on earth. On the morning of the 8th of September, Mercury sits just under $4\frac{1}{2}^\circ$ above the horizon as the Sun rises and despite its increase in brightness, will be difficult to observe as a result.

The next week sees Mercury plunging yet further towards the Sun (in Virgo) and it reaches superior conjunction (the opposite side of the Sun from our perspective here on Earth) on the 13th.

Mercury then begins to re-emerge as an evening object. However, unlike the orientation of the ecliptic for northern hemisphere observers in the mornings, at this time of the year, the

ecliptic plane sets at a very shallow angle. This means that Mercury will not attain anything like the height that it did in the morning sky in the early part of the month. On the evening of the 21st, Mercury will sit a little above 2° above the horizon as the sunset (again, as observed from 51° north). Even though the planet is still relatively bright at -1.0 magnitude, Mercury's proximity to the horizon will make it practically impossible to observe.

Skipping to the end of the month sees Mercury having faded a little to -0.5 magnitude. The planet is unfortunately still sitting at an altitude of under 3° at sunset, so will remain elusive at best.



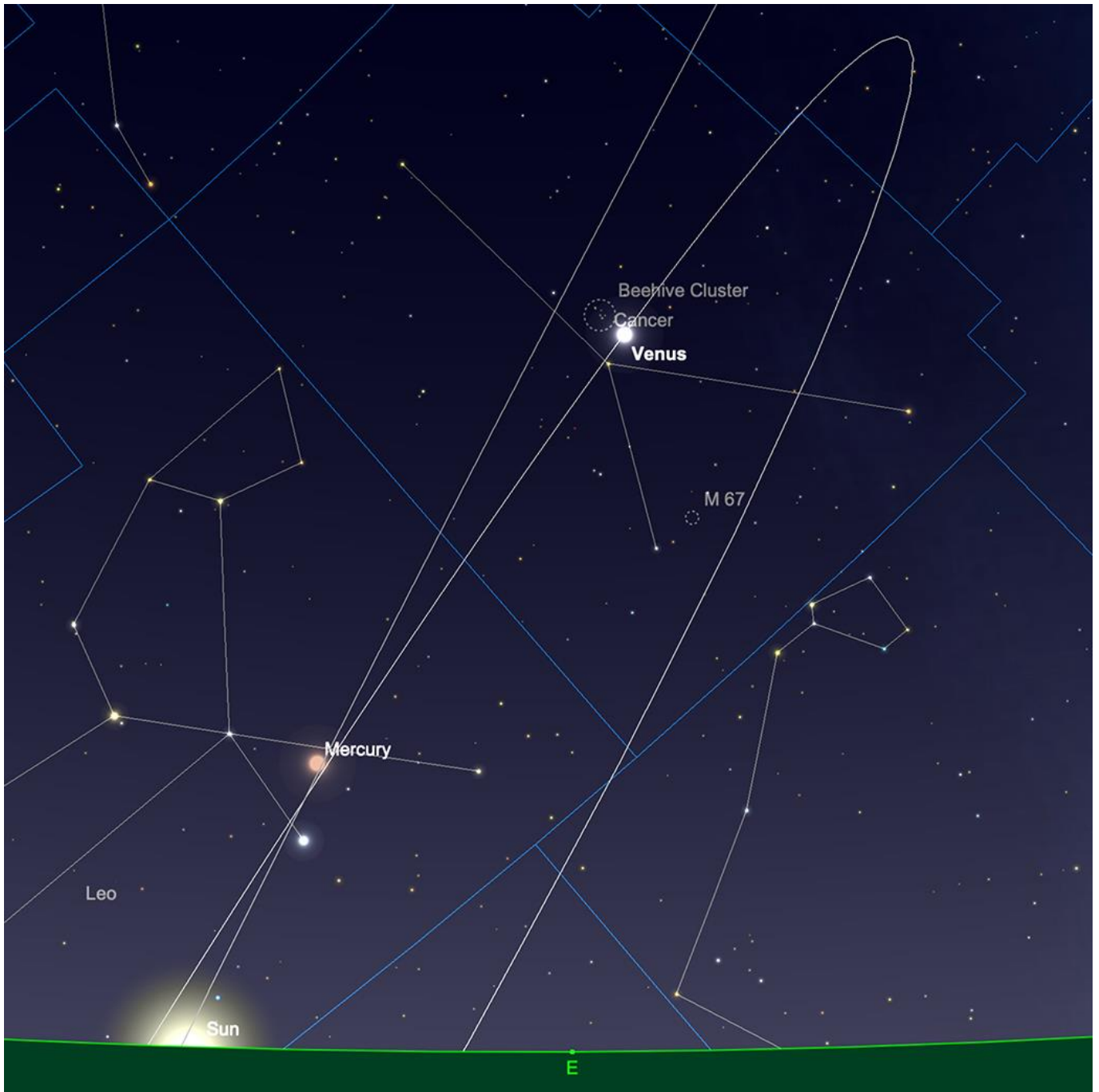
Mercury, sunrise, 1st September. Image created with SkySafari 6 for Mac OS X, ©2010-2024 Simulation Curriculum Corp., skysafariastronomy.com.

Venus

Venus begins September in Cancer, just next to the Beehive cluster in the morning sky. Shining at a brilliant -4.0 magnitude and apparent size of just over 12 seconds diameter, our planetary neighbour is in reasonable position for observation in the morning sky. Standing just over 26° high above the horizon as the Sun rises (as observed from 51° north), Venus is technically below the “magic” 30° plus elevation needed to take it out of the worst effects of the Earth’s atmosphere, from this latitude. However, careful observation, utilising less ambitious magnification will still show Venus reasonably well at this time.

Venus is descending back towards the Sun, as observed from our perspective on earth, but it does so at a much more sedate pace than mercury does. By the time we get to the middle of the month, Venus stands just over 24° high as the sun rises and has dimmed fractionally to -3.9 magnitude.

Moving to the end of the month, Venus has dropped to just over 21° altitude above the horizon as the Sun rises (again, as observed from 51° north) and is static in brightness at -3.9 magnitude. It is obvious that the trend is inching towards the negative from an observing point of view, as far as Venus is concerned. But there is still much to make of the “Morning Star”, as it is classically referred to, at this time of year.



Venus, sunrise 1st September. Image created with SkySafari 6 for Mac OS X, ©2010-2024 Simulation Curriculum Corp., skysafariastronomy.com.

Mars

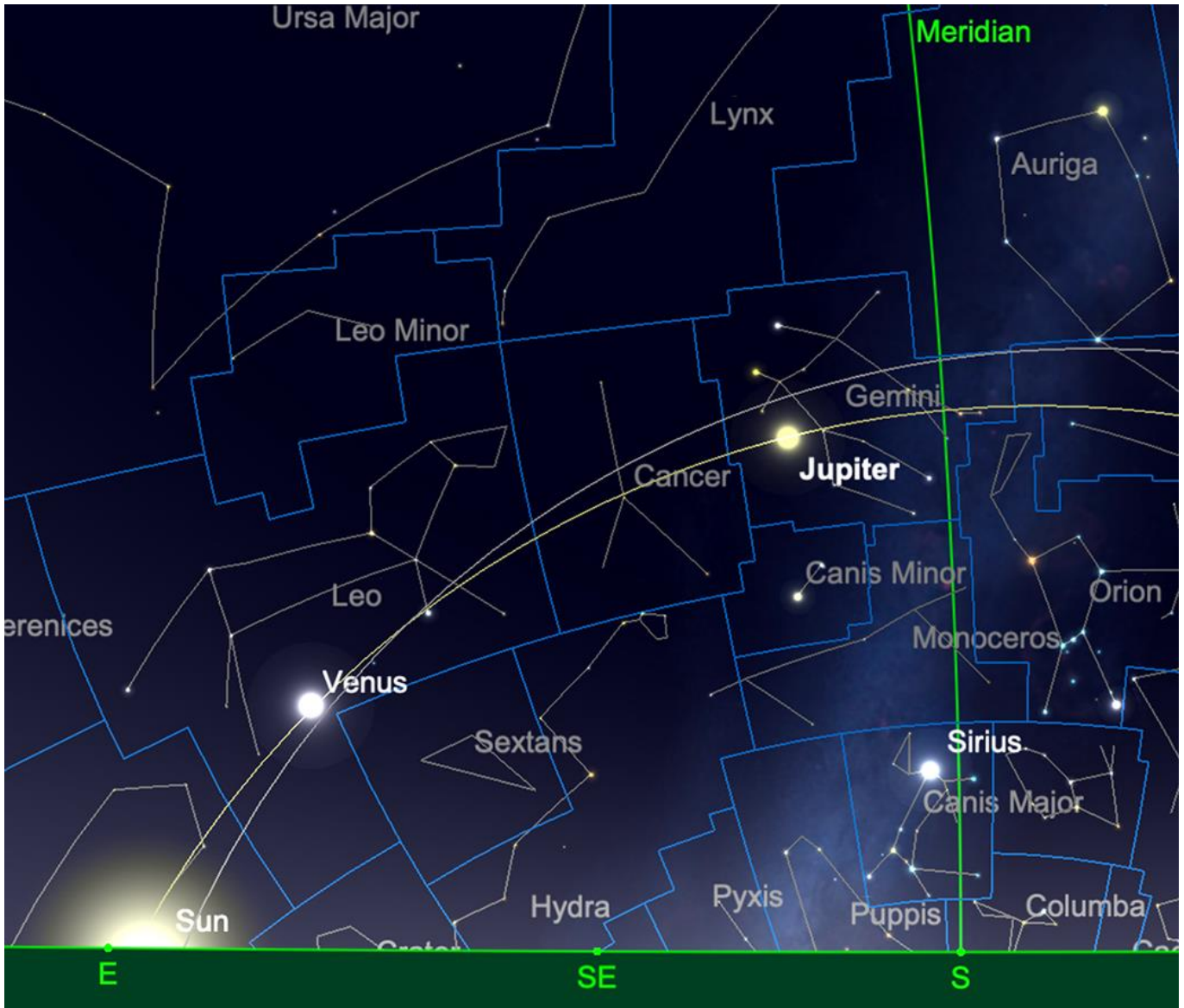
Mars is still hanging around in a diminutive fashion in Virgo, during the first part of the month at a somewhat uninspiring +1.6 magnitude. The planet displays a 4.1 arc second diameter disc at present and is just over 9° high in the sky as the Sun sets on the evening of the 1st. Owing to its small size, weak elevation and relative dimness, there are many other targets to occupy ourselves with at present.

Jupiter

We start September with Jupiter a resident of the constellation of Gemini. Shining at a steady -2.0 magnitude and displaying a 34 arc second diameter disc, Jupiter will rise at 1:45 am (BST) and will have reached an altitude of just under 41° elevation (as observed from 51° north) as the Sun rises.

Jupiter and Venus had been in very close conjunction with each other in mid-August, but the two worlds are now pulling in very different directions in the sky. Venus, as previously mentioned, is dropping towards the Sun, whereas Jupiter is pulling away from it. By the middle of the month, Jupiter has gained fractionally in magnitude and now displays a -2.1 magnitude disc, of apparent size of just under 35.5 arc seconds diameter at this point in the month Jupiter will be just over 51° in elevation as sun rises (again, as observed from 51° north).

By the time we get to the end of the month, Jupiter remains static in brightness, but has increased its angular size to just under 37 arc seconds diameter. The planet will now rise at a little after midnight and will attain an elevation above the horizon of a little under 59° (as observed from 51° north), as the Sun rises.



Jupiter, sunrise, 30th September. Image created with SkySafari 6 for Mac OS X, ©2010-2024 Simulation Curriculum Corp., skysafariastronomy.com.

Saturn

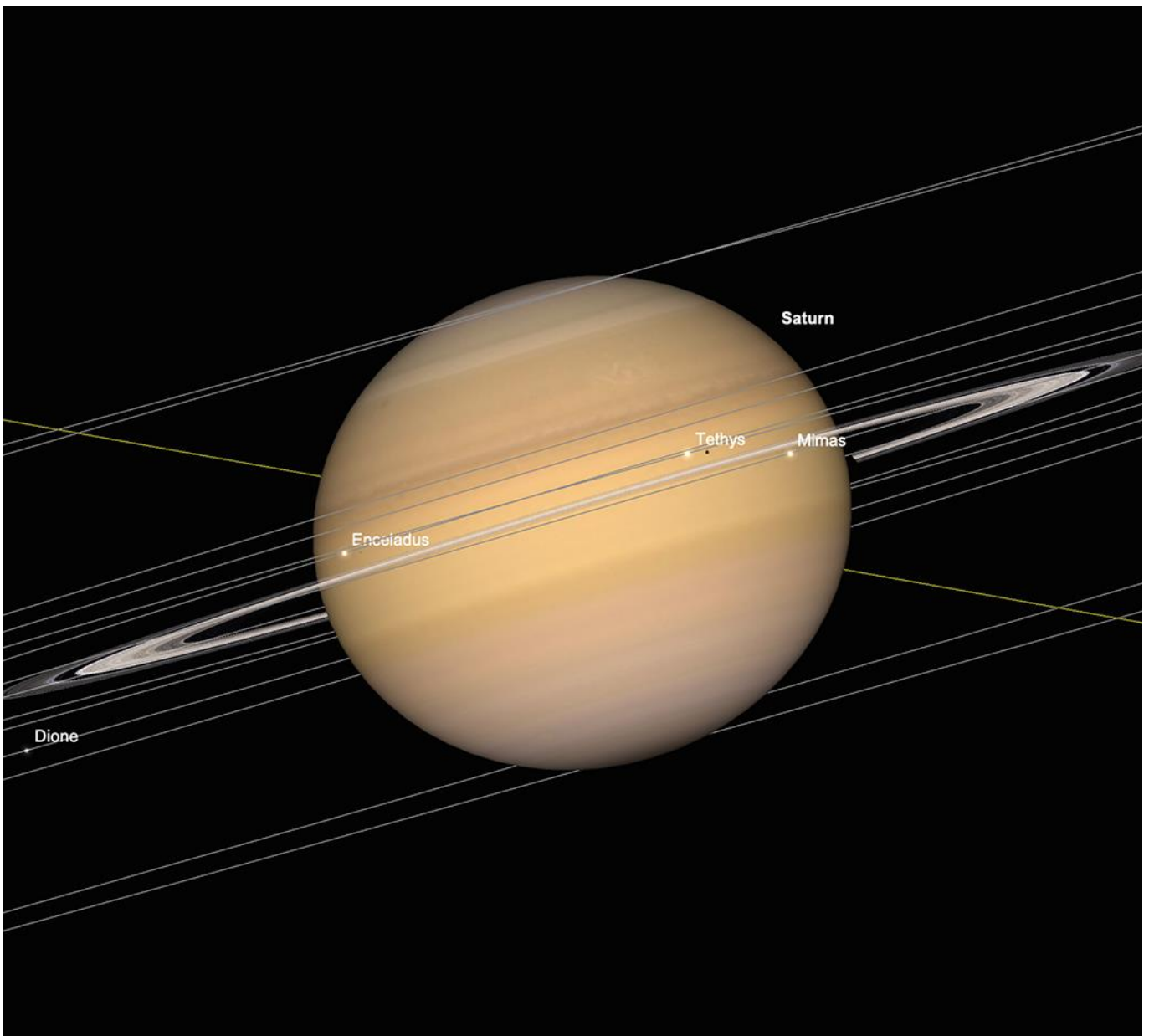
The beginning of September sees Saturn rising at around 8:40 pm (BST). At +0.7 magnitude, the planet is never incredibly bright in comparison to its neighbour, Jupiter. However, the dearth of bright stars in its current resident constellation of Pisces will make it pretty easy to identify. At 19.3 arc seconds diameter, it is a healthy size at present, although its ring system is still relatively shallow, after March 2025 ring plane crossing.

The undoubted highlight of planetary observing during September is the opposition of Saturn, which it reaches on the 21st of September. By this point in the month, Saturn will have increased fractionally in brightness to +0.6 magnitude and will now display a 19.4 arc second diameter disc. Saturn will rise at a little after 7pm (BST) on the night of opposition, transiting

at a little after 1am. Saturn will attain a height of the horizon of $36\frac{1}{2}^{\circ}$ as it transits (as observed from 51° north).

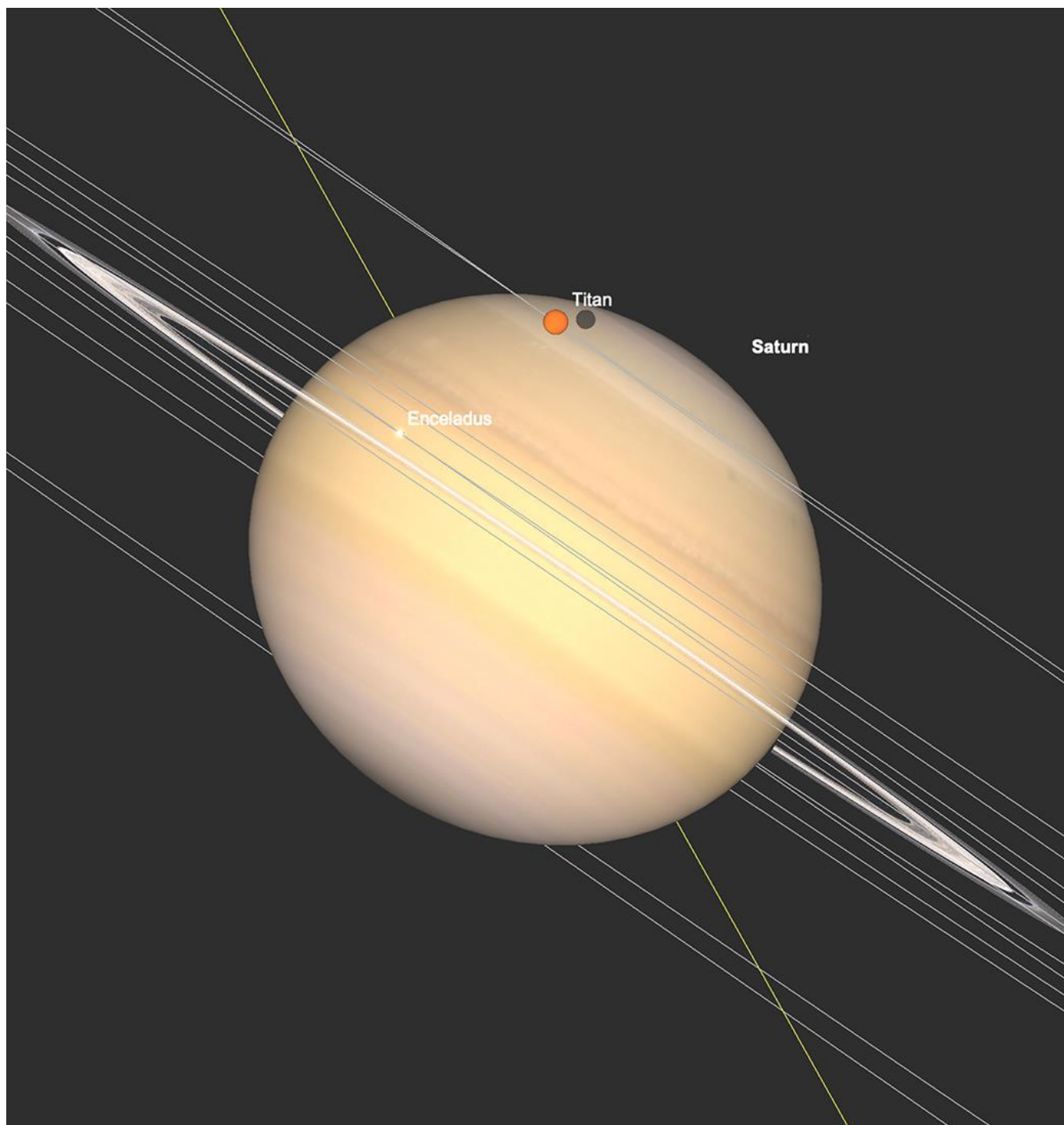
As we are only a few months after the ring plane crossing, the plane of Saturn's orbit and its equator are still well aligned with our orbit here on Earth. This means the chance of witnessing some of Saturn's moons and their shadows transiting the Saturnian disc.

The early morning of September 12th sees Enceladus, Tethys and Mimas all crossing Saturn at the same time. Of the three, it will be the largest, Tethys, that gives observers the greatest chance of seeing. Shadow transits of Saturn's moons are much easier to detect than the actual transits of the satellites themselves and in the case of September 12th's transits, it is the shadow of Tethys that observers stand the greatest chance of seeing.



Saturn, Enceladus, Tethys and Mimas Transits 12.45am September 12th. Image created with SkySafari 6 for Mac OS X, ©2010-2024 Simulation Curriculum Corp., skysafariastronomy.com.

Later in September, just before opposition, Saturn's largest moon, Titan, transits its disc just before sunrise across much of Europe. This is an event that will be much easier for telescopic observers to witness, as Titan is considerably larger than any of the other moons of Saturn.



Saturn and Titan Transit, sunrise, 20th September. Image created with SkySafari 6 for Mac OS X, ©2010-2024 Simulation Curriculum Corp., skysafariastronomy.com.

By the time we get to the end of September, Saturn has dimmed fractionally to +0.7, now presenting a 19.4 arc second diameter disc. The planet will rise at a little before 7 pm (BST) and transit at just after half past midnight.

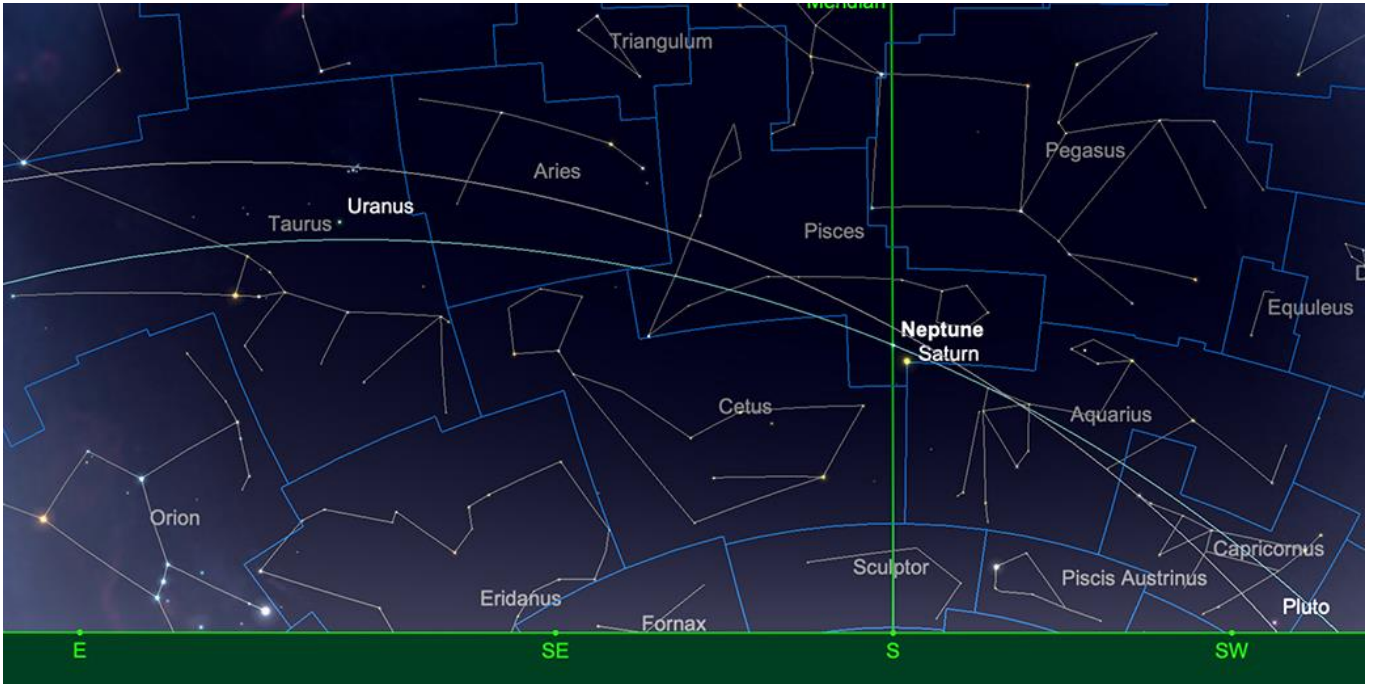
Post-opposition, is when the outer planets start to become visible more readily in the evening sky. So the next few months will be a great period to observe Saturn at near its best - at a sensible time in the evening. Make the most of this!

Uranus and Neptune

The outer planets are readily visible in the morning skies. Uranus is a resident of Taurus currently, as a visual magnitude of +5.7, mid-month. Uranus displays a 3.7 arc second diameter disc and will rise at a little before 10 pm in the middle of September, transiting at a little after 5:30 am the following morning.

Neptune has been shadowing Saturn in Pisces, with the ringed planet acting as a useful waypoint to find the elusive outer world. It may not surprise readers to find out that just as Saturn has its opposition in September, so does the nearby Neptune. Neptune reaches opposition on the 23rd of September, a couple of days after its neighbour. At opposition, Neptune will attain a visual magnitude of +7.8 and display a 2.4 arc second diameter disc. Naturally, as we have covered in previous sky guides, Neptune is much more of a challenge to find, but owing to its proximity to Saturn, should be easy enough to observe in binoculars, with a reasonably dark sky. The planet is a striking blue colour, which is often commented to be much more vibrant than the much brighter Uranus' disc.

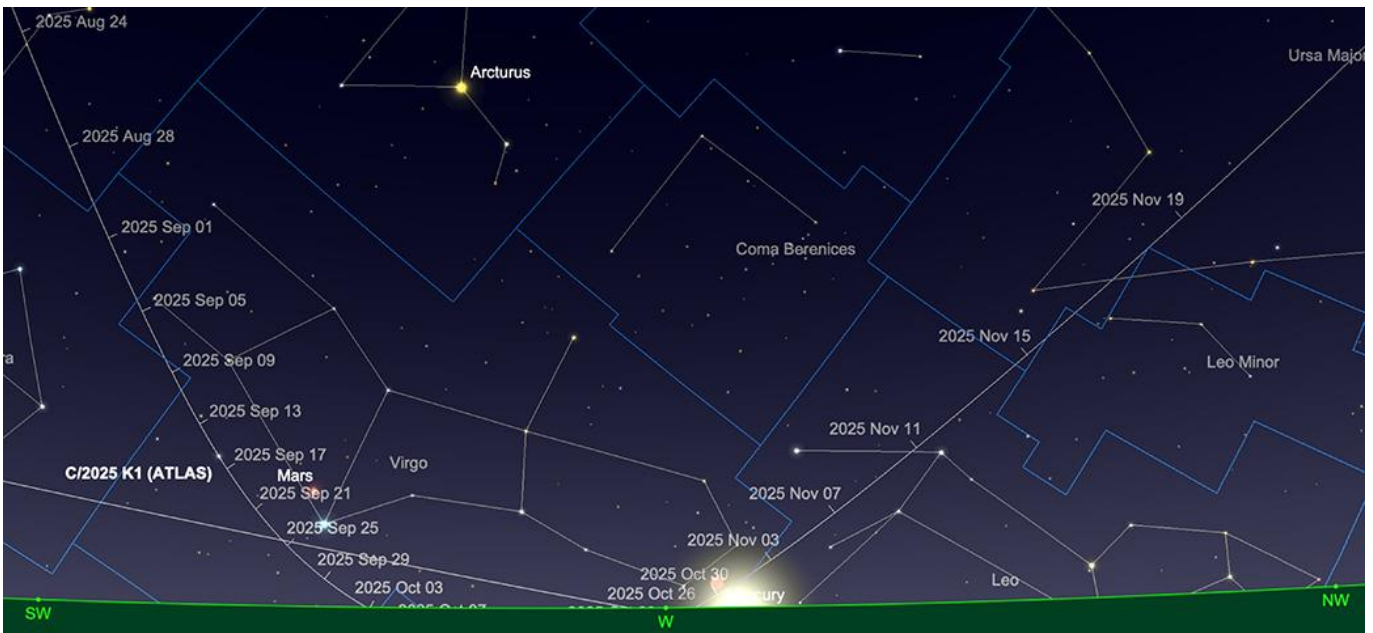
Neptune was first identified through mathematical prediction. While Galileo observed Neptune near Jupiter in 1612 and 1613, he mistook it for a star. After Sir William Herschel's discovery of Uranus in 1781, anomalies in the observation of the planet's orbit hinted at another distant planet, further out in the icy reaches of the solar system. English astronomer John Couch Adams and French mathematician Urbain Le Verrier separately calculated its potential location. Their predictions, initially overlooked, were later recognised for their accuracy. However, due to outdated star maps and communication issues, Neptune was observed, but not identified by the British. Meanwhile, Le Verrier shared his predictions with the Berlin Observatory. Resident Astronomers Johann Galle and Henrich d'Arrest found Neptune within an hour of searching on 24th September 1846, very close (within a degree) of Le Verrier's predicted location.



Uranus and Neptune relative sky positions, 15th September. Image created with SkySafari 6 for Mac OS X, ©2010-2024 Simulation Curriculum Corp., skysafariastronomy.com.

Comets

There are no reasonably bright comets observable at present. Comet 2025 K1 (Atlas) may reach 5th or 6th magnitude in October - if it survives late September's perihelion. If it does, we will cover this in next month's sky guide. It will still (in all likelihood) be a tricky target to observe, even if it does make it through its close encounter with our parent star.



C/2025 K1 (ATLAS) path during September (comet position shown 15th September). Image created with SkySafari 6 for Mac OS X, ©2010-2024 Simulation Curriculum Corp., skysafariastronomy.com.

C/2024 E1 (Wierchchos) is also showing some promise, though is unlikely to be as bright, when it gets to its best in early 2026. The comet is brightening ahead of predicted levels, though as seasoned comet observers know, this does not automatically mean great things are to come.

An object still making headlines is 3I/ATLAS, or C/2025 N1 (ATLAS). This is the third object to be observed on a truly hyperbolic orbit, making it extremely likely to be an interstellar visitor to the inner solar system and not an object from the Oort cloud - the Sun's own captive cometary reservoir. Water vapour and other compounds typical of cometary composition have been observed in this objects by several observatories already. Some interesting characteristics, atypical of our solar system's comets have been noted - and it has been suggested by some astronomers that this object was initially formed around a star of very low metallicity. The James Web Space Telescope was due at time of writing to observe this object spectrographically in August, with a follow up in December 2025, which should provide more detail. Some media coverage have latched on to comments made by Avi Loeb of Harvard University, speculating about the origin of 3I/ATLAS. Professor Loeb has suggested that this object and the previously observed 1I/'Oumuamua could have been alien spacecraft or interstellar probes. While the paths of these objects are unusual, the spectrographic analysis of 'Oumuamua showed it was extremely likely to be cometary - as, almost doubtlessly, the more detailed observations of 3I/ATLAS will confirm. While it may be fun to speculate about more unlikely origins of objects such as these, the reality of observations of can infer some extremely useful information about the environment of very different star systems to ours. While the hard science of cometary observations may not appear quite as glamorous as finding evidence of extraterrestrial intelligence, the chemical composition of these rarely-observed interstellar objects are their own treasure trove of useful information about very different environments to our own "backyard". The fact we live in an age where detection of such objects is becoming much more achievable than it used to be, is cause for some celebration. The recent commissioning of the Vera Rubin Observatory will only make detection of targets such as these easier and will confirm if interstellar visitors to our solar system are potentially more common than we previously have realised.

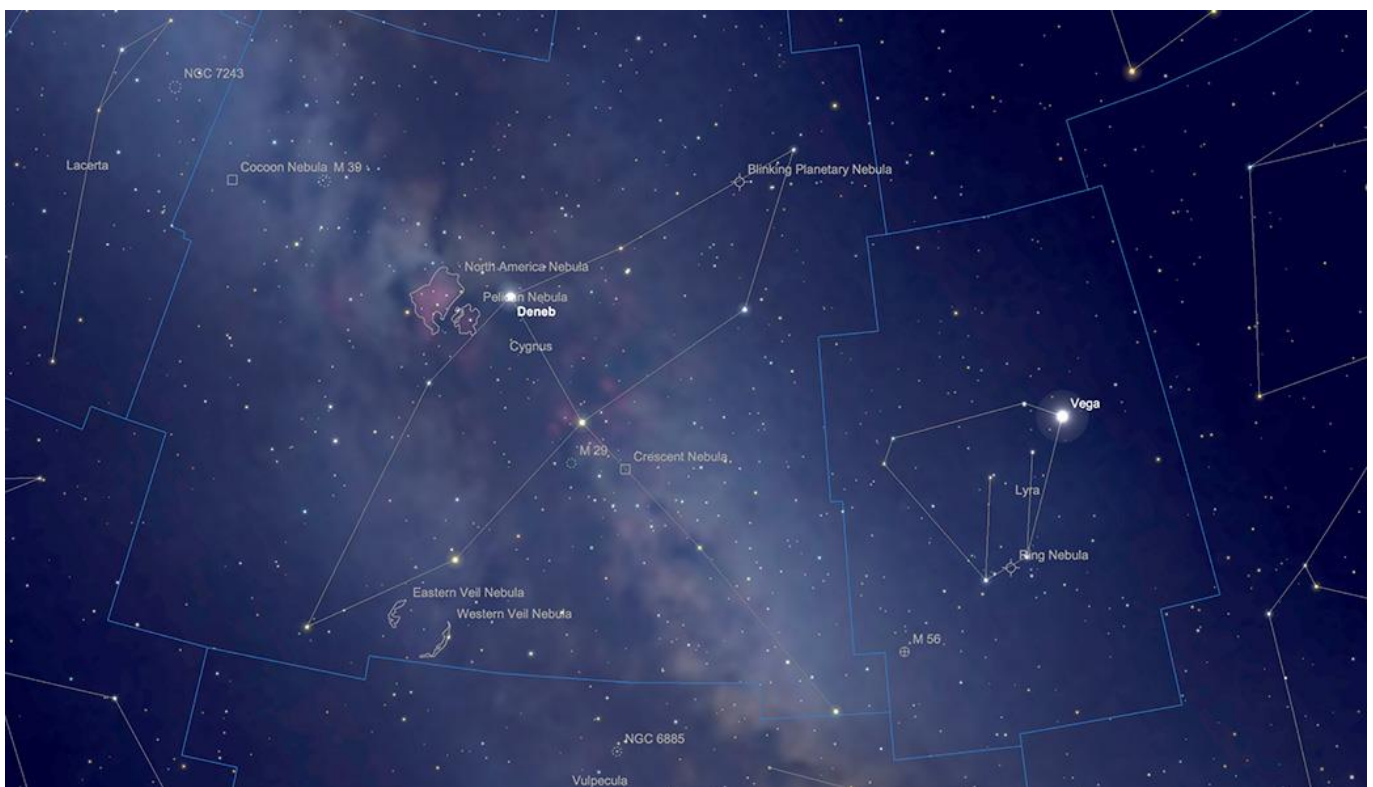
Meteors

September is a quiet month for meteors traditionally. There are some very weak minor showers predicted during the month, but as these output little more than the average sporadic meteor count, are not really worth spending time looking out for. Although the Perseids are technically supposed to end their excellent annual output in late August, the tail end of the shower can still carry over into early September. If you see a meteor during the early part of

the month, trace its path backwards and see if it came from around Perseus. If it did, it's likely you have witnessed a very late Perseid.

Deep Sky Delights - The Summer Triangle Part 2: Cygnus and Lyra

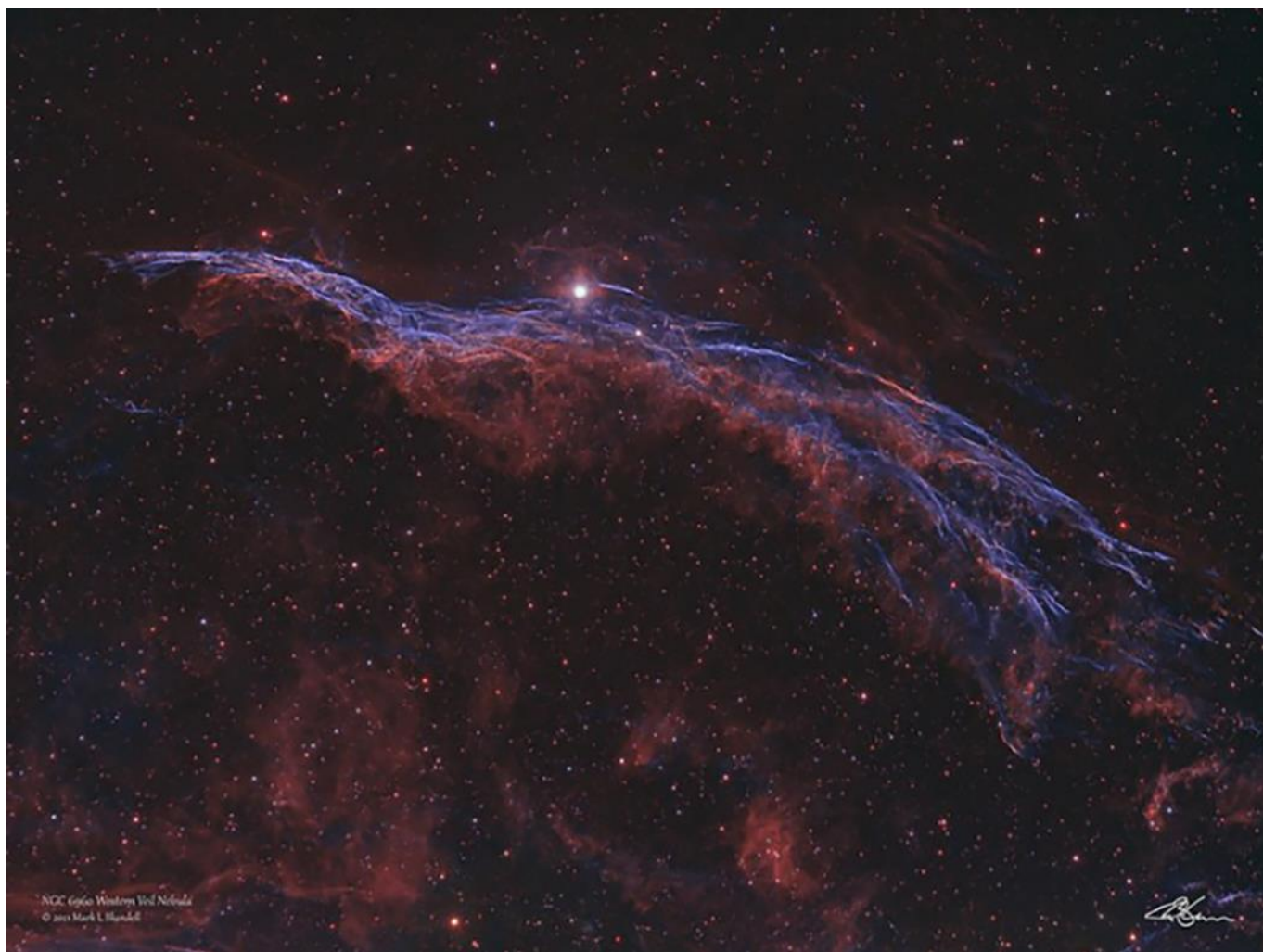
The Summer Triangle is an asterism that consists of the stars Vega, Deneb and Altair and was a term first associated with these stars by the Austrian astronomer Oswald Thomas in the early-to-mid 20th century, when he referred to it as Grosses Dreieck (Great Triangle) in the late 1920s and Sommerliches Dreieck (Summerly Triangle) in 1934. This area of sky takes in a huge swathe of sky: the constellations of Cygnus, Lyra, Aquila, Vulpecula and Sagitta. In part one of our coverage of this area of the heavens, last month, we covered the objects contained within the latter three of these constellations, plus some objects in the neighbouring adjacent constellation of Delphinus. This month we will take in the extremely rich northern end of the triangle - the redoubtable Cygnus and Lyra.



The constellations of Cygnus and Aquarius. Image created with SkySafari 6 for Mac OS X, ©2010-2024 Simulation Curriculum Corp., skysafariastromy.com.

Cygnus contains some of the finest nebulae in the sky - including the enchanting target of the Veil Nebula. The Veil Complex – NGCs 6960, 6974, 6979, 6992 and 6995 in Cygnus is a famous Supernova remnant, spread out over six times the diameter of the Full Moon. At combined brightness of +5 mag, The Veil can supposedly be glimpsed with the naked eye

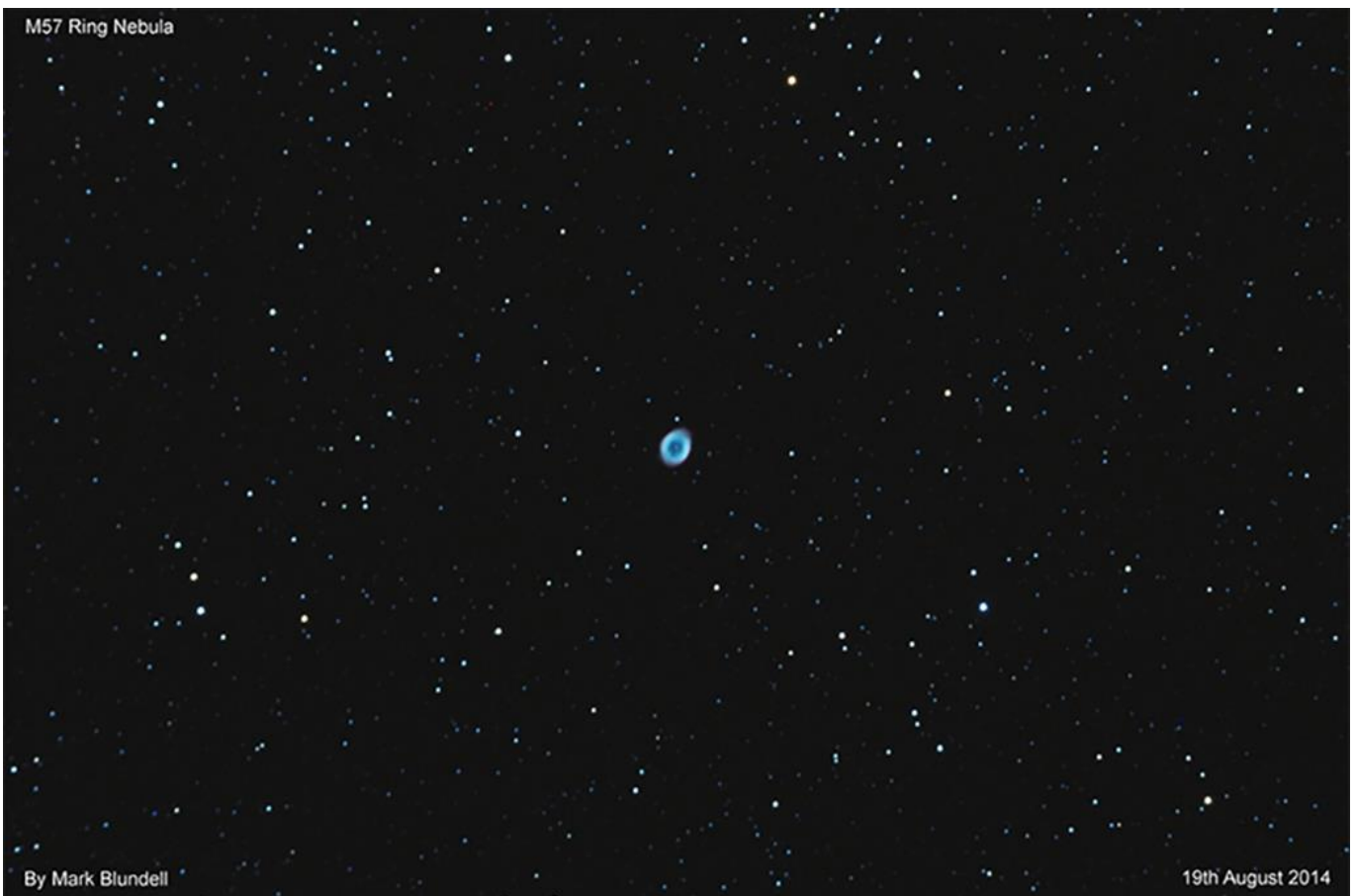
under truly exceptional conditions, but is much more likely to be seen (and better observed) in large binoculars and telescopes. The veil lies underneath the wing of Cygnus, close to Gienah (Epsilon Cygni). The brightest section this nebula is NGC6960, otherwise known as The Witches' Broom, due to its obvious broom-like shape, which reveals itself best in long duration exposures. NGC6960 has the star 52 Cygni apparently buried within it (it is in fact at least 10 times nearer to us), making this part of the nebula an easier target to find with non-Goto scopes. The Veil responds terrifically well to the OIII filter – indeed, it is almost the best-responding nebula to this particular narrowband wavelength. This beautiful structure can be seen in all manner of telescopes, but large instruments with low power, widefield eyepieces present it spectacularly well.



NGC 6960 - Western Veil Nebula, or Witches Broom. Image credit: Mark Blundell. Image used with kind permission.

Drifting Westwards, past one of the finest double stars in the entire sky, the Creamy Yellow and Electric Blue of Albireo (Beta Cygnii), just across the border into Lyra, The Lyre, sit two notable objects, the first of which is the globular cluster M56, which lies roughly equidistant between Albireo and Sulafat (Gamma Lyrae). At +8.27, it is of similar brightness to the globular M71, which we covered in last month's survey of the more southerly part of the Summer Triangle. Though M56, at 2.2 Arcminutes diameter – when compared to the larger M71 at 3.3 Arcminutes in size – is slightly more condensed and appears brighter. Indeed, both objects would possibly appear more prominent were they not lying so close to the axis of our Galaxy and therefore obscured by parts of the Milky Way.

Roughly halfway between Sulafat and the neighbouring naked eye variable star, Sheliak (Beta Lyrae) sits one of the showpieces of the sky, the wonderful M57, the Ring Nebula. M57's enduring popularity as a Deep Sky target may be partially down to the ease with which its location is to be found. Looking like an elongated smoke ring drifting through space, the Ring Nebula is perhaps the archetype of all planetary nebulae. Discovered in 1779 by the astronomer Antoine Darquier de Pellepoix, Messier was hot on his heels and independently discovered it a matter of days afterwards. Rather disappointing in binoculars, yet easily spotted in most telescopes due to its comparatively high surface brightness, M57 takes magnification and filtration (especially the OIII filter) extremely well. Naturally, the larger the telescope you point at it, the more the keen observer is likely to see, but those with smaller telescopes will not be disappointed as long as you keep magnification up.



Messier 57. Image credit: Mark Blundell. Image used with kind permission.

M57's distance is still up for debate, modern estimates of the central star put it at about 1400-4000+ light years away - quite a variation! It is thought is the former figure is the more correct, M57 is about a light year across from widest point to widest point and is a cylinder shape which we see from the end - quite the opposite, in fact, to M27's aspect. It is thought that The Ring Nebula is around 5-8000 years old.

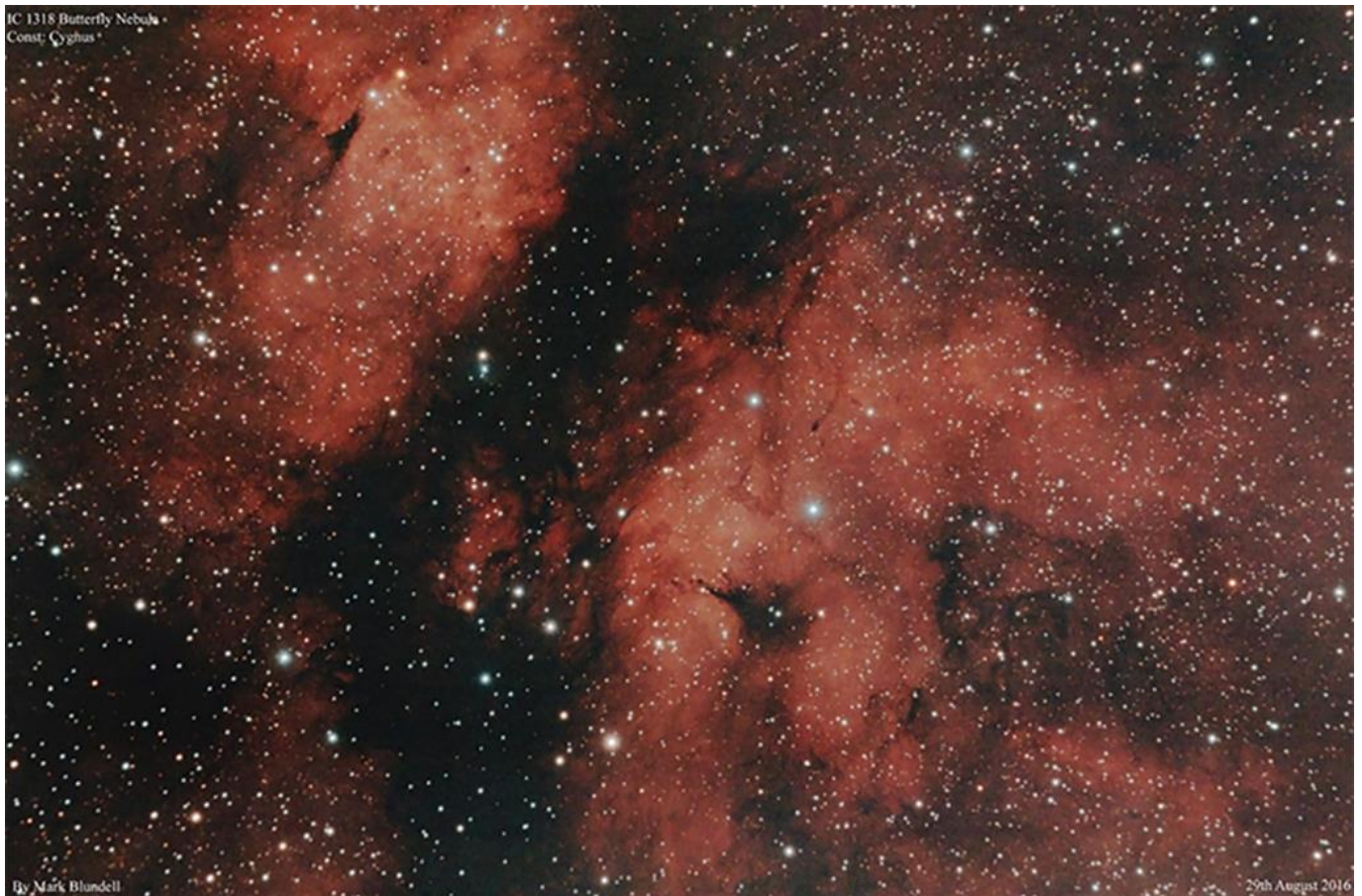
Back into Cygnus, climbing higher North up the spine of the Milky Way, we come to a reasonably diminutive, but nonetheless fascinating object: NGC 6888, The Crescent Nebula. A bright, compact nebula, which is the expanding shell of a Wolf-Rayet Star (HD 192163), which is steadily shedding its outer layers. The nebula glows, due to the fact that its gas is superheated by the collision of the

boundary layer of a faster-moving inner solar wind, meeting a less energetic layer of solar wind formed when the gaseous layer of HD192163's former outer atmosphere was ejected in its previous red giant phase. This bow shock is about 25 light years across and appears to us as a crescent shape, glowing at +7.40 mag. The "surface" of this crescent is incredibly detailed and its complicated texture can be noted in larger telescopes using OIII and UHC filtration. Much beloved of Astrophotographers, the Crescent Nebula is a rewarding target for imagers.



NGC 6888, The Crescent Nebula. Image Credit - Mark Blundell.

Right next door to the Crescent, clustered around the star Sadr (Gamma Cygni) is the vast expanse of the Gamma Cygni Nebula. Glimpsed in large binoculars and telescopes from an appropriately dark locale, IC 1318, or the Butterfly Nebula, as it is otherwise known, is a huge patch of red nebulosity, slightly larger in dimensions than the Veil. However, this nebula is very spread out, so its surface brightness is inherently low. It is best visually isolated with H-Alpha Filters, but is more easily captured in long duration astrophotography. The Gamma Cygni Nebula reaches out behind the Crescent and the star that it takes its name from. Sadr is around 750 light years away, whereas estimates for the distance of the nebula vary wildly from 2000-5000 light years distance.



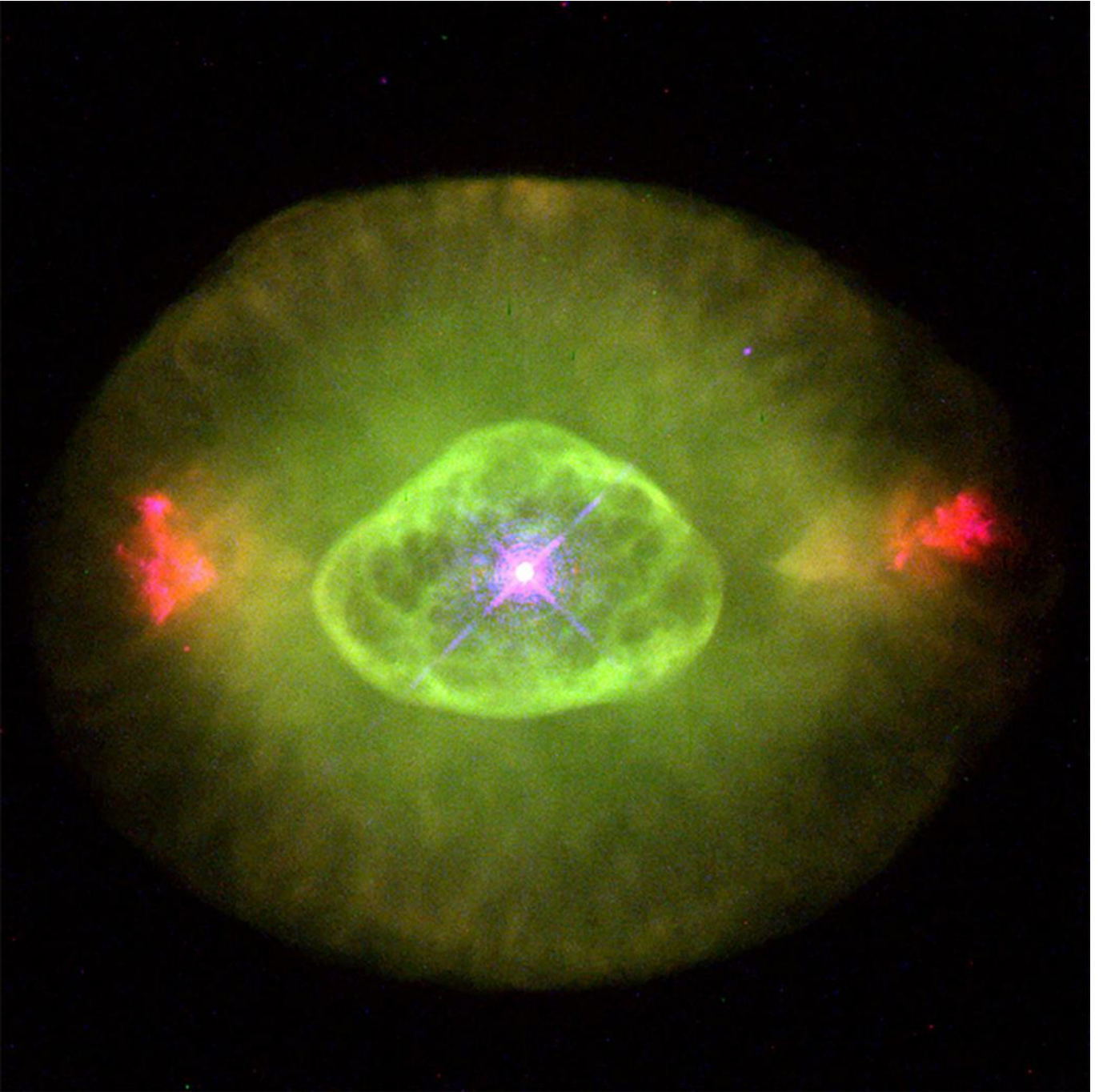
The Butterfly or Sadr Nebula in detail. Image Credit: Mark Blundell.

Further up the spine of Cygnus, just beyond its principal star, Deneb, is another vast nebula system: the North America Nebula (NGC7000) and tucked underneath it, the Pelican Nebula (IC5070). Of the two, the North America is undoubtedly brighter (at +4 mag, compared to the Pelican's +8 mag) and can be seen very well in large binoculars from a dark site. An OIII or H-Beta filter can be used successfully to enhance NGC7000 in widefield telescopes, but the complex does not respond well to magnification. Both nebulae are part of the same gas cloud, which may be ionised by emissions from nearby Deneb. If this is the case, their distance would be in the region of 1800+ light years away from our Solar System.



NGC 7000, The North America Nebula. Image Credit - Mark Blundell.

Last, but not least, is a much smaller object, the Blinking Planetary or NGC 6826. This nebula is 2.1 arc minutes in diameter and located towards Iota Cygni. Dimensionally, NGC6826 is fractionally larger than the Ring Nebula and about the same brightness. The "blinking" nature of this planetary is caused when an observer stares at the nebula's central star, at medium to high power, this overwhelms the eye and the nebula fades from view. When you look away to the nearby +8.5 magnitude star in the same field, the nebula reappears. This is not a unique phenomenon and is noted in other compact planetary nebulae with prominent central stars, but is best seen in the Blinking Planetary. Visually, the NGC6826 present two brighter regions on either side of its disc. These regions are Fast Low-ionization Emission Regions or FLIERs for short. These FLIERs are parts of the planetary formation which are expanding at extreme speeds in comparison to the surrounding nebula. It is postulated that these areas are so dense that the ionising effect of the ultraviolet radiation emitted from the parent star cannot penetrate them. The Blinking Planetary and the Saturn Nebula are two of the best known examples of planetaries that exhibit these FLIERs.



NGC 6826, The Blinking Planetary. Image Credit: Hubble Image NASA/ESA, Public Domain.