

SKY GUIDE

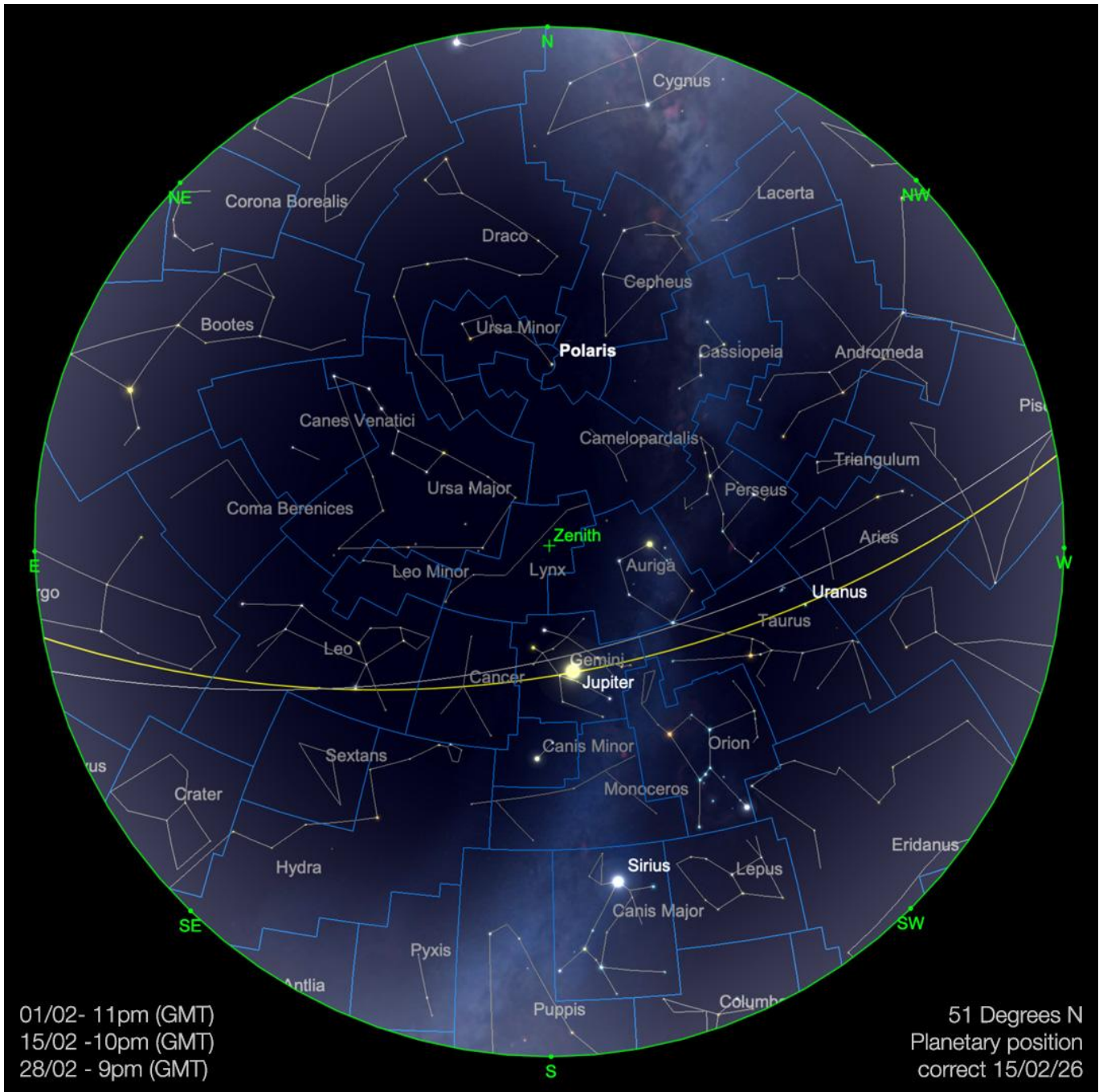
Astronomical guide for February 2026

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

Publisher: **Bresser GmbH**
Gutenbergstr. 2 · 46414 Rhede · Germany
+49 (0) 28 72 – 80 74 – 0
info@bresser.de · www.bresser.de

Original text: Kerin Smith
© 2026 – Bresser GmbH – Group of Companies

Expand your horizon



February is usually the shortest month, with 28 days, extending to 29 only in a Leap Year to keep the calendar aligned with the Earth's motion. The Gregorian Calendar, introduced in 1582, corrected inaccuracies in the older Julian system. Leap Years maintain this accuracy: 2024 qualified because it was divisible by 4 and not by 100 unless also by 400. The year 2026 meets none of these conditions, so February remains a standard 28-day month.

February's short length reflects the imperfect fit between human timekeeping and natural cycles. If left uncorrected, the calendar would gradually drift out of step with the Earth's rotation and its orbit around the Sun. An Astronomical Year lasts about 365.242 days, and the accumulated fraction of a day would soon become noticeable, shifting the calendar away from key events such as the Solstices and Equinoxes.

The Gregorian Calendar was introduced by Pope Gregory XIII as a refinement of Julius Caesar's Julian Calendar, which had proved increasingly inaccurate. Its underlying design was developed by the Italian scientist Luigi Lilio, who did not live to see it adopted. Leap Years, with their added day in February, were central to the new system and simpler than

those of the Julian Calendar. Despite its introduction in 1582, Britain did not adopt the Gregorian Calendar until 1752.

Modern timekeeping is further refined through Leap Seconds, the most recent of which was added in December 2016, to account for variations in the Earth's rotation caused by factors such as atmospheric drag. Venus offers an extreme example of this effect, with a rotation period longer than its year. However, the future of Leap Seconds is limited. In 2022, the BIPM voted to end their use by 2035, allowing time to drift slightly and instead correcting it with a Leap Minute every 50 to 100 years. The long-term implications for precision systems such as telescope tracking remain unclear, though reliance on GPS time, which operates independently of Universal Time, may reduce the practical impact.

The Solar System

The Sun

As we move into February 2026, the Sun continues to show a healthy level of activity as the current solar cycle unfolds. At time of writing, there have been several notable geomagnetic disturbances in the last month capable of producing aurorae at mid to high latitudes. The strongest event occurred over the night of the 19th/20th January which were the strongest events recorded since the extraordinary low latitude events 10th/11th May 2024. The peak was fairly brief, but produced some spectacularly beautiful aurora. Those who witnessed it were fortunate enough for this to coincide with a very favourable lunar cycle, which aided observation and imaging considerably.

According to data and projections issued by the National Oceanic and Atmospheric Administration, sunspot numbers were slightly up for December 2025. They are still well within the expected median range for this phase of Solar Cycle 25. This places current activity firmly in line with long-term statistical expectations. NOAA's regularly updated solar cycle progression charts remain one of the most reliable ways to track how observed sunspot numbers compare with predicted trends and they provide a useful long-term context for understanding short-term fluctuations. For those wishing to keep a closer eye on day-to-day solar behaviour, well-established resources, such as www.spaceweather.com and Michel Deconinck's monthly newsletter ([Aquarellia Observatory Forecasts](#)) cover various aspects of solar observations and provide valuable insights into the current state of our parent star. 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.



Aurora over East Devon, January 2026. Image credit: L Chadwick. Image used with kind permission.

Aurora over East Devon, January 2026. Image credit: L Chadwick. Image used with kind permission.

The Moon

The Moon begins February 2026 in the constellation of Cancer, riding relatively high in the ecliptic. Neatly, Full Moon occurs on 1st February, with the Moon drifting eastward during the night from the border with Gemini. This Full Moon stands high in the winter sky for northern hemisphere observers, rising around sunset and setting close to sunrise. While visually striking to the naked eye, the fully illuminated disc washes out most surface detail telescopically, making it a less favourable time for detailed lunar observing. We repeat our often read warning that the beginning (and end) of February will not be the best time for deep sky observing or imaging.

After Full Moon, the Moon begins to wane and gradually descends the ecliptic from a northern perspective. Over the first part of the month it passes through Leo and then into Virgo, its

gibbous phase slowly shrinking night-by-night. As it continues eastward, the Moon crosses Libra, entering the southern reaches of the ecliptic.

Last Quarter falls on 9th February, with the Moon in Libra, rising late in the evening and remaining visible into the morning hours. At this phase, low-angled sunlight brings out stark relief along the lunar terminator, making it a rewarding time for observation. However, this will have to be tempered by the Moon's relatively low position in the sky for northern hemisphere residents.

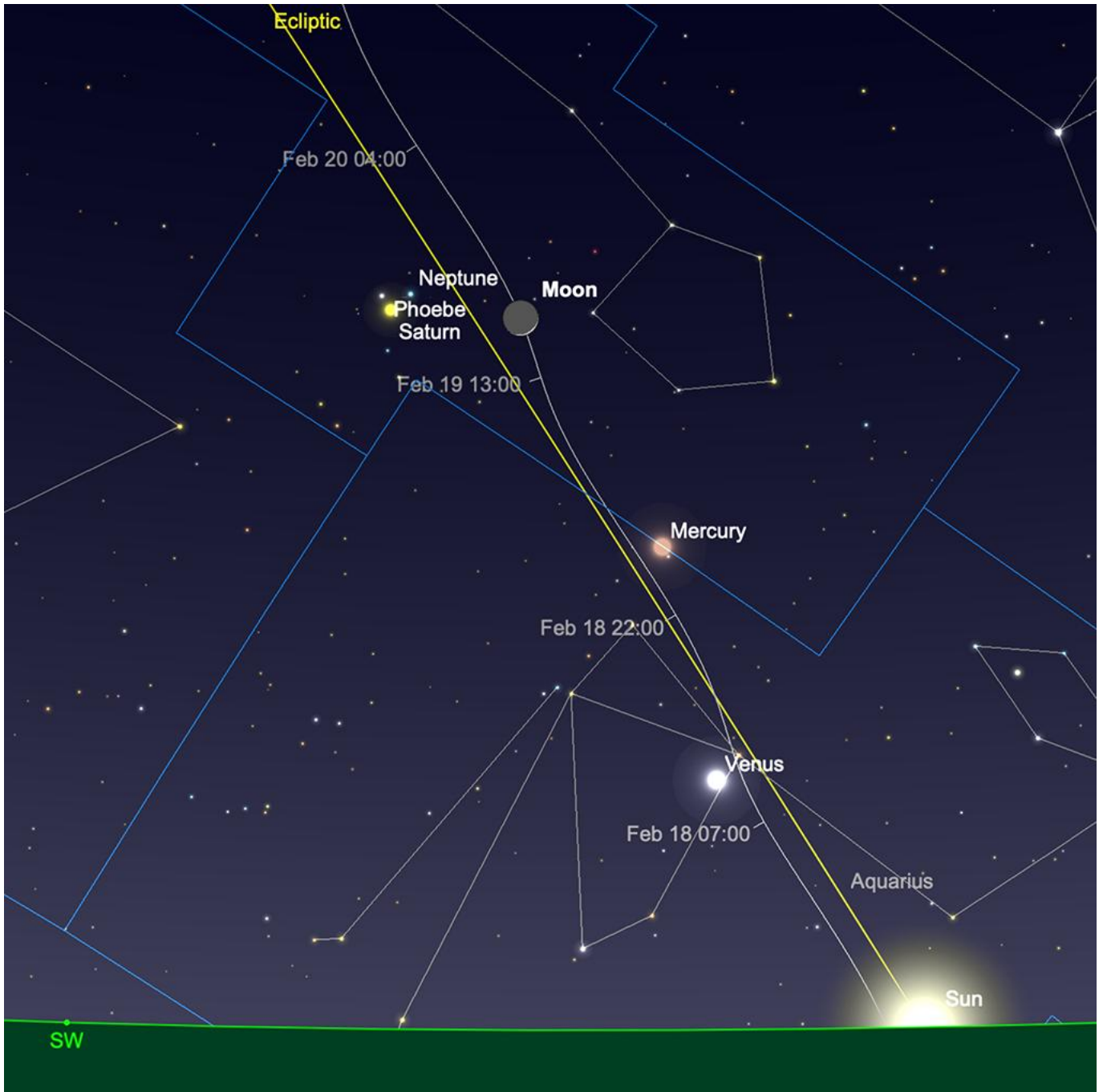
Following Last Quarter, the Moon becomes a waning crescent as it travels through Ophiuchus and Sagittarius, then onward into Capricornus and Aquarius. Its apparent path carries it ever closer to the Sun in the sky and by mid-month it is largely lost in the dawn twilight.

New Moon occurs on 17th February, with the Moon positioned near the Aquarius–Capricornus border region of the ecliptic. At this point the lunar disc is effectively invisible and the night sky is at its darkest, offering the best conditions of the month for deep-sky observing and imaging.

After New Moon the Moon reappears as a slim waxing crescent in the western evening sky. Over the following days it climbs steadily higher after sunset, passing through Aquarius and Pisces and the trio of low evening planets: Saturn, Mercury and Venus, as it does so. Its illumination grows quickly as it heads back toward the northernmost part of the ecliptic. Those of us in the northern hemisphere are headed towards the “high spring crescent phase” of the Moon's annual evening apparitions - and while the Moon does not sit at quite its highest at crescent phase this month, it heralds excellent observing conditions over the next few cycles.

First Quarter occurs on 24th February, with the Moon situated in Taurus, standing prominently high in the evening sky and setting around midnight. This phase once again provides excellent opportunities for observing surface detail along the terminator.

In the final days of February the Moon continues waxing as it moves from Aries into Taurus and then through Gemini and Cancer as the month draws to a close. By the end of February it is at a healthy gibbous phase once more, rising earlier each evening and signalling the approach of the next Full Moon, which will occur in early March.



The Crescent Moon, Saturn, Mercury and Venus, sunset, Jan 19th, 2026. Image created with SkySafari 6 for Mac OS X, ©2010-2016 Simulation Curriculum Corp., skysafariastromy.com.

Mercury

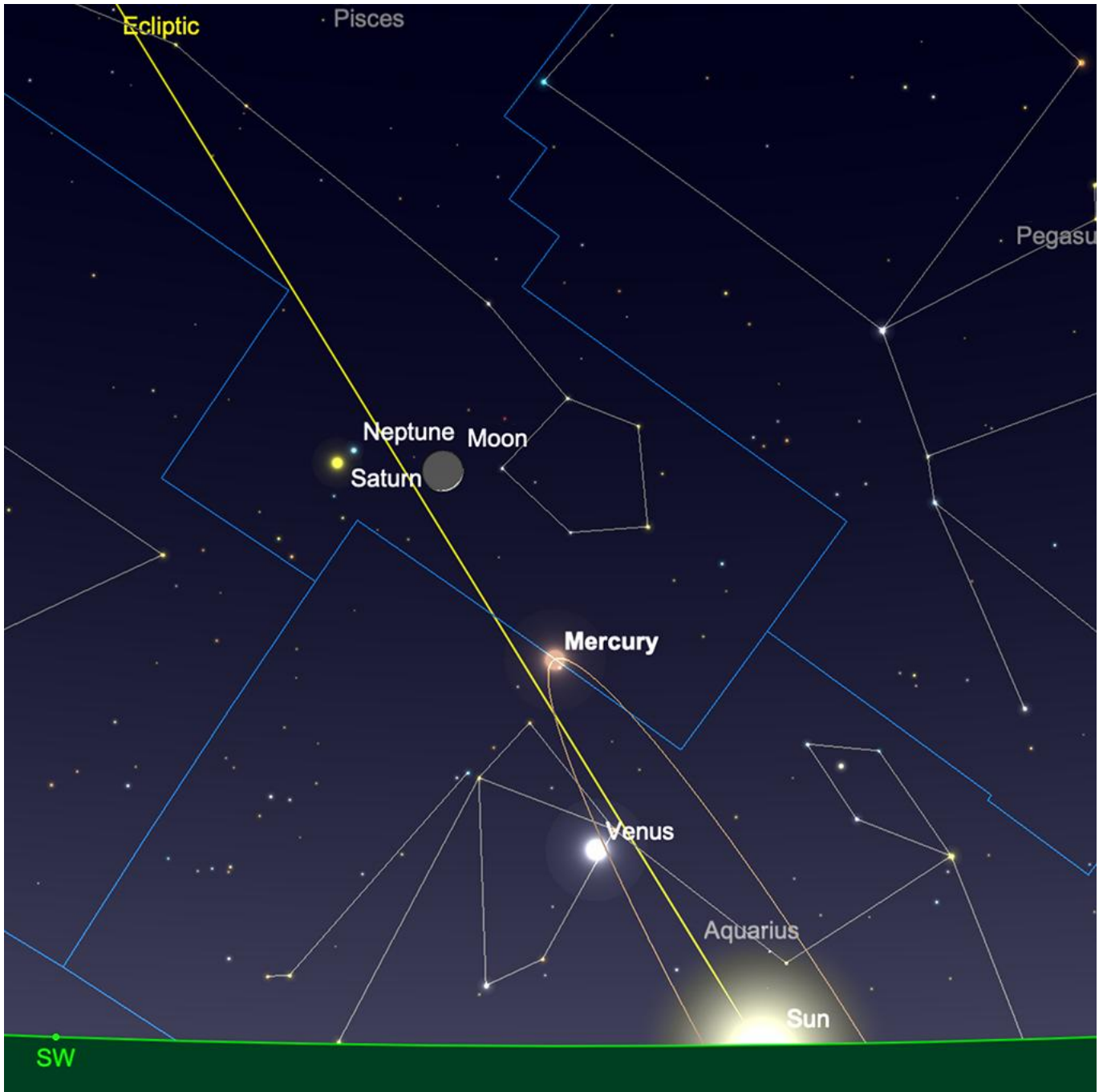
Mercury begins February emerging into the western evening sky, after passing around the far side of the Sun at superior conjunction in late January. For the early part of the month it is relatively low after sunset and may be difficult to spot in bright twilight, though it is relatively bright at -1.1 magnitude. However, Mercury is gradually moving into a more favourable observing window. As the days progress, the planet climbs higher above the western horizon as the Sun sets, making it increasingly accessible to keen observers with a clear horizon

toward the west. This gradual improvement in visibility continues through the first half of the month.

The highlight of Mercury's apparition in February 2026 comes around 19th February, when it reaches its greatest eastern elongation from the Sun. At this point the planet attains its maximum angular distance from the Sun in the evening sky for this cycle, at around 18 degrees separation - which works out at a separation from the horizon of around 15 degrees, as observed from 51° N. This elongation offers the best opportunity to observe Mercury on successive evenings shortly after sunset, provided the western horizon is sufficiently clear of obstructions and twilight has faded. Mercury will appear brighter than many stars near the horizon, though still modest in brightness compared with Venus. BY this point the [planet will be -0.4 magnitude and display a 7.2 arc second, 50% illuminated phase.

The evening before greatest eastern elongation, on the 18th February, the Moon and Mercury will appear close together in the twilight, with the slim lunar crescent offering a useful guide to locating the much smaller and fainter planet. This pairing just after sunset can be an attractive target for binoculars or wide-field imaging, if sky conditions permit.

The last few days of the month sees Mercury fading quite rapidly and headed backwards towards the Sun. By the time we get to the end of February, the planet will be a rather disappointing +1.9 magnitude and will be lost in the evening twilight again.



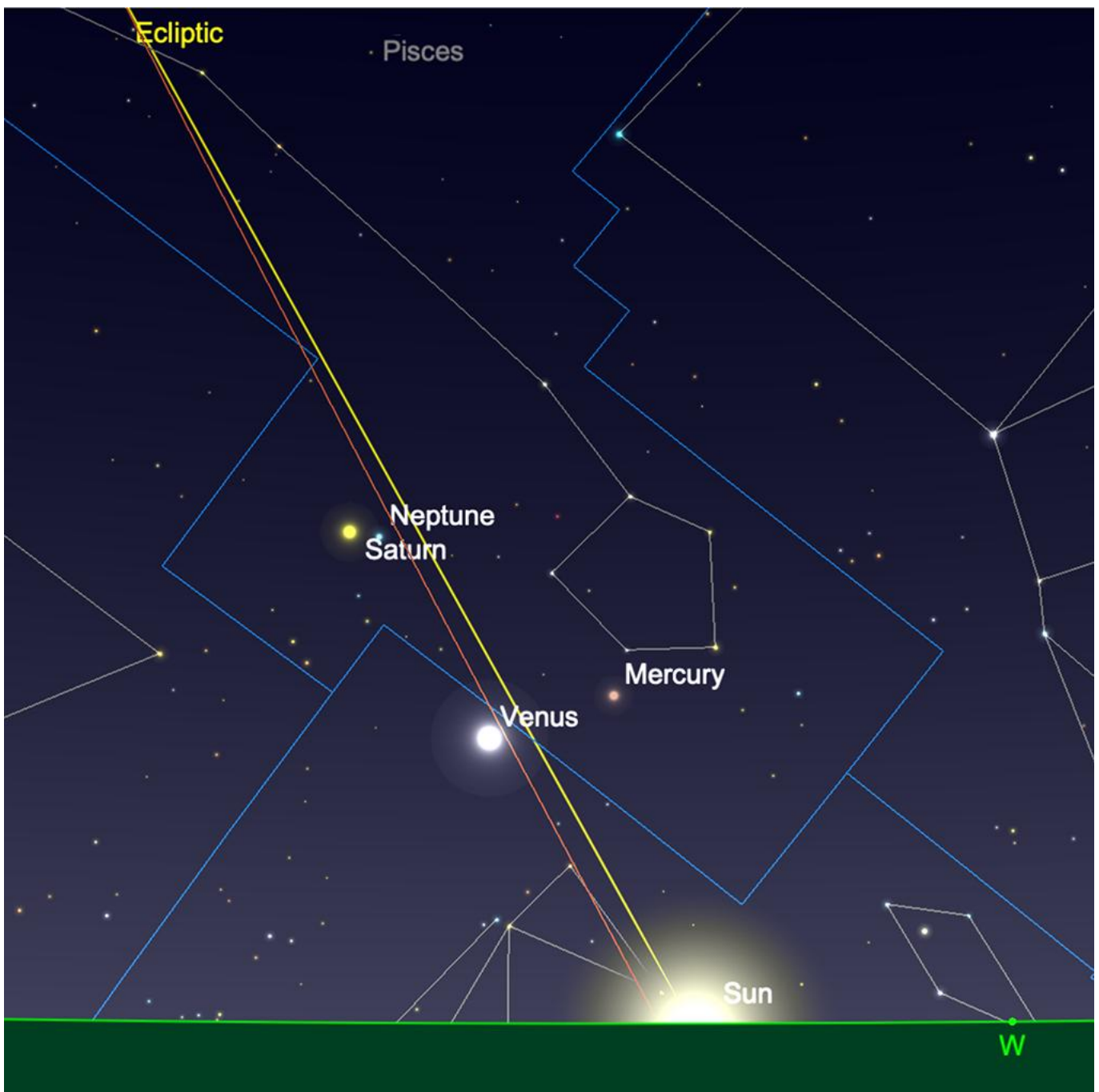
Mercury at greatest eastern elongation, sunset, 19th February. Image created with SkySafari 6 for Mac OS X, ©2010-2016 Simulation Curriculum Corp., skysafariastronomy.com.

Venus

Venus reached superior conjunction on 6th January 2026, when it passed nearly directly behind the Sun, relative to Earth's line of sight. At that point it was completely lost in the Sun's glare and not visible from Earth. For weeks afterwards it remained too close to the Sun's position in the sky to be easily seen with the unaided eye at dusk. As February begins, Venus is still emerging from this transition and remains very low in the twilight after sunset. Observers with a flat, unobstructed horizon may be able to glimpse it shortly after sunset during the first half of the month, but it will be a challenge and may require careful

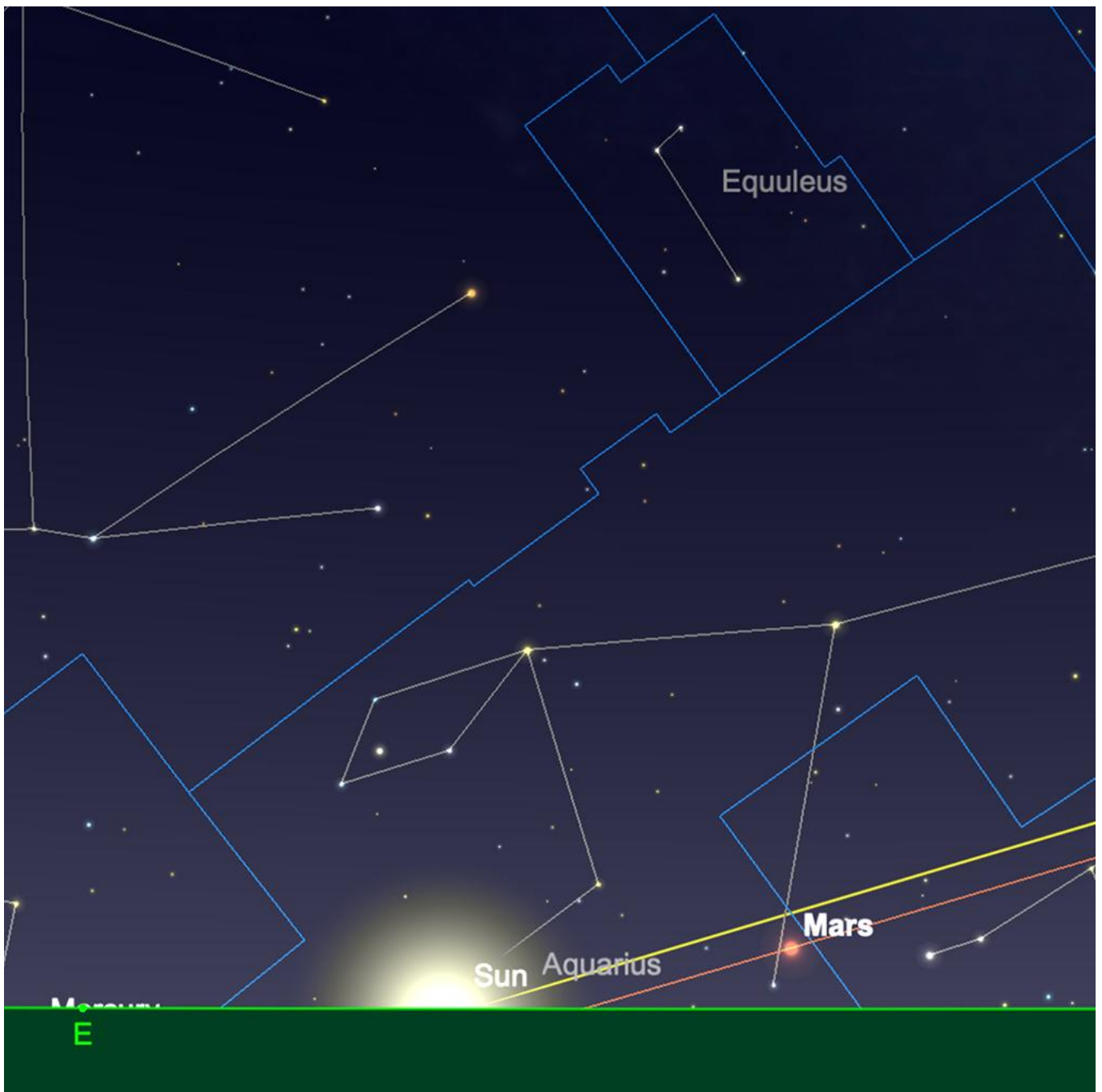
timing and possibly binoculars, if seeing conditions are less than ideal - though at -3.9 magnitude, the planet is still very brilliant.

By the middle to latter part of February, Venus moves farther from the Sun in our sky and becomes progressively easier to spot in the western evening twilight. It appears as the bright classical “evening star”, soon after sunset, although still close to the horizon and setting quickly as twilight deepens. The elongation of Venus from the Sun continues to grow through the month, making the evenings in late February the most favourable for casual observation from mid-northern latitudes. This period offers the best chance during February to see Venus without optical aid, especially in the last week of the month. However, as time progresses, Venus will climb higher and higher into the evening sky and become absolutely unstable. We miss our time a little until then.



Mars

Mars is re-emerging from January's superior conjunction and as such remains unobservable for much of the start of the month. Even by the time we get to the end of February, conditions have not improved dramatically. At +1.2 magnitude, Mars is still rather dim and rises almost in line with the Sun from mid northern latitudes on the Aquarius/Capricornus borders.



Jupiter

Jupiter was at opposition in early January 2026, so February remains a strong month for observation, as it remains very well-placed for observation, particularly from the northern hemisphere. In early February Jupiter continues to shine as one of the brightest objects in the night sky. It remains well above the horizon after sunset and through much of the night, making it straightforward to locate in the constellation Gemini.

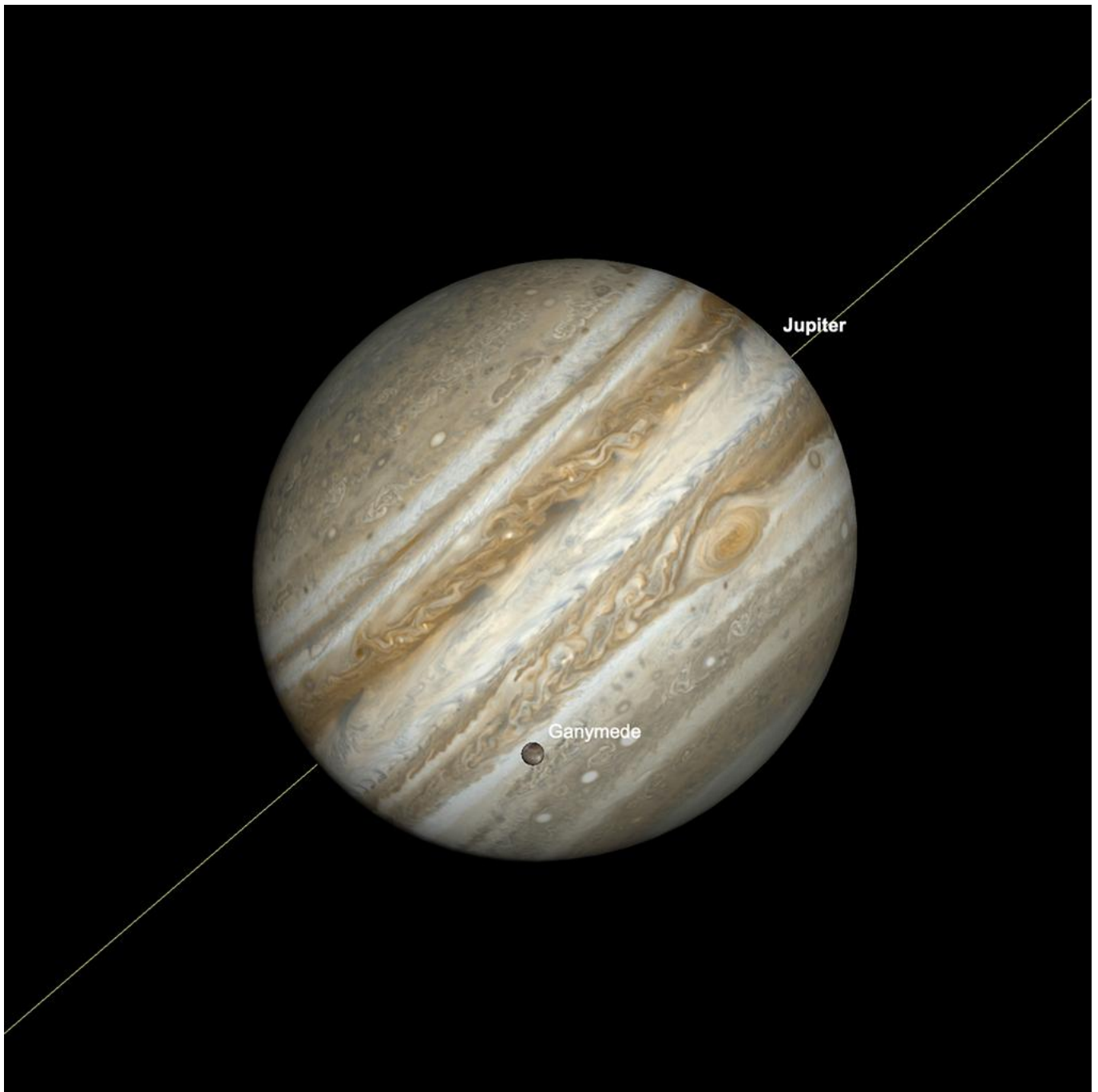
At the start of the month its apparent magnitude is -2.6, placing it brighter than all stars (bar the Sun) and easily visible even in the most light polluted environments. Its apparent angular diameter is still substantial, around 45.7 arc seconds, so through binoculars or a small telescope Jupiter presents a striking white disk, with its four largest moons - Io, Europa, Ganymede and Callisto - strung out on either side. Rising in the mid afternoon and setting well after midnight, Jupiter is highest in the southern sky around late evening, offering the best conditions for detailed observation when atmospheric seeing is steady.

By mid-February the brightness of Jupiter diminishes only slightly, to around -2.5, as its angular diameter decreases gradually, as its distance to Earth slowly increases. It still dominates the evening sky in Gemini and spends most of the night above the horizon. For observers at mid northern latitudes the planet will be well positioned for observation in the evening once twilight fades, reaching a comfortable altitude for telescopic viewing. During this period there are no close conjunctions between Jupiter and other bright planets, but it is joined by the Moon on the 1st of the month and then later on the 26th and 27th.

Towards the end of February Jupiter remains a prominent target and is still easily visible for much of the night from the mid latitudes of the northern hemisphere. Its brightness is -2.4 and its apparent size only slightly smaller than earlier in the month, around 42.8 arc seconds. It will be rising in the afternoon, culminating high in the southern sky in the late evening and only setting in the early hours of the morning, providing long observing windows. On 27th February the Moon makes a close approach to Jupiter in Gemini, offering a useful marker for locating the planet in the sky as the gibbous Moon passes nearby; this can be an attractive sight through binoculars or telescopes, when sky conditions permit.

Throughout February Jupiter's consistent brightness and high altitude make it one of the easiest planets to observe from mid northern latitudes. Its famous Great Red Spot and Galilean satellites will go through their usual cycles of transits. Here are some notable examples: February 11th sees a favourable Great Red Spot and Ganymede mutual transit

peaking at around 7:30 pm (GMT). There is a GRS and Io transit around 9:30 pm (GMT) on February 22nd.



Jupiter, GRS and Ganymede Transit, 7.39pm (GMT), 11th February. Image created with SkySafari 6 for Mac OS X, ©2010-2016 Simulation Curriculum Corp., skysafariastromy.com.

Saturn

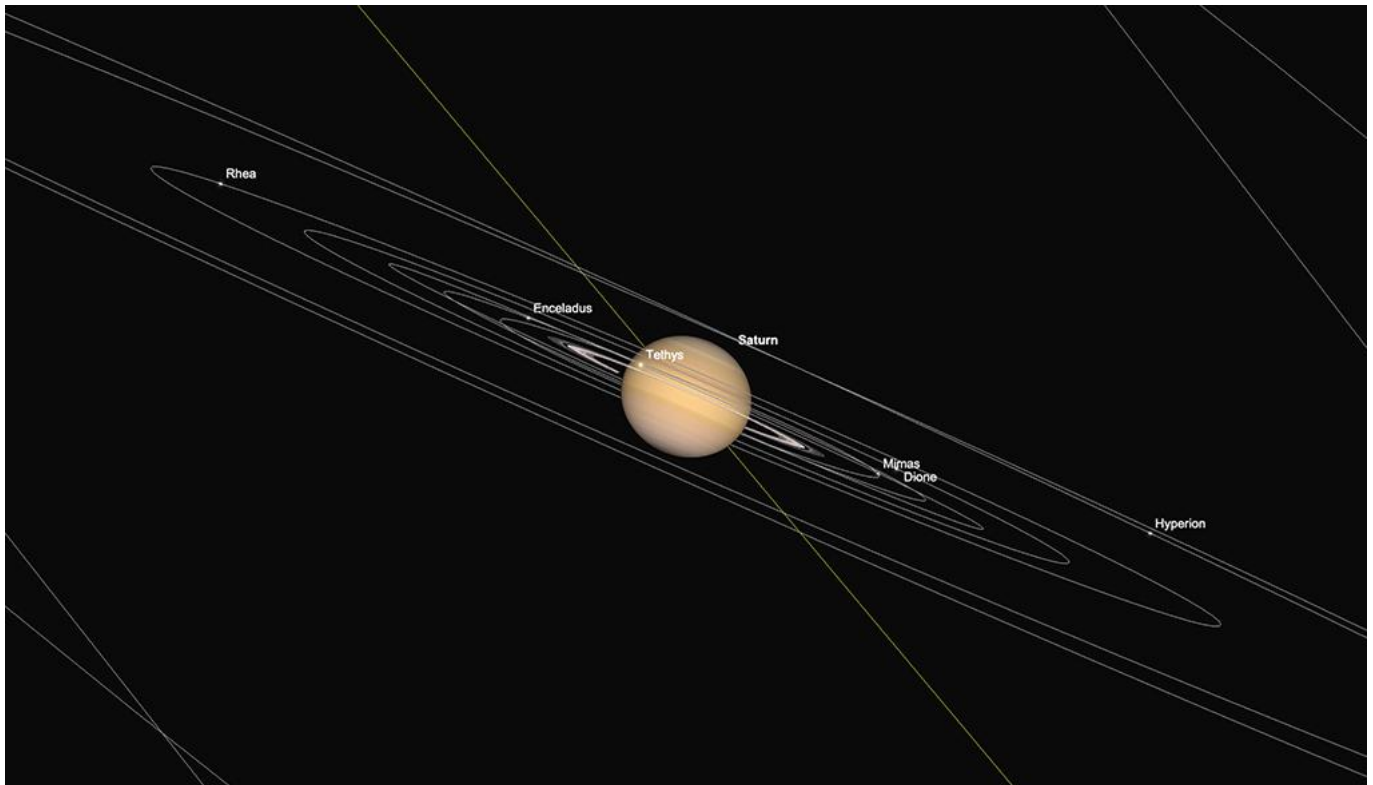
At the beginning of February, Saturn remains an early-evening object but is already slipping steadily closer to the Sun from our point of view. It is located in the western part of Pisces,

having left Aquarius during January. Its brightness at this stage is around magnitude +1.0 to +1.1, making it noticeably fainter than Jupiter but still the brightest object in its immediate region of sky. For observers at about 51° N, Saturn is visible shortly after sunset and culminates low in the south-west while twilight is still fading. Its altitude at transit is only a little above 30 degrees, meaning atmospheric seeing is often less than ideal, though steady evenings can still reward careful observation. Saturn sets before late evening, so observations are best attempted as soon as the sky becomes dark enough.

Moving into the middle of the month, Saturn's observing window shortens appreciably. It is now setting earlier each night and is increasingly immersed in twilight. Its brightness remains broadly unchanged at about magnitude +1.1, but its low altitude makes it more vulnerable to haze and poor transparency near the horizon. A notable feature of later mid-February 2026 is Saturn's close conjunction with Neptune, which also resides in Pisces. This event occurs on the 28th, with the two planets being just half a degree apart from each other. While Neptune is far too faint to see without optical aid, the pairing is of interest telescopically, with both planets fitting into the same low-power field of view. This conjunction occurs very low in the western sky after sunset and requires a clear, unobstructed horizon to observe successfully.

By the end of February, Saturn is becoming a difficult target from mid northern latitudes. It remains in Pisces but is now setting not long after the Sun, with its altitude at the end of twilight dropping into the low twenties of degrees or below. Its brightness is now magnitude +1.0, but the combination of low elevation and bright evening sky makes observation increasingly challenging. The planet's rings are still presented at a very shallow angle, as Saturn "recovers" from its recent ring-plane crossing. This reduces the ring's visual prominence and makes the planet appear more star-like at low magnifications. Observations at this stage of the month demand excellent transparency and precise timing, shortly after sunset.

Throughout February 2026, Saturn is no longer a long-duration evening showpiece, but remains worth attention early in the month, particularly for those interested in following the changing presentation of its ring system or observing its gradual retreat into the Sun's glare. The conjunction with Neptune adds a subtle point of interest, but overall February marks the closing phase of Saturn's evening apparition for northern hemisphere observers.



Saturn and inner moons, early evening, 13th February. Image created with SkySafari 6 for Mac OS X, ©2010-2016 Simulation Curriculum Corp., skysafariastronomy.com.

Uranus and Neptune

Of the two outer ice giants, Neptune is the more challenging target and should be prioritised early in the month. At the start of February it lies in Pisces, still in relatively close proximity to Saturn, with the separation between the two planets remaining just under 1.5 degrees. This makes Saturn a useful signpost while conditions allow. With Saturn placed toward the lower right of a typical binocular field, Neptune can be found toward the upper left, appearing as a very faint star-like point. At around magnitude +7.9 and with an apparent disc only about 2.3 arc seconds across, Neptune is beyond naked-eye visibility and requires binoculars at the very least, with a telescope needed to confirm its planetary nature. Observers with good colour sensitivity may notice its subtle bluish tint. Early February offers the best opportunity for observations, as Neptune is still high enough above the south-western horizon after sunset to be accessible before it sinks into thicker atmospheric layers.

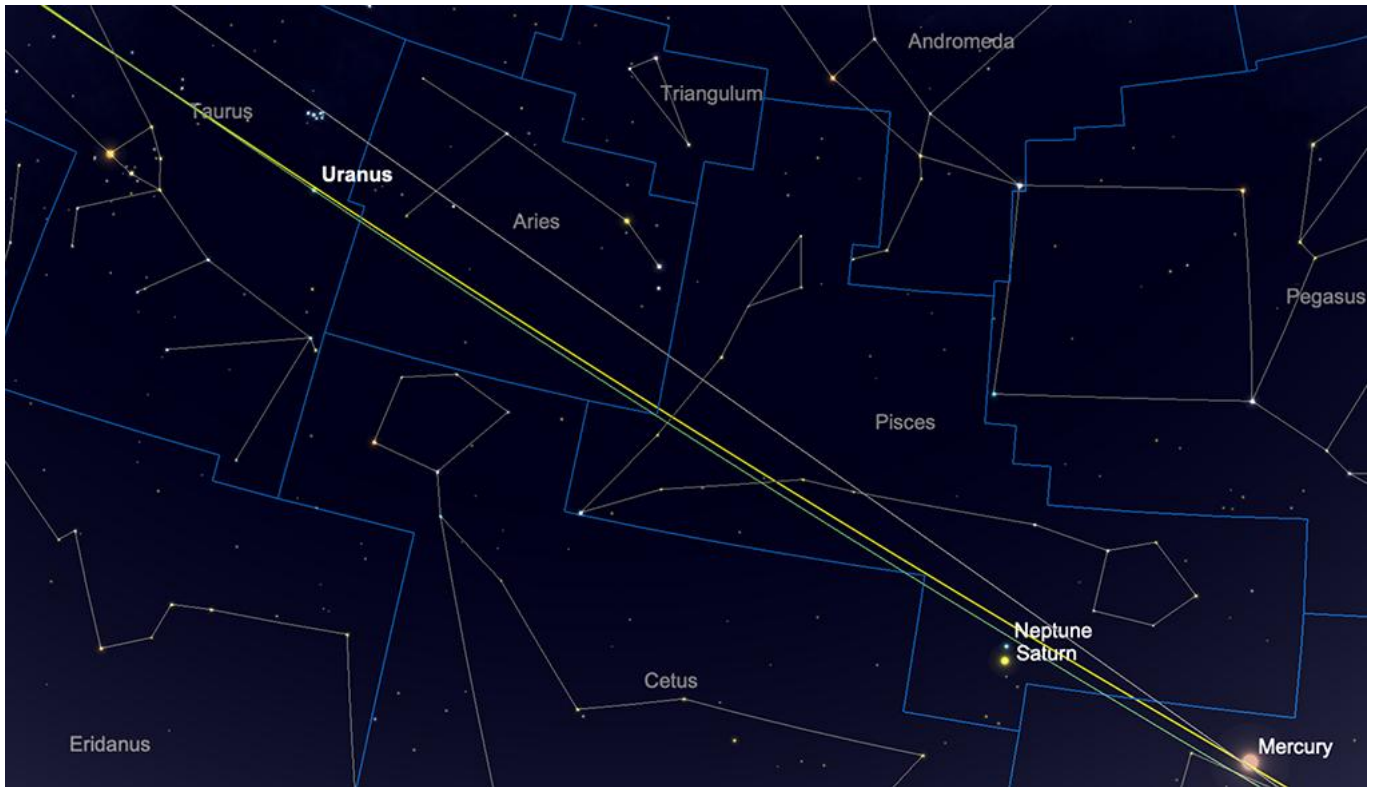
By mid February, Neptune's observing window narrows significantly. Although its brightness remains essentially unchanged, its altitude at the end of twilight is noticeably lower and the planet is increasingly affected by poor seeing and extinction near the horizon. The conjunction with Saturn is at its most interesting around this time, with both planets sharing the same general region of sky in Pisces, though Neptune remains a telescopic challenge even under good conditions. Observations now need to be made promptly after sunset from sites with a very clear western horizon.

Toward the end of February, Neptune becomes a difficult object from mid northern latitudes. It is setting soon after twilight ends and is effectively slipping out of reach for most observers until its return to the morning sky later in the year. While still technically observable, the combination of low altitude and bright sky makes successful observation increasingly dependent on excellent transparency and careful timing.

Uranus, by contrast, remains well placed throughout February and is the more rewarding of the two outer planets this month. It is located in Taurus, sitting roughly five degrees south of the Pleiades, which provides an excellent naked-eye guide to its position. With a brightness of about magnitude +5.7, Uranus is theoretically visible to the unaided eye from very dark sites, though most observers will find it far easier with binoculars. Its small apparent disc, around 3.7 arc seconds across, gives it a distinctly non-stellar appearance at moderate telescopic magnifications.

In early February, Uranus is already well clear of the horizon as darkness falls and is easily accessible during the evening. Its northerly position on the ecliptic makes it particularly well placed for observers in the northern hemisphere, with minimal atmospheric interference, compared to Neptune. By mid month, Uranus reaches transit in the early evening, around 6pm GMT. .

By the end of February, Uranus remains an excellent evening target, though it begins to set a little earlier each night. Its brightness and apparent size change very little over the course of the month and it continues to reward binocular users and small telescope owners alike. While resolving any albedo features on the planet itself requires large apertures and exceptional seeing, Uranus remains a satisfying and accessible outer planet to observe long after Neptune has faded into the twilight.



Uranus and Neptune relative position, astronomical dusk, 14th February. Image created with SkySafari 6 for Mac OS X, ©2010-2016 Simulation Curriculum Corp., skysafariastronomy.com.

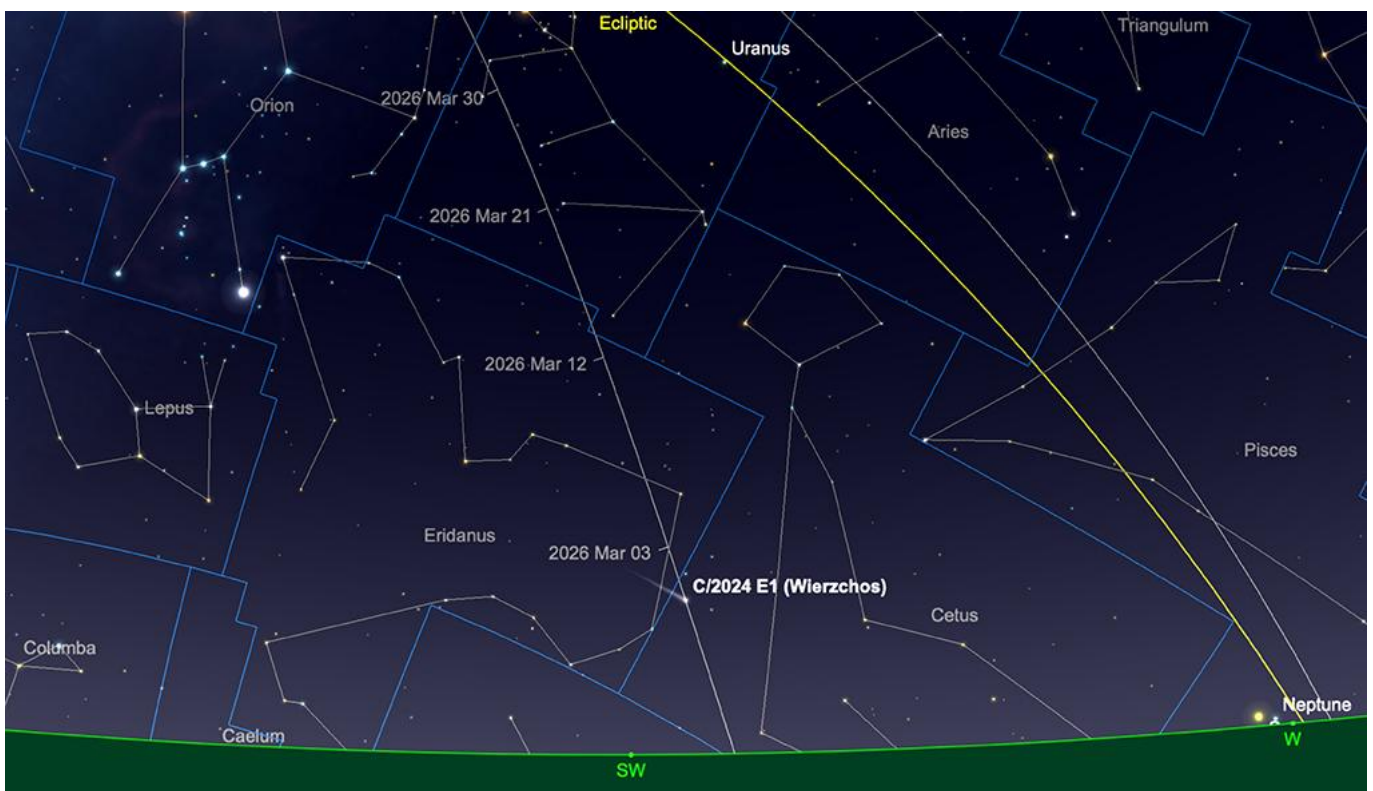
Comets

For February 2026 there is only one comet expected to be bright enough to consider observing from northern mid-latitudes and that is Comet C/2024 E1 (Wierzbach). Other known periodic comets are either too faint or remain outside accessible observing windows during much of February.

At the start of February C/2024 E1 is still largely lost in the glare of the Sun and not observable from most northern sites through the early part of the month. It has recently passed perihelion (its closest point to the Sun on about 20 January) and remains low in the evening sky toward the southwest once darkness falls. In early February its predicted brightness has already begun to diminish from earlier expectations and is likely in the range of about magnitude +6 to +7 or fainter, making it a borderline binocular target under dark skies, but very challenging low in the twilight from higher northern latitudes (where its declination places it closer to the horizon). Observers in particularly dark locations with clear southwestern horizons may succeed in spotting it with binoculars or a small telescope soon after sunset as it creeps above the atmospheric haze, though sky brightness and low altitude limit the observing window.

A more promising opportunity to see C/2024 E1 occurs around mid-February, near its closest approach to Earth on or around 17th February. Around this date its elongation from the Sun increases such that it becomes more accessible in the evening sky from the northern hemisphere. Predictions suggest a brightness of about +7 to 8th magnitude by mid-February, meaning that a moderate telescope or good binoculars under dark skies will be needed to detect its faint, diffuse coma. At this phase it will lie very low in the southwestern sky roughly an hour or so after sunset and will not climb to high altitudes. Observers will fare best attempting to catch it from sites with an unobstructed horizon away from light pollution.

By the end of February C/2024 E1 continues to fade as it moves farther from both the Sun and Earth. Predictions suggest magnitudes in the +9 to +10 range and an even lower evening position close to the southwestern horizon at the end of civil twilight. While the comet will still be climbing north, it will be fading significantly as it does, making detection more of a challenge.



C/2024 E1 (Wierchos) sky position at end of civil twilight, 28th February. Image created with SkySafari 6 for Mac OS X, ©2010-2016 Simulation Curriculum Corp., skysafariastronomy.com.

Meteors

There are no major meteor showers during February. Observers out under clear skies can expect to see a sporadic meteor once an hour or so, but these can come from any direction in the sky.

Deep Sky Delights in Gemini and Cancer



Gemini and Cancer. Image created with SkySafari 6 for Mac OS X, ©2010-2016 Simulation Curriculum Corp., skysafariastronomy.com.

Gemini and Cancer are two “next door neighbour” zodiacal constellations and have between them an array of very differing targets, some of which are very easy to see in binoculars and smaller telescopes.

Gemini is the more westerly of the two and where we will start this month. The most obvious place to begin it with Gemini’s two very prominent twin stars of Castor and Pollux, Alpha and Beta Geminorum, respectively. Pollux, the Beta star is actually brighter than Castor, the Alpha - and while it has been suggested that when Bayer codified the brightness classification of stars in the 17th century, Castor was the brighter of the two, this is extremely unlikely.

Castor is a fine double star and an easy target in small instruments. Consisting of two stars, A and B, of +2 and +2.9 mag respectively, Castor's elements are currently widening and are separated by 4.5-5 seconds of arc. Castor's double nature was discovered in 1678 by Cassini (he of Saturn's ring division fame, amongst many other discoveries) and bears the distinction of being the first gravitationally bound object to be identified beyond the reaches of the Solar System. Castor A and B's orbit about a mutual gravitational point takes around 467 years to complete, but both stars are also in turn doubles, with much fainter M-class dwarf

companions. In addition to these companions there is also present in the system a further pair of gravitationally bound M-class stars. This makes Castor not just a double star, but a sextuple - quite a collection! Sadly, only the primary elements are observable in amateur instruments.

To the westerly reaches of Gemini, is to be found M35. M35 is a very prominent star cluster, at +5 mag, easily picked in small telescopes and binoculars and can also be seen with the naked eye from a reasonable site. Consisting of well in excess of 100 observable stars (mags 6-13th), M35 was first noted by Astronomer Philippe Loys de Cheseaux in 1745. Also included in the Uranographica Britannica by John Bevis in 1750, M35 was catalogued by Messier in 1764, who credited Bevis with its discovery.

Many of the 100+ observable stars are types G and K stars - similar in class to our Sun - though these seem to be of a considerably larger mean size than main sequence. M35 is tentatively aged at about 100 million years - about the age of the nearby M45, (the Pleiades) though problematically, stellar evolution is thought to be considerably more advanced in the case of M35. Does this mean that M35 is in fact older, or are the Pleiades actually younger? Further observation and theories will be needed to explain this anomaly.

In the background sky to M35 lies the fainter (+8 mag) open cluster NGC2158, though this is nearly six times further away than M35's 2800 light years. In addition to this, there is also the yet fainter and more compact IC2157 cluster (+8.4 mag) - making this an extremely rich area for sweeping with virtually any type of optical aid.



Drifting eastward, $2\frac{1}{3}$ degrees east of the star Wasat (Delta Geminorum) is the fabulous Eskimo Nebula, NGC2392. This Planetary Nebula supposedly resembles an Eskimo's head, surrounded by the fur of an Arctic Parka hood. A reasonably compact 0.8 arc minute across (about $\frac{2}{3}$ the size of the Ring Nebula, M57), the Eskimo is only +9.19 mag, though its compact size makes its surface brightness quite high and it takes magnification well. Discovered by William Herschel in 1787, it is perhaps surprising that it wasn't noticed by earlier observers - though this is most likely down to its small size. OIII filters reveal more of the two stages of the object: its tenuous outer shell and the gleaming, brighter interior. Larger instruments reveal more of the complex structure of the internal part of the Eskimo - its radial double shell of expanding gasses and fine s blown by cosmic winds form its central star. This central star shines at +10.5 mag and is relatively easy to spot in most instruments. The nebula is thought to lie at 2800-3000 light years distance.



The Eskimo Nebula, Hubble Image. Image Credit: NASA/ESA. Public Domain.

Further south from the Eskimo is another older, larger and fainter object - The Medusa Nebula (Abel 21). Whereas the Eskimo is small and comparatively bright, the Medusa is large - at 10 arc minutes across it is a third the diameter of the Full Moon. Telescopes of 8-inches + aperture, coupled with a good OIII filter and a dark site will be needed to see the Medusa. Although listed as being +10.19 mag, this is spread out over a significant area of sky, so it is in long duration astrophotography that the wonders of the Medusa really start to reveal themselves. A modest aperture telescope will be needed and a sturdy equatorial mount, capable of being autoguided, will be needed to attempt to image this object. Images reveal the serpent-like tendrils of nebulosity that give this mysterious object its name - its namesake Medusa being the Gorgon who had snakes for hair in classical Greek mythology. The stare of Medusa was reputed to turn people to stone, though staring at this nebula through a large telescope will be a much more pleasant experience... The Medusa lies about half the

distance from us as the Eskimo Nebula - 1500 light years and is around 4 light years in diameter. Opinions were divided on the true nature of the Medusa: George Abel, its discoverer thought it to be an old planetary nebula, whereas many considered its irregular nature to indicate it was a supernova remnant. Narrowband imaging has revealed the true extent of the Medusa's helical hourglass figure - making it much more likely to be, as Abel initially suggested, a planetary nebula.



The Medula Nebula. Image Credit: Joel Schuman, Mt Lemmon Observatory, Creative Commons.

Drifting eastward,, we come to the neighbouring Cancer. which contains a couple of interesting objects for Deep Sky enthusiasts. Cancer is small and rather faint, containing no really bright stars, Gemini on the other hand is bright and prominent and easily identified, even from a light polluted environment.

Cancer, as mentioned, is not a particularly prominent constellation, comprising as it does of stars no brighter than the 3rd magnitude. Of its principle stars, Iota Cancri is probably the

most interesting for amateur observers. This star marks the most Northerly point of the main constellation and is a double star of +4.01 and +6.57 mags. The primary star is a yellow G-type star, the secondary a white A-type main sequence star. Separated by 30 seconds of arc, these are an easy and attractive pair for small telescopes. The angular separation of the two has not changed radically for over a century but it has been established the two are related. It is estimated their orbital period is over 65000 years.

Nine degrees to the south of Iota Cancri lies one of the jewels of the night sky, the bright, expansive open cluster of M44, The Beehive or Praesepe. At +3.09 mag this cluster is an easy naked eye object from a reasonable observing site and at over a degree in size, is pretty unmissable. Known since antiquity, M44 was known as Phatne - "The Manger" to the ancient Greeks (Praesepe being the Latinised translation of this title), though its first datable mention in literature came in 260 BC, when the Greek poet Aratos called it the "Little Mist". M44 was also contained in Hipparchus' star catalogue of 130 BC. The Beehive as a name seems apt, as the core of M44 could be argued to resemble a natural hive, with outlying stars being "the Bees" hovering around it.



Praesepe (M44-NGC2632), Stuart Heggie - <https://www.jpl.nasa.gov/spaceimages/details.php?id=PIA15801>. Reproduced under Creative Commons License.

Containing over 1000 individual stars (over 75 of which are observable to the smallest amateur telescopes), M44 seems to share a proper motion with the Hyades in neighbouring Taurus, which seems to suggest a common point of origin.- both clusters seem to be of a similar age too (around 600-730 million years). The Beehive lies 570-610 light years away from us and is estimated to be about 12 light years in diameter (though its tidal influence reaches much further). This cluster should be seen by everyone - it is easy enough in a modestly-sized pair of binoculars. The mix of stellar components make for a lovely imaging opportunity too.

Eight degrees to the southeast of the Beehive, another open cluster, M67, is to be found. Although fainter and more compact than M44 at +6.90 mag and 25 arc minutes, it is in its way, as attractive a target as its neighbour. Discovered by Johann Koelner in the late 1770s, M67 was catalogued by Messier in 1780.



M67 by Thomas Jäger. Reproduced under Creative Commons License. Visit Thomas' Website [here](#).

Comprising of about 100-or-so observable members (out of a total of over 500 stars), many of which are similar in class to the Sun, M67 is one of the oldest clusters in our galaxy. It is thought to be around 4 billion years old - nearly as old as our own Sun and lies 3000 light years away. M67 does also contain some "blue stragglers" - stars that technically speaking it should not contain. Whether these have been swept up by M67 during its journey around our galaxy (or not), is a question that, to date, remains unanswered. Observers using higher power magnifications will resolve some spectacular chains of stars in M67. It truly is a lovely object.

Further southeast (by just under 7 degrees) from the delights of M67 is a much more challenging target, the beautiful spiral galaxy NGC2775. Though not intrinsically conspicuous at +10.10 mag, it is a compact target at 4.3 x 3.3 minutes of arc and has a comparatively bright core. Lying some 60 million light years away, NGC2775 is an exotic blend of a spiral structure and large elliptical core, which itself is ringed by pronounced hydrogen regions. The

arms of the outlying spiral sections are very finely structured, though this is only really visible in long duration images. Visually, NGC2775 is visible with a reasonable-sized instrument, though a larger scope may on occasion show interactive stream of material from NGC2777, which is tidally interacting with its larger neighbour. Whilst a challenge, NGC2775 has been the site of some 5 Supernovae since the mid-1980s, so who knows what you may find there?



NGC2775, Copyright Adam Block/Mount Lemmon SkyCenter/University of Arizona. Image reproduced under Creative Commons License.

Cancer contains many galaxies between the +12-14 mag range. Being located so close to the Leo, Leo Minor and Hydra galaxy clusters, it would seem a fairly safe assumption that Cancer's galaxies are gravitationally clustered. Studies of proper motion based on spectral shift have confirmed, however, that these galaxies are not related. Still, there is much for owners of large telescopes and astrophotographers to enjoy galaxy-wise in Cancer. Although many of these objects are challenging and are not as easily-observed as those in the adjacent constellation of Leo.