Celestial Calendar 2026

the Irish Astronomical Society

Welcome

Welcome to the **Irish Astronomical Society**'s calendar of the celestial highlights throughout 2026.

Our own *Sky-High 2026* (irishastrosoc.ie) or *The BAA Handbook* (www.britastro.org) also expand coverage of the year. Subscribing to a monthly magazine (a couple of them may be available through your local library's BorrowBox service) will inform you of any transient events. Guides like *Stargazing 2026 (*published by Philips) or *Night Sky 2026 (*published by Collins) may be picked up online or in bookstores. The *Yearbook of Astronomy 2026* edited by Brian Jones can be bought online, while Guy Ottewell's *Astronomical Calendar 2026*, along with various other useful publications, is available from www.universalworkshop.com

The Irish Federation of Astronomical Societies (www.irishastronomy.org); the British Astronomical Association (britastro.org); or the Society for Popular Astronomy (www.popastro.com); will have details of nearby clubs if you wish to contact like-minded enthusiasts, seek out advice, or learn about upcoming events. Local clubs can provide speakers to visit schools, or organise observing nights, so do get in touch with them.

Various space flight missions often have their launch dates revised but we have included the most up-to-date information. However, two web sites to regularly check with for any amended plans are spaceflightnow.com/launch-schedule or en.wikipedia.org/wiki/2026_in_spaceflight

The IAS hold regular observing nights and public outreach events. Learn more about these at irishastrosoc.ie or on our social media sites.

Wishing you clear skies for the year ahead! *John Flannery*

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Cover image: The European Southern Observatory's Very Large Telescope complex at Paranal is one of the world's leading astronomical facilities and will be bolstered by the Extremely Large Telescope when its construction is finished on nearby Cerro Armazones in early 2029 and first light achieved.

Our calendar this year features selected images from the ESO. The cover picture is credited to ESO/M. Kornmesser (www.eso.org)

Words to know

AU One astronomical unit is simply the mean Earth-Sun distance, or roughly 149, 597, 870.691 km.

Angular size The Sun and Moon have the same apparent diameter in the sky, or a half degree (½°) across. Degrees are sub-divided into 60 arc-minutes (60') with each arc-minute made up of 60 arc-seconds (60"). Making a fist at arm's length is about 10°. Splaying your hand out wide is roughly 25°, or the span of The Plough. Your little finger covers 1°, or more than the apparent width of the Full Moon! Try it! The articles at www.timeanddate.com/astronomy/ go into more depth.

Conjunction Mercury and Venus reach inferior conjunction when directly between Earth and the Sun, and superior conjunction when they pass behind the Sun. The other planets can only be at superior conjunction. A conjunction (or *appulse*) also describes when two or more celestial objects appear near each other.

Easter Sunday is generally taken as the first Sunday after the first Full Moon after the Spring Equinox. The calculation is slightly more complex than this but it's a useful rule of thumb. This year it falls on April 20th.

Eclipse These are generally when the Moon hides the Sun or the Moon passes through Earth's shadow cast in space. Eclipses can also take place of Jupiter's four Galilean moons and times are listed in almanacs.

Elongation Mercury and Venus seem to swing from one side of the Sun to the other but viewed from Earth they never get further away than a position known as greatest elongation. This is the point at which they turn the curve of their orbit to dive back sunward. The other planets can lie anywhere in the zodiacal band.

Greek alphabet Used to designate the brightest stars in a constellation - though α (alpha) isn't always the brightest. See www.skyandtelescope.com/astronomy-resources/names-of-the-stars

Libration is an apparent "nodding" of the lunar disk that sometimes lets us peer a little beyond its edge. This is when features near the lunar limb are favourably placed to view. The calendar lists opportunities in 2025.

Magnitude of an object refers to its brightness, not to its size. The scale of magnitudes is a logarithmic one. The lower the magnitude number, the greater the brightness. The apparent brightness of a star depends on its true brightness and distance. A superscript ^{m} is used to denote magnitude in some of the calendar boxes, with a planet's mid-month's brightness given in parentheses. An article with more information on the subject is at www.skyandtelescope.com/astronomy-resources/the-stellar-magnitude-system

Meteor Popularly termed a "shooting star", it's the flash of light from a small dust particle or pebble vaporising due to friction on entering our atmosphere. At certain times during the year the Earth ploughs through a trail of particles shed by comets and on these occasions we get a meteor shower. The number seen is generally lower than the often-quoted theoretical ZHR value as that depends on sky conditions. See www.imo.net

Occultations are when the Moon briefly passes in front of a star or planet. Disappearance can be sudden due to the lack of a lunar atmosphere. Planets show an appreciable disk so it can take several seconds for them to fully disappear or reappear at the moon's limb. Asteroid occultations of stars are mostly telescopic events.

Opposition When the outer planets are in opposition they are opposite the Sun to us and are due south at local midnight. They may be seen right throughout the night around the dates of opposition.

Perihelion and **Aphelion** are the points in an object's orbit when it is closest or furthest from the Sun. For the Earth, those points vary from approximately 147 million km in January to 152 million km in July.

Planet phases Venus and Mercury show phases like the Moon. Mars can look gibbous, i.e. not quite full. Jupiter and Saturn can show very slightly less than full at **quadrature**, a position in an outer planet's orbit equivalent to that of the First & Last Quarter Moon. It makes a right angle with the Sun from our perspective.

Retrograde and **Prograde** motion is a consequence of the outer planets lying further from the Sun than us. Because they orbit more slowly, at opposition Earth can overtake an outer planet causing its apparent movement against the stars to grind to a halt, move back to the right, halt, & then resume direct (prograde) motion.

Supermoon is a (non-official) term for the year's biggest full moons. Our Moon's elliptical orbit means each full moon's apparent size varies. The closest full moon this year falls on December 24th while the most distant on May 31st is about 13% smaller than December's. See www.timeanddate.com/astronomy/moon

Twilight Civil Twilight ends after sunset (& begins before sunrise) when the Sun has reached 6° below the local horizon. Nautical twilight is when the Sun is 12° below, while astronomical twilight, when the sky is truly dark, occurs when it is 18° below. The sky is never truly dark during the summer months at IRL/UK latitudes.

Zodiac A band of constellations which cuts the sky in half that lies to either side of the ecliptic, and through which the Sun, Moon, & planets move. The **ecliptic** is our orbital plane projected on to the celestial sphere.

Special events in 2026

Note: Event times in the calendar this year are given in Summer Time during the period from March 29th to Oct 25th when Daylight Saving Time is in effect.

Eclipses

Two solar and two lunar eclipses occur during 2026. The highlight is the solar eclipse on August 12th which crosses Spain and is very accessible for chasers.

2026 Feb 17 - annular solar eclipse: This event is annular over eastern Antarctica and partial from the rest of the continent, along with southern areas of Argentina and Chile, and regions in the south of Africa.

2026 Mar 3 - total lunar eclipse: Totality is visible from eastern Asia, Australia, Pacific, and the Americas.

2026 Aug 12 - total solar eclipse: The path of totality sweeps over the Arctic, Greenland, western Iceland, and Spain. The eclipse will be partial from north N. America, west Africa, and Europe, including Ireland and the UK. See the August notes for exact times of the mid-partial phase for sites around the British Isles.

2026 Aug 28 - partial lunar eclipse: This will be seen from eastern Pacific, the Americas, Europe, and Africa. Ireland and the UK see the majority of the eclipse during the early hours before moonset.

See www.timeanddate.com/eclipse/2026 for more details of these events.

Comets

No bright comets are forecast for northern hemisphere observers but an unexpected discovery may put on a good show. At time of writing (October 2025) we are awaiting comets C/2025 A6 (Lemmon) and C/2025 A2 (SWAN) which are expected to put on a good show in the evening sky then.

24P/Schaumasse may be seen in Coma Berenices near the border with Virgo when it is rising just before midnight at the start of the year. It brightens very slightly to magnitude 7.9 at the end of the first week of January by when it will have moved into Virgo.

24P slowly fades as it crosses into Boötes on January 12th, which it traverses up to the middle of February, but it is still only rising around the witching hour and is only visible during the latter half of the night. The comet will dim to magnitude 9 at the end of the first week of February, and dips below magnitude 10 at the end of the month, by when it has moved into the head of Serpens.

2024 E1 (Wierzchos) is at solar conjunction in early January and is not well placed for observers in Ireland and the UK until the beginning of the last week of February. The comet is then low in the southwest evening sky in Fornax and may be magnitude 6.6 then.

The comet's position improves over the next few weeks but it is fading and will drop below magnitude 7.5 a few days after the beginning of March when it has reached Eridanus. 2024 E1 will move into Taurus in mid-March but will then only be around magnitude 8.5. The comet moves into Orion shortly after the beginning of April but will have faded below magnitude 10 by that time.

88P/Howell will only be within reach of smaller sized scopes for a short period before morning twilight interferes as its elongation from the Sun decreases. The comet will be in Capricornus during the first half of March.

Comet 10P/Tempel 2 becomes visible in large binoculars from mid-May when the magnitude 10 object is rising just after midnight in Aquila. It dips briefly into Capricornus at the beginning of the second week of June as the comet begins to brighten to magnitude 8.5.

10P moves into Aquarius on June 17th when the comet may be picked up as soon as the sky begins to darken - though lack of true darkness at this time of year could make a sighting a tad challenging (it is mag. 8.0 on June 21st).

The comet brightens to magnitude 7.5 at the beginning of July, and crosses back into Capricornus at the start of the second week of the month. 10P brightens above magnitude 7.0 the last ten days or so of July, and hovers around that brightness for a period of time but it is now getting lower in the evening sky. It crosses into Pisces Austranus on August 2nd and remains there until we lose sight of the comet from our latitude around the third week of August.

Meteors

The date given for a meteor shower is the expected date of maximum but the period of visibility can extend a few days either side of this with lower rates.

The **Perseids** in mid-August (virtually Moon-free in 2026) and the **Geminids** mid-December (also seeing little interference this year from moonlight) are the richest displays, closely followed by the sharply peaked **Quadrantids** (affected by the full moon on the day of maximum this year) in early January.

Asteroids

The calendar only has the opposition dates for 3 of the first 4 asteroids (Ceres is not at opposition until 2027 January 7) but our *Sky-High* annual will list opposition dates for all asteroids getting brighter than 10^{m}. Predictions of occultation events are at www.asteroidoccultation.com while details of close approaches of asteroids to deep sky objects in 2026 can be found at the site www.minorplanet.info/php/dsoappulses.php

Star and Planet Occultation

Occultation details for the major planets are listed in the calendar but more detailed information is generally found in the *BAA Handbook* or the *Occult* software package provided by the International Occultation Timing Association.

An occultation series of the beautiful Pleiades star cluster (M45) in Taurus continues this year. Some occur in daylight hours for us but those on Jan 27th (evening), August 7th (early morning), after midnight on October 27/28, and on December 21st (late evening) are favourable.

Useful web sites

www.skymaps.com - free pdf star charts
stellarium.org - planetarium software
www.timeanddate.com - general sky data
earthsky.org/astronomy-essentials - sky guide

Skills, news and magazines

www.astronomynow.com
www.skyatnightmagazine.com
www.skyandtelescope.org
www.astronomy.com
www.universetoday.com - astronomy news
www.heavens-above.com - satellite predictions

The Sun, Aurora, and Eclipses

www.spaceweather.com - transitory events
"Irish Aurora Chasers" page on Facebook
aurorawatch.lancs.ac.uk - aurora alerts
eclipse.gsfc.nasa.gov/eclipse.html - eclipses

The Moon and Planets

solarsystem.nasa.gov/planets
www.popastro.com/moonwatch/

Comets and Meteors

www.ast.cam.ac.uk/~jds - BAA comet section
"Comet Watch" page on Facebook
www.imo.net - International Meteor Organisation

Forums

www.irishastronomy.org or
boards.ie/vbulletin/forumdisplay.php?f=267
www.stargazerslounge.com (UK-based)
www.cloudynights.com (US-based)

Gear

www.astrobuysell.com - UK Astro Buy & Sell
www.ktectelescopes.ie - Stephen Kershaw (IRL)
www.northdowntelescopes.co.uk - Andy McCrea
www.horizonastronomy.ie

Time in the 2026 calendar

Astronomers use Universal Time (UT), a 24-hour system starting at mean midnight as measured at Greenwich. It is the same as Greenwich Mean Time (GMT). For Ireland and the UK, Summer Time in 2026 begins on **March 29th** at 01:00 when the clocks go forward one hour, and ends on **October 25th** at 02:00 when clocks go back one hour.

Eanáir / January 2026

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
			1 New Year's Day	2 Bank Holiday (Scotland)	3 10:03am Jupiter 4° lower left of tonight's supermoon Earth at perihelion, 5pm	4 Quadrantid meteors peak in the early hours
5	6 Venus is at superior conjunction the Moon lies near Regulus in Leo tonight	7	8 comet 24P/Schaumasse at perihelion (a scope or large binoculars needed)	9 Mars solar conjunction	10 3:48pm Jupiter at opposition	11
12	13	14	15 6pm: Galilean moons are in order of their increas-ing distance from Jupiter	16	17	18 7:52pm
19 Jupiter is near the star Wasat in Gemini tonight	20 perihelion of comet C/2024 E1 (Wierzchos)	21 Mercury is at superior conjunction	22 Venus at aphelion	23 Saturn 5° below the Moon tonight Pluto solar conjunction	24	25 optical aid shows the lunar X from 5pm Burns Night (Scotland)
26 4:47am	27 tonight's Moon hides, or occults, some members of the Pleiades from 9pm	28	29	30 Jupiter 6° lower left of the Moon tonight	31	

The planets this month

Evening - Saturn, Jupiter, Uranus, Neptune

Morning - none (Jupiter visible all night)

Mercury, Venus, and Mars are all too close to the Sun to be seen this month..

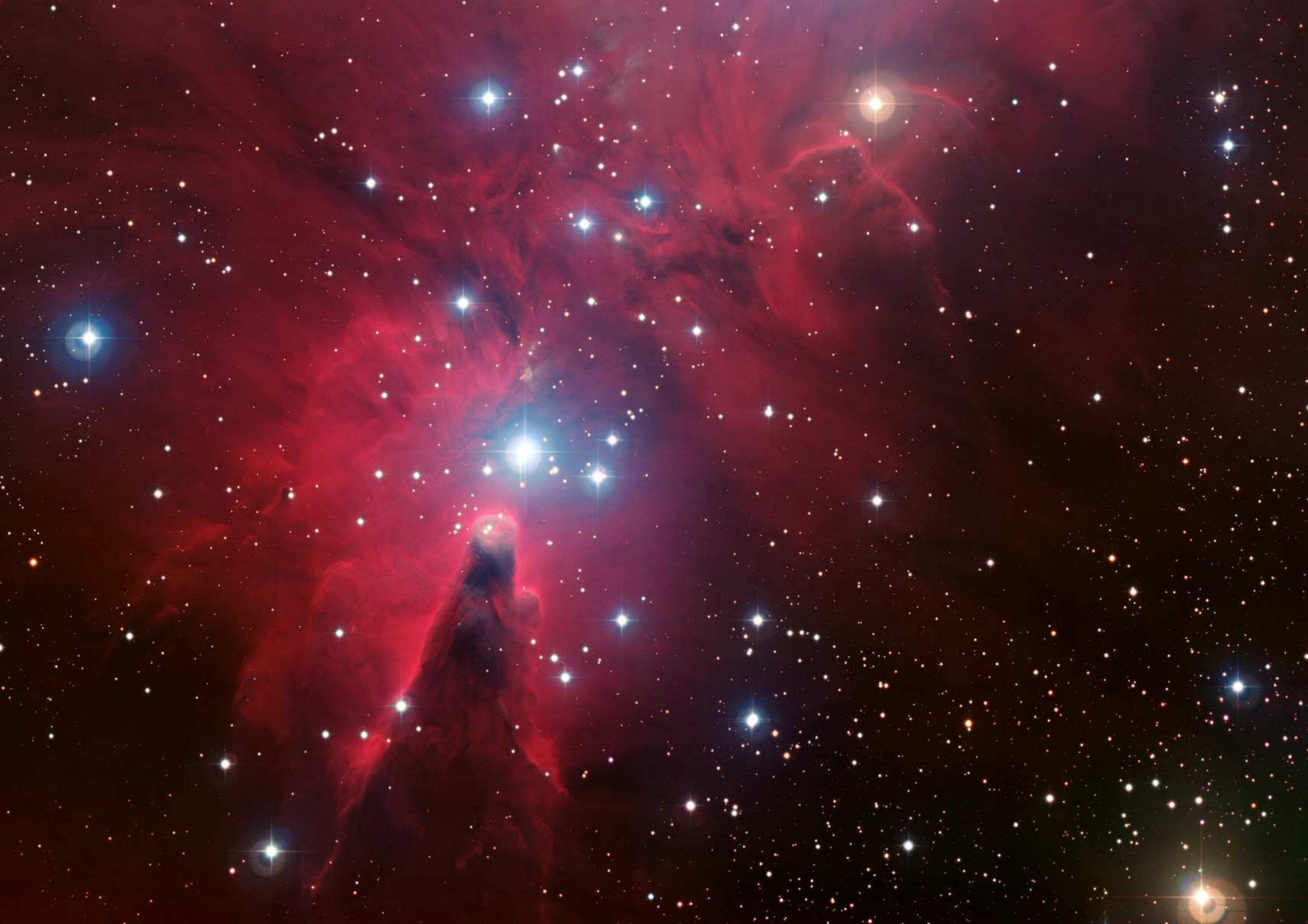
Cream-coloured **Jupiter** (-2.7^{m}) reaches opposition on the 10th when it can be seen throughout the night blazing brightly near the stars Castor and Pollux in Gemini. Binoculars reveal the four Galilean moons - Io, Europa, Ganymede, and Callisto - changing position from night to night as they zip round Jupiter. A telescope will show the planet's banded atmosphere, amongst other features.

Saturn (1.1^{m}) has a butterscotch hue and can be found in the western evening sky amongst the dim stars of Aquarius, before moving into Pisces on the 15th. Saturn sets at 11pm on January 1st and by 9:30pm at the end of the month. The rings are nearly edge-on to Earth presently - an unusual sight.

Uranus (5.6^{m}) is a pea-green dot below the Pleiades star cluster in Taurus, while bluish **Neptune** (7.9^{m}) is within 3° of Saturn.

This portrait of the Centaurus A galaxy was captured by the SPECULOOS observatory (the Search for habitable Planets EClipsing ULtra-cOOl Stars), located at Paranal in Chile. © ESO/SPECULOOS Team/E. Jehin

Ireland: BT Young Scientist, Dublin (7^{th} - 10^{th}); Galway Astronomy Festival (31^{st}) **UK**: York Astronomy Convention, Murton, York (24^{th}) **Other**: 18th European Space Conference, Brussels (27^{th} - 28^{th})



Feabhra / February 2026

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
						1 10:06pm Imbolc / St Brigid's Day
2 St Brigid's Day holiday (Ireland) the Moon lies near Regulus in Leo tonight	3	4 Uranus stationary, pro-grade motion resumes	5 NASA are targeting a February launch date for *Artemis 2* - but no later than this April... try to spot Mercury from today above the W sky-line 45 mins after sunset	6	7 the UK hosts various dark sky festivals this month. Details are at tinyurl.com/44jt2a8y	8
9 12:43pm	10	11 Int'l Day of Women and Girls in Science *AM*: Moon near Antares (tau Scorpii is occulted)	12 3 Jovian moons form a vertical line late tonight	13 Saturn & Neptune are < 1° apart until the 26th	14 Valentine's Day	15 1826: Irish physicist George J. Stoney born
16	17 12:01pm Chinese New Year (of the Horse) begins annular solar eclipse - not visible from IRL / UK	18 Ash Wednesday Mercury is above, and Venus below, the crescent moon tonight	19 Saturn 4° to the left of the Moon tonight Mercury at greatest elongation (18° 07' E)	20 Saturn and Neptune now closest (50' apart)	21	22
23 the Moon is near the Pleiades tonight	24 12:28pm 2026's closest FQ moon	25	26 Venus & faint Mercury < 5° apart tonight, with Saturn to their upper left	27 Jupiter 8° to the upper right of tonight's Moon	28 Venus & Mercury closest tonight (4½°)	

The planets this month

Evening - Mercury, Venus, Jupiter, Saturn

Morning - none (Jupiter until early hours)

Mercury may be seen low in the western evening sky from about the 5th when 2° up at the end of civil twilight. It climbs highest around date of elongation on the 19th when its angular distance from the Sun is greatest.

The -0.3^{m} planet soars 10° above the horizon that evening when it will set nearly two hours after the Sun. Mercury then slowly fades and loses height over the next ten days or so as it slips back into the solar glare .

Dazzling **Venus** (-3.9^{m}) should be picked up in the western evening sky from mid-month and is setting 45 minutes after the Sun then. It closes the gap to Mercury during February and sets an hour after the Sun on the 28th.

Regal **Jupiter** (-2.5^{m}) continues to rule the night in Gemini, augmenting the jewels of the winter sky. It sets by 5:30am at month's end.

Slow moving **Saturn** (1.0^{m}) sets at 9:30pm on the 1st but at 8pm on the 28th - still, that's nearly two hours after the Sun. Try glimpse **Neptune** (7.9^{m}) near Saturn this month.

This view of NGC 2264 — an area of sky that includes the sparkling baubles of the Christmas Tree star cluster & the Cone Nebula — was taken by the Wide Field Imager at ESO's La Silla Observatory. © the ESO

Ireland: iWish, Dublin (5th); Engineers Week (Feb 28th - Mar 6th) **UK**: Astrofest, London (6th - 7th); N. Ireland Science Festival (11th - 22nd); Norwich SciFest(14th - 21st); Nottinghamshire SciFest (9th - 20th)

Marta / March 2026

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
						1 St David's Day (Wales)
2 Regulus upper right of the Moon tonight	3 11:38am total lunar eclipse - not visible from IRL / UK	4	5	6	7 Mercury is at Inferior conjunction Venus and Neptune are very close tonight	8 Int'l Women's Day Venus and Saturn are < 1° apart tonight
9	10	11 9:39am Jupiter stationary, pro-grade motion resumes 2026's furthest LQ moon	12	13	14 Pi Day	15 Mother's Day (IRL/UK)
16	17 Equilux St Patrick's Day Holiday (Ireland) 1776: clockmaker John Harrison born	18 comet 88P/Howell reaches perihelion	19 1:23am very thin lunar crescent low in W. sky tonight is only 18 hours after New	20 Venus 6° lower left of the Moon tonight Spring equinox, 2:46pm	21 optimum Messier Marathon weekend	22 Neptune solar conjunction
23 daylight occultation of Pleiades from IRL/UK	24	25 7:18pm Saturn solar conjunction optical aid shows the lunar X from 9pm	26 Jupiter 4½° lower right of tonight's Moon Saturn crosses the celestial equator S → N	27 Mars at perihelion	28 Earth Hour	29 Summer Time begins for IRL / UK daylight occultation of the star Regulus
30	31					

*When the Moon is a slender crescent you may notice the rest of its disk faintly illuminated by **earth-shine**. The phenomenon is often popularly known as "the old Moon in the new Moon's arms". The effect is caused by sunlight reflected off the day side of the Earth on to the unlit portion of the Moon. The first correct explanation of its basis is found in Leonardo da Vinci's "Codex Leicester".*

The planets this month

Evening - Venus, Jupiter, Saturn

Morning - none (Jupiter until the early hours)

Venus (-3.9^{m}) burns brightly in the western sky these evenings and is setting almost two hours after the Sun on the 30th. Venus lies extremely close to Neptune (8.0^{m}) on the 7th - the former is 57,500 times brighter than the ice giant. Use a scope to see them 4' apart.

Venus slips past Saturn the next night when they are less than 1° apart. Venus is ≈ 100 times brighter than Saturn presently.

Jupiter (-2.3^{m}) sets at 4:30am at the end of March and pauses on the 11th to resume its eastward trek against the background stars.

Saturn (1.0^{m}) sets two hours after the Sun on the 1st but succumbs to the twilight glow by the end of the second week of March. It is at solar conjunction on the 25th, a time when a planet is too close to the Sun to observe.

Summer Time in Ireland and the UK is in effect from the 29th when clocks are set forward by one hour. Some articles about time are at www.timeanddate.com/time

This image shows a group of thick clouds of dust known as Thackeray globules silhouetted against the pale pink glowing gas of the star forming region IC 2944. © the ESO

31 **IRL**: Astronomy Week (20th - 28th); Skellig Dark Sky Festival (20th - 22nd) **UK**: Practical Astronomy Show, Coventry (7th); Humber SciFest (12th - 15th); British Science Week (13th - 22nd); Kielder Star Camp (18th - 23rd)

Aibreán / April 2026

times adjusted when Summer Time is in effect

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
		1 Global Astronomy Month	2 3:12am	3 Good Friday (Bank Holiday, UK) Mercury at greatest elongation (27° 49' W)	4	5 Easter Sunday Jupiter at E quadrature
6 Easter Monday holiday (IRL, NIR, ENG, WAL)	7 Venus and Uranus are 20° apart tonight. That gap is < 1° by the 24th	8	9 the Moon appears like a shark fin on the horizon as it rises about 4:30am	10 5:52pm	11	12 Int'l Day of Human Spaceflight
13 .	14	15	16	17 12:52pm	18 young crescent moon tonight is 31 hours old	19 Moon is 1½° from the Pleiades tonight (occulted in daylight)
20 Venus & Uranus now < 5° apart and in the same binocular field	21	22 Earth Day Lyrid meteors peak Jupiter 3° lower left of the Moon tonight	23 St George's Day (ENG)	24 3:32am Neptune crosses the celestial equator S → N Uranus and Venus < 1° apart 3½° from Pleiades	25 Spring Astronomy Day	26 Moon & Regulus close before setting at 4:30am
27 Venus between the Hyades & Pleiades star clusters tonight	28	29	30 Jupiter is near the star Wasat in Gemini tonight			

The planets this month

Evening - Venus and Jupiter

Morning - none (Jupiter until the early hours)

Venus (-3.9^{m}) is still striking in our evening skies and sets at 11:30pm at the end of the month, or about 2½ hours after the Sun. The cloud-shrouded world coasts towards the ice giant **Uranus** during April and they are < 1° apart on the 23rd. Binoculars will show the more distant planet as a 5.8^{m} speck.

Planetary scientists are keen to send a mission to orbit Uranus, along with deploying a probe in its atmosphere. If developed, the launch is proposed for 2031/32, with a 13-year cruise time.

Jupiter (-2.1^{m}) sets just after 4am on April 1st and by 2:30am on the 30th. Jupiter is at eastern quadrature on the 5th, a position in an outer planet's orbit equivalent to that of the first and last quarter moon. It then forms a right angle with the Sun from our perspective.

The Jovian moons Io, Europa, and Callisto are arranged like an isosceles triangle about 8:30pm on the 19th.

Astrophotographer Yuri Beletsky calculated that a location nine kilometres to the east of Paranal offered a view of the setting lunar eclipse of May 2021 briefly visible just over the telescope domes. © Y. Beletsky / ESO

Ireland: Cosmos 2026, Midlands Astronomy Club (11th) **UK**: Edinburgh Science Festival (4th - 19th) **Global**: International Dark Sky Week (13th - 20th)

Bealtaine / May 2026

times adjusted when Summer Time is in effect

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
				1 6:23pm Bealtaine / May Day	2	3 Moon & Antares close when they rise tonight
4 May Day Holiday (Ireland)	5 eta Aquarid meteor shower is at maximum	6	7 Int'l Day of Planetariums	8	9 10:10pm	10
11	12 favourable libration to view Mare Orientale	13 Venus lies between the stars marking the horns of Taurus this evening	14 Saturn 7° lower right of Moon before dawn	15 Mercury is at superior conjunction Mars 6° lower right of Moon before dawn	16 9:01pm Int'l Day of Light	17 look for a day old crescent moon in the western sky tonight
18 Venus 4° to the left of the Moon tonight	19 Venus 5° lower right of the Moon tonight	20	21	22 Uranus solar conjunction	23 12:11pm optical aid shows the lunar X from 11pm Moon and Regulus are close in the early hours	24
25 Bank Holiday (UK)	26 1826: Richard Carrington, English astronomer	27	28 Mercury is between the horns of Taurus tonight	29	30	31 9:45am Blue Moon and the furthest full moon of 2026

The Moon orbits the Earth in 29.53059 days (called the synodic month) so we may see the same lunar phase repeat in a month. This occurs every 2½ years on average. This month has two full moons, while this December has two last quarter moons. The second full moon in a month is popularly called the Blue Moon. Traditionally, the Blue Moon is the third of four full moons in a season.

The planets this month

Evening - Mercury, Venus, and Jupiter

Morning - Saturn

Shy **Mercury** tiptoes onto the evening stage the last week of May when it can be found 1° up, and magnitude -1.5, at the end of civil twilight on the 22nd. Its position improves by the end of May when Mercury is 6° over the NW skyline. Glimmering at magnitude -0.7, it sets 90 minutes after the Sun then.

Venus (-4.0^{m}) sets around midnight all month with Summer Time in effect. It is highest mid-May for the current evening apparition when Venus attains almost 16° altitude.

Jupiter (-2.0^{m}) and Venus are a dramatic sight in our late evening sky as they end May less than 9° from each other. The former can still be found in Gemini and sets just before 1am on the 31st.

Saturn (0.9^{m}) has now moved into the morning sky and can be picked up mid-month as it pops above the eastern horizon just before 4:30am. Saturn is up an hour earlier than that by the 31st.

NGC 1365 is enormous. At 200000 light-years across, it is one of the largest galaxies known. Astronomers think our own Milky Way looks similar, but at half the size. © ESO / IDA / Danish 1.5 m/Gendler/Ovaldsen/Thöne/Feron

31 **Ireland**: National Biodiversity Week (15th - 24th) **IRL / UK**: Pint of Science (18th - 20th) **UK**: ESB Science Blast, Belfast (5th) **Other**: Starmus, Bratislava (12th - 17th); Science on Stage, Lithuania (28th - 31st)

Meitheamh / June 2026

times adjusted when Summer Time is in effect

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
1 Bank Holiday (Ireland)	2	3 Jupiter, Venus, and Mercury fall in a 20° span of sky looking WNW tonight	4	5 World Environment Day	6	7
8	9 11:00am Venus and Jupiter are < 2° apart tonight	10 Saturn 6° lower left of the Moon before dawn	11	12 Mars 7° lower right of the Moon before dawn	13 daylight occultation of the Pleiades for IRL/UK	14
15 3:54am Mercury at greatest elongation (24° 31' E)	16 Mercury 2° below the Moon tonight - Jupiter is 6° to the Moon's left	17 Islamic New Year, 1448 AH Venus < 1° from the Moon tonight	18	19 Moon is near Regulus tonight Venus < 1° from the Beehive star cluster	20 King's Birthday (UK)	21 10:55pm Father's Day (IRL/UK) Summer solstice, 9:25am
22	23 Castor, Pollux, and Jupiter all lie in a straight line this evening	24	25 Mercury < 4° from Jupiter but both are v. low tonight	26	27	28 Mars and Pleiades 4° apart in the early hours
29 European Astronomical Soc. meet, Lausanne (to Jul 3rd)	30 00:57am Int'l Asteroid Day					

Summer lends itself to occasional displays of noctilucent cloud. NLCs are visible long after sunset when their great height allows them remain lit by the Sun. Their fine cirrus-like strands can be observed low on the northern skyline about 90 minutes after sunset or before sunrise. Learn more about them at www.nightskyhunter.com

The planets this month

Evening - Mercury, Venus, and Jupiter

Morning - Mars and Saturn

Mercury (-4.0^m) is an evening sky object for us almost all month, and is setting two hours after the Sun on the 10th, when magnitude 0.

Venus (-4.0^m) sets around midnight and is dramatically paired with Jupiter on the 9th.

Mars (1.3^m) has wend its way from Sagittarius to Taurus - or more than halfway round the sky - since the start of the year but we only get our first glimpse of the planet this month as it has just been too close to the Sun's glare to be seen sooner. We should pick it up from the beginning of the second week of June, when it rises at 3:30am, or a half hour before the start of civil twilight. .

Jupiter (-1.8^m) is setting at 11pm at the end of June, or about an hour after the Sun. It forms a line with Castor and Pollux on the 22nd - the same day it moves into Cancer.

Saturn (0.8^m) moves into Pisces just after the start of June and rises at 3:15am on the 1st, and at 1:30am at the end of the month.

The Eagle Nebula (M 16), imaged with the Wide-Field Imager camera at La Silla Observatory. At the centre, the so-called "Pillars of Creation" can be seen. © ESO

31 **Ireland**: 8th ICASE Conference, Cork (22nd - 25th) **UK**: Cheltenham SciFest (2nd - 7th); Great Exhibition Rd Festival, London (6th - 7th); Royal Society Summer Science Exhibition, London (to July 5th)

Iúil / July 2026

times adjusted when Summer Time is in effect

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
		1	2	3	4 Mars and Uranus < ¼° apart in the early hours	5
6 Earth at aphelion, 6pm Saturn at W quadrature	7 8:29pm	8 Saturn 8° lower right of Moon this morning	9 Venus < 1° from Regulus this evening	10	11 Moon and Pleiades 2° apart in the early hours	12 Battle of the Boyne (NIR)
13 Mercury is at inferior conjunction Bank Holiday (NIR)	14 10:43am	15	16 Moon is near Regulus tonight	17 Venus 4° upper right of the Moon tonight	18	19
20	21 12:06pm optical aid shows the lunar X from 9pm	22	23	24 Moon is near Antares after dark	25	26 asteroid Juno (9.1m) at opposition in Aquila
27 Saturn stationary, starts to retrograde Pluto is at opposition	28 delta Aquarid meteor shower is at maximum	29 3:36pm Jupiter solar conjunction	30	31		

The planets this month

Evening - Venus and Jupiter (briefly)

Morning - Mars and Saturn

Mercury might be seen the last couple of days of July in the morning sky but next month is a better opportunity to see it.

Venus (-4.2^m) sets at midnight at the start of July, and at 10:45pm on the 31st. .

Mars (1.3^m) rises at 2:45am on the 1st and is coming up just before 2am on the 31st. Mars traverses Taurus during July and nears the Bull's horns at the end of the month.

Mars is very close to Uranus on July 4th - a chance to see a planet you might not have before. Will the orange tint of Mars accentuate the greenish colour of Uranus?

Jupiter (-1.8^m) is very close to dropping out of sight and we lose it from our evening sky only a few days after the start of July before passing through solar conjunction (when it is on the far side of the Sun to us) on the 29th.

Saturn (0.7^m), in Pisces, rises at 1:30am on the 1st and at 11:30pm on the 31st.

A dark cloud of cosmic dust snakes across this spectacular wide field image of the star forming region Lupus 3. It is a composite of images from the VLT and 2.2-metre instrument at La Silla. © ESO / R. Colombari

UK: History of Science Conference, Edinburgh (13th - 16th); National Astronomy Meeting, Birmingham (20th - 24th) **Other**: Origins 2026, Paris (5th - 10th); Asteroids, Comets & Meteors, Poznań, Poland (6th - 10th)

Lúnasa / August 2026

times adjusted when Summer Time is in effect

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
					1 Lughnasadh	2 10P/Tempel 2 is at perihelion Mercury at greatest elongation (19° 28' W)
3 Bank / Summer Holiday (IRL / SCO) Saturn is 5½° below the Moon this evening	4	5	6 3:21am	7 daylight occultation of Pleiades from IRL/UK	8	9 Mars 4° below the Moon in the early hours
10	11 Mercury 4° lower left of Moon before dawn	12 6:37pm Perseid meteors peak total solar eclipse - very deep partial from IRL/UK	13	14 Mercury & Jupiter ≈ ½° apart in the morning sky	15 Venus at greatest elongation (45° 53' E) Mars ½° from the star cluster M35 in Gemini	16 Venus 7° upper right of Moon low in evening sky
17 kappa Cygnid meteor shower is at maximum	18	19 QiXi Festival (Chinese)	20 3:46am Moon is near Antares after dark	21	22	23
24	25	26	27	28 5:18am	29	30
31 Bank Holiday (ENG/NIR/WAL)		helical rising of Sirius	Mercury is at superior conjunction	deep partial lunar eclipse visible from IRL & UK in the early hours		Saturn 6° lower left of the Moon this evening

The track of the total solar eclipse of August 12th clips SW Iceland before sweeping over the eastern Atlantic Ocean off the coast of Ireland, crosses Spain between Madrid and Zaragoza, and finally ends at sunset for the NW of the Balearic Islands. Great care is needed if you wish to see the deep partial eclipse from Ireland and the UK that evening. Advice about safe viewing techniques can be found at tinyurl.com/ysf7xbd4, while astronomy societies will likely organise public events. Local circumstances are: Ballycroy, Mayo (mid-eclipse approximately 7:09pm / the Sun is 96% obscured); Ballinskelligs, Kerry (7:13pm / 97½%); Dublin (7:10pm / 94%); Belfast (7:08pm / 93%); Cardiff (7:13pm / 93%); Edinburgh (7:05pm / 90½%); and London (7:13pm / 91½%).

The planets this month

Evening - Venus and Saturn

Morning - Mercury, Mars, and Jupiter

Mercury brightens from 0.3^{m} to -0.3^{m} in the morning sky between the 1st and 5th, while reaching an altitude of 7° at 5am at the end of that interval. The innermost planet can be followed up to around August 20th.

Venus (-4.5^{m}) shows a half phase in a telescope all month in our evening sky. Venus sets at 10:30pm on the 1st, or 75 minutes after the Sun, and by 9pm on the 31st.

Mars (1.3^{m}) is in Taurus at the beginning of August but crosses into Gemini on the 12th. Use binoculars to see it near the star cluster M35 at the feet of the Twins on the 15th.

Jupiter (-1.8^{m}), in Cancer, rises more than two hours before the Sun at the end of August and we should see it from 4:30am then.

Saturn (0.6^{m}) rises at 11:30pm at the start of the month but appears at 9:30pm by the 31st - just a half hour after the end of civil twilight.

The partial phase of the **August 28th lunar eclipse** begins at 3:33am and mid-eclipse is at 5:12am (93%). The partial phase ends at 6:52am, which will be after moonset.

Two Auxiliary Telescopes are observing the night sky at the Paranal Observatory. Streaks are from satellites and planes passing over.
© R. Wesson/ESO

31 **Ireland**: Heritage Week (15th - 23rd); Skellig Star Party, Co. Kerry (date TBA) **Other**: COSPAR Scientific Assembly, Florence (1st - 9th)

Meán Fómhair / September 2026

times adjusted when Summer Time is in effect

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
	1 Venus ≈ 1° from Spica very low in evening sky	2	3 daylight occultation of Pleiades from IRL/UK	4 8:51am	5	6 the Pleiades are now rising just after 9:30pm
7 Mars 5° upper right of the Moon this morning	8 Moon occults the Beehive star cluster this morning	9 Jupiter 5° upper right of Moon this morning	10 Uranus stationary, begins to retrograde unar crescent this morning is 21 hours from New	11 4:27am	12 Jewish New Year, A.M 5787	13
14 daylight occultation of Venus for IRL/UK	15	16 Neptune crosses the celestial equator N → S Cloud Appreciation Day	17 Moon is near Antares tonight	18 12:06pm optical aid shows the lunar X from 7pm Culture Night (Ireland) 2026's furthest FQ Moon	19 Int'l Observe The Moon Night & Astronomy Day	20
21	22	23 Autumn equinox, 1:06am	24	25 Equilux	26 5:49pm Saturn 7° lower left of Moon this evening Neptune at opposition	27
28	29	30 Moon very close to Pleiades this evening				

The planets this month

Evening - Venus and Saturn

Morning - Mars and Jupiter

Venus is a brilliant -4.8^{m} object in our evening sky but we will lose sight of the planet mid-month as it sinks into the sunset glow. You will see the crescent of Venus narrow even more in a telescope during September.

Mars (1.2^{m}) scuttles across to Cancer on the 26th and rises around 1am all month.

Jupiter (-1.8^{m}) opens the month in Cancer but crosses into Leo on the 24th. The behemoth roars into view at 4am on the 1st and at 2:45am at month's close.

Saturn (0.4^{m}) crosses into Cetus from Pisces on the 5th, where it will remain for the rest of 2026. It rises an hour after sunset on the 1st but is already up as twilight fades at the end of the month.

Neptune (7.8^{m}) is at opposition in watery Pisces when steadily held binoculars and a good chart of its position will let you net the solar system's most distant major planet.

This month's full moon on the 26th is by definition the Harvest Moon -- i.e., it is the closest full moon to the autumnal equinox. On average, the Moon rises around one hour later each night. What marks out the Harvest Moon as special is that it appears to rise around sunset for several successive evenings.

NGC 5426 and NGC 5427 are two spiral galaxies of similar sizes engaged in a dramatic dance. New stars are being created as a result of the mutual gravitational attraction between the galaxies. © ESO

IRL: Astronomy Ireland Star-B-Q, Wicklow (5th); IFAS AstroCon, Birr Castle (12th) **UK**: Orkney SciFest (3rd - 9th); British Science Festival, Southampton (16th - 20th); Herstmonceaux Astronomy Festival (date TBA)

Deireadh Fómhair / October 2026

times adjusted when Summer Time is in effect

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
			1	2	3 2:25pm 2026's closest LQ moon	4 Saturn at opposition
5 Mars 1½° lower left of the Moon this morning	6 asteroid Pallas (8.2m) at opposition in Cetus Jupiter 3° lower left of the Moon this morning	7 Moon is close to Regulus this morning	8	9 Draconid meteor shower peaks in the early hours	10 4:50pm	11 Mars lies in front of the Beehive star cluster
12 Mercury at greatest elongation (25° 10' E)	13 asteroid Vesta (6.5m) at opposition in Cetus	14 Moon is near Antares tonight	15	16 Hamilton Walk, Dunsink	17	18 5:13pm
19	20	21 Orionid meteors peak in the early hours	22	23	24 Venus is at inferior conjunction Saturn 6° lower right of Moon this evening	25 Summer Time ends (IRL/UK)
26 4:12am Bank Holiday (Ireland)	27 Pleiades occulted by Moon tonight into 28th	28	29	30	31 Dark Matter Day Halloween / Samhain	

The planets this month

Evening - Saturn (all night)

Morning - Mars and Jupiter

Mars now begins to brighten a little from 1.1^{m} to 0.9^{m}, and the pumpkin hued world moves into Leo from Cancer on Halloween night, where it spends the rest of 2026. It rises just before midnight on the 1st and only ever so slightly earlier on the 31st, at 11:30pm. Mars buzzes the Beehive's stars on the 11th.

Jupiter (-1.9^{m}), in Leo, rises just before 3am at the beginning of October, and appears on the eastern horizon a little after 1am at the end of the month.

Saturn (0.3m) is at opposition on the 4th in Cetus - not one of your traditional zodiacal constellations, but one whose boundaries intrude on that swathe of sky the planets negotiate on the celestial sphere.

Saturn is visible throughout the night this month and does not set until 4:30am on the 30th. The southern aspect of Saturn's ring system is tipped 7.5° towards us presently, and the planet is 8.434 AU from the Earth.

Part of the southern Milky Way, around the constellations of Centaurus, Crux and Carina. The brightest of the stars to the lower left is Alpha Centauri, one of the closest stars to our Sun. © ESO/P. Horálek

31 **IRL**: Space Week Ireland (4th - 10th); Maths Week Ireland (10th - 18th); Mayo Dark Sky Festival (Oct 30th - Nov 1st) **UK**: Kelling Heath Star Party (5th - 12th); dates TBA for Kielder Autumn Star Camp & New Scientist Live

Samhain / November 2026

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
						1 8:28pm Mars 7° lower left of the Moon at rise tonight
2 Jupiter 2° above the Moon at rise tonight	3 Moon is near Regulus before dawn	4 Mercury is at inferior conjunction	5 Southern Taurid meteor shower peaks Guy Fawkes Day (UK)	6	7 Venus 2° lower left of the Moon this morning	8 Mercury 6½° upper left of Moon but low in dawn Remembrance Sunday
9 7:02am	10	11 Venus 0.1° from Spica in morning sky	12 Northern Taurid meteor shower peaks	13	14	15 Mars and Jupiter 1¼° apart when they rise in the ENE about 11:30pm
16 optical aid shows the lunar X from 7pm	17 11:48am Leonid meteor shower peaks in the early hours	18 Jupiter at W quadrature	19 Mars at W quadrature	20 Saturn 5° lower left of the Moon this evening	21 Mercury at greatest elongation (19° 37' W)	22
23	24 2:53pm	25	26	27	28	29
30 St Andrew's Day (Scotland)	Supermoon	Mars < 2° from Regulus this evening Uranus at opposition			Moon occults the Bee-hive star cluster tonight	Jupiter 4½° lower left of the Moon this evening

31 **Ireland**: Science Week Ireland (8th - 15th) **UK**: International Astronomy Show, Coventry (date TBA)

The planets this month

Even. - Mars, Jupiter & Saturn ('til early hrs)

Morning - Mercury and Venus

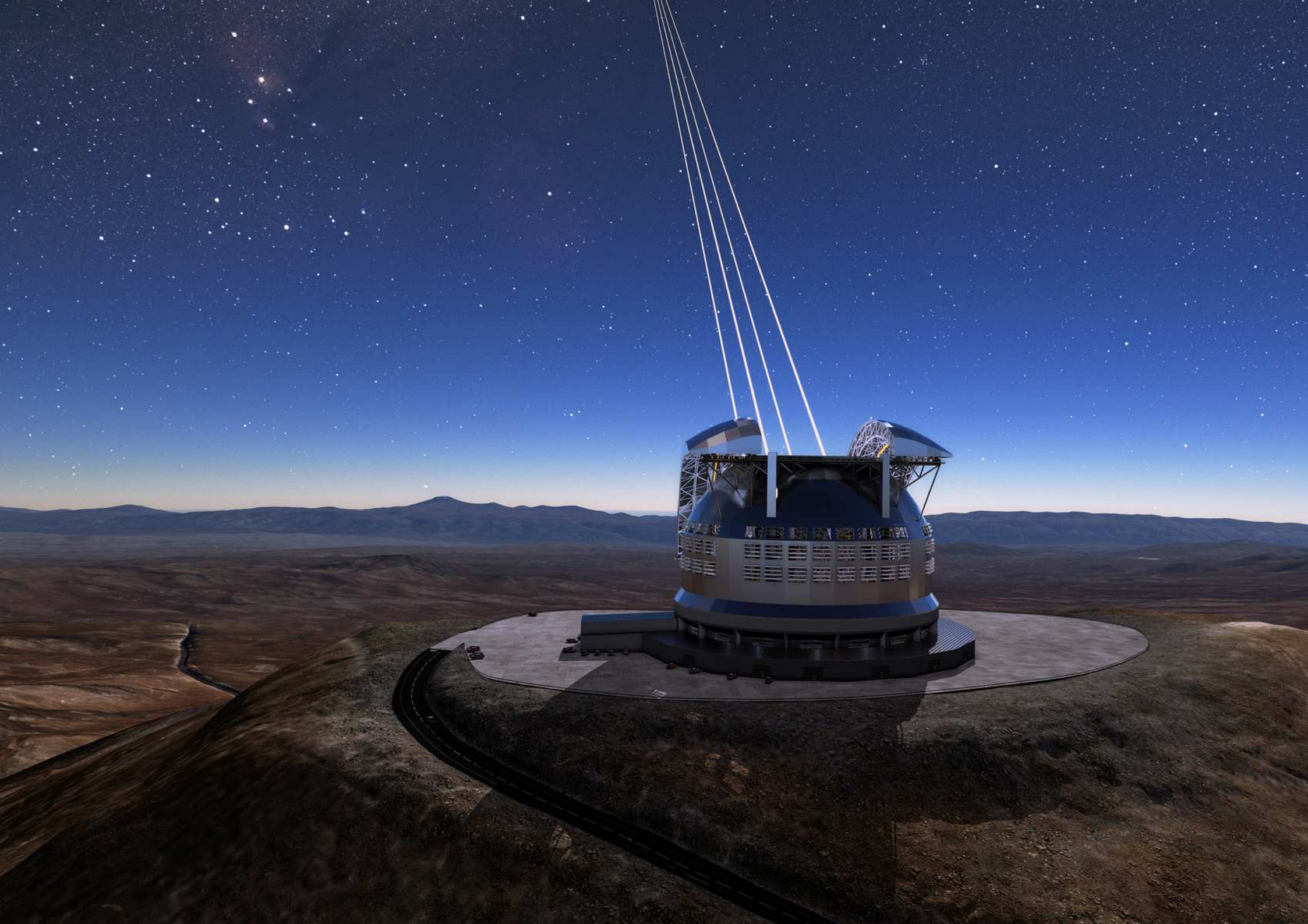
Mercury puts on a good morning sky show during the second half of November. You will find its 0.9m spark already 7° up on the 12th at 6:15am. Searching on an earlier date will likely prove difficult as the planet is a little fainter then. Mercury peaks 10° above the ESE horizon on the 20th when -0.6m, and ends the month 7° high and still as bright.

Venus (-4.8m) rises just before the start of civil twilight on the 1st but very quickly pulls clear of the dawn to end November up nearly four hours before the Sun. Venus presently exhibits a lovely crescent phase in a scope.

Mars (0.9m to 0.5m) and **Jupiter** (-2.1m), both in Leo, rise around midnight on Nov. 1st but will be up before 11pm at the end of the month.

Saturn (0.6m), in Cetus, fades slowly after its opposition early last month. The ringed planet sets at 4:30am on the 1st and by 2:30am on November 30th.

A spectacular close-up of the famous Horse Head Nebula in Orion taken from Paranal by the Callisto one-metre telescope that is part of the SPECULOOS planet hunting network.
© SPECULOOS Team/E. Jehin/ESO



Nollaig / December 2026

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
	1 6:09am	2	3	4	5 Venus 7° upper left of the Moon this morning	6
7 Mercury 8° upper left of Moon this morning	8 Venus 24° high in SE at start of civil twilight	9 0:52am	10	11 Saturn stationary, pro-grade motion resumes 2026's most distant Moon	12	13 Jupiter stationary, begins to retrograde
14 Geminid meteor shower peaks	15	16	17 5:43am Saturn 7° lower left of the Moon this evening	18	19	20
21 Pleiades occulted by the Moon this evening Winter solstice, 8:50pm	22 Ursid meteor shower peaks	23	24 1:28am supermoon and the nearest FM of 2026	25 Christmas Day	26 St. Stephen's Day / Boxing Day	27 Moon is near Regulus tonight Jupiter 5° upper right of Moon this evening
28 Bank Holiday Mars 8° upper left of the Moon this evening	29 Saturn at E quadrature	30 6:59pm asteroid Ceres (6.9^{m}) is near Castor & Pollux	31 New Year's Eve			

The distribution of the 21 first magnitude stars on the celestial sphere means around New Year offers the best chance to see the 15 visible from the latitude of IRL/UK in a single night from dusk to dawn. Fomalhaut is your first objective in the evening sky, while Antares, the last, needs a clear SE aspect - the star is only 2½° up at 7:30am as the sky lightens. It's a unique way to usher in 2027!

The planets this month

Even. - Mars, Jupiter & Saturn ('til early hrs)

Morning - Mercury and Venus

Mercury can be found almost 7° above the ESE horizon roughly 90 minutes before sun-rise on the 1st. The -0.6^{m} planet remains on view until around the 13th, but loses a little height each day as it dives back sunward. It is just 1° up at 7:30am on the 12th.

Venus (-4.8^{m}) rises around four hours before the Sun all month and illuminates our dark mid-winter mornings.

Mars, in Leo, continues to brighten from 0.5^{m} to -0.1^{m} during December and grows closer to the Earth - it is one AU away on the 21st.

Jupiter (-2.3^{m}) heaves itself over the horizon with Leo just before 10:30pm on the 1st and by 8:30pm on the 31st.

Saturn (0.8^{m}) sets in Cetus during the early hours. It lingers until about 2:30am at the start of December but will slip away from the crowd on the 31st shortly after the bells peal for the New Year.

An artist's rendering shows how the Extremely Large Telescope's Adaptive Optics system will look in action. Its 39-metre diameter mirror will be the world's biggest eye on the sky. © ESO/ L. Calçada

2026 rise/set times for the Sun and classical planets at Dublin, Ireland (www.timeanddate.com gives day-by-day details for your location)

		Sun	Sun	Sun	Sun	Mer	Mer	Mer	Mer	Mer	Ven	Ven	Ven	Ven	Ven	Mars	Mars	Mars	Mars	Mars	Jup	Jup	Jup	Jup	Sat	Sat	Sat	Sat
Mth	Day	B/CT	Rise	Set	E/CT	Rise	Set	Mag.	D"	Ph.	Rise	Set	Mag.	D"	Ph.	Rise	Set	Mag.	D"	Ph.	Rise	Set	Mag.	D"	Rise	Set	Mag.	D"
Jan	1	07:58	08:41	16:17	17:00	08:00	15:16	-0.6	4.88	0.949	08:43	16:05	----	9.76	1.000	08:58	16:18	1.2	3.88	1.000	16:55	09:30	-2.7	46.47	11:46	23:13	1.2	17.11
Jan	15	07:52	08:33	16:37	17:18	08:38	16:02	-1.1	4.70	0.993	08:49	16:41	-4.0	9.76	0.999	08:39	16:20	1.2	3.91	1.000	15:50	08:29	-2.7	46.53	10:52	22:24	1.2	16.73
Jan	30	07:35	08:13	17:05	17:43	08:43	17:30	-1.3	4.95	0.982	08:38	17:30	-3.9	9.81	0.995	08:11	16:27	1.2	3.93	0.999	14:41	07:25	-2.6	45.86	09:55	21:33	1.1	16.40
Feb	1	07:32	08:10	17:08	17:46	08:42	17:44	-1.2	5.03	0.970	08:35	17:36	-3.9	9.82	0.995	08:07	16:29	1.2	3.94	0.999	14:32	07:16	-2.6	45.72	09:47	21:26	1.1	16.36
Feb	15	07:08	07:44	17:36	18:12	08:14	19:16	-0.9	6.29	0.698	08:12	18:25	-3.9	9.92	0.987	07:37	16:38	1.2	3.97	0.997	13:30	06:17	-2.5	44.45	08:54	20:40	1.1	16.12
Feb	28	06:40	07:15	18:01	18:36	07:16	19:19	1.7	9.26	0.139	07:46	19:09	-3.9	10.06	0.977	07:05	16:47	1.2	4.00	0.995	12:35	05:23	-2.5	42.95	08:05	19:57	1.0	15.97
Mar	1	06:38	07:13	18:03	18:38	07:11	19:13	2.1	9.52	0.107	07:44	19:13	-3.9	10.07	0.976	07:02	16:48	1.2	4.00	0.995	12:31	05:19	-2.4	42.82	08:02	19:54	1.0	15.96
Mar	15	06:05	06:40	18:29	19:04	06:03	17:07	2.5	10.60	0.100	07:14	20:00	-3.9	10.28	0.962	06:26	16:58	1.2	4.04	0.992	11:35	04:24	-2.3	41.04	07:09	19:09	1.0	15.86
Mar	30	05:29	06:04	18:57	19:32	05:30	16:12	0.4	8.28	0.418	06:42	20:51	-3.9	10.59	0.941	05:45	17:07	1.2	4.08	0.988	10:39	03:27	-2.2	39.13	06:13	18:21	0.9	15.85
Apr	1	05:24	05:59	19:01	19:36	05:27	16:13	0.3	7.99	0.453	06:38	20:58	-3.9	10.64	0.938	05:40	17:09	1.2	4.08	0.987	10:31	03:19	-2.2	38.88	06:05	18:14	0.9	15.85
Apr	15	04:49	05:26	19:26	20:03	05:05	16:50	0.0	6.44	0.653	06:12	21:47	-3.9	11.02	0.914	05:01	17:17	1.2	4.12	0.983	09:43	02:29	-2.1	37.23	05:13	17:29	0.9	15.92
Apr	30	04:13	04:53	19:53	20:34	04:41	18:16	-0.7	5.43	0.852	05:55	22:36	-3.9	11.56	0.882	04:19	17:25	1.2	4.17	0.978	08:53	01:36	-2.0	35.66	04:17	16:40	0.9	16.08
May	1	04:11	04:51	19:55	20:36	04:40	18:23	-0.8	5.38	0.866	05:54	22:39	-3.9	11.60	0.880	04:17	17:26	1.2	4.17	0.977	08:50	01:32	-2.0	35.56	04:13	16:37	0.9	16.10
May	15	03:41	04:26	20:19	21:04	04:27	20:28	----	5.09	1.000	05:54	23:14	-3.9	12.26	0.845	03:38	17:33	1.2	4.22	0.972	08:06	00:44	-2.0	34.32	03:21	15:50	0.9	16.32
May	30	03:17	04:06	20:41	21:30	04:52	22:25	-0.7	5.90	0.749	06:15	23:31	-3.9	13.15	0.802	02:59	17:41	1.3	4.28	0.966	07:22	23:49	-1.9	33.24	02:24	14:59	0.9	16.63
Jun	1	03:14	04:04	20:43	21:33	04:58	22:33	-0.6	6.10	0.700	06:19	23:32	-4.0	13.28	0.795	02:54	17:41	1.3	4.29	0.965	07:16	23:43	-1.9	33.11	02:17	14:53	0.9	16.68
Jun	15	03:04	03:57	20:55	21:48	05:46	22:37	0.4	8.04	0.398	06:56	23:24	-4.0	14.38	0.749	02:19	17:47	1.3	4.35	0.959	06:36	22:56	-1.8	32.35	01:24	14:03	0.8	17.04
Jun	30	03:09	04:01	20:57	21:49	05:51	21:32	2.2	10.79	0.133	07:42	23:00	-4.1	15.88	0.695	01:46	17:50	1.3	4.44	0.952	05:55	22:05	-1.8	31.76	00:27	13:09	0.8	17.47
Jul	1	03:10	04:02	20:57	21:48	05:48	21:26	2.4	10.96	0.117	07:45	22:58	-4.1	16.00	0.691	01:44	17:51	1.3	4.45	0.951	05:52	22:02	-1.8	31.73	00:23	13:05	0.8	17.50
Jul	15	03:27	04:16	20:46	21:34	04:31	19:53	5.2	11.56	0.014	08:26	22:25	-4.2	17.84	0.635	01:16	17:50	1.3	4.54	0.944	05:15	21:15	-1.8	31.41	23:25	12:12	0.7	17.94
Jul	30	03:54	04:38	20:24	21:08	03:12	19:11	0.6	8.39	0.284	09:05	21:45	-4.3	20.44	0.569	00:52	17:45	1.3	4.67	0.937	04:35	20:24	-1.8	31.29	22:27	11:14	0.6	18.42
Aug	1	03:58	04:41	20:21	21:04	03:09	19:12	0.3	7.93	0.346	09:09	21:39	-4.3	20.85	0.559	00:49	17:43	1.3	4.69	0.936	04:29	20:17	-1.8	31.29	22:19	11:06	0.6	18.48
Aug	15	04:25	05:05	19:53	20:33	03:46	19:35	-1.2	5.64	0.836	09:40	20:56	-4.5	24.25	0.488	00:32	17:31	1.3	4.84	0.928	03:52	19:29	-1.8	31.41	21:24	10:09	0.6	18.90
Aug	30	04:54	05:31	19:20	19:56	05:41	19:34	-1.7	4.90	0.995	10:06	20:06	-4.6	29.29	0.401	00:18	17:12	1.3	5.03	0.920	03:12	18:37	-1.8	31.76	20:24	09:06	0.5	19.28
Sep	1	04:58	05:35	19:15	19:51	05:56	19:31	-1.5	4.89	0.989	10:09	19:59	-4.6	30.10	0.388	00:16	17:09	1.3	5.06	0.919	03:07	18:30	-1.8	31.82	20:16	08:57	0.5	19.32
Sep	15	05:24	05:59	18:41	19:16	07:28	19:04	-0.4	5.04	0.907	10:20	19:06	-4.8	37.05	0.288	00:06	16:44	1.2	5.29	0.912	02:28	17:41	-1.8	32.39	19:20	07:57	0.4	19.57
Sep	30	05:50	06:25	18:05	18:39	08:46	18:28	-0.1	5.66	0.783	10:02	18:02	-4.7	47.23	0.160	23:56	16:11	1.1	5.60	0.905	01:46	16:48	-1.9	33.23	18:19	06:51	0.3	19.70
Oct	1	05:52	06:27	18:02	18:37	08:50	18:26	-0.1	5.72	0.773	09:59	17:58	-4.7	48.00	0.151	23:55	16:09	1.1	5.62	0.905	01:43	16:45	-1.9	33.30	18:15	06:47	0.3	19.70
Oct	15	06:17	06:52	17:29	18:04	09:35	17:51	-0.1	7.03	0.563	08:48	16:55	-4.3	58.07	0.037	23:45	15:35	1.0	5.98	0.899	01:02	15:54	-1.9	34.32	17:18	05:46	0.4	19.67
Oct	30	06:44	07:20	16:57	17:34	08:39	17:03	2.2	9.61	0.105	06:46	16:00	-4.2	60.38	0.017	23:31	14:54	0.9	6.46	0.895	00:15	15:00	-2.0	35.65	16:18	04:41	0.5	19.48
Nov	1	06:47	07:24	16:53	17:30	08:16	16:55	3.4	9.87	0.048	06:30	15:54	-4.2	59.64	0.025	23:29	14:49	0.9	6.54	0.895	00:09	14:52	-2.0	35.85	16:09	04:32	0.5	19.44
Nov	15	07:12	07:51	16:29	17:08	06:01	16:04	0.0	7.96	0.344	05:03	15:18	-4.8	50.48	0.134	23:13	14:08	0.7	7.12	0.895	23:18	14:00	-2.1	37.32	15:13	03:33	0.6	19.13
Nov	30	07:35	08:16	16:11	16:53	06:34	15:35	-0.6	5.61	0.831	04:21	14:45	-4.9	39.75	0.269	22:49	13:23	0.5	7.90	0.898	22:25	13:03	-2.2	39.05	14:13	02:31	0.7	18.71
Dec	1	07:36	08:18	16:11	16:52	06:39	15:34	-0.6	5.52	0.846	04:19	14:43	-4.9	39.13	0.278	22:47	13:19	0.5	7.95	0.899	22:21	13:00	-2.2	39.17	14:09	02:27	0.7	18.68
Dec	15	07:52	08:35	16:06	16:49	07:50	15:27	-0.7	4.83	0.965	04:16	14:16	-4.8	31.74	0.383	22:17	12:35	0.2	8.87	0.908	21:27	12:05	-2.3	40.86	13:13	01:32	0.8	18.24
Dec	30	07:58	08:41	16:15	16:58	08:51	15:54	-1.3	4.66	0.998	04:31	13:51	-4.6	26.15	0.476	21:34	11:44	-0.1	10.07	0.926	20:25	11:06	-2.4	42.58	12:14	00:35	0.8	17.76

Times are in UT so add 1 hour when Summer Time is in effect. B/CT and E/CT are beginning + end of Civil Twilight. Mag = planet's magnitude, D" is diameter in arc-seconds, and Ph is the illuminated phase