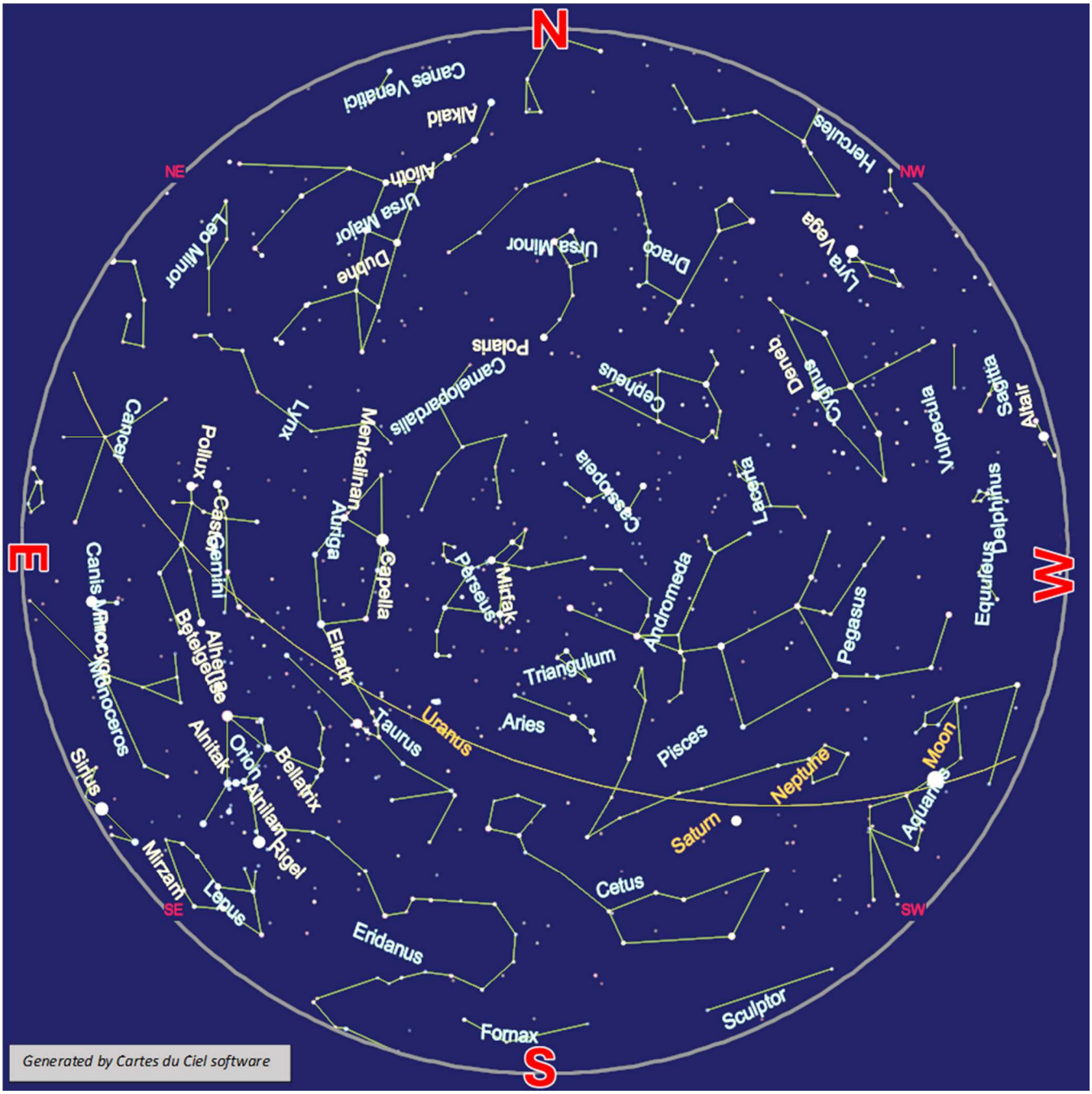
The Night Sky in December 2026

Happy Christmas and Clear Skies to you all!

Monthly Guide

compiled by Doug Bickley

PERTON LIBRARY ASTRONOMY GROUP



The chart is based on location 52.6° N, 2.2° W (Perton, Wolverhampton, UK) @ 21:00 on 15/12/2026.
The orange line is the ecliptic.
We are looking SOUTH (as shown at the bottom of the chart) at the constellations Orion, Taurus, Pisces and Aquarius with the constellations Canis Minor, Gemini, Perseus, Andromeda and Delphinius overhead.

***TO USE THE CHART - hold it so that the direction you are facing is at the bottom** – the lower part of the chart shows the sky ahead of you and the centre of the chart shows the sky directly over your head.*

Events summary to look out for this month:

1	Crescent Moon near Venus (morning)
9	New Moon
14	Gemini meteor shower peak (favourable)
17	Moon near Saturn
17	Perton Library Astronomy Group meeting 7pm
21	Winter Solstice
21	Moon moves though M45 Pleiades
22	Ursid meteor shower peak
24	Full Moon - Supermoon
24/25	Fast moving sleigh peak (visibility unfavourable) 
27	Jupiter and Moon in conjunction
28	Moon near Mars (Morning)

Detailed phenonema for the month

:times based at Perton, Wolverhampton, UK

	Date	Hour	Description of the phenomenon
	yyyy mm dd	hh:mm	
1	2026 12 01	06:08	LAST QUARTER OF THE MOON
2	2026 12 02	00:00	Meteor shower : Dec. Phoenicids (duration = 11.0 days)
3	2026 12 09	00:00	Meteor shower : Monocerotids (3 meteors/hour at zenith; duration = 20.0 days)
4	2026 12 09	00:00	Meteor shower : Sigma Hydrids (7 meteors/hour at zenith; duration = 12.0 days)
5	2026 12 09	00:52	NEW MOON
6	2026 12 11	06:46	Moon at apogee (geocentric dist. = 406419 km)
7	2026 12 14	13:59	Meteor shower : Geminids (150 meteors/hour at zenith; duration = 12.0 days)
8	2026 12 17	05:43	FIRST QUARTER OF THE MOON
9	2026 12 17	17:46	Close encounter between the Moon and Neptune (topocentric dist. center to center = 4.0°)
10	2026 12 21	20:50	WINTER SOLSTICE
11	2026 12 21	23:27	Close encounter between the Moon and the Pleiades (topocentric dist. center to center = 0.5°)
12	2026 12 22	04:50	Close encounter between the Moon and Uranus (topocentric dist. center to center = 4.5°)
13	2026 12 22	22:00	Meteor shower : Ursids (10 meteors/hour at zenith; duration = 9.0 days)
14	2026 12 23	00:00	Meteor shower : Coma Berenicids (3 meteors/hour at zenith; duration = 11.0 days)
15	2026 12 24	01:28	FULL MOON
16	2026 12 24	03:01	Close encounter between the Moon and M 35 (topocentric dist. center to center = 2.4°)
17	2026 12 24	08:00	Mercury at its aphelion (distance to the Sun = 0.46670 AU)
18	2026 12 24	08:29	Moon at perigee (geocentric dist. = 356650 km)
19	2026 12 25	21:00	Venus at its perihelion (distance to the Sun = 0.71846 AU)
20	2026 12 27	21:05	Close encounter between the Moon and Regulus (topocentric dist. center to center = 1.7°)
21	2026 12 30	18:59	LAST QUARTER OF THE MOON

THE MOON

Lunar Phases this month



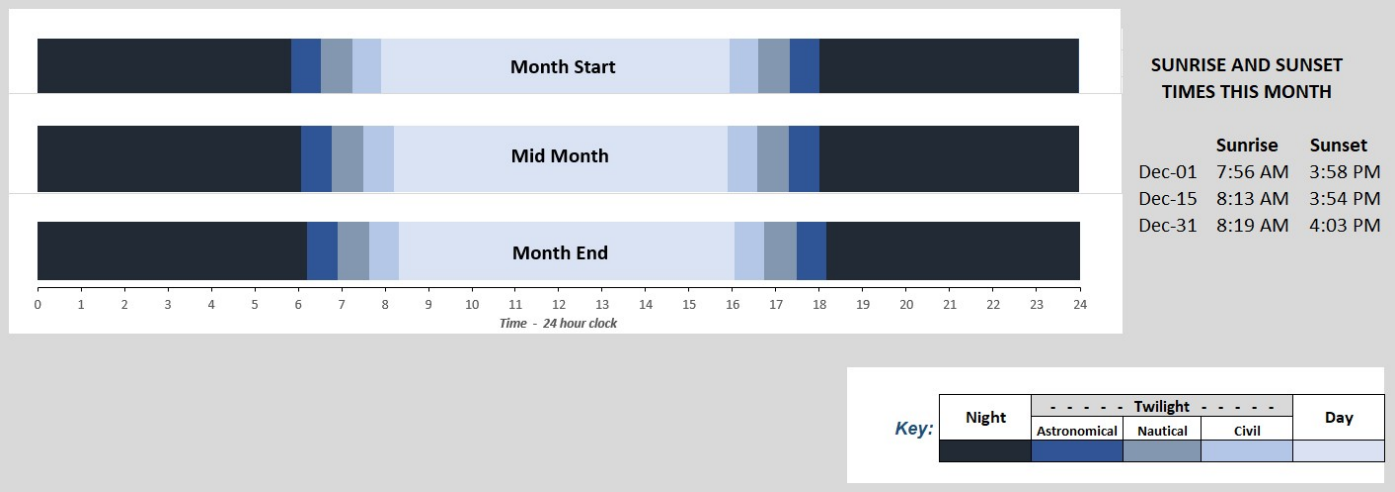
December's Full Moon is traditionally called the Cold Moon, a fitting name for the middle of winter. Because the Sun is so low in the sky at this time of year, the Full Moon takes a particularly high path across the night sky. Other names are the Long Night Moon and the Oak Moon. The Old English and Anglo-Saxon names are the Moon Before Yule or the Long Night Moon, referring to the longest night of the year in the Northern Hemisphere, the December solstice. The Celts called it the Oak Moon or the Full Cold Moon.

December's Full Moon occurs at 01:28 GMT on Christmas Eve, Thursday 24 December, and it will be another supermoon, the second of a series of four (the next ones are 22 January and 20 February 2027) and will look slightly larger and brighter than an average Full Moon. The difference isn't particularly obvious to the naked eye, but it is still a wonderful sight. The best time to enjoy it will be on the evening of 23 December, as it approaches full phase, or on Christmas Eve itself. If the skies are clear on Christmas night, the Moon will still appear almost full.

On the evening of Monday 21 December, the Moon passes across the Pleiades star cluster in Taurus. The Pleiades, also known as the Seven Sisters or M45, is one of the most beautiful open star clusters in the sky. On a clear night they can be seen with the naked eye as a small group of sparkling stars, while binoculars reveal many more and is definitely a WOW moment if you haven't viewed them this way before. During the evening, the Moon will move across part of the cluster, occulting some of its stars. The Moon will be about 93% illuminated, so its brightness will make some of the fainter stars difficult to see.

THE SUN

Graphical format showing sun rising, setting and twilight linked to an online data source (time-ok.com) to show twilight zones more clearly. Location is set at Wolverhampton UK.



The winter solstice occurs on Monday 21 December at 20:50 GMT, marking the shortest day and longest night of the year in the northern hemisphere. In Wolverhampton, daylight lasts only about seven hours at this time of year, with the Sun following a very low path across the southern sky.

The solstice marks the point when the Sun reaches its most southerly position in the sky. After this, the days gradually begin to lengthen again, although it will be some weeks before the difference becomes particularly noticeable.

Solar activity in December 2026 is projected to stay at generally low levels, but 2026 is widely expected to be one of the strongest years for Northern Lights activity in more than a decade as Solar Cycle 25 approaches its peak, so keep a lookout.

METEOR SHOWERS

Wrap up warm, give your eyes at least 20 minutes to adjust to the darkness. No telescope or binoculars are needed. A reclining chair and a flask of something hot are probably more useful!

Geminids
The significant event in December is the Geminids meteor shower, which often shows good activity before midnight. It will be active from 4 December to 17 December, producing its peak rate of meteors around 14 December. As this is around the time of the Moon is a thin waxing crescent so observations will be better later in the evening after it sets. The source is debris from asteroid 3200 Phaethon.

The Wolverhampton Astronomical Society will be organising a viewing event for members so check out the Wolvas member's forum for more details.

Ursids
There is a second shower, the Ursids, in the latter part of December, peaking on 22, but this coincides with a waxing gibbous Moon and conditions are unfavourable. The source of the meteors is the comet 8P/Tuttle.

PLANETS THIS MONTH

Here's my usual summary table showing times for planetary rising and setting, with observation opportunities based on mid-month data.

December brings the longest nights of the year and some wonderful sights in the winter sky. With darkness falling before 4pm in Wolverhampton, there's no excuse for not getting outside to explore the night sky, and you won't have to stay up too late.

	Planetrise/Planetset, Tue, 15 Dec 2026			
Planet	Rise	Set	Meridian	Comment
Mercury	Wed 07:33	Wed 15:15	Wed 11:24	Difficult to see
Venus	Wed 03:57	Wed 13:59	Wed 08:58	Great visibility
Mars	Tue 22:02	Wed 12:12	Wed 05:07	Perfect visibility
Jupiter	Tue 21:12	Wed 11:42	Wed 04:27	Perfect visibility
Saturn	Tue 12:56	Wed 01:11	Tue 19:03	Perfect visibility
Uranus	Tue 14:32	Wed 06:34	Tue 22:33	Average visibility
Neptune	Tue 12:39	Wed 00:38	Tue 18:38	Difficult to see

Data from timeanddate.com

Mercury is still in the SE in Libra shining at mag -0.6, a morning planet with a maximum altitude of only 6°. On 7 December a waning crescent Moon is close by but the planet will be lost from around 10 December.

Venus is still in the SE in Virgo, at a maximum altitude of 18°, remaining a brilliant morning planet shining at mag -4.5. On 5 December a 13%-lit Moon will be close.

Jupiter is still in Leo in the S at an altitude of 50° shining at mag. -2.2. On 28 December it will be close to a waxing gibbous Moon. Currently, the four Galilean moons can be seen interacting with one another in the form of 'mutual events'.

Mars is still in the S in Leo at a maximum altitude of 48°, shining at mag. +0.5 (and brightening to mag -0.1 at month end). Although very small its distinctive orange colour makes it easy to recognise, particularly alongside the much brighter Jupiter and Regulus. Observations continue to improve towards opposition in February 2027. With Mars being the closest of the superior planets this will make a great difference.

Saturn is still in the S in Cetus shining at mag. 0.5 with a maximum altitude of 38° and early evening observations will be good. On 14 December a 38%-lit waxing Moon will be close by. The rings are still gradually opening up after appearing almost edge-on during 2025,

Uranus is still in the S in Taurus at a maximum altitude of 58° shining at mag. +5.6. You will definitely need a good set of binoculars or a small telescope. On 22 December a 93%-lit waxing gibbous Moon will be close.

Neptune is still in the S in Pisces at a maximum altitude of 36° shining at its usual brightness of around mag +7.9 throughout the month. The planet is close to Saturn all month.

International Space Station (ISS)

Forecast times for visible passes this month as reported by the Heavens Above website

You can also use these apps to check for ISS passes:



Android: *ISS Detector Satellite Tracker*



IOS: *ISS Spotter*

Date	Mag	Transit time	Start Time	Start Alt.degs.	Start Az.	High point	End Time	End Alt.degs.	End Az.
01-Dec	-0.4	02:10	17:40	10°	WSW	11°	17:42	10°	SSW
02-Dec	-0.7	04:20	16:51	10°	WSW	16°	16:55	10°	S
10-Dec	-0.2	02:26	07:14	10°	SSE	12°	07:17	10°	ESE
12-Dec	-1.1	05:22	07:12	10°	SSW	22°	07:18	10°	E
13-Dec	-0.8	04:17	06:25	10°	S	16°	06:29	10°	ESE
14-Dec	-0.6	02:00	05:38	10°	SSE	11°	05:40	10°	ESE
14-Dec	-2.3	06:18	07:12	10°	SW	39°	07:18	10°	E
15-Dec	-1.9	05:55	06:23	10°	SW	29°	06:29	10°	E
16-Dec	-1.5	03:50	05:37	18°	S	21°	05:41	10°	E
16-Dec	-3.2	06:37	07:11	10°	WSW	60°	07:18	10°	E
17-Dec	-0.7	01:01	04:51	14°	ESE	14°	04:52	10°	ESE
17-Dec	-3.0	05:30	06:24	18°	SW	49°	06:29	10°	E
18-Dec	-2.6	03:12	05:38	37°	SSE	37°	05:41	10°	E
18-Dec	-3.6	06:42	07:11	10°	W	76°	07:18	10°	E
19-Dec	-0.7	00:58	04:51	16°	E	16°	04:52	10°	E
19-Dec	-3.6	04:54	06:24	29°	WSW	69°	06:29	10°	E
20-Dec	-3.0	02:51	05:38	51°	SE	51°	05:41	10°	E
20-Dec	-3.6	06:38	07:11	10°	W	75°	07:17	10°	E
21-Dec	-0.7	00:49	04:51	16°	E	16°	04:52	10°	E
21-Dec	-3.8	04:38	06:24	35°	W	77°	06:29	10°	E
22-Dec	-3.0	02:40	05:38	52°	ESE	52°	05:40	10°	E
22-Dec	-3.4	06:23	07:11	12°	W	58°	07:17	10°	ESE
23-Dec	-0.7	00:44	04:51	16°	E	16°	04:52	10°	E
23-Dec	-3.7	04:29	06:24	36°	W	69°	06:28	10°	ESE
24-Dec	-2.9	02:36	05:37	50°	ESE	50°	05:40	10°	E
24-Dec	-2.7	06:01	07:10	11°	W	37°	07:16	10°	SE
25-Dec	-0.6	00:40	04:51	15°	E	15°	04:51	10°	E
25-Dec	-3.2	04:17	06:24	34°	WSW	48°	06:28	10°	SE
26-Dec	-2.7	02:26	05:37	42°	SE	42°	05:39	10°	ESE
26-Dec	-1.9	05:11	07:10	10°	W	21°	07:15	10°	SSE
27-Dec	-0.5	00:31	04:50	14°	ESE	14°	04:51	10°	ESE
27-Dec	-2.5	03:42	06:23	26°	SW	29°	06:27	10°	SSE
28-Dec	-2.1	02:00	05:36	28°	SSE	28°	05:38	10°	SE
28-Dec	-1.3	01:55	07:10	10°	WSW	11°	07:12	10°	SSW
29-Dec	-0.4	00:07	04:50	11°	ESE	11°	04:50	10°	ESE
29-Dec	-1.7	02:19	06:23	16°	SW	16°	06:25	10°	S
30-Dec	-1.3	00:55	05:36	15°	S	15°	05:37	10°	SSE

I've listed all the forecast visible passes this month, some in the early hours of the morning.

Check the Heavens-Above website to see the passes that I haven't show and for the latest forecasts.
[source: https://www.heavens-above.com/]

PERTON LIBRARY ASTRONOMY GROUP



The group meets on the third Thursday of every month of the year at Perton Library from 7pm to 9pm. No subscription, no need to book, all free, just drop in at any time during the evening.
(Location WV6 7QU or on what3words ///saints.empty.stands)
The group is a relaxed and friendly gathering with the occasional talk.

We are particularly suited to beginners who very often bring their telescopes along for advice on how to set up, and we have experienced members who can help with this. If the skies are clear we do try to do some observing with library and member equipment.

WOLVERHAMPTON ASTRONOMICAL SOCIETY

The Wolvas annual subscription is currently a bargain at £15 per annum and you can sign up now our website www.wolvas.org.uk and pay your subscription, preferably by bank transfer.

We put together a yearly 16 lecture programme and the host location for our live talks remains the University of Wolverhampton in the city centre. Access and facilities are excellent - details are available on the Wolvas website. Lectures in person or online will only be available to paid-up members of the Society. Members will receive regular emails with invitations to the Zoom sessions and reminders of the in-person lectures.
Non-members may attend the talks live for £2 on the door.

As you can see we have some excellent talks lined up for the upcoming season (just awaiting confirmation from two speakers in April and June):

DATE	SPEAKER	SUBJECT
07-Dec-26	Prof Jane Greaves	Life in the clouds of Venus
11-Jan-27	Ian Mould	Stellar Evolution for Beginners
25-Jan-27	Dr MichelleThaller	Neutron Stars
08-Feb-27	Roy Gunson	Beginning of time
22-Feb-27	Linda Manas	Trigonometry in Astronomy part 2: Copernicus and Kepler
22-Mar-27	Martin Lewis	Imaging the Night Side of Venus
12-Apr-27	TBA	To be decided
26-Apr-27	Dr Jenifer Millard	The Nancy Grace Roman Observatory
10-May-27	Mary McKintyre	Augsburg Wunderzeichenbuch (The Book of Miracles)
14-Jun-27	TBA	To be decided

As well as our website we will be posting details of events on social media, so keep an eye on our Facebook (https://www.facebook.com/wolvasuk) and X *[Twitter]* (https://twitter.com/wolvasuk) pages for the latest news.