

*Cyclones at the north pole of Jupiter appear as swirls of striking colours in this rendering of an image from NASA's Juno mission
Credit: NASA/JPL-Caltech/SwRI/MSSS*

What to look out for in the night sky

13/14 December - Geminid Meteors

This is one of the best meteor showers of the year, peaking on the night of 13 December but visible from 4-16 December.

21 December - Winter Solstice

This the shortest day of the year in the Northern Hemisphere.

21/22 December - Ursid Meteors

This is the last major meteor shower of the year, peaking between the night of 21 and 22 December.

21/22 December - Great Conjunction of Jupiter and Saturn

This significant meeting of Jupiter and Saturn, the two biggest worlds in our solar system, will be on 21 December. It will be the first Jupiter-Saturn conjunction since 2000 and the closest since 1623. At the peak of the conjunction, Jupiter and Saturn will be only 0.1 degrees apart, 1/5 of the diameter of a full moon. This very close Jupiter-Saturn conjunction will not occur again until 2080.

30 December - Full Moon

This Full Moon in December is called a Cold Moon because of low temperatures in most locations in the Northern Hemisphere.

Venus remains a prominent object in the dawn twilight throughout December

2 January - Earth's Perihelion

At 13:50 UTC, the Earth will reach its perihelion which is the point on its orbit that is closest to the Sun.

2/3/4 January - Quadrantids Meteors

The Quadrantids shower peaks on the night of 3 January with up to 40 meteors per hour at its peak. The shower runs annually from 1-5 January. Although the waning gibbous moon will block out most of the faintest meteors, some brighter ones should be visible. Meteors can appear anywhere in the sky.

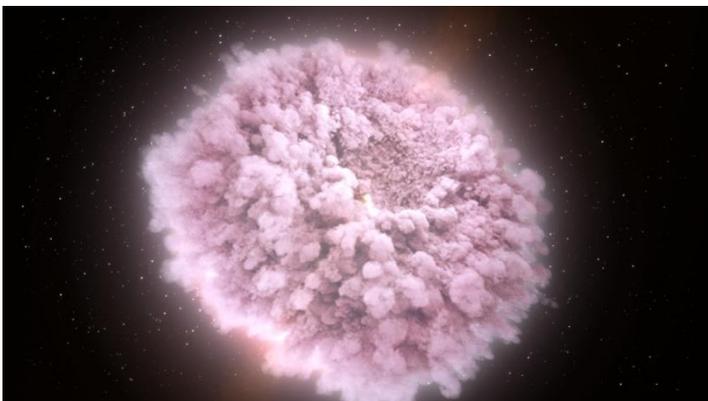
13 January - New Moon

24 January - Mercury at Greatest Eastern Elongation

The planet Mercury reaches its greatest eastern elongation of 18.6 degrees from the Sun. This is the best time to view Mercury since it will be at its highest point above the horizon in the evening sky. Look for the planet low in the west, just after sunset.

28 January - Full Moon

This Full Moon is known as the Wolf Moon, Old Moon and Moon After Yule



When two neutron stars merge into each other, a cloud or 'kilonova' is produced. Within the neutron-rich debris, large quantities of some of the universe's heaviest elements are forged, including gold and platinum.

Image Credit: NASA's Goddard Space Flight Center/CI Lab, 20 October 2020

Useful websites

Spot the International Space Station:

https://spotthestation.nasa.gov/sightings/view.cfm?country=United_Kingdom®ion=England&city=Kettering#.Xxl13ihKhPY

www.space.com

<https://www.nasa.gov/>

<https://astronomynow.com/uk-sky-chart/>

<https://www.skyatnightmagazine.com/advice/skills/astronomy-guide-viewing-planets-night-sky/>

<https://www.timeanddate.com/astronomy/sights-to-see.html>

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