

CAS Sky Notes for January 2024

Planets:

Mercury: Mercury is in the morning sky and reaches greatest western elongation of 23° on the 12th January. You might be able to pick it up if you have a really clear eastern horizon. However, it is well south of the celestial equator and won't be an easy object.

Venus: Venus is still a morning object. Its elongation drops to around 30° throughout the month. Its magnitude drops from -4.1 to -3.9 as the phase increases to 85% by the end of the month. The diameter decreases to around 13 arcsec during this month. Also, it is well south of the celestial equator and so is much lower in the sky.

Mars: Although moving into the morning sky, it is still a very difficult object this month.

Jupiter: Jupiter is still fairly well placed and visible throughout the night. It is quite high in the sky by mid evening and unmistakable. Look out for the 4 Galilean moons. Various websites will help you to identify them, www.shallowsky.com is worth using as it also shows the position of the Great Red Spot (GRS) and when it is visible.

Saturn is still observable in the early evening, but sets around 7 pm. It is low in the sky, but is well worth viewing. The rings are at a shallow angle and it is a beautiful sight if you have a clear evening and a clear western horizon. There is an interactive map of the moons available at skyandtelescope.org

Uranus is well placed throughout December. It is situated roughly half way between Jupiter and the Pleiades and so is fairly easy to find. R.A. 03h 02m, Dec $+17^\circ$. If anyone wants more details, please email Neil at coord@cotswoldas.org.uk

Neptune. Neptune is still just observable, but sets mid evening. It is at R.A. 23h 42m and Dec. -3.3° . Contact your Coordinator if you want more ephemeris to find it.

The Sun

Solar activity is still increasing and solar observations are a good idea. **Take great care to never look directly at the Sun, or directly through an optical instrument.**

We reach Perihelion (closest to the Sun) on the 4th January.

Aurora Borealis: Increasing solar activity increases the chance of seeing an aurora. There are a number of Apps that can give you warnings and chances of seeing Aurorae. Mine is called *Aurora Pro*.

Meteor Showers: The Quadrantid meteor shower peaks on the 4th of January, but some may be seen a few days either side of this. The radiant is in Draco, just above the handle of the Plough. This shower has sometimes produced huge numbers in the past, but there is no guarantee. One to watch out for.

Moon

4th January: Moon is at last quarter

18th January: Moon is at First Quarter

11th January: New Moon

25th January: Full Moon