

## CAS Sky Notes for August 2025

### Planets

#### Mercury

Mercury becomes a morning object, having passed through inferior conjunction on 31<sup>st</sup> July. By the middle of August it will reach an elongation of  $-18^\circ$ , with a phase of 40% and a diameter of 8 arc sec. It is fairly well placed for observation before sunrise for much of the month after the 10<sup>th</sup>, due to its positive declination.

#### Venus

Venus remains a prominent morning object, with an elongation decreasing from  $36^\circ$  to  $32^\circ$  by the end of the month. The magnitude remains around -3.9, while the phase increases from 75% to 83% by the end of the month.

#### Mars

Mars is a very difficult object this month as it is pretty much lost in the twilight.

#### Jupiter

Jupiter is now a morning object and is easier to see as the month progresses. On the morning of the 12<sup>th</sup> August, Jupiter will be  $0.9^\circ$  North of Jupiter.

#### Saturn

Saturn now rises about 10 pm and is therefore well placed by midnight. Its magnitude of only +0.8 is due to the rings being nearly edge on, although they will be tilted to about  $3.0^\circ$  throughout the month. It is now a little higher in the sky.

#### Uranus

Uranus is a morning object this month, but is a very difficult object pre dawn.

#### Neptune

Neptune is now rising around 10 pm. It is not an easy object, but it can be found with coordinates: RA 00h 08m, Dec  $-0.6^\circ$ . On the 6<sup>th</sup> August, Saturn is  $1.1^\circ$  south of Neptune, which might make it easier to find.

#### Moon

##### Phases:

**1<sup>st</sup> Aug:** Moon is at First Quarter

**9<sup>th</sup> Aug:** Full Moon

**16<sup>th</sup> Aug:** Moon is at last quarter

**23<sup>rd</sup> Aug:** New Moon

#### Sun

The Sun is currently a little less active than one might expect near solar maximum, but do watch out for large Sunspot groups. Remember to **never look at the Sun directly without a proper solar filter**.

#### Aurora

Aurora may still be hard to see this month as the northern skies do not get fully dark until quite late. Watch out for any exceptional activity though, using one of the many aurora alert apps.

## **Meteors**

The **Perseids** reach their maximum on the evening of the 12<sup>th</sup> with a ZHR of around 80. The radiant can be found near RA 03h 11m, Dec +58°. These are always worth looking for as they often include bright meteors.

## **Deep Sky Objects**

Being well past the longest day, the nights are drawing in noticeably, giving more opportunity to observe deep sky objects. M51 (Whirlpool) and M101 (Pinwheel) near Ursa Major are now well placed for observation and photography. M13 and M92 globular clusters in Hercules are a good target once it gets dark. The Ring nebula (M57) in Lyra is another good target. While in that region, have a look at Alberio in Cygnus. It's a beautiful double star (orange and blue) and is an easy object to see and view in a small telescope. The Double cluster in Perseus is another object to view, either in a small telescope or with binoculars.