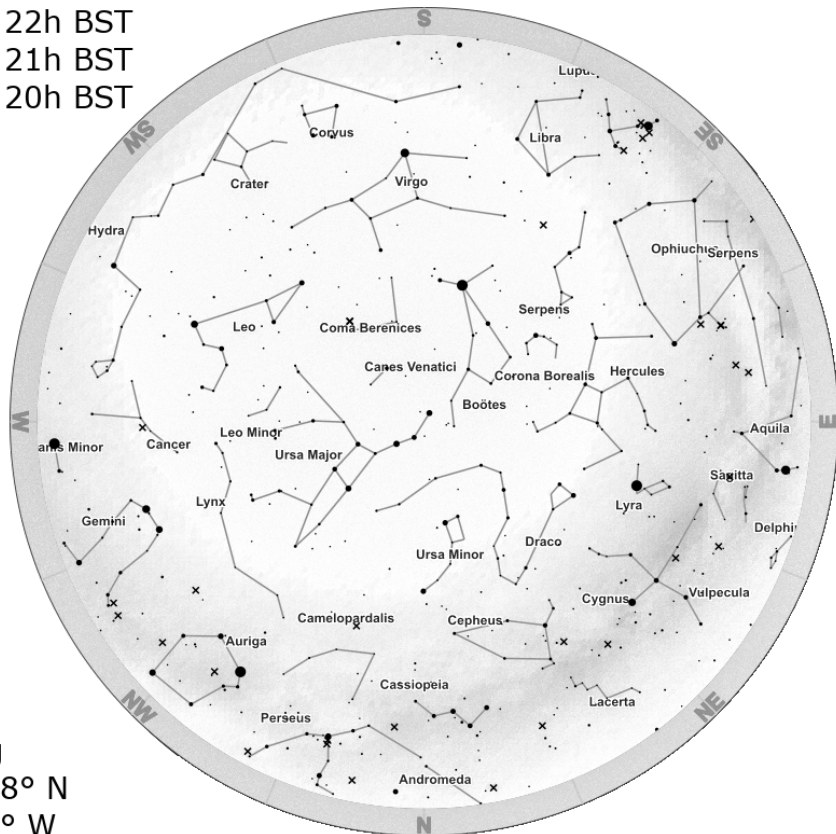


# June Sky Notes 2021

01 Jun 22h BST

15 Jun 21h BST

30 Jun 20h BST



Woking

51.3168° N

0.5600° W

## Constellations

These constellations are well placed in the evening this month, but many more can be seen. Check the star map for more.

**Aquila** can be seen throughout the night, appearing in the eastern sky at sunset and rising high in the south over the course of the night. Its brightest star is Altair, at the northernmost tip of the constellation.

**Virgo** appears in the south western sky at the beginning of the month, moving to set due west before sunrise. It can be seen from sunset, but appears lower as the month goes on, therefore setting earlier at the end of the month. Look for the bright blue star, Spica.

**Hercules** can be seen from sunset, appearing near the zenith. It then moves towards the west during the night, and will be visible right up until sunrise. It is located between Lyra and Boötes, which contain 2 bright stars: Vega and Arcturus.

# Planets

**Mercury** will be below the horizon at night during this month. It undergoes 2 unobservable events, aphelion on the 10<sup>th</sup> and inferior solar conjunction on the 11<sup>th</sup>.

**Venus** sticks close the Sun this month, only appearing a few degrees above the horizon immediately after sunset, so is not readily visible. Venus will be in conjunction with the Moon and at perihelion on the 12<sup>th</sup>.

**Mars** appears above the western horizon at sunset, but not for long. It will be in the sky longest at the beginning of the month, but you will need a clear horizon to see it. Mars will be in conjunction with the Moon on the 13<sup>th</sup>.

**Jupiter** can be seen low in the south eastern sky in the early hours of the morning this month. It rises earlier as the month goes on, becoming visible just before midnight by the end of the month. Jupiter will be in conjunction with the Moon on the 1<sup>st</sup> and the 28<sup>th</sup>. It will enter retrograde motion, where it moves in opposition to the motion of the stars, on the 20<sup>th</sup>.

**Saturn** is slowly moving apart from Jupiter, but still appears close to it this month. Look for it low in the south eastern sky in the early hours of the morning. Best viewing will be at the end of the month, when it rises nearer to midnight. Saturn will be in conjunction with the Moon on the 27<sup>th</sup>.

**Uranus** is too faint to be seen with the naked eye. It stays below the horizon for most of the night, rising slightly before the Sun. It rises later as the month goes on, so is better viewed later in the month. Look for it low in the eastern sky just before dawn.

**Neptune** is too faint to be seen with the naked eye. It rises due east in the early hours of the morning, and will be highest in the sky just before dawn. Neptune enters retrograde motion, where it moves in opposition to the motion of the stars on the 25<sup>th</sup>.

# Meteor Showers

Active from 14<sup>th</sup> April to 24<sup>th</sup> June, the **Daytime Arietids** reach their peak on the 10<sup>th</sup>. The radiant (apparent origin point) of the meteors is in the constellation of Aries, which will be above the horizon between 02:24 and dawn. Meteors will only be visible during this time. Best displays are likely to be just before dawn, when Aries is at its highest point. The shower produces about 50 meteors per hour, but due to the low position of Aries you will likely see about 10 per hour.

Active from 22<sup>nd</sup> June to 2<sup>nd</sup> July, the **June Boötids** reach their peak on the 27<sup>th</sup>. The radiant (apparent origin point) of the meteors is in the constellation of Boötes. This is a circumpolar constellation, so will be above the horizon all night allowing meteors to be seen. Best displays are likely to be just after nightfall, as the radiant point is highest in the sky at 22:00 BST. The Moon will be close to full, so provides a lot of interference.

# Moon

**Full Moon:** 24<sup>th</sup>

**Last Quarter:** 2<sup>nd</sup>

**New Moon:** 10<sup>th</sup>

**First Quarter:** 18<sup>th</sup>

The Moon reaches **perigee**, its closest point to the Earth, on the 23<sup>rd</sup> and **apogee**, its furthest point from the Earth, on the 8<sup>th</sup>. This effect is not visually apparent.

The Moon reaches **perihelion**, its closest point to the Sun, on the 9<sup>th</sup> and **aphelion**, its furthest point from the Sun, on the 25<sup>th</sup>. This effect is not visually apparent.

## Points of Interest

There will be an **annular solar eclipse** on the 10<sup>th</sup>, mainly visible from Canada and Greenland, but there will be a partial eclipse visible from Woking. It will be visible between 10:16 and 12:16 BST, with the Moon covering 20% of the Sun at its peak.

**You must use solar filters or eclipse glasses to view the Sun safely. Sunglasses are NOT sufficient.**

The **June Solstice** is on the 21<sup>st</sup>. This marks the longest day of 2021 in the northern hemisphere and the beginning of shorter daylight hours.

Visit <https://spotthestation.nasa.gov/sightings/> to find out when the ISS will be visible from your location.

If you enjoyed these Sky Notes, visit our website at [www.wokingplanetarium.co.uk](http://www.wokingplanetarium.co.uk) for more astronomy news, including recent launches, observing opportunities and Sky Notes each month.