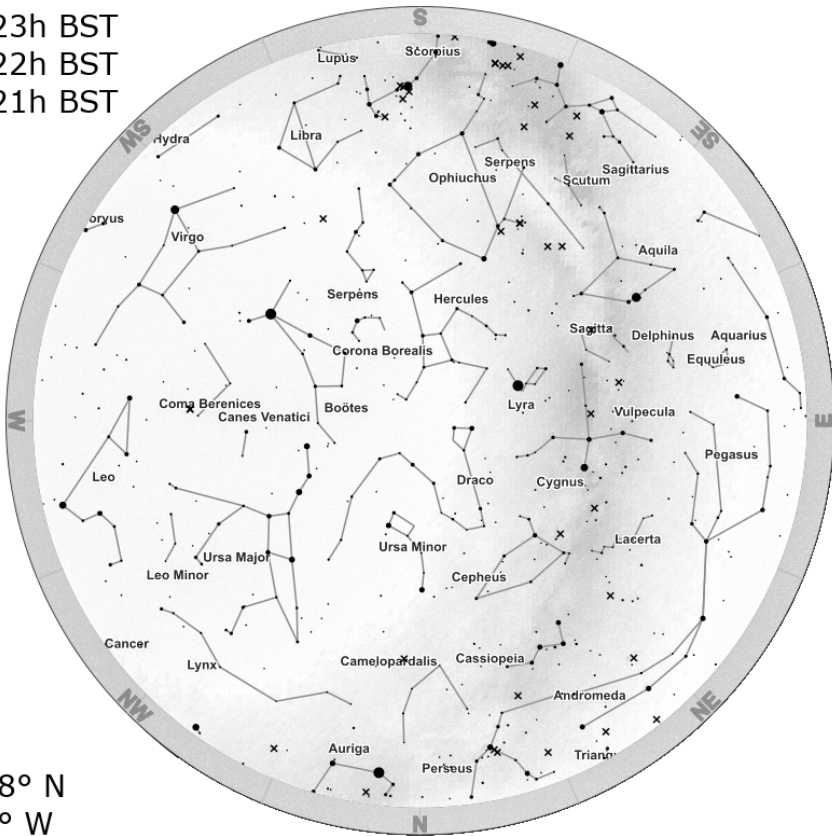


# July Sky Notes 2021

01 Jul 23h BST

15 Jul 22h BST

30 Jul 21h BST



Woking

51.6138° 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.

**Cygnus** appears high in the eastern sky at sunset and moves towards the zenith across the course of the night. As the month continues, it appears slightly higher each night. Also known as the Northern Cross, Cygnus is best identified by its distinctive cross shape.

**Pegasus** rises in the east as the Sun sets, creeping higher as the night goes on. It is best seen towards the end of the month when it rises earlier. It can be found by looking for the Great Square of Pegasus that forms the body of the creature.

**Cassiopeia** is a circumpolar constellation, so can be seen at all times. Look for it in the northeast, lower in the sky in the early evening. It forms a bright 'W' shape that can be seen on the northern side of Cygnus.

# Planets

**Mercury** stays close to the Sun this month, so will not be visible. It reaches greatest elongation west on the 5<sup>th</sup>, dichotomy (half-phase) on the 9<sup>th</sup>, and its highest altitude on the 13<sup>th</sup>.

**Venus** is a little further from the Sun than Mercury this month, but it is still too close to be seen. It is in conjunction with the Moon on the 12<sup>th</sup>.

**Mars** is too close to the Sun to be seen this month, but may be seen immediately above the horizon just before sunset at the beginning of the month. NEVER point binoculars or a telescope directly at the Sun. It reaches aphelion, its furthest point from the Sun, on the 13<sup>th</sup>.

**Jupiter** rises around midnight at the beginning of the month, rising earlier as the month goes on until it rises around sunset at the end of the month. Look for it rising in the southeast and moving south across the night. Jupiter is in conjunction with the Moon on the 26<sup>th</sup>.

**Saturn** follows the same path as Jupiter this month, a little ahead of it. Look for it rising in the southeast and moving south across the night. Rising just before midnight at the beginning of the month, as the month goes on it rises earlier. Saturn is in conjunction with the Moon on the 24<sup>th</sup>.

**Uranus** is too faint to be seen with the naked eye. It rises in the early hours of the morning in the east, staying in the sky for only a couple of hours before sunrise. It rises earlier as the month goes on, reaching higher points in the sky before sunrise.

**Neptune** is too faint to be seen with the naked eye. It rises in the east early in the night, moving south as the night goes on. As the month continues, it rises earlier.

# Meteor Showers

The **Piscis Austrinids** reach their peak on the night of the 28<sup>th</sup>. The radiant (apparent origin point) of the meteors is in the constellation of Piscis Austrinus. Meteors will only be visible when it is in the sky, from about 00:23 BST to dawn. Best displays are likely to be just before dawn, when the radiant is highest in the sky. There are very few meteors visible from this shower.

The **Southern  $\delta$ -Aquariids** reach their peak on the night of the 30<sup>th</sup>. The radiant (apparent origin point) of the meteors will be in the constellation of Aquarius. Meteors will be visible from around 22:32 BST until dawn when Aquarius is in the sky. Best displays are likely to be just before dawn when it is at its highest. You will be able to see about 9 meteors per hour.

The  **$\alpha$ -Capricornids** reach their peak on the night of the 30<sup>th</sup>. The radiant (apparent origin point) will be in the constellation of Capricornus. It is in the sky all night, so meteors will always be visible. Best displays are likely to be in the early hours of the morning around 01:00 BST when it is highest in the sky. You will be able to see around 2 meteors per hour.

# Moon

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

Last Quarter: 1<sup>st</sup>, 31<sup>st</sup>

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

First Quarter: 17<sup>th</sup>

The Moon reaches **apogee**, it's furthest point from Earth, on the 5<sup>th</sup> and **perigee**, its closest point to the Earth, on the 21<sup>st</sup>.

The Moon reaches **aphelion**, its furthest point from the Sun on the 23<sup>rd</sup>, and **perihelion**, its closest point to the Sun, on the 10<sup>th</sup>.

## Points of Interest

The Earth reaches **aphelion**, its furthest point from the Sun, on the 5<sup>th</sup>.

Comet **15P/ Finlay** reaches its brightest point on the 7<sup>th</sup> and perihelion, its closest approach to the Sun, on the 14<sup>th</sup>.

Comet C/2020 T2 (Palomar) reaches **perihelion**, its closest approach to the Sun on the 10<sup>th</sup>.

**134340 Pluto** reaches opposition on the 18<sup>th</sup>. It lies in the constellation of Sagittarius, but will not rise higher than 16° above the horizon.

**Asteroid 6 Hebe** reaches opposition on the 19<sup>th</sup>. It lies in the constellation of Aquila and will be visible all night, reaching its highest point in the sky around midnight. It will stop being observable about 03:08 BST.

**Asteroid 12 Victoria** will be at opposition on the 30<sup>th</sup>. It becomes visible around 22:41 until dawn. It will be best visible when it reaches its highest point in the sky around midnight.

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

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