



SUN Moving through *Virgo* the Maiden into *Libra* the Balance.

MOON New Moon on the 28th, Full Moon on the 14th.

PLANETS **Mercury** is unfavourably placed for observation this month.
Venus is an evening object very low down in the SW after sunset.
Mars is moving too close to the Sun for easy observation this month.
Jupiter is a bright evening object low down in the south in the constellation of *Sagittarius*. Its low altitude means it is poorly placed for observation from the UK.
Saturn is a morning object passing slowly through the constellation of *Leo*. Look for it an hour before sunrise in the East.

COMETS No periodic comets expected this month.

METEORS The Taurid meteor shower is active this month, beginning on the 20th and carrying on until late November. It is a weak shower with a maximum rate of 10 per hour. These dust grains entering our atmosphere at speeds of 50km/s are the remains of comet P/Encke.
Also present are the Orionids, which originate from comet P/Halley and peak on the 23rd. Clear skies should give a rate of up to 25 per hour after midnight.

STARS γ *delphini* is a nice telescopic double star with coloured components, described as yellow and emerald green. Keep an eye on this constellation, which despite its small size has played host to more than its fair share of novæ, the most famous being George Alcock's 1967 discovery of *HR delphini*.
Al Giedi (α *capricornus*) is a naked eye double, whereas Dabih (β *capricornus*) is a binocular double with contrasting colours.
Observers in the far south of the country will be able to see Fomalhaut (α *pisces austrinus*) twinkling on the horizon.

NEBULÆ There are two planetary nebulae in this region of the sky (so called because they appear as disks in a small telescope, rather like a planet). In reality they are shells of gas thrown off a star in the last stages of its life. Both of these are in the constellation of *Aquarius*.
NGC 7009 or the Saturn Nebula is fairly bright and compact. Binoculars show a fuzzy star-like object. A small telescope reveals twin lobes either side that resemble the rings of Saturn.
The Helix Nebula (NGC 7293) requires exceptionally clear skies to make out this large but dim smoke ring from the UK. Better views will be gained by travelling further South. This is the nearest and largest planetary nebula lying at a distance of 450 ly. and is best observed with binoculars or a rich field telescope.

CLUSTERS One of the best globular clusters in northern skies is visible just beyond the nose of *Pegasus*. M15 is a compact and fairly bright ball of several hundred thousand stars and is a prodigious source of X-rays. Astrophysicists have suggested that a supermassive black hole lies at the centre. It is visible with the naked eye, but binoculars or a small telescope will reveal more detail.
M2 is another globular cluster immediately below M15 and at 6.4^M is a binocular object.
M72 in *Aquarius*, is a telescopic object, whilst M30 in *Capricornus* is a rewarding binocular globular despite its low altitude from the UK

GALAXIES There are no worthwhile galaxies in this area of sky.