

SKYNOTES for June 2018

An easily printable version to encourage active observing among members of the Nottingham AS

Stand-out features highlighted

All times given below are in British Summer Time (BST)

PHASES OF THE MOON

<i>Phase</i>	<i>Date and time</i>
Last Quarter	7:33 pm on June 6 th
New Moon	8:44 pm on the 13 th
First Quarter	11:52 am on the 20 th
Full Moon	5:54 am on the 28 th

This month the Moon is closest to the Earth on the 14th, and furthest on the 2nd.

THE PLANETS

*As the sky gets darker after sunset at the start of this month, **two stand-out planets can be observed in opposite parts of the sky: Venus in the northwest and Jupiter in the southeast.** Other than the Moon, these are the brightest objects in the night sky, and are almost unmissable, even to a casual observer.*

Mercury passes through superior conjunction on June 6th, thereafter becoming an evening object for the rest of the month and for the whole of July. It may be spotted, just above the northwestern horizon, at the end of June.

Venus is a brilliant object in the northwest after sunset, shining at magnitude -4.0 and gradually brightening. Its angular diameter will be approaching 16 arcseconds by the end of the month, and by then it will be more than 40 degrees from the Sun.

Mars will brighten by a whole magnitude this month, becoming almost as bright as Jupiter by the end of June, so by then we shall have three bright planets to admire. Mars, with its distinct orange hue, will unfortunately be about 22 degrees south of the celestial equator (great for southern hemisphere observers, but disadvantageous for those in the UK), and its angular diameter will have expanded to nearly 21 arcseconds.

Jupiter, in the constellation of Libra, will be fairly well placed for observation as June begins. Having an equatorial diameter of 44 arcseconds, and shining at magnitude -2.4 , it **will be well worth a look, either with the naked eye, or with binoculars or a telescope.** For telescopic observers, a *shadow transit* of **Io** will occur on the evening of June 1st, of **Europa** on the evening of the 6th, of **Ganymede** on the 18th, and **Io** again on the 24th. Watch out for a dark spot slowly crossing the planet's disk on each occasion.

Saturn, in the constellation of Sagittarius, rises just after 11 pm as June begins, and will be due south at 3 am. Being more than 22 degrees south of the celestial equator throughout the month, this gas giant is far from ideally-placed for northern hemisphere observers. However, its brightness will be increasing, reaching magnitude zero at the close of June. By this time it will be a little more than 9 astronomical units from Earth, with the north pole tilted toward us at an angle of about 26 degrees.

Uranus must now be regarded as unobservable as it is very close to the Sun.

Neptune, in the constellation of Aquarius, is now a morning object, but will be very difficult to observe in a sky that is never totally dark.

METEORS With its lack of true darkness, June is not the best time of the year for observing meteors, and there are no major showers during the month.