

THE NIGHT SKY ABOVE YORK FOR JUNE & JULY 2014

This chart is oriented for 12pm June 9th, 11pm June 23rd, 10pm July 7th, but can be used at any time.

To use the chart, hold it up to the sky. Turn the chart so that the direction you are looking is at the bottom of the chart. If you are looking to the south then have the 'South Horizon' at the bottom edge. As the Earth turns the stars appear to rotate anti-clockwise around the North Celestial Pole, marked by the star Polaris. Stars rise in the east and set in the west just like the Sun. The sky makes a small westward shift every night as we orbit the Sun.



PLANET WATCH

Mars is a great planet to spot right now as it has just passed close to the Earth in its orbit. It can be found close to the bright star Spica in the South-West. Mars has two moons, Phobos and Deimos. They are small, potato-shaped moons that orbit Mars much closer than our Moon. It is expected that Phobos will soon (in the next million years or so) either be ripped apart by Mars' gravity or crash into the Martian surface.

Saturn will also begin to rise in the evening in the constellation Libra. Saturn's spectacular rings can be seen through a small telescope. The rings are made of water ice and small chunks of rock or dust. Gaps in the rings form due to interactions with the rings and the moons of Saturn. Some are caused by gravitational 'dead zones' from large moons and some are from small Shepard Moons herding the debris like sheepdogs.

CONSTELLATION WATCH

The Little Bear, Ursa Minor can be seen all year round. Also called the Small Dipper, the Little Bear has a long tail that makes it look like a ladle on the sky. The most important (but not the brightest) star in the Northern Hemisphere is the very last star of the tail of the bear. This star, Polaris, is the North Star. If you draw the shortest line from this star to the horizon you can find due north. All other stars in the sky appear to rotate around this star as the Earth turns. Because the Earth wobbles as it turns, Polaris has only been the North Star for about 1500 years. In another 100 years there will be no North Star at all!

Leo is a good constellation of the Zodiac to spot in June and July, low in the South-West sky. Leo can be identified by a sickle shape, or a backwards question mark. In Greek mythology Leo is the lion that is slain by Hercules. Leo has two bright stars that are not what they appear to be when viewed through a small telescope. Regulus, the brightest star, is actually a double star- two stars at different distances from Earth that happen to line up on the sky.

