

High overhead at this time of night is the faint but distinct constellation of Cepheus, looking like a child's drawing of a house. Look at the star midway between the two stars at the bottom of the house. Heschel's Garnet Star is a brilliant red. Easily visible in binoculars or a small telescope. Next door is the much brighter and even more distinctive Cassiopeia, its five stars marking a "W" shape. The Milky Way runs right through this area of sky, so there are lots of open clusters and nebulae along here. Further south, the fours stars of The Great Square of Pegasus are visible. The horse flies upside down. Can you trace out its head a galloping hooves? The first magnitude star Formalhaut in The Southern Fish looks really lonely shining way down in the southern sky. In the western sky Corona Borealis and Boötes have almost set, following soon will be Aquila. In the northern sky The Plough is at its lowest, but being circumpolar, never sets. In the eastern sky Auriga and Taurus are blazing the trail for the coming of the winter stars. Stay up until the early hours to greet them.

THE MOON	The Moon will be close to:
$\operatorname{Full} - 5^{\operatorname{th}}$.	Neptune on the 3 rd .
Last Qtr. -12^{th} .	Aldebaran on the 9 th & 10 th .
New -19^{th} .	Praesepe on the 14 th .
First Qtr. -27^{th} .	Regulus on the 15 th .
Crescent Moon visible:	Mars on the 17 th .
17 th & 18 th - Eastern morning sky.	Venus on the 18 th .
22 nd & 23 rd . South-western evening sky.	Saturn on the 24 th .

THE SOLAR SYSTEM

MERCURY – Reaches superior conjunction on the 8th, so will be too close to the Sun to be seen this month.

VENUS – Visible low in the eastern morning sky before sunrise throughout the month. Very bright at magnitude -3.9. Now moving towards the Sun and will soon be lost. Very close to Mars on the 5th & 6th.

MARS – Very low in the eastern sky just before dawn and remains in more or less the same place in the sky throughout the month. Easy to identify at a bright magnitude of +1.8.

JUPITER – Now on the far side of the Sun. Reaches superior conjunction on the 26^{th} , so will not be seen this month.

SATURN – Now well past its best, low down in the south-western sky after sunset. It will soon be lost from view. Magnitude +0.5.

URANUS – Reaches opposition on the 19^{th} in the constellation of Pisces. At magnitude +5.7 it is just about visible to the naked eye and can easily be observed as a small blue disk through the telescope.

NEPTUNE – Fairly high up in the evening sky just south of the 4th magnitude star Lambda Aquilae. At magnitude +7.8 it will need binoculars or a small telescope to identify. A larger telescope is required to reveal the small pale blue disk.

Asteroid 2012 TC4. - This 33-100 feet asteroid could pass the Earth as close as 4,200 miles on the 12th. Its orbit is not determined exactly, but it doesn't pose a risk to Earth this time round. Once recovered, astronomers will be studying the orbit more closely, to update their information to make more accurate predictions for future passes. Updates of possible visibility will appear on my blog as more details become available.

For a much fuller guide, maps, graphics and my latest news visit my blog: www.star-gazing.co.uk