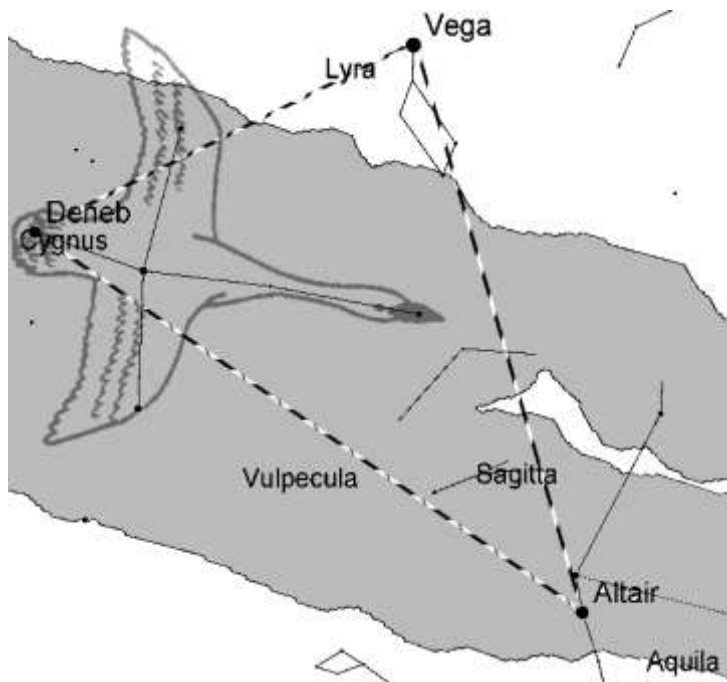


New Moon 26 th July @ 23:42	First Quarter 4 th August @ 01:50	Full Moon 10 th August @ 19:10	Last Quarter 17 th August @ 12:26
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Note: Times are in Chailey local time – BST/GMT+1

This month, the Summer Triangle asterism is again high in the sky to the South at around 9pm in the evening. You can easily spot the Summer Triangle in the night sky by looking for 3 very bright stars – Altair in the South near the Horizon in the constellation of Aquila, Vega about 2/3rds of the way to the Zenith (straight up above your head) in the constellation of Lyra the Lyre, and Deneb, the star marking the tail-feathers of Cygnus the Swan. These 3 stars are our markers known as the Summer Triangle – I’ve marked them below. Astronomers regularly use these stars to find things in the night sky.



The grey area in the chart below is the Milky Way itself – the Galaxy in which our Solar System lives. It appears like a cloud stretching across the night sky from a dark site. It is easily visible to the naked on good clear nights in Chailey. That cloud is the combined light from thousands of distant stars. Even a very small telescope or pair of ordinary binoculars pointed at the Milky Way will show individual stars making up the ‘cloud’.

The best way to see the Milky Way with the naked eye. You don’t need to close one eye – let both your eyes do the work. If you let your gaze drift slightly away from the ‘cloud’, and try to concentrate away from where you are looking, you will notice the ‘cloud’ more easily. Astronomers call this ‘Averted Vision’, and it is because the central part of your retina is setup for colour and detail vision. The outer part of your retina is setup for monochrome (black & white) and low light sensitivity. By using this part of eye, you should see the dim stars making up the cloud more clearly.

If you look carefully, you should also see that some of the cloud appears to be missing. A dark patch appears stretching away from Cygnus the Swan’s beak. This dark area is called the ‘Cygnus Rift’, part of the ‘Great Rift’. The Great Rift is a series of overlapping, non-luminous, molecular dust clouds located between our Solar System, and the Sagittarius Arm of the Milky Way Galaxy. They are about 300 light years away from us, and are estimated to contain 1 million times the amount of matter as is in our own Sun. They block the visible light from the galaxy behind, so astronomers have to use infrared cameras which can detect what lies beyond to study the core of our galaxy.

The Great Rift stretches from the constellation of Cygnus, into the constellation of Aquila the Eagle, through the constellation of Ophiuchus the serpent bearer, where it broadens. It continues on

through Sagittarius, obscuring our views of the centre of the Milky Way from Earth, and finishes in the Southern Hemisphere constellation of Centaurus, home to Alpha, Beta and Proxima Centauri, the 3 nearest stars to our Solar System.

I am now available to give talks on Astronomy to local groups and schools. Please contact me on 01273 400989 or use the email address below. I am a registered STEM Ambassador, and have been CRB checked accordingly.

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