Our Sky in March 2013

Isn't it great to have the longer days and, with the Sun crossing the equator on the 21st, it is time for the Northern hemisphere to have its extra share of the daylight.

The spring constellations are making an appearance in the early evening now, and you will be able to see Leo with the bright red star Regulus rising in the east, while Orion still strides across the southern sky, followed by his faithful Sirius, but with his eyes fixed on Taurus the Bull who is still accompanied by Jupiter. Saturn will be rising in the South-east by about 11pm in the middle of the month, but Venus is too close to the Sun to be visible.

The red star in Orion's shoulder, called Betelgeuse, appears to be set to collide with a dusty "wall" in 5,000 years.

A new image from the Herschel Space Observatory, shows that this ageing star is located near an odd, linear bar of material. Analysis of the new image suggests that the bar is a separate object: either a linear filament linked to the galaxy's magnetic field, or the edge of a nearby interstellar cloud that is being illuminated by Betelgeuse.

If the bar is completely separate from the star, then the outermost arc around Betelgeuse is estimated to collide with the bar in just 5,000 years, with the star itself hitting the bar about 12,500 years later.

Roughly 1,000 times the diameter of our sun and shining 100,000 times more brightly, Betelgeuse is probably on its way to ending its life in a huge supernova explosion. It has already swelled into a red supergiant and shed a significant fraction of its outer layers, and is probably the likeliest of candidates in our vicinity to expire in this spectacular fashion.

The new infrared view from Herschel also shows how the star's winds are crashing against the surrounding interstellar medium creating a bow shock, rather like that of a supersonic aircraft, as the star moves through space at speeds of around 30 kilometers per second (about 67,000 mph).

Meanwhile, enjoy the coming Spring and the warmer evenings which might tempt you to study the night skies before Summer brings you other ways to occupy your time!