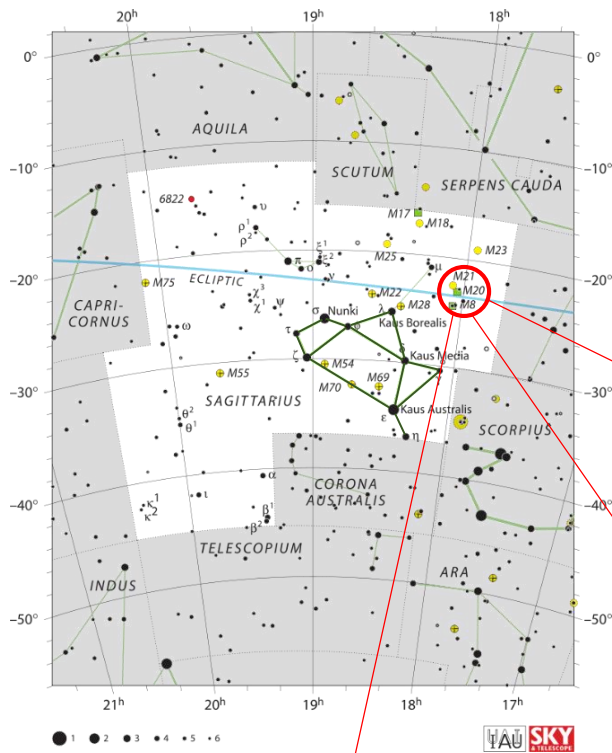
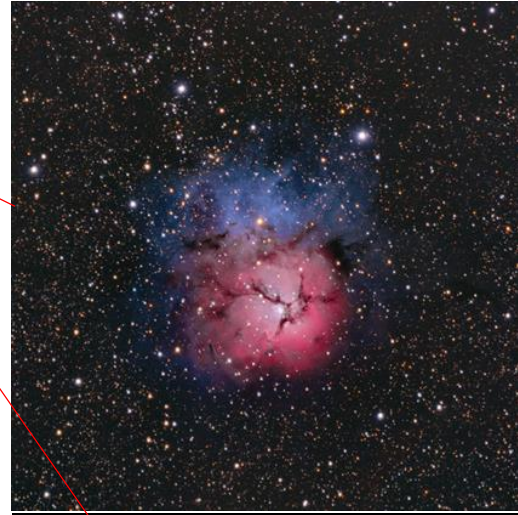


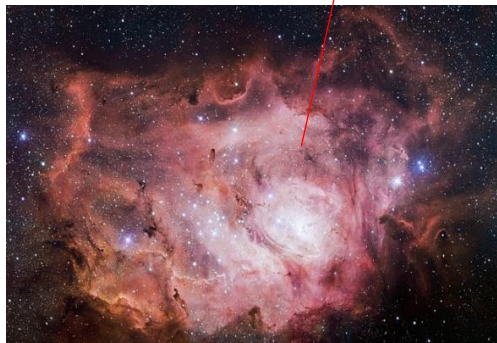
JULY Night Sky .



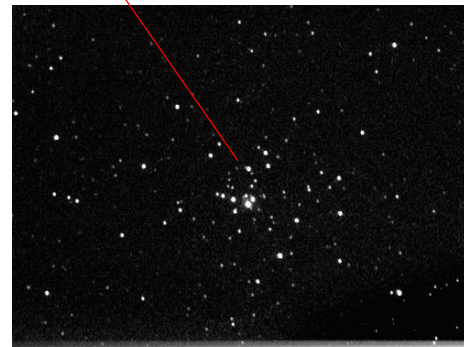
Using binoculars, look due south just above the horizon at around 23:00 to locate the constellation *Sagittarius*. Scan for the dense dust and gas nebulae which are stellar nurseries of new and still forming stars.



M20



M8



M21

M8 – The **Lagoon Nebula**, a cloud of dust and gas, whose oval shape is around 110 x 50 light-years in size. Although appearing optically in the sky as being close to M20, it is actually 1,000 light-years nearer to our Sun. Within this cloud is the **Hourglass Nebula NGS6531** (RA 18h 02m Dec -23° 03') and also a blue O type star emitting strong ultraviolet radiation, which is believed to be heating and ionising the nebular surface.

M20 - the **Trifid Nebula** at about 5,000 light-years away containing clusters of over 3,000 young stars. At its centre is a star **HD 164492A** (Spec.type O7.5 III RA 18h 02m Dec. -23° 02'), with a mass 20x that of the Sun.

M21 – An open cluster of mainly dim, small, closely packed and relatively young stars, together with a few blue giant O type stars. Some astronomers believe that the insignificant spread of star ages suggests that all their formations may have occurred at around the same time. Distance 4,000 ly (RA 18h 04m Dec -22° 29')

Travelling at over 240,000 km/h, last month the **Parker Solar Probe** completed its 5th orbit of the Sun. On 10th July its next orbit is intend to pass about 500 miles above the surface of **Venus** making use of Gravity Assist techniques to control its momentum for the 6th solar approach. **JULY Newsletter.docx**