

Binocular Observing September 2019 by Andrew Lohfink

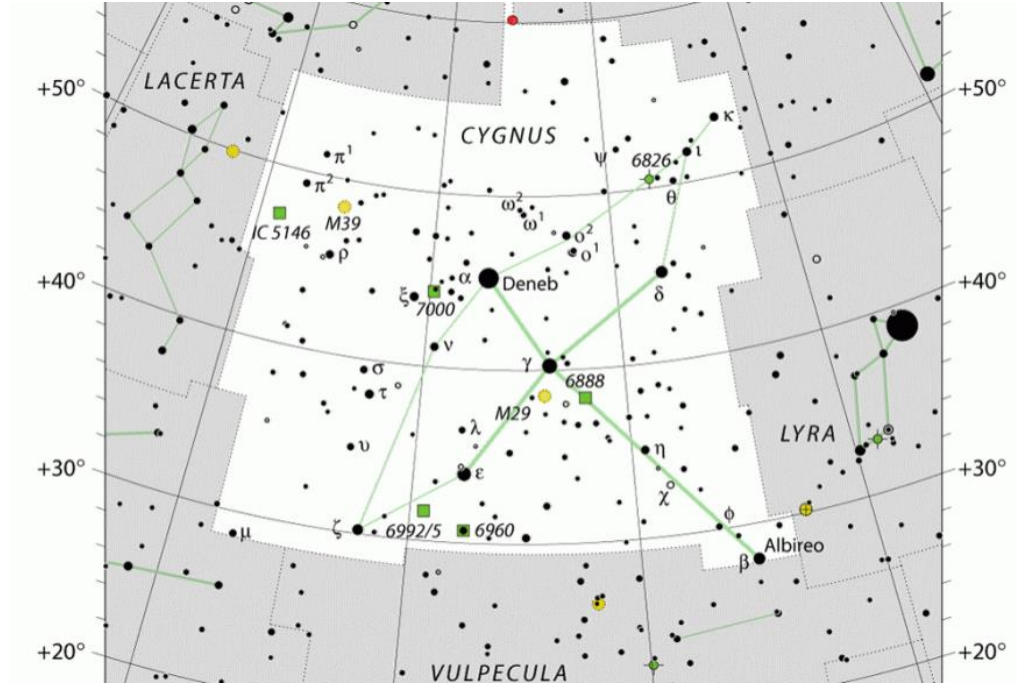


The Night Sky

September 2019.

BST (universal time plus 1 hour) is used this month.

Cygnus Constellation.



How to Find Cygnus

The constellation Cygnus is easy to find in the night sky by using the summer triangle asterism – the star Deneb is the brightest star in Cygnus and marks the head of the swan.



M39 An Open Cluster

M39 is an open cluster between 200 and 300 million years old and lies 800 light years away. Scan to the north east of Deneb with your binoculars. Small optics will reveal a milky glow with a few sparkling stars while higher magnifications will show greater detail.



M29 – An Open Cluster

This cluster is easy to find – it lies just south west from the central star (Sadr) of the Northern Cross asterism. The cluster is 4000 light years distant and approximately 10 million years old. Try and make out the cooling tower asterism formed by stars in the cluster.

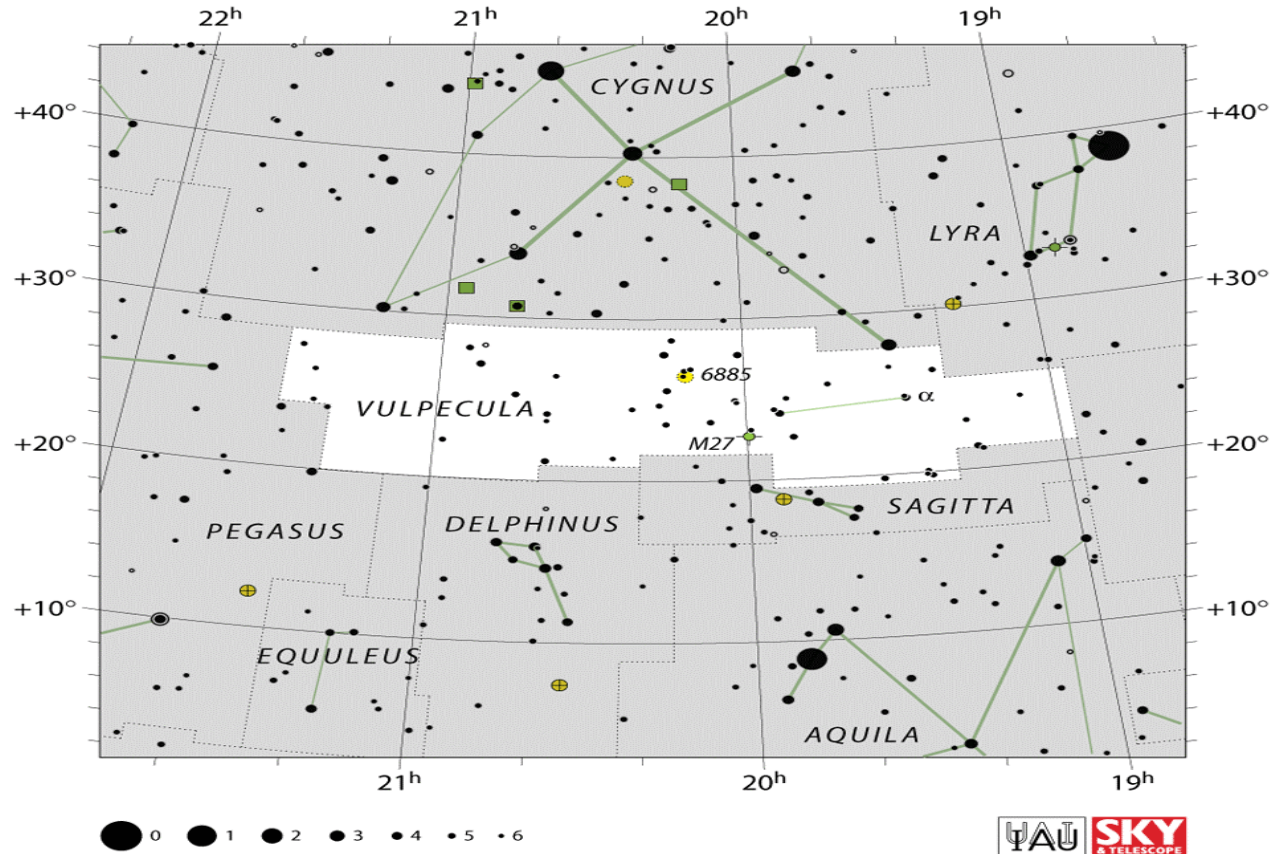


The North American Nebula – NGC 7000

NGC 7000 is an emission nebula and lies just south east of Deneb. It is very large, about 120 by 100 arc minutes and as such is best viewed through binoculars at low magnification. It gets its name as its shape resembles the USA. The trick is to look for the Gulf of Mexico and then the rest of nebula becomes easier to view. In very dark skies it can be seen with the naked eye.



Vulpecula Constellation.

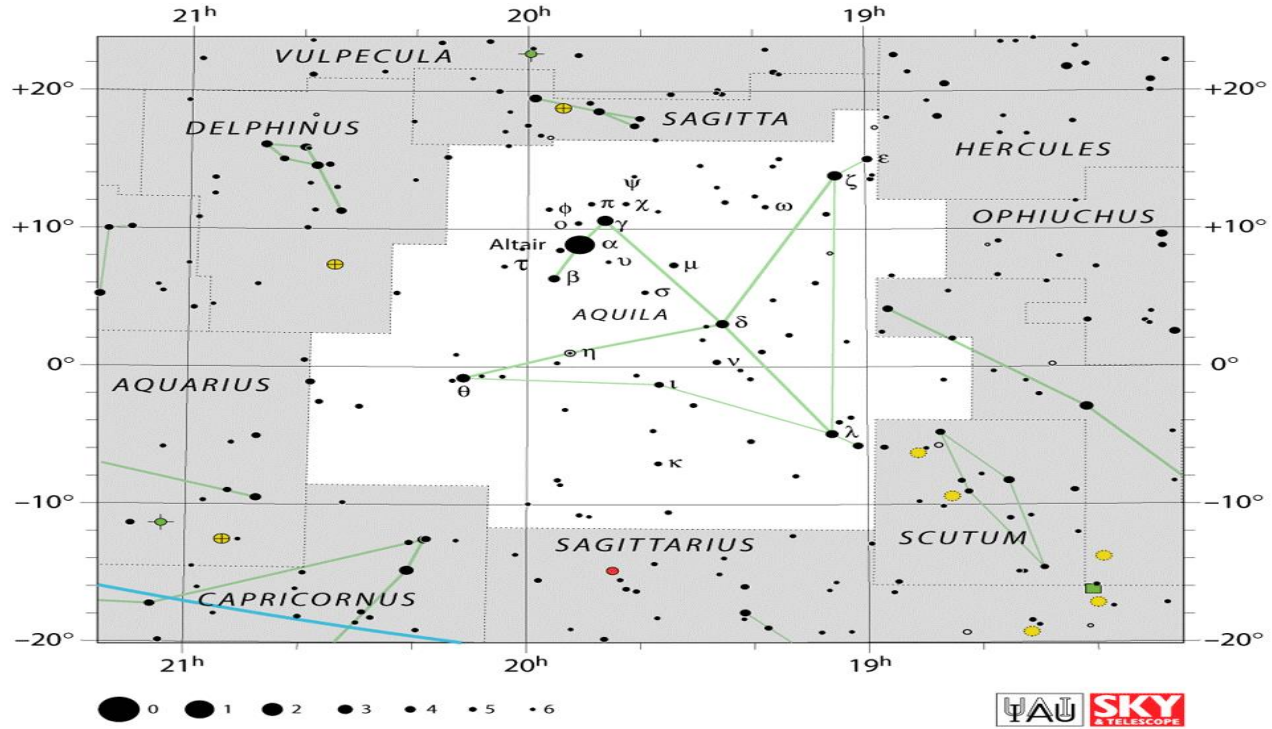


M27 – The Dumbbell Nebula

Vulpecular is a tiny constellation just below Cygnus and has only 2 easily seen stars – the alpha star is the brightest and 23 Vulpeculae is the second brightest. This constellation contains the famous planetary nebula known as The Dumbbell because of its shape at high magnifications. It lies just south east of 23 Vulpeculae. 8X40 binoculars will show a milky patch and 25x100 may show some of the dumbbell shape and structure.



Aquila Constellation.



The Stars Altair and Tarazed.

Aquila (The Eagle) is easily found as Altair forms part of the summer triangle asterism – it is the southern most star. Its brightest neighbour which lies north is Tarazed and the colour difference between the two is obvious through binoculars of any size. Altair is one of the closest stars to Earth and looks blue white through binoculars. Tarazed looks orange and is 2960 times more luminous than the sun and is only 100 million years old but is already burning helium into carbon in its core.



Barnard's E Nebula – Barnard's 142 & 143

The E Nebula consists of 2 dark nebulae – Barnard's 142 & 143 and represent vast dust clouds blocking out the light from stars. It is located 1.5 degrees west of Tarazed and is roughly the size of the full moon. You should look for a large dark “C” or possibly an “E” depending on your skies.

