

MESSIER 24, THE SMALL SAGITTARIUS STAR CLOUD

M24, also known as Delle Caustiche and IC 4715 is a star cloud in the constellation of Sagittarius, approximately 600 light years wide, which was discovered by Charles Messier in 1764. It is sometimes known as the Small Sagittarius Star Cloud to distinguish it from the Great Sagittarius Star Cloud located to the north of Gamma Sagittarii and Delta Sagittarii.

The stars, clusters and other objects comprising M24 are part of the Sagittarius or Sagittarius-Carina arms of the Milky Way galaxy. Messier described M24 as a "large nebulosity containing many stars" and gave its dimensions as being some 1.5° across.

M24 fills a space of significant volume to a depth of 10,000 to 16,000 light-years. This is the most dense concentration of individual stars visible using binoculars, with around 1,000 stars visible within a single field of view.

DETAILS

In Constellation Sagittarius

Right ascension: 18h 17m

Declination: -18° 29'

Distance: ~10 kly (3070 Pc)

Apparent magnitude (V) 4.6

Apparent dimensions (V) 90'

Radius: ~300

Estimated age: 220 million years

Other designations: Delle Caustiche, IC 4715

THE CARINA–SAGITTARIUS ARM

The Carina–Sagittarius Arm of our Milky Way galaxy is generally thought to be a minor spiral arm of the galaxy.

These spiral arms are gigantic structures composed of billions of stars and thousands of gas clouds. The Carina–Sagittarius Arm is one of the most pronounced arms in our galaxy as a large number of HII regions, young stars and giant molecular clouds are concentrated in it. It lies between two major spiral arms, the Scutum-Centaurus Arm inside and the Perseus Arm outside. It is named for its proximity to the Sagittarius and Carina constellations as seen in the night sky from Earth, in the direction of the galactic centre.

The Sagittarius Arm is divided into two parts. Curving outward from the galaxy's central bar is the Sagittarius Arm, which further outward becomes the Carina Arm.

HISTORY OF OBSERVATION:

As bright as the Sagittarius Star Cloud is, we assume that Messier probably wasn't the first to see it – but he was the first to catalogue it. As he wrote about it in his notes:

"In the same night, June 20 to 21, 1764, I have discovered near the extremity of the bow of Sagittarius, a considerable nebulosity, of about one degree and a half extension. In that nebulosity there are several stars of different magnitudes; the light between these stars is divided in several parts. I have determined approximately the position of the middle of this cloud of light; its right ascension is 270d 26', and its declination 18d 26', south."

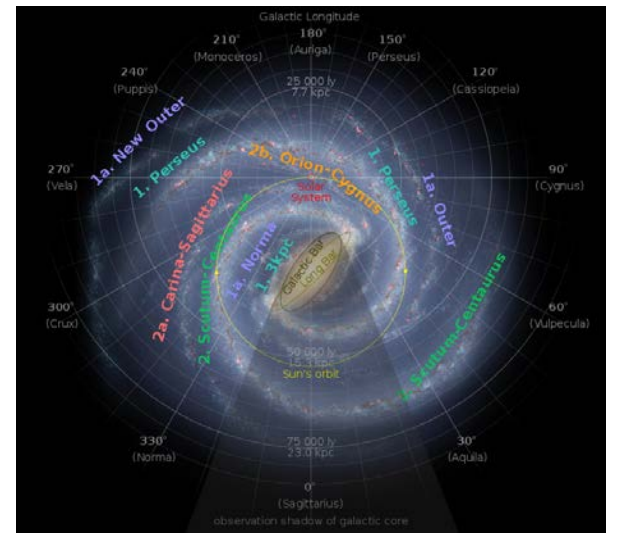
LOCATING MESSIER 24:

From a dark sky location, M24 is easily located with the unaided eye. It will appear as a large hazy patch in northern portion of the constellation of Sagittarius, about a hand-span above the teapot-shaped Sagittarius asterism.

AK, with Wikipedia Notes



The Sagittarius Star Cloud was named "Delle Caustiche" by **Fr. Secchi**, from the peculiar arrangement of its stars in rays, arches, caustic curves, and intertwined spirals.



Observed structure of the Milky Way's spiral arms.

