

Messier 80 Globular Cluster in the Constellation Scorpius

Also known as M80 or NGC 6093, it is a globular cluster in the constellation Scorpius and was discovered by **Charles Messier** in 1781.

The star cluster is located midway between a Scorpii (Antares) and β Scorpii in a field in the Milky Way that is rich in nebulae. It can be viewed with modest amateur telescopes as a mottled ball of light. With an apparent diameter of about 10' and at an estimated distance of 32,600 light-years, M80's spatial diameter is about 95 light-years. It contains several hundred thousand stars, and is among the more densely populated globular clusters in the Milky Way.

OBSERVATION DATA (J2000 EPOCH)

Class II Constellation Scorpius

Right ascension 16h 17m 02.41s

Declination $-22^{\circ} 58' 33.9''$

Distance 32.6 kly (10.0 kpc)

Apparent magnitude (V) +7.87

Apparent dimensions (V) 10'.0

Mass $5.02 \times 10^5 M_{\odot}$

It contains a relatively large number of blue stragglers, stars that appear to be much younger than the cluster itself. It is thought these stars have lost part of their outer layers due to close encounters with other cluster members or perhaps the result of collisions between stars in the dense cluster. Images from the Hubble Space Telescope have shown districts of very high blue straggler densities, suggesting that the centre of the cluster is likely to have a very high capture and collision rate.

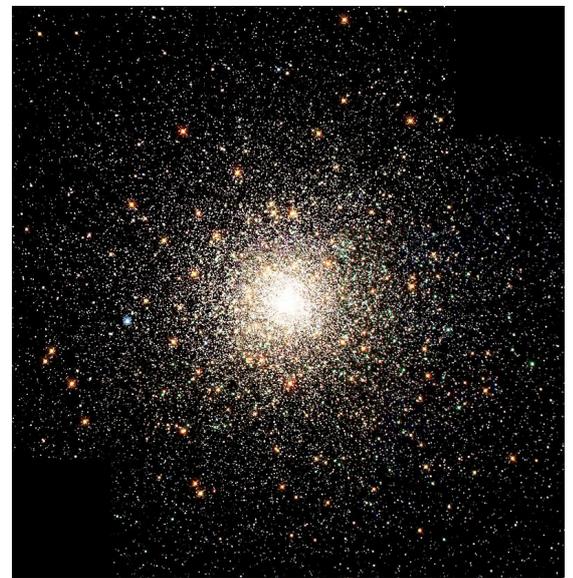
On May 21, 1860, a nova was discovered in M80 that attained a magnitude of +7.0. The nova, variable star designation T Scorpii, reached an absolute magnitude of -8.5, briefly outshining the entire cluster.

Scorpius is one of the constellations of the zodiac. Its name is Latin for scorpion. Scorpius is one of the 48 constellations identified by the Greek astronomer **Ptolemy** in the second century. It is an ancient constellation that pre-dated the Greeks. It lies between Libra to the west and Sagittarius to the east. It is a large constellation located in the southern hemisphere near the centre of the Milky Way.

Due to its location straddling the Milky Way, this constellation contains many deep-sky objects such as the open clusters Messier 6 (the Butterfly Cluster) and Messier 7 (the Ptolemy Cluster), NGC 6231, and the globular clusters Messier 4 and Messier 80. It was the site of a rare discovery in 1860 when **Arthur von Auwers** discovered the nova T Scorpii.

MYTHOLOGY

In Greek mythology, the myths associated with Scorpio almost invariably also contain a reference to Orion. When Orion boasted to goddess Artemis that he would kill every animal on the Earth, she offered protection to all creatures and sent a scorpion to deal with Orion. The pair battled and the scorpion killed Orion. That is why constellation Orion still flees the sky whenever the Scorpion appears in the East. AK, with EarthSky and Wikipedia Notes



M80, one of the densest of the 147 known globular star clusters in the Milky Way galaxy. Located about 28,000 light-years from Earth, M80 contains hundreds of thousands of stars, all held together by their mutual gravitational attraction

