

Kitt Peak Nightly Observing Program

Splendors of the Universe on YOUR Night!

Many pictures are links to larger versions.

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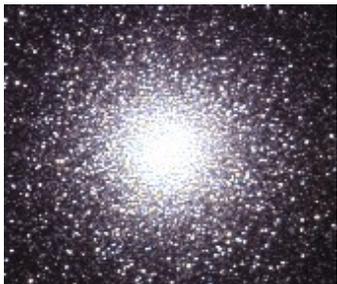
M17 Swan Nebula

M17, also known as the "**Swan Nebula**," or the "**Omega Nebula**" is a vast cloud of gas—mostly hydrogen, in which clumps of gas are contracting to make new stars. The nebula is 15 light-years across, and 5,500 light-years away.



M51 Whirlpool Galaxy

M51, the **Whirlpool Galaxy**, gets its name from its bright and prominent spiral arms. It lies at a distance of 23 million light-years away. It also has a smaller, companion galaxy (NGC 5195). The two galaxies are one of the best examples of interacting galaxies.



M3

M3 is a globular cluster with a half of a million stars. It orbits the core of our Milky Way Galaxy almost perpendicular to the galactic disk. It is currently 33,900 light-years away, and approaching our Solar System at 100 miles per second.



M4

M4 is a globular star cluster located near the bright, orange star Antares, in the constellation Scorpius. It is on the small side, as globular clusters go—only 70-75 light-years across. It is about 7,200 light-years away, which makes it possibly the closest globular cluster to our solar system.



M13 Hercules Globular

M13, the "**Great Globular Cluster in Hercules**" was first discovered by Edmund Halley in 1714, and later catalogued by Charles Messier in 1764. It contains 300,000 stars, and is 22,000 light-years away. Light would need over a century to traverse its diameter.



M57 (Ring Nebula)

M57: The Ring Nebula. This remnant of a dead star looks exactly as its name says - a ring or doughnut shape cloud of gas. The nebula is about 2.6 lightyears across and lies about 2,300 lightyears away.



Jupiter

Jupiter is the largest planet in the Solar System, a “gas giant” 11 Earth-diameters across. Its atmosphere contains the Great Red Spot, a long-lived storm 2-3 times the size of the Earth. The 4 large Galilean satellites and at least 63 smaller moons orbit Jupiter.



Saturn

Saturn, the second-largest planet in the Solar System, is known for its showy but thin rings made of ice chunks as small as dust and as large as buildings. Its largest moon, Titan, has an atmosphere and hydrocarbon lakes; at least 61 smaller moons orbit Saturn.

Dean Salman

Your Telescope Operator and Guide. Thank you for joining me this evening! See you soon!!

The web page for the program in which you just participated is at [Nightly Observing Program](#). Most of the above images were taken as part of the Overnight Telescope Observing Program. For more information on this unique experience please visit [Overnight Telescope Observing Program](#).

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