

Hidden Universe

The Omega Nebula | Gallery Explorer

Transcript

The Omega Nebula, or M 17, is a star-forming region in the constellation of Sagittarius and is about 6,000 light years away.

It gets its name from a dust cloud that, in visible light, looks like the Greek letter omega.

In infrared light that dust fades into transparency, and the nebula more resembles the Roman letter "V."

A cluster of huge stars lies at the heart of the nebula. Some of them are over 40 times as massive and 100,000 times as bright as our sun.

Such stars produce strong winds of charged gas particles that flow outward and sculpt out the shape of the nebula.

Nearby less massive stars are surrounded by curved "bow shocks." These glowing shells form where the weaker winds from the smaller stars slam into the stronger winds from the cluster.

The "bow shocks" act like weather vanes, showing astronomers which direction the interstellar winds are blowing.