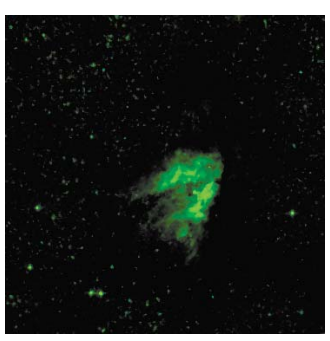
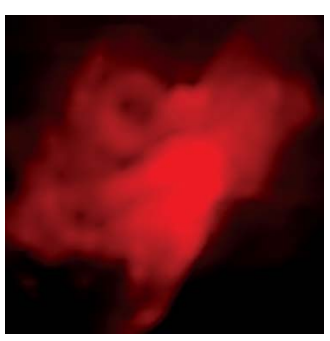
Omega Nebula

The ***Omega Nebula*** (also known as ***M17***, the ***Swan Nebula***, and the ***Lobster Nebula***) lies about 5700 light years away in the constellation of Sagittarius. The nebula is found at the edge of a dark gas cloud in which new stars are being born. Optical light, infrared radiation and radio waves are emitted by the nebula. The infrared radiation (green) is emitted by dust clouds warmed by new stars imbedded in the nebula. The optical light (blue) and radio waves (red) are produced when hot, young stars ionize the gas around them. While much of the optical light is blocked by foreground dust clouds, the radio radiation streams on through, allowing us to see all of the hot gas.

Optical data (Digital Sky Survey)



Infrared data (2 MASS)



Radio data from the GBT (NRAO)

Infrared image courtesy of the Two Micron All Sky Survey (2MASS). Collaborators:UMass/IPAC-Caltech/NASA/NSF.

Optical image courtesy of the Digital Sky Survey. Collaborators: National Geographic Society/Caltech/STScI

Image courtesy of:

Frank Ghigo, Ron Maddalena, Glen Langston and Toney Minter (NRAO)

The Robert C. Byrd Green Bank Telescope (GBT)

Composite Image by Bill Saxton (NRAO)

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