



Harvard-Smithsonian Center for Astrophysics 60 Garden Street, Cambridge, MA 01238 USA http://chandra.harvard.edu

DEM L71: A supernova remnant in the Large Magellanic Cloud galaxy about 180,000 light years from Earth. **Credit:** X-ray: NASA/CXC/Rutgers/J.Hughes et al; Optical: Rutgers Fabry-Perot

Chandra's X-ray image (left panel) of the supernova remnant DEM L71 revealed a 10 million-degree hot inner cloud (aqua) of glowing iron and silicon surrounded by an outer ring of 5 million-degree gas. The outer ring is also visible at optical wavelengths (right panel). An analysis of the Chandra data identified the inner cloud as the remains of a white dwarf star that exploded. The white dwarf pulled matter from a nearby companion star onto itself until it became unstable and blew apart in a thermonuclear explosion called a Type Ia supernova.

Scale: Each panel is 1.7 arcmin on a side.

Chandra X-ray Observatory ACIS Image

CXC operated for NASA by the Smithsonian Astrophysical Observatory