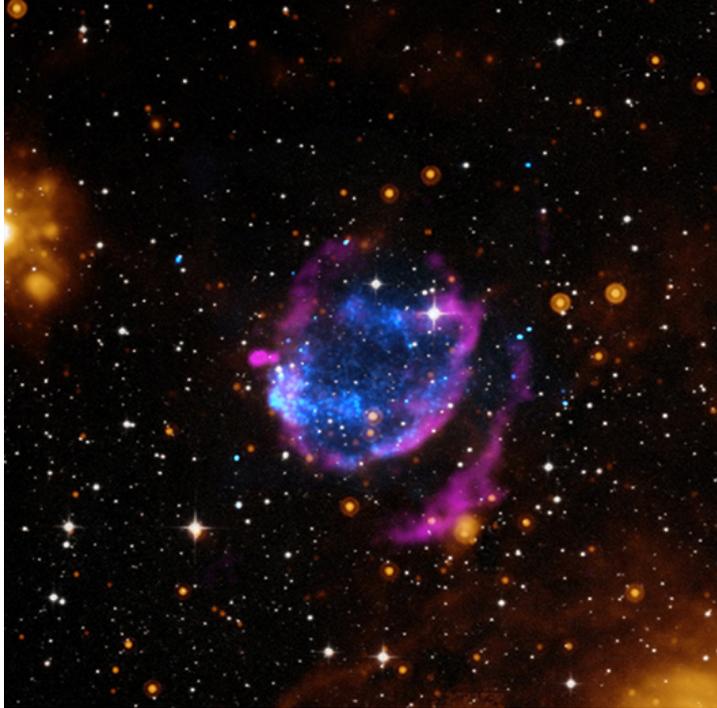




Chandra Science Highlight

G352.7-0.1: An Ejecta-Dominated Mixed-Morphology Galactic Supernova Remnant



Scale:

Image is about 14.5 arcmin across (about 1,000 light years).

Distance Estimate:

24,000 light years

A composite of X-ray (blue), optical(white), infrared (orange) and radio (pink) images of the supernova remnant G352.7-0.1.

- ❑ The X-ray emission from in G352.7-0.1 is from two components: About 2.5 solar masses of hot (about 30 MK) ejecta from the exploded star, and about 45 solar masses of cooler (about 2 MK) material that has been swept up by the expanding shock wave.
- ❑ Most of the radio emission is from a shell, shaped like an ellipse, contrasting with the X-ray emission that fills in the center of the radio ellipse.
- ❑ The remarkably high swept-up mass may indicate an unusual evolutionary scenario involving a massive progenitor star interacting with a dense molecular cloud environment.

Reference: Pannuti, T. et al. 2014, ApJ 782, 102; arXiv:1401.6603

Credit: X-ray: NASA/CXC/Morehead State Univ/T.Pannuti et al.; Optical: DSS; Infrared: NASA/JPL-Caltech; Radio: NRAO/VLA/Argentinian Institute of Radioastronomy/G.Dubner

Instrument: Chandra ACIS Observation

CXC Operated for NASA by the Smithsonian Astrophysical Observatory



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