



**Chandra X-ray
Observatory Center**

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G54.1+0.3: A supernova remnant about 20,000 light years from Earth.
(Credit: X-ray: NASA/CXC/SAO/T.Temim et al.; IR: NASA/JPL-Caltech)

Caption: A composite image from Chandra (blue) and Spitzer (green and red-yellow) data shows the dusty remains of a collapsed star. The white source at the center is a pulsar that is generating a wind of high-energy particles seen by Chandra that expands into the surrounding environment. The infrared shell that surrounds this pulsar wind is made up of gas and dust that condensed out of debris from the supernova explosion. The nature and quantity of dust produced in supernova explosions is a long-standing mystery, and G54.1+0.3 supplies an important piece to the puzzle.

Scale: Image is 3 arcmin across (about 15 light years across).

Chandra X-ray Observatory ACIS Image

CXC operated for NASA by the Smithsonian Astrophysical Observatory