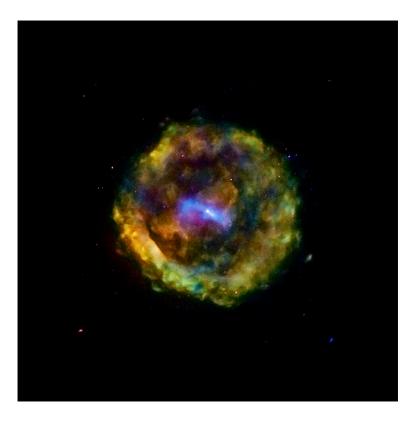


## **Chandra Science Highlight**

## G11.2-0.3: The Young Remnant of a Core-Collapse Supernova



Scale: Image is 9 arcmin across (about 43 light years)

**Distance Estimate:** 16,000 light years

## **CXC** Operated for NASA by the Smithsonian Astrophysical Observatory

Chandra X-ray image of G11.2-0.3, with low, medium and high energy X-rays shown in red, green and blue, respectively.

- ❑ Very high absorption measured at X-ray and infrared wavelengths rules out association of G11.2-0.3 with the possible historical supernova of CE 386.
- Chandra observations over nearly 13 years yield an expansion rate of 0.0277%/yr, implying a age between 1400 and 2400 yr, depending on the assumed expansion law.
- The bright blue nebula at the center of the supernova remnant has been created by a high-energy wind from a rapidly rotating (period = 65 msec) neutron star.

Reference: Borkowski, K. et al. 2016, Astrophys. J 819, 160 arXiv:1602.03531 Credit: X-ray: NASA/CXC/NCSU/K.Borkowski et al; Optical: DSS Instrument: ACIS



