



# Chandra Science Highlight

## NGC 6357: 3 Young Star Clusters



- NGC 6357 is a "cluster of clusters," containing at least three clusters of young (age ~ a few Myr) stars. These clusters formed from a giant molecular cloud.
- Chandra and ROSAT data reveal hundreds of young stars (the point-like sources).
- Optical and infrared observations reveal large cavities created by radiation and hot stellar winds from the surfaces of massive stars, and by supernova explosions.
- Diffuse X-ray emission from multimillion degree gas fills these cavities.

Scale: Image is about 44 arcmin across (70 light years)

Distance Estimate: About 5,500 light years

This composite image contains X-ray data from Chandra and the ROSAT telescope (purple), infrared data from NASA's Spitzer Space Telescope (orange), and optical data from the SuperCosmos Sky Survey (blue) made by the United Kingdom Infrared Telescope.

Credit: X-ray: NASA/CXC/PSU/L.Townsley et al; Optical: UKIRT; Infrared: NASA/JPL-Caltech

Instrument: ACIS

Reference: : Townsley, L. et al, 2014, ApJS, 213, 1;  
arXiv:1403.2576

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