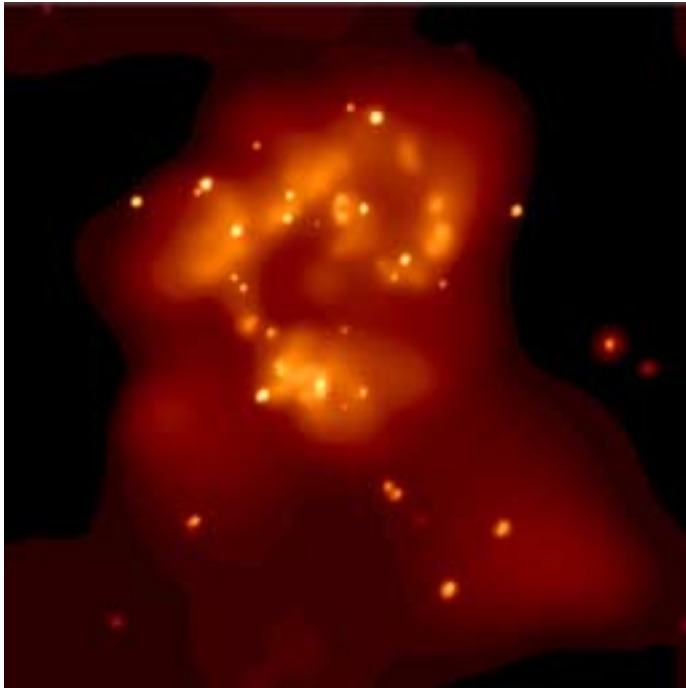




Chandra Science Highlights

The Antennae (NGC4038/4039):

Colliding galaxies about 60 million light years from Earth located in the constellation Corvus.



Chandra's spectacular image of the Antennae shows the central regions of two merging galaxies. The bright fuzzy patches are superbubbles thousands of light years in diameter that were produced by the accumulated power of thousands of supernovae. The dozens of bright point-like sources are neutron stars or black holes pulling gas off nearby stars. The remaining glow of x-ray emission could be due to many faint x-ray sources, or to clouds of hot gas in the galaxies.

Credit: NASA/SAO/CXC/G. Fabbiano et al.

Chandra X-ray Observatory ACIS Image

Scale: The image is 4 arc minutes on a side.

- At least 15 individual sources detected with luminosities equal to or greater than the Eddington limit for a 10 solar mass star.
- A few sources have x-ray luminosities comparable to the entire x-ray binary population of the Andromeda galaxy.
- Extended emission from superbubbles containing hot plasma at several million kelvins, and having luminosities of 2×10^{39} erg/s.

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