



**Chandra X-ray
Observatory Center**

Harvard-Smithsonian Center for Astrophysics
60 Garden St. Cambridge, MA 02138 USA
<http://chandra.harvard.edu>

Whirlpool Galaxy: A spiral galaxy located about 30 million light years from Earth. (Credit: X-ray: NASA/CXC/Wesleyan Univ./R.Kilgard, et al; Optical: NASA/STScI)

Caption: This image contains nearly a million seconds worth of Chandra observing time (purple) along with optical data from the Hubble Space Telescope (red, green, and blue). The X-ray data reveal hundreds of point-like sources, most of which are X-ray binary systems (XRBs) containing a neutron star or black hole in orbit with a star like the Sun. Researchers are studying the XRBs in M51, a.k.a. the "Whirlpool Galaxy," to better understand the role they play in the evolution of the galaxy.

Scale: Image is 6 x 10 arcmin (About 52,000 x 87,000 light years)

Chandra X-ray Observatory ACIS Image

CXC operated for NASA by the Smithsonian Astrophysical Observatory
