



## Chandra X-Ray Observatory Center

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**Chandra Deep Field North:** A 500,000 second image of an area in the sky known as the Hubble Deep Field North.  
**Credit:** NASA/PSU/G.Garmire, N.Brandt et al.

Chandra's extremely deep image provides a crucial view of one of the most intensively studied patches of the night sky – the Hubble Deep Field North. This area has been examined at all wavelengths, from radio through optical and now X-ray. About half the X-ray sources in this image are due to matter falling into supermassive black holes in the centers of active galaxies and quasars. Other sources include galaxies that are much like our own Milky Way galaxy, but several billion years younger. The X-rays are color coded with shades of red representing lower energies and blue representing the highest energies.

**Scale:** Images are 2.5 arcmin on a side.  
*Chandra X-ray Observatory ACIS Image*

*CXC operated for NASA by the Smithsonian Astrophysical Observatory*