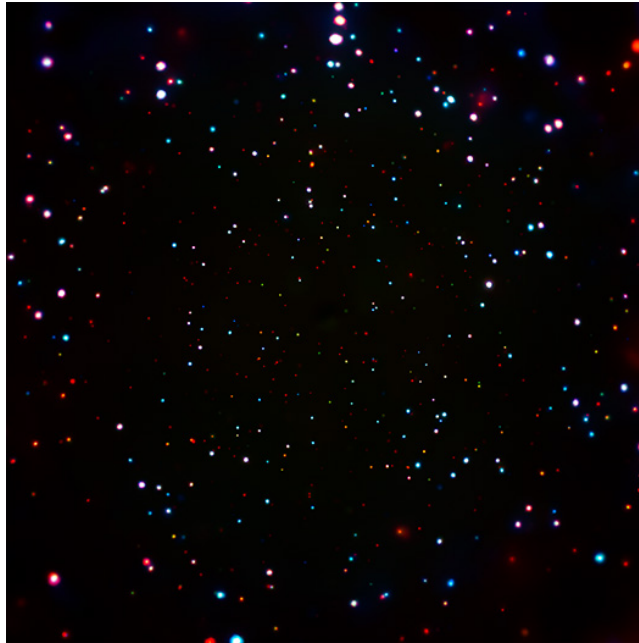




Chandra Science Highlight

Chandra Deep Field South: Deepest Ever X-ray Image



The image is from the Chandra Deep Field-South, or CDF-S. The red, green, and blue colors in this image represent low (0.5-2.0 keV), medium (2-4 keV), and high (4-7 keV) energy X-rays, respectively.

- The CDF-S comprises 102 observations totaling more than 7 million seconds. It covers an area roughly twice that shown here.
- 711 supermassive black holes have been identified in the CDF-S.
- The faintest sources detected in the CDF-S are one ten-billionth as bright as Sco X-1, the first extrasolar X-ray source discovered.
- For comparison, the faintest galaxy in the Hubble eXtreme Deep Field is one-ten billionth the brightness of what the human eye can see.

Scale: Image is 16 arcmin across

Credit: NASA/CXC/Penn State/B. Luo et al.

Instrument: ACIS

Reference: Luo, B. et al, 2016, ApJS (in press); arXiv:1611.03501; Vito, F. et al, 2016, MNRAS, 463, 348; arXiv:1608.02614

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