



Chandra X-ray Observatory Center

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Ophiuchus: a galaxy cluster located about 390 million light years from Earth (Credit: X-ray: Chandra: NASA/CXC/NRL/S. Giacintucci, et al., XMM: ESA/XMM; Radio: NCRA/TIFR /GMRT; Infrared: 2MASS/UMass/IPAC-Caltech/NASA/NSF)

Caption: Evidence for the biggest explosion seen in the Universe comes from a combination of X-ray data from Chandra and XMM-Newton (shown as pink in the inset and main panel, respectively), and the Murchison Widefield Array and Giant Metrewave Telescope (blue). The eruption is generated by a black hole located in the cluster's central galaxy, which has blasted out jets and carved a large cavity in the surrounding hot gas. Researchers estimate this explosion released five times more energy than the previous record holder and hundreds of thousands of times more than a typical galaxy cluster.

Scale: The main image is about 25.2 arcmin (2.8 million light years) across. The inset image is about 6.5 arcmin (720,000 light years) across.

Chandra X-ray Observatory ACIS Image

CXC operated for NASA by the Smithsonian Astrophysical Observatory