



**Chandra X-Ray
Observatory Center**

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Centaurus A: (NGC 5128) A radio galaxy in the constellation Centaurus, 10 million light years from Earth.
Credit: NASA/CXC/SAO

The Chandra X-ray image of Centaurus A shows a bright source in the nucleus of the galaxy, which is thought to be due to a supermassive black hole. The main jet extending to the upper left far outside the galaxy is caused by explosive activity around the black hole. A smaller "counter jet" extending to the lower right can also be seen. The faint arc on the lower right is thought to represent a shock wave produced by energetic particles expanding away from the nucleus. Numerous point-like sources of X rays are also apparent. These are probably due to neutron stars or black holes that are accreting matter from nearby companion stars.

Scale: Image is 15 arcmin on a side.
Chandra X-ray Observatory HRC Image

CXC operated for NASA by the Smithsonian Astrophysical Observatory