



**Chandra X-Ray
Observatory Center**

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NGC 253: A spiral starburst galaxy located about 8 million light years from Earth in the constellation Sculptor.

Credit: X-ray: NASA/CXC/SAO; Optical: ESO

The Chandra image of NGC 253 shows a plume of 5 million degree gas in the central region of the galaxy extending above and below the disk of the galaxy, along with point-like X-ray sources. The brightest of the point sources are much more powerful than similar sources in our galaxy, and are believed to be caused by binary star systems in which a massive black hole is pulling matter away from a companion star. The hot plume is caused by the high rate of formation and explosion of massive stars, which is characteristic of a starburst galaxy.

Scale: Optical: Image is 32.4 arcmin on a side. X-ray: Image is 2.2 arcmin on a side.

Chandra X-ray Observatory ACIS image

CXC operated for NASA by the Smithsonian Astrophysical Observatory