



**Chandra X-ray
Observatory Center**

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Sagittarius A*: The supermassive black hole located 26,000 light years from Earth in the center of the Milky Way.

(Credit: X-ray: NASA/UMass/D.Wang et al., IR: NASA/STScI)

Caption: One of the biggest observing campaigns ever performed by Chandra has provided new understanding into why gas near the giant black hole at the center of the Milky Way is extraordinarily faint in X-rays. The large image contains X-rays from Chandra (blue) and infrared emission from the Hubble (red and yellow). The inset shows a close-up of Sgr A* in X-rays only, covering a region half a light year wide. The diffuse X-ray emission is from hot gas captured by the black hole and being pulled inwards. The new results indicate that less than 1% of the material that is initially within the black hole's gravitational grasp reaches the event horizon, or, point of no return.

Scale: Wide-field: 1 arcmin across (about 7.5 light years); Close-up: about 4 arcsec (about 0.5 light year)

Chandra X-ray Observatory ACIS Image

CXC operated for NASA by the Smithsonian Astrophysical Observatory