



**Chandra X-ray
Observatory Center**

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Sagittarius A*: The supermassive black hole about 26,000 light years from Earth at the center of the Milky Way
(Credit: NASA/CXC/APC/Université Paris Diderot/M.Clavel et al)

Caption: Researchers have found evidence that the normally dim region very close to the supermassive black hole at the center of the Milky Way galaxy flared up with at least two bright outbursts in the past few hundred years. This image is from a new study of Chandra observations taken over twelve years that shows rapid variations in the X-ray emission from gas clouds surrounding the supermassive black hole. The phenomenon, known as a "light echo," provides astronomers an opportunity to piece together what objects like Sgr A* were doing long before there were X-ray telescopes to observe them.

Scale: Image is 18.5 arcmin across. (about 140 light years)

Chandra X-ray Observatory ACIS Image

CXC operated for NASA by the Smithsonian Astrophysical Observatory
