



**Chandra X-ray  
Observatory Center**

Harvard-Smithsonian Center for Astrophysics  
60 Garden St. Cambridge, MA 02138 USA  
<http://chandra.harvard.edu>

**Light Echo at Galactic Center:** X-rays bounced off gas clouds near the Milky Way's supermassive black hole.  
(Credit: NASA/CXC/Caltech/M.Muno et al.)

**Caption:** This set of Chandra images shows evidence for a light echo generated by the Milky Way's supermassive black hole, a.k.a. Sagittarius A\*. Astronomers believe a mass equivalent to the planet Mercury was devoured by the black hole about 50 years earlier, causing an X-ray outburst which then reflected off gas clouds near Sagittarius A\*. Studying this light echo gives a crucial history of activity from the black hole, and it also illuminates and probes the gas clouds near the center of the Galaxy.

**Scale:** Close up images are 5 arcmin across; Full-field is 12.5 arcmin across.

*Chandra X-ray Observatory ACIS Images*

*CXC operated for NASA by the Smithsonian Astrophysical Observatory*