



**Chandra X-ray  
Observatory Center**

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**M87:** A massive galaxy about 50 million light years away in the Virgo Cluster.  
(Credit: X-ray (NASA/CXC/KIPAC/N. Werner et al); Radio (NRAO/AUI/NSF/W. Cotton))

**Caption:** This composite image shows the eruption of a galactic “super-volcano” in the galaxy M87. X-rays from Chandra (blue) show the cluster surrounding M87 is filled with hot gas. As this gas cools, it can fall toward the galaxy’s center where it should continue to cool even faster and form new stars. Radio observations with the VLA (red-orange) suggest that jets of very energetic particles produced by the black hole interrupt this process. This interaction shares similar properties to an Icelandic volcano that erupted in the spring of 2010.

*Chandra X-ray Observatory ACIS Image*

*CXC operated for NASA by the Smithsonian Astrophysical Observatory*