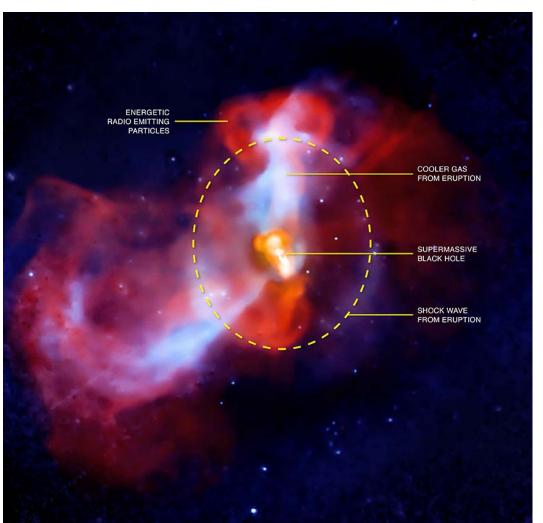


## Chandra Science Highlight

## **M87**



This image shows the eruption of a galactic "super-volcano" in the massive galaxy M87 as observed by NASA's Chandra X-ray Observatory (blue) and the Very Large Array radio observatory (blue).

- An eruption generated by gas accreting into a supermassive black hole in the nucleus of M87 has created opposing jets of high energy particles.
- These jets have lifted relatively cool gas near the center of the galaxy and created a shock wave.
- This cosmic eruption is an example of a process of black hole blowback that could inhibit the formation of hundreds of millions of stars from gas settling onto M87.

References: Werner, N. Et al, 2010, MNRAS, in press. Million, E. Et al. 2010, MNRAS, in press

Credits: X-ray: (NASA/CXC/KIPAC/N. Werner, E. Million et al); Radio (NRAO/AUI/NSF/F. Owen)

Distance Estimate: About 50 Million light years Scale: Image is 14 arc min across (about 200,000 light years)