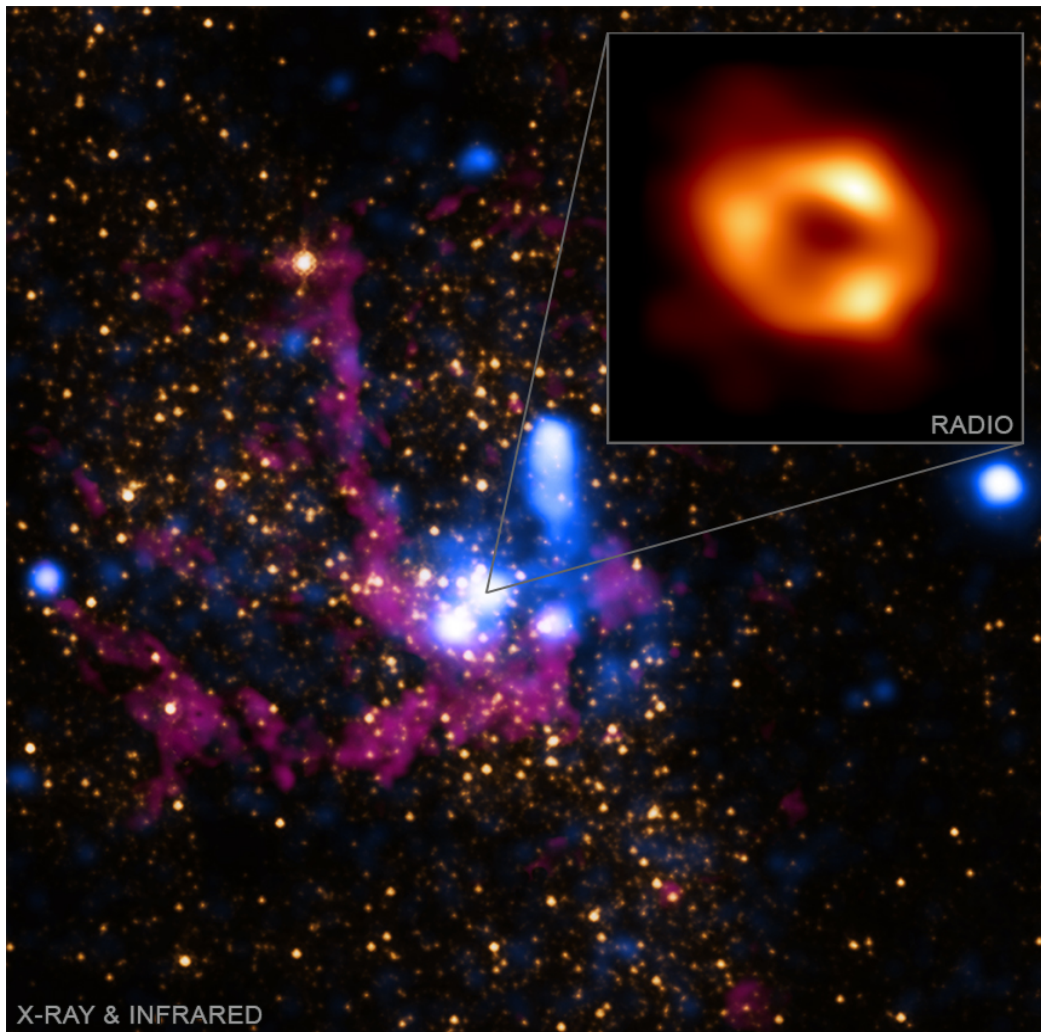




Chandra Science Highlight

NASA Telescopes Support Event Horizon Telescope in Studying Milky Way's Black Hole



- Multiple telescopes, including Chandra, observed the Milky Way's giant black hole simultaneously with the Event Horizon Telescope (EHT).
- This combined effort gave insight into what is happening farther out than the field-of-view of the EHT.
- X-rays from Chandra reveal hot gas that was blown away through winds from the black hole known as Sagittarius A*.
- These data will help astronomers better understand the complex process of "accretion" where material falls towards and into the black hole.

Distance estimate: About 26,500 light-years.

Credits: X-ray: NASA/CXC/SAO; IR: NASA/HST/STScI; Inset: Radio (EHT Collaboration)

Instrument: ACIS

Reference: The EHT Collaboration, 2022, *ApJL*, 930, L13 and The EHT Collaboration, 2022, *ApJL*, 930, L16.

Caption: The main panel of this graphic contains X-ray data from Chandra (blue) showing hot gas that was blown away from massive stars near the Milky Way's central supermassive black hole known as Sagittarius A* (Sgr A*). Two infrared images at different wavelengths from Hubble reveal stars (orange) and cool gas (purple). The new image of Sgr A* from the Event Horizon Telescope, based on data obtained in April 2017, is in the inset. This shows the area close to the "event horizon," the boundary of a black hole from which nothing can escape. <https://chandra.si.edu/photo/2022/sgra/>

The CXC is Operated for NASA by the Smithsonian Astrophysical Observatory



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