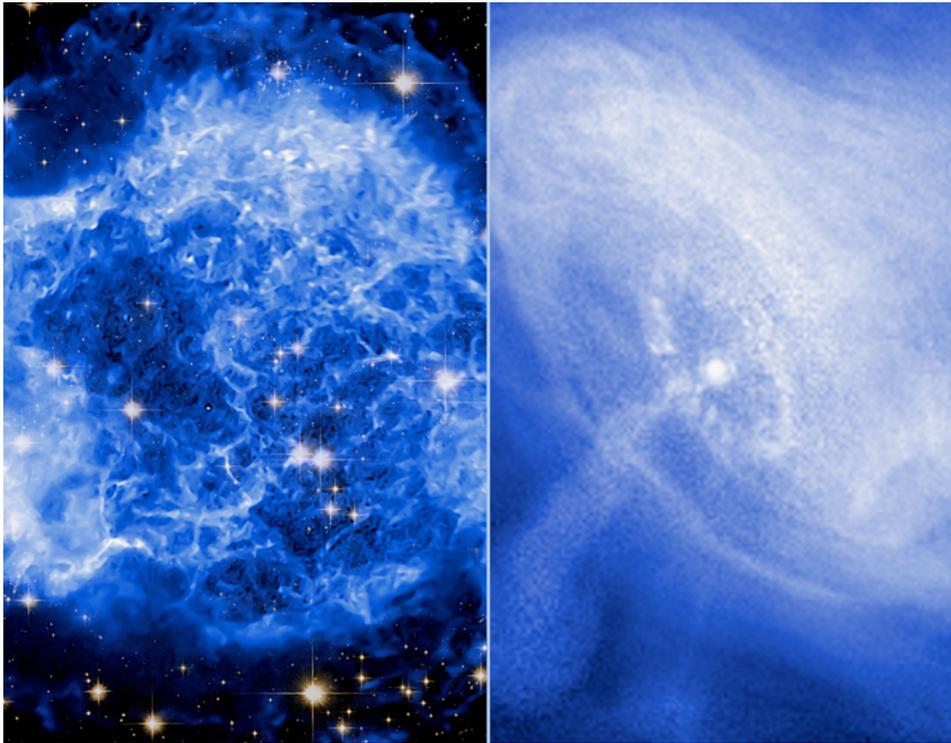




# Chandra Science Highlight

## NASA's Chandra Releases Doubleheader of Blockbuster Hits



- X-ray movies of two famous objects in space, the Crab Nebula and Cassiopeia A (Cas A), have been released. These movies are made from about two decades of data collected by NASA's Chandra X-ray Observatory.
- In the Crab Nebula, the movie shows changes in both the rings around the pulsar and the jets it is blasting into space.
- The Cas A movie features the debris field from the supernova remnant, and its blast wave, and how they are expanding.
- These movies show the value of Chandra's X-ray vision remaining as sharp as ever after two decades in space.

**Distance estimate:** 11,000 light-years (Cas A) and 6,500 light-years (Crab Nebula)

**Credits:** For Cas A: X-ray: NASA/CXC/SAO; Optical: NASA/STScI; Image Processing: NASA/CXC/SAO/J. Major, A. Jubett, K. Arcand. For the Crab Nebula: X-ray: NASA/CXC/SAO; Image processing: NASA/CXC/SAO/J. Schmidt, J. Major, A. Jubett, K. Arcand

**Instrument:** ACIS

**Reference:** Sakai, Y. et al. ApJ, 951, 59; <https://arxiv.org/abs/2306.13355>

**More information:** The detailed caption is here: <https://chandra.harvard.edu/photo/2024/timelapse/> and the movies, in different formats, are here: <https://chandra.harvard.edu/photo/2024/timelapse/animations.html>

The CXC is operated for NASA by the Smithsonian  
Astrophysical Observatory



April 2024