



 **Chandra X-Ray
Observatory Center**

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Crab Nebula: The remnant of a supernova located 6000 light years from Earth in the constellation Taurus.

Credit: NASA/CXC/ASU/J.Hester et al.

This collage is composed of Chandra images made over a span of several months (ordered left to right, except for the close-up). They provide a dramatic look at the activity generated by the pulsar (white dot near the center of the images) in the Crab Nebula. The inner X-ray ring is thought to be a shock wave that marks the boundary between the surrounding nebula and the flow of matter and antimatter particles from the pulsar. Energetic shocked particles move outward to brighten the outer ring and produce an extended X-ray glow. The jets perpendicular to the ring are due to matter and antimatter particles spewing out from the poles of the pulsar.

Scale: Close up image is 0.8 arcmin, other 7 images are 1.6 arcmin.

Chandra X-ray Observatory ACIS Image

CXC operated for NASA by the Smithsonian Astrophysical Observatory