



**Chandra X-ray  
Observatory Center**

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**Zeta Ophiuchi:** A hot star located about 440 light-years from Earth.  
(Credit: X-ray: NASA/CXC/Dublin Inst. Advanced Studies/S. Green et al.; Infrared: NASA/JPL/Spitzer)

**Caption:** Zeta Ophiuchi was once in close orbit with another star, before being ejected when this companion was destroyed in a supernova explosion. Infrared data from Spitzer, seen in this new composite image, reveal a spectacular shock wave (red and green) that was formed by matter blowing away from the star's surface and slamming into gas in its path. Data from Chandra show a bubble of X-ray emission (blue) located around the star, produced by gas that has been heated by the shock wave to tens of millions of degrees. The Chandra data help tell more of the story of this runaway star.

**Scale:** The image is about 36 arcmin (5.6 million light years) across.

*Chandra X-ray Observatory ACIS Image*

*CXC operated for NASA by the Smithsonian Astrophysical Observatory*