

## Space image: Carina Nebula: 14,000+ Stars

## October 17 2011

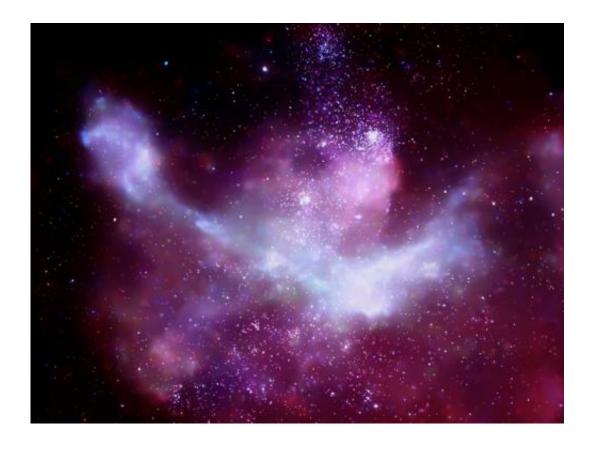


Image Credit: NASA/CXC/Penn State/L. Townsley et al.

(PhysOrg.com) -- The Carina Nebula is a star-forming region in the Sagittarius-Carina arm of the Milky Way that is 7,500 light years from Earth and the Chandra X-Ray Observatory has detected more than 14,000 stars in the region.

Chandra's X-ray vision provides strong evidence that massive stars have



self-destructed in this nearby star-forming region. Firstly, there is an observed deficit of bright X-ray sources in the area known as Trumpler 15, suggesting that some of the massive stars in this cluster were already destroyed in supernova explosions. Trumpler 15 is located in the northern part of the image and is one of ten star clusters in the Carina complex.

The detection of six possible <u>neutron stars</u>, the dense cores often left behind after stars explode in supernovas, provides additional evidence that supernova activity is increasing up in Carina. Previous observations had only detected one neutron star in Carina.

## Provided by JPL/NASA

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