



**Chandra X-ray  
Observatory Center**

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**Cygnus OB2:** A star cluster about 5,000 light years from Earth that contains many massive young stars. (Credit: X-ray: NASA/CXC/SAO/J.Drake et al, Optical: Univ. of Hertfordshire/INT/IPHAS, Infrared: NASA/JPL-Caltech)

**Caption:** This composite image of the star cluster Cygnus OB2 contains X-rays from Chandra (blue), infrared data from Spitzer (red), and optical emission from the Isaac Newton Telescope (orange). Astronomers would like to better understand how this and other star factories like it form and evolve. Deep observations with Chandra have been used to detect the hot outer atmosphere for young stars in such clusters. Cygnus OB2 is the closest massive star cluster to Earth, and Chandra's observations revealed almost 1,500 X-ray sources there. Astronomers think these young stars in Cygnus OB2 range in age from one million to seven million years.

**Scale:** Image is: 11.8 arcmin across (16 light years)

*Chandra X-ray Observatory ACIS Image*

*CXC operated for NASA by the Smithsonian Astrophysical Observatory*

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