



**Chandra X-Ray  
Observatory Center**

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**Vela Pulsar (Wide-Field View):** A rapidly rotating neutron star in the Vela supernova remnant.

**Credit:** NASA/SAO/CXC

In this wide angle view, the Vela pulsar wind nebula is seen against a background of clouds, or filaments, of multi-million degree Celsius gas. These clouds are part of a huge sphere of hot expanding gas produced by the supernova explosion associated with the creation of the Vela pulsar about 10,000 years ago. As the ejecta from the explosion expanded into space and collided with the surrounding interstellar gas, shock waves were formed and heated the gas and ejecta to millions of degrees. The sphere of hot gas is about 100 light years across, 15 times larger than the region shown in this image, and is expanding at a speed of about 400,000 km/hr.

**Scale:** Image is 30 arcmin per side.

*Chandra X-ray Observatory HRC Image*

*CXC operated for NASA by the Smithsonian Astrophysical Observatory*

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