



**Chandra X-ray  
Observatory Center**

Harvard-Smithsonian Center for Astrophysics  
60 Garden St. Cambridge, MA 02138 USA  
<http://chandra.harvard.edu>

---

**Lagoon Nebula and RCW 120:** Two star-forming regions in the Milky Way galaxy at 4,400 and 5,500 light years away respectively.  
(Credit: X-ray: NASA/CXC/Penn State/K. Getman, et al; Infrared: NASA/JPL/Spitzer)

**Caption:** These images contain two of the star-forming regions of the largest such survey done to date in X-rays by Chandra. The study outlines the link between very powerful flares, or outbursts, from about 24,000 young stars and the impact they could have on planets in orbit around them. In both of these composite images, X-rays from Chandra (purple) are combined with infrared data from Spitzer (blue, gold, white). The powerful flares observed by Chandra in this research occur in all of the star-forming regions and among young stars of all different masses, including those similar to the Sun. These flares can influence how planets form as well as the presence of any atmospheres they possess.

**Scale:** Image of the Lagoon Nebula is about 27.1 arcmin (34.6 light years) across.  
Image of RCW 120 is about 17.2 arcmin (27.4 light years) across.

*Chandra X-ray Observatory ACIS Image*

*CXC operated for NASA by the Smithsonian Astrophysical Observatory*

---