



**Chandra X-ray  
Observatory Center**

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**Jupiter:** The fifth planet from the Sun and the largest in our Solar System.  
(Credit: X-ray: NASA/CXC/UCL/W.Dunn et al, Optical: NASA/STScI)

**Caption:** Solar storms are triggering X-ray auroras on Jupiter that are about eight times brighter than normal over a large area of the planet. These Jovian auroras are hundreds of times more energetic than Earth's 'northern lights,' according to a study using Chandra data. These images, where X-rays from Chandra (purple) have been combined with an optical image from Hubble, show Jupiter and its aurora during and two days after a giant solar storm arrived at the planet in 2011. This result is the first time that the auroras have been studied in X-ray light when such a massive storm impacted Jupiter.

**Scale:** Each image is 60 arcsec across.

*Chandra X-ray Observatory ACIS Image*

*CXC operated for NASA by the Smithsonian Astrophysical Observatory*