



Chandra X-Ray Observatory Center

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KS 1731-260: A remarkably cool neutron star in the constellation Ophiuchus.
Credit: NASA/Chandra/Wijnands et al.

Chandra's observation in March of 2001 of the neutron star KS 1731-260 (pale blue dot just above the middle of the image) showed that it is a remarkably "cool" 3 million degrees Celsius. This low temperature was surprising because in the period 1988 to 2000, the neutron star was shining brightly in X-rays due to the heavy bombardment of gas from a companion star, not visible here. The relatively low temperature in its present quiet state suggests that KS 1731-260 was in a deep freeze for a thousand years before 1988 and took 12 years just to get to the temperature it is today. If so, it may represent a new type of neutron star system, and there could be hundreds of them in our Galaxy.

Scale: Image is 1 arcmin on a side.

Chandra X-ray Observatory ACIS Image

CXC operated for NASA by the Smithsonian Astrophysical Observatory