



Chandra X-Ray Observatory Center

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Beta Ceti: An X-ray bright giant star 95 light years from Earth.
Credit: NASA/CXC

Beta Ceti is in an advanced stage of evolution called core helium burning. In this stage, the core of the star is very hot (more than a hundred million degrees Celsius), and composed almost entirely of helium, which is being converted to carbon by nuclear fusion reactions. For reasons not yet understood, the outer atmospheres, or coronas, of core-helium-burning giants are strong X-ray sources. The corona of Beta Ceti, for example, radiates about 2,000 times more X-ray power than does the Sun.

Scale: Image is 1 arcmin per side.

Chandra X-ray Observatory ACIS/HETG Image

CXC operated for NASA by the Smithsonian Astrophysical Observatory