Tycho's Supernova Remnant: The remains of a supernova about 7,500 light years from Earth.
Credit: NASA/CXC/SAO

Chandra's image reveals the turbulent remains of a supernova explosion that was observed by the Danish astronomer Tycho Brahe in the year 1572. The red, green, and blue colors represent low, medium and high X-ray energies, respectively. The image is cut off at the bottom because of an instrumental artifact. A shock wave produced by the expanding debris is outlined by the strikingly sharp blue circular arcs of twenty million degree Celsius gas seen on the outer rim. The stellar debris, which has a temperature of about ten million degrees and is visible only in X-rays, shows up as mottled yellow, green and red fingers of gas.

Scale: Image is 9.6 arcmin on a side.
Chandra X-ray Observatory ACIS Image