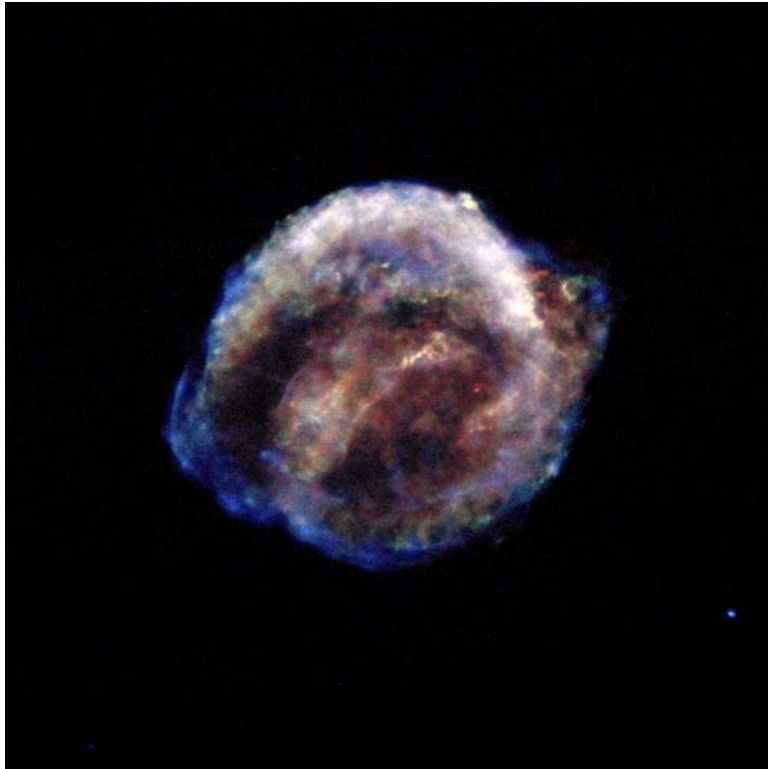




# Chandra Science Highlight

## Kepler's Supernova Remnant

Chandra X-ray Observatory ACIS Image



- The higher-energy X-rays (colored blue) come primarily from the regions directly behind a shock wave moving into the interstellar gas.
- Lower-energy X-rays (colored green and red) mark the location of the remains of the exploded star that have been heated by an inward-moving shock wave.
- The X-rays from the region on the lower left (blue) may be dominated by extremely high energy electrons that were produced by the shock wave and are radiating at radio through X-ray wavelengths as they spiral in the intensified magnetic field behind the shock front.

Scale: Main image is 5 arcmin across

Kepler's Supernova Remnant: The remains of a supernova first seen in 1604. The image shows a cloud of 10 MK gas that is 14 light years in diameter and expanding at 2,000 kilometers per second.

Credit: NASA/CXC/JHU/R.Sankrit & W. Blair