



**Chandra X-ray
Observatory Center**

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XJ1500+0154: An X-ray source located in a small galaxy about 1.8 billion light years from Earth.
(Credit: X-ray: NASA/CXC/UNH/D.Lin et al, Optical: CFHT, Illustration: NASA/CXC/M.Weiss)

Caption: This artist's illustration depicts what astronomers call a "tidal disruption event," or TDE, when an object such as a star wanders too close to a black hole and is destroyed by tidal forces generated from the black hole's intense gravitational forces. A trio of X-ray telescopes including Chandra witnessed a TDE that has lasted more than a decade, much longer than any previously observed TDE. This implies that the event involved either the most massive star to be completely ripped apart and devoured by a black hole or the first instance where a smaller star was completely ripped apart.

Scale: Image is about 11 arcsec (about 10 million light years) across

Chandra X-ray Observatory ACIS Image

CXC operated for NASA by the Smithsonian Astrophysical Observatory
