



**Chandra X-ray
Observatory Center**

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GW170817: A neutron star merger that produced both gravitational waves and light.
(Credit: X-ray: NASA/CXC/Northwestern Univ./A. Hajela et al.; Illustration: NASA/CXC/M.Weiss)

Caption: An artist's conception illustrates the aftermath of two neutron stars merging. Chandra has been collecting data on such an event called GW170817 since shortly after it was first detected in gravitational waves by the LIGO and Virgo on August 17, 2017. Chandra is now the only observatory still able to detect light - in the form of X-rays -- from GW170817 nearly four years after the original event. The X-rays (inset) show the presence of a shock (similar to a sonic boom produced by a plane) in the aftermath of the merger.

Scale: Inset image is 30 arcsec across (19,000 light-years)

Chandra X-ray Observatory ACIS Image

CXC operated for NASA by the Smithsonian Astrophysical Observatory
