



**Chandra X-ray
Observatory Center**

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GRS 1915+105: A system containing a black hole about 14 times the Sun's mass in orbit with a companion star.
(Credit: X-ray (NASA/CXC/Harvard/J.Neilsen); Optical (Palomar DSS2))

Caption: Researchers monitored this system with Chandra and RXTE for over eight hours and saw that it pulses in X-ray light every 50 seconds. This type of rhythmic cycle resembles an electrocardiogram of a human heart, though at a slower pace. The inset to the upper left shows a Chandra image of the system, while the one to the lower right contains the light curve revealing its 'heartbeat.' The main graphic shows the crowded field containing GRS 1915 in optical light from the Digital Sky Survey.

Scale: 5 degrees across

Chandra X-ray Observatory ACIS/HETG Image

CXC operated for NASA by the Smithsonian Astrophysical Observatory