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**V745 Sco:** An orbiting red giant and white dwarf star system located about 25,000 light years from Earth.

(Credit: Illustration: NASA/CXC/M.Weiss)

**Caption:** V745 Sco is a close binary where a white dwarf pulls the red giant's outer layers onto its surface, occasionally triggering an explosion. Astronomers have observed outbursts from V745 Sco in 1937, 1989, and most recently in 2014. About two weeks after this latest outburst, researchers observed V745 Sco with Chandra. From this and other data, they were able to construct the first three-dimensional model of an explosion from this system, depicted in this artist's illustration. This 3D model helps scientists better understand what is happening in this energetic event.

Chandra X-ray Observatory ACIS Image

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