Chandra Science Highlight-I

CRAB NEBULA: SPACE MOVIE REVEALS SHOCKING SECRETS OF THE CRAB PULSAR

A wisp can be seen moving outward at ~0.5 c from the upper right of the inner ring around the pulsar. The wisp appears to merge with a larger outer ring that is visible in both X-ray and optical images.

The inner X-ray ring consists of about two dozen knots that form, brighten and fade.

The wisps and diffuse X-ray emission appear to emerge from the inner X-ray ring.

The data are consistent with the ring and the base of the jet being quasi-stationary shock structures in the equatorial wind and the polar jet from the pulsar.


Credit: NASA/CXC/ASU/J. Hester et al.