

Tycho's Supernova Remnant

A long Chandra observation of the Tycho supernova remant has re vealed a pattern of X-ray "stripes." The stripes, which were discovered in the high-energy X-ray band (blue), are found to the lower right of this image. They may provide the first direct evidence that a supernova shock wave can accelerate particles to energies a hundred times higher than the most powerful accelerator on Earth. High-energy X-rays produced by a shell of extremely energetic electrons behind the supernova shock wave can also be seen. Low-energy X-rays (red) reveal expanding debris from the supernova explosion in this composite image that also includes optical data from the Digitized Sky Survey.

February 2012

| S | M | Т | W | Th | F | Sa |
|----|----|----|----|----|----|----|
| | | | 1 | 2 | 3 | 4 |
| 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| 12 | 13 | 14 | 15 | 16 | 17 | 18 |
| 19 | 20 | 21 | 22 | 23 | 24 | 25 |
| 26 | 27 | 28 | 29 | | | |