



Chandra Science Highlight



Chandra X-ray Observatory ACIS image.

NGC 2841: Galactic Chimneys Turn Up the Heat

This X-ray/optical composite image of the large spiral galaxy NGC 2841 shows multimillion degree gas (blue/X-ray) rising above the disk of stars and cooler gas (gray/optical).

- Rapid outflows of gas from giant stars, and supernova explosions in the disk of a galaxy create huge shells or bubbles of hot gas that expand rapidly and rise above the disk like plumes of smoke from a chimney.
- Chandra's image of NGC 2841 provides direct evidence for this process, which pumps energy into the thin gaseous halo that surrounds the galaxy.
- Galactic chimneys also spread hot, metal enriched gas away from the disk of the galaxy into the halo.

Credit: X-ray: NASA/CXC/U. Mass/Q.D. Wang; Optical: NOAO/KPNO