Rosette Nebula: A star-forming region 5,000 light years away in the constellation Monoceros.
Credit: NASA/Penn State/L. Townsley et al.

These four Chandra images combine to form a mosaic of a region of the Rosette Nebula. The images move outward from the center of the Nebula (right) into the Rosette Molecular Cloud (left). Massive young stars in the central regions of the Nebula produce strong winds that slam into cooler gas. These collisions create a cloud of 6 million degree Celsius gas - visible as diffuse emission in the right image - that contributes to heating the Nebula and interstellar gas. The red and blue sources indicate individual stars producing X-rays. The blue sources are newly formed stars where the low energy X-rays are absorbed by surrounding gas and dust.

Scale: Image is 17 arcmin per side for each frame.
Chandra X-ray Observatory ACIS Image

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