RCW36: A region of star formation about 2,900 light-years from Earth.
(Credit: X-ray: NASA/CXC/Ames Research Center/L. Bonne et al.; Infrared: ESA/NASA/JPL-Caltech/Herschel Space Observatory/JPL/IPAC)

Caption: A study of RCW 36, a large cloud of ionized hydrogen, shows that stars in a cluster can limit how many new stars form when the biggest and brightest members expel most of the gas from the system, thus drastically slowing down star birth. This composite image of RCW 36 includes X-rays from Chandra (blue) and infrared data from Herschel (red, orange, and green). Data from the SOFIA and APEX telescopes were also used in the study. The X-rays from Chandra reveal very hot gas near the center of the cluster and near the edges of the image.

Scale: The image is about 17 arcmin (14 light-years) across.

Chandra X-ray Observatory ACIS Image

CXC operated for NASA by the Smithsonian Astrophysical Observatory