



**Chandra X-ray
Observatory Center**

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NGC 604: The largest region of star formation in the nearby galaxy M33.
(Credit: X-ray: NASA/CXC/CfA/R. Tuellmann et al.; Optical: NASA/AURA/STScI)

Caption: This composite image from Chandra X-ray data (colored blue) and optical light data from the Hubble (red, green and yellow) shows a divided neighborhood where some 200 hot, young, massive stars reside. Bubbles in the cooler gas and dust have been generated by powerful stellar winds, which are then filled with hot, X-ray emitting gas. Scientists find the amount of hot gas detected in the bubbles on the right side corresponds to the amount entirely powered by winds from the 200 hot massive stars. The situation is different on the left side where the amount of X-ray gas cannot explain the brightness of the X-ray emission. The bubbles on this left side appear to be much older and were likely created and powered by young stars and supernovas in the past.

Scale: Image is 1.14 arcmin across.

Chandra X-ray Observatory ACIS Image

CXC operated for NASA by the Smithsonian Astrophysical Observatory