NGC 3293: An open cluster of stars located about 8,300 light-years from Earth

Caption: This stellar cluster is one of 10 different systems that astronomers studied with Chandra to determine how magnetically active their stars are. Since most of the stars in these clusters are between 7 million and 25 million years old, the study gives a window into how stars like our Sun behaved at this age and how this could affect planets around them. In this composite image of NGC 3293, X-rays from Chandra (purple) have been combined with infrared data from Herschel (red) and Spitzer (blue and white), and optical data from the MPG/ESO 2.2-meter telescope in La Silla, Chile, appearing as red, white and blue. The team found that the X-ray brightness of young, Sun-like stars is roughly constant for the first few million years, and then fades from 7 to 25 million years of age. This decrease happens more quickly for heftier stars.

Scale: The image is about 22 arcmin (53 light years) across.

Chandra X-ray Observatory ACIS Image

CXC operated for NASA by the Smithsonian Astrophysical Observatory