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Arches, Quintuplet, and GC Star Clusters: This Chandra X-ray image of the Galactic Center shows three massive star clusters near Sagittarius A*. (Credit: NASA/CXC/UMass Amherst/Q.D.Wang et al.)

Caption: The clusters, Arches (upper right), Quintuplet (upper center), and the GC cluster (bottom center), contain massive stars that appear as very bright, point-like X-ray sources when winds from their surfaces collide with those from an orbiting companion. Vast amounts of energy are also released when these stars explode as supernovas, heating the surrounding material. Stellar corpses in this image also emit X-rays as either neutron stars or black holes in binary systems. Collisions between the clusters themselves and cooler molecular clouds of gas contribute to the diffuse X-rays seen in this image.

Scale: Image is 17 x 20 arcmin.

Chandra X-ray Observatory ACIS Image

CXC operated for NASA by the Smithsonian Astrophysical Observatory