The Crab Nebula

In 1054 AD, Chinese astronomers and others around the world noticed a new bright object in the sky. This “new star” was, in fact, the supernova explosion that created what is now called the Crab Nebula. At the center of the Crab Nebula is an extremely dense, rapidly rotating neutron star left behind by the explosion. The neutron star, also known as a pulsar, is spewing out a blizzard of high-energy particles, producing the expanding X-ray nebula seen by Chandra. In this new image, lower-energy X-rays from Chandra are red, medium energy X-rays are green, and the highest-energy X-rays are blue.

Credit: NASA/CXC/SAO