

## Hand Of God' Spotted By NASA's NuSTAR Space Telescope

Religion and astronomy may not overlap often, but a new NASA X-ray image captures a celestial object that resembles the "Hand of God."

The cosmic "hand of God" photo was produced when a star exploded and ejected an enormous cloud of material, which NASA's Nuclear Spectroscopic Telescope Array, or NuSTAR, glimpsed in high-energy X-rays, shown in blue in the photo. NASA's Chandra X-ray Observatory had imaged the green and red parts previously, using lower-energy X-rays.

The hand might look like an X-ray from the doctor's office, but it is actually a cloud of material ejected from a star that exploded. NASA's NuSTAR spacecraft has imaged the structure in high-energy X-rays for the first time, shown in blue.

Lower-energy X-ray light previously detected by NASA's Chandra X-ray Observatory is shown in green and red.

The new image depicts a pulsar wind nebula, produced by the dense remnant of a star that exploded in a supernova. What's left behind is a pulsar, called PSR B1509-58 (B1509 for short), which spins around 7 times per second blowing a wind of particles into material ejected during the star's death throes.

The red cloud appearing at the fingertips is a separate structure called RCW 89. The pulsar's wind may be heating the cloud to produce the low-energy X-ray glow, astronomers believe.

The X-ray energies seen by NuSTAR range from 7 to 25 kiloelectron volts, or keV, whereas the energies seen by Chandra range from 0.5 to 2 keV.

The Hand of God is an example of pareidolia, the psychological phenomenon of perceiving familiar shapes in random or vague images. Other common forms of pareidolia include seeing animals or faces in clouds, or the man in the moon. Despite its supernatural appearance, the Hand of God was produced by natural astrophysical phenomena.

