THE CRAB – an image in visible light taken by the Hubble Space Telescope.

The Crab Nebula is the remnant of a supernova explosion which was visible from Earth in the year 1054. Originally called a nova because it seemed to be a new star, a supernova is actually the death of an old star. As you touch the image, you can feel the jagged outer edge of the nebula revealing the chaotic and violent nature of the explosion that ripped off the outer layers of a once majestic star. The nebula is still expanding outwards at 1500 kilometers per second, almost a thousand years after the explosion occurred!

THE CRAB – an image in combined X-Ray and visible light, taken by the Hubble Space Telescope and the Chandra X-Ray Observatory.

As you touch this image, you can feel the outline of the visible Crab from the previous image. Now move your finger towards the center of the image to feel the X-ray emission, a tilted ring of high-energy particles surrounding a tiny point source. Two jets of high energy particles are shooting outwards towards at two and eight o'clock. The source is called a pulsar, a rapidly spinning neutron star no larger than an average city, but spinning on its axis 30 times a second. As the neutron star spins it flashes its jets towards the Earth. This pulsar is the leftover core of the original supergiant star that exploded.

