Galactic Center: The center of the Milky Way galaxy located about 26,000 light years from Earth. (Image Credit: NASA/CXC/Pontifical Catholic Univ. of Chile / C. Russell et al.)

Caption: Combining data from Chandra and other telescopes with supercomputer simulations and virtual reality, a new visualization allows users to experience 500 years of cosmic evolution around the Milky Way’s supermassive black hole called Sgr A*. Each color represents different phenomena including Wolf-Rayet stars (white), their orbits (grey), and hot gas due to the supersonic wind collisions observed by Chandra (blue and cyan). There are also regions where cooler material (red and yellow) overlaps with the hot gas (purple). The visualization covers about 3 light years, or about 18 trillion miles, around Sgr A*.

Chandra X-ray Observatory ACIS Image

CXC operated for NASA by the Smithsonian Astrophysical Observatory