Abell 1758: A collision of four galaxy clusters located about 3 billion light years from Earth. (Credit: X-ray: NASA/CXC/SAO/G.Schellenberger et al.; Optical:SDSS)

Caption: Astronomers using Chandra data (blue and white) and several other telescopes have put together a detailed map of a rare collision between four galaxy clusters in the system Abell 1758. Eventually all four clusters — each with a mass of at least several hundred trillion times that of the Sun — will merge to form one of the most massive objects in the Universe. X-rays from Chandra have been combined with an optical image from the Sloan Digitized Sky Survey in this composite image.

Scale: About 16.7 arcmin (14 million light years across).

Chandra X-ray Observatory ACIS Image

CXC operated for NASA by the Smithsonian Astrophysical Observatory