Object: Galaxy M82

Distance from Earth: 11 million light-years

Size: 370,000 light-years across

Telescopes: Chandra X-ray Observatory, Hubble Space Telescope, Spitzer Space Telescope

Lights: X-ray (blue), infrared (red), and visible light (green, orange)

Description: Star formation has gone wild in the central region of M82. Massive young stars race through their evolution to explode as supernovae. Galaxy M82 averages a supernova every 10 years—many more than a typical galaxy. These explosions spit newly formed hot (blue) and cooler (red) carbon and oxygen into the galaxy (green and orange) at millions of kilometres per hour.

Credit: NASA/CXC/JHU/D.Strickland; Optical: NASA/ESA/STScI/AURA/M. Mountain & The Hubble Heritage Team; IR: NASA/JPL-Caltech/Univ. of AZ/C. Engelbracht & R. Kennicutt