



Chandra X-ray
Observatory Center

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Mz 3, BD+30-3639, Hen 3-1475, and NGC 7027: Four newly-formed planetary nebulas in the Milky Way Galaxy.

(Credit: Credit: X-ray: NASA/CXC/RIT/J.Kastner et al.; Optical/IR: BD +30 & Hen 3: NASA/STScI/Univ. MD/J.P.Harrington; NGC 7027: NASA/STScI/Caltech/J.Westphal & W.Latter; Mz 3: NASA/STScI/Univ. Washington/B.Balick)

Caption: This panel of composite images (X-ray/blue, optical/green, and infrared/red) shows a scene of the unfolding drama of the last stages of the evolution of sun-like stars. Planetary nebulas - so called because some of them resemble a planet when viewed through a small telescope - are produced in the late stages of moderate-mass stars' life. Over a period of a few hundred thousand years, much of a star's mass is expelled at a relatively slow speed. This mass loss creates a more or less spherical cloud around the star and eventually uncovers the star's blazing hot core. Later, shock waves generated by the collision of high-speed gas from the hot core with the previously ejected cloud create the multimillion degree bubbles observed by Chandra.

Scale: Mz3 Image is 110 x 75 arcsec

Chandra X-ray Observatory ACIS Images

CXC operated for NASA by the Smithsonian Astrophysical Observatory