

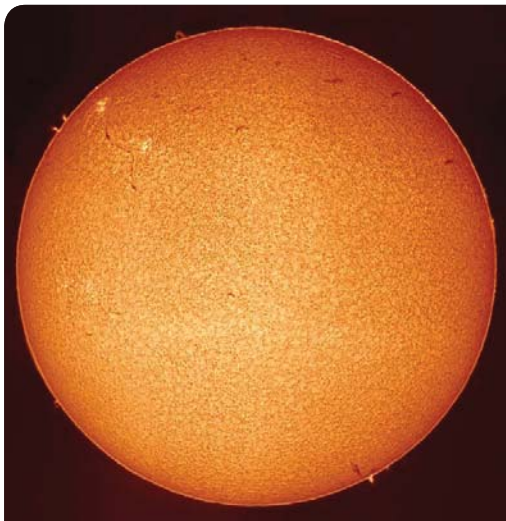


Watch the space bubble

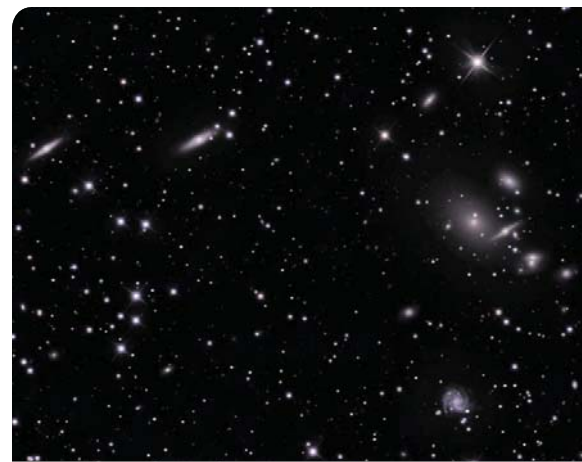
RCW 58 lies in the southern constellation Carina the Keel. This dim shell of gas forms a ring around the Wolf-Rayet star HD 96548 (also known as WR 40). Wolf-Rayet stars are hot (25,000 to 50,000 kelvins), massive (more than 20 solar masses), and near the end of their lives. The expanding bubble results from the central star ejecting stellar matter outward at high velocity and following it with a stellar wind that clears out the region surrounding the star. Astronomers note this nebula is remarkable for its large-scale curls and the existence of radial features not observed in any similar object.

RCW 58 (LightBuckets online telescope rentals 16-inch RC Optical Systems Ritchey-Chrétien telescope at f/8.4, Apogee Alta U9000 CCD camera, 90-minute exposures through red, green, and blue filters) • Jason Jennings, Melbourne, Australia

► **This full-disk solar image** shows numerous small filaments and prominences. The photographer combined nine exposures made from movie files to create this composite. (4-inch Vixen FL-102S refractor, SolarScope SF-70 0.7-angstrom Hydrogen-alpha filter, Lumenera SKYnyx 2-0M CCD camera, taken June 15, 2010, at 11h52m UT, from Selsey, England) • Pete Lawrence, Selsey, England



Barnard 164 is a dark nebula in Cygnus. Its discoverer, astronomer Edward Emerson Barnard, noted its V shape, which reminded him of a kidney. (6.4-inch Astro-Physics StarFire EDF refractor at f/7.5, SBIG ST-2000XM CCD camera, LRGB image with 48 minutes of exposure through each filter) • Anthony Ayiomamitis, Athens, Greece



Galaxy cluster Abell 262 is a loose group of more than 100 galaxies in Andromeda. The brightest member is the magnitude 11.9 elliptical galaxy NGC 708. (16-inch RC Optical Systems Ritchey-Chrétien reflector at f/9, SBIG STL-6303E CCD camera, 520 minutes of luminance data combined with 380 minutes of data through R, G, and B filters) • Mark Manner, Nunnely, Tennessee

► **The Box** is a group of four galaxies — NGC 4169, NGC 4173, NGC 4174, and NGC 4175 — in Coma Berenices. The quartet spans about 5'. (24-inch RC Optical Systems Ritchey-Chrétien reflector at f/9, SBIG STL-11000 CCD camera, LRGB image with exposures of 120, 40, 30, and 40 minutes, respectively) • Adam Block, Mount Lemmon SkyCenter, University of Arizona



The Cat's Paw Nebula (NGC 6334, right) lies near the Lobster Nebula (NGC 6357) in Scorpius. British astronomer Sir John Herschel discovered both objects in 1837 while he was at the Cape of Good Hope in South Africa. (4-inch FSQ-106 ED apochromatic refractor at f/5, SBIG STL-11000M CCD camera, Hydrogen-alpha/LRGB image with exposures of 120, 45, 15, 15, and 15 minutes, respectively) • John A. Davis, Dallas, Texas