



STAR-FORMING REGION RCW 108

The beautiful region around the Ara CB1 association in the southern Milky Way (in the constellation of that name - "The Altar") contains many young and bright stars. It is located at a distance of about 4000 light-years from the Sun.

RCW 108 is a molecular cloud in this area that is in the process of being destroyed by intense ultraviolet radiation from heavy and hot stars in the nearby stellar cluster NGC 6193 (left). Most of this radiation comes from the bright object near the center of the image, which is actually a binary system composed of two O-type stars. The red glow that pervades most of the field is emission from hydrogen (H-alpha spectral line). It reveals a massive stream of gas that flows away from the molecular complex as it is being heated and ionized.

This cloud is the site of intense star formation. The small bright patch with several stars near the darkest part of the nebulosity (right) is the infrared source IRAS 16362-4845. It marks a site where a small cluster of stars is being formed at present.

The photo was obtained with the Wide Field Imager (WFI), a 67 million pixel camera at the MPG/ESO 2.2-m Telescope at the ESO La Silla Observatory.

The WFI is a joint project between the European Southern Observatory (ESO), the Max-Planck-Institut für Astronomie (MPI-A) in Heidelberg (Germany) and the Osservatorio Astronomico di Capodimonte (OAC) in Naples (Italy).

Technical information: This colour picture is a composite made from 12 separate WFI images, obtained on March 27, 1999. The blue component corresponds to the B-filter, the green to the V-filter, and the red to the H-alpha filter. The images in each filter are the composite of 4 individual frames obtained with the telescope pointing at slightly different positions on the sky. The field measures about 32 x 32 sq arcmin, or about 40 x 40 light-years square at the distance of RCW 38.

More information about ESO can be found at URL: <http://www.eso.org>