



STAR-FORMING REGION RCW 108 (INFRARED VIEW)

The RCW 108 complex in the Southern Milky Way is full of stars and nebulae. This wide-angle infrared view was obtained with the SOFI multi-mode instrument at the ESO 3.58-m New Technology Telescope (NTT) at the La Silla Observatory. It provides a deep look into this star-forming region, where stars are in the process of being born from dense clouds of dust and gas.

It is interesting to compare the appearance of the area in this infrared view (SOFI) with that obtained at visible wavelengths (WFI), cf. ESO Poster No. 8. As they look quite different, such a comparison is greatly facilitated by referring to the positions of the same brighter objects in the two photos.

In visible light, the Eastern edge of the cloud appears as a bright rim; the same edge is present, although less prominent, to the left in the infrared image. This is where the outer surface of the cloud is eroded and later completely dissolved by the strong ultraviolet light of a nearby cluster of stars, that lies beyond the edge of the infrared image. The bright nebula at the center (IRAS 16362-4645) is much more prominent here than in the visible image. This is because it is deeply embedded in the cloud and its visible light is heavily obscured by the dust particles.

Technical information: The image is a mosaic of a total of about 600 individual exposures obtained in February 2000 in the J (wavelength 1.25 micron, here rendered as blue), H (1.65 micron, green) and K (2.2 micron, red) infrared filters. The field-of-view measures about 13 x 13 arcmin, corresponding to 17 x 17 light-years. North is up and East is left.

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