

Starburst Cluster Shows Celestial Fireworks

A young, glittering collection of stars light up the sky like a fireworks display. The cluster of huge, hot stars, called NGC 3603, is located 20,000 light-years away, in the constellation Carina.

The cluster is surrounded by clouds of interstellar gas and dust—the raw material for new star formation. The cloud shapes jut from the lower left corner and the lower edge of the image.

Ultraviolet radiation and violent stellar winds have blown out an enormous cavity in the gas and dust enveloping the cluster, providing an unobstructed view of the cluster, in the center of this image.

Most of the stars in the cluster were born around the same time but differ in size, mass, temperature, and color. The course of a star's life is determined by its mass, so a cluster of a given age will contain stars in various stages of their lives, giving an opportunity for detailed analyses of stellar life cycles.

NGC 3603 also contains some of the most massive stars known. These huge stars live fast and die young, burning through their hydrogen fuel quickly and ultimately ending their lives in supernova explosions.

**For more information on Tactile Astronomy projects from the Space Telescope Science Institute in Baltimore, Maryland, go to the following page at the Web site, Amazing Space:
<http://amazing-space.stsci.edu/tactile-astronomy/>**