

Hubble Views a Grand Star-Forming Region

This Hubble Space Telescope picture postcard displays hundreds of brilliant blue stars wreathed by warm, glowing clouds. The festive portrait is the most detailed view of the largest stellar nursery in our local galactic neighborhood.

The massive, young stellar grouping, called R136, is only a few million years old. The cluster resides in the 30 Doradus Nebula, a turbulent star-birth region in the Large Magellanic Cloud, a satellite galaxy of our Milky Way.

Many of the diamond-like icy blue stars are among the most massive stars known. Several of them are over 100 times more massive than our Sun . These hefty stars are destined to pop off, like a string of firecrackers, as supernovas in a few million years.

The nebula is close enough to Earth that Hubble can resolve individual stars, giving astronomers important information about the stars' birth and evolution.

The brilliant stars are carving deep cavities in the surrounding material by unleashing a torrent of ultraviolet light and hurricane-force stellar winds. These stellar winds are streams of charged particles that are etching away the enveloping hydrogen gas cloud in which the stars were born.

The image reveals a fantasy landscape of pillars, ridges, and valleys. Besides sculpting the gaseous terrain, the brilliant stars can also help create a successive generation of offspring. When the winds hit dense walls of gas, they create shocks, which may be generating a new wave of star birth.

**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/>**