

Heart of star cluster packed with stars

This Hubble Space Telescope image of a brilliant stellar jewel box was one of the first snapshots taken after the May 2009 servicing mission to upgrade the Earth-orbiting observatory.

The snapshot reveals an assortment of 100,000 stars residing in the crowded core of the massive globular cluster Omega Centauri, which boasts nearly 10 million stars. Globular clusters, ancient swarms of stars united by gravity, are the homesteaders of our Milky Way galaxy.

The image shows stars of many different colors and ages. Most of them are like our Sun . Some of the stars are nearing the ends of their lives. The stars are cozy neighbors. The average distance between any two stars in the cluster's packed core is only about a third of a light-year, roughly 13 times closer than our Sun's nearest stellar neighbor, Alpha Centauri. The cluster

lies about 16,000 light-years from Earth.

**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/>**