The Carina Nebula is an immense cloud of gas and dust where tens of thousands of stars are cycling through the stages of stellar life. Some of the most massive stars are nearing death, while new stars continue to arise within the turbulent landscape.

The nebula, which can be seen from the southern hemisphere, is located in the constellation Carina, 7,500 light years away from Earth. The Carina nebula spans over 300 light years, but the Hubble Space Telescope was able to capture this 50 light-year-wide view of its central region.

The story of the Carina Nebula began three million years ago, when a huge cloud of cold hydrogen molecules began to collapse into dense clumps of gas. The clumps ignited into stars whose radiation carved out an expanding bubble in the gas cloud.

Hurricane blasts of stellar winds and blistering ultraviolet radiation from the nebula’s first generation of stars are now compressing the surrounding walls of cold hydrogen, triggering a second stage of star birth.