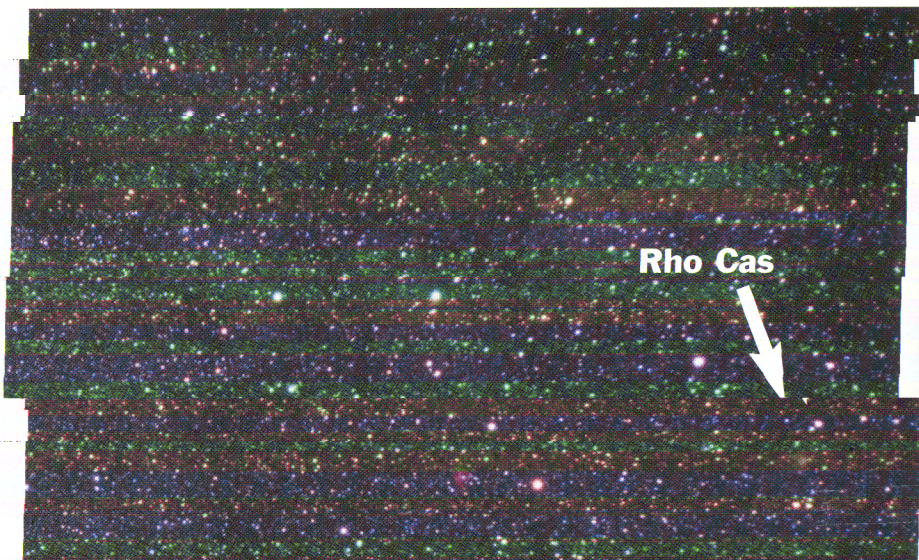


When stars go w

Whirling hydrogen gas on the surface of the star Rho Cassiopeia is turbulent; a seething, frothing mass, normally radiating at a temperature of 7,000 Kelvin. Keith Cooper explains what happens when, periodically, Rho Cassiopeia's surface gets the better of it.

The onset of an eruption is signalled when gas begins to swirl and fall in towards the centre of the star. The pressure rises, and heating the gas, causing it to brighten briefly. Essentially, the star bounces up like a spring on a trampoline. In months, it bounces back. In the summer of the year 2000, hydrogen gas measuring ten thousand Earth diameters blasted out from the surface of the largest surface eruption ever observed on a star. A shock wave of ionized gas encircles the star that could be seen as a nebula around Rho Cassiopeia. The Homunculus Nebula around Eta Carinae. During the eruption



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The hydrogen gas is compressed, and the star brightens. The star is coiling in on itself, and, within a few days, the gas has cooled and is falling back onto the star. In the summer of 2000, the hydrogen gas measuring ten thousand Earth diameters was blasted out from the surface of Rho Cas, the largest surface eruption ever observed on a star. The material now forms a nebula around the star, similar to the Homunculus Nebula around the star Eta Carinae. During the eruption

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