





## **Deviant Behaviour**



A bright star in the night sky has begun to act a little strange and astronomers have taken notice.

Astronomers have captured the dimming of the star Betelgeuse (you say the name as "Beetle-Juice") in the constellation of Orion. Not only is the star's bright light fading, but its shape is also changing.

Betelgeuse used to be an average-sized star, just like the Sun. But as Betelgeuse got older and it ran out of hydrogen fuel to burn, it grew bigger in size and redder in color, turning it into a red giant star. If you replaced the Sun in our Solar System with this star, it is so wide that it would reach as far as the planet Jupiter!

Betelgeuse has been a beacon in the night sky for sky watchers but it began to dim late last year (you can see how the star dimmed in just one month here). Betelgeuse is currently about 36% of its normal brightness, a change that is noticeable even to the naked eye.

Many astronomy enthusiasts wondered if Betelgeuse's dimming meant that it was about to explode. Like all red supergiants. Betelgeuse will one day experience an explosive death known as a supernova. These explosions are amongst the most energetic events in the Universe and are so bright they can outshine an entire galaxy!

However, astronomers don't think this is happening now. The team behind these new images of Betelgeuse's strange behaviour suggest instead that the star is becoming very active and its surface is cooling.

Astronomy enthusiasts and scientists alike were excitedly hoping to find out more about this unprecedented dimming.

Image credit: ESO/M. Montargès et al.



Our Sun will eventually become a Red Giant star like Betelgeuse - but not for another 5,000,000,000 years!



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