

“Blaze Star” set for nova explosion

A star located 3,000 light-years from Earth is predicted to become visible to the naked eye on March 27 – a once-in-a-lifetime viewing opportunity caused by a nova burst that only occurs roughly every 80 years

WHAT CAUSES IT?

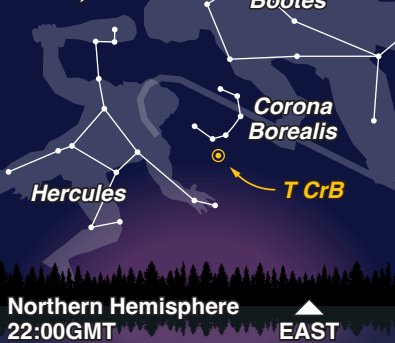
One of only five recurring nova* in our galaxy, *T Coronae Borealis* (*T CrB*) is binary system where *white dwarf* collects matter from unstable *red giant* – eventually setting off thermonuclear detonation

WHITE DWARF

What stars become after exhausting nuclear fuel, leaving only hot core – stage that follows being red giant in star's life cycle

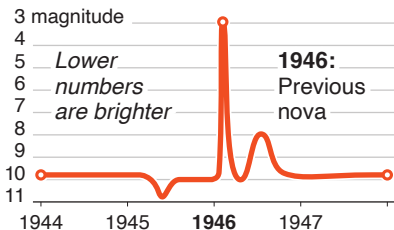
WHERE IS IT?

Mar 27, 2025



RED GIANT
Star that's past its peak and has spent core's hydrogen fuel

HOW BRIGHT WILL IT BE?



Material being drawn from red giant onto white dwarf

*Temporary brightening of star before it fades again – not Supernova, which occurs when massive star runs out of fuel and explodes at end of life. Picture: NASA/CXC/M Weiss. Sources: Sky at Night Magazine (BBC), Forbes, NASA, Sky & Telescope, Star Walk 2 (Vito Technology) © GRAPHIC NEWS