

WHAT IS THE FATE OF EARTH AFTER FIVE BILLION YEARS?

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As a star runs out of fuel, it will billow out to a million times its original size, engulfing any matter, including planets, in its wake. Until now, scientists have observed hints of stars just before and shortly after the act of consuming entire planets, but they have never caught one in the act (*Nature*).

The planetary demise appears to have taken place in our own galaxy, some 12,000 light-years away, near the eagle-like constellation, Aquila. There, astronomers spotted an outburst from a star that became more than 100 times brighter over just 10 days, before quickly fading away. Curiously, this white-hot flash was followed by a colder, longer-lasting signal. This combination, the scientists deduced, could only have been produced by one event: a star engulfing a nearby planet, as per a release.

The scientists estimate that it was likely a hot, Jupiter-sized world that spiralled close, then was pulled into the dying star's atmosphere, and, finally, into its core.

A similar fate will befall earth, though not for another five billion years, when the sun is expected to burn out, and burn up the solar system's inner planets.

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