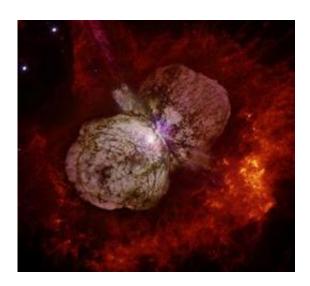


Aboriginal astronomers observed and recorded a 'supernova-impostor' event: research

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(PhysOrg.com) -- New research by Macquarie University astronomers Duane Hamacher and David Frew supports the assertion that Aboriginal Australians were active observers of the night sky and incorporated significant astronomical events into their oral traditions.

In their paper, published in the November issue of the *Journal of Astronomical History & Heritage*, Hamacher and Frew present strong evidence that the Boorong people near Lake Tyrell in northwestern Victoria observed a "supernova-impostor" event in the 19th century,



which they incorporated into their oral traditions.

This "supernova-impostor" refers to Eta Carinae, an enigmatic, supermassive binary star system prone to periodic violent outbursts.

"In the 1840s, Eta Carinae underwent a significant outburst, termed the Great Eruption, that released nearly as much energy as a <u>supernova</u>", said Frew, a post-doctoral Fellow in the Department of Physics & Astronomy.

During this time, Eta Carinae was the brightest star in the night sky after Sirius, before it faded from view 20 years later. The Boorong observed and incorporated this event into their oral history and later shared their astronomical knowledge with the Victorian pastoralist and philanthropist, William Stanbridge, who presented a paper on Boorong astronomy to the Philosophical Institute of Victoria in 1857.

"It seems Stanbridge was completely unaware of Eta Carinae, its outburst, or of the significance of the Boorong recording the event", said Hamacher, a PhD candidate in the Department of Indigenous Studies researching Aboriginal Astronomy.

"It only took 150 years for someone to finally make the connection!"

The Boorong prided themselves on knowing more about astronomy than any other Aboriginal group and their observations represent the first and only definitive indigenous record of Eta Carinae's Great Eruption identified in the historical and scientific literature to date.

Hamacher and Frew concluded that Eta Carinae was not in Boorong oral history prior to its eruption. Instead, the outburst was incorporated in the 1840s, showing that Aboriginal oral traditions are dynamic and evolving and not static, as many people commonly think.



Provided by Macquarie University

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