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Super-Nova - Google Docs

Super-Nova!

Footage of a supernova in a distant galaxy is released to the public.

Nasa released footage on October 1 showing the supernova of a star in the spiral galaxy NGC 2525, 70 million light-years away, taken between 2018 and 2019. NASA said that at its peak, the supernova was as bright as 5 billion suns!

Hubble began observing SN 2018gv, in the southern constellation of Puppis, in February 2018, after the supernova was first detected by amateur astronomer Koichi Itagaki a few weeks earlier in mid-January. Although in the footage it may seem like a concise process, in reality, the footage was a one year time lapse taken from February 2018-19

"No Earthly fireworks display can compete with this supernova, captured in its fading glory by the Hubble Space Telescope," said Nobel laureate Adam Riess, of the Space Telescope Science Institute (STScI)



The type of supernova on this occasion originated from a burned out star — a white dwarf located in a close binary system¹ — that is gaining material from its twin star. When the white dwarf reaches a critical mass², its core becomes hot enough to ignite nuclear fusion, turning it into a giant atomic bomb. This process tears the dwarf apart.³ Because supernovae of this variety all peak at the same brightness, they are known as "standard candles," which act as cosmic tape measures. Knowing the actual brightness of the supernova and observing its brightness in the sky, astronomers can calculate the distances of their galaxies. This allows astronomers to measure the expansion rate of the universe.

Katie Boag, 43, told us that capturing a supernova on camera was an incredible feat, and that this shows that there had been a great advancement in space technologies. But not everyone believes this ; Dua lipa says: " I think all of this supernova malarkey is rubbish. They probably used technology to develop a video of the explosion - you can tell by the poor quality,"

A binary star is a star system consisting of two stars orbiting around the centre of the gap between the two stars.

A critical mass is the smallest amount of material needed for a nuclear chain reaction.