



Blast From The Past

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Astronomers are always making new discoveries. Sometimes, discoveries are made that change what scientists thought they knew!

Further than Believed

An international team of astronomers using the Gemini North's telescope have discovered that CK Vulpeculae is approximately five times farther away than astronomers previously thought!

CK Vulpeculae was first seen as a bright new star that exploded into view in 1670. This makes the 1670 explosion of CK Vulpeculae much more energetic than scientists previously believed.

This has led to many new questions about what type of explosion took place. Astronomers believe the burst was too faint to be a [supernova](#), which is a giant explosion that takes place when a massive star dies.

Redshift, Blueshift

To better understand how far away the object is, astronomers looked at something called the redshift of the nebula's [atoms](#), to see that the object is expanding much quicker than they had thought. Just like how the pitch of an ambulance siren changes depending on whether the vehicle is moving towards or away from you, objects in space change color depending on whether they are moving towards or away from an observer (like a telescope). Objects moving away from Earth become redder (known as redshift) and objects moving closer become bluer (known as blueshift).

Image credit: International Gemini Observatory/NOIRLab/NSF/AURA. Image processing: Travis Rector (University of Alaska Anchorage), Mahdi Zamani & Davide de Martin



COOL FACT

When the French monk Anthelme Voituret saw this bright new star flare into life over 350 years ago, the star became almost as bright as the North Star! It was monitored by some of the leading astronomers of the day before it faded from view after a year.

This Space Scoop is based on a Press Release from [NOIRLab](#).
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