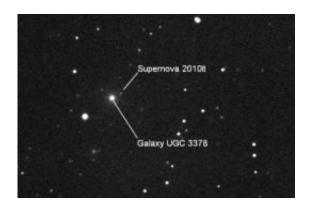


10-year-old girl discovers a supernova

January 4 2011, by Nancy Atkinson



Supernova 2010lt discovered by Kathryn Aurora Gray. Image credit: Dave Lane.

A ten-year old girl from Canada has discovered a supernova, making her the youngest person ever to find a stellar explosion. The Royal Astronomical Society of Canada announced the discovery by Kathryn Aurora Gray of Fredericton, New Brunswick, (wonderful middle name!) who was assisted by astronomers Paul Gray and David Lane. Supernova 2010lt is a magnitude 17 supernova in galaxy UGC 3378 in the constellation of Camelopardalis, as reported on IAU Electronic Telegram 2618. The galaxy was imaged on New Year's Eve 2010, and the supernova was discovered on January 2, 2011 by Kathryn and her father Paul.

The observations were made from Abbey Ridge Observatory, and this is the third seen from this observatory. It was Lane's fourth <u>supernova</u>



discovery, Mr. Gray's seventh, and Kathryn's first.

The discovery was soon verified by Illinois-based amateur astronomer Brian Tieman and Arizona-based Canadian amateur astronomer Jack Newton.

Since a supernova can outshine millions of ordinary stars, it can be easy to spot with a modest telescope, even in a distant galaxy like UGC 3378 which is about 240 million light-years away. The trick is to check previous images of the same location to see if there is any changes. That's what Kathryn was doing for the images of the galaxy taken by her father.

Supernovas are stellar explosions that signal the violent deaths of stars several times more massive than our sun, and can be used to estimate the size and age of our universe.

Supernovas are rare events. The Chandra X-Ray telescope found evidence of a supernova explosion that occurred about 140 years ago in our galaxy (although no one saw the explosion take place), making it the most recent in the Milky Way. Previously, the last known supernova in our galaxy occurred around 1680, an estimate based on the expansion of its remnant, Cassiopeia A.

Source: <u>Universe Today</u>

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