

## Amateur astronomers contribute observations of the brightest supernova in 20 years

Skywatchers in the northern hemisphere are being treated to a rare, bright supernova in a nearby galaxy, and observers just like you have the opportunity to contribute scientific data to our study of this object!

This supernova, named SN 2011fe, exploded in the nearby spiral galaxy Messier 101 some time on August 24, 2011, and quickly became bright enough for backyard astronomers to observe with modest-sized telescopes. The supernova belongs to the class of objects called "Type-Ia supernovae" that are caused by the explosion of a white dwarf in a binary star system. When these stars explode, they briefly give off as much energy as all of the other stars in the galaxy combined, making them visible from millions and billions of light years away. SN 2011fe is special because it exploded in a galaxy that's "only" 20 million light years from Earth -- very close compared to the size of the Universe! This gives astronomers a great opportunity to understand better what Type-Ia supernovae are like and how they change over time. This is where backyard astronomers like you can help!

The American Association of Variable Star Observers, an organization dedicated to collaborative science by amateur and professional astronomers, is one of many groups observing this supernova, and we've provided the community with tools to help them make observations and share them with the broader astronomical community. The AAVSO has published star charts and other materials that enable anyone with a modest sized telescope (6 inches/15 centimeters or larger) to measure the brightness of this supernova with their own eyes. We also give observers the ability to report their observations in a way that's useful for researchers studying this supernova. Observing the supernova is not only fun, you can help astronomers do real science!

The AAVSO invites all members of the public, world-wide, to help us to record this special event! Astronomers just like you are helping improve our understanding of this important phenomenon, and the universe that we live in.

To learn more about how to observe this supernova and contribute your observations, please visit

<http://www.aavso.org/sn-2011fe>

About the AAVSO:

The American Association of Variable Star Observers (AAVSO) is a 501(c)(3) non-profit research and educational organization of amateur and professional astronomers who are interested in stars that change in brightness, known as variable stars. The AAVSO was founded in 1911 to coordinate variable star observations made largely by amateur astronomers for Harvard College Observatory. In 2011, we are celebrating our Centennial Year as an independent, private research organization headquartered in Cambridge, Massachusetts. With members and observers in 52 countries, and an archive of over 20 million variable star observations, the AAVSO is the world's largest association of variable star observers.

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