

Meteor Shower Expected When Earth Collides with Comet Debris Nov. 19

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DURHAM, N.H. -- Last November, New Englanders defied the chilly temperatures and early wake-up call to watch a spectacular display of the Leonid meteor shower. This year's Leonids are expected to cause another good show over North America on Tuesday morning, Nov. 19, with a prediction of as many as 1,000 to be sighted per hour in the Northeast.

"The rub this year is that the moon will interfere," says Eberhard Moebius, professor of space physics at University of New Hampshire's Institute for the Study of Earth, Oceans, and Space, explaining that a full moon can obscure the view. "The plentiful small meteors will be washed out. The big ones should be visible, however."

The Leonid meteor shower occurs every November as the Earth passes through the orbit of the Tempel-Tuttle comet. The streaks of light, or "shooting stars," seen in the sky are pieces of debris from the comet that burn up when they enter the Earth's atmosphere.

Over the past few years the showers have been particularly spectacular, because the producing comet was close to the Earth's orbit. After this year the strength of the Leonids will decline, until Tempel-Tuttle comes around again on its orbit in 2033.

The Leonids -- so named because they appear to emanate out of the constellation Leo -- are fast meteors, entering the Earth's atmosphere traveling at speeds of over 158,000 miles per hour, more than 50 times faster than the speediest jet plane. The Earth will encounter

two major clouds of these fast moving particles this year; the second of which will cause the biggest outburst over North America at about 5:30 a.m. Eastern Standard Time.

After midnight through dawn is generally the best meteor viewing time. "It is then that we are looking into a piece of the sky which represents the 'windshield' of the Earth on its journey around the sun," says Moebius. "Meteors are scooped up by this side of the Earth, like snowflakes by the windshield of a car during a drive in a snowstorm."

For best viewing of the Leonids, Moebius recommends finding a dark site away from bright lights. The "shooting stars" will appear white, blue-white, or greenish in color.

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