

### Comets are not streakers

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Contrary to current popular misconception, comets do not go streaking across the sky. True, they are traveling thousands of miles per hour, but at the extreme distances they are located, such speed is not readily apparent to the eye.

Even when the comet is visible it will not appear to be moving—unless you are viewing it through a large telescope. The only indication of movement will be the next evening when it will be located in another part of the sky.

The approaching comet ISON (C/2012 S1) is currently outside the orbit of Mars approaching the Sun. It will go around the Sun on Nov. 28 (Thanksgiving Day).

On Sept. 1, it crossed the so-called “Frost Line.” An imaginary line where heat from the Sun begins to have an effect on the comet; raising surface temperatures and causing its water and ice mixture to melt, releasing bits of small rock and sand or gravel from its core.

Those small bits of sand-gravel are left in the wake of the comet and will produce a meteor shower the next time Earth travels through the stream. Earth will travel through the comet's tail on Jan. 16, so we may have an unexpected shower.

There was a great hubbub when ISON was first discovered. It was thought then that the brightness of the comet at the distance it was located could produce a very bright comet when it came closer to the inner planets and rounded the Sun.

Some people who should have known better started using the phrase, “Comet of the Century.” However, upon further observation, as it has come closer it became evident that it will probably not produce the expected brightness. Since this is ISON's first trip in from the outer solar system astronomers don't really know what to expect.

Since it is a “Sungrazer,” or comet that will travel very close to the Sun (an estimated 734,000 miles), it will travel through the Sun's outer atmosphere where it could be destroyed.

Comets are thought to come from the Oort Cloud, a huge ball of cemetery bodies—perhaps a billion or even a trillion in number—that astronomers believe is located about a light year from the Sun.

**SKY WATCH:** First quarter moon, Thursday, Sept. 12. In the evening sky there are two planets for our viewing pleasure, very bright Venus and not so bright Saturn. Look west about an hour after local sunset for the pair. Saturn is about seven degrees to the left of Venus which is almost in the same binocular field of view.

Now, just because they look close does not mean they are close. Venus is about 93 million miles from us (about the same distance as the Sun) and Saturn is about 930 million miles from us.

On Friday, Sept. 13, the moon will be almost in front of Pluto. You won't be able to see the tiny planet; this is just so you will know where it is.

On the evening of Sept. 17, we can use the moon as a helper to locate the outer gas-giant planet Uranus. Best time to look is about 9 p.m. when the sky is good and dark. View from a very dark location. Uranus will be about five degrees to the lower left of a bright moon. It will help to put the moon out of your field of view.

NEXT WEEK: The Harvest Moon, more comet ISON, and more astronomical blathering.