

# HYPING COMET ISON

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Get ready for lots of hype, misinformation and scare tactics. Comet C/2012 S1 (ISON) is coming our way!

(See note on the comet's name or designation at end of this email.)

I have been following announcements on Comet ISON for several days.

On-line announcements, even by well-known sources, are already declaring this comet a winner! For example, I found the following statements:

*Astronomy Magazine* writes, "New comet will light up the sky" and further states that "About a year from now, Comet C/2012 S1 (ISON) probably will become the brightest comet anyone alive has ever seen."

*Sky & Telescope* headlines the comet with, "A 'Dream Comet' Heading Our Way?"

*Mail Online* declares, "Comet 'shining 15 times brighter than moon will fly by our planet in 2013."

Likewise, *NDVTV* writes, "Comet 'shining 15 times brighter than moon' will fly by Earth."

And one commentator blurted that its tail will spread over half the sky.

(Where have we heard all this before?)

Need I go on?

Although many announcements further explain the prediction of comet brightness is speculative, the public will often see only the headlines and not the real story that might be within the article.

Astronomers, given good observations, can predict comet orbits accurately but not comet brightness (or tail length).

Comet ISON's orbit takes it very close to the Sun at the end of November 2013 (0.012 AU) and relatively close to Earth (0.43 AU) by the end of December. That much is fairly certain.

Some sources are stating a peak magnitude of -11.64 or brighter. And note this magnitude is even listed to an accuracy of 0.01 magnitudes more than one year from now!

Really?

This comet "could" become very bright but watch out for the hype.

Astronomers have often been burned before. We simply don't know how bright this comet

will become. And we probably won't until later next year. So, we need to be very careful with our communications with the public about Comet ISON.

Comet ISON has also been compared with the Comet Kirch ("The Great Comet of 1680") due to apparent similarity of orbital elements. Some even say these two comets are the same. But Comet ISON's orbit period may be much longer although perturbations or comet breakup may have altered the orbit. We don't know. (The comet's orbit is presently indistinguishable from a parabola suggesting an orbit period that could be hundreds of thousands of years, probably much longer than Comet Kirch.)

Also look forward to doom and gloom:

In fact, meteorologist Jay Anderson (well-known for his excellent work on eclipse weather) suggests:

"Shall we have a pool as to when the first prediction of doom and the end of the Earth will be posted online about this comet and the one in March?"

(Anderson is referring to Comet Pan-STARRS or C/2011 L4, discovered last June, which may become naked-eye near perihelion next March.)

So, I guess the world will not end this coming December but late next year?

Let's hope this comet does become the most spectacular of our lifetime but let's also be careful about what we communicate to others.

Meanwhile, for us Northern Hemisphere observers, Comet ISON's orbit should favor us rather than our neighbors to the south.

(Recall Comet McNaught or C/2006 P1 that became the Great Comet of 2007, but only for Southern Hemisphere locations.)

Super-Comet or Super-Dud? Will it brighten enormously without being disrupted? Will it blaze or fizzle?

Stay tuned to the sky but calm down, be careful what you say, and hope for the best.

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**NOTE ON COMET'S NAME:** The designation for this comet (ISON) comes from the International Scientific Optical Network (ISON) since the discovery telescope (in Russia) is part of this network. The official IAU (International Astronomical Union) designation C/2012 S1 indicates this is a non-periodic comet (C/) and is the first comet discovered in the second half of September 2012. (Letters after the year show the half-month of discovery beginning with "A" for Jan. 1-15, "B" for Jan. 16-31, etc., with "I" omitted and "Z" not used.)

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