

Comet ISON unpredictable

By Vernon Whetstone

Amateur Astronomer

Comet ISON has passed Mars on its million-year inward-bound journey from the outer solar system. It is already visible in small telescopes and in another two weeks or so it should become visible in binoculars.

Last week I mentioned that ISON was a “sungrazer.” This week I want to examine that term a little closer. It is basically what the term sounds like. A “sungrazer” is a comet that comes very close to the Sun.

Several things can happen to a comet that gets too close. Some have crashed into the Sun. Others have been destroyed—evaporated into a debris cloud—while others have had their orbit changed by the effects of the Sun’s gravity into a new orbit.

Do you remember Comet Shoemaker-Levy Nine from 1994? While it was not a sungrazer, what happened to it is similar to what happens to comets that come too close to the Sun. That particular comet was captured by Jupiter’s gravity which pulled it in so close that it was fragmented into 21 pieces which subsequently crashed into the planet.

That is why astronomers are reluctant to predict what will happen to ISON. When it passes around the Sun on Thanksgiving Day in November any, or all, or those things could happen to it.

If you would like to know more about sungrazers, point your browser to soho.nasa.gov for some photos and stories about sungrazer comets.

Right now, and for the next couple of weeks, it should be relatively easy to find ISON, it will be very close—about one degree away—to the planet Mars in the early morning sky. The best time for looking is about an hour to an hour-and-a-half before local sunrise.

Visibility in a pair of binoculars could begin around Oct. 12 or 13.

My old friend is back, the star Fomalhaut, in the constellation Piscis Austrinus, the Southern Fish. It is relatively easy to locate Fomalhaut; it is the only bright star in the southeastern sky. All of the other stars in the constellation are fourth magnitude in brightness or dimmer.

You would think that such an isolated star may not garner much attention, but it was one of the four royal stars of the Babylonian Empire, so somebody was paying attention. That is why I like it so much, it is out there, all by itself, yet it is still shining brightly for all to see.

To find it, look between due south and southeast about 8:30 p.m. MDT. Scan the sky for the only bright point of light and say hello to my friend.

SKY WATCH: New moon, Friday, Oct. 4, and, of course, you remember a new moon means no moon showing at all. At new moon, the moon is between Earth and the Sun so no light is reflected off the face of the moon we can see. It is all shining on the other side. This coming weekend, Oct. 4, 5 and 6, the bright planet Jupiter will be very close to the star Wasat, in the constellation Gemini. A pair of binoculars or even a small telescope will show them in the same

field of view. The tiny dot of the star will look like a wayward moon of Jupiter.

Sunday evening, Oct. 6, about 45 minutes after local sunset the lovely thin crescent of a two-day old moon will be right between the planets Saturn and Mercury. They will all be very close to the western horizon so binoculars will be essential to pull them all out of the soup along the horizon, but it will be worth the effort to go look.

Another item may not be worth the effort, the Draconid meteor shower on the evenings of October 7 and 8. This is an unusual shower in that you won't have to wait until after midnight to view the shower peak. The parent constellation, Draco, is circumpolar so it is high in the northern sky early in the evening of both days.

NEXT WEEK: More about ISON, and the lunar eclipse nobody will see, and more astronomical blathering.