

### Comet making progress

**By Vernon Whetstone**

*Amateur Astronomer*

The comet is still coming.

Comet ISON that is. Officially designated Comet C/2013 S1, it is basically a hunk of frozen water and rock with small, gravel or grain of sand-sized bits with perhaps some carbon dioxide thrown in for good measure.

After its initial discovery in January of this year, there was some hope that ISON could perhaps put on a great show in November becoming a very bright comet. However, as we get closer to the November 28th date when the comet will do a close turn around the Sun such hopes have been fading by the week.

Really, astronomers have no way of knowing just how bright any given comet will be. At most it is just an educated guess, but it is still just a guess. Comets have a way of doing strange things.

On Thursday, Oct. 1, ISON was at its closest distance from the planet Mars, some 6.7 million miles compared to the 39.9 million miles it will be from Earth at its closest point.

There is some hope that the cameras on the Mars rover, Curiosity, or one of the many spacecraft in orbit of Mars would be able to produce a photograph.

As the comet continues to travel on its million-year trip in from the outer solar system it will pass close to and around the Sun on Nov. 28, Thanksgiving Day. Traveling at a close distance of 700,000 miles from the Sun there is the possibility the comet could either be destroyed by the Sun's heat and intense gravity or break up completely.

That is why the comet is called a "Sungrazer."

At present, the comet is only visible to those using larger telescopes—larger than 10-inches in diameter. It could be possible to view the comet using binoculars beginning about Oct. 13.

On that date there will be a very handy helper to help locate the comet, the planet Mars in the early morning hours before local sunrise.

The comet will be just to the upper right of the planet about one degree away. In fact, Mars and the comet will be in the same field of binocular view until the end of October.

**SKY WATCH:** Third quarter moon, Thursday, Sept. 26. Tonight, Wednesday, Sept. 25, an almost third-quarter moon will be near the star Aldebaran in the constellation Taurus, the Bull at midnight.

Friday morning, Sept. 27, the moon and Jupiter will have a meeting before local sunrise. It won't be as close as they have been in the past—just 10-degrees apart—they will be closer on Saturday morning Sept. 28, just five degrees away.

The moon continues on, its crescent growing thinner by the day until it meets the planet Mars on Monday, Sept. 30. On Tuesday, Oct. 1, the bright star Regulus, the brightest star in the constellation Leo, the Lion will join the moon and Mars making a nice triangle in the early morning sky.

Be out looking at least an hour before local sunrise. In the morning sky, very bright Venus and dimmer Saturn are still making a nice showing in the early evening sky in the west. Last week Saturn was above Venus, but this week they have moved to where Saturn is about seven-degrees to the right of Venus.

NEXT WEEK: Will comet ISON break up when it goes around the Sun? What then? Also, more astronomical blather.