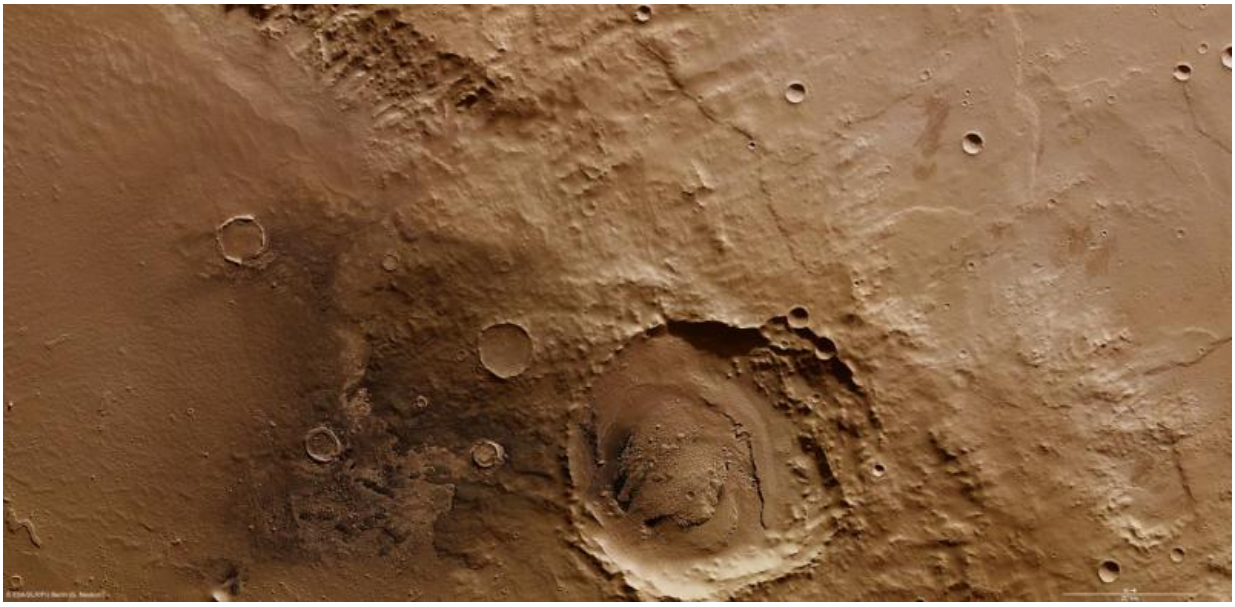
Image: On the rim of Schiaparelli crater

November 23 2015



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A 42 km-wide impact crater and numerous smaller craters straddle the northwestern rim of the 460 km-diameter Schiaparelli basin in this image taken by ESA's Mars Express on 15 July 2010.

The large basin is named for Italian astronomer Giovanni Schiaparelli (1835–1910). The entry, descent and landing demonstrator module of the joint ESA–Roscosmos ExoMars 2016 mission also honours the astronomer with the name Schiaparelli.

Giovanni Schiaparelli is famous for observing straight-line features on Mars that he called 'canali'. This term was mistakenly translated into English as 'canal' instead of 'channel', conjuring up images of vast irrigation networks constructed by intelligent beings.

We now know that Schiaparelli's canali were illusions created by the comparatively poor telescopes of the time and that there are no water-filled channels on Mars today – but there is plenty of evidence that water was once present in Mars' past. The Schiaparelli basin may be one such location: layers in its walls and deposits on its floor suggest it once hosted a lake. The scene shown here has also been modified by lava flows and wind erosion.

Meanwhile, the 'other' Schiaparelli, that of the ExoMars 2016 mission, is getting ready – along with the Trace Gas Orbiter – to leave Europe for its launch site in Kazakhstan. They are due for launch on a Russian Proton rocket in March 2016, arriving at the Red Planet in October.

While Schiaparelli will demonstrate technologies for Europe to land on Mars, the orbiter will take a detailed inventory of Mars' trace gases. Although present in the atmosphere only in very small quantities, these gases, including methane, imply a current source and therefore could be linked to present-day geological or biological activity.

More information about the image, which was first published on the ESA Portal on 10 December 2010, can be found here.

For the latest news on ExoMars, visit: mars/" target="_blank">exploration.esa.int/mars/

As a piece of related movie trivia, Schiaparelli basin was chosen as the landing site for AresIV in The Martian, which the stranded astronaut has to reach for rescue. His route takes him right next to the crater in this

image. www.leonarddavid.com/wp-conten … martian_traverse.jpg

Provided by European Space Agency

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