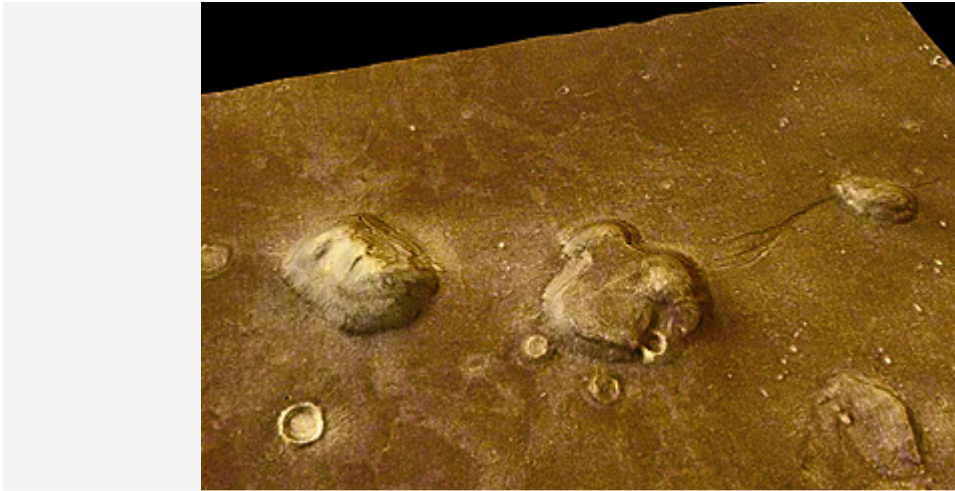


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The Cydonia Region – The "Face On Mars"

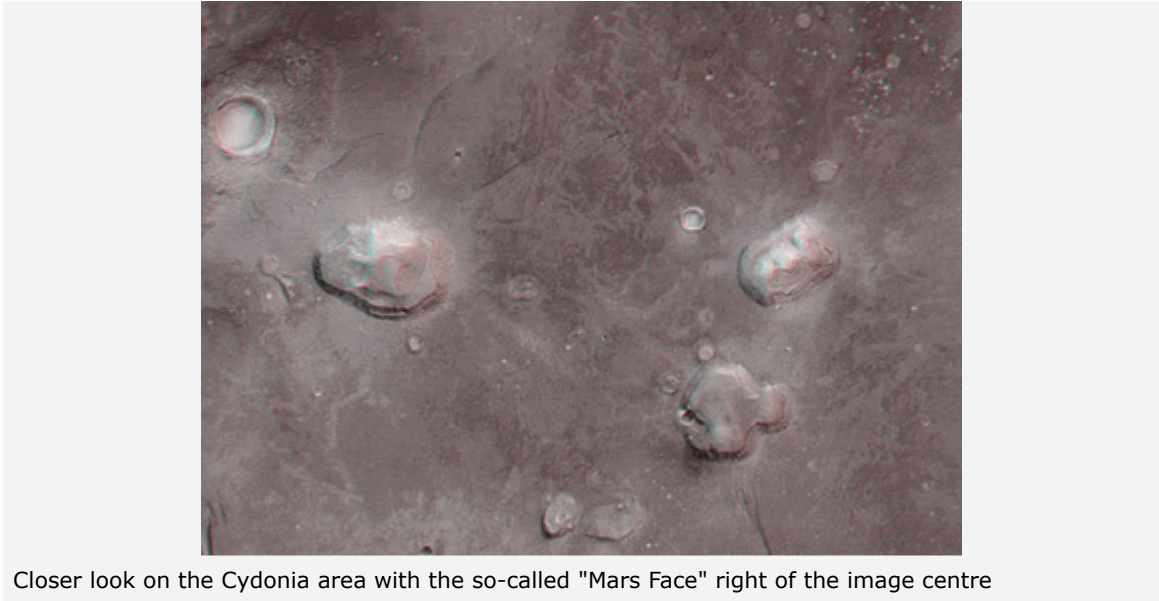
21 September 2006



"Face on Mars" perspective view



The "Face on Mars" in a perspective view



Closer look on the Cydonia area with the so-called "Mars Face" right of the image centre



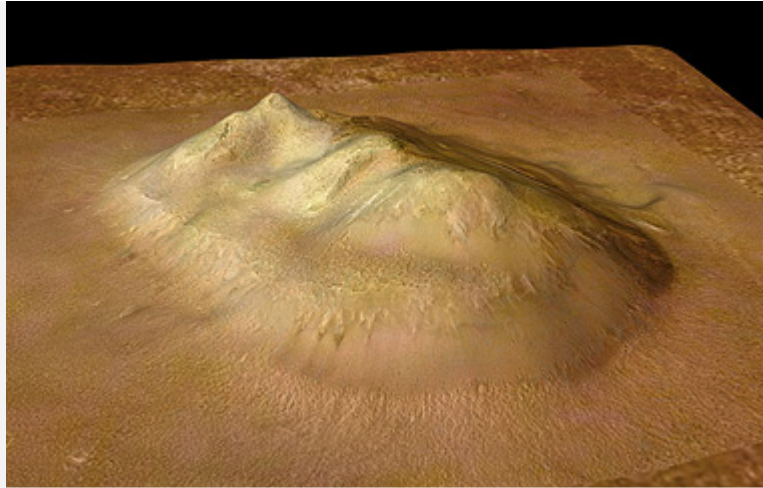
Viking orbiter image of the "Face on Mars," taken 25 July 1976

On 22 July 2006, the DLR-operated High Resolution Stereo Camera (HRSC) onboard ESA's Mars Express obtained images of the Cydonia region, site of the famous "Face on Mars." The HRSC images include some of the most spectacular views of the Red Planet ever seen.

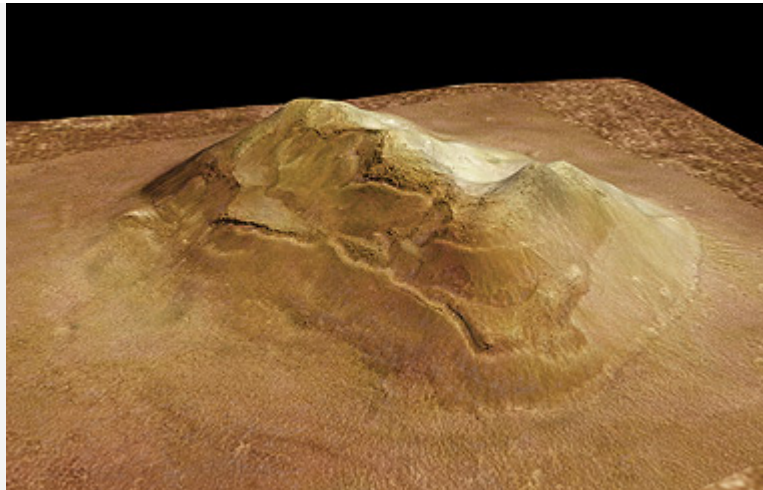
The HRSC obtained image data in orbit 3253 with a ground resolution of approximately 13.7 metres per pixel. The data were acquired at a latitude of approximately 40.75 degrees North and about 350.54 East longitude.

Triggered by a photo of the Cydonia region taken on 25 July 1976 by the American Viking 1 Orbiter, one of the visible remnant massifs has become famous during the last 30 years as the "Face on Mars". It was first publicly labelled as "resembling a human head" in the NASA press release on 31 July 1976. Even then, NASA scientists interpreted the formation as an optical illusion caused by the illumination angle of the Sun and the surface morphology, with the resulting shadows giving the impression of eyes, nose and mouth.

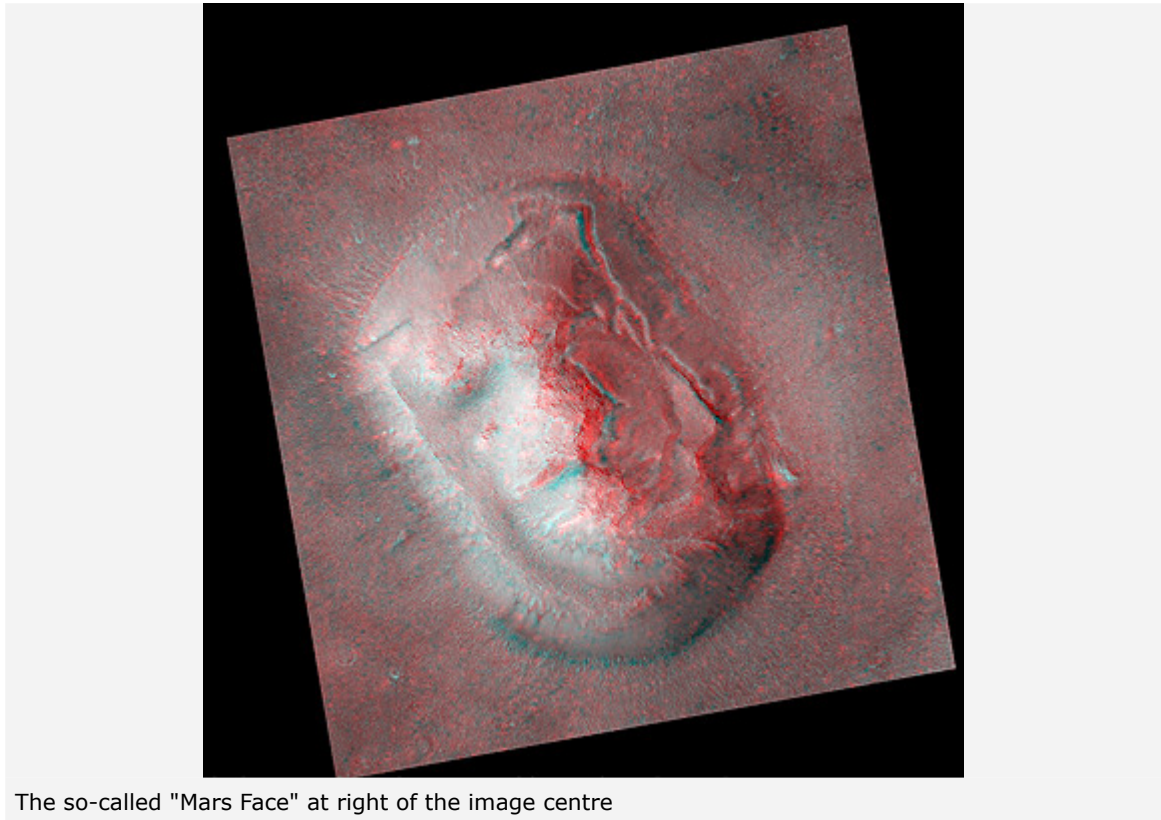
Nevertheless, in the following years, the "Face on Mars" was the cause for much speculation about artificial structures on Mars, their possible origin and purpose. The "Face on Mars" is the most famous formation in an array of structures which have been interpreted by some space-enthusiasts as artificial landscapes, such as potential pyramids and even a ruined city. The idea that Mars could have been home to intelligent beings inspired the imagination of many people interested in the Red Planet and was expressed in numerous, more or less serious, newspaper articles, in science-fiction literature, in television programmes, in computer games and on many webpages.



"Face on Mars" viewed from the south



The 'Face on Mars' - perspective view

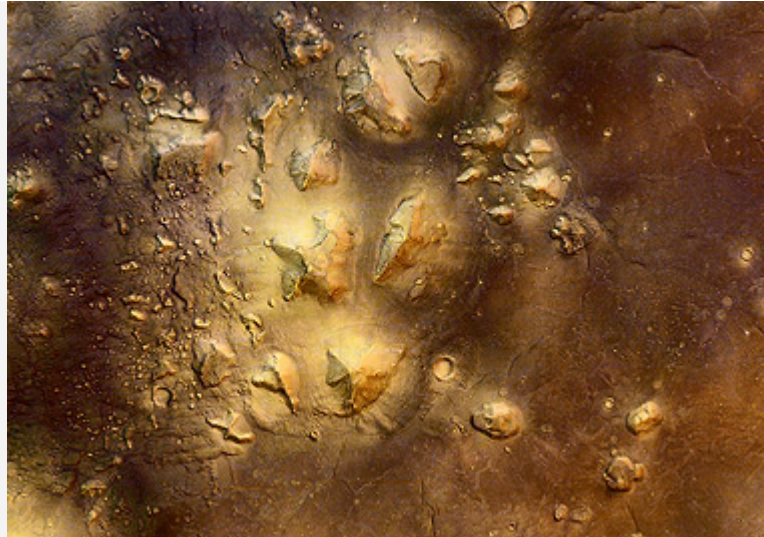


The so-called "Mars Face" at right of the image centre

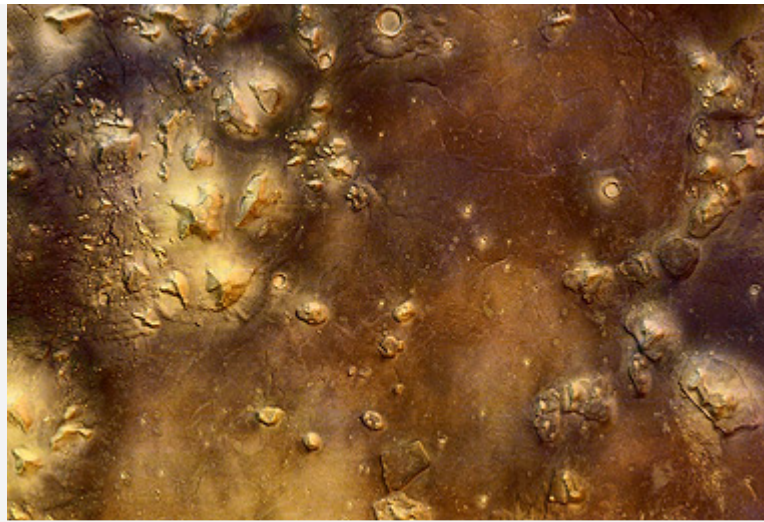
The official scientific interpretation has never changed: the "Face on Mars" has remained an optical phenomenon caused by shadow on a heavily-eroded surface. It took until April 1998, when further image data of the Mars Orbiter Camera on the NASA mission Mars Global Surveyor, helped to confirm this view. Also data from the same orbiter in 2001 verified this interpretation.

Between April 2004 and July 2006, the HRSC experiment on the ESA Mars Express orbiter acquired data in the Cydonia region multiple times. However, high flight altitude, resulting in poor data resolution at the ground (orbit 0262, orbit 2533, orbit 2872), as well as dust and haze in the Martian atmosphere leading to heavily reduced data quality (orbit 1216, orbit 2872) mostly prevented the acquisition of high-quality data of the region. On 22 July 2006, the HRSC was finally successful in orbit 3253. A wide area in Cydonia could be covered in best possible resolution and in 3D.

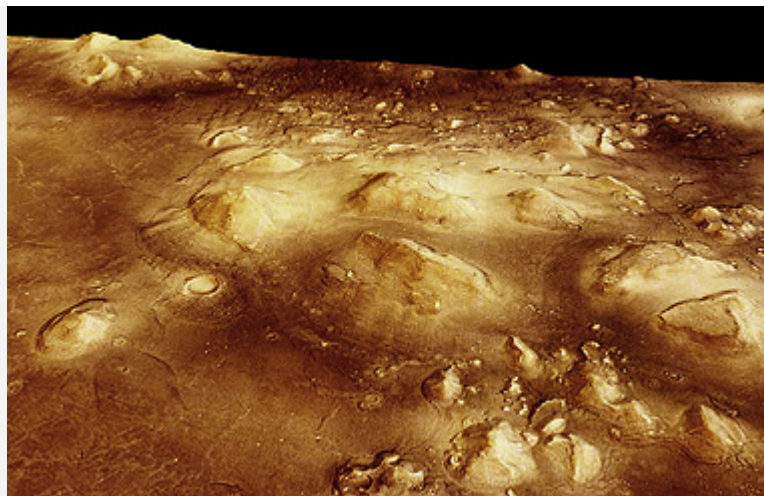
In the HRSC images, there are various views of this area but no face. "We didn't expect anything else!", explains Professor Ralf Jaumann, HRSC Experiment Manager from DLR's Institute of Planetary Research in Berlin, "there is nothing else to see in our HRSC images but an isolated mountain in the plains, shaped by erosion."



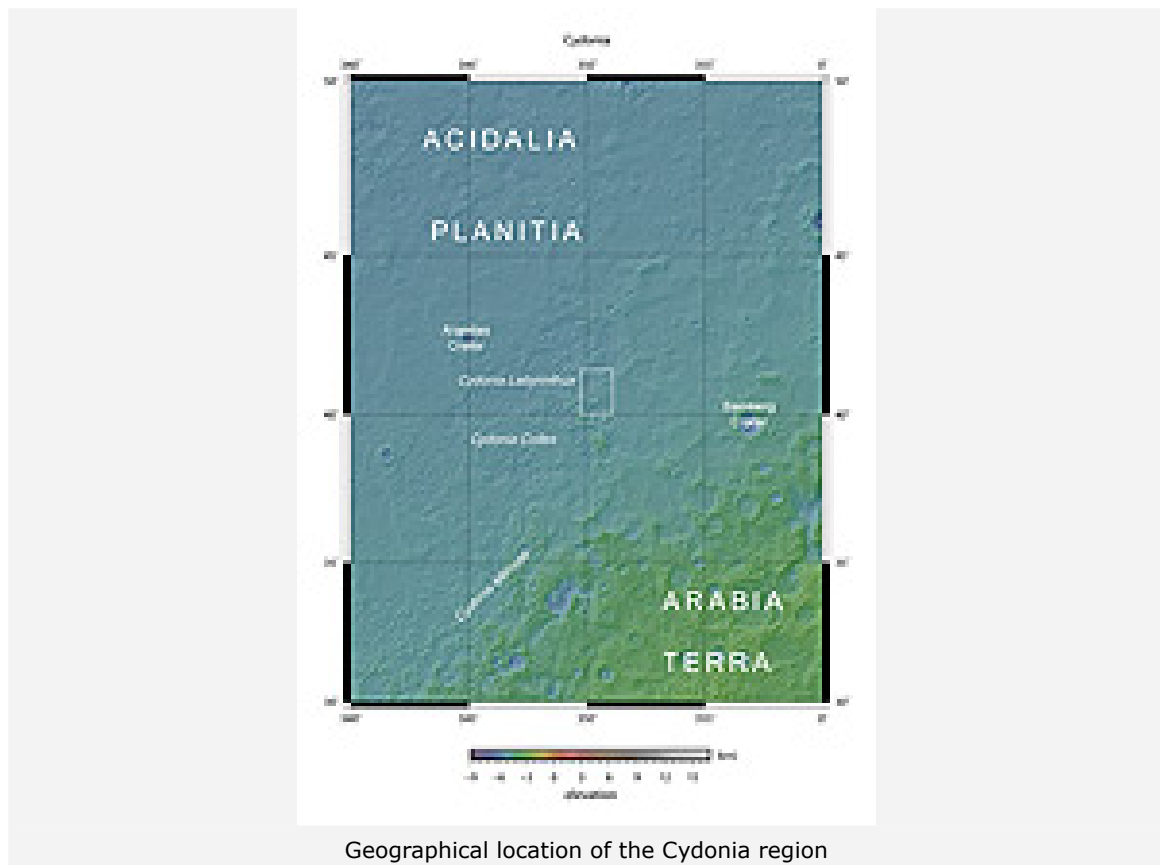
Colour, high-resolution image of the Cydonia region



HRSC colour view of the Cydonia region (orbit 3253)



Perspective view to the South-West of the "Mars Face" formations



The Cydonia region is located in the Arabia Terra region on Mars and belongs to the transition zone between the southern highlands and the northern plains of Mars. This transition, the so-called 'dichotomy boundary', is characterised by wide debris-filled valleys and isolated remnant mounds of various sizes and shapes.

In areas adjacent to Cydonia, debris aprons are frequently found. These are formed at the foot of remnant mounds and probably consist of a mixture of rocky debris and ice. In Cydonia such aprons are often missing in smaller massifs. The formation of debris aprons is considered to be controlled by talus formation and landslides. At the "Face of Mars" such characteristic landslides and an early form of debris apron formation can also be observed.

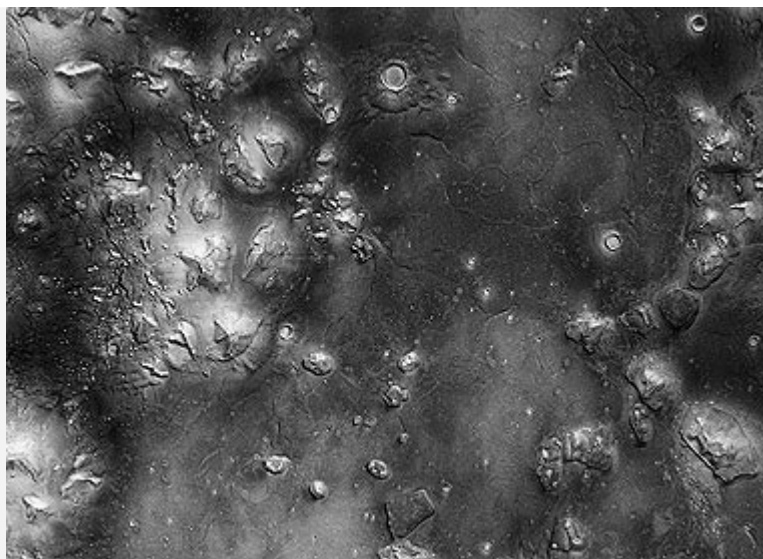
Former larger debris aprons might have been covered up by later lava flows in the surroundings. The western wall of the "Face" moved downslope as a coherent mass. The location of the detachment zone is reflected by a large scarp extending from north to south. The results of large mass wasting are also visible at the foot of the pyramid-like formations.

In addition to the well known "Face on Mars" and the "Pyramids", a skull-like structure is visible in between. It is accordingly taken into account by the selection of the image scenes.

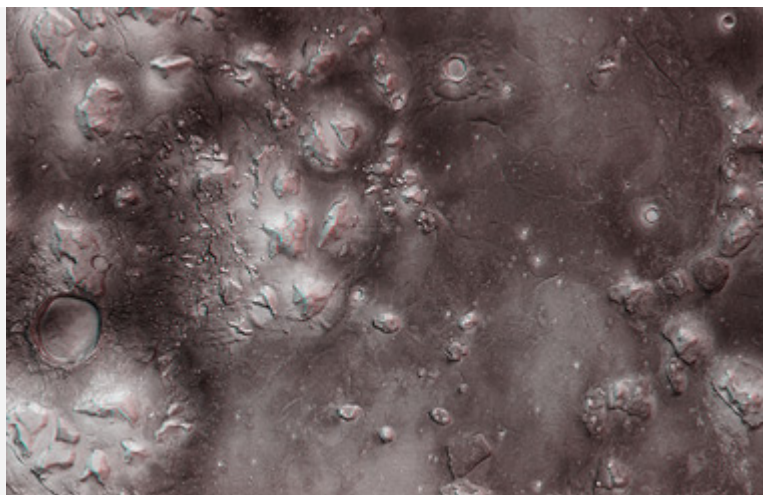
The High Resolution Stereo Camera (HRSC) experiment on the ESA Mars Express Mission is led by the Principal Investigator (PI) Prof. Dr Gerhard Neukum who also designed the camera technically. The science team of the experiment consists of 45 Co-Investigators from 32 institutions and 10 nations. The camera was developed at the German Aerospace Center (DLR) under the leadership of the PI G. Neukum and built in cooperation with industrial partners (EADS Astrium, Lewicki Microelectronic GmbH and Jena-Optronik GmbH). The experiment on Mars Express is operated by the DLR Institute of Planetary Research, through ESA/ESOC. The systematic processing of the HRSC image data is carried out at DLR. The scenes shown here were processed by the PI-group at the Institute for Geosciences of the Freie Universität Berlin in cooperation with the German Aerospace Center (DLR), Institute of Planetary Research, Berlin.



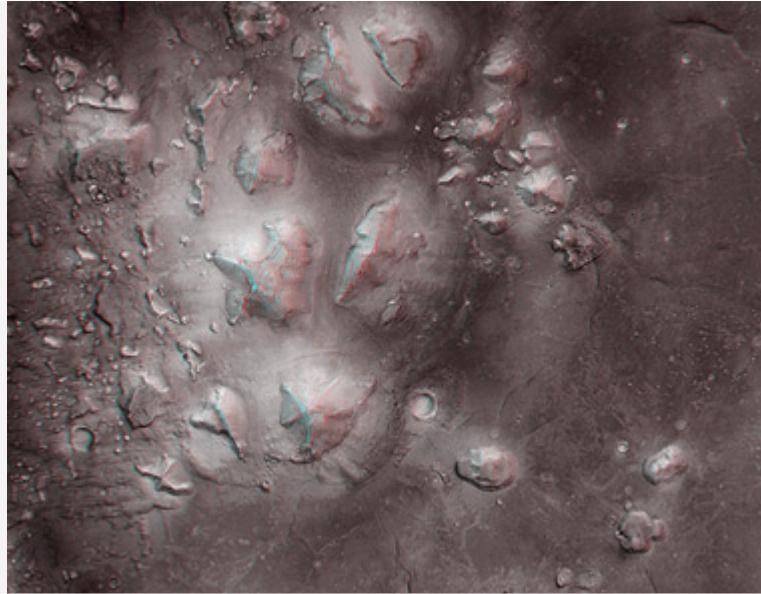
Perspective view from the North-East



High-resolution nadir image of the Cydonia region



The so-called "Mars Face" is located approximately in the image centre



The so-called "Mars Face" is located in the lower right corner

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