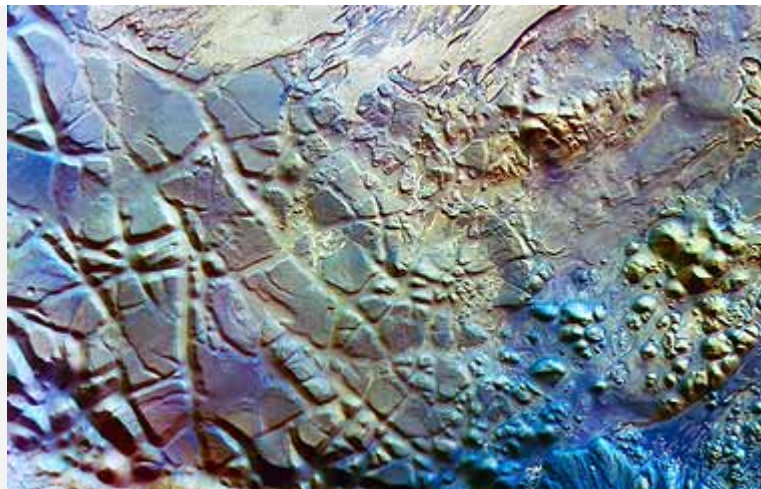


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Aram Chaos, east of Valles Marineris

30 May 2006



Aram Chaos in false colour



Aram Chaos, perspective view

These images, taken by the DLR-operated High Resolution Stereo Camera (HRSC) onboard ESA's Mars Express, show Aram Chaos, a 280-km-wide circular structure characterised by chaotic terrain.



Aram Chaos, 3D anaglyph

As the name 'chaos' suggests, this terrain comprises large-scale remnant massifs, large relief masses that have been moved and weathered as a block. These are heavily eroded and dominate the circular morphology, or structure, which may have formed during an impact.

As seen in the colour image, these remnant massifs range from a few kilometres to approximately ten kilometres wide and have a relative elevation of roughly 1000 metres.

The western region of the colour image is characterised by brighter material, which seems to be layered and could be the result of sedimentary deposition. Distinct layering, causing a terrace-like appearance, is also visible east of this brighter material and in the relatively flat region located in the northwest of the colour image.

Some scientists believe that the numerous chaotic regions located in the eastern part of Valles Marineris were the source of water or ice thought to have created the valleys that extend into Chryse Planitia. These regions are particularly interesting because they may yield clues to the relationship between Valles Marineris, the chaotic terrain, the valleys and the Chryse basin.

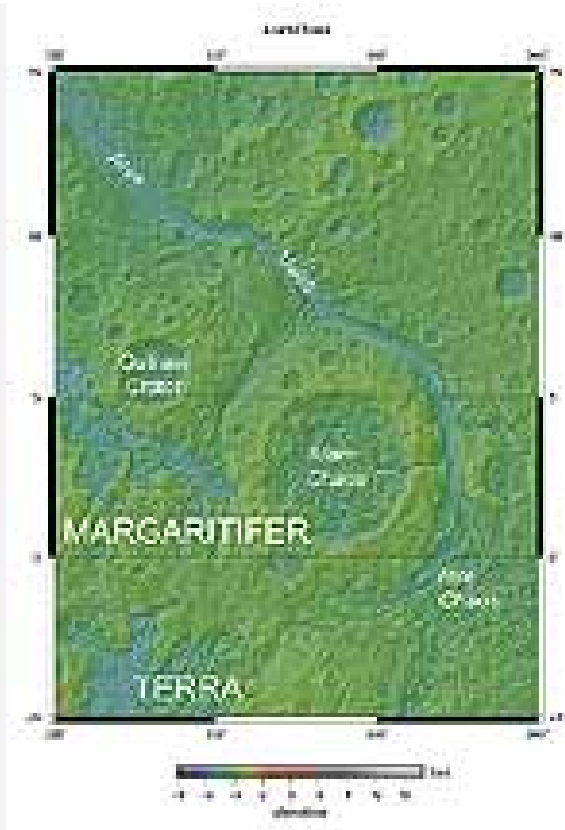


Aram Chaos, colour view



Aram Chaos, black-and-white view

The colour scenes have been derived from the three HRSC colour channels and the nadir channel. The perspective view has been calculated from the digital terrain model derived from the stereo channels. The anaglyph image was calculated from the nadir and one stereo channel. Image resolution has been decreased for use on the internet.



Map showing Aram Chaos in context

The High Resolution Stereo Camera (HRSC) experiment on ESA's 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 Universitaet Berlin (Free University Berlin) in cooperation with DLR's Institute of Planetary Research, Berlin.

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