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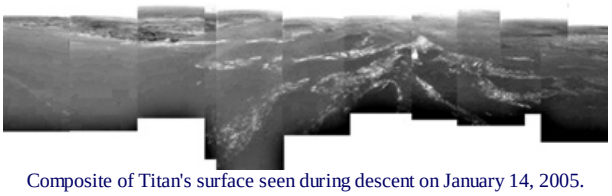
Updated - Cassini/Huygen's First Look At Titan's Surface

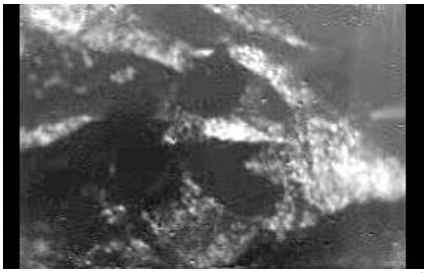
January 14, 2005 Darmstadt, Germany - European Space Agency scientists celebrated today after the first raw images of the Cassini/Huygen space probe sent back the first images of Saturn's moon, Titan, which has been shrouded by thick atmosphere until now.

ESOC's Main Control Room (MCR) at 14:12 CET, 14 January 2005,
as flight control staff wait for first data from Huygens probe as it descended to Titan's surface.



Composite of Titan's surface seen during descent on January 14, 2005.

Huygens at Titan 3 - 16.2 Kilometers Above Titan's Surface
January 14, 2005

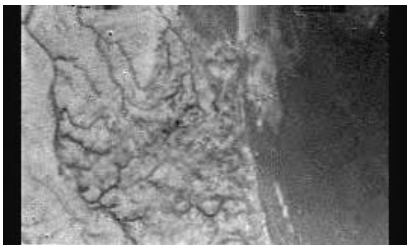


Huygens raw image at 16.2 kilometers above Titan's surface.
Credit: ESA/NASA/University of Arizona.

Raw image returned at 16.2 kilometers from Titan's surface, with a resolution of approximately 40 meters per pixel. ESA said, "It apparently shows short, stubby drainage channels leading to a shoreline." It was taken with the Descent Imager/Spectral Radiometer, one of two NASA instruments on the probe.

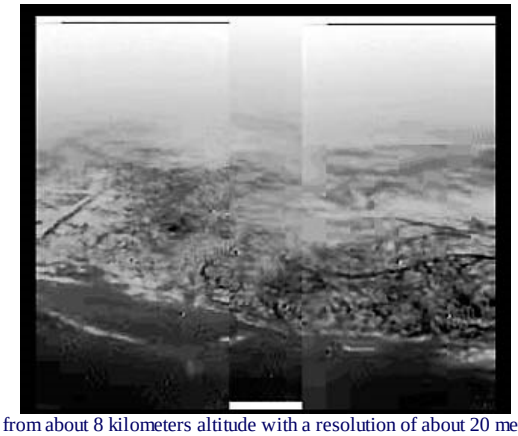
The Cassini-Huygens mission is a cooperative project of NASA, the European Space Agency and the Italian Space Agency. The Jet Propulsion Laboratory, a division of the California Institute of Technology in Pasadena, manages the Cassini-Huygens mission for NASA's Science Mission Directorate, Washington, D.C. The Cassini orbiter and its two onboard cameras were designed, developed and assembled at JPL. The Descent Imager/Spectral team is based at the University of Arizona, Tucson, Arizona.

Huygens at Titan 2 - 8 Kilometers Above Titan's Surface.
January 14, 2005



Huygens raw image at 8 kilometers above Titan's surface.
Credit: ESA/NASA/University of Arizona.

Raw image returned by the European Space Agency's Huygens probe at 8 kilometers from Titan's surface, with a resolution of 20 meters per pixel. ESA said, "It shows what could be the landing site, with shorelines and boundaries between raised ground and flooded plains." It was taken with the Descent Imager/Spectral Radiometer, one of two NASA instruments on the probe.

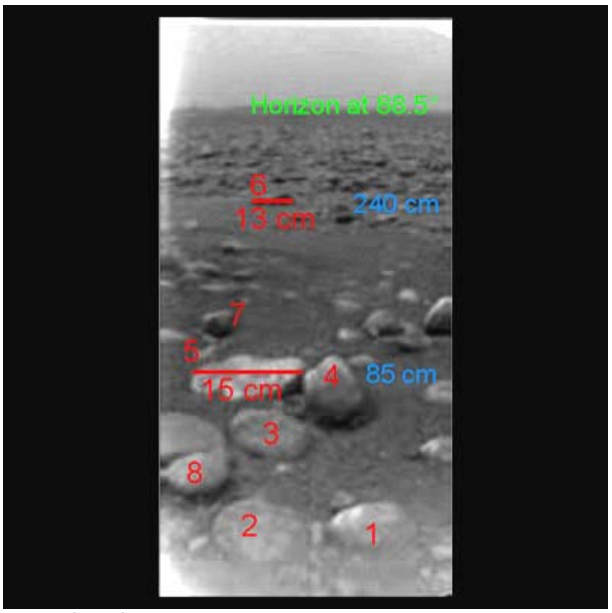


Also image from about 8 kilometers altitude with a resolution of about 20 meters per pixel shows boundary between high, lighter-colored terrain and and darker lowland area on Titan. This composite was produced from images returned January 14, 2005, by ESA's Huygens probe. ESA reports: "There appear to be drainage channels and darker lower areas." Image source: ESA/NASA/JPL/University of Arizona.

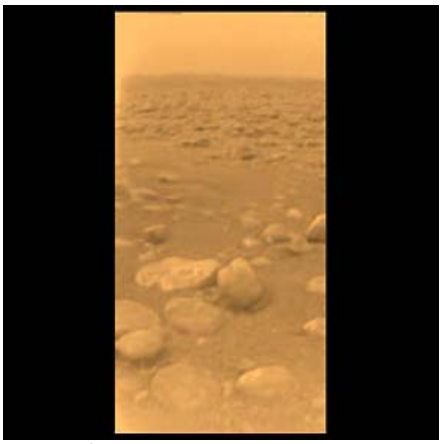
Huygens at Titan 1 - On Titan's Icy Surface
January 14, 2005

Huygens raw image from Titan's surface.
Credit: ESA/NASA/University of Arizona.

ESA reports: "This raw image was returned by the Descent Imager/Spectral Radiometer camera onboard the European Space Agency's Huygens probe after the probe descended through the atmosphere of Titan. It shows the surface of Titan with ice blocks strewn around. The size and distance of the blocks will be determined when the image is properly processed."



Raw surface of Titan with scale captions added by European Space Agency.


First color view of Titan's surface covered by "boulders" most likely made of frozen methane.

Websites:

http://www.esa.int/esaCP/index.html

http://saturn.jpl.nasa.gov.

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