

## Parachuting to Titan: Update 1

## January 14 2005

Radio astronomers confirm Huygens entry in the atmosphere of Titan. The Robert C. Byrd Green Bank Telescope (GBT) in West Virginia, USA, a part of the global network of radio telescopes involved in tracking the Huygens Titan probe, has detected the probe's 'carrier' (tone) signal.

The detection occurred between 11:20 and 11:25 CET, shortly after the probe began its parachute descent through Titan's atmosphere. The extremely feeble signal was first picked up by the Radio Science Receiver supplied by the NASA Jet Propulsion Laboratory. This signal is an important indication that the Huygens probe is 'alive'. However, it does not contain yet any substance; the latter is expected to come a few hours later via the Cassini spacecraft.

It indicates that the back cover of Huygens must have been ejected, the main parachute must have been deployed and that the probe has begun to transmit, in other words, the probe is 'alive'. This, however, still does not mean that any data have been acquired, nor that they have been received by Cassini.

Two hours will take the European Space Agency's Huygens probe to parachute to the surface of Titan. Descending through thick orange clouds, Huygens will taste Titan's atmosphere, measure its wind and rain, listen for alien sounds and, when the clouds part, start taking pictures.

Huygens rode to Saturn onboard NASA's Cassini spacecraft. The trip lasted 7 years. Cassini arrived in July 2004 and is now orbiting Saturn.



Huygens remained onboard until Dec. 25th when it separated from its mothership and headed for Titan.

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