



First results on the characteristics of Titan's atmosphere by the Huygens Atmospheric Structure Instrument (HASI) measurements.

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The Huygens Atmospheric Structure Instrument (HASI) operated nominally during the entry, descent, impact and surface phases of the Huygens probe mission at Titan.

The accelerometers (ACC sensors) provided the data from the very beginning of the entry phase ($h > 1300$ km) and down to the impact phase at the surface of Titan.

Temperature and pressure profile were obtained by direct measurements of temperature (TEM sensors) and pressure (PPI package) during the descent and the surface of Titan, providing us with hints on the physical structure of Titan's atmosphere.

The electrical properties, as the permittivity at 45 Hz and the conductivity of the atmosphere have been measured during the whole descent phase and at the surface of Titan by sensors of the Permittivity, Wave and Altimetry package (PWA) .

The radar altimeter data collected in the range of elevation 45-0.15 km have been processed by the HASI PWA data processing unit, providing us with both information on the elevation of the probe in the last part of the descent and on some physical properties of Titan's surface.

A summary of the obtained results will be presented and discussed.