



## **First in-situ Observations of Lightning and related Phenomena in the Atmosphere of Titan**

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The CASSINI/HUYGENS mission provided for the first time the opportunity to investigate in-situ electrical phenomena in the atmosphere of Titan. During the descent of the HUYGENS probe the electric sensors of the Permittivity, Wave and Altimetry experiment (PWA) as part of the Huygens Atmospheric Structure Instrument (HASI) observed fluctuations of the electric field up to 10 kHz. The observed events below 140 km have been compared with the electric field of lightning and resonance phenomena observed on earth and calculated with a numerical model.