Polar ionic conductivity in Titan Atmosphere. Measurements of Relaxation Probe of HUYGENS HASI

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The PWA is a subsystem of HASI, one of the six instruments onboard the Huygens probed that successfully landed in Titan. PWA was equipped with two Relaxation Probes devoted to the determination of the conductivity of the atmosphere of Titan. It worked from 140 km down to the surface. However, due to the loss of Channel A in the Huygens-Cassini link, we lost the measurements of the Relaxation Probe more sensible and hence collected data in from 140 to 40 km. The method of sounding allows the determination of the conductivity due to negative and positive charges. We present in this work the conductivity of the Titan Atmosphere from 140 down to 40 km.