LOFAR observations of Saturn's atmosphere

Daniel Gautier^{*1}

¹Observatoire de Paris (LESIA) – CNRS : UMR8109 – Place J. Janssen 92190 Meudon, France

Résumé

The LOFAR interferometer permits us to measure the brightness temperature emitted by Saturn at meter wavelenghts. We show that they will provide us with the temperature profile of the deep troposphere of the planet in a region where the opacity is mainly due to water vapor. As a result, it will be possible to infer the O/H ratio, an information necessary to fit the gravitational moments measured by the Cassini spacecraft and then to infer the structure of the interior of the planet.

^{*}Intervenant