

Preliminary results about temperature effect in Titan ionospheric chemistry

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We will present first results obtained by an experimental simulation of Titan ionospheric chemistry with a high resolution and temperature adjustable mass spectrometer (Fourier Transform Ion Cyclotron Resonance). Nitrogen ions are selected in the ion trap filled with a nitrogen/methane mixture. Mass spectra are recorded as a function of time and temperature. The aim is to investigate changes in the global ion chemistry when varying temperature from 300K down to 130K.