



Stability of the methane and the ethane in Titan atmosphere

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The climate model that we have developed is able to give accurate prediction of the haze and the clouds in the lower atmosphere. We used this model to study the behaviour of the methane and the ethane in the troposphere of Titan. We find that the methane tends to evaporate from the latitudes near the equator and the tropics and accumulate in the polar regions. Ethane is directly transported in the winter polar region by the stratospheric circulation. In this work we try to correlate the predictions of the model and the recent observations of lakes and clouds in the winter (northern) polar region.