



## **Observations of CO on Saturn and Uranus at millimeter and submillimeter wavelength**

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An external supply of oxygenated compounds exists on outer planets. Carbon monoxide has been detected on each giant planet. The source of CO has been proved to be mainly external on Jupiter and Neptune, but this is still not clear in the case of Saturn and Uranus. Therefore, constraining the amount of CO in the stratosphere and/or high troposphere of these planets would help solve this problem.

We performed observations of Saturn and Uranus at millimeter and submillimeter wavelengths in the CO (1-0), (2-1) and (3-2) lines. Observations were carried out with the IRAM 30-m telescope (Pico Veletta, Spain) in september 2006 and with the JCMT 15-m telescope (Hawaii, USA) in january 2008. We have recorded broad multi-band spectra of each planet using Lellouch et al (2005) observing technique. The results of these observations will be presented and discussed.

Reference :

Lellouch et al, 2005. A&A, 430, L37-L40