

A mapping of water vapor and a study of CO in the Martian atmosphere using OMEGA/Mars Express

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The OMEGA imaging spectrometer aboard Mars Express has been used to map water vapor over the seasonal cycle, using the 2.6 microns H₂O band. Two periods have been studied in particular : (1) Ls = 330-40°, around the equinox and (2) Ls = 93-126°, at the time of maximum water sublimation around the north pole (Encrenaz et al., *Astron. Astrophys.* 441, L9, 2005 ; Melchiorri et al., submitted to *Planet. Space Sci.*, 2006). An extended coverage of the water vapor mapping will be shown, using more recent data. In addition, preliminary results on the CO abundance will be presented, from the analysis of the CO(2-0) band at 2.35 microns. Results will be discussed and compared with other measurements and with the GCM predictions.