



## **Diversity of atmospheric components, detected by OMEGA/MEX limb observations**

Brigitte Gondet, Jean-Pierre Bibring, and Mathieu Vincendon

CNRS / Université Paris Sud, Institut d' Astrophysique spatiale (IAS), Orsay Campus, France (brigitte.gondet@ias.fr)

Since 2004 OMEGA has acquired more than 500 vertical limb profiles at various locations, seasons and illuminations. With its 1 mrad IFOV, the vertical sampling is in the kilometer scale. At each altitude step, OMEGA acquires the full spectrum, in more than 300 spectral channels covering the range .5 to 5.1  $\mu\text{m}$ . The spectral features (continuum slope, absorption and emission bands) are diagnostic of all atmospheric constituents: molecules, grains, icy particles, clouds. Their monitoring in time and space offers a unique means to decipher the atmospheric processes taking place in the Mars environment. We will present and discuss them, primarily within the frame of the H<sub>2</sub>O and CO<sub>2</sub> cycles.