

## Hydrated minerals on Mars as seen by MEx-OMEGA

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Numerous geomorphic features on Mars support for the past existence of large quantities of surface or near-surface water. Thanks to the spectral range, spectral resolution and high S/N of OMEGA, characteristic water and hydroxyl absorptions in the 1.9, 2.2-2.5, and 3-4  $\mu$ m ranges can be unambiguously identified. In contrast to the 3  $\mu$ m feature present in all OMEGA spectra, the other features, found in a variety of hydrated minerals, hydroxides, clays and salts, are identified in some specific areas only (Bibring et al. 2005, submitted). We will present the nature of the hydrated minerals detected by OMEGA by focussing this work on the hydrated silicates, hydroxides and clays. The morphology of the different hydrated mineral-rich units will be then examined, and the implications on the past climate on Mars discussed.