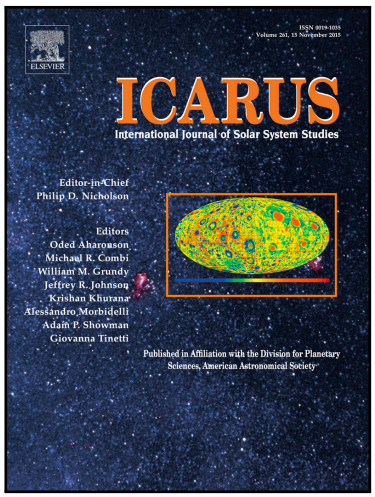

What is controlling the reflectance spectra (0.35- 150 μm) of hydrated (and dehydrated) carbonaceous chondrites?

Pierre Beck , A. Maturilli , A. Garenne , P. Vernazza , J. Helbert , E. Quirico , B. Schmitt

PII: S0019-1035(17)30780-7
DOI: 10.1016/j.icarus.2018.05.010
Reference: YICAR 12898

To appear in: *Icarus*

Received date: 8 November 2017
Revised date: 1 March 2018
Accepted date: 14 May 2018

Please cite this article as: Pierre Beck , A. Maturilli , A. Garenne , P. Vernazza , J. Helbert , E. Quirico , B. Schmitt , What is controlling the reflectance spectra (0.35- 150 μm) of hydrated (and dehydrated) carbonaceous chondrites?, *Icarus* (2018), doi: 10.1016/j.icarus.2018.05.010

Highlight:

- The 0.7 μm feature in hydrated carbonaceous chondrites correlates with water content.
- Continuum reflectance is not related to carbon content but primary mineralogy
- The CR1 has a spectra very similar to CM, and shows an 0.7 μm feature
- The surface of Cgh/Ch asteroids is a mixture of hydrated and not hydrated material
- Goethite like 3-μm band are observed for some CR chondrites and heated CM.