Supplementary Information

Laboratory and field characterization of visible to near infrared spectral reflectance of nitrate minerals from the Atacama Desert, Chile and implications for Mars

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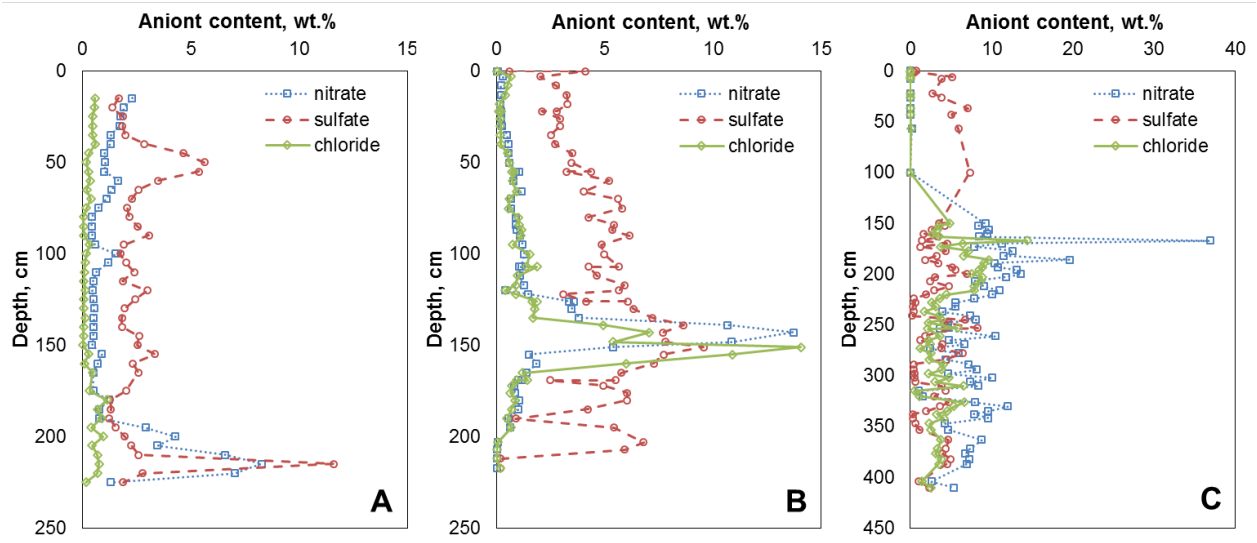

Figure S1 Variations of the anion contents (unit: wt.%) with depth for the LT (A), ST (B) and CCP (C) profiles. The anion contents at the LT site were previously reported in the unit of mmol (g soil)$^{-1}$ in Wang et al. (2015).

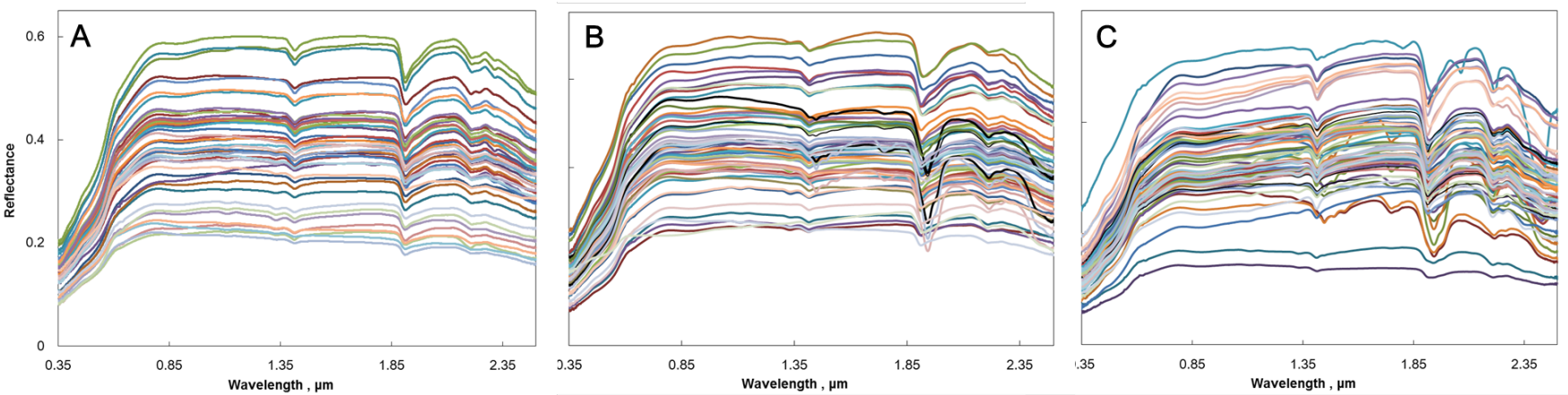

Figure S2 The laboratory reflectance spectra of three sets of regolith samples from the LT (A), ST (B) and CCP (C) profiles

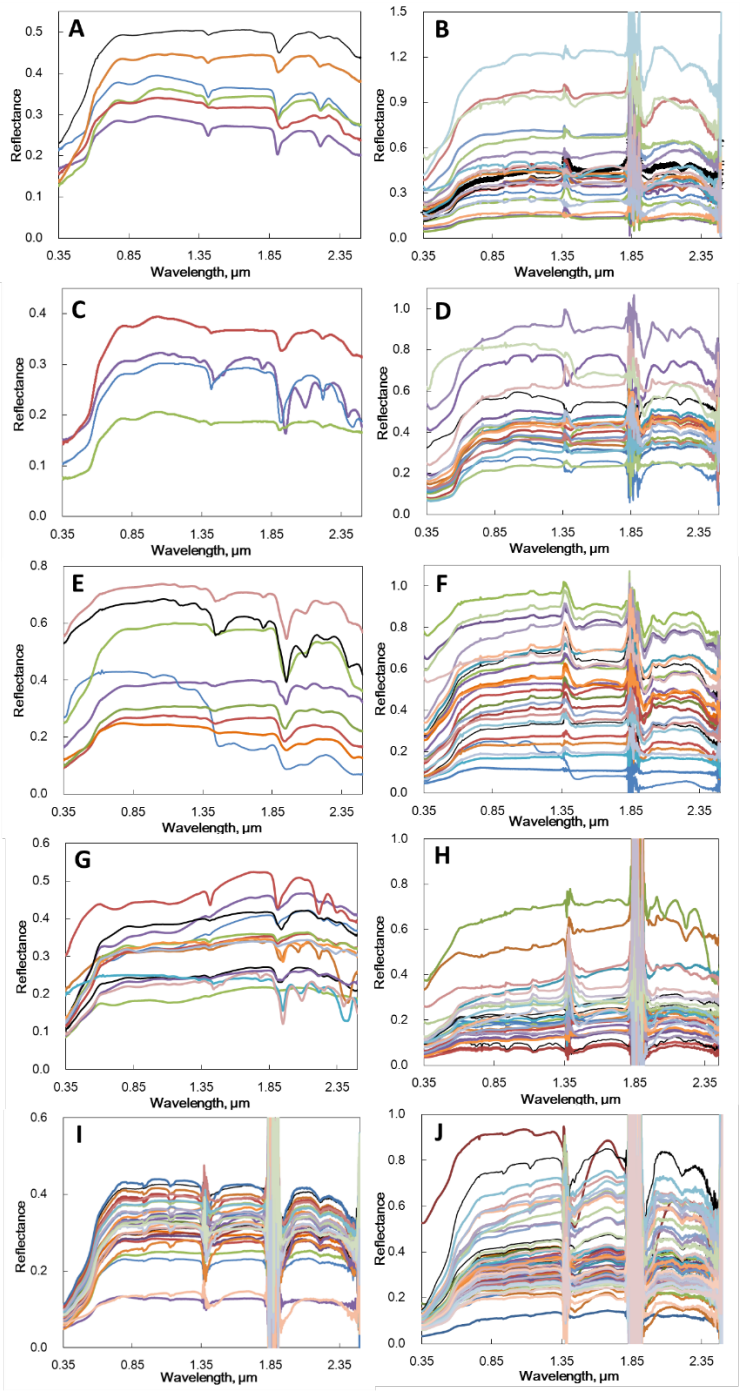

Figure S3 Reflectance spectra collected in the laboratory for returned samples (A-Baquedano mine, C-Baquedano pit 1, E-Sierra Gorda mine, G-Tama mine) and in the field (B-Baquedano mine, D-Baquedano pit 1, F-Sierra Gorda mine, H-Tama mine, I-Salar de Carmen, J-Salar de Grande). The significant absorptions around 1.4 and 1.9 µm in the field spectra are caused by atmospheric water.

Reference

Wang, F., Michalski, G., Seo, J.H., Granger, D.E., Lifton, N., and Caffee M. (2015) Beryllium-10 concentrations in the hyper-arid soils in the Atacama Desert, Chile: Implications for arid soil formation rates and El Niño driven changes in Pliocene precipitation. Geochimica et Cosmochimica Acta, 160, 227-242.