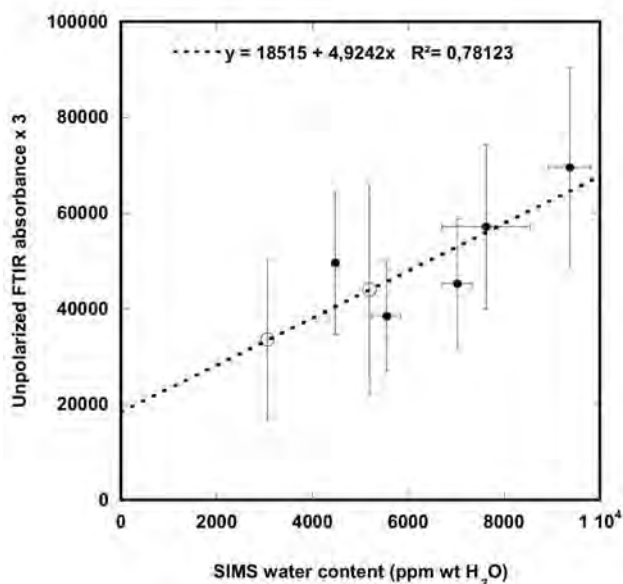
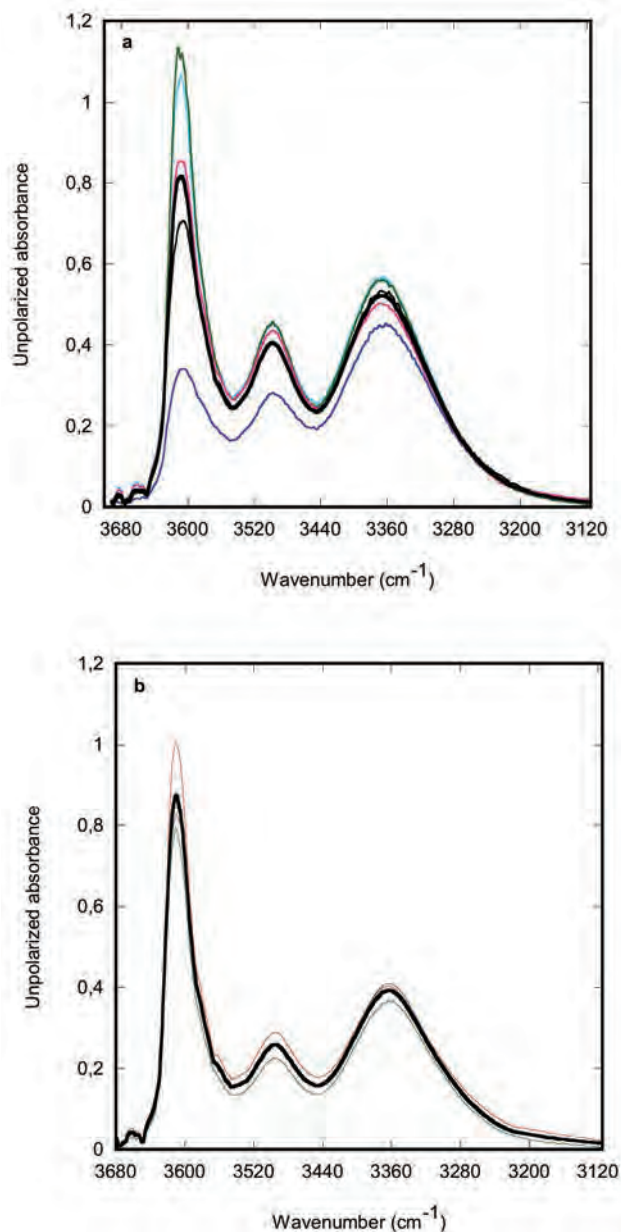


Supplementary Figure 1



**Supplementary Figure 1.** An estimation of the water content in samples 963a and b, that were not analyzed by SIMS, was performed using unpolarized FTIR measurements (see Supplementary Fig. 2). A working curve using the average of unpolarized absorbencies (x3) as a function of the SIMS water content was established (full circles) and used to calculate the water content in samples 963a and b from their average absorbance (empty circles).

Supplementary Figure 2



**Supplementary Figure 2.** Unpolarized FTIR spectra of samples 963a and b showing the average (thick curve) of several spectra taken on randomly oriented grains. Sample thickness is 50  $\mu$ m.