Nitric acid-induced surface disordering on ice

Supporting Information

Samar G. Moussa[†], Min H. Kuo, V. Faye McNeill^{*}

Department of Chemical Engineering, Columbia University, New York, New York 10027

[†] Current Address: Atmospheric Science and Technology Dictorate, Science and Technology Branch, Environment Canada, 4905 Dufferin Street, Toronto, Ontario.

Author to whom correspondence should be addressed: vfm2103@columbia.edu; phone (212) 854-2869; FAX (212) 854-3054



Figure S1: Time study of phase-modulated ellipsometry signals for a constant-temperature experiment in the hydrate regime of the HNO_3 -ice phase diagram. Top panel is the x-signal and the bottom panel is the y-signal.



Figure S2: HNO₃ CIMS signal (HF·NO₃⁻ peak at m/z 82) for an experiment under hydrate formation conditions (top) and another in which HNO₃–induced DIL was detected using ellipsometry (bottom).