Probing ice VII crystallization from amorphous NaCl-D₂O solutions at gigapascal pressures

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Supplementary Material

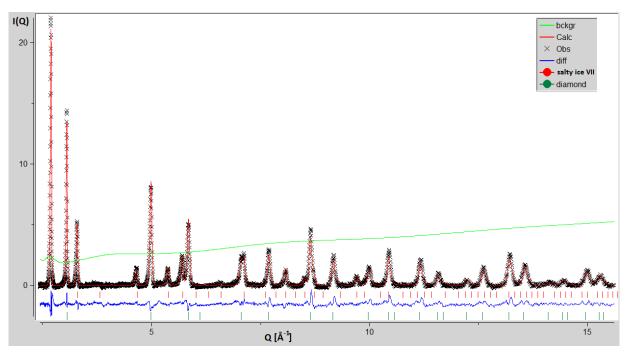


Fig. S1 GSAS fit of sample A at 260 K and 3.6 GPa with a model of salty ice VII (R = 11.5). The fit contains the following phases, the peak positions of which are indicated by tick marks. Salty ice VII red, diamond dark green, βN_2 in black.

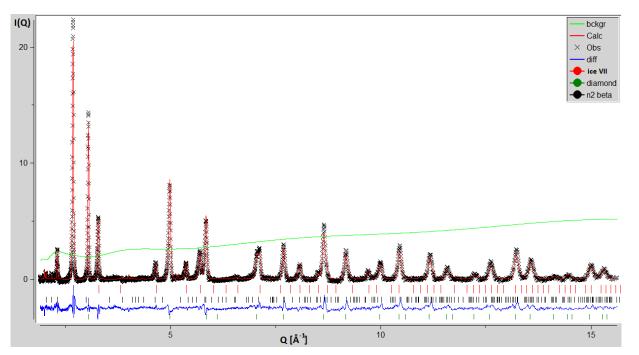


Fig. S2 GSAS fit of sample A at 260 K and 3.6 GPa with a model of pure ice VII. The fit contains the following phases, the peak positions of which are indicated by tick marks. Salty ice VII red, diamond dark green.

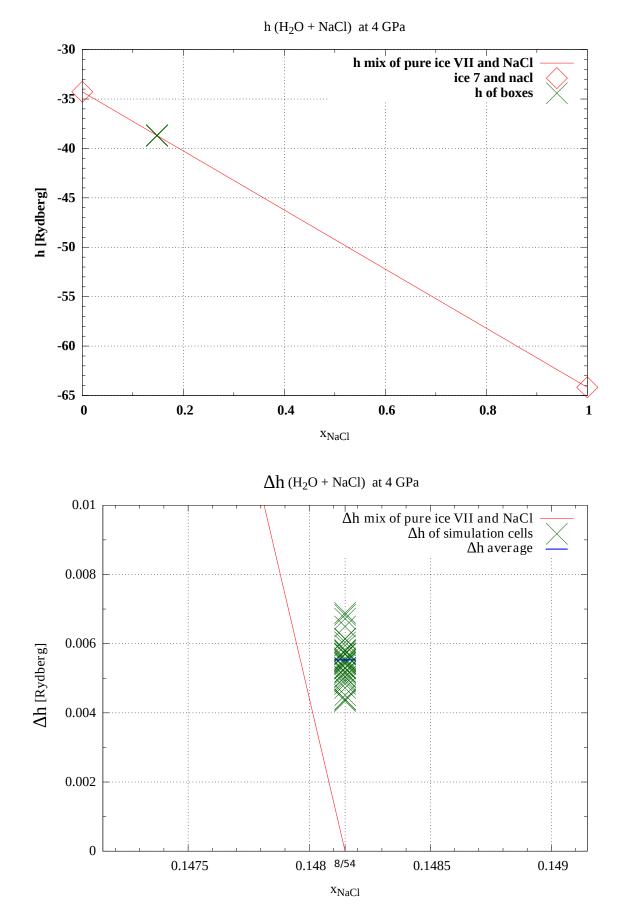


Fig. S3 Convex hull diagram of the Δh enthalpy difference for configurations of salty ice with 8 ions (R = 11.5) at 4 GPa. The abscissa indicated the molar fraction of salt x_{NaCl} . The red line gives the energy corresponding to phase separation at a given concentration. At both pressures the energy of the salty ice lies above that of phase separation.