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Atmospheric Chemistry and Physics Discussions

Interactive comment on "Molecular Dynamics Simulation of the Surface Tension of Aqueous Sodium Chloride: from Dilute to Highly Supersaturated Solutions and Molten Salt" *by* Xiaoxiang Wang et al.

Anonymous Referee #2

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In this paper, the authors use MD simulations to study the surface tension of NaCl aqueous solutions across all concentrations. The authors present results with an intriguing three regime behavior (water-dominated, transition, and molten salt dominated), which appears well supported by the method used. Overall, this is a good and interesting paper and I'd recommend for publication after the authors address a couple of points.

A couple of comments and suggestions:

Can the authors comment further on other systems such as KCl, NH4Cl, NaNO3, and NH4NO3, at least qualitatively? What about mixed-salt systems? Are the same behaviors expected?

In the transition regime, is there any reason entropy is increasing as the mass fraction approaches the efflorescence point?Âă

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