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Supplemental Information for
Urban aerosol chemistry at a land-water transition site during summer – Part 2: Aerosol
pH and liquid water content

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Figure S1: Site map of met stations used in the analysis with Baltimore City, MD as a local urban reference. The instruments in the current study were deployed at the Hart-Miller Island site, while previous studies have utilized data available from the CASTNET and AMoN monitoring networks at the HU-Beltsville and Beltsville sites (© Google Earth).

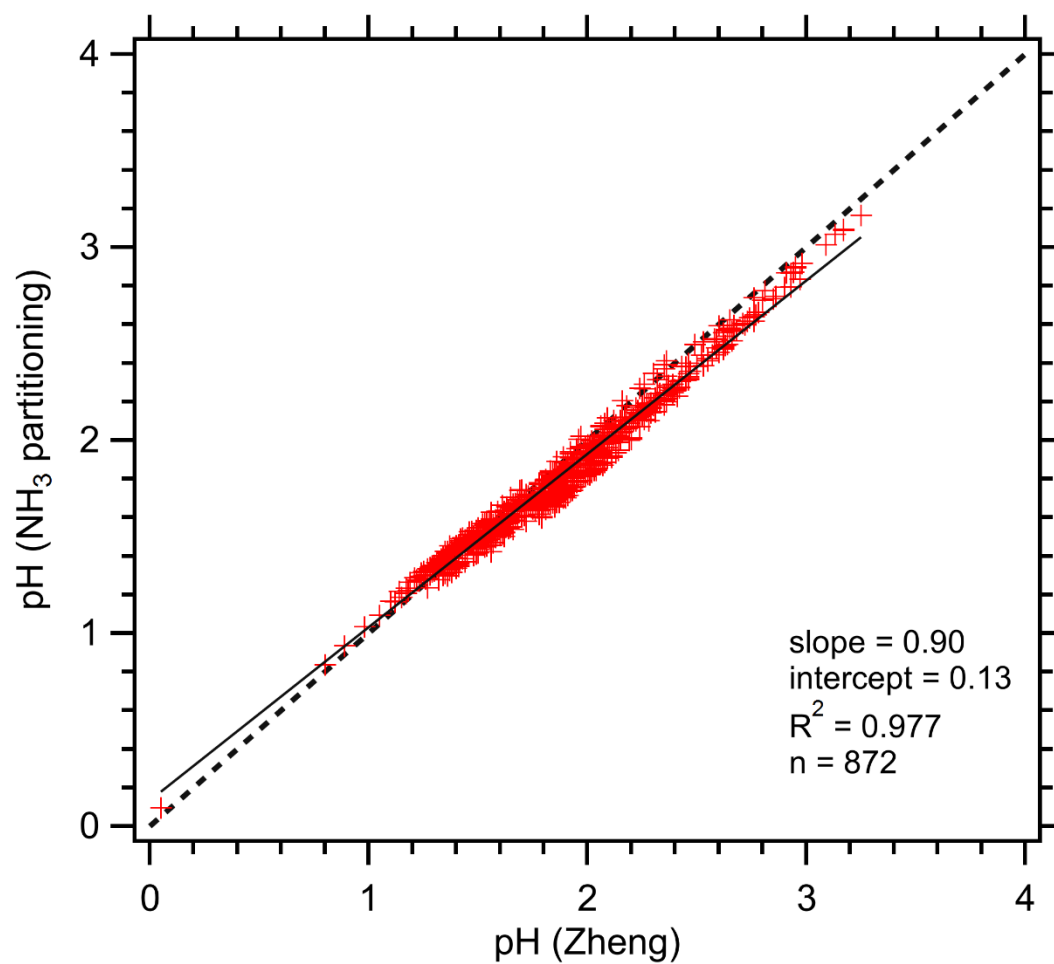


Figure S2: Comparison of aerosol pH computed using the methods of Hennigan et al. (2015) and Zheng et al. (2020).

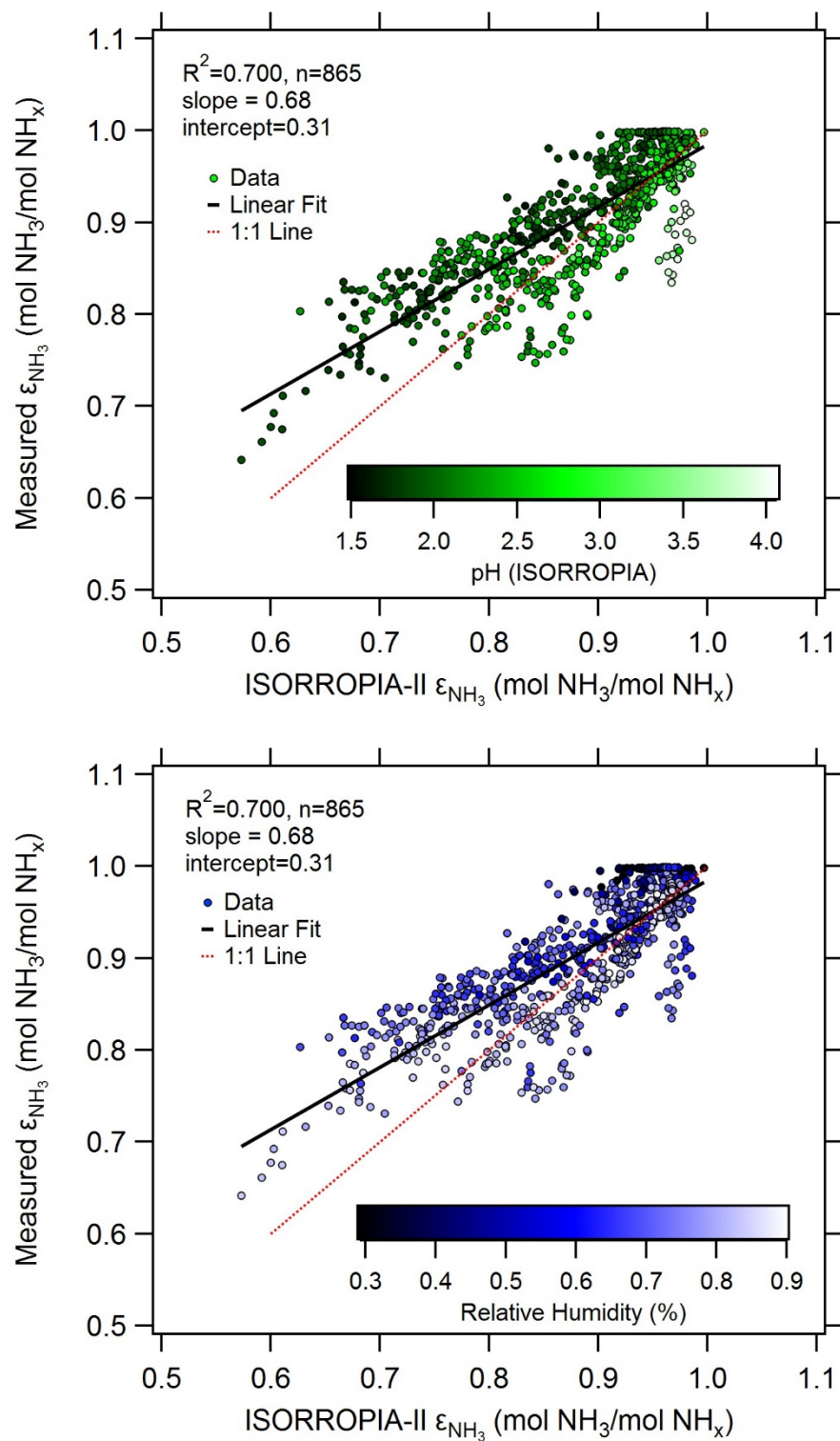


Figure S3: Scatterplots of measured ϵ_{NH_3} vs. ISORROPIA-predicted ϵ_{NH_3} during the OWLETS-2 study colored by ISORROPIA-predicted aerosol pH (top) and measured RH (bottom).

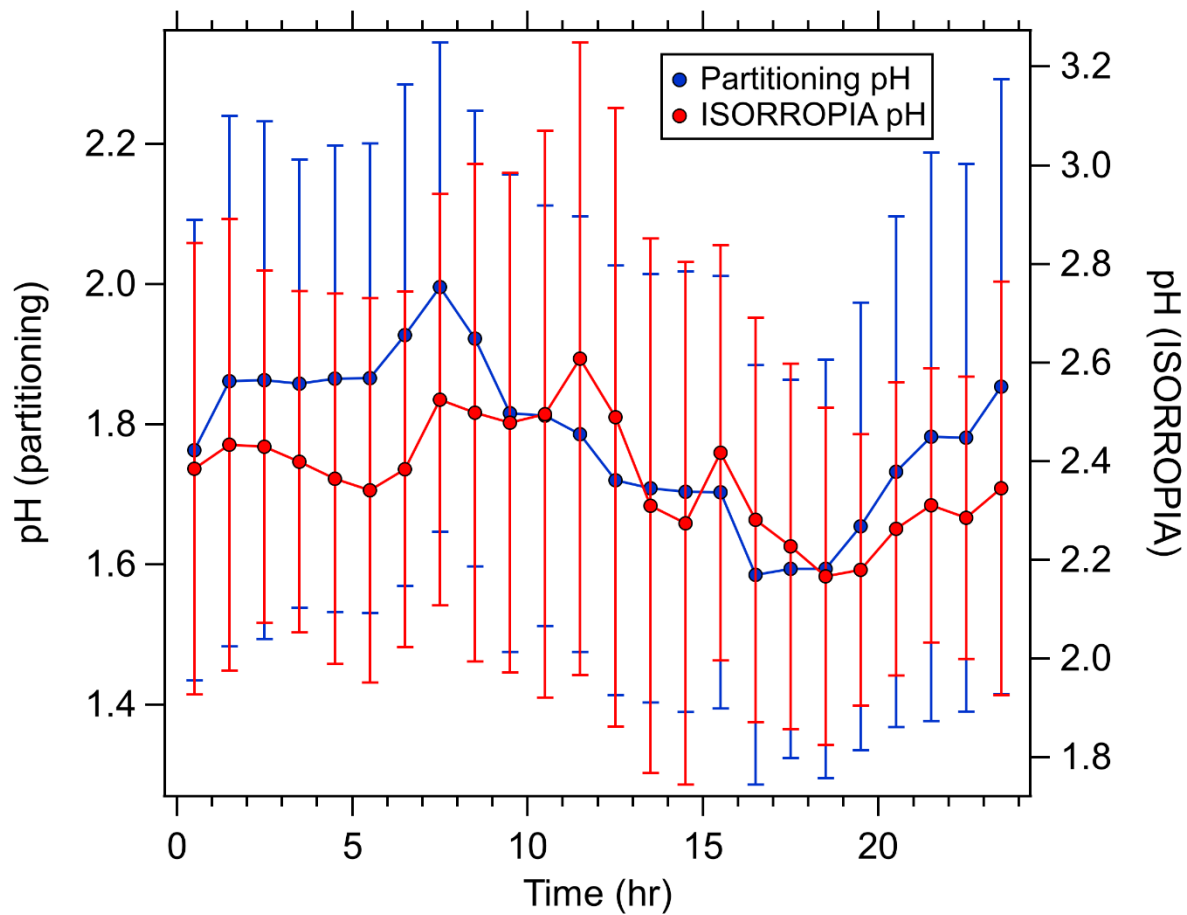


Figure S4: Diurnal profiles of ISORROPIA-predicted aerosol pH and NH₃ partitioning-predicted aerosol pH.

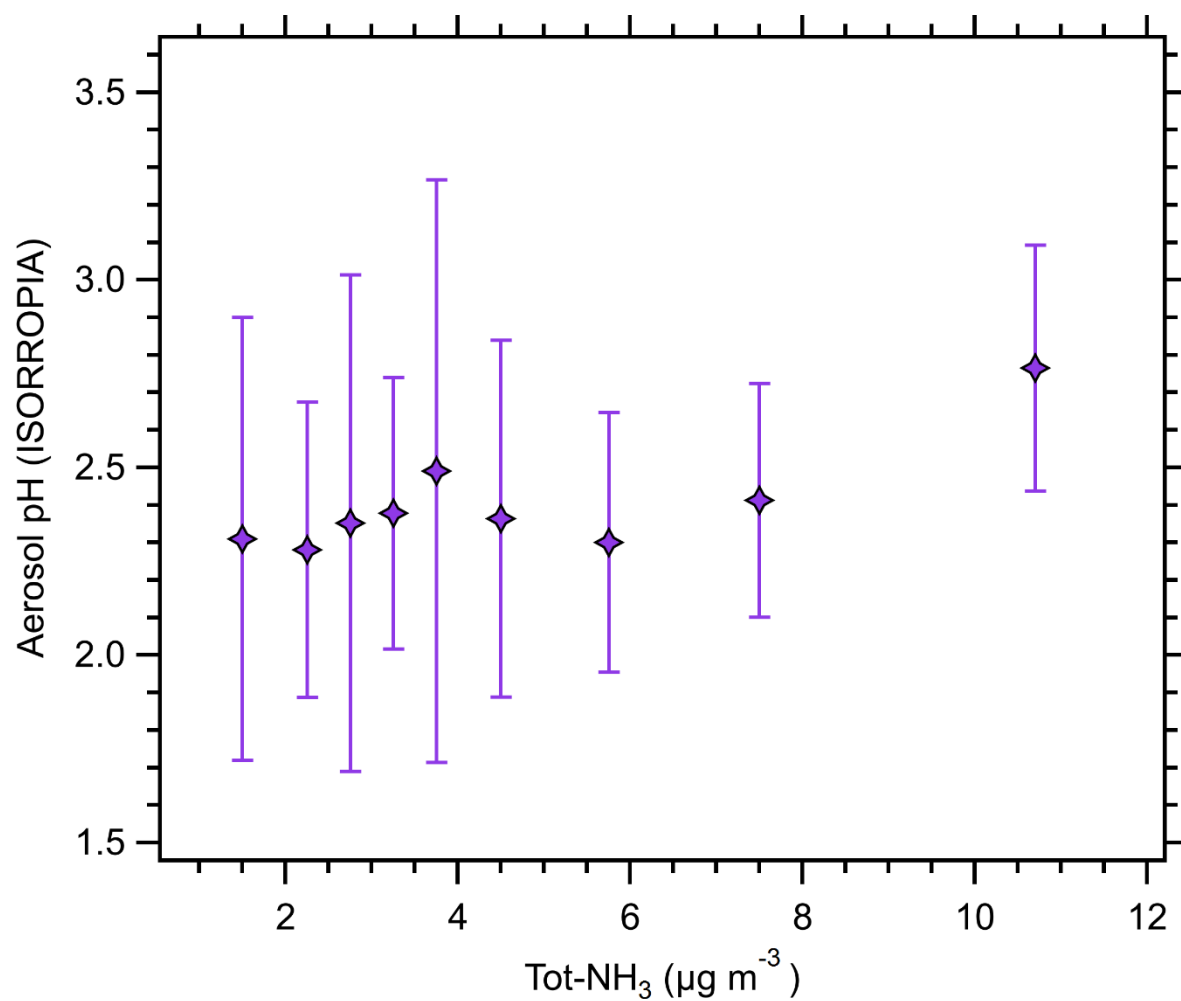


Figure S5: ISORROPIA-predicted aerosol pH (molarity basis) vs. Total NH₃ (= NH₃ (g) + NH₄⁺).

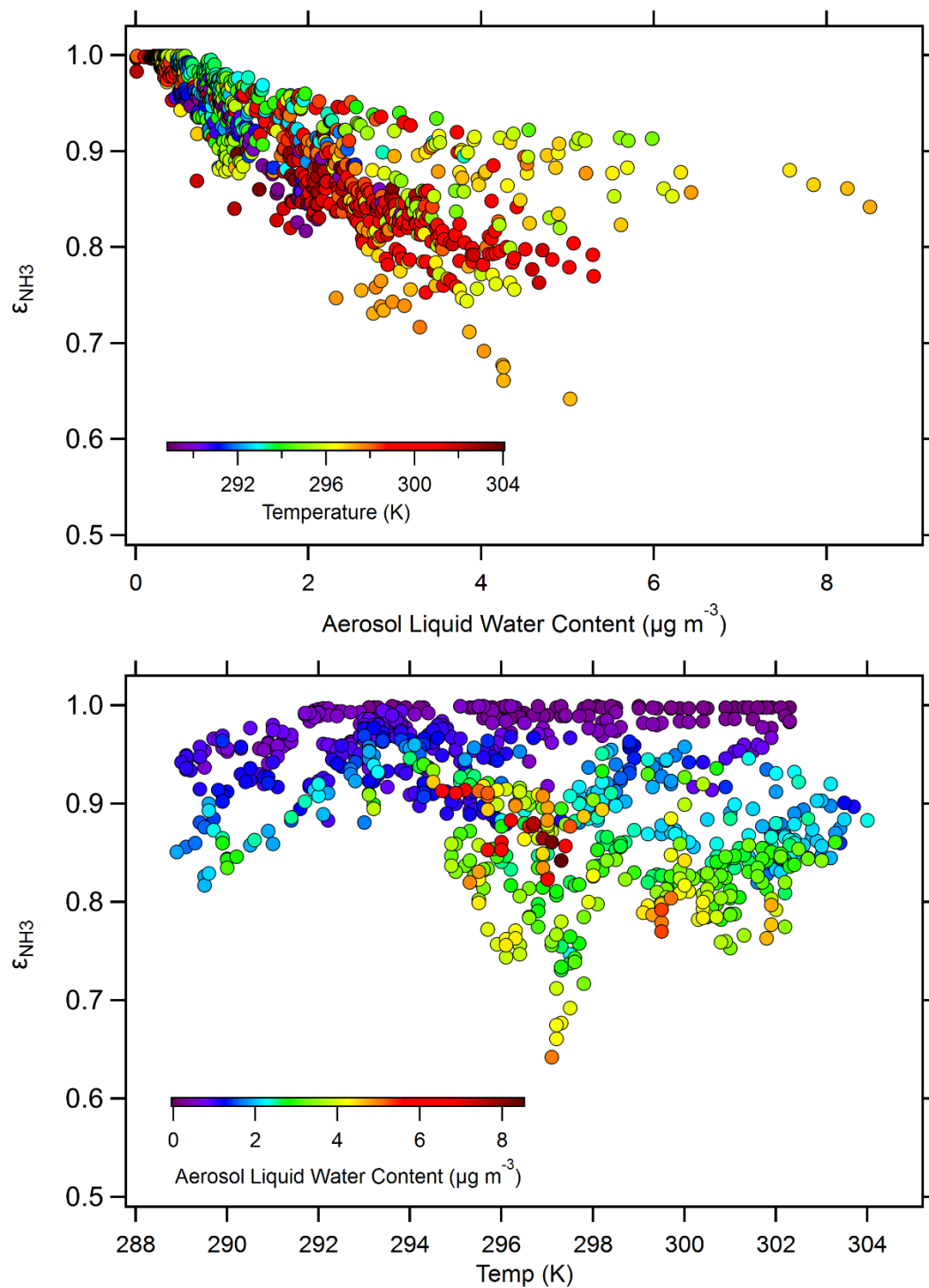


Figure S6: ϵ_{NH_3} vs. ALWC colored by ambient T, and ϵ_{NH_3} vs. ambient T colored by ALWC.

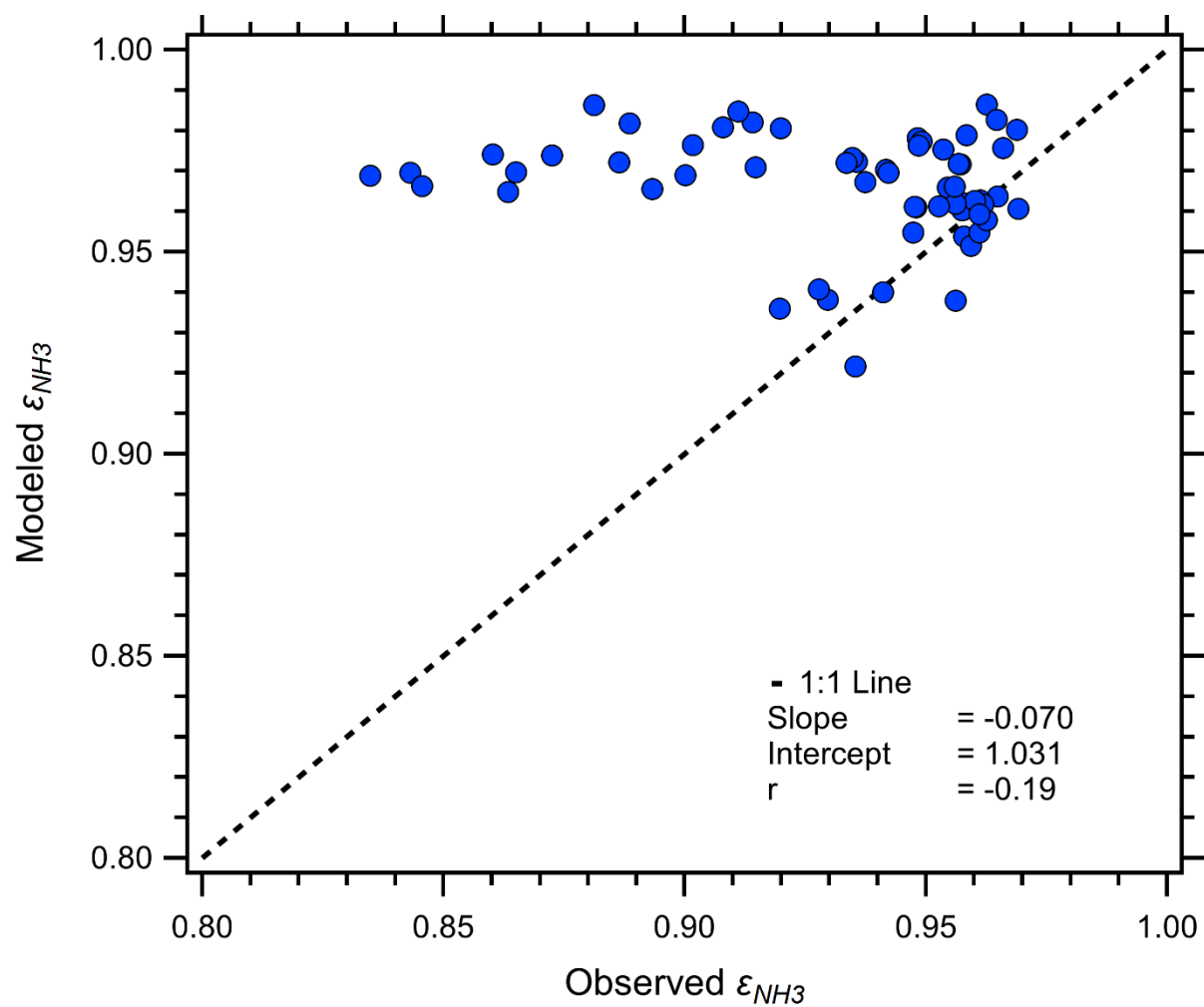


Figure S7: ISORROPIA-predicted ϵ_{NH3} vs. observed ϵ_{NH3} during chloride depletion event observed during OWLETS-2.