Atmos. Chem. Phys. Discuss.,
https://doi.org/10.5194/acp-2018-207-AC1, 2018

Atmospheric Chemistry and Physics Discussions

Interactive comment on "Establishing the Impact of Model Surfactants on Cloud Condensation Nuclei Activity of Sea Spray Aerosols" *by* Sara D. Forestieri et al.

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Received and published: 17 March 2018

It has come to our attention that the particle diameter used in the calculations and experiments in Fig. 5b was incorrectly reported as 180 nm in the caption. The actual seed particle mobility diameter used was 150 nm, which after accounting for the NaCl shape factor, is equivalent to a diameter for use in the Kohler calculations of 142 nm. A corrected caption is provided below.

We thank Prof. Andreas Zuend (McGill Univ.) for pointing out the discrepancy between the figure and the information in the caption.

Figure 5. (A) Apparent κ values as a function of εorg as calculated from the critical supersaturation for NaCl particles coated with oleic acid (circles), a mixture of myristic acid and oleic acid (squares), a mixture of palmitic acid and oleic acid (crosses) and oxidized oleic acid (triangles). Also shown is the predicted κ based on volume mixing rules assuming that κNaCl = 1.3 and κorg = 0.001, with σ = 72 mN/m. Each point is colored by the actual surface tension required to match observations in κ. (B) Relative humidity as a function of measured wet diameter for 150 nm (mobility diameter) NaCl seed particles coated with a fixed amount of oleic acid (εorg = 0.95). Points are colored by upper-limit estimates for surface tension and the size of the points corresponds to the wet diameter. Also shown are values predicted from the compressed film model and κ-kohler theory assuming σ = 72 mN/m.

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