

Interactive comment on “Composition and properties of atmospheric particles in the eastern Atlantic and impacts on gas phase uptake rates” by J. D. Allan et al.

Anonymous Referee #1

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This is a well written summary of aerosol data collected aboard the RRS Discovery on ACMME and RHAMBLE 2007 cruise. The data are then used to test a model of aerosol hygroscopicity and to investigate the effect of the aerosol on multiphase chemistry. I recommend publication with minor revisions outlined below:

1. HOI should be defined in the abstract (hypoiodous acid) 2. line 14 page 18334. the increased scattering will increase the single scattering albedo. 3. Figure 4. Is this the wind direction relative to the bow of the ship? At what point are you measuring Discovery exhaust? These data should be eliminated from the figure. 4. It would be useful to have a table with average aerosol number, volume, and component concentrations for

C5556

each case study as well as transit to CV.

Interactive comment on Atmos. Chem. Phys. Discuss., 9, 18331, 2009.

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