

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.

J. D. Allan et al.

james.allan@manchester.ac.uk

Received and published: 15 November 2009

Reviewer: “1. HOI should be defined in the abstract (hypoiodous acid)”

Response: Added.

Reviewer: “2. line 14 page 18334. the increased scattering will increase the single scattering albedo.”

Response: Corrected.

Reviewer: “3. Figure 4. Is this the wind direction relative to the bow of the ship?”

C7141

Response: The data is the raw orientation of the ship’s weather vane relative to the bow, so is effectively the wind direction relative to stern. This is explained in the modified caption.

Reviewer: “At what point are you measuring Discovery exhaust? These data should be eliminated from the figure.”

Response: We do not believe we are directly sampling the Discover’s exhaust at any point (with the possible exception of when berthed at CV), due to the apparent wind direction being consistently from the bow and all turns were performed into the wind (as is shown by the apparent wind direction). This is evidenced by the lack of significant spikes in the MAAP data. This is mentioned in the revised text.

Reviewer: “4. It would be useful to have a table with average aerosol number, volume, and component concentrations for each case study as well as transit to CV.”

Response: Table added as requested.

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

C7142