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7, S3961-S3962, 2007

Interactive Comment

Interactive comment on "A new atmospheric aerosol phase equilibrium model (UHAERO): organic systems" by N. R. Amundson et al.

Anonymous Referee #1

Received and published: 12 August 2007

General Comments

This paper presents the extension of the inorganic UHAERO equilibrium model to treat organic species. As before, the gas-solid-liquid phase equilibrium problem is solved by minimizing the total Gibbs free energy of the system. The paper is well written but it takes some effort to understand the details.

Specific Comments

1) From the discussion in section 4, it appears that the effect of organics (at least the ones present in this study) on inorganic species deliquescence RH is not particularly significant. Is this a fair assessment of the results? This and other major results of this study need to be highlighted in the Abstract and Conclusions section.

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2) It would also be useful to add a few words in the Conclusions section on the overall practical significance of this work for secondary organic aerosol modeling.

Typographical error

Page 8718, lines 9-10: Should HR+ and R2+ be HR- and R2- (i.e., anions instead of cations)?

Interactive comment on Atmos. Chem. Phys. Discuss., 7, 8709, 2007.

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