Atmos. Chem. Phys. Discuss., 10, C4449–C4450, 2010 www.atmos-chem-phys-discuss.net/10/C4449/2010/ © Author(s) 2010. This work is distributed under the Creative Commons Attribute 3.0 License.



## Interactive comment on "Derivation of the stoichiometric coefficient of water ( $\nu_w$ ) to account for water uptake by atmospheric aerosols" by S. Metzger et al.

S. Metzger et al.

swen.metzger@mpic.de

Received and published: 25 June 2010

We deeply appreciate the time and effort everyone involved have devoted to this and the assoicated review process of Xu et al. 2009. We are in full agreement with the 3rd reviewer and fully accept the editor decision. Instead of salvaging the derivation of  $\nu_w$  from first principles, we will concentrate on a comprehensive clarification of the EQSAM3 concept (ML07), describing all aspects of the principle clearly, covering all aspects of the model, detailing the aspects that are parameterisation and how the parameters are empirically derived (even though based on firm principles such as solubility) and those aspects that can be analytically derived, and all in relation to established

C4449

concepts.

We will do this in the hope that such a parameterisation model and description paper may be a useful addition to the literature.

Interactive comment on Atmos. Chem. Phys. Discuss., 10, 8165, 2010.