Atmos. Chem. Phys. Discuss., 13, C8985–C8985, 2013 www.atmos-chem-phys-discuss.net/13/C8985/2013/

© Author(s) 2013. This work is distributed under the Creative Commons Attribute 3.0 License.



## **ACPD**

13, C8985-C8985, 2013

Interactive Comment

## Interactive comment on "Heterogeneous reaction of $N_2O_5$ with illite and Arizona Test Dust particles" by M. J. Tang et al.

**MJR Rossi (Referee)** 

michel.rossi@psi.ch

Received and published: 11 November 2013

I would like to post an amendment to the third "bullet" in my referee comment: (a) the length scale of the average size of the mineral dust particles (illite, ATD) are micrometers, not millimeters; (b) I stand by my point on surface-weighting of the size distribution function in terms of number concentration: at constant mass the total surface area decreases as does the gas-wall collision frequency "omega" on all particles considered in the volume. This should make "gamma" larger, not smaller, at a given (measured) value of the rate constant k according to: k = gamma x omega.

Interactive comment on Atmos. Chem. Phys. Discuss., 13, 24855, 2013.

Full Screen / Esc

**Printer-friendly Version** 

Interactive Discussion

**Discussion Paper** 

