Atmos. Chem. Phys. Discuss., 10, C14730–C14731, 2011
www.atmos-chem-phys-discuss.net/10/C14730/2011/

Atmospheric Chemistry and Physics Discussions

Interactive comment on "Chemical ionization mass spectrometry (CIMS) may not measure all gas-phase sulfuric acid if base molecules are present" *by* T. Kurtén et al.

T. Kurtén et al.

theo.kurten@helsinki.fi

Received and published: 25 March 2011

Dear J. Ma,

thank you for your comment! Unfortunately, we had to recalculate the thermodynamic parameters as the method used in the original manuscript was likely unsuitable for predicting amine-acid binding. The new values indicate that while some fraction of the amine-acid clusters may be left uncharged by CIMS, this fraction is probably quite small. As you say, it is very hard to make an accurate calculation, not only due to the computational uncertainties, but also due to the unknown magnitudes of many of the relevant experimental parameters.

Interactive comment on Atmos. Chem. Phys. Discuss., 10, 30539, 2010.