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Comment

Interactive comment on “Hygroscopic properties of ultrafine aerosol particles in the boreal forest: diurnal variation, solubility and the influence of sulfuric acid” by M. Ehn et al.

M. Ehn et al.

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While examining the analyzed data, a mistake was noticed in taking into account the “true” dry sizes measured by the HTDMA. The error was less than 5%, and did not make any significant difference for any of the conclusions in the paper. The most significant change after correction was to Fig.3, where the plots for 50 nm particles were both shifted upwards around 3%, bringing them above the corresponding 30 nm plots. This is how we would expect it to be, and thus the part of the text commenting on that they were below the 30 nm plots, has been removed.

When measuring the GF with a dry DMA2, we got values between 1.03 and 1.04 depending on the selected dry size. This meant that we would be overestimating the

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GF:s, and therefore we corrected for this by dividing the measured humidified GF:s by the measured dry GF:s. This is a normal procedure when analyzing HTDMA data.

The above mentioned mistake resulted in the 50 nm particles being divided by the dry GF one time more than the other measured sizes. In figures 3 and 5, the 50 nm GF:s were too low, whereas in figures 6, 8, 9 and table 1 the 50 nm is correct, but all the other sizes are a few percent too high. All of these have been corrected now.

Interactive comment on Atmos. Chem. Phys. Discuss., 6, 9937, 2006.

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