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Atmospheric Measurement Techniques Discussions

Interactive comment on "Design and performance of an automatic regenerating adsorption aerosol dryer for continuous operation at monitoring sites" *by* T. M. Tuch et al.

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Hi

This is a readable and most useful paper.

I, like Mr. Villani, would appreciate to know why the transmission is higher than 1.0 in figure 5? 1) Different geometry in the valve for the two directions, with different losses? 2) If the data was used from fig 4, a slight drying of the particles might have occured with dryer? That would, for sizes larger than 70 nm have decreased the "dry counts" (size distribution is decreasing in that range) which should have thus decreased transmission (and vice versa for below 70 nm - i.e. the whole "after dryer" size distribution

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should have been measured shifted to the left due to removal of water?)?

If the authors would please clarify the possible reason for the high transmission would be great.

I am currently testing losses for a dryer with two cylindrical tubes of GoreTex 55 and 65 mm diameter, with an earthed metal mesh on side towards aerosol flow to reduce charge losses. Drying works fine for 5 lpm (down to <10%). It will take another few months before a report comes...

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Interactive comment on Atmos. Meas. Tech. Discuss., 2, 1143, 2009.