

Interactive comment on “Intercomparison of 15 aerodynamic particle size spectrometers (APS 3321): uncertainties in particle sizing and number size distribution” by S. Pfeifer et al.

Anonymous Referee #3

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This is a small study addressed to closed community of scientists using a specific particle size spectrometer type. The study is important since it documents problems with the instruments. Careful inter-comparison of 15 pieces has shown problems with sizing small and large particles within the the operational range of the probes. Problems are substantial and affect measured aerosol size distributions. Partial discussion of the possible problem source is included. The paper is in a good shape, concise, well written and informative and should be published after minor revision.

Specific comments: p. 11519 l. 27. "The results for larger PSL spheres might be influenced by poor counting statistics" Elaborate more, please. Any numbers?

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Section 3.2 and Fig.4. It seems that instruments which deviate from the mean for large particles, reasonably agree with the others for small particles . The opposite (deviations on the left, agreement on the right) seems also true. Comments, please.

Finally: any suggestion for the traceable reference method you call for in the conclusion?

Interactive comment on Atmos. Meas. Tech. Discuss., 8, 11513, 2015.

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