Interactive comment on “Measurement of ambient aerosols in northern Mexico City by single particle mass spectrometry” by R. C. Moffet et al.

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Other points
- P6416, line 5: we suggest also citing the recently published MCMA-2003 overview paper by Molina et al. (2007), which summarizes the observations from that campaign. This paper discusses BB in some detail as a potentially important source of fine PM in MC.
- P6416, 2nd paragraph: one of the major findings of the MCMA-2003 campaign was that current models underpredict SOA formation from anthropogenic precursors by up to a factor of 8 in MC, and that SOA is a major component of fine particles in MC [Volkamer et al., 2006]. This is an important context for the interpretation of the data.
from this study, since much of the OC, especially in the afternoons, is very likely SOA.
- P6416, end of 2nd paragraph: Johnson et al. (2006) also identified biomass burning emissions as an important source of refractory species in MC. This should also be mentioned here.

- P6420, line 13: the fact that OC particles were one of the most abundant types is consistent with the results of Salcedo et al. (2006) and Volkamer et al. (2006). A significant fraction of the OC in the afternoons is likely SOA.

- P6421, line 25: at this point in the paper is unclear why oxalate is mentioned in the same paragraph as the Vanadium-type particles. Later on the paper does clarify that both components appear to be related, but we suggest making that clear here.

- P6422: the association of nitrate and dust types described here is consistent with the paper (published after this one) of Fountoukis et al. (2007).

- P6426, line 10: the Kelvin effect only plays an important role for particles below 100 nm, so it cannot explain the differences between the sub and supermicron modes reported here, since the submicron mode reported here starts at ∼400 nm Da (Fig. 3).

Grammar etc.
- P6416, line 2: we suggest replacing “K particles” by “K in particles”, as the Moya et al. study used a bulk analysis technique rather than a single particle technique.
- P6418, line 2: Moffet reference repeated (or missing from reference list).

References

Clarke A., et al. (2007), Biomass burning and pollution aerosol over North America: Or-


J. Alex Huffman, John T. Jayne, Frank Drewnick, Allison C. Aiken, Timothy Onasch, Douglas R. Worsnop, and Jose L. Jimenez. Design, Modeling, Optimization, and Experimental Tests of a Particle Beam Width Probe for the Aerodyne Aerosol Mass


Park, K., Kittelson, D. B., Zachariah, M. R., and McMurry, P. H. Measurement of In-


