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12, C2560-C2561, 2012

Interactive Comment

Interactive comment on "Chemically-resolved aerosol eddy covariance flux measurements in urban Mexico City during MILAGRO 2006" by R. Zalakeviciute et al.

O. Klemm (Referee)

otto.klemm@uni-muenster.de

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This is a very nice presentation of aerosol particle chemical analysis and fluxes as measured of Mexico City during a short measuring campaign in 2006. Novel and detailed insight into aerosol dynamics is shown. Local and regional analysis of the composition and fluxes of particle fractions, particularly of various organic fractions, are offered. Experiments and data analysis were performed with high quality. This manuscript definitively deserved publication in ACP. Only a few minor comments are given below:

Specific comments:



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p 11903, lines 18-19: The Nemitz et al (2012) citation can not be accepted as is. Instead, other cities' results should be cited, see Atmos. Chem. Phys., 8, 7405-7417, 2008

p 1194, I 25: provide also metric units for the diameter

p 11909, lines 14 – 16: incomplete sentence

Fig. 1 is not as informative as it could (should) be. Information about streets and land use would be helpful.

Fig. 2: The temp scale should be stretched to allow more precise reading. The wind direction should not be presented as a line graph to avoid vertical lines during the turn of the wind direction over North. Use a scatter plot instead. There seems to be a bug in the pressure data of 12 March.

Tab. 1: Some of the numbers are given with too high precision. Don't use more than 3 significant digits. It would be preferable to use only 2 digits.

Fig. 3: Why is a color plot used here, but a b/w one in Fig. 2?

p 11912, line 20 and p 11916, line 11: suggestion to delete "error" as day-to-day variability is shown rather than errors.

p 11912, lines 22 - 24: Is there independent support for the occurrence of the rush hour peak, for example from traffic count data or from the emission inventory? Does the stability of the boundary layer play a role here as well?

Fig. 8, caption: The notion "Comparison of the diurnal profiles of PM1 fluxes of primary aerosols..." is misleading, as F(HOA+BC) is shown. The last sentence of the section does not help. The text is clear, though. Please clarify the caption.

Interactive comment on Atmos. Chem. Phys. Discuss., 12, 11899, 2012.

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