

Interactive comment on “Biomass burning aerosol emissions from vegetation fires: particle number and mass emission factors and size distributions” by S. Janhäll et al.

S. Janhäll et al.

saraj@mpch-mainz.mpg.de

Received and published: 10 December 2009

The authors would like to thank the referee for the valuable comments that we believe have helped us to improve this paper. Each comment has been addressed individually below.

- 1) and 2) the error of the different fits are now explained in the end of the Methods section. The standard error of the fit is available in matlab through the “linest” command.
- 3) The parentheses are removed.
- 4) The calculation of many subsets, but presentation of results from only one sub-

C8205

set, i.e. the one including all data between PM_{0.5} and PM₄, is now clarified in the manuscript.

5) The way of using F-statistics to test if there is a relation between two variables is now discussed in the paper indicating what numbers are used and the result of high F-statistics and low Perr implicating a relationship. This is also supported by a reference to a textbook in the subject.

6) The large effect on MCE is from varying the CO emission factor, while the CO₂ emission factor does not vary as much. Thus the CO₂ emission factor can be given a constant value and the CO emission factor calculated from this CO₂ emission factor and the MCE. Naturally the CO has be measured to get the MCE, but it is not presented in the papers. This is clarified in the paper.

7) The shaded area did not make it into the final figures and the word is not removed also from the text.

8) The calculation is now clarified in the text; with some more detail and one extra equation, together with a reference to a textbook in the subject, added.

9) Corrected

10) Corrected

11) The explanation is now added to the caption.

We have also tried to improve the structure of the Supplementary information.

Interactive comment on Atmos. Chem. Phys. Discuss., 9, 17183, 2009.