

Interactive comment on “Improved measurement of carbonaceous aerosol in Beijing, China: intercomparison of sampling and thermal-optical analysis methods” by Y. Cheng et al.

Anonymous Referee #2

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This paper focuses on positive and negative sampling artefacts of OC. Furthermore the influence of the peak inert temperature on the OC-EC split was investigated. The study was well conducted and is a useful contribution to the discussion about carbonaceous aerosols. The manuscript should be published after a few corrections.

p. 15673, line 2: it should be clarified in the introduction that only in PM_{2.5} aerosols the carbonaceous fraction mainly consists of EC and OC. In PM₁₀ aerosols carbonates may constitute an important carbonaceous fraction as well. This makes the analysis and attribution to the different fractions even more complicated.

p. 156679, lines 19-20: the mentioned instrument is more accurate than? Please

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clarify.

p. 15685, lines 25-32: it is a bit risky to deduce brown carbon from the larger discrepancy between EC values defined by different temperature protocols only. Is there data about the influence of biomass burning on the ambient aerosol available?

p. 15694, lines 2-3: it should be stated clearly that the CIG filter is not suitable for the assessment of negative artefacts in China.

Interactive comment on Atmos. Chem. Phys. Discuss., 10, 15671, 2010.