

Interactive comment on “Emissions of mercury in Southern Africa derived from long-term observations at Cape Point, South Africa” by E.-G. Brunke et al.

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We thank to referee #1 for thoughtful comments on our paper. The uncertainties of our estimates are now discussed in more detail and the conclusions are modified accordingly. We are especially thankful for the suggestion of the seasonality as the possible origin of the discrepancy between the observed and derived CO/CO₂ emission ratios.

Specific comments:

P81 L8: We think that the uncertainty of the emission estimates for South Africa is sufficiently illustrated by the following paragraph.

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P81 L27: The text has been modified accordingly.

Section 3.4: The issue of CO/CO₂ emission ratio is now explicitly discussed.

P90 L24/26: The issue of uncertainties is now extensively discussed.

P91 L18: We now note that considering the uncertainties of our estimate, of the inventories, and of the speciation of mercury emissions, our GEM emission estimate is comparable to the emissions in 2004 and somewhat lower than the emissions in 2006. However, a final judgment of the difference will need at least an update of mercury emissions for the years of observations, i.e. 2007 – 2009, which are not available yet. Better data on speciation of mercury emissions would also be highly desirable.

P93 L1: We agree, the term “hot spot” has been deleted.

Please also note the supplement to this comment:

<http://www.atmos-chem-phys-discuss.net/12/C5319/2012/acpd-12-C5319-2012-supplement.pdf>

Interactive comment on Atmos. Chem. Phys. Discuss., 12, 11079, 2012.

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