Atmos. Chem. Phys. Discuss., 10, C8363–C8364, 2010
www.atmos-chem-phys-discuss.net/10/C8363/2010/


Atmospheric Chemistry and Physics Discussions

# *Interactive comment on* "Primary aerosol emission trends for China, 1990–2005" *by* Y. Lei et al.

**Anonymous Referee #3**

Received and published: 7 October 2010

Lei et al. applied a bottom up approach to make a technology based estimation of primary aerosol emissions for China, from 1990 to 2005. They inform not only the emissions by size but also by species, namely OC, BC, Ca and Mg. The manuscript is well organised and provides useful emission data for scientists in general, but also for local policymakers. In my opinion it is of enough originality and interest to merit its publication, after a minor revision related to the following aspects:

1) It is not clear which sources were included (and excluded) in the emissions inventory presented. I understand that the authors considered antropogenic sources, both stationary and mobile, excluding for example (i) all the off road mobile sources and (ii) fugitive emissions from the energy and industrial sectors. It would be insteresting to include a list of all of the sectors included (for example expanding the Table 1 where



the source of activity data is presented).

2) The authors included emissions from metals, namely Ca and Mg, based on a publication (in Chinese) that indicates "anthropogenic emissions of Ca and Mg might be larger than natural sources". I am surprise about that, mainly because the inventory presented does not include sources related with construction activities. It would be good to expand this point presenting a more detailed discussion and perhaps considering other elements related with the activities analyzed (only as an example I can mentioned Pb, Cd and Zn, as was analyzed by Hsu et al, 2005).

3) A description of the stages 1 and 2 included in table 8.

---

Interactive comment on Atmos. Chem. Phys. Discuss., 10, 17153, 2010.