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Atmospheric Chemistry and Physics Discussions

Interactive comment on "MIX: a mosaic Asian anthropogenic emission inventory for the MICS-Asia and the HTAP projects" *by* M. Li et al.

Anonymous Referee #3

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The paper provides a useful description of the MIX inventory. The paper could be enhanced by providing additional detail for the data and inventory construction methodologies. In addition to the suggestions from other reviewers I suggest the following:

It appears that the mosaic inventory was constructed using the five sectors: power, industry, residential, transportation, and agriculture. This should be explicitly stated.

The definition of these sectors should be provided (this could be in the supplement). Some of the issues that are potentially inconsistent between inventories include the sector assignment for: auto producer industrial emissions, mobile residential and commercial emissions, and off-road mobile emissions. A mapping between the summary sectors and IPCC/NFR categories would be useful.

Some discussion of how consistent the sector definitions are across the different inventories used in MIX would also be helpful. For example, do all the inventories define these sectors in the same manner and include all sub-sectors?

It appears that some emissions, although somewhat small, may be missing (For example there are no emissions from agriculture listed except for NH3. I would expect NOx emissions, for example.)

Section 4.2.1, line 24 âĂŤ 30% is a fairly large difference for China. I'm not sure this can be classified as "good" agreement.

Table 3 should clarify that the last line in each section is the sum for that set of countries..

Table 4 is appropriate for the main paper. A similar table by country with emissions by sector should be provided in the supplement in order to more fully document the dataset.

Interactive comment on Atmos. Chem. Phys. Discuss., 15, 34813, 2015.

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