

## ***Interactive comment on “Variations of China’s emission estimates response to uncertainties in energy statistics” by Chaopeng Hong et al.***

**Anonymous Referee #1**

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The authors try to understand the uncertainties in China’s energy statistics and estimate their impacts on China’s emissions during the period of 1990-2013 using MEIC. The uncertainty of energy consumption statistics in China were appointed out in the previous many studies. This work is highly motivated and the authors try to understand the uncertainties of national statistics from China inside. Particularly, the discussion in the section ‘4.1 Understanding the reliability of energy statistics’ is important. And also the authors analysis the uncertainties of emission inventory for air pollutants in China caused by those of energy statistics. In my knowledge, this is a first work. Additionally, the manuscript indicates the variations at energy consumption could be an important source of energy-induced emission uncertainties in China. The topic certainly is suitable for ACP. The authors define the apparent uncertainty as the maximum discrepancy among different datasets of energy consumption. My question is that this definition is

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appropriate. For example, the converging in 2013 may be caused by any artificial modification because the trajectories in two datasets during 2010-2013 are quite different. This converging indicates small uncertainty? I think the "uncertainty" is unsuitable term and should be replaced to another term, such as "discrepancy in statistics" or other. In conclusion, the reviewer is recommending the minor revision of the manuscript.

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