

## Interactive comment on "Intercomparison of $NO_X$ emission inventories over East Asia" by Jieying Ding et al.

## **Anonymous Referee #2**

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The paper compares NOx emission inventories that use bottom-up methods as well as satellite remote sensing. This shows the relative merits of the methods and underscores the need for using multiple satellite sensors in developing inventories. The paper is clear and thorough and within the scope of ACP, I am happy to recommend publication subject to minor comments listed below.

Page 11, Line 25: Temporal correlation coefficients in Tables 3 & 4 are similar to the spatial coefficients in Table 2? Do you mean the pattern is similar? In general, I think it would be good to add the number of points used in the correlation coefficients for the different tables. This would help interpret the r values and also clarify what they are based on.

Table 3 & 4: If I understood correctly, these are based on 12 data points similar to those

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in Fig. 6? I think Fig. 6 could be expanded to show total emissions for Urban areas (panel b) and Rural areas (panel c), keeping panel a as it is.

The three bullet points in the conclusions seem a little disconnected from the body of the paper. It may be useful to add some discussion of how the present study relates to the expected products of the GEMS sensor on GEO-KOMPSAT-2B.

Technical comments: Fig 5: The labels are not legible (remove lat/lon, increase font size for title and colorbar, label colorbar on right).

Table 2 caption: China should be capitalized.

Interactive comment on Atmos. Chem. Phys. Discuss., doi:10.5194/acp-2017-265, 2017.