Interactive comment on “Multi-annual changes of NO\textsubscript{x} emissions in megacity regions: nonlinear trend analysis of satellite measurement based estimates” by I. B. Konovalov et al.

Anonymous Referee #1

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Konovalov et al. have used a novel inverse technique to quantify the interannual variability in summertime NO\textsubscript{x} emissions from urban agglomerations based on analysis of a combination of satellite measurements and a chemical transport model. The emissions trends thus identified are compared with data from emissions inventories and air quality monitoring data from the areas in question. The comparison with air quality monitoring data is an especially nice part of their analysis as it acts as an independent check on their method; unfortunately the scale mismatch between the locally-representative air quality measurements and the relatively coarse resolution of the inverse technique does not always allow a meaningful comparison.

This paper makes an important contribution to the understanding of emissions from megacities, which is an issue that will continue to receive attention given the expected increase in the global urban population. The paper is also well structured and well written.

Interactive comment on Atmos. Chem. Phys. Discuss., 10, 10925, 2010.