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Atmospheric Chemistry and Physics Discussions

Interactive comment on "Effect of isoprene emissions from major forests on ozone formation in the city of Shanghai, China" *by* F. Geng et al.

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Comments;

This paper discusses the impact of large forests on the ozone formation in a megacity (Shanghai, China). The result of the paper will be a valuable contribution to the literature on isoprene/urban interactions.

In the revised paper, the authors have carefully addressed my comments, and the paper should be ready for the publication in ACP. However, I also suggest that the authors should add 1) some sentences for QA/QC of the chemical analysis (e.g. any field blanks have been collected and analyzed? What are the difference between the results from two GC systems (ïňĄeld and laboratory analysis) 2) some sentences to

discuss the lifetime of HCHO, since it is very important for the travelling distance of the forest plume.

Response;

1) In the revised paper, we add the following sentences to address the reviewer's questions. "At each sampling site, air samples were collected onto two cartridges simultaneously, one for analysis in Shanghai using the Inficon GC-MS and one for analysis at NCAR using the Agilent GC-MS. Concentrations determined using the two analytical systems differed by an average of 18% with no systematic bias, and values reported are the average of the two determinations. Three blank (i.e., unfilled) cartridges were analyzed, yielding an average of 0.45 ng of isoprene. Air samples ranged from 3.4 to 59 ng, averaging 24.6 ng, leading to a slight potential overestimation of air concentrations."

2) In the revised paper, we add the sentences that "Because HCHO has a longer chemical residence time (a few hours) than isoprene (Seinfeld and Pandis, 2006), they can be transported to regions downwind of the forests.

Interactive comment on Atmos. Chem. Phys. Discuss., 11, 18527, 2011.