

## Responses to Editor

We appreciate the Editor for his valuable comments that were of great help in improving the quality of the manuscript. We also thank the Editor for his patience and help during the revision of the manuscript.

Comments to the Author:

Please copy-edit the final version. There are still a couple of misspellings in the submitted manuscript.

Reply: The Editor's comments are highly appreciated. We have revised the manuscript accordingly and our detailed responses are shown below. All the revision is highlighted in the revised manuscript.

Line 396: ... of VOC sources...

Reply: It has been corrected. For details, please refer to Line 396, Page 14 in the revised manuscript.

Line 399: ... maximum incremental reactivities of VOCs with the OH radical...

Reply: It has been revised. For details, please refer to Line 399, Page 14 in the revised manuscript.

Line 401: Industrial emissions were found...

Reply: It has been corrected. For details, please refer to Line 401, Page 14 in the revised manuscript.

Line 401 cc: (you might want to rephrase this sentence or split it up in two - it is a very long sentence and ends up being grammatically wrong).

Reply: Thanks for the comment. The sentence has been revised as followed:

“Industrial emissions were found to have the largest OFP at JAES due to the high loadings of aromatic VOC species that have relatively high OH reactivities in this source profile (Atkinson and Arey, 2003), with the OFP value of  $\sim 43 \mu\text{g}/\text{m}^3$  and the

contribution percentage of ~32% to the total OFP of all VOC sources, followed by diesel vehicular exhausts (~36  $\mu\text{g}/\text{m}^3$ , ~27%), gasoline vehicular exhausts (~32  $\mu\text{g}/\text{m}^3$ , ~24%) and fuel evaporation (~13  $\mu\text{g}/\text{m}^3$ , ~10%). Furthermore, though the MIR value of isoprene was much higher than other VOC species, biogenic emissions only contributed ~7% (~9  $\mu\text{g}/\text{m}^3$ ) to the total OFP of all VOC sources as the relatively low mixing ratio of isoprene at the JAES site.”

For details, please refer to Lines 401-408, Pages 14-15 in the revised manuscript.

Line 409: ... dominant VOC sources of the total...

Reply: It has been corrected. For details, please refer to Line 410, Page 15 in the revised manuscript.

figure 6: ...The contribution of individual sources to...

Reply: It has been corrected. For details, please refer to Figure 6 in the revised manuscript.