MS No.: acp-2014-47 MS Type: Research Article

Dear Dr. Maenhaut,

Thank you very much for your useful comments and suggestions on our manuscript! We have revised the manuscript accordingly. The detailed responses to the comments and suggestions are shown below, and a marked-up manuscript version in blue.

Thank you very much for your considerations!

Sincerely yours, Dr. Lili Tang

Response to the Editor's comments and suggestions

Comments to the Author:

The authors have reasonably addressed the comments of the referees. However, some minor alterations are needed before the manuscript and its Supplement can be published in ACP.

Main text:

Line 38: Replace "into particle phase" by "into the particle phase".

Line 43: Replace "mass back-trajectory" by "mass back-trajectories".

Line 85: Replace "oxidation process" by "oxidation".

Line 127: Replace "at same site" by "at the same site".

Line 197: Replace "than that of the other" by "than the other".

Line 269: Replace "and/or BB source" by "and/or BB".

Line 405: Replace "yields from open BB" by "production from open BB".

Line 465: Replace "that BB source" by "that the BB source".

Line 584: Replace "play more" by "play a more".

Response: Thanks for the suggestions! All the suggestions have been adopted.