

Interactive comment on “Aircraft measurements of gases pollutants and particles during CAREBeijing-2008: distributions, characteristics and influencing factors” by W. Zhang et al.

W. Zhang

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Dear Anonymous Referee #2,

We appreciate your useful comments. Following your suggestions, we have redone and re-analyzed the data, including the tables and figures. In the new version, the dispersion forecast results were also considered during the grouping for all the flights, and the box and whisker plots, and the independent t-test results for gas and particle pollutants were also added. Correspondingly, the manuscript results and discussion were almost re-written following the new results. In a word, big changes have done in the new version.

However, only the gases and number concentration of particles were made during the flights. It is very difficult to make too deep for the changes and variations during the transport, and only the number concentration variations could be observed in the new version. In addition, there seems not too much aircraft measurements especially not so many field campaigns during Beijing around areas in China have been made before, it is too difficult to make too deep discussion on variations without the chemical species information. Considering this, the averages of the gas and particle pollutants for the same group were also statistically analyzed to discuss, and changes and variations were discussed and compared too. Too detailed information for each flight have not been included too much, and other researches for detailed flight will be discussed specially. In this work, only the group information and variations were considered especially for the gas and particles.

All the best,

On behalf of all the authors,

Wenjie Zhang