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ACPD

8, S4593–S4595, 2008

Interactive Comment

Interactive comment on "Using 3DVAR data assimilation system to improve ozone simulations in the Mexico City basin" *by* N. Bei et al.

Anonymous Referee #1

Received and published: 9 July 2008

The paper addresses an important topic regarding the impacts of meteorological conditions on ozone concentrations. This paper demonstrates that by improving metrological conditions using the 3DVAR method, the model calculated ozone concentrations are improved. The paper is well written, and has scientific merit to be published in ACP. My detailed comments are in the follows.

The quality of figures needs to be improved. The labels on figures are too small to be read. There are some grammas need to be checked. For example, the title "Available observations and experiments descriptions" should be "Available observation and experiment descriptions". Some previous studies regarding Mexico City basin ozone need to be referenced.



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Interactive Discussion

Discussion Paper



- Does the paper address relevant scientific questions within the scope of ACP? Yes
- Does the paper present novel concepts, ideas, tools, or data? Yes
- Are substantial conclusions reached? Yes
- Are the scientific methods and assumptions valid and clearly outlined? Yes
- 5. Are the results sufficient to support the interpretations and conclusions? Yes
- 6. Is the description of experiments and calculations sufficiently complete and precise to allow their reproduction by fellow scientists (traceability of results)? Yes
- 7. Do the authors give proper credit to related work and clearly indicate their own new/original contribution?

Need to quote more previous works, and state the more clearly their original contributions.

8. Does the title clearly reflect the contents of the paper?

Yes

9. Does the abstract provide a concise and complete summary?

Yes

ACPD 8, S4593–S4595, 2008

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10. Is the overall presentation well structured and clear?

Yes

- 11. Is the language fluent and precise? Some minor problems
- 12. Are mathematical formulae, symbols, abbreviations, and units correctly defined and used?

Yes

13. Should any parts of the paper (text, formulae, figures, tables) be clarified, reduced, combined, or eliminated?
The multiple of formulae to be improved by the improved by the

The quality of figures needs to be improved.

- 14. Are the number and quality of references appropriate?Need some references for previous works
- 15. Is the amount and quality of supplementary material appropriate? Yes

Interactive comment on Atmos. Chem. Phys. Discuss., 8, 12529, 2008.

8, S4593-S4595, 2008

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