

Interactive comment on “Evaluation of two ozone air quality modelling systems” by S. Ortega et al.

Anonymous Referee #2

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The paper of Ortega et al. is a precise description of the implementation of two different ozone air quality modelling systems. One is the photochemical box model OZIPR, the other is the Eulerian CT model MM5/UAM V. It is easy to understand what has been done and how input data were prepared.

The main limitation of the study is that the models were applied to forecast ozone only in a 3 day period. The the model accuracy measures can therefore not been compared to intercomparison studies of CTM ozone forecast (i.e. Tilmes 2002, JAC V 42) or to the performance of statistical model.

The area covered by the models seems rather small for an ozone forecast. Therefore it is easy to anticipate that chemical boundary condition are extremely important and initial condition are not important for the model result. Boundary conditions have been derived from measurements (see chapter 5.2). This would mean that the models have not been applied in a real forecast mode since the boundary conditions are based on

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information which would be not known in advance. A comment to clarify this issue would be helpful.

The more detailed comparison of the daily cycle (fig 7 - 9) revealed a better simulation by the box model. UAM tends to simulate the ozone rise in the morning to late. What could be an explanation for this behaviour?

Interactive comment on Atmos. Chem. Phys. Discuss., 4, 1855, 2004.

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