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Interactive comment on "An evaluation of the performance of chemistry transport models, Part 2: detailed comparison with two selected campaigns" *by* D. Brunner et al.

Anonymous Referee #2

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The manuscript "An evaluation of the performance of chemistry transport models, 2: Detailed comparison with two selected campaigns" is a carefully thought-out analysis of several chemistry transport models and significantly advances the state-of-the-art for the evaluation of these models, in particular through introducing the use of Taylor diagrams to evaluate the model performance. The paper is well structured and clearly written and could be published almost as-is with few minor corrections:

page 8 "providing clear evidence" - this may be too strong. I suggest "some evidence" instead.

section 3.1.3

add reference to Vay et al., 2003 with air mass classification

page 15, last para before 3.2.6: how about the photolysis of H2O2 as an OH source? (see e.g. Jaegle et al., 2003). It may be worthwhile to discuss the hen and egg problem regarding CO: if CO is too low, OH is too high, but if OH is too high (for other reasons), CO is too low.

page 16 "reduced performance in terms of ozone *variability*"

Interactive comment on Atmos. Chem. Phys. Discuss., 4, 7355, 2004.