

Interactive comment on “Regional pollution potentials of megacities and other major population centers” by M. G. Lawrence et al.

M. G. Lawrence et al.

Received and published: 12 March 2007

We agree with the referee (as indicated in our previous response) that the manuscript was not aimed at specifically an audience that is familiar with details of atmospheric circulation and transport, but also a broader audience. However, the referee has a good point in suggesting that as it is currently written, we risk missing both audiences. We appreciate the numerous helpful specific comments of the referee, and based on these, plus the comments of Referee #1 (which in many cases are similar to this referee's suggestions), we hope to be able to revise the manuscript so that the abstract and conclusions are particularly accessible and interesting to a broader audience, and the main body is more interesting to a specialty audience.

We agree with many of the specific comments of the referee, although there are several that we either disagree with, or which we suspect will not be applicable after the broad

Full Screen / Esc

Printer-friendly Version

Interactive Discussion

Discussion Paper

revisions. We will respond to the full set of comments individually when we submit the revised version. Here we include initial responses to the most important comments and criticisms.

The suggestion of separating the 1-day and 100-day tracer discussions from the 10-day tracer discussion is sensible, along with the other suggestion of separating the discussion of specific tracers from the general discussion (similar to Referee #1), and we will follow these in the revised manuscript.

The suggestions for revising the abstract and the conclusions to include additional points and downscale others are nearly all very similar to Referee #1 and will be followed.

The question about why ELR_COL does not vary much given the other variability is a good one, and the answer is not clear to us yet; we will try to figure this out still for the revised manuscript.

We disagree that the conclusions will risk appearing trivial to most readers, but nevertheless agree that it makes sense to adjust the balance in emphasis on points in the conclusions as suggested in general in the referee's comments (and in those of Referee #1).

We did not mean to indicate that a city might be free of local pollution problems in the sense that this is normally meant; our use of the term "local" here was not well-chosen, since we meant local in the sense of a global model (i.e., the couple grid cells including and surrounding the source cell), rather than "local" on the urban or street-level scale that is normally thought of. We will revise this statement to try to make our intended meaning more precise.

Interactive comment on Atmos. Chem. Phys. Discuss., 6, 13323, 2006.

[Full Screen / Esc](#)[Printer-friendly Version](#)[Interactive Discussion](#)[Discussion Paper](#)