

Editors review of gmd-2014-116, “Dynamic model evaluation for secondary inorganic aerosol and its precursors over Europe between 1990 and 2009”.

Given the extensive time for which the Authors responses took to appear and the significant restructuring of the manuscript including a cut-and-paste error with one of the tables, I decided to look at the responses and match them to the updated manuscript rather than asking for another round of reviews. The updates have all been performed as stated, although care should be taken that all the Figures and Tables are named in the text to address the modifications.

Specific comment on the responses:

For the interpretation of the model results we need to keep in mind that there are no trends in boundary conditions considered over the investigated 20 year period.

Although this is clearly stated there is no mention in the discussion regarding the impacts of this. How does this relate to the increases in the model bias between 1990-2009 and 2000-2009 shown in Table 4. The size of the sample is different which masks a like for like analysis (i.e. fixed station numbers 1990-2000 c.f. 2000-2009) and implicitly you also get an error due to errors in the mission trends in the input, but nevertheless, can the authors provide some basic quantification of errors due to the fixed boundary conditions? The case is made about changes in trends due to the fall of the USSR but if the boundaries are fixed did this actually happen to the eastern edge? In hindsight would have been much more logical to use e.g. C-IFS output from the re-analysis for the boundaries even though it is provided on a relatively coarse resolution.

The section on **Code Availability** should be included (see accepted GMD manuscripts for examples).

Quality of the Figures:

There is too much dead space in the Figures which can be improved by changing axis limits.

Figure 1: Faint lines are difficult to see. Use dashed lines of same thickness.

Figure 2: Change the temperature limits on y-axis to 265-300 (K), RH to 0.6->1.0, precip to max 4.1.

Figure 3: Change limits e.g TNO₃ conc max 1 , min 0.2.

Figure 6: Improve axis to make differences more visible (all panels)!