Interactive comment on “Aerosol modelling in Europe with a focus on Switzerland during summer and winter episodes” by S. Aksoyoglu et al.

Anonymous Referee #2

Received and published: 27 May 2011

This is a very good paper, with a detailed comparison between speciated modelled and observed aerosol concentrations. I have however one concern, and I would like to ask the authors to comment on that. Because MM5 overpredicts the low windspeed conditions, a sensitivity run is carried out with a factor of two lower windspeeds (page 10808) Because MM5 has problems in predicting correct temperatures, a sensitivity run is carried out with + and - 5 Degrees. In how far is this approach valid? In this way meteorological fields are created which are inconsistent. Temperature, windspeed, Kz, clouds etc are interrelated.

The focus of the paper is on Switzerland; however the modelling has taken place over the whole of Europe. Some comparisons with observations outside Switzerland would have improved the impact of the research.

One comment. Page 10801, line 4. Is the annual average PM 10 limit value in Switzerland really 20 ugr/m3? So exceedences everywhere?