

Interactive comment on “European NO_x emissions in WRF-Chem derived from OMI: impacts on summertime surface ozone” by Auke J. Visser et al.

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This is an interesting study about European NO_x emissions. I was puzzled by the fact that the ozone increase of 6 ug/m³ due to optimized emissions (which is reported to be largely due to increases in soil NO_x emissions) is very similar to what I estimated as the impact of soil NO_x emissions (albeit with even higher soil NO_x emissions) of 4 (1.4-9.6) ppb a long time ago using a very simple all-European box model (Stohl, 1996). Is this just a coincidence, given the very simple set-up in Stohl (1996) and also differences in both soil and other NO_x emissions between the two studies?

Reference: Stohl, A., E. Williams, G. Wotawa, and H. Kromp-Kolb (1996): A Euro-

C1

pean inventory of soil nitric oxide emissions and the effect of these emissions on the photochemical formation of ozone in Europe. Atmos. Environ. 30, 3741-3755.

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C2