Atmos. Chem. Phys. Discuss., 8, S1093–S1094, 2008 www.atmos-chem-phys-discuss.net/8/S1093/2008/ © Author(s) 2008. This work is distributed under the Creative Commons Attribute 3.0 License.



ACPD

8, S1093–S1094, 2008

Interactive Comment

## *Interactive comment on* "Online coupled meteorology and chemistry models: history, current status, and outlook" by Y. Zhang

## Y. Zhang

Received and published: 31 March 2008

Interactive comment on "Online coupled meteorology and chemistry models: history, current status, and outlook" by Y. Zhang

B. Langmann baerbel.langmann@zmaw.de Received and published: 27 March 2008

As already written by the two anonymous reviewers and J. Fast, I agree that a review paper is useful to document the state of the art in a particular topic of science, in this case the topic deals with on-line coupled meteorological and chemical models. However, for review papers the demands and requirements are slightly different from 'usual' research papers. I expect from a review paper a neutral and exhaustive report, which is often impossible. So it is for the topic chosen here. Nowadays, published articles about on-line coupled



models are that numerous that it is hard to have a real overview. Therefore I would like to draw the attention of the author to another online coupled regional scale atmosphere-chemistry model called REMO in earlier times and later REMOTE (http://www.mpimet.mpg.de/en/wissenschaft/modelle/remote.html - web-page not updated since three years), which has been developed at the end of the last century, years before the WRF model. The first paper documenting this model tool is Langmann (2000). Applications in a global to mesoscale model chain are described in Langmann et al. (2003). There are different trace species modules available: a photochemical module (RADMII), stable water isotopes have been studied (Sturm et al., 2005, 2007), carbon dioxide (e.g. Karstens et al., 2006) and recently an aerosol microphysical module has been implemented in addition to the photochemical one (Langmann et al., 2008). A study on the second indirect aerosol effect is described in Langmann (2007). The model is flexible to be applied all over the world: many applications focus on Europe (e.g. Langmann, 2000; Marmer and Langmann, 2005; Marmer et al., 2007a, b; O&#8217:Dowd et al., 2008), some studies on Indonesia (Langmann and Heil, 2004; Langmann, 2007). Meanwhile the model is applied in Indonesia, China, Germany, UK and Ireland, where it is further developed to study a variety of scientific Questions.

## Reply:

Thanks for bringing several papers to my attention and providing a brief review of REMO model development and application. They will be added in the revised paper.

## ACPD

8, S1093-S1094, 2008

Interactive Comment

Full Screen / Esc

**Printer-friendly Version** 

Interactive Discussion

**Discussion Paper** 



Interactive comment on Atmos. Chem. Phys. Discuss., 8, 1833, 2008.