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> Interactive Comment

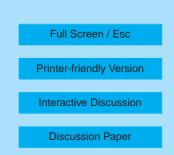
## *Interactive comment on* "Online coupled meteorology and chemistry models: history, current status, and outlook" by Y. Zhang

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The paper gives a really unique review of the history and current status of development and application of online coupled meteorology and chemistry models. After the mentioned COST overview of the European online coupled meteorology and chemistry models this is the first analysis of the online coupled models developed in USA. Of course many modern European online coupled models are not considered in this paper, however, I suppose, ir should be done as a separate paper (e.g. as a result of the COST Action 728). The needs of such an overview publication are very strong, because the online integration of meteorology and chemistry models with consideration of the climate-chemistry-aerosol-cloud-radiation feedbacks becomes the promissing way for future atmospheric simulation systems. It would lead to a new generation of models





for improved climate, meteorology, environment systems studies and chemical weather forecasting.

From scientific point of view the paper is interesting and will be very useful for modellers in meteorology, climate and environment. Proceeding from that I strongly recommend to publish the paper.

The paper is relatively long (however such a review should be long) and the final part with the case studies with the USA models GATOR-GCMOM, WRF/Chem, CAM3, MI-RAGE and Caltech could be considered as a separate paper. However, it is a good complementary to the main review part.

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

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