

Interactive comment on “Observations and modeling of air quality trends over 1990–2010 across the Northern Hemisphere: China, the United States and Europe” by J. Xing et al.

Anonymous Referee #2

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This study simulates the air quality over the North Hemisphere during the past two decades (1990–2010) and analyzes its trends particularly on three regions, China, US, and Europe. It is a good attempt to model long-term air quality change in large scale using the 3-D air quality model, and also provide valuable suggestions on air pollution controls. This paper is well organized and written. I would suggest it published after minor revisions.

(1) The limitations of this paper, e.g., O₃ chemistry over China is discussed without evaluation due to the unavailability of O₃ data, should be discussed in the conclusion section.

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(2) Seven cities are selected in CN-API network in model evaluation. It is better to add an explanation of the reasons to chose only those seven cities for China.

(3) The heading rows of Table 3 are confusing (% , emission, and concentration). Please revise it into a more readable format.

Interactive comment on Atmos. Chem. Phys. Discuss., 14, 25453, 2014.

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