

Interactive comment on “Trans-pacific transport and evolution of aerosols: Evaluation of quasi global WRF-Chem simulation with multiple observations” by Zhiyuan Hu et al.

Anonymous Referee #2

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General comment:

This paper presents a nice evaluation of a quasi-global WRF-Chem model in simulating trans-pacific transport of aerosol. Multiple satellites and in-situ observations are used to evaluate spatial, temporal and vertical distribution of aerosol simulations. Aerosol species over the West US and their contributions from local emissions are also discussed. This paper is well written and very useful for other researchers. I only have a few minor comments that should be addressed prior to publications.

Minor comment:

1. L170: Could you specify what kind of technical difficulties in running global WRF-

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Chem?

2. L283-286: Is CALIOP data collocated with model simulations? Please clarify.
3. L387-389: What's the mean values for model simulations?
4. L441: “followed by DJF”?
5. Figure 15: This figure needs some improvement. The dots are not easy to see.

Interactive comment on Geosci. Model Dev. Discuss., doi:10.5194/gmd-2015-248, 2016.

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