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> Interactive Comment

Interactive comment on "Implementation of warm-cloud processes in a source-oriented WRF/Chem model to study the effect of aerosol mixing state on fog formation in the Central Valley of California" by H.-H. Lee et al.

Anonymous Referee #1

Received and published: 12 December 2015

As some reviewers pointed out in previous submission, the simulation improvement of the new source-oriented approach is marginal but the computational cost increases a lot. The application of such method in operational forecasts is deemed to be impractical. Therefore, the current study raises speculations from readers about the importance of the new methodology. The best way to demonstrate the merit of the approach is to conduct idealized simulations under highly controlled conditions to explore the sensitivity of simulated clouds and radiative feedback to a wide range of parameter space. Then the best application of this methodology is to come up with novel param-





eterizations based on idealized results that can improve the simulations by the simple approach, such as the internal mixture method.

Interactive comment on Atmos. Chem. Phys. Discuss., 15, 32239, 2015.

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