Geoscientific
Model Development
Discussions

# *Interactive comment on* "Multi-model simulations of springtime dust storms in East Asia: Implications of an evaluation of four commonly used air quality models (CMAQv5.2.1, CAMxv6.50, CHIMEREv2017r4, and WRF-Chem v3.9.1)" *by* Siqi Ma et al.

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Hello, I enjoyed looking over this paper and I think there are some pretty interesting results. I would like to caution the authors that the UoC bug fix discussed on lines 18 through 19 in section 2.4.1 was not implemented into WRF-Chem until version 4.0. Therefore unless, the authors are using a modified version of WRF 3.9.1, the UoC bug is active in the WRF version described in the paper. If the authors are using a modified

version, that needs to be stated. Otherwise, I encourage the authors to fix this bug in their copy of WRF 3.9.1 and rerun the UoC simulations. It's an easy bug to fix: located in subroutine qwhite within the module_qf03.F in the chem directory within WRFV3. This will be substantially less burdensom than rerunning all simulations with a newer version of WRF. Additionally, I recommend that the authors refine their text in section 2.4.1 such that it is clear to the reader that the bug is not corrected in the publicly available versions of WRF-Chem until version 4.0 to avoid any confusion down the line.

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