

Interactive comment on "Decadal evaluation of regional climate, air quality, and their interactions using WRF/Chem Version 3.6.1" *by* K. Yahya et al.

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Dear Editor,

Thank you for your comments. We have gone through the references you provided the Journal white paper, Editorial and the requirements of papers published in GMD. Our paper presents decadal application and comprehensive evaluation of an already published model, which falls into the Technical, development, and evaluation (TDE) papers manuscript type. According to the aforementioned Editorial documents, for TDE papers, we are strongly encouraged to provide a code for potential users to perform test cases published in our paper and to include electronic versions of model output where possible.

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As per your request, we will add a Code and Data Availability section to the last section of our manuscript when we submit the revised paper. The WRF/Chem v3.6.1 code used for this paper will be available upon request. However, since we are not the group who is in charge of the official WRF/Chem code release and maintenance, we highly encourage users to download the latest available version of the WRF/Chem code from NOAA's web site at http://www2.mmm.ucar.edu/wrf/users/download/get_source.html. We have worked with the WRF/Chem development group at the National Oceanic and Atmospheric Administration (NOAA) to migrate the updates in our in-house version of WRF/Chem v3.6.1 into WRF/Chem v3.7 and WRF/Chem v3.7.1 for scientific community release. The WRF/Chem v3.7 and WRF/Chem v3.7.1 codes are now publicly available at http://www2.mmm.ucar.edu/wrf/users/download/get_source.html. These latest versions of the source codes contain all major changes that we made in the standard version of WRF/Chem v3.6.1; they have been rigorously tested for compatibility and compiling issues on various platforms.

As our simulations were conducted over a period of ten years, they required large amount of model input data and also generated huge amount of model output data. It is therefore not possible for us to provide all the inputs and outputs for our decadal simulations due to logistical issues. However, upon request, we will be able to provide the inputs including the meteorological files, meteorological and chemical initial and boundary conditions, model the namelist set-up, and instructions on how to run the simulations for a 1-day test case. We can also provide sample outputs for the 1-day test.

We hope that the above planned changes of our paper and our efforts to make the source codes and 1-day testbed available to the scientific community will meet the expectations of the publication of a TDE paper on GMD.

Interactive comment on Geosci. Model Dev. Discuss., 8, 6707, 2015.