

Interactive comment on “Air quality modelling in the Berlin-Brandenburg region using WRF-Chem v3.7.1: sensitivity to resolution of model grid and input data” by Friderike Kuik et al.

Anonymous Referee #1

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With regard to increasing urbanisation and connected air pollution, improving air quality models in urban areas gets more and more important in order to understand the complex interactions between physical and chemical processes in these highly dynamic environments. The existing paper nicely presents a regional WRF-Chem modelling study for the urban area of Berlin discussing the model sensitivity to varying resolution and different input data. It is well structured and written in an understandable way, which makes it easy to follow and get the aim of the work. The relevance for the scientific field is given on the one hand by using a novel methodology coupling a modified version of the WRF Urban Canopy Model to WRF-Chem and further relating to existing relevant studies in the field. Before being suitable for publication in

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‘Geoscientific Model Development’ however some important points have to be clarified and discussed further, which are mentioned in the attached material.

Please also note the supplement to this comment:

<http://www.geosci-model-dev-discuss.net/gmd-2016-190/gmd-2016-190-RC1-supplement.pdf>

Interactive comment on Geosci. Model Dev. Discuss., doi:10.5194/gmd-2016-190, 2016.

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