Dear authors,

Thank you for revising the manuscript according to the comments. As also mentioned by reviewer2, I do see the premature status as a core problem for really assessing the model's performance for operational use. With other model activities are emerging in that area, e.g. in the framework of PALM-4U developments, it will be interesting however to know, how these results will compare with future studies/systems. A common problem might be, that these systems are way too complex for using it operationally, by 'external users'. You are giving some hints about potential modifications which still have to be accomplished, a detailed view on that is still not provided - or easy to do at this stage. I do think however, that the study could provide a starting point for future model intercomparisons and directions towards operational use.

A few things still pop up:

- It does not come out clearly, what will be needed to run this model in 'forecasting mode'. I expect the analysis presented refers to a hindcast mode?

-Figure 13: Could the reason for high PM values in the north west could be related to roads?

- the new Figure 5 is too busy, maybe divided in subplots

Chapter 4.2. The evaluation should come more as an introduction or more prominent, rather than being just a brief sentence in the paragraph.

- maybe not for direct discussion in the paper, it would be interesting if the model system WRF-Chem itself would be further maintained in the future

- The studies added to comment on the vertical distributions (Line 378-383) are not perfectly suited here, as one analysis summer conditions, and the other a more rural location. maybe you can find another study, highlighting that effect. Or provide a comment that with a 50x50m grid cell size, the height of 15m would be reasonable.