

***Interactive comment on “Development of Korean Air Quality Prediction System version 1 (KAQPS v1): an operational air quality prediction system with focuses on practical issues” by Kyunghwa Lee et al.***

**Anonymous Referee #1**

Received and published: 11 September 2019

This is a straightforward manuscript describing a WRF-CMAQ system with data assimilation adjustment for its initial condition, and shows that the data assimilation improve the predictions in most cases. Here are some specified comments.

The data assimilation method mentioned mainly include AOD assimilation and surface measurement assimilation. Which one play a more important role for PM10 and PM2.5 adjustment? Do these adjustments have any conflict? Table 1 shows that CO's R and SO2's MNB become worse after data assimilation, why? Any discussion about it

C1

Other minor issues: Line 276 (page 12), “Tang et al., 2017” can not be found in the reference. Line 282 (page 13), equation (7): the term “l” does not come with explanation in the text.

---

Interactive comment on Geosci. Model Dev. Discuss., <https://doi.org/10.5194/gmd-2019-169>, 2019.

C2