

Dear editors,

We have now taken the referee comments into account. Please find below summary of the changes.

We refer to our author comment at <https://doi.org/10.5194/gmd-2020-200-AC1> for our detailed response to the referees' comments. Below, we summarize changes we made to the manuscript based on these comments. Additionally, we updated some of the references.

The referees had a total of 4 comments (1 by referee RC1, 3 by referee RC2).

Comment by RC1 about scaling variable:

We added the following paragraph to Sect. 2.5 on page 9 to clarify the issue raised by the reviewer:

mRMSE therefore depends only on the relative magnitudes of the pollutant concentrations and it is invariant to linear scaling of the training or evaluation data. For a new evaluation dataset, we could either use the same multiplicative constant -- if the scaling in the new evaluation dataset is expected to be identical to the scaling in the old evaluation data -- or find a new multiplicative constant.

Comment by RC2 about the problem of negative outputs (comment 1):

We added the following clarifying sentence to Sect. 3.1 on page 10 (our addition has been **bolded** here):

A possible approach for avoiding negative predictions is **either to use a transformation that allows only positive predictions (for example, log-linear regression instead of linear regression), or** to clip model outputs to a minimum of zero after prediction.

Comment by RC2 about logarithmic vs. standard SVR (comment 2):

As argued in the author comment, we feel that we have already covered this issue in Sect. 3.2 on page 11. We therefore did not modify the manuscript.

Comment by RC2 about choice of the dummy model (comment 3):

As argued in the author comment, we feel that including the dummy model as a baseline is informative. We therefore did not modify the manuscript.

Yours sincerely,

Kai Puolamäki, on behalf of the authors