

Geosci. Model Dev. Discuss., author comment AC1  
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## Reply on CEC1

Daniel C. Anderson et al.

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Author comment on "A machine learning methodology for the generation of a  
parameterization of the hydroxyl radical" by Daniel C. Anderson et al., Geosci. Model Dev.  
Discuss., <https://doi.org/10.5194/gmd-2022-44-AC1>, 2022

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Thank you for your comment.

Compressed versions of the parameterization and training dataset for one month exceed 1 Gbyte of storage, and thus, a repository such as GitHub is not a viable solution for the long-term, as they exceed maximum file size limits without a subscription. We have included scripts to generate the training dataset from data that are publicly available as well as a script to generate the parameterization from that dataset. A reader interested in using the parameterization therefore has the tools necessary to regenerate the parameterizations used in this work.

Additionally, because, as described in the paper, a new parameterization should be created for different model setups, the parameterizations created for MERRA2 GMI should not be applied to other models. We believe that including the parameterization used in the paper on GitHub could lead to its incorrect usage.

We therefore believe that the files we have provided are sufficient. If they are not, can you be more specific in the files you would like uploaded? Do you want the parameterization and/or do you want a file containing the training dataset used to create the parameterization? And do you have suggestions for repositories that can accommodate files of these size without payment?

Please let us know if you need any further information. Thanks,

Dan Anderson