

Geosci. Model Dev. Discuss., chief editor comment CEC1 https://doi.org/10.5194/gmd-2021-299-CEC1, 2021 © Author(s) 2021. This work is distributed under the Creative Commons Attribution 4.0 License.

Comment on gmd-2021-299

Juan Antonio Añel

Chief editor comment on "Stable climate simulations using a realistic general circulation model with neural network parameterizations for atmospheric moist physics and radiation processes" by Xin Wang et al., Geosci. Model Dev. Discuss., https://doi.org/10.5194/gmd-2021-299-CEC1, 2021

Dear authors,

After checking your manuscript, it has come to our attention that it does not comply with our Code and Data Policy.

https://www.geoscientific-model-development.net/policies/code_and_data_policy.html

First of all, the SPCAM v2 model is only available from a SVN repository and the access is restricted. We can not accept this. You must publish the code of the model in one of the appropriate repositories (e.g., Zenodo) without restrictions.

Secondly, the coupler to use the DNN with the model seems to be one of the most relevant parts of your work; however, in the NNCAM file in the Zenodo repository, it is not clear if it is included. I guess that it could be in the nncam-couple directory, but the fact is that in the main directory, there is no description about what this file contains, what each script does, etc. Please, add a file with the information. The structure is similar to the one of the CCSM or CESM, but it is necessary to explain better for readers not familiar with these models.

Also, when using machine learning techniques that include training, the data used to train the neural network are of the utmost importance for the reproducibility of the experiments. Therefore, please, share the data that you have used in the Zenodo repository.

Please, address all these issues as soon as possible, as this information must be available for the Discussions stage. Also, remember that you must include the modified 'Code and Data Availability' with all the new information in a potential reviewed version of your manuscript.

Best regards,

Juan A. Añel

Geosc. Mod. Dev. Executive Editor