

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

Xin Wang et al.

Author 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-AC1>, 2021

Dear Dr. Añel,

Many thanks for the comment.

First, we are sorry for the inconvenience when accessing the SPCAM v2 model. Here we provide SPCAM v2 model directly in Zenodo next to the NNCAM. And we have submitted a proper description of the case used to generate target data for training, validation and testing.

Secondly, we thanks for your attention on our work. Yes, the DNN-GCM Coupler is one of the most important parts in our work. We are sorry that we did not describe it in detail. Now we provide a sophisticated README file in our Zenodo repository.

We are fully aware the responsibility of scientists to share the original data, and we are preparing to do so. Right now, duty to the storage quota of Zenodo, we can only provide one year of the SPCAM simulation with all considered variables in training. That is the maximum data we can provide, even after we apply for a 100GB storage quota. We believe that these data is enough to reduplicate the neural network training. If the readers want more data, we recommend they install the provided SPCAM and run the suggest case.

It will take a few days to fully upload all the data and codes in Zenodo. Right now we provide you source codes of SPCAM and NNCAM include proper descriptions file.

They are attached in the reply.

Best regards,

Xin Wang

Please also note the supplement to this comment:

<https://gmd.copernicus.org/preprints/gmd-2021-299/gmd-2021-299-AC1-supplement.zip>