

Dear Chief Editor:

Thank you very much for your professional comments concerning our manuscript “ENSO-ASC 1.0.0: ENSO Deep Learning Forecast Model with a Multivariate Air–Sea Coupler” (ID: gmd-2021-213). Those comments are all very valuable and helpful for revising and improving our manuscript, we have updated our manuscript as your suggestion. The point-by-point responses are as following:

Comment 1: In your work, it is of the utmost importance that you publish the input sub-datasets used for ENSO-ASC and the output data. Therefore, please, post your data in one of the appropriate repositories.

Response: Thank you for spotting our crucial neglects in the datasets used for ENSO-ASC. We have created a repository to store the data we used, including the training/validation dataset and the model output examples, and updated the corresponding statements at **line 862** (*Data availability*) as the [blue](#) text below:

“Thanks to NOAA/CIRES, Remote Sensing System, and China Meteorological Administration for providing the historical geoscience data and analysis tools. (<https://rda.ucar.edu/>, <http://www.remss.com/>, <https://cmdp.ncc-cma.net>, last access: 8 Jul 2021). [The related training/validation datasets can be also accessed at https://doi.org/10.5281/zenodo.5179867](https://doi.org/10.5281/zenodo.5179867)”

Comment 2: In the README file of the model, you mention several versions of python or CUDA necessary for your work. This is precisely the kind of information that you must mention in the manuscript and the Code Availability section.

Response: Thank you so much for your professional comments. We have updated the corresponding statements at **line 860** (*Code availability*) as the [blue](#) text below:

“[The source code of the ENSO-ASC is available in the Git repository: https://github.com/BrunoQin/ENSO-ASC](https://github.com/BrunoQin/ENSO-ASC) (last access: 14 August 2021), which is implemented by Python 3.6 (or 3.7) and CUDA 11.0. The present version of ENSO-ASC 1.0.0 is available at <https://doi.org/10.5281/zenodo.5081793>.”

Comment 3: There is no license listed in the Zenodo repository. For ENSO-ASC (it reads other), but in the uploaded material, there is not a License file. If you do not include a license, the code continues to be your property and can not be used by others. Therefore, when uploading the model's code to Zenodo, you could want to choose a free software/open-source (FLOSS) license. We recommend the GPLv3. You only need to include the file '<https://www.gnu.org/licenses/gpl-3.0.txt>' as LICENSE.txt with your code. Also, you can choose other options that Zenodo provides: GPLv2, Apache License, MIT License, etc.

Response: We thank the reviewer for this valuable comment. We have updated our model repository and supplement the GPLv3 license into the latest repository as the comment said.

Comment 4: In the files of the model, it reads several times "Linux". The correct way of naming it is "GNU/Linux"; Linux is only the kernel of the operative system

Response: Thank you for pointing out our mistake very much. We have also replaced the related "Linux" to "GNU/Linux" in the "README.md" file in our model repository.

Thank you again for your positive comments and valuable suggestions to improve the quality of our manuscript.

On behalf of all the co-authors, best regards,
Bo Qin