EGUsphere, community comment CC2
https://doi.org/10.5194/egusphere-2022-618-CC2, 2022
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Reply on Editor comment. License and Input Training/Testing datasets.

Matjaz Licer

Community comment on "HIDRA2: deep-learning ensemble sea level and storm tide forecasting in the presence of seiches – the case of the northern Adriatic" by Marko Rus et al., EGUsphere, https://doi.org/10.5194/egusphere-2022-618-CC2, 2022

Point-by-point reply to issues raised by the GMD editor:

GMD: - First, regarding code: the Hidra 2 model does not have a license listed. If you do not include a license, despite you publishing it, the code is not available to use by anyone; it continues to be your property. Therefore, add a license to your code in 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.

Authors' reply:

We have added a licence file to the repository.

GMD: - Secondly, you use the UTIDE package. However, this package is stored on GitHub, as you mention in the list of References. UTIDE is released under the MIT license so that you can copy it. Therefore, as GitHub is not a suitable repository (GitHub itself instructs authors to use other alternatives for long-term archival and publishing, such as Zenodo), please, publish UTIDE (maintaining the MIT license) in one of the appropriate repositories, and reply to this comment with the relevant information (link and DOI).

Authors' reply:

Utide package, used in the manuscript, is now uploaded to Zenodo under MIT license.

link: https://zenodo.org/record/7103894

DOI: https://doi.org/10.5281/zenodo.7103894

- Also, your manuscript is about a learning method. As this technique heavily depends on the input data, and the reproducibility of the work is compromised

without it, we request that you publish in the repositories for your paper the input and output files used in your work. In the Code and Data Availability section, you mention in a generic way the MARS retrieval system. This is not enough. You must publish the specific data used as input. If variables are taken from a larger file, you can post simply the input data taken from them and used. For outputs, nothing prevents you from publishing them.

Authors 'reply:

We have published the entire processed input training and test datasets for HIDRA2 at the following location:

link: https://zenodo.org/record/7123911

DOI: https://doi.org/10.5281/zenodo.7123910

Note these are not the original ECMWF ensemble fields but rather a substantially coarsened and processed fields - original fields are only available via MARS system request specifications AREA="46./5./35./21.", GRID="0.125/0.125", STEP="00/to/72/by/1", PARAMS="165.128/166.128/167.128/151.128", NUMBER="1/to/50", TIMES="00".

We have also updated the repository to include HIDRA2 predictions on the test set, and refined instructions on how to train and evaluate HIDRA2 on the published data. The repository is available here:

link: https://github.com/rusmarko/HIDRA2

DOI: https://doi.org/10.5281/zenodo.6784842

We will add this information to the revised version of the manuscript.

Finally, you use the NEMO model. However, you do not provide the NEMO code. You simply cite a pdf file, listed in the references, stored in a webpage that is not a trustable repository. Also, you do not identify the NEMO version used for your work. All these issues must be fixed. First, you must clearly state in your manuscript the NEMO version that you use. Then you must provide in the Code and Data Availability section a link to a trustable repository containing it. Many papers on the development of NEMO have been published in our journal, and in this way many NEMO versions are already stored in Zenodo. You could want to check if it is the case of the version you have used and simply cite its current Zenodo repository. If not, please, create a new one.

Authors' reply:

We are using the Copernicus Marine Environment and Monitoring Service (CMEMS) operational forecasting product which is publicly available and based on NEMO v3.6 (https://doi.org/10.25423/CMCC/MEDSEA_ANALYSISFORECAST_PHY_006_013_EAS6). We are not running the NEMO model ourselves for this particular study. However, a regional setup of NEMO v3.6, which officially ships with NEMOGCM code (https://www.nemo-ocean.eu/), is available at the following repository:

Link: https://zenodo.org/record/4022310

Doi: https://doi.org/10.5281/zenodo.4022309

We will include the version number in the revised manuscript and we will remove the untrusted documentation pdf address and replace it by the official Copernicus documentation doi for the used sea level product: https://doi.org/10.25423/CMCC/MEDSEA_ANALYSISFORECAST_PHY_006_013_EAS6 .

Please, reply as soon as possible to this comment with all the information requested above, so it is available for the Discussions process as it should be. Note that your manuscript should have never been accepted for Discussions with all the mentioned flaws, this was an oversight from the Topical Editor, and we are trying to fix it now. Also, please, be aware that failing to comply with this request could result in rejecting your manuscript for publication. Moreover, you must include in any reviewed version of your manuscript the modified 'Code and Data Availability' section with all the new information requested.

Authors' reply: Thank you, we will include this information in any revised version of the manuscript.