

Dear Executive Editor Juan A. Añel,

Thank you for your guidance on the GMD Code and Data Policy. We have addressed each of your concerns point by point below to ensure full compliance.

[0] Unfortunately, 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

Response: Sorry for not following the most recent policy. We had referred to some previously published papers in *GMD*. We have now corrected all related issues.

[1] First, you have archived your code on a Zenodo private repository, something we can not accept. The GMD review and publication process depends on reviewers and community commentators being able to access, during the discussion phase, the code and data on which a manuscript depends, and on ensuring the provenance of replicability of the published papers for years after their publication. Therefore, you must public openly and without restrictions the code used in your manuscript to continue the Discussions and peer review process.

Response: The PLSTM-Reg v1.0 model code is now freely available through a Zenodo repository. It is fully public, open access, and permanently archived at <https://doi.org/10.5281/zenodo.18265198> (Yu et al., 2026).

[2] In addition, to access the data used and produced in your work you cite several sites; however, the cited sites do not fulfil GMD's requirements for a persistent data archive because: * They do not appear to have a published policy for data preservation over many years or decades (some flexibility exists over the precise length of preservation, but the policy must exist). * They do not appear to have a published mechanism for preventing authors from unilaterally removing material. Archives must have a policy which makes removal of materials only possible in exceptional circumstances and subject to an independent curatorial decision. * They do not appear to issue a persistent identifier such as a DOI or Handle for each precise dataset. If we have missed a published policy which does in fact address this matter satisfactorily, please post a response linking to it. If you have any questions about this issue, please post them in a reply.

Response: We have taken the following steps to address the issues you raised.

To ensure our reservoir operation dataset meets the requirements for long-term preservation and prevents unilateral removal, we have formally published the resource on HydroShare. It is now locked, permanently archived, and accessible via a persistent identifier: <https://doi.org/10.4211/hs.092720588e2e4524bf2674235ff69d81>. (The DOI is currently under registration and is expected to be activated within 1–2 working days.)

In addition, we have replaced the general website URLs for the Daymet meteorological forcings and the Global Dam Watch (GDW) database with their official persistent DOIs from compliant long-term archives:

<https://doi.org/10.3334/ORNLDAAAC/2129> and <https://doi.org/10.6084/m9.figshare.25988293>, respectively.

[3] There is a site in the case of your manuscript that could almost be considered in compliance with our policy, the Texas Data Repository; however, after reading their policy, it seems that the service for hosting and curating the data are not provided directly by the Texas Digital library, but by AWS, which is a private company, and therefore we can not accept as a long-term repository valid for scientific publication.

Response: We appreciate your careful examination of the dataset. To address the issue with the Texas Data Repository, and to simultaneously resolve the preservation issues for the MERIT websites mentioned above, we have bundled the data subsets covering the Contiguous United States (CONUS) into a single, fully compliant archive. This package includes topography (MERIT-Hydro) and routing (MERIT-Basins) data organized by Pfafstetter Level 2 continental units (codes 71-78), as well as the complete time-series (Global Reservoir Surface Area Dataset, GRSAD) files describing reservoir surface area dynamics. These inputs have now been permanently archived in a new public Zenodo repository under a CC BY-NC-SA 4.0 license, available at <https://doi.org/10.5281/zenodo.19284811> (Yu et al., 2026).

[4] Please, therefore, publish all the code and data used in your work and necessary to replicate it in one of the appropriate repositories according to the policy of the journal, and reply to this comment with the relevant information (link and a permanent identifier for it (e.g. DOI)) as soon as possible. We cannot have manuscripts under discussion that do not comply with our policy. The 'Code and Data Availability' section must also be modified to cite the new repository locations, and corresponding references added to the bibliography. I must note that if you do not fix this problem,

we cannot continue with the peer-review process or accept your manuscript for publication in GMD.

Response: We have revised the Code and Data Availability section to ensure full compliance and have included all corresponding references in the bibliography. The updated section is provided below.

Code and data availability

The reservoir operation dataset used in this study is available via HydroShare at <https://doi.org/10.4211/hs.092720588e2e4524bf2674235ff69d81> (Chen et al., 2025). Static reservoir attributes were obtained from the Global Dam Watch (GDW) database, available via Figshare at <https://doi.org/10.6084/m9.figshare.25988293> (Lehner et al., 2024). Meteorological forcings from the Daymet dataset are available from the ORNL Distributed Active Archive Center at <https://doi.org/10.3334/ORNLDAAC/2129> (Thornton et al., 2022). The Global Aridity Index dataset is available from Figshare at <https://doi.org/10.6084/m9.figshare.7504448> (Zomer et al., 2022). Catchment delineation relied on MERIT-Hydro raster data (Yamazaki et al., 2019), and MERIT-Basins vector data (Lin et al., 2019). The time-series surface area dynamics for the evaluated reservoirs were provided by the Global Reservoir Surface Area Dataset (GRSAD; Zhao & Gao, 2018). To ensure reproducibility and compliance with long-term archiving requirements, the specific subsets of raster, vector, and surface area data used for the evaluated reservoirs have been bundled and permanently archived on Zenodo at <https://doi.org/10.5281/zenodo.19284811> (Yu et al., 2026).

Catchment delineation was performed using the delineator package, available at <https://doi.org/10.5281/zenodo.7314286> (Heberger, 2023). The model training and evaluation framework was built using the open-source NeuralHydrology Python library, available at <https://doi.org/10.5281/zenodo.7063258> (Kratzert et al., 2022). The PLSTM-Reg v1.0 model used in this study is archived at <https://doi.org/10.5281/zenodo.18265198> (Yu, 2026).

Thank you again for your guidance and support. We look forward to the continuation of the peer-review process.

Best regards,

Yi Zheng [and Co-Authors]

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