Dear Chief Editor,

Thank you for your detailed feedback and for providing clear guidance on ensuring our manuscript complies with the journal's "Code and Data Policy." We have carefully addressed the issues raised. First, we have archived our code and data in the Zenodo and assigned it and the GitHub repository an appropriate open-source license (Apache License 2.0), ensuring long-term accessibility and usability. The DOI for the Zenodo archive is 10.5281/zenodo.14244062 and can be accessed via https://zenodo.org/records/14244062.

Regarding the WW3-ST6 dataset, it is already a well-known and widely-used dataset in the wave community and is readily accessible by contacting the authors via email. However, we understand the journal's requirement for open access. To address this, we have uploaded the subset of WW3-ST6 used in this study to the Zenodo repository (10.5281/zenodo.14244062), allowing readers to reproduce the comparisons presented in the manuscript.

Our training data consists of 18 years of ERA5 reanalysis data of global wind speed and significant wave height, totaling approximately 150 GB, which is too large for most data repositories. As this dataset is publicly available through the Copernicus Climate Data Store (CDS), we provided the scripts in the aforementioned repository to assist readers in efficiently and accurately downloading the data required for the model, which should be sufficient to replicate the outputs. Besides, in the Data and Method Section, we have stated clearly that "we utilized the global SWH and 10-meter longitudinal and latitudinal components of neutral wind (U10 and V10) from the ERA5 dataset for the period 2000-2017 to train the global AI SWH model. The corresponding data in the year 2022 was used for validation to prevent over-fitting, while the model testing was conducted with data in the year 2020. Both the wind and wave data used here are at a 0.5° × 0.5° × 1h spatio-temporal resolution". Any readers who have experience downloading data from CDS should be able to download the data mentioned above. Regarding the output, the outputs generated by our rolling model are derived from over 200 different initial conditions on the test sets, exceeding 100 GB in size, which is also too large for most data repositories. To facilitate reproducibility, we have uploaded all the required test data to the Zenodo repository (10.5281/zenodo.14244062). Readers can easily reproduce the outputs by running the code provided in the repository without the need to download any additional data themselves.

Furthermore, we have included additional data in the Zenodo repository (10.5281/zenodo.14244062) to support validation and further analysis. These include the original data files used for the performance evaluation of the models based on altimeter data and the movies provided in the manuscript’s supplementary materials.

We have updated the manuscript's "Open Research" section and these modifications will be reflected in the revised manuscript. It now states:

The ERA5 data is downloaded from Copernicus Climate Data (https://cds.climate.copernicus.eu/). The CCI-Sea State dataset is downloaded from the Centre for Environmental Data Analysis (https://archive.ceda.ac.uk/). The WW3-ST6 dataset is available from Liu et al. (2021), and the subset used in this study is available in the Zenodo repository (https://zenodo.org/records/14244062). The AI models established in this study and relevant test data have also been archived in the Zenodo repository (https://zenodo.org/records/14244062).

We believe these updates address the issues raised and ensure compliance with the journal's policy. Please let us know if there are any additional concerns or further clarifications required. Thank you for your time and assistance.