Comment on gmd-2022-180
David Ham

I've taken a look at the code and data availability sections of this manuscript and they're currently far from satisfactory.

This manuscript documents a proprietary code that the authors do not have the licence to distribute publicly. Nonetheless, GMD policy requires that the authors have archived (privately) the code used in the paper, and given the editor and reviewers access. The purpose of this is so that the editor and reviewers can satisfy themselves that the authors would be able to reproduce the work presented.

In this case, it appears that the authors have only archived the newly developed code, and not the whole model. It seems the archived code might not even be fully compilable, let alone sufficient to demonstrate the reproducibility of the work presented. In order for this manuscript to be properly reviewed, the authors need to ensure that the exact version of all the code necessary to reproduce the work presented has been archived, and access given to the editor and reviewers.

The data archive is also, regretably, unsatisfactory. It appears to be a fileshare site with no assurances of persistence or non-revokability. No persistent identifier (e.g. DOI) is provided for the data. Further, the data is very small (2.6Mb) so there does not seem to be any reason why a suitable archive, such as Zenodo, could not be employed. As with the code availability, this issue needs to be remedied so that the reviewers and editor can satisfy themselves that the work presented is reproducible and will remain so into the future.