Dear Sir,

Thank you very much for accepting our manuscript referenced EGUSPHERE-2022-690. Please find below our response to the changes you have asked for.

The version on Zenodo has now been revised and more information added. In detail the content of the package with the DOI is now :

### Grids

The 4 grids for which the constructions and quality of the routing graph were evaluated are provided.

### Data

This directory contains the hydrological digital elevation models (HDEM) used in the paper to produce the routing graph which are evaluated.

### Documentation

A copy of the WiKi is provided so that the software can be used with the above data.

- [Access to the documentation.](#)

- [Evolving documentation on gitlab](#).

### Routingpp

The main code as used for the paper. In this directory some standard test cases are also provided.

### Diagnostic Tools

The diagnostic tools used to analyse the produced routing graph are provided :

- MainStream : The codes to generate and analyse the river segments to evaluate the quality of the graphs.
- validation : Validation of river discharge and temperature simulated by ORCHIDEE using the graphs build with the Routingpp code.

The new Zenodo repository is : https://doi.org/10.5281/zenodo.7788209
This information has been updated in the manuscript but is not well highlighted by latexdiff tool.

We hope that this satisfies the reproducibility ambitions GMD has set for the results to be published in the journal.

Best regards

Jan Polcher