

## Author's response for egusphere-2022-740, revised submission after editorial decision on 7 January 2023

We would like to thank the editor and the referees for the assessment of our revised paper. The manuscript submitted for final publication deviates from the accepted version in the following aspects.

### Requested changes:

- Modified Fig. 8 and Fig. 9 to make them readable for people with color blindness (added symbols)
- We have uploaded the research data for this manuscript in the repository KITopendata (with doi:10.5445/IR/1000154410) and have modified the “code availability” section accordingly: “ICON model output (2d fields) and post-processing scripts are available for download (Thomas et al., 2023). The full 3d model output fields are available upon request.” The 3d model output files are too large (700 GB) to be uploaded onto the repository and will be archived on a tape archive at KIT.
- A reference to the OpenStreetMap licensing conditions has been added in the caption of Fig. 2: “OpenStreetMap data is distributed under the Open Database License (ODbL, see [url{openstreetmap.org/copyright}](https://openstreetmap.org/copyright)).”

### Other minor corrections:

- L271: corrected typo than -> then
- Removed reference to Hall et al. 2012 (as the recorded presentation is only difficult to access because it requires unsupported software)
- Other minor corrections in the reference list (added links etc.)