

Dear Editor,

We would like to thank you for the important suggestions (in blue below). Below we explain how we have addressed each of the points.

First, the "Code Availability" section only contains information for CleanSnow v1.0.0; however, to perform your work you have used additional software. It is the case of MeteolO. For MeteolO you cite a paper published ten years ago in our journal, that points to a webpage that does not comply with our current requirements for code availability. That is, it is not an acceptable repository. Regarding this, MeteolO is published under the GPLv3 license, so you can take the code, and store it in a repository that complies with our policy. Therefore, please, do it, and reply to this comment with the link and DOI of its repository.

With regard to MeteolO, we have not used the original repository, but we have reimplemented the function FilterDeGrass, which we use in our comparison. As MeteolO is a 3rd party software, we did not consider it part of our submission. We regret the misunderstanding. To allow reproducibility of results produced by our MeteolO filter reimplementation, we now provide it as part of our software, which is as of now updated at: <https://doi.org/10.5281/zenodo.12698070>

The reimplementation of the MeteolO filter can be found at:
utils/filters.py

The code to reproduce filter predictions for the test stations is then at:
notebooks/meteoio/filter_de_grass.ipynb

As we did not run any code from MeteolO repository directly, we see no reason for providing it with our submission. We therefore find the aforementioned solution complete, without the need of uploading MeteolO codebase to Zenodo.

Secondly, for the "Data Availability" section: the link that you provide for a repository for the data used to train your model, is not valid. It is not a trustable long-term repository that can be accepted for scientific publication. Therefore, you must take all the data and store it in one the repositories that we can accept, and again, reply to this comment with the link and DOI for it. However, this is not the only problem: you use SnowPack data. For this dataset you cite a paper (Lehning et al., 1999), and despite you use the SWE data, it is not possible to access it. Therefore, as for the annotated data used to train your model, you must publish the SWE data.

Regarding dataset availability, we have chosen a repository (EnviDat) that is recognized by, for instance, the Swiss National Science Foundation. Moreover, it is listed on <https://www.re3data.org/>. We can certainly switch to another repository that complies with your standards. We have now uploaded an updated version of the dataset (containing SWE data) to Zenodo at:

<https://doi.org/10.5281/zenodo.13324736>

Regarding SNOWPACK data used in our work, the previously published dataset already included these data in the folder:

snowpack-swe-data/

We had so far only provided thresholded data and now, in addition, also provide the original data (newly add column SWE in the CSV-file).

Also, remember that you must modify the "Code" and "Data" availability sections in any potentially reviewed version of your manuscript, so that they contain the information that you must post in reply to this comment.

We will make sure to update references to Code and Data in the next revision of our paper.

As we have addressed all the concerns, we hope that our submission will still be considered for discussion and publication in your journal.

Best regards,
Jan Svoboda