

Manuscript ID: egusphere-2025-4600

Manuscript title: Retrieving root-zone soil moisture from land surface modelling and GRACE/-FO and validating its dynamics with in-situ data over West Africa

Response to the Editor-in-Chief

In Figure 1, the green dots referred to in the caption are not visible. The figure should clearly display all individual soil-moisture stations (four in Benin, three in Niger, and one in Senegal), using symbols that remain distinguishable at the final publication size. Please also add a clear legend and ensure sufficient contrast.

Response : We appreciate your constructive comments and have addressed all the requested technical corrections. Figure 1 has been revised to ensure that all individual soil-moisture stations (four in Benin, three in Niger, and one in Senegal) are clearly visible. The station symbols have been enlarged and their contrast improved so that they remain distinguishable at the final publication size.

Notification to the authors:

1. Your reference list includes works "in preparation". Such works can be cited upon submission if being available to the reviewers. They should not be cited in the final, accepted manuscript, unless published, accepted for publication, or available as preprint with a DOI.

Response : Thank you for this comment. We have revised the reference (Defourny et al. (2023)), previously cited as "in preparation", by removing the expression "*In preparation*" and replacing it with the date on which the online resource was accessed, [2025-06-13], as this citation refers to the dataset available through the official download portal.

2. A dedicated "Code/Data availability" section is mandatory. Please include this section with the next file upload request. For further details, please refer to: https://publications.copernicus.org/for_authors/manuscript_preparation.html#assets > Data sets

Response : Thank you for this comment. We have added a dedicated Code and Data Availability section to the revised manuscript, in accordance with the journal's requirements. This section provides the availability and access information for all datasets used in this study. We have also indicated that the code used for the analyses is available from the corresponding author upon reasonable request.

3. Please add the following attribution texts to the following figure captions...

Response : Thanks. We have revised the captions of Figures 1, 6, and 7 by adding all the requested attribution statements acknowledging the respective data providers (ISMN, ESA, NCAR/UCAR, the GLWS team, and the WaterGAP project), in accordance with the journal's requirements.