

Dear editor and reviewers,

We thank you for the thorough handling of our manuscript and are happy that it is accepted for publication.

We have carefully considered the final comments in the author group and have decided not to include additional references or elaborate on the limitations and scale mismatch of soil moisture retrievals from satellites and cosmic ray neutron sensor (CRNS). Below we present our reasoning.

We have included references to existing literature concerning the comparison of satellite derived soil moisture and CRNS derived soil moisture at their original measurement scale (e.g. line 112). Here we discuss the scale mismatch. The objective of our study is to evaluate downscaled satellite derived soil moisture at the same scale as the measurement scale of the CRNS. The advantage being the similar scale and hence no significant scale mismatch.

In order not to distract the reader from this main point we do not want to elaborate further on the general and well-studied aspects of scale mismatch between non-downscaled satellite and ground measurements. Furthermore, we are not aware of which specific papers the reviewer has in mind.

Finally, we agree that the COSMOS-Europe paper is very valuable for future downscaling exercises. That is why we have already included it in our manuscript.

Sincerely,

Rena Meyer (in the name of all authors)