Dear Alberto Guadagnini,

We herewith submit the finalized manuscript "A thermodynamic formulation of root water uptake".

We understand your comment on the ongoing discussion on the REV-concept. We have changed the wording of this section as follows:

Old:

"Since energy content is better defined at scales not smaller than that of the representative elementary volume (REV), we state equations for discrete bulk soil compartments $V_{s,i}$ larger than the REV (that is, where porosity and the soil water retention curve are defined). "

New (Lines 167-170)

"We state equations for discrete bulk soil compartments $V_{s,i}$ of sufficiently large size such that the porosity and the soil water retention curve are defined at that scale."

Thank you for taking our manuscript over for the final steps.

Sincerely, Anke Hildebrandt