

January 4, 2019

Dear Reviewers,

Please find enclosed a revised version of our manuscript *“Inverse modeling of a single ring infiltration experiment: a key for analyzing unsaturated hydraulic properties of soils?”*.

We would like to thank both referees and editors for their valuable and constructive remarks and comments. All remarks and proposals have been addressed in the current revision. We believe that the revision according to both review reports has increased the level of the paper.

First of all we should highlight here, that the title of our paper has been updated for

“Scanning methodology to avoid convergence issues during inverse identification of soil unsaturated hydraulic properties.”

since we would like to underline the most important contribution of our work – the calibration methodology.

For your convenience, we have highlighted all changes in **red** in the revised manuscript, and we further include bulleted list detailing all changes in the manuscript according to the referees’ remarks and comments.

Yours sincerely,

Michal Kuraz, Lukas Jacka, Johanna Blöcher, and Matej Leps

Response to the referee's comments

Referee #1

1. *The abstract is very long; I suggest shortening it to convey the major points of this research.*

answer: Following your advice the abstract has been significantly reduced and rewritten.

2. *Typically, the last paragraph of the introduction section is reserved for describing the aim, innovation, general methodology of the research. This is missing from this manuscript. I like the fact that the authors present their research questions, but they also need to briefly describe the methodology used to answer them and how it is novel.*

answer: We completely agree with this remark, an extra section according to your advice has been added.