

Interactive comment on “Time-lapse monitoring of root water uptake using electrical resistivity tomography and Mise-à-la-Masse: a vineyard infiltration experiment” by Benjamin Mary et al.

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Received and published: 14 June 2019

Three reviewers have now provided very helpful and thorough comments on your manuscript. Reviewers 1 & 3 have concerns about the novelty of the study over Mary et al. (2018), which will need to be addressed with a strong and convincing statement about the originality of the submitted paper.

SOIL allows for public comment on all manuscripts so the paper will stay open until 3 July 2019, but you are welcome to comment on the reviews thus far.

Dear editor,

Thanks for giving us the opportunity to revise our article, and thanks for the reviews constructive comments. We took notice of all comments and the revised version of the manuscript.

In particular, we have reworked the manuscript in order to make its novelty more evident.

In order to deal with the lack of validation data, we have taken two actions:

- 1. We added a section describing a 1D hydrological modelling of infiltration;*
- 2. We discussed the limitations of data to be used for validation, and added a section of recommendations for future experiments.*

We agree with the reviewers' comments that the potential of this study and what makes its originality has not been fully exploited and explained. We took three actions in the revised version (after reformulating the goals):

- 1. We added the figures needed for a complete description and discussion of the full monitoring duration (30h) instead of the two related to the first-time steps;*
- 2. We added an improved version of the algorithm of current density inversion applied to root location identification;*
- 3. We discussed in detail the outcomes of the hydrological simulation that reproduce the infiltration experiment*

A revised version of the manuscript is now being resubmitted.

Best regards,

Benjamin Mary et al.