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Hydrology and Earth System Sciences
Discussions

Interactive comment on "Monitoring infiltration and subsurface stormflow in layered slope deposits with 3D ERT and hydrometric measurements – the capillary barrier effect as crucial factor" *by* Rico Hübner et al.

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First the authors want to thank the anonymous Referee #1 for his/her review of the manuscript and for the constructive and helpful comments. Find our response below each point.

1. I think the Authors should better explicate the targets of this work, given the particular assumptions they made on the stratigraphy.

We understand that the targets of this work have not been presented sufficiently clear

and we will revise the manuscript accordingly, giving more attention to the assumptions we have made based on the specific stratigraphy.

2. The Authors should better point out the limits of their experimental setup.

We totally agree that there are several limits of our experimental setup. In the revised version we add a critical discussion about the spatial and temporal resolution in general as well as regarding technical restrictions of our specific equipment and data.

3. I would suggest to simplify figures A8 and A9, since they are not easy to be interpreted

Figures 8 and 9 each represent a 1D profile over all measured time steps at two very important areas of the experimental plot. Since Figures 6 and 7 show only a limited number of time steps, Figures 8 and 9 are necessary to show that the processes are proceeding continuously. In the revised version, we display percentage change relating to the initial model (resistivity change) instead of the ratio which is in better agreement with the percentage changes presented in Figures 6 and 7. Moreover, we add some more explanations in the captions and in the corresponding text.

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