

Interactive comment on “Identifying a soil hydraulic parameterisation from on-ground GPR time lapse measurements of a pumping experiment” by A. Dagenbach et al.

Anonymous Referee #1

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This is a novel approach to derive extra information from reflection GPR, presented in a concise and to-the-point manner. However, I would encourage the authors to consider the effect of noise on the capability of the approach to distinguish, in practice, between different capillary parameterization. In fact, the authors state in their conclusions that a "a sharp air entry with a transition zone above is required to reproduce the reflections". To what extent is the noise in the GPR field data expected to blur our capability to see such features?

I also have some very minor comments: - why do the author refer to a "pumping"

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experiment? This is actually misleading, as the experiment consists of infiltration and drainage - line 71: put "oscillation" after "the water table" - line 76: the details of the dewow filter shall be presented (is it a median or a mean filter?). Such filtering may alter the wavelet shape. - line 80: remove "Regarding nature" (not sure what it means) - line 208: change "extend" into "extent" - line 209: change "higher" into "longer"

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