

Interactive comment on “Subgrid spatial variability of soil hydraulic functions for hydrological modelling” by P. Kreye and G. Meon

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The subject of the paper is relevant as hydrological properties of soils are of high importance in hydrological modeling. Scale problems are often ignored when large scale hydrological models are setup, partly because no soil-map preprocessing is made before the model setup and partly because of a lack of "easy access" methods for overcoming scale problems.

The work is relatively well presented in a clear language. The introduction is focused and gives a good overview. The text can in some sections be hard to follow for a non soil-scientist as my self (hydrological modeler) because of the large number of symbols and abbreviations.

Generally the figure captions needs to explain the symbols used in the figures, to com-

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ply with the "being able to stand alone" criteria.

How is the Ks and other values included in the hydrological model? And how does the model handle the parameter-variation within each soil class (if I understand you right)?, Please give an example of the difference the use of different parameter settings makes to the model outcome. Please state what the hydrological model is evaluated against.

I share the concerns of reviewer 3, comment 5.

Few specific comment: page 8 line 28, "than instead of "as" 9/6 How can the multivariate method give a worse fit than the linear? 11/20 respectively instead of each

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