## Functional test of pedotransfer functions to predict water flow and solute transport with the dual-permeability model MACRO.

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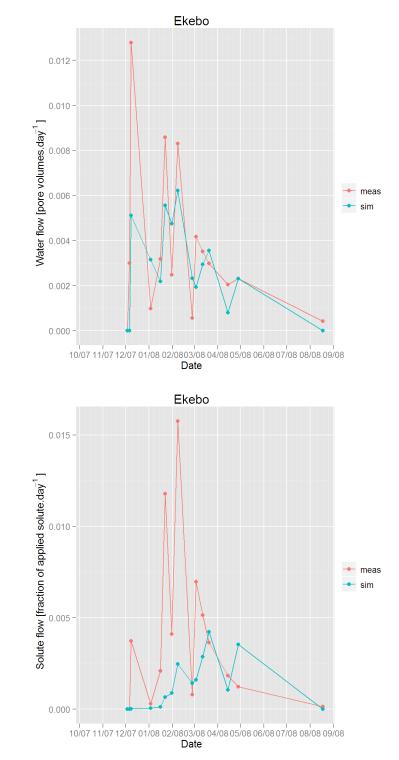
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- 11

## 12 **Supplementary Material:**

We present here the time series graphs representing modelled versus simulated water and solute flow for all the soil profiles included in our study. Water flow is given in grams of bromide per square meters and per day, and solute flow is given in pore volumes per day. The modelled water and solute flow have been down-scaled so their time steps match those of the measurements.

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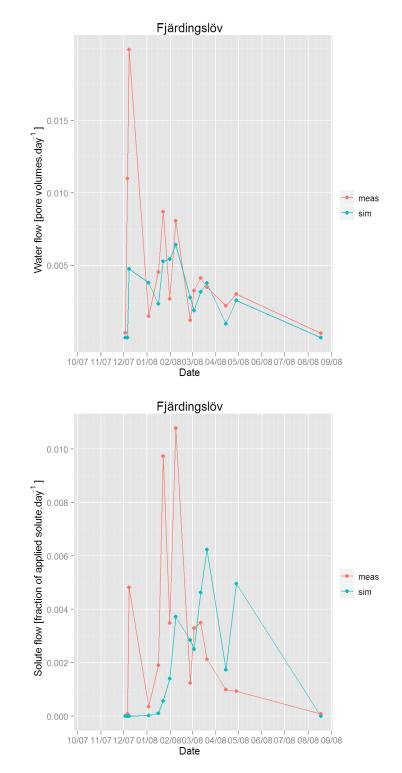


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22 Figure S1. Time series of measured ("meas") versus simulated ("sim") water and solute flow

- 23 for Ekebo soil.
- 24



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27 Figure S2. Time series of measured ("meas") versus simulated ("sim") water and solute flow

- 28 for Fjärdingslöv soil.
- 29

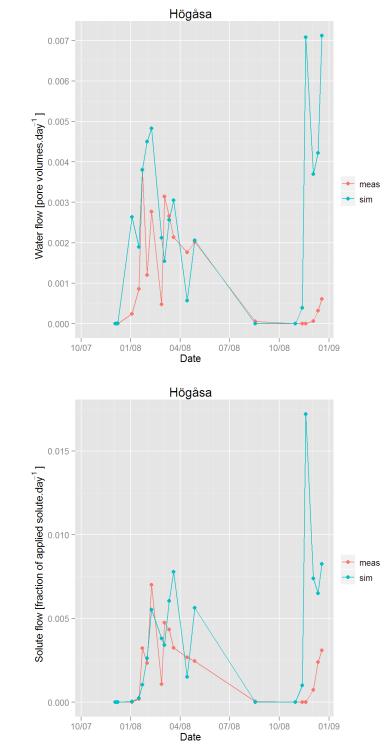
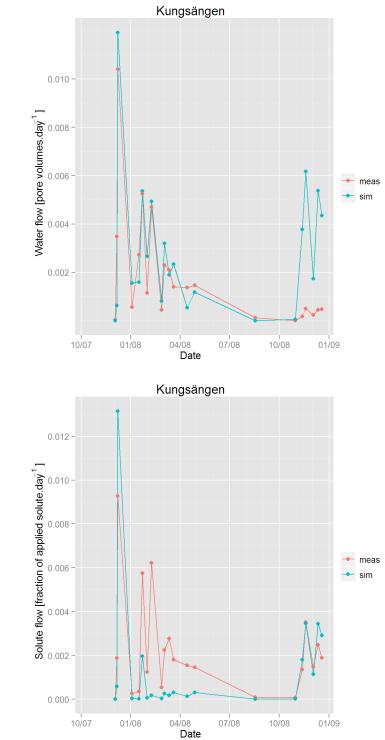




Figure S3. Time series of measured ("meas") versus simulated ("sim") water and solute flow
for Högåsa soil.



36

37 Figure S4.Time series of measured ("meas") versus simulated ("sim") water and solute flow

38 for Kungsängen soil.

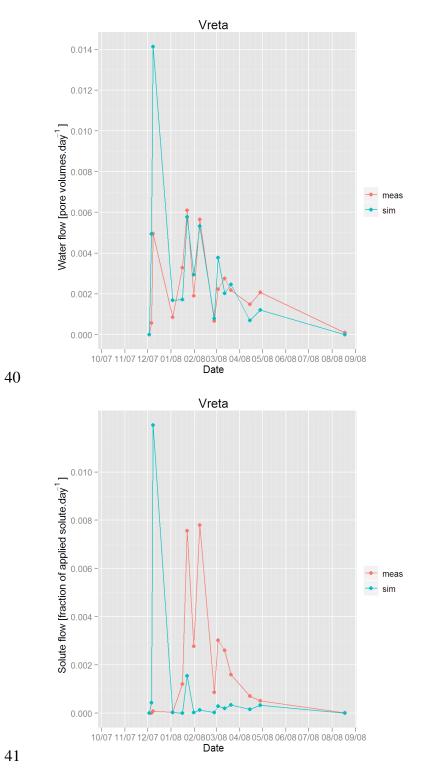
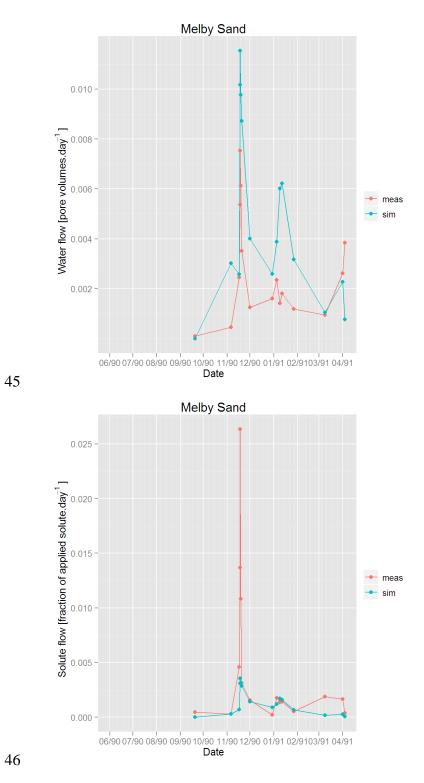




Figure S5. Time series of measured ("meas") versus simulated ("sim") water and solute flow 42

- 43 for Vreta soil.
- 44



- 47 Figure S6. Time series of measured ("meas") versus simulated ("sim") water and solute flow
- 48 for Mellby soil.
- 49

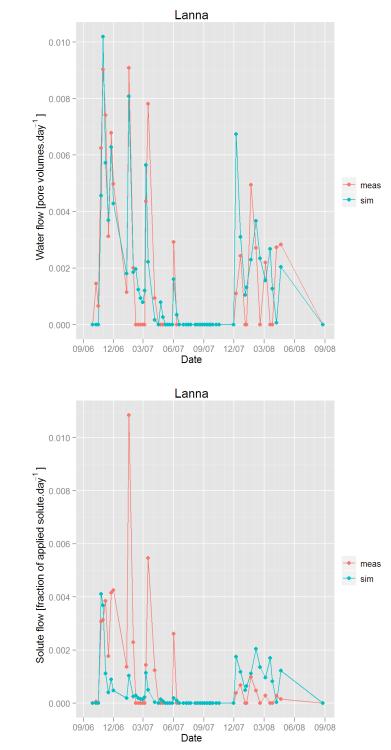




Figure S7. Time series of measured ("meas") versus simulated ("sim") water and solute flowfor Lanna soil.

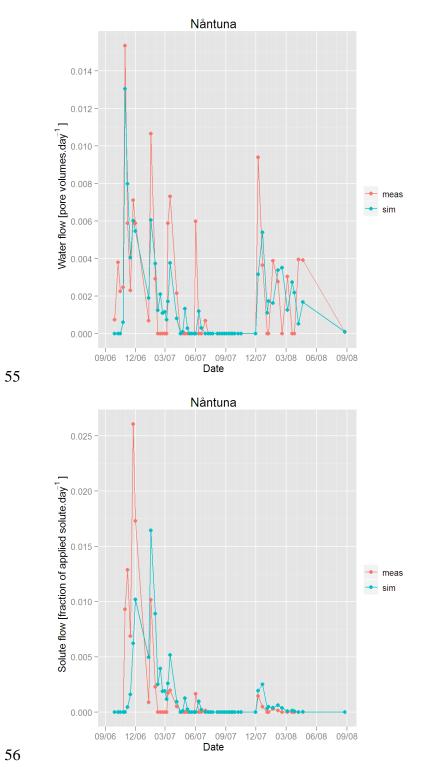


Figure S8. Time series of measured ("meas") versus simulated ("sim") water and solute flow 57

58 for Nåntuna soil.

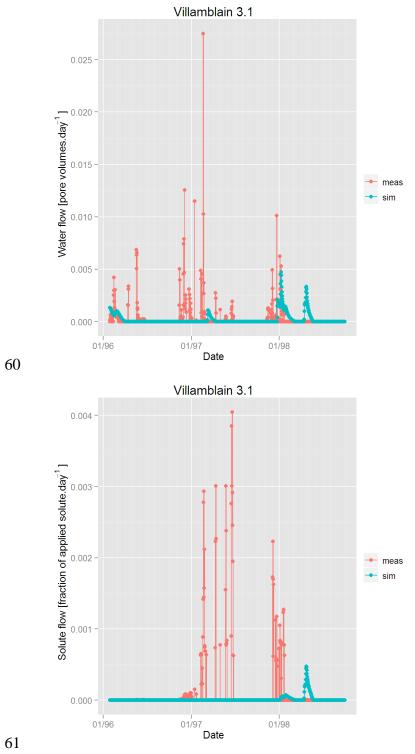




Figure S9. Time series of measured ("meas") versus simulated ("sim") water and solute flow 62 63 for Villamblain 3.1 soil.

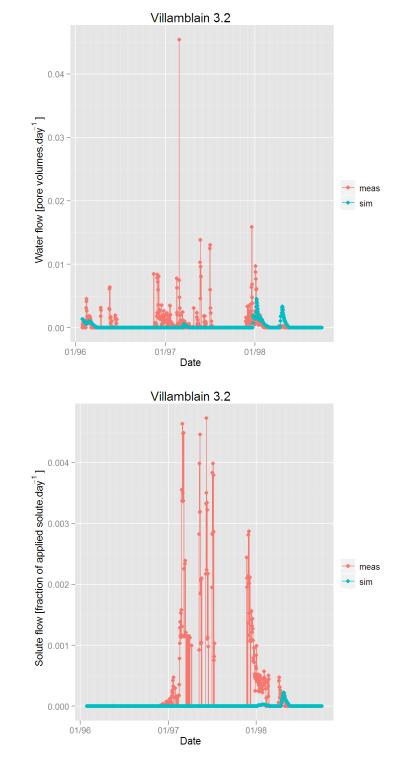




Figure S10. Time series of measured ("meas") versus simulated ("sim") water and solute flow
for Villamblain 3.2 soil.

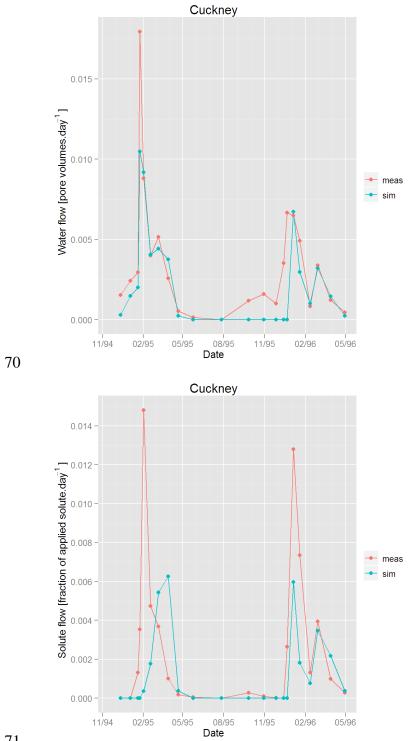


Figure S11. Time series of measured ("meas") versus simulated ("sim") water and solute flow for Cuckney soil.

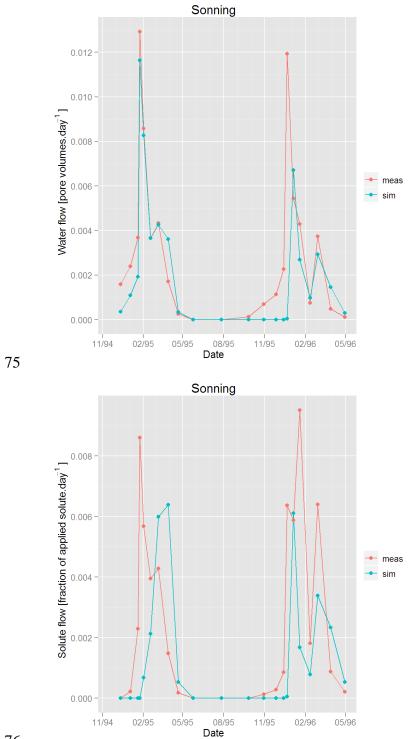




Figure S12. Time series of measured ("meas") versus simulated ("sim") water and solute flow 77 78 for Sonning soil.

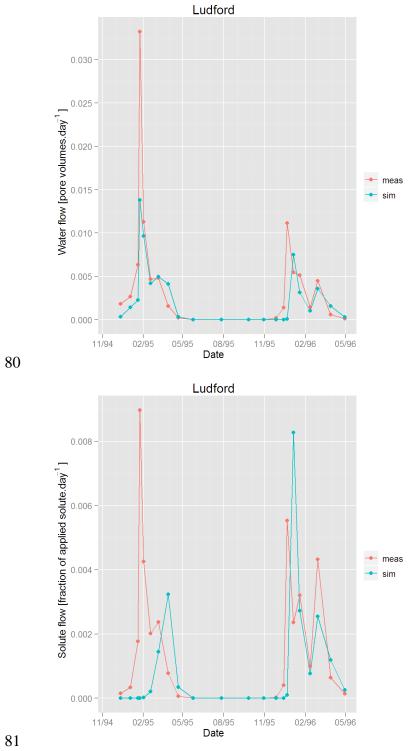




Figure S13. Time series of measured ("meas") versus simulated ("sim") water and solute flow 82 83 for Ludford soil.

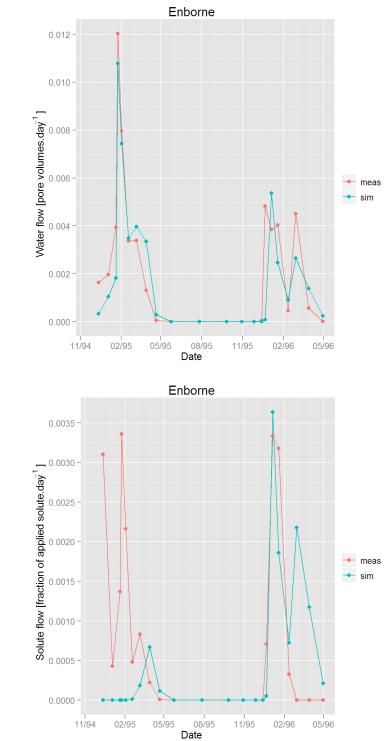




Figure S14. Time series of measured ("meas") versus simulated ("sim") water and solute flowfor Enborne soil.

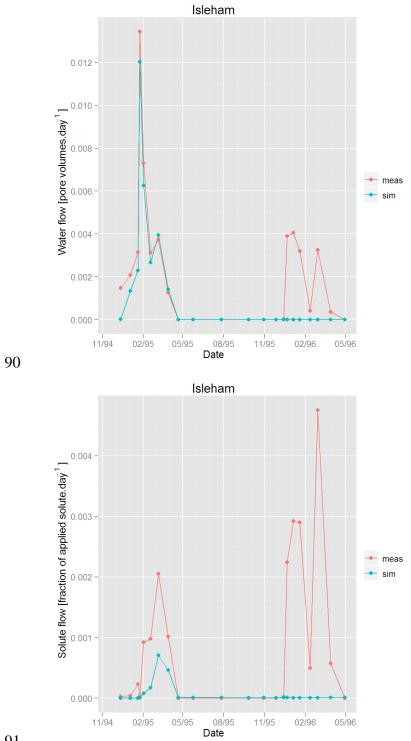


Figure S15. Time series of measured ("meas") versus simulated ("sim") water and solute flow for Isleham soil.

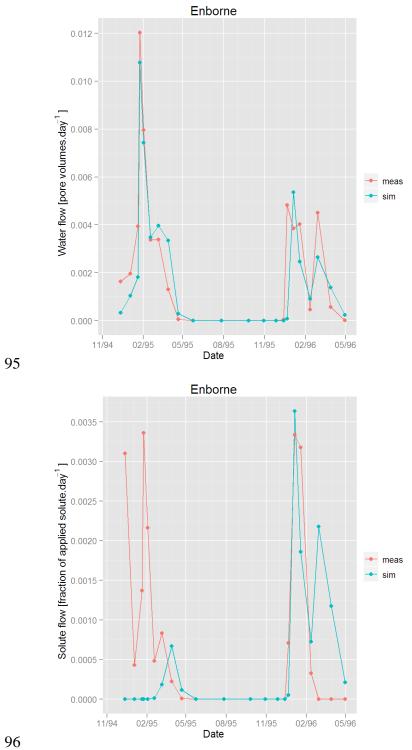


Figure S16. Time series of measured ("meas") versus simulated ("sim") water and solute flow 97

98 for Brimstone soil.