Interactive comment on “The suitability of remotely sensed soil moisture for improving operational flood forecasting” by N. Wanders et al.

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Received and published: 31 January 2014

A response to both reviewers has been uploaded and included as supplement.

Please also note the supplement to this comment: http://www.hydrol-earth-syst-sci-discuss.net/10/C7595/2014/hessd-10-C7595-2014-supplement.pdf

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., 10, 13783, 2013.
Forward model
\[ \psi(t+1) = f(\psi(t), F(t), p) \]

Find available observations (Y)
ASCAT, SMOS, AMSR-E, Discharge

Find equivalent model states (\( \psi_f \))

Add state variables to \( \psi_f \)
First and second layer soil moisture
Shallow and deep groundwater

Add parameters to \( \psi_f \)

Calculate Kalman gain
\[ P^H(T)P^H + R \]

Update states \( \psi^u \)

Update parameters (p)
Perturbation parameters with white noise

Fig. 1.
Fig. 2.