

Interactive comment on “A history of TOPMODEL” by Keith J. Beven et al.

Gilles Boulet

gilles.boulet@ird.fr

Received and published: 31 August 2020

Dear Authors, thanks for this review !

Also maybe of interest for the historical perspective:

- based on the analytical study of the "bias" mentioned in Saulnier and Datin 2004 we introduced in the TOPMODEL formulation, before coupling with a SVAT model over large basins, a critical deficit above which lateral flow is assumed to be negligible (cf. line 348, see Appendix 2 in Boulet, G., Kerr, Y., Chehbouni, A., and Kalma, J. D.: Deriving catchment-scale water and energy balance parameters using data assimilation based on extended Kalman filtering, Hydrological Sciences Journal-Journal Des Sciences Hydrologiques, 47, 449-467, 2002);

- TOPMODEL is/was a good candidate for disaggregation strategies of low resolution

[Printer-friendly version](#)

[Discussion paper](#)



soil moisture data from passive microwave remote sensing (e.g. Pellenq, J., Kalma, J., Boulet, G., Saulnier, G. M., Wooldridge, S., Kerr, Y., and Chehbouni, A.: A disaggregation scheme for soil moisture based on topography and soil depth, *Journal of Hydrology*, 276, 112-127, 10.1016/s0022-1694(03)00066-0, 2003);

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., <https://doi.org/10.5194/hess-2020-409>, 2020.

HESSD

[Interactive
comment](#)

[Printer-friendly version](#)

[Discussion paper](#)

