Hydrology and
Earth System
Sciences
Discussions
Open Access

Interactive comment on "From runoff to rainfall: inverse rainfall–runoff modelling in a high temporal resolution" *by* M. Herrnegger et al.

M. Herrnegger et al.

mathew.herrnegger@boku.ac.at

Dear David,

the periods from June to Sept. are simulated continously. Dry periods are therefore also simulated. In these periods the observed runoff will decrease exponentially. The simulated runoff from the model will decrease with the same rate (if calibrated correctly). Therefore no inverse rainfall is calculated. On the other hand, if $QOBS(t)$ increases, then a rainfall value $R(t)$ will be calculated, which raises the simulated runoff $QSIM(t)$ so that it is identical to the observed runoff (see eq.5). This calculated rainfall corresponds to the areal rainfall of the catchment.

Best regards, Mathew

C5521