

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

D. Brochart

david.brochart@irstea.fr

Received and published: 5 December 2014

Dear M. Herrnegger,

I was curious about your inversion algorithm. It seems that it works on a single time step basis, i.e. it infers the rainfall at time T given the discharge at time T , instead of working on a time window basis, i.e. inferring the rainfall at time T given the discharge at time T , $T+1$, ..., $T+n$. If it is the case, it is likely that the effect of rainfall cannot be seen on the discharge e.g. in the same hour (or even in the same day), since it takes time for the rainfall to be routed to the outlet. Depending on the size of the catchment, it can easily take days. Could you please explain how you take this time lag into account?

Best regards,

C5505

David Brochart.

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., 11, 13259, 2014.