

Interactive comment on “Hydrology modelling R packages: a unified analysis of models and practicalities from a user perspective” by Paul C. Astagneau et al.

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I would like to warmly congratulate with the authors, the paper is very interesting and extremely useful for the hydrological community. I just wanted to add a few short comments, in addition to the other reviews:

Lines 201-204: Please double check the description, “...either a remaining PET component is used to calculate evapotranspiration withdrawn (blue arrow) from the production store (green rectangle) or...” but blue arrow (evaporation) consistently withdraws from the interception storage and green arrow (transpiration) withdraws from root zone/production storage, right?

C1

Lines 312-316: I think that TUWmodel elevation zones can be set by the user as desired, even using different ranges if needed (if inputs and drainage areas are defined accordingly). Moreover, I would specify that, in contrast to CemaNeige, model parameters could be differentiated across elevation zones.

Table 4: I think that TUWmodel requires also subbasin areas.

Section 4: The authors analyse several package functionalities, as the presence of an automatic calibration function for the hydrological models. However, for the packages which do not include calibration functions (but, in general, for all packages if the user wants to implement a different calibration procedure) is there any advice on the suggested parameter ranges or any kind of related information? I would add such specific information along with the calibration functionalities: it is indeed helpful to the user for the implementation of the models.

Lines 434-438: please clarify, e.g. what do you mean with “combination of criteria” for preprocessing?

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., <https://doi.org/10.5194/hess-2020-498>, 2020.