



## **Can we construct back parametrizations of a given model structure using large sample hydrology?**

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A unified strategy for measurement of information content in hierarchical model building seems lacking. Firstly the model structure is built by its building blocks (control volumes or state variables) as well as interconnecting fluxes (formation of control volumes and fluxes). Secondly, parameterizations of model are designed, as an example the effect of a specific type of stage-discharge relation for a control volume can be explored. At the final stage the parameter values are quantified. In each step and based on assumptions made, more and more information is added to the model.

In this study we try to relax our assumption of shape of parameterization. We try to construct parameterizations of a hydrological model, by relaxing the assumptions, given a specific model structure and various forcing data from different catchments across various climatic conditions. This study helps us to find out whether there is a general pattern exist for parametrization of a given model structure.