

## **Geomorphology-structured hydroinformatics for downward basin modelling with flexible accounting for net rainfall variability**

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**Abstract** The HydroStruct software application is dedicated to the combined spatial, topological and scaling analysis of the morphometry of river networks. It was also developed to easily link geomorphometric observations with hydrological analysis and modelling approaches, such as geomorphology-based transfer functions and accounting for associated dominant variabilities. Flexibility of the accounting for net rainfall variability is demonstrated in the sense of downward basin rainfall-runoff modelling.

**Key words** river network; geomorphology-based transfer function; hydrological space-time variability; downward flexibility