



## **Functional streamflow disaggregation: Performance for headwater catchments from lowlands to alpine**

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The performance is demonstrated and evaluated, for headwater catchments across Central Europe, of the recently published Functional Streamflow Disaggregation (FSD) technique. To this end, some 16 gauging stations have been selected from river basins of the upper Danube (Southern Germany), the Danube tributary Ybbs (Central Austria), and the Elbe (German part). Independent simulations were available using three different distributed hydrologic models, namely LARSIM, SWAT, and SWIM. These are consulted in order to understand proper attribution of FSD-generated empirical flow components. The material is supplemented by another independent (yet intrinsic) evaluation via multifractal analysis. FSD is shown to reasonably perform within this context. In some cases, feedback to hydrologic model adjustment seems useful.