

## **Calibration and uncertainty estimation of a distributed model in a small drainage basin in southeast Sweden**

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**Abstract** The aim of this study was to calibrate and estimate uncertainties of discharge predictions for a tile-drained basin in a coastal area in southeast Sweden. Temporal trend and magnitude of monthly measured discharges, including their uncertainties, were well predicted. During the calibration period, 88%, and during the validation period, 75%, of the measured discharge were within the uncertainty limits (5 and 95%). The results indicated that the framework employed can be an effective tool for describing the discharge from drained basins under cold conditions in southern Sweden.

**Key words** equifinality; hydrological modelling; parameter calibration; prediction uncertainty

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