Article

Enhancing a Real-Time Flash Flood Predictive Accuracy Approach for the Development of Early Warning Systems: Hydrological Ensemble Hindcasts and Parameterizations

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Supplementary Table S1

Supplementary Table S1. Initial set of parameters and minimal and maximal searching ranges for the SCE-UA parameter

Optimized parameter/Condition	Initial	Minimum	Maximum
Soil roughness coefficient N_slo $[m^{-1/3}s]$	0.6	0.1	1
River roughness coefficient N_riv $[m^{-1/3}s]$	0.03	0.01	0.1
Effective porosity of non-capillary subsurface layer θ_a $[/]$	0.4	0.1	0.7
Saturated hydraulic conductivity k_a $[ms^{-1}]$	0.05	0.005	0.5
Canopy interception and evaporation factor $F1$ $[/]$	1	0.6	1
Effective porosity of capillary subsurface layer θ_m $[/]$	0.4	0.1	0.7
Degree of reduction of permeability due to the volumetric water rate decrease β $[/]$	4	2	10

calibrations. The first five parameters are used in 5-CPM.