Special Issue

Extreme Value Analysis of Short-Duration Rainfall and Intensity–Duration–Frequency Models

Message from the Guest Editor

Extreme rainfall events have a large impact on society and can lead to loss of life and property. For planning, design, and operation of water resources projects, the estimation of flood risks often relies on the statistics of extreme precipitation. The main aim is to develop methodologies and applications for the assessment of past and future characteristics of (short-duration) rainfall extremes. In particular, we welcome research findings in the form of intensity–duration–frequency (IDF) models. The research activities include a wide range of expertise, and may focus on (i) analysis of temporal or spatial trends in extreme rainfall intensities, (ii) the estimation of the impact of climate change on future climate IDF relationships, with associated uncertainties, (iii) the estimation of IDF curves at ungauged sites by means of spatial extreme value models, scale invariance properties, or any other methodology or framework, (iv) the conversion of IDF characteristics at the local scale to catchment-average rainfall intensity, (v) the use of alternative rainfall datasets and (vi) any other advanced statistical methodology.

Guest Editor

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Message from the Editor-in-Chief

In the context of global changes, the sustainable management of water cycles, going from global and regional water cycles to urban, industrial and agricultural water cycles, plays a very important role on the water resources and on their relationships with food, energy, biodiversity, ecosystem functioning and human health. *Water* invites authors to provide innovative original full articles, critical reviews and timely short communications and to propose special issues devoted to new technological and scientific domains and to interdisciplinary approaches of the water cycles. We ensure a critical review process and a quick turnaround between submission and final decision.

Editor-in-Chief

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