Special Issue

Spatial, Mathematical and Numerical Modelling of Hydrological Processes and Flooding

Message from the Guest Editor

The formation of runoff is complicated and contains several natural processes that are still not well understood. Over the years, researchers have proposed empirical, lumped, semi-distributed, and distributed models. Empirical manually derive a rainfall-runoff relationship formula based on observed data. Lumped and distributed models simulate a series of runoff yield and concentration processes such as rainfall, snow melting, interception, infiltration, evapotranspiration, and routing in a basin with the aid of computers. Lumped models treat the basin as a whole. Semi-distributed and distributed models, combined with geographical information systems and remote sensing technologies, can clearly reflect the spatial distribution and variations in some or all related elements of the basin. This Special Issue welcomes submissions with the spatial, mathematical, and numerical modeling of hydrological processes and flooding to gain valuable insights for the development of an accurate distributed model.

Guest Editor

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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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