

Special Issue

Multi-Dimensional Modeling of Flow and Sediment Transport

Message from the Guest Editor

In recent years, multi-dimensional (MD) models, primarily two-dimension (2D) and three-dimension (3D), are gaining popularity in simulating flows and sediment transport processes. MD models are more reliable and accurate than the 1D ones; their use, however, is hampered by various factors. In particular, guidelines are lacking regarding model input parameters and when to use MD modeling. This Special Issue, therefore, aims to gather high-quality papers that contribute to the current state-of-the-art in using MD flow and sediment models. Proposed topics may refer but are not limited to the following: the development of MD models, the application of MD models to shed light on model accuracy and reliability, and MD modeling guidelines in comparison with 1D models. The spatial scale of MD modeling may range from small-scale streams to large-scale watersheds, and temporal scale may be either constant-flow, event-based, or long-term. Submitted contributions will go through a peer review process performed by independent reviewers. Original studies of model development and/or improvement, case studies, and review papers are invited for publication in this Special Issue.

Guest Editor

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Deadline for manuscript submissions

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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

Dr. Jean-Luc PROBST

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