# **Special Issue**

# Treatment of Errors and Uncertainties in Watershed-Scale Hydrological and Hydrogeological Models

## Message from the Guest Editors

Hydrological models have developed significantly over the past few decades, from simple lumped empirical models to complex physically based integrated surface water-groundwater models. Recently, some studies have even combined hydrological process equations with machine learning (ML) models to form hybrid physics-ML hydrological models. Despite improvements in methodology, one major challenge facing the hydrological modeling community is to address the high computational costs of these methods, which may require thousands to millions of model runs, especially for computationally expensive models. More efficient methods/algorithms/tools are still highly sought after. This Special Issue focuses on the treatment of errors and uncertainties in watershedscale hydrological modeling, considering research on the development and application of new methods, specifically. Application research on the error interpretation and uncertainty quantification of complex hydrological models (such as hydrogeological models), as well as studies on related water systems (such as water quality) are also welcome.

#### **Guest Editors**

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# Deadline for manuscript submissions

closed (30 October 2023)



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#### Editor-in-Chief

### Dr. Jean-Luc PROBST

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