Advanced Hydrological Models Applications and Fidelity

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Deadline for manuscript submissions:
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Message from the Guest Editors

Dear Colleagues,

This Special Issue invites studies covering, but not limited to, the following areas:

- Improving hydrological process and water management representation in physically based hydrological models for better understanding of hydrological processes and accuracy of hydrological simulations;
- Utilizing different types of data (in situ observations, remote sensing datasets, and reanalysis products) in constraining hydrological models for better understanding of model behaviors and diagnosing model and data discrepancies;
- Developing and exploring novel data-model fusion approaches to integrate multi-source data and hydrological modeling framework for better quantifying water cycle dynamics from regional and global scales;
- Applying advanced and novel methodologies and techniques for evaluating and assessing hydrological performance of models (e.g., data assimilation, machine learning, uncertainty quantification, hybrid modeling);
- Reviewing multi-source data and their associated uncertainties and interaction with models in hydrological model applications, and water balance error analysis.

Guest Editors

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Special Issue

Editor-in-Chief

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Message from the Editor-in-Chief

Understanding the Earth's origin and its bio-geological evolution, the multiple implications of the geosciences (as a coherentset of interconnected disciplines), and the sociocultural and ethical interdisciplinary approaches, will be crucial for a better understanding of Nature, and also for undertaking scientificallybased political decisions.

We are committed to drive *Geosciences* to a position in which it is recognized for its high-quality, cutting-edge research and scientific influence, and strongly encourage and invite your participation and manuscripts.

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