Special Issue

Application of Water Stable Isotopes in Hydrological Processes

Message from the Guest Editors

Water stable isotopes serve as powerful natural tracers for deciphering the complexities of the hydrological cycle. This Special Issue aims to present the latest research and applications of water stable isotopes in understanding, quantifying, and modelling key hydrological processes. In the context of climate change and increasing challenges of water resource sustainability, stable isotopic techniques provide unique insights into soil–vegetation–atmosphere interactions, water source identification, and urban water system dynamics that are often elusive to conventional methods. We invite submissions of original and review articles on topics of interest, including but not limited to, the following:

- Tracing moisture sources, moisture recycling and their impacts on regional precipitation.
- Investigating groundwater recharge, flow pathways and surface water/groundwater interactions.
- Isotopic applications in transit time modelling, plant water uptakes, and soil moisture dynamics.
- Novel analytical techniques, isotopic monitoring networks, and data interpretation methods.
- Integrating isotopic data into hydrological and climate models.

Guest Editors

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About the Journal

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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