Special Issue

Novel Perspective for Interactions between Water and the Geology Using GRACE and Remote Sensing Data

Message from the Guest Editors

While the slow movement of groundwater through porous media (laminar flow) is well characterized by existing methods, modeling rapid and turbulent flow through geological structural pathways (shear zones/faults/karst) remains a challenging task. Traditional investigation methods include measurement of water flux across the groundwater movement, application of heat and environmental tracer methods, numerical simulations of the water flow, and mass-balance-based approaches. This Special Issue invites contributions using GRACE, remote sensing, and modeling to address and to better understand the nature, and the full scale, of water and geology interactions. We realize that there is added value in integrating observations extracted from GRACE and remote sensing data with those from other datasets (such as groundwater flow models or geochemical, isotopic tracers, and hydrologic models). These include but are not limited to field, hydrologic, geophysical, and geochemical data. As such, we encourage submissions with additional complementary approaches and investigation methods to better understand water and geology interaction.

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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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