

Special Issue

Simulation of the Hydrological, Thermal and Energy Budgets

Message from the Guest Editors

Recently, the scientific community has recognized the importance of land surface as a key component of the climate system. The soil represents a source term for hydrologic and energy budgets, as it partitions incoming net radiation into sensible and latent heat flux, and conductive heat flux, and redistributes the precipitation into evapotranspiration, surface or underground storage, runoff, and gravitational drainage. Latent heat flux, being proportional to evapotranspiration, links energy and hydrologic budgets. With these premises, the assessment of the energy and hydrologic budgets is crucial. However, only a few cases of extensive field campaigns using in situ measurements have been carried out to measure soil temperature and moisture, or turbulent fluxes. Satellite measurements may allow for extensive measurements of soil temperature and moisture in the skin layer, but not in the root zone, thus making it very difficult to evaluate the budgets. [...]

For further reading, please follow the link to the Special Issue Website at:

https://www.mdpi.com/journal/water/special_issues/Hydrological_Thermal

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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

Dr. Jean-Luc PROBST

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