Special Issue

Modelling Precipitation in Space and Time

Message from the Guest Editor

Modeling precipitation in space and time over specified areas, such as a hydrological catchment or a grid-cell of various climatic, hydrologic, and ecological models is of great interest. In modeling precipitation, the key issue is the choice of an interpolation approach. In areas with low relief, even distribution of rain gauges and abundant data, most interpolation techniques give similar results. Unfortunately, such conditions are rarely met, and when data are sparse, especially in mountainous areas, the implicit or explicit underlying assumptions about the variation among measured points may differ significantly even at relatively reduced scales. Moreover, modeling precipitation enables making inferences about the knowledge of the precipitation process, and caution is required in using information on precipitation relying only on statistical relationships. Potential topics include but are not limited to the following:

- Interpolating precipitation in space, in time, and in space and time;
- Methods for quantifying uncertainty;
- Accounting for missing data in precipitation series;
- Using environmental covariates to improve precipitation modeling.

Guest Editor

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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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