

Special Issue

Recent Advances in Coupled Hydrology - Vegetation- Atmosphere Modelling

Message from the Guest Editor

The continuously increasing computational power enables, for the first time, the exploration of uncertainty in coupled Earth system dynamics. Remote sensing provides global scale data for hydrological, meteorological, and vegetation dynamics at fine spatial and temporal scales. The full potential of integrating the achievements of computer science and remote sensing with coupled models, in order to understand Earth system dynamics and their uncertainty in depth is yet to be achieved. For this Special Issue, we invite you to contribute your research on new developments and applications of coupled hydrological-vegetation-atmosphere models. Contributions include but are not limited to: hyper-resolution models investigating the importance of the coupled water and carbon cycles on weather and climate and flood/drought forecasting, model-data fusion of new streams of data, such as satellite remote sensing and novel plant trait databases, and model uncertainty quantification.

Guest Editor

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Deadline for manuscript submissions

closed (8 January 2021)



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About the Journal

Message from the Editor-in-Chief

Continued developments in instrumentation and modeling have driven atmospheric science to become increasingly more complex with a deeper understanding of concepts, mechanisms, and interactions. This is the field that innovation built and it has led to a better appreciation for the complexity with atmosphere. Human life is intertwined in this complexity as we strive to better understand our atmosphere. Climate change is constantly stretching the limits of our thinking and forcing new ideas and concepts to be played out. Welcome to the Anthropocene!

Editor-in-Chief

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