

# Special Issue

## Advances in Hydrometeorological Simulation and Prediction

### Message from the Guest Editors

This Special Issue aims to advance the state of the art in hydrometeorological simulation and prediction. Potential topics for submission include, but are not limited to, the following:

- The analysis of hydrometeorological extremes;
- Assessments of hydrometeorological hazards and risks;
- Hydrological simulations in areas with limited observational data;
- Applications of satellite remote sensing, big data mining, and artificial intelligence in hydrometeorology;
- Enhancements to operational hydrometeorological forecasting methods;
- Uncertainty in hydrometeorological simulations;
- Hydrologic models that convert meteorological inputs into hydrological outputs;
- Approaches for characterizing uncertainty in hydrological model outputs;
- Stochastic simulations;
- The development of novel datasets for various components of risk;
- Predictions in ungauged basins;
- Multivariate frequency analyses;
- The assessment of regional and spatial dependencies;
- Understanding the physical processes behind extremes and quantifying their potential future changes.

### Guest Editors

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### Deadline for manuscript submissions

31 December 2025



## Atmosphere

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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!

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### Editor-in-Chief

Dr. Daniele Contini

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