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Novel Approaches and Metrics to Characterize and Predict Hydrometeorological Extremes: Machine Learning and Numerical Models

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Deadline for manuscript submissions:

closed (30 May 2023)

Message from the Guest Editors

Hydrometeorological extremes such as droughts and floods due to climate change present an urgent issue. These extremes are associated with increasing hydroclimatic intensity and more moisture held in air due to Clausius–Clapeyron scaling. While major efforts have been made to characterize and predict hydrometeorological extremes, this phenomenon remains a challenge due to the lack of proper approaches and metrics. This Special Issue aims to develop novel approaches and metrics to characterize and predict hydrometeorological extremes. We encourage submissions that are focused on leveraging machine learning techniques and numerical models. All related manuscripts are welcome. Topics of interest include, but are not limited to: the application of machine learning and numerical models for advancing the prediction skill of hydrometeorological extremes; the development of new approaches and metrics to quantify and predict hydrometeorological extremes; and the application of machine learning or other novel methods to improve climate models and hydrological models. Review articles are also encouraged.



mdpi.com/si/126591

Special Issue



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Message from the Editor-in-Chief

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