

## Special Issue

# Extreme Weather Detection, Attribution and Adaptation Design

### Message from the Guest Editors

Extreme events can lead to substantial loss of property and life. The timely and accurate predictions of these events can potentially mitigate some of these losses by providing decision support to stakeholders and communities. The skillful prediction of such extreme events through numerical weather prediction (NWP), statistical techniques, or their combination in hybrid dynamical-statistical methods is crucial for managing preparedness, emergency response, and mitigation of impacts. However, the prediction of rainfall extremes remains challenging in NWP due to various causes, including model deficiencies and initial-value problems. Several approaches for assimilating precipitation observations in NWP models have been developed to improve the model's initial states and subsequent short-range forecasts. This Special Issue invites papers on observational and numerical modeling studies of extreme events, encourage to explore extreme events related to past and near-future hazards. We also would like to include articles that use observations and modeling techniques to understand the physics of rainfall extremes and further enhance overall model forecast skills.

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### Guest Editors

Dr. Chandrasekar Radhakrishnan

Dr. Attada Raju

Dr. Biswas Sounak

Dr. Kannan Srinivasa Ramanujam

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### Deadline for manuscript submissions

closed (31 December 2025)



## Climate

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## About the Journal

### Message from the Editor-in-Chief

*Climate* (ISSN 2225-1154) was established in 2013 to provide an open-access outlet for innovative research, review articles, new direction papers, and short communications relevant to all disciplines related to climate at all scales. The journal encourages papers ranging from climate change detection and attribution and Earth system modeling to ecosystem, hydrologic, and socioeconomic impacts and climate mitigation and adaptation measures. The influence of *Climate* is strong and growing (IF 3.2 in 2024, CiteScore 5.7 in 2024).

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### Editor-in-Chief

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### Author Benefits

#### High Visibility:

indexed within Scopus, ESCI (Web of Science), GEOBASE, GeoRef, AGRIS, and other databases.

#### Journal Rank:

JCR - Q2 (Meteorology and Atmospheric Sciences) /  
CiteScore - Q2 (Atmospheric Science)

#### Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 20.8 days after submission; acceptance to publication is undertaken in 3.8 days (median values for papers published in this journal in the second half of 2025).