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Hydroclimate Dynamics and Extreme Weather Events in Africa

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Deadline for manuscript
submissions:

closed (28 February 2025)

Message from the Guest Editors

This Special Issue focuses on climate dynamics and extreme weather events in Africa, with the aim of exploring the current status, trends, and potential impacts in the region amidst the backdrop of climate change. Africa is a diverse continent, playing a critical role in the global climate system. However, it faces increasing challenges due to local and global greenhouse gas emissions.

The research covered in this Special Issue includes various aspects of:

1. Atmospheric moisture fluxes and soil water budget: Examining precipitation–evaporation balance, river discharge, and run-off patterns and trends;
2. Atmospheric emissions and air chemistry over Africa: Analyzing biomass burning, deforestation, and urban–industrial emissions;
3. Droughts and floods: Addressing the frequency, intensity, historical trends, future projections, and impacts that threaten water resources, agriculture, food security, and infrastructure;
4. Climate variability and extreme weather: Studying the mechanisms that connect climate variability to extreme weather events such as intense rainfall, dust plumes, and heatwaves in Africa.



mdpi.com/si/181725

Special Issue



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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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