

Special Issue

Effects of Climate Change on Ecosystem Behavior Across Varied Environments

Message from the Guest Editors

Climate change is altering ecosystems worldwide. Understanding ecosystem behavior under climate stress is key to predicting future changes and informing adaptation strategies. This Special Issue examines diverse climate impacts across terrestrial, aquatic, and cryospheric ecosystems. It will highlight both gradual trends (e.g., warming-driven vegetation shifts) and abrupt changes (e.g., tipping points from extreme events), advancing ecosystem-climate interaction understanding. By integrating ecological, climatological, and biogeochemical perspectives, this issue provides insights into the vulnerability and adaptability of ecosystems under accelerating climate change.

Topics of interest include:

Impacts of climate change on biodiversity, species interactions, and ecosystem services;
Alterations in carbon and nutrient cycling across ecosystems;
Ecosystem thresholds, resilience, and feedback mechanisms;
Effects of extreme weather events (e.g., droughts, floods, wildfires) on ecosystem structure and function;
Modeling and monitoring approaches to assess ecosystem responses to climate stress;
Nature-based solutions and ecosystem restoration under climate change scenarios.

Guest Editors

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Deadline for manuscript submissions

30 November 2025



Climate

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by MDPI

Impact Factor 3.2
CiteScore 5.7



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About the Journal

Message from the Editor-in-Chief

Editor-in-Chief

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Author Benefits

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CiteScore - Q2 (Atmospheric Science)

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manuscripts are peer-reviewed and a first decision is provided to authors approximately 21.6 days after submission; acceptance to publication is undertaken in 3.9 days (median values for papers published in this journal in the first half of 2025).