

Special Issue

Climate System Modelling and Observations

Message from the Guest Editor

Climate change directly or indirectly affects various research fields. Since the pioneering work carried out in 1960s and 1970s, the climate model has become a critical tool to improve our understanding of climate change from seasonal to even longer timescales. Models of the various components of the climate system may be coupled to produce increasingly complex models, such as the Earth system model, which is the nucleus of the most complex atmosphere and ocean models, and carbon cycle processes. Advanced climate modeling and observations can improve accurate prediction of climate change and long-term trends. To further our understanding of our climate changing system, we are calling for original research papers related to climate modeling and observations in this Special Issue. This includes the multidisciplinary exercise of global climate models and regional climate models, mitigation studies of extreme weather events, more sophisticated future predictions and projections of the earth system by coupling with other Earth system components, and some new artificial intelligence, such as artificial neural networks, random forest, and support vector machines.

Guest Editor

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Deadline for manuscript submissions

closed (31 December 2023)



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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).

Editor-in-Chief

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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).