



Land–Atmosphere Coupling under Climate Change

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Deadline for manuscript submissions:

closed (28 April 2023)

Message from the Guest Editors

Dear Colleagues,

Increasing greenhouse gas concentrations is likely to enhance the interannual variability of climate change around the globe. Studies have identified that the extent of land–atmosphere interactions or coupling prevails at local, regional, and global scales. Challenges still exist in understanding the spatial and temporal variations in land–atmosphere coupling due to limited observations in heat fluxes. Land surface conditions including soil moisture, precipitation, temperature, land use, land cover, and snow cover could considerably affect atmospheric processes in many parts of the globe.

In this regard, we invite the submission of original research articles and reviews on any aspect of land–atmosphere coupling under climate change. The Special Issue aims to improve our understanding of the processes, interactions, feedback, coupling, and teleconnections at the land–atmosphere interface from the perspectives of reanalysis, observation, simulation, and future projection. We especially encourage studies using the most recent technology, such as reanalysis and using state-of-the-art CMIP6 GCMs, to address such issues.





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Message from the Editor-in-Chief

Continued developments in instrumentation and modeling have driven atmospheric science to become increasingly more complex with a deeper understanding of concepts, mechanisms, and interactions. This is the field that innovation built and it has led to a better appreciation for the complexity with atmosphere. Human life is intertwined in this complexity as we strive to better understand our atmosphere. Climate change is constantly stretching the limits of our thinking and forcing new ideas and concepts to be played out. Welcome to the Anthropocene!

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