Special Issue

Forest-Climate Ecosystem Interactions

Message from the Guest Editors

The terrestrial biosphere plays a major role as a dynamic component of the climate system. Large-scale changes in vegetation cover can alter climate processes both locally and globally. Feedback interactions between forest biogeophysical processes and climate can either enhance or mitigate climate change and many unknowns still exist regarding these interactions, as is evidenced by the large uncertainty contributed by land cover to Earth System Model projections. To address this uncertainty and document new insights into forest-climate interactions, this issue will feature research that seeks to better understand forest biogeophyscial or biogeochemical processes and climate interactions, the influence of plant functional processes, and the quantification of interactions between the water-energy-climate nexus. It focuses on new approaches which combine ecosystem and forest modeling with forest monitoring, land-atmosphere interactions with a focus on changes to albedo, evapotranspiration, vapor pressure deficient, and carbon fluxes to estimate carbon storage. We welcome submissions that investigate these dynamics across all scales and regions.

Guest Editors

Dr. Jennifer A. Holm

Lawrence Berkeley National Laboratory, Berkeley, CA, USA

Dr. David A. Lutz

Environmental Studies Program, Dartmouth College, 6182 Steele Hall, Room 113, Hanover, NH 03755, USA

Dr. Luxon Nhamo

1. Water Research Commission (WRC), Water Utilisation in Agriculture, 4 Daventry St, Lynnwood Manor, Pretoria 0081, South Africa
2. Centre for Transformative Agricultural and Food Systems, School of Agricultural, Earth and Environmental Sciences, University of KwaZulu-Natal (UKZN), Scottsville, Pietermaritzburg 3209, South Africa

Deadline for manuscript submissions

closed (30 April 2022)

Climate

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 5.7

mdpi.com/si/48186

Climate
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
climate@mdpi.com

mdpi.com/journal/climate

Climate

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 5.7

mdpi.com/journal/climate

MDPI

About the Journal

Message from the Editor-in-Chief

Editor-in-Chief

Dr. Timothy G. F. Kittel
Institute of Arctic and Alpine Research, University of Colorado Boulder, Boulder, CO 80309-0450, USA

Author Benefits

High Visibility:

indexed within Scopus, ESCI (Web of Science), 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 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).