

Special Issue

Carbon, Water and Energy Fluxes in Forest Ecosystems

Message from the Guest Editors

More than two-thirds of the world's forests are dominated by human activities, and the amount of primary forest is in precipitous decline. In Europe, 86% of the forested area is managed with a different range of intensity. Management can change the forest canopy characteristics, soil properties (temperature profile, heat and water storage, nutrient and carbon stocks), and understory vegetation with significant impacts on carbon, water, and energy fluxes. Here, we consider primary forests to be forests of native tree species where there are no clearly visible indications of human activities, and the ecological processes are not significantly disturbed. This Special Issue focuses on carbon (CO₂ and CH₄), water, and energy fluxes in undisturbed primary forests based on long-term measurements using the eddy covariance technique or chamber method. Contribution can be related to the following:

- Carbon, water, and energy interactions in forest ecosystems;
- Effects of extreme climatic events on water, carbon cycles and forest functions;
- Impacts and consequences of the main disturbance factors on forest ecosystems.

Guest Editors

Dr. Andrej Varlagin

A.N. Severtsov Institute of Ecology and Evolution, Russian Academy of Sciences, Moscow 119071, Russia

Dr. Julia Kurbatova

A.N. Severtsov Institute of Ecology and Evolution, Russian Academy of Sciences, Moscow 119071, Russia

Deadline for manuscript submissions

closed (15 July 2024)



Forests

an Open Access Journal
by MDPI

Impact Factor 2.5
CiteScore 4.6



mdpi.com/si/155234

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

[mdpi.com/journal/
forests](https://mdpi.com/journal/forests)





Forests

an Open Access Journal
by MDPI

Impact Factor 2.5
CiteScore 4.6



[mdpi.com/journal/
forests](https://mdpi.com/journal/forests)



About the Journal

Message from the Editor-in-Chief

Forests (ISSN 1999-4907) is an international and cross-disciplinary, scholarly forestry journal. The distinguished editorial board and refereeing process ensures the highest degree of scientific rigor and review of all published articles. Original research articles and timely reviews are released online, with unlimited free access. Our goal is to have *Forests* be recognized as one of the foremost publication outlets for high quality, leading edge research in this broad and diverse field. We therefore invite you to be one of our authors, and in doing so share your important research findings with the global forestry community.

Editor-in-Chief

Prof. Dr. Giacomo Alessandro Gerosa

Department of Mathematics and Physics, Catholic University of Brescia,
I-25121 Brescia, Italy

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), Ei Compendex, GEOBASE, PubAg, AGRIS, PaperChem, and other databases.

Journal Rank:

JCR - Q2 (Forestry) / CiteScore - Q1 (Forestry)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 16.8 days after submission; acceptance to publication is undertaken in 2.5 days (median values for papers published in this journal in the second half of 2025).