Special Issue

Modeling Aboveground Forest Biomass: New Developments

Message from the Guest Editors

Forest biomass modelling is crucial to its monitoring and storage. However, biomass in stands and forests varies according to the species, stand structure, and site. Biomass models can be developed using data obtained destructive sampling, forest inventory, remote sensing, and ancillary. There is a wide range of data science methods and techniques currently applied in order to fit the models and evaluate their uncertainties. Biomass models can be utilized in order to produce management alternatives. This Special Issue aims to offer an overview of the various data sets and modelling methods currently employed to develop biomass functions, as well as their applicability at both the tree and area levels. Potential topics include, but are not limited to, the following:

- biomass models at tree level;
- biomass models at stand level;
- data sets used in biomass modelling;
- data science methods and techniques used in biomass modelling;
- model performances and uncertainties.
- development of management alternatives with biomass models

Guest Editors

Dr. Ana Cristina Gonçalves

MED–Mediterranean Institute for Agriculture, Environment and Development & CHANGE–Global Change and Sustainability Institute, Instituto de Investigação e Formação Avançada, Departamento de Engenharia Rural, Escola de Ciências e Tecnologia, Universidade de Évora, Apartado 94, 7002-544 Évora, Portugal

Prof. Dr. Teresa Fidalgo Fonseca

Department of Forestry Sciences and Landscape Architecture (CIFAP), University of Trás-os-Montes and Alto Douro, 5001-801 Vila Real, Portugal Forest Research Centre (CEF), School of Agriculture, University of Lisbon, Tapada da Ajuda, 1349-017 Lisboa, Portugal

Deadline for manuscript submissions

31 January 2025



Forests

an Open Access Journal by MDPI

Impact Factor 2.4 CiteScore 4.4



mdpi.com/si/171015

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

mdpi.com/journal/

forests





Forests

an Open Access Journal by MDPI

Impact Factor 2.4 CiteScore 4.4



forests



About the Journal

Message from the Editorial Board

Forests (ISSN 1999-4907) is an international and crossdisciplinary, 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.

Editors-in-Chief

Prof. Dr. Cate Macinnis-Ng

Department of Biological Sciences, Faculty of Science, University of Auckland, Private Bag 92019, Auckland 1142, New Zealand

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 - Q1 (Forestry) / CiteScore - Q1 (Forestry)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 16.9 days after submission; acceptance to publication is undertaken in 2.5 days (median values for papers published in this journal in the first half of 2024).