Special Issue

Growth Models for Forest Stand Development Dynamics

Message from the Guest Editors

Forest stand dynamics analysis focuses on changes in forest structure and composition over time. In the contemporary era, understanding and modeling how forests grow is essential for enhancing their resilience and adaptability to the current unpredictable climate conditions. Forest growth models have a long history of development, spanning hundreds of years. Advances in statistical science and computing technology have led to increasingly sophisticated approaches in modeling forest stand dynamics, resulting in a wide variety of growth models.

This research topic explores the integration of remote sensing technologies, artificial intelligence and machine learning algorithms to enhance the precision and scope of growth models.

Potential topics include, but are not limited to, the following:

- Size class and individual tree approaches for modeling forest growth and yield;
- Tree- and whole-stand level models;
- Ecological and process models;
- Models for incorporating the response of trees and stands to stress factors such as changing climatic conditions;
- New theories and methods for forest growth modeling.

Guest Editors

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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.

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