Special Issue

Estimation and Monitoring of Forest Biomass and Fuel Load Components

Message from the Guest Editors

Forest biomass and fuel load components are the main carbon pools of forest ecosystems and play an important role in the global carbon cycle and in climate change mitigation. In this process, data, including three types of forest resources survey data and special survey data, form the substructure and their typicality, comprehensiveness, and representativeness have a direct impact on the results of estimation and evaluation. The model is the key, including the allometric growth model of biomass at the individual tree level, the biomass conversion and expansion model of at the stand regional scale, and the process-based mechanism model. It is imperative to ensure that when the data and model scales are inconsistent, the corresponding scale conversion method is adopted to achieve the compatibility of measurement results to ensure the accuracy of the evaluation. This Special Issue aims to introduce the latest research results from data, models, and methods for the process of estimation and monitoring, improve the accuracy of forest biomass and fuel load component estimation and monitoring results, and reduce uncertainty.

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Deadline for manuscript submissions

closed (31 December 2024)



Forests

an Open Access Journal by MDPI

Impact Factor 2.5 CiteScore 4.6



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