Special Issue

Emerging Advances in Digital Forest Monitoring, Analysis, and Modeling

Message from the Guest Editor

Forests are critical in global energy–water–carbon cycles, biodiversity, climate mitigation and adaptation, and human socioeconomics. Emerging advances in digital techniques, analysis, and modeling enable better the assessment and understanding of forest properties and processes across various spatial and temporal scales under environmental changes. This Special Issue aims to synthesize and present current advanced digital techniques and their applications in the monitoring, analyzing, and modeling of forests, including, but not limited to, carbon stock, vegetation structure and traits, biophysical and biogeochemical processes, biodiversity, disturbances, forest resistance and resilience, forest management, human–forest interactions, natural climate solutions, and sustainable development. Research utilizing the following techniques are highly relevant to this Special Issue: remote sensing, Geographic Information Systems (GIS), air and ground observations (e.g., eddy covariance, chamber, and isotope), statistical analysis, machine/deep learning, digital twin, and Earth system modeling/terrestrial ecosystem modeling.

Guest Editor

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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

mdpi.com/si/201757

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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.

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