

Special Issue

Artificial Intelligence and Remote Sensing Applied to Forest Management: Advances in Machine Learning and Deep Learning Applications

Message from the Guest Editors

The parallel evolution of artificial intelligence, particularly machine learning and deep learning, and remote sensing technologies has transformed forest monitoring, enabling the extraction of detailed information from both passive and active sensors. The availability of these multi-resolution and multi-temporal datasets is enhancing forest structural characterization and monitoring, supporting analyses across local, regional, and global spatial domains. In parallel, the proliferation of cloud-based platforms, big data analytics, and open data repositories is increasing the scalability of forest monitoring, allowing for analyses over vast spatial extents and extended timeframes. This Special Issue aims to synthesize studies that develop and apply artificial intelligence techniques in forest remote sensing. Articles may address topics including, but not limited to, the following: Forest structure; Biomass; Carbon stock; Live fuel moisture content; Forest segmentation; Species classification; Forest changes; Forest inventory; Forest fuel; Forest degradation; Forest diseases.

Guest Editors

Dr. Pablo Crespo-Peremarch

GeoEnvironmental Cartography and Remote Sensing Group (CGAT),
Department of Cartographic Engineering, Geodesy and
Photogrammetry, Universitat Politècnica de València, Camí de Vera s/n,
46022 València, Spain

Dr. Juan Pedro Carbonell-Rivera

Integrated Remote Sensing Studio, Department of Forest Resources
Management, Faculty of Forestry, University of British Columbia,
Vancouver, BC V6T 1Z4, Canada



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

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Message from the Editor-in-Chief

Remote Sensing is now a prominent international journal of repute in the world of remote sensing and spatial sciences, as a pioneer and pathfinder in open access format. It has highly accomplished global remote sensing scientists on the editorial board and a dedicated team of associate editors. The journal emphasizes quality and novelty and has a rigorous peer-review process. It is now one of the top remote sensing journals with a significant Impact Factor, and a goal to become the best journal in remote sensing in the coming years. I strongly recommend *Remote Sensing* for your best research publications for a fast dissemination of your research.

Editor-in-Chief

Dr. Prasad S. Thenkabail

Senior Scientist (ST), U. S. Geological Survey (USGS), USGS Western Geographic Science Center (WGSC), 2255, N. Gemini Dr., Flagstaff, AZ 86001, USA

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