Special Issue

GIS and Satellite Image Technology in Forest and Urban Forest Detection and Monitoring

Message from the Guest Editors

Forests are essential components of green infrastructure. Their health affects environmental quality in many ways, and the opposite is also true. The services they provide are recognized as key in tackling climate change effects at local and global scales. Remote sensing/Earth observation (RS/EO) technologies provide a whole series of information that gives access to the mapping and multi-temporal analysis of the spectral behavior of tree species. Specific vegetation indexes can give insights into forest health status and complement future scenario elaborations. On the other hand, GIS-based technologies can add and implement the current knowledge with either spatial or multi-criteria analysis of the many variables influencing tree communities. Eventually, improvements in statistical correlations between remotely sensed and ground data have the potential to improve the quality and reliability of available information. This Special Issue aims to garner state-of-the-art RS/EO-based and GIS-based knowledge, artificial intelligence and machine learning applications concerning forests' and urban forests' monitoring and management.

Guest Editors

Dr. Michaela De Giglio

Department of History and Cultures (DiSCi), University of Bologna, Bologna, Italy

Prof. Dr. Maurizio Barbarella

Department of Civil, Chemical, Environmental and Materials Engineering DICAM, University of Bologna, Bologna, Italy

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Editor-in-Chief

Prof. Dr. Giacomo Alessandro Gerosa
Department of Mathematics and Physics, Catholic University of Brescia, I-25121 Brescia, Italy

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