

**Call for Papers**  
**IEEE Journal of Selected Topics in Applied Earth Observation and Remote Sensing (J-STARS)**  
**Special issue on *Multi-Scale Forestry Applications Supported by Remote Sensing and Spatial Information Systems***

Papers are solicited for a Special Issue of IEEE J-STARS on *Multi-Scale Forestry Applications Supported by Remote Sensing and Spatial Information Systems*.

The development, implementation and monitoring of environmental policies is dependent on the availability of sound information on the state of the environment. Of special interest is the information on forests, due to the important role of the forest sector within many thematic disciplines, such as climate change, bio-energy, biodiversity and land management. Such data are essential inputs for environmental models and scenarios - both forest-related and multi-disciplinary - and are required at a range of spatial scales from local through to national and global levels. Remote sensing and geographic information systems provide the means for the frequent acquisition and processing of detailed spatial forest information at regional through to global scales.

Within the above context, national, regional and global forestry information systems are being developed that integrate and make use of tools such as Earth observation (EO), geographic information systems, spatial data infrastructures and modeling. However, the development of such multi-scale forestry information systems is hampered to some extent by limitations related to data harmonization and comparability, and system interoperability. Lack of guidelines and standards regarding the development of such systems can adversely affect the efficiency, interoperability and interconnectivity between many existing and future information systems.

Initiatives such as the Global Earth Observation System of Systems (GEOSS) contribute to the development of global information systems and the inter-linkage with regional and national systems. At the European level, the INSPIRE initiative, dealing with harmonization and interoperability of spatial data and systems, plays an essential role in promoting the development and implementation of multi-disciplinary and interoperable information systems, and in providing decision-makers with access to up-to-date and reliable forestry information to fully understand environmental processes, interactions and tendencies.

**Papers are being solicited in (but not limited to) the following areas:**

- Forestry information systems & interoperability and implications for decision makers;
- Remote sensing of forests (forest resources, forest condition, change detection, parameter estimation);
- Forestry data harmonization and comparability;
- Forest ecosystem services, carbon sequestration and forest dynamics using remote sensing.

**Manuscript submission deadline: 30<sup>th</sup> April 2012**

Inquiries concerning the Special Issue should be directed to the Guest Editors. Papers in electronic format can be submitted using the manuscript central web link <http://mc.manuscriptcentral.com/jstars>

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European Commission, JRC	Pacific Forestry Centre, Natural Resources Canada	Food & Agriculture Organization of the United Nations (FAO) Forestry Department	European Commission, JRC	School of Computing and Mathematical Sciences
Institute for Environment & Sustainability	506 Burnside Road West, Victoria,		Institute for Environment & Sustainability	University of Greenwich
LMNH Unit, Ispra VA-21017 Italy	BC V8Z 1M5 Canada	Viale delle Terme di Caracalla, Rome 00153, Italy	LMNH Unit, Ispra VA-21017 Italy	London SE10 9LS , UK
jesus.san-miguel@jrc.ec.europa.eu	dgoodeno@nrcan.gc.ca	<a href="mailto:Mette.Loyche-Wilkie@fao.org">Mette.Loyche-Wilkie@fao.org</a>	daniel.mcinerney@jrc.ec.europa.eu	k.rennolls@gre.ac.uk