



CALL FOR PAPERS

IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing

Special Issue on “Analysis of Multitemporal Remote Sensing Data”

In the last decade a large number of new satellite remote sensing missions has been launched, resulting in a dramatic improvement in the capabilities of acquiring images of the Earth's surface. This involves an enhanced possibility to acquire multitemporal images of large areas of the Earth's surface, with improved temporal and spatial resolution. The new capabilities significantly increase the interest of the remote sensing community in the multitemporal domain and allow addressing new important and challenging applications. Nonetheless, the properties of the images acquired by the last generation sensors (e.g., very high geometrical resolution, large time series of images, etc.) pose new methodological problems that require the development of a new generation of methods for the analysis of multitemporal images and temporal series of data. This is common to both passive (multispectral, hyperspectral, etc.) and active (synthetic aperture radar, lidar, etc.) sensors. The potentials of the technological development go hand in hand the increased awareness of the importance of monitoring the Earth's surface at local, regional, and global scale. Assessing, monitoring, and predicting the dynamics of land cover and of anthropogenic processes are at the basis of both the understanding of the problems related to climate change and the definition of politics for a sustainable development. The enhanced capability to perform multitemporal analysis of local areas at a very detailed scale is put beside these global themes and represents another strategic area of application. In occasion of the 9th International Workshop on the Analysis of Multitemporal Remote Sensing Images (MultiTemp2017, Bruges, Belgium, June 2017) all the above-mentioned topics have been widely addressed in many high quality oral and poster presentations. This special issue is open to papers presented at the workshop, and other papers in response to this call for papers.

Papers will be solicited in the following application fields:

- Climate
- Agriculture
- Hydro/cryosphere
- Biodiversity and ecosystems
- Land cover and land use dynamics
- Forestry
- Disaster assessment
- Mapping
- Water & coast

Contributions to all issues related to multitemporal data processing, to the analysis of time series acquired by passive and active sensors at all ranges of spatial resolutions and to the related applications fields listed above are welcome, including:

- Multitemporal image calibration, correction and registration techniques
- Multitemporal image analysis techniques
- Analysis of time series
- Multitemporal SAR and InSAR data analysis
- Big data mining
- Data mining in time series
- Change detection methods
- Fusion of multitemporal data
- Classification of multitemporal data
- Phenology monitoring
- New satellite missions for acquiring time series
- Data harmonisation
- Uncertainty propagation
- Uptake of Sentinel missions
- Synergetic use of different imaging systems
- Validation approaches for multitemporal data analysis

Schedule

November 30, 2017 Full paper submission deadline
November 2018 Publication date

Format

All submissions will be peer reviewed according to the IEEE Geoscience and Remote Sensing Society guidelines. Submitted articles should not have been published or be under review elsewhere. Submit your manuscript on <http://mc.manuscriptcentral.com/jstars>, using the Manuscript Central interface and select the "Multitemporal Remote Sensing" special issue manuscript type. Prospective authors should consult the site <http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=7676436> for guidelines and information on paper submission. All submissions must be formatted using the IEEE standard format (double column, single spaced). Please note that IEEE JSTARS applies a mandatory page over length charge of \$200 per page (beginning with page 7 and beyond).

Guest Editors

Bart Deronde VITO, Belgium, bart.deronde@vito.be
Else Swinnen VITO, Belgium, else,swinnen@vito.be
Lorenzo Bruzzone University of Trento, Italy, lorenzo.bruzzone@unitn.it