



CALL FOR PAPERS

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

Special issue on “Analysis of multitemporal data and applications”

After 40 years of *Earth Observation* missions with both passive (multispectral, hyperspectral, etc.) and active (synthetic aperture radar, lidar, etc.) sensors, remote sensing data offer a unique opportunity to record, to analyze and to predict the evolution of our living planet.

In the last decade, a large number of new satellite remote sensing missions have been launched, resulting in dramatic improvement in the image acquisition capabilities. The Landsat open archives program, the successful launching of the *Sentinel-1* in 2014 and the launching of the coming satellites of the *Copernicus* program, with regular acquisition plans and free data access policy, result in new challenges for handling and processing such huge volume of data. This increasing number of *Earth Observation* systems involves an enhanced possibility to acquire multitemporal images of the Earth surface, with improved temporal and spatial resolution. Such new scenario significantly increases the interest of the time series processing in the remote sensing community. The development of novel data processing techniques to address new important and challenging applications is promising.

This special issue will focus on all the issues related to multitemporal data processing, to the analysis of time series acquired by passive or active sensors and to the related applications, including:

- Multitemporal image analysis techniques
- Image registration, calibration and correction techniques
- Classification of multitemporal data
- Fusion and assimilation of multitemporal data
- Data mining and analysis of remote sensing time series
- Change detection methods
- Change detection accuracy assessment
- Multitemporal SAR and InSAR data analysis
- Multitemporal LiDAR data analysis
- Timelaps and multitemporal photogrammetric data analysis
- Land-cover and land-use dynamics
- Phenology product development and monitoring applications
- Applications of multitemporal data and time series
- Sea-ice dynamics and cryospheric monitoring and modeling
- Ocean dynamics, modelling and prediction

- Water and ecosystem resources monitoring and modeling
- Environmental reclamation monitoring and modeling
- Drought monitoring and predictive modeling
- Vegetation dynamics and productivity
- Forestry and agriculture monitoring
- Stress and damage assessment
- New satellite missions for high temporal resolution time series
- New satellite missions for very high spatial resolution time series

Format and preliminary schedule

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 www.grss-ieee.org/publications/jstars/ for guidelines and information on paper submission. Please note that IEEE JSTARS applies a mandatory page over length charge of \$200 per page (beginning with page 7 and beyond).

Importante Dates

- **Full paper submission deadline:** October, 30 2015.
- **Expected publication date:** June 2016.

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