



## **CALL FOR PAPERS**

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

# Special Issue on "Quality Improvements of Remote Sensing Data"

Remote sensing data are often degraded owing to many factors, such as various types of noise, blur, low resolution, system aberrations, sensor nonlinearities and malfunctions, atmospheric disturbances, and topography effects. These degradation mechanisms reduce the quality of the acquired data, making it difficult to extract useful information from them, as well as visual and automatic interpretations. As a result, application of powerful restoration and enhancement techniques to remote sensing data has been considerable widened. The theoretical, conceptual, and algorithmic developments in the recent years in the areas of data modeling (e.g., sparse, non-local, low-rank, and self-similar representations, signal decompositions, and deep learning), optimization (e.g., proximity calculus in convex and non-convex optimizations, online optimization, stochastic optimization, and fast and parallel solvers), and statistical inference (e.g., proximal Markov chain Monte Carlo algorithms and high-dimensional Monte Carlo and Quasi-Monte Carlo methods) have opened new opportunities for developing effective and efficient techniques to generate high-quality remote sensing data. This special issue is to provide a venue for publishing the most recent developed innovative methods and techniques for quality improvement of remote sensing data.

Aiming at the processing of all types of remote sensing data, topics of the special issue will include, but are not limited to

- Denoising
- Deblurring
- Despeckling
- Image destriping
- Image inpainting
- Image dodging
- Haze removal
- Cloud and cloud shadow detection and removal
- Building shadow removal
- Dead pixel recovery
- Topographic correction
- Image super-resolution
- Quality assessment

#### 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 (in the IEEE required double column and single-spaced format) on <a href="http://mc.manuscriptcentral.com/jstars">http://mc.manuscriptcentral.com/jstars</a>, using the Manuscript Central interface and select the "Remote Sensing Data Quality Improvements" special issue manuscript type. For more guidelines and information on paper submission, please consult the site <a href="http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=7556450">http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=7556450</a>. Please note that IEEE JSTARS applies a mandatory page over length charge of \$200 per page (beginning with page 7 and beyond).

### Schedule

June 1, 2017 Full paper submission deadline

July 2018 Publication date

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