



CALL FOR PAPERS

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

Special Issue on “Reproducible Research in Remote Sensing”

Reproducibility is at the core of experimental sciences. It is also a basilar element of scientific integrity. The advent of data science is leading to new requirements and practices able to cope with the challenges posed by huge volumes of data, often of dynamic nature. Modern grounds for Reproducible Research were set before the widespread use of deep learning and other massively data-based techniques. Among the efforts made towards building Remote Sensing Reproducible Research environments, one may mention Code Ocean and GRSS Remote Sensing Code Library. These two initiatives belong to the IEEE scientific ecosystem. However, is just making code and data available enough for healthy science in Remote Sensing? We do not think so. Many authors continuously strive to disseminate their research findings in such a way that any user will be able to validate them at a later stage. This includes the proposal of software architectures, the use of open data, FLOSS (Free/Libre Open Source Software), and other initiatives.

This J-STARS Special Section is devoted to tools, techniques, practices, and experiences in Reproducible Research Remote Sensing. Besides the scientific contents and style, all works will be assessed under the light of full reproducibility. This Special Section aims at gathering contributions that become a reference for future research. Submissions would be solicited on, but not restricted to contributions related to the following main issues:

- Analysis of the Remote Sensing literature with regards to reproducibility
- Ethical issues, publications, patents
- Data sharing
- Data formats and standards
- Reproducibility and replicability
- Reproducibility in simulation
- Reproducibility with large data sets
- Reproducible Deep Learning
- Reproducible Data Science

Schedule

November 1 st , 2019:	Submission system opening
April 30 th , 2020:	Submission system closing
2020:	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 using the Manuscript Central interface (<http://mc.manuscriptcentral.com/jstars>) and select the “Reproducible Research in Remote Sensing” special issue manuscript type. Please consult <http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=7416303> for guidelines and information on paper submission. All submissions must be formatted using the IEEE standard format (double column, single-spaced). For a layout template, please see http://www.ieee.org/publications_standards/publications/authors/author_templates.html. Note that as of Jan. 1, 2020, J-STARS will become a fully open-access journal charging a flat publication fee \$1250 per paper.

Guest Editors

Alejandro C. Frery	Universidade Federal de Alagoas, Brazil (acfrery@laccan.ufal.br)
Luis Gomez	Universidad de Las Palmas de Gran Canaria, Spain (luis.gomez@ulpgc.es)
Qi Wang	Northwestern Polytechnical University, China (crabwq@nwpu.edu.cn)