



CALL FOR PAPERS
IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing
Special Issue on “Exploring the Potential of Urban Remote Sensing”

Urban areas across the world attempt to address multiple challenges (climate change, hazards, pollution, social exclusion, etc.) towards achieving sustainable, resilient and inclusive development. Remote Sensing can provide useful data, analyses and products to investigate the manifold aspects (environmental, socio-economic, cultural, etc.) of the urban environment and inform planning and decision-making. Research and studies based on Earth Observation can efficiently contribute to the exploration of urban forms and functions and their spatiotemporal dynamics, applying innovative methodologies (algorithms and techniques based on artificial intelligence, machine learning, modeling, data fusion, etc.) and deploying novel technological resources (i.e. exploitation of pioneer orbital, airborne and in-situ sensors as well as unconventional data sources), to better prepare cities and towns for their future transitions.

The broad topics include (but are not limited to):

- New data & sensors (SAR, InSAR, LiDAR, UAV, VHR optical, Hyperspectral sensors and data)
- Algorithms and techniques for data interpretation and applications (Artificial intelligence, Deep Learning, Modeling, Data mining, Data fusion, Simulation studies, Trend monitoring, GIS)
- Form detection and characterization (Structure change detection, Classification, Features extraction, Calibration and correction approaches, Multitemporal analysis, Growth pattern analysis, Development modeling)
- Climatology, geology, and geohazards (Climate change, Thermal monitoring, Atmosphere monitoring, Risk assessment, Subsidence, Earthquake/Volcanic activities, Landslide and debris, Coastal hazards, Hydrology)
- Applications to planning, social science and conservation (Digital twin, Smart city, Land use/cover mapping, Traffic/Transportation, Air quality assessment, Health, Security and emergency, Archaeology, Cultural heritage)
- Ecology (Environmental monitoring, NBS, Landscape, Biodiversity, Process modeling, Comparative studies)

Schedule

1 May 2023	Submission system opening
31 December 2023	Submission system closing

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 “**Exploring the Potential of Urban Remote Sensing**” special issue manuscript type. Prospective authors should consult the site <https://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=9082768> for guidelines and information on paper submission. All submissions must be formatted using the IEEE standard format (double column, single spaced). Please visit http://www.ieee.org/publications_standards/publications/authors/author_templates.html to download a template for transactions. Please note that as of Jan. 1, 2020, IEEE J-STARS has become a fully open-access journal charging a flat publication fee \$1,250 per paper.

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