



CALL FOR PAPERS
IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing
Special Issue on
“LiDAR Technology and Applications in Coastal and Island/Reef Zone”

The coastal and Island/Reef zones, as the interface between land and ocean, boasts abundant natural resources and ecosystems, while also facing increasing environmental pressures and human impacts. Accurate and efficient acquisition of coastal zone information, such as topography, vegetation, and hydrology, is crucial for coastal resource management, environmental protection, and disaster warning.

Traditional LiDAR technology faces limitations in coastal and Island/Reef zones observation, including high costs, large data volumes, and difficulties in penetrating water bodies. In recent years, novel photon-counting and waveform LiDAR technologies, with its advantages at coastal and Island/Reef zones, has provided a new solution for high-precision and high-efficiency observation and detection.

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

- **LiDAR Systems and Technologies in Coastal and Island/Reef Zones**
 - Design and development of novel LiDAR systems
 - Data processing and information extraction algorithms for LiDAR
 - Performance evaluation and calibration methods for LiDAR systems in Coastal and Island/Reef Zones
- **Applications of LiDAR in Coastal and Island/Reef Zones**
 - Topography mapping and change monitoring in Coastal and Island/Reef Zones
 - Coastal vegetation classification and biomass estimation
 - Sediment and benthic Detection in Coastal and Island/Reef Zone
 - Retrieval of hydrological parameters and water quality monitoring
 - Coastal disaster monitoring and assessment
- **Integration of LiDAR with Other Remote Sensing Technologies**
 - Fusion of LiDAR and optical imagery
 - Fusion of LiDAR and synthetic aperture radar
 - Fusion of LiDAR and ocean observation data

Schedule

2025.06.01, Submission system opening

2025.12.31, 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 “**LiDAR Technology and Applications in Coastal and Island/Reef Zone**” 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 since Jan. 1, 2025, IEEE J-STARS, as a fully open-access journal, charges a flat publication fee \$1,800 per paper.

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