

Journal of Indian Society of Remote Sensing

CALL FOR PAPERS FOR JISRS SPECIAL ISSUES

The Journal of Indian Society of Remote Sensing invites original research contributions to be published in two separate Special Issues during the year 2022 on the following themes.

SPECIAL ISSUE 1.

Theme: Satellite Oceanography: Revolutionizing the “Blue Economy”

The “Blue Economy” revolution in recent years has paved the way for alternate sources of food and energy with safe navigation that has traditionally been at the forefront. While healthy oceans are the need of the hour, the coastal zones are correspondingly under stress due to excessive exploitation. It is therefore essential to monitor and predict the oceans to safeguard and harness their potential. Realizing the need for sustainable ocean development in a more transparent and responsible manner, the United Nations has declared 2021-2030 as the “Ocean Decade” with a major emphasis on working together for “Oceans that we Have to Oceans that we Want”. To accomplish this, regular observations of oceans have become very crucial. Earth Observation satellites play an important role in providing synoptic coverage in a repetitive mode. Several EO satellites, both from polar and Geo platforms have been routinely providing the observations of sea surface temperature, sea level, ocean color, wave height, ocean surface winds and sea surface salinity. These observations in conjunction with in situ measurements and numerical models become the backbone of operational oceanography and in the studies of ocean extremes, ocean hazards, renewable energy, ocean productivity, coastal vulnerability and climate. In this context, this special issue aims to explore fundamental and applied research on satellite oceanography.

The theme of the special section includes the following:

- Enabling Sensor Technologies for Oceanography
- Safe Navigation and Operational Oceanography
- Marine resources (living and non-living)
- Coastal Ecosystems, Disasters and Vulnerability
- Marine Pollution including plastic pollution
- Marine Geodetic Applications
- AI/ML based ocean applications
- Oceans and Climate change impact

- Data democracy/dissemination/smart.

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Important Timelines:

- Deadline of Manuscript Submission: October 31, 2021
- Author Notification: November 30, 2021
- Revised Papers Submission: December 31, 2021
- Final Acceptance: February 28, 2022
- Publication: 1st Quarter of 2022

SPECIAL ISSUE 2.

Theme: Deep Learning for Remote Sensing Based Earth and Environment Resources Management”

In the current era, earth resource and environmental remote sensing have become crucially important due to increasing earth hazards. In general, remote sensing is the science of acquiring information from a distance. The goal of earth resource and environmental remote sensing is to observe the earth through remote sensors and provide a global perspective of the earth system and a wealth of data on earth resources to make vital decisions on the current and future state of our planet. The major objective here is to provide the policymakers and the general public with the necessary identification and understanding of the earth issues. However, it requires massive computational capabilities to perform planetary-scale geospatial analysis to deal with high

impact societal issues such as climate monitoring, environmental protection, deforestation, drought, disaster, food security, climate monitoring, water management, and environmental protection. This is where exactly the role of deep learning comes into the picture of earth resources and environmental remote sensing.

The intersection of deep learning and earth resource monitoring creates massive opportunities that weren't possible before. Deep learning assists integrated geospatial analysis for modelling and monitoring the earth system for sustainable development. It enables the users to compute petabytes of remotely sensed data (spatial, temporal, and spectral data) without the need for complex cloud-based parallelization. It provides more inclusive access to the data with the growth of earth observation in such a way that is previously unimaginable. Broadly speaking, deep learning has become the core component of geospatial analysis along with remote sensing techniques. It provides tools and algorithms that can be used along with remote sensing data to solve earth-related complex problems. Deep learning for earth resource and environmental remote sensing comes with the promise of making earth image analysis more scalable, easier, and more broadly applicable. However, with the growing complexity of remote sensing imagery, the scientific community is under the need to explore more against the background of using deep learning techniques for earth resource and environmental monitoring.

The topic of interest includes the following:

- Advances in deep learning for earth resource and environmental remote sensing
- Deep learning meets big data analytics to support earth resource and environmental monitoring
- Challenges and benefits of using deep learning for earth resource monitoring with appropriate solutions
- Innovations in deep learning assisted remote sensing for earth conservation
- Earth imagery analytics with deep learning and computer vision
- Deep learning assisted hyperspectral and multispectral remote sensing for earth resource and environmental monitoring
- Land and marine observation with deep learning and remote sensing techniques
- Deep learning for remote sensing data reception, processing and transmission
- Deep learning for earth image interpretation and analysis

- Application of deep learning assisted earth resource and environmental remote sensing for agriculture, forestry

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Important Timelines:

- Deadline of Manuscript Submission: February 25, 2022
- Author Notification: May 05, 2022
- Revised Papers Submission: July 15, 2022
- Final Acceptance: September 27, 2022
- Publication: 4th Quarter of 2022

GENERAL INSTRUCTIONS:

All the submission should address the following as per the template provided below.

Objective	What is the basic motive for writing the paper (or the aims of the research)?
Theme	How does it relate to the current theme?
Design/methodology/approach	What is the theoretical or subject scope of the article? How are the objectives achieved? What is the approach to the topic? This will include the methodology followed in the study.
Findings	What are the main findings in the work? This will refer to analysis, discussion, and results.

Research limitations/implications (if applicable).	This section should include suggestions for future research and any identified limitations in the current research process.
Practical implications (if applicable)	All articles should have practical applications. Mention the applications of the research outcomes and implications which are identified for practice? What changes to practice can be made as a result of this research?
What is the original/value of paper	What is novel in the paper? State if there is any value addition made and who all are the beneficiaries of this research.

Interested researchers engaged in the development and demonstration of innovative applications in areas mentioned above may submit their contributions to the Special Issue using the 'Online Submission' portal of JISRS (<https://www.editorialmanager.com/isrs/default.aspx>). The authors are also requested to follow the Author Guidelines of JISRS.