





an Open Access Journal by MDPI

Deep Learning for Land Use and Land Cover Change Monitoring with Optical and SAR Images

Guest Editors:

Prof. Dr. Hyung-Sup Jung

Department of Geoinformatics, University of Seoul, Seoul 130-743, Republic of Korea

Dr. Jin-Woo Kim

Roy M. Huffington Department of Earth Sciences, Southern Methodist University, Dallas, TX 75275, USA

Prof. Dr. Zhong Lu

Roy M. Huffington Department of Earth Sciences, Southern Methodist University, Dallas, TX 75275, USA

Deadline for manuscript submissions:

31 May 2025

Message from the Guest Editors

This Special Issue focuses on discussing research that utilizes state-of-the-art deep learning techniques from optical and synthetic aperture radar (SAR) imagery to monitor land use and land cover changes. In recent years, evolving deep learning techniques have shown excellent results in analyzing optical and SAR images to accurately detect Earth's surface changes, which are caused by various factors such as natural and anthropogenic hazards and environmental changes. Deep learning research in land use and land cover change monitoring emphasizes the richness and diversity of training data and models trained in various geographical regions and environmental conditions. Through the innovative use of deep learning technology, global change detection, which was previously considered a difficult or expensive task, can be performed efficiently. For this Special Issue, we invite innovative research that uses deep learning techniques to accurately monitor various changes in land use and land cover using optical and SAR imagery.











an Open Access Journal by MDPI

Editor-in-Chief

Dr. Prasad S. Thenkabail

Senior Scientist (ST), U. S. Geological Survey (USGS), USGS Western Geographic Science Center (WGSC), 2255, N. Gemini Dr., Flagstaff, AZ 86001, USA

Message from the Editor-in-Chief

Remote Sensing is now a prominent international journal of repute in the world of remote sensing and spatial sciences, as a pioneer and pathfinder in open access format. It has highly accomplished global remote sensing scientists on the editorial board and a dedicated team of associate editors. The journal emphasizes quality and novelty and has a rigorous peer-review process. It is now one of the top remote sensing journals with a significant Impact Factor, and a goal to become the best journal in remote sensing in the coming years. I strongly recommend Remote Sensing for your best research publications for a fast dissemination of your research.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within Scopus, SCIE (Web of Science), Ei Compendex, PubAg, GeoRef, Astrophysics Data System, Inspec, dblp, and other databases.

Journal Rank: JCR - Q1 (Geosciences, Multidisciplinary) / CiteScore - Q1 (General Earth and Planetary Sciences)

Contact Us