Special Issue

Advances in Deep Learning Change Detection Based on High-Resolution Remote Sensing Imagery

Message from the Guest Editors

High-resolution remote sensing (RS) imagery change detection (CD) plays an important role in resources surveying, urban sprawl monitoring, environmental assessment, and rapid disaster response. With the development of remote sensing big data, highperformance computing resources and powerful network architectures, deep learning techniques have been widely introduced to address CD tasks, pushing the automation and intelligence of CD to an amazing level. Particularly, the emergence of remote sensing large foundation models, zero-shot foundation models, and powerful generative models has opened up new opportunities to address CD tasks in a more robust way. The aim of this Special Issue is to highlight state-of-theart research that addresses various issues of deep learning CD for high-resolution remote sensing imagery with the development of model architectures, labelefficient learning methods, and large foundation models, among others. In addition, we also aim to highlight research work focused on smart deep learning CD applications in various areas, including geohazard identification, natural resources investigation, environmental monitoring, and rapid disaster response.

Guest Editors

Dr. Daifeng Peng

Dr. Sicong Liu

Dr. Yuxing Chen

Dr. Zhi Zheng

Deadline for manuscript submissions

30 August 2025



an Open Access Journal by MDPI

Impact Factor 4.1 CiteScore 8.6



mdpi.com/si/228982

Remote Sensing Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 remotesensing@mdpi.com

mdpi.com/journal/ remotesensing





an Open Access Journal by MDPI

Impact Factor 4.1 CiteScore 8.6



About the Journal

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 peerreview 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.

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

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)

