CALL FOR PAPER

Deep Learning in Remote Sensing: Sample Datasets, Algorithms and Applications

JOINT SPECIAL ISSUE

Dear Colleagues,

In the last few years, remote sensing has entered the era of big data characterized by "volume, velocity, variety, and value." Deep learning has been proven to be efficient for large remote sensing data sets, particularly for feature or target detection, and for image and data classification. Deep learning-based applications are also emerging in various domains, such as disaster assessment, agricultural monitoring, and urban planning. Still, strategies for the creation of massive sample datasets and for the construction of deep learning networks play essential roles in the success of deep learning. Researchers have developed a number of marker sample datasets for object detection and image classification, which have supported successful applications of deep learning in remote sensing. Hence, the joint publication and release of these sample databases and related algorithms or applications will undoubtedly promote the further development of deep learning in the field of remote sensing and will increase transparency, transferability and reproducibility.

This Joint Special Issue calls the original outcomes from research activities and to publish simultaneously remote sensing sample datasets and the description of related algorithms or applications from the same research team or scholars. We aim that the jointly published papers will promote a transparent use of deep learning in remote sensing, as well as sharing of high-precision sample datasets while simultaneously documented through the corresponding papers of the joint special issue.

Potential topics include, but are not limited to:

- Remote sensing data sample datasets and descriptions for deep learning
- Innovative deep learning algorithms for remote sensing data processing
- Deep learning for image processing and classification
- Deep learning for remote sensing data fusion
- Deep learning for time-series applications
- Applications of deep learning in remote sensing
- Training and testing deep learning algorithms and solutions to remote sensing problems
- Deep learning for image understanding including semantic labeling, object detection, or image retrieval
- Deep learning with scarce or low-quality remote sensing data across resolutions or sensors

NODA

NODA

CALL FOR PAPER

Deep Learning in Remote Sensing: Sample Datasets, Algorithms and Applications

The outcomes of a research activity are not only a discovery paper, but relevant research data and data paper. Supported by **National Earth Observation Data Center (NODA)**, we invite original results of a research activity for a joint special issue of three publishers, including Global Change Research Data Publishing & Repository (DOI:10.3974, Regular member of the World Data System) for publishing datasets and two journals, Global Change Research Data & Discovery (ISSN 2096-3645) for publishing data papers and Remote Sensing (ISSN 2072-4292) for publishing discovery papers based on the relevant datasets and data papers. All of the datasets, data papers and discovery papers are peer-reviewed openly accessible.

Submissions should consist of a set of one dataset and two relevant papers: first, a data paper and its dataset should be submitted to Global Change Research Data Publishing & Repository. Upon approval, the related discovery paper based on such dataset should be submitted to the journal of Remote Sensing.

Important Date:

Submission system opening	November 4, 2019
Submission system closing	March 31, 2020 for Global Change Research Data Publishing & Repository
	October 31, 2020 for Remote Sensing

Links:

Global Change Research Data Publishing & Repository	*http://www.geodoi.ac.cn/WebEn/IssuesInfo.aspx?ID=202001*
Remote Sensing	*https://www.mdpi.com/journal/remotesensing*

Special Issue Editors:

Prof. Guoqing Li	RADI of C-A-S, Beijing 100094, China
Prof. Bing Zhang	RADI of C-A-S, Beijing 100094, China
Prof. Dr. Thomas Blaschke	University of Salzburg, Salzburg, A-5020, Austria
Dr. Junshi Xia	RIKEN, Tokyo 103-0027, Japan
Prof. Chuang Liu	IGSNRR of C-A-S, Beijing 100101, China
Prof. Carol Song	Purdue University, West Lafayette, IN 47907, USA
Prof. Phillipe De.Meayer	Ghent University, 9000 Gent, Belgium
Prof. Yifang Ban	KTH Royal Institute of Technology in Stockholm, Sweden
Dr. Xiaochuang Yao	China Agricultural University, Beijing, 100083, China
Dr. Amani J. Uisso	National Institute of Forestry, Tanzania

Global Change Research Data Publishing & Repository
– Metadata, Data Products and Data Papers

remote sensing