



CALL FOR PAPERS

IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing

Special Issue on

“GeoAI: AI Empowered Monitoring of Climate and Environmental Changes by Remote Sensing”

Climate and environmental changes, as revealed by gradual changes in temperature, precipitation, atmospheric moisture, water warming, and wind intensity, as well as sea-level rise, coastal erosion, and changes in the occurrence of extreme events is affecting the Earth and life resources dramatically. According to United Nation’s 2022 Progress towards the Sustainable Development Goals, it is stated that, global emissions are set to increase by almost 14% over the current decade, which could lead to a climate catastrophe unless governments, the private sector and civil society work together to take immediate action.

New technological monitoring and assessment solutions need to aid achieving climate-neutral environment. Sustainable preservation of environment should aim to control damage from human intrusion and environmental factors. Understanding vulnerability constitutes a necessary step towards risk reduction and the pursuing of protection and preservation strategies. The recent developments on Earth Observation and artificial intelligence (AI) technologies provides a great opportunity to develop reliable, accurate and time-effective solutions and indicators to overcome climate and environmental change challenges. Although considerable attention has been given in developing improved data and statistical systems for climate and environmental monitoring, there are still substantial gaps in terms of data, processing and analysis. Therefore, the United Nations develop several policies and regulations to overcome above mentioned problems in terms of data generation, sharing and re-use.

The special issue is aimed to contribute to all climate and environmental solutions by focusing on taking urgent action to combat global warming, climate change and their impacts in order to fight against global threats on ecosystems which results in long-term serious socio-economic effects on nature and human life.

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

- Global Warming / Climate Change
- Environmental Monitoring
- Agriculture/Forest Applications
- Ocean Monitoring
- Biodiversity Mapping

Schedule

01.01.2023 Submission system opening

31.07.2023 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 “GeoAI: AI Empowered Monitoring of Climate and Environmental Changes by Remote Sensing” 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 as of Jan. 1, 2020, IEEE J-STARS has become a fully open-access journal charging a flat publication fee \$1,250 per paper.

Guest Editors

Bulent Bayram	Yildiz Technical University, Turkey (bayram@yildiz.edu.tr)
Amit K. Mishra	University of Cape Town, South Africa (amit.mishra@uct.ac.za)
Tolga Bakirman	Yildiz Technical University, Turkey (bakirman@yildiz.edu.tr)