Special Issue

Environmental Features Assisted Satellite Navigation

Message from the Guest Editor

The global navigation satellite system (GNSS), which provides accurate position information at an economic cost, has become vital for various civil applications, especially for location-based services. Since GNSS measurement errors are introduced by environmental objects, it is reasonable to obtain the surrounding environment's information to improve the performance of GNSS. Thus, recent studies tend to explore the opportunity of employing environmental information (e.g., extracts from additional sensors, external databases, or even measurement itself via deep learning), which is correlated with the measurement degradations, to assist GNSS error detection, mitigation, or even correction. The goal of this Special Issue on "Environmental Features Assisted Satellite Navigation" is to collect papers (original research articles and review papers) to give insights about associating environmental features from various approaches (such as mapping, spatial data, external sensor observations, deep learning networks, etc.) with GNSS degradations, thereby assisting adequate error detection, mitigation, or correction to improve GNSS positioning and navigation performance.

Guest Editor

Dr. Guohao Zhang Department of Aeronautical and Aviation Engineering, The Hong Kong Polytechnic University, Kowloon, Hong Kong

Deadline for manuscript submissions

23 January 2026



Geomatics

an Open Access Journal by MDPI

Impact Factor 2.8 CiteScore 5.1



mdpi.com/si/245579

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

mdpi.com/journal/

geomatics





Geomatics

an Open Access Journal by MDPI

Impact Factor 2.8 CiteScore 5.1



geomatics



About the Journal

Message from the Editor-in-Chief

Geomatics is an information technology discipline which integrates the tasks of gathering, storing, processing, modeling, analyzing, and delivering spatially referenced or location information.

Geomatics journal offers a new forum to promote multidisciplinary research over broad ranges geomatics innovative research and applications. Original contributions in the form of research papers, communications, letters, short notes, and reviews on all aspects of *Geomatics* are invited.

Editor-in-Chief

Prof. Dr. Enrico Corrado Borgogno Mondino Department of Agricultural, Forest and Food Sciences, University of Turin, L.go Braccini 2, 10095 Grugliasco, Italy

Author Benefits

Open Access:

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

High Visibility:

indexed within ESCI (Web of Science), Scopus, EBSCO, and other databases.

Journal Rank:

JCR - Q2 (Geography, Physical) / CiteScore - Q1 (Earth and Planetary Sciences (miscellaneous))