

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

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Message from the Editor-in-Chief

Geomatics is the modern adaptation of traditional surveying, mapping, and their related skills. In geomatics, Information and Communication Technology (ICT) and digitization play a focal role. Geomatics is the discipline that integrates the tasks of gathering, storing, processing, modeling, analyzing, and delivering georeferenced information. Geomatics produces, validates, and represents georeferenced data that helps to provide services that meet the needs of society.

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