Special Issue

Precise Orbit Determination with GNSS

Message from the Guest Editor

In the last twenty years, although a very complex and diversified service network has been built over global navigation satellite systems (GNSS), all these services definitely rely on the capability of precisely and almost continuously determining the position and velocity of each GNSS spacecraft, by routinely performing what is called a precise orbit determination (POD). At present, the various GNSS networks are increasingly integrating with important research areas in geodesy and geophysics (think about the ongoing global geodetic observing system—GGOS), and generally in Earth system sciences.

The aim of this Special Issue is to host both research and review articles related to the POD of satellites belonging to the various GNSS constellations, including (but not limited to):

Orbit determination status of a given constellation; Dedicated procedures for orbit determination and parameter estimation;

Contributions to geodesy and geophysics;

Satellite dynamics modelization;

Constellation-specific issues (e.g., biases);

Future use of on-board accelerometers;

Current and future implementations of laser ranging tracking;

Orbit determination software; Ground segment for satellite tracking.

Dr. Roberto Peron

Guest Editor

Istituto Nazionale di Astrofisica – Istituto di Astrofisica e Planetologia Spaziali (INAF-IAPS), 00133 Roma, Italy

Deadline for manuscript submissions

closed (15 November 2022)



an Open Access Journal by MDPI

Impact Factor 4.1 CiteScore 8.6



mdpi.com/si/96889

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)

