

Special Issue

Advancements in Ground Movement Monitoring through Remote Sensing Techniques

Message from the Guest Editors

Visual inspection, crack meters, surveying/prisms and inclinometers and extensometers are examples of the conventional geotechnical instruments for monitoring the surface and subsurface ground movement. Some of these methods have recently been used with automated measuring systems, e.g. robotic total stations, Global navigation satellite system (GNSS) and Terrestrial Laser Scanner (TLS), but they cannot be defined as fully “remote” since they need targets or sensors installed on the ground.

In recent years, digital image correlation techniques have emerged as a remote displacement measurement method, due to its advantages of low cost, and full-field deformation measurement. These techniques are based on the comparison of images, gathered at different times, typically from aircrafts, unmanned aerial vehicles (UAV) or satellites. For each source, methods have been developed to obtain ground movement from these images. As an example, regarding data gathered from satellites, recently, monitoring of ground deformation at centimeter to millimeter resolution has been achieved in some studies with the spaceborne Synthetic Aperture Radar (SAR) interferometry method.

Guest Editors

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Message from the Editorial Board

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 peer-review 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.

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