Global Biospheric Monitoring with Remote Sensing

Message from the Guest Editors

The biosphere as the interface between lithosphere and atmosphere modulates most of the Earth processes, enabling the cycling of energy, water, and chemical elements. The role of the biosphere on the functioning of biogeochemical cycles results in substantial local or regional alterations that can impact the conditions of the entire planet, including the climate. In addition, climate change occurring at a global scale has an effect on atmosphere–land surface interactions in all regions of the planet.

At present, technical advances enable the exploration and monitoring of the biosphere. Remote sensing is potentially the most powerful tool to explore the Earth, making it possible to assess biosphere dynamics at several scales.

This Special Issue intends to disseminate advanced research on biosphere monitoring based on remote sensing data at the regional and global scales. All topics related to biosphere functioning are considered, for example, biodiversity, phenology, land use change, burning dynamics, energy balance, and soil resources.