

CALL FOR PAPERS

Innovative Uses of Remote Sensing in Biodiversity Conservation

Highlighting the exciting developments in remote sensing to monitor changes in biodiversity resulting from climate change



Abstract Submission Deadline: 12 November 2021

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Dr. Patricia Gandini
Universidad Nacional de
la Patagonia Austral



Dr. Diogo B Provete
Federal University of
Mato Grosso do Sul

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The use of remote sensing techniques are changing how biodiversity is measured. Recent developments have allowed ecologists to estimate biodiversity facets, such as functional diversity, from satellite images, the so-called spectral diversity. The use of satellite imagery to accurately estimate key biodiversity components may have profound implications for how we monitor biodiversity at a global scale, improve our ability to predict how biodiversity will change in the face of climate change, and help us monitor restoration efforts. At the same time, the field of bioacoustics has begun to use passive (or autonomous) acoustic recorders to monitor biodiversity from a distance. The development of affordable recording devices allowed scientists to establish a network of acoustic monitoring to estimate species richness and abundance of several species at a time. This approach has also allowed long-term monitoring projects to become more common and widespread in the globe. This special issue will highlight exciting work that has used some form of remote sensing to monitor biodiversity, allowing us to evaluate landscape changes due to climate change and human impact. We encourage submissions of primary research papers, especially those that propose new methodological approaches, including new methods that deal with artificial intelligence to analyse big data sets generated by remote sensing techniques, and literature reviews that help us advance key conceptual issues in the field.

Topics

- Remote sensing for evaluating habitat and landscape changes due to climate change and human impact
- How to deal with big data sets in the analysis of remote sensing
- Uses of remote sensing for monitoring biodiversity from space
- Estimating functional diversity of plants from space
- Acoustic monitoring networks for monitoring biodiversity
- Affordable autonomous recording devices
- Surveying biodiversity with sounds
- The promises of Ecoacoustics



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