

# Remote sensing of terrestrial and aquatic ecosystems

*Tuesday 5 March 2024 14:15 (2 hours)*

Landscapes undergo continual transformations, necessitating observation and monitoring across various disciplines and scales to understand their dynamics shaped by both natural and anthropogenic factors. In this regard, remote sensing technology plays a key role, allowing for multi-sensor observations with high spatial and temporal resolution. We invite contributions to demonstrate this potential for multi-temporal characterization and monitoring of terrestrial and aquatic ecosystems.

1. Activities of the Global Land Monitoring (GLM) (Benjamin Brede, GFZ)
2. A hybrid modelling and machine learning approach to infer forest attributes from hyperspectral data (Samuel Fischer, UFZ)
3. Presenting remote sensing analysis of Arctic land surface change through a web- based tool (Tillmann Lübker, AWI)
4. Monitoring landscape dynamics and disturbances in the Arctic permafrost region (Ingmar Nitze, AWI)
5. Multiscale Mapping of Vegetation Patterns for Biodiversity Monitoring (Carsten Neumann, GFZ)
6. Remote sensing of soil moisture and extreme events detection (Toni Schmidt, UFZ)

**Presenters:** ROESSNER, Sigrid (GFZ); HEROLD, Martin (GFZ); PENG, Jian (UFZ)

**Session Classification:** Breakout Sessions