



## SPECIAL SESSION 9

### Trees outside the forest: monitoring forest and landscape restoration

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#### **The goal of the session**

Forest and landscape restoration has risen to the forefront of the international agenda, with more than 200 million hectares committed to restoration globally. However, monitoring forest and landscape restoration brings special challenges, including the heterogeneity of tree sizes, species, distributions, and background land use types. Because most remote sensing approaches to forest monitoring are tailor built for monitoring contiguous and homogenous landscapes, they are not directly applicable to monitoring forest and landscape restoration. However, remote-sensing based approaches to forest and landscape restoration monitoring is critical because restoration projects comprise multiple, geographically unlinked, regions that may be costly or laborious to monitor, especially over the long time frame of restoration. This session seeks to understand and address the challenges posed to satellite monitoring of restoration, and to compare restoration monitoring needs to forest monitoring needs.

#### **Potential topics:**

- Fusion of satellite sources
- Estimation of carbon biomass
- Multi-temporal approaches
- Combining satellite and ground truth data
- Regional fine-tuning and human-in-the-loop remote sensing
- Data collection and validation methods