



## SPECIAL SESSION 17

# Satellite data for assessing forest-related GHG emissions: progress on national and international reporting and the way forward

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

Countries report forest greenhouse gas (GHG) emissions and removals in multiple venues, including in national GHG inventories under the UNFCCC and, REDD+ tracking under emerging voluntary and compliance markets. Although national forest monitoring systems have historically used site-based monitoring, countries are increasingly supplementing their inventories with Earth observation data. Guidance has been developed to address this advancement, for example, through the Global Forest Observations Initiative (GFOI). The GFOI released the third version of the “Methods and Guidance Documentation: Integration of remote-sensing and ground-based observations for estimation of emissions and removals of greenhouse gases in forests” during summer 2020. Despite such guidance, integration of Earth observation data into national forest monitoring systems is still new, many questions remain about how to report the results from such systems, and best practices are not necessarily being shared. Countries must balance reporting requirements, such as those of UNFCCC, emerging best practices, such as from GFOI, user and stakeholder needs, and institutional capacity. They must also develop new data and information infrastructure and maintain it, ideally without sacrificing other programs. This session will cover examples and best practices of countries using satellite data to assess GHG emissions and removals from forests, primarily from the perspectives of data providers, researchers, and funding organizations.

### **Potential topics**

- Best practice guidance for use of Earth observation data in reporting under the UNFCCC, and alignment with requirements from the revised IPCC guidance of 2019.
- Stakeholder needs for data, methods/tools, and infrastructures to support use of Earth observation data for forest-related national GHG reporting.
- National GHG reporting using satellite data: examples from REDD+ countries.
- Novel methods for moving from activity data and emissions factor generation towards land-based emissions accounting.
- Challenges for consistent monitoring – integration of new satellite data streams, and uncertainty estimation related to activity data, emissions factors and emissions estimates.