



## SPECIAL SESSION 3

### Applications of drones in forestry: lessons learnt and way forward

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

Nowadays, drones are established acquisition platforms for remotely sensed data for forest resource management. The driver of the drone industry is currently seeing a shifting from developments in the drone technology itself to the applications of its data. Thus, it is now the moment to summarize the lessons learnt from 10 years of UAV forestry-related research and to define the way forward.

Drones allow translating any landscape into finely detailed data points useful for better, cheaper, and more environmentally-friendly decision making. Thanks to their unprecedented level of detail, drone data can be more accurate or even provide new information compared to traditional field-surveys or alternative remote sensing-based inventories. Coupled with an increasing acceptance of drones for information management, it is more and more commonplace for forestry researchers and practitioners to be equipped with drones. With this exciting technology at our fingertips, it is critical to identify the niche applications for which drones may be competitive compared to the alternative field, proximally or remotely sensed data surveys.

#### **Potential Topics**

This session is intended to bring together novel and operational uses of drones in forestry. In particular, we encourage studies building upon the strengths of drone data such as the use of multi-temporal data, from multiple sensors (e.g., hyperspectral, laser scanning), providing real-time actionable insights. We encourage studies targeting the use of UAVs for uses that are competitive compared to other methods (e.g. field surveys or airborne laser scanning forest inventories) and studies showing how drones can be used for large-scale application (e.g. fusion with spaceborne observations).