

# EO services contributing to SDGs

## Pest and Disease Risk Mapping in Timber



- User: Forestry sector, governments and supply chain managers
- Challenge/Needs: Bark beetles often target weakened trees by breeding between the bark and the wood of the tree. Outbreaks seriously impact the timber industry, water quality, fish and wildlife and property values
- Initiative: Development of two risk models that classify the timber plantations in 7 risk levels; 1 being very low risk and 7 being high risk. Both models use a combination of **Sentinel-2** imagery, soil information, weather data and forest conditions to best determine where beetles are likely to emerge
- Results: Successful risk mapping of bark beetles including weather models and in-situ data sources.
- Service Provider: Space4Good (Kanton Bern)

Target 15.1: By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements.

Target 15.2: By 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally.



Bark beetle risk modelling in state forestries including weather models and in-situ data sources.



Beetles affect lumber industry, water quality, wildlife and property value