

AUTOMATIC DETECTION OF FOREST HEALTH RISK AREAS

The new service providing the most actual data about forest health risk (water, bark beetle, illnesses, windfalls) and changes (clear cuts, growth of new forest).

Key features of the service:

- **Accurate identification of risk areas:** use of time series of satellite imagery and vegetation indexes (LAI, MSAVI2, NDVI, NDWI, infrared imagery and others)
- **Extensive history (since 2019):** go back in time to identify trends and patterns of infestation and forest damage over time
- **Wide coverage:** the whole territory of any country
- **Early detection to minimize economic loss:** detects small clusters of trees (from 3-5 individual trees)
- **Monitor other forest activities:** clear cuts, digging ditches, mowing agriculture land, thinning
- **Integration with enterprise GIS:** XYZ/TMS, WMS services, API, file download

Key benefits for the forest industry:

- Low cost service covering the whole country: from 0.49 EUR / 1 ha
- Time savings – regular monitoring and early risk detection helps to adapt forest management strategies without delay and promote long-term health and vitality of the forest
- Timely intervention: take prompt action to mitigate the impact (targeted harvesting of infested trees, apply appropriate insecticides, destroy beaver dams, etc.)
- Preserve healthy trees: precise identification of high risk spots allows rapid implementation of preventive measures such as tree thinning to reduce risk of further damage
- Financial savings – by salvaging infested trees before they lose commercial value and spread infestation or illness to neighboring trees, forest owners can maximize the financial returns

Satisfied end-users:

Successful testing examples (total test area >2000 km²) - bark beetle infestation and beaver dam detection.

