





May 2022





FOREST MONITORING SERVICE **FOR SOUTH TYROL**



>>> A few years later

In the last few years, the work on this solution has continued. At the moment, several EO-based services are being developed within a regional initiative "Earth Observation for Alpine ecosystems - eco4alps". In this framework, the mountain forests of the Alpine region are being monitored. Derived information is allowing to map a spatial pattern and timing of forest disturbances.

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BENEFICIARIES



EURAC Research

Forest Service of Bolzano

Foresters of the Forest Service: Forest owners; Residents; Tourists

Citizens and Society

TIER 1: **SERVICE PROVIDER**

Sentinel-2; Copernicus Land Monitoring Service (CLMS)

TIER 2 **PRIMARY USER**

Pre - operational Forest Monitoring Service; Vegetation indices on vitality Inss

TIER 3 **SECONDARY USER**

Effective protection against soil erosion and natural hazards (avalanches, landslides, debris flows);

More efficient forest management (benefits forest owners);

TIER 4 **END USER BENEFICIARIES**

Ensuring recreation opportunities for tourists and residents: Conservation of biodiveristy

Value chain definition following SeBS Methodology - https://earsc.org/sebs

The space-based solution

This Copernicus-based solution was produced by a scientific entity for a Public Administration. From a technical perspective, the solution is now more advanced: additional information in now generated.

The Usage Maturity Level

Since 2018, the solution remained at the same stage because there was not the need nor opportunity to perform any other trial or activities. However, the solution still remains in the interest of the organisation.

Thematic Area



Region of Application



Sentinel mission used





Conernicus Service used

Usage Maturity Level



THE EVER GROWING USE OF COPERNICUS ACROSS EUROPE'S REGIONS: A selection of 99 user stories by local and regional authorities

Overall benefits

ECONOMIC



No noticeable additional modification/impact on the functioning of the public administration nor on the lives of the citizens since 2018.

INNOVATION



New funding has been acquired, specifically within a regional initiative "Earth Observation for Alpine ecosystems - eco4alps"

ENVIRONMENTAL



No noticeable additional modification/impact on the functioning of the public administration nor on the lives of the citizens since 2018.

SCIENCE



There was an increase in technical/scientific expertise related to Copernicus/EO within the PA

REGULATORY



The solution has facilitated or improved the compilation of institutional reports by the PA

SOCIETAL



- Improved coordination and governance has been registered
- Sense of trust and community for the involved actors has increased
- There have been improvements in public awareness

Benefits classification following SeBS Methodology - https://earsc.org/sebs

Interesting facts...

After favorable temperature conditions in the spring, bark beetles have drastically increased in number and spread over the region of South Tyrol. Forest monitoring service plans to contribute to monitoring practices in order to and assess the impact of this species on the forests of the region.

Outlook to the future

In the near future, several monitoring practices are foreseen, including an assessment of a large amount of dead trees that have not been removed after the Vaia windstorm occurring in 2018.

Acknowledgements

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Find the original story at

www.nereus-regions.eu/copernicus4regions/user-stories-sheets or Download the full publication

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