

April 2022



REMOTE SENSING FOR GARAJONAY NATIONAL PARK MANAGEMENT

>>> A few years later

In the past few years, Garajonay National Park has organized a congress where all the studies carried out after the fire have been presented. The need to integrate new technologies as tools for decision making and management of such an important natural area has been highlighted and emphasized.

Mariluz Guillen-Climent, Agresta S. Coop. Remote Sensing Department



BENEFICIARIES	Agresta S. Coop	Garajonay National Park	Forest management decision-makers;	Citizens and society
SERVICES	TIER 1: SERVICE PROVIDER Sentinel-2	TIER 2 PRIMARY USER Vegetation indices related with biophysical and biochemical vegetation parameters such as Enhanced Vegetation Index (EVI), Soil Adjusted Vegetation Index (SAVI), Normalized Difference Vegetation Index (NDVI) and Structure Intensive Pigment Index (SIPI)	TIER 3 SECONDARY USER Updated maps (Laurisilva forest); Location of devitalisation hot spots	TIER 4 END USER BENEFICIARIES Better understanding and awareness of environment (forests) protection

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 other users such as companies, professionals, agencies, associations, single citizens.

The Usage Maturity Level

In the past few years the solution has transitioned to a higher level. The main reason enabling such transition was identified in the increased awareness about Copernicus programme at decision-making level.

Thematic Area



AGRICULTURE, FOOD, FORESTRY AND FISHERIES

Region of Application



LA GOMERA

Sentinel mission used



S2

Copernicus Service used



-

Usage Maturity Level



5

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



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

ENVIRONMENTAL



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

SCIENCE



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

REGULATORY



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

SOCIETAL



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

Benefits classification following SeBS Methodology - <https://ears.org/sebs>

Interesting facts...

From a technical perspective, the solution is now more advanced and additional types of Copernicus Sentinels data and Copernicus Services data are now used. More specifically, in addition to Sentinel-2, the solution now uses Sentinel-3 data and products of Copernicus Land Monitoring Service. Experts in Copernicus data management have joined the team.

Outlook to the future

In the future, the use Copernicus products will continue in order to propose space-based solutions that can contribute to the sustainable management of our forests.

Acknowledgements

We are grateful to Ángel B. Fernández López who supplied the terrain information and all the knowledge about Laurisilva in Garajonay National Park. This study is part of a more comprehensive research study developed by Garajonay National Park whose aim is to have a deep comprehension of vegetation inside the Park.

Contacts

Mariluz Guillen-Climent | mguillen@agresta.org

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