Forest-LidaRioja | Forest inventory and fuel model map using remote sensing technologies



This project has created an updated cartography of the main forest species in La Rioja, collecting data such as the volume of wood, tree heights and vegetation structure for every 25x25m of land, with a very high level of resolution.

The Forest-LidaRioja operational group has been formed with the aim of developing a forest inventory and a fuel model map of La Rioja using remote sensing technologies. Among the main practical utilities, we can highlight the importance for improving sustainable forest management, since with accurate and updated data, better decisions can be made and actions in forest areas can be better planned. This project has allowed the development of methodologies and processes for the integration of different sources of information (mainly airborne LiDAR from PNOA 2016 data and OPTICA satellite information). These methods are supported by the development of algorithms that correlate by statistical methods precise terrain data with LiDAR data, requiring the realization of very well calibrated forest plots and measurements located with sub-meter precision in strategic points for each forest species and working area.

The main results of the Forest-LidaRioja Project are:

- Forest inventory of the forests of La Rioja.
- Mapping of fuel models of the forest area of La Rioja to plan preventive forest fire prevention work.
- Study of the evolution of poplar groves in the region and their supply potential.
- Technical training on the products generated for professionals interested in their practical use.

The products generated are open to the public so that anyone can download and use them.

DETALII

SURSA DE LEMN

Pădure

TIPUL DE LEMN

--

TIPUL DE LEMN îN CAUZă

Wood standing

IMPACTUL ASUPRA MEDIULUI șI BIODIVERSITățII

Difficult to estimate

EFECT ASUPRA VENITURILOR

--

POTENțIAL DE EXPLOATARE

--

HUB

Hub Sud-Vest

IMPACT ECONOMIC

POTENțIALUL DE MOBILIZARE

Difficult to define, but if we base ourselves on the annual felling and the possibilities in La Rioja, it could be between 100,000 and 250,000 m3 of wood, but it would not be only through this system.

POTENțIAL DE SUSTENABILITATE - VALOARE

Foarte pozitiv

FACILITATEA DE IMPLEMENTARE

A very easy-to-use application has been created to make it user-friendly for everyone, with a basic variant for all audiences that is intuitive to use and a more advanced variant for technicians (the latter was accompanied by training).

FACILITATEA DE IMPLEMENTARE - EVALUARE

Very Easy

CONDIțII CHEIE PREALABILE

--

TIPUL DE EVENIMENT LA CARE A FOST PREZENTAT ACEST IPB

--

EFECT ASUPRA LOCURILOR DE MUNCă

Difficult to specify

COSTURI PENTRU IMPLEMENTARE (EURO - €)

High at the scale of forest users, facilitates many processes linked to public forest services and lowers inventory costs for both public and private users. 243000

CUNOȘTINȚE SPECIFICE NECESARE

For the all public variant none, only knowledge of the location of the plot and internet access, for the technical variant knowledge of foresters and some rudiments of using the application.

MAI MULTE DETALII

PROVOCARE ABORDATă

2. Îmbunătățirea infrastructurilor și a capacității actorilor publici

DOMAIN

Inventariere, evaluare, monitorizare

Recoltare, infrastructură, logistică

TIP DE SOLUȚIE

Modelare, DSS, simulare, optimizare

CUVINTE CHEIE

Cartografía

Inventario forestal continúo

LiDAR

SOLUȚIE DIGITALă

Da

INOVAȚIE

Da

ȚARA DE ORIGINE

Spania

SCARA DE APLICARE

Regional/ sub-național

ANUL DE îNCEPUT ȘI DE SFâRȘIT

2018 - 2020

DATE DE CONTACT

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REFERENCES AND RESOURCES

PAGINă WEB

https://www.forest-lidarioja.info/

WEBSITE PROJECT

https://www.forest-lidarioja.info/grupo-operativo/

REFERINță PROIECT

FEADER

RESURSE

Spatial Data Infrastructures of the Government of La Rioja (IDErioja)

Application for consulting and extracting data from specific plots of land

DESPRE EXEMPLUL DE BUNă PRACTICă

A PRINCIPALEI ORGANIZAțII

PROIECTUL îN CADRUL CăRUIA A FOST CREATă ACEASTă FIșă INFORMATIVă

Rosewood 4.0

DATA POSTăRII

8 Sep 2021

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 862681

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