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.

DETALJER

OPPRINNELSE FOR TRE
Skog

TYPE TRE
--

TYPE TRE INVOLVERT
Wood standing

PåVIRKNING På MILJø OG BIOLOGISK MANGFOLD
Difficult to estimate

INNTEKTSEFFEKT
--

UTNYTTELSESPOTENSIAL
--

HUB
South-West Hub

ØKONOMISK PåVIRKNING

MOBILISERINGSPOTENSIAL
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.

BæREKRAFTPOTENSIAL - VERDI
Veldig positivt

ENKEL IMPLEMENTERING
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).

ENKEL IMPLEMENTERING - EVALUERING
Very Easy

VIKTIGE FORUTSETNINGER
--

TYPE BEGIVENHET DER DENNE BPI HAR BLITT OMTALT
--

EFFEKT På ARBEIDSPLASSER
Difficult to specify

KOSTNADER MED IMPLEMENTERING (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

SPESIFIKKE KUNNSKAPSBEHOV

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.

MER INFORMASJON

UTFORDRING ADRESSERT

2. Forbedre infrastruktur og kapasitet for offentlige aktører

DOMENE

Inventering, vurdering, overvåking

Avvirkning, infrastruktur, logistikk

TYPE LØSNING

Modellering, DSS, simulering, optimalisering

NØKKELORD

Cartografía

Inventario forestal continúo

LiDAR

DIGITAL LØSNING

Ja

INNOVASJON

Ja

OPPRINELSESLAND

Spania

POTENSIALE

Regional/deler av landet

START OG SLUTT åR

2018 - 2020

KONTAKT INFORMASJON

EIER ELLER FORFATTER

Agresta S. Coop.

David García

dgarcia@agresta.org

https://agresta.org/

RAPPORTØR

CESEFOR

Ángela García de Arana

angela.garcia@cesefor.com

REFERENCES AND RESOURCES

HJEMMESIDE (HOVEDSIDE)

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

PROSJEKTETS HJEMMESIDE

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

REFERANSE TIL PROSJEKT

FEADER

RESSURSER

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

Application for consulting and extracting data from specific plots of land

LOGO FOR BESTE PRAKSIS

LOGO FOR HOVEDORGANISASJON

PROSJEKT SOM DETTE FAKTAARKET ER OPPRETTET UNDER

Rosewood 4.0

INNLEGGSDATO

8 sep 2021

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A TOOL FROM ROSEWOOD 4.0, DESIGNED AND DEVELOPED BY