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.

PODROBNOSTI

PôVOD DREVA
Les

DRUH DREVA
--

UVAžOVANý DRUH DREVA
Wood standing

VPLYV NA ŽIVOTNé PROSTREDIE A BIODIVERZITU
Difficult to estimate

DOPAD NA PRíJMY
--

POTENCIáL VYUžITIA
--

ROZBOčOVAč
Juhozápadné centrum

EKONOMICKý VPLYV

MOBILZAčNý POTENCIáL
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.

POTENCIáL UDRžATEľNOSTI - HODNOTA
Veľmi pozitívne

UľAHčENIE IMPLMENTáCIE
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).

UľAHčENIE IMPLMENTáCIE - HODNOTENIE
Very Easy

KľúčOVé PREPOKLADY
--

TYP PODUJATIA, NA KTOROM BOL TENTO BPI PREZENTOVANý
--

DOPAD NA ZAMESTNANOSť
Difficult to specify

NáKLADY NA IMPLEMENTáCIU (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

POTREBA šPECIFICKýCH ZNALOSTí

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.

VIAC INFORMáCIí

RIEšENá VýZVA

2. Zlepšiť infraštruktúru a kapacity verejných aktérov

DOMAIN

Inventarizácia, posudzovanie, monitoring/monitorovanie

Ťažba, infraštruktúra, logistika

TYP RIEšENIA

Modelovanie, simulácia, optimalizácia

KľúčOVé SLOVá

Cartografía

Inventario forestal continúo

LiDAR

DIGITALNE RIEšENIE

áno

INOVáCIE

Áno

KRAJINA PôVODU

Španielsko

ROZSAH APLIKáCIE

Regionálny/

ZAčIATOK A KONIEC ROKA

2018 - 2020

KONTAKTNé úDAJE

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REFERENCES AND RESOURCES

HLAVNá WEBSTRáNKA

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

PROJEKTOVá WEBSTRáNKA

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

REFERENCIA PROJEKTU

FEADER

ZDROJE

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

Application for consulting and extracting data from specific plots of land

LOGO NAJLPEŠEJ PRAXE

LOGO HLAVNEJ ORGANIZáCIE

PROJEKT, V RáMCI KTORéHO BOL TENTO INFORMAčNý PREHľAD VYTVORENý

Rosewood 4.0

DáTUM ODOSLANIA

8 sep 2021

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A TOOL FROM ROSEWOOD 4.0, DESIGNED AND DEVELOPED BY