## 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.

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PODROBNOSTI	
PôVOD DREVA	MOBILZAČNý POTENCIÁL
Les	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.
DRUH DREVA	
	POTENCIÁL UDRŽATEľNOSTI - HODNOTA
	Veľmi pozitívne
UVAžOVANý DRUH DREVA	UľAHČENIE IMPLMENTÁCIE
Wood standing	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).
VPLYV NA ŽIVOTNÉ PROSTREDIE A BIODIVERZITU	UľAHČENIE IMPLMENTÁCIE - HODNOTENIE
Difficult to estimate	Very Easy
DOPAD NA PRÍJMY	KľúčOVé PREPOKLADY
POTENCIÁL VYUŽITIA	TYP PODUJATIA, NA KTOROM BOL TENTO BPI PREZENTOVANÝ
ROZBOčOVAč	DOPAD NA ZAMESTNANOSť
Juhozápadné centrum	Difficult to specify
EKONOMICKý VPLYV	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 INFORMáCI**í

RIEŠENá VýZVA

2. Zlepšiť infraštruktúru a kapacity verejných

aktérov

**DOMAIN** 

áno

Inventarizácia, posudzovanie,

monitoring/monitorovanie

DIGITALNE RIEŠENIE

Ťažba, infraštruktúra, logistika

KľúčOVé SLOVá

Cartografía

Inventario forestal continúo

LiDAR

KRAJINA PôVODU

Španielsko

ROZSAH APLIKÁCIE

Regionálny/

TYP RIEŠENIA

Modelovanie, simulácia, optimalizácia

**INOVáCIE** 

Áno

ZAČIATOK A KONIEC ROKA

2018 - 2020

**KONTAKTNÉ úDAJE** 

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**REPORTÉR** 

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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









## 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



