

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.

DETTAGLI

ORIGINE DEL LEGNO

foresta

POTENZIALE DI MOBILITAZIONE

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.

TIPO DI LEGNO

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POTENZIALE SOSTENIBILITÀ - VALORE

Molto positivo

TIPO DI LEGNO IN QUESTIONE

Wood standing

FACILITÀ DI IMPLEMENTAZIONE

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).

IMPATTO SULL'AMBIENTE E LA BIODIVERSITÀ

Difficult to estimate

FACILITÀ DI IMPLEMENTAZIONE - VALUTAZIONE

Very Easy

EFFETTO SUL REDDITO

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PREREQUISITI CHIAVE

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POTENZIALE DI SFRUTTAMENTO

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TIPO DI EVENTO IN CUI QUESTO BPI È STATO PRESENTATO

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HUB

Hub sud-ovest

EFFETTO SUL LAVORO

Difficult to specify

IMPATTO ECONOMICO

I COSTI DI ATTUAZIONE (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

CONOSCENZE SPECIFICHE NECESSARIE

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.

PIÙ DETTAGLI

SFIDA RISOLTA	DOMINIO	TIPO DI SOLUZIONE
2. Migliorare le infrastrutture e le capacità degli attori pubblici	Inventario, la valutazione, il monitoraggio La raccolta, le infrastrutture, la logistica	Modellazione, DSS, la simulazione, l'ottimizzazione
PAROLE CHIAVE	SOLUZIONE DIGITALE	INNOVAZIONE
Cartografía	Sì	Sì
Inventario forestal continúo		
LiDAR		
PAESE D'ORIGINE	SCALA DI APPLICAZIONE	INIZIO E FINE ANNO
Spagna	Regionale / sub-nazionale	2018 - 2020

CONTATTI

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REFERENCES AND RESOURCES

SITO PRINCIPALE	RISORSE
https://www.forest-lidarioja.info/	Spatial Data Infrastructures of the Government of La Rioja (IDErioja)
SITO WEB DEL PROGETTO	
https://www.forest-lidarioja.info/grupo-operativo/	Application for consulting and extracting data from specific plots of land
PROGETTO DI RIFERIMENTO	
FEADER	

LOGO DELLE MIGLIORI
PRATICHE



LOGO DELLA PRINCIPALE
ORGANIZZAZIONE



PROGETTO NELL'AMBITO DEL QUALE QUESTA SCHEDA è STATA CREATA

Rosewood 4.0

DATA DI INSERIMENTO

8 Set 2021



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A TOOL FROM ROSEWOOD 4.0, DESIGNED AND DEVELOPED BY



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