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

IZVOR LESA
Gozd

TIP LESA
--

VRSTA OBRAVNAVANEGA LESA
Wood standing

VPLIV NA OKOLJE IN BIODIVERZITETO
Difficult to estimate

VPLIV NA PRIHODKE
--

POTENCIAL IZKORIŠČANJA
--

VOZLIŠČE
Jugozahodno vozlišče

GOSPODARSKI VPLIV

POTENCIAL ZA MOBILIZACIJO
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.

TRAJNOST - VREDNOST
Zelo pozitivno

ENOSTAVNOST IZVEDBE
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).

ENOSTAVNOST IZVEDBE - OCENJEVANJE
Very Easy

KLJUČNI PREDPOGOJI
--

VRSTA DOGODKA, NA KATEREM JE BIL PREDSTAVLJEN TA BPI
--

VPLIV NA DELOVNA MESTA
Difficult to specify

STROŠKI IZVEDBE (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

POTREBNO SPECIFIČNO ZNANJE

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.

VEč PODROBNOSTI

IZZIV

2. Izboljšava infrastrukture in kapacitet deležnikov

DOMENA

Inventura, ocena, monitoring

Sečnja in spravilo, infrastruktura, logistika

TIP REŠITVE

Modeliranje, DSS, simulacija, optimizacija

KLJUČNE BESEDE

Cartografía

Inventario forestal continúo

LiDAR

DIGITALNE REŠITVE

Da

INOVACIJA

Da

IZVORNA DRŽAVA

Španija

OBSEG UPORABE

Regionalni

ZAČETNO IN KONČNO LETO

2018 - 2020

KONTAKTN PODATKI

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REFERENCES AND RESOURCES

SPLETNA STRAN

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

SPLETNA STRAN PROJEKTA

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

REFERENCA PROJEKTA

FEADER

VIRI

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

Application for consulting and extracting data from specific plots of land

LOGOTIP DOBRE PRAKSE

LOGOTIP GLAVNE ORGANIZACIJE

PROJEKT, V OKVIRU KATEREGA SO BILI ZBRANI OSNOVNI PODATKI

Rosewood 4.0

DATUM OBJAVE

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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