

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.

Λεπτομέρειες

Προέλευση ξυλείας

Δάσος

Δυνατότητες διακίνησης

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.

Τύπος ξυλείας

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Δυναμικό βιωσιμότητας - Αξία

Πολύ θετικό

Τύπος εμπλεκόμενης ξυλείας

Wood standing

Ευκολία υλοποίησης

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).

Επιπτώσεις στο περιβάλλον και τη βιοποικιλότητα

Difficult to estimate

Ευκολία εφαρμογής - Αξιολόγηση

Very Easy

Δυνατότητες ειδοδήματος

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Βασικά προαπαιτούμενα

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Δυνατότητες για εκμετάλλευση

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Τύπος εκδήλωσης στην οποία έχει παρουσιαστεί αυτός ο BPI

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Κόμβος

Νοτιοδυτικός κόμβος

Δυνατότητες εργασίας

Difficult to specify

Οικονομικός αντίκτυπος

Κόστος υλοποίησης (ευρώ - €)

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

Ειδικές προαπαιτούμενες γνώσεις

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.

Περισσότερες λεπτομέρειες

Πρόκληση η οποία αντιμετωπίζεται	Όνομα χώρου	Τύπος λύσης
2. Βελτίωση υποδομών και των ικανοτήτων των δημοσίων φορέων	Απογραφή, αξιολόγηση, παρακολούθηση Συγκομιδή, υποδομές, εφοδιαστική/διαχείριση υλικού	Μοντελοποίηση, συστήματα στήριξης αποφάσεων, προσομοίωση, βελτιστοποίηση
Λέξεις κλειδιά	Ψηφιακή λύση	Καινοτομία
Cartografía	ναι	Ναι
Inventario forestal continuo		
LiDAR		
Χώρα προέλευσης	Κλίμακα της εφαρμογής	Έτος έναρξης και λήξης
Ισπανία	Περιφερειακό	2018 - 2020

Στοιχεία επικοινωνίας

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REFERENCES AND RESOURCES

Κύριος ιστότοπος	Πηγές
https://www.forest-lidarioja.info/	Spatial Data Infrastructures of the Government of La Rioja (IDerioja)
Ιστότοπος έργου	
https://www.forest-lidarioja.info/grupo-operativo/	Application for consulting and extracting data from specific plots of land
Αναφορά έργου	
FEADER	

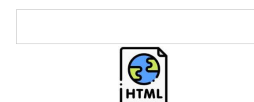


Έργο για το οποίο έχει δημιουργηθεί το παρόν φύλλο πληροφοριών
Rosewood 4.0

Ημερομηνία δημοσίευσης
8 Σεπ 2021



This project has received funding from the European Union's Horizon
2020 research and innovation programme under grant agreement No.
862681



A TOOL FROM ROSEWOOD 4.0, DESIGNED AND DEVELOPED BY

