

Remote sensing based assessment of woody biomass and carbon storage in forests



RemBioFor

R&D project, which aim is to work out the complex method of defining selected forest stand descriptions as well as aboveground biomass and carbon sequestration, based on the use of remote sensing for the purposes of forest management planning.

The aim of the project was to work out the complex method of defining selected forest stand descriptions as well as aboveground biomass and carbon sequestration, based on the use of remote sensing for the purposes of forest management planning.

Among main goals were:

- acquisition and processing of remote sensing, laboratory and field data,
- determining the amount of biomass and carbon in the forest based on radar data,
- development of methods for the inventory of selected stand descriptions, growing stock and biomass with the use of active remote sensing techniques,
- local correction of dendrometric volume equations based on terrestrial laser scanning data (TLS),
- development of the merchantable volume conversion factors into biomass and carbon.

Results of the project allow to: reduce time needed to carry out the work of the forest management, especially inventory of growing stock; obtain higher accuracy of the CO₂ balance, biomass and annual allowable cut calculations; determine growing stock for any forest area; reduce cost of field work in forest management.

DETALHES

ORIGEM DA MADEIRA

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TIPO DE MADEIRA

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TIPO DE MADEIRA EM CAUSA

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IMPACTE NO AMBIENTE E BIODIVERSIDADE

--

IMPACTE NAS RECEITAS

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POTENCIAL DE EXPLORAçãO

--

HUB

Centro-Oriente Hub

IMPACTE ECONOMICO

--

CONHECIMENTOS ESPECÍFICOS NECESSÁRIOS

--

POTENCIAL DE MOBILIZAçãO

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SUSTENTABILIDADE POTENCIAL - VALOR

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FACILIDADE DE IMPLEMENTAçãO

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FACILIDADE DE IMPLEMENTAçãO

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PRE-REQUISITOS CHAVE

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TIPO DE EVENTO EM QUE ESTE BPI TEM SIDO APRESENTADO

Visita de estudo (T2.3)

IMPACTE NO EMPREGO

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CUSTOS DE IMPLEMENTAçãO (EURO - EUR)

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MAIS DETALHES

DESAFIO ABORDADO	DOMÍNIO	TIPO DE SOLUçãO
1. Melhorar a resiliência e adaptação das florestas às alterações climáticas	Inventário, avaliação e monitorização Gestão florestal, silvicultura, serviços do ecossistema, optimização resiliencia Investigação e desenvolvimento	Modelação, sistemas de apoio à decisão, simulaçã,
PALAVRAS-CHAVE	SOLUçãO DIGITAL	INOVAçãO
remote sensing techniques; carbon sequestration; forestry	Sim	Sim
PAÍS DE ORIGEM	ESCALA DE APLICAçãO	ANO DE INÍCIO E FIM
Polónia	Nacional	2015 - 2018

DADOS DE CONTACTO

PROPRIETáRIO OU AUTOR

Instytut Badawczy Leśnictwa
Krzysztof Stereńczak
K.Stereńczak@ibles.waw.pl
<https://www.ibles.pl/>

REPÓRTER

Łukasiewicz Research Network - Wood Technology Institute (ITD)
Dobrochna Augustyniak-Wysocka
dobrochna.augustyniak@itd.lukasiewicz.gov.pl

REFERENCES AND RESOURCES

WEBSITE PRINCIPAL

<http://rembiofor.pl/en/>

RECURSOS

Parkitna K., Krok G., Lisańczuk M., Mitelsztedt K., Ukalski K., Magnussen S., Markiewicz A., Miścicki S., Stereńczak K. 2021. Modelling growing stock volume of forest stands with the use of selected LiDAR Area Based Approaches in various predictive models. *Forestry: An International Journal of Forest Research*

WEBSITE DO PROJETO

<http://rembiofor.pl/en/>

REFERÊNCIA AO PROJETO

Remote sensing based assessment of woody biomass and carbon storage in forests (REMBIOFOR), National Centre for Research and Development within the program „Natural environment, agriculture and forestry” BIOSTRATEG, agreement no. BIOSTRATEG1/267755/4/NCBR/2015

LOGOTIPO DA BOA
PRÁTICA



LOGOTIPO DA ORGANIZAÇÃO
PRINCIPAL



PROJETO NO âMBITO DO QUAL A FOLHA DE DIVULGAÇÃO FOI CRIADA

Rosewood 4.0

DATA DE ENTRADA

12 Ago 2021



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A TOOL FROM ROSEWOOD 4.0, DESIGNED AND DEVELOPED BY



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