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 CO_2 balance, biomass and annual allowable cut calculations; determine growing stock for any forest area; reduce cost of field work in forest management.

PODROBNOSTI

PôVOD DREVA

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DRUH DREVA

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UVAžOVANý DRUH DREVA

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VPLYV NA ŽIVOTNé PROSTREDIE A BIODIVERZITU

--

DOPAD NA PRíJMY

--

POTENCIáL VYUžITIA

--

ROZBOčOVAč

Stredovýchodný uzol

EKONOMICKý VPLYV

--

POTREBA šPECIFICKýCH ZNALOSTí

--

MOBILZAčNý POTENCIáL

--

POTENCIáL UDRžATEľNOSTI - HODNOTA

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UľAHčENIE IMPLMENTáCIE

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UľAHčENIE IMPLMENTáCIE - HODNOTENIE

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KľúčOVé PREPOKLADY

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TYP PODUJATIA, NA KTOROM BOL TENTO BPI PREZENTOVANý

Návšteva v rámci štúdie (T2.3)

DOPAD NA ZAMESTNANOSť

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NáKLADY NA IMPLEMENTáCIU (EURO - €)

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VIAC INFORMáCIí

RIEšENá VýZVA

1. Zlepšenie odolnosti lesov a adaptácie na zmenu klímy

DOMAIN

Inventarizácia, posudzovanie, monitoring/monitorovanie

Lesné hospodárstvo/hospodárska úprava lesa, pestovanie lesa, ekosystémové služby, odolnosť

Výskum a vývoj

TYP RIEšENIA

Modelovanie, simulácia, optimalizácia

KľúčOVé SLOVá

remote sensing techniques; carbon sequestration; forestry

DIGITALNE RIEšENIE

áno

INOVáCIE

Áno

KRAJINA PôVODU

Poľsko

ROZSAH APLIKáCIE

Národný

ZAČIATOK A KONIEC ROKA

2015 - 2018

KONTAKTNé úDAJE

VLASTNíK ALEBO AUTOR

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REPORTéR

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REFERENCES AND RESOURCES

HLAVNá WEBSTRáNKA

http://rembiofor.pl/en/

ZDROJE

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

PROJEKTOVá WEBSTRáNKA

http://rembiofor.pl/en/

REFERENCIA PROJEKTU

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

LOGO NAJLPEŠEJ PRAXE

LOGO HLAVNEJ ORGANIZáCIE

PROJEKT, V RáMCI KTORéHO BOL TENTO INFORMAčNý PREHľAD VYTVORENý

Rosewood 4.0

DáTUM ODOSLANIA

12 aug 2021

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Link to Rosewood 4.0

A TOOL FROM ROSEWOOD 4.0, DESIGNED AND DEVELOPED BY

Centro de Servicios y Promoción Forestal y de su Industria de Castilla y León