FINT-CH (Find Individual Trees Switzerland)



FINT-CH

In the project FINT-CH a methodology for the large-scale characterization of forest structures, thereon a better detection of single trees on the basis of remote sensing data, is under development. Top height, cover and mixture ratio get determined.

In the project FINT-CH a methodology for the large-scale characterization of forest structures, thereon a better detection of single trees on the basis of remote sensing data, is under development. By using segmentation, stand boundaries and the corresponding top height, cover and mixture ratio get determined. This forms the basis for the specific single tree detection using forest structures. Largescale geodata with valuable forest information can be generated. Their usage in practice are demonstrated on the basis of four examples.Vector-geodata (type polygon) with stand boundaries and the following attributes:

- Basic shape (uniform, unequally)
- Top height (hdom)
- Cover ratio
- Mixture ratio

- Stem number of upper-class trees

- Basal area of upper-class trees the following attributes: Vector-geodata (type points) with detected single trees and

- Top height
- BHD
- Social status in the upper-class
- -Z-trees

Vector-geodata (type polygon) with forest gaps, boundaries and aisle The methodology should be able to get a simple and large-scale investigation every 5 to 10 years regarding the mentioned data attributes mentioned beforehand. With these attributes conclusions are possible regarding stem numbers of different classes, protective forest investigations, mapping of forest gaps, boundaries and aisle as well as on stock estimations and finally operational planning (allowable cut, activity planning...)

| PROVOCARE ABORDATă | DOMAIN | TIP DE SOLUțIE |
|---|--|----------------------------------|
| 2. Îmbunătățirea infrastructurilor și a capacității | Inventariere, evaluare, monitorizare | Senzori, echipamente de măsurare |
| actorilor publici | Managementul pădurilor, silvicultura, servicii | |
| | ecosistemice, reziliență | |
| | Cercetare și dezvoltare | |
| CUVINTE CHEIE | SOLUțIE DIGITALă | INOVAĻIE |
| Remote sensing data; monitoring; Detection; | Da | Da |
| Software | | |
| ȚARA DE ORIGINE | SCARA DE APLICARE | ANUL DE îNCEPUT și de sfârșit |
| Elveția | Național | |
| DATE DE CONTACT | | |

DATE DE CONTACT

| PROPRIETAR SAU AUTOR | REPORTER |
|---|--|
| BFH Bern University of Applied Sciences | BFH Berne University of Applied Sciences |
| Luuk Dorren | Moritz Dreher |
| luuk.dorren@bfh.ch | moritzkaspar.dreher@bfh.ch |
| https://www.bfh.ch/hafl/en/ | |

REFERENCES AND RESOURCES

| PAGINă WEB | RESURSE |
|-----------------------------|---------|
| https://www.bfh.ch/hafl/en/ | |
| WEBSITE PROJECT | |
| | |
| REFERINță PROIECT | |

PROIECTUL ÎN CADRUL CĂRUIA A FOST CREATĂ ACEASTĂ FIȘĂ INFORMATIVĂ

Rosewood 4.0

DATA POSTĂRII

12 Aug 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



