FINT-CH (Find Individual Trees Switzerland)

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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. Large-scale 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 Vector-geodata (type points) with detected single trees and the following attributes:
- 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…)

PLUS DE DéTAILS

DéFI CONCERNé

2. Améliorer les infrastrctures et les capacités des acteurs publics

DOMAINE

Inventaire, diagnostic, monitoring

Getsion forestière, sylviculture, services écosystémiques, résilience

Recherche et développement

TYPE DE SOLUTION

Capteurs, équipement de mesure

MOTS-CLéS

Remote sensing data; monitoring; Detection; Software

SOLUTION DIGITALE

Oui

INNOVATION

Oui

PAYS D'ORIGINE

Suisse

ECHELLE D'APPLICATION

Nationale

DéBUT ET FIN D'ANNéE

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INFORMATIONS DE CONTACT

PROPRIéTAIRE OU AUTEUR

BFH Bern University of Applied Sciences

Luuk Dorren

luuk.dorren@bfh.ch

https://www.bfh.ch/hafl/en/

RAPPORTEUR

BFH Berne University of Applied Sciences

Moritz Dreher

moritzkaspar.dreher@bfh.ch

REFERENCES AND RESOURCES

SITE WEB PRINCIPAL

https://www.bfh.ch/hafl/en/

SITE WEB DU PROJET

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RéFéRENCE DU PROJET

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RESSOURCES

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PROJET SOUS LEQUEL CETTE FICHE D'INFORMATION A éTé CRééE

Rosewood 4.0

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