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. 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…)

MEHR DETAILS

ANGESPROCHENE HERAUSFORDERUNG	DOMäNE	ART DER LöSUNG
2. Verbesserung der Infrastrukturen und Kapazitäten der öffentlichen Akteure	Bestandsaufnahme, Bewertung, Überwachung Waldmanagement, Waldbau, Ökosystemleistungen, Resilienz Forschung und Entwicklung	Sensoren, Messgeräte
SCHLüSSELWöRTER	DIGITALE LöSUNG	INNOVATION
Remote sensing data; monitoring; Detection; Software	Ja	Ja
HERKUNFTSLAND	UMFANG DER ANWENDUNG	ANFANGS- UND ENDJAHR
Schweiz	National	--

KONTAKTDATEN

EIGENTüMER ODER 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

HAUPT-WEBSITE	RESSOURCEN
https://www.bfh.ch/hafl/en/	--

PROJEKT-WEBSITE

--

PROJEKT-REFERENZ

--

A TOOL FROM ROSEWOOD 4.0, DESIGNED AND DEVELOPED BY

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

EFI