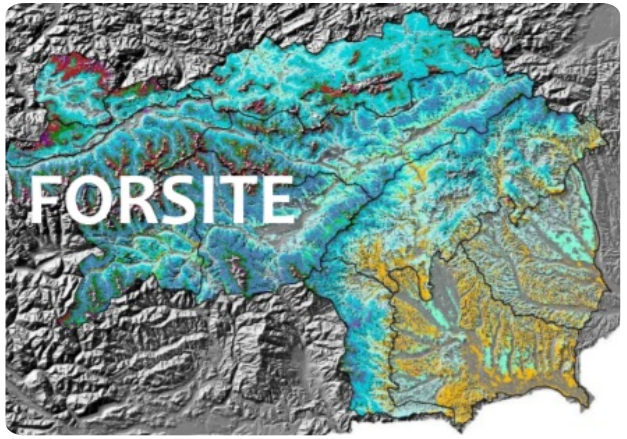
FORSITE | Dynamic ecological forest site classification



A lack of forest site information in Styria asks for a new approach to forest site classification and mapping. In this project the forest site classification will be based on a GIS-based geo-ecological stratification model.

A lack of forest site information in Styria created a need for a new approach to forest site classification and mapping, considering the changing climatic conditions, which will affect the classification of forest sites and the choice of tree species. Theoretical concepts for a new approach in "dynamic site classification" existed, but the implementation of an integrated site and forest classification in for the whole forest area in Styria has been a scientific challenge. In this project the forest site classification is based on a GIS-based geo-ecological stratification model. The database is based on a digital elevation model, a geological base map, digitally available site and climate data as well as empirical site parameters. A map of forest types is derived based on several thematic maps, including information about energy, water and nutrient balance. Those parameters are modeled on the basis of point and area related data, which are then combined into forest types with a uniform combination of factors. The model allows a stratification of the forest types on all sites based on digital geo-ecological parameters. In addition to the ecological facts, each forest type is characterized by a description of silvicultural guidelines containing information on the appropriate choice of tree species, potential hazards and adaptation methods. These guidelines also describe previous experiences with the tree species and their mixtures, and will provide recommendations for the future forest management with regard to climate change.

MEHR DETAILS

ANGESPROCHENE HERAUSFORDERUNG

1. Verbesserung der Widerstandsfähigkeit der Wälder und ihrer Anpassung an den Klimawandel

DOMäNE

Waldmanagement, Waldbau, Ökosystemleistungen, Resilienz

ART DER LöSUNG

Modellierung, DSS, Simulation, Optimierung

SCHLüSSELWöRTER

Silviculture; Forest ecology; Forest growth; Soil science; Tree Secies suitability; climate change; Site classification; Silvicultural Guidelines;

DIGITALE LöSUNG

Ja

INNOVATION

Ja

HERKUNFTSLAND

Österreich

UMFANG DER ANWENDUNG

Regional/sub-national

ANFANGS- UND ENDJAHR

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https://forschung.boku.ac.at/fis/suchen.projekt_uebersicht?sprache_in=en&menue_id_in=300&id_in=12683

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REFERENCES AND RESOURCES

HAUPT-WEBSITE

https://forschung.boku.ac.at/fis/suchen.projekt_uebersicht

PROJEKT-WEBSITE

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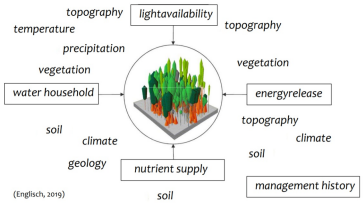
PROJEKT-REFERENZ

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RESSOURCEN

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LOGO DER BEST PRACTICE



LOGO DER HAUPTORGANISATION

PROJEKT, IN DESSEN RAHMEN DIESES FACTSHEET ERSTELLT WURDE

Rosewood 4.0

BEITRAGSDATUM

11 Aug. 2021

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