Metadata form of Silva Fennica

This form is designed for writing the elements of metadata, which are used in the description of research materials such as data and codes. The form is based on the work done in the Work Group "Description of research materials" under the Finnish Open Science Coordination.

Item	Description	Responsible
Name of the data / code	Validation of Norwegian forest attribute maps across different spatial resolutions	Author
Author & ORCID	Zsofia Koma https://orcid.org/0000-0002-0003-8258 Johannes Breidenbach https://orcid.org/0000-0002-3137-7236	Author
Authors' affiliation(s)	Norwegian Institute for Bioeconomy (NIBIO), Division of Forest and Forest Resources, National Forest Inventory	Author
Owner of the material	NIBIO **https://ror.org/04aah1z61**	Author
Publisher	To be filled out	Author
Funder	NIBIO **https://ror.org/04aah1z61**	Author
Description	The dataset consists of input to reproduce the results of the article, "Large-scale validation of forest attribute maps across different spatial resolutions."	Author
Methods	We applied the regression models to predict biomass, volume, basal area, and Lorey's height at the different spatial resolutions for the pixels covering the validation stands. We then estimated forest attributes for the validation stands by calculating the mean of the predicted forest attributes at stand-level. Pixel predictions were weighted according to the proportion by which they covered the plots to account for the fact that not all pixels fully fall within them. The observed and predicted values on plot-level were then averaged on stand level. This process resulted in a dataset with (synthetic) estimates and observed values of forest attributes based on different pixel sizes which was used in the accuracy assessment.	Author
Variables	FID: Stand ID Obs_vol: observed volume (m3ha-1) Obs_lh: observed Lorey's height (m) Obs_ba: Observed basal area (m2ha-1) Obs_bm: Observed biomass (Mg ha-1) Pred_volmb: Predicted volume (m3ha-1) Pred_lh: Predicted Lorey's height (m) Pred_ba: Predicted basal area (m2ha-1) Pred_biom:Predicted biomass (Mg ha-1) Res_class: Resolution class (1,5,10,16,30 m) Area_ha: area of stand in hectare (Ha) Dom_sp: Dominant tree species in Norwegian either spruce (GRAN), pine (FURU) or boardleaf (BJERK)	Author
Author keywords	Spatial resolution dependence, area-based approach, forest attribute mapping	Author
Vocabulary keywords (community standard)	Keywords from controlled vocabularies and ontologies (general or disciplinary) that improve the findability of the material. Provide links to the vocabularies used e.g., the taxonomic database used for nomenclature.	Author
Discipline	Forestry, Remote Sensing	Archive/Repository/Publisher
Type of material	Dataset and code	Author
Language	UTF-8	Author
Time range covered	01.01.2018-31.12.2022.	Author

Geographic region	Norway	Author
Version	If several versions of the material exist, provide a clear version number.	Author
File format(s)	Csv, R	Author
Availability of the materials (open, embargo, registration, limited, registration required)	Open	Author
Justification for access restrictions	Not relevant	Author
Licence	Creative Commons Attribution 4.0 International	Author
Connections with other research materials	isBasedOn	Author
Access to the connected research materials	On request.	Author
Codes only: hardware/software requirements for running the code	R version 4.4.1	Author
Connections to other products of research	DOI of the article in Silva Fennica will be added	Author
Personal data	Not applicable	Author
Confidential or secret data	Not relevant	Author
Publication date	To be added	Archive/Repository/Publisher
Preservation policy	Not relevant	Author
Permanent identifier (PID)	**10.5281/zenodo.16532989**	Archive/Repository/Publisher