

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
<i>Remotely sensed data</i>	Airborne laser scanning data, aerial images	Author
<i>Author & ORCID</i>	Norwegian Mapping Authority	Author
<i>Authors' affiliation(s)</i>	https://ror.org/05dz27378	Author
<i>Owner of the material</i>	https://ror.org/05dz27378	Author
<i>Publisher</i>	Laserdata: https://hoydedata.no ; Aerial images: https://www.norgebilder.no/	Author
<i>Funder</i>	https://ror.org/05dz27378	Author
<i>Description</i>	Airborne laser scanner data: The airborne laser data are available for all users at https://hoydedata.no. The web application allows the user to select the area of interest on a map to get an overview of the available datasets. The datasets can be downloaded from the web application. Aerial images: The aerial images can be downloaded from https://www.norgebilder.no/. “Norge i bilder” is a website realized in collaboration between the Norwegian Public Roads Administration, the Norwegian Institute for Bioeconomy (NIBIO) and the Norwegian Mapping Authority. Here you will find an overview of orthophotos (accurate-scale aerial images) that the partners in “Norge digitalt” offer on the internet. “Norge digitalt” is a collaboration between all public agencies that have a responsibility for geodata or are major users of such data. Publishing in Norway in Pictures is also open to data providers outside “Norge digitalt”. In Norway in Pictures you can search for, find information about and access orthophotos for all of Norway. There are separate guidelines for downloading and using various services from this solution. Sales of orthophotos to users outside “Norge digitalt” are made through our dealers. Field data: The field data (single tree measurements on 241 field sample plots) were collected as part of an operational forest inventory in 2015, where the main purpose is that they should serve as ground reference data for training regression model to predict forest attributes. The company responsible for the data collection was Glommen-Mjøsen Skog SA. The inventory was carried out in Rendalen municipality, south-eastern Norway. The forest attributes for the sample plots used in this study were calculated from the single tree measurements by the authors of the article corresponding to this meta data form. Contact information to Glommen-Mjøsen Skog is: Glommen Mjøsen Skog SA Grindalsvegen 3 2406 Elverum Contact person: Erik Ødegård Email: eo@glommen-mjosen.no	Author

<i>Methods</i>	The study used data from a regular forest management inventory in Rendalen, Norway. Field measurements included tree species, diameter at breast height (dbh), and tree height. Four forest attributes (plot basal area, plot volume, basal area-weighted mean height, and dominant height) were calculated. ALS and DAP point clouds were generated from data acquired in 2015 and 2018 using various software packages (Agisoft, MatchAT1, MatchAT2, Pix4D, SURE). Statistical analyses compared model performance for ALS and DAP data.	Author
<i>Variables</i>	NA	Author
<i>Author keywords</i>	Laserdata: https://hoydedata.no/ ; Aerial images: https://www.norgeibilder.no/	Author
<i>Vocabulary keywords (community standard)</i>	NA.	Author
<i>Discipline</i>	Forest inventory, remote sensing	Archive/Repository/Publisher
<i>Type of material</i>	Point data from laser scanning; RGB aerial images	Author
<i>Language</i>	Nor; eng	Author
<i>Time range covered</i>	2015-09-29 2018-05-29	Author
<i>Geographic region</i>	Rendalen municipality, Innlandet county, eastern Norway. NOR (578)	Author
<i>Version</i>	NA	Author
<i>File format(s)</i>	JSON; LAZ	Author
<i>Availability of the materials (open, embargo, registration, limited, registration required)</i>	The remotely sensed data are available through web applications as described above. Requests for field data must be directed to Glommen-Mjøsen Skog.	Author
<i>Justification for access restrictions</i>	The remotely sensed data are available, but the field data are company assets for the forest owner association Glommen-Mjøsen Skog	Author
<i>Licence</i>	Freely open remotely sensed data.	Author
<i>Connections with other research materials</i>	IsBasedOn	Author
<i>Access to the connected research materials</i>	Laserdata: https://hoydedata.no/ ; Aerial images: https://www.norgeibilder.no/	Author
<i>Codes only: hardware/software requirements for running the code</i>	Codes used in the study can be made available by reasonable request by e-mail to the first author.	Author
<i>Connections to other products of research</i>	NA	Author
<i>Personal data</i>	NA	Author
<i>Confidential or secret data</i>	NO	Author
<i>Publication date</i>	NA	Archive/Repository/Publisher
<i>Preservation policy</i>	Maintained by the Norwegian Mapping Authority	Author
<i>Permanent identifier (PID)</i>	Laserdata: https://hoydedata.no/ ; Aerial images: https://www.norgeibilder.no/	Archive/Repository/Publisher