## Metadata form of Silva Fennica / ARIAL IMAGES

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* | Oslo-Østlandet CIR 2022 / Oslo-Østlandet RGB 2022<br>Oslo/Eastern-Norway CIR 2022 / Oslo-Eastern Norway 2022 | Author |
| *Author & ORCID* | Captured by Terratec AS<br>Stored by the Norwegian Mapping Authority | Author |
| *Authors' affiliation(s)* | | Author |
| *Owner of the material* | The Norwegian Mapping Authority | Author |
| *Publisher* | norgeibilder.no | Author |
| *Funder* | The Norwegian Public Roads Administration<br>Norwegian Institute of Bioeconomy Research<br>The Norwegian Mapping Authority | Author |
| *Description* | The dataset contains aerial images captured by the Norwegian program for recurring aerial imagery. The images are stored as two separate sets: Oslo-Eastern Norway CIR, which includes the red, green, and near-infrared bands, and Oslo-Eastern Norway RGB, which includes the red, green, and blue bands.<br><br>The images have a spatial resolution of 0.25 meters and an 8-bit radiometric resolution. They are stored by the Norwegian Mapping Authority at norgeibilder.no, with coverage number TT-14549. | Author |
| *Methods* | Processed in accordance with the process described in the paper, using (not yet) published source code. The near-infrared channel was transfered from the CIR image and added to the RGB image, creating a single multispectral four-channel image. The image was then downsampled to a spatial resolution of 1m. The image was split into individual image tiles. The image tiles were randomly split into three datasets: training, validation, and test images. | Author |
| *Variables* | R – Red, G – Green, B – Blue, Nir – Near-infrared | Author |
| *Author keywords* | | Author |
| *Vocabulary keywords (community standard)* | | Author |

| | | |
|---|---|---|
| *Discipline* | | Archive/Repository/Publisher |
| *Type of material* | Raw data - Multispectral aerial images | Author |
| *Language* | | Author |
| *Time range covered* | 2022-08-14; 2022-09-01 | Author |
| *Geographic region* | Oslo and eastern Norway | Author |
| *Version* | TT-14549 | Author |
| *File format(s)* | .tiff | Author |
| *Availability of the materials (open, embargo, registration, limited, registration required)* | The data is available through The Norwegian Mapping Authorities portal for aerial images; norgeibilder.no, and are stored with the identifier TT-14549. | Author |
| *Justification for access restrictions* | | Author |
| *Licence* | | Author |
| *Connections with other research materials* | These aerial images serve as the raw data for the analysis, with pre-processing and data splitting following the procedure described in the paper and outlined in the source code.<br>The multispectral aerial images were combined with a canopy height model, produced from airborne laser scanning data (detailed in a separate metadata form), to provide the model with both spectral and structural information. | Author |
| *Access to the connected research materials* | (Not accessible) See separate metadata form | Author |
| *Codes only: hardware/software requirements for running the code* | | Author |
| *Connections to other products of research* | | Author |
| *Personal data* | | Author |
| *Confidential or secret data* | | Author |
| *Publication date* | | Archive/Repository/Publisher |
| *Preservation policy* | | Author |
| *Permanent identifier (PID)* | | Archive/Repository/Publisher |