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<b>Data product name</b>	<b>Open forest data</b>
<b>Producer</b>	Finnish Forest Centre
<b>Description and data content</b>	<p>‘Open forest data’ refers to the spatial data freely available through the ‘Open forest data’ section of the Metsään.fi website at <a href="https://www.metsaan.fi/en/">https://www.metsaan.fi/en/</a>.</p> <p>Open forest data includes environmental data, such as data concerning the growing stock, action suggestions, measures implemented, soil characteristics and habitats. In other words, data that describes the site and previous and future measures implemented at the site. Open forest information does not include any personal data, such as information about properties and their owners, names of people or organisations, or values in euro.</p> <p><b>Data content:</b></p> <ul style="list-style-type: none"> <li>• Forest resources stands</li> <li>• Stands with habitats of special importance (also included in the forest resources stands data)</li> <li>• Grid cell data</li> <li>• Forest use declarations data</li> <li>• KAMERA data</li> <li>• Remote sensing sample plots</li> </ul> <p><b>Distribution methods:</b></p> <ul style="list-style-type: none"> <li>• Spatial datasets</li> <li>• Data interfaces</li> <li>• Map services</li> </ul>
<b>Data collection method, data sources</b>	<p>Forest resources stands and grid cell data See the quality description of the forest resources information (available in Finnish; the English translation is pending).</p> <p>1) Stands with habitats of special importance See the <a href="#">quality description of the forest resources information</a> and the <a href="#">notification concerning habitats of special importance</a> (available in Finnish; the English translations are pending).</p> <p>2) Forest use declarations dataset The forest owner or their authorised representative must submit a forest use declaration of any timber felled for sale or timber harvesting ten days before felling begins. The declaration is valid for three years.</p> <p>Further information about the forest use declaration is available from the <a href="#">website of the Finnish Forest Centre</a> (available in Finnish; the English translation is pending).</p> <p>3) KAMERA data The forest owner or their authorised representative must apply for KAMERA support prior to starting any related work. The completion of</p>

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	<p>the work must be reported using a separate implementation declaration.</p> <p>Further information about the KAMERA dataset is available from the <a href="#">website of the Finnish Forest Centre</a> (available in Finnish; the English translation is pending).</p> <p>5) Remote sensing sample plots See the <a href="#">quality description of the forest resources information</a></p>
<b>Updating frequency</b>	<p>The data updating frequency varies depending on the dataset and data distribution method.</p> <p>Data accessible through the interfaces and map services becomes available immediately once it has been updated in the back-end system. The updating of the spatial dataset starts after this and takes a longer time.</p> <p>For spatial datasets, the updating of the data files requires a service break. The service break takes place on weekdays between 05:30 and 06:30 am. During the service break, all new data updates are incorporated in to the spatial datasets. At times, the number of data updates may be quite large and the updating may take longer than usual.</p> <p>The updating frequency of open forest data varies depending on the dataset and data distribution method as follows:</p> <p><b>Update run 1</b> This update run concerns forest resources stands and stands with habitats of special importance. Both forest resources stands and stands with habitats of special importance are updated simultaneously.</p> <ul style="list-style-type: none"> <li>i) Interfaces and map services The updating process starts on Fridays at 06:00 am and on Tuesdays at 00:05 am. The updating process takes around four hours, after which the datasets are again available for use.</li> <li>ii) Spatial datasets The updating process starts on Fridays at 06:00 am and on Tuesdays at 00:05 am. The updating process takes around 36 hours, which means that new data is available at the beginning and towards the end of each week.</li> </ul> <p><b>Update run 2</b> This update run concerns the forest use declaration, KAMERA and grid cell datasets. The forest use declaration data is updated first, followed by the KAMERA and grid cell data, respectively. The updating process takes around one hour for the forest use declaration and KAMERA datasets and around three hours for the grid cell data.</p> <p>Update run 2 takes place on weekdays at 01:00 am, 07:00 am, 01:00 pm and 07:00 pm.</p>

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	<ul style="list-style-type: none"> <li>i) Interfaces and map services The updating process takes around 10 minutes for the forest use declaration and Kemera datasets and around two hours for the grid cell data from the start of the update run. The interfaces and map services and any updated information will be accessible once the updating process is completed.</li> <li>ii) Spatial datasets The updating process takes around one hour for the forest use declaration data and around one hour for the Kemera data and three hours for the grid cell data from the start of the update run. If the amount of updated data is small, the data likely becomes available for use on the same day starting from the 01:00 am update run; however, usually starting from the 07:00 pm update run on the previous day at the latest. Where the amount of updated data is large, the updating process may take longer.</li> </ul> <p><b>Update run 3</b> This update run concerns remote sensing sample plots. Due to the exceptional data collection and quality control process applied to this data, the data is updated four times a year.</p> <ul style="list-style-type: none"> <li>i) Interfaces and map services The updating takes around one hour. The interfaces and map services and any updated information will be accessible once the updating process is completed.</li> <li>ii) Spatial datasets The updating takes around three hours.</li> </ul> <p>The duration of the updating process varies depending on the updated data content. Thus, the durations specified above are only indicative. Especially the updating of the grid cell data may take a long time, sometimes up to one day. The amount of data updated in each dataset also affects the other updating processes. The updating load is particularly high towards the year-end, when data relating to the growing stock growth calculations carried out on stands arrives at the Finnish Forest Centre, as well as in the summer when surveys are carried out on new grid cells.</p>
<b>Reliability of the data</b>	<ul style="list-style-type: none"> <li>1) A quality description has been published about forest resources stands: <a href="https://www.metsakeskus.fi/sites/default/files/metsa_varatiedon_laatuseloste.pdf">https://www.metsakeskus.fi/sites/default/files/metsa_varatiedon_laatuseloste.pdf</a> (available in Finnish; the English translation is pending).</li> <li>2) Stands with habitats of special importance  Data on habitats of special importance specified in the Forest Act has been collected in separate surveys carried out between 1998 and 2005 and in connection with regional forest planning until 2011. In addition, data on habitats of special importance has also been collected in connection with other field trips. The mapping of such habitats is</li> </ul>

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incomplete and some habitats of special importance are missing from the dataset.

The forest legislation and related interpretation guidelines valid at the time of each survey have been followed in the data collection. Site data is updated as deskwork and based on field trips, and the updating progresses in stages. The sites must be specified and marked on field before taking any processing measures concerning the sites.

- 3) In the case of the grid cell data, the reliability of data may be generalised on the basis of the quality attributes of the sample plot used in the tendering procedure. The habitat size may deviate greatly in individual grid cells, if the habitat is located, for example, on a border of a field and a forest.

<b>Target RMSE-% Variable</b>	<b>h</b>	<b>d1.3</b>	<b>BA</b>	<b>v</b>
Total growing stock (mature forest sample plots, development class 02-04)	10	15	20	20
Main tree species (based on the main/secondary tree species survey)	10	20	30	30
Most common coniferous tree species in the area (pine-spruce-birch10)	15	25	35	35
Secondary coniferous tree species (pine-spruce-birch10)	15	25	40	40
Deciduous tree species (pine-spruce-birch10)	20	30	45	45

- 4) Forest use declarations dataset

The forest owner or their authorised representative must submit a forest use declaration of any timber felled for sale, with the exception of certain circumstances. The declaration must be submitted at minimum ten days before felling begins and it is valid for three years. This means that the felling must be completed within the same time period. The declaration obligation applies to all forest owners (i.e. private forest owners, enterprises, Metsähallitus, etc.).

The declaration must indicate the size of the felling area and the felling method. Felling methods include, for example, harvesting, small-scale clearcutting and regeneration felling. The declared area may be left untouched either in part or in full – the Finnish Forest Centre does not need to be notified of such decisions. The actual felling area may deviate from the declared area to some extent (typically between 0% and 10%) due to technicalities concerning drawings, etc. issues.

- 5) Kamera data

A private forest owner may receive financial support from the State for forest management and improvement work. The forest owner or their authorised representative must apply for this Kamera support prior to starting any related work. Support can be applied for the

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	<p>improvement of seedling stands and young stands, remedial fertilisation, improvement of peatland stands, and improvement or construction of forest roads. Once the work is completed, an implementation declaration must be lodged.</p> <p>When applying for support, the applicant must indicate the activity and area for which support is being applied. The work must be completed within a specified time limit, which ranges between one to three years. It is not required to carry out activities in all the areas specified in the application. The applicant may also choose not to implement the project without any obligation to notify the Finnish Forest Centre of such a decision. It may also be possible to receive Kemera support for areas left untouched by submitting a new application. The area specified in the application and the actual forest management are may deviate from the declared area to some extent (typically between 0% and 10%) due to technicalities concerning drawings or other issues.</p> <p>6) Remote sensing sample plots See point 3 above concerning the reliability of the grid cell data.</p>
<b>Availability of data and conditions for use</b>	<p>Open forest data is available through the Metsään.fi website and it is published under the <a href="#">Creative Commons Attribution International 4.0 licence</a> (CC BY 4.0). The materials subject to this licence may be freely used for any purposes, provided that the data source is given appropriate credit.</p> <p>Where a data user intends to link open forest data with personal data, they must ensure that there are legitimate reasons for the processing of personal data and that all obligations concerning the protection of personal data are followed (see <a href="#">Disclosure of public environmental data</a> ) As the data controller, the Finnish Forest Centre is not liable for any damage resulting from any failure by a data recipient to comply in the processing of data with the conditions and restrictions set out by the data controller.</p> <p>The Finnish Forest Centre aims to offer accurate data in its service without any interruptions. Provisions concerning the accuracy of data and the responsibilities of the Finnish Forest Centre as the data controller are laid down in the act on the forest data system of the Finnish Forest Centre (66/2018). The Finnish Forest Centre is not liable for the correctness of any data submitted by other authorities or voluntarily to the Finnish Forest Centre, unless the Finnish Forest Centre has verified the data on field.</p> <p>Open forest data refers to location-specific data that describes Finnish forests and management thereof. Forest data may include some inaccuracies but at the same time be considered accurate for the purposes of law.</p> <p>The data accuracy may depend depending on the type of data, data collection method and data collection period. Forest resources information must be regularly updated taking into account, for example, the personnel and financial resources available to the Finnish Forest Centre and the data needs relating to the management of public administration duties.</p>

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	<p>Service users commit to using the service at their own risk. The Finnish Forest Centre is liable for the data as specified in the Act 66/2018. The Finnish Forest Centre is not liable for any direct or indirect damages resulting, for example, from service errors or deficiencies, use of data, claims put forward by a third party, service breaks, alteration of any data content, ceasing the maintenance of the data system, service failure, or from the fact that the service is not suitable for a certain purpose.</p>
<b>Pricing</b>	The data is available free of charge.
<b>Contact details</b>	Finnish Forest Centre's customer support at <a href="http://metsakeskus.fi">metsakeskus.fi</a>
<b>Completion or publication schedule</b>	See 'Updating frequency'