

Control points

The National Land Survey's product Control points contains information on nationwide control points. The points are mainly horizontal and elevation benchmarks surveyed by the National Land Survey. The benchmark register also contains some control points surveyed by other agencies than the NLS, such as the Finnish Geodetic Institute and the Finnish Transport Agency. The benchmark register comprises of horizontal and elevation control points in classes 1–3.

The control point data is updated and maintained continuously. The product is available by various search criteria, e.g. by choosing a particular area or according to the category or quality of the control point or to the time of the measurement etc. Control points extend throughout the whole country.

The product is not available via the service interface.

The product is a part of the open data of the National Land Survey of Finland.

Purpose:

Control points as well as their coordinates and elevation in practice define the coordinate reference and height systems used in Finland. Control points can be used as starting points in surveying and as anchor points in coordinate and height transformations.

Geographic location:

Entire Finland

Responsible party:

National Land Survey of Finland

Scale:

1:10000

Spatial representation:

Text or table format

Spatial representation**info:**

Geometry only

Data content:

The control point data includes the coordinates (coordinate reference systems: EUREF-FIN and KKJ = the national grid coordinate system) and the elevation of the points (height systems: N2000 and N60) as well as their attributes.

Maintenance:

The control point data is updated and maintained continuously.

Quality information

Lineage: Earlier, the method used for determining horizontal control points was triangulation but now satellite surveying is used. The elevation control points have been determined by leveling. The dataset Control points contains points with different levels of accuracy; the information about the accuracy class is included in the control point information.

Conformity: Information product specification: Elevation, COMMISSION REGULATION (EU) No 1089/2010. of 23 November 2010 implementing Directive 2007/2/EC of the European Parliament and of the Council as regards interoperability of spatial data sets and services. 2011-02-22, 2010-12-08 The information product specification has not been published yet., The conformity has not been assessed. false

Distribution and further information

Distributor: National Land Survey of Finland, Kiintopisteet@maanmittauslaitos.fi

Conditions applying to access and use: The product belongs to the open data of the National Land Survey. Open data license:<http://www.maanmittauslaitos.fi/en/en/national-land-survey-open-data-cc-40-licence> . More information: Acquisition of open data<http://www.maanmittauslaitos.fi/en/opendata/acquisition> . The product is available by various search criteria, e.g. by choosing a particular area, according to the category or quality of the control point, according to the time of the measurement etc. A separate benchmark report card with descriptions is also available; you can also acquire the data as a text file. The product Control points is available even via the Land Information Service; the benchmark register (in Finnish) <http://www.maanmittauslaitos.fi/aineistot-palvelut/verkkopalvelut/kiinteistotietopalvelu>.

Limitations on access: The copyright and the other immaterial rights on the dataset Control points are owned by the agencies that have made the measurements. The data material is not confidential. Public access to the material is not restricted by the INSPIRE Directive.

Reference system: ETRS-TM35FIN

Distribution format: PDF-file/printout,, txt-file

Further information: <http://www.maanmittauslaitos.fi/en/maps/mapping/benchmarks>
