

# How to work with elevation data in Locus?

Elevation data are necessary for many aspects of work with Locus:

- base of calculation of route **elevation gain** when [planning](#).
- definition of **elevation of point objects** (POIs, geocaches...)
- database for **dynamic elevation tool** (displays elevation on the position of the map cursor)
- database for rendering **terrain shading**
- filling elevation of imported **Map items** in case the file contains at least one route
- **elevation of routes** calculated by [external navigation engines](#) (BRouter, YOURS, ..)
- **altitude optimization**
- elevation gain displayed with **guiding lines** or lines to GPS location
- database necessary for **pressure sensor calibration**
- calculation of **Trip time**



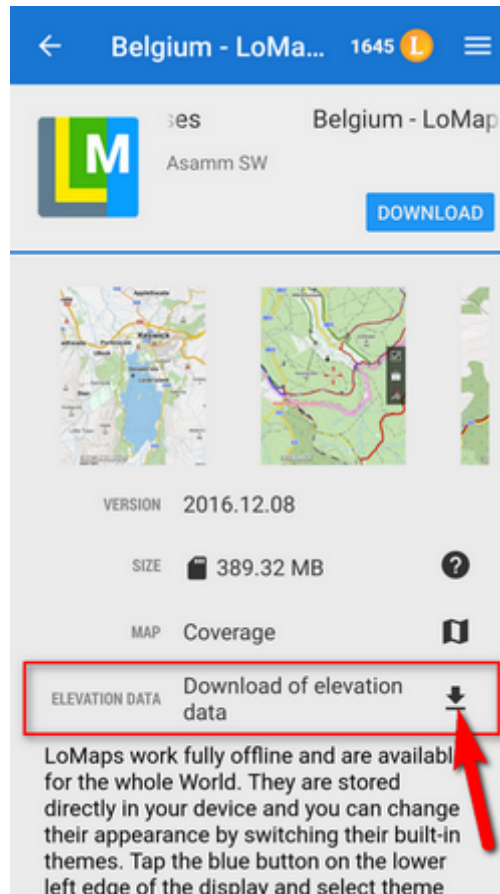
Please do not confuse with **current altitude** that is obtained from GPS data together with values from the barometric pressure meter in your device (if applicable), [see more >>](#). Current altitude values are also used for calculating elevation gain in recorded tracks.

## Where to get them?

To use all features above, it is necessary to **download elevation data**. There are a few methods on how to get them:

### Offline maps



LoMaps and other offline maps from our map partners offered in [Locus Store](#) in packages cover the whole World. **Each map package contains elevation data that can be downloaded separately for free:**





## Creating or editing a point of interest

- [Add a new point of interest](#) or open detail screen of an existing point located in the area that we want to cover with elevation data
- find *Elevation* field and if it is empty, tap the button GET next to it

## Group of points

- select points (check them) in a desired point folder
- tap  More and  Fill elevation in bottom panel

## Track or route

- open a track/route detail screen
- tap  More and  Fill elevation in bottom panel

### Custom elevation data sources



- [Viewfinderpanoramas.org](https://www.viewfinderpanoramas.org) - SRTM3 data enhanced in mountainous and polar areas. Resolution 3".
- [Sonny's LiDAR Models of European Countries](#) - very accurate data obtained from LiDAR mapping missions, covering many European countries. Resolutions 1"



and 3".

- store the data in Locus/data/srtm directory and **restart the app**

## Map shading

Map or terrain shading serves better readability of the displayed terrain relief. Locus offers three modes:

- **hill shading** - simulating covering of the landscape by sun shade
- **slopes** - highlighting slope gradients of  $>30^\circ$ ,  $>35^\circ$  and  $>40^\circ$
- **colored elevation** - elevation levels are differed by colors (e.g. lowlands are green, mountains brown).

## Instructions

Go to Settings > Maps > Advanced > Map shading > Enable (select which type of map should display the shading)

[More about map shading settings >>](#)

From:

<https://docs.locusmap.eu/> - **Locus Map Classic - knowledge base**

Permanent link:

[https://docs.locusmap.eu/doku.php?id=manual:faq:how\\_to\\_add\\_map\\_shading](https://docs.locusmap.eu/doku.php?id=manual:faq:how_to_add_map_shading)

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