

Description of the geoid file FIN2023N2000.lst

The FIN2023N2000 is a quasigeoid model (height conversion surface) of Finland. The model is recommended to be used inside of the Finnish borders as well as in the territorial waters of Finland. The model contains quasigeoid heights that are used to convert EUREF-FIN ellipsoidal heights to normal heights in the national height system of Finland, N2000.

The model is given as a point-list file in ASCII-format (FIN2023N2000.lst).

The dimensions and parameters of the file:

Minimum latitude: 58.80°
Maximum latitude: 70.19°
Minimum longitude: 19.00°
Maximum longitude: 31.98°
Latitude spacing: 0.01°
Longitude spacing: 0.02°
Total number of points (rows): 741 000

The file consist of rows, which are given as following (file starts from the northwest and ends in the southeast):

- Latitude, longitude and quasigeoid height
- Latitudes and longitudes are given in degrees
- Heights are given in meters with millimeter accuracy.

Examples, N = quasigeoid height:

First row:

70.190000 19.000000 31.498 → Lat. 70.19°, Lon. 19.00°, N = 31.498 m

Second row:

70.190000 19.020000 31.457 → Lat. 70.19°, Lon. 19.02°, N = 31.457 m

Last row:

58.800000 31.980000 14.902 → Lat. 58.80°, Lon. 31.98°, N = 14.902 m

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