

Localization of Coordinates in MarushkaDesign



GEOVAP

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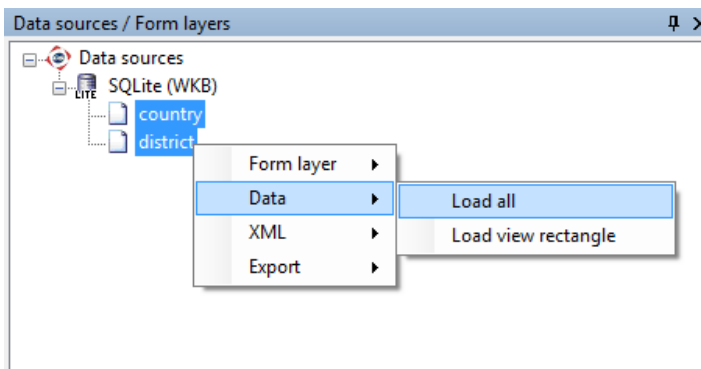
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1 Aim of the Example

In this example we will demonstrate localization of Target coordinates and WGS 84 coordinates in MarushkaDesign. This example was created in version 4.0.1.0, so it does not have to be compatible with older versions.

2 Working with Example

- Unzip the **LocalizeCoordinates_EN.zip** into **c:\MarushkaExamples** folder. The target folder must be respected due to interconnection of paths with the project. In the case of placing the files in the different folder, it would not be possible to work with an example.
- Open the **LocalizeCoordinates_EN.xml** in MarushkaDesign environment.
- Select both form layers, in context menu choose Data – Load all:



- In map window choose „Fit all“:



- Launch the local web server:



3 Dialog Box Sample

Fig 1: Result of query 1 *Localize target coordinates* for city Brno

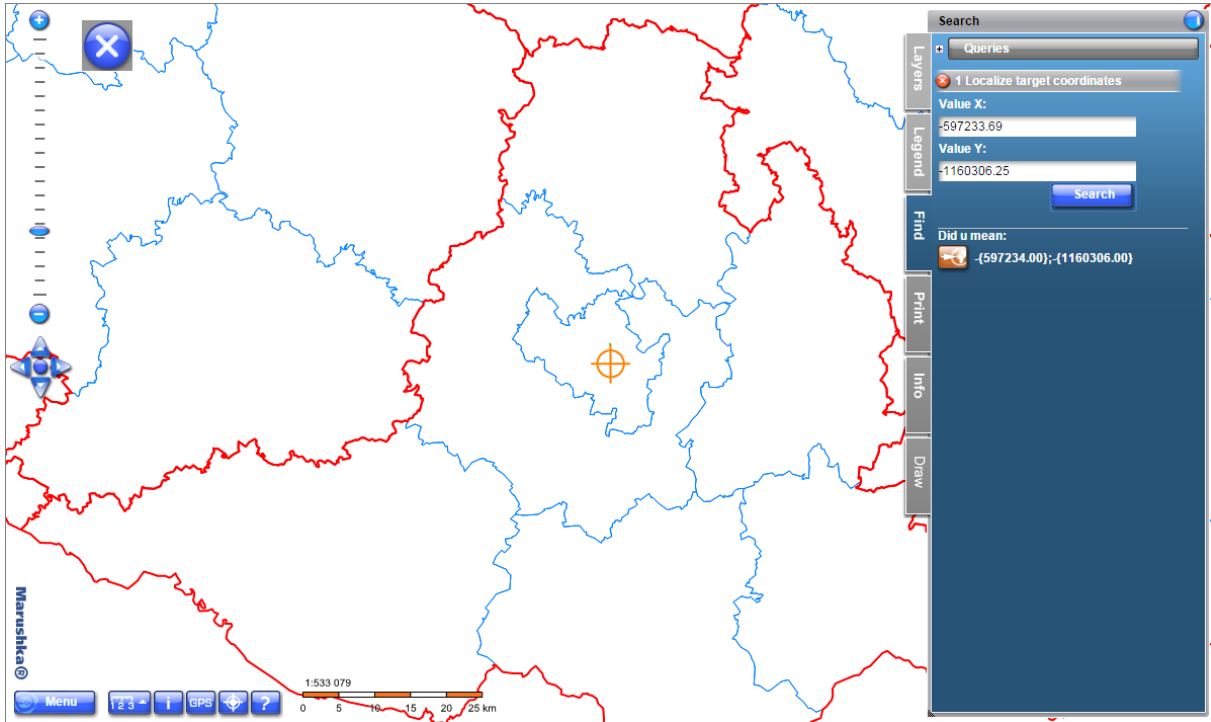
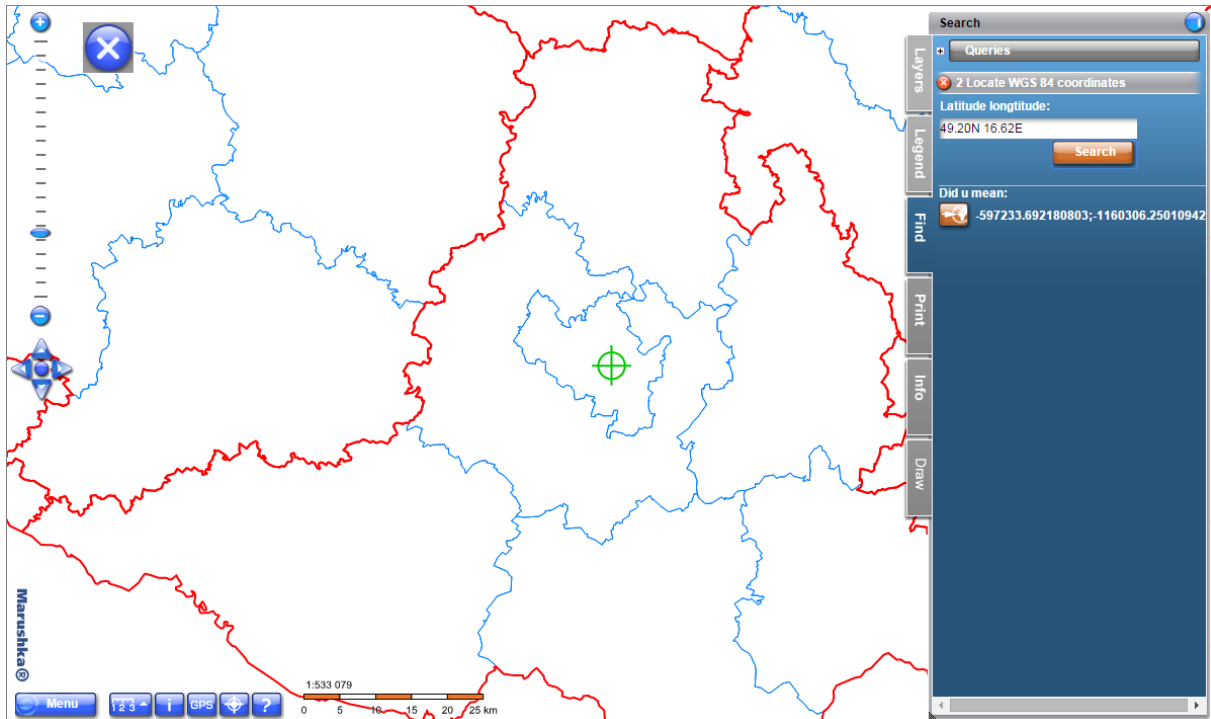


Fig 2: Result of query 2 *Locate WGS 84 coordinates* for city Brno



4 A Brief Description of the Example in MarushkaDesign

This example contains a SQLite database with two form layers. Form layer *country* is related to database table GS_TABLE1 and it draws country borders. Form layer *district* is related to the table GS_TABLE2 and draws borders of the former districts in the Czech Republic.

In the query library are created 2 localization queries. You can see query settings in menu – Tools / Libraries / Queries.

- 1) Query **1 Locate target coordinates** is a simple localization query, which enables localization of target coordinates.

Item *LabelXCoordinate* in the query properties sets description for X-coordinate in the web publication, *LabelYCoordinate* sets description for Y-coordinate in the web publication, *Precision* sets the precision of coordinates and *SwapCoordinates* allows swapping the X and Y coordinates. Item *Range* sets tolerance of limiting rectangle in the target units.

In the property *Symbology* the query has set the cell from the cell library, which appears in the place of localization result. The cell should originate from the same data store as query, otherwise it would not display in the place of localization result. You can see this cell in a place of the result of this query or in the cell library. This cell is orange.

The values of X for the Czech Republic limiting rectangle are in the range of approx. -900 000 to -430 000, Y values approx. -1 200 000 to -935 000. These values, however, are maximum values of the limiting rectangle and therefore they may not necessarily hit directly in the Czech Republic area.

The result of the query is then displayed in a web publication in the tab Search.

- 2) Query **2 Locate WGS 84 coordinates** is a simple localization query, which locates coordinates on the basis of the specified latitude and longitude.

In the property *Symbology* the query has set the cell from the cell library, which appears in the place of localization result. The cell should originate from the same data store as a query, otherwise it would not display in the place of localization result. You can see this cell in a place of the result of this query or in the cell library. This cell is green.

Coordinates can be entered in free text, you can enter coordinates in format **49.20N 16.62E** (equivalent to 49°20' N and 16°62' E). It is important to separate the degrees and minutes by the decimal point, otherwise the query should return no result. Other supported formats are **16° 62' 00"**; **-16° 62' 00" E**; **-16° 62' 00"**; **+16° 62' 00" E**; **16* 62' 00"**; **+16 62 00 E**; **16 62' 00"**; **E 16* 62' 00"**; **E16d62m**. It is important to emphasize that both coordinates must be specified in the same format (same number of units and the same format).

Maximum values for the Czech Republic are approx. 48.37N, 51.2N and 12.6E, 18.51E. Again, these values are maximum values of the limiting rectangle and therefore may not necessarily hit directly in the Czech Republic area.

You can try to locate for example regional cities of the Czech Republic.

City	Value X	Value Y	Geographic coordinates
Brno	-597233.69	-1160306.25	49.20N 16.62E
České Budějovice	-755338.03	-1165611.76	48.98N 14.48E
Hradec Králové	-641082.14	-1041177.88	50.22N 15.83E
Jihlava	-669832.57	-1129575.78	49.40N 15.58E
Karlovy Vary	-849422.65	-1011194.38	50.23N 12.88E
Liberec	-686396.04	-973932.78	50.77N 15.08E
Olomouc	-547163.89	-1120779.14	49.60N 17.25E
Ostrava	-470840.47	-1102162.05	49.83N 18.28E
Pardubice	-647126.94	-1061741.21	50.03N 15.78E
Plzeň	-822898.40	-1069340.31	49.75N 13.37E
Praha	-744277.82	-1042526.06	50.09N 14.40E
Ústí nad Labem	-761682.51	-977183.94	50.65N 14.03E
Zlín	-520794.10	-1164669.46	49.23N 17.67E