

3D Vectors and Point Cloud in Marushka Design



GEOVAP

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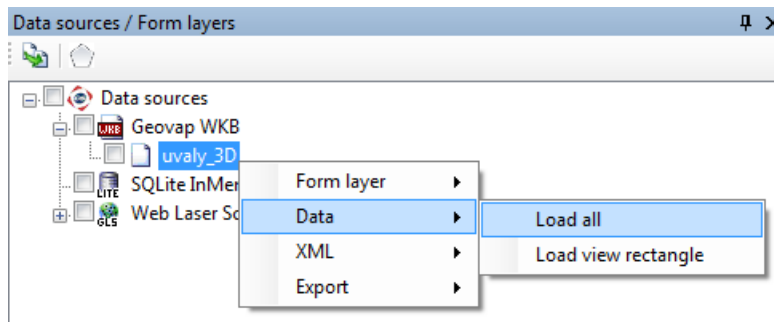
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1 Aim of the Example

In this example we will demonstrate, from what components do this project constitutes from and how does look the web publication. This example was created in version 4.1.0.32 and it does not have to be compatible with older versions.

2 Working with the Example

- Unzip the **3D_EN.zip** into **c:\MarushkaExamples** folder. The 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 the example.
- First, make sure the folder Themes are no files other than **Blank.xml** and **ThemesBlankTemplate.xml**, delete other files.
- In MarushkaDesignu environment open the project **3D_CZ.xml**.
- Select form layer **Geovap WKB ~ uvaly_3D**, in the context menu choose Data – Load all:



- Zoom-in roughly to scale 1: 500 somewhere on the drawing.
- Launch the local web server:



- Open project **3D_CZ1.xml**
- Launch the local web server:



3 Dialog Box Sample

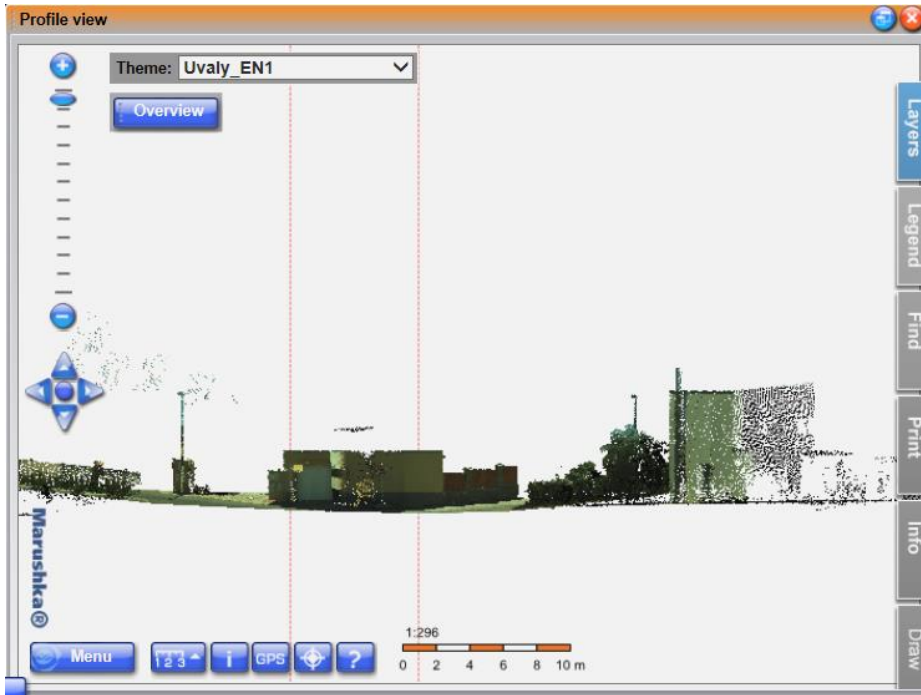


Fig 1: Profile dialog box in Marushka

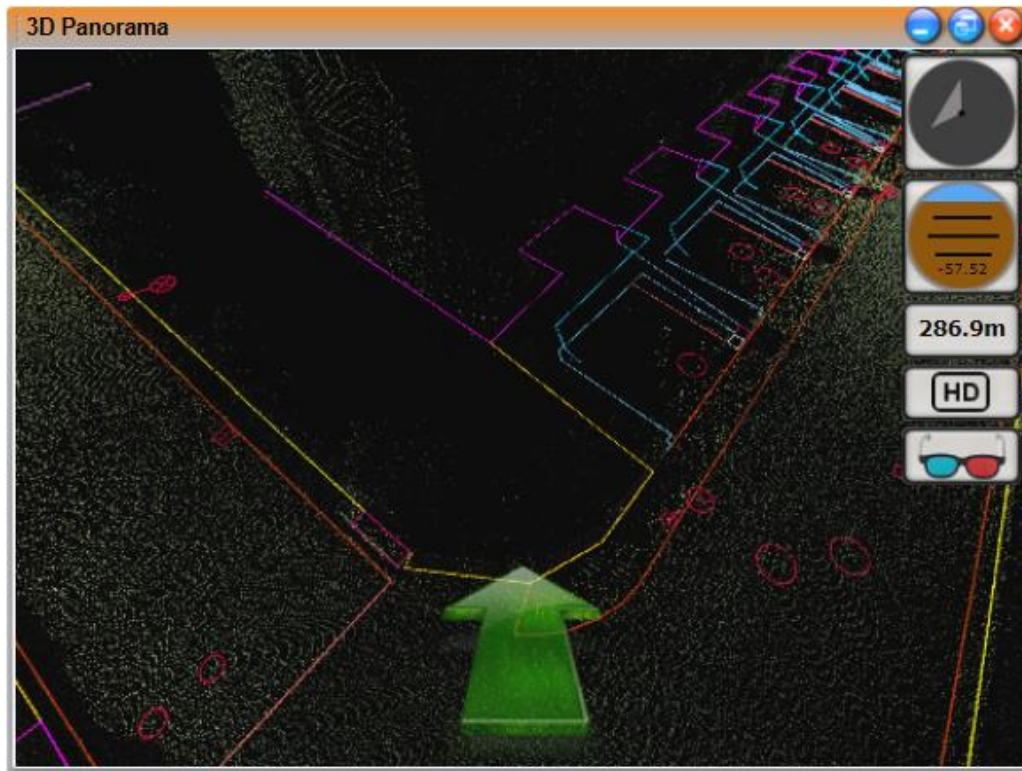


Fig 2: Panorama dialog box in Marushka

4 A Brief Description of the Example in Marushka Design

This sample project displays a point cloud of geodetically measured points in combination with 3D vectors, which were been evaluated from the point cloud. Roads are displayed in orange; outlines of houses are pink, outlines of gardens in pink, etc.

This example contains two projects, the first is the main project and also the auxiliary project, which is used to call dialog box Profile.

4.1 Description of the Project in Marushka Design

Main project (Uvaly_EN)

The project includes in this example following data stores:

- 1) **Geovap WKB** – it includes classified 3D vectors in WKB format.
- 2) **SQLite InMemory** – is an auxiliary data store, it includes queries for calling Panorama and Profile
- 3) **Web Laser Scan Service** – this data store is connected using service, which provides streamed data in GLS format.

In query library in the data store SQLite InMemory are two queries, which call Panorama and Profile dialog boxes. Publish layers include layers **GLS** and **Classified data** (vectors in WKB format). In the cell library are icons, which are used as buttons for calling queries Panorama and Profile.

Auxiliary project (Uvaly_EN1)

This project includes data store Web Laser Scan Service, so called point cloud in GLS format and also data store Geovap WKB, including vectors. In the project, it is necessary to set parameters PassedParams PROFILE_DEPTH and PROFILE_LINE, otherwise the Panorama and Profile call will not work correctly.

4.2 Project Control in Marushka

If you click on the icon 3D, a dialog window with title Marushka 3D invokes.

In the first line, after clicking on the button z/y it is possible to draw a line into the map window to define a profile cut. After definition of the profile is the dialog window invoked by clicking on the button create. Control of this window is quite standard.

In the second row with caption Panorama is only one button, which activate dialog box Panorama. To retrieve the data into this window, it is necessary to click on any point on the map. This dialog box is controlled using both the mouse and arrow keys and also via buttons on the right side of the dialog box. Using these buttons, it is possible to set default north view, zero horizon, and height of view, run view in HD resolution and start view with 3D glasses.