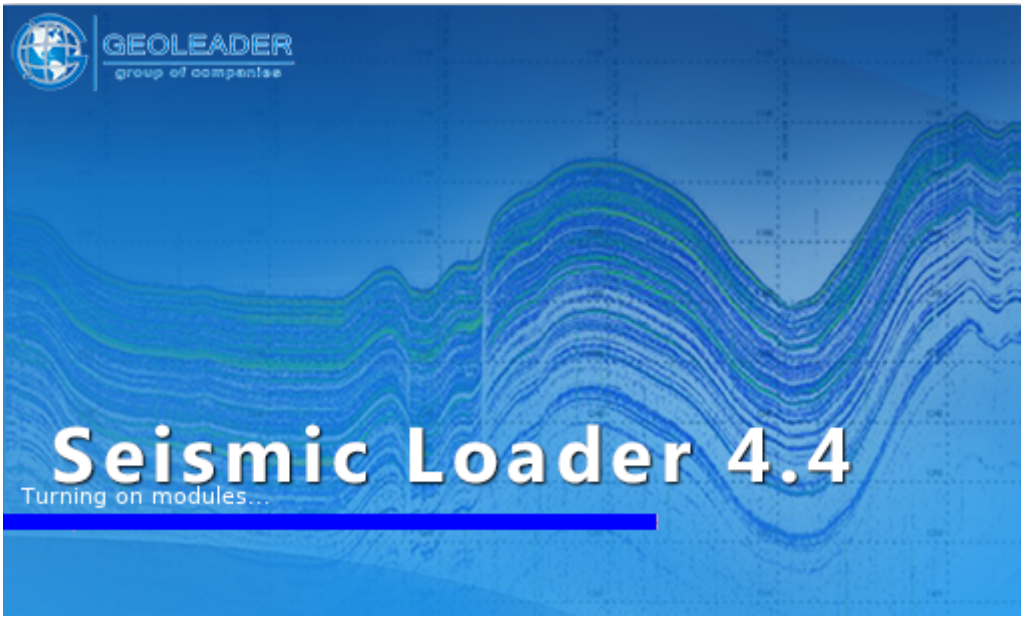
Seismic Loader 4.4



Operational scenario: processing the seg-y file

Introduction

Seismic Loader application is designed to work with seismic, navigation and topographic data.

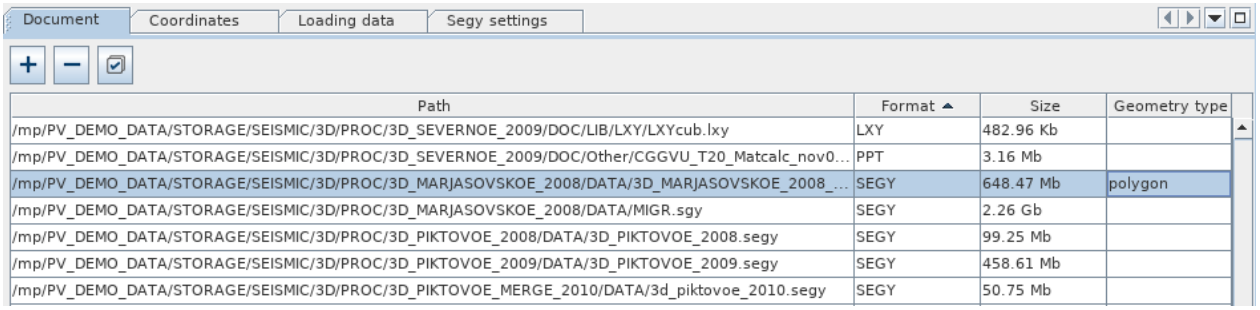
This document is auxiliary and clearly shows the main stages of working with a *seg-y* file:

1. Adding a file
2. Setting parameters and attributes
3. Processing input material
4. View processed material
5. Saving the processed material to a *shape* file
6. Usage example

Adding a file

Add the document you are going to work with to the “Document” tab using the  button.

Set the appropriate geometry type. The example shows working with the "polygon" geometry type.



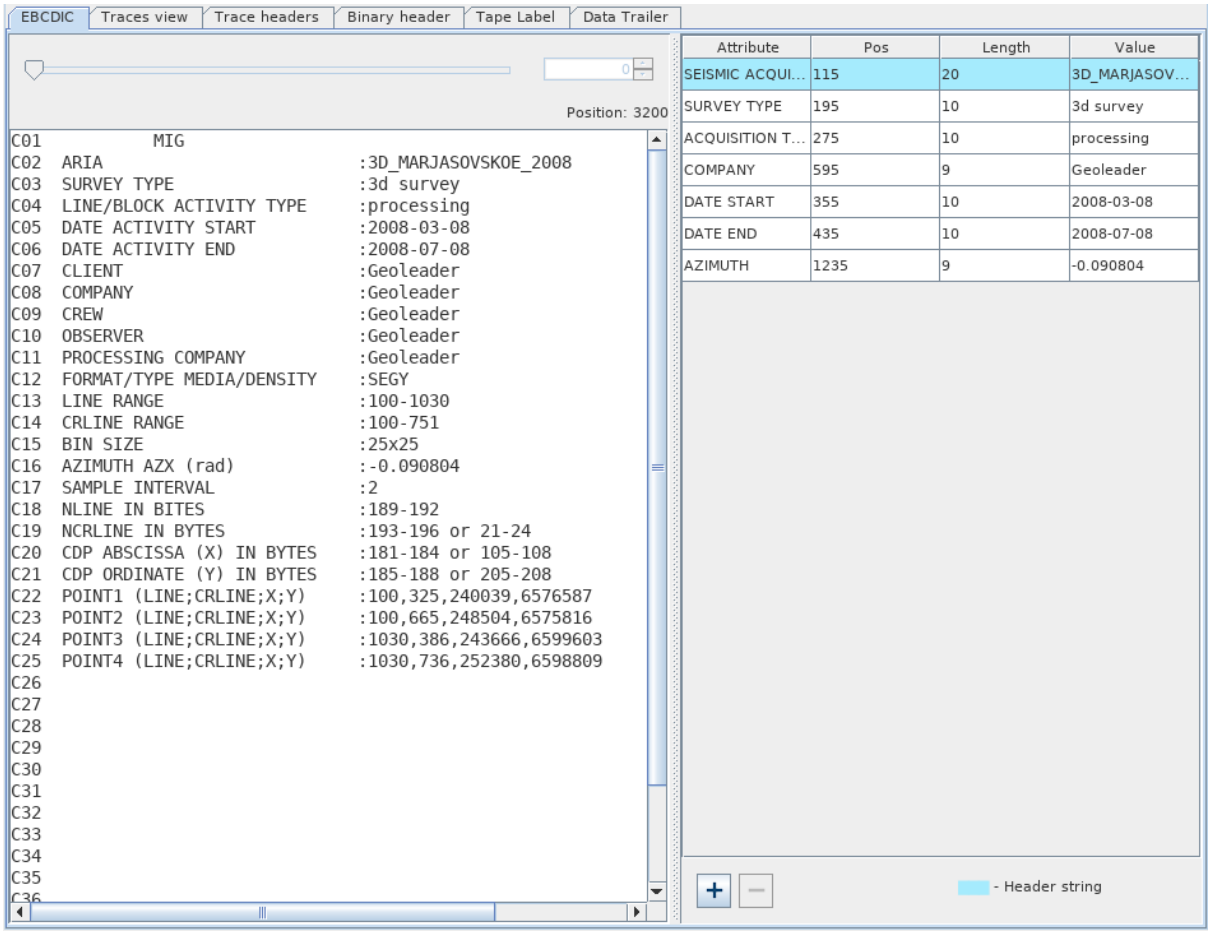
Setting up

Go to the “Segy settings” tab that has appeared.

“EBCDIC” tab

Go to the EBCDIC tab and select the required attributes. In the example, the following attributes are selected:

- SEISMIC ACQUISITION
- SURVEY TYPE
- ACQUISITION TYPE
- COMPANY
- DATE START
- DATE END
- AZIMUTH



“Trace headers” tab

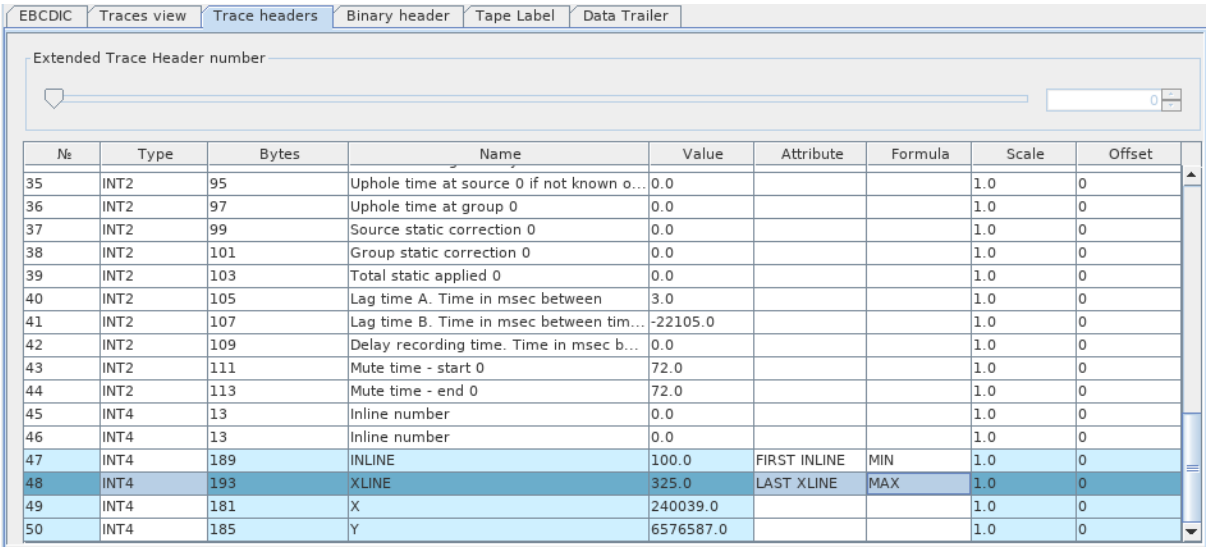
Set the bytes for the *X, Y, INLINE, XLINE* parameters, which are usually indicated on the “EBCDIC” tab. In the example they are:

- INLINE = 189
- XLINE = 193
- X = 181
- Y = 185

All parameters have data type INT4.

Now you need to specify the necessary attributes and formulas that will determine which value will be included in the attribute information.

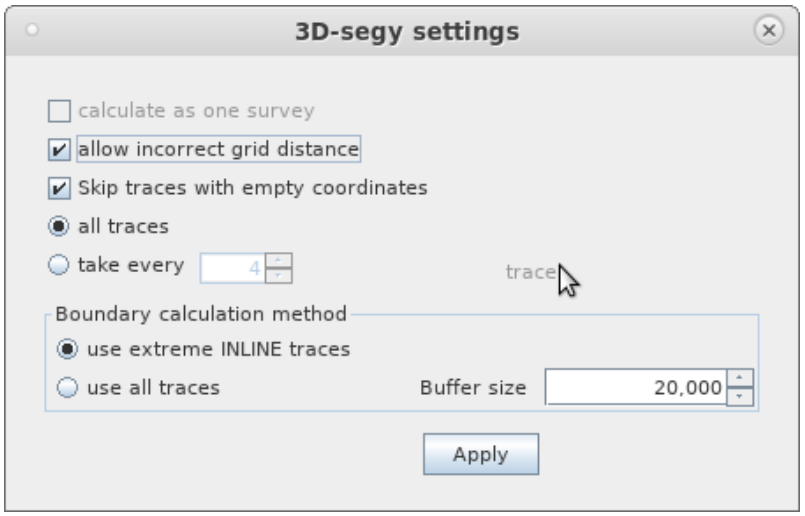
For the INLINE parameter, we set the FIRST INLINE attribute and the MIN formula, which means that the minimum value of the first *inline* parameter will be included in the attribute information. For XLINE, the LAST XLINE attribute is selected and the MAX formula - the maximum value of the last *xline* parameter.



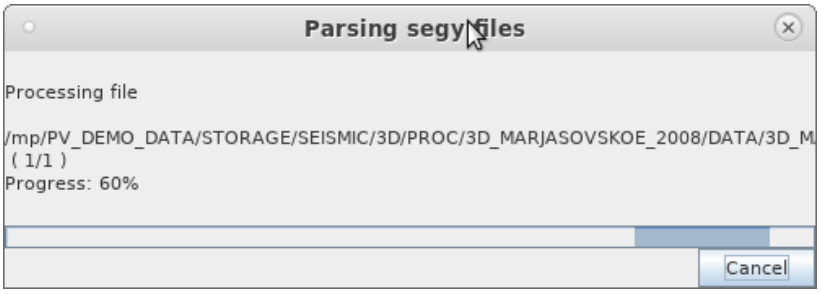
№	Type	Bytes	Name	Value	Attribute	Formula	Scale	Offset
35	INT2	95	Uphole time at source 0 if not known o...	0.0			1.0	0
36	INT2	97	Uphole time at group 0	0.0			1.0	0
37	INT2	99	Source static correction 0	0.0			1.0	0
38	INT2	101	Group static correction 0	0.0			1.0	0
39	INT2	103	Total static applied 0	0.0			1.0	0
40	INT2	105	Lag time A. Time in msec between	3.0			1.0	0
41	INT2	107	Lag time B. Time in msec between tim...	-22105.0			1.0	0
42	INT2	109	Delay recording time. Time in msec b...	0.0			1.0	0
43	INT2	111	Mute time - start 0	72.0			1.0	0
44	INT2	113	Mute time - end 0	72.0			1.0	0
45	INT4	13	Inline number	0.0			1.0	0
46	INT4	13	Inline number	0.0			1.0	0
47	INT4	189	INLINE	100.0	FIRST INLINE	MIN	1.0	0
48	INT4	193	XLINE	325.0	LAST XLINE	MAX	1.0	0
49	INT4	181	X	240039.0			1.0	0
50	INT4	185	Y	6576587.0			1.0	0

Conversion

Go to the "Coordinates" tab. You will see a window for configuring the reading of a *seg-y* file. Use the default settings and click continue.

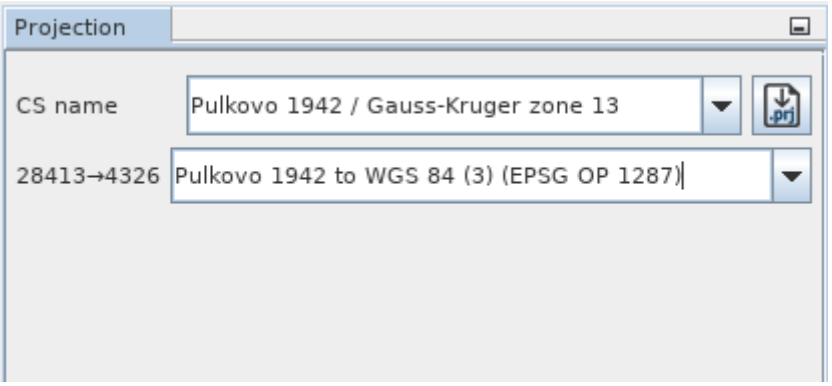


A file processing window will appear displaying the current progress of the operation.



Upon completion of processing, you will see the processed material in the data window, automatically marked up by the application.

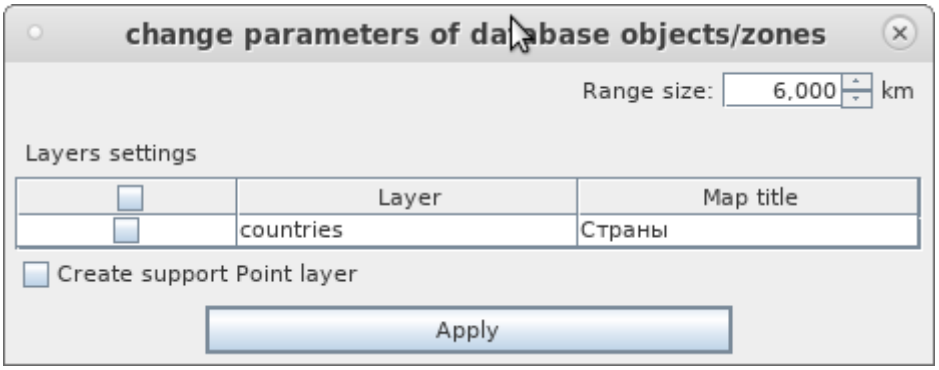
Then, on the Projection tab, select the appropriate coordinate system and datum shift from the drop-down lists.



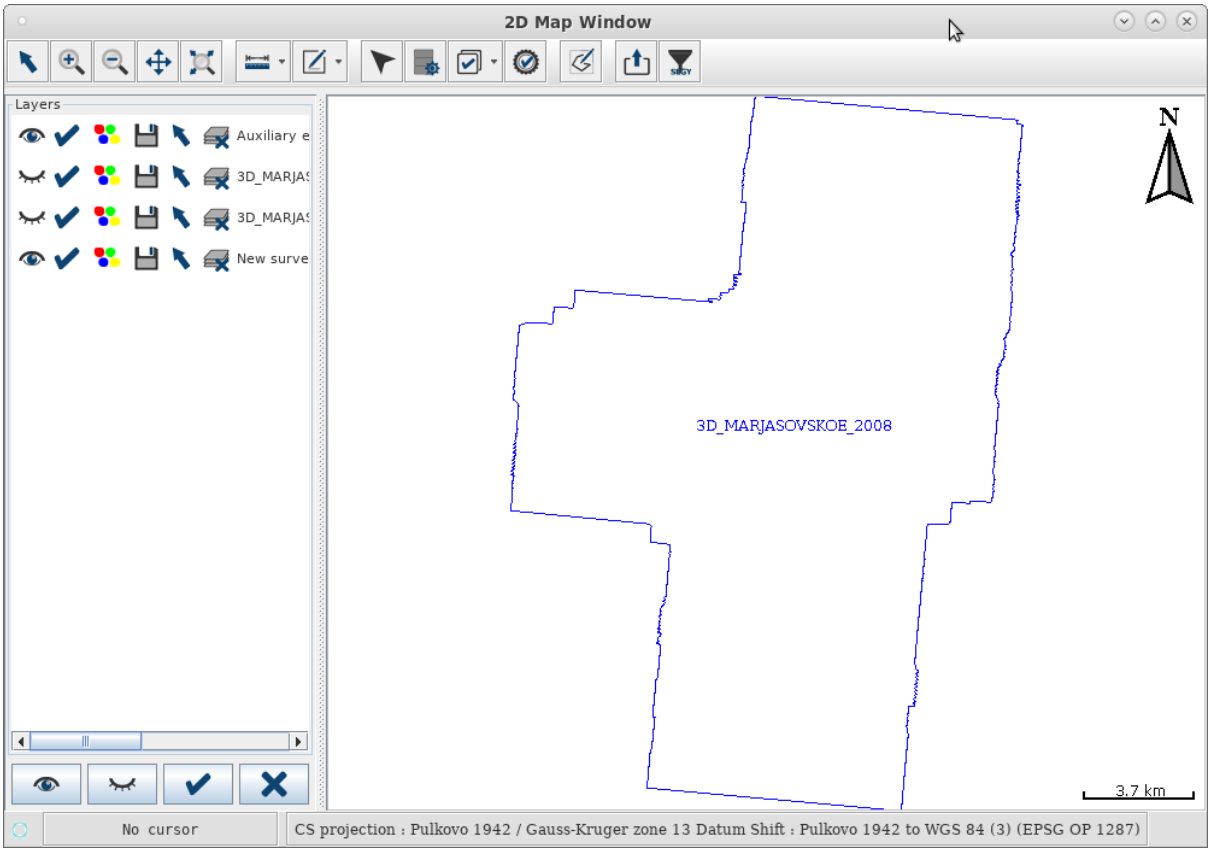
Then click on the  button - the data will appear in the "Objects" tab. After that you can interact with the processed material.

View

In order to open the map module, just click on the  button. You will see a window for changing the parameters of database objects. Leave the default settings and click apply.



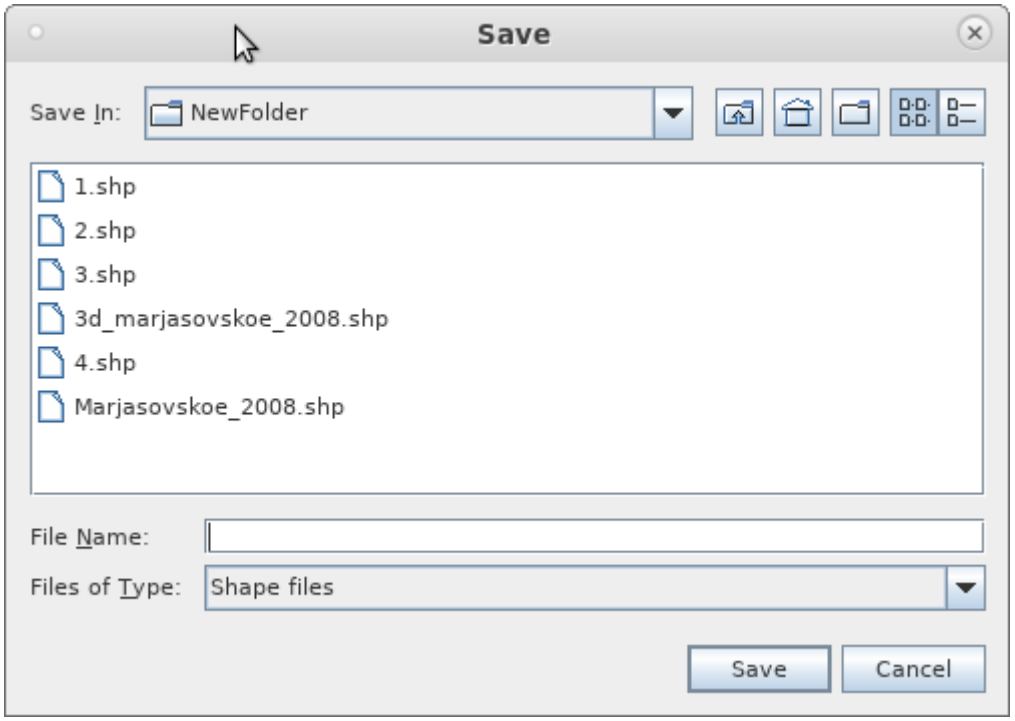
After loading, you will see the map module:



Saving to *shape*-file

The application allows you to save survey geometry and attribute information to a *shape* file and accompanying files.

In order to save the data, click on the  button. After that, the save window will appear. Select a directory where you want to save the file and enter a name for the file.

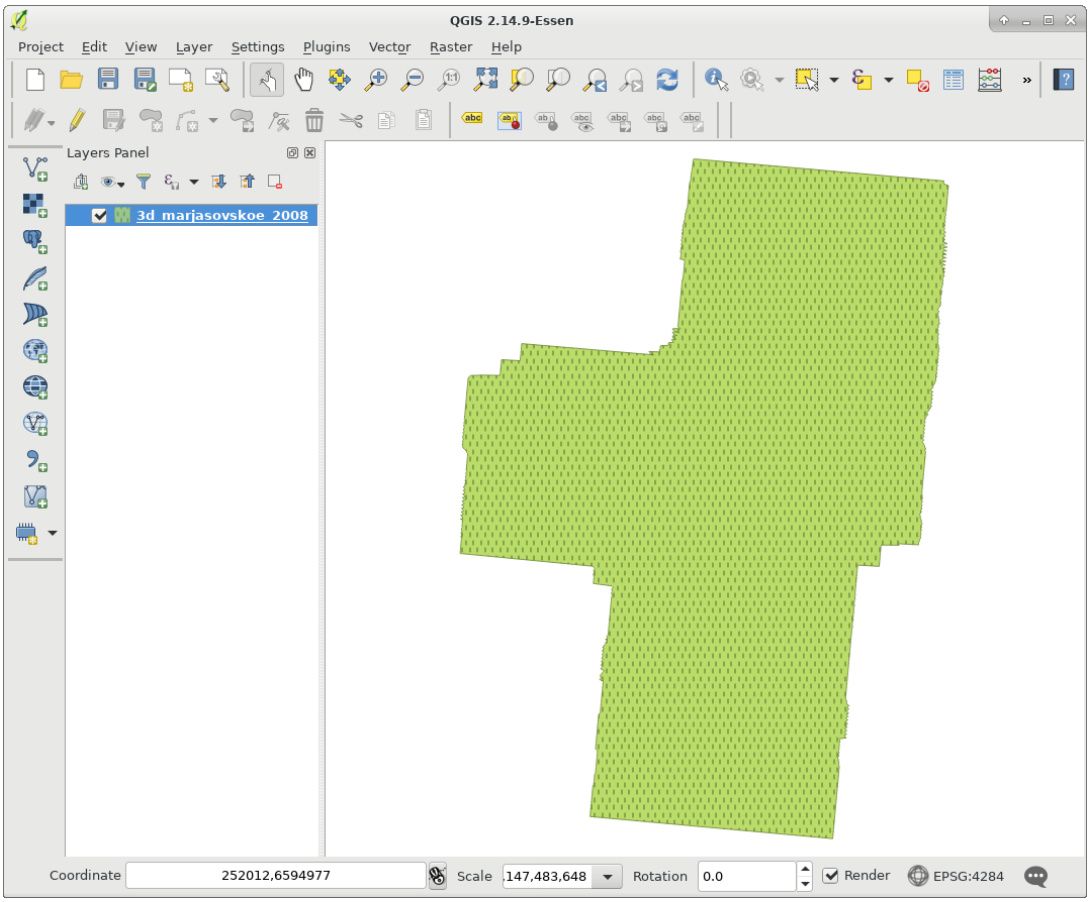


Upon completion of the operation, an information message will appear in the lower right corner of the application:

Usage example

Files saved this way are compatible with *shape* file viewers.

1. Survey geometry of a saved file opened with a third-party *QGIS* application



2. Attribute information of a saved file opened with a third-party *QGIS* application