

# HOW TO IMPORT DATA FROM FG-33+ AND FG-43 TO SURFER

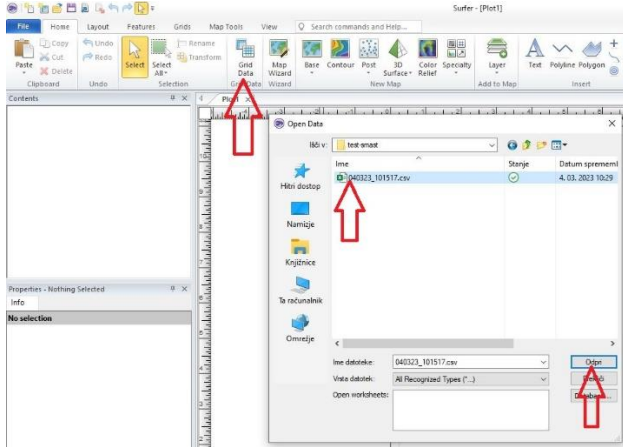
In this document we will show how to import FG-33+ and FG-43 file into the Surfer and Google Earth program.

**Important Note: Works only with devices manufactured after 2023**

## SURFER

After the recording with FG-33+ or FG-43 sensor is done, download the data and save it to your PC.

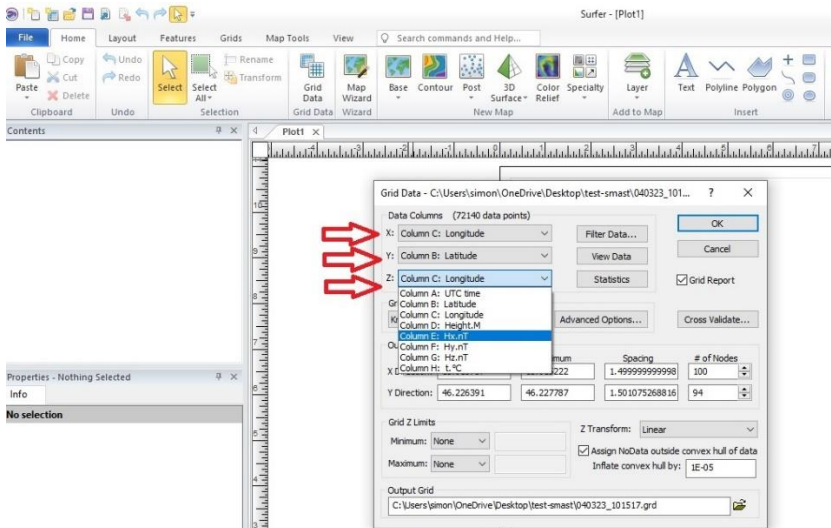
Open the Surfer program and click the Grid Data button. Find and select .CSV file downloaded from the sensor and open it.



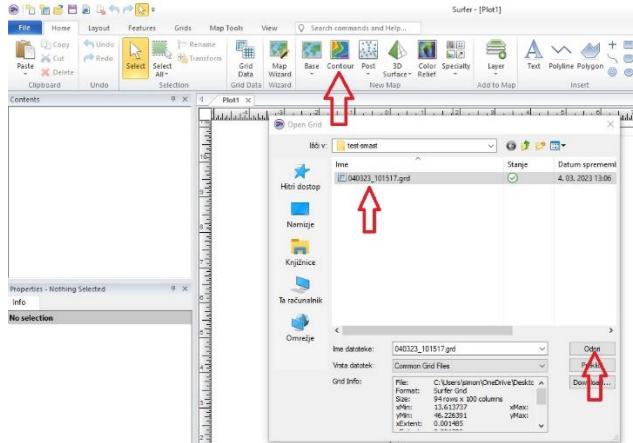
From the Data Columns select

- X → Column C: Longitude
- Y → Column B: Latitude
- Z → Column E: Hx or F: Hy or G: Hz (depends on which axes you are interested in)

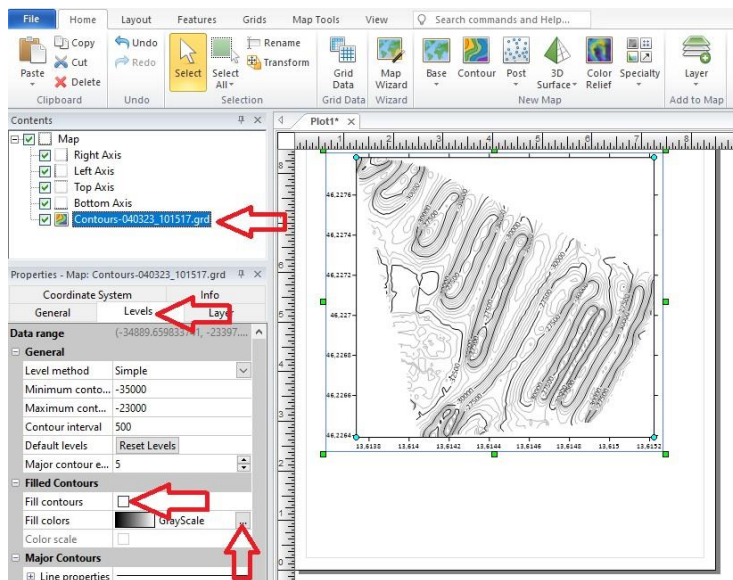
And press OK to convert the data.



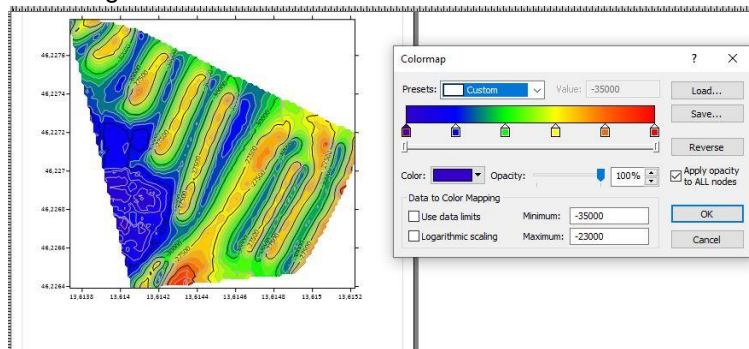
Next click on Contour button, select the converted file and choose Open to load the data



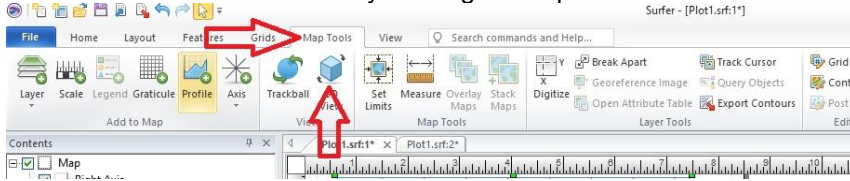
Now you can view the scanned data. This view can also be improved by adding colour. To do this click on Contours-[your\_file\_name], select Levels menu, check the Fill contours check box and click "..." button under the Fill colours option.



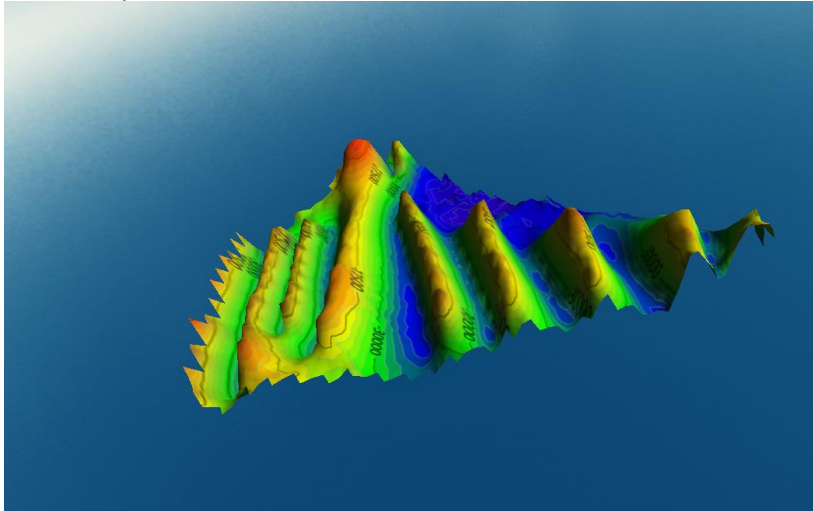
The image now looks much better



You can also create 3D view by clicking on Map Tools button and selecting 3D view

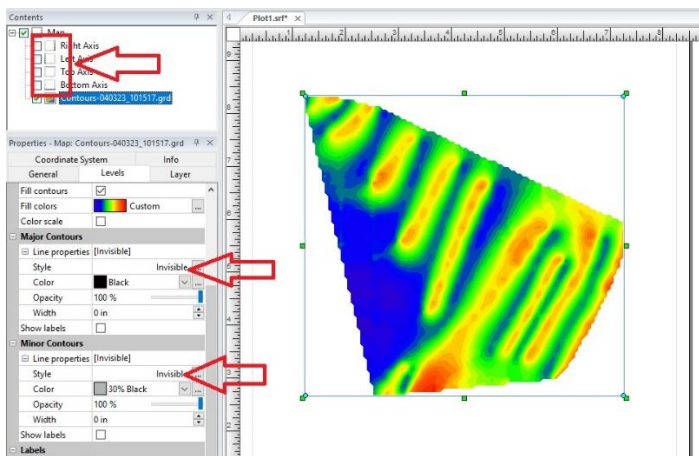


Our example of the 3D scan below would be nicer, if the track was denser.

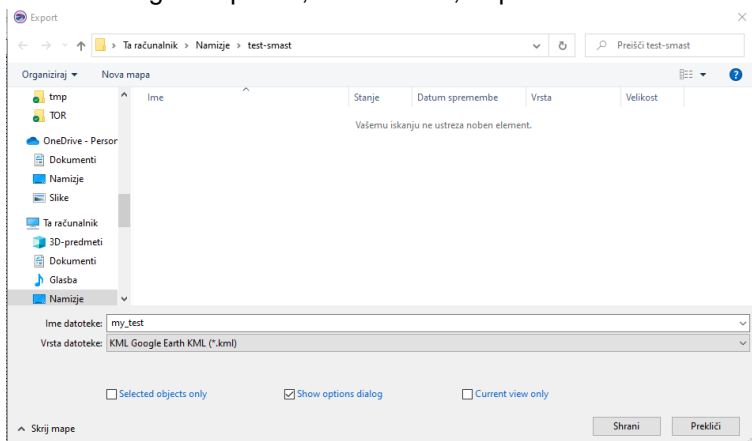


## GOOGLE EARTH

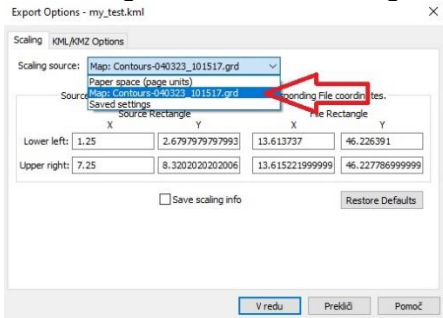
Before exporting the data all axis check boxes and lines options should be cleared



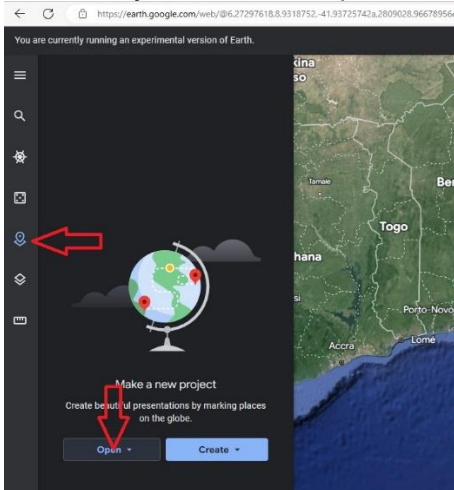
After clearing the options, choose File, Export and enter the name of the file. Then click SAVE.



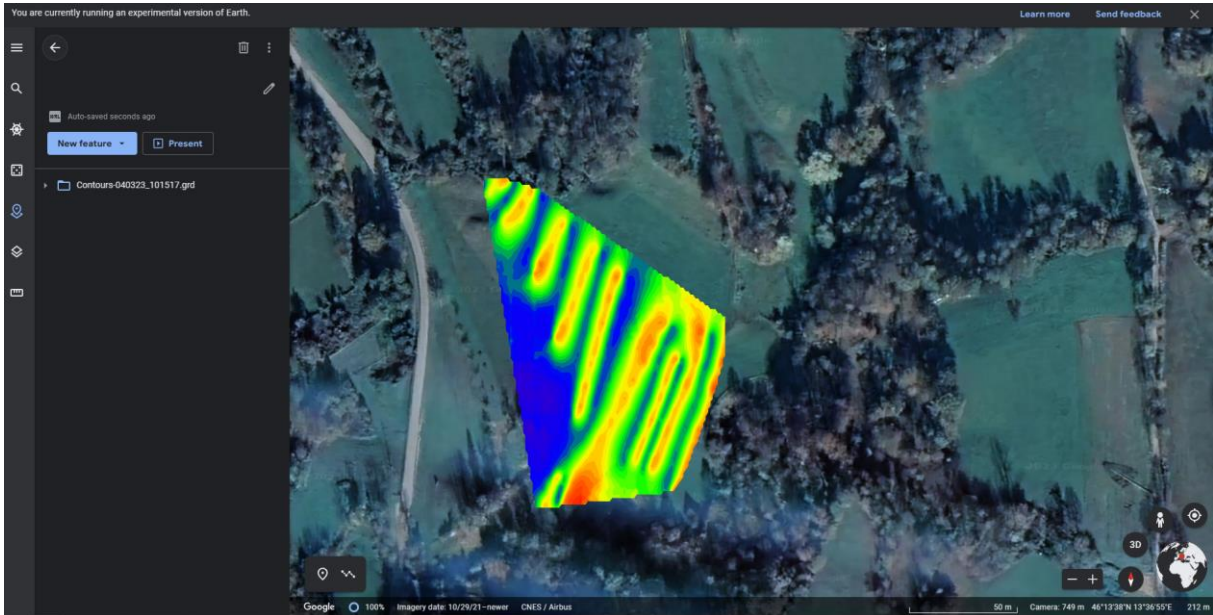
Do not forget to select the scaling source → Map: Coutours-GPS\_[your\_file\_name]



To open Google Earth, open your browser and go to <https://earth.google.com/>  
Select "Projects" and click Open



And the final result:



**Note:**

For writing this manual we used Golden Software Surfer v15.6.3. If using other versions, some changes might be needed.

Special thanks to Timur (<https://www.ntc-spector.ru/>) for his help with the manual.