

# **LORENZ DEEPMAX Z1 series detector**

## **Data Logger**

### **Software Installation Manual**

**Oct. 2015**

## 1. Introduction

This Guide describes the Installation Steps to

- Install the Softwarepackage „Golden Software Surfer 12 / 13“
- Install the Virtual Com Port Driver to connect the Deepmax Z1 to a USB Port of your Computer
- Install the Components „LorenzScript“ and „Lorenz Z1 Datalogger Utility“

When these steps are done, the last chapter describes how to work with DEEPMAX Z1, „Scripter“ and „Lorenz Z1 Datalogger Utility“ to show the logged Fields on your Computer.

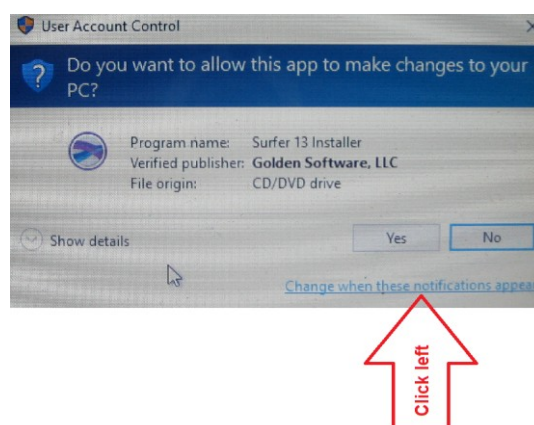
Windows 7 / 8 / 10 or Windows Vista are strongly recommended.

## 2. Installation steps

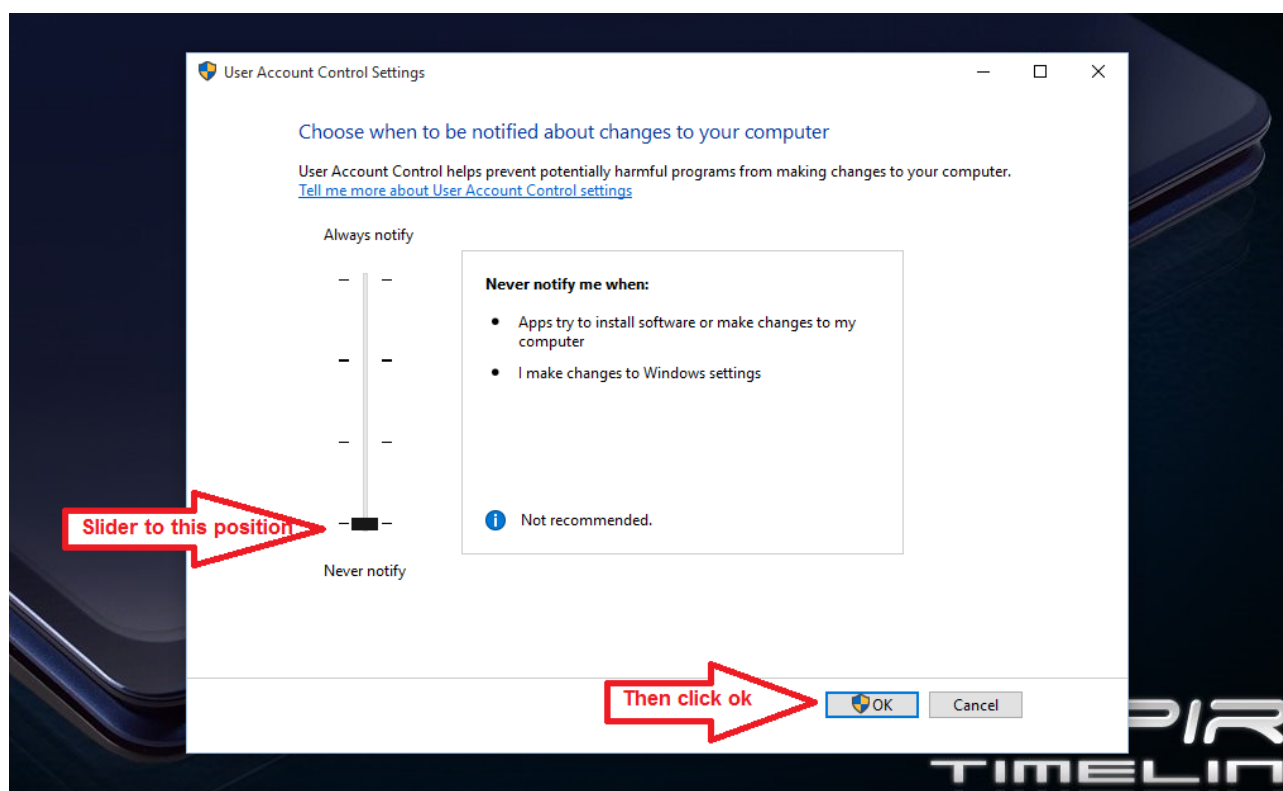
### 2.1 Installation of Golden Software Surfer and Scripter

Place the Surfer CD in the CD-ROM drive and close it.  
The installation program will start. Follow the instructions.  
Don't change the default installation path.

Depending on settings of your User account it might be that a first User Account Window will pop up:



After clicking left, a second User Account Control window appear:



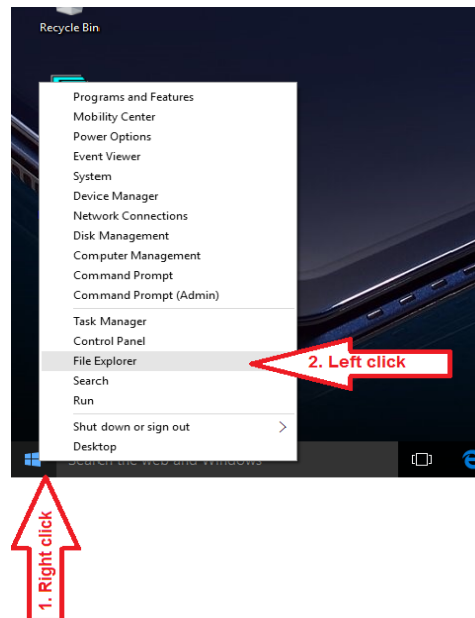
After that, the first User Control Window will appear again to confirm the setting of your User Account. Simply click „Yes“.

Users of Windows 7 and 8 now have to restart Windows to make the new changes in the User account take effect, then start the installation again.

## 2.2 Instructions to run Surfer continuously as administrator

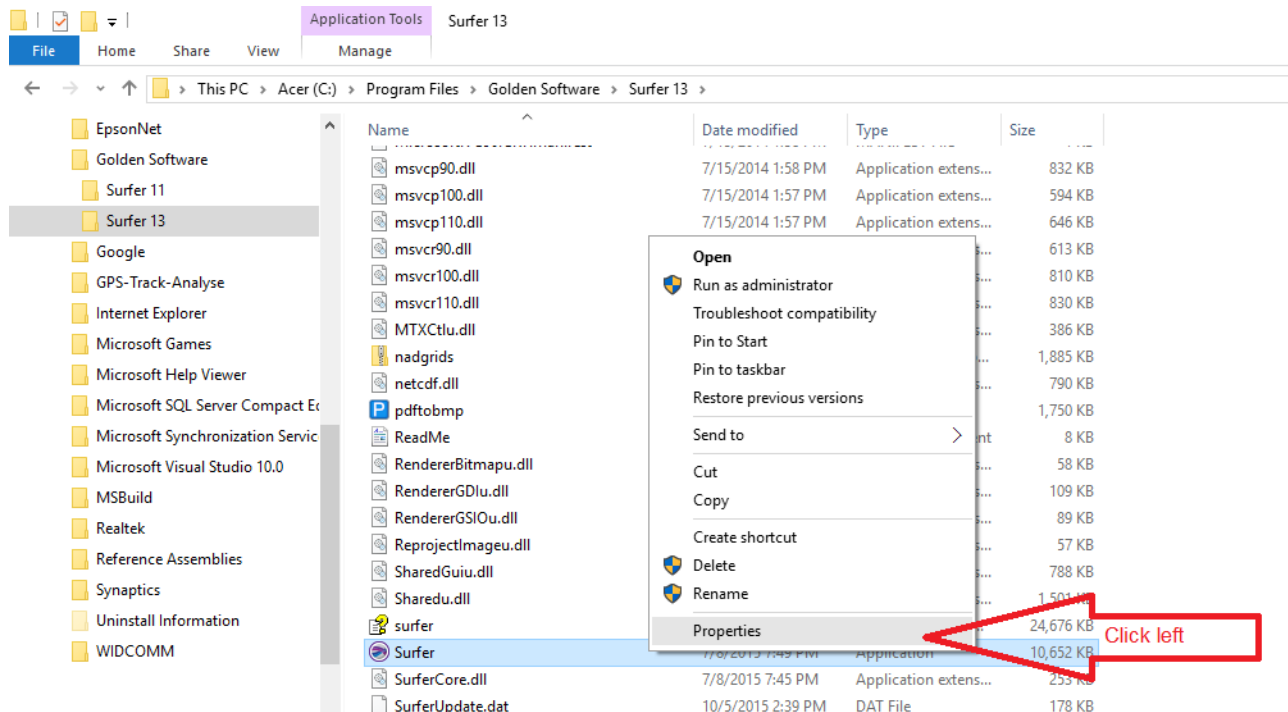
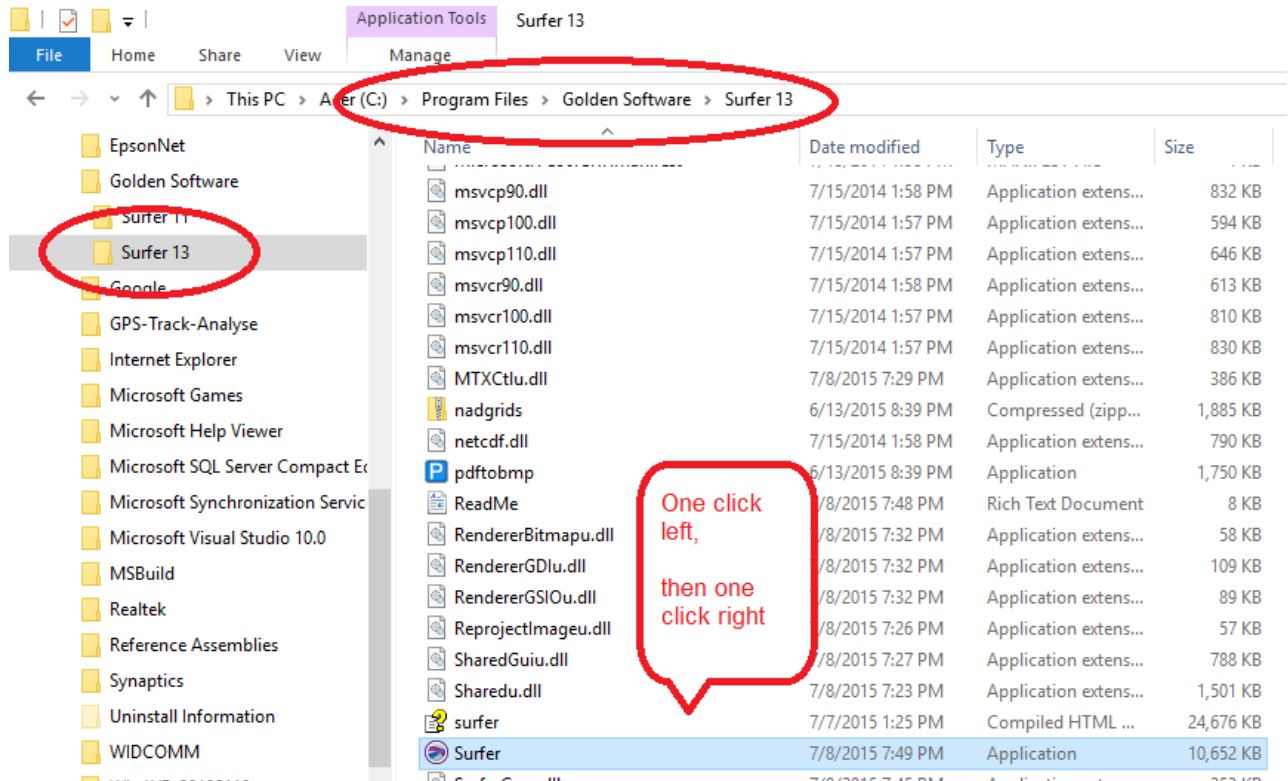
It is necessary to run Surfer and Scriptor under administrator rights.

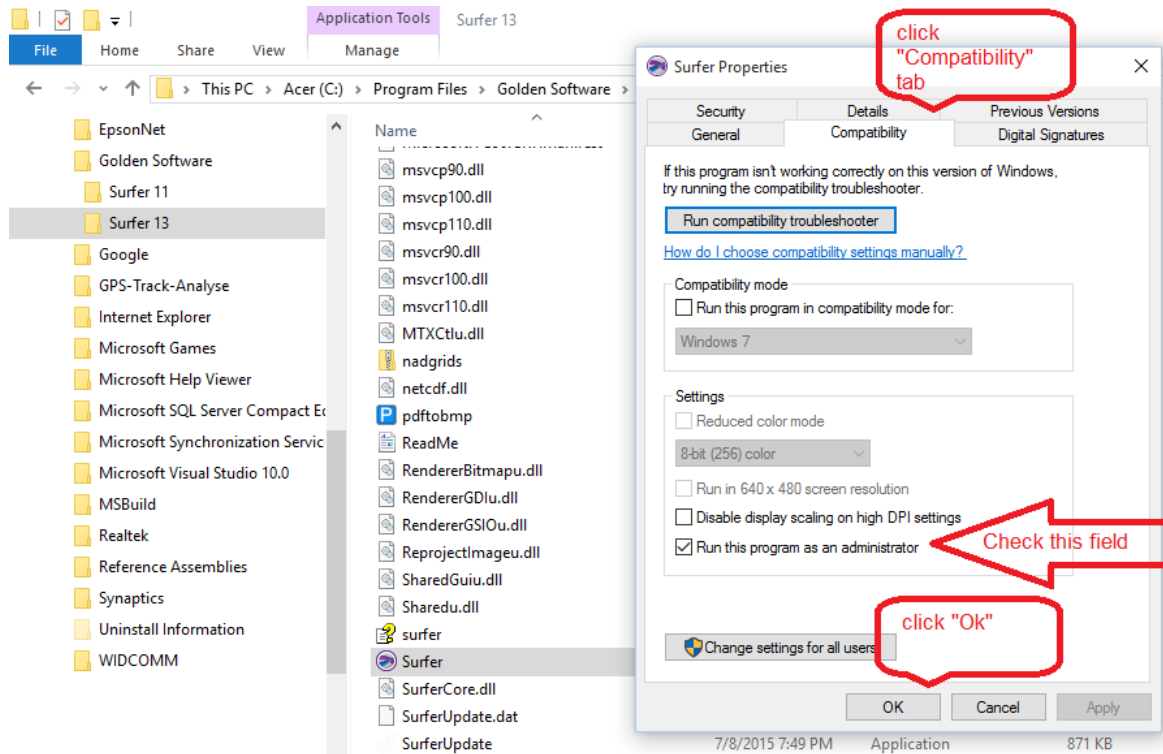
Open the File Explorer



and navigate to C: > Program Files >  
Golden Software > Surfer 13 > Surfer (Application)

Follow the instructions in the next pictures :

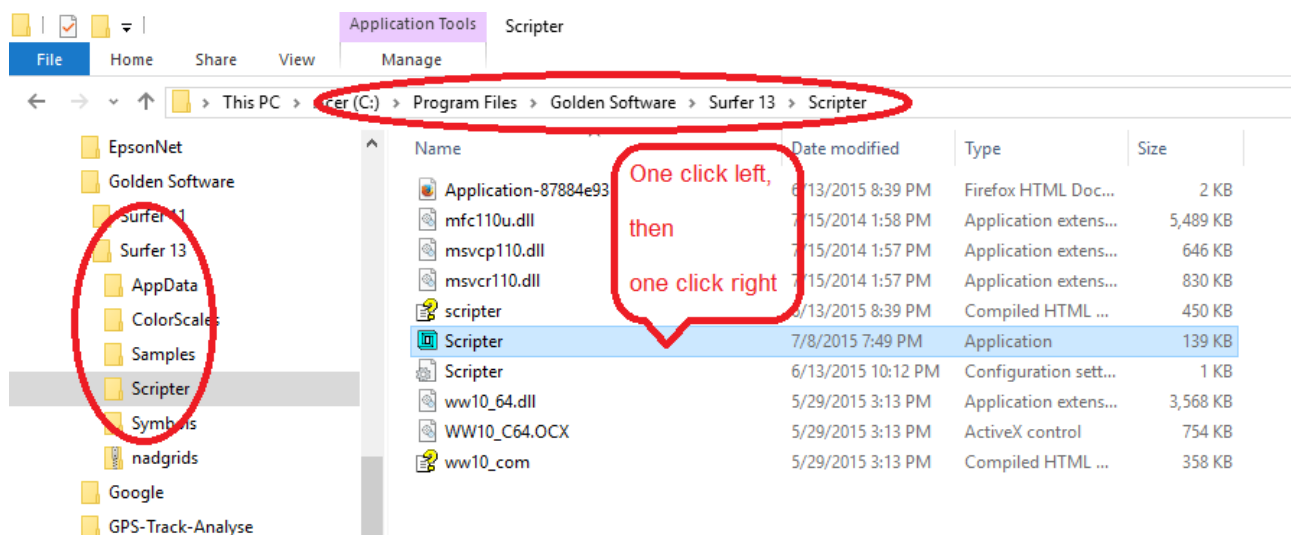


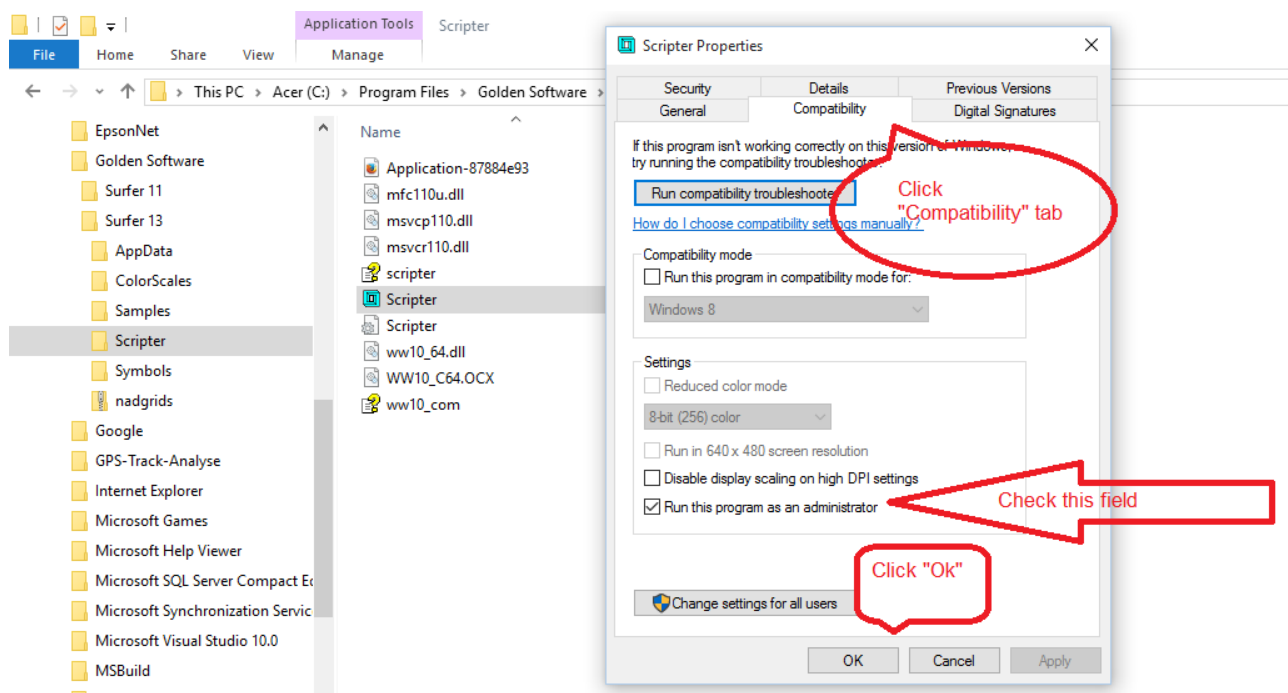
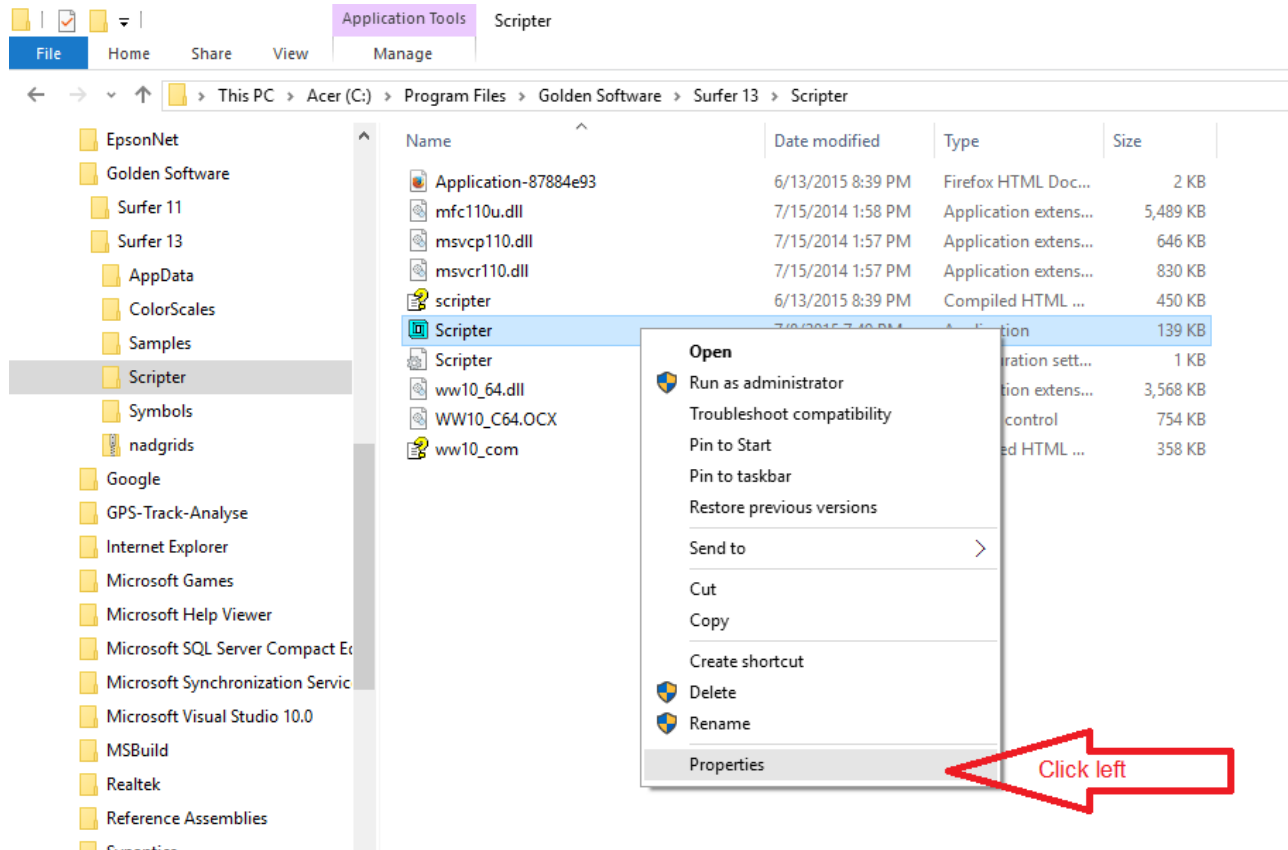


## 2.3 Instructions to run Scripiter continuously as administrator

Navigate to C: > Program Files > Golden Software > Surfer 13 > Scripiter > Scripiter (Application)

Follow the instructions in the next pictures :



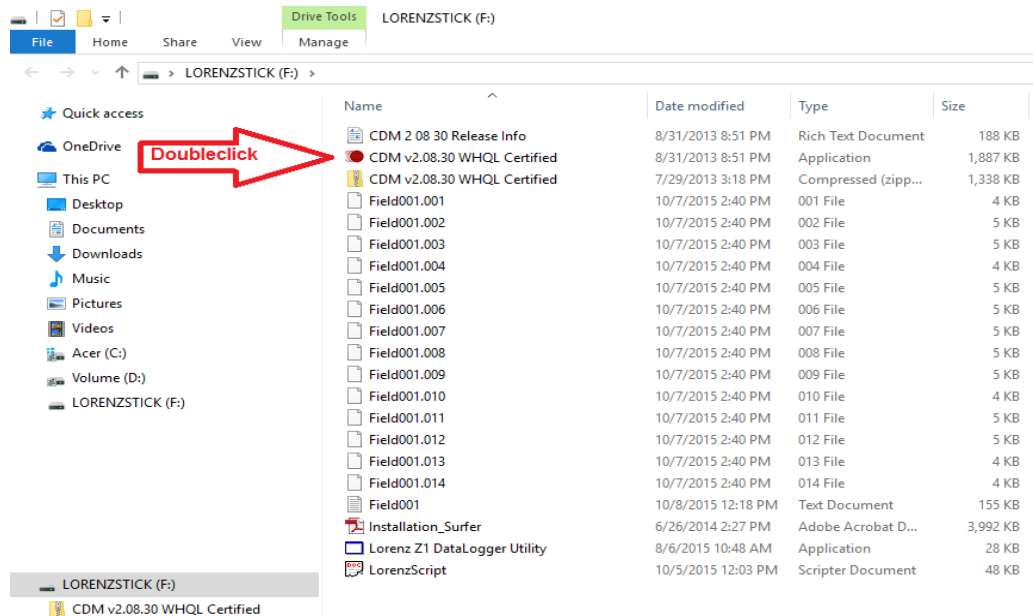




## 2.4 Installation of the Virtual Com Port Driver

Insert the Lorenz Data Cable in a free USB Connector of your PC.  
The other end of the cable left unconnect.

Insert the Lorenz USB-Stick in a free USB Connector of your PC.  
A File Explorer Window will open. Doubleclick the marked application.

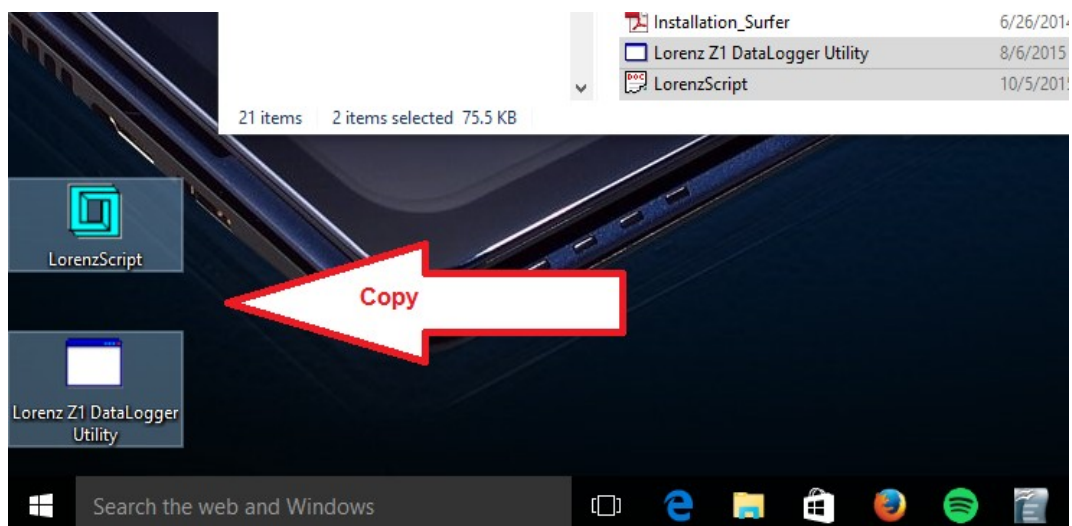


Follow the instructions of the Driver Installation Software.

Note: In some cases the Installation terminate with an error,  
then start the Driver Installation Software again.

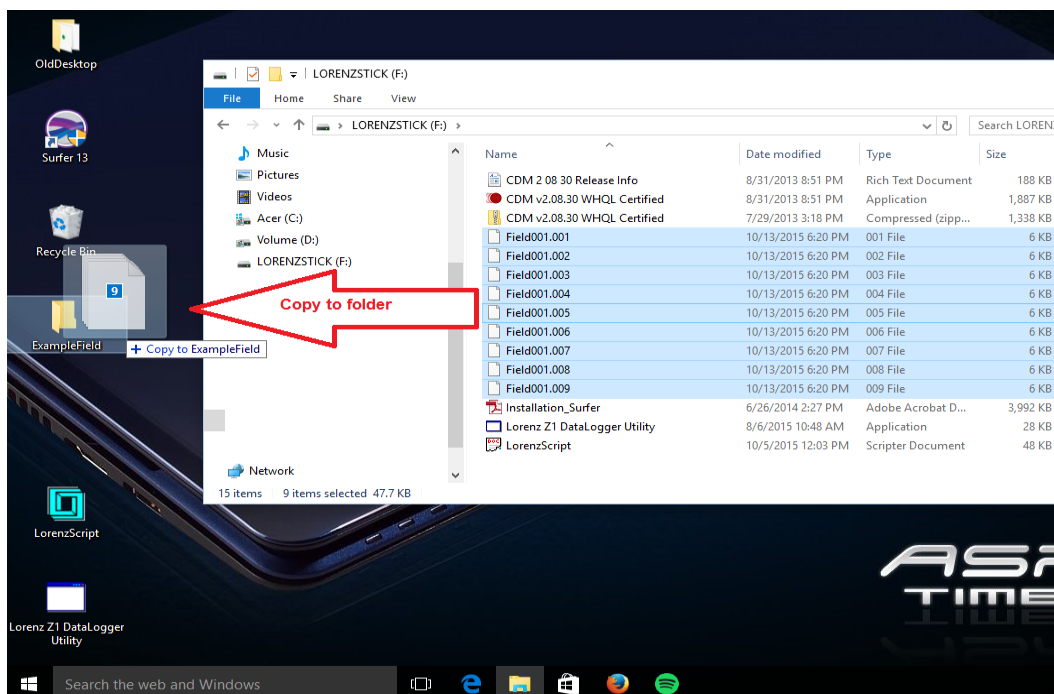
## 2.5 Copy other Lorenz Files

Copy LorenzScript and Lorenz Z1 DataLogger Utility to your Desktop.





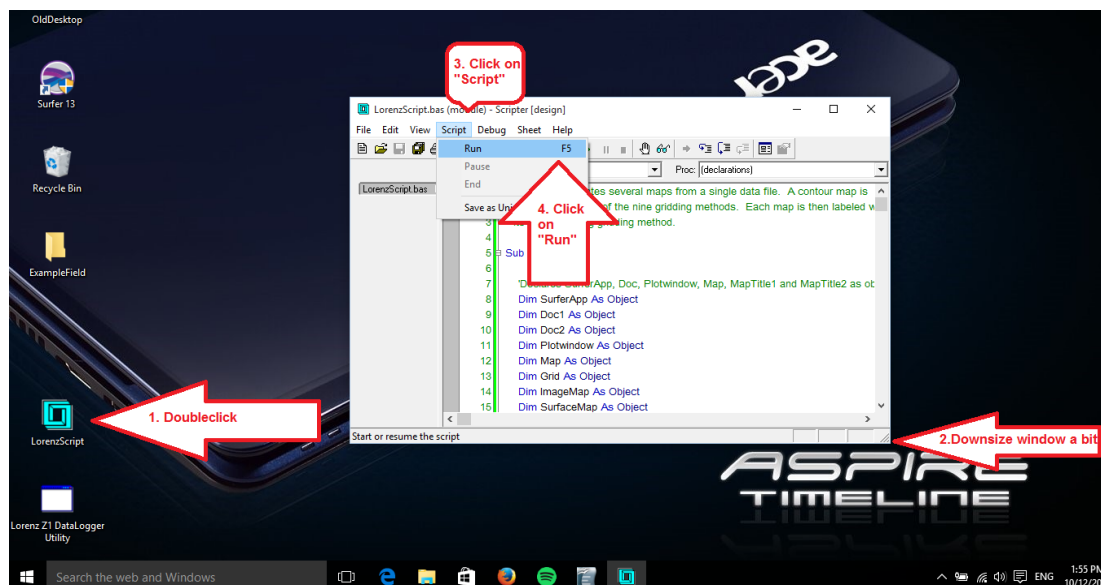
Create a new folder „ExampleField“ under your Desktop and copy in this folder all „Field001“ - files on the Lorenz-USB-Stick:



### 3. Working with Scripser and Surfer

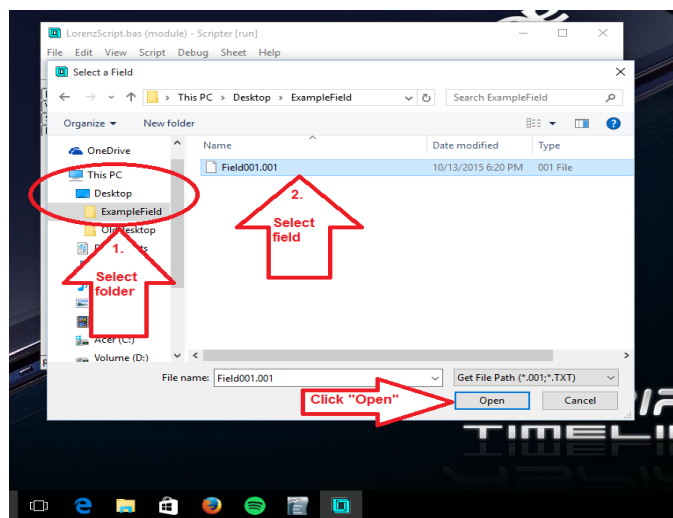
“Scripser” is a program that controls the program “Surfer”. For this, the script file "LorenzScript" is loaded and executed in scripser. Lets start an example to show how it all works together.

#### 3.1 Starting Scripser



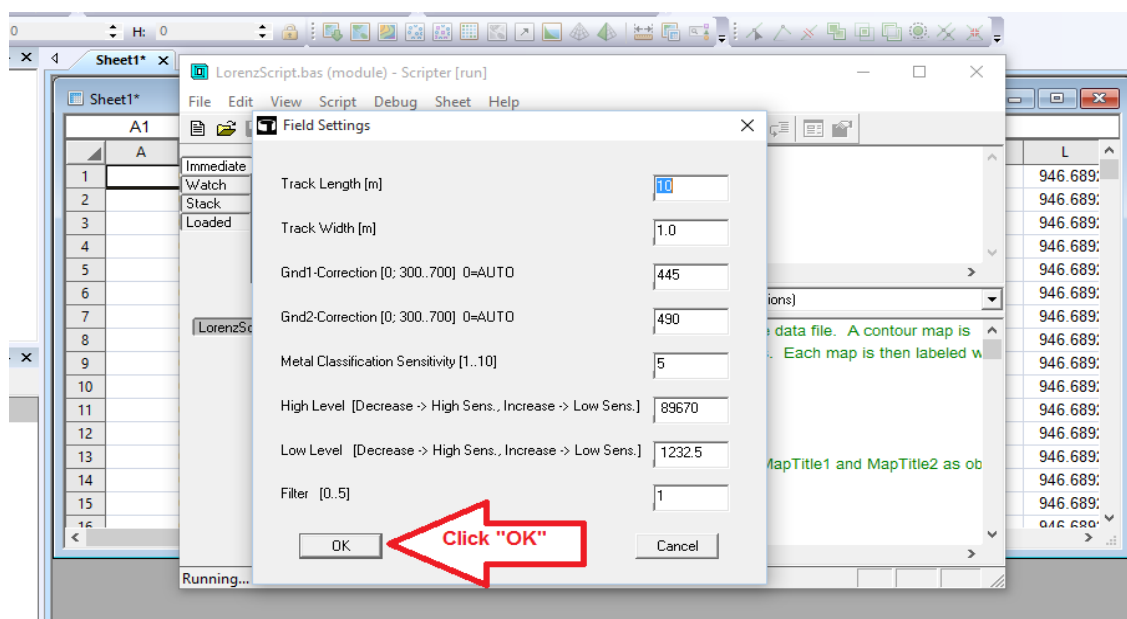
### 3.2 Selecting a Field

First step is selecting a field with the logged data of the Z1 datalogger. In this case we have logged an example field for you, „Field001“. Remember that you have copied in Chapter 2.5 nine tracks of Field001, named Field001.001 ... Field001.009 . In this dialog you only see the track 001 of the complete field, because it is sufficient to select the first track of the field.



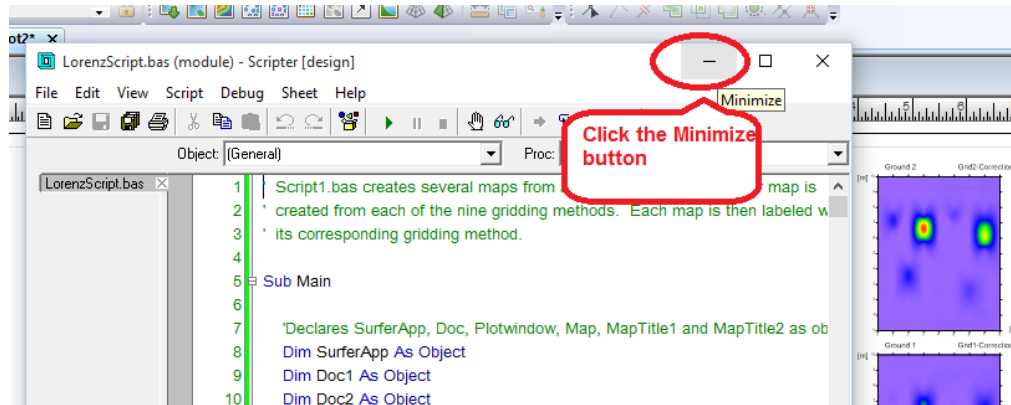
### 3.3 The Field Settings Dialog

When you have clicked „Open“, all nine tracks are combined together to the complete field. Here you can set various properties of the field, we discuss these properties later and now simply click „OK“, so Scripter make calculations with these default properties.

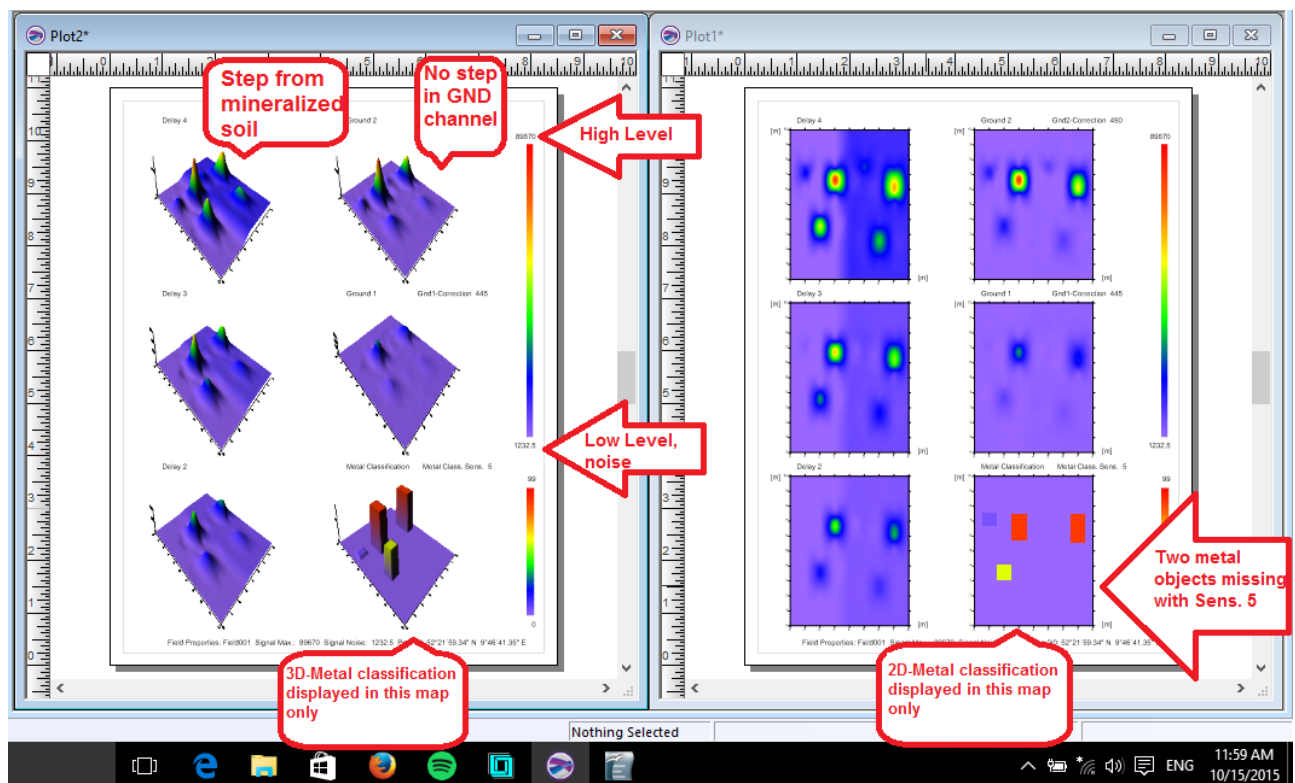


### 3.4 The result of all

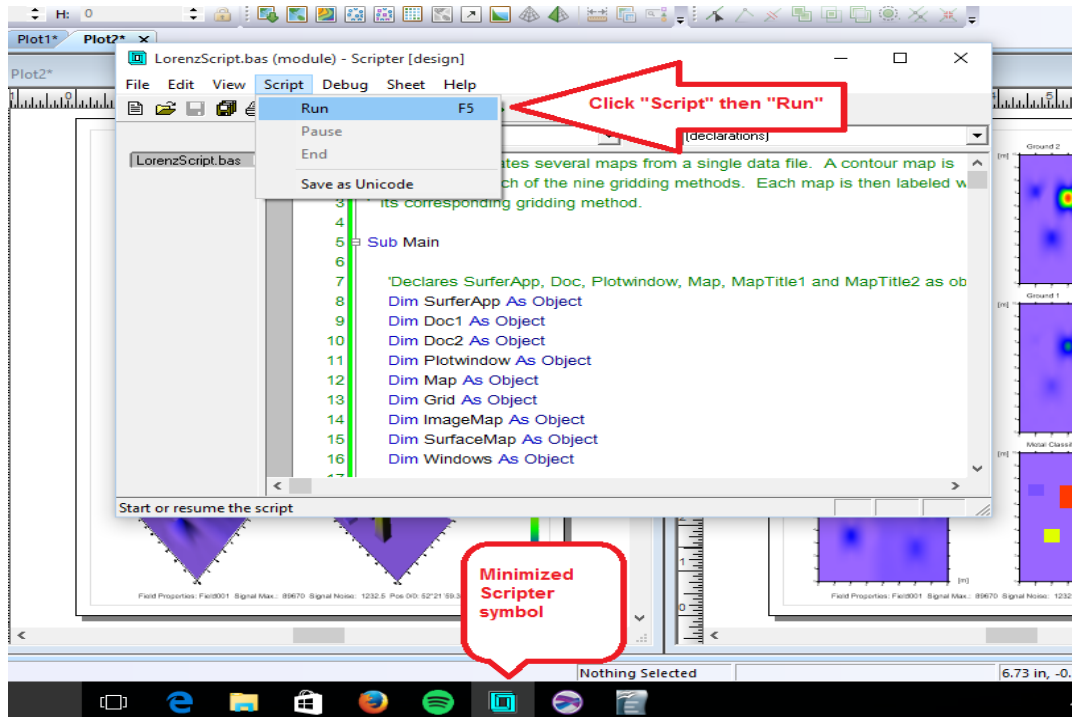
To get a better look to the result click the minimize button at the Scripser window:



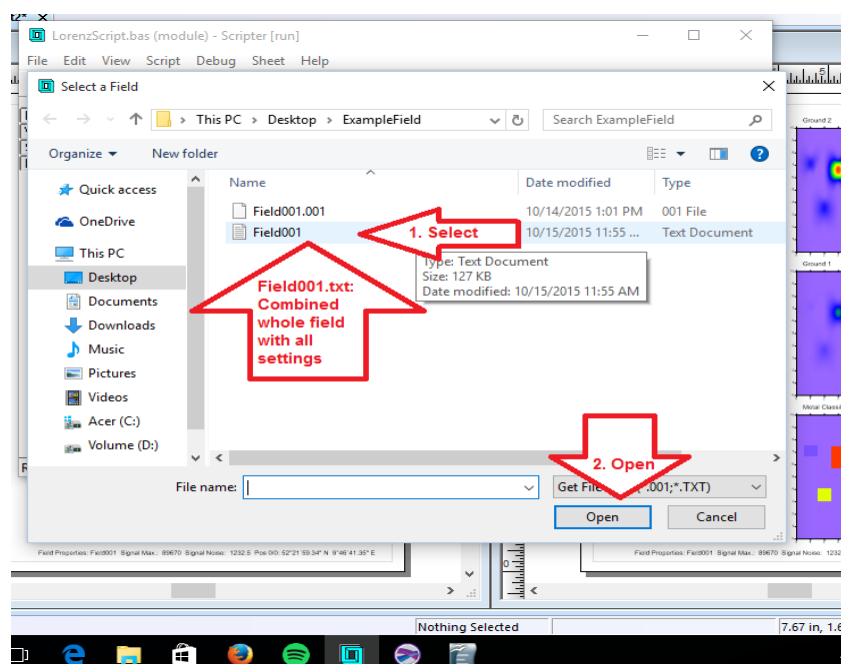
Now you can see what Scripser and Surfer have made from the measured values of the field:



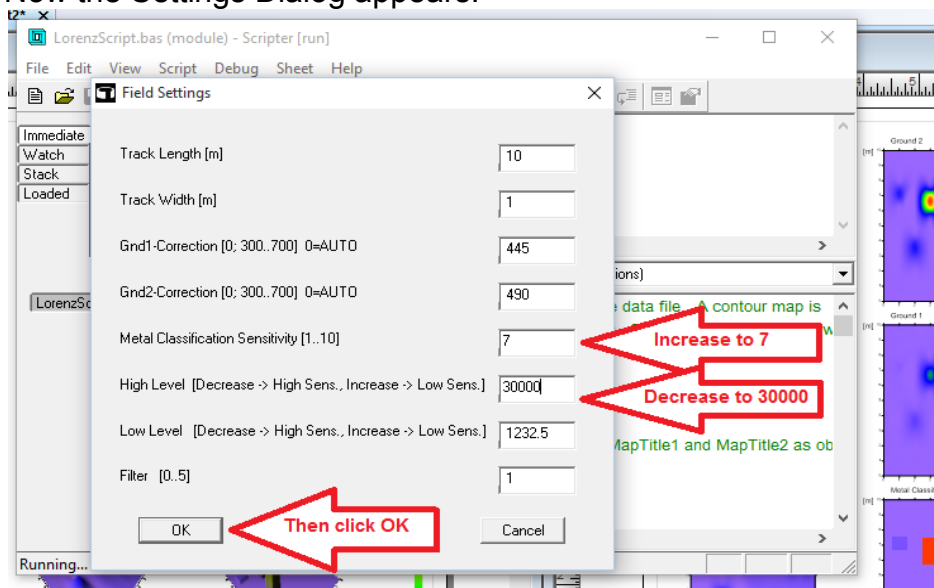
Next we start Scripter again ( click at the minimized Scripter symbol ), then „Script“ and „Run“.



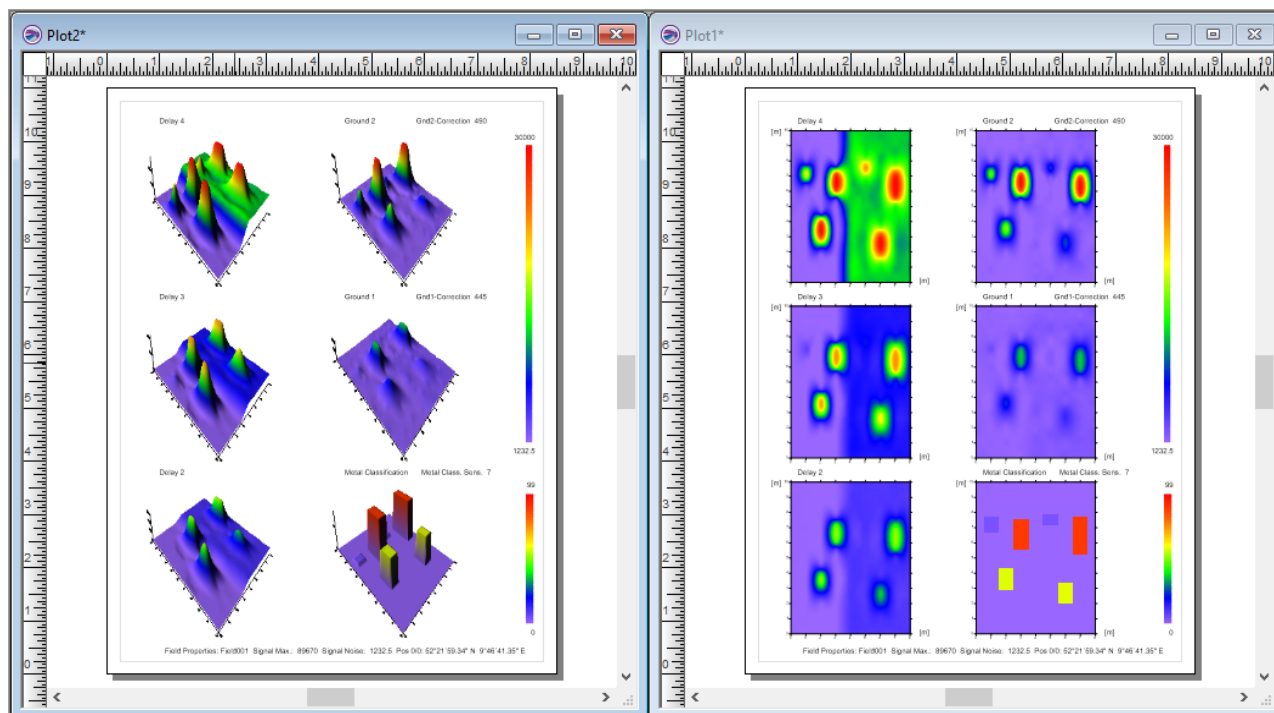
At the first start, we select „Field001.001“, the first track of the complete field. During the first run, Scripter combine all the tracks and settings to one Field001.txt – file. So now we select „Field001.txt“ in the next dialog:



Now the Settings Dialog appears:



In the Surfer window from the first run we are missing in the „Metal Classification“ - map two objects. We try to display these objects, so we increase „Metal Classification Sensitivity from 5 to 7. Additionally we want to display more weak signals in the other maps by decreasing the „HighLevel“ setting from peak signal 89670 to 30000. With other words, you cut off the peaks from 30000 to 89670. Therefore the 30000 is now the highest red peak level.



Compared to the first run we see two more objects in the Metal Classification maps ( 2D and 3D ) and weak signals are displayed more intense.

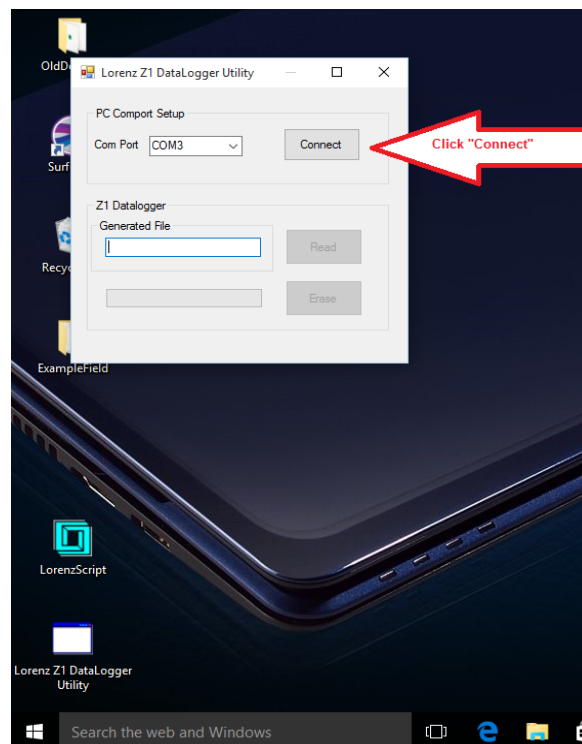
#### 4. Working with Lorenz Z1 DataLogger Utility

This Utility Program reads the Loggerdata from the DEEPMAX Z1 to your Computer.

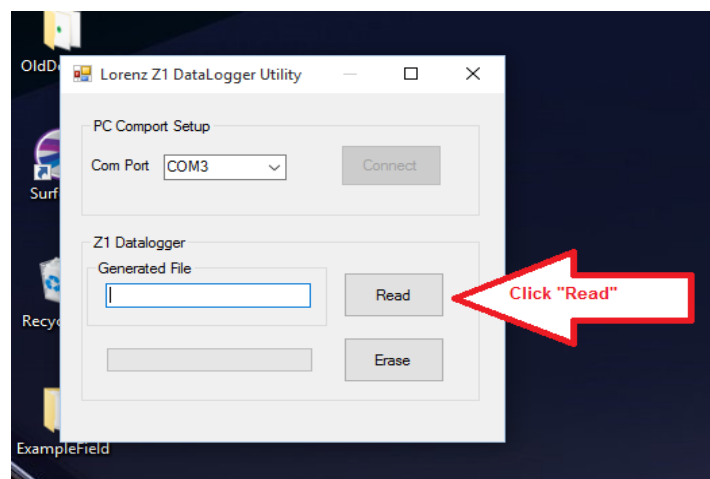
Create a Field in the DEEPMAX Z1 as described in the DEEPMAX Z1 Manual.

- Connect DEEPMAX Z1 with the Computer via the Lorenz Data Cable.
- Connect battery and turn on the DEEPMAX Z1.
- Start „Lorenz Z1 DataloggerUtility“ from the Desktop.

This window appears:

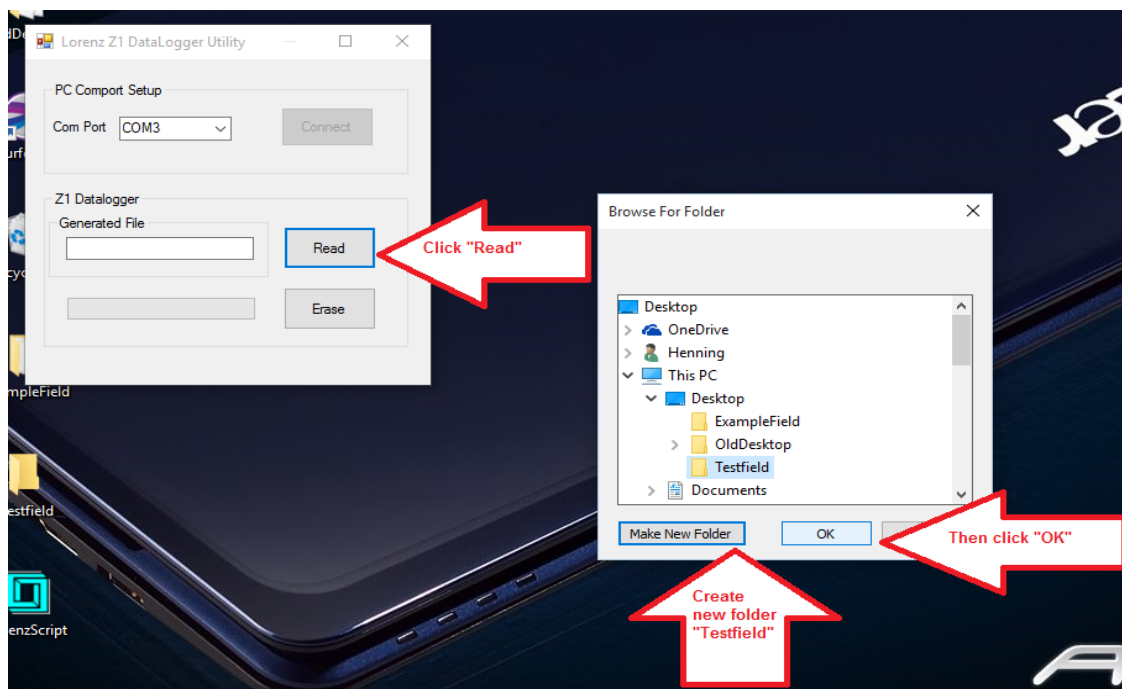


Click „Connect“. The „Read“ and „Erase“ - Buttons become active.  
Click „Read“.

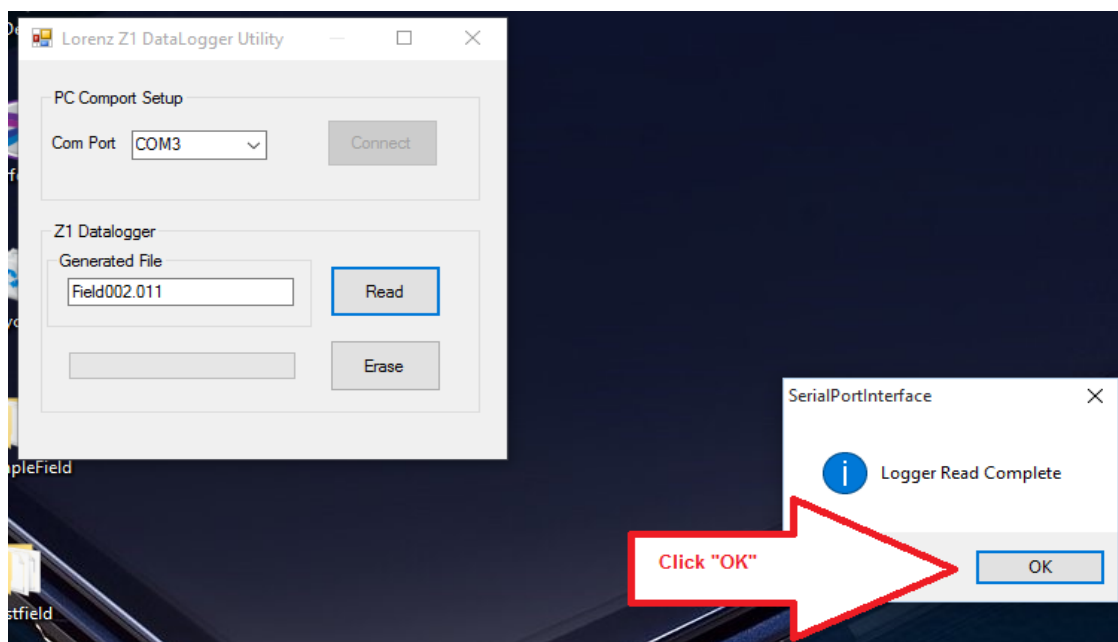




Now you can navigate to the destination of the data to be read or you can create a new folder to archive your fields, here we create a new folder „Testfield“ under the Desktop.



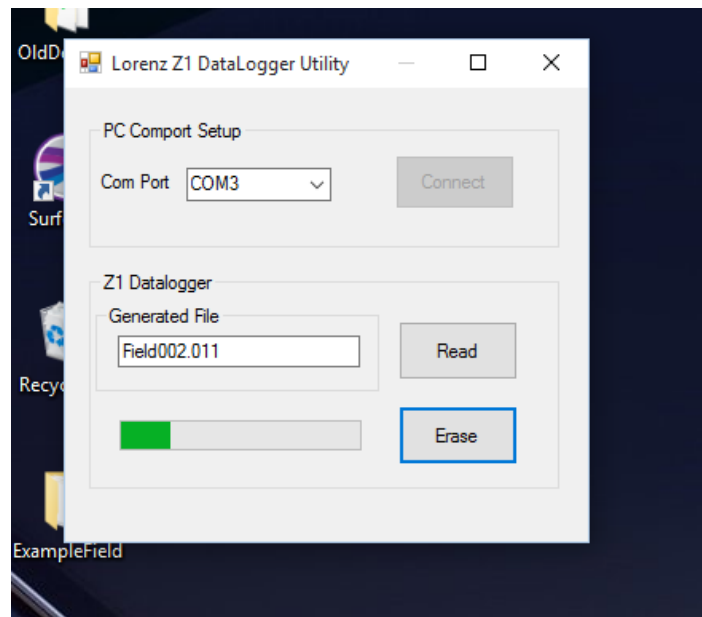
The progress of the reading is displayed in the box beneath the „Read“ Button. When reading is complete, this window will pop up:



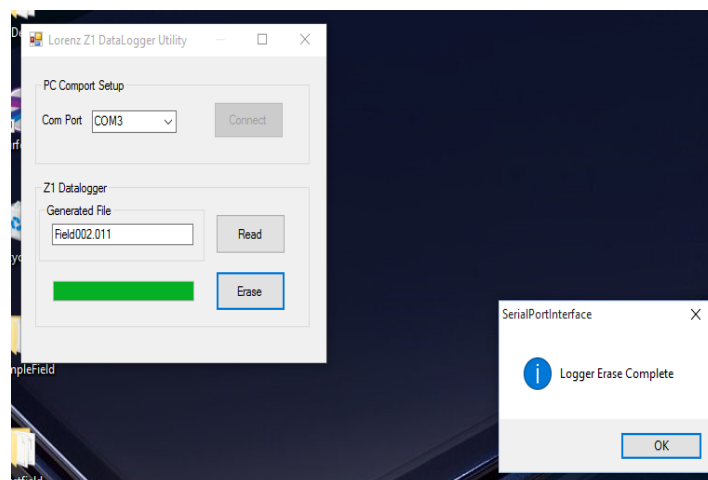
Now the Loggerdata is on your Computer in your selected destination folder.



To erase the loggerdata on the DEEPMAX Z1 click „Erase“:



The green Bar displays the progress of erasing.  
When erasing is complete, this window will pop up:



Click „OK“ to terminate the process.

All data in the DEEPMAX Z1 is now erased.

The Fieldname of the next Field you will store on the DEEPMAX Z1 will be again „Field001“ !

Because you will get equal filenames it is a good idea to create folders with a unique name to archive your data.

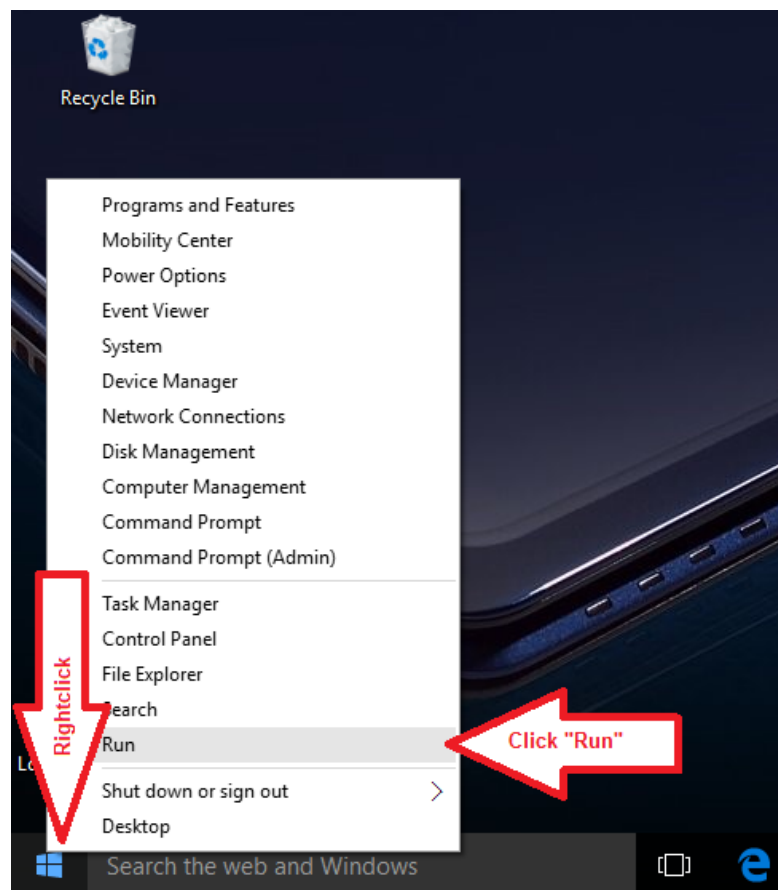
The loggerdata in the DEEPMAX Z1 will stay there until you erase it !

**Note: On every readout of the loggerdata the complete loggerdata will be read !  
So it is a good idea to erase the loggerdata from the DEEPMAX Z1 after  
you have saved the loggerdata on your Computer.**

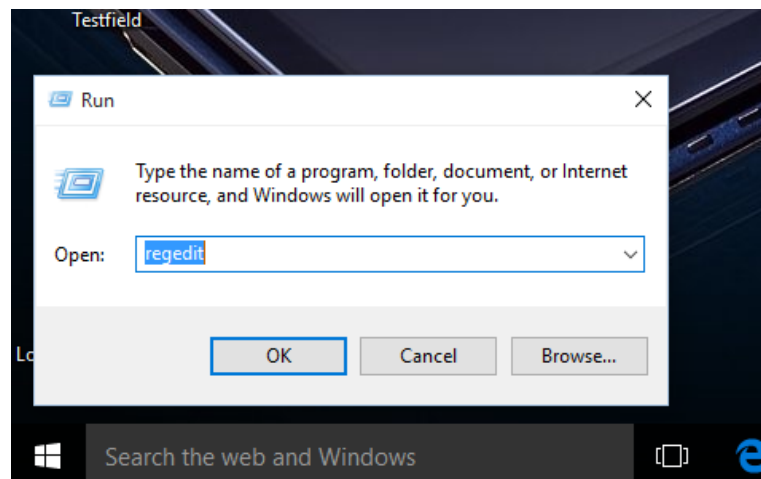
## 5. Procedure for graphic driver problems

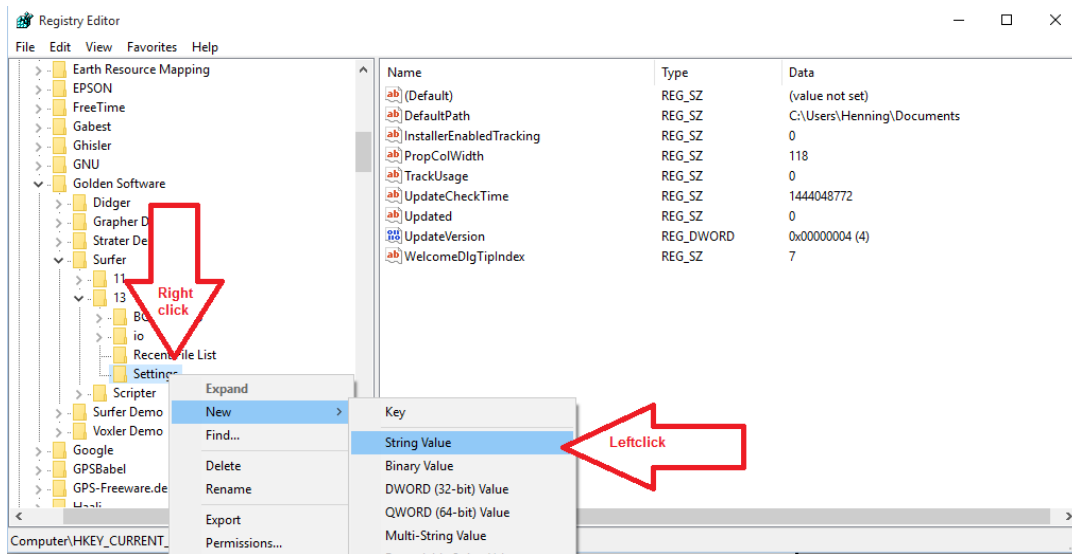
In some cases problems occurred with the graphic driver and surfer, showing display faults. Here comes a workaround:

Rightclick the Windows button. Click „Run“.

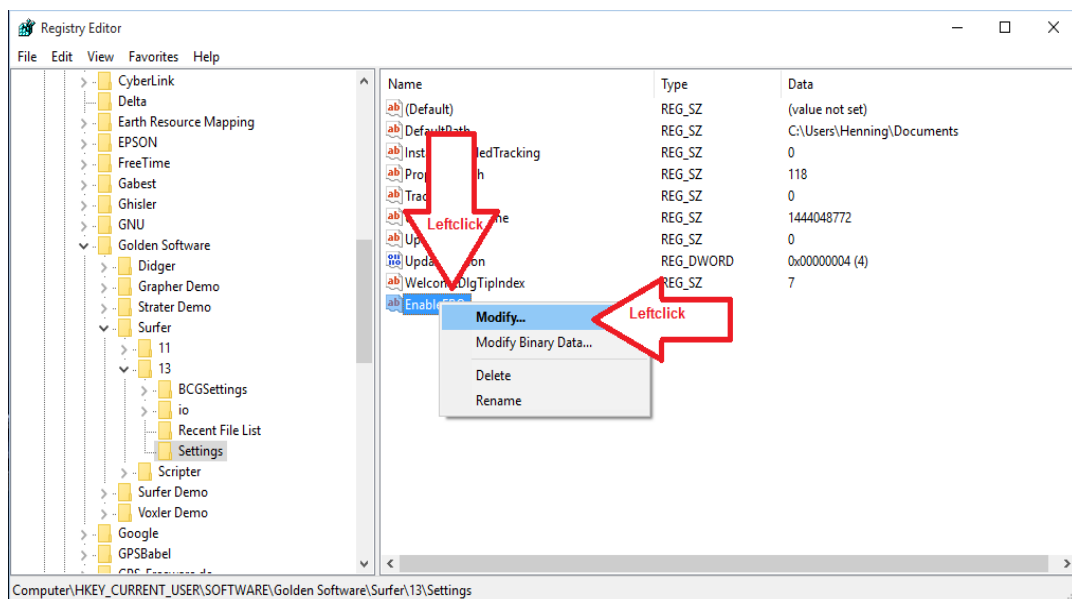
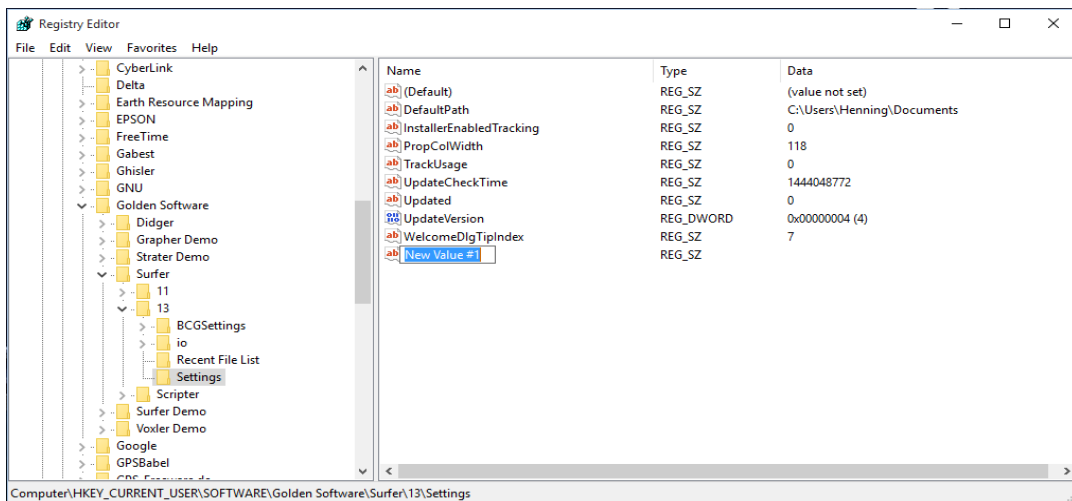


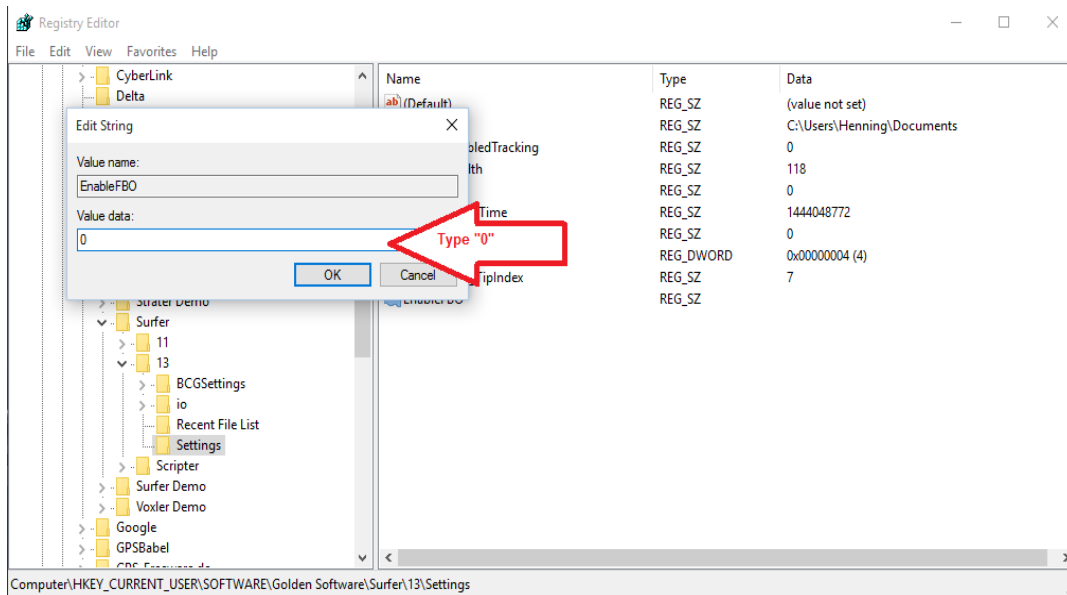
Type „regedit“, Click „OK“.



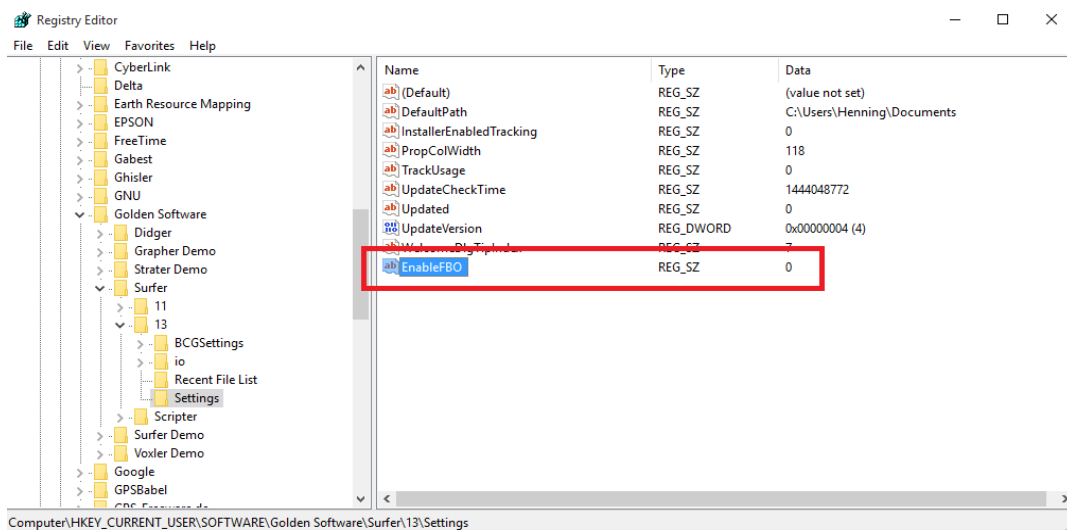


Type „EnableFBO“





At the end of all the regeditor should look like this:



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