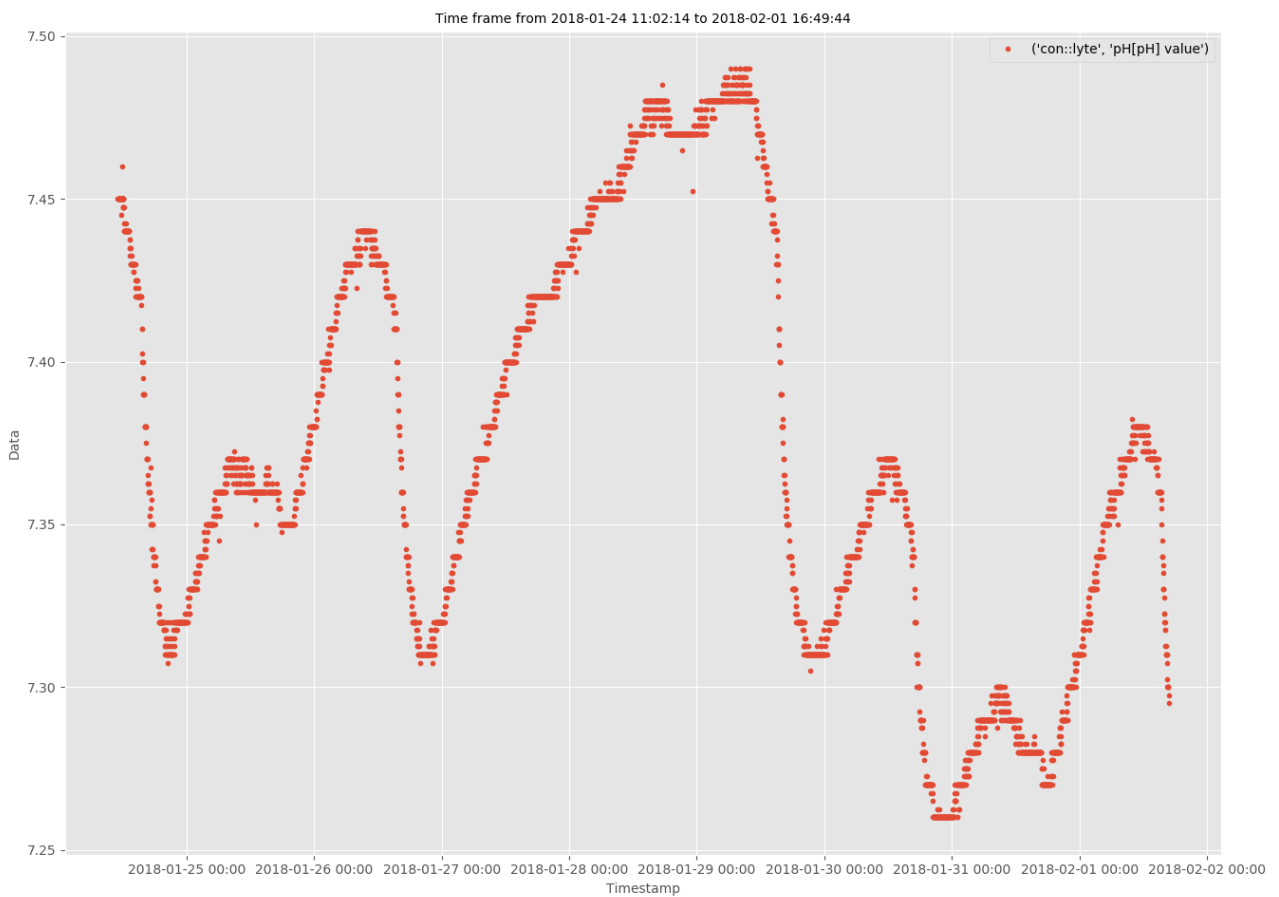




visu::tool – user manual



Data visualization tool for con::lyte timeseries data



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Table of contents

1	Introduction	3
2	Installation	3
2.1	Option A: Using the Installer	3
2.2	Option B: Using the Distribution Folder	5
3	Load data	6
3.1	Load data: drag-and-drop	6
3.2	Load data: open directory dialogue	7
3.3	Load data: open recent directory	7
4	Data structure	8
5	Plot Timeseries	9
5.1	Plot Timeseries	9
5.2	Plot Timeseries Subplot	10
6	Graph navigation tools	11
7	Write timeseries data to Excel file	12
8	Further hints	13

1 Introduction

This manual describes the features of visu::tool – Data Visualization tool by s::can Messtechnik GmbH.

2 Installation

visu::tool may be installed on your local file system using the installer file (option A, recommended) provided by your distribution partner, or, alternatively by copying the installation folder to your local file system (option B).

2.1 Option A: Using the Installer

Double-click the installer .exe file to run the installer. The Setup wizard will guide you through the installation process.

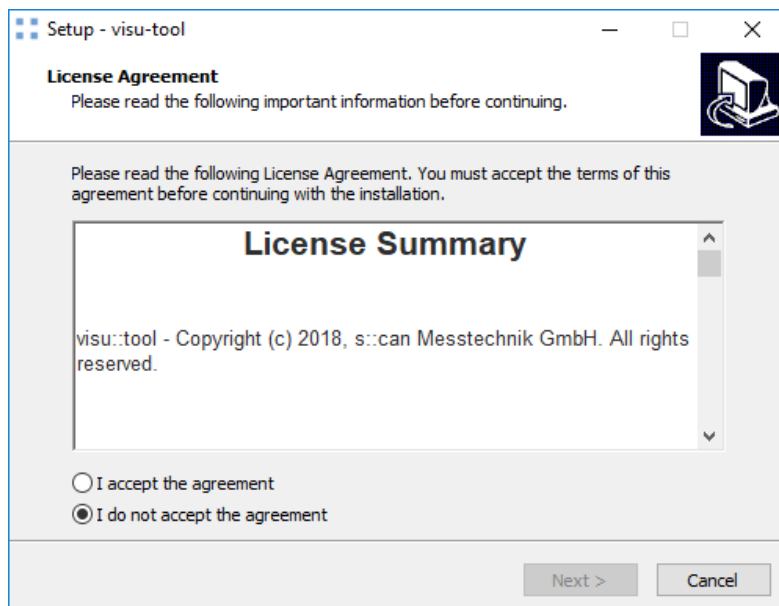


Figure 1: Read and accept the license agreement

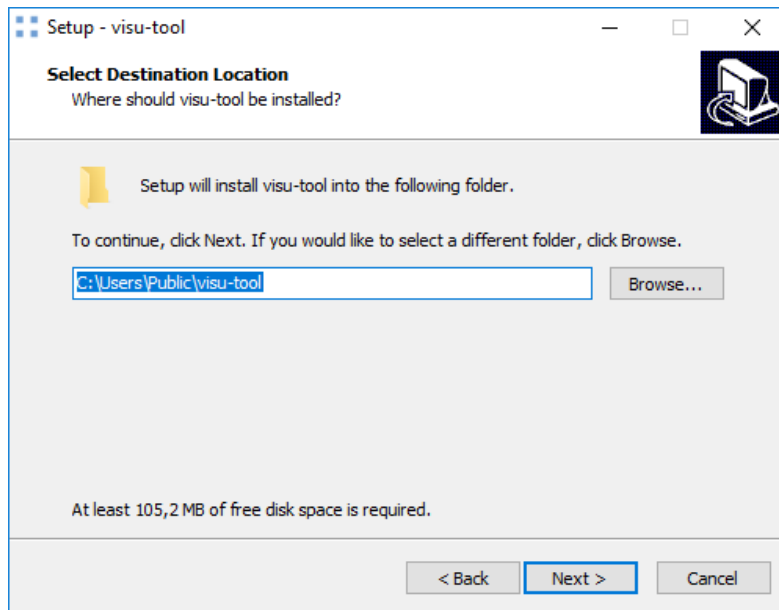


Figure 2: Select the installation folder or proceed with the default directory (recommended)

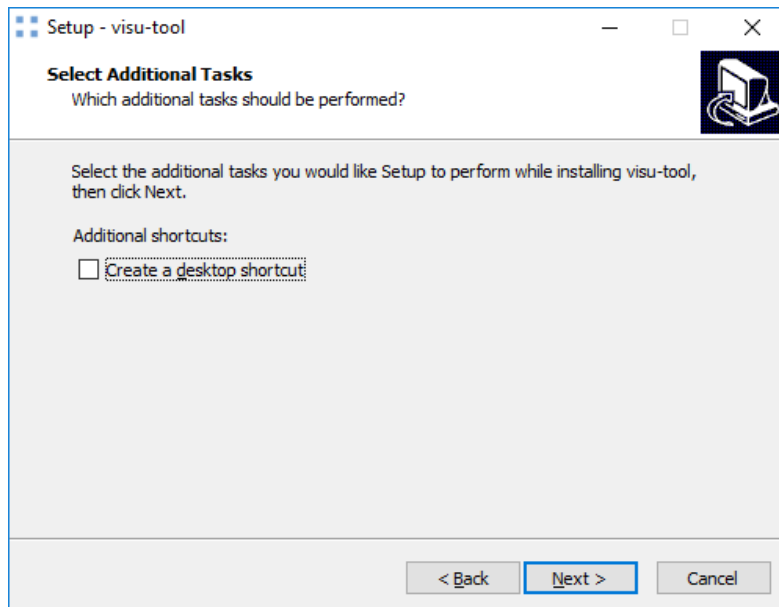


Figure 3: optionally create a desktop shortcut

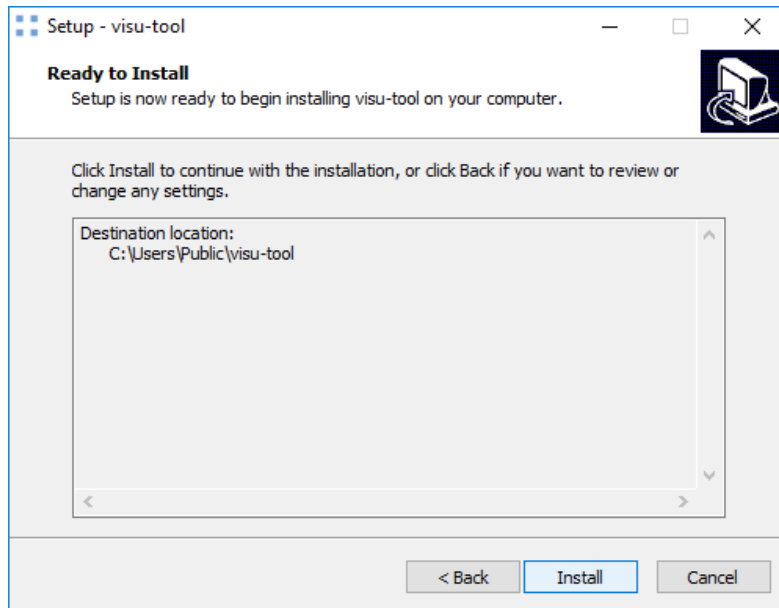


Figure 4: Hit „Install” to start the installation

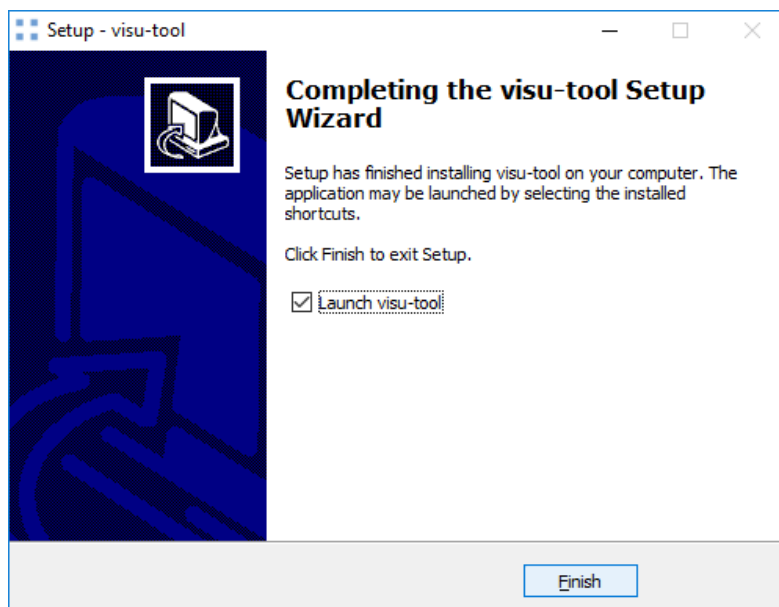


Figure 5: Launch visu::tool to test your installation

2.2 Option B: Using the Distribution Folder

This option may be used if you do not have permissions to install program on your system.

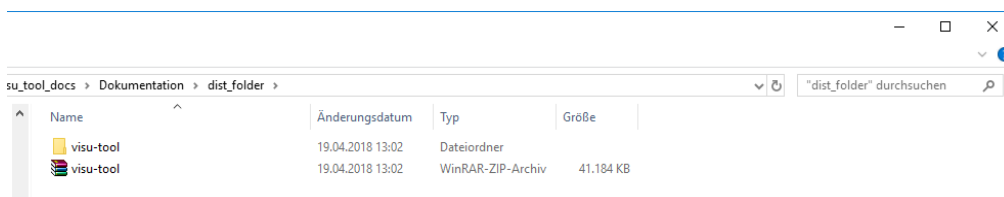


Figure 6: unpack the compressed visu::tool archive and copy it to a folder somewhere on your system

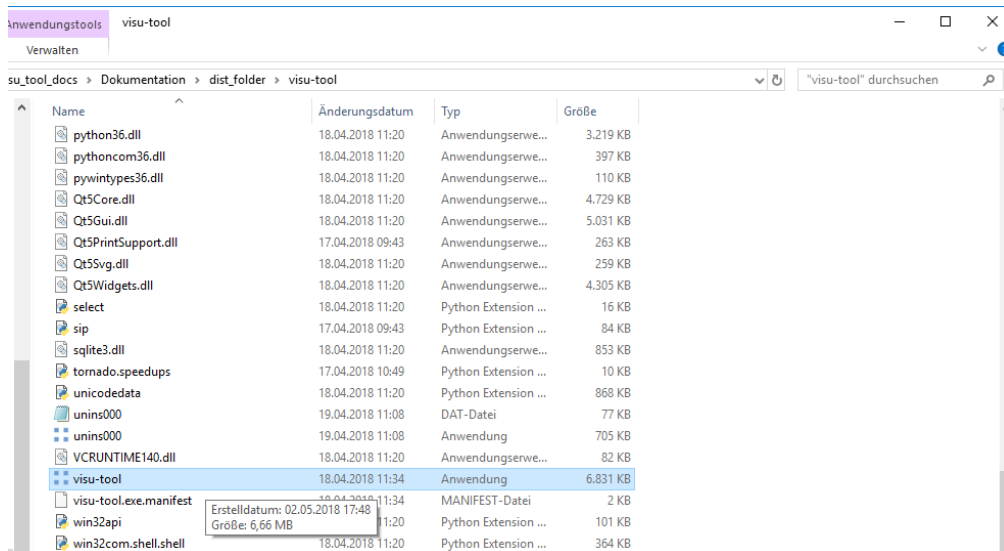


Figure 7: open the visu-tool folder and run visu-tool.exe to start the application

3 Load data

visu::tool always loads data from one folder specified by the user. The folder may be loaded into visu::tool via drag-and-drop or via the open directory dialogue.

3.1 Load data: drag-and-drop

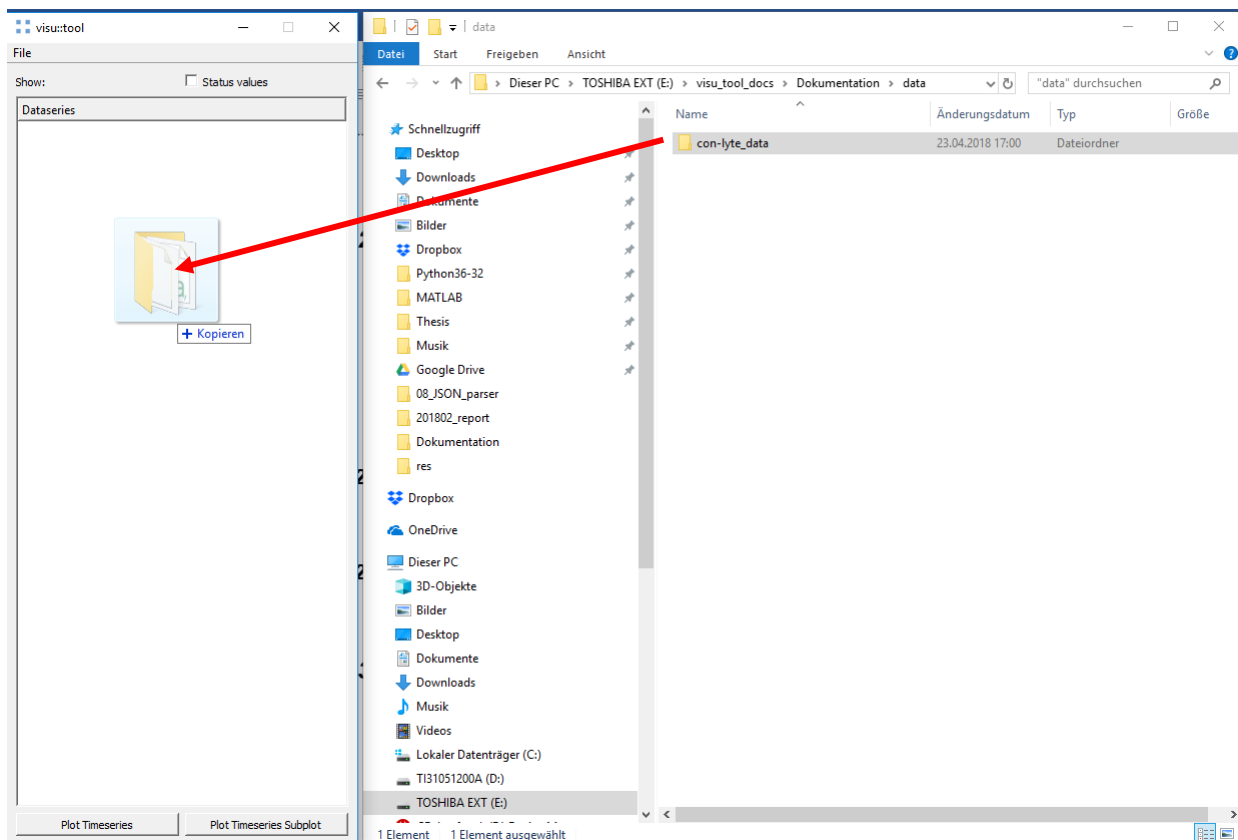


Figure 8: Hit your left-mouse button on a folder that contains con::lyte data and drag the folder into the visu::tool main window

3.2 Load data: open directory dialogue

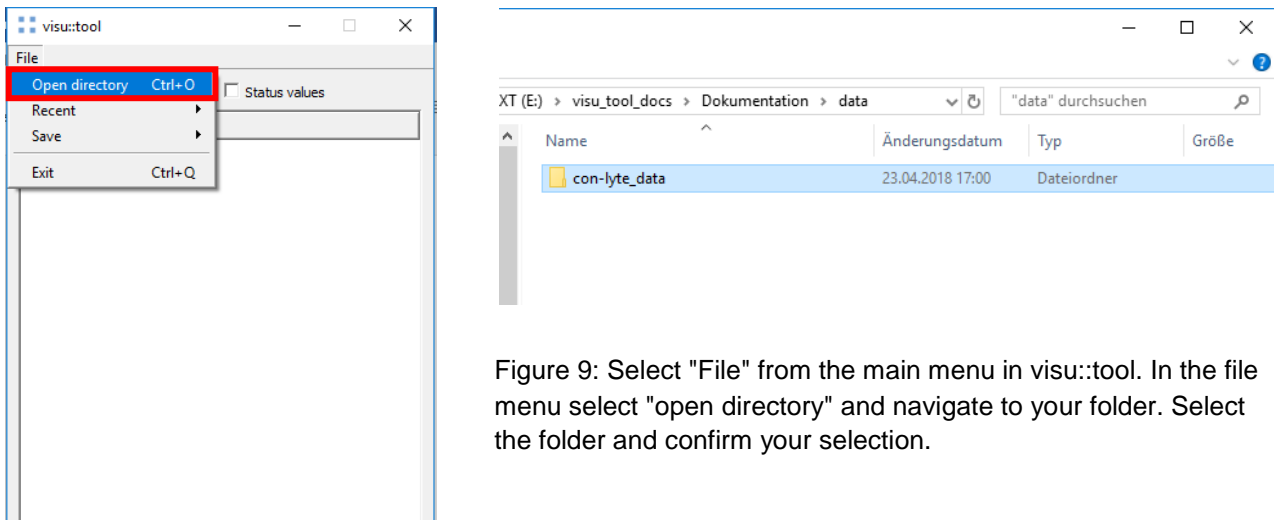


Figure 9: Select "File" from the main menu in visu::tool. In the file menu select "open directory" and navigate to your folder. Select the folder and confirm your selection.

3.3 Load data: open recent directory

For loading data into visu::tool, one may also select from a list of previously selected directories for convenience. To do so, select "Recent" from the main directory and select from among a folder path given in the list.

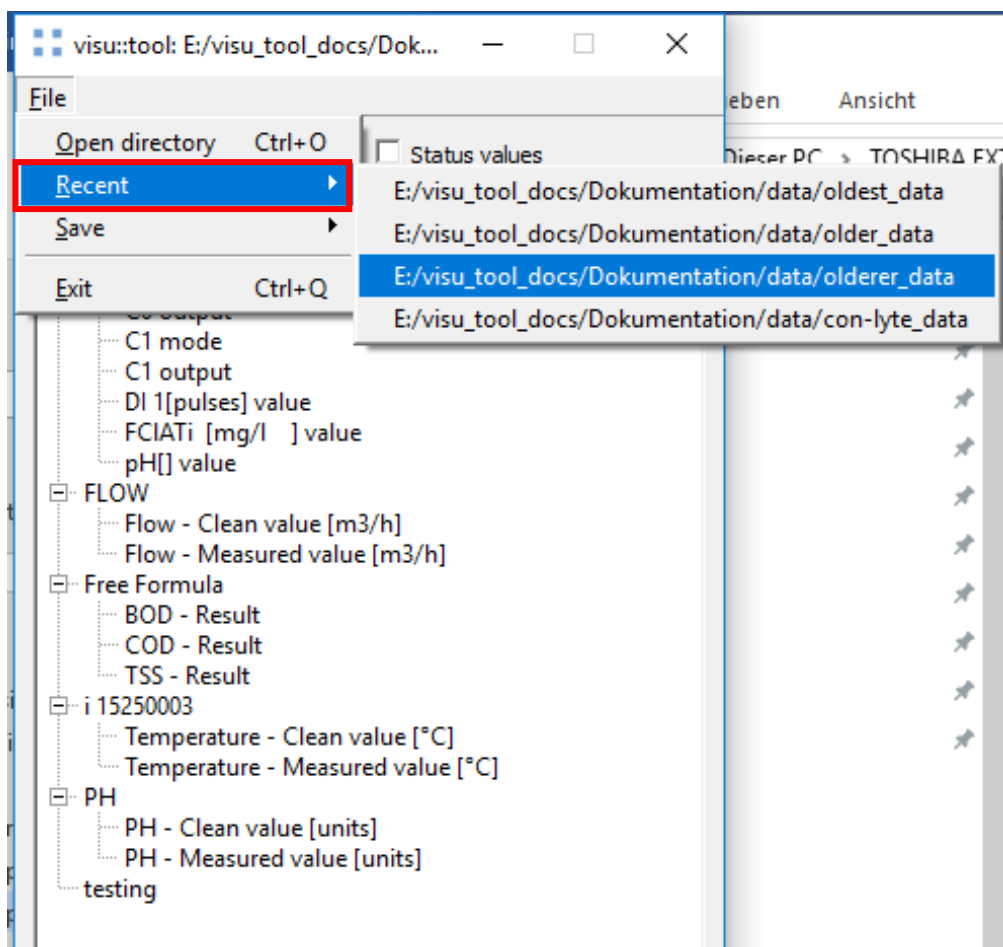


Figure 10: Load data from a previously selected folder

4 Data structure

Once the data is loaded, you will see a tree view like this one:

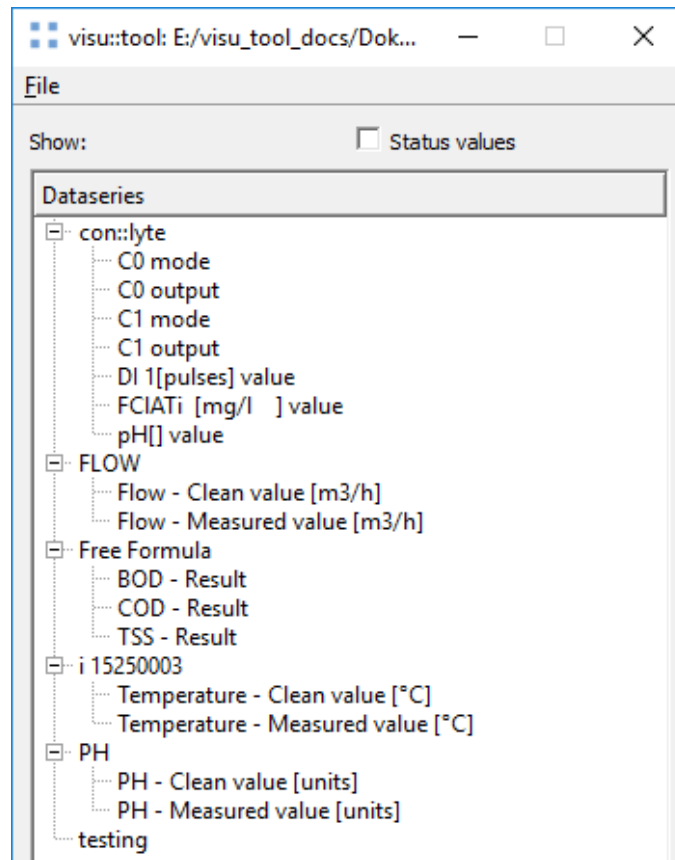


Figure 11: Loaded timeseries tree representation

Every item in the tree represents a timeseries object that can be selected and plotted. All timeseries are grouped in categories where every category represents the sensor of origin.

5 Plot Timeseries

Finally, it is time to plot our data. You are free to select as many timeseries as you like for plotting. To select a timeseries left-click it with your mouse. To deselect it, left-click it once again.

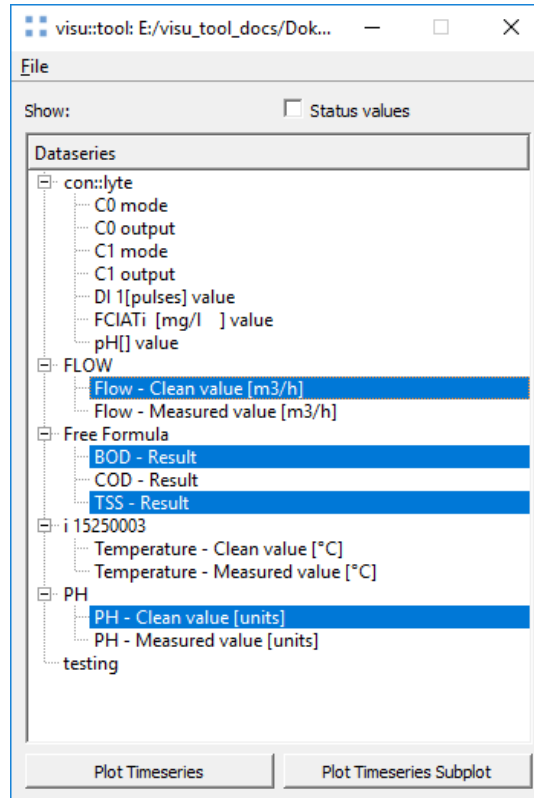


Figure 12: Loaded data with 4 selected timeseries

5.1 Plot Timeseries

Once you have selected the timeseries of interest, hit “Plot Timeseries” at the bottom left of the main window to create the graph.

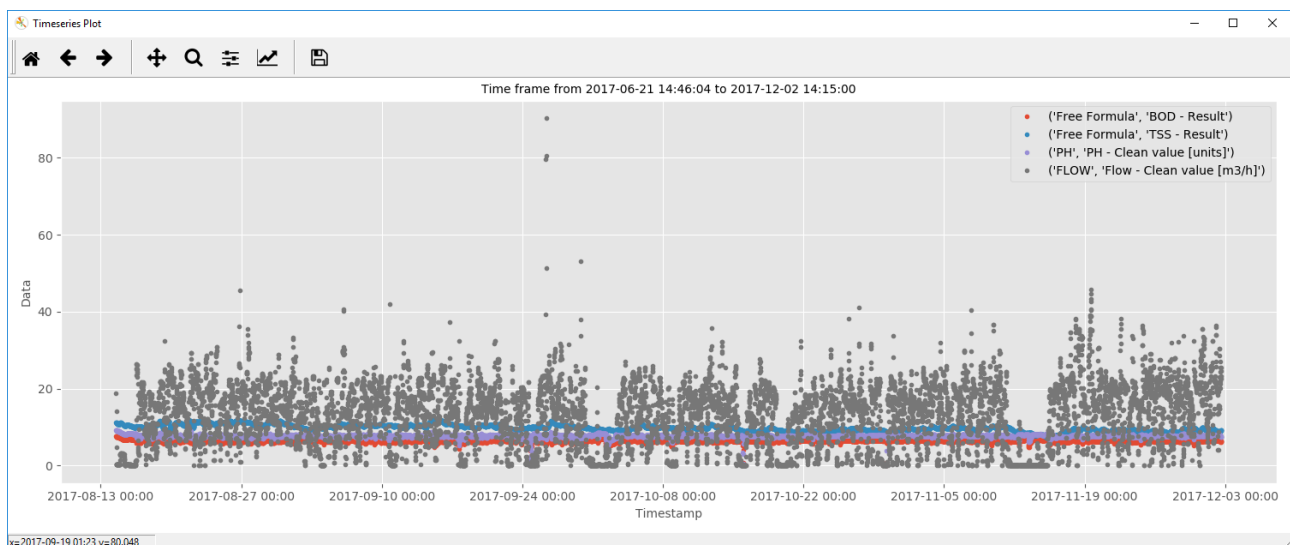


Figure 13: Four timeseries plotted in one graph window

5.2 Plot Timeseries Subplot

You may also decide to plot all selected timeseries in separate graphs. To do so, hit “Plot Timeseries Subplot” at the bottom right of the main window.

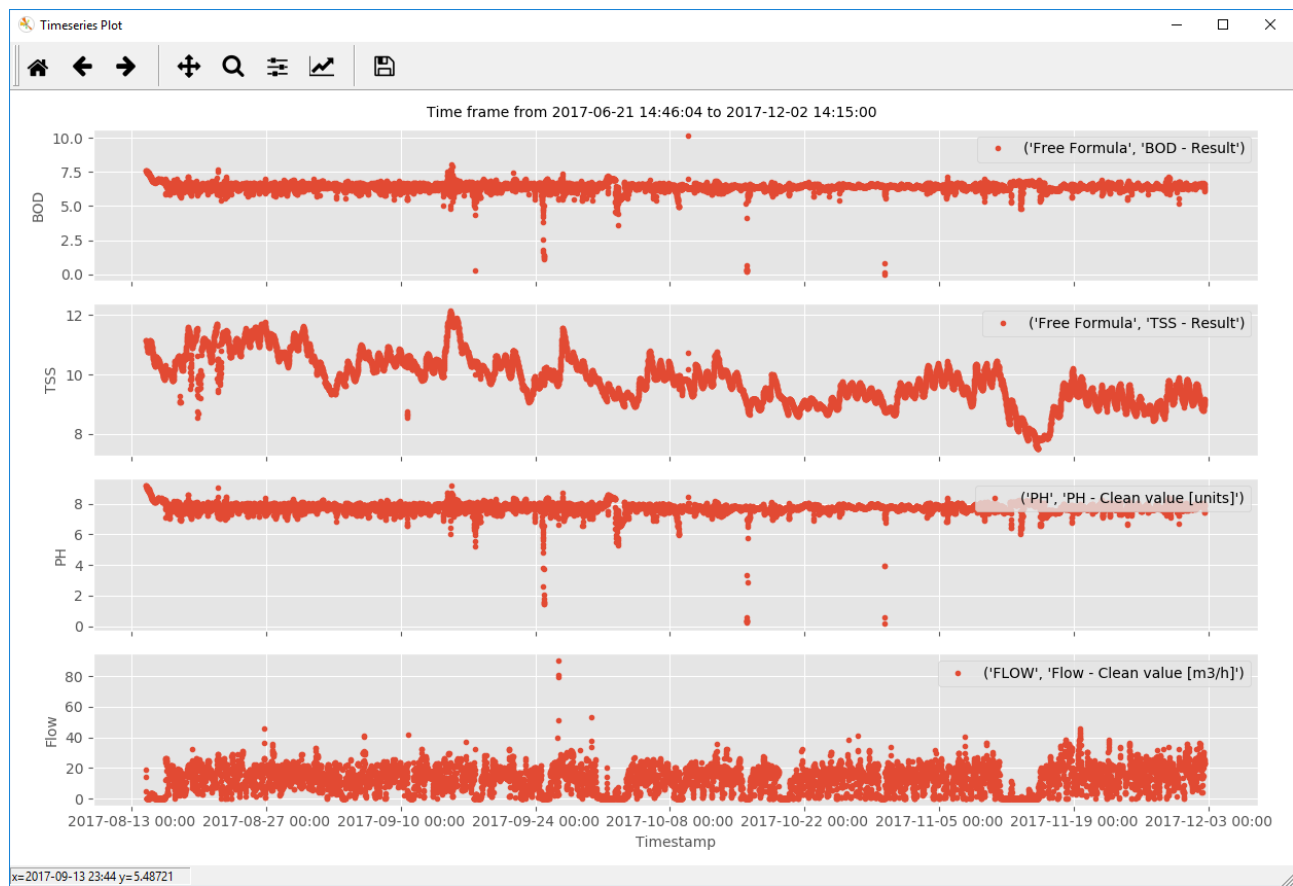


Figure 14: Four timeseries in separate graphs

6 Graph navigation tools

To drill into your timeseries data, there exist a number of tools in the top left of every plot window.

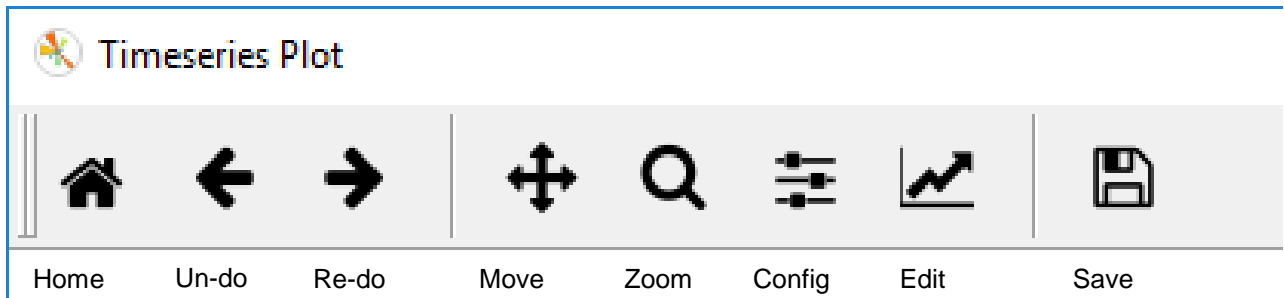


Figure 15: Tools available in every plot window

Home: The house icon restores the original view that is shown when the graph is first loaded

Un-do: The left arrow restores the previous view of the graph

Re-do: The right arrow restores the view from before the undo operation

Move: The move-cross lets you move the graph axes with your left mouse button pressed

Zoom: The magnifying glass lets you zoom with your left mouse button

Config: The configurations icon lets you configure the boundaries of the graph inside the window

Edit: The edit axis icon enables axis labelling and configuration, and marker size and colour adaptation

Save: The save icon lets you export the graph to an image file

7 Write timeseries data to Excel file

Select File from the main menu and select Save. You can either store all timeseries selected, or write all timeseries loaded to an Excel file.

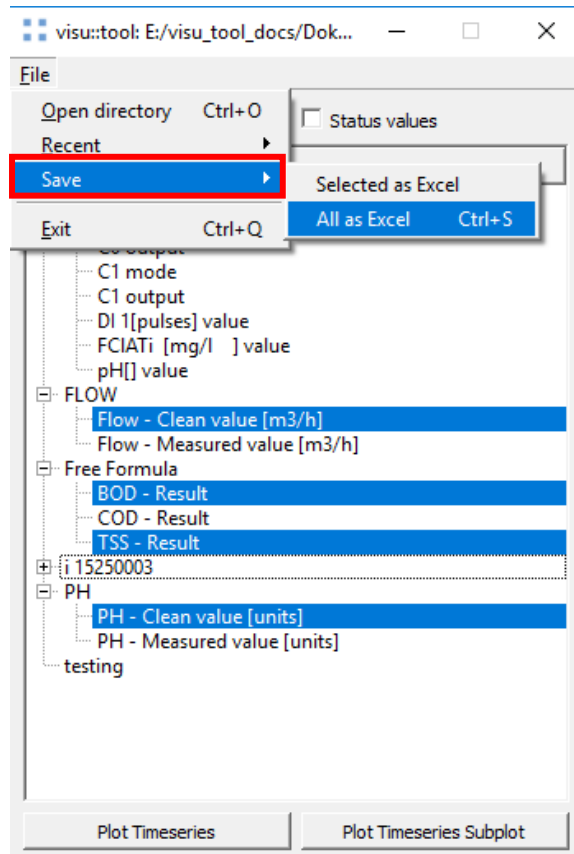


Figure 16: Save timeseries data to Excel

	A	B	C	D	E	F	G
1		Free Formula	i 15250003	Free Formula		FLOW	PH
2	DateTime	COD - Result	Temperature - Measured value [°C]	TSS - Result	BOD - Result	Flow - Measured value [m3/h]	PH - Measured value [units]
3	2017-12-01 22:00:00	50.84	28.6	9.43	6.57	22.18	7.91
4	2017-12-01 22:15:00	50.62	28.4	9.38	6.57	20.27	7.92
5	2017-12-01 22:30:00	50.62	28.4	9.38	6.58	22.56	7.93
6	2017-12-01 22:45:00	50.51	28.4	9.36	6.59	22.18	7.94
7	2017-12-01 23:00:00	50.4	28.3	9.34	6.59	21.6	7.94
8	2017-12-01 23:15:00	50.28	28.2	9.32	6.59	20.84	7.94
9	2017-12-01 23:30:00	50.28	28.2	9.32	6.59	21.6	7.94
10	2017-12-01 23:45:00	50.17	28.2	9.3	6.59	21.6	7.94
11	2017-12-02 00:00:00	50.06	28.1	9.28	6.58	20.46	7.93
12	2017-12-02 00:15:00	49.95	28.1	9.26	6.58	22.18	7.92
13	2017-12-02 00:30:00	49.84	28	9.24	6.58	21.6	7.92
14	2017-12-02 00:45:00	49.84	28	9.24	6.57	24.46	7.92
15	2017-12-02 01:00:00	49.62	27.9	9.2	6.56	26.94	7.91
16	2017-12-02 01:15:00	49.62	27.9	9.2	6.56	31.54	7.91
17	2017-12-02 01:30:00	49.51	27.8	9.18	6.56	36.31	7.91
18	2017-12-02 01:45:00	49.4	27.8	9.16	6.57	37.26	7.91

Figure 17: Timeseries Excel output file example

8 Further hints

Copy ["CTRL"+"C"] in a plot window and paste ["CTRL"+"V"] in a word file to quickly get a graph into a word report.

Every Plot opens in a separate window and it is possible to open multiple plot windows at the same time.

Since visu::tool smartly concatenates all timeseries in a folder if they share the parameter name and the sensor name, the tool may also be used to concatenate con::lyte timeseries that are stored in different files.

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