

imc FAMOS 7.4

What is new

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Foreword

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imc FAMOS Update Info	4
1 imc FAMOS Update-Info (Version 7.4)	4
1.1 Sequence-Editor	4
1.2 Panel	4
1.3 User-defined dialogs	5
1.4 Projekte	6
1.5 File-Browser	6
1.6 Data-Format	7
1.7 Curve window	7
1.8 Functions	9
1.9 Miscellaneous	11

imc FAMOS Update Info

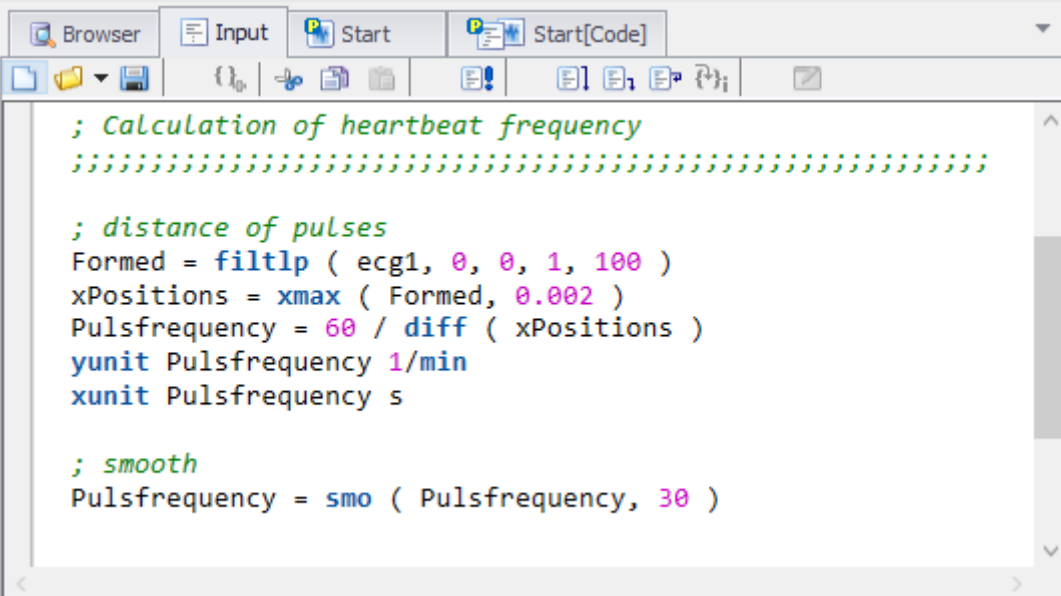
This chapter lists all new features and changes implemented with this version.

A **complete history of the update information** of all versions can be found in the **CHM help** under "C:\Program Files\imc\imc\imc FAMOS Version\Hlp\de\imc_FAMOS_WhatsNew.chm". This is also part of the help, which you can open with F1 in imc FAMOS.

1 imc FAMOS Update-Info (Version 7.4)

1.1 Sequence-Editor

The Sequence-Editor has been completely revised.



```

; Calculation of heartbeat frequency
;::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::

; distance of pulses
Formed = filtp ( ecg1, 0, 0, 1, 100 )
xPositions = xmax ( Formed, 0.002 )
Pulsfrequency = 60 / diff ( xPositions )
yunit Pulsfrequency 1/min
xunit Pulsfrequency s

; smooth
Pulsfrequency = smo ( Pulsfrequency, 30 )

```

The following improvements, among others, have been implemented:

- Code folding of code-blocks: The system recognizes the blocks by keywords for program flow control (e.g. WHILE, FOR, IF, END). Furthermore, any lines of comment beginning with ";< " or "> " are recognized as the beginning, or respectively ending of possible code folding.
- Improved saving options for syntax coloring (bold, cursive, underlines). The style of the program flow control keywords can be set separately.
- Improved Search function: Searches for regular expressions, marking of all search term locations found in the text, list of most recent patterns for search/replacement
- Moving of breakpoints and bookmarks by means of mouse
- Rectangle zone selection of Editor content.
- Copying in HTML-format for any desired regions (previously, only whole lines)
- The use of keyboard shortcuts has been completely revised.

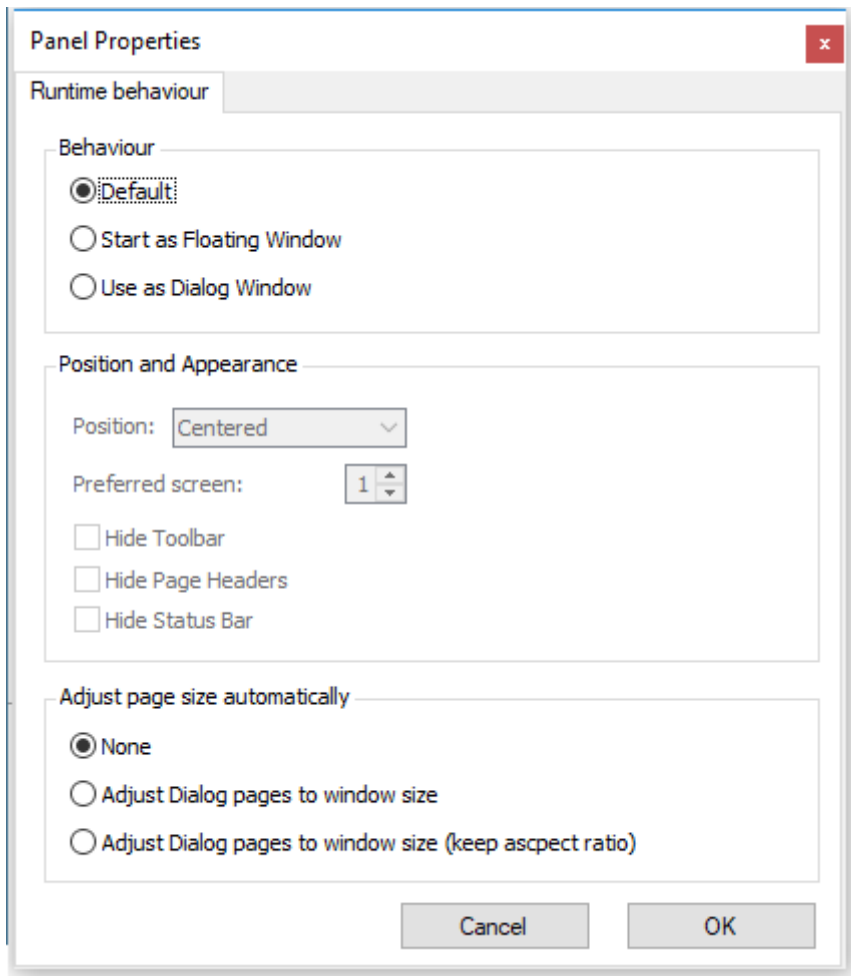
1.2 Panel

1.2.1 Password protection

Panels can now be protected by a password. This protects the underlying programming from third parties.

1.2.2 Panel-dialog

Panels can now be used as dialogs. This means that they can be run modally, like user-defined dialogs. For this purpose, additional options have been implemented in the Panel-settings.



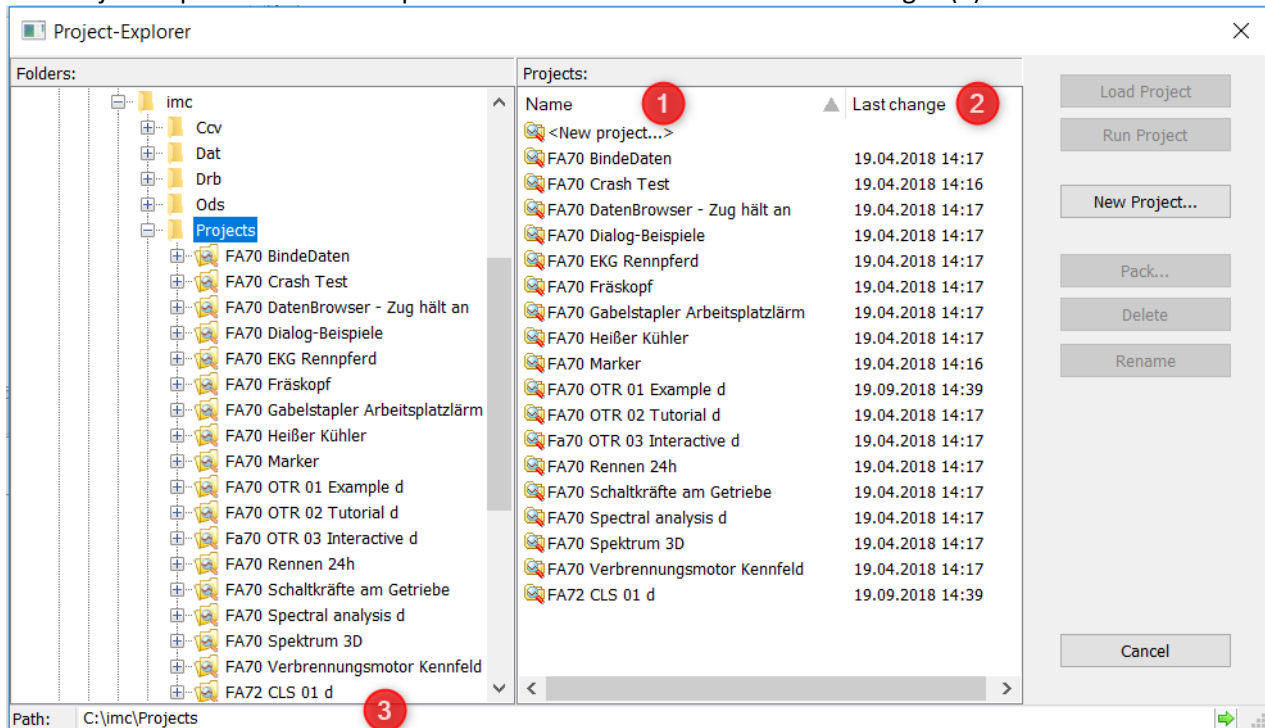
1.3 User-defined dialogs

- New element: Radiogroup
An associated group of radio buttons, which select mutually exclusive alternative options.
- Support of the Tab-key for alternating the focus among the elements

1.4 Projekte

1.4.1 Project-Explorer

The Project-Explorer has been expanded with the column Date of last changes (2).



1.4.2 Project properties and configurations

It is now possible to specify various configurations as additional features of the project:

1. ASCII/EXCEL-import-configurations (*.ascimp) created with the ASCII/EXCEL-Import Assistant
2. ASCII/EXCEL-export templates (*.aet)
3. File Assistant import filters (*.fas)
4. DLL-declaration files for the external DLL-interface (*.def)
5. Definitions for data sources
6. Definitions for derivative import filters

These are saved along with the project and no longer require extra transferal when a project is transferred.

1.5 File-Browser

The new option "*Simplified display for folder tree diagram*" **accelerates** the construction of the folder hierarchy structure.

This option is found under "*Options*" / "*Browser*" / "*Data sources*".

In particular when there are network drives and folder structures with many subfolders, this makes the process of setting up the tree diagram much faster.

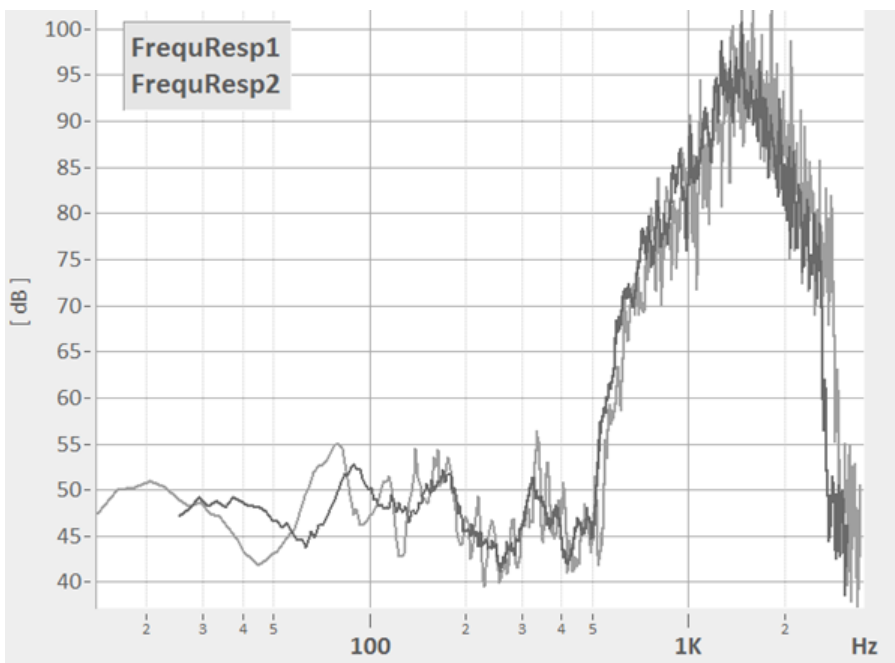
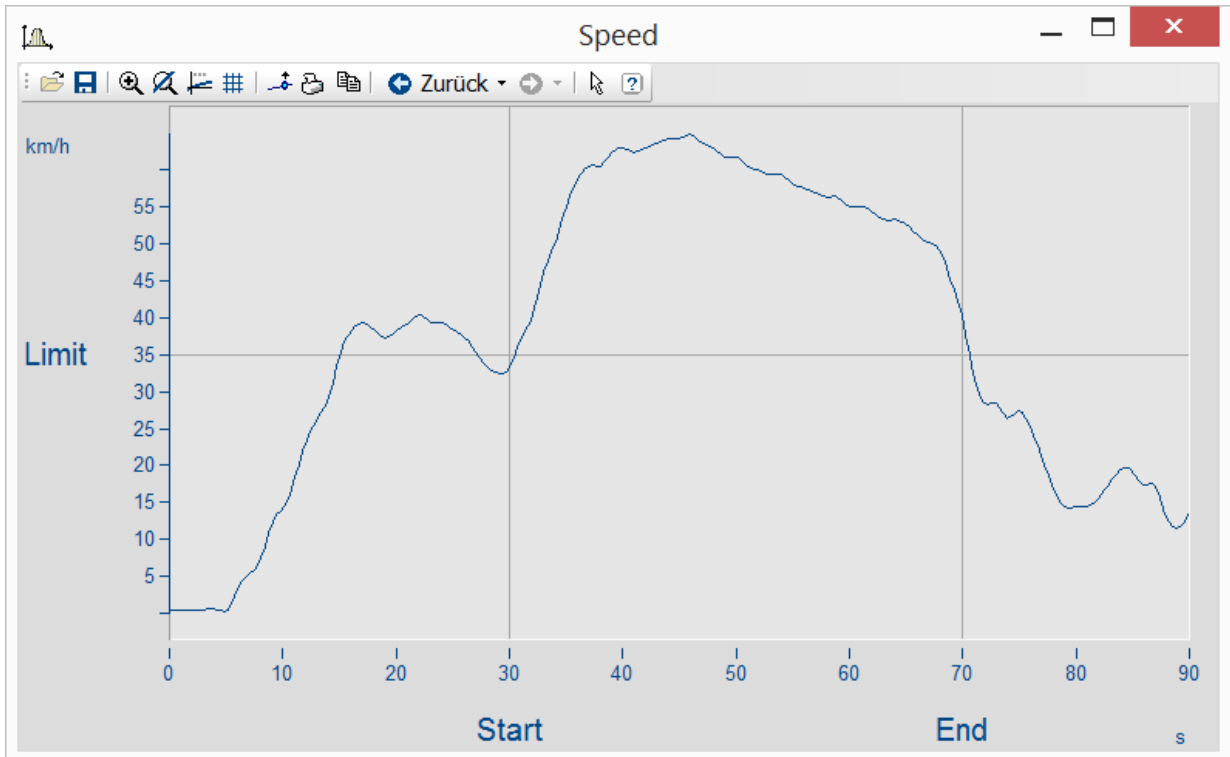
1.6 Data-Format

The new imc3 data format has been implemented.

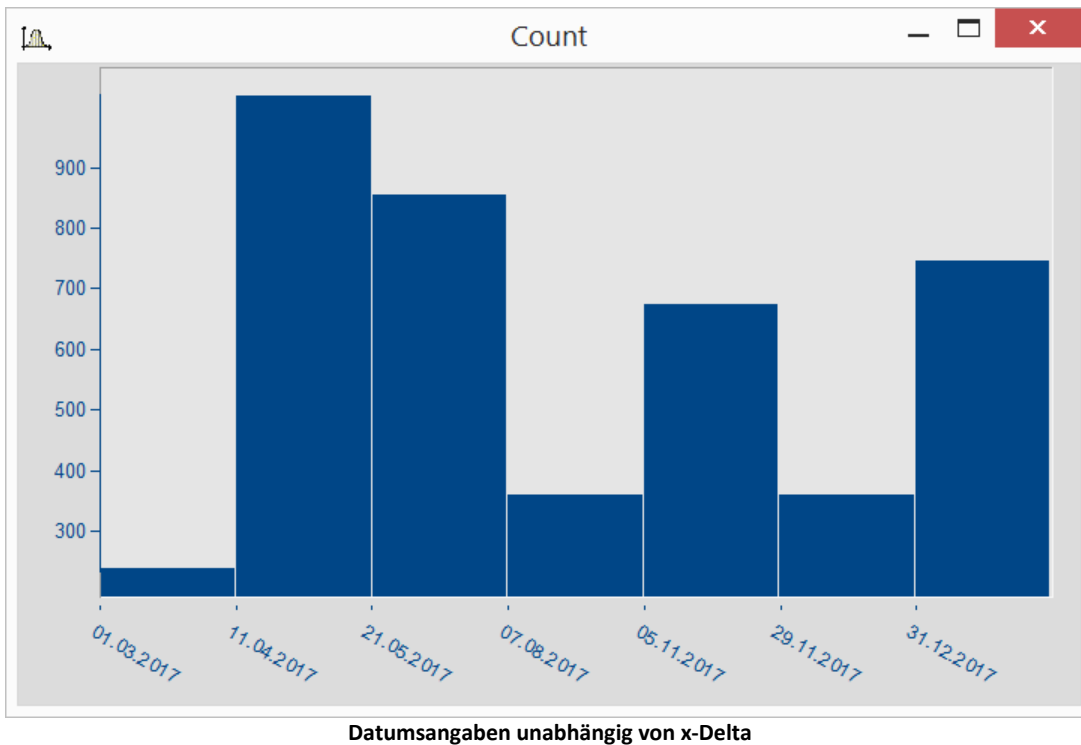
- Faster display of large files in particular when using 64-bit

1.7 Curve window

User Ticks



Beliebige Formatierung z.B. bei log. Darstellung



Datumsangaben unabhängig von x-Delta

The axis settings have been supplemented with the tab "User Ticks". This allows extra ticks with labels to be inserted. The font size, -style, -color, and text angle and position can be freely specified.

In this context, the Axis Arrangement page has been supplemented with the parameter "Axis width". Additionally, the units can be hidden.

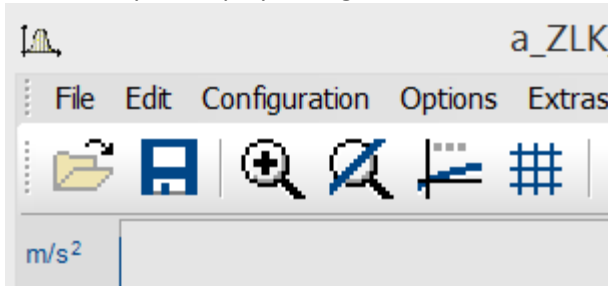
Legend

The font size for the legend is now adjustable.

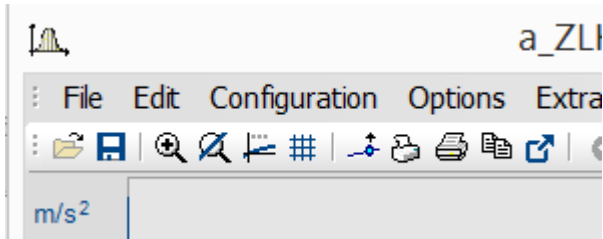
Toolbars

The size of the icons in the toolbars can be adjusted under *Extras\Menu and Toolbar\Adapt* on the page *Options -> Large Icons*.

For the purpose of clearer display at high resolutions e.g. on 4K monitors, the icons can now additionally be displayed larger.



large icons



small icons

Accelerated display

The display of very large data volumes has been accelerated.

1.8 Functions

New functions

- *Panel:*
 - *PnShowPage()*: Controls visibility and operability of a Panel page
 - *PnRemovePage()*: Deletion of a Panel page.
- *CutDt()*: Function for making excerpts from data sets. The parameters are the starting point in time and the length of the excerpted region. The length may even extend beyond the end of the data set.
- *GrExpand()*: Expands a data group
- Expanding of groups via menu command: It is also possible to expand groups having a measurement-based association (expanded channels are associated with the same measurement)
- *RenameMeasurement()*: A measurement's name can now be altered.
- New and enhanced **Excel-functions**
 - *XIWbOpen()* wit additional parameters (password)
 - *XIWbGetCount()*: Gets the count of currently open workbooks.
 - *XIWbGetName()*: Gets the name of an open workbook.
 - *XIWbExist()*: Checks whether a workbook of the specified name is currently open.
 - *XISheetGetCount()*: Gets the count of sheets in the active workbook.
 - *XISheetGetTitle()*: Gets the title of a sheet in the active workbook.
 - *XISheetExist()*: Checks whether the active workbook contains a sheet having the specified title.
 - *XISheetInsertCopy()*: Inserts the copy of a sheet into the active workbook.
 - *XISheetMove()*: Changes the position of a sheet in the active workbook or moves a sheet from another workbook to the active workbook.
 - *XISheetRename()*: Renames a sheet in the active workbook.

- *XISelectRange()*: Selects a cell or a cell region.
- *XIGetSelectedRange()*: Excel: Gets region selected.
- *XIPaste()*: Inserts the content of the Clipboard into the active sheet.
- *XIFind()*: Searches for text in the current sheet.
- *XISheetSetOption()*: Sets display and print options for the current sheet.
- New and enhanced **Spectral Kit-functions**
 - *SDOF_Response()*: The SDOF (single degree of freedom system) is agitated according to the acceleration plot provided. The Response is determined.
 - *Sharpness()*: The sharpness [*acum*] is determined from the specific loudness [*sone/Bark*].
 - *ShockResponseSpectrum()*: Supplemented with new models, e.g. *pseudo velocity (PVSS)*
 - *LoudnessSpectrum()*, *LoudnessLevel()*: Updated in conformity to ISO 532-1:2017
- New in the **Order Analysis package**:
 - *OtrTimeOrderSpectrum()*: The order spectrum is determined from the plots of the vibration and the tacho-signal in over time.
- *SpeakText()*: Voice output of the specified text via the default audio output device.

The following functions have been enhanced

- *GetSystemInfo("Famos.IsKitAvailable", ...)*: Queries whether a particular expansion Kit is present.
- *SetOption("DLLImport.DefinitionFile", ...)*: Activation of definitions file for external DLL-functions via sequence
- *GetOption("Dir.DefinitionFiles")*: Returns the folder containing definitions files.
- *FileLoad()*: It is now also possible to use import filters which are currently deactivated.
- *Dialog()*: It is now also possible to specify a [Panel-file](#)⁵ which is run "modally".
- *FileOpenDSF()*, *FileSave()*, *FileLoad()* support the new imc3 format.
- *FileOpenFAS()* can now also use the "*imc/Text*" and "*imc/Video*"– formats when loading.
- The functions library of the Curve-Kit has been supplemented with the following parameters in accordance with the new [parameters](#)⁷.

CwDisplaySet

legend.font.size

legend.font.style

CwAxisSet

count.userticks

userticks

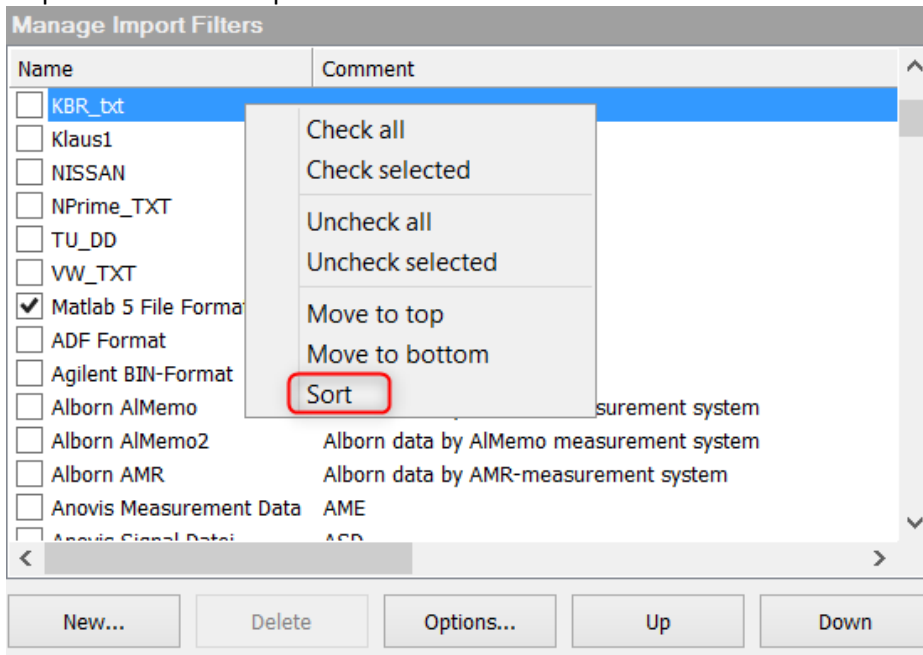
userticks.*

unit.visible

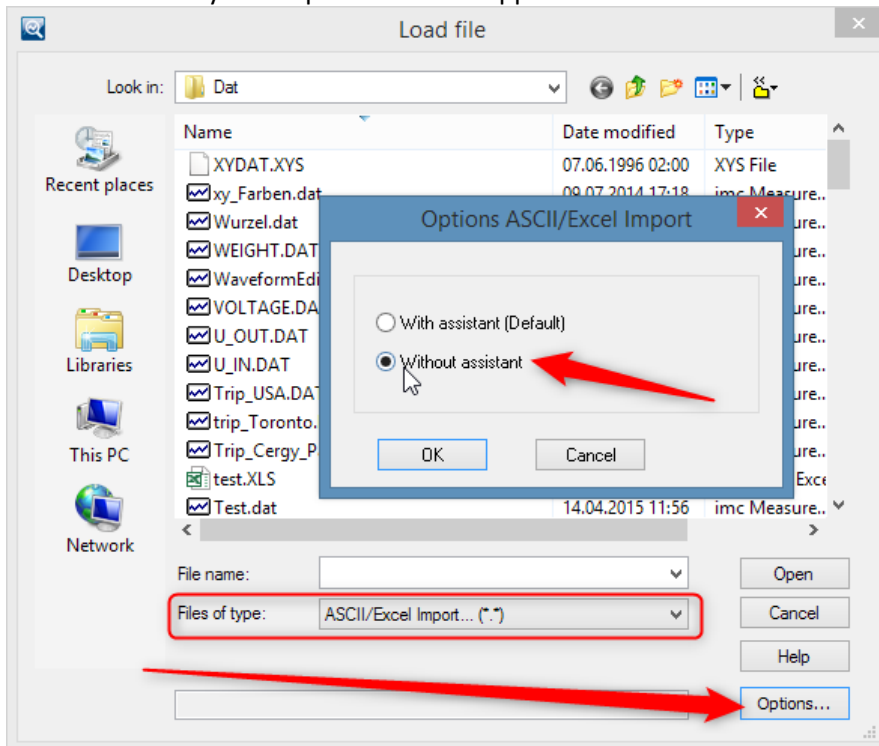
width

1.9 Miscellaneous

- **Dialog "Mange import filters"** : New command in the context menu: "Sort" – restores the default sequential order of import filters.



- **ASCII/EXCEL Import Assistant**: Optionally, the data can now be loaded without opening the Assistant. The automatically found presets will be applied in this context.



Use of the ASCII/Excel imports with default settings, without the Assistant

- **Command line parameter "/I"**: The command line parameter for ignoring Kits has been supplemented with the following abbreviations:
 - "RKT" (R-Kit)
 - "RWY" (Railway-Kit)

- **Indexing of variables:** Using the indexer [*], data can now be replaced, without changing the properties Comment, User-defined properties, Filename/source, display-color and display Y-scaling.
- **Kits Registration:** Kits are now no longer de-selectable; instead all existing and licensed Kits are always loaded.