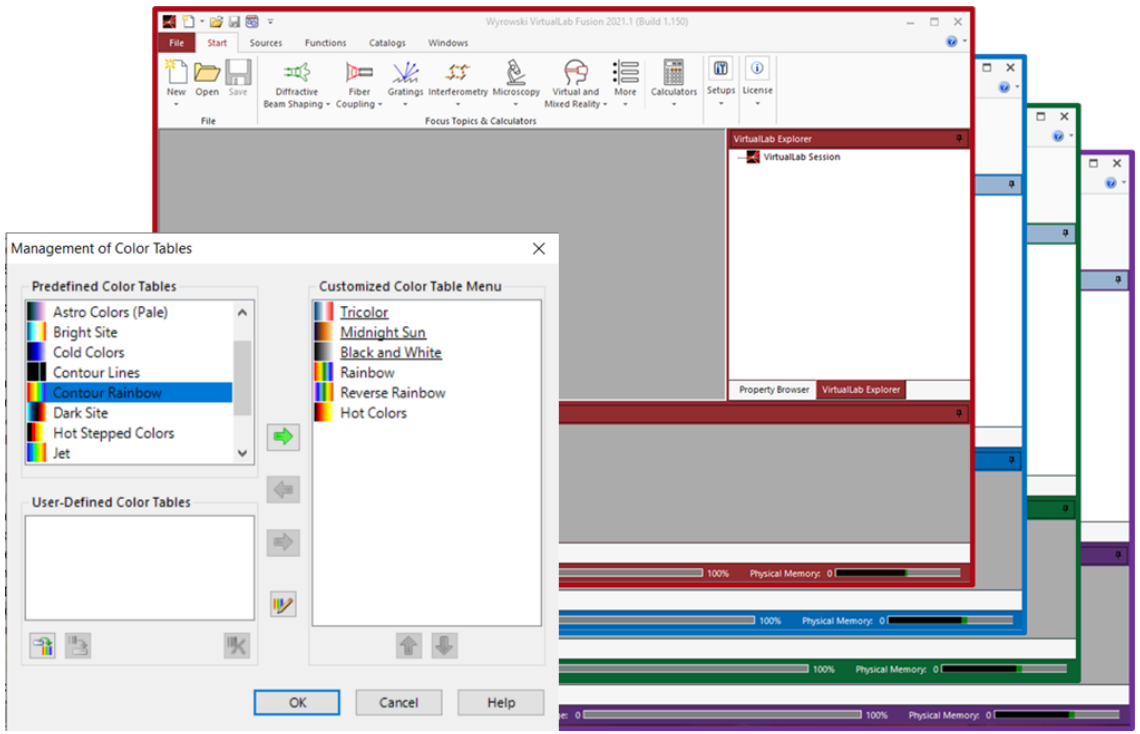
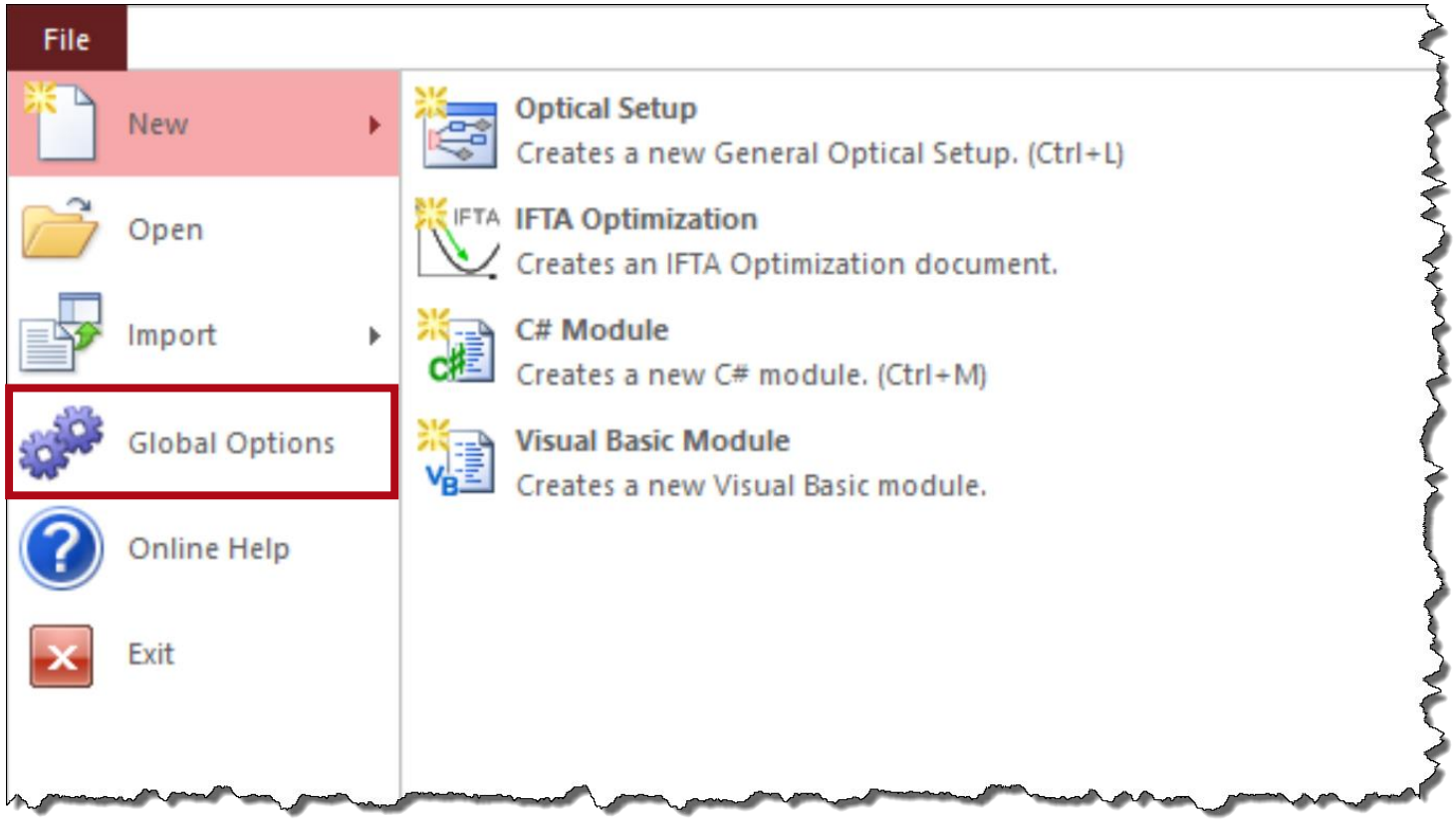
Personalization Settings for Visualization in VirtualLab Fusion

Abstract



The Global Options dialog in VirtualLab Fusion makes it easy to customize the look and feel of the software. It is also possible to save and load the Global Options file so that the preferred settings can be transferred easily from one device to another. This document illustrates the usage of the Global Options parameters that relate to visualization and the graphic display of results.

How to access Global Options

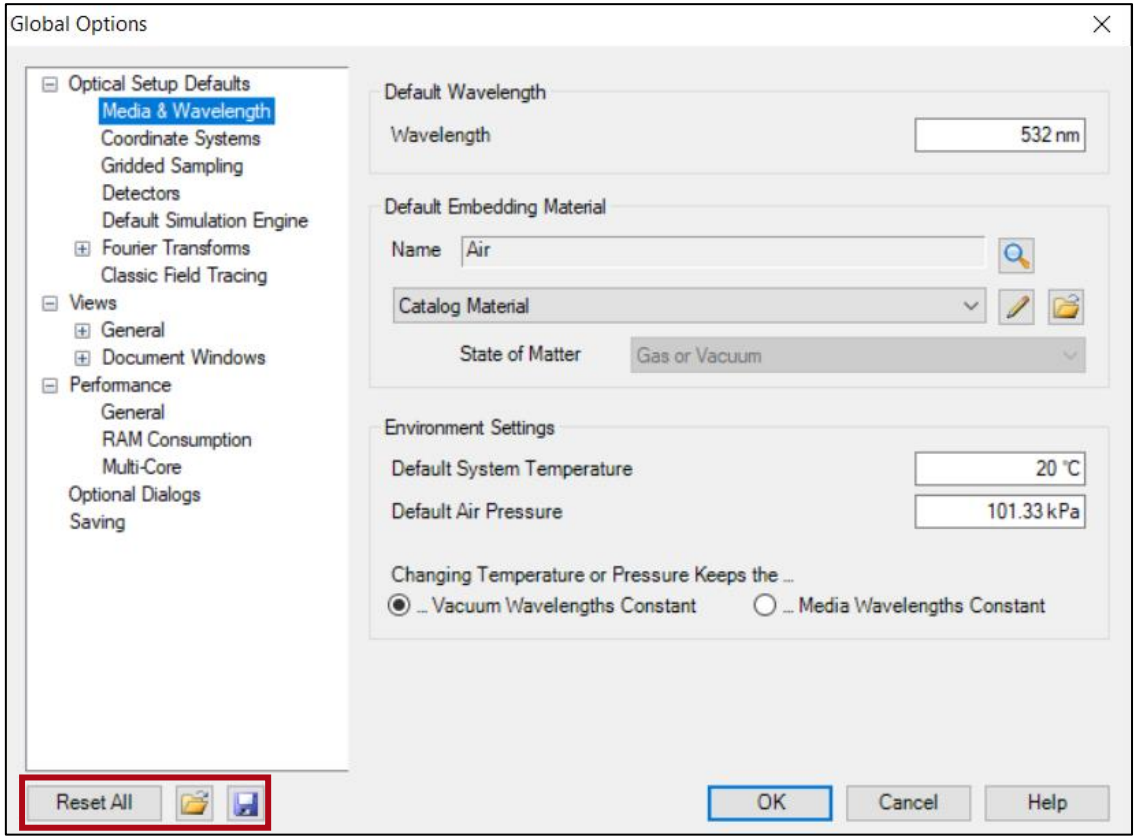


Go to the *File* menu at the top left corner of the main window and then to *Global Options.*

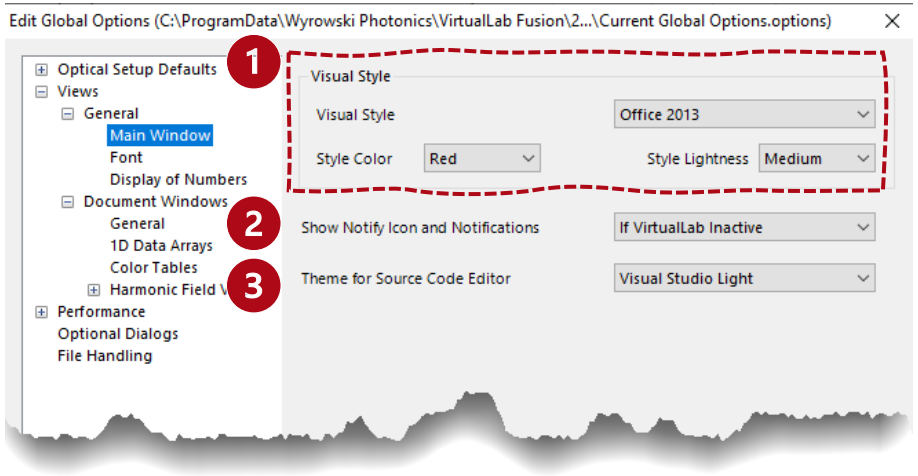
Loading & Saving the Global Options

After configuring all settings, except for the file paths in the *Saving* category, the global options can be reset, loaded, and saved with the following controls:

Item	Description
Reset All	Resets all global program options to their initial values.
Load Global Options	With this button you can load the Global Options from a file saved with the button.
Save Global Options	With this button you can save the Global Options into a .options file, either as backup or to transfer them to another computer.



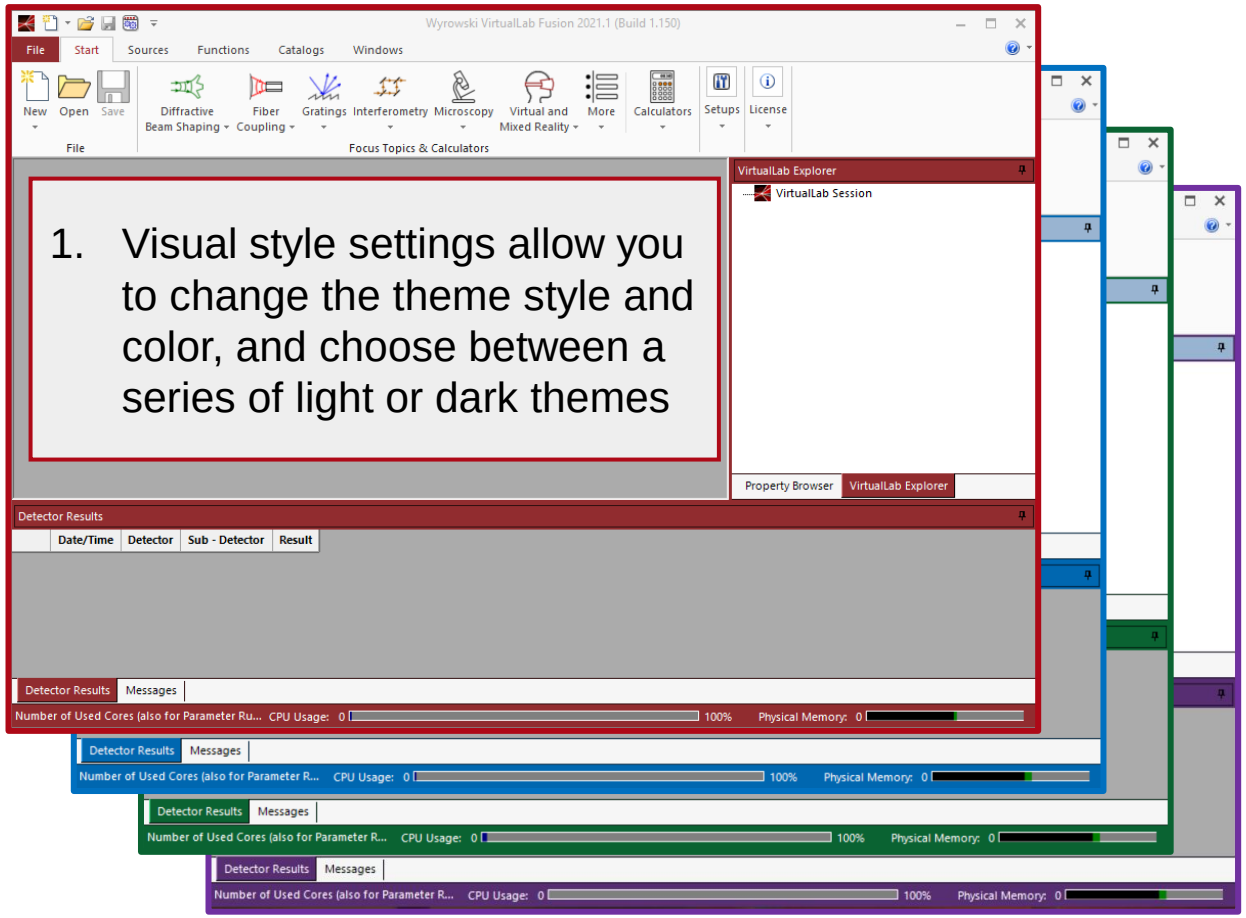
Main Window Settings



2. choose whether to always show notifications, only if VirtualLab is inactive, or not to show them at all

Note: notifications can also by switched off via Windows.

3. select the color scheme of the source code editor

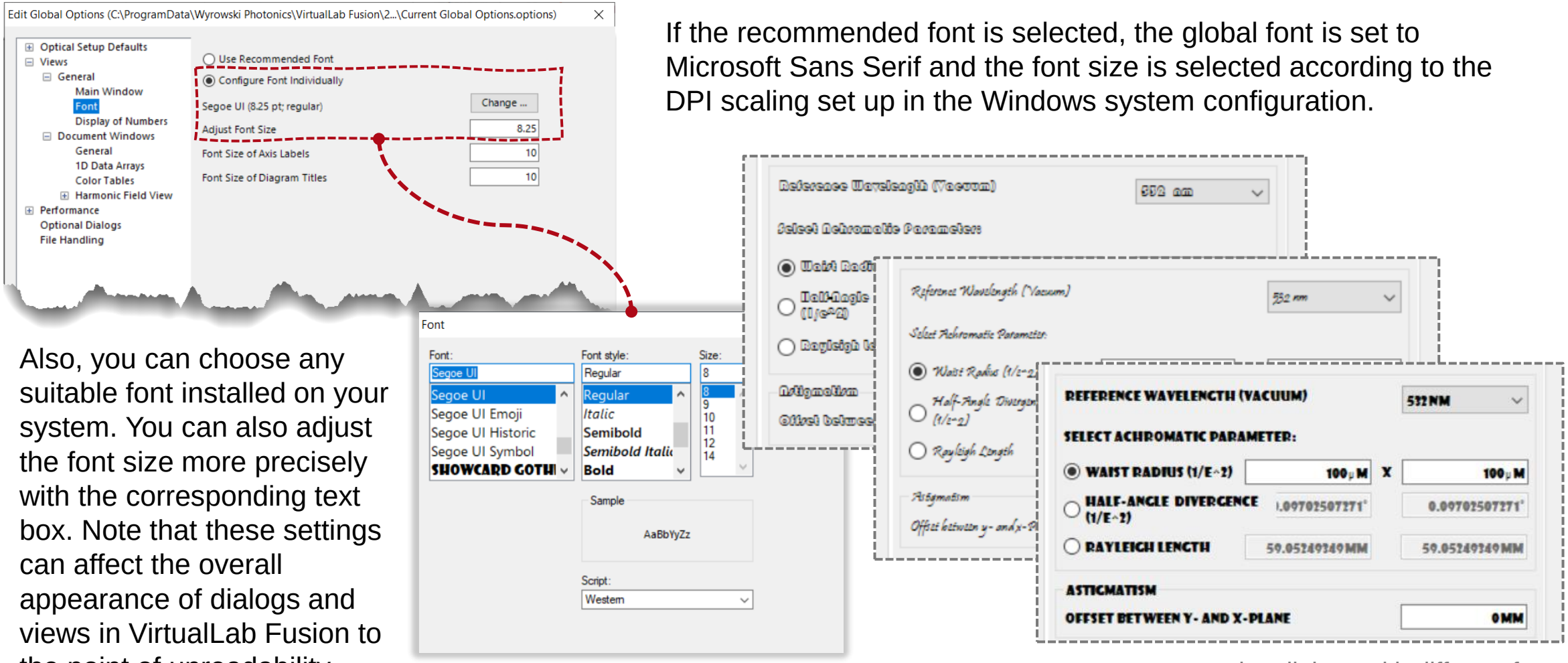


main window with different theme colors

Font Configuration

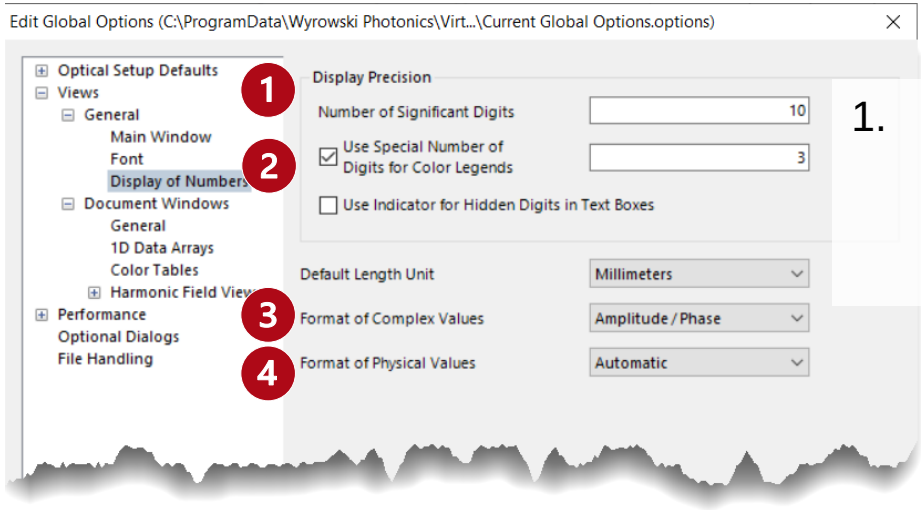
If the recommended font is selected, the global font is set to Microsoft Sans Serif and the font size is selected according to the DPI scaling set up in the Windows system configuration.

Also, you can choose any suitable font installed on your system. You can also adjust the font size more precisely with the corresponding text box. Note that these settings can affect the overall appearance of dialogs and views in VirtualLab Fusion to the point of unreadability.

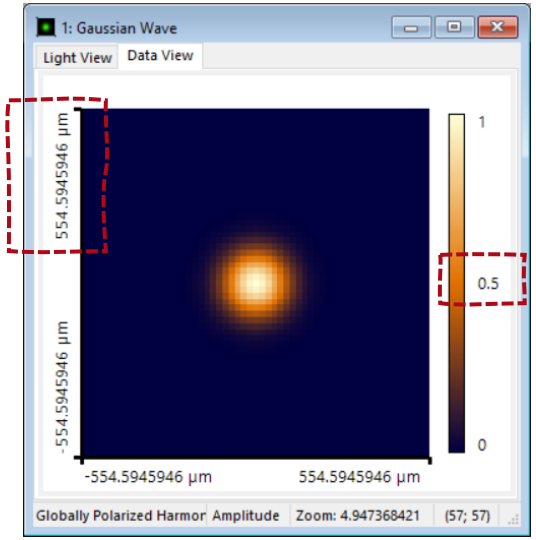


setting dialogs with different fonts

Display of Numbers



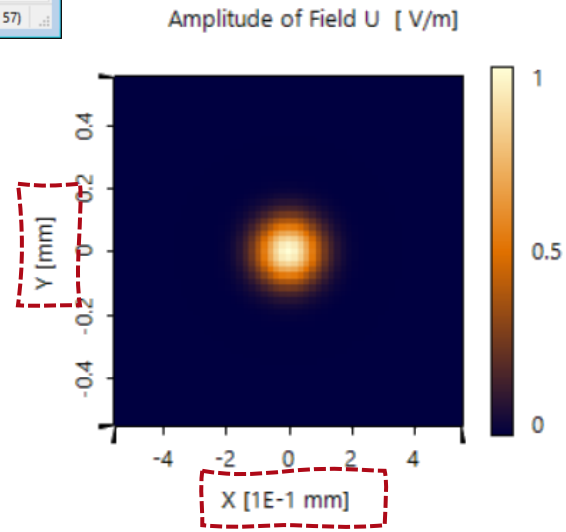
1. Default number of significant digits for displaying floating point numbers.



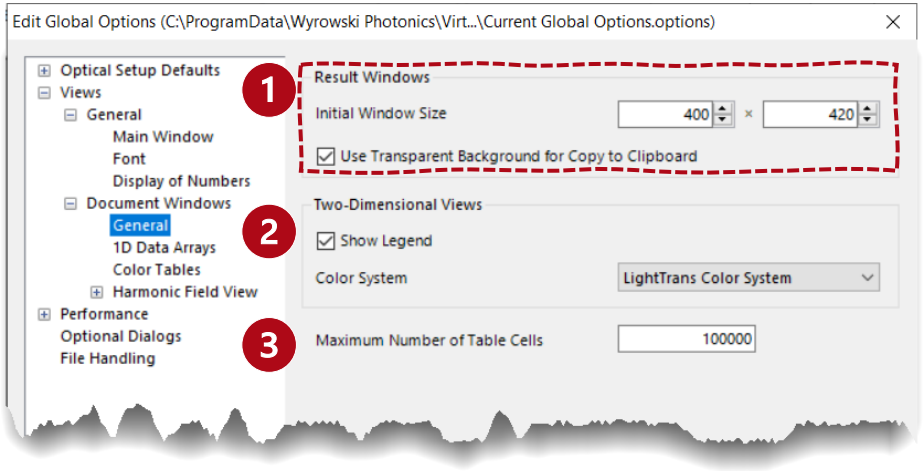
2. It is possible to configure this parameter independently for color legends.

3. Complex Values Format	Description	Example
Real Part / Imaginary Part	{real part} + i{imaginary part}	-776.2149313 + i241.0177765 mV/m
Amplitude / Phase	{amplitude} · exp({phase} · i)	812.7725316 · exp(2.8405 27313 · i) mV/m
PTF	({real part}, {imaginary part})	(-0.7762149313, 0.2410177765) mV/m
MATLAB	{real part}+{imaginary part}i	-776.2149313 + 241.0177765i mV/m

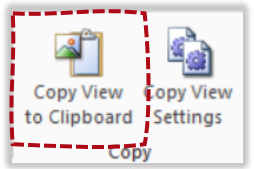
4. set physical value format to scientific (X-axis) or engineering convention (Y-axis)

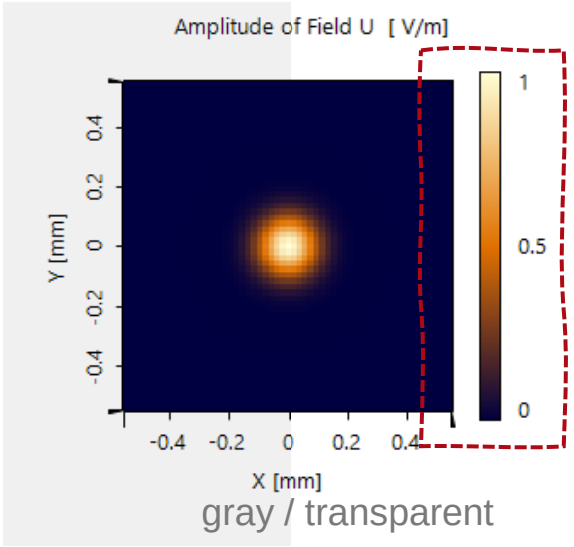


Document Window Settings



1. General settings for document windows allow you to define the initial window size in pixels for all newly created result windows. If you choose to use transparent background, the gray background of the view is replaced by a transparent color when *Copy View to Clipboard* operation is executed.

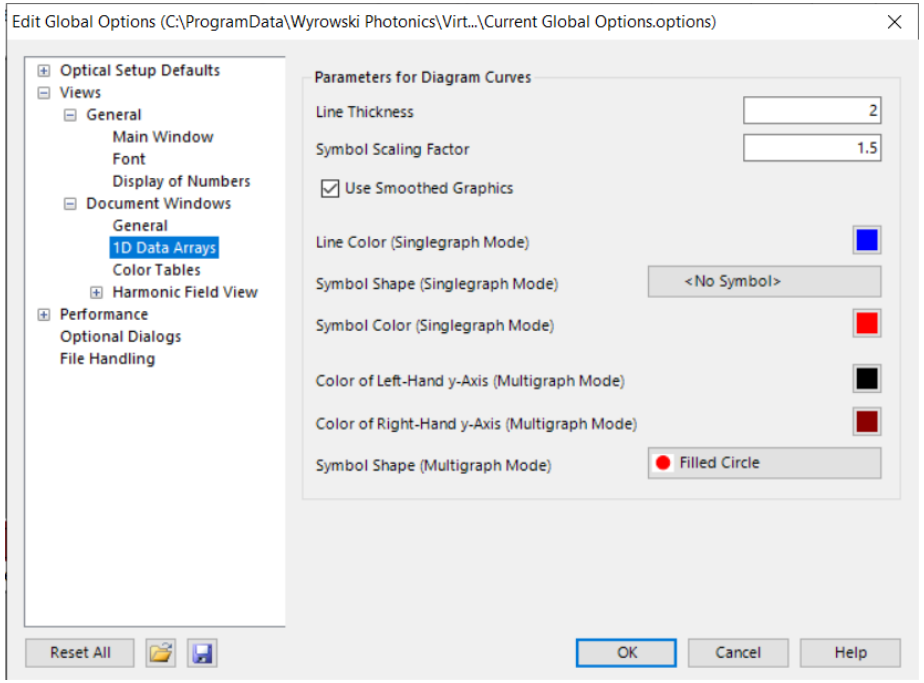


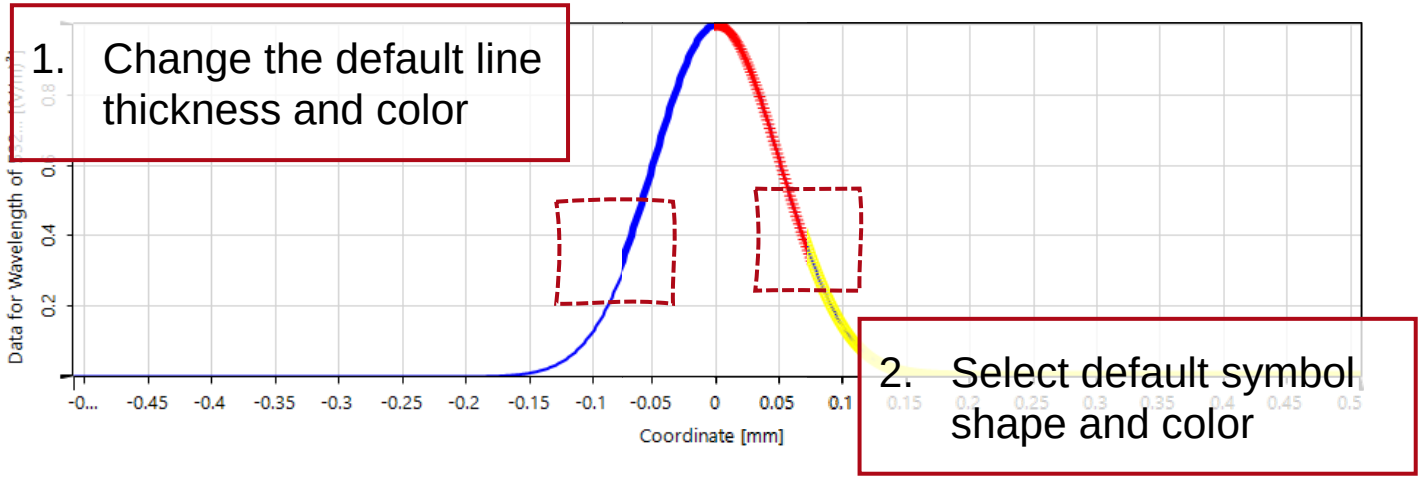


2. Set whether a color legend is visible per default or not. The color system can also be configured.

3. Maximum number of table cells that are displayed in the *Table* tab of a *Data Array's* view. If this value would be exceeded, no table is shown unless the user explicitly states to do so. This setting also influences the automatic resizing of table cells in certain tables: Only this number of cells is resized to the actual content, all other cells use a good estimate. This can increase performance significantly.

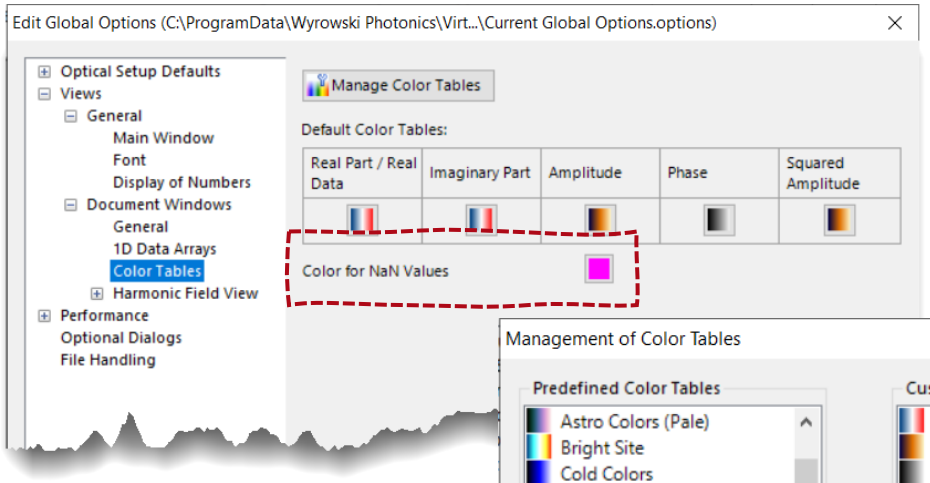
1D Data Array Visualization Settings

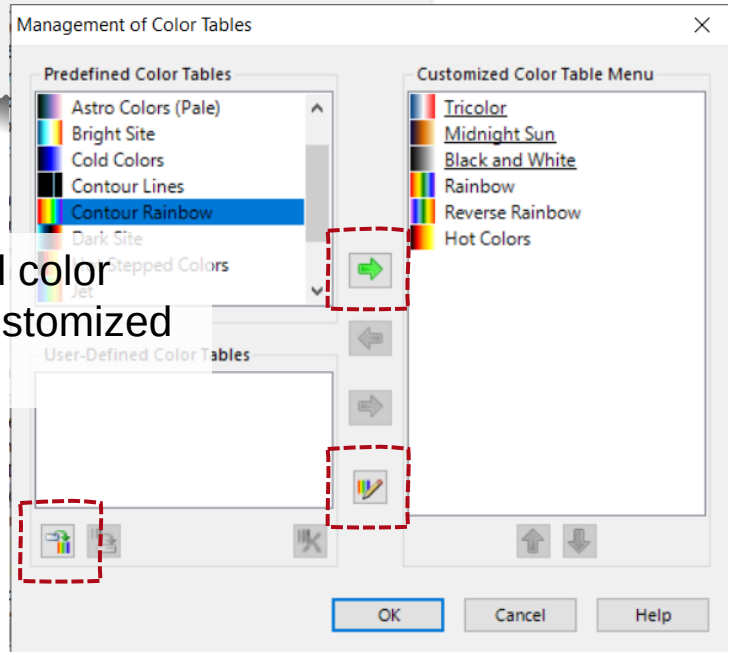




3. Set the default axis color for the left-hand and right-hand y-axis of *1D Numerical Data Arrays* in *Multigraph Mode*.
4. Set the default symbol shape for data points in x-y-diagrams for *Multigraph Mode* so that the different subsets can be distinguished by different colors. If all colors have been used, the symbol will be changed for the additional subset curves.

Color Tables

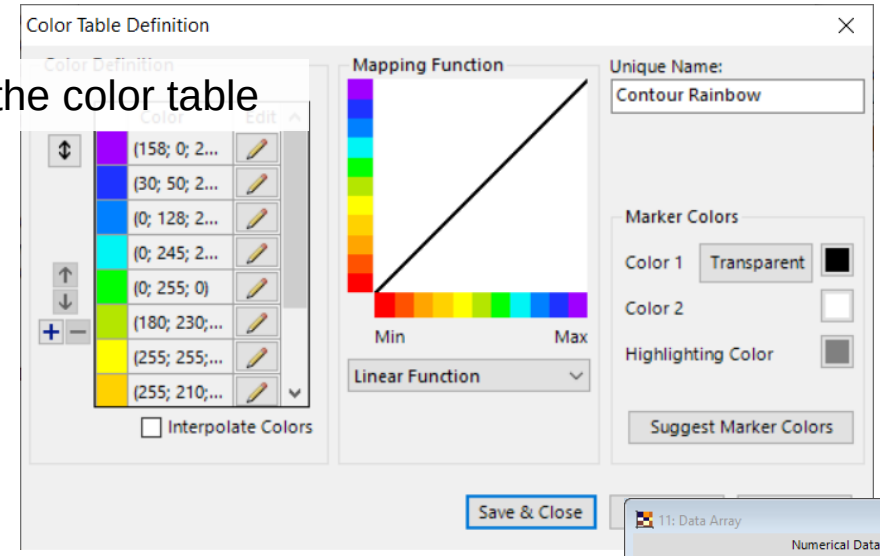




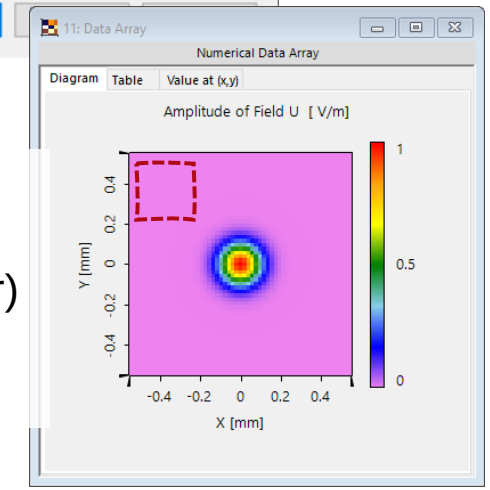
1. select from predefined color tables and add it to customized color table menu

2. import customized color table from file

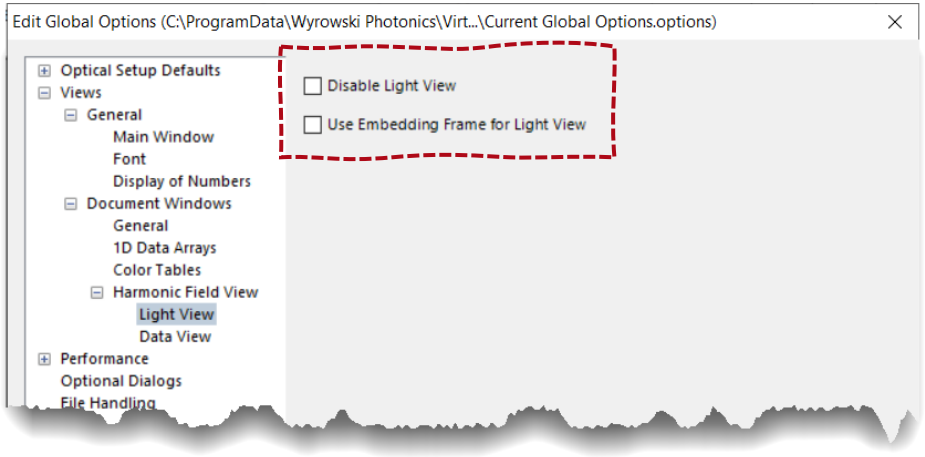
3. edit the color table

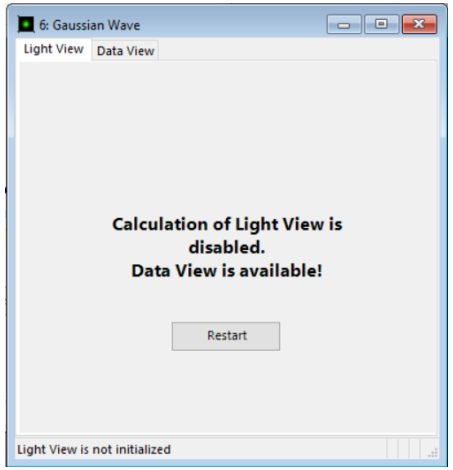


4. Select the color for NaN values: The color which indicates NaN (not a number) values in 1D as well as 2D data array views.



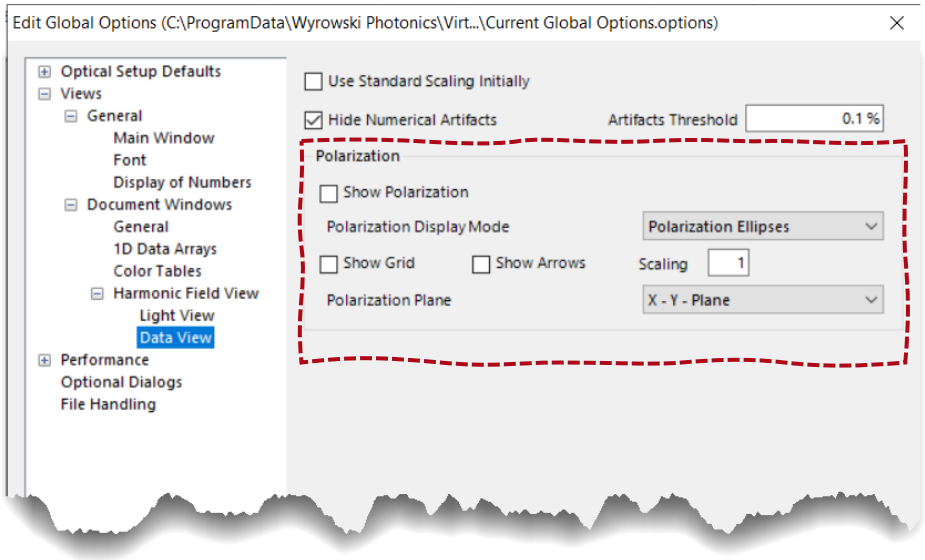
Harmonic Field Views

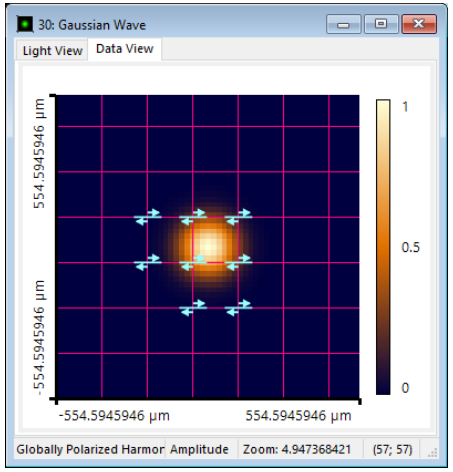




Light View

1. Disables the automatic calculation of the light view. It is still possible to start the calculation manually.
2. Select, whether fields shown in the Light View are embedded in a black frame or not.





Data View

1. Set the initial scaling mode to standard scaling, so that for newly created fields, no minimum and maximum determination is done. It is still possible to switch to automatic scaling.
2. Set whether polarization shall be visualized in the Data View per default or not. And only if the display mode is set to be polarized ellipses, the grid and arrows that indicate the direction of rotation for the ellipses can also select to show.

Document Information

title	Personalization Settings for Visualization in VirtualLab Fusion
document code	
version	1.0
edition	VirtualLab Fusion Basic
software version	2021.1 (Build 1.150)
category	Feature Use Case
further reading	- Performance Settings in Global Options of VirtualLab Fusion