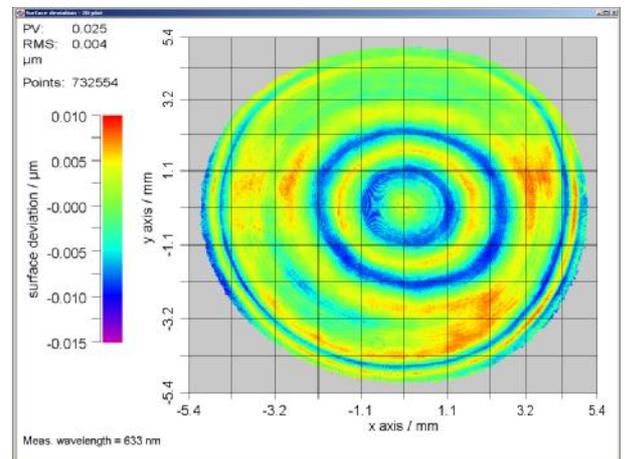# Feature: 2D Color Plot

General

A picture says more than thousand data values. Although for all analyses inside µShape™ all detected values are used (and these are usually about 750'000) you cannot say whether the measurement was successful or not, until you take a look at the result plot. Here you see immediately whether there are areas of missing data, vibrations during measurement, dust on the surface, missing alignment correction or whether the residual is rotational symmetric etc. In parts of a second you analyze the plot. All these problems can also be detected by a combination of analysis parameters, but this takes much longer. This is the reason why the color plot is such an import analysis feature, although it gives "subjective" results only. Beside the color plot µShape™ offers various other data plots such as Line plots and 3D plots (see [G1], [G2]).
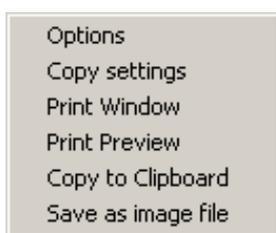
1   Color or 2D-Plot window

This window displays the corresponding data map where the height value (z-value) is color coded. Left beside the plot, some additional parameters are listed. At the top you find the corresponding PV and RMS value and the number of displayed points. Below you can see the color code of the color scale and at the bottom some additional important information according to the displayed map, in general i.e. the measurement wave length.

The window title identifies the displayed map.
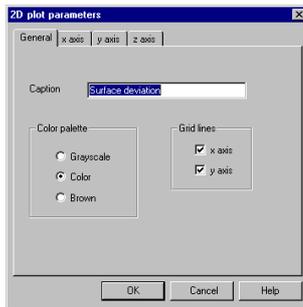

2   Popup Menu

A right click inside the window opens a popup menu, which offers you several options:
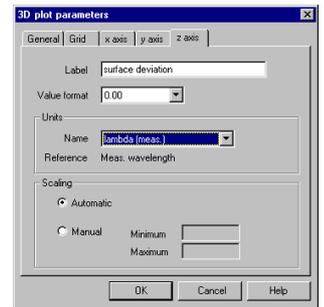
Options allows you to configure the plot (see chapter 3). With **Copy Settings** the current line window settings; specified in the options dialog, can be transferred to further views of the same object (e.g second color plot or 3D plot). **Print** transmits the window content to a printer. To use the current window for further tasks like documentation use **Copy to Clipboard** or **Save as image file** that allows you to save the window content in different graphic formats like BMP or JPEG.

Further documentation options are given in [G3].

3   Options Dialog

The options dialog consists of several pages allowing you to configure the appearance of the corresponding plot. On the general page you specify the color scale, grid lines display and caption for printing and saving. The axis pages allow you to select the axis caption and the display format and unit. By default the z axis is scaled automatically. You can disable automatic scaling by defining a minimum and a maximum value. All values outside this range will be set to the limits (just for display). Finally on the grid page you can define the position of the origin for the x- and y-axis.

You find a more detailed technical description of all the features and possibilities of the color plot in the integrated online-help by pressing the 'F1' key while the color plot window is active.

4   Reference Documents

[G1] µShape Feature: Line Plot ("mShape_LinePlot.pdf")

[G2] µShape Feature: Advanced 3D Plot ("mShape_Adv3D.pdf")

[G3] µShape Feature: Printing Results ("mShape_PrintingResults.pdf")

[G4] µShape Feature: Online Help ("mShape_OnlineHelp.pdf")

The references can be found in our download area (www.trioptics-berlin.com/download).

If you need more information don't hesitate to contact us at software@trioptics-berlin.com.