The Color Transition Values Macro

This macro creates a column of colors changing smoothly in colors as the data changes from its minimum value to its maximum value and employs this gradient to color e.g. the symbols in a scatter plot.

You must have a graph page with at least one graph open to run this macro.

In the SigmaPlot Macro Data Sets.JNB (open it from the Help menu), you find the “Color Transition Values Sample Data” section with two sample graph pages.

- Scatter & Bar Chart: two single Y plots, in one graph
  - Plot 1: Bar, from col(2)
  - Plot 2: Scatter, from col(4)

- Pie Chart: single Y, from col(2)

To run the macro, and apply a color range to a graph:

1. Start with the Bar & Scatter plot.

Select the graph page.
Select ToolBox > Macros, open and run the Color Transition Values macro. (Or directly run it with a doubleclick.)
In the macro dialog, select

- the plot to use (if there are two or more plots in the graph); here: Plot 1
- the data column which shall be expressed in colors: column name “Plot 1” = col(2)
- the color result column. This is the first empty column.
- the start and end colors for the color transition range; here: Red and Blue.
- the graph elements to be colored (Fills, Edges, etc.)

and click on Run.

The macro writes graphic cell values into the selected color result column. This column is then applied to the graph elements. Check the Graph Properties dialog after running the Macro.

2, Next: the Pie Chart

Select the Pie Chart graph page, and the graph.
Select ToolBox > Macros, open and run the Color Transition Values macro. (Or directly run it with a doubleclick.)
In the macro dialog, select

- the plot to use (if there are two or more plots in the graph); here: Plot 1 only
- the data column which shall be expressed in colors: column name “Plot 1” = col(2)
- the color result column. This is the first empty column.
- the start and end colors for the color transition range; here: Green and Blue.
- the graph elements to be colored (Fills, Edges, etc.)

and click on OK.

The macro writes graphic cell values into the selected color result column. This column is then applied to the graph elements. Check the Graph Properties dialog after running the Macro.
**Technical details:**
The macro uses the “run transform in a macro” option, and in the transform it uses the rgbcolor() function to write the color values. See Help > Automation Help for the first item, and the Transform and Regression Help for the second.

Click twice on one of the graphic cells to see its rgbcolor content:

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<th>2-Plot 1</th>
<th>3</th>
<th>4-Plot 2</th>
<th>5</th>
<th>6-Color</th>
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