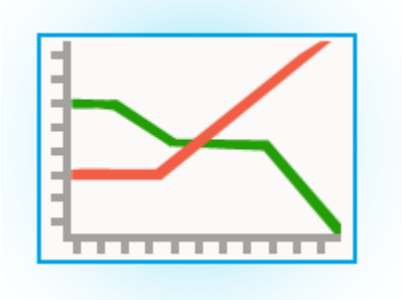
Multicolor Plot

Plot a curve in multiple colors



Product: IBM® SPSS® Modeler

Extension type: Output

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Description

This SPSS Modeler 'Graph' node allows you to plot different intervals of a same curve in various colors. Simply install the node, select the coordinate's fields, select the different intervals you want and choose the visual parameters that suit you best..

Requirements

- SPSS Modeler v16.0 or later
- SPSS Modeler 'R Essentials' plugin

Installation

Close SPSS Modeler. Save the *.cfe* file in the CDB folder of the IBM SPSS Modeler installation directory for Windows and Linux. The copy should reside in that same folder and not in a sub-folder.

For example, for Windows 7 the default location is "*C:\ProgramData\IBM\SPSS\Modeler\16\CDB*".

Restart SPSS Modeler: the node will now appear in the Field Ops palette.

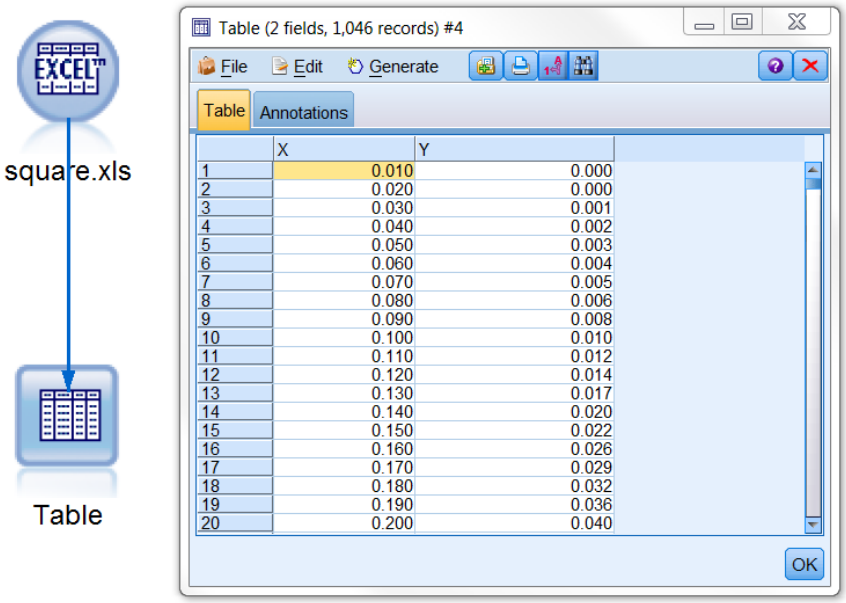
R Packages used

- None

Tutorial

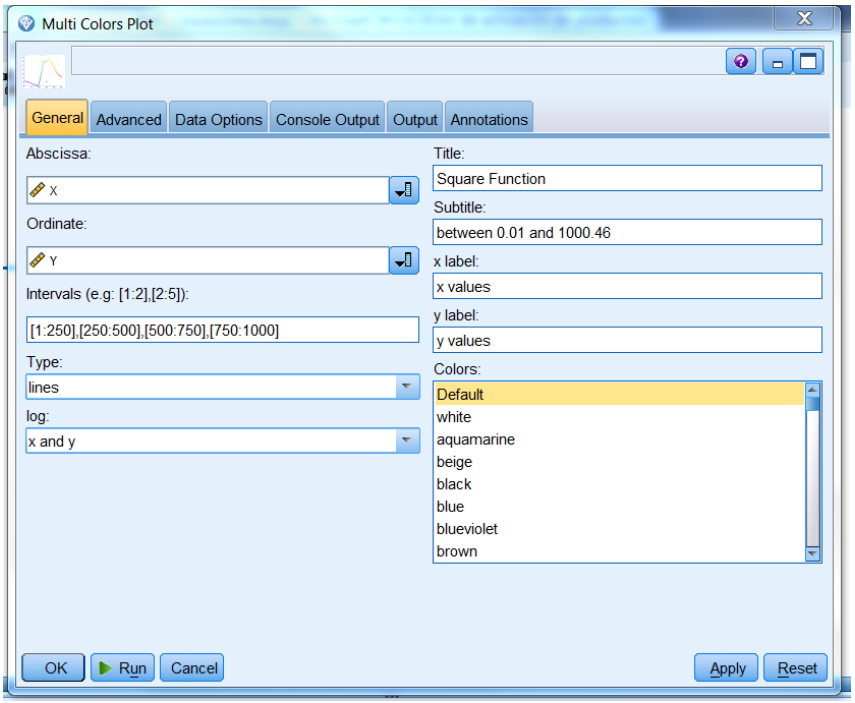
1. Import and prepare your data.

   For example, you can use the square.xls file which is the square function between 0 and 10 approximately.



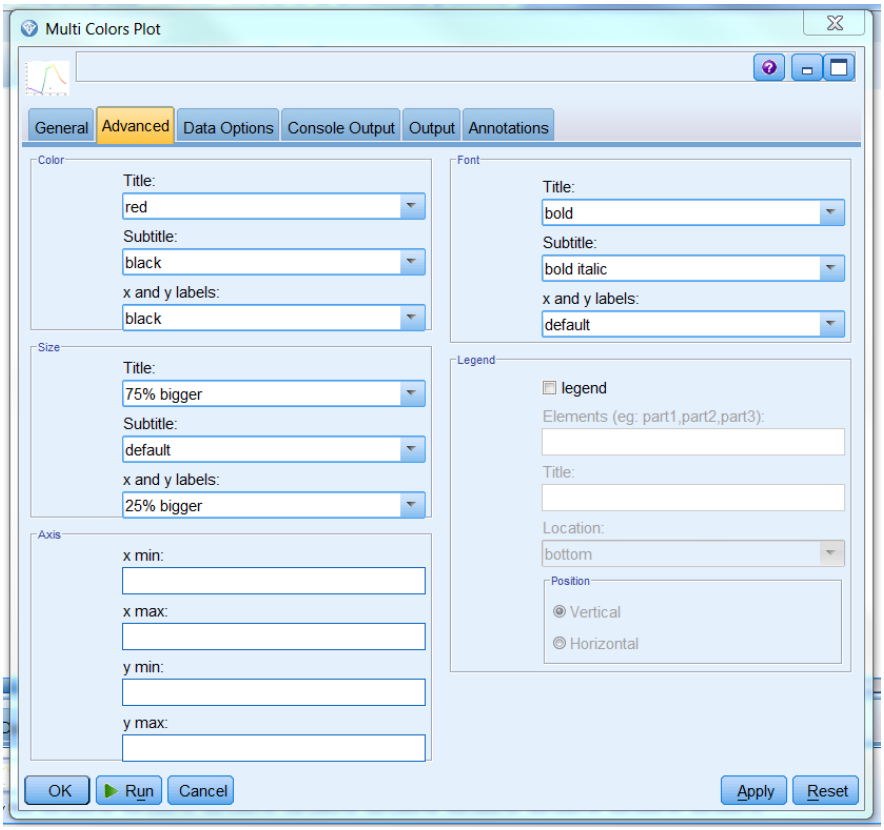
	X	Y
1	0.010	0.000
2	0.020	0.000
3	0.030	0.001
4	0.040	0.002
5	0.050	0.003
6	0.060	0.004
7	0.070	0.005
8	0.080	0.006
9	0.090	0.008
10	0.100	0.010
11	0.110	0.012
12	0.120	0.014
13	0.130	0.017
14	0.140	0.020
15	0.150	0.022
16	0.160	0.026
17	0.170	0.029
18	0.180	0.032
19	0.190	0.036
20	0.200	0.040

2. Connect a ‘Multi Color Plot’ node to the last node of your stream, with your data prepared. Double click on it.

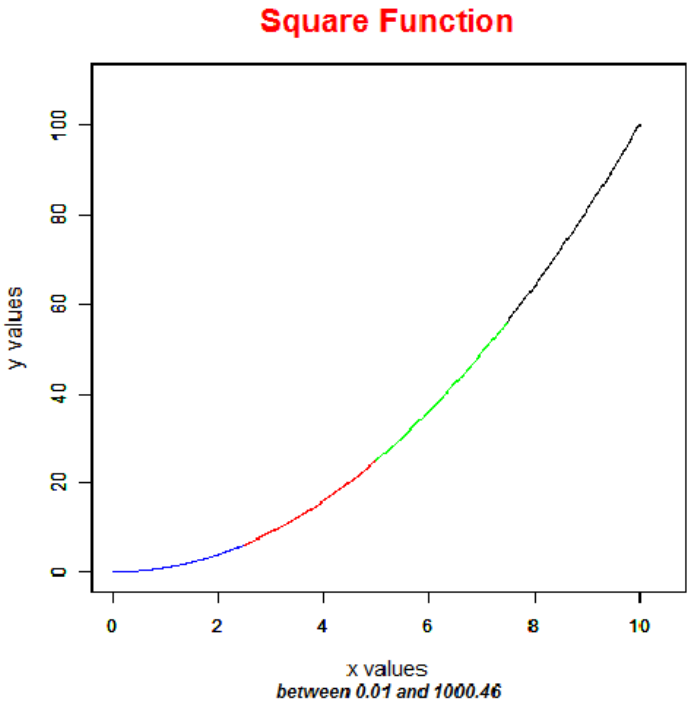


Now you have to fill the fields within two tabs:

- Tab ‘General’:
  - ‘Abscissa’ – ‘Ordinate’: Select the Coordinates fields
  - ‘Intervals’: Write the different intervals
  - ‘Type’: Select the type of plot you want
  - ‘log’: If you want logarithmic scale. It is possible only if the x and/or y values are strictly positive
  - ‘Title’ – ‘Subtitle’ – ‘x label’ – ‘y label’: Enter the different titles
  - ‘Colors’: Select colors of each interval
- Tab ‘Advanced’:
  - ‘Color’: Choose the colors of each title
  - ‘Size’: Choose the size you want for each title
  - ‘Font’: Choose the font of each of each title
  - ‘Axis’: Specify the limits of each axis
  - ‘Legend’: Choose the legend title and its position



3. Click on ‘Graph Output’ tab to see the graph:



Important links

Learn

- Learn more about SPSS software.
- Visit developerWorks Business analytics for more technical analytics resources for developers.
- The Comprehensive R Archive Network is the main site for the R project and each R package. The help pages and manuals that are associated with `optimx`, `nlmrt`, and `Rcgmin` are detailed. Numerous references are provided.
- Read "Do I need to learn R?" (Catherine Dalzell, developerWorks, September 2013) to learn why R is a valuable tool for data analytics that was expressly designed to reflect the way that statisticians think and work.
- "Calling R from SPSS" describes how to use R code inside IBM SPSS Modeler 16.
- Read "Using Google maps API" to discover how to use Google Maps API with R.
- Read “Create new nodes for IBM SPSS Modeler 16 using R” to learn how to create new extensions easily.

Get products and technologies

- Download the R plug-in for SPSS plugin.
- Download the R 2.15.2 for Windows package.

Discuss

- Visit the IBM SPSS DevCentral developerWorks community to share tips and experiences with other IBM SPSS developers.
- Follow developerWorks on Twitter to be among the first to hear about new resources.