

Visualisation in SAS

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The Power to Know.

Agenda

Creating SAS/GRAPH output easier

New Functionality

Enhancing SAS/GRAPH output with images

Producing Graphics output for different media

Interactive Graphics

Other visualisation tools

Creating SAS/GRAPH output easier

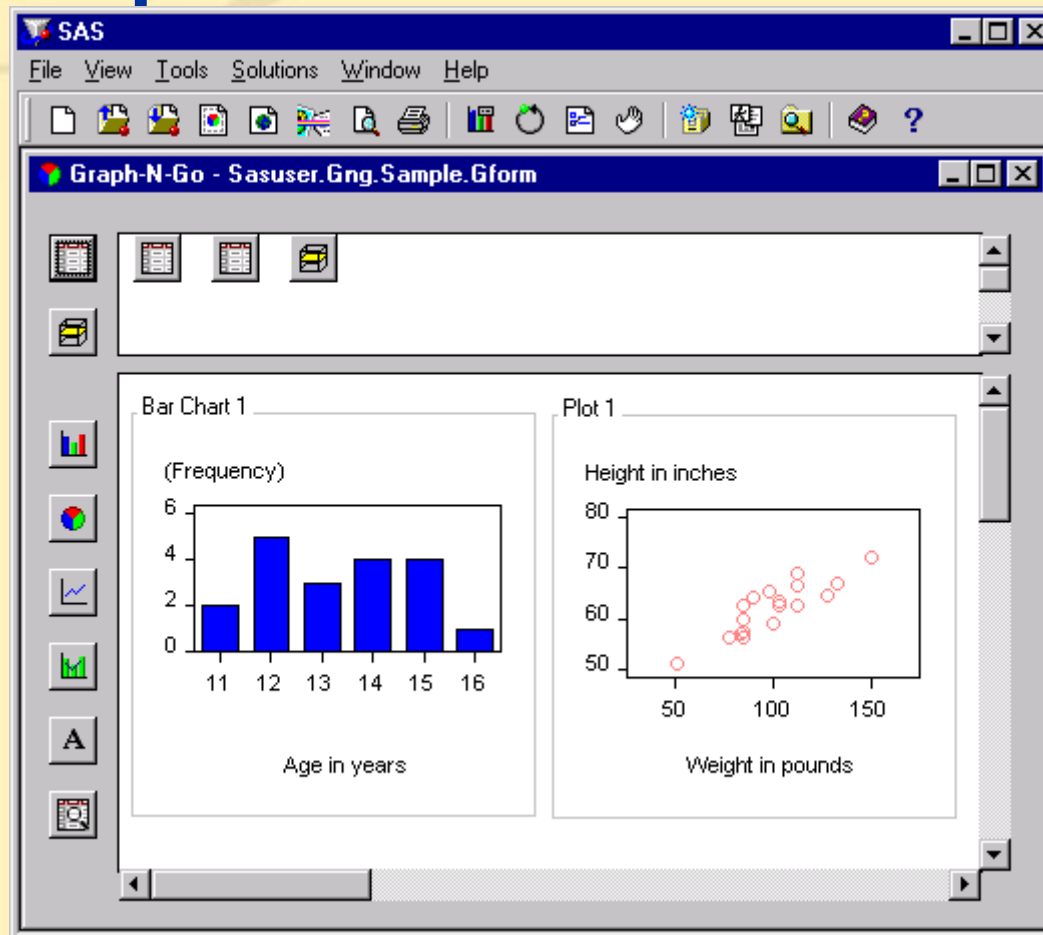
New Interfaces

- Enterprise Guide
- Analyst Application
- Graph-N-Go

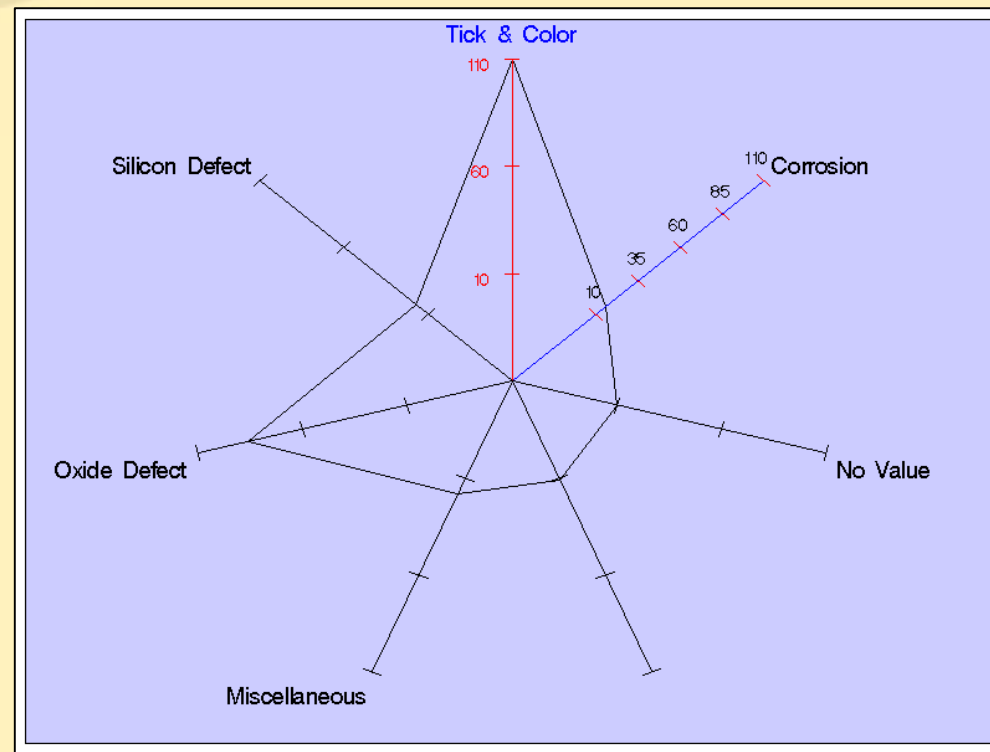
Traditional Interfaces

- SAS/ASSIST
- Graphics Editor
- Image Editor

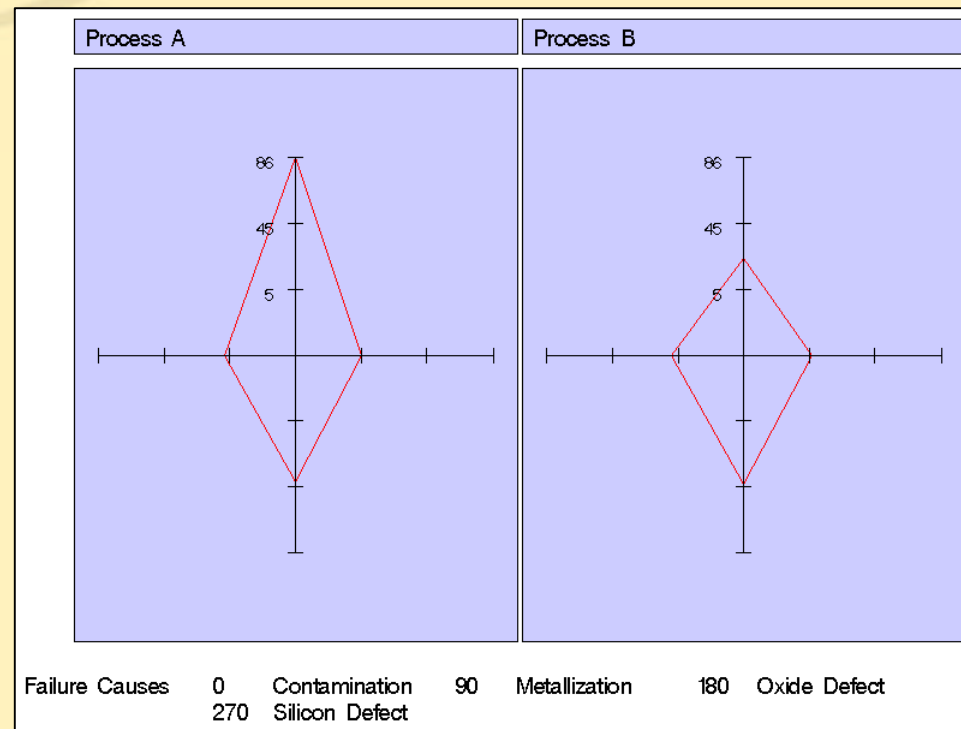
Graph-N-Go



New Functionality – RADAR Charts

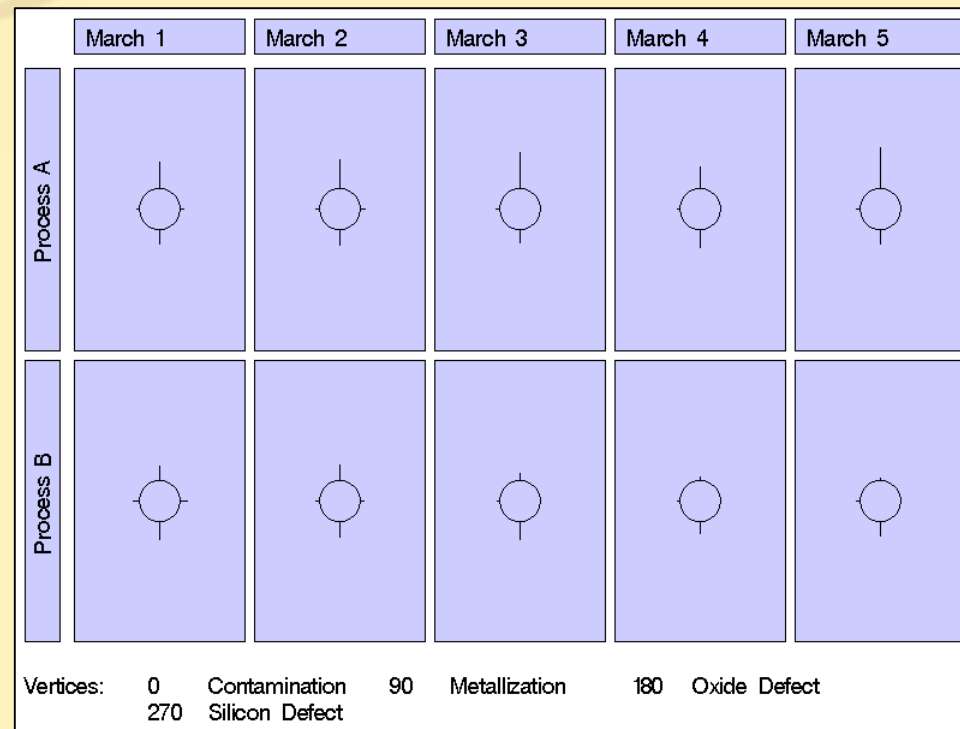


New Functionality – RADAR Charts



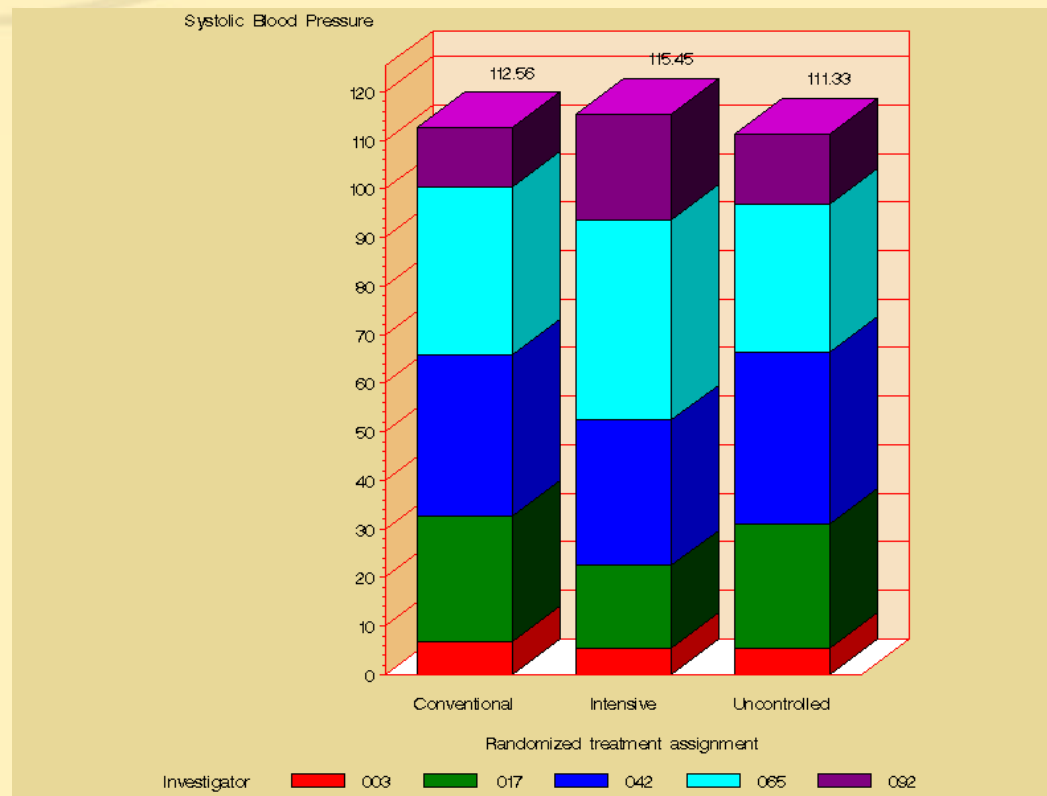
Across Options with Classification Variable

New Functionality – RADAR Charts



Two-Way Comparative

New Functionality – 3D Charts



Enhancing SAS/GRAPH output with images

Background Area (GOPTIONS IBACK=)

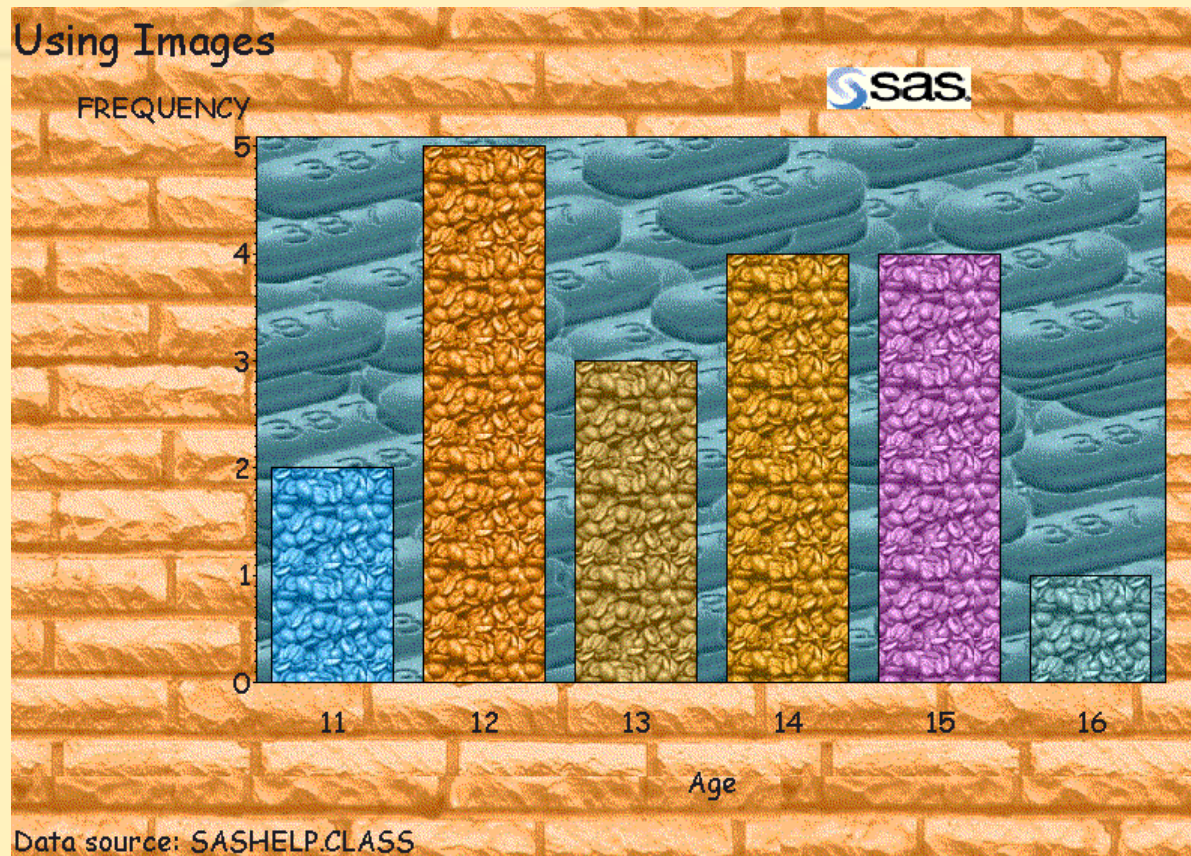
Frame Area (IFRAME=)

Bars in 2D bar charts (PATTERN IMAGE=)

Customisation (eg. Logos)

- Annotate
- DSGI

Who said it had to be tasteful ?



Producing Graphics output for different media - Web

ODS HTML & Macros

HTML statements to allow drill down

Graphics Drivers

- WEBFRAME
- HTML
- GIF
- IMGJPEG

Producing Graphics output for different media - Word

ODS RTF

Cut and Paste

Graphics Drivers

- CGMOF97P
- CGMOF97L

Interactive Graphics - Java

GraphApplet (graphapp.jar)

- Bar Charts, Pie Charts, Scatter Plots (DS2GRAF macro)

ContourApplet (ctrapp.jar)

- Contour and Surface Plots

MapApplet (mapapp.jar)

- Map spatial data

MetaViewApplet (metafile.zip)

- Displays SAS/GRAPH metagraphics data (META2HTM macro)

Interactive Graphics - Java

RangeViewApplet (rvapplet.jar)

- Displays Critical Success Factors (DS2CSF macro)

TreeViewApplet (treeview.jar) -EXP

- Displays hierarchical data (DS2TREE macro)

ConstChartApplet (constapp.jar) –EXP

- Visualize a node-link diagram

ServerSideRenderer (xml2grph.jar) –EXP

- Renders server side images. Supported by ODS PDF and ODS PRINTER.

Interactive Graphics - ActiveX

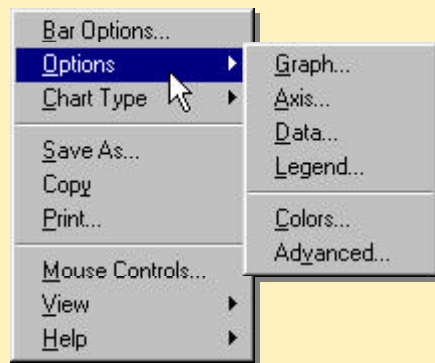
ActiveX control supports the following:

- Bar & Pie charts
- Scatter & Bubble plots
- Area, Line & Regression plots
- Box-and-Whisker & High-Low plots
- Standard Deviation plots
- Contour & Surface Plots
- Maps

You can also use the (DS2GRAF Macro)

ActiveX GUI Changes in 8.2

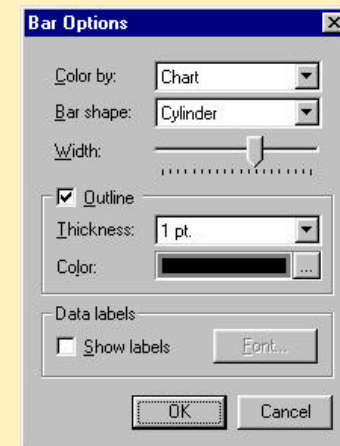
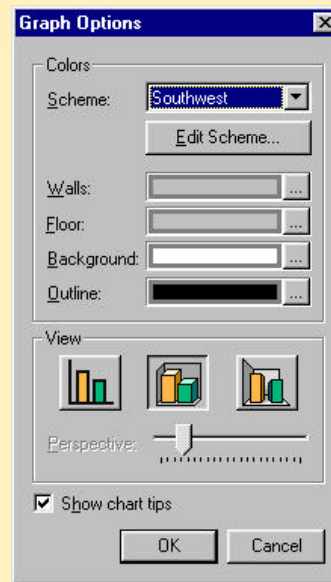
Revised Menus



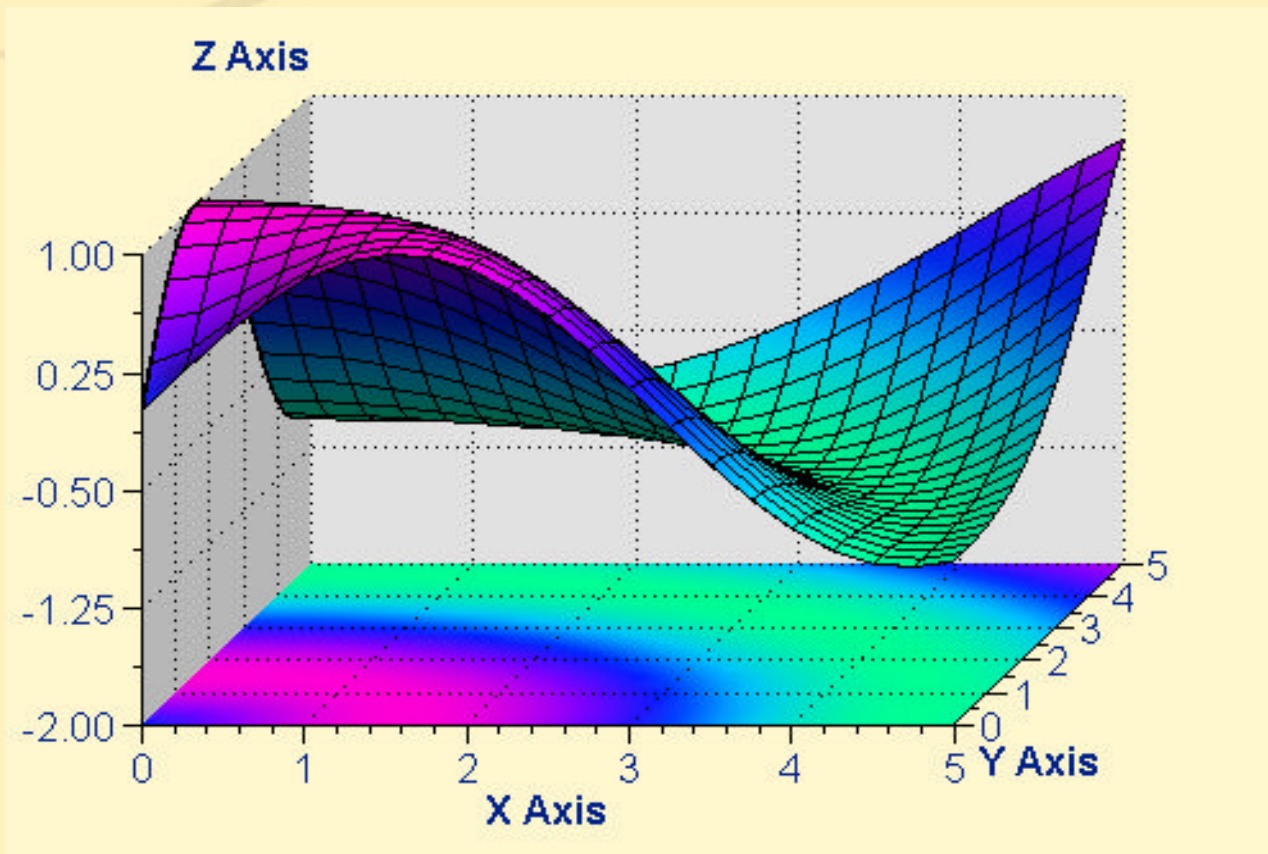
New Toolbar



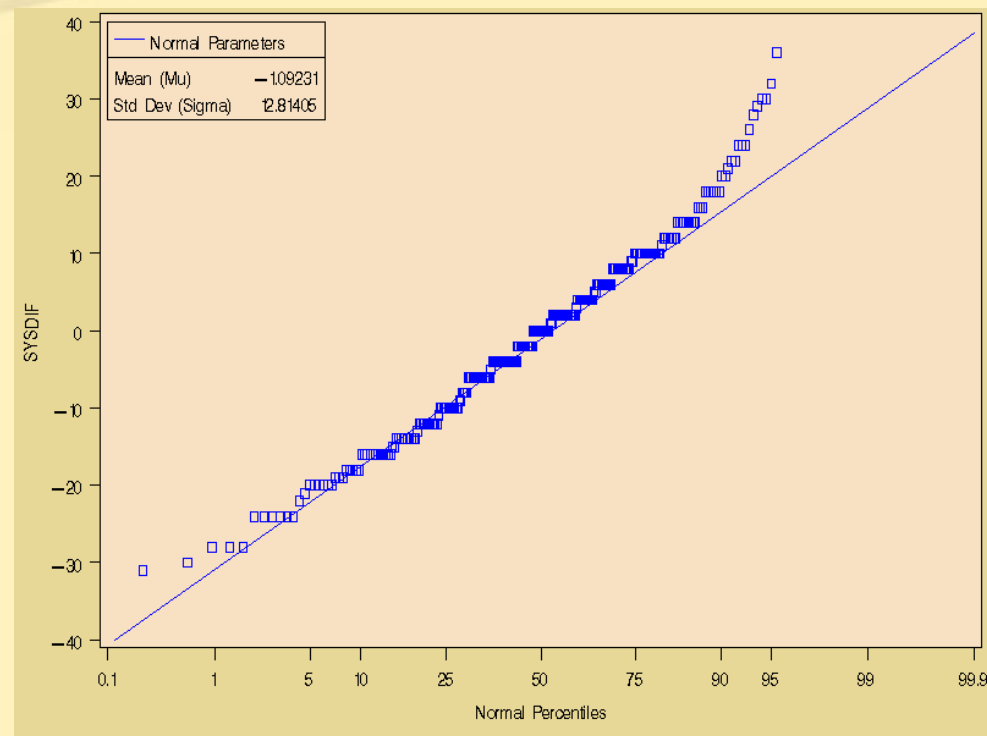
New Dialogs



ActiveX Example

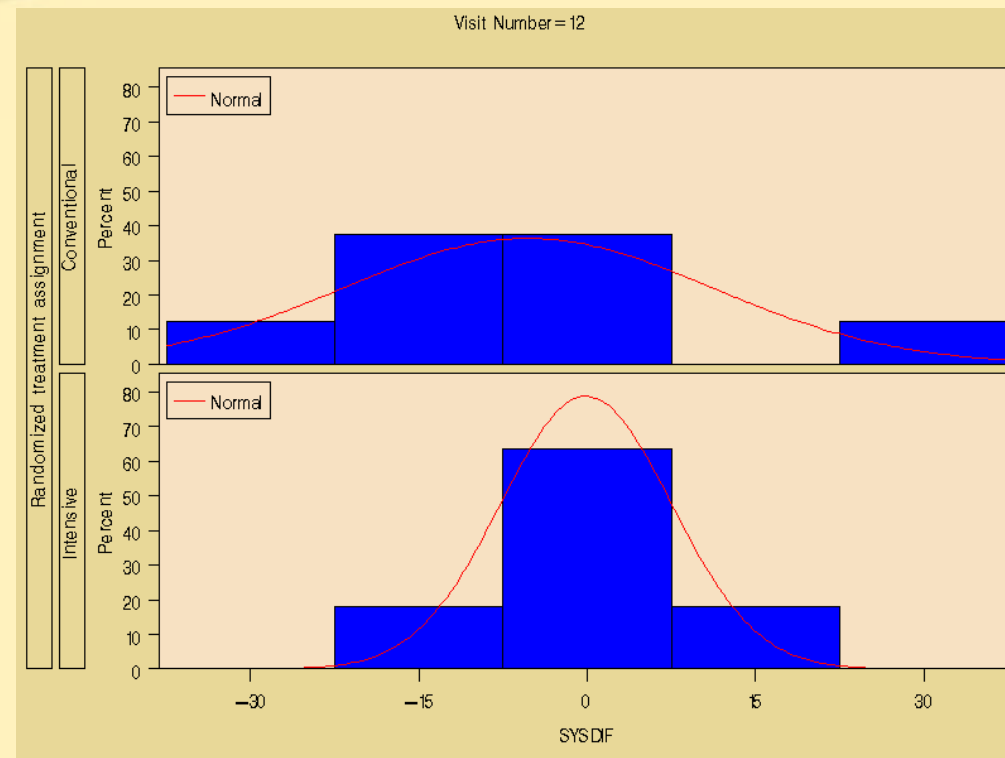


Other Visualisation tools - Base



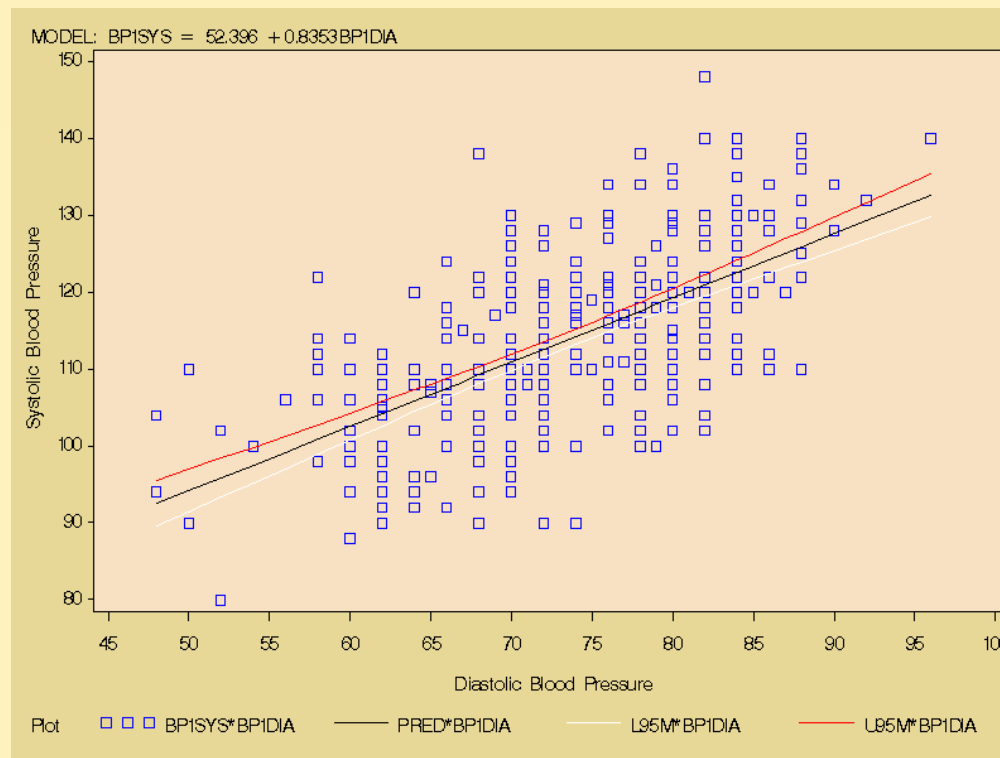
UNIVARIATE

Other Visualisation tools - Base



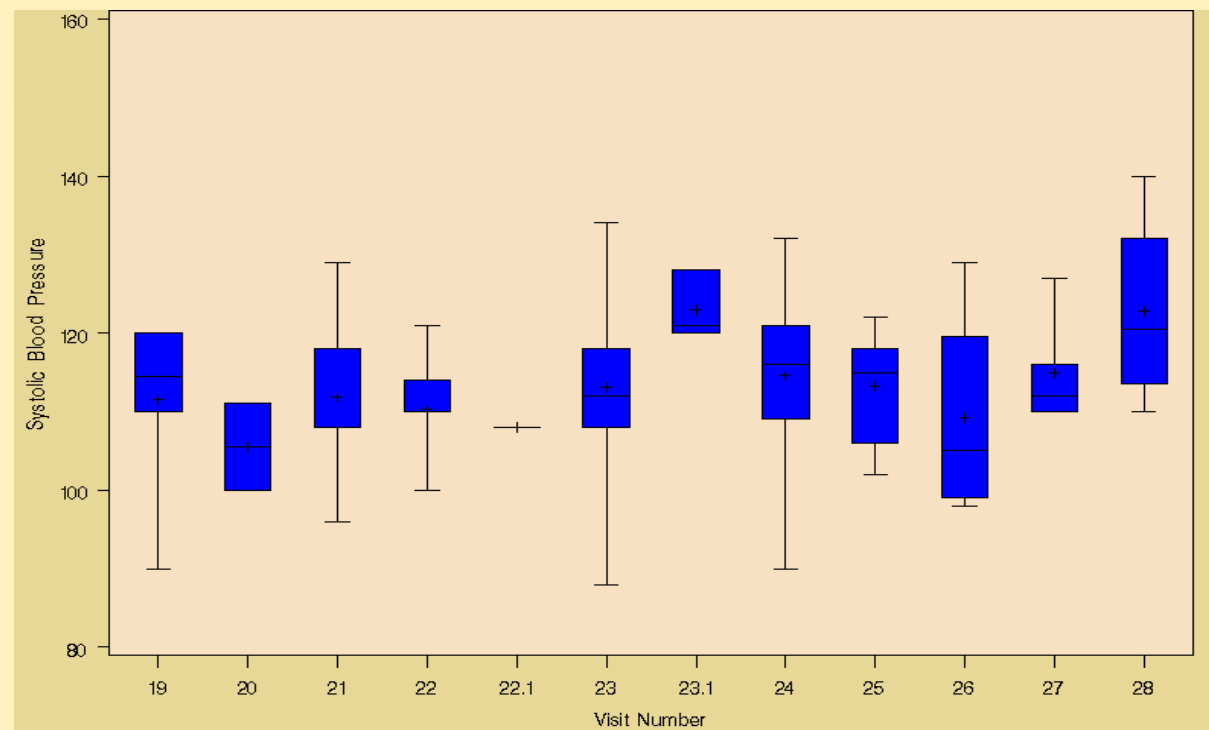
UNIVARIATE

Other Visualisation tools – SAS/STAT



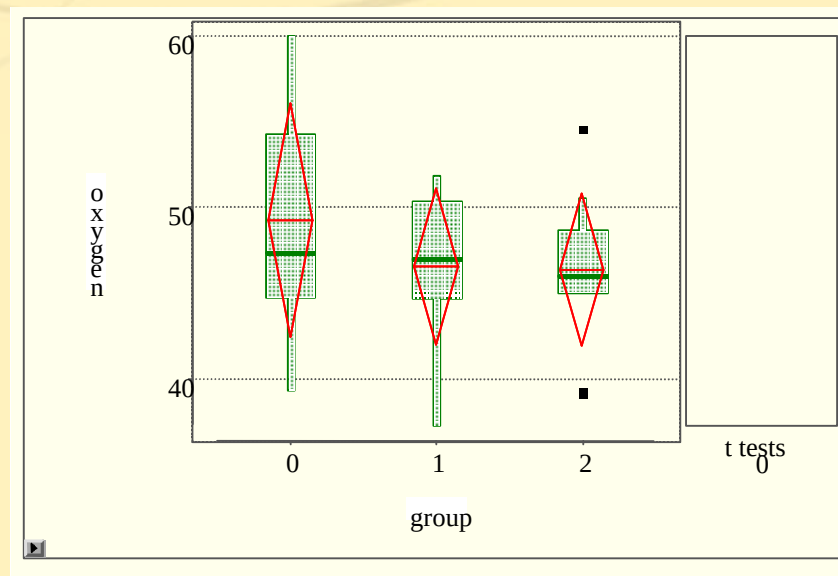
REG

Other Visualisation tools – SAS/STAT



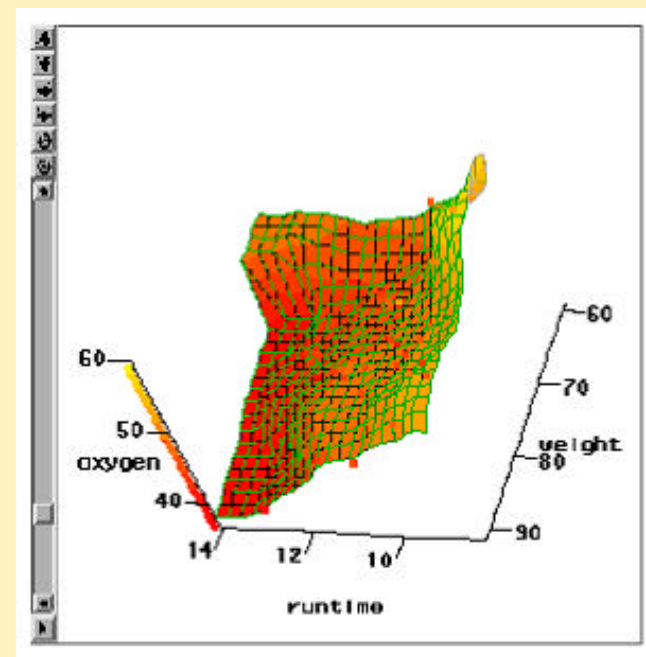
BOXPLOT

Other Visualisation tools – SAS/INSIGHT

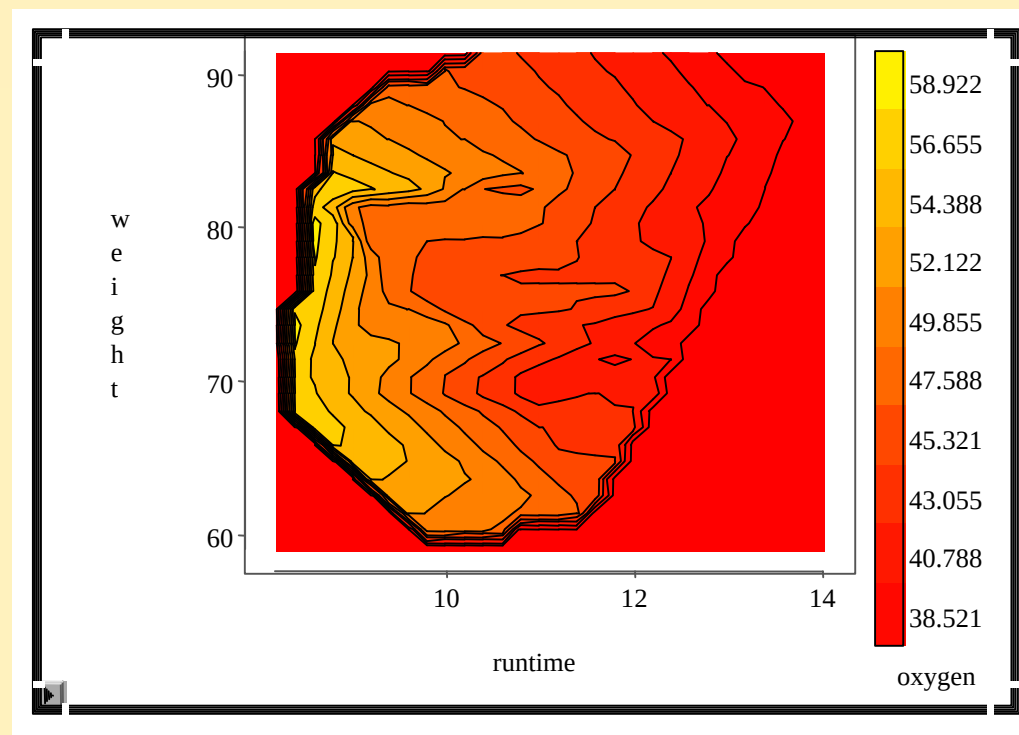


Multiple Comparison Circles

Kernel Surface Plots

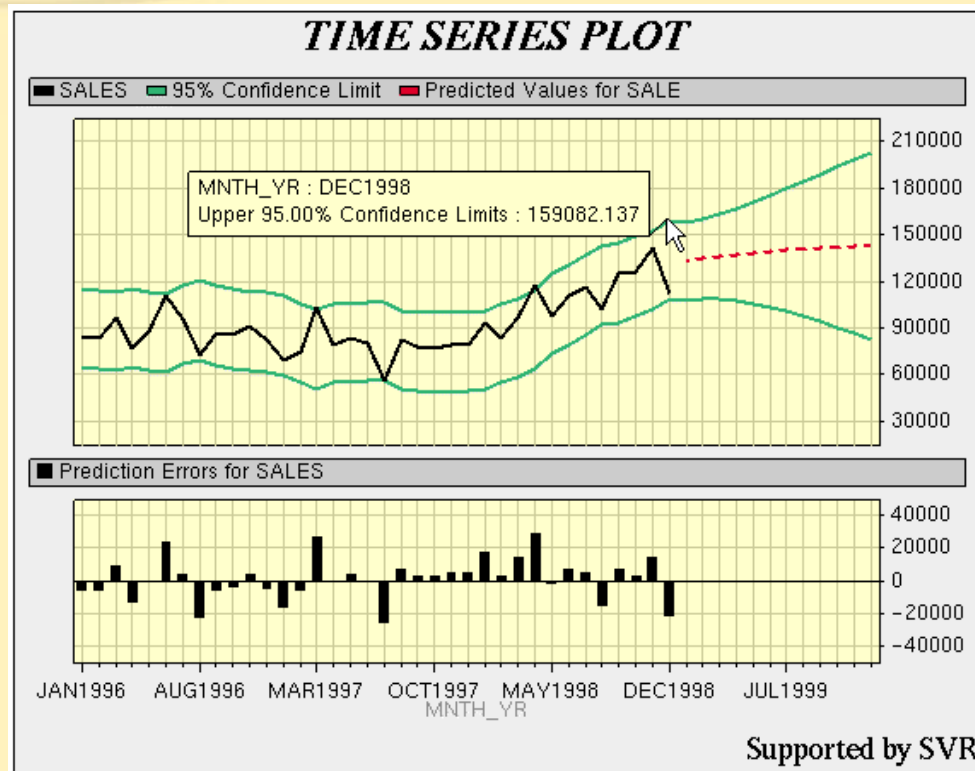


Other Visualisation tools – SAS/INSIGHT



Contour Plot

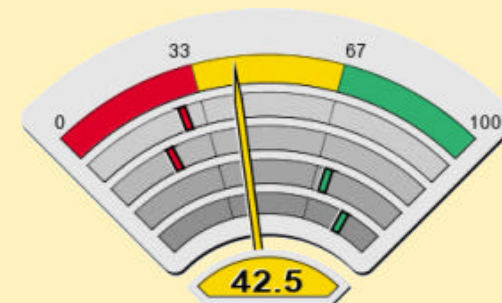
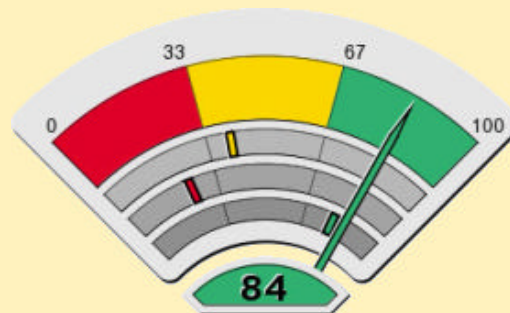
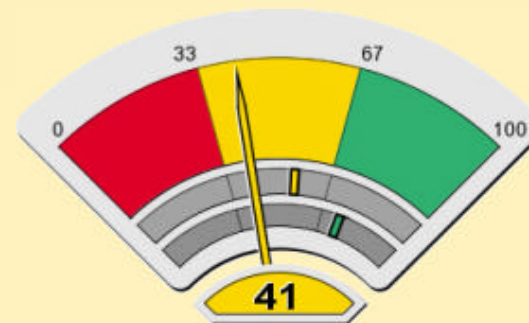
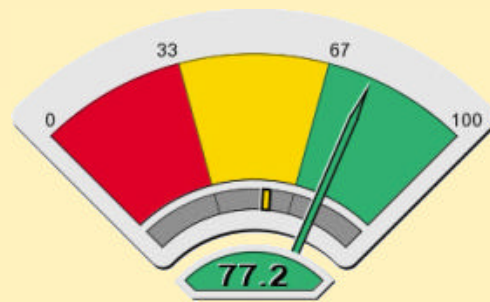
Other Visualisation tools – Time Series Plot



Used By:

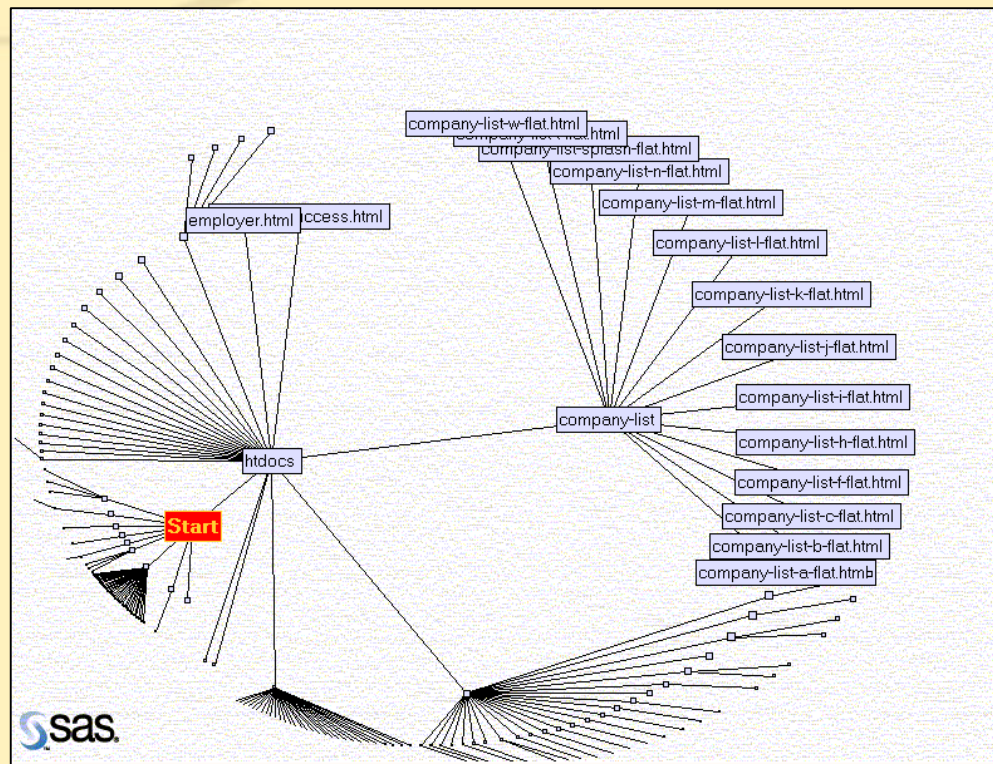
- Enterprise Miner
- Risk Dimensions

Other Visualisation tools – CSF Graphs



Range Views with history bands

Other visualisation tools – TreeView Applet



Used by Webhound

The Power to Know.

Conclusions

New functionality and new interfaces are making the output of graphics more powerful and easier to create

Visualisation is more than just SAS/GRAPH

Futures

More development in graphical functionality

Interfaces will be enhanced

Tighter integration between statistical output and graphical representation

More of a business look and feel to the graphics output