SGPLOT Procedures Tip Sheet

SGPLOT Statements

**Proc statement**
PROC SGPLOT <DATA= input-data-set>
  <CYCLEATTRS | NOCYCLEATTRS>
  <DESCRIPTION="string">
  <NOAUTOLEGEND>
  <TMPLMTHD="filename">
  <UNIFORM= GROUP | SCALE | ALL >;

**Basic plots**
BAND X=variable | Y=variable
LOWER=number | numeric-variable
UPPER=number | numeric-variable
< options > ;
BUBBLE X=variable | Y=variable
SIZE=numeric-variable < / options > ;
HIGHLOW X=variable | Y=variable
HIGH=numeric-variable
LOW=numeric-variable < / options > ;
NEEDLE X=variable Y=numeric-variable
< options > ;
SCATTER X=variable | Y=variable
< options > ;
SERIES X=numeric-variable
Y=numeric-variable < / options > ;
VECTOR X=numeric-variable
Y=numeric-variable < / options > ;

**Distribution plots**
DENSITY numeric-variable < / options > ;
HBOX numeric-variable < / options > ;
HISTOGRAM numeric-variable < / options > ;
VBOX numeric-variable < / options > ;

**Fit and confidence plots**
LOESS X=numeric-variable
Y=numeric-variable
< / smoothing-options > < options > ;
PLSPLINE X=numeric-variable
Y=numeric-variable
< / smoothing-options > < options > ;

REG X=numeric-variable
Y=numeric-variable
< / smoothing-options > < options > ;
ELLIPSE X=numeric-variable
Y=numeric-variable
< / smoothing-options > < options > ;

Common plot options
LEGENDLABEL="string"
NAME="string"
TRANSAPRENCY=number
XAXIS, YAXIS

**Axes and Reference lines**
REFLINE value-list | variable < / options > ;
XAXIS < options > ;
YAXIS < options > ;
XAXIS < options > ;
YAXIS < options > ;

**Categorization plots**
DOT category-variable < / options > ;
HBAR category-variable < / options > ;
HLINE category-variable < / options > ;
VBAR category-variable < / options > ;
VLINE category-variable < / options > ;

**Insets and Legends**
INSET "string-1" ... "string-n" | ( "label-1" = "value-1"
... "label-n" = "value-n"
) < / options > ;
KEYLEGEND "plot-name-1"..."plot-name-n" < / options > ;

Some KEYLEGEND options:
ACROSS = integer
BORDER | NOBORDER
DOWN = integer
LOCATION = OUTSIDE | INSIDE
POSITION = BOTTOM | TOP | RIGHT | LEFT | TOPRIGHT | TOPLEFT | BOTTOMRIGHT | BOTTOMLEFT
TITLE= "string"

Also see SAS 9.3 doc on:
- HBPARM, VBPARM
- LNEPARM
- WATERFALLPLOT (SGPLOT only)
- Discrete Attribute Maps
- Annotation

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For more information, see:
- SAS 9 documentation:
- SAS 9.3 documentation:
  - http://support.sas.com/resources/papers/hotnote/hotnote_graph.html
- Papers:
  - e/tnote_graph.html

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SGPLOT Procedure Tip Sheet

We've put all the information here to get you started with the SGPLOT procedure. The examples on the reverse side can be typed into the program editor and run.

This procedure lets you quickly create single-cell graphs with scatter plots, series plots, vector plots, confidence bands, prediction or confidence ellipses, fit lines, histograms, density plots, dot plots, bar charts, box plots and many more.

The SGPLOT procedure uses the ODS styles for creating aesthetic and effective graphs.

---

proc sgplot data=sashelp.heart;
title "Cholesterol Distribution";
histogram cholesterol;
density cholesterol;
density cholesterol / type=kernel;
run;

tickvalueformat = data | sas-format
type = linear | log | time | discrete

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proc sgplot data=sashelp.stocks
(where=(stock='IBM'));
band x=date upper=high lower=low / group=sex;
series x=date y=close /
legendLabel="High-Low";
band x=date upper=high lower=low /
(where=(stock='IBM'));
run;

proc sgplot data=sashelp.cars
(where=(origin='USA'));
vbar type / response=mpg_city
by make;

proc sgplot data=sashelp.cars
(where=(origin='Europe'));
dot make / response=mpg_city
stat=mean limitstat=clm;
run;

proc sgplot data=sashelp.class;
title "Student Weight distribution";
proc sgplot data=sashelp.class;
run;

proc sgplot data=sashelp.class;
run;

proc sgplot data=sashelp.cars;

proc sgplot data=sashelp.cars;

proc sgplot data=sashelp.class;

proc sgplot data=sashelp.class;

SGPLOT Procedures Tip Sheet

SGPlot: Basic Series with Band

SGPlot: Vertical Box with footnote

SGPlot: Dot plot

SGPlot: BY groups

SGPlot: Modify legend

SGPlot: Modify axis

SGPlot: Modify axis

SGPlot: Modify axis

SGPlot: Dot plot

SGPlot: Loess fit

SGPlot: Horizontal Box with title

SGPlot: Vertical Box with footnote

SGPlot: Basic Series with Band