SGPLOT Statements

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

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

</smoothing-options>
<options>;

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

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

Some common smoothing-options:

ALPHA= numeric-value
CLM = "text-string"
SMOOTH= numeric-value
WEIGHT= numeric-value

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

Common plot options

LEGENDLABEL="string"
NAME="string"
TRANSARENT=number
XAXIS , YAXIS

Axes and Reference lines

REFLINE value-list | variable
</options>;

<options>;
XAXIS</options>;
YAXIS</options>;

Some common axis options

DISPLAY = ALL | NONE | (display-items)
| display-items |
| NOLABEL | NOLINE |
| NOTICKS | NOVALUES |

GRID
LABEL = "string"
MAX = number, MIN = number
OFFSETMAX = number
OFFSETMIN = number

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:

• HBARPARM, VBARPARM
• LINEPARM
• WATERFALLPLOT (SGPLOT only)
• Discrete Attribute Maps
• Annotation

For more information, see:

Papers:
http://support.sas.com/resources/papers/tnote/graph.html

SAS® 9.3 documentation:
http://support.sas.com/documentation/onlin
doc/index.html
SAS9  SGPILOT Procedures Tip Sheet

SGPLOT: Basic Series with Band

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

SGPLOT: Vertical Box with footnote

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

SGPLOT: Horizontal Box with title

```
proc sgplot data=sashelp.cars;
  hbox weight / category=sex;
  title "Student Weight distribution";
run;
```

SGPLOT: Loess fit

```
proc sgplot data=sashelp.class;
  loess x=age y=height / group=sex clm;
run;
```

SGPLOT: Dot plot

```
proc sgplot data=sashelp.cars;
  dot make / response=mpg_city group=drivetrain stat=mean limitstat=clm;
run;
```

SGPLOT: BY groups

```
proc sgplot data=sashelp.cars;
  vbar type / response=mpg_city by make;
  by make;
  vbox mpg_city / category=type;
run;
```

SGPLOT: Modify axis

```
proc sgplot data=sashelp.class;
  xaxis label="Student Weight" grid;
run;
```

SGPLOT: Modify legend

```
proc sgplot data=sashelp.class;
  ellipse x=weight y=height / fill alpha=0.2;
  scatter x=weight y=height / fill alpha=0.2;
  keylegend "spl"/ title="Gender:" location=inside;
run;
```

SGPLOT: Modify legend

```
proc sgplot data=sashelp.cars;
  vbar type / response=mpg_city group=drivetrain stat=mean;
run;
```

SGPLOT: BY groups

```
proc sgplot data=sashelp.cars;
  vbar type / response=mpg_city group=make;
  by make;
run;
```