Zooming in on graphics

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• How to chose the axis range for multiple plots on same data
Proc GPLOT with axis statement Interpol=box

order=(0 to 6 by 1)

NOTE: 56 observation(s) outside the axis range for the y * x request.
WARNING: Values exist outside the axis range, but only values within the displayed range took part in interpolation calculations for the PLOT statement.
Restricting vertical axis

Proc GPLOT with axis statement Interpol=box

mode=exclude (Default)

Data not seen does not contribute to the calculation

mode=include

All data contributes

order=(0 to 6 by 1)

mode=include

NOTE: 56 observation(s) outside the axis range for the y * x request.
Interpol=join

mode=include  mode=exclude

No warning  No warning
Note        Note
Interpol=step

- mode=include: No warning
- mode=exclude: Warning Note

Same for Interpol=HILO, STD, L, SM, SPLINE, R or with BUBBLE statement
Zooming in on graphics

Proc Gplot & Interpol option

Interpol=needle

mode=include

mode=exclude

No warning
Note

No warning
Note
Interpol = map/plot-pattern

mode = include

No warning
Note

mode = exclude

Warning
Note
Clipfactor = \textit{factor}

factor > 1.

The upper limit is: \( Q1 + R \times \text{factor} \)
The lower limit is: \( Q3 - R \times \text{factor} \)

\( R = Q3 - Q1 \) is the interquartile range and \( Q1 \) and \( Q3 \) the mean of lower and upper quartiles across all groups.

Clipfactor = 2

Clipfactor = 1.4
Zooming in on graphics

Proc Boxplot & clipfactor

Clipfactor = 1.4

Output via GOPTIONS vs. ODS Output

GOPTIONS output

ODS output
Boxplot:

```proc sgplot;
    vbox y / category=x;
    yaxis max=7; /* same with values=(0 to 7) */
run;```
Example: Clipping extremes

symbol1 i=box v=dot
mode=include;
symbol2 i=none v=triangle;
axis1 order=(0 to &cutpnt by 10);
proc gplot;
  plot y*x=mark / vaxis=axis1;
run; quit;
### Quartile definitions

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Thank you for your interest