Improving Plots Using XAXISTABLE And YAXISTABLE

JACOB KEELEY, HENRY FORD HEALTH SYSTEM, DETROIT, MI
CARL NORD, ELI LILLY AND COMPANY, INDIANAPOLIS, IN

JACOB AND CARL BOTH GRADUATED FROM THE BIOSTATISTICS MASTER’S PROGRAM AT GRAND VALLEY STATE UNIVERSITY IN 2017, AND HAVE BEEN USING SAS FOR OVER 4 YEARS.
XAXISTABLE/YAXISTABLE STATEMENTS

• Aligned row/column of textual data
  • In relation to the primary plot

• Allows for additional information to be included in the plot

• The following primary plots are excluded:
  • BAND
  • BLOCK
  • FRINGE
  • REG
  • LOESS
BASIC SYNTAX

proc sgplot data=dat;
series x=Year y=Price;
  xaxistable Rating/
    valueattrs=(weight = bold size = 11)
    labelattrs=(weight = bold size = 12 color = green) pad = (top = 5pct) ;
  .
  .
run;

9/30/18  #MWSUG2018 SP-078
proc sgplot data=dat;
series x=Year y=Price;
  yaxistable Status/
  valueattrs=(weight = bold size = 11)
  labelattrs=(weight = bold size = 12 color = green);
run;
USEFUL OPTIONS

• Class – Creates a separate axis table for unique values
• X/Y – Variable to align the XAXISTABLE/YAXISTABLE to the axis
• Location – Specifies whether the axis table is inside or outside the axis area
PRACTICAL EXAMPLE

```
proc sgplot data=sales1 noautolegend;
format Method method.;
series x=Year y=Price/group=Method;
xaxistable Projection/
  colorgroup = method
  class = method
  location=inside x = Year;
  
run;
```
UTILIZATION IN SURVIVAL

- At Risk Table
- Output survival plot
- Tailor to specific project
UTILIZATION IN SURVIVAL

```
proc sgplot data=dat;

xaxistable ar_event /
x=tatrisk
class=stratumnum colorgroup=stratumnum
title= "Number at Risk (Events)" location=inside;

yaxistable yhelp/
y=med_stime
class=stratumnum nomissingchar classorder=descending
colorgroup=stratumnum
title= "Median Survival Time";

run;
```
Conclusion

• Useful addition to SGPLOT graphics
• Easily customizable
• Valuable in the context of survival analysis
Name: Jacob Keeley
Organization: Henry Ford Health System
E-Mail: J Keeley2@hfhs.org

Name: Carl Nord
Organization: Eli Lilly and Company
E-Mail: Nord_carl@lilly.com