

SAS[®] GLOBAL FORUM 2018

USERS PROGRAM

2743 - A Periodic Table of Introductory SAS[®] ODS Graphics Examples

Ted Conway, Chicago, IL

ted.j.conway@gmail.com, @vivasasvegas

April 8 - 11 | Denver, CO

#SASGF

A "Periodic Table" of Introductory SAS® ODS Graphics Examples

S₁
SCATTER

S₂
SCATTER

S₃
SCATTER

S₄
SCATTER

About SAS ODS Graphics

- Provides an easy-to-use, flexible, and rich feature set for data visualization
- Facilitates the automation of chart creation, promoting reproducible and repeatable results
- Scales, allowing you to produce dozens, hundreds, or even thousands of charts with a consistent look-and-feel
- Enables you to create precisely-sized and formatted charts that are chock-full-of-information
- Fully-integrated with all the powerful analytic and data transformation features of SAS software, so you can get your data chart-ready in no time!

About This E-Poster

- Selection of introductory SAS ODS Graphics examples – much more is possible!
- ■ SGPLOT (Basic) ■ SGMAP
- ■ SGPLOT (Categorization) ■ SGPANEL (Miscellaneous)
- ■ SGPLOT (Distribution) ■ SGSCATTER (Miscellaneous)
- ■ SGPLOT (Statements, Other) ■ SGRENDER, GTL (Miscellaneous)
- Mouseover squares to view chart images; click squares to view SAS code
- Inspired by "Towards A Periodic Table of Visualization Methods for Management," the classic 2007 data visualization paper

Li₁
LINE

Li₂
LINE

Li₃
LINE

Li₄
LINE

St₁
STEP

St₂
STEP

Ba₁
BAR

Ba₂
BAR

Ba₃
BAR

Ba₄
BAR

Ba₅
BAR

C₁
COMBO

C₂
COMBO

T
TABLE

D
DOT

Bu₁
BUBBLE

Bu₂
BUBBLE

Bu₃
BUBBLE

Bx₁
BOX

Bx₂
BOX

Bx₃
BOX

Hl₁
HIGH-LOW

Hl₂
HIGH-LOW

Hl₃
HIGH-LOW

W₁
WATERFALL

W₂
WATERFALL

Se₁
SERIES

Se₂
SERIES

Se₃
SERIES

Hi₁
HISTOGRAM

Hi₂
HISTOGRAM

V₁
VECTOR

V₂
VECTOR

Tx₁
TEXT

Tx₂
TEXT

N₁
NEEDLE

N₂
NEEDLE

H₁
HEATMAP

H₂
HEATMAP

B₁
BAND

B₂
BAND

Bl
BLOCK

M
MAP

E
ELLIPSE

Am₁
ATTR MAP

Am₂
ATTR MAP

Am₃
ATTR MAP

A
ANNOTATE

Hover to see charts!

Pn₁
BAR

Pn₂
DOT

Pn₃
LATTICE

Pn₄
SERIES

Sc₁
MATRIX

Sc₂
HISTOGRAM

Sc₃
PLOT

Sc₄
PLOT/ROWS

Click to see SAS code!

Sc₅
PLOT/COLS

Sc₆
COMPARE

P
POLYGON

Gt₁
GTL

Gt₂
GTL

Pi
PIE

Mo
MOSAIC

3D
HISTOGRAM

A "Periodic Table" of Introductory SAS® ODS Graphics Examples

S₁
SCATTER

S₂
SCATTER

S₃
SCATTER

S₄
SCATTER

About SAS ODS Graphics

- Provides an easy-to-use, flexible, and rich feature set for data visualization
- Facilitates the automation of chart creation, promoting reproducible and repeatable results
- Scales, allowing you to produce dozens, hundreds, or even thousands of charts with a consistent look-and-feel
- Enables you to create precisely-sized and formatted charts that are chock-full-of-information
- Fully-integrated with all the powerful analytic and data transformation features of SAS software, so you can get your data chart-ready in no time!

About This E-Poster

- Selection of introductory SAS ODS Graphics examples – much more is possible!
- ■ SGPLOT (Basic) ■ SGMAP
- ■ SGPLOT (Categorization) ■ SGPANEL (Miscellaneous)
- ■ SGPLOT (Distribution) ■ SGSCATTER (Miscellaneous)
- ■ SGPLOT (Statements, Other) ■ SGRENDER, GTL (Miscellaneous)
- Mouseover squares to view chart images; click squares to view SAS code
- Inspired by "Towards A Periodic Table of Visualization Methods for Management," the classic 2007 data visualization paper

Li₁
LINE

Li₂
LINE

Li₃
LINE

Li₄
LINE

St₁
STEP

St₂
STEP

Ba₁
BAR

Ba₂
BAR

Ba₃
BAR

Ba₄
BAR

Ba₅
BAR

C₁
COMBO

C₂
COMBO

T
TABLE

D
DOT

Bu₁
BUBBLE

Bu₂
BUBBLE

Bu₃
BUBBLE

Bx₁
BOX

Bx₂
BOX

Bx₃
BOX

Hi₁
HIGH-LOW

Hi₂
HIGH-LOW

Hi₃
HIGH-LOW

W₁
WATERFALL

W₂
WATERFALL

W₃
WATERFALL

W₄
WATERFALL

W₅
WATERFALL

W₆
WATERFALL

Hi₂
HISTOGRAM

V₁
VECTOR

V₂
VECTOR

Tx₁
TEXT

Tx₂
TEXT

N₁
NEEDLE

N₂
NEEDLE

H₁
HEATMAP

H₂
HEATMAP

H₃
HEATMAP

H₄
HEATMAP

H₅
HEATMAP

H₆
HEATMAP

Am₁
ATTR MAP

Am₂
ATTR MAP

Am₃
ATTR MAP

A
ANNOTATE

```
proc sgplot data=sashelp.prdsale(where=(year(month)=1994));
styleattrs datacolors=(palegreen lightblue);
title height=12pt "1994 MONTHLY SALES";
vbar month / response=actual group=division
    datalabel datalabelattrs=(size=8.5pt)
    seglabel seglabelformat=dollar9. seglabelattrs=(size=8.5pt);
xaxis display=(nolabel);
yaxis display=(nolabel) grid;
keylegend / title="" noborder;
format actual dollar9. month monname3.;
```

Pn₁
BAR

Pn₂
DOT

Pn₃
LATTICE

Pn₄
SERIES

Sc₁
MATRIX

Sc₂
HISTOGRAM

Sc₃
PLOT

Sc₄
PLOT/ROWS



Sc₅
PLOT/COLS

Sc₆
COMPARE

P
POLYGON

Gt₁
GTL

Gt₂
GTL

Pi
PIE

Mo
MOSAIC

3D
HISTOGRAM



SAS[®] GLOBAL FORUM 2018

April 8 - 11 | Denver, CO
Colorado Convention Center

#SASGF