

Initial Data Exploration Using PROC SGPANEL

Before you perform a mixed model analysis, an initial data exploration is recommended. You can use the SGPANEL procedure to explore your data. PROC SGPANEL creates a panel of graph cells for the values of one or more classification variables. Using PROC SGPANEL, you can produce a wide variety of plot types, and you can overlay multiple plots in each graph cell in the panel. PROC SGPANEL also produces several types of layouts. For example, if you want to compare box plots of a continuous variable A and a categorical variable B, you can use PROC SGPANEL to create a panel of box plots.

Let's take a quick look at some of the most commonly used statements in PROC SGPANEL. In the required PANELBY statement, you must specify one or more classification variables for the panel. The PANELBY statement must appear before any plot, axis, or legend statement or else an error occurs. To control the attributes of the panel of plots, you can specify many different options in the PANELBY statement. For example, the COLUMNS= option specifies the number of columns in the panel. The LAYOUT= option specifies one of four types of layouts for the panel: LATTICE, PANEL, COLUMNLATTICE, and ROWLATTICE. The default layout is a panel. The following statements are used to specify different types of plots: The HISTOGRAM statement creates a histogram that displays the frequency distribution of a numeric variable. The required argument response-variable specifies the analysis variable for the plot. The HBOX statement creates a horizontal box plot that shows the distribution of your data. The required argument response-variable specifies the analysis variable for the plot. The REG statement creates a fitted regression line or curve. The required arguments X= and Y= specify the numeric variable for the X axis and the Y axis, respectively. The SCATTER statement creates a scatter plot. The required arguments X= and Y= specify the numeric variable for the X axis and the Y axis, respectively. The VBOX statement creates a vertical box plot that shows the distribution of your data. The required argument response-variable specifies the analysis variable for the plot.

To learn more about PROC SGPANEL statements and options, see the SAS documentation.