

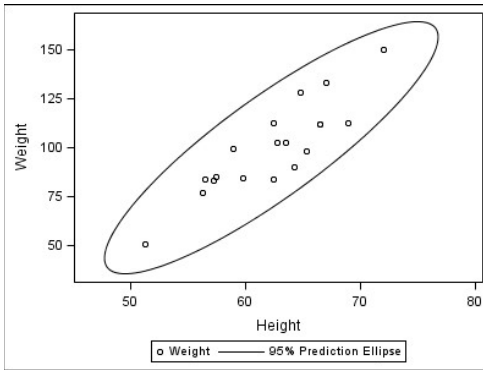
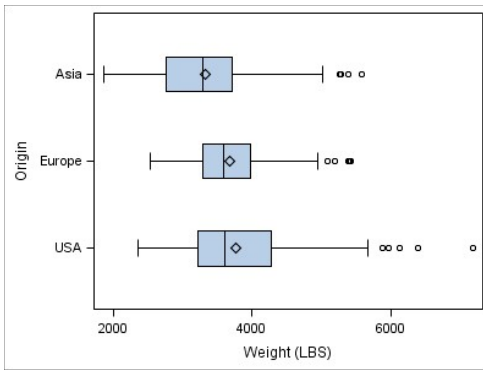
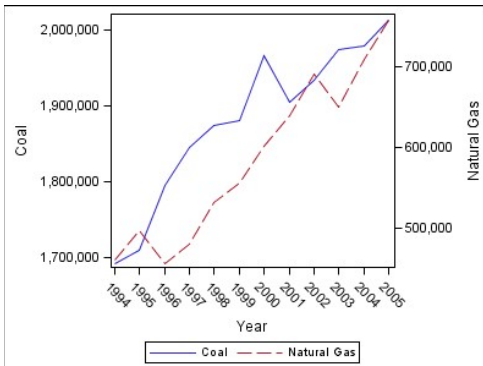
[Previous Page](#) | [Next Page](#)

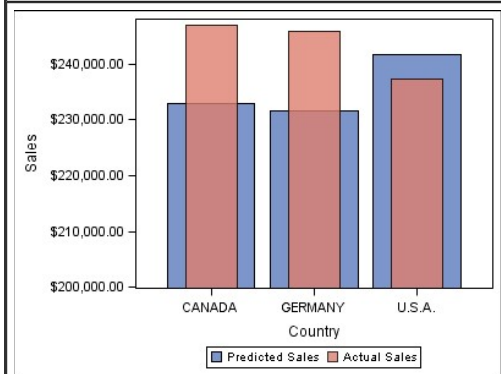
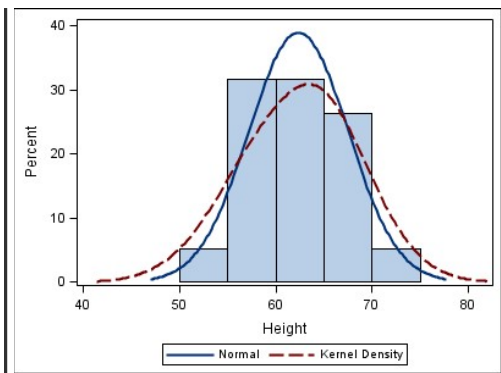
Overview

The SGPLOT procedure creates one or more plots and overlays them on a single set of axes. You can use the SGPLOT procedure to create statistical graphics such as histograms and regression plots, in addition to simple graphics such as scatter plots and line plots. Statements and options enable you to control the appearance of your graph and add additional features such as legends and reference lines.

The SGPLOT procedure can create a wide variety of plot types, and can overlay plots together to produce many different types of graphs. [Examples of Graphs that Can Be Generated by the SGPLOT Procedure](#) contains some examples of graphs that the SGPLOT procedure can create.

Examples of Graphs that Can Be Generated by the SGPLOT Procedure

 <p>A scatter plot showing the relationship between Height (X-axis, 50 to 80) and Weight (Y-axis, 50 to 150). The data points are represented by open circles. A solid line ellipse encloses the majority of the points, representing the 95% prediction ellipse. A legend at the bottom indicates 'o Weight' and '— 95% Prediction Ellipse'.</p>	<p>The following code creates an ellipse plot:</p> <pre>proc sgplot data=sashelp.class; scatter x=height y=weight; ellipse x=height y=weight; run;</pre>
 <p>A horizontal box plot showing the distribution of Weight (LBS) for three categories: Asia, Europe, and USA. The X-axis ranges from 2000 to 6000. Each box plot shows the median (diamond), quartiles (box), and range (whiskers). Outliers are shown as open circles. The legend at the bottom indicates 'o Weight' and '— 95% Prediction Ellipse'.</p>	<p>The following code creates a horizontal box plot:</p> <pre>proc sgplot data=sashelp.cars; hbox weight / category=origin; run;</pre>
 <p>A line plot showing the consumption of Coal (solid blue line) and Natural Gas (dashed red line) from 1994 to 2005. The left Y-axis represents Coal (1,700,000 to 2,000,000) and the right Y-axis represents Natural Gas (500,000 to 700,000). The X-axis represents the Year. A legend at the bottom indicates '— Coal' and '--- Natural Gas'.</p>	<p>The following code creates a graph with two series plots:</p> <pre>proc sgplot data=sashelp.electric(where=(customer="Residential")); xaxis type=discrete; series x=year y=coal; series x=year y=naturalgas / y2axis; run;</pre>
	<p>The following code creates a graph with a histogram, a normal density curve, and a kernel density curve:</p> <pre>proc sgplot data=sashelp.class; histogram height; density height; density height / type=kernel; run;</pre>



The following code creates a graph with two bar charts:

```
proc sgplot data=sashelp.prdsale;
  yaxis label="Sales" min=200000;
  vbar country / response=predict;
  vbar country / response=actual
    barwidth=0.5
    transparency=0.2;
run;
```