Chapter 34
Line Plots

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Chapter 34
Line Plots

You can create line plots to show the path of a variable over time. You can control the orientation of the plot, the information shown on the axes, and the color of the lines.

Figure 34.1. Line Plot
Variables

To assign variables for a line plot, choose Analyze:Line Plot (Y X). If you have already selected two or more variables, you obtain a line plot. The last variable you selected is assigned the X role, and all other variables are assigned the Y role.

If you have not selected any variables, a variables dialog appears.

![Figure 34.2. Line Plot Variables Dialog](image)

In the dialog, select at least one Y variable and at least one X variable. You will obtain one line plot for each X variable, while multiple Y variables are represented on each plot as multiple lines.

You can select one or more Group variables if you have grouped data. This creates line plots for each group.

You can select a Label variable to label observations in the plots.

Method

Observations with missing values for X variables are not used. Observations with missing values for a Y variable are not used in the line for that Y variable but are used in lines for other Y variables.
Output

To view or modify output options associated with your line plot, click on the Output button of the variables dialog. This displays the options dialog.

![Line Plot Output Options Dialog]

**Figure 34.3.** Line Plot Output Options Dialog

- **Variable:Names** labels the axes with variable names.
- **Variable:Labels** labels the axes with variable labels.
- **Variable:Both** labels the axes with both names and labels.
- **Orientation:**
  - **Y Axis Vertical** draws the axis for the Y variable vertically. If this option is turned off, the Y axis is horizontal.
  - **Vertical Axis at Left** places the vertical axis at the left side of the plot. If this option is turned off, the vertical axis appears at the right side of the plot.
  - **Horizontal Axis at Bottom** places the horizontal axis at the bottom of the plot. If this option is turned off, the horizontal axis appears at the top of the plot.
You can modify other aspects of the line plot by using the pop-up menu.

- **Ticks...** specifies tick labels on either axis.
- **Axes** toggles the display of axes.
- **Observations** toggles the display of observations. When this menu is toggled off, observations are displayed only if selected.
- **Reference Lines** toggles the display of lines that indicate the position of major ticks on the axes. This option is not available unless the axes are visible.
- **Marker Sizes** sets the size of markers used to display observations.

You can select and brush observations in the line plot even when they are not visible. If you click on a line at the location of an observation, you select that observation. If you click on a line between two observations, you select the line.

Lines in the plot are linked to variables on the Y axis. Click either on the line or on a Y variable to select both the line and its associated variable.

Finally, you can set colors, patterns, and widths of lines the same way you set these attributes for curves. See Chapter 13, “Fitting Curves,” for examples of setting patterns, widths, and colors.