Chapter 29
Configuring SAS/INSIGHT Software

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Chapter 29
Configuring SAS/INSIGHT Software

You can configure SAS/INSIGHT software in two ways. You can tailor SAS/INSIGHT software to the way you work by saving option settings for future use. You can also set host resources to improve SAS/INSIGHT software's performance on your host.

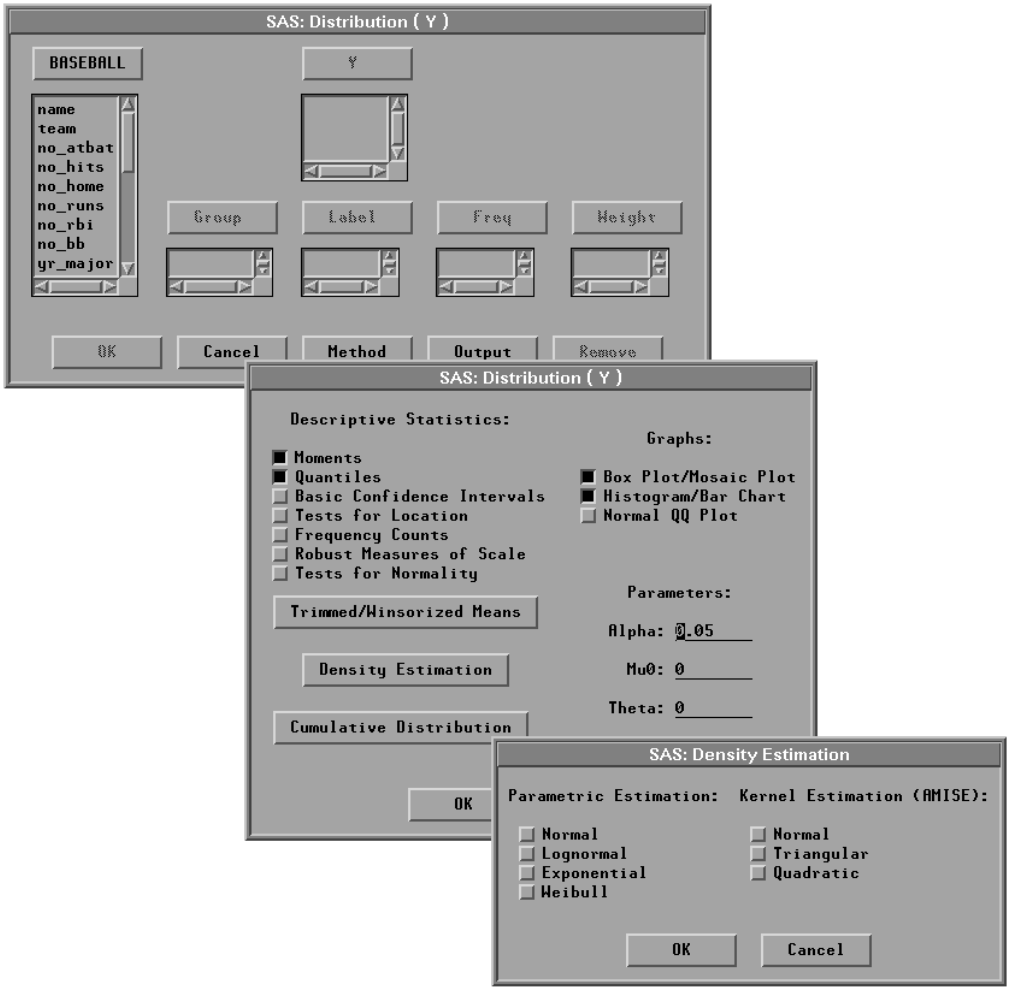

Figure 29.1. Setting Output Options

Setting Options

With SAS/INSIGHT software, you can set options in two ways. You can set options in an analysis window that affect the calculations and output displayed only in that window. Alternatively, you can set options that affect the display of all windows.

Setting Method and Output Options

Method options and *output options* affect only the individual analysis window for which they are set. You can set *method options* to determine how SAS/INSIGHT software performs calculations for a particular analysis. You can set *output options* to control the output produced in a graph or analysis. To modify method and output options for a box plot, follow these steps.

⟹ **Open the BASEBALL data set.**

⟹ **Choose Analyze:Box Plot/Mosaic Plot (Y).**

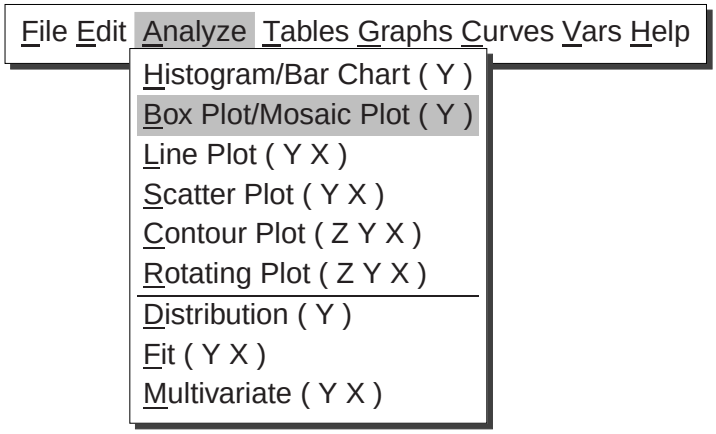

Figure 29.2. Analyze Menu

This displays the box plot variables dialog, as shown in Figure 29.3. Note that both a **Method** and an **Output** button are displayed in this dialog. You can set **Output** options for each of the choices in the **Analyze** menu in Figure 29.2. You can set **Method** options for each of these choices except for line plots, scatter plots, and rotating plots. You can find details on options for each analysis in the reference chapters.

⟹ **Assign NO_RBI the Y role by clicking on NO_RBI, then on Y.**

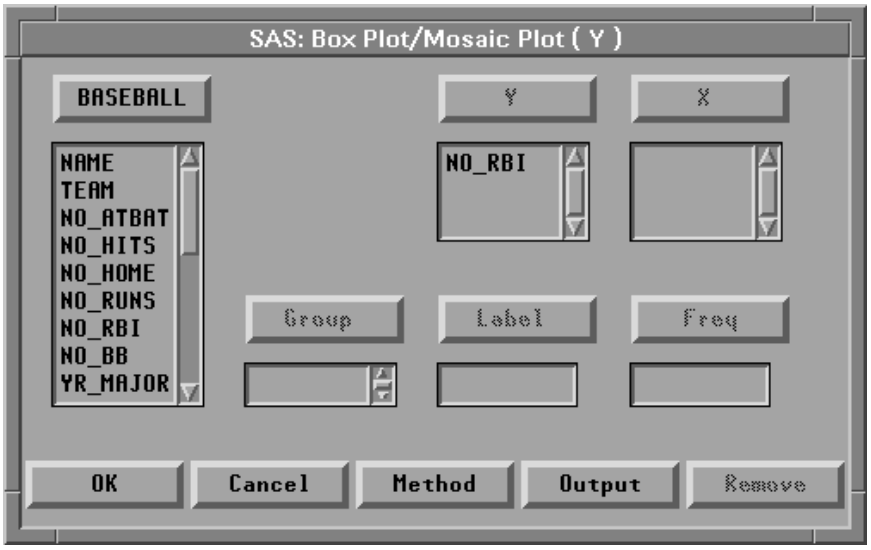

Figure 29.3. Box Plot Variables Dialog

⟹ **Click the OK button to create the box plot.**

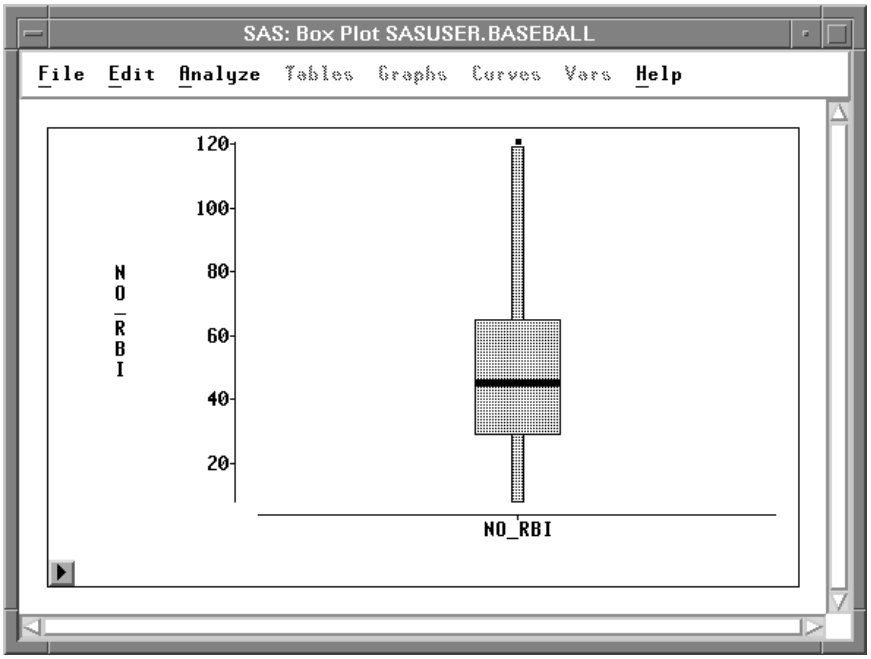

Figure 29.4. Box Plot

⟹ **Choose Edit:Windows:Renew in the box plot window.**
This redisplays the box plot variables dialog.

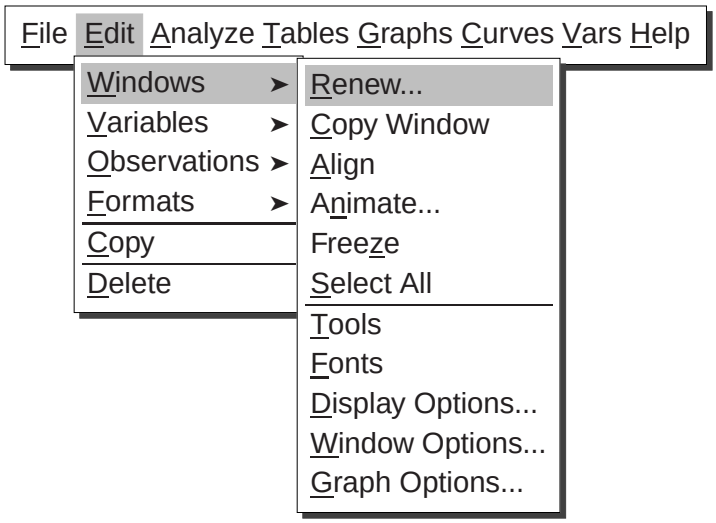

Figure 29.5. Edit:Windows Menu

⟹ **Click on the Method button to display the box plot method dialog.**

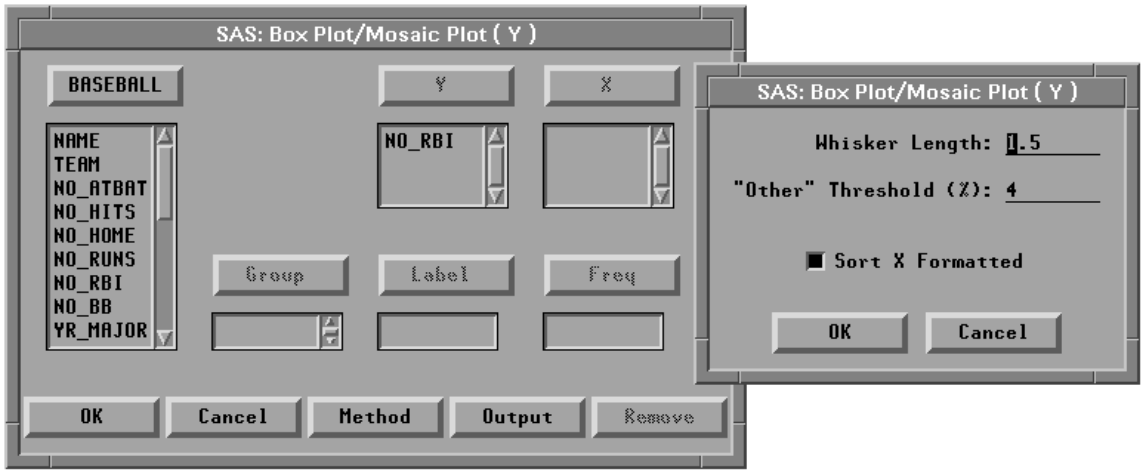

Figure 29.6. Variables and Method Dialogs

⟹ **Change the whisker length to 1.0 and click the OK button in the method dialog.**

⟹ **Click the Output button to display the box plot output dialog.**

⟹ **Click the Means, Labels, and Y Axis Vertical buttons.**
The **Means** and **Y Axis Vertical** buttons are toggles. The display of a means diamond is now on, and the **Y** axis is set to be displayed horizontally instead of vertically. The **Labels** button is a state indicator showing that variable labels are set to be displayed.

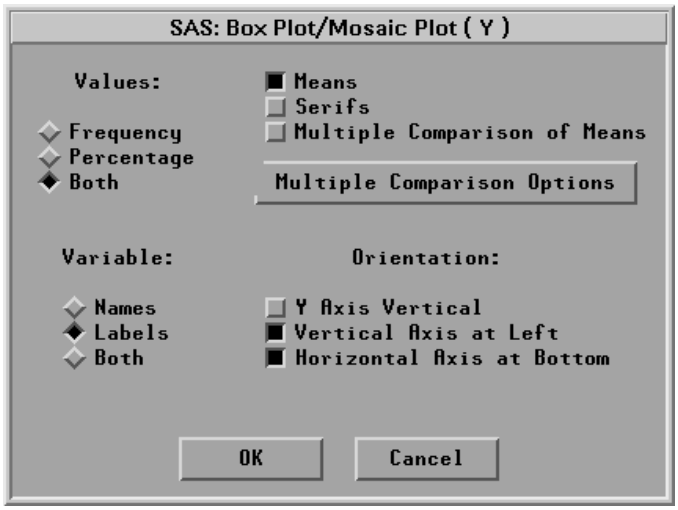

Figure 29.7. Box Plot Output Dialog

⟹ **Click OK in both the output dialog and the variables dialog.**
This displays the new box plot in Figure 29.8. Note that the box plot is displayed horizontally with a mean diamond. The upper whisker is now only the same length as the box, showing more points as individual outliers. Also, the RBI axis shows the variable label instead of the variable name.

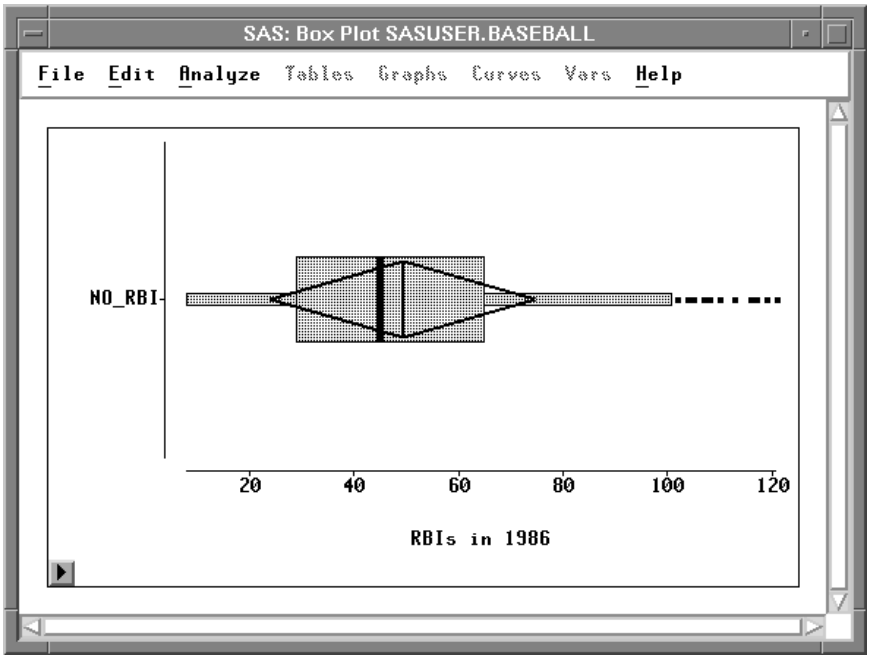

Figure 29.8. Modified Box Plot

Setting Display, Window, and Graph Options

Display options, *window options*, and *graph options* modify aspects of the software that affect every analysis. To set *display options*, choose **Edit:Windows:Display Options**. Note that you also set *window options* and *graph options* from the **Edit:Windows** menu.

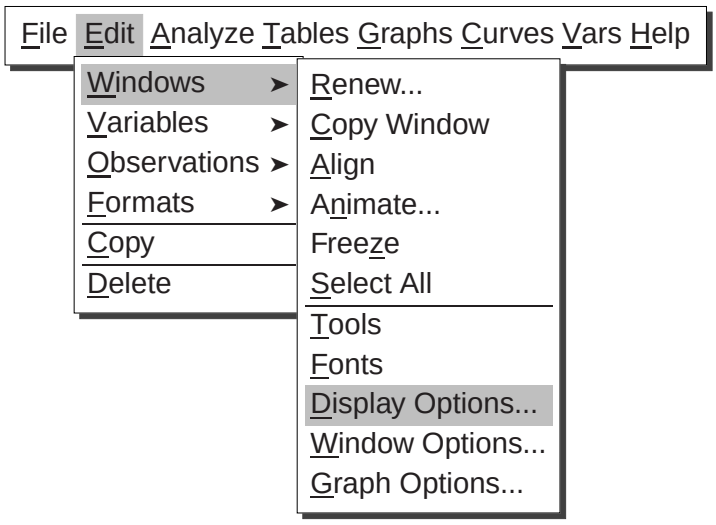

Figure 29.9. Edit:Windows Menu

This displays the display options dialog, as shown in Figure 29.10.

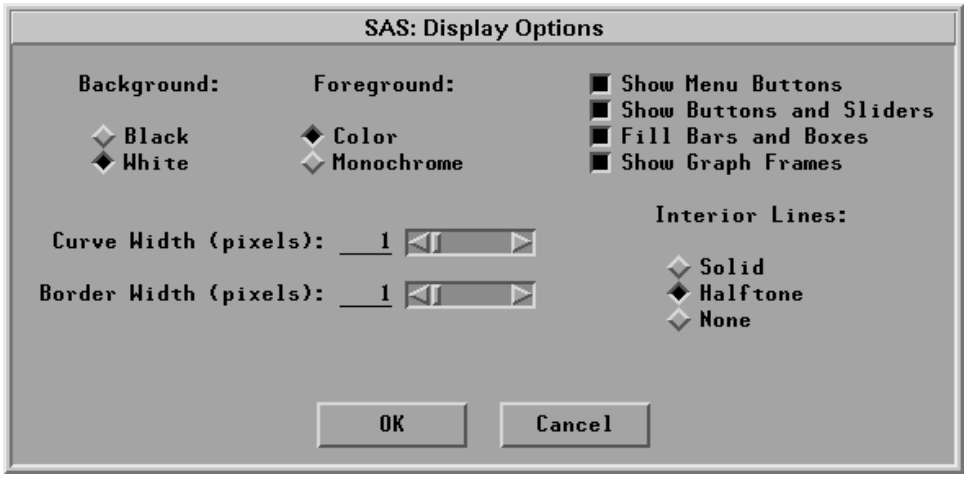

Figure 29.10. Display Options Dialog

The dialog contains the following options:

Background	specifies either **Black** or **White** background.
Foreground	specifies either **Color** or **Monochrome** foreground. **Monochrome** display improves printed output by removing shades of gray used to approximate color.
Show Menu Buttons	governs the display of pop-up menu buttons in all windows. Turn this option off to remove menu buttons.
Show Buttons and Sliders	governs the display of all buttons and sliders except menu buttons. Turn this option off to remove buttons and sliders.
Fill Bars and Boxes	specifies the use of pattern fill in bar charts, box plots, and mosaic plots. Turn this option off to display empty bars and boxes. On slower hosts, turning this option off improves display speed as well as printed output.
Show Graph Frames	In nonrotating plots, this option specifies whether the two axes are displayed as two disjoint line segments or are joined together as part of a frame.
Curve Width	sets the default width of curves in pixels. On most hosts, a width of 1 pixel maximizes display speed.
Border Width	sets the default width of graph and table borders in pixels. When you are printing with a black background, increasing border width improves the display of graphs and tables.
Interior Lines	sets the display of lines within the data window and analysis tables. **Solid** produces solid lines; **Halftone** produces a dimmer line; **None** removes interior lines. **Solid** and **None** settings improve display speed on personal computers.

The figures in this book are produced with **Foreground** set to **Monochrome** and **Curve Width** set to **2** pixels. Most figures have **Show Graph Frames** turned off.

To set *window options,* choose **Edit:Windows:Window Options**. This displays the window options dialog.

Figure 29.11. Window Options

The dialog contains the following options:

Layout sets the algorithm for positioning windows. **Spread** spreads the windows so that the maximum number of tables and graphs are visible. **Cascade** causes each window to be offset a small distance from the previous window. On some hosts, the effect of this option is overridden by the host window manager.

Show Tools at Startup causes the Tools window to display automatically when you invoke SAS/INSIGHT software.

Zoom/Scroll Speed (%) sets the speed of the zoom tool and the speed of automatic scrolling when you drag a selection past the window border. The speed is a percentage value between 0 and 100. Some hosts override this option.

Default Margin (mm.) sets the spacing in millimeters between graphs and tables in analysis windows. If your display is small, reduce this value to maximize the display of information.

Number of Groups sets the number of groups you can use in an analysis without getting a request for confirmation.

Zoom/Scroll Speed, **Default Margin**, and **Number of Groups** can be controlled by sliders to the right of the option. To set these options, either click or drag on the sliders or type in the entry field.

To set graph options, choose **Edit:Windows:Graph Options**. This displays the graph options dialog.

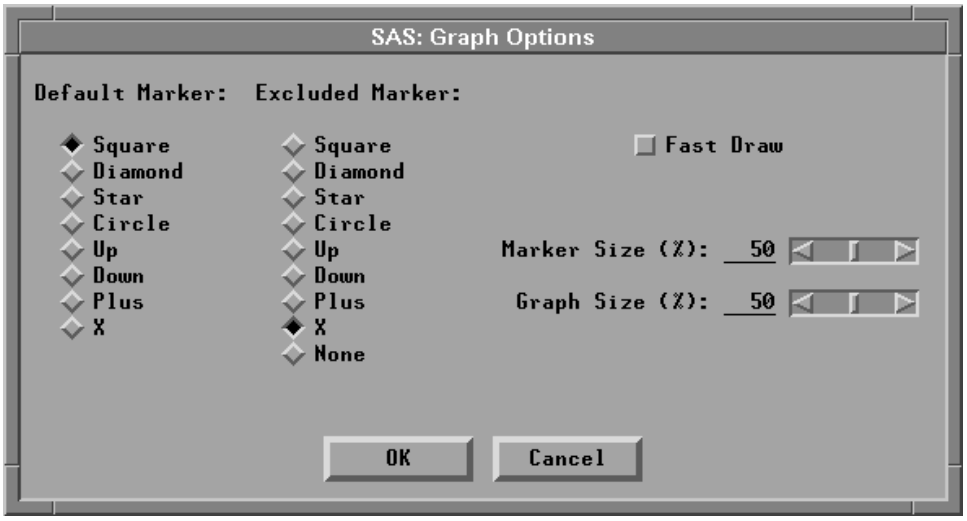

Figure 29.12. Graph Options

The dialog contains the following options:

Default Marker sets the default marker shape. On personal computers, **Square** and **Plus** are the best choices; these markers are the fastest to display. On fast workstations, **Circle** is preferable to minimize interference between plotted observations.

Excluded Marker sets the marker shape for observations that are excluded from calculations. **X** is the default. If you choose **None**, marker shape is not affected by exclusion.

Fast Draw sets display algorithms for rotation, brushing, manipulation of histograms, and dynamic curve fitting. By default, this option is off, which produces slower but smoother dynamic effects. If this option is on, speed is improved but, on some hosts, the display may flicker. The better choice of algorithms depends on your host, the size of your graphs, and the number of observations.

Marker Size (%) sets the default size of markers in plots. This is the marker size used when you choose **Marker Sizes:Size to Fit**. This is a percentage value between 0 and 100.

Graph Size (%) sets the default size of windows and graphs. This is a percentage value between 0 and 100. If your display is small, reduce this value to display more graphs.

To see the effects of various display, window, and graph options, follow these steps.

⟹ **Create a fit analysis for the model NO_RBI = NO_HITS.**
Use the techniques described in Chapter 13, “Fitting Curves.” This creates the fit analysis shown in Figure 29.13.

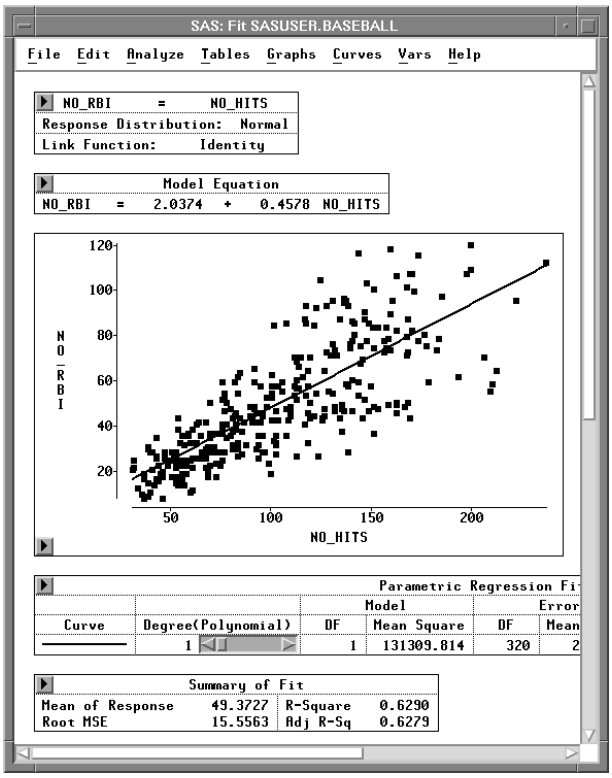

Figure 29.13. Fit Analysis

⟹ **Choose Edit:Windows:Display Options to display the display options dialog.**

⟹ **Click on the toggle button for Show Menu Buttons.**
Recall that the figures here already have **Foreground** set to **Monochrome** and **Curve Width** set to **2** pixels.

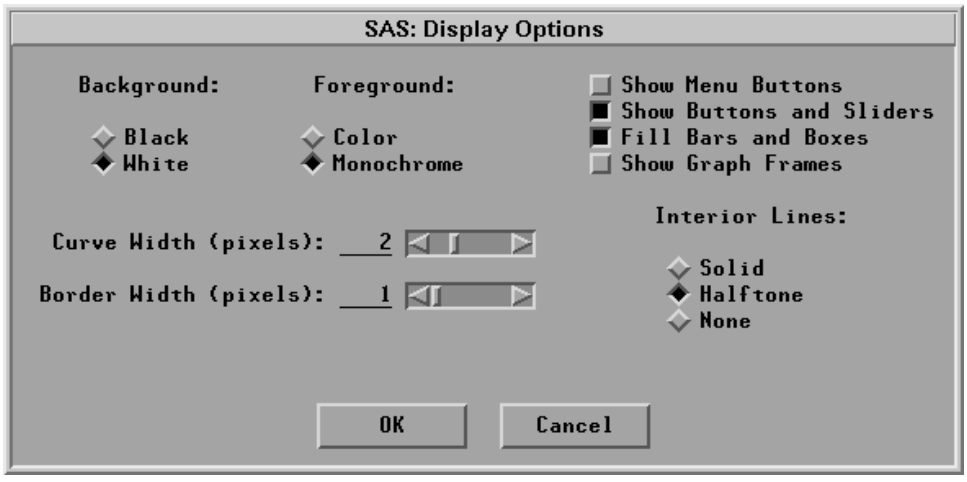

Figure 29.14. Setting Display Options

⟹ **Click OK to set the display options and close the dialog.**

⟹ **Choose Edit:Windows:Window Options to display the window options dialog.**

⟹ **Set the Default Margin to 1 mm.**

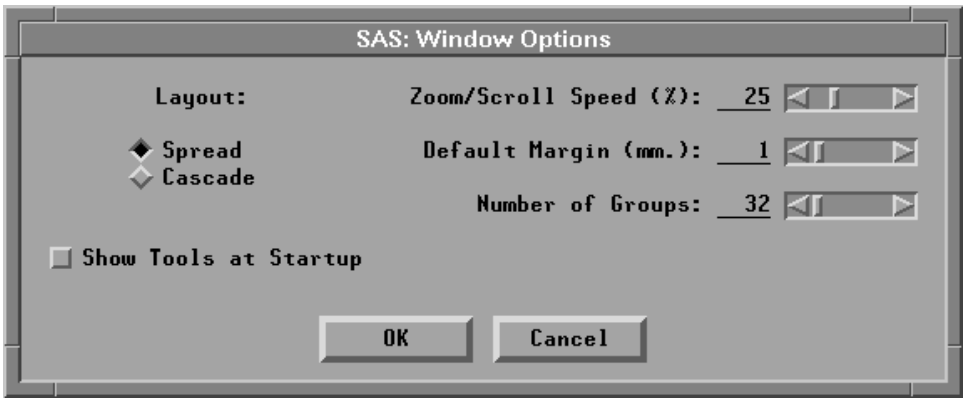

Figure 29.15. Setting Window Options

⟹ **Click OK to set the window options and close the dialog.**

⟹ **Choose Edit:Windows:Graph Options to display the graph options dialog.**

⟹ **Set the Marker Size to 100%.**

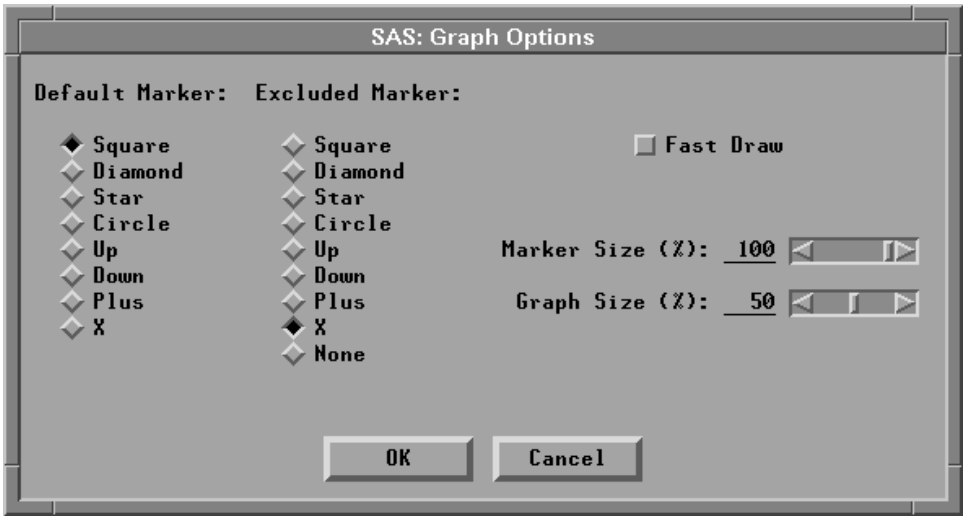

Figure 29.16. Setting Graph Options

⟹ **Click OK to set the graph options and close the dialog.**

⟹ **Choose Edit:Windows:Renew in the fit analysis window.**
This displays the fit analysis variables dialog.

⟹ **Click OK in the variables dialog.**

This redisplays the fit analysis with the modified option settings. Contrast Figure 29.17 with Figure 39. Note that the menu buttons are no longer displayed, the space between the tables and graphs is reduced, and the marker size is increased.

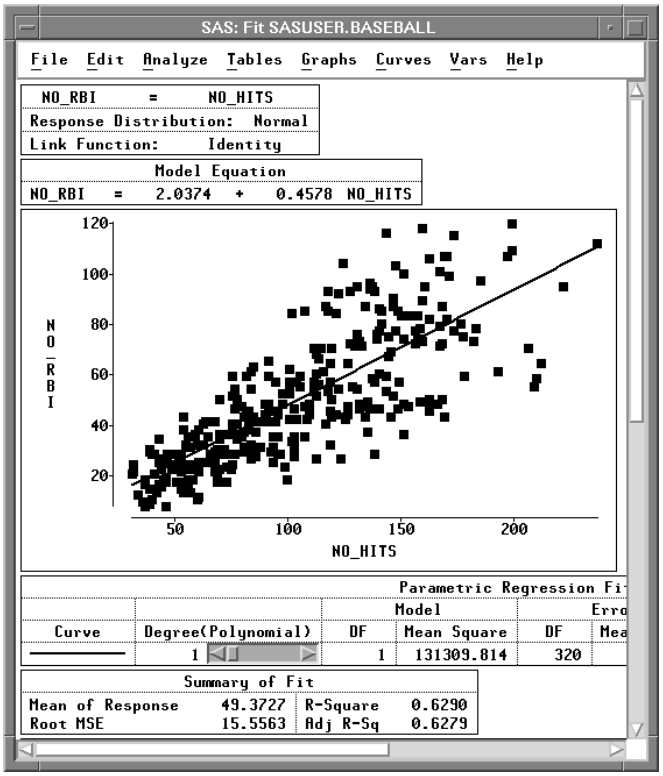

Figure 29.17. Modified Fit Analysis

Saving Options

Once you set any option, it remains in effect for the rest of your SAS/INSIGHT session. You can also save options so they become the default for future SAS/INSIGHT sessions by choosing **File:Save:Options**.

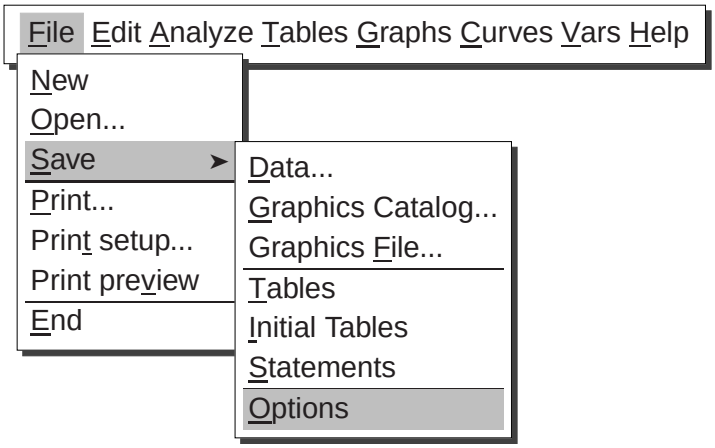

Figure 29.18. File:Save Menu

This saves options for all graphs and analyses, as well as display, window, and graph options, and stores these options in your SASUSER.PROFILE catalog. Option settings are read from SASUSER.PROFILE.INSIGHT and used as default settings the next time you invoke SAS/INSIGHT software. This enables you to tailor SAS/INSIGHT software to the way you work.

Setting Host Resources

You can modify the operation and appearance of SAS/INSIGHT software in ways that are specific to your host by setting *host resources*. For details on host resources, refer to the SAS companion for your host.

If you are on a UNIX host running X Windows, the behavior of the SAS System is determined by X resources. The following X resources improve the performance of SAS/INSIGHT software.

```
# SAS resources
SAS.windowUnitType:             percentage
SAS.windowHeight:               90
SAS.windowWidth:                100
SAS.maxWindowHeight:            90
SAS.maxWindowWidth:             100
SAS.sessionGravity:             NorthWestGravity

# Motif resources
Mwm*IconPlacement:              right bottom
Mwm*InteractivePlacement:       false
Mwm*ClientAutoPlace:            false
Mwm*KeyboardFocusPolicy:        pointer
```

These SAS resources and Motif resources enable the SAS System to use 90% of the display and enable SAS/INSIGHT software to place windows efficiently when you set the **Window Layout:Spread** option. If your host does not use the Motif window manager, it may use another window manager with similarly named resources.

Resource names are case-sensitive. You can load X resources at system initialization or use the UNIX **xrdb** command. For more information on X resources, refer to the SAS companion for the UNIX environment or your host documentation.

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