

Chapter 27

Saving and Printing Graphics

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Chapter 27

Saving and Printing Graphics

If you have SAS/GRAPH software installed, you can save any SAS/INSIGHT window to a graphics catalog. You can modify graphics using the Graphics Editor and print them on any SAS/GRAPH device. You can save graphics files in bitmap formats including GIF, TIFF, and PostScript™.

On Windows and OS/2 hosts, SAS/INSIGHT software prints using host printing facilities. On other hosts, you can print using SAS/GRAPH software or host-provided screen-dumping utilities.

To improve your output, you can choose proportional fonts and set display options.

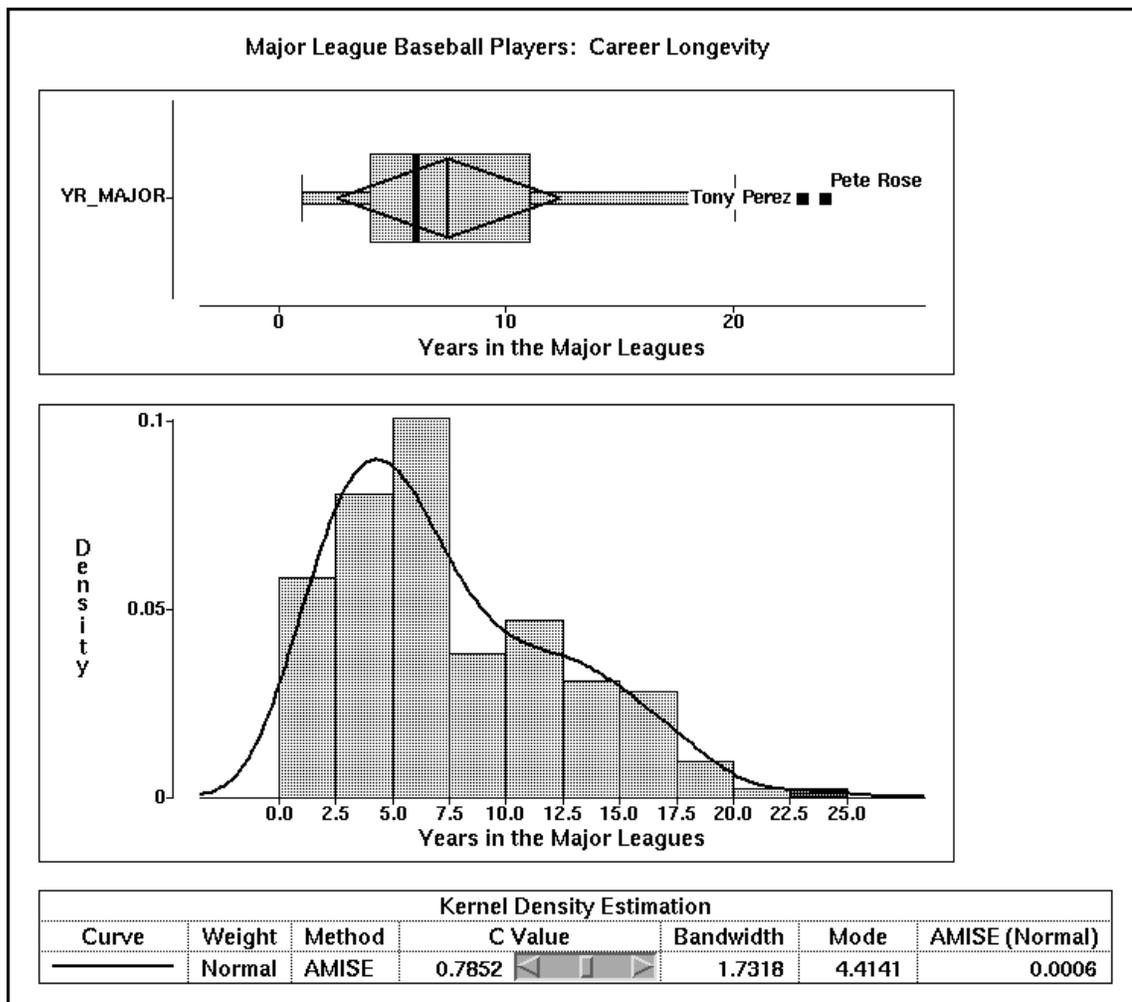


Figure 27.1. Printed Output with Title

Choosing Fonts

Proportional fonts make your output more readable. Choose **Edit:Windows:Fonts** to display the fonts dialog.

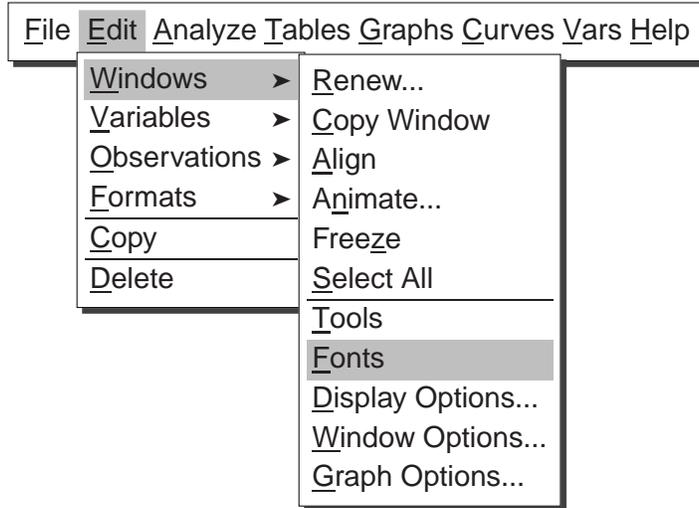


Figure 27.2. Edit:Windows Menu

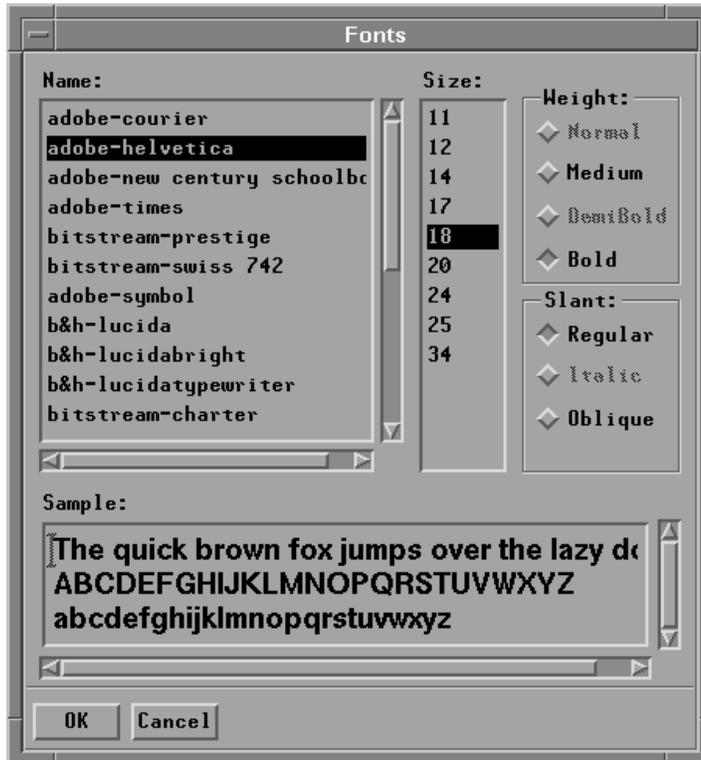


Figure 27.3. Fonts Dialog

The appearance of the fonts dialog depends on your host, and its contents depend on the fonts you have installed. On most hosts, you can simply click on a font name, click on other settings if desired, then click **OK** to set the font.

The font you choose is used to display tables, data values, and axis labels in graphs.

Tick labels in graphs use a slightly smaller font from the same font family.

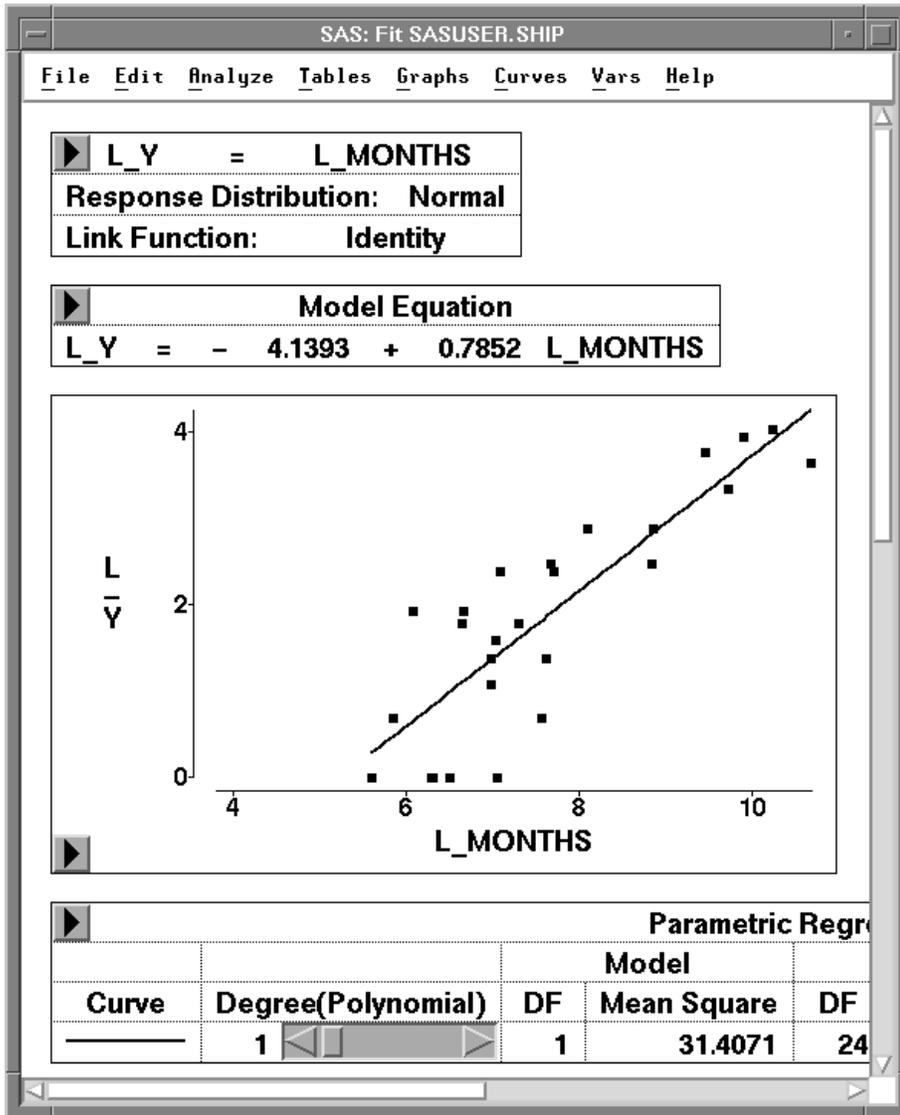


Figure 27.4. Fit Analysis with Proportional Font

Setting Display Options

To improve presentation output, SAS/INSIGHT software provides display options. Choose **Edit:Windows:Display Options** to produce the display options dialog.

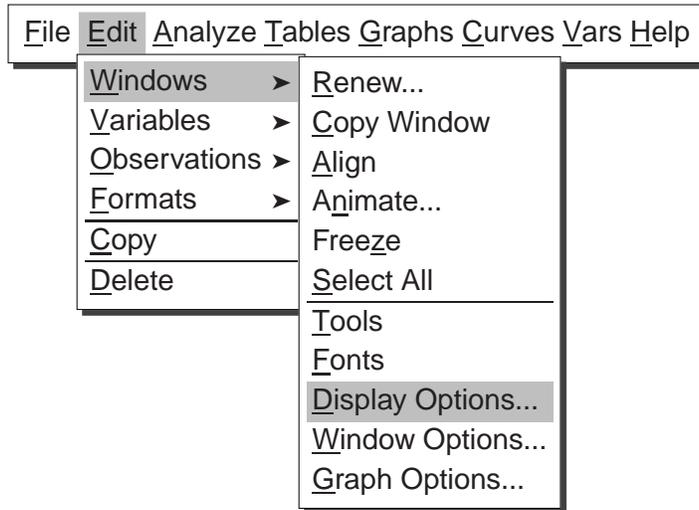


Figure 27.5. Edit:Windows Menu

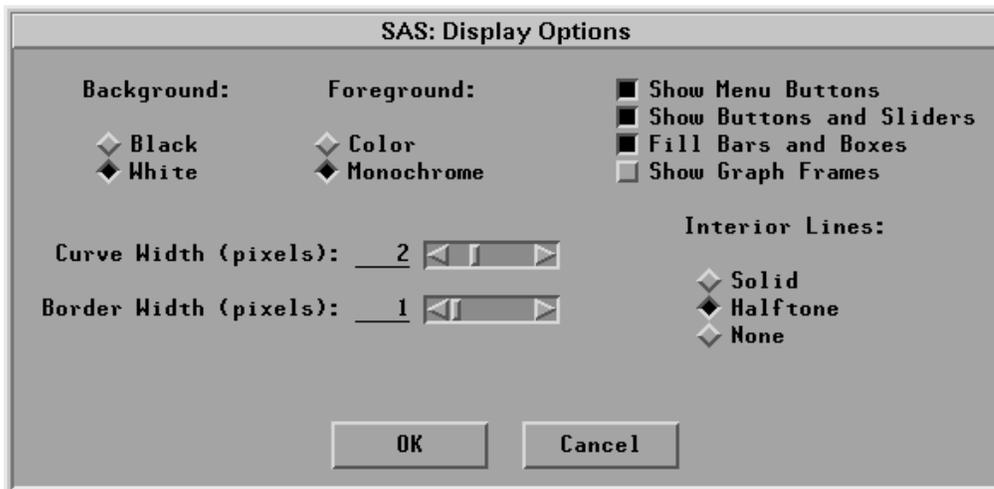


Figure 27.6. Display Options Dialog

The **Background** option enables you to choose a **Black** or **White** background. Because they provide maximum contrast, black and white are the best background colors for exploratory data analysis.

Printing on black-and-white printers may translate colors to shades of gray. If gray shades do not reproduce well on your printer, choose **Foreground:Monochrome** to improve your output. The figures in this book are set as in Figure 27.6.

The remaining display options are described in detail in Chapter 29, “Configuring SAS/INSIGHT Software.” You can choose **File:Save:Options** to save all option settings to use as defaults in subsequent SAS/INSIGHT sessions.

Saving Graphics

If you have SAS/GRAPH software installed, you can save graphics catalogs in either **Graph** or **Image** format. You can use SAS/GRAPH software to save graphics files in a variety of bitmap formats.

Saving Graphics Catalogs

To save SAS/GRAPH catalogs from SAS/INSIGHT software, follow these steps.

⇒ **Select any graphs or tables you want to save.**

If no graphs or tables are selected, you will save all objects visible in the active window. To save all objects in the window, visible or not, choose **Edit:Windows>Select All**. Choosing this menu selects all graphs and tables in the active window.

⇒ **Choose File:Save:Graphics Catalog.**

This calls up the save graphics catalog dialog.

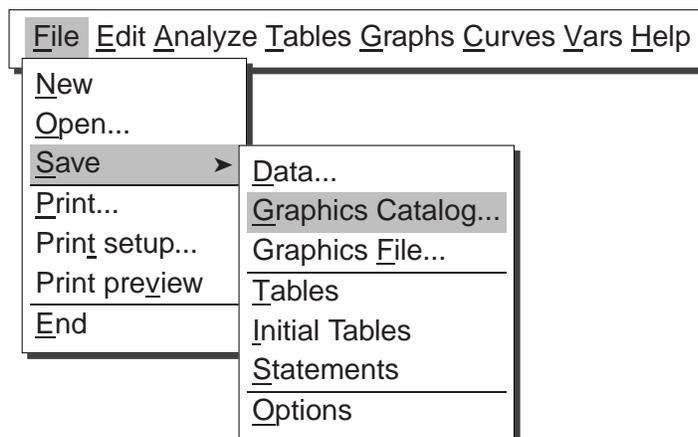


Figure 27.7. File:Save Menu

⇒ **Click the Graph or Image radio button to set your preference.**

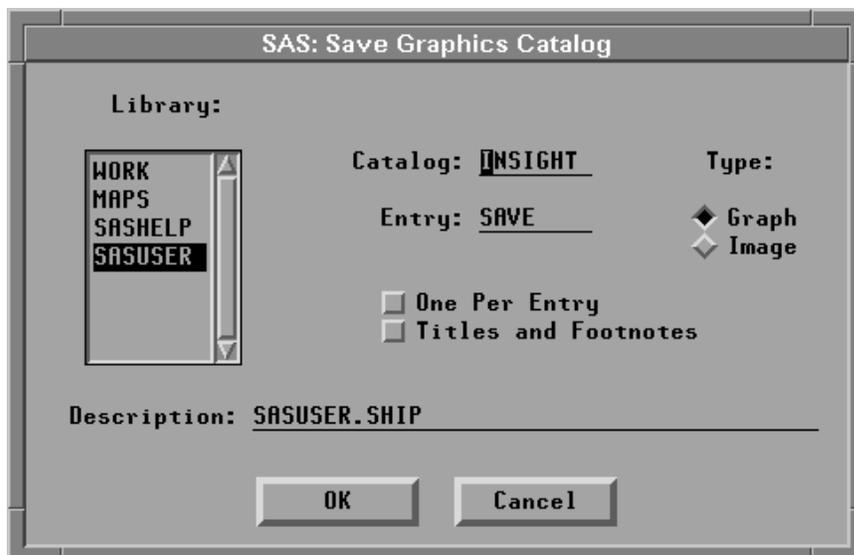


Figure 27.8. Graphics Catalog Dialog

You can also specify catalog, entry, and description for your graphics output.

Set the **One Per Entry** option if you want to store each graph and table as a separate catalog entry. Entry names are derived from the name of the graph or table.

Set the **Titles and Footnotes** option if you want to use SAS titles and footnotes.

If you set both **One Per Entry** and **Titles and Footnotes** options, and if your window contains group variables, an additional title is generated to show the group. The group title is similar to the BY-group title in SAS/GRAPH output.

⇒ **Click OK to save the catalog.**

Saving Graphics Files

You can use SAS/GRAPH software to save graphics files in a variety of bitmap formats. To save bitmaps, follow these steps.

⇒ **Select any graphs or tables you want to save.**

If no graphs or tables are selected, you will save all objects visible in the active window.

⇒ **Choose File:Save:Graphics File to display the graphics file dialog.**

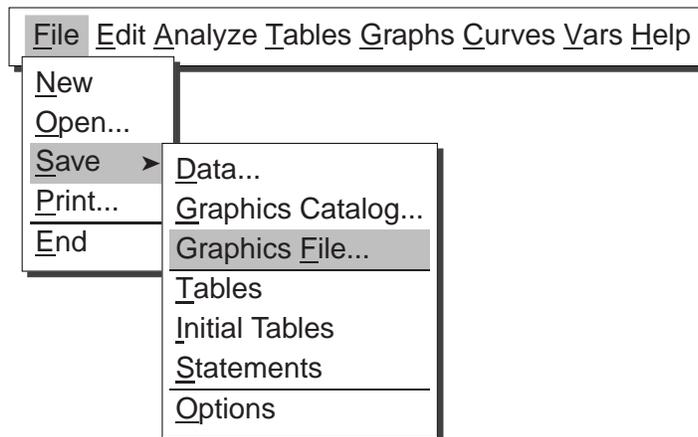


Figure 27.9. File:Save Menu

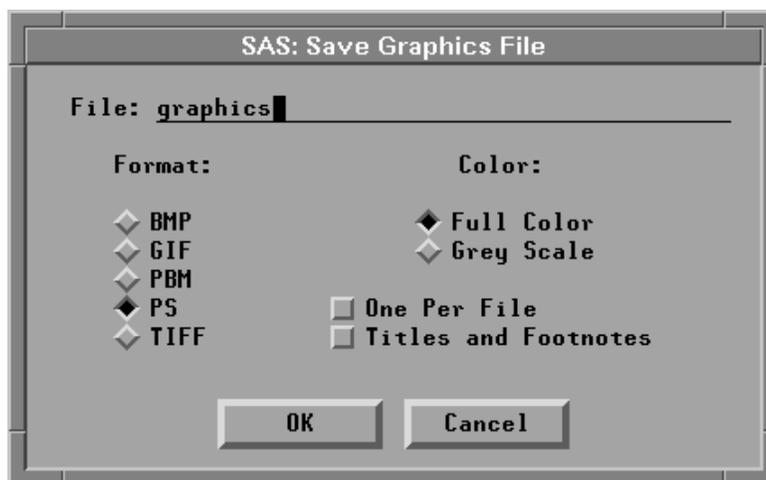


Figure 27.10. Graphics File Dialog

⇒ **Enter your file name, choose a format, and set additional options.**

Use the **Full Color** or **Grey Scale** options to control the colors stored in graphics files. Usually **Grey Scale** produces smaller files for faster printing.

Set the **One Per File** option if you want to store each graph and table in a separate file. If you set this option, the directory name is derived from the name you enter. Eight-character file names are derived from the name of the graph or table; for example, “scatter” for scatter plots, or “parametr” for parameter estimates.

Set the **Titles and Footnotes** option if you want to use SAS titles and footnotes.

If you set both **One Per File** and **Titles and Footnotes** options, and if your window contains group variables, an additional title is generated to show the group. The group title is similar to the BY-group title in SAS/GRAPH output.

⇒ **Click OK to save the graphics file.**

† **Note:** Clicking **OK** overwrites any files with the same file name.

For more information on saving graphics in bitmap formats, refer to the chapter on “Exporting SAS/Graph Output” in *SAS/GRAPH Software: Reference*.

Printing

Methods of printing vary greatly among different hosts. This section describes briefly the typical steps in printing on most personal computers and workstations. For more information on printing, refer to your host documentation and to the SAS companion for your host. See also the host changes and enhancements reports for Releases 6.10 and 6.11, as several hosts have improved printing in these releases.

Briefly, SAS/INSIGHT supports three ways of printing. If your host provides screen-dumping utilities, you can print anything that is visible on the display. Alternatively, on many hosts you can copy graphs and tables to the clipboard and then print the clipboard. Finally, you can use host printing facilities or SAS/GRAPH software to print directly from SAS/INSIGHT windows.

Printing from the Display

Many hosts provide tools or interfaces to print directly from the display. On UNIX hosts, tools such as **xwd** and **xv** deliver high-quality output. On Windows hosts, you can print the active window directly from the display by following these steps.

- ⇒ **Choose File:Print.**
- ⇒ **Set the Print as Bitmap check box.**
- ⇒ **Click OK.**

Printing from the display restricts you to printing objects that are visible. For more flexibility, you can print from the clipboard.

Printing from the Clipboard

Windows hosts support printing from the clipboard. To print graphs and tables from the clipboard, follow these steps.

- ⇒ **Select any graphs or tables you wish to print.**
Drag a rectangle through the graphs and tables, or click on their edges. If no graphs or tables are selected, you will print all objects visible in the active window.

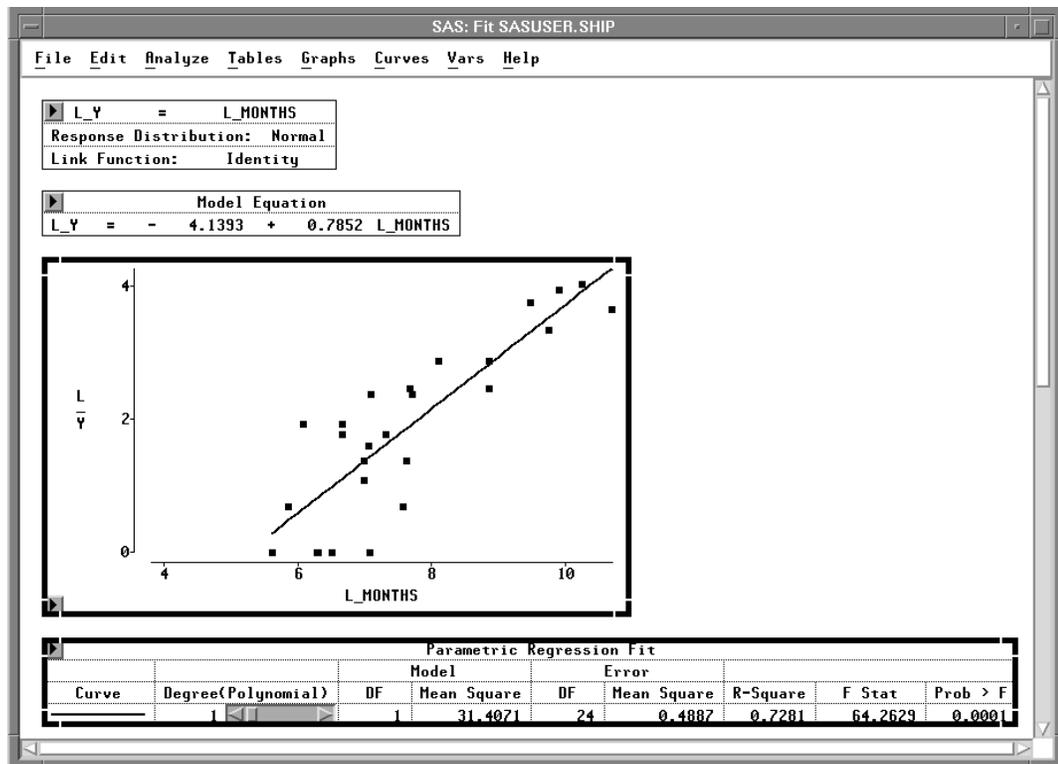


Figure 27.11. Selected Graphs and Tables

- ⇒ Choose **Edit:Copy** to copy selected objects to the clipboard.
- ⇒ Choose **File:Print**.
- ⇒ Set the **Print as Bitmap** check box.
- ⇒ Set the **Contents of list to Clipboard (bitmap)**.
- ⇒ Click **OK**.

Printing from the clipboard is not supported on all hosts. For a more general way of printing, you can print directly from a SAS/INSIGHT window.

Printing from the Window

Printing from the window is the most flexible way to print. To print from a SAS/INSIGHT window, follow these steps.

- ⇒ **Select any graphs or tables you wish to print.**
If no graphs or tables are selected, you will print all objects visible in the active window. To print all objects in the window, visible or not, choose **Edit:Windows:Select All** to select all graphs and tables in the window.
- ⇒ **Choose File:Print.**
On Windows and OS/2, this displays a host Print dialog, with options such as the **Print as Bitmap** option in the preceding sections. If you receive a host Print dialog, click **OK**. This displays the SAS/INSIGHT Print dialog.



Figure 27.12. SAS/INSIGHT Print Dialog

In the SAS/INSIGHT Print dialog, the **Fill Page** option expands your output to fill the area of the page. The **One Per Page** option prints each graph and table on a separate page. The **Titles and Footnotes** option prints using SAS titles and footnotes.

If you set both **One Per Page** and **Titles and Footnotes** options, and if your window contains group variables, an additional title is generated to show the group. The group title is similar to the BY-group title in SAS/GRAPH output. An example of the group title for histograms of **YR_MAJOR** by **LEAGUE** is shown in Figure 27.13.

⇒ **Set options as needed, then click OK in the Print dialog.**

Clicking **OK** in the Print dialog routes your printing through host printing facilities if they are provided. Windows and OS/2 provide such facilities, and they are documented in SAS companions and host changes and enhancements reports.

If your host does not support host printing, your printing is routed through SAS/GRAPH software. You will be prompted for an output device if you have not specified one with the GOPTIONS TARGETDEVICE= option.

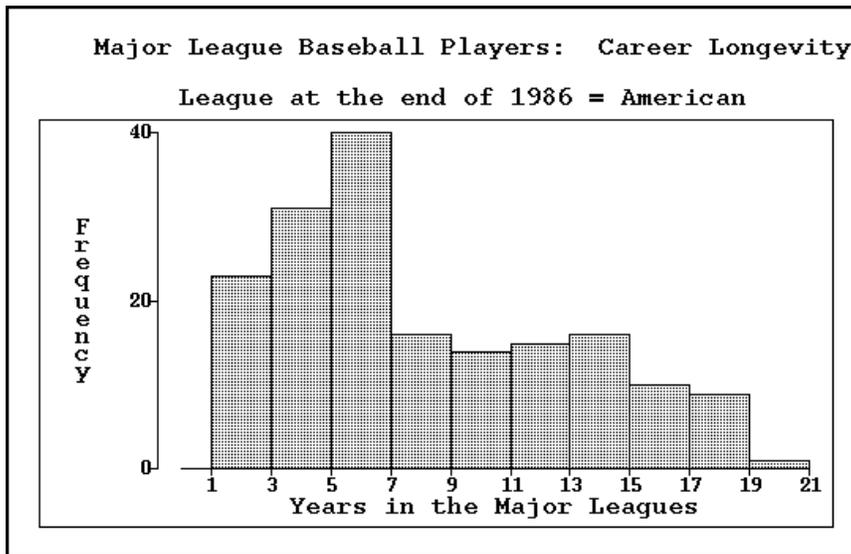


Figure 27.13. Output with Title and Group Title

An alternative way of printing is to save your graphics to catalogs and print them from SAS/GRAPH software. This enables you to edit your output before printing. SAS/GRAPH printing and graphics catalogs are described in *SAS/GRAPH Software: Reference*.

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