

This file consists of Appendix F to **MacAnova User's Guide** by Gary W. Oehlert and Christopher Bingham, issued as part of a revision of Technical Report Number 617, School of Statistics, University of Minnesota, August 1998, describing Version 4.07 of MacAnova.

This manual is Copyright © 1998 Gary W. Oehlert and Christopher Bingham, all rights reserved.

Fonts used in this manual are Palatino, Courier, and Symbol.

For information concerning MacAnova, write University of Minnesota, Department of Applied Statistics, 352 Classroom Office Building, 1994 Buford Avenue, St. Paul, MN 55108-6042.



Appendix F Motif version of MacAnova

F.1 Introduction This appendix summarizes features special to the Motif version of MacAnova running under Unix. It provides a windowed environment for MacAnova based on the Macintosh version. See Appendix E for information on the non-windowed Unix version.

The Motif version is very similar to the Windows version described in Appendix D. It has the full range of MacAnova commands and uses the clipboard. On any specific Unix computer, the files produced by `save()` and readable by `restore()` (Sec. 2.17, 7.7) should be compatible with those produced by a non-Motif version running on the same computer. The executable file is usually named `macanovawx`. Its location is installation dependent but is commonly in `/usr/local/bin`.

See Sec. D.1.1 for a general description of the windowing interface.

F.2 Launching MacAnova Motif MacAnova can be run only in an X Windows environment. Typically it is started up by typing `macanovawx` or `macanovawx &` at the Unix prompt.

F.3 Menus There are four menus, **File**, **Edit**, **Windows**, and **Help**, at the top of each window. Many of the items on the menus can be selected from the keyboard by a Ctrl key combination. For instance, pressing Ctrl together with S (notated Ctrl+S below and on the menu item itself) selects **Save Window** on the **File** menu. Most menus have different entries depending on whether a command/output or a graphics window is in front.

F.3.1 The File menu When a command/output window is in front, items **Open...**, **Save Window**, **Save Window As...**, **Page Setup...**, **Print Window...**, **Interrupt**, **Restore Workspace...**, **Save Workspace...**, **Save Workspace As...**, and **Quit** on the **File** menu are as described in Sec. D.3.1.

When a graph window is in front, items **Interrupt**, **Go On**, **Print Graph**, and **Quit** on the **File** menu are also as described in Sec. D.3.1.

F.3.2 The Edit menu When a command/output window is in front, items **Undo/Redo**, **Cut**, **Copy**, **Paste**, **Copy to End**, **Execute**, **Up History** and **Down History** are as described in Sec. D.3.2, except that Ctrl+ and Ctrl+ do *not* activate **Up History** and **Down History**. Instead use Ctrl+ and Ctrl+ on the “keypad.” See Sec. 8.8.2.

There is no **Edit** menu when a graph menu is in front and hence you cannot copy a graph to the clipboard.

F.3.3 The Windows menu This differs depending on whether a command/output or a graphics window is active.

Items **Hide**, **Close**, and **Graphs** that are present on the **Windows** menu when either type of window is in front are as described in Sec. D.3.3. In addition to key combinations Ctrl+F1,..., Ctrl+F8, key combinations Ctrl+1,..., Ctrl+8 display graph windows 1 through 8.

Items **New Window**, **Scroll To Top**, **Go To End**, and **Go To Prompt** that are on the menu when a command/output window is in front are as described in Sec. D.3.3.

There is no **Set Font** item in the Motif version.

F.3.4 The Help menu Items **About** and **Help** are as described in Sec. D.3.4.

F.4 Graph windows Graph windows **Graph 1**, **Graph 2**, ..., **Graph 8** are as described in Sec. D.4. In addition to the key combination Ctrl+F2, say, to make graph window 2 active, you can press Ctrl+2. You cannot copy a graph to the clipboard.

F.5 Location of files File locations are usually as for the non-windowed Unix versions of MacAnova. See Sec. E.4.

F.6 Other features

F.6.1 Interrupting MacAnova You can interrupt MacAnova by selecting **Interrupt** on the **File** menu or by pressing Ctrl+I. This terminates the current command, possibly after a delay, prints

```
***** Interrupt *****
```

and returns to the prompt level.

F.6.2 Running other programs while in MacAnova When running the Motif version on a workstation, you can start up a program in another window while you are in MacAnova. Such a program runs “in parallel” with MacAnova and has no effect on the running of MacAnova. You can transfer text lines to and from another program using **Cut**, **Copy** and **Paste** on the **Edit** menu or the usual X windows selection mechanism (select text using the left mouse button in one window, insert it elsewhere by pressing the middle mouse button).

MacAnova command `shell()` and shell escapes (lines starting with “!”) work as described in Sec. 8.7 except that output from shell escapes and `shell(cmd, interact:F)` appears in the window from which MacAnova was launched rather than in the MacAnova window.

F.6.3 Editing Macros This is done almost exactly as described in Sec. B.6.3 for the Macintosh version except you use Ctrl+C instead of ⌘C to select **Copy** on the **File** menu.

F.6.4 Using keys to move around the command/output window You can use menu commands and arrow keys to move around the command/output window the same way as in the Windows version (Sec. D.6.4).

F.6.5 Recalling previous commands This is the same as for the Windows version (Sec. D.6.5) except that in place of Ctrl+ and Ctrl+ , you must use Ctrl+keypad and Ctrl+keypad . See also Sec. 8.8.2

F.6.6 “Console” input under Motif This is the same as for the Windows version (Sec. D.6.6).

F.6.7 Viewing data and macros You can view large data sets and macros using the predefined macro `more` described in Sec. D.6.6. The data set or macro being viewed appears in the window from which MacAnova was launched instead of in the command/output window.

F.7 Command line arguments When launching the Motif version at the Unix prompt, you can use any of the command line¹ options described in Sec. C.6.1, C.6.2 and C.6.3. You can also define an environmental variable `MACANOVA` to set the default values of the command line options. See Sec. 7.8.2.

F.8 Non-interactive mode The Motif version of MacAnova has no purely interactive mode. You can achieve somewhat the same effect by creating a file containing all the commands to be executed and then using `batch()` to execute them (Sec. 7.6) or starting it up at the Unix prompt with a `-batch` flag (Sec. C.6.1), possibly with a `-bprompt` flag (Sec. C.6.3). For true non-interactive use of MacAnova, use a non-windowed Unix version (Sec. E.7).

F.9 Miscellaneous information

F.9.1 Compilers The Motif version has been compiled using `g++`, the GNU C++ compiler. The windowing features are based on version 1.68 of the `wxWin` cross-platform windowing interface developed by Dr. Julian Smart. See Sec. D.9.1 for information on obtaining `wxWin`.

F.9.2 Distribution of Motif version of MacAnova See Sec. E.8.2 for information on obtaining MacAnova source files from which the Motif version can be compiled.

¹This is the command line at the Unix prompt, not the line where you enter MacAnova commands.