FzzPlot version 3.95 Release Notes

Release Notes for FzzPlot version 3.95

FzzPlot is a small program that performs several basic plotting functions. FzzPlot's main advantage over large commercial graphing programs is that it is fast, inexpensive, and easy to use. It is also fully compatible with all models of the Macintosh, ranging from the Macintosh 128K to the Macintosh Plus, as well as machines with third-party memory or processor upgrades or hard disk upgrades.

FzzPlot offers the following basic functions:

• Scatter plots, with the option to connect data points, as well as to plot error bars (for data where standard deviations are supplied)

• Histograms (vertical bar plots)

• Statistical analysis functions: compute mean, standard deviation, and random uncertainty of currently loaded dataset, compute line of best fit, compute chi-squared (for weighted line fit only).

• Plot mean and line of best fit on graph.

• Print graph out on any Macintosh-supported printer (ImageWriter, LaserWriter, or others)

• Copy graph to Clipboard as it appears on the screen for easy pasting into word-processor documents or for further enhancement with graphics editors such as MacDraw_

FzzPlot offers these features:

• Easy preparation of data files using a text editor, wordprocessor, custom-written program or spreadsheet; the file format is documented below.

• Computation is done using the fullest real-number precision available on the Macintosh for maximum accuracy. Extended-precision numbers are also faster on the Macintosh, due to the way that lower precision floating-point numbers are implemented.

• Unlimited data capacity: FzzPlot can load as many data points as available memory can hold; on a Macintosh 512K this is about 10,000 data points if standard deviations are used, or about 25,000 data points otherwise.

• Memory efficiency: FzzPlot maximizes the amount of available data storage by dynamically loading code and resources; this enables FzzPlot to run under Switcher_ with 128K of memory allocated, or with a large Ramdisk installed, and still have room to hold about 200 data points.

• User Interface: FzzPlot closely follows the Macintosh User Interface Standard.

• Compatibility: FzzPlot is fully compatible with the new Macintosh system software, including the Hierarchical File System (HFS).

• User Efficiency: FzzPlot provides a "Transfer" option, so that users can run another program (a word-processor, for example) without having to quit to the Finder_. In addition, FzzPlot is tested and compatible with alternative shells such as Switcher, MultiMac_, and Servant_.

• Distribution: FzzPlot is distributed free of cost, provided that this release sheet is distributed along with it.

• Support Policy: For $15, a user can purchase a complete set of documentation, the latest version of FzzPlot, and continued technical support, bug fixes, and upgrades to the program. (A note: legitimately purchased copies of FzzPlot will not have the startup dialog in them). Site licenses are available: an educational institution or business can purchase the right to distribute FzzPlot to members of its immediate community, plus the documentation on disk, as well as the aforementioned technical support and upgrades, for the cost of $100.

• Licensing: There is none. The user is not asked to sign any warranty cards or agreement; I keep a file of who has purchased the program, so that only legitimate purchasers of FzzPlot can receive support. Buyers of site licenses can provide the name and site license number of their organization in order to receive support.

• Copy protection: There is none. In my book, copy protection is the absolute pits. If a product is copy-protected, it is not worth buying.

• Gratitude: I am grateful to the users who purchase FzzPlot, and who are honest in their distribution of FzzPlot. People like this make the world go 'round. Deepest gratitude is also due to people who call in with questions, comments, suggestions, or complaints.

• FzzPlot is continually being tested, bent, enhanced, and upgraded (on the weekends, so I don't mess up my studies). If the user response is sufficient, I will continue to release new versions of FzzPlot to paid owners and site license holders. The continued development of FzzPlot is dependent on user feedback.

Using FzzPlot: A Primer

This page contains information to get you started using FzzPlot. Included here is documentation on how to prepare the data files, and also a list of known bugs.

The file format for FzzPlot is straightforward. Each data point resides on a line. If you are plotting data without standard deviations, then the data file would look like this:

x1<tab>y1<return>
x2<tab>y2<return>
x3<tab>y3<return>
x4<tab>y4<return>

_and so on. Each line ends with a carriage return, and each number is separated by a Tab character.

If you wish to include standard deviations in your data file, there will be three numbers on each line:

x1<tab>y1<tab>s1<return>
x2<tab>y2<tab>s2<return>
x3<tab>y3<tab>s3<return>
x4<tab>y4<tab>s4<return>

_and so on.
Some things to be careful of:
    • There should be no excess blank lines at the beginning or end of the file.

• Non-integral values should have digits both before and after the decimal point. For example, the values "1." and ".452353" aren't correct; they should instead be typed in as "1.0" and "0.452353". Integers, however, aren't bound by this restriction; "45" and "3524621" are perfectly acceptable.

• Be careful not to have any extra characters in the data. There should be no commas either in the numbers or separating the numbers, and you should use only the Tab character to separate the numbers.

• If you are using a word-processor to create your datafile, be sure to save the file as "Text Only". In MacWrite_, tell the program to place carriage returns after paragraphs (when it asks). Placing carriage returns after line breaks will crash FzzPlot.

Bugs:

There are only three known bugs in FzzPlot:

• FzzPlot will crash if you use the "Transfer_" option while running under Switcher. This will be fixed by the next release.

• FzzPlot will crash if extra blank lines are in the data file, as noted above. This too will be fixed by the next release.

• FzzPlot doesn't do everything. This one's being worked on. Planned enhancements include fitting an exponential function to the data, fitting a Gaussian peak plus quadratic background to the data, fitting polynomials, the ability to plot multiple datasets on one graph, multiple graph windows, logarithmic axes, and more flexible print formatting.

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FzzPlot was written using Lightspeed_ Pascal, and uses standard Pascal procedures and functions contained therein. The implementation of these procedures, and the libraries containing them, are copyright ©1986 by Think Technologies.

Code for the pop-up menus was originally written by Darryl Lovato of Lovato Programming, and made into a standalone library by me; the routines are copyright ©1986 by TML Systems.

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