

PLOTXY DOCUMENTATION

What PlotXY is

PlotXY is a program to create scientific plots from files produced by simulation programs or laboratory instruments.

It is thought as a tool for scientists and engineers, and therefore it is optimised for speed, and thought from the ground up as a tool capable to deal with huge data sets.

PlotXY is available in the following versions:

- For Microsoft Windows operating systems (from Win-Xp to Win8)
- Apple (MAC) operating systems

Both versions have exactly the same functionality. The appearance, however, is slightly different, since it is coherent with the user interface recommendations from the operating systems manufacturers, for both systems.

The file formats it is compatible with are:

- ATP binary files (from Alternative Transients Program)
- MAT files (fully compatible with Matlab 4.0 format, and partially compatible with 6.0 format)
- COMTRADE files (both binary and textual)
- LVM files (output from National Instruments' Lab-view compatible software)
- ADF files (a very simple text file format explicitly defined for PlotXY use)

What PlotXY can basically do

The fundamental capability of PlotXY is to make line plots, with the following special characteristics:

- Plots can easily have hundreds of thousands point each, and contain several curves
- From the same set of files different curves can be simultaneously displayed in a single plot; up to four different plots (each having several curves) can be managed using the same program instance
- Not only can plot data from your files; it can also create new plots mixing those data using sums, products, integrals et cetera
- It can perform Fourier analysis of a plot and create bar charts for the Fourier harmonic components.
- The produced plots can be exported as images in the system's clipboard, or as a SVG (scalable Vector Graphics) file. They can also be printed on an actual printer or as a pdf file
- Underlying numerical data can be peeked at directly from the plots
- New files can be obtained (in several formats) by saving just a few variables

What to do to use PlotXY

If you read these notes, you've downloaded the archive PlotXY-2014, to which this file belongs.

If you want to try PlotXY, I recommend to do the following:

- Install the program This is simply done by copying the application file (**PlotXY.exe** for Microsoft Windows users or **PlotXY.app** for Apple Mac users) of the PlotXY-2014 archive in a directory of choice and using it. Windows users might find convenient to create a link to PlotXY.exe and to put that link wherever they like, for instance in Windows' desktop. At this point, to run the program all you have to do is to double-click on the application file or its link. Windows users can also just drag & drop input file(s) on the application exe or link..
- Have a look at the first pages of file **Tutorial.pdf** in folder [documentation](#). It explains how to do nearly everything. If by looking the first pages of this document you find that PlotXY may be useful for you, you are strongly recommended to follow the whole tutorial. It will require 20- 30 minutes, but I think it will be a good investment of your time.

In the same folder [documentation](#) you can find also the following support documents:

- File **Input formats and naming conventions.pdf**: a description of how different supported input file types are read, and how names are converted between different file formats
- File **History and road-map.pdf** A rapid résumé of the past history of PlotXY and programmed developments.
- File **Disclaimer & License.rtf**, containing disclaimer and license.

Finally, in the package you will find the [data sets](#) directory, containing some example files, which are used in the Tutorial.pdf to show the program characteristics and usage.

NOTE. The distribution archive PlotXY-2014 contains also the directory named [Pro & Object files](#). It is intended only for programmers. Any other user can totally ignore this folder, or even delete it.