

C-PLOT™ COMMAND REFERENCE

Version 4.0

Handling Data

| | |
|--|---------------------------|
| 2d | Select 2D mode |
| 3d | Select 3D mode |
| eb [x y z] [0 1] [?] | Select error-bar modes |
| gd [mode] [file .] [+skip] [=total] [&] [@] | Get data points |
| lc [0 1] | Select line-control mode |
| np [x][y][z] | Reset axes for new points |
| sa [[-b] file [a w]] | Save current data |
| ra [x][y][z] [ranges ...] | Select axis range |
| ro [x][y][z] | Select axis range options |

Low-Resolution PseudoGraphics Plotting

| | |
|----------------------------------|--------------------------|
| gr [term [character_set]] | Select terminal type |
| v | Draw plot |
| va | Draw axes |
| vb [0 1] | Select inclusion of axes |
| vp | Draw points |
| vt [0 1] | Select automatic drawing |

High-Resolution Plotting

p commands write to pen plotters; **z** to graphics filters.

| | |
|--------------------------------------|--------------------------|
| pa za | Draw axes |
| pb zb | Draw error bars |
| pd zd | Draw date in corner |
| pk zk [h v xbox ybox zbox] | Draw key |
| pl zl | Draw axis labels |
| pn zn [h v] [file] | Draw annotation text, 2D |
| pn zn [xbox ybox zbox] [file] | Draw annotation text, 3D |
| pp zp | Draw points |
| pt zt | Draw title |
| pz zz pz | Draw complete plot |

Special Pen Plotter Commands

| | |
|-------------------------------|----------------------------------|
| in [m] [device] [baud] | Open and initialize plotter |
| pv [velocity -1] | Select pen velocity |
| pw | Do not move pen off page |
| px ps | Move pen off page |
| p# | Select pen (# is an integer) |
| rp | Release exclusive use of plotter |

Special Filter Commands

| | |
|---|--------------------------------|
| sc [short_side long_side] | Select filter scaling factors |
| z# | Select "pen" (# is an integer) |
| ze | Erase old filter plot |
| zE | Erase current window |
| zf, zf1, zf2 | Select filter |
| zi [filter [file @spool_opts ...] [filter_opts ...]] | Initialize a filter program |
| zq | Do not echo text to screen |
| zs | Close filter and pause |
| zw | Do not close filter |
| zx | Close filter |

Plot Formatting

| | |
|--|---------------------------------|
| bo [xbox . ybox . zbox .] | Set 3D box edges |
| cs [t l n s k d [height [ratio [slant]]]] | Set character sizes |
| ft [code] | Select font |
| gk | Enter key symbols and text |
| lo [llx lly urx ury] | Locate plot |
| re | Reset program for new plot |
| se [dash [lgth] spacing [vert] t1 [%] xt1 [%] yt1 [%] zt1 [%] do_dir [dir] gd_dir [dir] fn_dir [dir]] | Set various parameters |
| st [code] | Select plot style |
| sw [angle] | Swivel plot |
| sy [symbol] | Select plotting symbol |
| tu [0 1] | Turn plot by 90 degrees |
| tw | Tweak plot orientation |
| tx [t x xu y yu z zu [text ...]] | Enter title and axis labels |
| ty [[+ -]type] ] | Set plot types (see other side) |

| | |
|--|----------------------------------|
| vi [[x . y . z .] r] | Set 3D viewpoint |
| wi [code] [[horz_off] vert_off] width height] | Select window size and location |
| yg [0 #] | Set gap between y-axis and label |

Utility Commands for Plotting and Fitting

| | |
|-----------------------------------|--------------------------------------|
| cd [directory] | Change directory |
| er | Erase the video screen |
| ex | Exit the program |
| h [command] | Get on-line help |
| u [command] | Create a subshell |
| ^C (interrupt character) | Return to command level of program |
| ^D (eof character) | Exit program or data-entry procedure |
| ^\ (quit character) | Terminate processes, return to shell |

Command Files

| | |
|------------------------|---------------------------------|
| ch [p z 0] | Change drawing command target |
| do [cmd_file .] | Take commands from a file |
| em | End making command file |
| mk cmd_file | Make command file |
| sf [filename] | Save format |
| w | Wait for user to enter <return> |

User-Function Commands

| | |
|---|---|
| fn f1 f2 f3 [.] [name.#[.c] [start end numb] [args ...]] | Run user function |
| fn f1 f2 f3 c e k ? | Compile, edit, kill, query user functions |

Standard User Functions

| | |
|------------------|--------------------------------------|
| calc.4 | General purpose data calculator |
| chaos.1 | Generates data that bifurcates |
| contour.4 | Generates contour plots |
| curves.2 | Generates geometric curves |
| fft.4 | Does fast Fourier transforms |
| fitpar.4 | Plots parameter files from fits |
| hist.4 | Makes a histogram |
| psych.4 | Generates psychedelic curves |
| shell.4 | Runs external program to filter data |
| smooth.4 | Smooths data using boxcar average |
| sort.4 | Sorts data |
| spline.4 | Interpolates data using cubic spline |

Fit-Package Commands

| | |
|--|----------------------------------|
| ch [p#=val ...] | Calculate chi squared |
| fc | Set fit criteria and fit options |
| fi [# ...] [p#=val ...] [L#=val ...] [U#=val ...] [n=val] [f#=val] [t#=val] | Fit the data points* |
| gd [options] | Get data points |
| gp | Get parameters values |
| lm [# [low high]] | Set constraints on parameters |
| md [#][o][p#=val ...] | Make data |
| mr [#][/][p#=val ...] | Make residuals |
| pg [#] | Get points from plot |
| ps [#] | Send points to plot |
| ra [0 #] | Select range of data to fit |
| rp [file .] | Read parameters from a file |
| sa [file [a w]] | Save data points* |
| sA [file [a w]] | Save plot points* |
| sf [file [a w]] | Save full parameters* |
| sF [file [a w]] | Save full parameters and errors* |
| sp [file [a w]] | Save parameters* |
| sP [file [a w]] | Save parameters and errors* |
| vp | Select parameters to vary |
| wt [i s n u] | Select how to weight data points |

* Use >file, > . or >>file to also sent output to file.

Plot and fit commands are one- or two-letter mnemonics. Parameters shown in boldface are to be typed literally. Parameters shown in italics are to be replaced with the appropriate characters for the desired instruction. Optional parameters appear in square brackets following the mnemonics. When several parameters are shown separated by vertical lines, you use only one of them with the command.