Plot

Pattabiraman V

plot

Generic X-Y Plotting

Generic function for plotting of R objects. For more details about the graphical parameter

For simple scatter plots, plot.default will be used. However, there are plot methods for many R objects, including functions, data.frames, density objects, etc. Use methods(plot) and the documentation for these

plot

Usage

plot(x, y, …)

Arguments

X - the coordinates of points in the plot. Alternatively, a single plotting structure, function or *any R object with a plot method* can be provided.

Y - the y coordinates of points in the plot, *optional* if x is an appropriate structure.

…Arguments to be passed to methods, such as graphical parameters (see par). Many methods will accept the following arguments:

Types of Plot

What type of plot should be drawn. Possible types are

"p" for **p**oints,

"l" for **l**ines,

"b" for **b**oth,

"c" for the lines part alone of "b",

"o" for both '**o**verplotted',

"h" for '**h**istogram' like (or 'high-density') vertical lines,

"s" for stair **s**teps,

"S" for other **s**teps, see 'Details' below,

"n" for no plotting.

All other types give a warning or an error; using, e.g., type = "punkte" being equivalent to type = "p" for S compatibility. Note that some methods, e.g.plot.factor, do not accept this.

Main – an overall title for the plot: see title.

Sub - a sub title for the plot: see title.

Xlab - a title for the x axis: see title.

Ylab – a title for the y axis: see title.

Asp - the y/x aspect ratio, see plot.window.

Types of Plot

Details

The two step types differ in their x-y preference: Going from (x1,y1) to (x2,y2) with x1<x2, type = "s" moves first horizontal, then vertical, whereas type = "S" moves the other way around.

Example Plot

```
require(stats) # for lowess, rpois, rnorm
plot(cars)
lines(lowess(cars))

plot(sin, -pi, 2*pi) # see ?plot.function

## Discrete Distribution
Plot:plot(table(rpois(100, 5)), type = "h", col = "red", lwd = 10,     main =
"rpois(100, lambda = 5)")

## Simple quantiles/ECDF, see ecdf() {library(stats)} for a better one:
plot(x <- sort(rnorm(47)), type = "s", main = "plot(x, type = \"s\")")
points(x, cex = .5, col = "dark red")
```

Thank you