

plot graphics

R Documentation

Generic X-Y Plotting

Description

Generic function for plotting of R objects. For more details about the graphical parameter arguments, see [par](#).

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.

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:

plot

type - what type of plot should be drawn. Possible types are

- ▶ "p" for points,
- ▶ "l" for lines,
- ▶ "b" for both,
- ▶ "ç" for the lines part alone of "b",
- ▶ ".o" for both overplotted,
- ▶ "h" for histogram like (or high-density) vertical lines,
- ▶ "s" for stair steps,
- ▶ "S" for other steps, see Details below,
- ▶ "n" for no plotting.

plot

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.

plot

Details

The two step types differ in their x-y preference: Going from (x_1, y_1) to (x_2, y_2) with $x_1 < x_2$, `type = "s"` moves first horizontal, then vertical, whereas `type = "S"` moves the other way around.

See Also

[plot.default](#), [plot.formula](#) and other methods; [points](#), [lines](#), [par](#). For thousands of points, consider using [smoothScatter\(\)](#) instead of `plot()`. For X-Y-Z plotting see [contour](#), [persp](#) and `image`.

Examples

```
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 j- sort(rnorm(47)), type = "s", main = "plot(x, type = s)")
points(x, cex = .5, col = "dark red")
```