splots

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plotScreen   *Plot a false-color representation of screening data*

Description

plotScreen produces a false-color representation of screening data from multiple plates (typical use case: dozens of plates) in a single plot.

Usage

```
plotScreen(z,
           ncol = 6L,
           dataSlot,
           zrange,
           main = "",
           do.names = TRUE,
           do.legend = FALSE,
           legend.mapping = seq(from=zrange[1], to=zrange[2]),
           nx = 24L,
           ny = 16L,
           fill = c("blue", "white", "red"),
           abris = "#333333",
           na.fill = "grey")
```

Arguments

z
: A list of plate data. Each element provides data for a single plate and is expected to be a vector of length at least nx*ny, (only the first nx*ny elements will be displayed). The values are assumed to come in row-by-row order. The elements of z can also be data.frames or lists, see the argument dataSlot.

ncol
: Integer of length 1. Number of columns (plates in one row) for the plot.

dataSlot
: Character of length 1. This can be convenient if elements of z are of class data.frame or list themselves. If dataSlot is not missing, lapply(z, "[[", dataSlot) is used.

zrange
: The numeric range that is mapped to the color scale. If missing, the range of the data in z is used.

main
: Character of length 1, the plot title.

`do.names`	Logical specifiying if plate captions should be plotted.
`do.legend`	Logical specifying if a legend for false color values should be output.
`legend.mapping`	
	A character vector of mappings from the integer numbers in `z` to descriptive names in the legend.
`nx`	An integer for the number of columns in a plate. Default 24 for a 384-well plate.
`ny`	An integer for the number of rows in a plate. Default 16 for a 384-well plate.
`fill`	A character vector of colors to create a color ramp for the false color data representation. At least two colors must be specified. The default color correspond to blue for low values, white for the middle of the range and red for high values.
`abris`	A character value for the color of the plate outline.
`na.fill`	Color for NA values.

Value

invisible(NULL)

Author(s)

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References

The idea for this function is from Ligia Bras.

Examples

```
screen = lapply(1:12, function(i) runif(352))
plotScreen(screen, ncol=3)
```

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