visHexMulComp

June 24, 2016

`visHexMulComp`	*Function to visualise multiple component planes of a supra-hexagonal grid*

Description

`visHexMulComp` is supposed to visualise multiple component planes of a supra-hexagonal grid

Usage

```
visHexMulComp(sMap, which.components = NULL, rect.grid = NULL,
margin = rep(0.1, 4), height = 7, title.rotate = 0, title.xy = c(0.45,
1), colormap = c("bwr", "jet", "gbr", "wyr", "br", "yr", "rainbow",
"wb"),
ncolors = 40, zlim = NULL, border.color = "transparent",
gp = grid::gpar(), newpage = T)
```

Arguments

`sMap`	an object of class "sMap"
`which.components`	an integer vector specifying which compopnets will be visualised. By default, it is NULL meaning all components will be visualised
`rect.grid`	a vector specifying the number of rows and columns for a rectangle grid wherein the component planes are placed. By defaul, it is NULL (decided on according to the number of component planes that will be visualised)
`margin`	margins as units of length 4 or 1
`height`	a numeric value specifying the height of device
`title.rotate`	the rotation of the title
`title.xy`	the coordinates of the title
`colormap`	short name for the colormap. It can be one of "jet" (jet colormap), "bwr" (blue-white-red colormap), "gbr" (green-black-red colormap), "wyr" (white-yellow-red colormap), "br" (black-red colormap), "yr" (yellow-red colormap), "wb" (white-black colormap), and "rainbow" (rainbow colormap, that is, red-yellow-green-cyan-blue-magenta). Alternatively, any hyphen-separated HTML color names, e.g. "blue-black-yellow", "royalblue-white-sandybrown", "darkgreen-white-darkviolet". A list of standard color names can be found in http://html-color-codes.info/color-names

ncolors	the number of colors specified
zlim	the minimum and maximum z values for which colors should be plotted, defaulting to the range of the finite values of z. Each of the given colors will be used to color an equispaced interval of this range. The midpoints of the intervals cover the range, so that values just outside the range will be plotted
border.color	the border color for each hexagon
gp	an object of class gpar, typically the output from a call to the function gpar (i.e., a list of graphical parameter settings)
newpage	logical to indicate whether to open a new page. By default, it sets to true for opening a new page

Value

invisible

Note

none

See Also

visVp, visHexComp, visColorbar

Examples

```
# 1) generate data with an iid matrix of 1000 x 3
data <- cbind(matrix(rnorm(1000*3,mean=0,sd=1), nrow=1000, ncol=3),
matrix(rnorm(1000*3,mean=0.5,sd=1), nrow=1000, ncol=3),
matrix(rnorm(1000*3,mean=-0.5,sd=1), nrow=1000, ncol=3))
colnames(data) <- c("S1","S1","S1","S2","S2","S2","S3","S3","S3")

# 2) sMap resulted from using by default setup
sMap <- sPipeline(data=data)

# 3) visualise multiple component planes of a supra-hexagonal grid
visHexMulComp(sMap, colormap="jet", ncolors=20, zlim=c(-1,1),
gp=grid::gpar(cex=0.8))
# 3a) visualise only the first 6 component planes
visHexMulComp(sMap, which.components=1:6, colormap="jet", ncolors=20,
zlim=c(-1,1), gp=grid::gpar(cex=0.8))
# 3b) visualise only the first 6 component planes within the rectangle grid of 3 X 2
visHexMulComp(sMap, which.components=1:6, rect.grid=c(3,2),
colormap="jet", ncolors=20, zlim=c(-1,1), gp=grid::gpar(cex=0.8))
```