Package ‘analogueExtra’

February 19, 2015

Type Package
Title Additional functions for use with the analogue package
Version 0.1-0
Date 18 Nov 2014
Depends vegan3d (>= 0.65-0), analogue (>= 0.16-0)
Imports rgl
Suggests testthat
Maintainer Gavin L. Simpson <ucfagls@gmail.com>

BugReports https://github.com/gavinsimpson/analogueExtra/issues

NeedsCompilation yes
Description Provides additional functionality for the analogue package
that is not required by all users of the main package.
License GPL-2
ByteCompile true

URL https://github.com/gavinsimpson/analogueExtra

Author Gavin L. Simpson [aut, cre]
Repository CRAN
Date/Publication 2014-11-19 02:11:54

R topics documented:

plot3d.prcurve .......................................................... 2

Index ........................................................................ 4
plot3d.prcurve

Interactive 3D plot of a principal curve in principal coordinate space

Description

Draws a 3D plot of the principal curve in principal coordinate space using the rgl package and functions from vegan3d.

Usage

## S3 method for class 'prcurve'
plot3d(x, choices = 1:3, display = "sites", scaling = 0,
   lcol = "darkorange", lwd = 2, decorate = TRUE, xlab = NULL,
   ylab = NULL, zlab = NULL, main = NULL, ...)

Arguments

x an object of class "prcurve" resulting from a call to prcurve.
choices numeric vector of length 3; the ordination axes to plot.
display character; which scores to display. See scores.rda.
scaling numeric; the scaling to use for the scores. Default is no scaling.
lcol, lwd The colour and width, respectively, for the principal curve.
decorate logical; should the plot be decorated with bounding box, axes and labels?
xlab, ylab, zlab, main
   Labels for the plot.
... Arguments passed to other functions. In particular, arguments are passed to ordirgl, lines3d, and decorate3d.

Value

A plot is drawn on the active RGL device. If there is no active RGL device, one is opened upon plotting.

Author(s)

Gavin L. Simpson

See Also

ordirgl, prcurve.
Examples

```r
## Only works if the analogue package is available
if (require("analogue")) {
  ## Load the Abernethy Forest late glacial pollen sequence
data(abernethy)

  ## Remove the Depth and Age variables
  abernethy2 <- abernethy[, -(37:38)]

  ## Fit the principal curve using the median complexity over
  ## all species
  aber.pc <- prcurve(abernethy2, method = "ca", trace = TRUE,
                      vary = FALSE, penalty = 1.4)

  ## 3D plot of data with curve superimposed
  plot3d.prcurve(aber.pc) # now deprecated, instead use
  plot3d(aber.pc)
}
```
Index

*Topic dynamic
  plot3d.pcurve, 2

*Topic graphics
  plot3d.pcurve, 2
  decorate3d, 2
  lines3d, 2
  ordirgl, 2
  plot3d(plot3d.pcurve), 2
  plot3d.pcurve, 2
  prcurve, 2
  scores.rda, 2