

Package ‘analogueExtra’

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Type Package

Title Additional Functions for Use with the Analogue Package

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Depends vegan3d (>= 0.65-0), analogue (>= 0.16-0)

Imports rgl

Suggests testthat

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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>

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Repository CRAN

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`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

<code>x</code>	an object of class "prcurve" resulting from a call to prcurve .
<code>choices</code>	numeric vector of length 3; the ordination axes to plot.
<code>display</code>	character; which scores to display. See scores.rda .
<code>scaling</code>	numeric; the scaling to use for the scores. Default is no scaling.
<code>lcol</code> , <code>lwd</code>	The colour and width, respectively, for the principal curve.
<code>decorate</code>	logical; should the plot be decorated with bounding box, axes and labels?
<code>xlab</code> , <code>ylab</code> , <code>zlab</code> , <code>main</code>	Labels for the plot.
<code>...</code>	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)

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See Also

[ordirgl](#), [prcurve](#).

Examples

```
## 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)
}
```

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