Package 'davidRian'

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Type Package

Title What the package does (short line)

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Description Utility functions for working with univariate Davidian Curves.

License GPL

Imports Rcpp (>= 0.12.14)

LinkingTo Rcpp, RcppArmadillo

RoxygenNote 6.0.1

R topics documented:

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dcGrad   *Gradient of the log likelihood of a univariate DC*

Description

Gradient of the loglikelihood of a univariate DC, to be used in estimation.

Usage

```
dcGrad(x, phi)
```

Arguments

x	A vector of observations.
phi	DC parameters as introduced in Woods & Lin.

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ddc   *Density function for univariate Davidian Curves (DC)*

Description

Returns the density for a vector of x.

Usage

```
ddc(x, mean, sd, phi)
```

Arguments

x	A vector of observations.
mean	Mean of the normal base of DC, see the package vignette.
sd	SD of the normal base of DC, see the package vignette.
phi	DC parameters as introduced in Woods & Lin.

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rdc   *Random samples from a univariate Davidian Curve (DC)*

Description

Returns n samples from a univariate DC.

Usage

```
rdc(n, mean, sd, phi)
```

Arguments

n	Number of observations to be sampled.
mean	Mean of the normal base of DC, see the package vignette.
sd	SD of the normal base of DC, see the package vignette.
phi	DC parameters as introduced in Woods & Lin.