

Package ‘piecenorms’

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Title Calculate a Piecewise Normalised Score Using Class Intervals

Version 1.0.0

Author David Hammond [aut, cre]

URL <https://github.com/david-hammond/piecenorms>

BugReports <https://github.com/david-hammond/piecenorms/issues>

Maintainer David Hammond <anotherdavidhammond@gmail.com>

Description Provides an implementation of piecewise normalisation techniques useful when dealing with the communication of skewed and highly skewed data.

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Suggests testthat (>= 3.0.0)

Config/testthat/edition 3

Encoding UTF-8

RoxygenNote 7.3.1

Imports dplyr, rlang, scales

Depends R (>= 2.10)

NeedsCompilation no

Repository CRAN

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piecenorms-package *piecenorms: Calculate a Piecewise Normalised Score Using Class Intervals*

Description

piecenorms has been built to calculate normalised data piecewise using class intervals. This is useful in communication of highly skewed data.

Details

For highly skewed data, the package `classInt` provides a series of options for selecting class intervals. The `classInts` can be used as the breaks for calculating the piecewise normalisation function `piecenorm`. The function also allows the user to select their own breaks manually.

For any call to `piecenorm`, the user provides a vector of observations, a vector of breaks and a direction for the normalisation. The data is then cut into classes and normalised within its class.

Number of Bins:

$$n = \text{length}(\text{brks}) - 1$$

Normalisation Class Intervals:

$$\left(\frac{i-1}{n}, \frac{i}{n} \right] \forall i \in \{1 : n\}$$

Author(s)

Maintainer: David Hammond <anotherdavidhammond@gmail.com>

See Also

Useful links:

- <https://github.com/david-hammond/piecenorms>
- Report bugs at <https://github.com/david-hammond/piecenorms/issues>

piecenorm *Get piecewise normalised values from a vector of observations*

Description

Get piecewise normalised values from a vector of observations

Usage

```
piecenorm(obs, breaks, polarity = 1)
```

Arguments

obs	A vector of observations.
breaks	The breaks to normalise to.
polarity	Which direction should the normalisation occur.

Value

Vector of normalised observations

Examples

```
obs <- exp(1:10)
breaks <- c(min(obs), 8, 20, 100, 1000, 25000)
y <- piecenorm(obs, breaks)
plot(obs, y, type = 'l',
      xlab = "Original Values",
      ylab = "Normalised Values")
```

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