

Package: VIMean (via r-universe)

September 18, 2024

Type Package

Title Variability Independent of Mean

Version 0.1.0

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Description To computed the variability independent of mean (VIM) or variation independent of mean (VIM). The methodology can be found at Peter M Rothwell et al. (2010) <[doi:10.1016/S1474-4422\(10\)70067-3](https://doi.org/10.1016/S1474-4422(10)70067-3)>.

License GPL-3

Encoding UTF-8

NeedsCompilation no

Date/Publication 2022-11-01 15:10:12 UTC

Repository <https://marsdu1989.r-universe.dev>

RemoteUrl <https://github.com/cran/VIMean>

RemoteRef HEAD

RemoteSha 61492c8db15e4934694d27237833a5f7f1aadd74

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VIM *variability independent of mean (VIM)*

Description

Please feel free to contact us, if you have any advice and find any bug!

Version History:

Version 0.1.0: The first version.

Usage

```
VIM(data, id, repeat.vars)
```

Arguments

| | |
|--------------------------|---|
| <code>data</code> | a width type data frame |
| <code>id</code> | the name of variable indicating the subjects, e.g., "ID" |
| <code>repeat.vars</code> | the name of variables indicating the repeated measurement data, e.g., c("x1", "x2", "x3") |

Value

| | |
|---------------------------------------|---|
| <code>vim</code> | the VIM of each subject |
| <code>coef</code> | the coefficients fitted from the regression of "sntd ~ k*avg^p" |
| <code>r.squared, adj.r.squared</code> | the r-squared and adjusted r-squared of the regression |

Examples

```
set.seed(123)
df <- data.frame( "ID" = paste("ID", seq(1,100,1), sep = ""),
                 "x1" = sample(90:220, size = 100, replace = TRUE),
                 "x2" = sample(90:220, size = 100, replace = TRUE),
                 "x3" = sample(90:220, size = 100, replace = TRUE),
                 "x4" = sample(90:220, size = 100, replace = TRUE),
                 "x5" = sample(90:220, size = 100, replace = TRUE))
rst <- VIM(data=df, id="ID", repeat.vars=paste0("x", 1:5))
```

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