

Package ‘VIMean’

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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)>.

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VIM	<i>variability independent of mean (VIM)</i>
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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., <code>c("x1", "x2", "x3")</code>

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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