

# Package ‘VIMean’

November 1, 2022

**Type** Package

**Title** Variability Independent of Mean

**Version** 0.1.0

**Author** Zhicheng Du

**Maintainer** Zhicheng Du <dgdzc@hotmail.com>

**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

**Repository** CRAN

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

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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**

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

**Value**

`vim` the VIM of each subject  
`coef` the coefficients fitted from the regression of "sntd ~ k\*avg^p"  
`r.squared, adj.r.squared`  
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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