

Package ‘MissingPlotRBD’

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Type Package

Title Missing Plot in RBD

Version 1.1.0

Description

A system for Analysis of RBD when there is one missing observation. Methods for this process is described in A.M.Gun,M.K.Gupta,B.Dasgupta(2019,ISBN:81-87567-81-3).

License GPL-3

Encoding UTF-8

RoxygenNote 7.1.2

NeedsCompilation no

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Contents

Missing.RBD	1
Index	3

Missing.RBD	<i>Missing Plot in Randomized Block Design(RBD)</i>
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Description

This function analyses RBD when there is one missing observation.

Usage

Missing.RBD(m, r, c)

Arguments

m	a matrix containing values in a RBD where row of the matrix denotes the treatments and the column of the matrix denotes block. In this matrix, we will replace the missing value with 0.
r	the index no. of row/Treatment containing the missing value.
c	the index no. of column/Block- containing the missing value.

Details

In RBD setup , if there is one missing observation we can use this function to estimate the missing observation along with Sum of Squares for testing the differential effect of the treatments. Here we estimate the missing observation twice by minimizing the SSE of the design.

Value

x.hat : the least square estimate of the missing observation.
SSE.x.hat : Sum of Squares of Error of x.hat.
x.double.hat : the least square estimate of the missing observation under the null hypothesis , H_0 .
SSE.x.double.hat : Sum of Squares of Error of x.double.hat.
F.stat : Observed value of the Test Statistic.
F.crit.value : Critical value of the Test Statistic.

Author(s)

Arnab Roy , Debarghya Baul.

Examples

```
p=matrix(c(12,15,16,18,16,21,0,27,29,30,35,36),nrow=4,ncol=3,byrow=TRUE )  
Missing.RBD(p,3,1)
```

Index

Missing. RBD, 1