

# Package ‘MissingPlotRBD’

June 17, 2022

**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

**Author** Arnab Roy [aut, cre],  
Debarghya Baul [aut]

**Maintainer** Arnab Roy <arnabroy7640@gmail.com>

**Repository** CRAN

**Date/Publication** 2022-06-17 14:40:02 UTC

## R topics documented:

Missing.RBD . . . . .	1
<b>Index</b>	<b>3</b>

---

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

---

### 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