# Package 'rotatogram'

May 17, 2023

Version 0.1.3	
<b>Description</b> A rotatogram is a method of displaying an association which is axis non-	
dominant. This is achieved in two ways: First, the method of estimating the slope and inter-	
cept uses the least-products method rather than more typical least squared error for the ``depo	en-

cept uses the least-products method rather than more typical least squared error for the "dependent" variable. The least products method has no "dependent" variable and is scale independent. Second, the plot is rotated such that the resulting regression line is vertical, reducing the suggestion that the vertical axis is the dominant one. The slope can be read relative to either axis equally.

License MIT + file LICENSE
Encoding UTF-8
Imports ggplot2,stats,grid
RoxygenNote 7.2.3
NeedsCompilation no
Author Noah Haber [aut, cre] ( <a href="https://orcid.org/0000-0002-5672-1769">https://orcid.org/0000-0002-5672-1769</a> )
Maintainer Noah Haber <noahhaber@gmail.com></noahhaber@gmail.com>
Repository CRAN
<b>Date/Publication</b> 2023-05-17 09:00:02 UTC

Title A Non-Axis-Dominant Association Plotting Tool

## **R** topics documented:

	rotatogram	 	 	٠	٠	٠	•	•	 •	٠	٠	٠	•	 ٠	٠	•	•	•	٠	٠	٠	•	•	•	 ٠	٠	•	•		2
Index																														3

2 rotatogram

rotatogram

Rotatogram

### Description

A rotatogram is a method of displaying an association which is axis non-dominant. This is achieved in two ways: First, the method of estimating the slope and intercept uses the least-products method rather than more typical least squared error for the "dependent" variable. The least products method has no "dependent" variable and is scale independent. Second, the plot is rotated such that the resulting regression line is vertical, reducing the suggestion that the vertical axis is the dominant one. The slope can be read relative to either axis equally.

#### Usage

```
rotatogram(
  x1,
  x2,
  x1.label = "X1",
  x2.label = "X2",
  suppress.plot = FALSE,
  return.values = FALSE
)
```

#### **Arguments**

x1	(required) A vector containing the data for the x1 variable
x2	(required) A vector containing the data for the x2 variable
x1.label	(optional) Changes the x1 axis label to the specified name
x2.label	(optional) Changes the x2 axis label to the specified name
suppress.plot	(optional) Suppresses the plot output
return.values	(optional) Exports the stored data for later access (e.g. slope and intercept calculated)

#### Value

description The resulting object contains the resulting intercept (\$intercept), slope/beta (\$beta), the slope in degrees (\$slope.degrees)

### **Examples**

```
# Output a rotatogram using the iris dataset rotatogram(iris$Sepal.Length,iris$Petal.Length,x1.label="Sepal length",x2.label="Petal length")
```

# **Index**

 $*\ association$ 

rotatogram, 2

 $\verb"rotatogram", 2$