Package ‘BiDimRegression’

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Title Calculates the bidimensional regression between two 2D configurations
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Description An S3 class with a method for calculates the bidimensional regression between two 2D configurations following the approach by Tobler (1965).
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R topics documented:

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BiDimRegression-package

package to calculate the bidimensional regression between two 2D configurations

Description

An S3 class with a method for calculates the bidimensional regression between two 2D configurations following the approach by Tobler (1965).

Details

Package: BiDimRegression
Type: Package
Version: 1.0-6
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License: What license is it under?

~ ~ Overview of the most important functions ~ ~ BiDimRegression <- function (coord) \ summary.BiDimRegression <- function(object, ...) \ print.summary.BiDimRegression <- function(x, ...) \ print.BiDimRegression <- function(x, ...)\

Author(s)

Who wrote it: Claus-Christian Carbon
Maintainer: Claus-Christian Carbon <ccc@experimental-psychology.com>

References

*** The routine is based on the following literature:
BiDimRegression

Examples

data(NakayaData)
resultsBiDimRegr <- BiDimRegression(NakayaData)
print(resultsBiDimRegr)
summary(resultsBiDimRegr)

---

BiDimRegression function to calculate the bidimensional regression between two 2D configurations

Description

An S3 class with a method for calculating the bidimensional regression between two 2D configurations following the approach by Tobler (1965).

Note

The author is grateful to Waldo R. Tobler, now Professor Emeritus at the Department of Geography, University of California, Santa Barbara, for providing his original publications and his helpful correspondence and to Dan Montello for calling the author's attention to Tobler's work many years ago. I would like to thank Alinda Friedman, Gregory Francis, Jan de Leeuw, Achim Zeileis, two anonymous reviewers and Arne Terkowsk and Chris Nappert for valuable comments on an earlier version of this paper, and Andrea Lyman and Vera M. Hesslinger for proofreading the manuscript. Last but not least, I am very indebted to Tomoki Nakaya, who has developed the original inference statistics of the overall models and the referring parameters and who helped me with reanalyzing these statistics as well as with ensuring the reliability of the used methods. Thank you!

Author(s)

Claus-Christian Carbon

References

*** The routine is described in detail in:

*** The routine is based on the following literature:
CarbonExample1Data


Description

Example 1 from the domain of aesthetics to show how the method can be utilized for assessing the similarity of two portrayed persons, actually the Mona Lisa in the world famous Louvre version and the only recently re-discovered Prado version

Usage

data(CarbonExample1Data)

Format

A data frame with 36 observations on the following 4 variables.

- depV1 a numeric vector
- depVR a numeric vector
- indepV1 a numeric vector
- indepVR a numeric vector

Examples

data(CarbonExample1Data)
## maybe str(CarbonExample1Data) ; plot(CarbonExample1Data) ...

CarbonExample2Data


Description

Example 2 originates from the area of geography and inspects the accuracy of different maps of the city of Paris which were created over the last 350 years as compared to a recent map

Usage

data(CarbonExample2Data)
**Format**

A data frame with 13 observations on the following 4 variables.

- depV1 a numeric vector
- depV2 a numeric vector
- indepV1 a numeric vector
- indepV2 a numeric vector

**Examples**

```r
data(carbonexample3data)
## maybe str(carbonexample3data) ; plot(carbonexample3data) ...```

---

**CarbonExample3Data**  

**Description**

Example 3 focuses on demonstrating how good a cognitive map recalculated from averaged cognitive distance data fits with a related real map

**Usage**

```r
data(carbonexample3data)
```

**Format**

A data frame with 10 observations on the following 4 variables.

- depV1 a numeric vector
- depV2 a numeric vector
- indepV1 a numeric vector
- indepV2 a numeric vector

**Examples**

```r
data(carbonexample3data)
## maybe str(carbonexample3Data) ; plot(carbonexample3Data) ...```
Description


Usage

data(FriedmanKohlerData1)

Format

A data frame with 4 observations on the following 4 variables.

- depV1 a numeric vector
- depV2 a numeric vector
- indepV1 a numeric vector
- indepV2 a numeric vector

Examples

data(FriedmanKohlerData1)
## maybe str(FriedmanKohlerData1) ; plot(FriedmanKohlerData1) ...

Description


Usage

data(FriedmanKohlerData2)
NakayaData

Format

A data frame with 4 observations on the following 4 variables.

- depV1 a numeric vector
- depV2 a numeric vector
- indepV1 a numeric vector
- indepV2 a numeric vector

Examples

data(FriedmankohlerdataR)
## maybe str(FriedmankohlerdataR) ; plot(FriedmankohlerdataR) ...


Description


Usage

data(NakayaData)

Format

A data frame with 19 observations on the following 4 variables.

- depV1 a numeric vector
- depV2 a numeric vector
- indepV1 a numeric vector
- indepV2 a numeric vector

Examples

data(NakayaData)
## maybe str(NakayaData) ; plot(NakayaData) ...
print.summary.BiDimRegression

Description

function to print the results of BiDimRegression

Author(s)

Claus-Christian Carbon

References


print.summary.BiDimRegression

function to print the summary of the results of BiDimRegression

Description

function to print the summary of the results of BiDimRegression

Author(s)

Claus-Christian Carbon

References

summary.BiDimRegression

function to provide a summary of the results of BiDimRegression

Description

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