

Package ‘DeductiveR’

December 17, 2024

Type Package

Title Deductive Rational Method

Version 1.1.0

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Description Apply the Deductive Rational Method to a monthly series of flow or precipitation data to fill in missing data. The method is as described in: Campos, D.F., (1984, ISBN:9686194444).

License GPL-3

LazyData true

Encoding UTF-8

RoxygenNote 7.2.3

Imports dplyr, reshape2, ggplot2, moments, ggpubr, lmomco

Suggests rmarkdown, knitr

VignetteBuilder knitr

Depends R (>= 2.10)

NeedsCompilation no

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data	<i>Monthly flow data from Estero Culebron DGA station</i>
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Description

A dataset containing dates and monthly flow values.

Usage

data

Format

A data frame with 480 rows and 5 variables:

date dates

year years

month months

day days

4400001 flows, in cubic meters per second

Source

<https://camels.cr2.cl/>

DR	<i>Apply the Deductive Rational Method to a monthly series of flow or precipitation data to fill in missing data.</i>
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Description

Apply the Deductive Rational Method to a monthly series of flow or precipitation data to fill in missing data.

Usage

DR(data)

Arguments

data	data frame with columns: date - year - month - day - station (Type date and numeric the rest)
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DR_boxplot	<i>BoxPlot from the result from the application of the Deductive Rational Method</i>
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Description

BoxPlot from the result from the application of the Deductive Rational Method

Usage

```
DR_boxplot(dr)
```

Arguments

dr data frame from DR function

DR_plot	<i>Plot the result from the application of the Deductive Rational Method</i>
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Description

Plot the result from the application of the Deductive Rational Method

Usage

```
DR_plot(dr)
```

Arguments

dr data frame from DR function

DR_stats	<i>Statistics for the result from the application of the Deductive Rational Method</i>
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Description

Statistics for the result from the application of the Deductive Rational Method

Usage

```
DR_stats(dr)
```

Arguments

dr data frame from DR function

DR_SVC	<i>Seasonal Variation Curves considering results from the application of the Deductive Rational Method</i>
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Description

Seasonal Variation Curves considering results from the application of the Deductive Rational Method

Usage

DR_SVC(dr)

Arguments

dr data frame from DR function

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