

# Package ‘DeductiveR’

July 21, 2025

**Type** Package

**Title** Deductive Rational Method

**Version** 1.1.0

**Date** 2024-12-16

**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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**Repository** CRAN

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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/>

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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

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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

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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

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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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