

Package ‘ideamdb’

March 24, 2019

Type Package

Title Easy Manipulation of IDEAM's Climatological Data

Version 0.0.9

Description Time series plain text conversion and data visualization. It allows to transform IDEAM (Instituto de Hidrologia, Meteorologia y Estudios Ambientales) daily series from plain text to CSV files or data frames in R. Additionally, it is possible to obtain exploratory graphs from times series. IDEAM's data is freely delivered under formal request through the official web page <<http://www.ideam.gov.co/solicitud-de-informacion>>.

License GPL (>= 2)

Depends R (>= 2.10)

Encoding UTF-8

LazyData true

RoxygenNote 6.1.1

Imports stringr, tidyr, dplyr, ggplot2, utils, graphics

Suggests knitr, rmarkdown

VignetteBuilder knitr

NeedsCompilation no

Author Luz Maria Morales [aut, cre],
Edwin Echeverri [aut],
Kenneth Roy Cabrera [aut]

Maintainer Luz Maria Morales <lummoralesgo@unal.edu.co>

Repository CRAN

Date/Publication 2019-03-24 19:10:06 UTC

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Example_IDEAM	<i>A dataset with fictitious values of no real IDEAM's Stations. The text file keeps IDEAM's text format.</i>
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Description

A dataset with fictitious values of no real IDEAM's Stations. The text file keeps IDEAM's text format.

Usage

```
data(Example_IDEAM)
```

Format

text file

Source

It is a self-made file. Original data could be freely required through IDEAM's web page. <http://www.ideam.gov.co/solicitud-de-informacion>

Examples

```
data(Example_IDEAM)
```

IdeamLong	<i>Create a day by day IDEAM's data serie</i>
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Description

Create a data frame with one value by row. The df is available to export as a CSV file

Usage

```
IdeamLong(file, write = FALSE, outfile = "MatrizIdeamLarga")
```

Arguments

file	IDEAM file path or file name if it is on the working directory
write	If True a CSV file is returned to the working directory, otherwise only a data frame is shown
outfile	Outfile name that will be saved on the working directory

Value

dataframe or a CSV file

Examples

```
# Retrieve example dataset
Example_IDEAM <- system.file("extdata", "Example_IDEAM", package = "ideamdb")
# Create a temporal file
example.ideam.long <- tempfile()
write.csv(IdeamLong(Example_IDEAM), file = example.ideam.long)
read.csv(example.ideam.long)
```

IdeamWide

Create a matrix with IDEAM's data

Description

Create a data frame that it is available to export as a CSV file

Usage

```
IdeamWide(file, write = FALSE, outfile = "MatrizIdeamAncha")
```

Arguments

file	IDEAM file path or file name if it is on the working directory
write	If True a CSV file is returned to the working directory, otherwise only a data frame is shown
outfile	Outfile name that will be saved on the working directory

Value

a data frame or a CSV file

Examples

```
# Retrieve example dataset
Example_IDEAM <- system.file("extdata", "Example_IDEAM", package = "ideamdb")
# Create a temporal file
example.ideam.wide <- tempfile()
write.csv(IdeamWide(Example_IDEAM), file = example.ideam.wide)
read.csv(example.ideam.wide)
```

TimeSeries

Graphical exploratory charts

Description

Create a time series chart and a boxplot of every data sample

Usage

```
TimeSeries(file, station = "all", variable = "all")
```

Arguments

file	IDEAM file path or file name if it is on the working directory
station	a single station name or type "all" or "todas" to plot everything
variable	a single variable name or type "all" or "todas" to plot everything only a data frame is shown

Value

time series plot and boxplot for every variable data and station

Examples

```
Example_IDEAM <- system.file("extdata", "Example_IDEAM", package = "ideamdb")
TimeSeries(Example_IDEAM, station = "LUCERO")
# Print time series chart and boxplots for all variables
# collected in an specific station
```

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