

Package ‘inmetwrangler’

September 28, 2017

Title Functions to Wrangle Data Files from INMET Weather Stations

Version 0.0.1

Description Functions to wrangle data files from INMET's automatic weather stations.

Depends R (>= 3.4.1)

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Encoding UTF-8

LazyData true

Imports magrittr, stringr, dplyr, purrr, readr, tibble

RoxygenNote 6.0.1

Suggests knitr, rmarkdown, tidyverse

VignetteBuilder knitr

NeedsCompilation no

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R topics documented:

import_txt_files_inmet	1
inmetwrangler	2
read_txt_file_inmet	3

Index	4
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import_txt_files_inmet	<i>Import raw data files of automatic stations</i>
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Description

Import raw data files of automatic stations

Usage

```
import_txt_files_inmet(files, verbose = TRUE, only.problems = FALSE,
  full.names = FALSE)
```

Arguments

<code>files</code>	character vector with path to files
<code>verbose</code>	logical scalar. If TRUE, print messages and warnings.
<code>only.problems</code>	logical value. Set TRUE to return a tibble with problems information on file and FALSE to return meteorological data.
<code>full.names</code>	a logical value. If TRUE, the directory path is prepended to the file names to give a relative file path. If FALSE, the file names (rather than paths) are returned.

Value

A data frame with one row for each problem and four columns:

<code>row, col</code>	Row and column of problem
<code>expected</code>	What readr expected to find
<code>actual</code>	What it actually got
<code>file</code>	file name or the path to file (if <code>full.names</code> is TRUE)

Examples

```
library(dplyr); library(purrr); library(stringr); library(readr)
# missing columns problem example
myfile <- system.file("extdata", "A838.txt", package = "inmetrwangler")
myfile
A838_problems <- import_txt_files_inmet(files = myfile,
                                       verbose = TRUE,
                                       only.problems = TRUE)
A838_data <- import_txt_files_inmet(files = myfile,
                                   verbose = TRUE,
                                   only.problems = FALSE)

#looking at rows
for(irow in A838_problems$row) read_lines(myfile, skip = irow-2, n_max = irow+2)
# View(slice(A838_data, A838_problems$row)) # columns filled with NAs
```

inmetrwangler

inmetrwangler: A package to wrangle data from INMET's stations.

Description

The inmetrwangler package offers functions to wrangle (raw) data files from INMET's automatic weather stations. The data were requested through <seoma.rs@inmet.gov.br>

inmetwrangler functions

The main function is

- `import_txt_files_inmet`

<code>read_txt_file_inmet</code>	<i>Read ASCII data file of INMET's automatic weather stations</i>
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Description

Read ASCII data file of INMET's automatic weather stations

Usage

```
read_txt_file_inmet(.file, .verbose = TRUE, .only.problems = FALSE,  
  .full.names = FALSE)
```

Arguments

<code>.file</code>	path to file
<code>.verbose</code>	logical value, when it is set to TRUE show warnings and messages
<code>.only.problems</code>	logical value. Set TRUE to report problems, FALSE to return meteorological data
<code>.full.names</code>	a logical value. If TRUE, the directory path is prepended to the file names to give a relative file path. If FALSE, the file names (rather than paths) are returned.

Details

When `only.problems` is TRUE a data frame with one row for each problem found for every file. When the files do not have any problem the data frame is returned empty (0 rows).

Value

A data frame with one row for each problem and four columns:

<code>row,col</code>	Row and column of problem
<code>expected</code>	What readr expected to find
<code>actual</code>	What it actually got
<code>file</code>	file name or the path to file (if <code>.full.names</code> is TRUE)

Index

`import_txt_files_inmet`, [1](#), [3](#)
`inmetrwangler`, [2](#)
`inmetrwangler-package`
 (`inmetrwangler`), [2](#)
`read_txt_file_inmet`, [3](#)