

Package: aire (via r-universe)

August 17, 2024

Type Package

Title Grab data on air pollution in Andalusia (Spain)

Version 0.0.2

Date 2016-09-19

Author Francisco Rodriguez-Sanchez, Francisco Viciano, Francisco Balao, Virginia Luque, Rocio Aguilar

Maintainer Francisco Rodriguez-Sanchez <f.rodriguez.sanc@gmail.com>

Description This package can download and retrieve daily data on air quality in Andalusia (Spain), from any of the stations maintained by 'Consejeria de Medio Ambiente' (<http://bit.ly/airedata>). The data are formatted so that they can be directly analysed with the 'openair' package. Note these data are collected automatically, and not validated. Check out Consejeria de Medio Ambiente website for monthly and annual reports based on validated data.

URL <https://github.com/SevillaR/aire>

BugReports <https://github.com/SevillaR/aire/issues>

License GPL-3

LazyData TRUE

RoxygenNote 5.0.1

Depends R (>= 3.1.0)

Imports httr, lubridate, rvest, xml2

Suggests openair, testthat, knitr, rmarkdown, sp

VignetteBuilder knitr

Repository <https://pakillo.r-universe.dev>

RemoteUrl <https://github.com/SevillaR/aire>

RemoteRef HEAD

RemoteSha a0e09297266bca0fc8e0548f2910ae56e9673b10

Contents

aire-package	2
get_daily_data	2
se2015	3
stations	4
Index	5

aire-package	<i>Grab data on air pollution in Andalusia</i>
--------------	--

Description

This package can download and retrieve daily data on air quality in Andalusia (Spain), from any of the stations maintained by 'Consejeria de Medio Ambiente' (<http://bit.ly/airedata>). The data are formatted so that they can be directly analysed with the 'openair' package. Note these data are collected automatically, and not validated. Check out Consejeria de Medio Ambiente website for monthly and annual reports based on validated data.

Details

Currently, data are available from 2005 onwards.

get_daily_data	<i>Get daily air pollution data for given dates and province</i>
----------------	--

Description

Get daily air pollution data for given dates and province

Usage

```
get_daily_data(dates, province, from, to)
```

Arguments

dates	Character vector with one or multiple dates formatted as "yyyy-mm-dd" (see examples). Alternatively, use from and to.
province	Character. The first two letters of province name.
from	Character. Starting date, with format "yyyy-mm-dd".
to	Character. Last date required, with same format as above.

Value

A dataframe, suitable to be used directly in **openair** package.

Examples

```
## Not run:
dataset <- get_daily_data("2015-01-28", province = "gr")

dataset <- get_daily_data("2015-01-03", "MA")

dataset <- get_daily_data("2015-01-03", "Se")

dataset <- get_daily_data(c("2015-01-28", "2015-01-29"), "se")

dataset <- get_daily_data(province = "se", from = "2015-01-10", to = "2015-01-15")

## End(Not run)
```

se2015

Air quality data for Sevilla province, year 2015.

Description

Air quality data for all stations in Sevilla province for year 2015.

Format

A dataframe with 606911 rows and 11 variables:

Provincia Province

Municipio Council where station is located

site Station name

Direccion Address

date Date and time of the measurement, in format "yyyy-mm-dd hh:mm:ss"

SO2 SO2 concentration (in micrograms per cubic meter)

PART Particles concentration (in micrograms per cubic meter)

NO2 NO2 concentration (in micrograms per cubic meter)

CO CO concentration (in micrograms per cubic meter)

O3 O3 concentration (in micrograms per cubic meter)

SH2 SH2 concentration (in micrograms per cubic meter)

Source

Consejería de Medio Ambiente, Junta de Andalucía (<http://bit.ly/airedata>)

stations

Measurement stations info

Description

Coordinates and information of all measurement stations in Andalusia.

Format

A SpatialPointsDataFrame with 99 rows and 5 variables:

X Station number

ESTACION Station name

MUNICIPIO Council

PROVINCIA Province

site Station name (used for compatibility with package openair)

Source

Consejería de Medio Ambiente, Junta de Andalucía (http://www.juntadeandalucia.es/medioambiente/portal_web/web/temas_ambientales/atmosfera/calidad_aire/RVCCAA_2015.pdf)

Index

*** package**

aire-package, [2](#)

aire (aire-package), [2](#)

aire-package, [2](#)

get_daily_data, [2](#)

se2015, [3](#)

stations, [4](#)