

Package ‘aimsir17’

October 12, 2022

Title Irish Weather Observing Stations Hourly Records for 2017

Version 0.0.2

Description Named after the Irish name for weather, this package contains tidied data from the Irish Meteorological Service's hourly observations for 2017. In all, the data sets include observations from 25 weather stations, and also latitude and longitude coordinates for each weather station. Now includes energy generation data for Ireland and Northern Ireland (2017), including Wind Generation data.

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Depends R (>= 2.10)

Suggests dplyr

Imports tibble

Encoding UTF-8

LazyData true

URL <https://github.com/JimDuggan/aimsir17>, <https://www.met.ie>,
<http://www.eirgridgroup.com/how-the-grid-works/renewables/>,
<http://www.eirgridgroup.com/site-files/library/EirGrid/SNSP-Formula-External-Publication.pdf>

RoxygenNote 7.1.1

NeedsCompilation no

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Repository CRAN

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R topics documented:

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eirgrid17

*EirGrid System Data Quarterly Hourly for 2017***Description**

EirGrid System Data Quarterly Hourly for 2017

Usage

eirgrid17

Format**year** Year of observation.**month** Month of observation.**day** Day of observation.**hour** Hour of observation.**minute** Minute of observation.**date** Date and Time (utc).**NIGeneration** Northern Ireland Generation.**NIDemand** Northern Ireland Demand.**NIWindAvailability** Northern Ireland Wind Availability.**NIWindGeneration** Northern Ireland Wind Generation.**IEGeneration** Republic of Ireland Generation.**IEDemand** Republic of Ireland Demand.**IEWindAvailability** Republic of Ireland Wind Availability.**NIWindGeneration** Republic of Ireland Wind Generation.**SNSP** System Non-Synchronous Penetration) is the sum of wind + solar generation + HVDC imports as a percentage of total demand + exports**Copyright** EirGrid**Licence Statement** This data is published under a Creative Commons Attribution 4.0 International (CC BY 4.0). <https://creativecommons.org/licenses/by/4.0/>**Disclaimer** Disclaimer: Please note that the data contained herein is indicative as it is based on raw 15-minute SCADA readings which have yet to be quality controlled. EirGrid as the Transmission System Operator (TSO) for Ireland and SONI as the TSO for Northern Ireland make no warranties or representations of any kind with respect of this document, including, without limitation, its quality, accuracy and completeness. While every effort has been made in the compilation of this report to ensure that the information herein is correct, the TSOs do not accept liability for any loss or damage arising from the use of this document or any reliance on the information it contains. Use of this document and the information it contains is at the user's sole risk. In addition, the TSOs strongly recommend that any party wishing to make a decision based on the content of this document should consult the TSOs in advance.

Modifications New columns added to the data for Year, Month, Day, Hour and Minute. Columns representing GMT offset removed. The column date transformed to a 'POSIXct' type. Furthermore, note that: The system data in this report is based on average 15-minute SCADA readings (MW). All figures represent net exported energy. Maximum/Minimum figures in the different jurisdictions do not necessarily occur at the same time. The maximum SNSP limit allowed on the system is 65 SNSP may exceed this maximum limit due to wind variations.

Source

<http://www.eirgridgroup.com/how-the-grid-works/renewables/>

| | |
|--------------|--|
| observations | <i>Met Eireann - Weather Observing Stations Records 01-Jan-2017 to 31-Dec-2017</i> |
|--------------|--|

Description

Met Eireann - Weather Observing Stations Records 01-Jan-2017 to 31-Dec-2017

Usage

observations

Format

date Date and Time (utc).
rain Precipitation Amount (mm).
temp Air Temperature (C)
wetb Wet Bulb Temperature (C)
dewpt Dew Point Temperature (C)
vappr Vapour Pressure (hPa)
rhum Relative Humidity %
mssl Mean Sea Level Pressure (hPa)
wddir Predominant Wind Direction (deg)

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Modifications New columns added to the data for Year, Month, Day and Hour. Columns representing indicators removed. The column date transformed to a 'POSIXct' type

Source

<https://www.met.ie>

stations

Summary of weather observing stations with observations

Description

Summary of weather observing stations with observations

Usage

stations

Format

station Name of the Weather Observing Station

height Height above sea level (M)

latitude Latitude of weather station

longitude Longitude of weather station

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Modifications New columns added to the data for Year, Month, Day and Hour. All ind columns removed. Date formatted to R data object format using package lubridate

Source

<https://www.met.ie>

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