# Package 'aimsir17'

July 22, 2025

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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eirgrid17

#### 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 Irekand Wind Generation.

**SNSP** System Non-Synchronous Penetration) is the sum of wind + solar generation + HVDC imports as a percentage of total demand + exports

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- **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.

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#### observations

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

#### 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 %
- **msl** 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

#### 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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