



[Center for Machine Learning and Intelligent Systems](#)

[About](#) [Citation Policy](#) [Donate a Data Set](#) [Contact](#)

☒ Repository ☐ Web



[View ALL Data Sets](#)

Individual household electric power consumption Data Set

Download: [Data Folder](#), [Data Set Description](#)

Abstract: Measurements of electric power consumption in one household with a one-minute sampling rate over a period of almost 4 years. Different electrical quantities and some sub-metering values are available.

Data Set Characteristics:	Multivariate, Time-Series	Number of Instances:	2075259	Area:	Physical
Attribute Characteristics:	Real	Number of Attributes:	9	Date Donated	2012-08-30
Associated Tasks:	Regression, Clustering	Missing Values?	Yes	Number of Web Hits:	360264

Source:

Georges Hebrail ([georges.hebrail '@' edf.fr](mailto:georges.hebrail@edf.fr)), Senior Researcher, EDF R&D, Clamart, France
 Alice Berard, TELECOM ParisTech Master of Engineering Internship at EDF R&D, Clamart, France

Data Set Information:

This archive contains 2075259 measurements gathered in a house located in Sceaux (7km of Paris, France) between December 2006 and November 2010 (47 months).

Notes:

- 1.(global_active_power*1000/60 - sub_metering_1 - sub_metering_2 - sub_metering_3) represents the active energy consumed every minute (in watt hour) in the household by electrical equipment not measured in sub-meterings 1, 2 and 3.
- 2.The dataset contains some missing values in the measurements (nearly 1,25% of the rows). All calendar timestamps are present in the dataset but for some timestamps, the measurement values are missing: a missing value is represented by the absence of value between two consecutive semi-colon attribute separators. For instance, the dataset shows missing values on April 28, 2007.

Attribute Information:

- 1.date: Date in format dd/mm/yyyy
- 2.time: time in format hh:mm:ss
- 3.global_active_power: household global minute-averaged active power (in kilowatt)
- 4.global_reactive_power: household global minute-averaged reactive power (in kilowatt)
- 5.voltage: minute-averaged voltage (in volt)
- 6.global_intensity: household global minute-averaged current intensity (in ampere)
- 7.sub_metering_1: energy sub-metering No. 1 (in watt-hour of active energy). It corresponds to the kitchen, containing mainly a dishwasher, an oven and a microwave (hot plates are not electric but gas powered).
- 8.sub_metering_2: energy sub-metering No. 2 (in watt-hour of active energy). It corresponds to the laundry room, containing a washing-machine, a tumble-drier, a refrigerator and a light.

9.sub_metering_3: energy sub-metering No. 3 (in watt-hour of active energy). It corresponds to an electric water-heater and an air-conditioner.

Relevant Papers:

N/A

Citation Request:

This dataset is made available under the “Creative Commons Attribution 4.0 International (CC BY 4.0)” license



In Collaboration With:



[About](#) || [Citation Policy](#) || [Donation Policy](#) || [Contact](#) || [CML](#)