


**Machine Learning Repository**  
Center for Machine Learning and Intelligent Systems

[About](#) [Citation Policy](#) [Donate a Data Set](#) [Contact](#)  
  
☒ Repository ☐ Web   
[View ALL Data Sets](#)

Check out the [beta version](#) of the new UCI Machine Learning Repository we are currently testing! ✕  
[Contact us](#) if you have any issues, questions, or concerns. [Click here to try out the new site.](#)

# 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.

<b>Data Set Characteristics:</b>	Multivariate, Time-Series	<b>Number of Instances:</b>	2075259	<b>Area:</b>	Physical
<b>Attribute Characteristics:</b>	Real	<b>Number of Attributes:</b>	9	<b>Date Donated</b>	2012-08-30
<b>Associated Tasks:</b>	Regression, Clustering	<b>Missing Values?</b>	Yes	<b>Number of Web Hits:</b>	545062

## 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

---



Supported By:

In Collaboration With:

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