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Individual household electric power consumption Data Set

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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: | 230084 |

Source:

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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
- 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:

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