There is 19 files in this dataset :

* informations\_households.csv : this file that contains all the information on the households in the panel (their acorn group, their tariff) and in which block.csv.gz file their data are stored
* halfhourly\_dataset.zip: Zip file that contains the block files with the half-hourly smart meter measurement
* daily\_dataset.zip: Zip file that contains the block files with the daily information like the number of measures, minimum, maximum, mean, median, sum and std.
* acorn\_details.csv : Details on the acorn groups and their profile of the people in the group, it comes from this [xlsx spreadsheet](https://acorn.caci.co.uk/what-is-acorn).The first three columns are the attributes studied, the ACORN-X is the index of the attribute. At a national scale, the index is 100 if for one column the value is 150 it means that there are 1.5 times more people with this attribute in the ACORN group than at the national scale. You can find an explanation on the [CACI website](https://acorn.caci.co.uk/what-is-acorn)
* weather*daily*darksky.csv : that contains the daily data from [darksky api](https://darksky.net/dev). You can find more details about the parameters in [the documentation of the api](https://darksky.net/dev/docs#response-format)
* weather*hourly*darksky.csv : that contains the hourly data from [darksky api](https://darksky.net/dev). You can find more details about the parameters in [the documentation of the api](https://darksky.net/dev/docs#response-format)

some ideas to analyze the data:

* Segmentation of the consumption daily pattern
* Disaggregation of the electricity load curve
* Cross the consumption result and the acorn information
* Forecast the electricity consumption of a household
* Forecast at a global scale (London consumption)

source: https://data.london.gov.uk/dataset/smartmeter-energy-use-data-in-london-households