



Household energy consumption

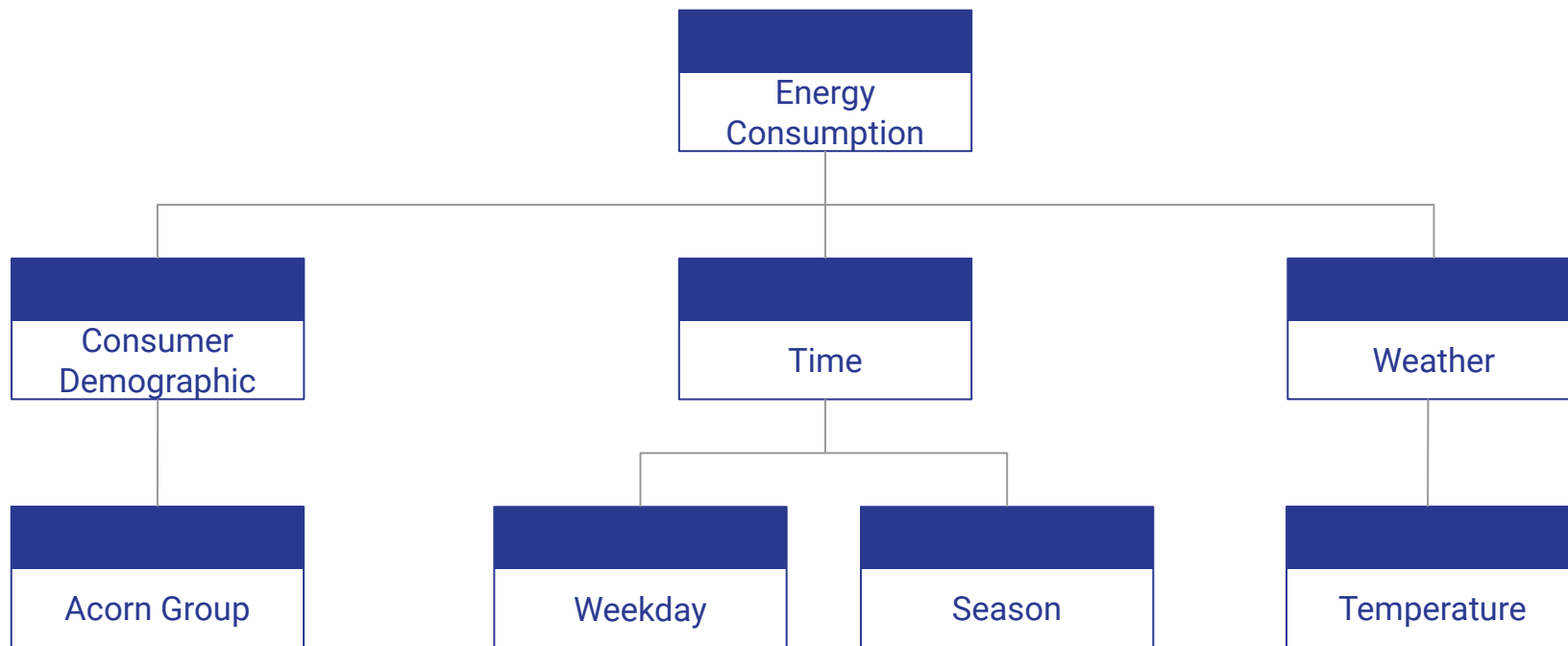
...and the possible variables that may affect it.

Data source: Kaggle

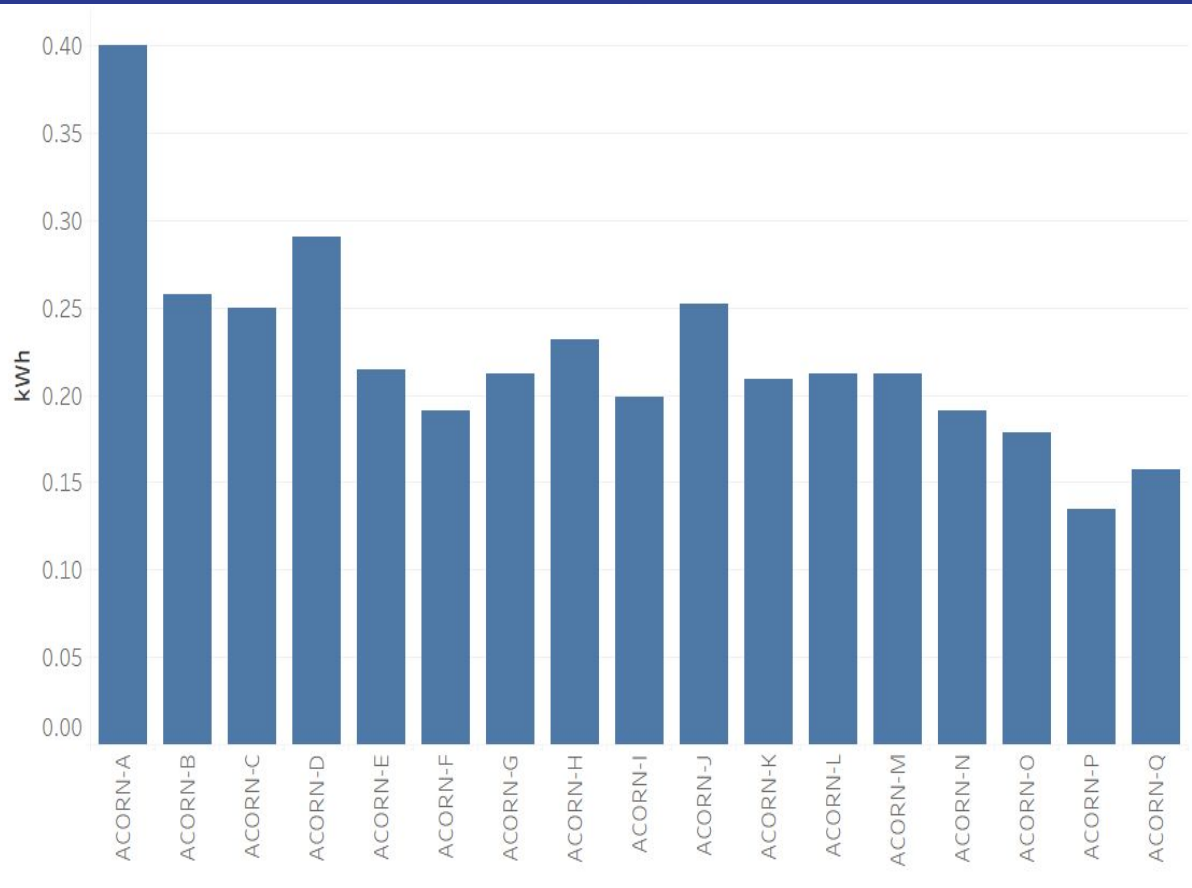
Timeframe: Nov 2011 - Feb 2014

- Smart meters in London households (approx. 5500 households)
- London weather
- ACORN groups

Overview



Consumer demographic - avg. daily consumption by ACORN group



ACORN A-C Affluent Achievers

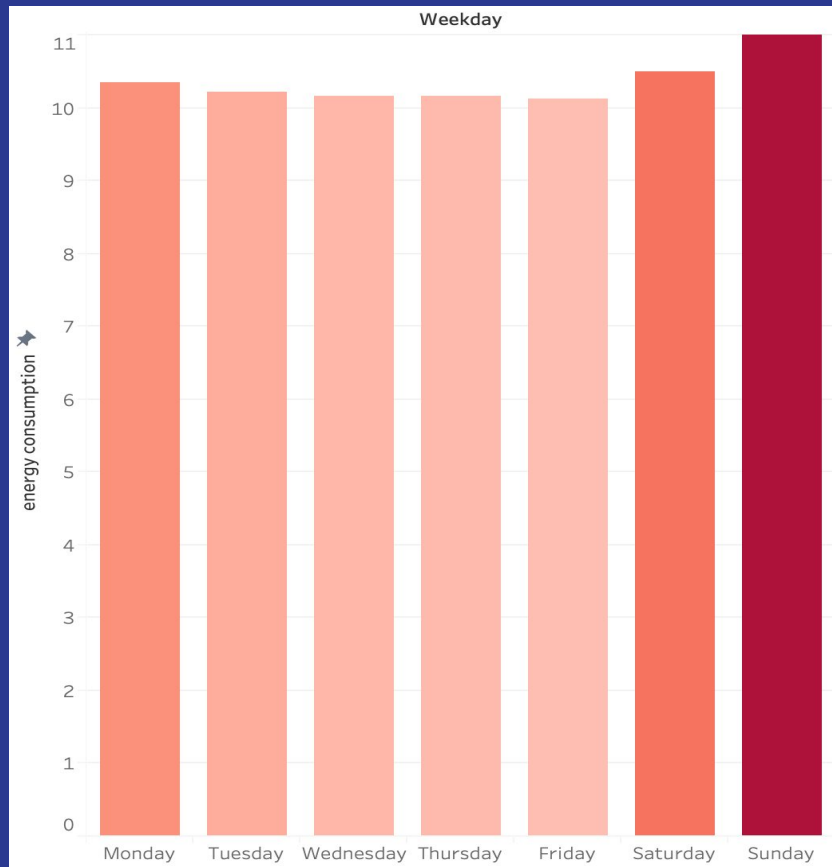
ACORN D-E Rising Prosperity

ACORN F-J Comfortable Communities

ACORN K-N Financially Stretched

ACORN O-Q Urban Adversity

Time - energy consumption by weekday

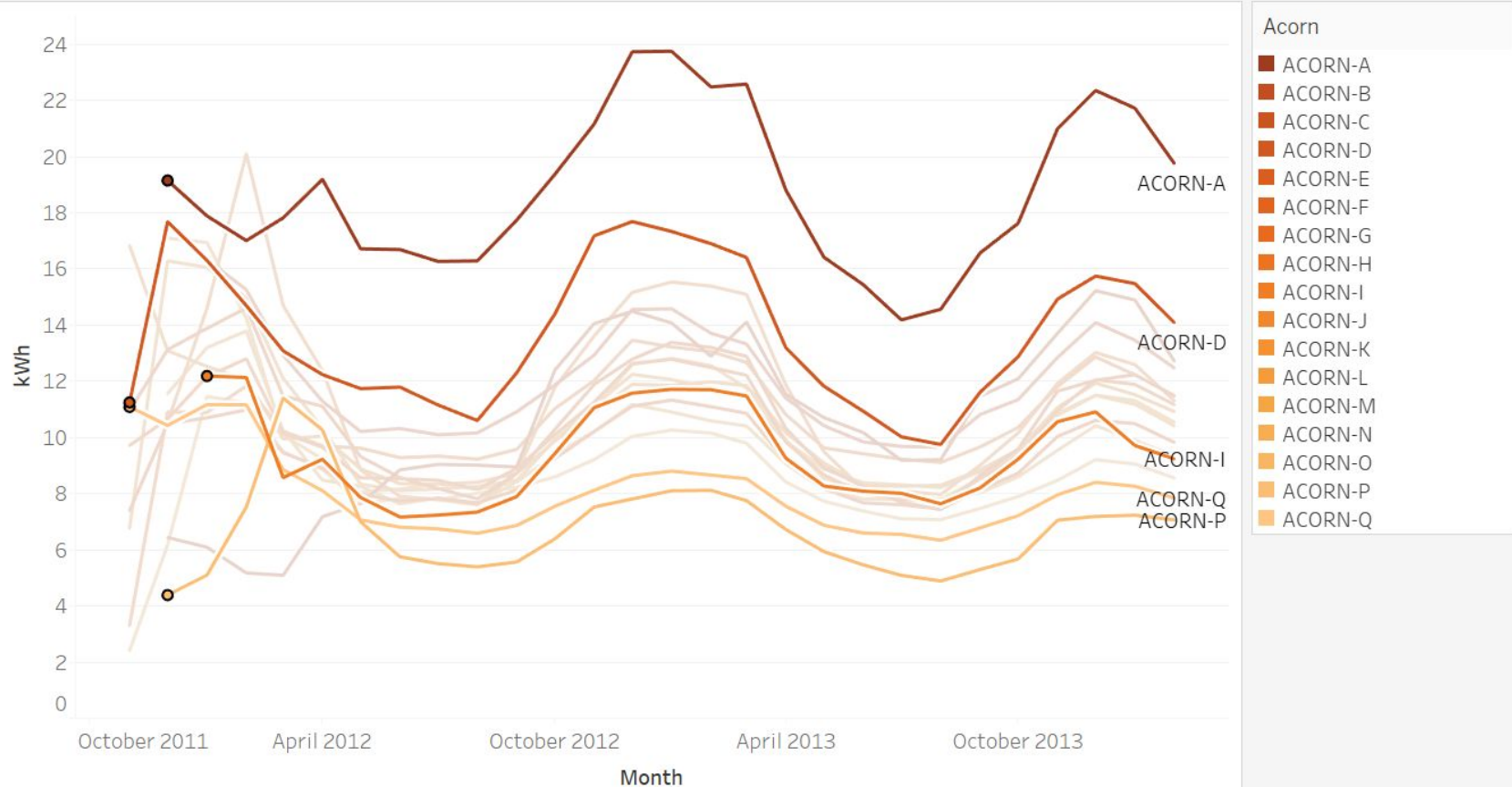


SUM(energy_sum)

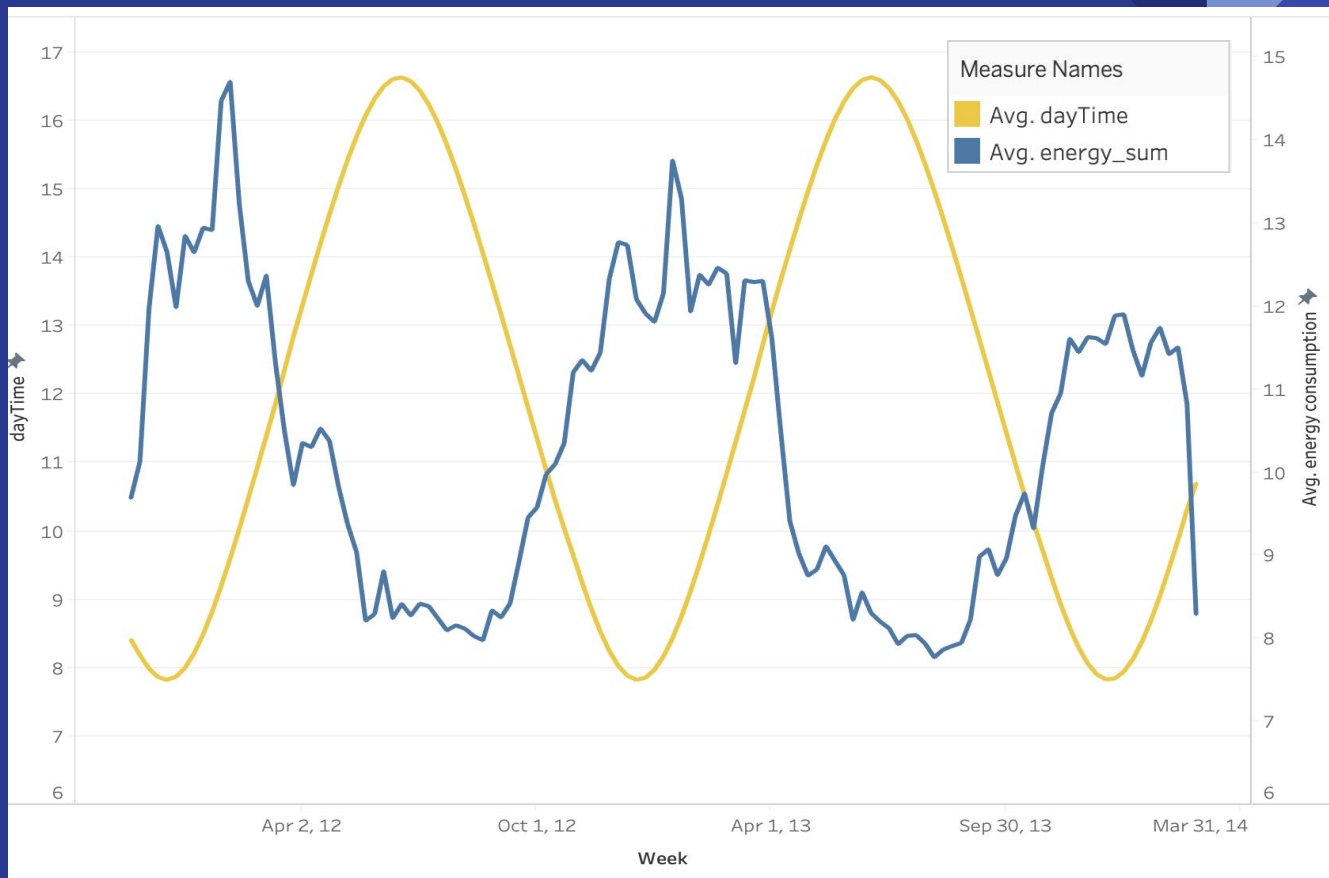
10.1314

10.9953

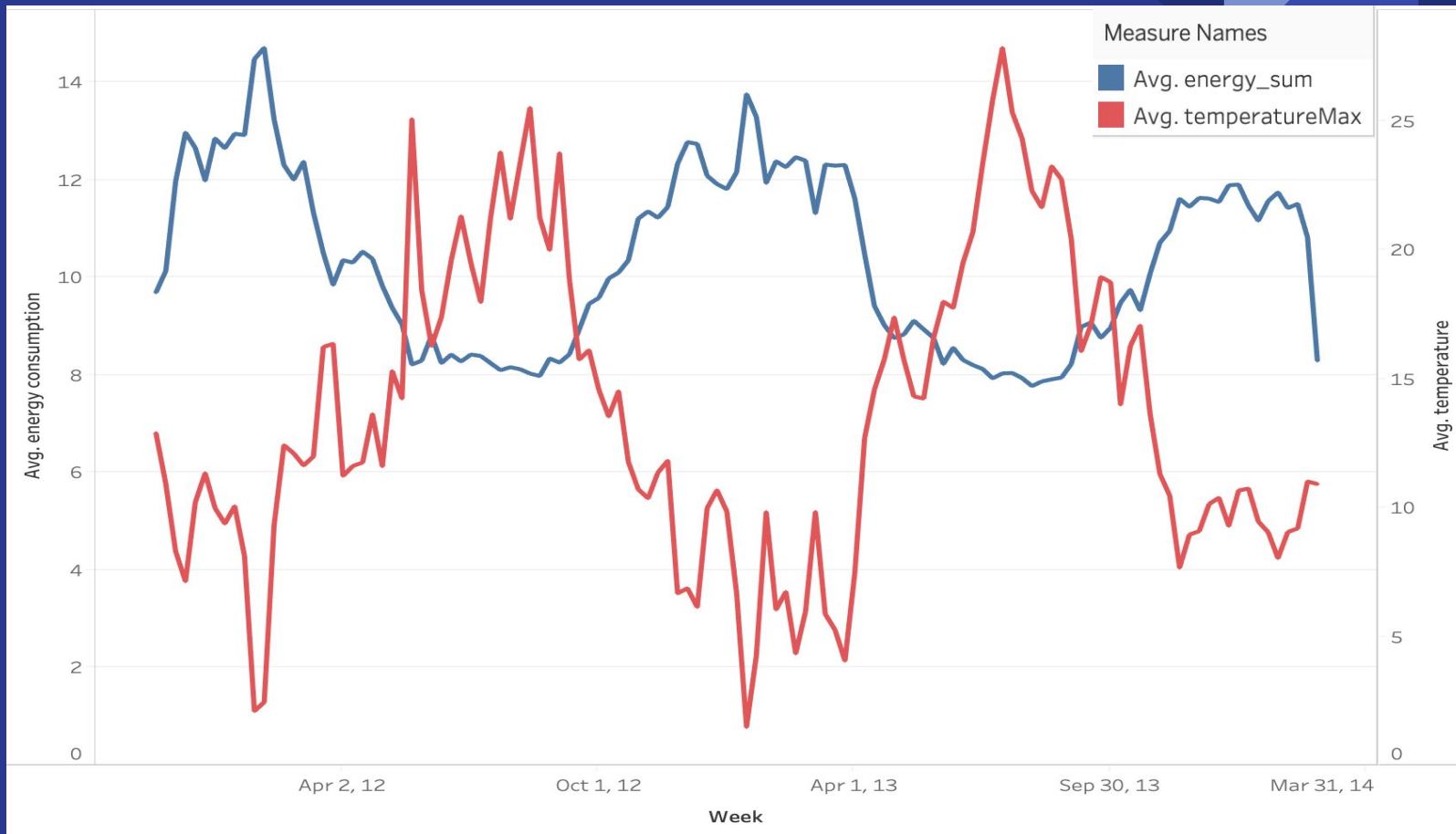
Consumer demographic - avg. monthly consumption by ACORN group



Time (seasonality) - daylight hours v energy consumption (weekly)

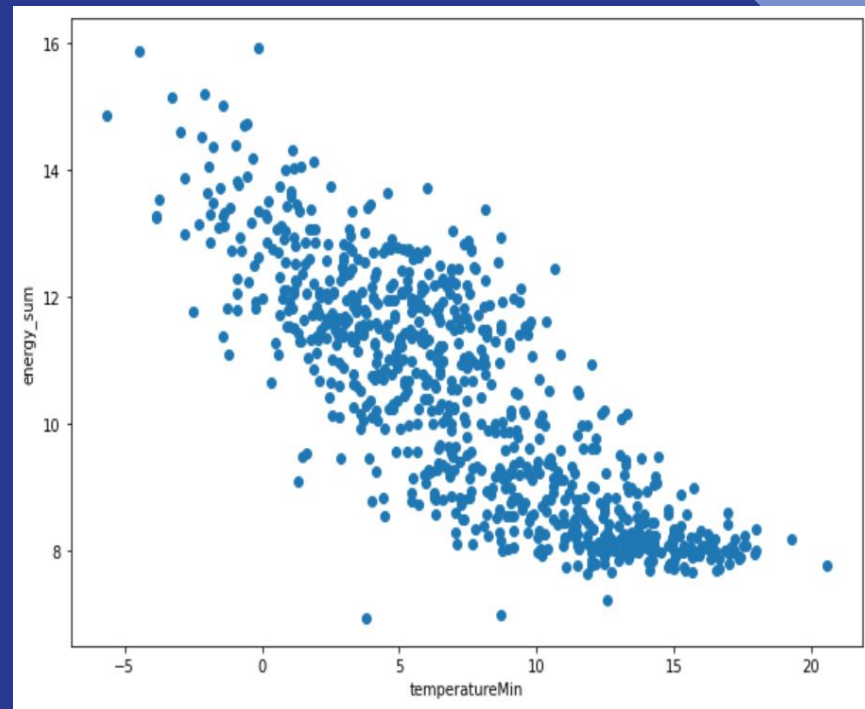
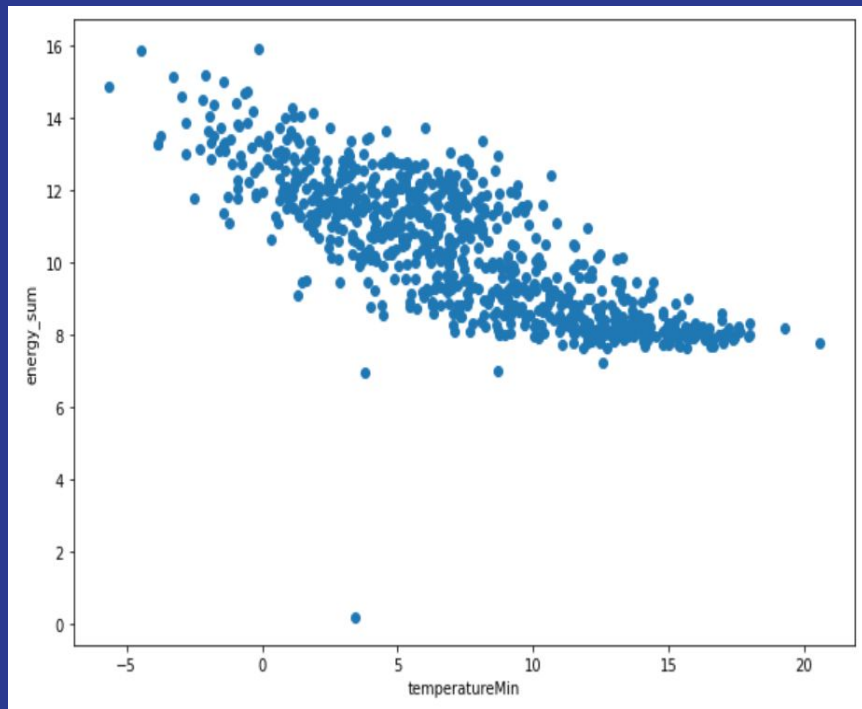


Weather - temperature v energy consumption (weekly)



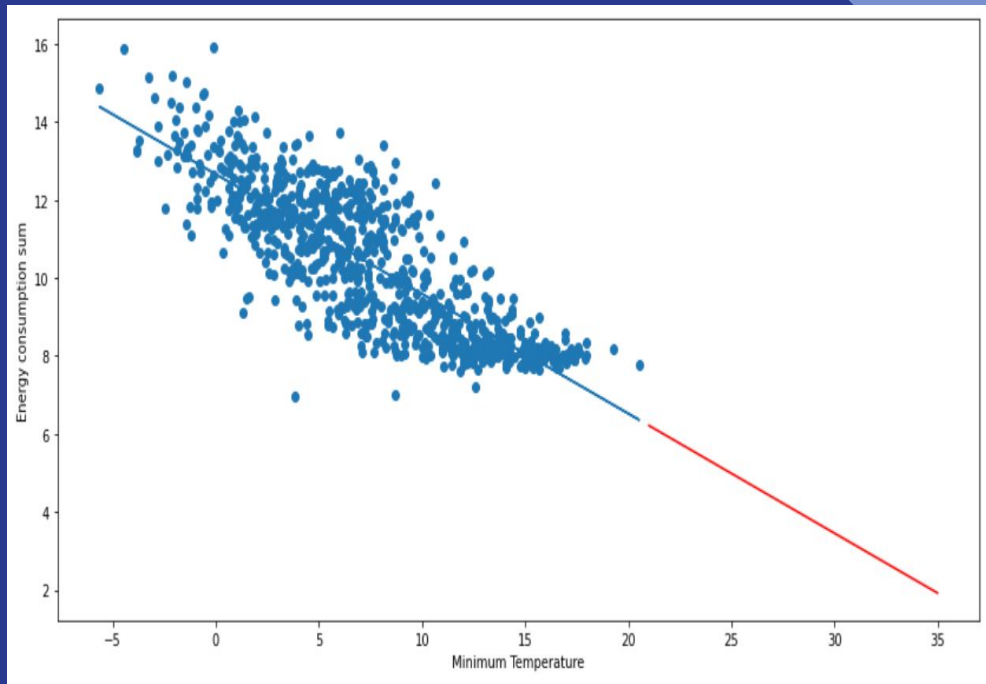
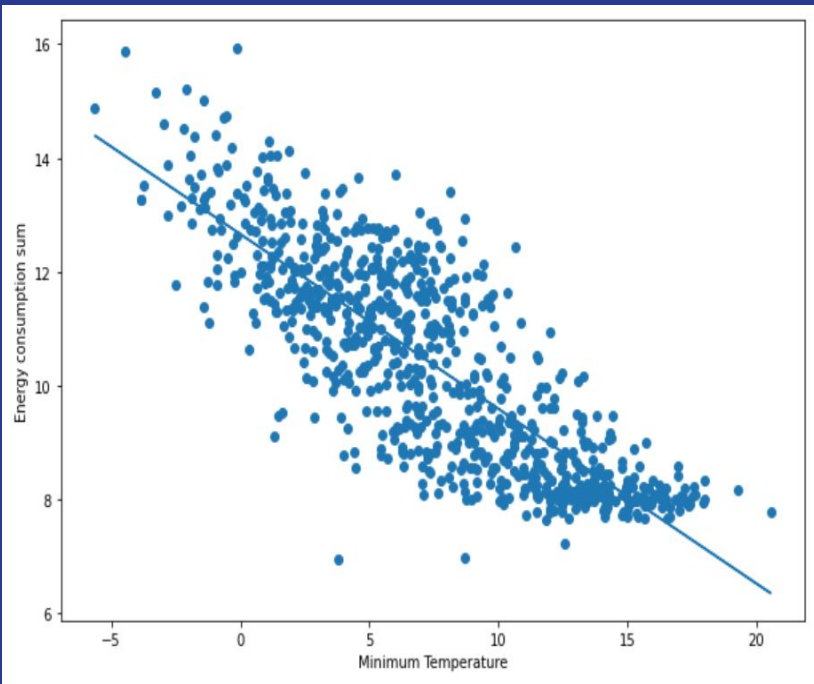
Weather - temperature v energy consumption (daily)

Scatterplot

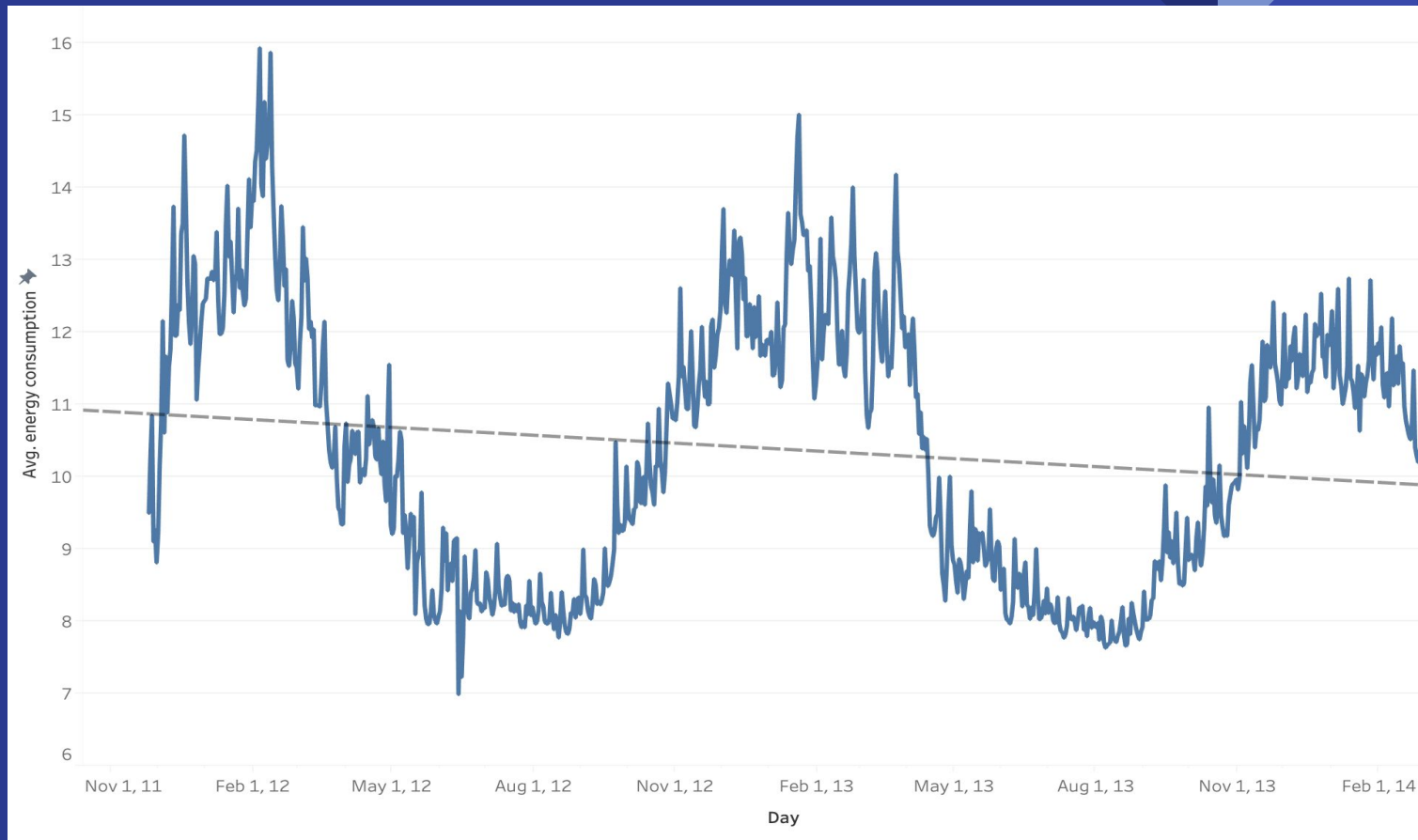


Weather - temperature v energy consumption (daily)

Linear regression & prediction



Avg. energy consumption per day in London





Any questions?