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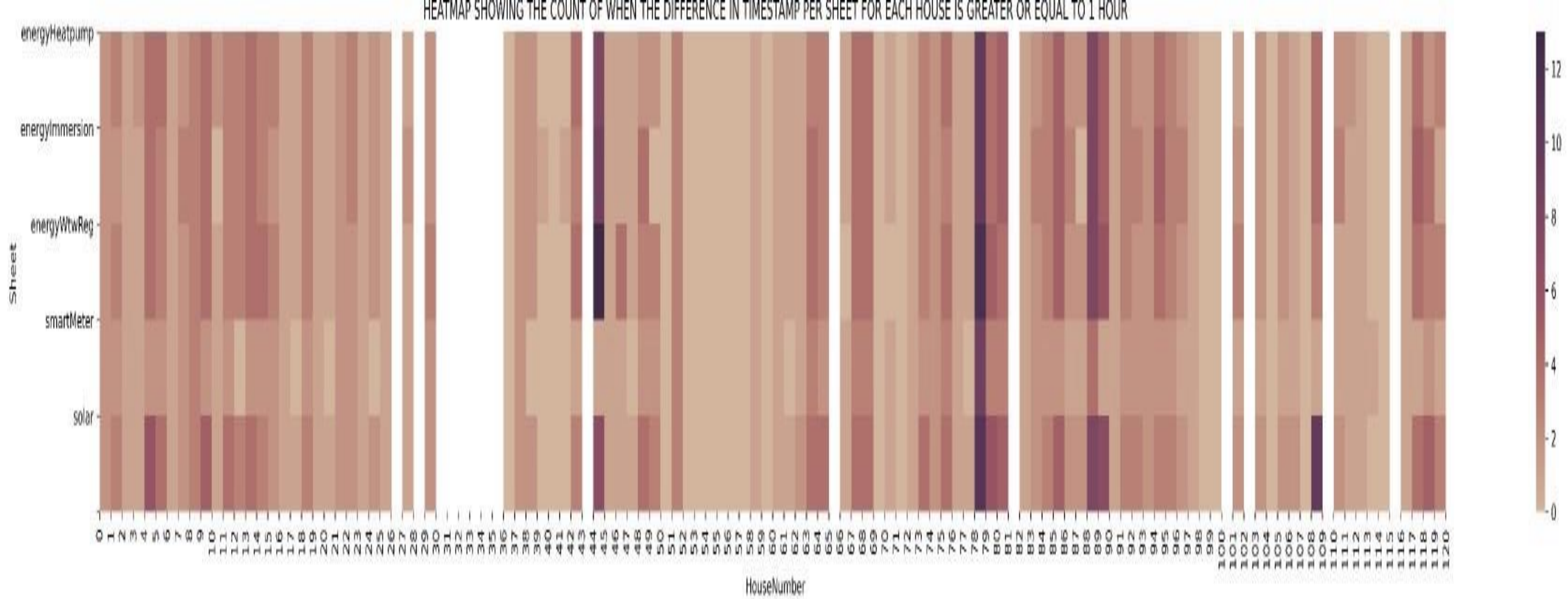
Team Zero

Last week

Tasks:

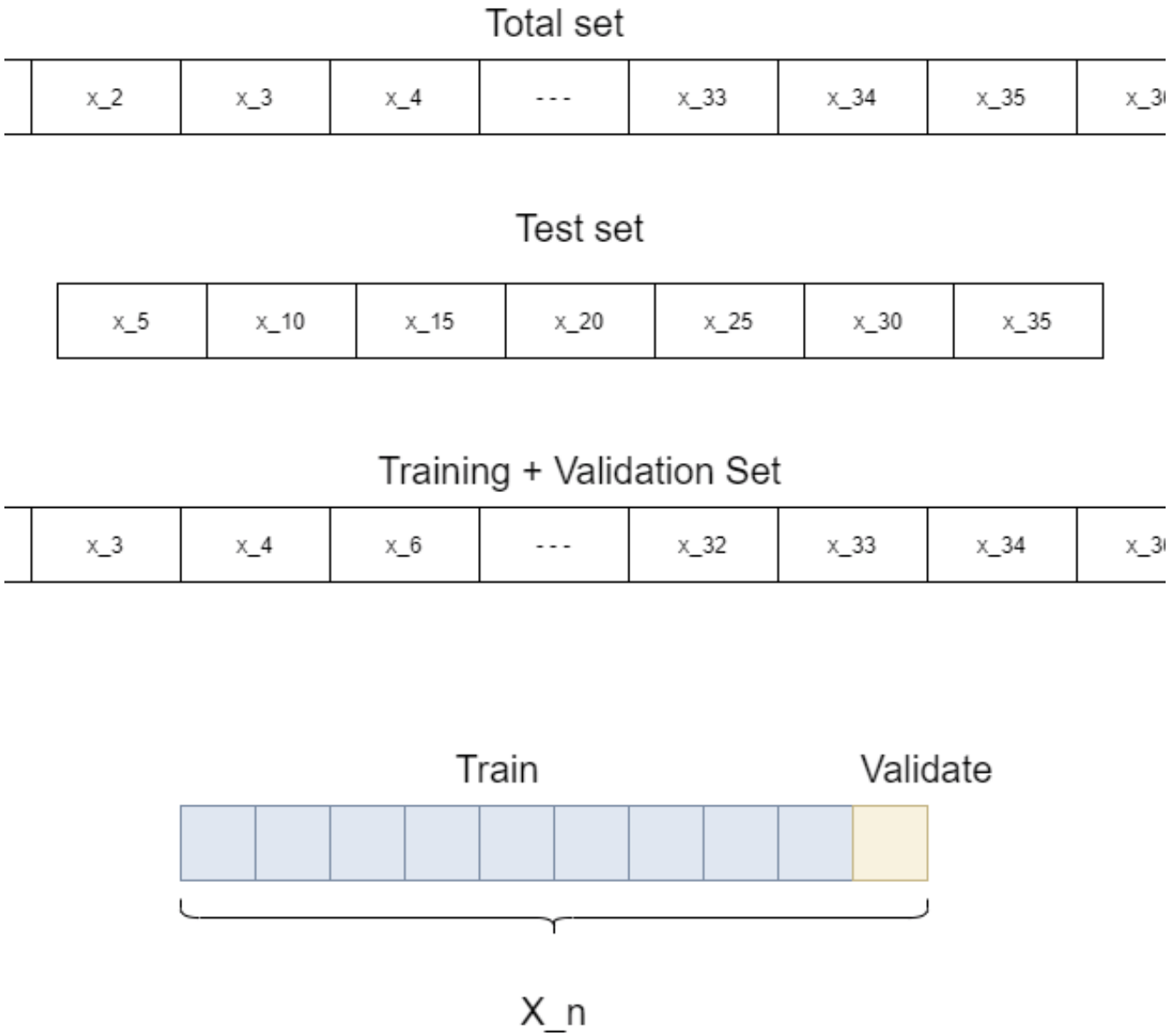
- Heatmap
- Data train, test split
- We improved our SVR model
- We improved our MVLR model



Heatmap

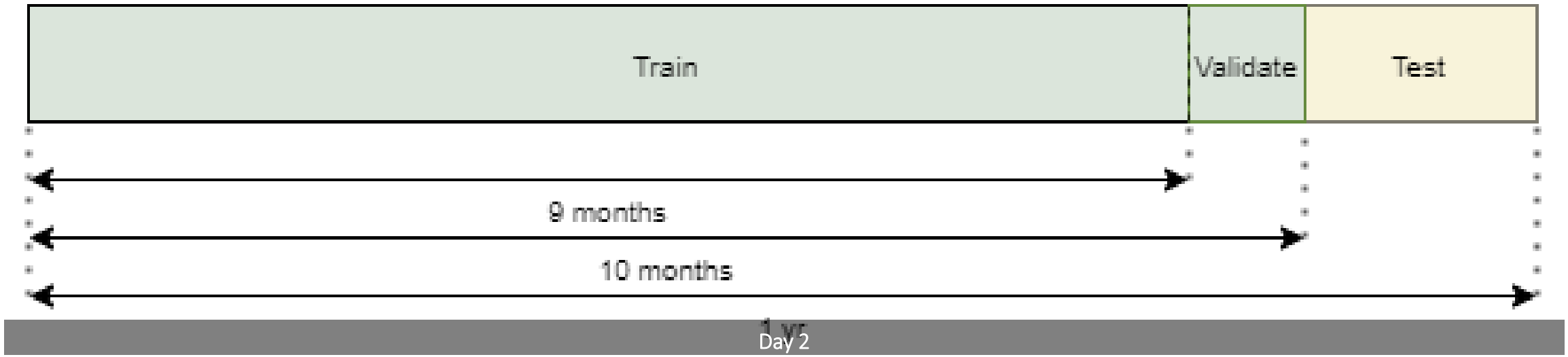
Heatmap showing the count of when the difference in timestamp per sheet for each house is greater or equal to 1 hour

The best houses for Solar energy production: [37,40,41,42,51,53,54,55,56,57,58,60,70,72,99,100,105,108,114,115]



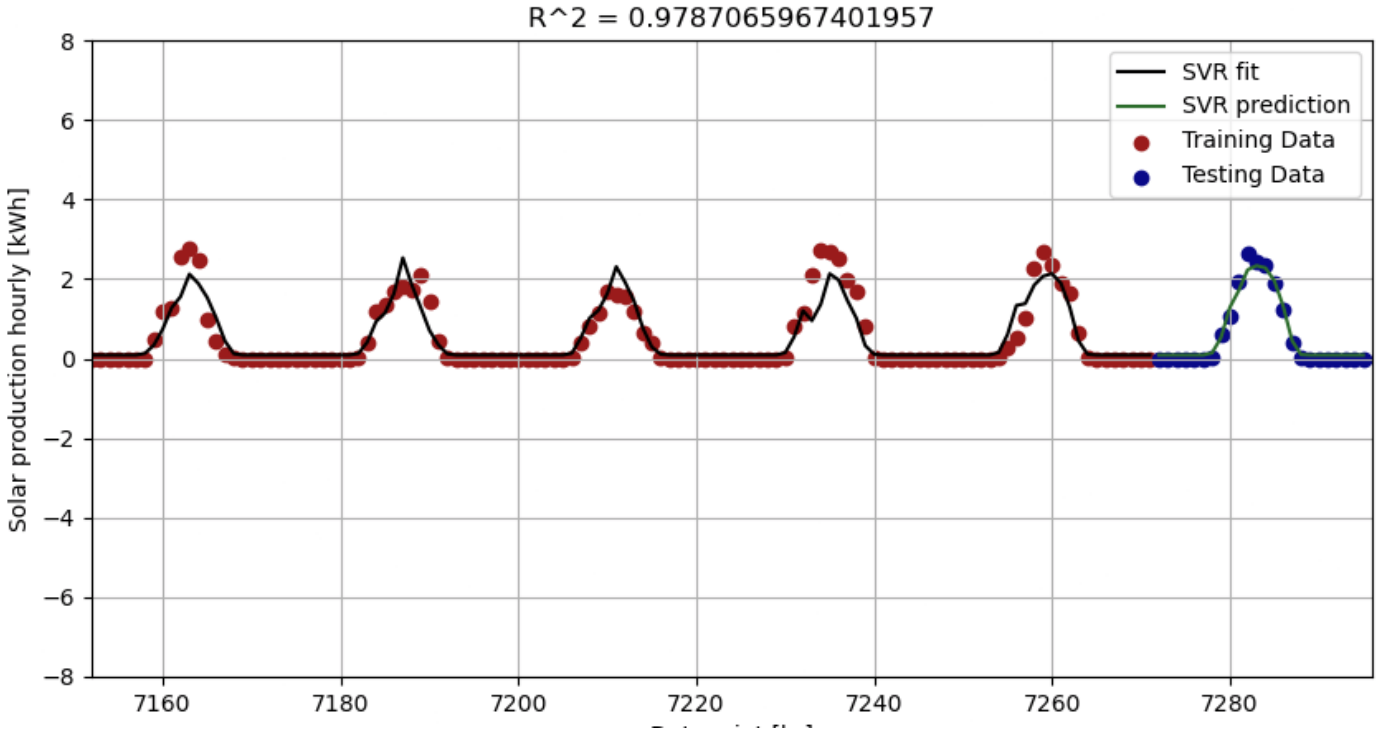
Data train, test split

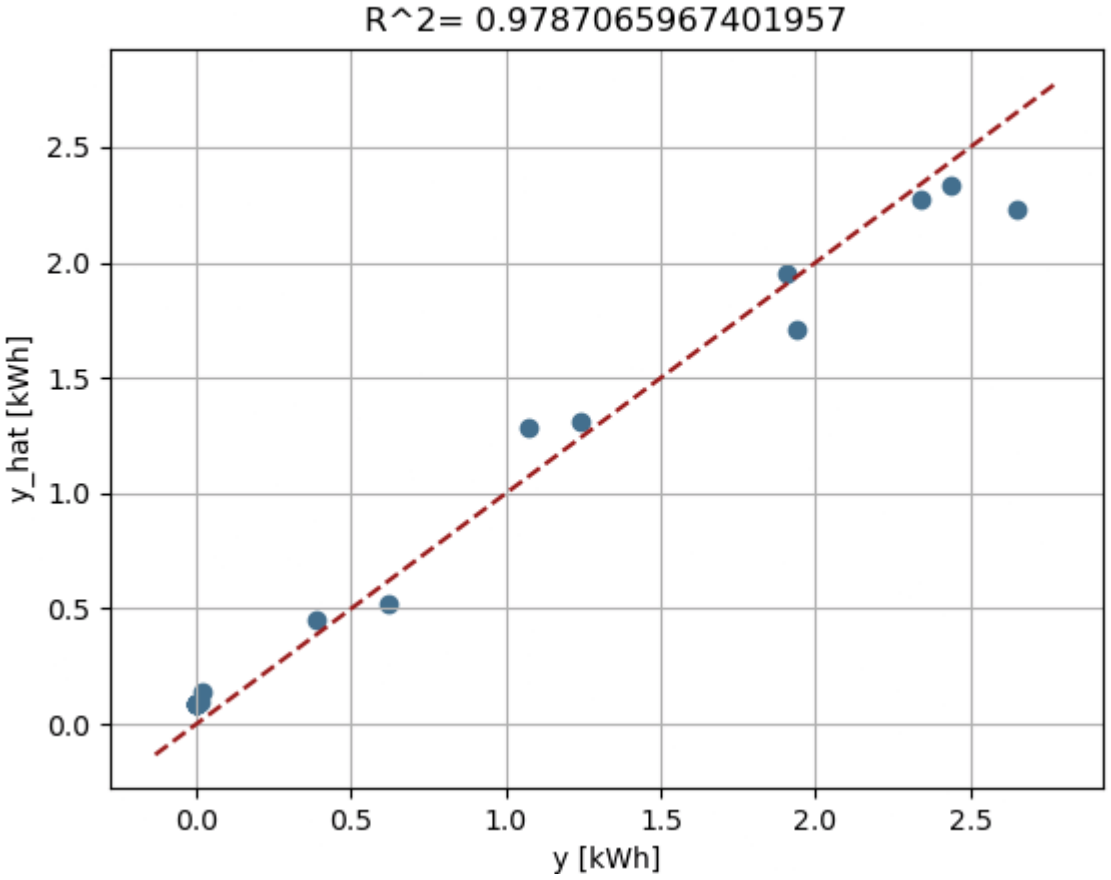
First method



Data train, test split

Classic model

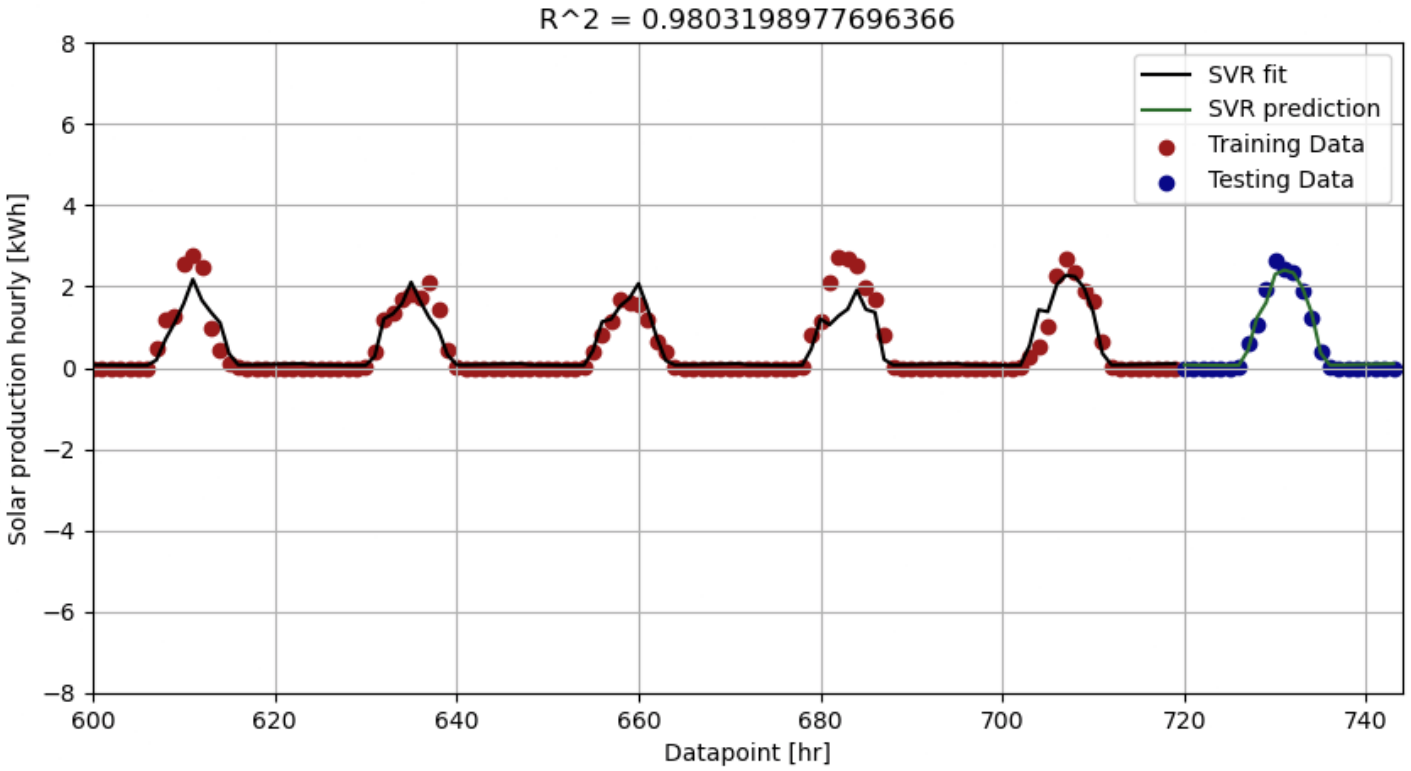


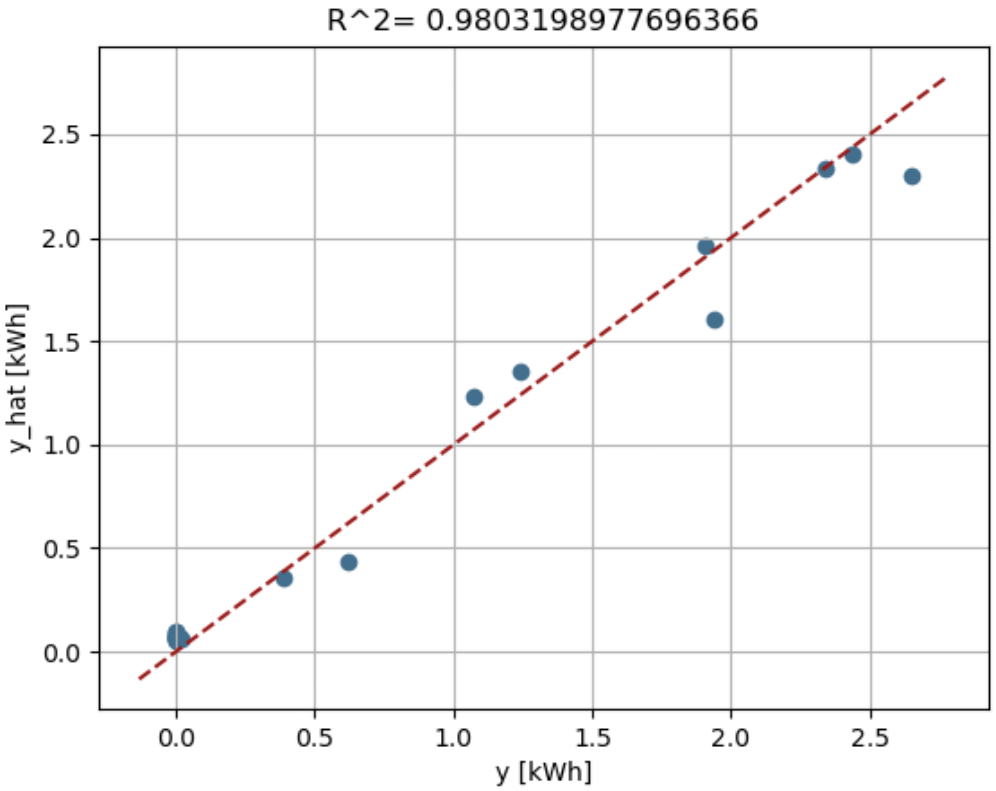


SVR – 10 months

Added:

-Irradiance & solar production data 1 , 2 and 3 days in the past (24hr 48hr, 72hr)
-hour of the day (0, 1, 2 ... 23)

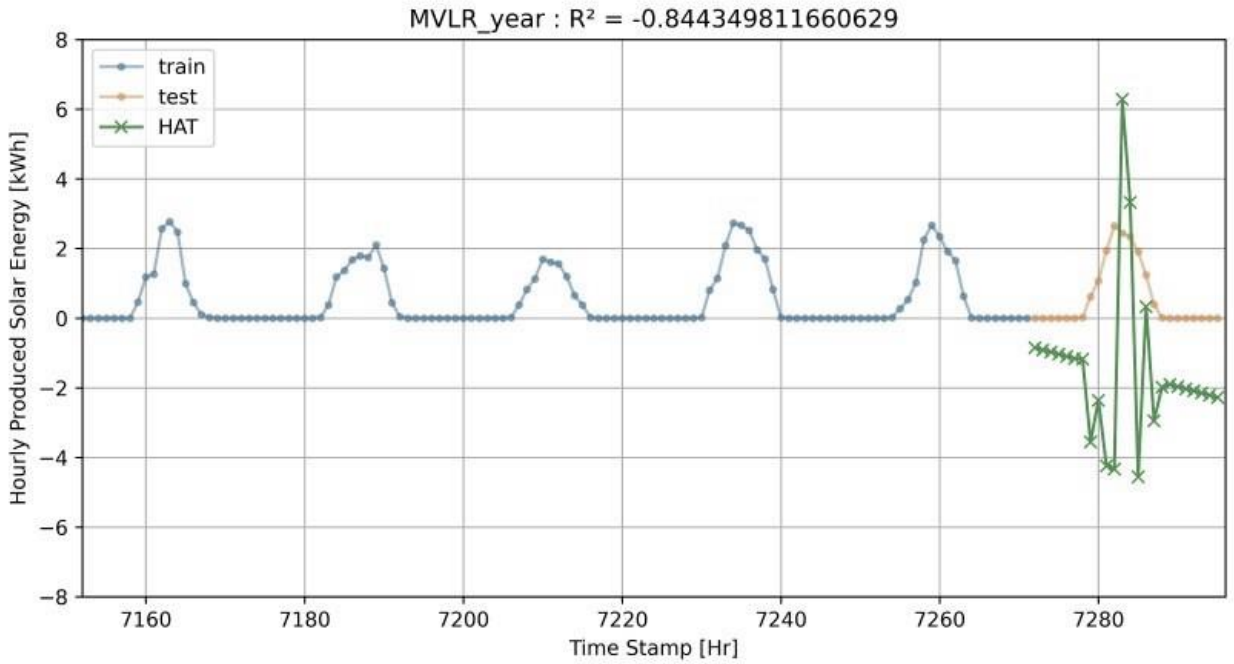


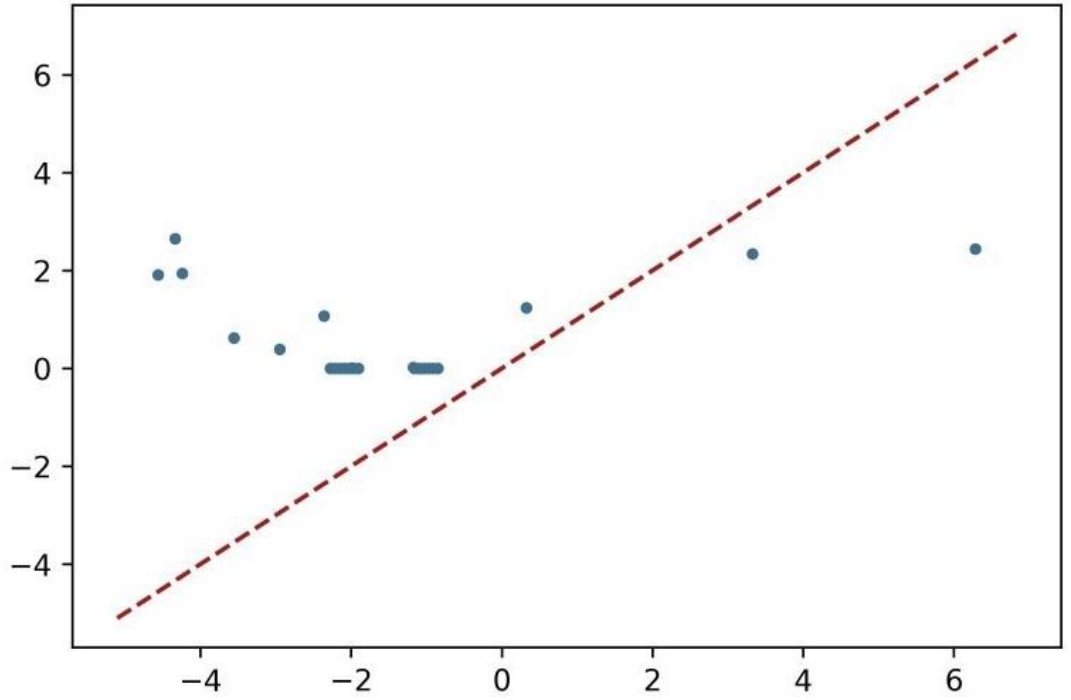


SVR – 1 month

Added:

-Irradiance & solar production data 1 , 2 and 3 days in the past (24hr 48hr, 72hr)
-hour of the day (0, 1, 2 ... 23)

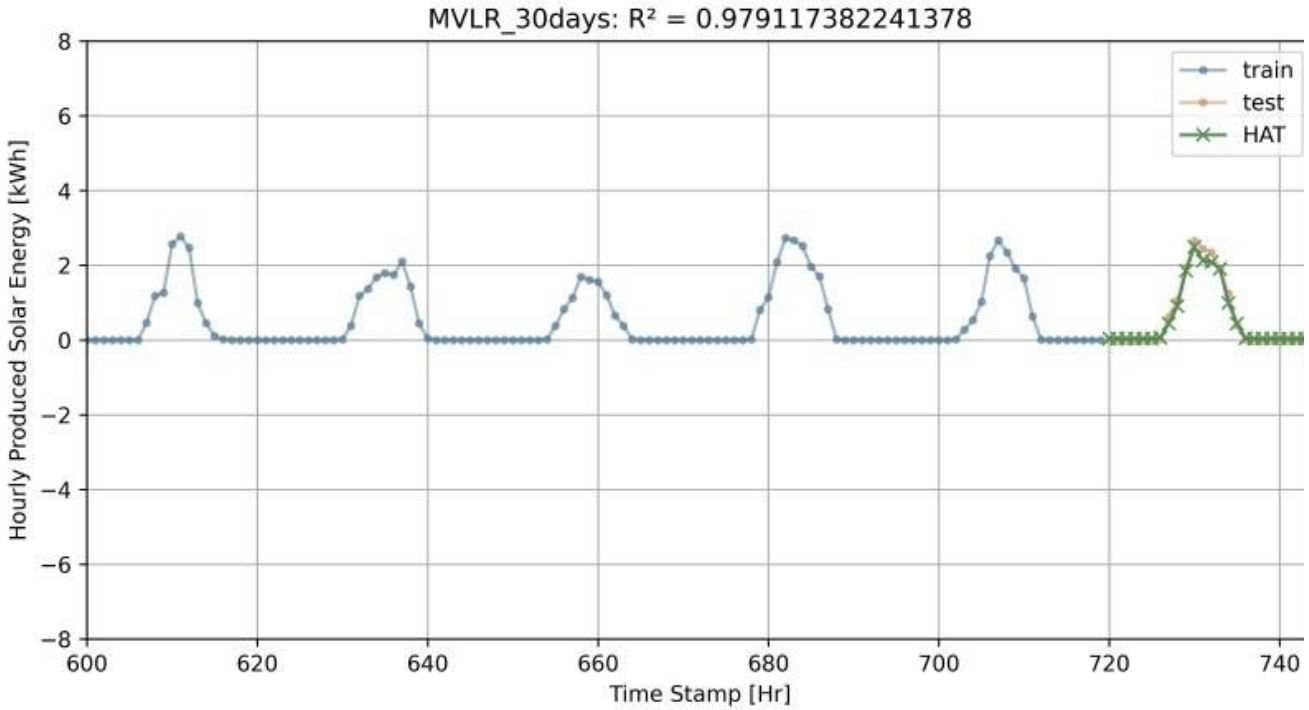


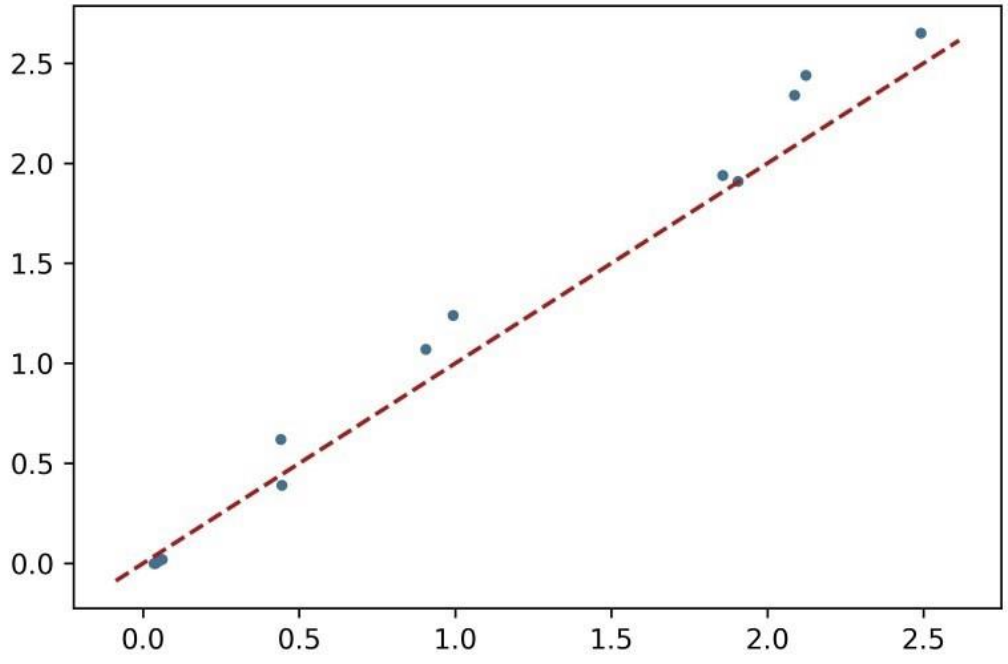


MVLR – 10 months

Added:

-Irradiance & solar production data 1 , 2 and 3 days in the past (24hr 48hr, 72hr)
-hour of the day (0, 1, 2 ... 23)





MVLR – 1 month

Added:

-Irradiance & solar production data 1 , 2 and 3 days in the past (24hr 48hr, 72hr)
-hour of the day (0, 1, 2 ... 23)

Next week

1. Find a way to filter the outliers properly out of the data for the MVLR, to improve performance.
2. Let the models run on the test dataset
3. Make 24 versions of each model that predicts every hour seperately (using a pipeline construction e.g.)
4. Acquire more knowledge concerning Artificial Neural Networks (by doing the Datacamp course Introduction to Deep Learning with Pytorch), and perhaps make a start with our very own LSTM!

Remarks, Suggestions, Questions