

Series Editor
Serge Petiton

Data Mining and Machine Learning in Building Energy Analysis

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Color section

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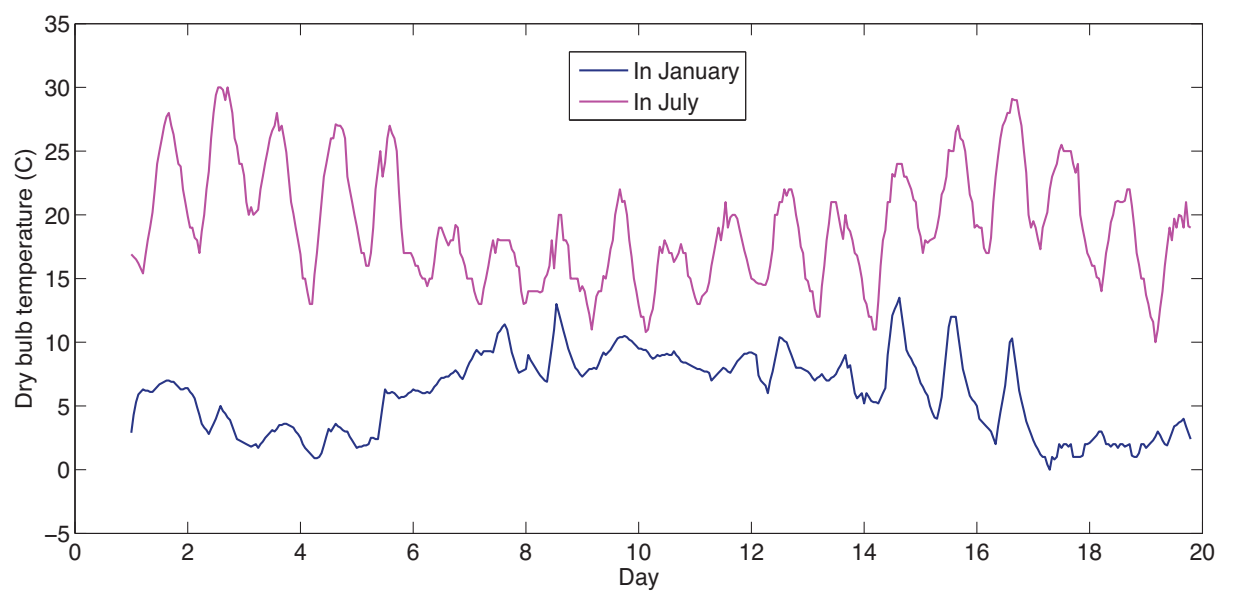


Figure 2.2. Dry bulb temperature in the first 20 days of January and July.

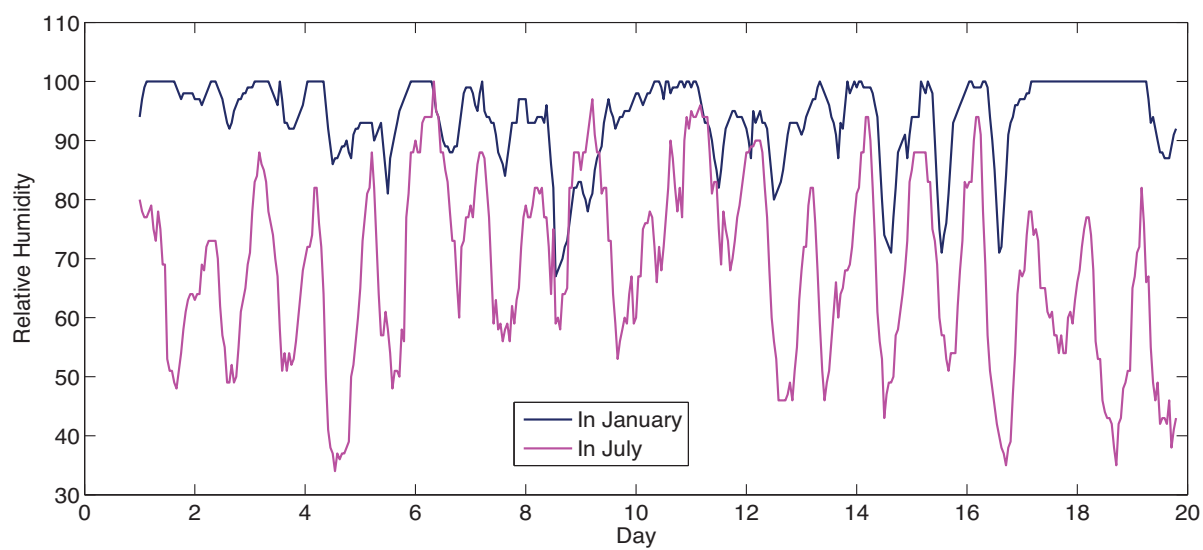


Figure 2.3. Relative humidity in the first 20 days of January and July.

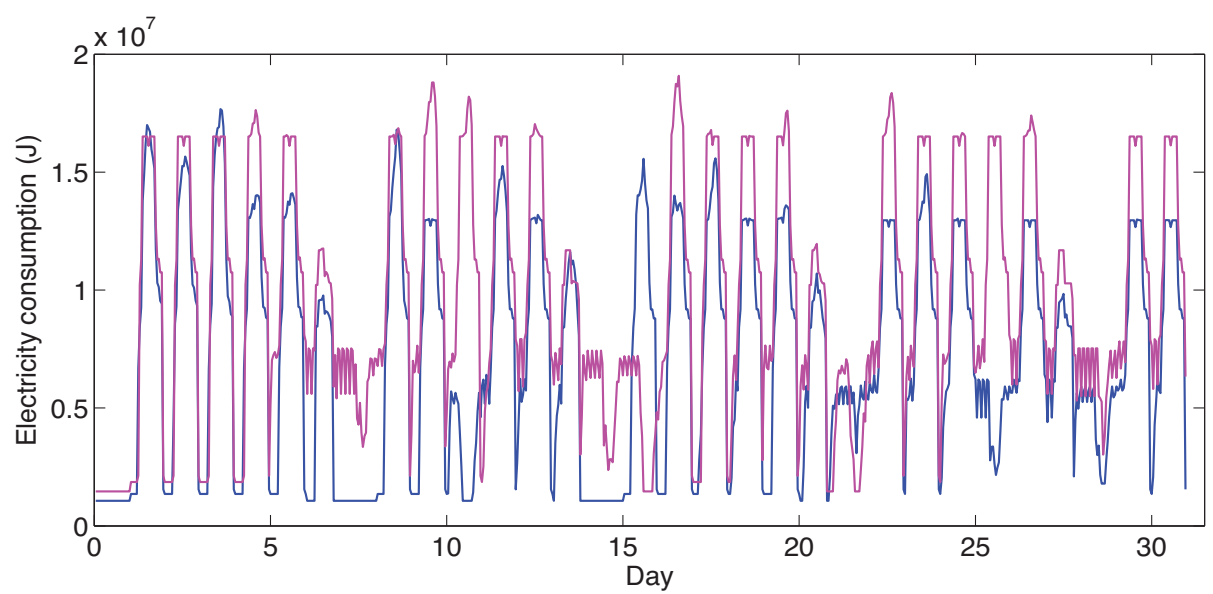


Figure 2.5. Hourly electricity consumptions of two buildings in November.

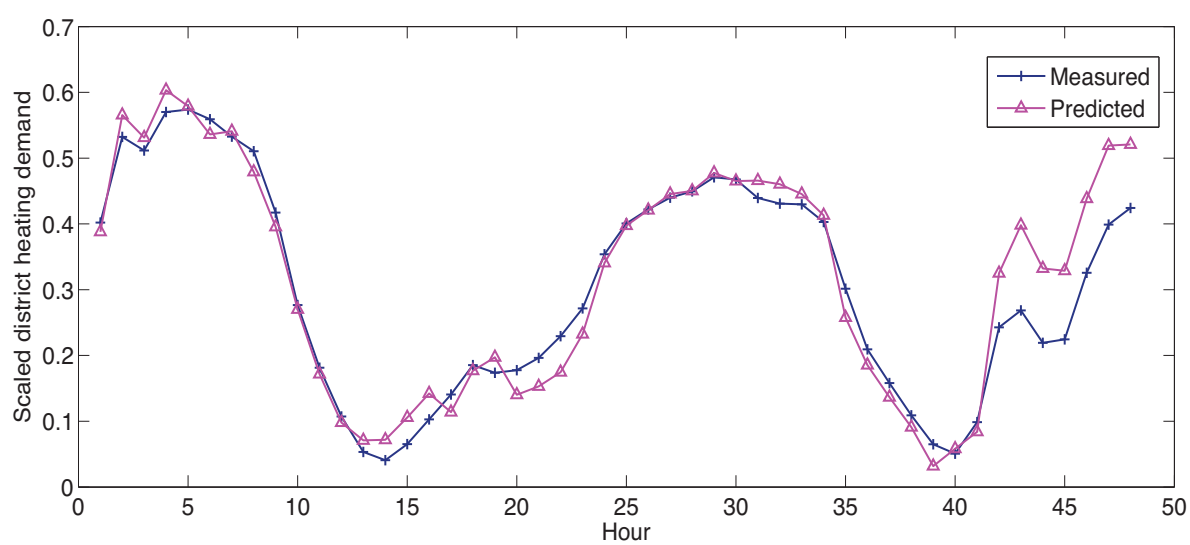


Figure 4.3. Measured and predicted district heating demand in heating season.

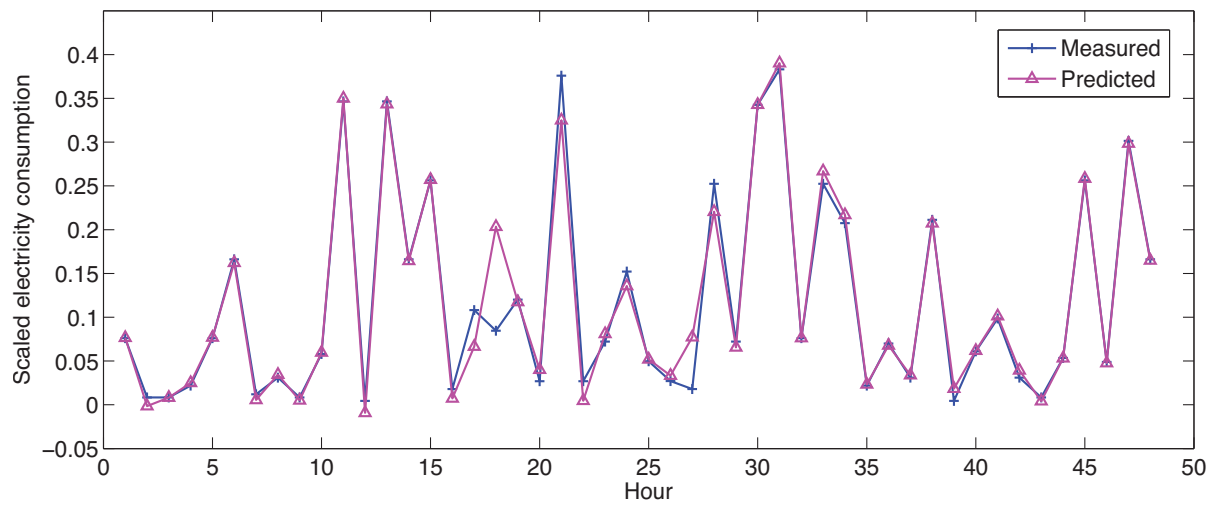


Figure 4.4. Measured and predicted electricity consumption in randomly selected 48 hr.

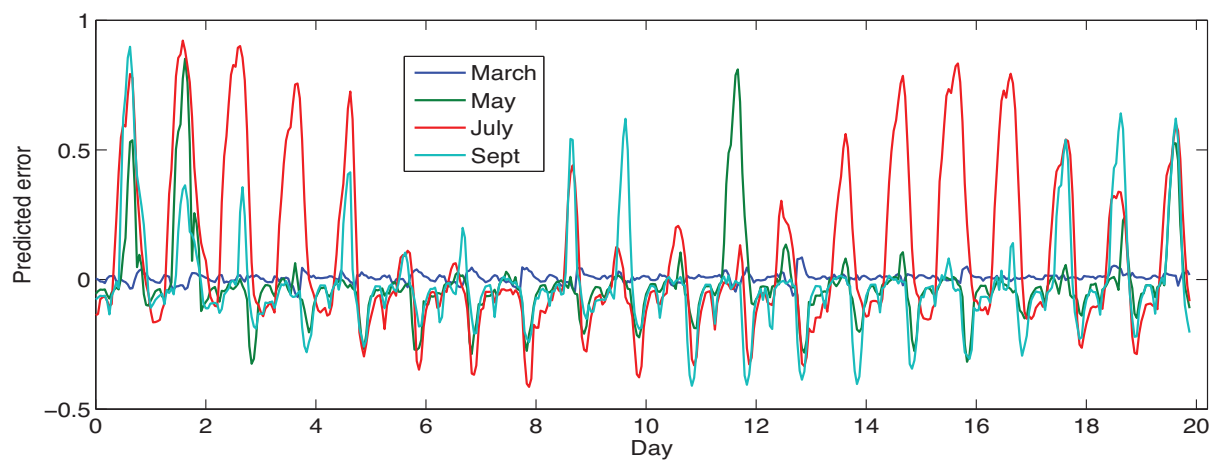


Figure 4.5. Prediction error of the model on the consumption of March, May, July and September. The model is trained on the data of January.

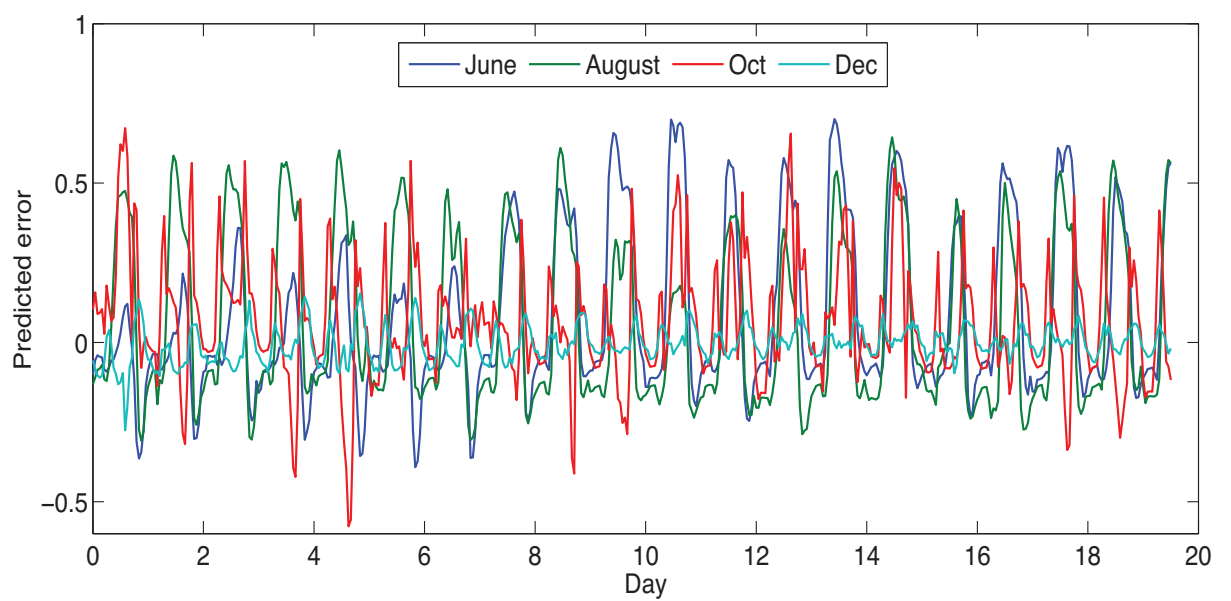


Figure 4.6. Prediction error of the model on the consumption of June, August, October and December. The model is trained on the data from January to April.

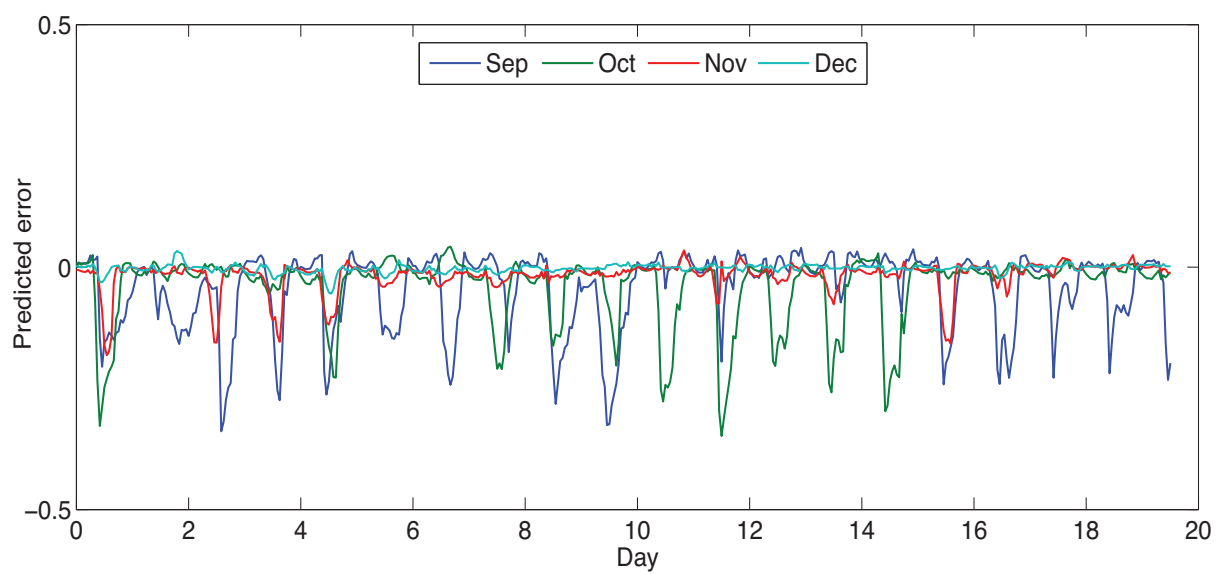


Figure 4.7. Prediction error of the model on the consumption of September, October, November and December. The model is trained on the data from January to August.

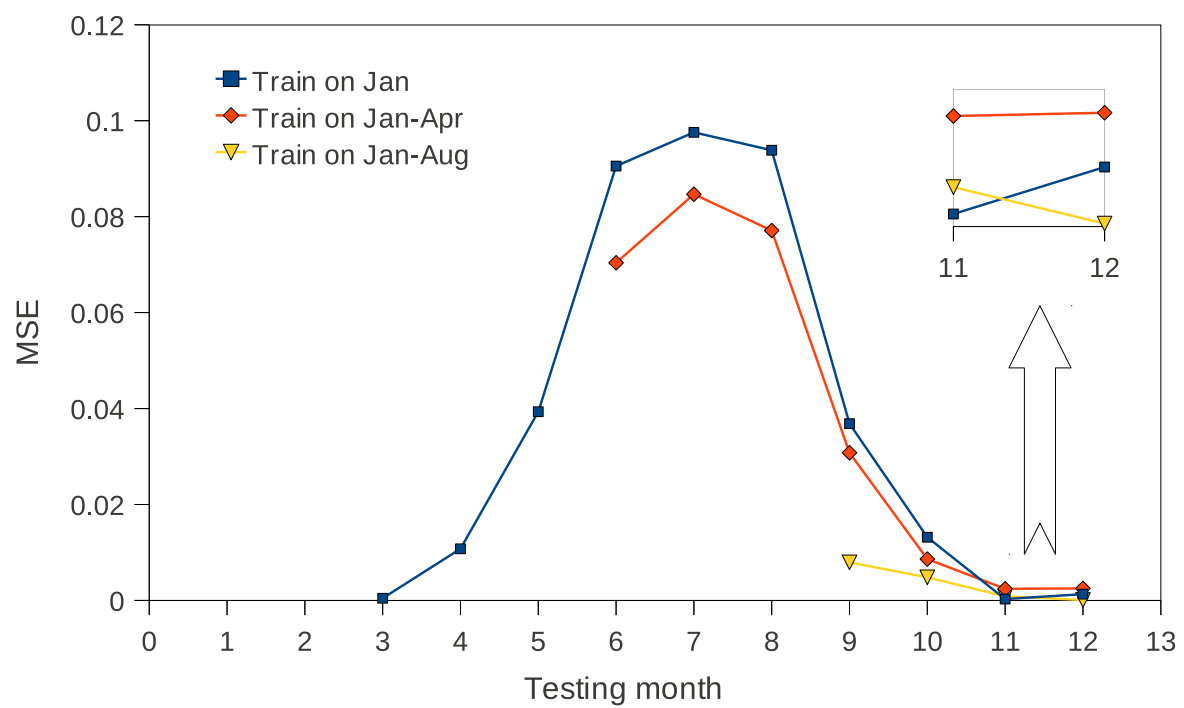


Figure 4.8. Mean squared error of the three models on the designed testing months.

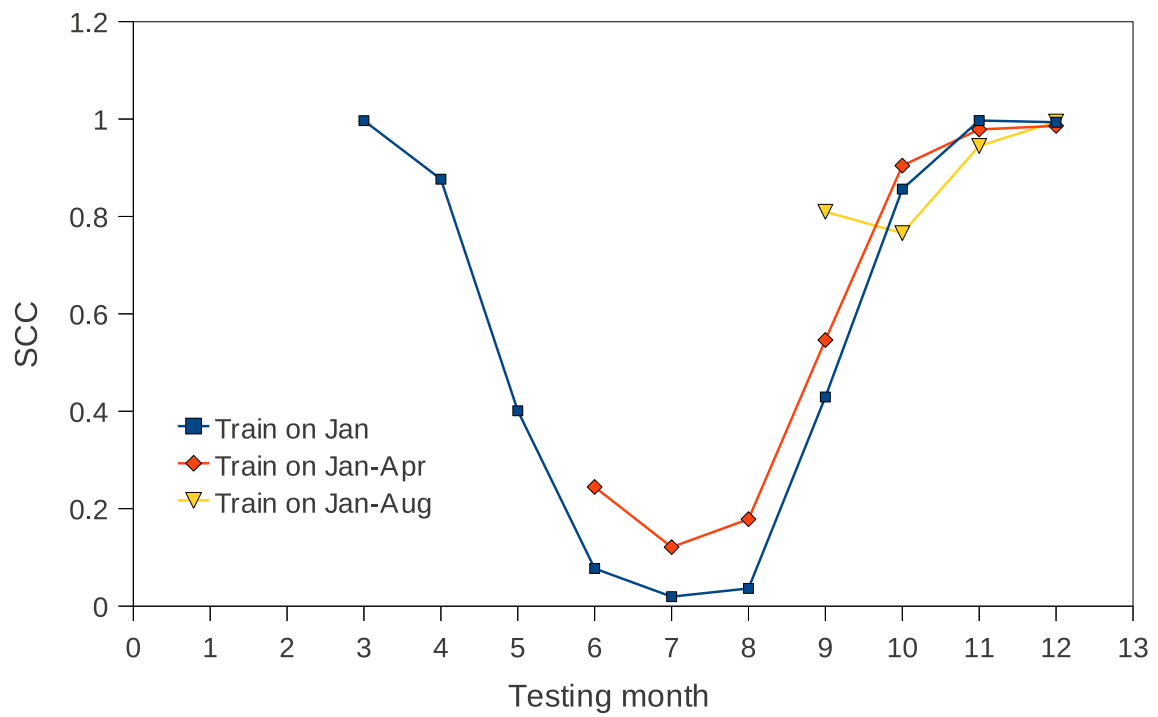


Figure 4.9. Squared correlation coefficient of the three models on the designed testing months.

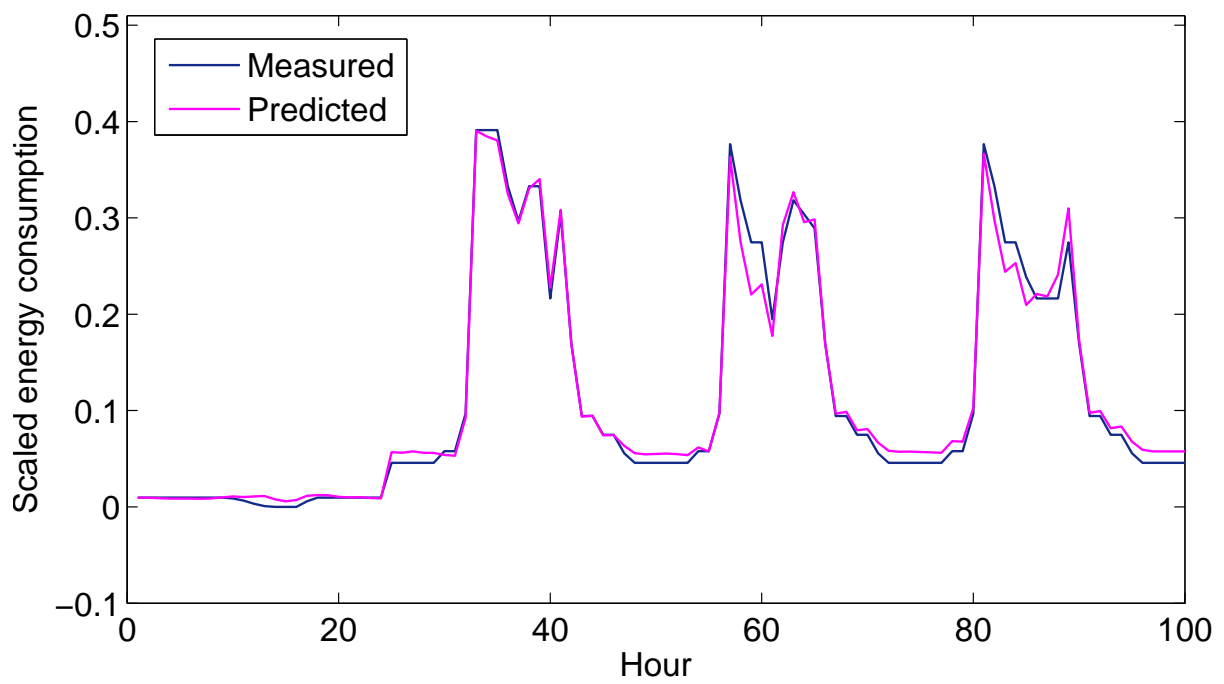


Figure 4.10. Measured and predicted electricity consumption for a totally new building. The model is trained on 99 buildings.

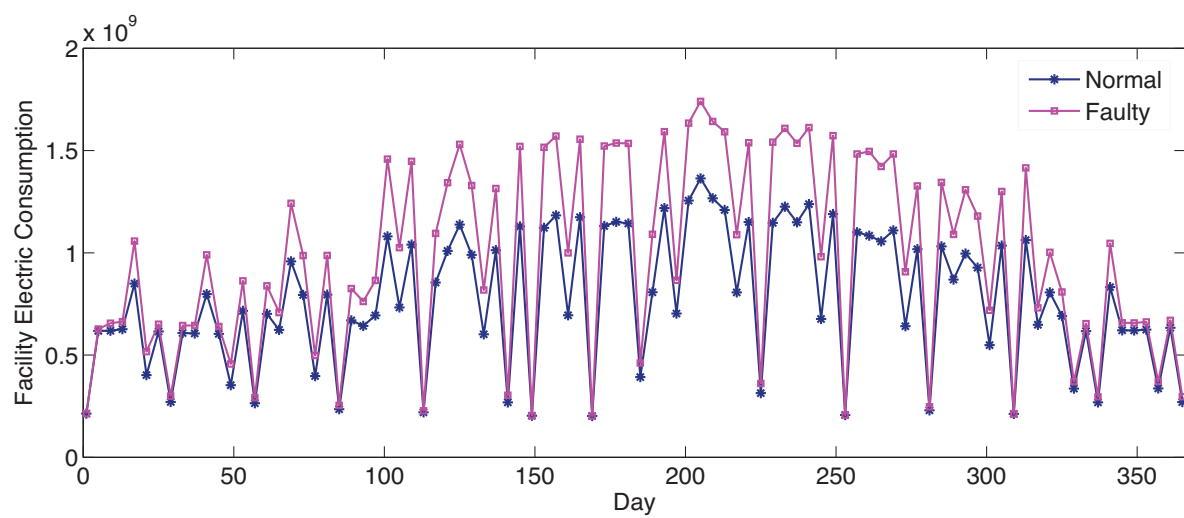


Figure 4.11. Normal and faulty facility electric consumption in 1 year (the unit is Joules (J)).

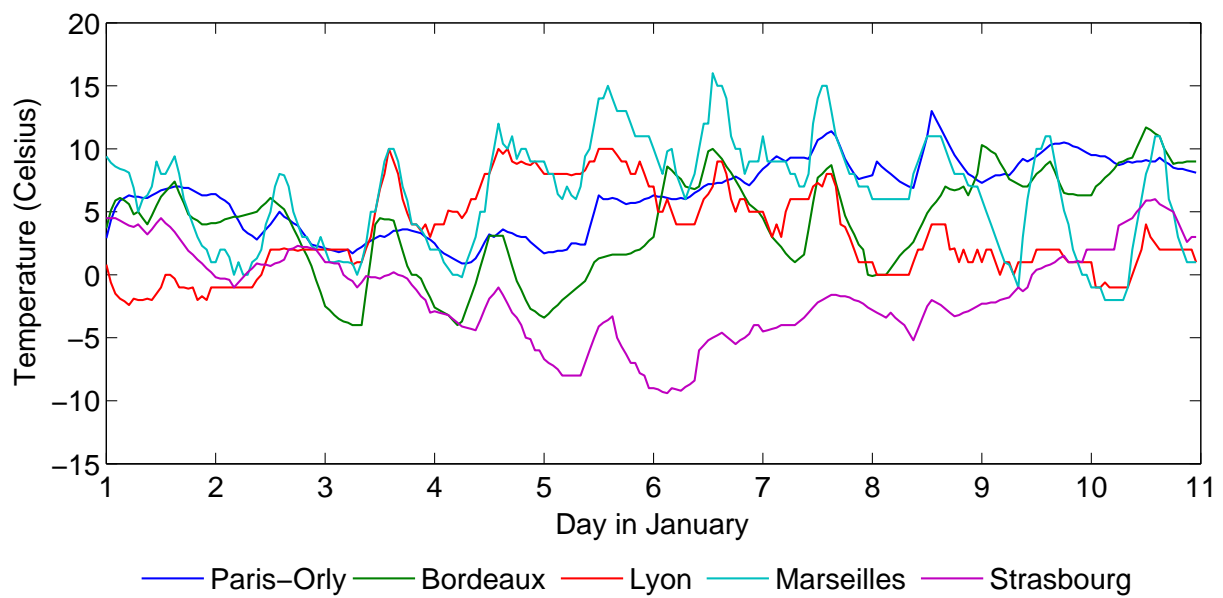


Figure 5.3. Dry bulb temperature in the first 11 days of January.