

Sparse Multiple Index (SMI) Models for High-dimensional Nonparametric Forecasting

Nuwani Palihawadana

Joint work with : Rob Hyndman, Xiaoqian Wang

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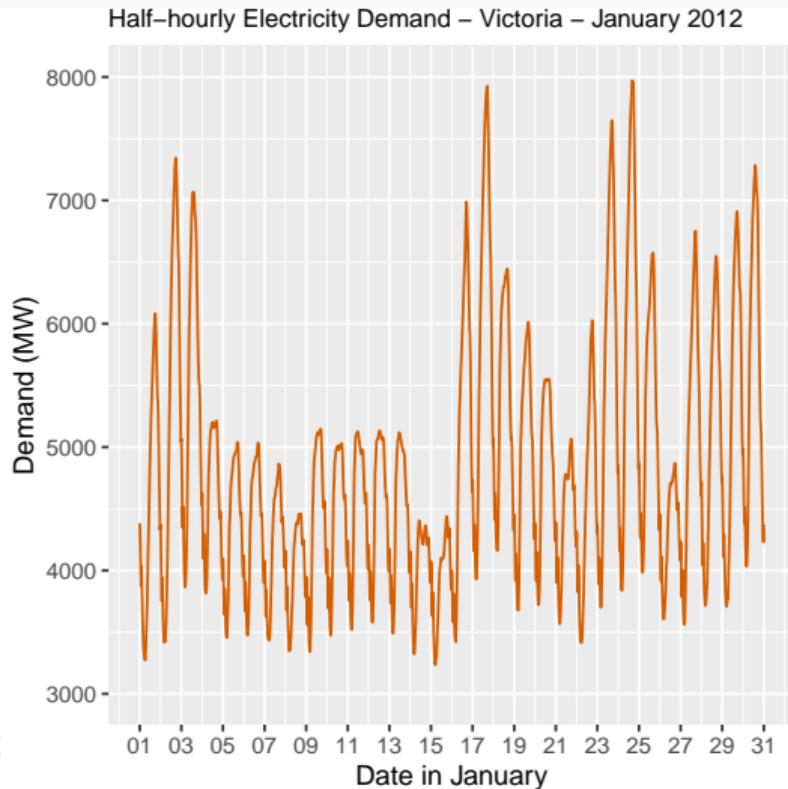
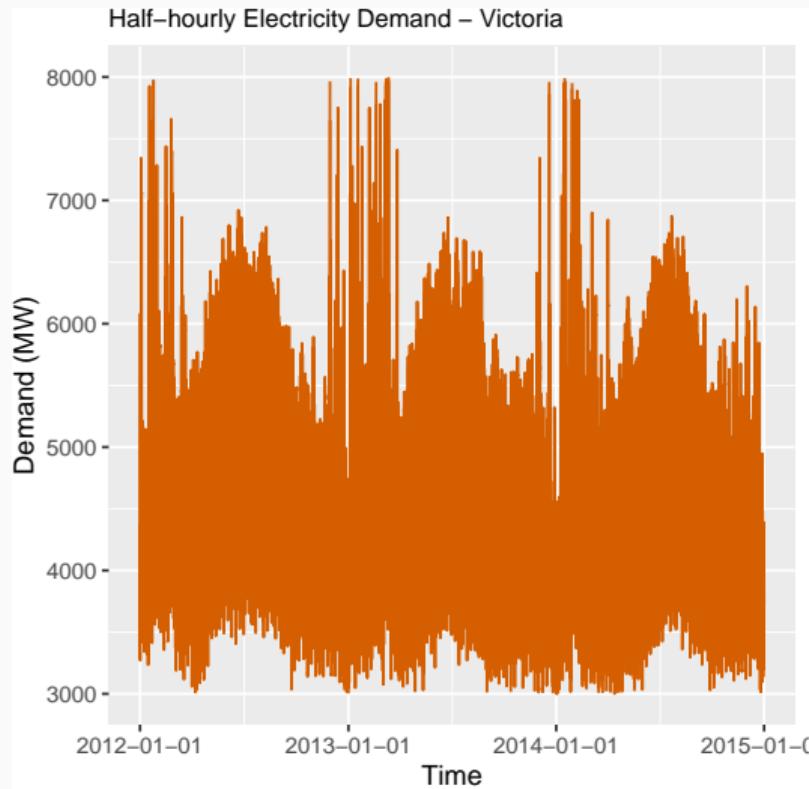
Outline

1 Motivation

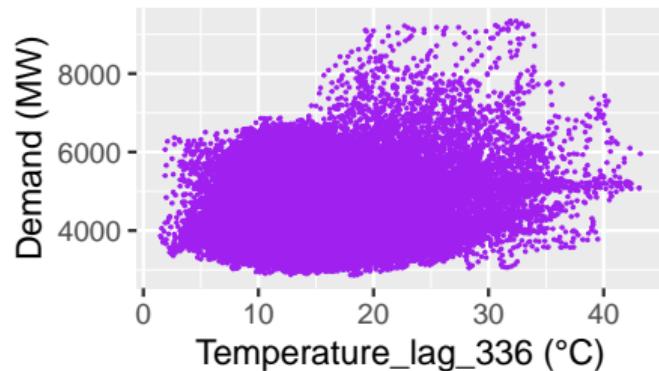
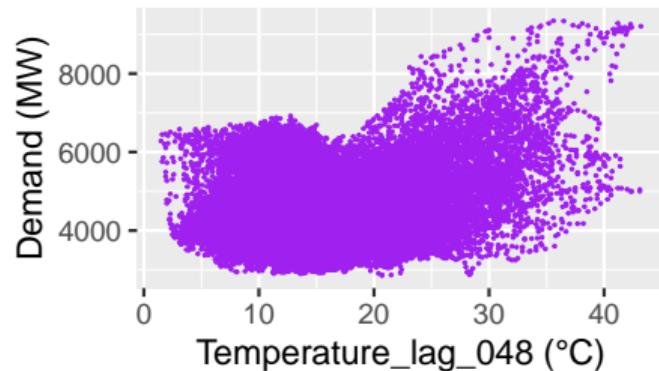
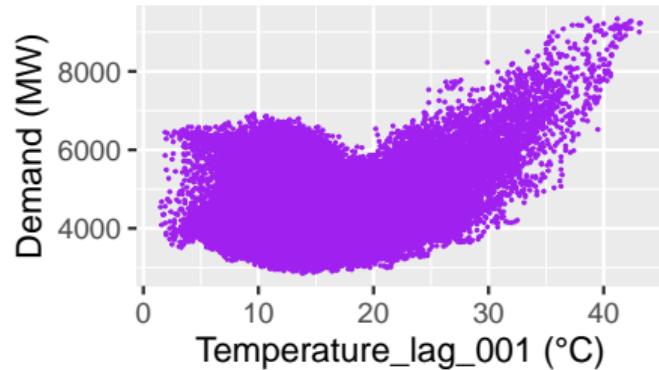
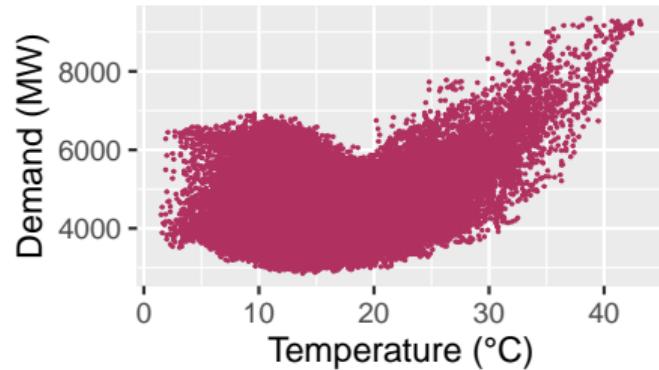
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Electricity Demand Data



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■ *Nonlinear "Transfer Function" model*

y_t – variable to forecast

x_t – a vector of predictors

ε_t – random error

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