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Wind Power Forecasts

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Abstract

In this thesis, we will apply time series analysis to make wind speed forecasts and then compute the corresponding wind energy that may be produced. The model used in this report is linear regression with ARMA-errors. The linear part of the model is intended to capture the seasonal effects present in the data and is composed by Fourier terms. A comparison between a model fitted to hourly average wind speeds and daily average wind speeds will be performed to check which produces the smallest forecasting errors.

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