Model	Model and data characteristics	Advantages	Disadvantages
Exponential smoothing	• both linear and non-linear *data requirements* • deterministic • stationarity • small quantity • continuity	• small quantity of data needed	• multivariate modelling is not possible • Prediction accuracy is low
ARIMA	• linear *data requirements* • stochastic • non-stationarity • small quantity	• well established theoretical background	• focus on mean, miss the extremes, , the accuracy is low for extremes. • sensitive to missing data
Kalman filtering	• linear *data requirements* • stochastic Gaussian	• multivariate modelling	• computationally complicated
Nearest neighbour	• non-linear	• simple model structure • multivariate modelling • robustness to missing data • adaptive to local information	• highly susceptible to curse of dimensionality
Neural networks	• non-linear	• able to map complex tempo-spatial relationships • multivariate modelling • accurate multistep-ahead predictions • robustness to missing data	• data and computation intensive
Support vector machines	• both linear and non-linear (using kernel trick)	• can model high dimensional data • good generalisation	• computational intensive • extensive memory requirements