

Time Series Analysis

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Time Series

What?

- ❑ Time series: observations that collected through time (equal intervals).
- ❑ In regular regression models, there is dependant and independent variables. In time series, we have one variable that changes over time.
- ❑ Ex. weather, stock price, sales quantity,...

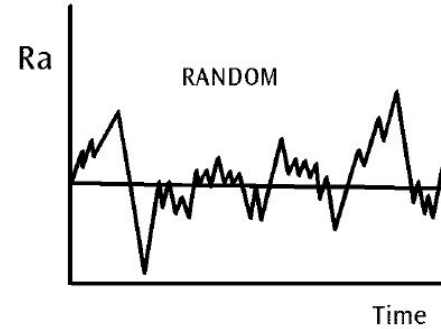
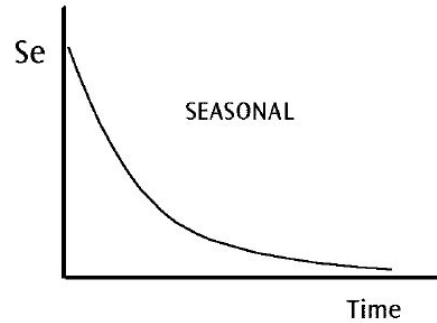
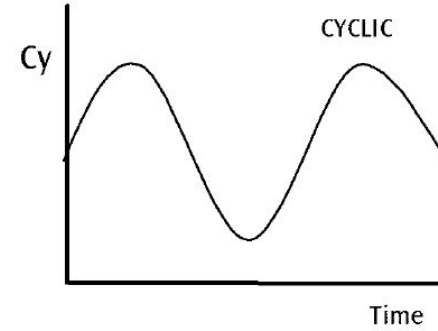
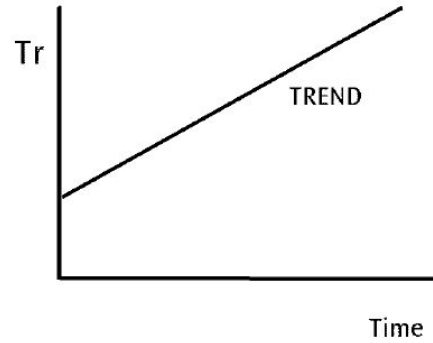
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Why?

- ❑ Understand the behaviour
- ❑ Predict/Forecast the future

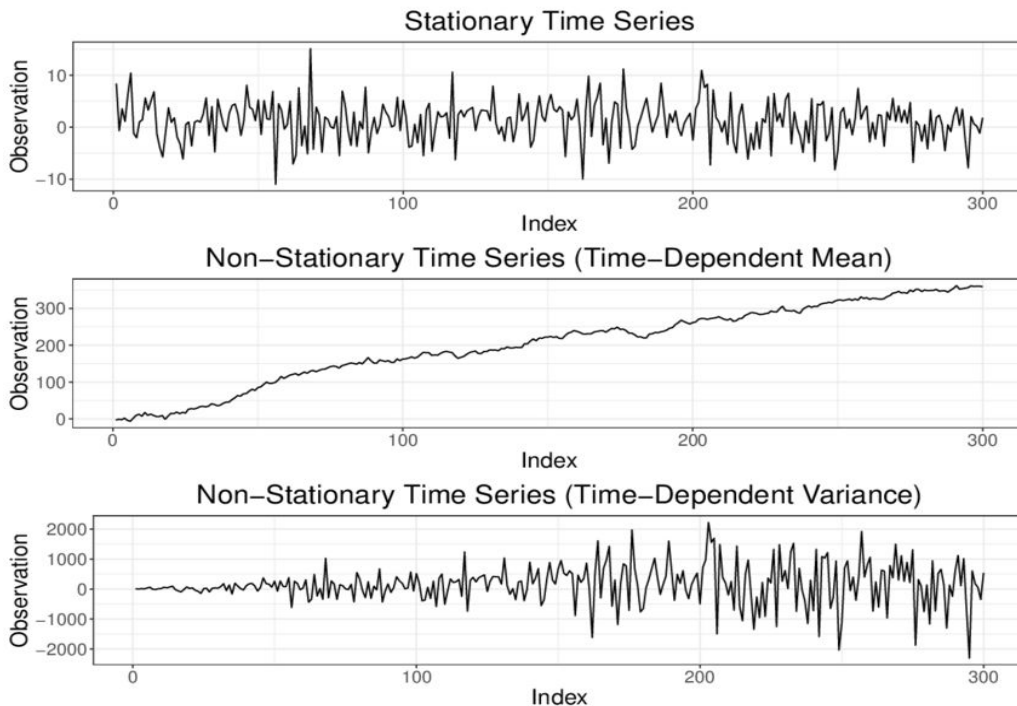
Time Series

How?



Stationary Time Series

Stationary is assumed in all time series models, which is the mean, variance and autocorrelation structure do not change over time.



Statistical Models

- ❑ Autoregression
- ❑ Moving Average
- ❑ ARIMA (Autoregressive Integrated Moving Average)



Thank you :)