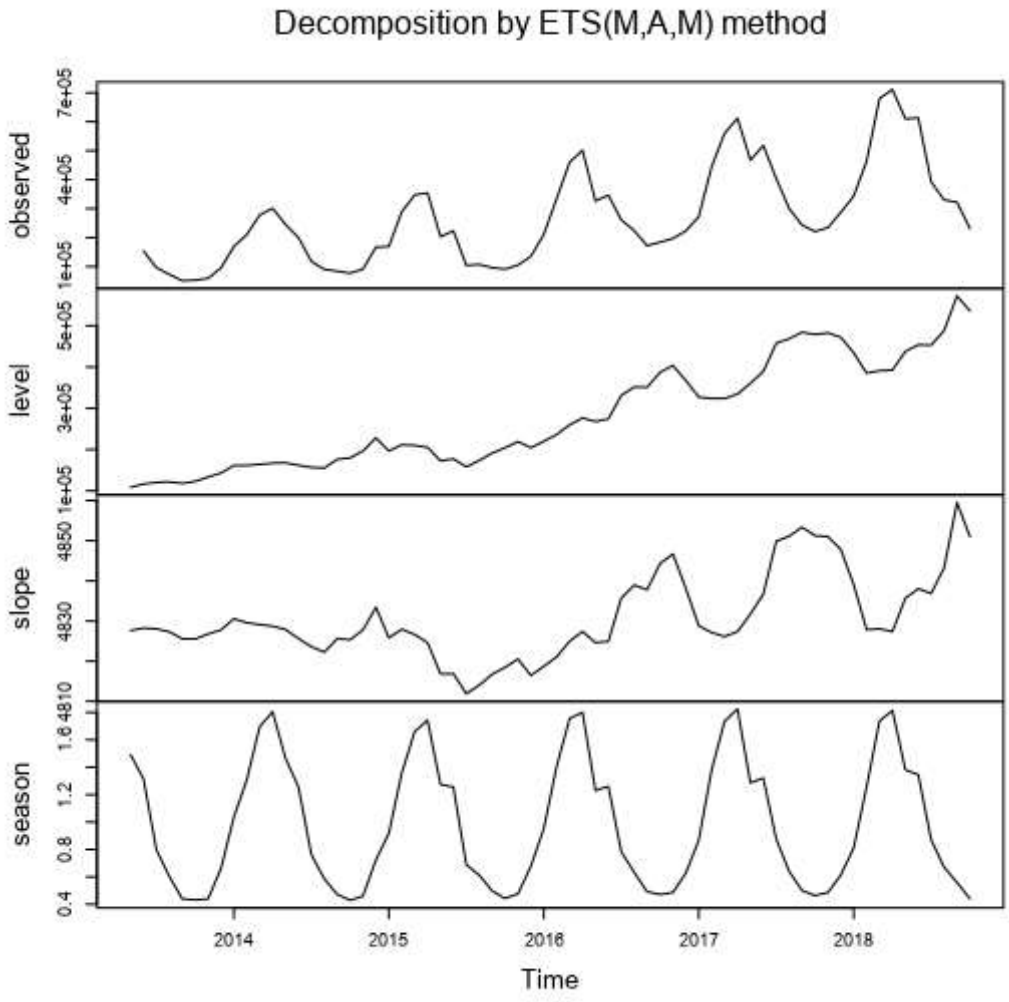
Record Report

1

Plots of Time Series Exponential Smoothing Model ETS

In statistics, a time series is a sequence of data points measured at successive points in time spaced at uniform intervals. Examples of time series are the daily closing value of a stock market index or the annual flow volume of a river. Time series analysis comprises methods for analyzing time series data in order to extract meaningful statistics and other characteristics of the data.

2



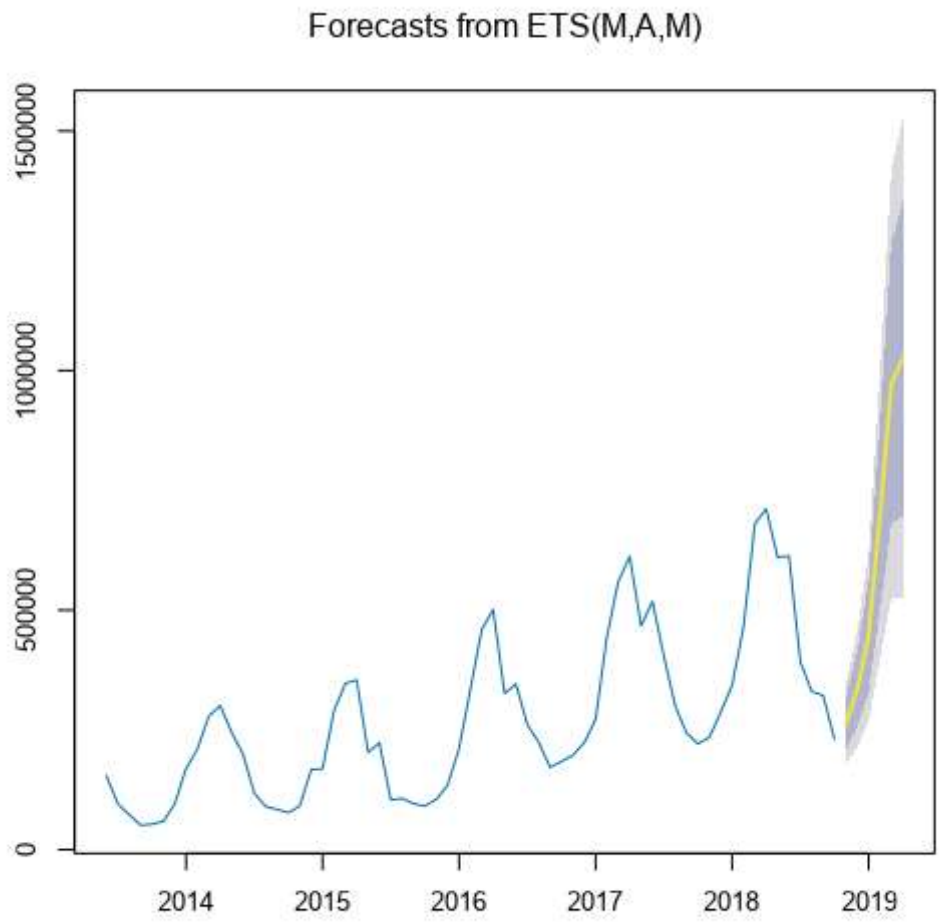
Decomposition Plot separates time series data into several components. Decomposition method is often used to yield information about time series components i.e. trend, cycle, seasonal, etc.

- Observed: This is the actual data.
- Level: This is the overall baseline without seasonal trends.
- Slope: This is the rate of change associated with the Level.
- Season: This shows the seasonal trend of the data.

Not all of the above components will occur each time.

Record Report

3



The Forecast Plot shows the historic data in black and the expected value in blue. The orange in the plot shows the 90% confidence interval, and the yellow shows the 95% confidence interval.

4

Summary of Time Series Exponential Smoothing Model ETS

5

Method:
ETS(M,A,M)

6

In-sample error measures:

ME	RMSE	MAE	MPE	MAPE	MASE	ACF1
281.3033372	40906.5798105	28212.6317577	-0.9199379	11.2444007	0.4115798	0.2971592

7

Information criteria:

AIC	AICc	BIC
1649.9458	1662.9671	1686.9104

Record Report

8

Smoothing parameters:

Parameter	Value
alpha	0.521724
beta	0.000108
gamma	0.383041

9

Initial states:

State	Value
l	108787.932406
b	4827.625519
s0	1.490441
s1	1.820727
s2	1.712194
s3	1.336567
s4	0.971124
s5	0.642641
s6	0.424334
s7	0.431702
s8	0.46189
s9	0.615683
s10	0.801504