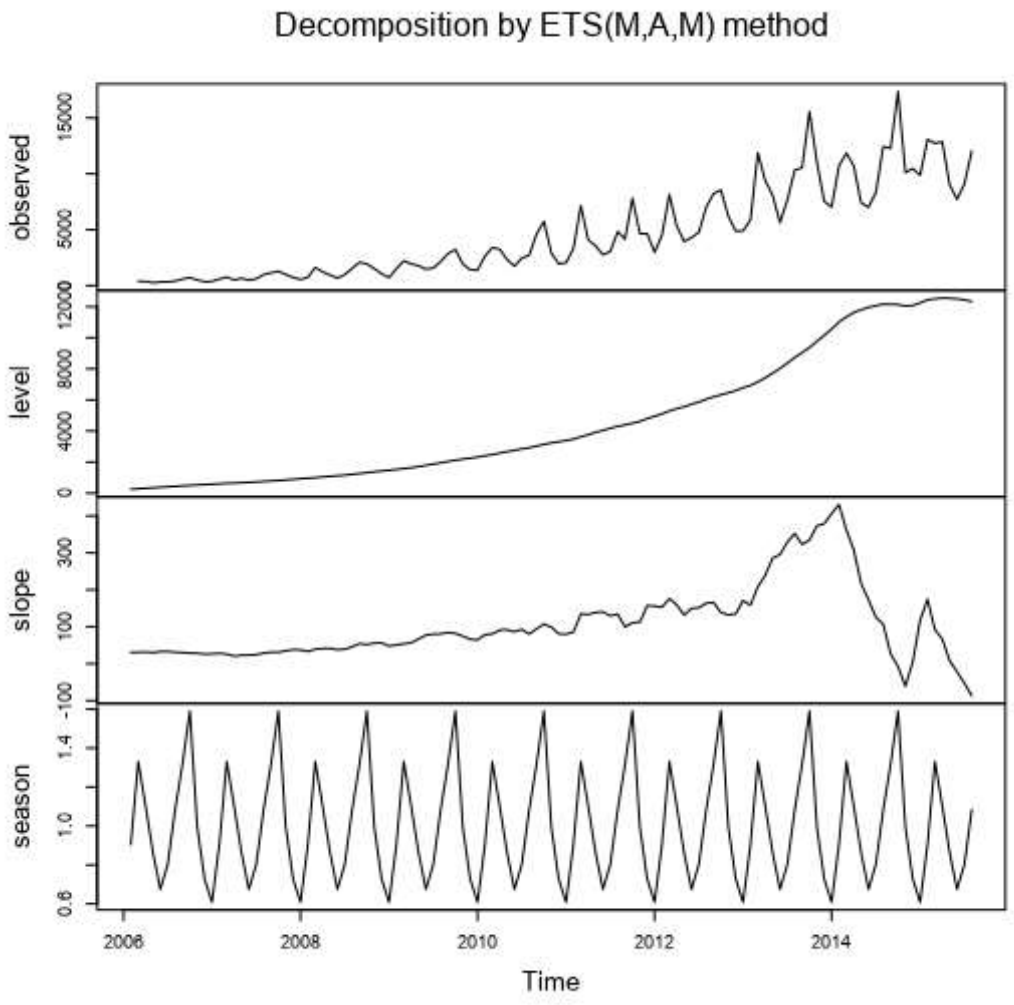
Plots of Time Series Exponential Smoothing Model MAM

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.



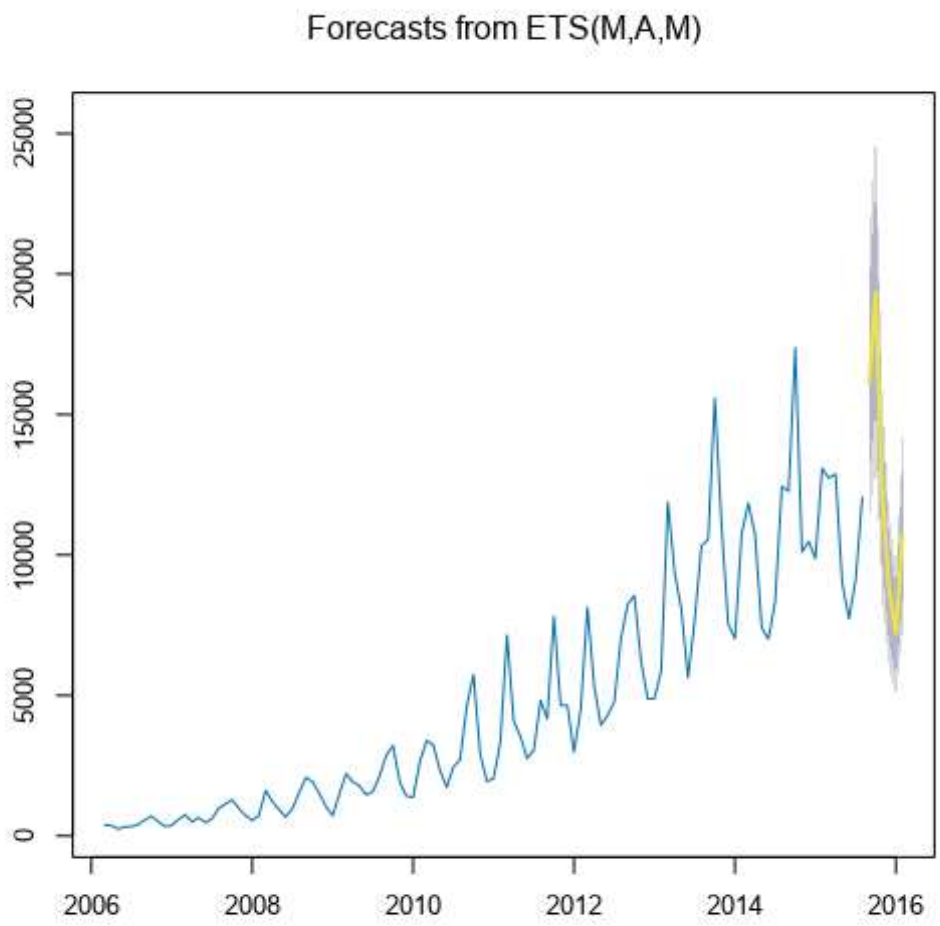
Decomposition Plot separates time series data into several components. Decomposition method is often used to yield information about time series components i.e. trend, cycle, seasonal, etc.

- Observed: This is the actual data.
- Level: This is the overal 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 MAM

5

Method:
ETS(M,A,M)

6

In-sample error measures:

ME	RMSE	MAE	MPE	MAPE	MASE	ACF1
-79.7491948	1050.4867424	626.3860015	-0.6915242	11.9712951	0.467887	0.3333564

7

Information criteria:

AIC	AICc	BIC
1947.4865	1953.8615	1994.0019

8

Smoothing parameters:

Parameter	Value
alpha	0.038903
beta	0.027172
gamma	0.000111

Initial states:

State	Value
l	248.082652
b	30.520435
s0	0.904623
s1	0.608175
s2	0.727612
s3	0.995515
s4	1.590156
s5	1.316945
s6	1.083267
s7	0.80276
s8	0.674414
s9	0.862952
s10	1.102751