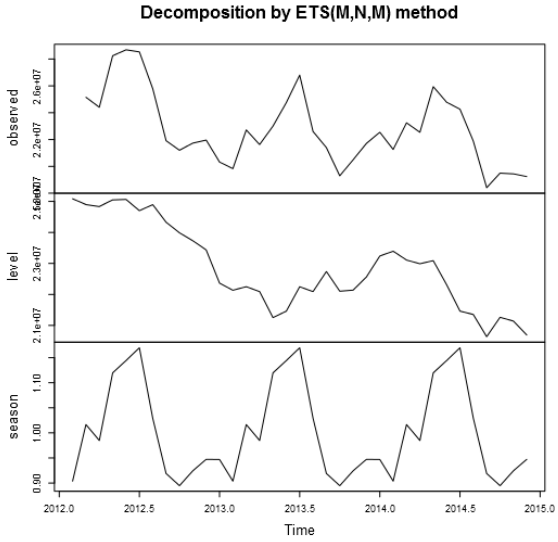
Plots of Time Series Exponential Smoothing Model ETS

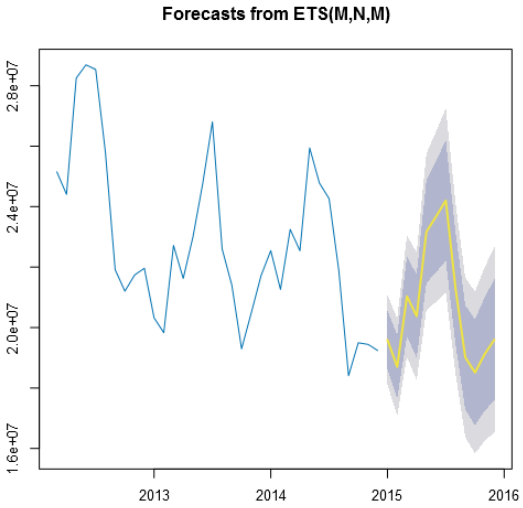
In statistics, a time series is a sequence of data points measured at successive points in time spaced at uniform intervals. Examples of time series are the daily closing value of a stock market index or the annual flow volume of a river. Time series analysis comprises methods for analyzing time series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



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.



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.

Summary of Time Series Exponential Smoothing Model ETS

Method:

ETS(M,N,M)

In-sample error measures:

ME	RMSE	MAE	MPE	MAPE	MASE	ACF1
-241658.3191269	886787.7565481	699047.4732303	-1.1576764	3.1317204	0.3724833	0.069077

Information criteria:

AIC	AICc	BIC
1078.9536	1101.0588	1100.3226

Smoothing parameters:

Parameter	Value
alpha	0.542014
gamma	1e-04

Initial states:

State	Value
l	25085732.869673
s0	0.903762
s1	0.946929
s2	0.947273
s3	0.924324
s4	0.894696
s5	0.918933
s6	1.029183
s7	1.169762
s8	1.14413
s9	1.119592
s10	0.984799