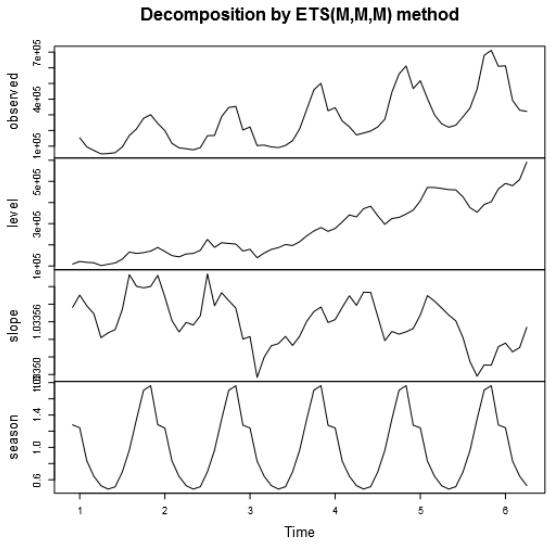
Plots of Time Series Exponential Smoothing Model ETS_M_M_M_

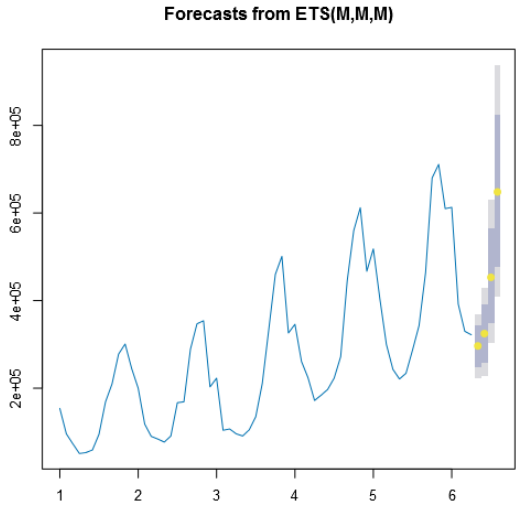
In statistics, a time series is a sequence of data points measured at successive points in time spaced at uniform intervals. Examples of time series are the daily closing value of a stock market index or the annual flow volume of a river. Time series analysis comprises methods for analyzing time series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

Method:

ETS(M,M,M)

In-sample error measures:

ME	RMSE	MAE	MPE	MAPE	MASE	ACF1
-1290.4529219	32059.8977969	24413.1111695	-1.9466585	10.4643339	0.3503952	0.1284335

Information criteria:

AIC	AICc	BIC
1608.0449	1619.6193	1642.587

Smoothing parameters:

Parameter	Value
alpha	0.766296
beta	0.000138
gamma	0.013962

Initial states:

State	Value
l	109364.950379
b	1.033576
s0	1.278758
s1	1.76285
s2	1.706315
s3	1.347014
s4	0.96514
s5	0.69364
s6	0.513554
s7	0.484925
s8	0.528341
s9	0.642998
s10	0.835801