

Time Series Forecasting

The Time Series Forecast platform builds a variety of different exponential smoothing models and automatically selects the with the best forecast performance. The platform is designed to forecast multiple time series.

Time Series Forecast

- 1. From an open JMP data table, select Analyze > Specialized Modeling > Time Series Forecast.
- 2. Select a continuous variable from **Select Columns**, and click Y (continuous variables have blue triangles).
 - More than one times series can be included in the Y role and models and forecasts will be created for each. Here we illustrate with just one time series (Sales).
- 3. Select the variable that identifies the time periods and click Time (optional).
 - Data must be sorted by time and equally spaced.
- 4. Click OK.

In Model Specifications you can view the recommended models or modify the modeling options.

Under Complete Specification, you can choose:

- Time periods to forecast (NAhead)
- Period for seasonality (e.g., monthly)
- Model Selection Strategy (AIC, BIC, or Forecasting Performance)
- Holdback sample and metric to assess fit (if chooseing Forecast Performance).

5. Click Run

- Best fit time series model is displayed (e.g., MAA: Multiplicative Error, Additive Trend, No Dampening, Additive Seasonality).
- Time Series graph displays data, best fit model, forecasting intervals, and future forecast as defined by NAhead.
- 6. Choose to Save Results to the original data table or to a new data table from the **red triangle** at the top of the Report

Monthly Sales.jmp (Help > Sample Data Folder > Time Series)







