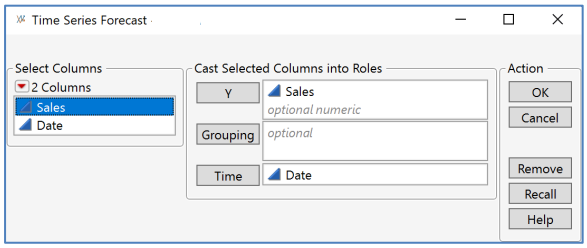
Time Series Forecasting

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

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

1. From an open JMP® data table, select **Analyze > Specialized Modeling > Time Series Forecast**.



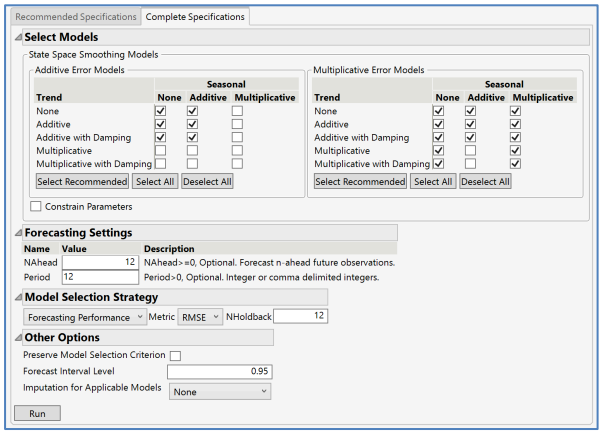
2. Select a continuous variable from **Select Columns**, and click **Y** (continuous variables have blue triangles).
   - More than one times series can be included in the Y role and models and forecasts will be created for each. Here we illustrate with just one time series (Sales).

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**.

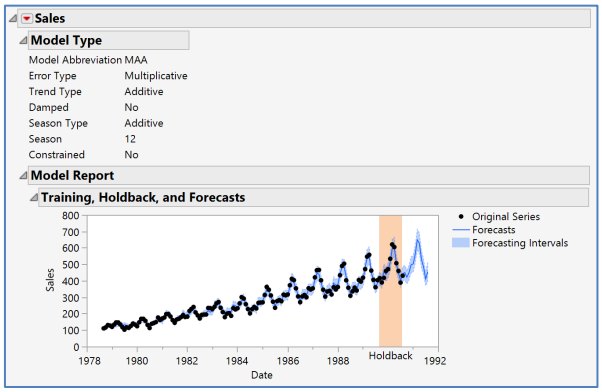
   In **Model Specifications** you can view the recommended models or modify the **modeling** options.



   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).

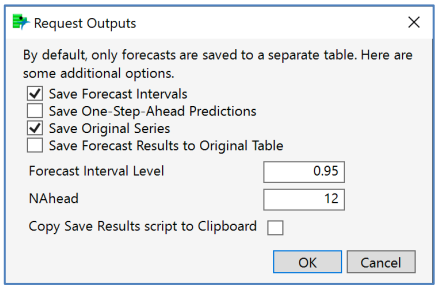
5. Click **Run**



   - 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



Visit **Predictive and Specialized Models > Time Series Forecast** in **JMP Help** to learn more.