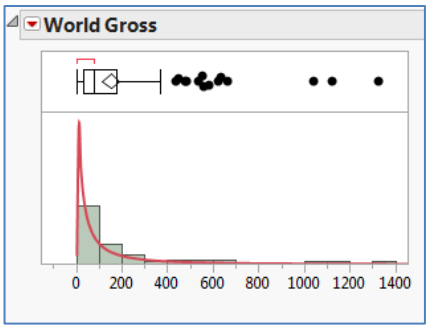
Fitting Distributions

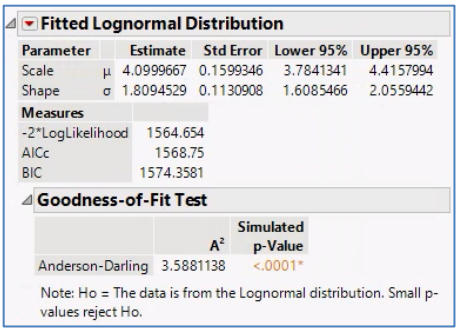
This guide provides information on fitting various continuous or discrete distributions to data.

Fitting One Continuous Distribution

1. From an open JMP data table, select **Analyze > Distribution**.
2. Select one or more continuous variables from **Select Columns**, click **Y, Columns**, then click **OK**. Here we chose the variable 'World Gross'
3. Select **Continuous Fit** from the red triangle for the variable and select a distribution (LogNormal was selected in the example below).
4. In the resulting fitted distribution output, click on the red triangle and select **Goodness of Fit** (shown) or **Diagnostic Plot** to assess the fit of the distribution.

Hollywood Movies.jmp (Help > Sample Data Folder)

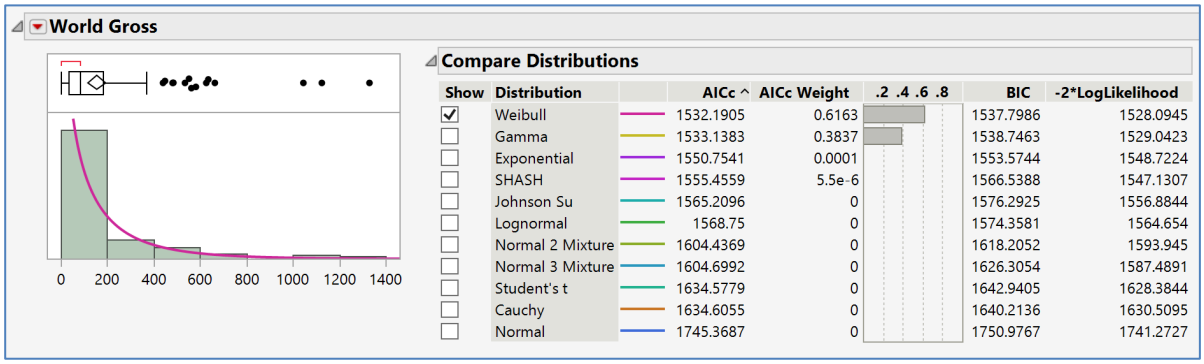




The small *p*-value suggest that the LogNormal Distribution does not provide good fit to the data.

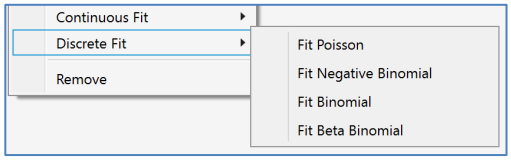
Fitting All Continuous Distributions

Select **Continuous Fit**, then **Fit All** from the red triangle for the variable. JMP will compare available continuous distributions. Note: The distribution with the lowest AIC value provides the best fit to the data. Goodness of Fit tests can be performed by selecting **Goodness of Fit** under the Red Triangle for the Fitted Distribution output.



Fitting Discrete Distributions

If the continuous variable contains only integer values, four discrete distributions are available under **Discrete Fit**.



Visit **Basic Analysis > Distributions > Options for Continuous Variables > Fit Distributions** in **JMP Help** to learn more