

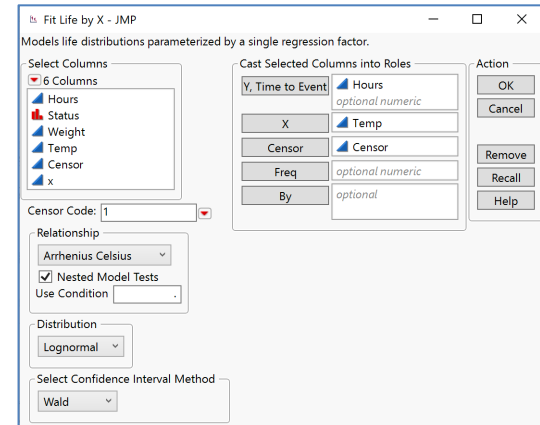
Accelerated Life Testing (Fit Life by X)

Use to model the relationship a factor has on the time-to-event. It is often used to model a factor that accelerates the event as a means to predict the time-to-event for normal operating conditions where failures do not frequently occur. This platform is able to analyze data that is censored (incomplete).

Accelerated Testing (Fit Life by X)

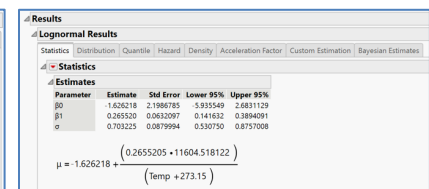
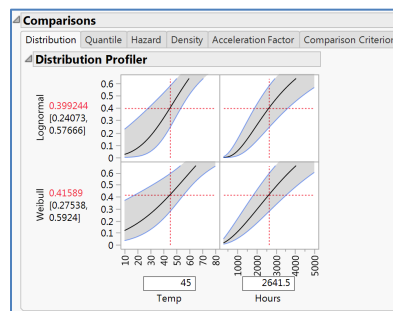
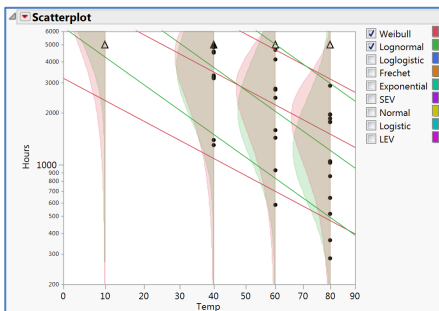
1. From an open JMP® data table, select **Analyze > Reliability and Survival > Fit Life by X**.
2. Select a continuous time variable from **Select Columns**, then Click **Y, Time to Event** (continuous variables have blue triangles).
3. Select the factor and click **X**.
4. If the data contains censored values, select the censoring variable and click **Censor**. Change the **Censor Code** if needed (the default is 1).
5. Select the **Relationship** to use, the probability **Distribution** to use, and the **Confidence Interval Method**, and click **OK**.

Devalt.jmp (Help > Sample Data Folder > Reliability)



JMP will display:

- A **scatterplot** of the data, with the time to event (Y) variable plotted against the factor (X). Triangles indicate censored values. Under the **red triangle** next to **Scatterplot** select **Show Density Curves** and **Add Quantile Lines** to compare density curves and quantiles for different values of the factor. Other distributions can be fit to the data by selecting under the **top red triangle**.
- The **Comparisons** panel, which allows you to compare various **profilers** and **statistics** for each of the selected distributions (below, middle).
- The **Results** panel for each selected distribution, containing diagnostic plots, statistical output, profilers, and **Custom Estimation** calculators to compute quantiles and probabilities (below, right).



Notes: Other options, such as fit individual distribution, fit all distributions, and view tabbed or individual reports are available under the **top red triangle**. Click on **red triangles** throughout the report to access additional features.

Visit **Reliability and Survival Methods > Fit Live by X** in **JMP Help** to learn more.