

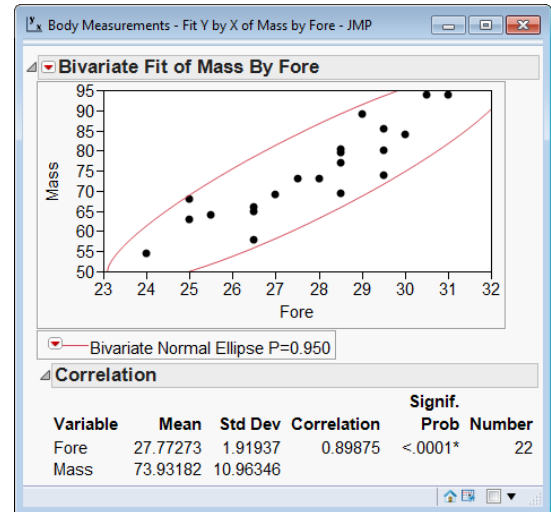
Correlation

Correlation is a measure of the linear association between two variables. This page documents the two platforms in JMP® for assessing correlation.

Correlation Between Two Variables

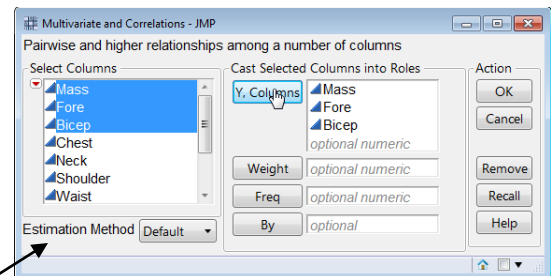
1. From an open JMP data table, select **Analyze > Fit Y by X**.
2. Click on a continuous variable from **Select Columns**, and click **Y, Response** (continuous variables have blue triangles).
3. Click on a second continuous variable, and click **X, Factor**.
4. Click **OK** to generate a scatterplot.
5. To display the correlation, click on the **red triangle** and select the **Density Ellipse > 0.95**.
 - A 95% density ellipse, which graphically shows the correlation, will display on the scatterplot.
 - To show the correlation coefficient, click on the **gray icon** next to **Correlation**.

Example: Body Measurements.jmp (Help > Sample Data)



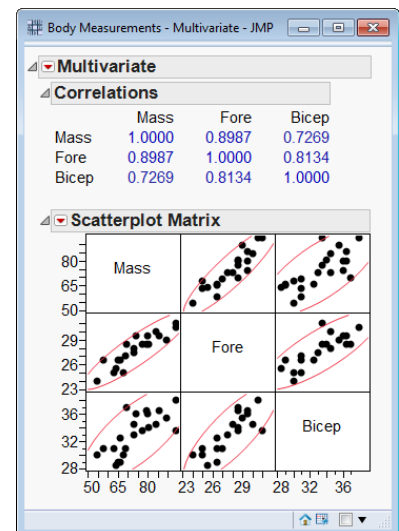
Correlations Between Multiple Pairs of Variables

1. From an open JMP data table, select **Analyze > Multivariate Methods > Multivariate**.
2. Click on two or more continuous variables from **Select Columns**, and click **Y, Columns**.
3. Click **OK** to produce a scatterplot matrix with density ellipses and a table of correlations.
 - The **Default** estimation method allows JMP to determine the method for estimating correlations that is most appropriate for your data set.



Tips:

- Many additional correlation options are available under the **red triangle** next to **Multivariate**, including:
 - CI of Correlations.
 - Inverse Correlations.
 - Partial Correlations.
 - Pairwise Correlations (Pearson product-moment).
 - Nonparametric Correlations (including Spearman's rho).
- Scatterplot options are available under the **red triangle** next to **Scatterplot Matrix**.



Notes: Density ellipses can also be generated from **Graph > Scatterplot Matrix** and **Graph > Graph Builder**. For additional information, search for "correlation" in the JMP Help.