

Explore Distributions

Use this guide to:

- Explore column distributions with the Distribution platform in JMP.

As an example, open the Restaurant Tips sample data table (Get Started > Explore Distributions > Open Data).

Basic analysis often starts with histograms and summary statistics, frequently referred to as univariate analysis. To create a histogram:

1. Go to Analyze > Distribution.
2. Select columns to see their distributions (for example, “Bill Amount” and “Day of Week”). You can do this by selecting the column and clicking Y, Columns or dragging the column to the Y, Columns role.

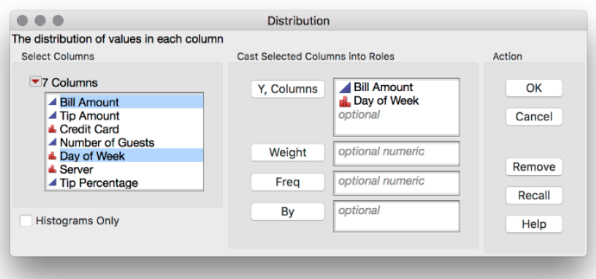


Figure 1: Select columns to view distributions

3. Click OK to see the distributions for the columns you selected. Since different types of statistics may be appropriate for different columns, JMP displays the proper statistics based on the data in the column.

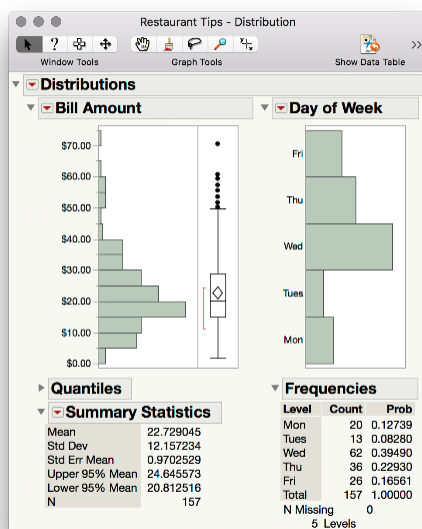


Figure 2: Distributions for two columns, Bill Amount and Day of Week

4. You can customize the Distribution output in a few ways:
 - Use the gray triangle to show or hide particular output.
 - Use the red triangle to produce new output.
 - Red triangles next to column names give you options for new analyses or output for that particular column. For example, you can assess the normality of Bill Amount with the normal quantile plot.

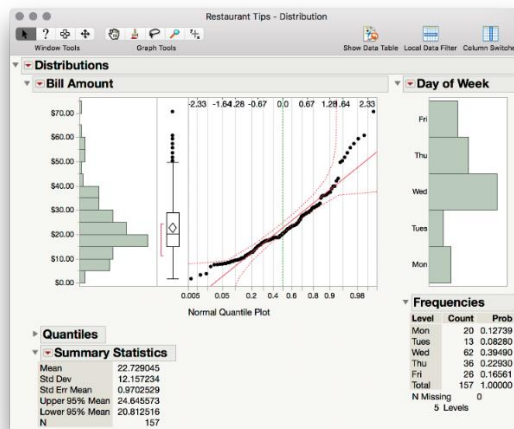


Figure 3: View Bill Amount on Normal Quantile Plot

- The red triangle next to Distributions controls the overall Distribution platform. For example, selecting Stack will rotate the output so that the histograms are horizontal. Uncheck Stack to revert to the original view.
5. You can interactively investigate relationships among variables or identify extreme points in your data, even in the Distribution platform. Since all output in JMP is interactive, when you select observations in a graph, JMP will show those observations in other graphs and select those rows in the data table.

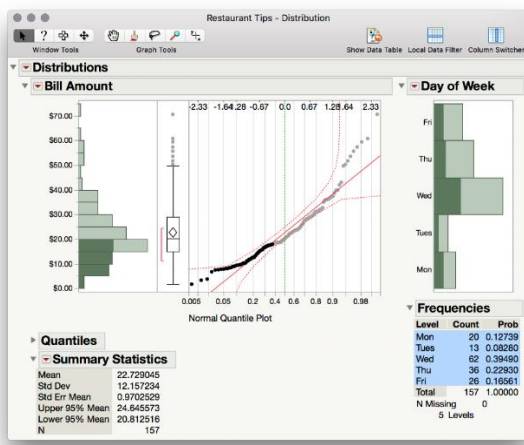


Figure 4: Select observations to interactively investigate across graphs and tables