# Release Notes for JMP 15.1

JMP 15.1 is a general maintenance release that contains enhancements and bug fixes. Reproducible crashes and numeric issues have been corrected. Applying this maintenance release is recommended for all users.

# **New Features**

- TLI, NFI, RMR, SRMR, Revised GFI, and Revised AGFI fit indices are available in the Structural Equation Models platform.
- The Structural Equation Models report contains a Status tab that checks a variety of identification rules to ensure that the currently specified model is identifiable.
- You can open the *Discovering JMP* book from the Help menu.
- New sample data have been added for documentation examples:
  - Graph Builder: Bands.jmp, Bullet Measures.jmp, Corn Wheat Soybean Production.jmp, Likert Survey.jmp, Pie Sales.jmp, and STEM Jobs.jmp.
  - Model-Driven Multivariate Control Chart: Polyethylene Process.jmp
- In Interactive HTML Control Charts, marker support is improved.
- In Control Chart Builder, a window is provided for creating an IMR on Means control chart.

# **General Improvements**

#### **Axis**

When the reference line is set to a value outside the axis range, and you change the scale to Log,
JMP no longer closes abruptly.

#### **Data Tables**

- The table script that is generated by Summary results is correct in the Summary table if there is a column named "None".
- The List Check column property supports more than 256 values. This change causes issues when you try to open the JMP 15 files in previous versions because previous versions do not allow list checks with more than 256 values. Here are the rules:
  - Fewer or equal to 255 values are saved in the old format readable by JMP 14 or 15. The List Check column property is preserved in both JMP 14 and JMP 15 data tables.
  - Greater than 255 and 65535 values are in the new format, readable only by JMP 15. If you attempt to open the data table in JMP 14, the List Check column property is not preserved.
- Selecting New Formula Column > Distributional > SHASH runs faster.
- When a column has a Supercategory property, you use the Column Info window to change the data type, and you try to re-create the Supercategory property, JMP no longer closes abruptly.

#### **Hover Labels**

Support was added for generating filters from Graph Builder grouping roles (Wrap, Page, Group X and Group Y).

# **Import and Export**

- Multiple File Import finds files on Microsoft OneDrive.
- JMP allocates enough memory when opening large XML files.

## JMP Help

The Help no longer uses port 3000, which prevented some users from opening the Help.

### **Projects**

 When you journal a report in a project and then save the journal as a PDF file, JMP no longer freezes.

#### Recode

 When a script clones a column that contains aliases (which is the case for data tables in our sample data library), the original and cloned column no longer have the same name after you reopen the data table.

# **Samples**

• The standard error is correctly calculated in the Confidence Interval for Proportion calculator (available from the Help > Sample Data Index window).

### **Tabulate**

• In Tabulate with summary statistics, if all rows that have missing values in the grouping column are excluded, adding a grouping column to the Column table might cause JMP to close abruptly.

#### **Transformations**

• Creating a new formula column using the Distributional, Johnson Normalizing transform no longer causes JMP to close abruptly.

# **Graph Builder**

- Using a logarithmic scale with low values no longer causes JMP to close abruptly.
- Saving a file as a JPG works when the default JPG application is Microsoft Paint.
- With certain bivariate contours, using Column Switcher to replace the Y variable with all responses no longer causes an error.
- Graph Builder correctly scales the Y axis when more than 50 Y variables are selected.
- Categorical colors no longer create black contours.

# **Statistics**

### **Control Chart Builder**

- When you create a control chart with Get Limits, and then select Redo Analysis from the red triangle menu, Get Limits is used in the new analysis.
- Checking tests in the control panel no longer closes the control panel.
- Capability customizations are saved to the script.
- The Alarm Report shows the tests that have been turned on.
- Box plots are correctly drawn with continuous subgroups.

#### **Discriminant**

• When you run a discriminant analysis in French, German, Spanish, or Italian, requesting the scatterplot matrix no longer fails.

#### Distribution

- The confidence level restriction for quantile confidence limits have been removed.
- The Process Capability report appears when the "Create Process Capability" Distribution platform preference is turned on and the column has spec limits.

#### Fit Distribution

- Check marks have been added to the model comparison for hiding and showing the individual fits.
- Preferences for the new fitter commands are available.
- Row states are supported in QQ and PP charts.
- The ZI Negative Binomial CDF and Distribution function now decrease to 0.

#### Fit Model

• When the second column in the Select Columns list of the launch window is double-clicked, it is no longer added as a Random Effect. The column is also added to the Construct Model Effects box.

# **Generalized Regression**

• Residual by Predicted Plot no longer has points for rows that should be missing.

## Fit Y by X

• When report title options are turned on, and Arrange in Rows is selected, a Oneway analysis is displayed correctly.

### **Functional Data Explorer**

- You can customize the number of functional principal components from the Functional PCA red triangle menu.
- There are three techniques available to reduce the data over the X values.

## Manage Spec Limits Utility

• When spec limit values are all missing, the Spec Limits column property is removed.

#### Multivariate

- The Auto Recalc setting is included in the Multivariate script saved from an analysis.
- Correlation Probabilities by Pairwise estimation are correct when there are missing values.

# **Nominal Logistic**

• The ROC Curve is available when one two-level categorical effect is specified and Validation column used.

# **Principal Components**

• The Score and Loading plots are labeled correctly when there are more than 101 components displayed in the scatterplot matrix.

#### **Profilers**

• New Profiler preferences have been added. You might need to update the syntax of the preferences in your scripts, or the scripts won't run.

# **Standard Least Squares**

- Cox Effect estimates based on the component range rather than the constrained space range are correct.
- Editing effects in Effect Summary no longer repeatedly shows the window of the LS Means plot option.

## **Structural Equation Models**

- The options for arranging the path diagram elements have been improved, and you can move items around by dragging them.
- You can choose to show parameter estimates (standardized or unstandardized) on the path diagram.

# **Support Vector Machines**

• Frequency columns are supported in SVM.

### Variability Chart

- Points are centered above X-axis labels in the Gauge R&R Mean Plot. The problem occurred only with a nested model type when the data were unbalanced.
- · Medians in imbalanced data are calculated correctly in the Variability Chart summary report.
- The appropriate error message appears when a continuous part column is used for random effects.
- Units column properties are shown on the axes for variability charts.

# **Scripting**

- Programmatically adding columns to a col list box runs the OnChange event in JSL scripts.
- Inserting a number as the first character in the i mageLocCol variable no longer prevents the image from displaying in the data table. Clicking on the data table cell with the missing image no longer causes JMP to close abruptly.
- Number Edi table Box() supports the font property during sizing and displaying.
- Col List Box() settings for the Set Analysis Type and Set Data Type messages are honored.
- In the Script Editor on macOS, folded expressions remain folded after you save and reopen a script.
- Using a custom script to remove rows from a data table no longer causes JMP to close abruptly.
- Trying to add new columns to a data table with an incorrect script no longer causes JMP to close abruptly.
- The Navi gate message for Web Browser Box() now accepts a column reference.
- When columns are preselected in the data table and a Col List Box is created, the selections of the columns are shown in the Col List Box. Previously, only the last selected column displayed in the Col List Box.
- When you try to save predicted Kernel Smoother values, JMP no longer closes abruptly.
- When axes are collapsed, grid lines disappear when the report is journaled, pasted, or saved as a PDF file. Saving the report from JMP as a picture file or a Microsoft PowerPoint presentation retains the grid lines in the graph.
- Text boxes that show the data filter conditions based on the selections made in the Local Data Filter can now be removed.
- When a Column Rank with the Ti e argument is performed, JMP no longer closes abruptly.