

BlueSky Statistics 6.0 Release Notes

Graphics and Visualizations

- Graphics menu is now sorted alphabetically to make it quicker to find what you need.
- Graphics syntax is now easier to read.
- Global graphics themes are now available. In prior releases, you could set themes on each graphic dialog. Now you set themes once in the main application or output window by clicking on themes in the top menu bar. You can save a default theme and override a theme. You can also set default fonts, font size, image height and width.

New Graphics Types

- Contour charts
- Bar Charts (with means)
- Improvements to the original Bar Chart
- Pie Charts
- Bulls eye charts
- Line Chart (drawn in the order in which variables appear)
- Line Chart (line drawn in the order of X axis variable)
- Line Chart (stair step plot)
- Improvements to PP and QQ plots to support beta, chisq, gamma, f, exp distributions
- Scatter plot with square bins
- Scatter plot with hex bins
- Violin plots

Data Management

- File-> Load Dataset from R Package added to import practice datasets from R packages
- New options to "Remove extra spaces" from factor/character variable names when opening SPSS datasets
- Data-> Re-order Variables in the Dataset Alphabetically gives you the ability to order the variables alphabetically or reverse alphabetically.
- Data->Reload Dataset from File restores the dataset from the file on disk

Scoring and modeling

- Enhanced logistic regression to support dependent variables of class logical and numeric
- Make scoring more robust when dependent variables are string and logical for decision tree and random forest models
- When scoring a dataset and saving numeric predictions and predicted probabilities, the values are rounded honoring the number of decimal digits setting in Tools-> Configuration Settings on the others tab.

Dialog Designer

- New icons for controls
- New Slider control
- New Advanced slider control that displays the value of the slider in a textbox
- New spinner control added (This is the last control on the grid, you need to click on the dropdown on the left-hand side grid displaying all the available controls to see the spinner control.)

General Features

- All required field on the dialogs are indicated by a red asterisk .
- A link "Coming Soon" has been added to the top menu bar to list the capabilities being evaluated for delivery in up-coming releases
- Default dataset that loads when application is launched, now contains NA instead of zeros as before
- Dataset navigation buttons at the right bottom of the Data grid will now enable/disable depending on if there are still more columns to load or either end has been reached

Syntax Editor

- R syntax pasted from the dialogs is much simpler and easier to read
- Long lines of ggplot code can now be split by ending at the "+" sign

Output

- Fonts choices have been improved throughout (matching APA style)
- Row/column headers in output tables are center aligned
- Dataset name is printed at the top of each analysis in the output.
- Pasted syntax now includes the title of the dialog which will help a user to easily locate specific pasted syntax
- Dataset split message that appears in the output has been made bigger to easily locate the split slice

Analysis

- Significance code with '***' is now shown as ' $(<.001)$ ***' in all output tables
- The logistic regression dialogs now accept numeric dependent variables, in addition to the usual factors
- The vertical bar symbol has been added to the GLZM dialog and linear model dialogs to support the creation of nested models
- Item Response Theory (IRT) analysis is now available on the Model Fitting menu. Included are: Simple Rasch models, Partial Credit models, and Rating Scale models
- Changed the labels with Multi-way Anova to indicate that 2 factor variables need to be specified as independent variables
- Added support for calculating McDonald's omega estimates in reliability analysis

Defect Fixes

- Fixed an issue where you could not load dialogs created with the Dialog Designer application in the main BlueSky Statistics application.
- '#' appearing in color code (#112233) will not be ignored by syntax parser
- Fixed where "Reload dataset from file" was not refreshing the variable grid
- Fixed a defect where if there is a statement above or below local and we try to run the whole syntax along with the statements before and after local, the last line after local() block gets trimmed. So if last line was BSkyLoadRefreshDataframe(), it is read as "frame()"
- If user saves (Save As) an in-memory dataset (that is currently loaded in the data grid), to a file on disk that is already loaded in the data grid, then the user will not be allowed to overwrite the file
- Fixed a crash where we were trying to call a function from BlueSky R package, when the BlueSky R package was not loaded correctly
- Fixed an issue with Hierarchical Clustering where the number of rows in the dataset that were assigned to a cluster was printing incorrectly. Also addressed an issue where the cluster numbers were not getting saved to the dataset.

Minor fixes

- Corrected defect in McNemar and Fisher test in crosstabs
- Improved formatting of Hosmer-Lemeshow test
- Fixed an issue where a real number is entered in a cell of a variable name that is of class integer. The user will get a prompt, informing the user that a real number has been entered and will be allowed to optionally change the class of the integer variable to numeric