

Release notes for Feb. 2017 StatCrunch updates

Enhancements:

- The Index/Time Plot has been upgraded to improve labeling for various options under “X axis Format”. See page 2 for details.
- Saving a data set for the first time in a blank StatCrunch session no longer requires the opening of a new page. See page 3 for details.
- Undo and Redo behavior throughout the StatCrunch application is improved. This will align StatCrunch behavior more closely to industry standards around Undo and Redo functionality. See page 4 for details.

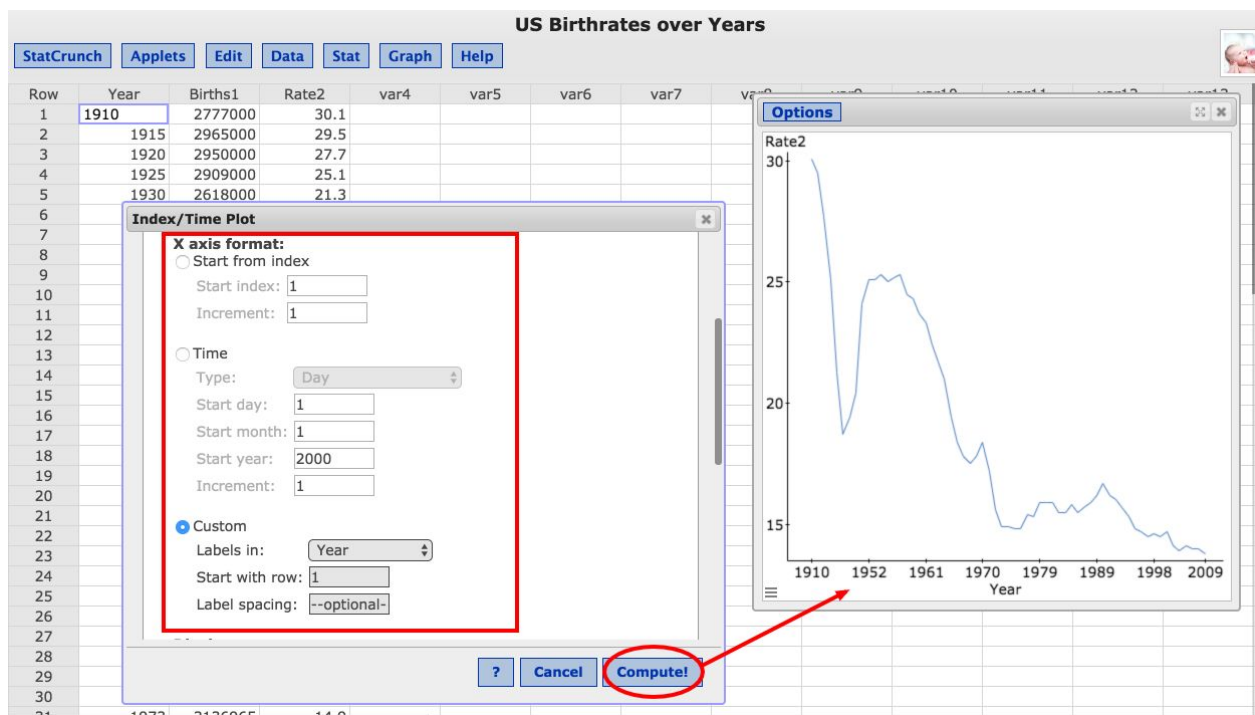
Minor fixes:

- The sorting of result tables was upgraded to handle Orderings.
- A bug with the refreshing of columns in a dialog was corrected.
- The behavior when expanding a feature to the full screen was improved.
- A wording issue on the copyable results for all Power/Sample size calculators was corrected.
- Minor bugs were corrected for the following procedures:
 - **Edit > Color Schemes**
 - **Data > Compute > Expression**
 - **Stat > Regression > Multiple Linear**
 - **Stat > Regression > Polynomial**
 - **Graph > Chart > Groups Stats**
 - **Graph > 3D Rotating Plot**

Upgraded Index/Time Plot

The Index/Time plot functionality within StatCrunch is designed to display time series data. One of the options is to build custom x-axis labels that do one of three things: follow indexes, use some sort of time labeling, or use labels that come from a column in the data table. Previously these options would sometimes produce x-axis labels with some imperfections.

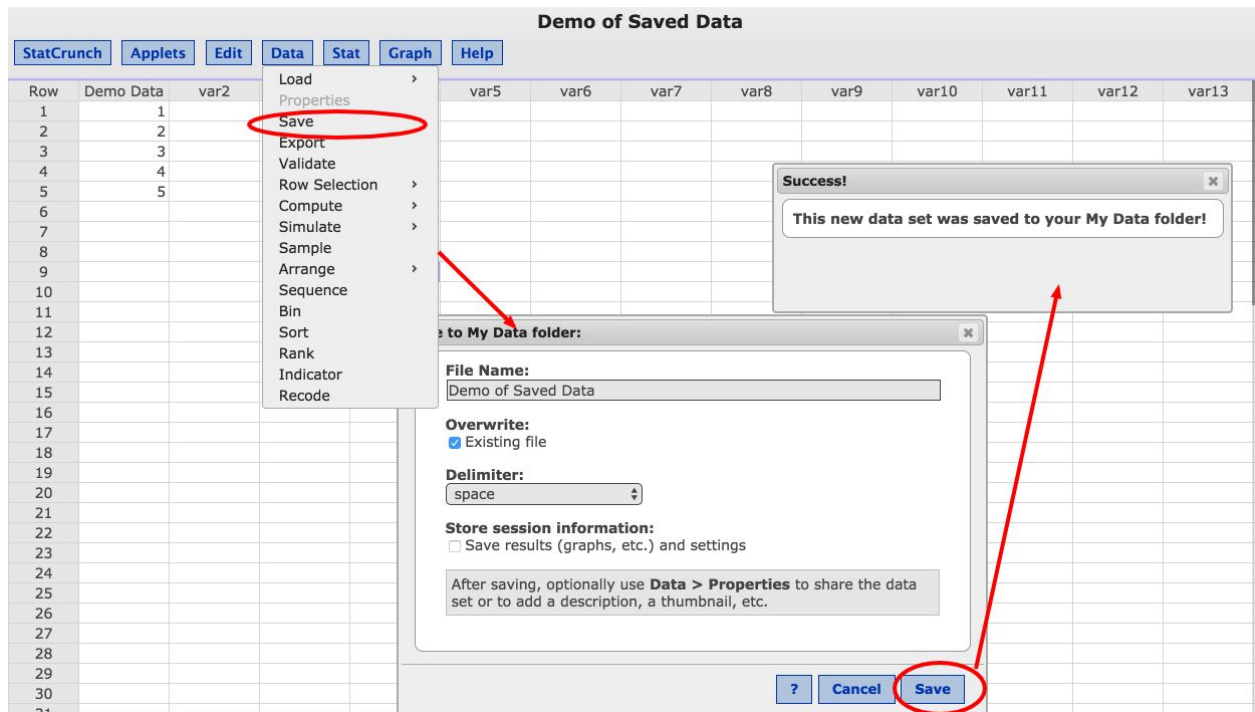
Below is a screenshot of the upgraded Index/Time plot. This data set is shared [here](#) and tracks the US birth rates over the years. Under **X axis format**, the “Custom” labels were chosen to incorporate the years from the data table.



Saving Data into a Blank Session

One way to load data into StatCrunch is to open a blank session and then do one of the following: type in values in the data table, paste values into the data set, or drag/drop files directly into the data table. The data can then be saved by going to **Data > Save** to create a name and special URL for that data set. Previously, this saving would require opening the data set in a new tab. Now, StatCrunch will change the URL and the title of the current session to match any newly saved data. This aligns with general industry standards around saving.

Below is an example where five values were typed into a previously blank StatCrunch session. This data set was saved and given the name "Demo of Saved Data". Once saved, the URL and the title for the current session were changed to connect with the newly saved data set in the database. (The URL is not visible in this screenshot.)



Improved Undo/Redo Behavior Throughout StatCrunch

A StatCrunch user has the ability to *undo* or *redo* any changes to the data table. This is done through keyboard shortcuts that are native to a computer's operating system. For a PC, Ctrl+Z will undo and Ctrl+Y will redo. For a Mac, Command+Z will undo and Command+Y will redo.

StatCrunch has been upgraded to allow *undo* and *redo* whenever data is added to the data table. Below is an example using simple linear regression where the residuals for the model are added to the data table. Previously, the added of residuals could not be undone. Now, these added residuals are handled with *undo* and *redo* the same as other changes to the data table.

The screenshot displays the StatCrunch interface for a dataset titled "Roller Coasters Data". The main data table has columns for Row, Height, Speed, Residuals, var4, var5, var6, var7, and var8. The "Residuals" column contains values such as 3.2387748, -6.6025916, and 4.5382617. A red arrow points from the "Residuals" column header to the "Options" dialog box.

The "Options" dialog box (1 of 2) shows the results of a simple linear regression. The dependent variable is Speed and the independent variable is Height. The regression equation is $\text{Speed} = 32.279184 + 1.4211361 \text{ Height}$. The R-squared value is 0.85089412, and the estimate of error standard deviation is 11.43828. The parameter estimates table is as follows:

Parameter	Estimate	Std. Err.	Alternative	DF	T
Intercept	32.279184	1.2126215	≠ 0	256	26.61
Slope	1.4211361	0.037181365	≠ 0	256	38.25

The "Table for regression model:" section shows the following values:

MS	F-stat	P-value
191135.83	1460.9007	<0.0001
130.83424		

The "Simple Linear Regression" dialog box is open, showing options for graphs and saving. The "Save:" section has "Residuals" selected and circled in red. The "Compute!" button is also circled in red. A red arrow points from the "Compute!" button to the "Residuals" column header in the main data table.