CHAPTER 3
Menus

A. THE MENUBAR

This version of STATsimple has six menus; the Apple menu (⚠), the File menu, the Edit menu, the Statistics menu, the Format menu and the Special menu (Figure 3.1).

Figure 3.1: STATsimple's menubar

B. THE APPLE MENU

The Apple menu has the customary "About…" menu item.

B1: About STATsimple…

Keyboard equivalent: NONE

Mouse equivalent: NONE

Description: Presents a dialog box containing STATsimple's version number, user name and serial number.

C. THE FILE MENU

The items in the File menu are for file operations, printer routines and program termination. The "Open sample…", "Close", "Save" and "Save as…" items are for STATsimple data file operations. The "Import…" item is for reading data from TEXT files. The "Export as" item is for saving data or statistical results in TEXT format, or for saving statistical graphics in PICT format. The "Page Setup…" and "Print…" items are for printer operations, and the "Quit" item terminates STATsimple.

C1: New sample…

Keyboard equivalent: Command–N

Mouse equivalent: Click the "NEW" icon in the Toolbar Area.

Description: Makes the first available sample space the current sample and automatically switches to edit mode.

C2: Open sample…

Keyboard equivalent: Command–O

Mouse equivalent: Click the "OPEN" icon in the Toolbar Area.

Description: Presents a Standard Open File dialog box from which to navigate and select the data file to be opened. This dialog box lists only STATsimple data files. To read data from TEXT files, use the File menu's "Import…" item.

    Data opened with this command is placed into the next available sample space in the Samples Area and flagged as the currently selected sample.

    This item is disabled when there are no more available sample spaces.

C3: Close

Keyboard equivalent: Command–W

Mouse equivalent: Click the "CLOSE" icon in the Toolbar Area.

Description: Removes the currently selected sample in the Samples Area from STATsimple.

    If the currently selected sample has been modified from its original state, a dialog box will alert you that the data file was modified. You can then choose to save the changes, leave the file unchanged, or cancel the Close command.

    This item is disabled when the currently selected sample has no data.

C4: Import…

Keyboard equivalent: Command–I

Mouse equivalent: NONE

Description: This command is used for importing TEXT data into STATsimple. It presents a Standard Open File dialog box from which to navigate and select the TEXT file to be imported. This dialog box lists only TEXT data files. To open data from STATsimple files, use the File menu's "Open sample…" item.

    Data imported with this command is placed into the next available sample space in the Samples Area and flagged as the currently selected sample. If the imported TEXT file has multiple columns of data in Tab-Delimited format, then those columns will be imported sequentially as separate samples.

    This item is disabled when there are no more available sample spaces.

C5: Export as TEXT… / Export as PICT…

Keyboard equivalent: Command–Y

Mouse equivalent: NONE

Description: This command is used for exporting the contents of the Viewing Area to a file. It presents a Standard Save File dialog box (Figure 3.2).

Sample data, Descriptive statistical results and t-Test results are saved as TEXT files. Histogram plots and Linear Regression plots are saved as PICT files.

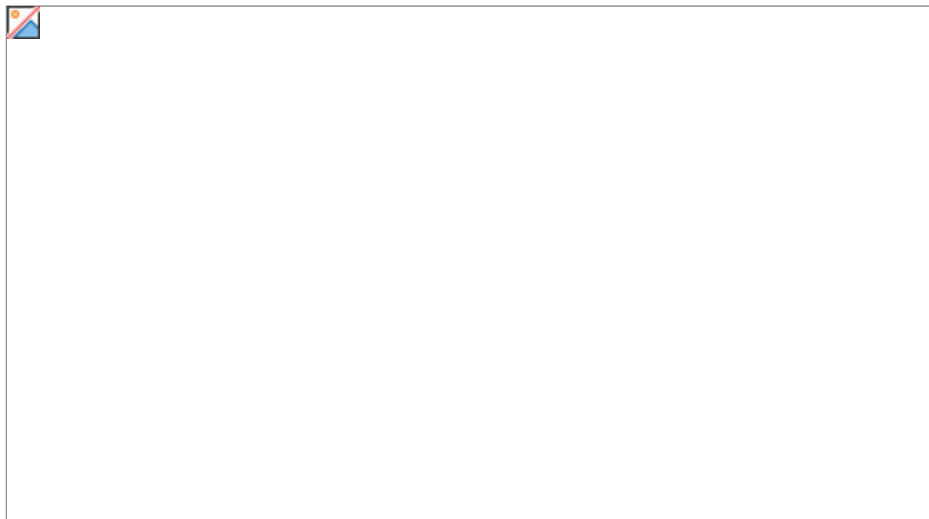This item is disabled when the Viewing Area is void of data or graphics.

Figure 3.2: The Standard Save File dialog box

C6: Save…

Keyboard equivalent: Command–S

Mouse equivalent: NONE

Description: This command saves the data of the currently selected sample.

If the currently selected sample has not been previously saved as a STATsimple data file, then a "Save as…" command is generated (see Section C6).

This item is disabled when the currently selected sample has no data, or if the currently selected sample's data has not been modified since it was last saved.

C7: Save as…

Keyboard equivalent: Command–A

Mouse equivalent: NONE

Description: This command is used for saving the data of the currently selected sample to a STATsimple data file. It presents a Standard Save File dialog box.

                      This item is disabled when the currently selected sample has no data.

C8: Page Setup…

Keyboard equivalent: Command–U

Mouse equivalent: NONE

Description: This command is used for setting the Printer output options. A Standard Printer Page Setup dialog box is presented.

C9: Print…

Keyboard equivalent: Command–P

Mouse equivalent: NONE

Description: Prints the contents of the Viewing Area. A Standard Print dialog box is presented.

C10: Quit

Keyboard equivalent: Command–Q

Mouse equivalent: Click the Close Box on STATsimple's application window (Figure 3.3).

Description: Terminates STATsimple.

                      STATsimple will notify you of any modified data files before quitting. You can then choose to save the changes, or leave the file unchanged, or cancel the Quit command.
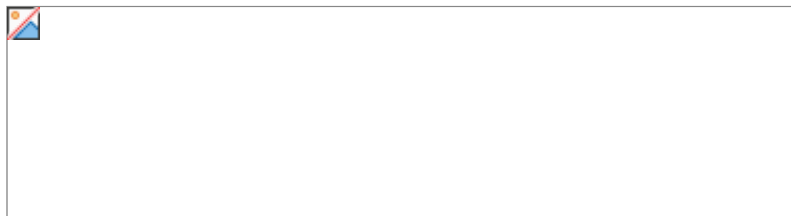

Figure 3.3: You can quit STATsimple by clicking in the window's Close Box

D. THE EDIT MENU

STATsimple has a Standard Edit Menu that provides basic text editing functions for data entry. In this version of STATsimple, the first menu item, "Can't Undo", is disabled and is for future use. The "Cut", "Copy", "Paste" and "Clear" menu items work whenever data or text is being entered.

D1: Can't Undo

Keyboard equivalent: Command–Z

Mouse equivalent: NONE

Description: FOR FUTURE USE. This menu item is disabled in this version of STATsimple.

D2: Cut

Keyboard equivalent: Command–X

Mouse equivalent: NONE

Description: Removes currently selected text from an edit field and copies it to the clipboard.

D3: Copy

Keyboard equivalent: Command–C

Mouse equivalent: NONE

Description: Copies currently selected text from an edit field to the clipboard.

D4: Paste

Keyboard equivalent: Command–V

Mouse equivalent: NONE

Description: Copies the contents of the clipboard (TEXT only) to the currently active edit field.

D5: Clear

Keyboard equivalent: NONE

Mouse equivalent: NONE

Description: Removes currently selected text from an edit field.

E. THE STATISTICS MENU

The Statistics menu allows access to the STATsimple's statistical routines. This menu has five items; i) the Edit Data item allows data entry and data modification in the Viewing Area, ii) the Descriptive item shows some descriptive statistics of the currently selected sample, iii) the Histogram item shows a histogram plot of the currently selected data, iv) the Student's T-test item initialises a two-tailed, unpaired t-test, and v) the Linear Regression item initialises a linear regression plot.

E1: Edit Data

Keyboard equivalent: Command–E

Mouse equivalent: Click the "EDIT" icon in the Toolbar Area.

Description: Shows the data of the currently selected sample in the Viewing Area. New data may be entered or existing data modified.

E2: Descriptive

Keyboard equivalent: Command–D

Mouse equivalent: Click the "DESC" icon in the Toolbar Area.

Description: Shows some descriptive statistics of the currently selected sample in the Viewing Area. This version of STATsimple shows the following descriptive statistics:

- Mean
- Standard Deviation
- Standard Error of the Mean
- Minimum
- Maximum
- Median
- Sum
- Sum of Squares
- Variance
- 90%, 95%, and 99% confidence limits using the "t" statistical tables

E3: Histogram

Keyboard equivalent: Command–H

Mouse equivalent: Click the "HIST" icon in the Toolbar Area.

Description: Shows a histogram plot of the currently selected sample in the Viewing Area. Initially, STATsimple will estimate the lower and upper plotting limits as well as the number of classes. To set your own plotting limits and number of classes, double-click anywhere on the plot and you will be presented with a dialog box that allows you to set the Number of Classes, Lower Limit, Upper Limit, and Bar Pattern.

E4: Student's T-test

Keyboard equivalent: Command–T

Mouse equivalent: Click the "T-TEST" icon in the Toolbar Area.

Description: Initialises a two-tailed, unpaired Student's t-test and shows the results in the Viewing Area. Initially, a blank framework for the t-test results will be shown. To add a sample to the t-test, click on a sample in the Samples Area. After two samples are added, the following results are shown:

– degrees of freedom (d.f.), t-value (t) and p-value (p)
– t-critical values for p=0.10, p=0.05 and p=0.01
– Mean, SEM and number of observations for the first sample
– Mean, SEM and number of observations for the second sample

E5: Linear Regression

Keyboard equivalent: Command–R

Mouse equivalent: Click the "REG" icon in the Toolbar Area.

Description: Initialises a linear regression plot in the Viewing Area. Initially, a blank framework for the regression plot will be shown. To add an independent data set (X-data), click on a sample in the Samples Area. After an independent data set has been added, a dependent data set (Y-data) may be added by clicking on a sample in the Samples Area. Once the two data sets are added, the Viewing Area shows the regression plot and equation (Figure 3.4).
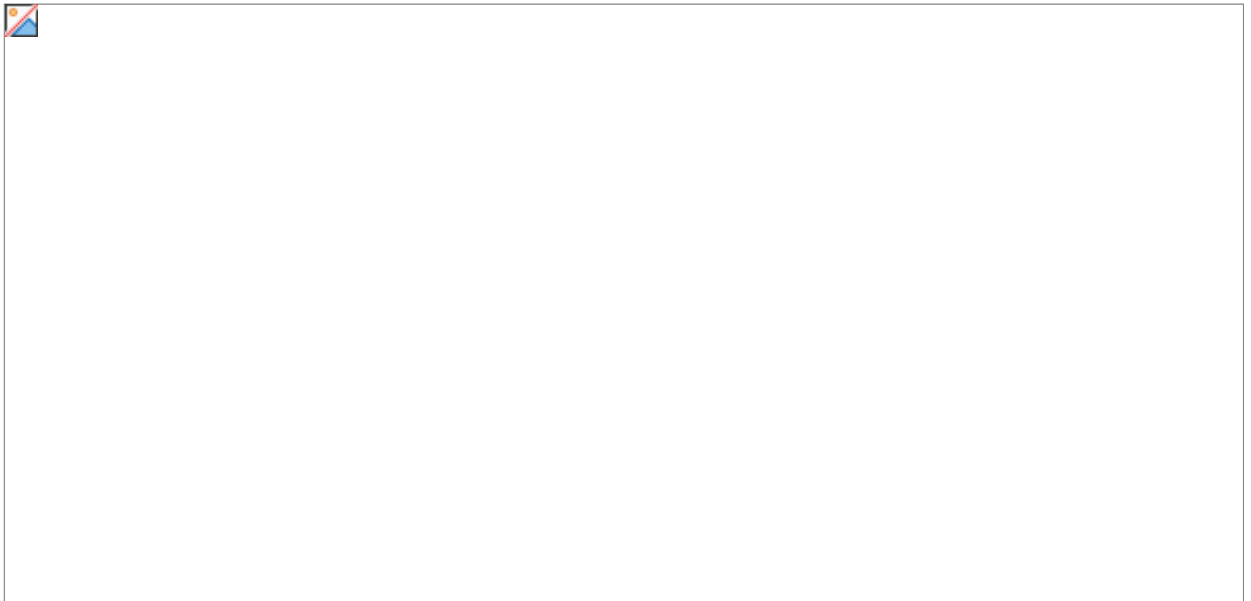

Figure 3.4: The linear regression plot shows the regression equation at its top right section

F. THE FORMAT MENU

The Format menu is used to change the number of decimal places that are displayed in data in the Viewing Area. Sometimes referred to as the 'precision' of the number, this parameter can be changed to zero, one, two and three decimal places via keyboard short-cuts. To display number precisions from 4 decimal places to 9 decimal places, the 'Other…' menu item is used.

F1: 0

Keyboard equivalent: Command–0

Mouse equivalent: NONE

Description: Changes the number precision to zero decimal places.

F2: 1

Keyboard equivalent: Command–1

Mouse equivalent: NONE

Description: Changes the number precision to one decimal place.

F3: 2

Keyboard equivalent: Command–2

Mouse equivalent: NONE

Description: Changes the number precision to two decimal places.

F4: 3

Keyboard equivalent: Command–3

Mouse equivalent: NONE

Description: Changes the number precision to three decimal places.

F5: Other…

Keyboard equivalent: Command–F

Mouse equivalent: NONE

Description: A dialog box is presented, allowing you to change the number of decimal places to a number between 0 and 9.

G. THE SPECIAL MENU

The Special menu has two items. The "Document…" item is used to set the document margins for print-outs and the "Chart…" item is used to set the plotting parameters for histogram and regression plots.

G1: Document…

Keyboard equivalent: Command–M

Mouse equivalent: NONE

Description: Allows you to change the document margins for print-outs. A dialog box is presented with four changeable parameters; Left, Top, Right and Bottom. The margins are specified in inches.

G2: Chart…

Keyboard equivalent: Command–G

Mouse equivalent: Double-Click on any part of a histogram or regression plot.

Description: Allows you to change the plot parameters for histograms and linear regressions.

When a histogram is in the Viewing Area, a dialog box is presented with four changeable parameters; Number of Classes, Lower Limit, Upper Limit, and Bar Pattern. If you specify a lower limit greater than the minimum data value, or if you specify an upper limit less than the maximum data value, then STATsimple ignores your specification and chooses a limit that ensures all data are visible in the histogram.

When a linear regression is in the Viewing Area, a dialog box is presented with six changeable parameters; X-min, X-max, Increment (ΔX), Y-min, Y-max, and Increment (ΔY).

The "Chart…" item is disabled when no histogram or regression plot is present, or when no data is available for the histogram or regression plot.
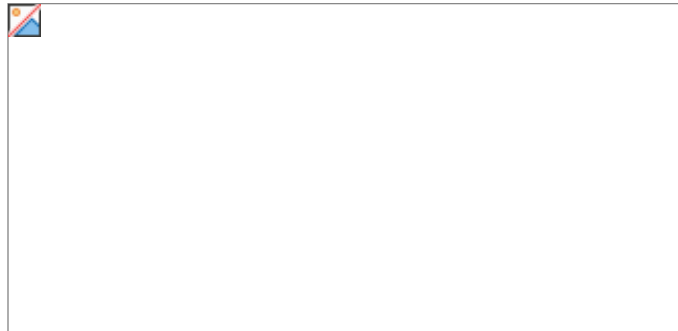

Figure 3.5: Six patterns are available for the histogram plot