StatsMate

User Guide

Overview

StatsMate is an easy-to-use powerful statistical calculator. It has been featured by Apple on Apps For Learning Math in the App Stores around the world.

- StatsMate comes with
  - 17 Probability Distribution Calculators
  - 10 Hypothesis Testing Calculators
  - 4 p-Value Calculators
  - 2 Confidence Interval Calculators
  - A Basic Data Analysis Calculator with Histogram Creator
  - 2 ANOVA Calculators
  - A Linear Regression Calculator

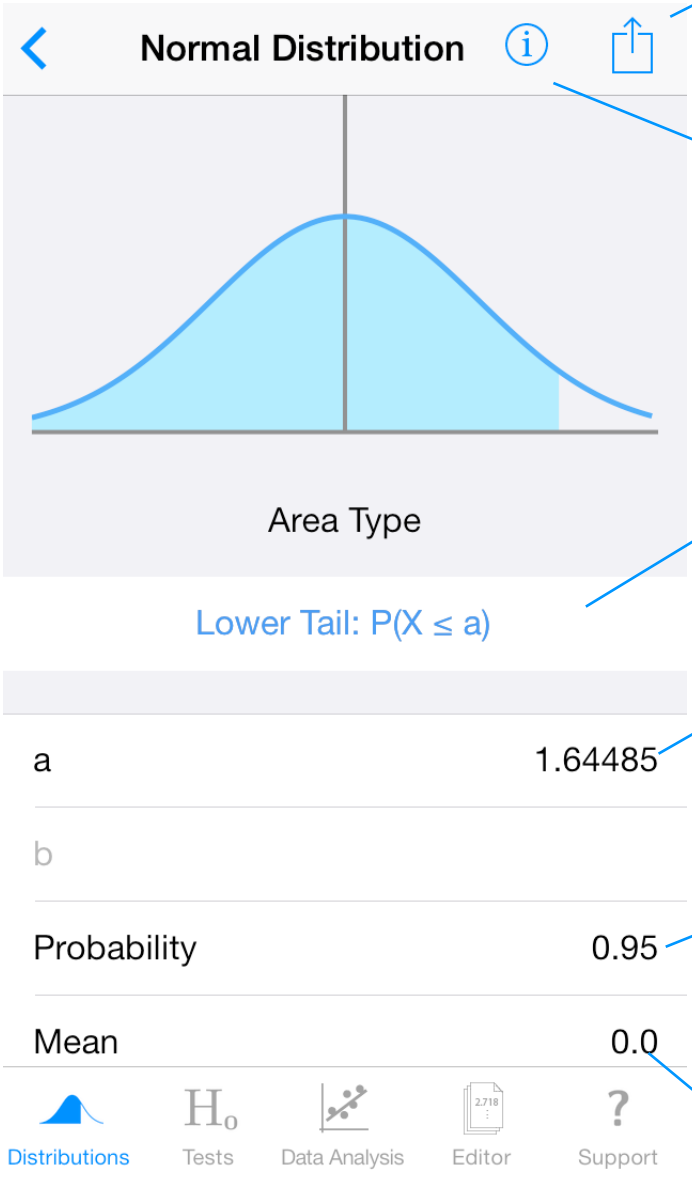
- You can export datasets created by StatsMate as a PDF file, a Microsoft Excel spreadsheet, a CSV file, or a text file. You can export calculation and analysis results via AirPrint, email, message, or open in other apps.

- StatsMate comes with a customized keyboard with built-in scientific calculator.

- With Dataset Management, you can manage, save, and import datasets created on other apps or devices. You can store your datasets locally or on the iCloud. Supported document types are Microsoft Excel spreadsheet, CSV, plain text, and rich text.

Probability Distributions

In *Probability Distributions* mode, you can calculate the probability from a critical point, and calculate the critical point from a probability.



Export the result

More information

Tap to change the area type

Enter a critical value to find the probability

Enter a probability to find the critical value

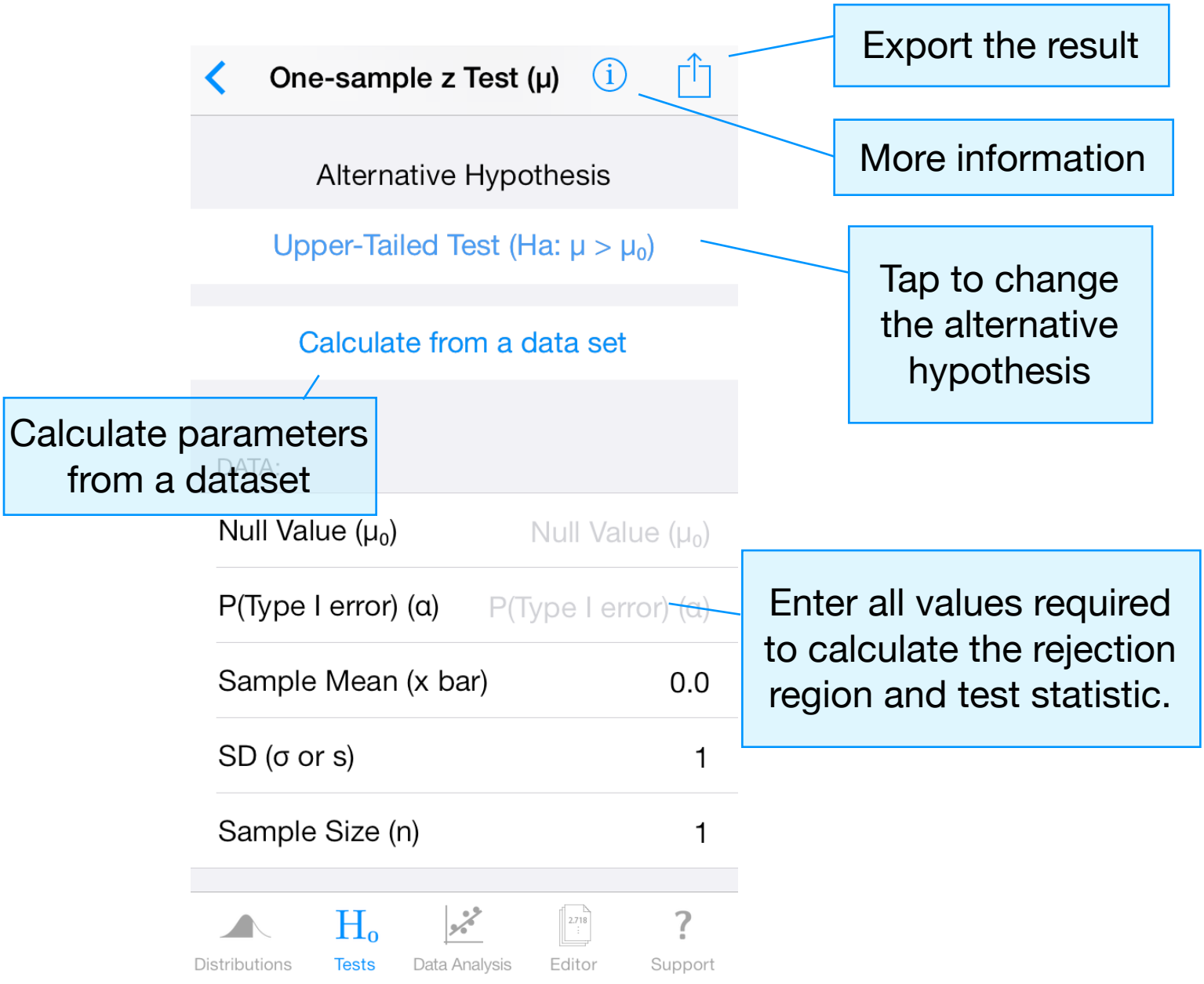
Enter parameters for each distribution

StatsMate calculates the following probability distributions:

- Uniform Distribution
- Normal Distribution
- Chi Square Distribution
- Gamma Distribution
- Exponential Distribution
- Beta Distribution
- t Distribution
- Noncentral t Distribution
- F Distribution
- Lognormal Distribution
- Weibull Distribution
- Cauchy Distribution
- Binomial Distribution
- Poisson Distribution
- Geometric Distribution
- Negative Binomial Distribution
- Hypergeometric Distribution

Statistical Tests

In *Statistical Tests* mode, you can do hypothesis testings and calculate p-values and confidence intervals.



StatsMate performs the following statistical tests and calculations:

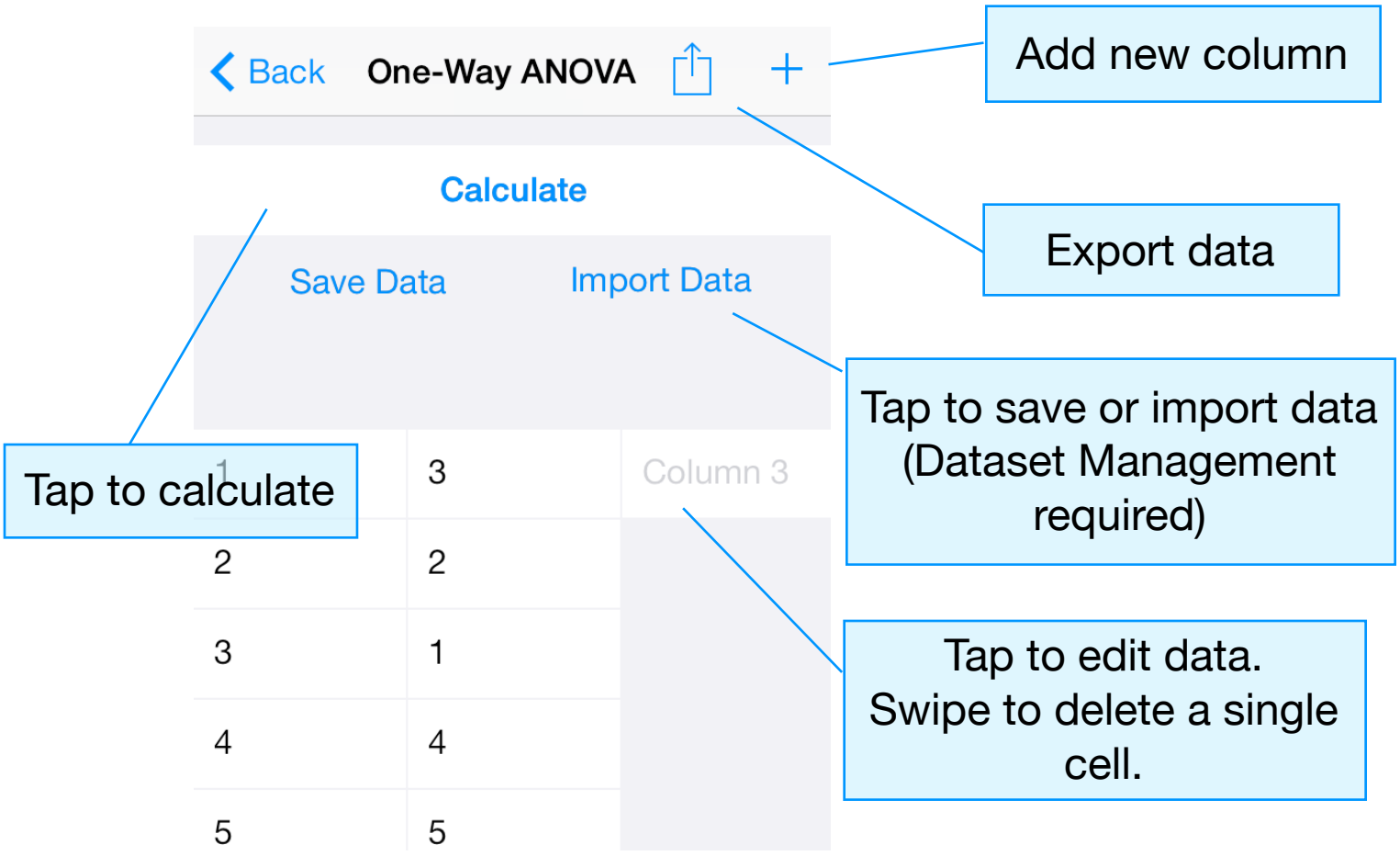
Hypothesis Testings
- One-sample z Test (μ)
- One-proportion z Test (p)
- One-sample t Test (μ)
- Two-sample z Test (μ_1, μ_2)
- Two-sample t Test (μ_1, μ_2)
- Two-sample Pooled-t Test (μ_1, μ_2)
- Paired Sample t Test (d)
- Two-proportion z Test (p_1,p_2)
- Chi Square Test for SD (σ)
- F Test for two SD's (σ_1, σ_2)

p-Values
- p-Value for Z Tests
- p-Value for t Tests
- p-Value for F Tests
- p-Value for Chi Square Tests

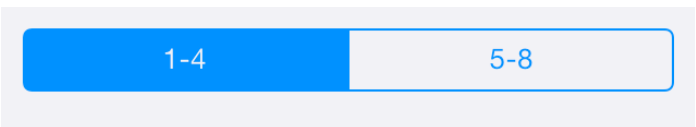
Confidence Intervals
- Large-Sample Confidence Intervals
- Confidence Intervals for Population Variance

Data Analysis

In Data Analysis mode, you can perform basic data analysis, linear regression, one-way ANOVA, and randomized block design ANOVA.

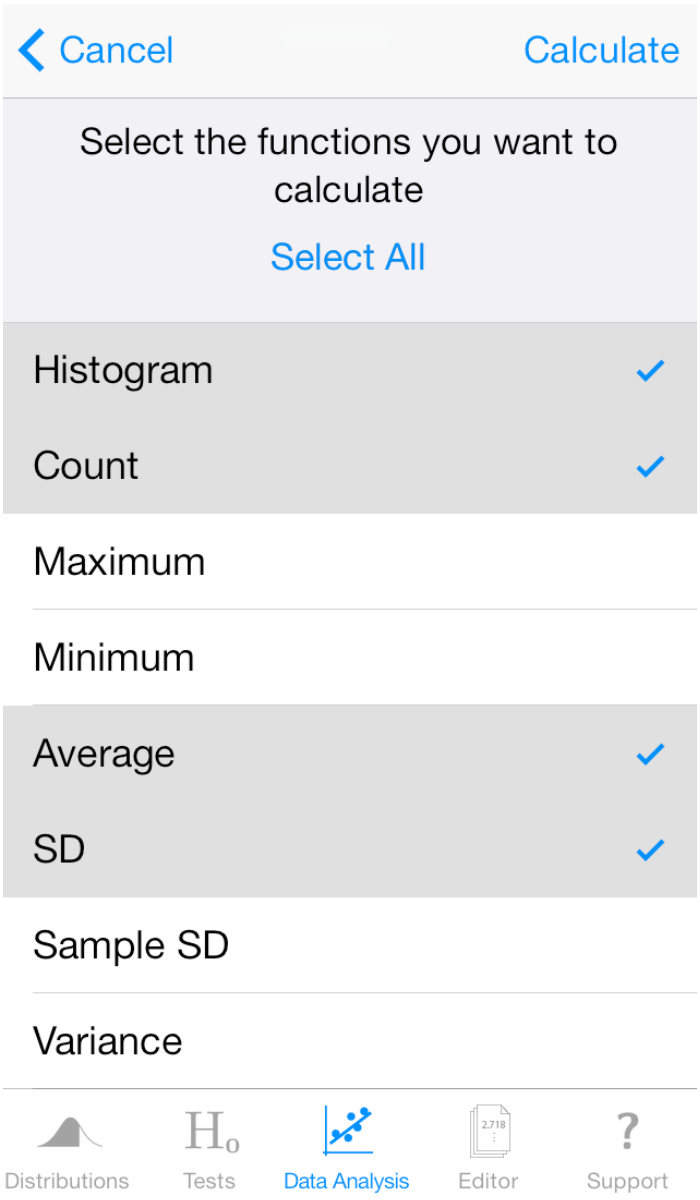


StatsMate now supports multiple column datasets.

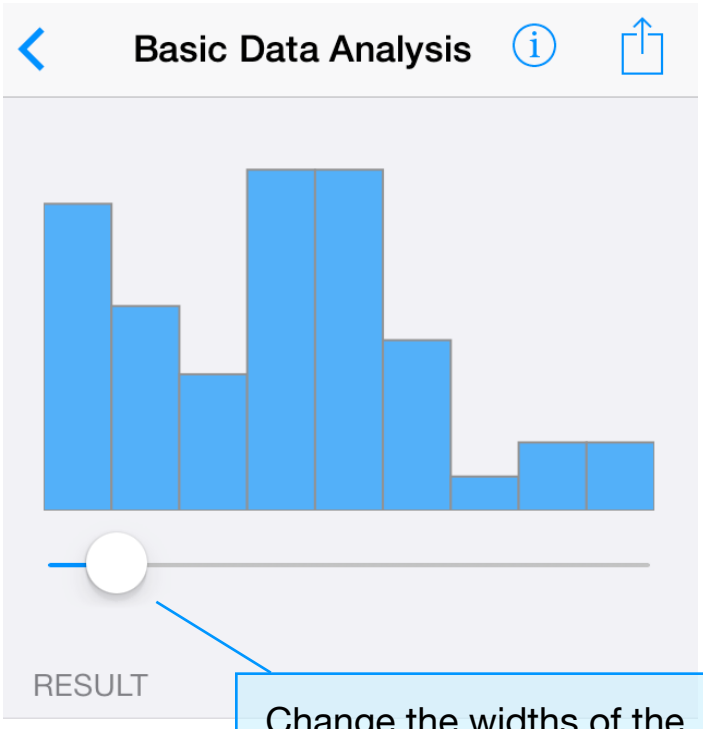


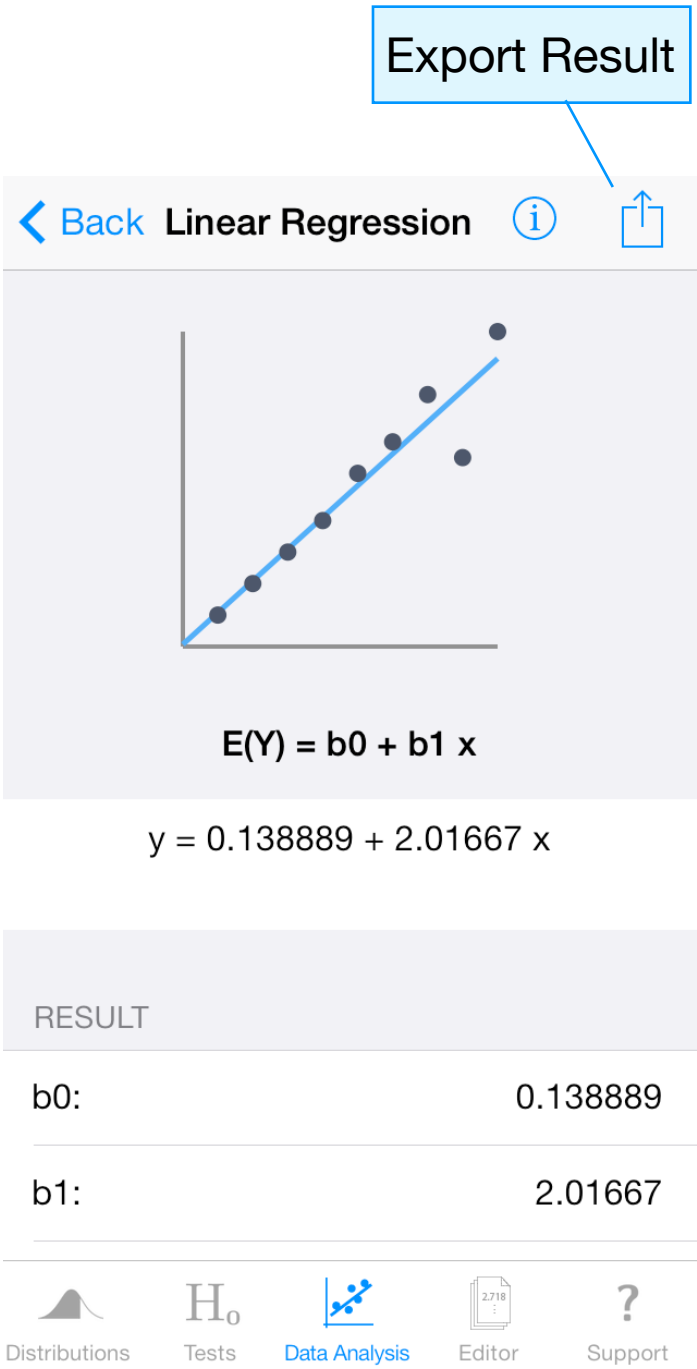
A segment control will show up if there are more than 4 columns.

In Basic Data Analysis, once you tap ‘Calculate,’ select the functions you want to calculate then tap ‘Calculate.’



Examples of Result Pages

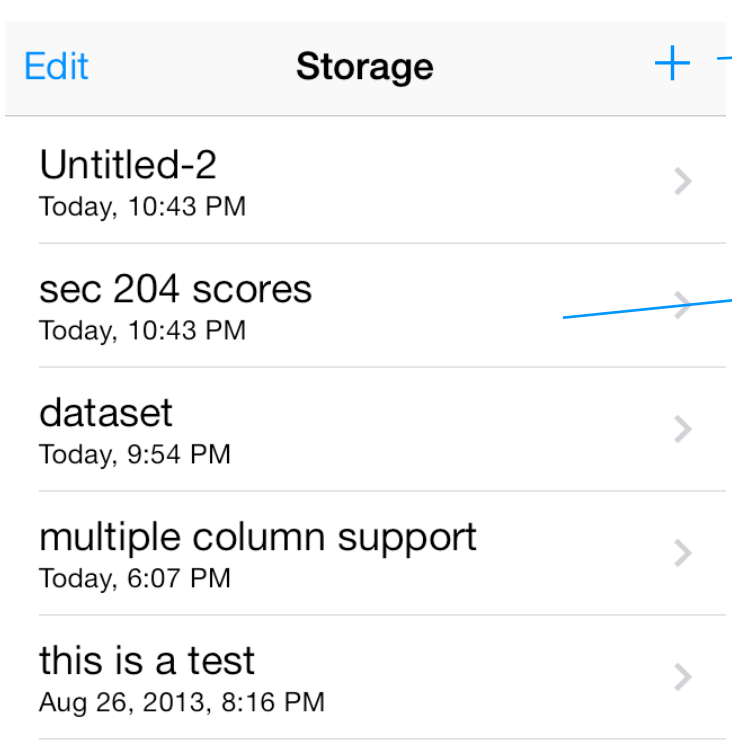




Dataset Management

With Dataset Management, you can save and manage your data. You can also import datasets created on other apps or devices. StatsMate now support multiple column datasets.

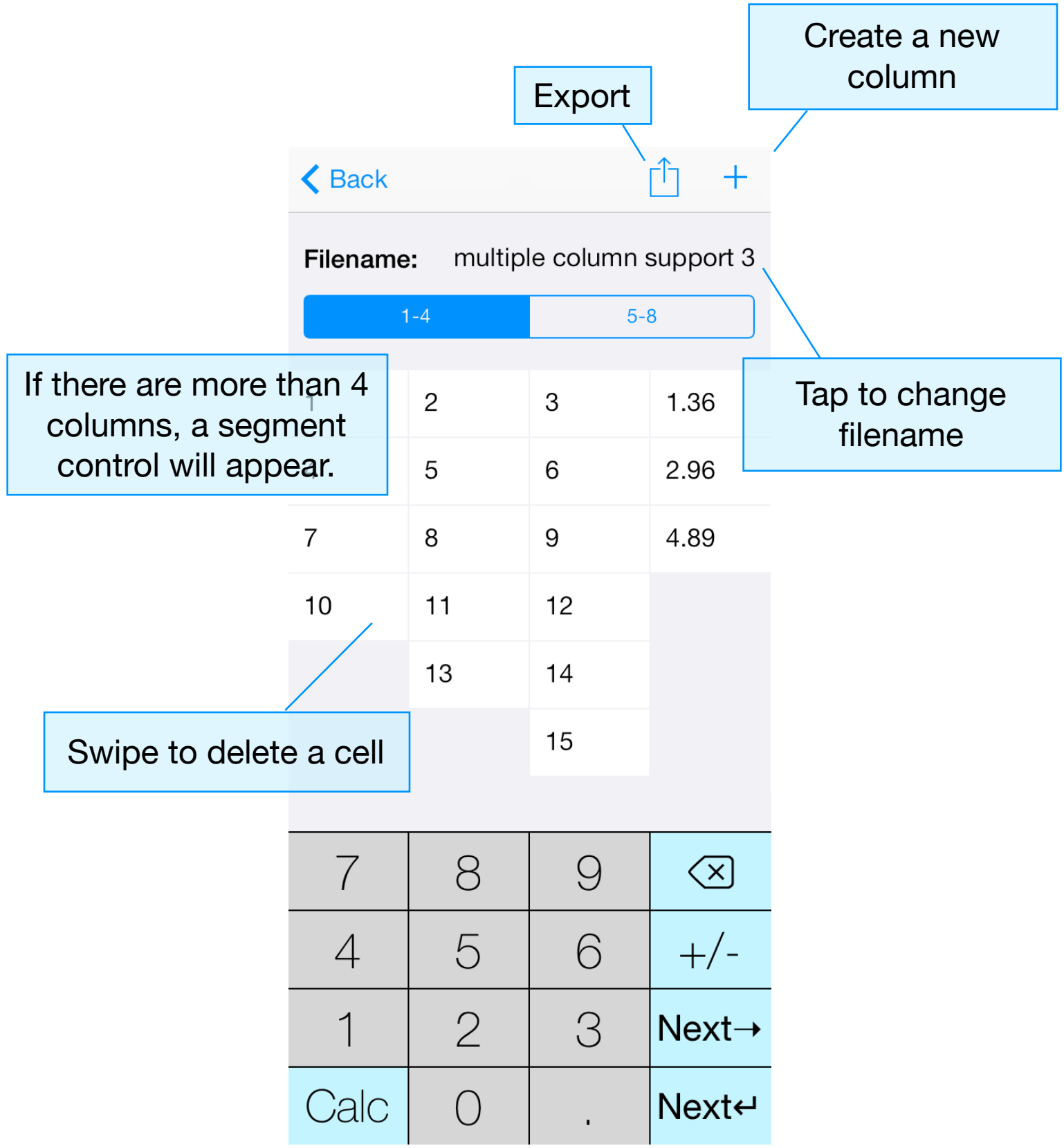
You can store your data locally or on the iCloud*. If you choose to store your data on the iCloud, you data will be synced across all of your iOS devices. You can change the preference anytime in
Setting -> StatsMate.



Create a new dataset

Tap to select a dataset.
Swipe to delete.

*StatsMate 3.0 internal file format is different than those in the older versions. If you store your data on the iCloud, older version of StatsMate on other devices might crash. Please update StatsMate on all of your devices.


Create a new column
Export
Back
Filename: multiple column support 3
1-4
5-8
Tap to change filename
If there are more than 4 columns, a segment control will appear.
2
3
1.36
5
6
2.96
7
8
9
4.89
10
11
12
13
14
15
Swipe to delete a cell
7
8
9
4
5
6
+/-
1
2
3
Next→
Calc
0
.
Next↵

How to import data

Currently, StatsMate supports Microsoft Excel spreadsheets, CSV files, plain text files, and rich text files. StatsMate now support multiple column datasets.

Requirements:

- Microsoft Excel Spreadsheets

Please save your dataset in .xls format. (.xlsx is not currently supported) Only the first sheet will be read. Do not include text cells such as header or footer cells.

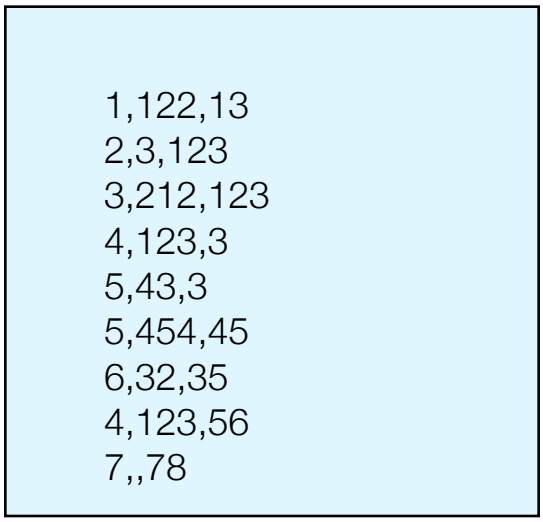
1	122	13	
2	3	123	
3	212	123	
4	123	3	
5	43	3	
5	454	45	
6	32	35	
4	123	56	
7		78	

- CSV (Comma-Separated-Value Document)

StatsMate only supports CSV documents that use ‘comma’ (,) as the separator for columns and use ‘new line’ as the separator for rows.

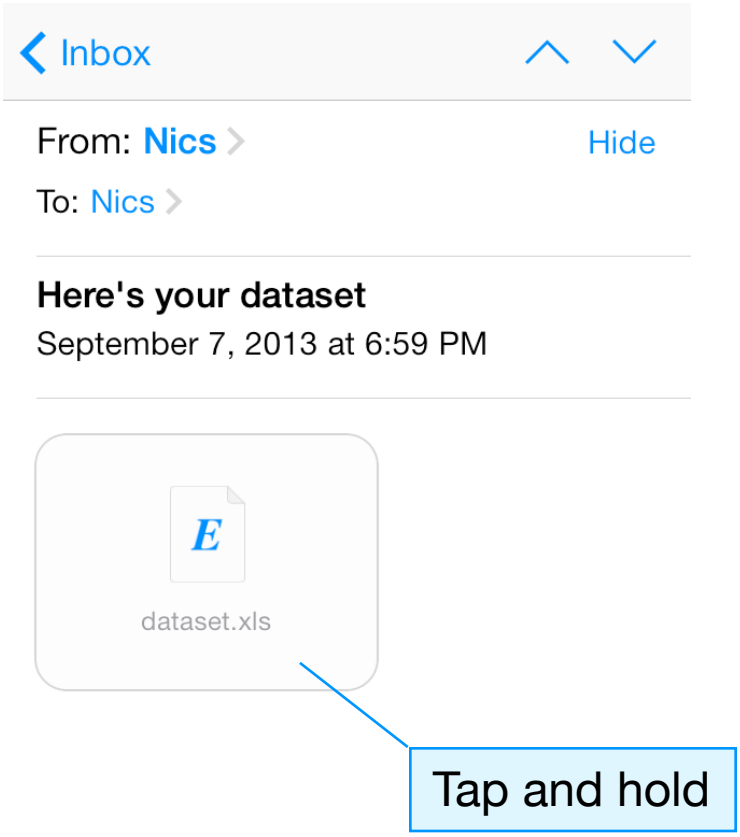
- Plain Text and Rich Text Documents

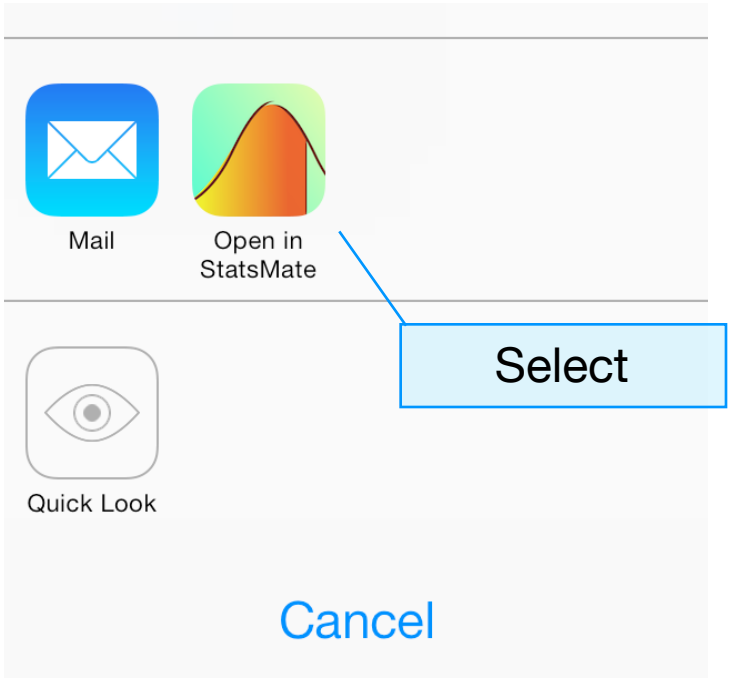
Use ‘comma’ (,) as the separator for columns and use ‘new line’ as the separator for rows. Do not include any text.



How to import data

1. Create your dataset using other apps or devices.
2. Transfer the file to your iOS devices via email, message, Airdrop, or any other apps that are able to export files such as Dropbox.
3. Activate the ‘Open in...’ option. This depends on the app you are using. For example, in Mail, tap and hold the attachment to activate ‘Open in...’ option.
4. In the ‘Open in...’ menu, select ‘Open in StatsMate’ from the list.





Setting

You can set displayed number format in the Setting app. Go to the Setting app on your home screen, then scroll down to StatsMate.

You can also select where to store your data here.