


Hypothesis Tests on Excel 2008 for Mac

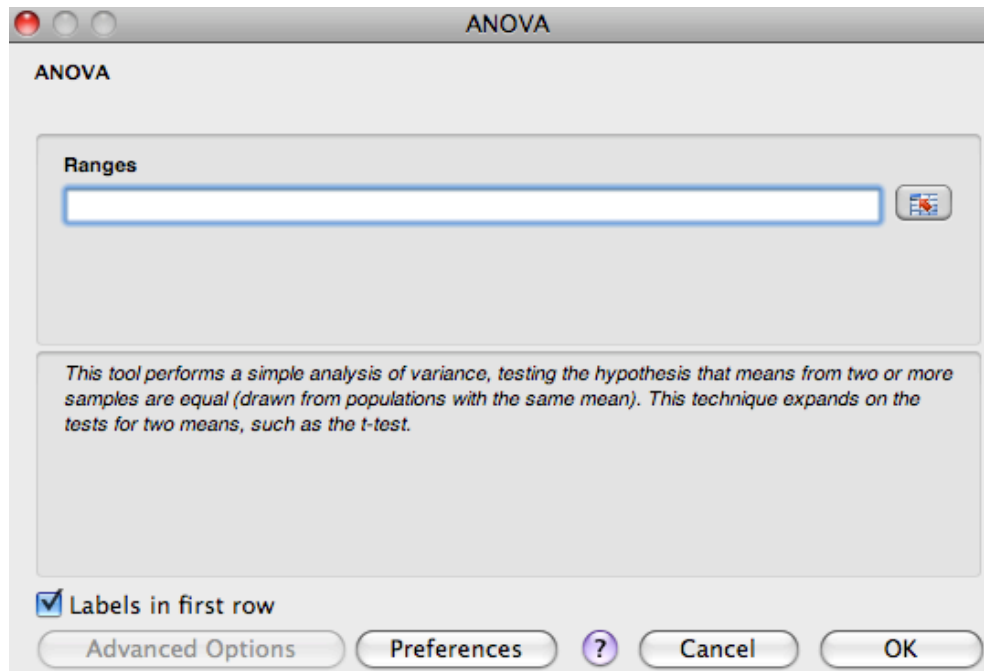
- BASIC HYPOTHESIS TESTS

- StatPlus will perform z-tests (one and two sample), t-tests (only two sample on the free version), F-tests, and correlations.
- All of these can be found under “Statistics” → “Basic Statistics and Tables”.

Just click on the  buttons to retrieve your data like before and let StatPlus do the rest.

- ANOVA

- To perform this test, go to “Statistics” → “Analysis of Variance (ANOVA)” → “One-way ANOVA...”
- An options window will open up where you can input your data.



- Uncheck “Labels in first row” if it is not the case, edit whatever you like in “Preferences” (such as your alpha value), and hit “OK”.
- A new Excel window will open up with results that look like this:

	A	B	C	D	E	F	G
1	Analysis of Variance (One-Way)						
2							
3	Summary						
4	Groups	Sample size	Sum	Mean	Variance		
5	Series #1	22	2.31E+2	1.05E+1	8.83E+0		
6	Series #2	22	2.14E+2	9.73E+0	7.26E+0		
7	Series #3	22	2.01E+2	9.14E+0	1.12E+1		
8							
9	ANOVA						
10	Source of Variation	SS	df	MS	F	p-level	F crit
11	Between Groups	2.06E+1	2	1.03E+1	1.13E+0	3.29E-1	4.17E+0
12	Within Groups	5.72E+2	63	9.09E+0			
13							
14	Total	5.93E+2	65				

- REGRESSION

- To perform this test, go to “Statistics” → “Regression” → “Linear Regression...”
- An options window will open up where you can input your data.
 - The dependent variable is your y-values and your independent variables are your x-values.

- The “Advanced Options” will usually not be necessary, but you can edit whatever you like in “Preferences” (such as your alpha value).
- Uncheck “Labels in first row” if it is not the case, and hit “OK”.

- A new Excel window will open up with results that look like this:

	A	B	C	D	E	F	G	H
1	Linear Regression							
2								
3	Regression Statistics							
4	R	5.92E-2						
5	R Square	3.5E-3						
6	Adjusted R Square	-1.21E-1						
7	Standard Error	2.13E+1						
8	Total Number Of Cases	10						
9	A = 52.9333 + 0.3939 * B							
10								
11	ANOVA							
12		<i>d.f.</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>p-level</i>		
13	Regression	1.E+0	1.28E+1	1.28E+1	2.81E-2	8.71E-1		
14	Residual	8.E+0	3.64E+3	4.55E+2				
15	Total	9.E+0	3.65E+3					
16								
17		<i>Coefficients</i>	<i>Standard Error</i>	<i>LCL</i>	<i>UCL</i>	<i>t Stat</i>	<i>p-level</i>	<i>H0 (2%) rejected?</i>
18	Intercept	5.29E+1	1.46E+1	1.07E+1	9.51E+1	3.63E+0	6.66E-3	Yes
19	B	3.94E-1	2.35E+0	-6.41E+0	7.2E+0	1.68E-1	8.71E-1	No
20	T (2%)	2.9E+0						
21	<i>LCL - Lower value of a reliable interval (LCL)</i>							
22	<i>UCL - Upper value of a reliable interval (UCL)</i>							
23								
24	Residuals							
25	<i>Observation</i>	<i>Predicted Y</i>	<i>Residual</i>	<i>Standard Residuals</i>				
26	1	5.33E+1	-7.33E+0	-3.64E-1				
27	2	5.37E+1	2.13E+1	1.06E+0				
28	3	5.41E+1	-3.01E+1	-1.5E+0				
29	4	5.45E+1	-5.09E-1	-2.53E-2				
30	5	5.49E+1	3.21E+1	1.6E+0				
31	6	5.53E+1	-2.03E+1	-1.01E+0				
32	7	5.57E+1	-1.69E+0	-8.41E-2				
33	8	5.61E+1	8.92E+0	4.43E-1				
34	9	5.65E+1	1.75E+1	8.71E-1				
35	10	5.69E+1	-1.99E+1	-9.88E-1				