## APPENDIX G T-TEST OUTPUT FILES

	A B C	D	E	F	G	Н	l l	J	K	L
1	t-Test	Sample 1 vs	s Sample 2 C	comparison for	or Uncensore	ed Full Data	Sets withou	t NDs		
2										
3	User Selected Options									
4	Date/Time of Computation	12/22/2014	10:52:03 AN	Л						
5	From File	Pro_Farmvi	ew.xls							
6	Full Precision	OFF								
7	Confidence Coefficient	95%								
8	Substantial Difference (S)	0.000								
9	Selected Null Hypothesis	Sample 1 M	lean <= Sam	ple 2 Mean (	Form 1)					
10	Alternative Hypothesis	Sample 1 M	lean > the Sa	ample 2 Mea	n					
11										
12										
	Sample 1 Data: BR-01									
	Sample 2 Data: BR-02									
15										
16		Raw Statistic	:S						+	
17			Sample 1	Sample 2					+	
18	Number of Valid Ob	servations	11536	850					+	
19	Number of Distinct Ob		4533	691					+	
20	Number of Distinct Of	Minimum	4106	9766						
21		Maximum	17778	13268						
22			11759	11135						
23		Mean								
24		Median	11456	11050						
25		SD	1564	614.6						
26		SE of Mean	14.56	21.08						
27										
28	Sample 1 vs Sample	ample 2 Two	-Sample t-Te	est						
29										
30	H0: Mean of Sample 1 - Mean of Sar	mple 2 <= 0								
31			t-Test	Critical						
32	Method	DF	Value	t (0.05)	P-Value					
33	Pooled (Equal Variance)	12384	11.572	1.645	0.000					
34	Welch-Satterthwaite (Unequal Varian	1821.7	24.366	1.646	0.000					
35	Pooled SD 1517.798									
36	Conclusion with Alpha = 0.050									
37	Student t (Pooled) Test: Reject H0,		-	-						
38	Welch-Satterthwaite Test: Reject H	0, Conclude	Sample 1 >	Sample 2						
39										
40										
41	Test of I	Equality of Va	ariances							
42									1	
43	Variance o	f Sample 1	2445469						1	
44	Variance o	f Sample 2	377715							
45			1	1	<u> </u>				1	
46	Numerator DF Denomi	nator DF	F-Tes	t Value	P-Value					
47		49		474	0.000				+	
	Conclusion with Alpha = 0.05		1						+	
48	Two variances are not equal								+	
49									+	
50									1	

	A B C	D	E	F	G	Н	l	J	K	L		
1	t-Test	Sample 1 vs	s Sample 2 C	Comparison fo	or Uncensore	ed Full Dat	a Sets withou	ut NDs				
2		T.										
3	User Selected Options											
4	Date/Time of Computation		8:45:34 AM									
5		Pro_Hig.xls	i									
6	Full Precision	OFF										
7	Confidence Coefficient	95%										
8	Substantial Difference (S)	0.000										
9	Selected Null Hypothesis	Sample 1 M	lean <= San	nple 2 Mean (	Form 1)							
10	Alternative Hypothesis	Sample 1 M	lean > the S	ample 2 Mea	n							
11		II.										
12												
	Sample 1 Data: BR-04											
	Sample 2 Data: BR-07											
15												
16												
17	F	Raw Statistic	·s									
18			Sample 1	Sample 2								
	Number of Valid Ob	servations	2906	2389								
19	Number of Distinct Ob		2288	1860								
20		Minimum	7892	7975								
21		Maximum	16512	15641								
22		Mean	12655	12511								
23		Median	13022	12843								
24	SD 1588 1449											
25	SE of Moon 20.46 20.64											
26		or mean	29.40	23.04								
27	Sample 1 vs Sa	ample 2 Two	Sample + T	oct								
28	Sample 1 vs Sa	ample 2 1 wo	-Sample t-1	<del></del>								
29	H0: Mean of Sample 1 - Mean of San	nnla 0 d= 0										
30	no: Mean of Sample 1 - Mean of San	npie 2 <= 0	1 T1	O within a l								
31	NA .dd.	DE.	t-Test	Critical	D.// I							
SZ	Method	DF	Value	t (0.05)	P-Value							
55	Pooled (Equal Variance)	5293	3.431	1.645	0.000							
34	Welch-Satterthwaite (Unequal Variar	5236.1	3.462	1.645	0.000							
33	Pooled SD 1526.915											
36	Conclusion with Alpha = 0.050											
37	Student t (Pooled) Test: Reject H0,		-	-								
38	Welch-Satterthwaite Test: Reject H	0, Conclude	Sample 1 >	Sample 2								
39												
40												
41	Test of E	Equality of Va	ariances									
42												
43	Variance of	-	2522583									
44	Variance of	f Sample 2	2098981									
45					•							
46	Numerator DF Denomi	nator DF	F-Tes	st Value	P-Value							
47	2905 23	388	1.	202	0.000							
	Conclusion with Alpha = 0.05		1		<u>I</u>							
49	Two variances are not equal											
50												
						1	I	l	1			

Liser Selected Options		A B C	D	E	F	G	Н	l	J	K	L		
Date/Time of Computation   22/22/014 8 46 59 AM	1	t-Test	Sample 1 vs	s Sample 2 C	Comparison fo	or Uncensore	ed Full Data	Sets withou	t NDs				
Date/Time of Computation   2/22/2014 8:46:59 AM   From File   Fro. Sample   December   Pro. Sample   December   Pro. Sample   December   Pro. Sample   December   D	2												
From File Pro_saxes.xls Full Precision OFF Confidence Coefficients 95% Substantial Difference (S) 0000 Selected Null Hypothesis Sample 1 Mean < Sample 2 Mean (Form 1) Alternative Hypothesis Sample 1 Mean > the Sample 2 Mean Alternative Hypothesis Sample 1 Mean > the Sample 2 Mean Alternative Hypothesis Sample 1 Mean > the Sample 2 Mean  Raw Statistics Sample 1 Data: BR-05 Sample 2 Data: BR-07  Raw Statistics Sample 1 Sample 2 Number of Valid Observations 1387 2389 Number of District Observations 1073 1860 Minimum 10936 7975 Maximum 10067 19411 Mean 13411 12511 Median 13411 12543 SD 731.6 1449 SE of Mean 19.64 29.64 Sample 1 vs Sample 2 Two-Sample 1-Test Sample 1 vs Sample 2 Two-Sample 1-Test  Nethod DF Value 1(0.05) P-Value Provided (Equal Varianco) 3774 21.591 1.494 0.000 Provided (Equal Varianco) 3774 21.591 1.495 0.000 Provided SD 1234.785 Conclusion with Alpha = 0.050 Sudent (Poolity Test Reject H), Conclude Sample 1 > Sample 2 Welch-Satterthwaite Test: Reject H), Conclude Sample 1 > Sample 2 Welch-Satterthwaite Test: Reject H), Conclude Sample 1 > Sample 2 Welch-Satterthwaite Test: Reject H), Conclude Sample 1 > Sample 2 Welch-Satterthwaite Test: Reject H), Conclude Sample 1 > Sample 2 Welch-Satterthwaite Test: Reject H), Conclude Sample 1 > Sample 2 Welch-Satterthwaite Test: Reject H), Conclude Sample 1 > Sample 2 Welch-Satterthwaite Test: Reject H), Conclude Sample 1 > Sample 2 Welch-Satterthwaite Test: Reject H), Conclude Sample 1 > Sample 2 Welch-Satterthwaite Test: Reject H), Conclude Sample 1 > Sample 2 Welch-Satterthwaite Test: Reject H), Conclude Sample 1 > Sample 2 Welch-Satterthwaite Test: Reject H), Conclude Sample 1 > Sample 2 Welch-Satterthwaite Test: Reject H), Conclude Sample 1 > Sample 2 Welch-Satterthwaite Test: Reject H), Conclude Sample 1 > Sample 2 Welch-Satterthwaite Test: Reject H), Conclude Sample 1 > Sample 2 Welch-Satterthwaite Test: Reject H), Conclude Sample 1 > Sample 2 Welch-Satterthwaite Test: Reject H), Conclude Sample 1 > Sample 2 Welch-Satterthwaite Test: Reject H), Conclud	3	·											
Confidence Coefficient   S95%	4	·											
Confidence Coefficient   95%	5	From File	Pro_saxes.	xls									
Substantial Difference (S)   0.000	6	Full Precision	OFF										
Selected Null Hypothesis	7	Confidence Coefficient	95%										
Selected Null Hypothesis   Sample 1 Mean <= Sample 2 Mean   Form 1	8	Substantial Difference (S)	0.000										
Alternative Hypothesis   Sample 1 Mean > the Sample 2 Mean	9	Selected Null Hypothesis	Sample 1 M	lean <= Sam	nple 2 Mean (	Form 1)							
Sample 1 Data: BR-05 Sample 2 Data: BR-07    Rew Statistics	10	Alternative Hypothesis	Sample 1 M	lean > the S	ample 2 Mea	n							
Sample 1 Data: BR-05	11												
Sample 1 Data: BR-05   Sample 2 Data: BR-07   Sample 1 Sample 2   Sample 3   Sample 4   Sample 4   Sample 4   Sample 4   Sample 5   Sample 5   Sample 6   Sample 6   Sample 7   Sample 8   Sample 8   Sample 9   S	12												
Sample 2 Data: BR-07   Sample 1   Sample 2		Sample 1 Data: BR-05											
		Sample 2 Data: BR-07											
Raw Statistics		· · · · · · · · · · · · · · · · · · ·											
Raw Statistics   Sample 1   Sample 2	15										+		
Sample 1   Sample 2	16	F	Raw Statistic	·s									
Number of Valid Observations   1387   2389	17				Sample 2								
Number of Distinct Observations   1073   1860	18	Number of Valid ∩b	servations	· ·									
Minimum   10936   7975	19												
Maximum   16067   15641	20	Number of Distilict Ob											
Median   13411   12511   Median   13431   12843   SD   731.6   1449   SE of Mean   19.64   29.64   SE of Mean   19.64   SE of Mea	21												
Median   13431   12843	22												
SD   731.6   1449	23												
Sample 1 vs Sample 2 Two-Sample t-Test	24	<u></u>											
Numerator DF	25												
Numerator DF   Denominator DF   F-Test Value   P-Value   P-Value   P-Value	26	S	E of Mean	19.64	29.64								
1	27												
H0: Mean of Sample 1 - Mean of Sample 2 <= 0	28	Sample 1 vs Sa	ample 2 Two	-Sample t-To	est								
Method	29												
Method DF Value t (0.05) P-Value 3 Pooled (Equal Variance) 3774 21.591 1.645 0.000 4 Welch-Satterthwaite (Unequal Varian 3712.4 25.309 1.645 0.000 5 Pooled SD 1234.785 6 Conclusion with Alpha = 0.050 7 Student t (Pooled) Test: Reject H0, Conclude Sample 1 > Sample 2 8 Welch-Satterthwaite Test: Reject H0, Conclude Sample 1 > Sample 2 9 Welch-Satterthwaite Test: Reject H0, Conclude Sample 1 > Sample 2 9 Variance of Sample 1   535230	30	H0: Mean of Sample 1 - Mean of San	nple 2 <= 0										
Pooled (Equal Variance)   3774   21.591   1.645   0.000	31			t-Test	Critical								
Welch-Satterthwaite (Unequal Variar   3712.4   25.309   1.645   0.000	32	Method	DF	Value	t (0.05)	P-Value							
Welch-Satterthwaite (Unequal Variant   3712.4   25.309   1.645   0.000	33	Pooled (Equal Variance)	3774	21.591	1.645	0.000							
Pooled SD 1234.785		Welch-Satterthwaite (Unequal Variar	3712.4	25.309	1.645	0.000							
Conclusion with Alpha = 0.050   Student t (Pooled) Test: Reject H0, Conclude Sample 1 > Sample 2		Pooled SD 1234.785	1	1	<u>. I</u>	<u>I</u>							
Student t (Pooled) Test: Reject H0, Conclude Sample 1 > Sample 2		Conclusion with Alpha = 0.050											
Welch-Satterthwaite Test: Reject H0, Conclude Sample 1 > Sample 2	37	Student t (Pooled) Test: Reject H0,	Conclude Sa	ample 1 > Sa	ample 2								
Test of Equality of Variances    Variance of Sample 1   535230	38	Welch-Satterthwaite Test: Reject H0	0, Conclude	Sample 1 >	Sample 2								
Test of Equality of Variances  Variance of Sample 1   535230	39												
Test of Equality of Variances    Calcal   Calcal	40												
Variance of Sample 1 535230	41	Test of E	Equality of Va	ariances									
Variance of Sample 1   535230	41		-										
Variance of Sample 2 2098981		Variance of	f Sample 1	535230									
Numerator DF	43		-										
Numerator DF	44												
2388 1386 3.922 0.000  Conclusion with Alpha = 0.05  Two variances are not equal	45	Numerator DF Denomin	nator DF	F-Tes	st Value	P-Value							
Conclusion with Alpha = 0.05  Two variances are not equal	46										-		
Two variances are not equal	47			1		3.000							
	40	<u> </u>											
	49	i wo variances are not equal											
	50												

	A B C	D	E	F	G	Н		J		K L		
1	t-Test	Sample 1 vs	s Sample 2 C	Comparison fo	or Uncensore	ed Full Da	ıta Sets wi	thout NDs				
2												
3	User Selected Options											
4	Date/Time of Computation		8:43:29 AM									
5		Pro_Dut.xls	i									
6	Full Precision	OFF										
7	Confidence Coefficient	95%										
8	Substantial Difference (S)	0.000										
9	Selected Null Hypothesis	Sample 1 M	lean <= Sam	nple 2 Mean (	Form 1)							
10	Alternative Hypothesis	Sample 1 M	lean > the S	ample 2 Mea	n							
11												
12												
13	Sample 1 Data: BR-06											
14	Sample 2 Data: BR-07											
15												
16												
17	F	Raw Statistic	s									
18			Sample 1	Sample 2								
19	Number of Valid Ob	servations	1452	2389								
20	Number of Distinct Ob	servations	1140	1860							$\exists$	
21		Minimum	9875	7975							=	
22		Maximum	15757	15641							$\dashv$	
23		Mean	13363	12511								
		Median	13430	12843							-	
24	SD 799.5 1449											
25	SE of Mean 20.98 29.64											
26											_	
27	Sample 1 vs Sa	mple 2 Two	-Sample t-To	est							-	
28	•	•	•									
29 30	H0: Mean of Sample 1 - Mean of San	nple 2 <= 0									_	
		•	t-Test	Critical							-	
31	Method	DF	Value	t (0.05)	P-Value							
32	Pooled (Equal Variance)	3839	20.584	1.645	0.000							
33	Welch-Satterthwaite (Unequal Varian		23.461	1.645	0.000						$\dashv$	
34	Pooled SD 1243.873	<u> </u>									=	
35	Conclusion with Alpha = 0.050										$\dashv$	
36	Student t (Pooled) Test: Reject H0,	Conclude Sa	ample 1 > Sa	ample 2							$\dashv$	
37	Welch-Satterthwaite Test: Reject H0		•	•							$\dashv$	
38		,	- 'F '	· F							$\dashv$	
39											$\dashv$	
40	Tast of F	Equality of Va	ariances								=	
41	1631 01 E	-quality Of Vi									$\dashv$	
42	Variance of	Sample 1	639154								-	
43	Variance of	•	2098981								$\dashv$	
44	variance of	Junipie Z	2000001								$\dashv$	
45	Numerator DF Denomin	nator DF	F-Too	st Value	P-Value						=	
46	2388 14			284	0.000						$\blacksquare$	
47	Conclusion with Alpha = 0.05	<b>U</b> 1	3.	207	0.000						$\blacksquare$	
48	Two variances are not equal											
49	i wo variances are not equal										_	
50												

	A B C	D	E	F	G	Н	l	J	K	L		
1	t-Test	Sample 1 vs	s Sample 2 C	Comparison fo	or Uncensore	ed Full Data	Sets withou	t NDs				
2												
3	User Selected Options											
4	Date/Time of Computation		8:53:21 AM									
5	From File	Pro_Westga	ate.xls									
6	Full Precision	OFF										
7	Confidence Coefficient	95%										
8	Substantial Difference (S)	0.000										
9	Selected Null Hypothesis	Sample 1 M	lean <= San	nple 2 Mean (	Form 1)							
10	Alternative Hypothesis	Sample 1 M	lean > the S	ample 2 Mea	n							
11												
12												
13	Sample 1 Data: BR-08											
14	Sample 2 Data: BR-09											
	<u> </u>											
15												
16	F	Raw Statistic	·s									
17			Sample 1	Sample 2								
18	Number of Valid Ob	servations	5590	222								
19	Number of Distinct Ob		2387	214								
20	Number of Distilict Ob	Minimum	9771	10313								
21		Maximum	14234	13565								
22												
23		Mean	11990	11960								
24	Median 11988 11998											
25	SD 692.9 736											
26	S	E of Mean	9.267	49.4								
27												
28	Sample 1 vs Sa	mple 2 Two	-Sample t-T	est								
29												
30	H0: Mean of Sample 1 - Mean of San	nple 2 <= 0										
31			t-Test	Critical								
32	Method	DF	Value	t (0.05)	P-Value							
33	Pooled (Equal Variance)	5810	0.636	1.645	0.262							
34	Welch-Satterthwaite (Unequal Varian	236.8	0.602	1.651	0.274							
35	Pooled SD 694.560	<u> </u>	1	<u>. I</u>	<u>I</u>							
36	Conclusion with Alpha = 0.050											
37	Student t (Pooled) Test: Do Not Reje	ect H0, Cond	clude Sampl	e 1 <= Samp	e 2							
38	Welch-Satterthwaite Test: Do Not R	eject H0, Co	nclude Sam	ple 1 <= San	ple 2							
39												
40												
41	Test of E	quality of Va	ariances									
42												
	Variance of	Sample 1	480066									
43	Variance of	•	541763									
44												
45	Numerator DF Denomin	nator DF	F-Tes	st Value	P-Value							
46		89		129	0.194					-		
47	Conclusion with Alpha = 0.05		1		3.104							
48	Two variances appear to be equal											
49	1 440 variances appear to be equal											
50												

	A B C	D	E	F	G	Н	l	J	K	L
1	t-Test	Sample 1 vs	s Sample 2 C	comparison for	or Uncensore	ed Full Data	Sets withou	t NDs		
2		T								
3	User Selected Options									
4	Date/Time of Computation		8:51:06 AM							
5	From File	Pro_Spence	er.xls							
6	Full Precision	OFF								
7	Confidence Coefficient	95%								
8	Substantial Difference (S)	0.000								
9	Selected Null Hypothesis	Sample 1 M	lean <= Sam	ple 2 Mean (	Form 1)					
10	Alternative Hypothesis	Sample 1 M	lean > the Sa	ample 2 Mea	n					
11										
12										
13	Sample 1 Data: BR-10									
14	Sample 2 Data: BR-11									
15										
16	F	Raw Statistic	:S							
17	<u> </u>		Sample 1	Sample 2						
18	Number of Valid Ob	servations	9253	596						-
19	Number of Distinct Ob		3326	504						
20	Number of Distillet Ob	Minimum	5888	9449						
21		Maximum	15179	12762						
22			11968	10898						
23		Mean								
24		Median	11977	10882						
25		SD	995.5	590.9						
26	S	E of Mean	10.35	24.2						
27										
28	Sample 1 vs Sa	ample 2 Two	-Sample t-Te	est						
29										
30	H0: Mean of Sample 1 - Mean of San	nple 2 <= 0								
31			t-Test	Critical						
32	Method	DF	Value	t (0.05)	P-Value					
33	Pooled (Equal Variance)	9847	25.936	1.645	0.000					
34	Welch-Satterthwaite (Unequal Varian	830.7	40.635	1.647	0.000					
35	Pooled SD 975.843									
36	Conclusion with Alpha = 0.050									
37	Student t (Pooled) Test: Reject H0,		-	-						
38	Welch-Satterthwaite Test: Reject Ho	), Conclude	Sample 1 >	Sample 2						
39										
40										
41	Test of E	Equality of V	ariances							
42										
43	Variance of	f Sample 1	991059							
44	Variance of	f Sample 2	349106							
45			<u> </u>	1	1					
46	Numerator DF Denomi	nator DF	F-Tes	t Value	P-Value					
46		95		839	0.000					
	Conclusion with Alpha = 0.05		<u> </u>							
48	Two variances are not equal									
49										
50										

Date Time of Computation   12/22/2014 8:49:12 AM		A B C_	D	E	F	G	Н	l	J	K	L	
Date   Selected Options   A	1	t-Test	Sample 1 vs	Sample 2 C	Comparison fo	or Uncensore	ed Full Data	Sets withou	t NDs			
A   DatesTime of Computation   12/22/2014 8.49:12 AM	2		T									
Full Precision   OFF	3	·										
Full Precision   OFF	4	<u> </u>										
7 Confidence Coefficient 95% 8 Substantial Difference (S) 0.000 9 Selected Null Hypothesis Sample 1 Mean <= Sample 2 Mean (Form 1) 10 Alternative Hypothesis Sample 1 Mean > the Sample 2 Mean 11 1 12 2	5	From File	Pro_Wildca	t.xls								
Substantial Difference (S)   0.000	6	Full Precision	OFF									
Selected Null Hypothesis   Sample 1 Mean <= Sample 2 Mean	7	Confidence Coefficient	95%									
Selected Null Hypothesis	8	Substantial Difference (S)	0.000									
Alternative Hypothesis Sample 1 Mean > the Sample 2 Mean  Alternative Hypothesis Sample 1 Mean > the Sample 2 Mean  Alternative Hypothesis Sample 1 Mean > the Sample 2 Mean  Alternative Hypothesis Sample 1 Mean > the Sample 2 Mean  Alternative Hypothesis Sample 1 Mean > the Sample 2 Mean  Alternative Hypothesis Sample 1 Mean > the Sample 2 Mean  Alternative Hypothesis Sample 1 Mean > the Sample 2 Mean  Alternative Hypothesis Sample 1 Mean > the Sample 2 Mean  Alternative Hypothesis Sample 1 Mean > the Sample 2 Mean  Alternative Hypothesis Sample 1 Mean > the Sample 2 Mean  Alternative Hypothesis Sample 1 Mean > the Sample 2 Mean  Alternative Hypothesis Sample 1 Mean > the Sample 2 Mean  Alternative Hypothesis Sample 1 Mean > the Sample 2 Mean  Alternative Hypothesis Sample 2 Mean  Alternative Hypothesis Sample 1 Mean > the Sample 1 Mean  Alternative Hypothesis Hy		Selected Null Hypothesis	Sample 1 M	lean <= Sam	nple 2 Mean (	Form 1)						
Sample   Data: BR-12   Sample   Data: BR-13   Sample   Data: BR-14   Sample   Data: BR-15   Sample   Data: BR-15   Sample   Data: BR-16   Sample   Data: BR-17   Data: BR-17   Sample   Data: BR-17   Dat	10	Alternative Hypothesis	Sample 1 M	lean > the Sa	ample 2 Mea	n						
Sample 1 Data: BR-12	11											
	12											
Sample 2 Deta: BR-13		Sample 1 Data: BR-12										
		Sample 2 Data: BR-13										
Raw Statistics   Sample 1   Sample 2		·										
										+	+	
Number of Valid Observations   Sample 1   Sample 2		F	Raw Statistic	 S						+		
Number of Valid Observations   4644   961	17	<u>'</u>			Sample 2					+		
Number of Distinct Observations   2532   793	18	Number of Valid Ob	servations		·					+		
Minimum   6114   9526	19											
Maximum   12050   13180	20	Number of Distilict Ob								1		
Mean   9136   11273	21									1		
Median   9121   11311	22											
Section   Sect	23											
SE of Mean   13.14   20.83	24	<u>.</u>										
Sample 1 vs Sample 2 Two-Sample t-Test	25											
Sample 1 vs Sample 2 Two-Sample t-Test   Sample 1   Sample 1 - Mean of Sample 2 <= 0	26	S	E of Mean	13.14	20.83							
Ho: Mean of Sample 1 - Mean of Sample 2 <= 0	27											
H0: Mean of Sample 1 - Mean of Sample 2 <= 0	28	Sample 1 vs Sa	ample 2 Two	-Sample t-To	est							
10   10   10   10   10   10   10   10	29											
Method   DF	30	H0: Mean of Sample 1 - Mean of San	nple 2 <= 0									
Pooled (Equal Variance)   5603   -70.304   1.645   1.000	31			t-Test	Critical							
Welch-Satterthwaite (Unequal Variar   1815.6	32	Method	DF	Value	t (0.05)	P-Value						
Welch-Satterthwaite (Unequal Variar   1815.6   -86.756   1.646   1.000	33	Pooled (Equal Variance)	5603	-70.304	1.645	1.000						
Pooled SD 857.578		Welch-Satterthwaite (Unequal Varian	1815.6	-86.756	1.646	1.000						
Conclusion with Alpha = 0.050   Student t (Pooled) Test: Do Not Reject H0, Conclude Sample 1 <= Sample 2   Sample 2   Sample 1 <= Sample 2		Pooled SD 857.578	1	<u></u>	<u>. I.</u>	и				1		
Student t (Pooled) Test: Do Not Reject H0, Conclude Sample 1 <= Sample 2		Conclusion with Alpha = 0.050										
Welch-Satterthwaite Test: Do Not Reject H0, Conclude Sample 1 <= Sample 2	37	Student t (Pooled) Test: Do Not Rej	ect H0, Cond	clude Sample	e 1 <= Samp	le 2						
39	38	Welch-Satterthwaite Test: Do Not R	eject H0, Cc	nclude Sam	ple 1 <= San	nple 2				1		
Test of Equality of Variances  12  13	39											
Test of Equality of Variances	40											
12		Test of E	Equality of Va	ariances								
Variance of Sample 1   801263										+		
Variance of Sample 2 417094  Variance of Sample 2 417094  Numerator DF Denominator DF F-Test Value P-Value  46 Numerator DF Denominator DF De		Variance of	f Sample 1	801263						+		
15			-							+	+	
Numerator DF	44									1		
17 4643 960 1.921 0.000	45	Numerator DF Denomin	nator DF	F-Tes	st Value	P-Value				+		
18 Conclusion with Alpha = 0.05  Two variances are not equal	46											
Two variances are not equal	47					3.000				+		
10	40	<u> </u>										
50	49	i wo variances are not equal								-		
	50											

	A B C	D	Е	F	G	Н	l	J	K	L		
1	t-Test	Sample 1 vs	Sample 2 C	Comparison fo	or Uncensore	ed Full Data	Sets withou	t NDs				
2												
3	User Selected Options											
4	Date/Time of Computation	12/22/2014										
5	From File	Pro_blake.x	ils									
6	Full Precision	OFF										
7	Confidence Coefficient	95%										
8	Substantial Difference (S)	0.000										
9	Selected Null Hypothesis	Sample 1 M	lean <= Sam	ple 2 Mean (	Form 1)							
10	Alternative Hypothesis	Sample 1 M	ean > the S	ample 2 Mea	n							
11												
12												
13	Sample 1 Data: BR-15											
14	Sample 2 Data: BR-14											
	<u> </u>											
15										+		
16	F	Raw Statistic	S									
17			Sample 1	Sample 2						+		
18	Number of Valid Ob	servations	5395	1359						+		
19	Number of Distinct Ob		2811	1151								
20	Number of Distilict Ob	Minimum	2032	7695								
21		Maximum	14053	14509								
22												
23		Mean	10759	10873								
24	Median         10861         10816           SD         1053         1128											
25												
26	S	E of Mean	14.33	30.59								
27												
28	Sample 1 vs Sa	imple 2 Two	-Sample t-To	est								
29												
30	H0: Mean of Sample 1 - Mean of San	nple 2 <= 0										
31			t-Test	Critical								
32	Method	DF	Value	t (0.05)	P-Value							
33	Pooled (Equal Variance)	6752	-3.525	1.645	1.000							
34	Welch-Satterthwaite (Unequal Varian	1995.4	-3.383	1.646	1.000							
35	Pooled SD 1068.235	<u> </u>	1	П	<u>I</u>							
36	Conclusion with Alpha = 0.050											
37	Student t (Pooled) Test: Do Not Reje	ect H0, Cond	clude Sample	e 1 <= Sampl	e 2							
38	Welch-Satterthwaite Test: Do Not R	eject H0, Co	nclude Sam	ple 1 <= Sam	ple 2							
39												
40												
41	Test of E	quality of Va	ariances									
42		-								+		
	Variance of	Sample 1	1108213							+		
43	Variance of		1271858							+		
44												
45	Numerator DF Denomin	nator DF	F-Tes	t Value	P-Value							
46	1358 53			148	0.001							
47	Conclusion with Alpha = 0.05	- •	'.		3.001					+		
48	Two variances are not equal									+		
49	1 440 Valiances are not equal											
50												

Date Flience of Computation   12/22/2014 8:55:29 AM   From File   Sweeds.xls   Fruit Procession   OFF		A B C_	D	E	F	G	Н	l I	J	K	L		
Date Fine of Computation   \$222/2014 8:55:29 AM   From File   Pro. Swedo.xis   Full Procision   OFF	1	t-Test	Sample 1 vs	Sample 2 C	Comparison fo	or Uncensore	ed Full Dat	a Sets withou	ut NDs				
Date/Time of Computation   20/22/2014 8:96 29 AM   From File   Pro_Swede.xis   Pro_Swede.xis   Pro_Swede.xis   Studential Difference (S)   95%	2		T										
From File   Pro_Swede xis   Full Precision   OFF	3	·											
Full Precision OFF Confidence Coefficient   55% Substantal Difference (2)   0.000 Selected Null Hypothesis   Sample 1 Mean ≈ Sample 2 Mean (Form 1) Alternative Hypothesis   Sample 1 Mean ≈ Sample 2 Mean    Sample 1 Data: BR-17 Sample 2 Data: BR-16    Raw Statistics   Sample 1   Sample 2	4	•	12/22/2014	8:56:29 AM									
Substantial Difference (S)   0.000	5	From File	Pro_Swede	.xls									
Substantial Difference (S)   0.000   Selected Null Hypothesis   Sample 1 Mean <= Sample 2 Mean (Form 1)	6	Full Precision	OFF										
Salected Null Hypothesis   Sample 1 Maan <= Sample 2 Mean	7	Confidence Coefficient	95%										
Selected Null Hypothesis   Sample 1 Mean < Sample 2 Mean   Form 1)	8	Substantial Difference (S)	0.000										
Alternative Hypothesis   Sample 1 Mean > the Sample 2 Mean	9	Selected Null Hypothesis	Sample 1 M	lean <= Sam	nple 2 Mean (	Form 1)							
Sample 1 Data: BR-17	10	Alternative Hypothesis	Sample 1 M	lean > the S	ample 2 Mea	n							
Sample 1 Deta: BR-17	11												
Sample 1 Data: BR-17	12												
Sample 1 Data: BR-16   Sample 1   Sample 2		Sample 1 Data: BR-17											
Raw Statistics   Sample 1   Sample 2		Sample 2 Data: BR-16											
Raw Statistics   Sample 1   Sample 2   Sample 3   Sample 4   Sample 2   Sample 4   Sample 2   Sample 5   Sample 2   Sample 5   Sample 2   Sample 6   Sample 1   Sample 2   Sample 6   Sample 6   Sample 7   Sample 8   Sample 8   Sample 8   Sample 8   Sample 9   Sam		·											
Raw Statistics   Sample 1   Sample 2	15												
Sample 1   Sample 2	16	F	Raw Statistic	S									
Number of Valid Observations   4388   592	17	·			Sample 2								
Number of Distinct Observations   2285   498	18	Number of Valid Ob	servations		·								
Minimum   9100   9470	19												
Maximum   13870   12360	20	Number of Distilict OD											
Median   11555   10614	21												
Median   11586   10587   SD   761   461.3   SE of Mean   11.49   18.96   Sample 1 vs Sample 2 Two-Sample t-Test   Sample 1 vs Sample 2 Two-Sample t-Test   H0: Mean of Sample 1 - Mean of Sample 2 <= 0   I-Test   Critical   Method   DF   Value   I (0.05)   P-Value   Pooled (Equal Variance)   4978   29.364   1.645   0.000   Pooled (Equal Variance)   4978   29.364   1.645   0.000   Pooled SD 731.336   Conclusion with Alpha = 0.050   Student I (Pooled) Test: Reject H0, Conclude Sample 1 > Sample 2   Welch-Satterthwaite Test: Reject H0, Conclude Sample 1 > Sample 2   Welch-Satterthwaite Test: Reject H0, Conclude Sample 1 > Sample 2   Welch-Satterthwaite Test: Reject H0, Conclude Sample 1 > Sample 2   Welch-Satterthwaite Test: Reject H0, Conclude Sample 1 > Sample 2   Welch-Satterthwaite Test: Reject H0, Conclude Sample 1 > Sample 2   Welch-Satterthwaite Test: Reject H0, Conclude Sample 1 > Sample 2   Welch-Satterthwaite Test: Reject H0, Conclude Sample 1 > Sample 2   Welch-Satterthwaite Test: Reject H0, Conclude Sample 1 > Sample 2   Welch-Satterthwaite Test: Reject H0, Conclude Sample 1 > Sample 2   Welch-Satterthwaite Test: Reject H0, Conclude Sample 1 > Sample 2   Welch-Satterthwaite Test: Reject H0, Conclude Sample 1 > Sample 2   Welch-Satterthwaite Test: Reject H0, Conclude Sample 1 > Sample 2   Welch-Satterthwaite Test: Reject H0, Conclude Sample 1 > Sample 2   Welch-Satterthwaite Test: Reject H0, Conclude Sample 1 > Sample 2   Welch-Satterthwaite Test: Reject H0, Conclude Sample 1 > Sample 2   Welch-Satterthwaite Test: Reject H0, Conclude Sample 1 > Sample 2   Welch-Satterthwaite Test: Reject H0, Conclude Sample 1 > Sample 2   Welch-Satterthwaite Test: Reject H0, Conclude Sample 1 > Sample 2   Welch-Satterthwaite Test: Reject H0, Conclude Sample 1 > Sample 2   Welch-Satterthwaite Test: Reject H0, Conclude Sample 1 > Sample 2   Welch-Satterthwaite Test: Reject H0, Conclude Sample 1 > Sample 2   Welch-Satterthwaite Test: Reject H0, Conclude Sample 1 > Sample 2   Welch-Satterthwaite Test: Reject H0, Conclude Sa	22												
SD   761   461.3	23												
Sample 1 vs Sample 2 Two-Sample t-Test	24												
Sample 1 vs Sample 2 Two-Sample t-Test	25												
H0: Mean of Sample 1 - Mean of Sample 2 <= 0	26	S	E of Mean	11.49	18.96								
H0: Mean of Sample 1 - Mean of Sample 2 <= 0    Method	27												
H0: Mean of Sample 1 - Mean of Sample 2 <= 0	28	Sample 1 vs Sa	ample 2 Two	-Sample t-To	est								
Nethod	29												
Method	30	H0: Mean of Sample 1 - Mean of San	nple 2 <= 0										
Pooled (Equal Variance)	31			t-Test	Critical								
Welch-Satterthwaite (Unequal Variar   1084.9   42.445   1.646   0.000	32	Method	DF	Value	t (0.05)	P-Value							
Welch-Satterthwaite (Unequal Variar   1084.9   42.445   1.646   0.000	33	Pooled (Equal Variance)	4978	29.364	1.645	0.000							
Pooled SD 731.836		Welch-Satterthwaite (Unequal Varian	1084.9	42.445	1.646	0.000							
Conclusion with Alpha = 0.050 Student t (Pooled) Test: Reject H0, Conclude Sample 1 > Sample 2 Welch-Satterthwaite Test: Reject H0, Conclude Sample 1 > Sample 2  Test of Equality of Variances  Variance of Sample 1   579070		Pooled SD 731.836	1	<u></u>	<u>. I.</u>	1							
Student t (Pooled) Test: Reject H0, Conclude Sample 1 > Sample 2		Conclusion with Alpha = 0.050											
Welch-Satterthwaite Test: Reject H0, Conclude Sample 1 > Sample 2	37	Student t (Pooled) Test: Reject H0,	Conclude Sa	ample 1 > Sa	ample 2								
Test of Equality of Variances	38	Welch-Satterthwaite Test: Reject H0	0, Conclude	Sample 1 >	Sample 2								
Test of Equality of Variances  Variance of Sample 1   579070	39												
Test of Equality of Variances	40												
Variance of Sample 1 579070  Variance of Sample 2 212790  Numerator DF Denominator DF F-Test Value P-Value  4387 591 2.721 0.000  Conclusion with Alpha = 0.05  Two variances are not equal	41	Test of E	Equality of Va	ariances									
Variance of Sample 1   579070	42												
Variance of Sample 2 212790  Numerator DF Denominator DF F-Test Value P-Value  4387 591 2.721 0.000  Conclusion with Alpha = 0.05  Two variances are not equal		Variance of	f Sample 1	579070									
Numerator DF Denominator DF F-Test Value P-Value  4387 591 2.721 0.000  Conclusion with Alpha = 0.05  Two variances are not equal	43		-										
Numerator DF	44			_									
4387 591 2.721 0.000  Conclusion with Alpha = 0.05  Two variances are not equal	45	Numerator DF Denomin	nator DF	F-Tes	st Value	P-Value							
Conclusion with Alpha = 0.05  Two variances are not equal	46												
Two variances are not equal	47		- •	2.		3.000							
	40	<u> </u>											
	49	i wo variances are not equal											
	50												

	A B C_	D	E	F	G	Н	l	J	K	L	
1	t-Test	Sample 1 vs	s Sample 2 C	Comparison fo	or Uncensore	ed Full Data	Sets withou	t NDs			
2											
3	User Selected Options										
4	Date/Time of Computation	12/22/2014	8:58:12 AM								
5	From File	Pro_cripper	n.xls								
6	Full Precision	OFF									
7	Confidence Coefficient	95%									
8	Substantial Difference (S)	0.000									
9	Selected Null Hypothesis	Sample 1 M	lean <= Sam	nple 2 Mean (	Form 1)						
10	Alternative Hypothesis	Sample 1 M	lean > the S	ample 2 Mea	n						
11											
12											
	Sample 1 Data: BR-18										
13	Sample 2 Data: BR-19										
14											
15											
16		Raw Statistic	•					1			
17	<b>r</b>	vavv StatistiC	Sample 1	Sample 2				1			
18	N f.V1: 1 O.	oonistis	· ·	·				1			
19	Number of Valid Ob		5231	727				1			
20	Number of Distinct Ob		2427	614							
21		Minimum	6821	6066							
22		Maximum	16990	9949							
23		Mean	9510	7524							
24		Median	9395	7479							
25	CD 020.0 615.6										
26	S	E of Mean	12.73	22.83							
27				-							
28	Sample 1 vs Sa	ample 2 Two	-Sample t-To	est							
29											
	H0: Mean of Sample 1 - Mean of San	nple 2 <= 0									
31			t-Test	Critical							
	Method	DF	Value	t (0.05)	P-Value						
	Pooled (Equal Variance)	5956	56.411	1.645	0.000						
55	Welch-Satterthwaite (Unequal Varian		75.962	1.646	0.000						
34	Pooled SD 889.323							1			
აა	Conclusion with Alpha = 0.050							+			
30	Student t (Pooled) Test: Reject H0,	Conclude Sa	ample 1 > Sa	ample 2				+			
37	Welch-Satterthwaite Test: Reject H0		•	•				+		+	
38	TOTAL CAROTHIWARD TEST. NEJECT TR	o, conclude	Cumpio 17	Cumpic Z				1			
39								1			
40	T-21-15	Sauglika -417	orionasa					1			
41	l est of E	Equality of Va	апапсе\$					1			
42	.,,	10 1 1	0.40005		I			1			
43	Variance of	-	848085								
44	Variance of	r Sample 2	378912								
45	1				T						
46		nator DF		st Value	P-Value						
47		26	2.	238	0.000						
48	Conclusion with Alpha = 0.05										
49	Two variances are not equal										
50											

13		A B C	D	E	F	G	Н	l	J	K	L
A   Date   Selected Options   Selected Notions   Sample 1 Mean > the Sample 2 Mean (Form 1)	1	t-Test Sa	ample 1 vs	Sample 2 C	comparison for	or Uncensore	ed Full Data	Sets without	NDs		
	2										
From File   Clark_rd_b.xis	3										
Full Precision   OFF	4	•									
Confidence Coefficient   95%	5			xls							
Substantial Difference (S)   0.000   Selected Null Hypothesis   Sample 1 Mean <= Sample 2 Mean (Form 1)	6										
Selected Null Hypothesis   Sample 1 Mean <= Sample 2 Mean (Form 1)	7										
Alternative Hypothesis   Sample 1 Mean > the Sample 2 Mean	8	` '									
Sample 1 Data: BR-20	9	• •	•		·						
Sample 1 Data: BR-20	10	Alternative Hypothesis Sa	ample 1 M	ean > the Sa	ample 2 Mea	n					
Sample 1 Data: BR-20	11										
Sample 2 Data: BR-21	12										
	13	•									
18	14	Sample 2 Data: BR-21									
18	15										
	16										
Number of Valid Observations   3944   877	17	Ra	w Statistic:	s							
Number of Valid Observations   3944   877	18			Sample 1	Sample 2						
Number of Distinct Observations   2708   769	19	Number of Valid Obse	ervations	3944	877						
Minimum   5404   6232	20	Number of Distinct Obse	ervations	2708	769						
Maximum   13511   12463	21	N	/linimum	5404	6232						
Mean   8825   8611	22	M	laximum	13511	12463						
Median   8747   8560	23		Mean	8825							
SD   1317   898.8			Median	8747							
SE of Mean   20.97   30.35			SD	1317	898.8						
Sample 1 vs Sample 2 Two-Sample t-Test   Sample 1 Sample 1 Sample 2 Sample 3 Sampl		SE	of Mean	20.97							
Sample 1 vs Sample 2 Two-Sample t-Test   Sample 2 Sample 1 - Mean of Sample 1 - Mean of Sample 2 <= 0											
Ho: Mean of Sample 1 - Mean of Sample 2 <= 0		Sample 1 vs Sam	ple 2 Two	-Sample t-Te	est						
Ho: Mean of Sample 1 - Mean of Sample 2 <= 0											
1		H0: Mean of Sample 1 - Mean of Samp	le 2 <= 0								
Method   DF				t-Test	Critical						
Section   Poled (Equal Variance)   4819   4.578   1.645   0.000		Method	DF	Value	t (0.05)	P-Value					
Welch-Satterthwaite (Unequal Variar   1820.2   5.798   1.646   0.000		Pooled (Equal Variance)	4819	4.578		0.000					
33   Pooled SD 1251.494	33										
Conclusion with Alpha = 0.050   Student t (Pooled) Test: Reject H0, Conclude Sample 1 > Sample 2   Sample 2	34					<u> </u>					
Student t (Pooled) Test: Reject H0, Conclude Sample 1 > Sample 2  38 Welch-Satterthwaite Test: Reject H0, Conclude Sample 1 > Sample 2  39 40	აა										
Welch-Satterthwaite Test: Reject H0, Conclude Sample 1 > Sample 2	30	·	onclude Sa	ample 1 > Sa	mple 2						
39   40   Test of Equality of Variances   41   Test of Equality of Variances   42   43   Variance of Sample 1   1734740   44   Variance of Sample 2   807781   45   46   Numerator DF   Denominator DF   F-Test Value   P-Value   47   3943   876   2.148   0.000   48   Conclusion with Alpha = 0.05   49   Two variances are not equal				-	-						
40				1							
Test of Equality of Variances											
42   43   Variance of Sample 1   1734740     44   Variance of Sample 2   807781     45     46   Numerator DF   Denominator DF   F-Test Value   P-Value   47   3943   876   2.148   0.000     48   Conclusion with Alpha = 0.05     49   Two variances are not equal     1734740		Test of Fa	uality of Va	ariances							
43       Variance of Sample 1       1734740       173474	41	100:01 Eq									
44	42	Variance of S	ample 1	1734740							
45   46   Numerator DF   Denominator DF   F-Test Value   P-Value   47   3943   876   2.148   0.000   48   Conclusion with Alpha = 0.05   Two variances are not equal	43		-		1						
46         Numerator DF         Denominator DF         F-Test Value         P-Value           47         3943         876         2.148         0.000           48         Conclusion with Alpha = 0.05         Two variances are not equal	44	variance of S	ampic Z	337701	1						
47 3943 876 2.148 0.000 48 Conclusion with Alpha = 0.05 49 Two variances are not equal	45	Numerator DF Denomina	tor DF	F-Too	t Value	P_\/alue					
47 Conclusion with Alpha = 0.05 49 Two variances are not equal	46										
49 Two variances are not equal	47			۷.	140	0.000					
45	40										
50	43	i wo variances are not equal									
	50										

	A B C	D	E	F	G	Н	l	J	K	L
1	t-Test	Sample 1 vs	Sample 2 C	omparison to	or Uncensore	ed Full Data S	ets without	NDs		
2		,								
3	User Selected Options									
4	Date/Time of Computation		9:21:43 AM							
5	From File	Mckinney_c	campbell_c.x	ls						
6	Full Precision	OFF								
7	Confidence Coefficient	95%								
8	Substantial Difference (S)	0.000								
9	Selected Null Hypothesis	Sample 1 M	lean <= Sam	ple 2 Mean (	Form 1)					
10	Alternative Hypothesis	Sample 1 M	lean > the Sa	ample 2 Meai	n					
11		L								
12										
13	Sample 1 Data: BR-23									
14	Sample 2 Data: BR-22									
15							<del></del>			
16	F	Raw Statistic	 :S							
17			Sample 1	Sample 2					-	+
18	Number of Valid Ob	servations	3375	704				-	<del>                                     </del>	
19	Number of Distinct Ob		2310	665			<u> </u>			
20	Number of Distilict Ob	Minimum	5349	5947					-	
21			13217	13126						
22		Maximum								
23		Mean	8590	9317 9019						
24		Median	8498							
25		SD	1182							
26	S	E of Mean	20.34							
27							<u></u>			
28	Sample 1 vs Sa	ample 2 Two	-Sample t-Te	est						
29							<u> </u>			
30	H0: Mean of Sample 1 - Mean of San	nple 2 <= 0					i			
31			t-Test	Critical			1			
32	Method	DF	Value	t (0.05)	P-Value					
33	Pooled (Equal Variance)	4077	-13.780	1.645	1.000					
34	Welch-Satterthwaite (Unequal Varian	860.2	-11.140	1.647	1.000					
35	Pooled SD 1274.111	L	<u> </u>	<u>п</u>						
36	Conclusion with Alpha = 0.050									
37	Student t (Pooled) Test: Do Not Reje	ect H0, Cond	clude Sample	e 1 <= Sampl	e 2					
38	Welch-Satterthwaite Test: Do Not R	eject H0, Co	nclude Sam	ple 1 <= Sarr	iple 2					
39										
40									+	
41	Test of E	Equality of Va	ariances							+
41		· •								
	Variance of	f Sample 1	1396851							
43	Variance of	-	2710464						+	
44			<u> </u>		L					
45	Numerator DF Denomin	nator DF	F-Tes	t Value	P-Value				-	+
46		374		940	0.000			-	-	
47	Conclusion with Alpha = 0.05		1					-	<del>                                     </del>	
48	Two variances are not equal								1	
49	i wo variances are not equal								<del> </del>	
50										

	A B C	D	E	F	G	Н	l	J	K	L
1	t-Test	Sample 1 vs	Sample 2 C	Comparison fo	or Uncensore	ed Full Data	Sets without	NDs		
2		I								
3	User Selected Options									
4	Date/Time of Computation		9:23:38 AM							
5		Mckinney_c	ampbell_c.x	ds						
6	Full Precision	OFF								
7	Confidence Coefficient	95%								
8	Substantial Difference (S)	0.000								
9	Selected Null Hypothesis	Sample 1 M	lean <= Sam	ple 2 Mean (	Form 1)					
10	Alternative Hypothesis	Sample 1 M	lean > the Sa	ample 2 Mea	n					
11										
12										
	Sample 1 Data: BR-24									
	Sample 2 Data: BR-22									
15										
16										
17	F	Raw Statistic	S							
18			Sample 1	Sample 2						
	Number of Valid Ob	servations	3375	704						
19	Number of Distinct Ob		2310	665						
20		Minimum	5349	5947						
21		Maximum	13217	13126						
22		Mean	8590	9317						
23		Median	8498	9019						
24		SD	1182	1646						
25		E of Mean	20.34	62.05						
26	3	or mean	20.34	02.05						
27	Ormale 4 vs Or	I. O.T	0							
28	Sample 1 vs Sa	ampie ∠ i wo	-Sample t- i e	est						
29										
30	H0: Mean of Sample 1 - Mean of San	nple 2 <= 0			T					
31			t-Test	Critical						
SZ	Method	DF	Value	t (0.05)	P-Value					
JJ	Pooled (Equal Variance)	4077	-13.780	1.645	1.000					
34	Welch-Satterthwaite (Unequal Variar	860.2	-11.140	1.647	1.000					
აა	Pooled SD 1274.111									
36	Conclusion with Alpha = 0.050									
37	Student t (Pooled) Test: Do Not Rej		-	-						
38	Welch-Satterthwaite Test: Do Not R	eject H0, Co	nclude Sam	ple 1 <= Sam	ple 2					
39										
40										
41	Test of E	Equality of Va	ariances							
42										
43	Variance of	f Sample 1	1396851							
44	Variance of	f Sample 2	2710464							
45			II.	1	II.					
46	Numerator DF Denomi	nator DF	F-Tes	t Value	P-Value					
47	703 33	374	1.9	940	0.000					
	Conclusion with Alpha = 0.05		<u> </u>		<u> </u>					
49	Two variances are not equal									
50	·									
υU										

	A B C_	D	E	F	G	H		J	K	L
1	t-Test	Sample 1 vs	Sample 2 C	comparison fo	or Uncensore	ed Full Data S	ets without	NDs		
2		,								
3	User Selected Options									
4	Date/Time of Computation	12/22/2014								
5	From File	Roberts_Hil	l_rd_b.xls							
6	Full Precision	OFF								
7	Confidence Coefficient	95%								
8	Substantial Difference (S)	0.000								
9	Selected Null Hypothesis	Sample 1 M	lean <= Sam	nple 2 Mean (	Form 1)					
10	Alternative Hypothesis	Sample 1 M	lean > the Sa	ample 2 Meai	n					
11										
12										
	Sample 1 Data: BR-25									
	Sample 2 Data: BR-26									
15										
16	-					+		+	+	
17	F	Raw Statistic	S					+		
18			Sample 1	Sample 2				+		
19	Number of Valid Ob	servations	1984	343						
	Number of Distinct Ob	servations	1608	328						
20		Minimum	5069	5882						
21		Maximum	13248	11208						
22		Mean	7781	8226						
23		Median	7436	8254						
24		SD	1487	892.8						
25		E of Mean	33.38	48.21						
26		L OI Weall	33.36	40.21			<del> </del>			
27	Sample 1 vs Sa	ample 2 Two	Sample t T				<del> </del>			
28	Sample I vs Sa	illible 2 I wo	-Sample t- re				<del> </del>			
29	H0: Mean of Sample 1 - Mean of San						<del> </del>			
30	no: Mean of Sample 1 - Mean of San	npie 2 <= 0	4 T4	0-:4:1	1		<u> </u>			
31		5.5	t-Test	Critical	5.77		<u> </u>			
SZ	Method	DF	Value	t (0.05)	P-Value		<u> </u>			
33	Pooled (Equal Variance)	2325	-5.375	1.646	1.000		<u> </u>			
34	Welch-Satterthwaite (Unequal Variar	719.9	-7.585	1.647	1.000					
33	Pooled SD 1415.014									
36	Conclusion with Alpha = 0.050						<u> </u>			
37	Student t (Pooled) Test: Do Not Rej		-	-						
38	Welch-Satterthwaite Test: Do Not R	eject H0, Co	nclude Sam	ple 1 <= Sam	ıple 2					
39										
40										
41	Test of E	Equality of Va	ariances				<u></u>			
42							<u> </u>			
43	Variance of	-	2210101				<u></u>			
44	Variance of	f Sample 2	797172							
45		-	•	-						
46	Numerator DF Denomi	nator DF	F-Tes	st Value	P-Value					
47	1983 34	42	2.	772	0.000					
	Conclusion with Alpha = 0.05		1		1					
49	Two variances are not equal									
50		-	-	-	-			+	+	

	A B C	D	E	F	G	Н	l l	J	K	L
1	t-Test	Sample 1 vs	Sample 2 C	Comparison fo	or Uncensore	ed Full Data	Sets withou	t NDs		
2		T								
3	User Selected Options									
4	Date/Time of Computation	12/22/2014	9:27:43 AM							
5	From File	Piper_rd_b.	xls							
6	Full Precision	OFF								
7	Confidence Coefficient	95%								
8	Substantial Difference (S)	0.000								
9	Selected Null Hypothesis	Sample 1 M	lean <= Sam	nple 2 Mean (	Form 1)					
10	Alternative Hypothesis	Sample 1 M	lean > the Sa	ample 2 Mea	n					
11										
12										
	Sample 1 Data: BR-28									
	Sample 2 Data: BR-27									
15										
16										
17	F	Raw Statistic	s							
18			Sample 1	Sample 2						
	Number of Valid Ob	servations	3376	579						
19	Number of Distinct Ob		2328	545						
20		Minimum	4597	5708						
21		Maximum	12475	11333						
22		Mean	7785	8267						
23		Median	7678	8281						
24			1234	955.5						
25		SD								
26	5	E of Mean	21.24	39.71						
27			<u> </u>							
28	Sample 1 vs Sa	ample 2 I wo	-Sample t-10	est						
29										
30	H0: Mean of Sample 1 - Mean of San	nple 2 <= 0			T					
31			t-Test	Critical						
SZ	Method	DF	Value	t (0.05)	P-Value					
55	Pooled (Equal Variance)	3953	-8.947	1.645	1.000					
34	Welch-Satterthwaite (Unequal Variar	942.9	-10.702	1.646	1.000					
ათ	Pooled SD 1197.479									
36	Conclusion with Alpha = 0.050									
37	Student t (Pooled) Test: Do Not Rej		-	-						
38	Welch-Satterthwaite Test: Do Not R	eject H0, Co	nclude Sam	ple 1 <= San	ple 2					
39										
40										
41	Test of E	Equality of Va	ariances							
42										
43	Variance of	f Sample 1	1523192							
44	Variance of	f Sample 2	912904							
45			l .	I	I .					
46	Numerator DF Denomi	nator DF	F-Tes	t Value	P-Value					
47	3375 5	78	1.	669	0.000					
	Conclusion with Alpha = 0.05		1		<u> </u>					
48	Two variances are not equal									
50	·									
υU										

	A B C_	D	E	F	G	Н	l	J	K	L
1	t-Test	Sample 1 vs	s Sample 2 C	Comparison fo	or Uncensore	ed Full Data	a Sets withou	it NDs		
2		T								
3	User Selected Options									
4	Date/Time of Computation	12/22/2014	9:29:04 AM							
5	From File	Etzel_rd_b.:	xls							
6	Full Precision	OFF								
7	Confidence Coefficient	95%								
8	Substantial Difference (S)	0.000								
9	Selected Null Hypothesis	Sample 1 M	lean <= Sam	nple 2 Mean (	Form 1)					
10	Alternative Hypothesis	Sample 1 M	lean > the S	ample 2 Mea	n					
11										
12										
	Sample 1 Data: BR-29									
13	Sample 2 Data: BR-30									
14										
15										
16		Raw Statistic	•							
17	<b>r</b>	vavv StatistiC	Sample 1	Sample 2						
18	N f.V1: 1 O.	oonistis								
19	Number of Valid Ob		2556	759						
20	Number of Distinct Ob		2103	655						
21		Minimum	5309	5687						
22		Maximum	14465	10360						
23		Mean	9490	7925						
24		Median	9041	7965						
25		SD	1924	703.5						
26	S	E of Mean	38.05	25.54						
27				1						
28	Sample 1 vs Sa	ample 2 Two	-Sample t-To	est						
29										
	H0: Mean of Sample 1 - Mean of San	nple 2 <= 0								
		-	t-Test	Critical						
31	Method	DF	Value	t (0.05)	P-Value					
32	Pooled (Equal Variance)	3313	21.984	1.645	0.000					
55	Welch-Satterthwaite (Unequal Varian		34.159	1.645	0.000					
34	Pooled SD 1722.442	102.1	100	1.0 10	3.000					+
33	Conclusion with Alpha = 0.050									
30	Student t (Pooled) Test: Reject H0,	Concludo Sa	amnla 1 > Sa	amnle 2						
37	Welch-Satterthwaite Test: Reject H0		-							
38	vveicii-Sattertriwaite Test: Reject Ht	o, conclude	Sample 1 >	Jampie Z						
39										
40										
41	Test of E	Equality of Va	ariances							
42			T-		1					
43	Variance of	-	3700154							
44	Variance of	f Sample 2	494907							
45		-	-		-					
46	Numerator DF Denomin	nator DF	F-Tes	st Value	P-Value					
47	2555 75	58	7.	476	0.000					
	Conclusion with Alpha = 0.05		1		Ш					
49	Two variances are not equal									
50										+ -
JU						<u> </u>		1	1	

	A B C	D	Е	F	G	Н		J	K	L
1	t-Test	Sample 1 vs	Sample 2 C	Comparison fo	or Uncensore	ed Full Data	Sets withou	t NDs		
2		Ī								
3	User Selected Options									
4	Date/Time of Computation	12/22/2014	9:39:03 AM							
5	From File	Allegheny_e	e.xls							
6	Full Precision	OFF								
7	Confidence Coefficient	95%								
8	Substantial Difference (S)	0.000								
9	Selected Null Hypothesis	Sample 1 M	lean <= Sam	ple 2 Mean (	Form 1)					
10	Alternative Hypothesis	Sample 1 M	ean > the S	ample 2 Mea	n					
11										
12										
13	Sample 1 Data: BR-31									
14	Sample 2 Data: BR-32									
	·									
15										
16	F	Raw Statistic	S							
17	·		Sample 1	Sample 2						
18	Number of Valid Ob	servations	7245	1958						
19	Number of Distinct Ob		3605	1541						
20	Number of Distinct Ob	Minimum	6200	6527						
21		Maximum	14415	14117						
22										
23		Mean	9801	10093						
24		Median	9744	10057						
25		SD	1172	1118						
26	S	E of Mean	13.77	25.28						
27										
28	Sample 1 vs Sa	ample 2 Two	-Sample t-To	est						
29										
30	H0: Mean of Sample 1 - Mean of San	nple 2 <= 0								
31			t-Test	Critical						
32	Method	DF	Value	t (0.05)	P-Value					
33	Pooled (Equal Variance)	9201	-9.890	1.645	1.000					
34	Welch-Satterthwaite (Unequal Varian	3215.3	-10.161	1.645	1.000					
35	Pooled SD 1161.143									
36	Conclusion with Alpha = 0.050									
37	Student t (Pooled) Test: Do Not Rej	ect H0, Cond	clude Sample	e 1 <= Sampl	e 2					
38	Welch-Satterthwaite Test: Do Not R	eject H0, Co	nclude Sam	ple 1 <= Sam	ple 2					
39										
40										
41	Test of E	Equality of Va	ariances							
42										
43	Variance of	f Sample 1	1374541							
	Variance of	•	1250949							
44 45		•	<u> </u>							
45	Numerator DF Denomin	nator DF	F-Tes	t Value	P-Value					
46		57		099	0.010					
47	Conclusion with Alpha = 0.05									
48	Two variances are not equal									
49	variances are not equal									
50										

	A B C	D	E	F	G	Н	l	J	K	L
1	t-Test	Sample 1 vs	s Sample 2 C	Comparison fo	or Uncensore	ed Full Data	Sets withou	t NDs		
2		T								
3	User Selected Options									
4	Date/Time of Computation		9:39:57 AM							
5		Allegheny_6	e.xls							
6		OFF								
7	Confidence Coefficient	95%								
8	Substantial Difference (S)	0.000								
9	Selected Null Hypothesis	Sample 1 M	lean <= Sarr	nple 2 Mean (	Form 1)					
10	Alternative Hypothesis	Sample 1 M	lean > the S	ample 2 Mea	n					
11		1								
12										
13	Sample 1 Data: BR-33									
	Sample 2 Data: BR-32									
15										
16										
17	F	Raw Statistic	s							
18			Sample 1	Sample 2						
19	Number of Valid Ob	servations	2603	1958					1	
20	Number of Distinct Ob	servations	1587	1541						
21		Minimum	6030	6527						
22		Maximum	10975	14117					+	
		Mean	8406	10093						
23		Median	8442	10057						
24		SD	658.4	1118						
25	S	E of Mean	12.91	25.28						
26			12.01							
27	Sample 1 vs Sa	ample 2 Two	-Sample t-To	est						
28										
29	H0: Mean of Sample 1 - Mean of San	nnle 2 <= 0								
30			t-Test	Critical						
31	Method	DF	Value	t (0.05)	P-Value					
32	Pooled (Equal Variance)	4559	-63.691	1.645	1.000					
33	Welch-Satterthwaite (Unequal Varian		-59.459	1.645	1.000					
34	Pooled SD 885.681		30.700	1.010					1	
აა	Conclusion with Alpha = 0.050								+	
30	Student t (Pooled) Test: Do Not Rej	ect HO Cond	dude Sample	e 1 <= Samp	le 2				+	
37	Welch-Satterthwaite Test: Do Not R		•	-						
38	WOOD FOR THE PROPERTY OF THE P	.cjeci i 10, C0	moluue Salli	ihie i >= oqii	ihie 7				1	
39									1	
40	T* - 4 F	Equality of V	orionasa						1	
41	l est of E	Equality of Va	anances						1	
42	\	Committee	122550	1					1	
43	Variance of	-	433556						1	
44	Variance of	sample 2	1250949							
45	N DE D	BE		+ \ / -	D.V.				1	
46		nator DF		st Value	P-Value					
47		502	2.	885	0.000				1	
48	Conclusion with Alpha = 0.05									
49	Two variances are not equal								1	
50										

	A B C	D	E	F	G	Н	l l	J	K	L
1	t-Test	Sample 1 vs	s Sample 2 C	Comparison fo	or Uncensore	ed Full Data	Sets withou	t NDs		
2		T								
3	User Selected Options									
4	Date/Time of Computation	12/22/2014	9:40:55 AM							
5	From File	Allegheny_e	e.xls							
6	Full Precision	OFF								
7	Confidence Coefficient	95%								
8	Substantial Difference (S)	0.000								
9	Selected Null Hypothesis	Sample 1 M	lean <= Sam	nple 2 Mean (	Form 1)					
	Alternative Hypothesis	Sample 1 M	lean > the S	ample 2 Mea	n ·					
10	,,	'								
11										
12	Sample 1 Data: BR-34									
13	Sample 2 Data: BR-32									
14	Sample 2 Data. BN-32									
15										
16										
17	F	Raw Statistic		1-						
18			Sample 1	Sample 2						
19	Number of Valid Ob	servations	3347	1958						
20	Number of Distinct Ob	servations	1991	1541						
21		Minimum	5340	6527						
22		Maximum	11448	14117						
23		Mean	8211	10093						
		Median	8276	10057						-
24		SD	790.3	1118						
25	S	E of Mean	13.66	25.28						
26		- Of Wicari	10.00	20.20						
27	Sample 1 vs Sa	mple 2 Two	Comple + T	not						
28	Sample 1 vs Sa	ample 2 1 WO	-Sample t-10	ะงเ						
29	110.14									
30	H0: Mean of Sample 1 - Mean of San	npie 2 <= 0	T		T					
31			t-Test	Critical						
SZ	Method	DF	Value	t (0.05)	P-Value					
55	Pooled (Equal Variance)	5303	-71.518	1.645	1.000					
34	Welch-Satterthwaite (Unequal Variar	3112.0	-65.515	1.645	1.000					
35	Pooled SD 925.080									
	Conclusion with Alpha = 0.050									
37	Student t (Pooled) Test: Do Not Rej	ect H0, Cond	clude Sample	e 1 <= Samp	le 2					
38	Welch-Satterthwaite Test: Do Not R	eject H0, Co	nclude Sam	ple 1 <= San	ple 2					
39										
40										
	Test of E	Equality of Va	ariances							
41		. , ,								
42	Variance of	f Samnle 1	624642							
43	Variance of	-	1250949							
44	variance of	Julipie Z	1200343							
45	Numerates DE Dec 1	notor DE	F T.	ot \/ol⋅	D.Valera					
46		nator DF		st Value	P-Value					
47		346	2.	003	0.000					
48	Conclusion with Alpha = 0.05									
49	Two variances are not equal									
50										

	A B C_	D	Е	F	G	Н	l	J	K	L
1	t-Test	Sample 1 vs	Sample 2 C	Comparison fo	or Uncensore	ed Full Data	Sets withou	t NDs		
2										
3	User Selected Options									
4	Date/Time of Computation	12/22/2014	9:41:55 AM							
5	From File	Allegheny_e	e.xls							
6	Full Precision	OFF								
7	Confidence Coefficient	95%								
8	Substantial Difference (S)	0.000								
9	Selected Null Hypothesis	Sample 1 M	lean <= Sam	nple 2 Mean (	Form 1)					
	Alternative Hypothesis	Sample 1 M	lean > the Sa	ample 2 Mea	n					
10				<u> </u>						
11										
12	Sample 1 Data: BR-35									
13	Sample 2 Data: BR-32									
14	Campie 2 Data. Bit-02									
15										
16	<del>-</del>	Davis Or - 1' - 1'								
17	F	Raw Statistic		In						
18			Sample 1	Sample 2	T					
19	Number of Valid Ob		2186	1958						
20	Number of Distinct Ob	servations	1590	1541						
21		Minimum	5972	6527						
22		Maximum	12056	14117						
23		Mean	9076	10093						
24		Median	9036	10057						
25		SD	925.2	1118						-
	S	E of Mean	19.79	25.28						
26										-
27	Sample 1 vs Sa	ample 2 Two	-Sample t-To	est						
28		pio 2 1 110	- Cumpio t 1							
29	H0: Mean of Sample 1 - Mean of San	nnlo 2 <= 0								
30	no. Mean of Sample 1 - Mean of Sam	lipie 2 <= 0	t Toot	Critical						
31	NA calc o d	DE	t-Test		D. Valera					
SZ	Method	DF	Value	t (0.05)	P-Value					
55	Pooled (Equal Variance)	4142	-32.033	1.645	1.000					
34	Welch-Satterthwaite (Unequal Variar	3809.4	-31.704	1.645	1.000					
აა	Pooled SD 1021.073									
36	Conclusion with Alpha = 0.050									
37	Student t (Pooled) Test: Do Not Rej		-	-						
38	Welch-Satterthwaite Test: Do Not R	eject H0, Co	nclude Sam	ple 1 <= San	ple 2					
39										
40										
41	Test of E	Equality of Va	ariances							
42	Variance of	f Sample 1	855972							
43	Variance of	-	1250949							
44										
45	Numerator DF Denomi	nator DF	F <sub>-</sub> T <sub>o</sub> c	st Value	P-Value					
46		85		461	0.000					
47		00	1.	TU I	0.000					
48	Conclusion with Alpha = 0.05									
49	Two variances are not equal									
50										

	A B C_	D	Е	F	G	Н	l	J	K	L
1	t-Test	Sample 1 vs	Sample 2 C	Comparison fo	or Uncensore	ed Full Data	Sets withou	t NDs		
2										
3	User Selected Options									
4	Date/Time of Computation	12/22/2014	9:43:27 AM							
5	From File	Warner_rd_	b.xls							
6	Full Precision	OFF								
7	Confidence Coefficient	95%								
8	Substantial Difference (S)	0.000								
9	Selected Null Hypothesis	Sample 1 M	lean <= Sam	ple 2 Mean (	Form 1)					
	Alternative Hypothesis	Sample 1 M	lean > the Sa	ample 2 Mea	n ·					
10		•								
11										
12	Sample 1 Data: BR-37									
13	Sample 2 Data: BR-36									
14	Cample 2 Data. Bit-00									
15										
16	-	Davis Ot-1'-1'								
17	F	Raw Statistic		0 : -						
18			Sample 1	Sample 2	T					
19	Number of Valid Ob		10257	975						
20	Number of Distinct Ob	servations	2917	802						
21		Minimum	5591	5693						
22		Maximum	11617	10981						
23		Mean	8059	8502						
24		Median	8069	8566						
25		SD	699.3	748.1						
	S	E of Mean	6.905	23.96						
26										
27	Sample 1 vs Sa	ample 2 Two	-Sample t-Te	est						
28		pio 2 1 110	- Cumpio t i							
29	H0: Mean of Sample 1 - Mean of San	nnlo 2 <= 0								
30	no. Mean of Sample 1 - Mean of Sam	lipie 2 <= 0	t Toot	Critical						
31	NA calc o d	DE	t-Test		D. Valora					
SZ	Method	DF	Value	t (0.05)	P-Value					
55	Pooled (Equal Variance)	11230	-18.776	1.645	1.000					
34	Welch-Satterthwaite (Unequal Variar	1141.8	-17.759	1.646	1.000					
აა	Pooled SD 703.653									
36	Conclusion with Alpha = 0.050									
37	Student t (Pooled) Test: Do Not Rej		-	-						
38	Welch-Satterthwaite Test: Do Not R	eject H0, Cc	nclude Sam	ple 1 <= San	ple 2					
39										
40										
41	Test of E	Equality of Va	ariances							+ 1
42	Variance of	f Sample 1	489004							
43	Variance of	-	559612							
44										
45	Numerator DF Denomi	nator DF	F_Toc	t Value	P-Value					-
46		256		144	0.004					
47		200	1.	1-1-1-1	0.004					
48	Conclusion with Alpha = 0.05									
49	Two variances are not equal									
50										

	A B C_	D	E	F	G	Н	l	J	K	L
1	t-Test	Sample 1 vs	Sample 2 C	Comparison fo	or Uncensore	ed Full Data	a Sets withou	ıt NDs		
2		T								
3	User Selected Options									
4	Date/Time of Computation		9:45:10 AM							
5		Snyder_rd_	b.xls							
6		OFF								
7	Confidence Coefficient	95%								
8	Substantial Difference (S)	0.000								
9	Selected Null Hypothesis	Sample 1 M	lean <= Sam	nple 2 Mean (	Form 1)					
10	Alternative Hypothesis	Sample 1 M	lean > the S	ample 2 Mea	n					
11		1								
12										
13	Sample 1 Data: BR-39									
	Sample 2 Data: BR-38									
15										
16										
17	F	Raw Statistic	s						1	
18			Sample 1	Sample 2					1	
19	Number of Valid Ob	servations	1124	406						
20	Number of Distinct Ob	servations	899	372					1	
21		Minimum	6124	6105					1	
		Maximum	10535	10668						-
22		Mean	7920	7979					+	
		Median	7942	8006						
24		SD	648.8	661.5						
25	S	E of Mean	19.35	32.83						
26										
27	Sample 1 vs Sa	ample 2 Two	-Sample t-Te	est						
28	•	•								
29	H0: Mean of Sample 1 - Mean of San	nple 2 <= 0								
30			t-Test	Critical						
31	Method	DF	Value	t (0.05)	P-Value					
SZ	Pooled (Equal Variance)	1528	-1.552	1.646	0.940					
33	Welch-Satterthwaite (Unequal Varian		-1.538	1.647	0.938					
34	Pooled SD 652.169			1					+	
აა	Conclusion with Alpha = 0.050									
30	Student t (Pooled) Test: Do Not Rej	ect H0 Cond	clude Sampl	e 1 <= Samp	le 2					
37	Welch-Satterthwaite Test: Do Not R			•					1	
38		,		Oali	.p.o 2			1	1	
39										
40	Toot of E	Equality of Va	arianoss						1	
41	i est of E	-quality Of Vi	anances							
42	Variance of	f Sample 1	420889						-	
43	Variance of Variance of	-	437624							
44	variance of	oampie z	43/024					1	1	
45	Numorotor DE Des	notor DC	Гт	at Malus	D Value			1	1	
46		nator DF		t Value	P-Value					
47		23	1.	040	0.624				1	
48	Conclusion with Alpha = 0.05									
49	Two variances appear to be equal								1	
50										

	A B C	D	E	F	G	Н	ı	J	K	L
1	t-Test S	sample 1 vs	s Sample 2 C	Comparison fo	or Uncensore	ed Full Data	Sets withou	t NDs		
2										
3	User Selected Options	0.00.00.1.1								
4	•		9:48:08 AM							
5		Stewart_rd_	_b.xls							
6		OFF								
7		95%								
8	` '	0.000								
9	* *			ple 2 Mean (	•					
10	Alternative Hypothesis S	Sample 1 M	lean > the Sa	ample 2 Mea	n					
11										
12										
13	Sample 1 Data: BR-40									
14	Sample 2 Data: BR-41									
15										
16										
17	Ra	aw Statistic								
18			Sample 1	Sample 2						
19	Number of Valid Obs		3712	510						
20	Number of Distinct Obs		1933	458						
21	J	Minimum	5684	5868						
22	N	Maximum	11617	10227						
23		Mean	7866	7974						
24		Median	7883	8001						
25		SD	653.1	679.1						
26	SE	of Mean	10.72	30.07						
27				*						
28	Sample 1 vs San	nple 2 Two	-Sample t-Te	est						
29										
30	H0: Mean of Sample 1 - Mean of Samp	ole 2 <= 0								
31			t-Test	Critical						
32	Method	DF	Value	t (0.05)	P-Value					
	Pooled (Equal Variance)	4220	-3.461	1.645	1.000					
	Welch-Satterthwaite (Unequal Varian	645.1	-3.360	1.647	1.000					
	Pooled SD 656.334									
	Conclusion with Alpha = 0.050									
37	Student t (Pooled) Test: Do Not Reject		-							
38	Welch-Satterthwaite Test: Do Not Re	ject H0, Co	nclude Sam	ple 1 <= San	ple 2					
39										
40										
41	Test of Ed	quality of Va	ariances							
42										
43	Variance of S	Sample 1	426595							
44	Variance of S	Sample 2	461244							
45			1	1	I					
46	Numerator DF Denomina	ator DF	F-Tes	t Value	P-Value					
47	509 371	1	1.0	081	0.231					
	Conclusion with Alpha = 0.05		I .		I					
49	Two variances appear to be equal									
50										
JU						1	1	1	1	

1
3   User Selected Options
Date/Time of Computation   12/22/2014 10:27:31 AM
From File   Buffalo TWP UCL.xls
Full Precision   OFF
Confidence Coefficient   95%   Substantial Difference (S)   0.000
Substantial Difference (S)   0.000
Selected Null Hypothesis   Sample 1 Mean <= Sample 2 Mean (Form 1)
Selected Null Hypothesis   Sample 1 Mean <= Sample 2 Mean (Form 1)
Alternative Hypothesis   Sample 1 Mean > the Sample 2 Mean
11
12
Sample 1 Data: BR-44
Sample 2 Data: BR-46         15         16         17       Raw Statistics         18       Sample 1       Sample 2         19       Number of Valid Observations       5223       917         20       Number of Distinct Observations       3569       752         21       Minimum       5710       5017         Abviroum       15408       9427
15       16       17     Raw Statistics       18     Sample 1 Sample 2       19     Number of Valid Observations 5223 917       20     Number of Distinct Observations 3569 752       21     Minimum 5710 5017       Maximum 15408 9437
16       17     Raw Statistics       18     Sample 1 Sample 2       19     Number of Valid Observations     5223 917       20     Number of Distinct Observations     3569 752       21     Movimum 15408     9437
Raw Statistics           18         Sample 1         Sample 2           19         Number of Valid Observations         5223         917           20         Number of Distinct Observations         3569         752           21         Minimum         5710         5017           21         Movimum         15408         9437
Sample 1   Sample 2
19         Number of Valid Observations         5223         917           20         Number of Distinct Observations         3569         752           21         Minimum         5710         5017
20 Number of Distinct Observations 3569 752 21 Minimum 5710 5017  Maximum 15408 9437
21 Minimum 5710 5017 Movimum 15408 9437
Movimum 15409 9427
<u> </u>
23 Mean 9995 6260
24 Median 9911 6195
25 SD 1759 577.9
26 SE of Mean 24.34 19.08
27
Sample 1 vs Sample 2 Two-Sample t-Test
29
30 H0: Mean of Sample 1 - Mean of Sample 2 <= 0
31 t-Test Critical
32 Method DF Value t (0.05) P-Value
33 Pooled (Equal Variance) 6138 63.708 1.645 0.000
34 Welch-Satterthwaite (Unequal Varian 4315.6 120.780 1.645 0.000
35 Pooled SD 1637.499
36 Conclusion with Alpha = 0.050
37 Student t (Pooled) Test: Reject H0, Conclude Sample 1 > Sample 2
38 Welch-Satterthwaite Test: Reject H0, Conclude Sample 1 > Sample 2
39
40
41 Test of Equality of Variances
42
Variance of Comple 1 2002174
Variance of Sample 2, 222052
44
45 Numerator DF Denominator DF F-Test Value P-Value
40
Conclusion with Alpha = 0.05
The variances are not equal
45
50

2		A B C	D	E	F	G	Н		J	K	L	
2   DateFilmer of Computation   22/22/2014 10/28/42 AM	1	t-Test Sample 1 vs Sample 2 Comparison for Uncensored Full Data Sets without NDs										
A   DaterTime of Computation   \$12222914 102842 AM	2											
Form File   Suffalo TWP UCL.xis	3	·										
Full Precision   OFF	4	•										
7   Confidence Coefficient   95%   8   Substantial Difference (S)   0.000   9   Selected Mult Pyrophesis   Sample 1 Mean ≤ Sample 2 Mean (Form 1)   10   Alternative Hypothesis   Sample 1 Mean ≥ the Sample 2 Mean   11   Sample 1 Data: BR-45   12   Sample 1 Data: BR-45   13   Sample 1 Data: BR-45   14   Sample 2 Data: BR-46   15   Sample 1 Data: BR-46   15   Sample 1 Mumber of Valid Observations   1399   917   16   Number of Distinct Observations   1399   917   17   Number of Distinct Observations   1399   917   18   Number of Distinct Observations   1399   917   19   Number of Distinct Observations   1399   917   10   Number of Distinct Observations   1399   917   10   Number of Distinct Observations   1399   917   11   Sample 1   Sample 2   12   Maximum   15390   8437   12   Maximum   15390   8437   13   Mean   11015   6260   14   Sample 1   Sample 2   15   Sample 1   Sample 2   16   Sample 1   Sample 2   17   Sample 1   Sample 2   18   Median   11258   6195   18   Sample 1   Sample 2   19   Median   1258   6195   19   Sample 1   Sample 2   19   Median   1258   6195   19   Sample 1   Sample 2   10   Median   1258   1058   10   Sample 1   Sample 2   10   Median   1258   1058   10   Sample 1   Sample 2   10   Median   1258   1058   10   Sample 1   Sample 2   10   Median   1258   1058   10   Sample 1   Sample 2   10   Median   1258   1058   10   Sample 1   Sample 2   10   Median   1258   1058   10   Sample 1   Sample 2   11   Sample 2   12   Sample 1   Sample 2   13   Suderit (Pooled)   7est Reject H0 Conclude Sample 1 > Sample 2   14   Variance of Sample 2   2343289   14   Variance of Sample 2   2343289   15   Sample 1   Sample 2   16   Numerator DF   Denominator DF   F-Tost Value   P-Value   17   Sample 1   Sample 2   18   Variance of Sample 2   2343289   18   Variance are not equal	5	From File	Buffalo TWI									
Substantial Difference (S)   0.000   Solected Null Pypothesis   Sample 1 Mean <= Sample 2 Mean (Form 1)	6	Full Precision	OFF									
Selected Null Hypothesis   Sample 1 Mean <= Sample 2 Mean (Form 1)	7	Confidence Coefficient	95%									
Selected Null Hypothesis   Sample 1 Mean ≈ Sample 2 Mean (Form 1)	8	Substantial Difference (S)	0.000									
Alternative Hypothesis Sample 1 Mean > the Sample 2 Mean  Ample 1 Data: BR-45  Sample 1 Data: BR-45  Sample 2 Data: BR-46  Raw Statistics  Raw Statistics  Sample 1 Sample 2  Number of Valid Observations 1399 917  Number of Distinct Observations 1219 752  Maximum 15390 8437  Mean 11015 6280  Median 117288 6195  SE of Mean 40.93 19.08  SE of Mean 40.93 19.08  SE of Mean 40.93 19.08  Median 1005 Servations 1219 87.79  SE of Mean 40.93 19.08  Median 1005 Servations 1219 87.79  Modelian 1005 Servations 1219 87.79  Modelian 1005 Servations 1219 87.79  Modelian 1005 Servations 1218 87.79  Modelian 1005		Selected Null Hypothesis	Sample 1 M	lean <= Sam	ple 2 Mean (	Form 1)						
12	10	Alternative Hypothesis	Sample 1 M	lean > the Sa	ample 2 Mea	n						
		,										
Sample   Data: BR-45												
Sample 2 Data: BR-46		Sample 1 Data: BR-45										
		Sample 2 Data: BR-46									-	
		·										
Number of Valid Observations   Sample 1   Sample 2		F	Raw Statistic	·s								
Number of Valid Observations   1399   917					Sample 2							
19		Number of Valid ∩b	servations	· ·								
Maximum   6376   5017	19											
Maximum   15390   8437	20	Number of Distilict Ob										
Mean   11015   6260	21											
Median   11268   6195	22											
SE of Mean   40.93   19.08	23											
SE of Mean   40.93   19.08	24											
Sample 1 vs Sample 2 Two-Sample t-Test	25											
Sample 1 vs Sample 2 Two-Sample t-Test	26	SE of Mean 40.93 19.08										
1	27											
H0: Mean of Sample 1 - Mean of Sample 2 <= 0	28	Sample 1 vs Sample 2 Two-Sample t-Test										
1	29											
Method   DF	30	H0: Mean of Sample 1 - Mean of San	nple 2 <= 0									
33 Pooled (Equal Variance) 2314 89.945 1.646 0.000  34 Welch-Satterthwaite (Unequal Varian 1932.6 105.293 1.646 0.000  35 Pooled SD 1244.142  36 Conclusion with Alpha = 0.050  37 Student t (Pooled) Test: Reject H0, Conclude Sample 1 > Sample 2  38 Welch-Satterthwaite Test: Reject H0, Conclude Sample 1 > Sample 2  39 Welch-Satterthwaite Test: Reject H0, Conclude Sample 1 > Sample 2  40 Test of Equality of Variances  41 Test of Equality of Variances  42 Variance of Sample 1 2343289  43 Variance of Sample 2 333953  44 Variance of Sample 2 P-Value  45 Numerator DF Denominator DF F-Test Value P-Value  46 Numerator DF Denominator DF Test Value P-Value  47 1398 916 7.017 0.000  48 Conclusion with Alpha = 0.05  Two variances are not equal	31			t-Test	Critical							
Welch-Satterthwaite (Unequal Variar   1932.6   105.293   1.646   0.000     34	32	Method	DF	Value	t (0.05)	P-Value						
Welch-Satterthwaite (Unequal Variant   1932.6   105.293   1.646   0.000	33	Pooled (Equal Variance)	2314	89.945	1.646	0.000						
Pooled SD 1244.142		Welch-Satterthwaite (Unequal Variar	1932.6	105.293	1.646	0.000						
Conclusion with Alpha = 0.050   Student t (Pooled) Test: Reject H0, Conclude Sample 1 > Sample 2		Pooled SD 1244.142	1	1	1	1						
Student t (Pooled) Test: Reject H0, Conclude Sample 1 > Sample 2		Conclusion with Alpha = 0.050										
Welch-Satterthwaite Test: Reject H0, Conclude Sample 1 > Sample 2	37	Student t (Pooled) Test: Reject H0,	Conclude Sa	ample 1 > Sa	mple 2							
39	38	Welch-Satterthwaite Test: Reject Ho	0, Conclude	Sample 1 >	Sample 2							
Test of Equality of Variances	39											
Test of Equality of Variances												
42   43   Variance of Sample 1   2343289     44   Variance of Sample 2   333953     45     46   Numerator DF   Denominator DF   F-Test Value   P-Value   47   1398   916   7.017   0.000     48   Conclusion with Alpha = 0.05     49   Two variances are not equal     47   Two variances are not equal     48   Two variances are not equal     49   Two variances are not equal     40   Two variances     40   Two variances     41   Two variances     42   Two variances     43   Two variances     44   Two variances     45   Two variances     46   Two variances     47   Two variances     48   Two variances     49   Two variances     40   Two variances     41   Two variances     42   Two variances     43   Two variances     44   Two variances     45   Two variances     45   Two variances     46   Two variances     47   Two variances     48   Two variances     48   Two variances     48   Two variances     48   Two variances     49   Two variances     49   Two variances     49   Two variances     40   Two varian		Test of Equality of Variances										
Variance of Sample 1   2343289												
Variance of Sample 2 333953  Variance of Samp		Variance of Sample 1   2343289										
45   46   Numerator DF   Denominator DF   F-Test Value   P-Value   47   1398   916   7.017   0.000   48   Conclusion with Alpha = 0.05   Two variances are not equal			-									
46         Numerator DF         Denominator DF         F-Test Value         P-Value           47         1398         916         7.017         0.000           48         Conclusion with Alpha = 0.05         Two variances are not equal					<u> </u>							
1398 916 7.017 0.000  48 Conclusion with Alpha = 0.05  49 Two variances are not equal		Numerator DF Denomi	nator DF	F-Tes	t Value	P-Value						
Conclusion with Alpha = 0.05  Two variances are not equal												
Two variances are not equal	47			/.'		3.000						
+5	40	<u> </u>										
50	49	i wo variances are not equal										
	50											

t-Test Sample 1 vs Sample 2 Comparison for Uncensored Full Data Sets without NDs  User Selected Options Date/Time of Computation 12/22/2014 10:29:32 AM  From File Buffalo TWP UCL.xls  Full Precision OFF Confidence Coefficient 95%										
User Selected Options Date/Time of Computation 12/22/2014 10:29:32 AM  From File Buffalo TWP UCL.xls Full Precision OFF										
Date/Time of Computation 12/22/2014 10:29:32 AM  Buffalo TWP UCL.xls  Full Precision OFF										
5 From File Buffalo TWP UCL.xls 6 Full Precision OFF										
6 Full Precision OFF										
6										
Confidence Coefficient 05%										
7 Confidence Coefficient 95%										
8 Substantial Difference (S) 0.000										
9 Selected Null Hypothesis Sample 1 Mean <= Sample 2 Mean (Form 1)										
10 Alternative Hypothesis Sample 1 Mean > the Sample 2 Mean										
Sample 1 Data: BR-47										
13 Sample 1 Data: BR-46  Sample 2 Data: BR-46										
15										
16 Raw Statistics										
Sample 1 Sample 2										
Number of Valid Observations 2424 017										
Number of Dictingt Observations 2071 752										
Minimum 5177 5017										
Maximum 10500 9427										
22										
23 Mean 7258 6260										
24 Median 7252 6195										
25 SD 822.1 577.9										
26 SE of Mean 14.03 19.08										
Sample 1 vs Sample 2 Two-Sample t-Test										
29										
30 H0: Mean of Sample 1 - Mean of Sample 2 <= 0										
31 t-Test Critical										
32 Method DF Value t (0.05) P-Value										
33 Pooled (Equal Variance) 4349 34.574 1.645 0.000										
34 Welch-Satterthwaite (Unequal Varian 2016.5 42.165 1.646 0.000										
35 Pooled SD 777.078										
36 Conclusion with Alpha = 0.050										
37 Student t (Pooled) Test: Reject H0, Conclude Sample 1 > Sample 2										
38 Welch-Satterthwaite Test: Reject H0, Conclude Sample 1 > Sample 2										
39										
40										
41 Test of Equality of Variances										
42 Variance of Sample 1 675865										
Veriance of Comple 2, 2220F2										
44										
45 Numerator DF Denominator DF F-Test Value P-Value										
40										
Conclusion with Alpha = 0.05										
Two variances are not equal										
43										
50										

	A B C_	D	E	F	G	Н	l	J	K	L	
1	t-Test	Sample 1 vs	Sample 2 C	Comparison fo	or Uncensore	ed Full Data	Sets without	t NDs			
2											
3	User Selected Options										
4	Date/Time of Computation		2/22/2014 10:30:29 AM								
5	From File	Buffalo TWI	uffalo TWP UCL.xls								
6	Full Precision	OFF									
7	Confidence Coefficient	95%									
8	Substantial Difference (S)	0.000									
9	Selected Null Hypothesis	Sample 1 M	lean <= Sam	nple 2 Mean (	Form 1)						
10	Alternative Hypothesis	Sample 1 M	lean > the S	ample 2 Mea	n						
11											
12											
	Sample 1 Data: BR-48										
13	Sample 2 Data: BR-46										
14											
15											
16		Raw Statistic	e								
17	<b>r</b>	vavv StatistiC	Sample 1	Sample 2							
18	N f.V1: 1 O.	oonistis	3152	· ·							
19	Number of Valid Ob			917							
20	Number of Distinct Ob		2256	752							
21		Minimum	5208	5017							
22	Maximum 12338 8437										
23		Mean	7991	6260							
24		Median	7868	6195							
25		SD	1239	577.9							
26	S										
27				+	1						
28	Sample 1 vs Sample 2 Two-Sample t-Test										
29											
	H0: Mean of Sample 1 - Mean of San	nple 2 <= 0									
31			t-Test	Critical							
	Method	DF	Value	t (0.05)	P-Value						
	Pooled (Equal Variance)	4067	41.035	1.645	0.000						
33	Welch-Satterthwaite (Unequal Varian		59.338	1.645	0.000						
34	Pooled SD 1124.254										
35	Conclusion with Alpha = 0.050										
36	Student t (Pooled) Test: Reject H0,	Conclude Sa	ample 1 > Sa	ample 2						-	
37	Welch-Satterthwaite Test: Reject H0		-	-							
38	TOTAL CAROTHIWARD TEST. NEJECT TR	o, conclude	Cumpio 17	Cumpic Z							
39											
40	T-21-15	Sauciika -417	nulon cos								
41	Test of Equality of Variances										
42	Variance of Sample 1   1534298										
43		-	1534298								
44	Variance of Sample 2 333953										
45	1		1		T						
46		nator DF		st Value	P-Value						
47		16	4.	594	0.000						
48	Conclusion with Alpha = 0.05										
49	Two variances are not equal										
50											
							·				

	A B C	D	E	F	G	H	l l	J	K	L	
1	t-Test	Sample 1 vs	s Sample 2 C	Comparison fo	or Uncensore	ed Full Data	Sets without	t NDs			
2											
3	User Selected Options										
4	Date/Time of Computation		2/22/2014 10:31:45 AM								
5	From File	Buffalo TWI	uffalo TWP UCL.xls								
6	Full Precision	OFF									
7	Confidence Coefficient	95%									
8	Substantial Difference (S)	0.000									
9	Selected Null Hypothesis	Sample 1 M	lean <= Sam	ple 2 Mean (	Form 1)						
	Alternative Hypothesis	Sample 1 M	lean > the S	ample 2 Mea	n						
10	<u> </u>										
11											
12	Sample 1 Data: BR-49										
13	Sample 1 Data: BR-49 Sample 2 Data: BR-46										
14	Sample 2 Data. BN-40										
15											
16											
17	F	Raw Statistic		T_							
18			Sample 1	Sample 2							
19	Number of Valid Ob	2928	917								
20	Number of Distinct Ob	servations	2225	752							
21	Minimum 5523 5017										
22	Maximum 14314 8437										
23		Mean	9124	6260							
		Median	8906	6195							
24		SD	1418	577.9							
25	CF of Moon 26 21 10.00										
26		- Of Wicari	20.21	10.00							
27	Somple 1 vs Somple 2 Two Somple 4 Tost										
28	Sample 1 vs Sample 2 Two-Sample t-Test										
29											
30	H0: Mean of Sample 1 - Mean of San	nple 2 <= 0	1	_	1						
31			t-Test	Critical							
SZ	Method	DF	Value	t (0.05)	P-Value						
JJ	Pooled (Equal Variance)	3843	59.629	1.645	0.000						
34	Welch-Satterthwaite (Unequal Variar	3610.4	88.353	1.645	0.000						
	Pooled SD 1269.369	•	•	*							
	Conclusion with Alpha = 0.050										
37	Student t (Pooled) Test: Reject H0,	Conclude Sa	ample 1 > Sa	ample 2							
38	Welch-Satterthwaite Test: Reject Ho	0, Conclude	Sample 1 >	Sample 2							
39											
										_	
40	Test of F	Equality of Va	ariances								
41											
42	Variance of Comple 1 2011042										
43		-	333953								
44	Variance of Sample 2 333953										
45	N DE D	BE		+1/-1	D.V.						
46		nator DF		t Value	P-Value						
47		16	6.	022	0.000						
48	Conclusion with Alpha = 0.05										
49	Two variances are not equal										
50											
							<u> </u>				

	A B C	D	E	F	G	Н	[	J	K	L	
1	t-Test	Sample 1 vs	s Sample 2 C	comparison for	or Uncensore	ed Full Data	Sets withou	t NDs			
2											
3	User Selected Options										
4	Date/Time of Computation		2/22/2014 10:32:38 AM								
5	From File	Buffalo TWI	uffalo TWP UCL.xls								
6	Full Precision	OFF									
7	Confidence Coefficient	95%									
8	Substantial Difference (S)	0.000									
9	Selected Null Hypothesis	Sample 1 M	lean <= Sam	ple 2 Mean (	Form 1)						
10	Alternative Hypothesis	Sample 1 M	lean > the Sa	ample 2 Mea	n						
11											
12											
	Sample 1 Data: BR-50										
	Sample 2 Data: BR-46										
15											
16	F	Raw Statistic	·s								
17	<u> </u>		Sample 1	Sample 2							
18	Number of Valid Ob	servations	2293	917							
19	Number of Distinct Ob		1723	752							
20	Number of Distillet Ob	Minimum	6066	5017							
21		Maximum	12933	8437							
22											
23		Mean	9292	6260							
24											
25	SD 1067 577.9										
26	SE of Mean 22.27 19.08										
27											
28	Sample 1 vs Sample 2 Two-Sample t-Test										
29											
30	H0: Mean of Sample 1 - Mean of San	nple 2 <= 0									
31			t-Test	Critical							
32	Method	DF	Value	t (0.05)	P-Value						
33	Pooled (Equal Variance)	3208	81.442	1.645	0.000						
34	Welch-Satterthwaite (Unequal Varian	2935.0	103.387	1.645	0.000						
35	Pooled SD 952.987										
36	Conclusion with Alpha = 0.050										
37	Student t (Pooled) Test: Reject H0,		•	•							
38	Welch-Satterthwaite Test: Reject Ho	0, Conclude	Sample 1 > 3	Sample 2							
39											
40											
41	Test of E	Equality of Va	ariances								
42											
43	Variance of Sample 1 1137676										
44	Variance of	f Sample 2	333953								
45			<u> </u>	1	1						
46	Numerator DF Denomi	nator DF	F-Tes	t Value	P-Value						
46	2292 916 3.407 0.000										
	Canalysian with Alpha = 0.05										
48	Two variances are not equal										
49											
50											