

A	B	C	D	E	F	G	H	I	J	K	L
1	UCL Statistics for Data Sets with Non-Detects										
2											
3	User Selected Options										
4	Date/Time of Computation		ProUCL 5.110/13/2016 3:05:20 PM								
5	From File		ProUCL input 01-007(b) 0-1, 0-5, 0-10_a.xls								
6	Full Precision		OFF								
7	Confidence Coefficient		95%								
8	Number of Bootstrap Operations		2000								
9											
10											
11	Chromium										
12											
13	General Statistics										
14	Total Number of Observations			34		Number of Distinct Observations			30		
15						Number of Missing Observations			0		
16	Minimum			1.33		Mean			7.298		
17	Maximum			41.1		Median			3.215		
18	SD			8.844		Std. Error of Mean			1.517		
19	Coefficient of Variation			1.212		Skewness			2.368		
20											
21	Normal GOF Test										
22	Shapiro Wilk Test Statistic			0.669		Shapiro Wilk GOF Test					
23	5% Shapiro Wilk Critical Value			0.933		Data Not Normal at 5% Significance Level					
24	Lilliefors Test Statistic			0.263		Lilliefors GOF Test					
25	5% Lilliefors Critical Value			0.15		Data Not Normal at 5% Significance Level					
26	Data Not Normal at 5% Significance Level										
27											
28	Assuming Normal Distribution										
29	95% Normal UCL					95% UCLs (Adjusted for Skewness)					
30	95% Student's-t UCL			9.865		95% Adjusted-CLT UCL (Chen-1995)			10.45		
31						95% Modified-t UCL (Johnson-1978)			9.968		
32											
33	Gamma GOF Test										
34	A-D Test Statistic			2.037		Anderson-Darling Gamma GOF Test					
35	5% A-D Critical Value			0.772		Data Not Gamma Distributed at 5% Significance Level					
36	K-S Test Statistic			0.225		Kolmogorov-Smirnov Gamma GOF Test					
37	5% K-S Critical Value			0.155		Data Not Gamma Distributed at 5% Significance Level					
38	Data Not Gamma Distributed at 5% Significance Level										
39											
40	Gamma Statistics										
41	k hat (MLE)			1.183		k star (bias corrected MLE)			1.098		
42	Theta hat (MLE)			6.168		Theta star (bias corrected MLE)			6.644		
43	nu hat (MLE)			80.46		nu star (bias corrected)			74.7		
44	MLE Mean (bias corrected)			7.298		MLE Sd (bias corrected)			6.963		
45						Approximate Chi Square Value (0.05)			55.79		
46	Adjusted Level of Significance			0.0422		Adjusted Chi Square Value			54.98		
47											
48	Assuming Gamma Distribution										
49	95% Approximate Gamma UCL (use when n>=50))			9.771		95% Adjusted Gamma UCL (use when n<50)			9.915		
50											
51	Lognormal GOF Test										
52	Shapiro Wilk Test Statistic			0.903		Shapiro Wilk Lognormal GOF Test					

A	B	C	D	E	F	G	H	I	J	K	L
53			5% Shapiro Wilk Critical Value		0.933		Data Not Lognormal at 5% Significance Level				
54			Lilliefors Test Statistic		0.172		Lilliefors Lognormal GOF Test				
55			5% Lilliefors Critical Value		0.15		Data Not Lognormal at 5% Significance Level				
56	Data Not Lognormal at 5% Significance Level										
57											
58	Lognormal Statistics										
59			Minimum of Logged Data		0.285		Mean of logged Data				1.509
60			Maximum of Logged Data		3.716		SD of logged Data				0.918
61											
62	Assuming Lognormal Distribution										
63			95% H-UCL		10.04		90% Chebyshev (MVUE) UCL				10.41
64			95% Chebyshev (MVUE) UCL		12.06		97.5% Chebyshev (MVUE) UCL				14.34
65			99% Chebyshev (MVUE) UCL		18.83						
66											
67	Nonparametric Distribution Free UCL Statistics										
68	Data do not follow a Discernible Distribution (0.05)										
69											
70	Nonparametric Distribution Free UCLs										
71			95% CLT UCL		9.793		95% Jackknife UCL				9.865
72			95% Standard Bootstrap UCL		9.75		95% Bootstrap-t UCL				11.18
73			95% Hall's Bootstrap UCL		10.97		95% Percentile Bootstrap UCL				9.863
74			95% BCA Bootstrap UCL		10.47						
75			90% Chebyshev(Mean, Sd) UCL		11.85		95% Chebyshev(Mean, Sd) UCL				13.91
76			97.5% Chebyshev(Mean, Sd) UCL		16.77		99% Chebyshev(Mean, Sd) UCL				22.39
77											
78	Suggested UCL to Use										
79			95% Chebyshev (Mean, Sd) UCL		13.91						
80											
81	Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.										
82	Recommendations are based upon data size, data distribution, and skewness.										
83	These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).										
84	However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.										
85											
86											
87	Nickel										
88											
89	General Statistics										
90			Total Number of Observations		34		Number of Distinct Observations				28
91							Number of Missing Observations				0
92			Minimum		0.504		Mean				3.253
93			Maximum		12.7		Median				1.95
94			SD		3.152		Std. Error of Mean				0.541
95			Coefficient of Variation		0.969		Skewness				1.926
96											
97	Normal GOF Test										
98			Shapiro Wilk Test Statistic		0.708		Shapiro Wilk GOF Test				
99			5% Shapiro Wilk Critical Value		0.933		Data Not Normal at 5% Significance Level				
100			Lilliefors Test Statistic		0.311		Lilliefors GOF Test				
101			5% Lilliefors Critical Value		0.15		Data Not Normal at 5% Significance Level				
102	Data Not Normal at 5% Significance Level										
103											
104	Assuming Normal Distribution										

A	B	C	D	E	F	G	H	I	J	K	L	
105	95% Normal UCL					95% UCLs (Adjusted for Skewness)						
106	95% Student's-t UCL			4.168		95% Adjusted-CLT UCL (Chen-1995)				4.333		
107						95% Modified-t UCL (Johnson-1978)				4.197		
108												
109	Gamma GOF Test											
110	A-D Test Statistic			1.921		Anderson-Darling Gamma GOF Test						
111	5% A-D Critical Value			0.764		Data Not Gamma Distributed at 5% Significance Level						
112	K-S Test Statistic			0.246		Kolmogorov-Smirnov Gamma GOF Test						
113	5% K-S Critical Value			0.153		Data Not Gamma Distributed at 5% Significance Level						
114	Data Not Gamma Distributed at 5% Significance Level											
115												
116	Gamma Statistics											
117	k hat (MLE)			1.659		k star (bias corrected MLE)			1.532			
118	Theta hat (MLE)			1.961		Theta star (bias corrected MLE)			2.123			
119	nu hat (MLE)			112.8		nu star (bias corrected)			104.2			
120	MLE Mean (bias corrected)			3.253		MLE Sd (bias corrected)			2.628			
121						Approximate Chi Square Value (0.05)			81.63			
122	Adjusted Level of Significance			0.0422		Adjusted Chi Square Value			80.65			
123												
124	Assuming Gamma Distribution											
125	95% Approximate Gamma UCL (use when n>=50))			4.151		95% Adjusted Gamma UCL (use when n<50)			4.202			
126												
127	Lognormal GOF Test											
128	Shapiro Wilk Test Statistic			0.929		Shapiro Wilk Lognormal GOF Test						
129	5% Shapiro Wilk Critical Value			0.933		Data Not Lognormal at 5% Significance Level						
130	Lilliefors Test Statistic			0.19		Lilliefors Lognormal GOF Test						
131	5% Lilliefors Critical Value			0.15		Data Not Lognormal at 5% Significance Level						
132	Data Not Lognormal at 5% Significance Level											
133												
134	Lognormal Statistics											
135	Minimum of Logged Data			-0.685		Mean of logged Data			0.849			
136	Maximum of Logged Data			2.542		SD of logged Data			0.782			
137												
138	Assuming Lognormal Distribution											
139	95% H-UCL			4.279		90% Chebyshev (MVUE) UCL			4.527			
140	95% Chebyshev (MVUE) UCL			5.157		97.5% Chebyshev (MVUE) UCL			6.032			
141	99% Chebyshev (MVUE) UCL			7.75								
142												
143	Nonparametric Distribution Free UCL Statistics											
144	Data do not follow a Discernible Distribution (0.05)											
145												
146	Nonparametric Distribution Free UCLs											
147	95% CLT UCL			4.142		95% Jackknife UCL			4.168			
148	95% Standard Bootstrap UCL			4.124		95% Bootstrap-t UCL			4.445			
149	95% Hall's Bootstrap UCL			4.253		95% Percentile Bootstrap UCL			4.17			
150	95% BCA Bootstrap UCL			4.376								
151	90% Chebyshev(Mean, Sd) UCL			4.874		95% Chebyshev(Mean, Sd) UCL			5.609			
152	97.5% Chebyshev(Mean, Sd) UCL			6.628		99% Chebyshev(Mean, Sd) UCL			8.631			
153												
154	Suggested UCL to Use											
155	95% Chebyshev (Mean, Sd) UCL			5.609								
156												

A	B	C	D	E	F	G	H	I	J	K	L	
157	Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.											
158	Recommendations are based upon data size, data distribution, and skewness.											
159	These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).											
160	However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.											
161												
162	Selenium											
163												
164	General Statistics											
165	Total Number of Observations			34	Number of Distinct Observations			25				
166	Number of Detects			24	Number of Non-Detects			10				
167	Number of Distinct Detects			16	Number of Distinct Non-Detects			9				
168	Minimum Detect			0.17	Minimum Non-Detect			0.54				
169	Maximum Detect			0.96	Maximum Non-Detect			3.07				
170	Variance Detects			0.0328	Percent Non-Detects			29.41%				
171	Mean Detects			0.324	SD Detects			0.181				
172	Median Detects			0.27	CV Detects			0.559				
173	Skewness Detects			2.435	Kurtosis Detects			6.689				
174	Mean of Logged Detects			-1.23	SD of Logged Detects			0.431				
175												
176	Normal GOF Test on Detects Only											
177	Shapiro Wilk Test Statistic			0.721	Shapiro Wilk GOF Test							
178	5% Shapiro Wilk Critical Value			0.916	Detected Data Not Normal at 5% Significance Level							
179	Lilliefors Test Statistic			0.235	Lilliefors GOF Test							
180	5% Lilliefors Critical Value			0.177	Detected Data Not Normal at 5% Significance Level							
181	Detected Data Not Normal at 5% Significance Level											
182												
183	Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs											
184	KM Mean		0.321	KM Standard Error of Mean			0.0348					
185	KM SD		0.172	95% KM (BCA) UCL			0.389					
186	95% KM (t) UCL		0.379	95% KM (Percentile Bootstrap) UCL			0.382					
187	95% KM (z) UCL		0.378	95% KM Bootstrap t UCL			0.425					
188	90% KM Chebyshev UCL		0.425	95% KM Chebyshev UCL			0.472					
189	97.5% KM Chebyshev UCL		0.538	99% KM Chebyshev UCL			0.667					
190												
191	Gamma GOF Tests on Detected Observations Only											
192	A-D Test Statistic		0.963	Anderson-Darling GOF Test								
193	5% A-D Critical Value		0.746	Detected Data Not Gamma Distributed at 5% Significance Level								
194	K-S Test Statistic		0.161	Kolmogorov-Smirnov GOF								
195	5% K-S Critical Value		0.178	Detected data appear Gamma Distributed at 5% Significance Level								
196	Detected data follow Appr. Gamma Distribution at 5% Significance Level											
197												
198	Gamma Statistics on Detected Data Only											
199	k hat (MLE)		5.004	k star (bias corrected MLE)			4.406					
200	Theta hat (MLE)		0.0648	Theta star (bias corrected MLE)			0.0736					
201	nu hat (MLE)		240.2	nu star (bias corrected)			211.5					
202	Mean (detects)		0.324									
203												
204	Gamma ROS Statistics using Imputed Non-Detects											
205	GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs											
206	GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)											
207	For such situations, GROS method may yield incorrect values of UCLs and BTVs											
208	This is especially true when the sample size is small.											

A	B	C	D	E	F	G	H	I	J	K	L
209	For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates										
210		Minimum	0.17						Mean	0.316	
211		Maximum	0.96						Median	0.294	
212		SD	0.153						CV	0.484	
213		k hat (MLE)	6.78						k star (bias corrected MLE)	6.201	
214		Theta hat (MLE)	0.0466						Theta star (bias corrected MLE)	0.0509	
215		nu hat (MLE)	461						nu star (bias corrected)	421.7	
216		Adjusted Level of Significance (β)	0.0422								
217		Approximate Chi Square Value (421.67, α)	375.1						Adjusted Chi Square Value (421.67, β)	372.9	
218		95% Gamma Approximate UCL (use when $n \geq 50$)	0.355						95% Gamma Adjusted UCL (use when $n < 50$)	0.357	
219											
220	Estimates of Gamma Parameters using KM Estimates										
221		Mean (KM)	0.321						SD (KM)	0.172	
222		Variance (KM)	0.0297						SE of Mean (KM)	0.0348	
223		k hat (KM)	3.46						k star (KM)	3.174	
224		nu hat (KM)	235.3						nu star (KM)	215.9	
225		theta hat (KM)	0.0926						theta star (KM)	0.101	
226		80% gamma percentile (KM)	0.454						90% gamma percentile (KM)	0.562	
227		95% gamma percentile (KM)	0.662						99% gamma percentile (KM)	0.878	
228											
229	Gamma Kaplan-Meier (KM) Statistics										
230		Approximate Chi Square Value (215.86, α)	182.9						Adjusted Chi Square Value (215.86, β)	181.4	
231		95% Gamma Approximate KM-UCL (use when $n \geq 50$)	0.378						95% Gamma Adjusted KM-UCL (use when $n < 50$)	0.382	
232											
233	Lognormal GOF Test on Detected Observations Only										
234		Shapiro Wilk Test Statistic	0.908						Shapiro Wilk GOF Test		
235		5% Shapiro Wilk Critical Value	0.916						Detected Data Not Lognormal at 5% Significance Level		
236		Lilliefors Test Statistic	0.133						Lilliefors GOF Test		
237		5% Lilliefors Critical Value	0.177						Detected Data appear Lognormal at 5% Significance Level		
238	Detected Data appear Approximate Lognormal at 5% Significance Level										
239											
240	Lognormal ROS Statistics Using Imputed Non-Detects										
241		Mean in Original Scale	0.314						Mean in Log Scale	-1.235	
242		SD in Original Scale	0.153						SD in Log Scale	0.363	
243		95% t UCL (assumes normality of ROS data)	0.358						95% Percentile Bootstrap UCL	0.359	
244		95% BCA Bootstrap UCL	0.37						95% Bootstrap t UCL	0.391	
245		95% H-UCL (Log ROS)	0.349								
246											
247	Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution										
248		KM Mean (logged)	-1.237						KM Geo Mean	0.29	
249		KM SD (logged)	0.414						95% Critical H Value (KM-Log)	1.875	
250		KM Standard Error of Mean (logged)	0.0845						95% H-UCL (KM -Log)	0.362	
251		KM SD (logged)	0.414						95% Critical H Value (KM-Log)	1.875	
252		KM Standard Error of Mean (logged)	0.0845								
253											
254	DL/2 Statistics										
255	DL/2 Normal					DL/2 Log-Transformed					
256		Mean in Original Scale	0.594						Mean in Log Scale	-0.852	
257		SD in Original Scale	0.524						SD in Log Scale	0.789	
258		95% t UCL (Assumes normality)	0.746						95% H-Stat UCL	0.789	
259	DL/2 is not a recommended method, provided for comparisons and historical reasons										
260											

A	B	C	D	E	F	G	H	I	J	K	L
261	Nonparametric Distribution Free UCL Statistics										
262	Detected Data appear Approximate Gamma Distributed at 5% Significance Level										
263											
264	Suggested UCL to Use										
265	95% KM Adjusted Gamma UCL			0.382		95% GROS Adjusted Gamma UCL			0.357		
266											
267	When a data set follows an approximate (e.g., normal) distribution passing one of the GOF test										
268	When applicable, it is suggested to use a UCL based upon a distribution (e.g., gamma) passing both GOF tests in ProUCL										
269											
270	Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.										
271	Recommendations are based upon data size, data distribution, and skewness.										
272	These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).										
273	However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.										
274											
275	Plutonium-239/240										
276											
277	General Statistics										
278	Total Number of Observations			31		Number of Distinct Observations			30		
279	Number of Detects			23		Number of Non-Detects			8		
280	Number of Distinct Detects			23		Number of Distinct Non-Detects			7		
281	Minimum Detect			0.135		Minimum Non-Detect			0.0049		
282	Maximum Detect			20.1		Maximum Non-Detect			0.224		
283	Variance Detects			32.36		Percent Non-Detects			25.81%		
284	Mean Detects			5.423		SD Detects			5.689		
285	Median Detects			3.76		CV Detects			1.049		
286	Skewness Detects			1.326		Kurtosis Detects			1.111		
287	Mean of Logged Detects			0.995		SD of Logged Detects			1.378		
288											
289	Normal GOF Test on Detects Only										
290	Shapiro Wilk Test Statistic			0.83		Shapiro Wilk GOF Test					
291	5% Shapiro Wilk Critical Value			0.914		Detected Data Not Normal at 5% Significance Level					
292	Lilliefors Test Statistic			0.176		Lilliefors GOF Test					
293	5% Lilliefors Critical Value			0.18		Detected Data appear Normal at 5% Significance Level					
294	Detected Data appear Approximate Normal at 5% Significance Level										
295											
296	Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs										
297	KM Mean			4.026		KM Standard Error of Mean			0.982		
298	KM SD			5.346		95% KM (BCA) UCL			5.715		
299	95% KM (t) UCL			5.692		95% KM (Percentile Bootstrap) UCL			5.672		
300	95% KM (z) UCL			5.641		95% KM Bootstrap t UCL			6.138		
301	90% KM Chebyshev UCL			6.971		95% KM Chebyshev UCL			8.305		
302	97.5% KM Chebyshev UCL			10.16		99% KM Chebyshev UCL			13.79		
303											
304	Gamma GOF Tests on Detected Observations Only										
305	A-D Test Statistic			0.345		Anderson-Darling GOF Test					
306	5% A-D Critical Value			0.777		Detected data appear Gamma Distributed at 5% Significance Level					
307	K-S Test Statistic			0.139		Kolmogorov-Smirnov GOF					
308	5% K-S Critical Value			0.188		Detected data appear Gamma Distributed at 5% Significance Level					
309	Detected data appear Gamma Distributed at 5% Significance Level										
310											
311	Gamma Statistics on Detected Data Only										
312	k hat (MLE)			0.847		k star (bias corrected MLE)			0.765		

A	B	C	D	E	F	G	H	I	J	K	L
313				Theta hat (MLE)	6.405					Theta star (bias corrected MLE)	7.086
314				nu hat (MLE)	38.95					nu star (bias corrected)	35.2
315				Mean (detects)	5.423						
316											
317	Gamma ROS Statistics using Imputed Non-Detects										
318	GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs										
319	GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)										
320	For such situations, GROS method may yield incorrect values of UCLs and BTVs										
321	This is especially true when the sample size is small.										
322	For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates										
323				Minimum	0.01					Mean	4.026
324				Maximum	20.1					Median	1.3
325				SD	5.434					CV	1.35
326				k hat (MLE)	0.363					k star (bias corrected MLE)	0.349
327				Theta hat (MLE)	11.1					Theta star (bias corrected MLE)	11.53
328				nu hat (MLE)	22.49					nu star (bias corrected)	21.65
329				Adjusted Level of Significance (β)	0.0413						
330				Approximate Chi Square Value (21.65, α)	12.07					Adjusted Chi Square Value (21.65, β)	11.68
331				95% Gamma Approximate UCL (use when $n \geq 50$)	7.219					95% Gamma Adjusted UCL (use when $n < 50$)	7.465
332											
333	Estimates of Gamma Parameters using KM Estimates										
334				Mean (KM)	4.026					SD (KM)	5.346
335				Variance (KM)	28.58					SE of Mean (KM)	0.982
336				k hat (KM)	0.567					k star (KM)	0.534
337				nu hat (KM)	35.17					nu star (KM)	33.1
338				theta hat (KM)	7.098					theta star (KM)	7.542
339				80% gamma percentile (KM)	6.628					90% gamma percentile (KM)	10.74
340				95% gamma percentile (KM)	15.11					99% gamma percentile (KM)	25.78
341											
342	Gamma Kaplan-Meier (KM) Statistics										
343				Approximate Chi Square Value (33.10, α)	20.94					Adjusted Chi Square Value (33.10, β)	20.41
344				95% Gamma Approximate KM-UCL (use when $n \geq 50$)	6.362					95% Gamma Adjusted KM-UCL (use when $n < 50$)	6.53
345											
346	Lognormal GOF Test on Detected Observations Only										
347				Shapiro Wilk Test Statistic	0.951					Shapiro Wilk GOF Test	
348				5% Shapiro Wilk Critical Value	0.914					Detected Data appear Lognormal at 5% Significance Level	
349				Lilliefors Test Statistic	0.139					Lilliefors GOF Test	
350				5% Lilliefors Critical Value	0.18					Detected Data appear Lognormal at 5% Significance Level	
351	Detected Data appear Lognormal at 5% Significance Level										
352											
353	Lognormal ROS Statistics Using Imputed Non-Detects										
354				Mean in Original Scale	4.058					Mean in Log Scale	0.21
355				SD in Original Scale	5.41					SD in Log Scale	1.799
356				95% t UCL (assumes normality of ROS data)	5.707					95% Percentile Bootstrap UCL	5.71
357				95% BCA Bootstrap UCL	5.986					95% Bootstrap t UCL	6.016
358				95% H-UCL (Log ROS)	19.7						
359											
360	Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution										
361				KM Mean (logged)	-0.604					KM Geo Mean	0.547
362				KM SD (logged)	2.965					95% Critical H Value (KM-Log)	5.332
363				KM Standard Error of Mean (logged)	0.548					95% H-UCL (KM -Log)	796.4
364				KM SD (logged)	2.965					95% Critical H Value (KM-Log)	5.332

	A	B	C	D	E	F	G	H	I	J	K	L	
365	KM Standard Error of Mean (logged)					0.548							
366													
367	DL/2 Statistics												
368	DL/2 Normal					DL/2 Log-Transformed							
369	Mean in Original Scale					4.033	Mean in Log Scale					-0.255	
370	SD in Original Scale					5.429	SD in Log Scale					2.518	
371	95% t UCL (Assumes normality)					5.688	95% H-Stat UCL					154	
372	DL/2 is not a recommended method, provided for comparisons and historical reasons												
373													
374	Nonparametric Distribution Free UCL Statistics												
375	Detected Data appear Approximate Normal Distributed at 5% Significance Level												
376													
377	Suggested UCL to Use												
378	95% KM (t) UCL					5.692							
379													
380	When a data set follows an approximate (e.g., normal) distribution passing one of the GOF test												
381	When applicable, it is suggested to use a UCL based upon a distribution (e.g., gamma) passing both GOF tests in ProUCL												
382													
383	Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.												
384	Recommendations are based upon data size, data distribution, and skewness.												
385	These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).												
386	However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.												
387													