

US EPA ARCHIVE DOCUMENT

APPENDIX 1

label list

method:

- 1 original
- 2 Allender
- 3 Novigen
- 4 MaxLIP1

. sort meth

. by meth: summarize residue,detail

-> meth=original

residue					

Percentiles	Smallest				
1%	.002512	.0011884			
5%	.0055915	.0015736			
10%	.0087305	.001632	Obs		450
25%	.01904	.0024258	Sum of Wgt.		450
50%	.0446428		Mean		.1001748
		Largest	Std. Dev.		.1898224
75%	.1051224	1.021243			
90%	.2268092	1.247094	Variance		.0360326
95%	.3613527	1.335169	Skewness		6.774018
99%	.8992397	2.533085	Kurtosis		70.76885

-> meth=Allender

residue					

Percentiles	Smallest				
1%	.00409	.0021			
5%	.00833	.0027			
10%	.01239	.00279	Obs		450
25%	.02479	.00396	Sum of Wgt.		450
50%	.052905		Mean		.1003352
		Largest	Std. Dev.		.1565942
75%	.11334	.85673			
90%	.22464	1.02339	Variance		.0245217

95% .33996 1.08744 Skewness 5.593789
 99% .76505 1.92235 Kurtosis 51.01083

-> meth= Novigen

residue

```
-----
Percentiles  Smallest
1% .0014286 .0010695
5% .0043364 .0010941
10% .0079836 .0011415  Obs          450
25% .0190545 .0011662  Sum of Wgt.  450

50% .0489341          Mean          .0985186
      Largest  Std. Dev.    .1263297
75% .1186389 .5417213
90% .243962 .5599318  Variance     .0159592
95% .4451822 .5666574  Skewness     2.145612
99% .5308715 .7022806  Kurtosis     7.231329
```

-> meth= MaxLIP1

residue

```
-----
Percentiles  Smallest
1% .00346 .001578
5% .00758 .00219
10% .0115985 .002772  Obs          450
25% .023184 .00313  Sum of Wgt.  450

50% .051655          Mean          .1002643
      Largest  Std. Dev.    .154345
75% .113096 .883497
90% .228798 1.01795  Variance     .0238224
95% .353235 1.24546  Skewness     4.72429
99% .755985 1.61948  Kurtosis     35.03111
```

. with logres meth if meth==1|meth==2: ksmirnov logres, by(meth)

Two-sample Kolmogorov-Smirnov test for equality of distribution functions:

```
Smaller group  D    P-value Corrected
-----
original:      0.0778  0.066
Allender:     -0.0111  0.946
Combined K-S:  0.0778  0.131  0.115
```

```
. with logres meth if meth==1|meth==3: ksmirnov logres, by(meth)
```

Two-sample Kolmogorov-Smirnov test for equality of distribution functions:

Smaller group	D	P-value	Corrected
original:	0.0467	0.375	
Novigen:	-0.0222	0.801	
Combined K-S:	0.0467	0.711	0.682

```
. with logres meth if meth==1|meth==4: ksmirnov logres, by(meth)
```

Two-sample Kolmogorov-Smirnov test for equality of distribution functions:

Smaller group	D	P-value	Corrected
original:	0.0578	0.223	
MaxLIP1:	-0.0067	0.980	
Combined K-S:	0.0578	0.440	0.408

```
. qqplot logres1 logres1, xlab(-7(1) 0) ylab(-7(1) 0) saving(pic101)
```

```
. qqplot logres1 logres2, xlab(-7(1) 0) ylab(-7(1) 0) saving(pic102)
```

```
. qqplot logres1 logres3, xlab(-7(1) 0) ylab(-7(1) 0) saving(pic103)
```

```
. qqplot logres1 logres4, xlab(-7(1) 0) ylab(-7(1) 0) saving(pic104)
```

```
. graph using pic101 pic102 pic103 pic104, margin(15) saving(pic100)
```

Q-Q PLOTS: theo_CV=2_30comp_uncensored

STATA LOG FILE/OUTPUT: theo_CV=1_30comp_censored.log

label list

method:

- 1 original
- 2 MaxLIP1
- 3 MaxLIP2
- 4 MaxLIP3
- 5 MaxLIP4
- 6 MaxLIP5
- 7 Allender
- 8 Novigen

. sort meth

. by meth: summarize residue, detail

-> meth=original

residue

```
-----  
Percentiles  Smallest  
1%   .0104443   .0064023  
5%   .0182625   .0078619  
10%  .0241493   .0087233   Obs          450  
25%  .040491    .0094144   Sum of Wgt.  450  
  
50%  .0704659  
      Largest  Std. Dev.  .1000437  
      .5153022  
75%  .1241246   .609885    Variance     .0098253  
90%  .2044574   .6113446   Skewness     3.384686  
95%  .2848463   .9999917   Kurtosis     22.12941  
99%  .5067896
```

-> meth= MaxLIP1

residue

```
-----  
Percentiles  Smallest  
1%   .006801    .003112  
5%   .012948    .004712  
10%  .018105    .00522    Obs          450  
25%  .033539    .006293   Sum of Wgt.  450  
  
50%  .0639835  
      Largest  Std. Dev.  .0982464  
      .1065999
```


75%	.122838	.568162		
90%	.2168105	.620855	Variance	.0113635
95%	.293713	.709869	Skewness	3.071871
99%	.538324	.951251	Kurtosis	17.23734

-> meth= MaxLIP2

residue

Percentiles		Smallest		
1%	.0341	.0218		
5%	.0501	.0273		
10%	.0636	.0297	Obs	450
25%	.0776	.0323	Sum of Wgt.	450
50%		.08645	Mean	.1039447
		Largest	Std. Dev.	.0563251
75%	.11	.361		
90%	.168	.391	Variance	.0031725
95%	.213	.434	Skewness	2.899569
99%	.34	.509	Kurtosis	14.91835

-> meth= MaxLIP3

residue

Percentiles		Smallest		
1%	.00804	0		
5%	.0209	0		
10%	.0284	0	Obs	450
25%	.0458	0	Sum of Wgt.	450
50%		.0761	Mean	.0980601
		Largest	Std. Dev.	.081478
75%	.125	.442		
90%	.19	.469	Variance	.0066387
95%	.247	.56	Skewness	2.621793
99%	.417	.717	Kurtosis	14.33496

-> meth= MaxLIP4

residue

Percentiles		Smallest		
1%	.0488	1.09e-26		
5%	.0696	4.13e-23		
10%	.0737	6.17e-21	Obs	450
25%	.0811	1.10e-18	Sum of Wgt.	450

50%	.09205		Mean	.1020758
		Largest	Std. Dev.	.0318593
75%	.119	.203		
90%	.1485	.209	Variance	.001015
95%	.165	.218	Skewness	.8910966
99%	.198	.234	Kurtosis	4.740295

-> meth= MaxLIP5

residue

	Percentiles	Smallest		
1%	.0623	1.72e-23		
5%	.071	.0502		
10%	.07455	.0577	Obs	450
25%	.0814	.0605	Sum of Wgt.	450

50%	.09255		Mean	.1037798
		Largest	Std. Dev.	.0329351
75%	.119	.22		
90%	.15	.225	Variance	.0010847
95%	.17	.241	Skewness	1.452663
99%	.214	.271	Kurtosis	5.832544

-> meth=Allender

residue

	Percentiles	Smallest		
1%	.02129	.01464		
5%	.03263	.01713		
10%	.04039	.01855	Obs	450
25%	.05996	.01966	Sum of Wgt.	450

50%	.09156		Mean	.1124434
		Largest	Std. Dev.	.0792857
75%	.14113	.41884		
90%	.206655	.47641	Variance	.0062862
95%	.26626	.47728	Skewness	2.297578
99%	.41354	.69517	Kurtosis	11.94352

-> meth= Novigen

residue

	Percentiles	Smallest		
1%	.0004956	.000075		

5%	.002254	.0003163		
10%	.0049331	.0004724	Obs	450
25%	.015895	.0004758	Sum of Wgt.	450
50%	.0455017		Mean	.0885098
		Largest	Std. Dev.	.1153374
75%	.1068703	.5294565		
90%	.238763	.5486197	Variance	.0133027
95%	.368078	.5711085	Skewness	2.228153
99%	.5110412	.5974749	Kurtosis	7.83988

. with logres meth if meth==1|meth==2: ksmirnov logres, by(meth)

Two-sample Kolmogorov-Smirnov test for equality of distribution functions:

Smaller group	D	P-value	Corrected
original:	0.0133	0.923	
MaxLIP1:	-0.0711	0.103	
Combined K-S:	0.0711	0.205	0.182

. with logres meth if meth==1|meth==7: ksmirnov logres, by(meth)

Two-sample Kolmogorov-Smirnov test for equality of distribution functions:

Smaller group	D	P-value	Corrected
original:	0.1756	0.000	
Allender:	-0.0133	0.923	
Combined K-S:	0.1756	0.000	0.000

. with logres meth if meth==1|meth==8: ksmirnov logres, by(meth)

Two-sample Kolmogorov-Smirnov test for equality of distribution functions:

Smaller group	D	P-value	Corrected
original:	0.0356	0.566	
Novigen:	-0.2422	0.000	
Combined K-S:	0.2422	0.000	0.000

. qqplot logres1 logres1, xlab(-10(2) 0) ylab(-10(2) 0) saving(pic201)

. qqplot logres1 logres7, xlab(-10(2) 0) ylab(-10(2) 0) saving(pic202)

```
. qqplot logres1 logres8, xlab(-10(2) 0) ylab(-10(2) 0) saving(pic203)  
. qqplot logres1 logres2, xlab(-10(2) 0) ylab(-10(2) 0) saving(pic204)  
. graph using pic201 pic202 pic203 pic204, margin(15) saving(pic200)
```

Q-Q PLOTS: theo_CV=1_30comp_censored

STATA LOG FILE/OUTPUT: theo_cv=1_10comp_uncensored.

label list

method:

- 1 original
- 2 Allender
- 3 Novigen
- 4 MaxLIP1

. sort meth

. by meth: summarize residue, detail

-> meth=original

residue

Percentiles		Smallest		
1%	.0106457	.0064023		
5%	.0182469	.0106457		
10%	.0242162	.0113911	Obs	150
25%	.0403267	.0131453	Sum of Wgt.	150
50%		.0705089	Mean	.099377
		Largest	Std. Dev.	.0937839
75%	.1241246	.3799233		
90%	.2044574	.4373933	Variance	.0087954
95%	.2848463	.5153022	Skewness	2.524185
99%	.5153022	.609885	Kurtosis	11.3392

-> meth=Allender

residue

Percentiles		Smallest		
1%	.01	.01		
5%	.02	.01		
10%	.02	.01	Obs	150
25%	.04	.01	Sum of Wgt.	150
50%		.07	Mean	.0992667
		Largest	Std. Dev.	.0991785
75%	.12	.4		
90%	.21	.46	Variance	.0098364
95%	.29	.55	Skewness	2.650132
99%	.55	.65	Kurtosis	12.13445

-> meth= Novigen

residue

Percentiles		Smallest		
1%	.0060007	.0024436		
5%	.0115108	.0060007		
10%	.0165487	.0066583	Obs	150
25%	.0333049	.0081255	Sum of Wgt.	150
50%		.0660467	Mean	.0980262
		Largest	Std. Dev.	.0936227
75%	.1280603	.4147782		
90%	.2227006	.4346096	Variance	.0087652
95%	.3116175	.4372376	Skewness	1.808153
99%	.4372376	.4562849	Kurtosis	6.300382

-> meth= MaxLIP1

residue

Percentiles		Smallest		
1%	.006678	.004565		
5%	.012775	.006678		
10%	.0181775	.008076	Obs	150
25%	.03228	.009358	Sum of Wgt.	150
50%		.0639495	Mean	.1010434
		Largest	Std. Dev.	.1133421
75%	.123211	.441192		
90%	.225403	.493464	Variance	.0128464
95%	.320747	.58564	Skewness	2.82956
99%	.58564	.777415	Kurtosis	13.52952

. with logres meth if meth==1|meth==2: ksmirnov logres, by(meth)

Two-sample Kolmogorov-Smirnov test for equality of distribution functions:

Smaller group	D	P-value	Corrected
---------------	---	---------	-----------

original:	0.0267	0.899	
Allender:	-0.0667	0.513	
Combined K-S:	0.0667	0.893	0.866

. with logres meth if meth==1|meth==3: ksmirnov logres, by(meth)

Two-sample Kolmogorov-Smirnov test for equality of distribution functions:

Smaller group	D	P-value	Corrected
original:	0.0333	0.846	
Novigen:	-0.0867	0.324	
Combined K-S:	0.0867	0.626	0.574

. with logres meth if meth==1|meth==4: ksmirnov logres, by(meth)

Two-sample Kolmogorov-Smirnov test for equality of distribution functions:

Smaller group	D	P-value	Corrected
original:	0.0267	0.899	
MaxLIP1:	-0.0867	0.324	
Combined K-S:	0.0867	0.626	0.574

. qqplot logres1 logres1, xlab(-6(1) 0) ylab(-6(1) 0) saving(pic301)

. qqplot logres1 logres2, xlab(-6(1) 0) ylab(-6(1) 0) saving(pic202)
file pic202.gph already exists
r(602);

. qqplot logres1 logres2, xlab(-6(1) 0) ylab(-6(1) 0) saving(pic302)

. qqplot logres1 logres3, xlab(-6(1) 0) ylab(-6(1) 0) saving(pic303)

. qqplot logres1 logres4, xlab(-6(1) 0) ylab(-6(1) 0) saving(pic304)

. graph using pic301 pic302 pic303 pic304, margin(15) saving(pic300)

.

Q-Q PLOT: theo_cv=1_10comp_uncensored

STATA LOG FILE/OUTPUT: theo_cv=1_10comp_censored

label list

method:

- 1 original
- 2 Allender
- 3 Novigen
- 4 MaxLIP1

. sort meth

. by meth: summarize residue, detail

-> meth=original

Percentiles		Smallest		
1%	.01065	.0064		
5%	.01825	.01065		
10%	.024215	.01139	Obs	150
25%	.04033	.01315	Sum of Wgt.	150
50%			Mean	.099377
		Largest	Std. Dev.	.0937834
75%	.12412	.37992		
90%	.20446	.43739	Variance	.0087953
95%	.28485	.5153	Skewness	2.524163

99% .5153 .60988 Kurtosis 11.33908

-> meth=Allender

residue

Percentiles		Smallest		
1%	.0144658	.0119897		
5%	.0292241	.0144658		
10%	.0396419	.018851	Obs	150
25%	.0568663	.0241437	Sum of Wgt.	150
50%		.0836838	Mean	.1036115
		Largest	Std. Dev.	.0725697
75%	.1248899	.2869433		
90%	.1856865	.2930372	Variance	.0052664
95%	.2471603	.3350985	Skewness	2.522367
99%	.3350985	.5692753	Kurtosis	13.88663

-> meth= Novigen

residue

Percentiles		Smallest		
1%	.0008644	.0007836		
5%	.0027517	.0008644		
10%	.0052957	.000879	Obs	150
25%	.015139	.0012189	Sum of Wgt.	150
50%		.0467842	Mean	.0899784
		Largest	Std. Dev.	.1150946
75%	.1135213	.4738443		
90%	.2398872	.4764183	Variance	.0132468
95%	.3712737	.483834	Skewness	2.158361
99%	.483834	.5739807	Kurtosis	7.452154

-> meth= MaxLIP1

residue

Percentiles		Smallest		
1%	.00457	.00321		
5%	.00931	.00457		
10%	.0137	.00557	Obs	150
25%	.0274	.00634	Sum of Wgt.	150
50%		.05785	Mean	.1010811
		Largest	Std. Dev.	.124524

75%	.124	.484		
90%	.2375	.542	Variance	.0155062
95%	.334	.633	Skewness	2.977822
99%	.633	.868	Kurtosis	14.69869

. with logres meth if meth==1|meth==2: ksmirnov logres, by(meth)

Two-sample Kolmogorov-Smirnov test for equality of distribution functions:

Smaller group	D	P-value	Corrected
original:	0.1600	0.021	
Allender:	-0.0333	0.846	
Combined K-S:	0.1600	0.043	0.032

. with logres meth if meth==1|meth==3: ksmirnov logres, by(meth)

Two-sample Kolmogorov-Smirnov test for equality of distribution functions:

Smaller group	D	P-value	Corrected
original:	0.0400	0.787	
Novigen:	-0.2333	0.000	
Combined K-S:	0.2333	0.001	0.000

. with logres meth if meth==1|meth==4: ksmirnov logres, by(meth)

Two-sample Kolmogorov-Smirnov test for equality of distribution functions:

Smaller group	D	P-value	Corrected
original:	0.0333	0.846	
MaxLIP1:	-0.1333	0.069	
Combined K-S:	0.1333	0.139	0.111

. qqplot logres1 logres1, xlab (-8(2) 0) ylab(-8(2) 0) saving(pic401)

. qqplot logres1 logres2, xlab (-8(2) 0) ylab(-8(2) 0) saving(pic402)

. qqplot logres1 logres3, xlab (-8(2) 0) ylab(-8(2) 0) saving(pic403)

. qqplot logres1 logres4, xlab (-8(2) 0) ylab(-8(2) 0) saving(pic404)

. graph using pic401 pic402 pic403 pic404, margin(15) saving(pic400)

PLOT: theo_cv=1_10comp_censored

Q-Q

STATA LOG FILE/OUTPUT: theo2dist(25%)_cv=1 _cens.log

label list

method:

- 1 Original
- 2 Allender
- 3 Novigen
- 4 MaxLIP1
- 5 MaxLIP2
- 6 MaxLIP3
- 7 MaxLIP4
- 8 MaxLIP5

. sort meth

. by meth: summarize residue, detail

-> meth=Original

residue

Percentiles		Smallest		
1%	.013145	.006402		
5%	.024512	.010444		
10%	.0344085	.010646	Obs	450
25%	.061403	.011391	Sum of Wgt.	450
50%		.1211225	Mean	.2046446
		Largest	Std. Dev.	.2646265
75%	.247587	1.303771		
90%	.450136	1.550776	Variance	.0700272
95%	.637528	1.922001	Skewness	4.668925
99%	1.272551	3.059975	Kurtosis	38.87212

-> meth=Allender

residue

Percentiles		Smallest		
1%	.0123877	.0041459		
5%	.025437	.0078348		
10%	.0387616	.0104602	Obs	450
25%	.0733772	.0119519	Sum of Wgt.	450

50%	.1536242		Mean	.274754
		Largest	Std. Dev.	.5237432
75%	.310614	2.12866		
90%	.5808705	2.385667	Variance	.2743069
95%	.8561678	2.637975	Skewness	11.33465
99%	1.890491	9.082289	Kurtosis	181.0417

-> meth= Novigen

residue

	Percentiles	Smallest		
1%	.0002374	.0000252		
5%	.0008388	.0000694		
10%	.0018749	.0001249	Obs	450
25%	.0111889	.0002316	Sum of Wgt.	450
50%	.0608923		Mean	.1939281
		Largest	Std. Dev.	.3284133
75%	.2058088	1.640383		
90%	.5631062	1.65851	Variance	.1078553
95%	.8685383	1.725988	Skewness	2.809264
99%	1.62936	1.875082	Kurtosis	11.26928

-> meth= MaxLIP1

residue

	Percentiles	Smallest		
1%	.00121	.00039		
5%	.00345	.00066		
10%	.006345	.00092	Obs	450
25%	.01657	.00111	Sum of Wgt.	450
50%	.0496		Mean	.1959748
		Largest	Std. Dev.	.501669
75%	.15113	3.07284		
90%	.411	3.52139	Variance	.2516718
95%	.8328	3.97003	Skewness	5.954972
99%	2.7684	5.55595	Kurtosis	47.80728

-> meth= MaxLIP2

residue

	Percentiles	Smallest
1%	.0209	.0133

5%	.0365	.0159		
10%	.04845	.0177	Obs	450
25%	.0786	.0195	Sum of Wgt.	450
50%	.14		Mean	.2084231
		Largest	Std. Dev.	.210582
75%	.26	1.13		
90%	.45	1.29	Variance	.0443448
95%	.603	1.45	Skewness	2.967521
99%	1.05	1.84	Kurtosis	16.3107

-> meth= MaxLIP3
residue

	Percentiles	Smallest		
1%	1.01e-23	9.48e-28		
5%	1.69e-18	1.05e-25		
10%	.0328	8.82e-25	Obs	450
25%	.0701	2.63e-24	Sum of Wgt.	450
50%	.1375		Mean	.2016791
		Largest	Std. Dev.	.2139922
75%	.262	1.15		
90%	.4435	1.26	Variance	.0457927
95%	.603	1.48	Skewness	2.889687
99%	1.03	1.86	Kurtosis	16.0941

-> meth= MaxLIP4
residue

	Percentiles	Smallest		
1%	1.06e-19	4.90e-22		
5%	4.05e-17	5.97e-21		
10%	6.42e-15	1.58e-20	Obs	450
25%	.0643	4.55e-20	Sum of Wgt.	450
50%	.1735		Mean	.1973293
		Largest	Std. Dev.	.1884106
75%	.27	.989		
90%	.3955	1.1	Variance	.0354986
95%	.532	1.22	Skewness	2.145598
99%	.915	1.44	Kurtosis	10.95138

-> meth= MaxLIP5
residue

```

-----
      Percentiles   Smallest
1%      .0923      .0604
5%      .113       .0749
10%     .113       .0819   Obs          450
25%     .113       .0872   Sum of Wgt.  450

50%     .14
          Largest   Mean      .2161073
          Largest   Std. Dev. .1692832
75%     .259       .982
90%     .3965      1.07   Variance    .0286568
95%     .55       1.18   Skewness    3.203414
99%     .905      1.62   Kurtosis    18.57704
  
```

```

. wtih logres meth if meth==1|meth==2: ksmirnov logres, by(meth)
unrecognized command: wtih
r(199);
  
```

```

. with logres meth if meth==1|meth==2: ksmirnov logres, by(meth)
  
```

Two-sample Kolmogorov-Smirnov test for equality of distribution functions:

```

Smaller group   D   P-value Corrected
-----
Original:       0.1000  0.011
Allender:      -0.0044  0.991
Combined K-S:   0.1000  0.022   0.018
  
```

```

. with logres meth if meth==1|meth==3: ksmirnov logres, by(meth)
  
```

Two-sample Kolmogorov-Smirnov test for equality of distribution functions:

```

Smaller group   D   P-value Corrected
-----
Original:       0.0356  0.566
Novigen:       -0.3133  0.000
Combined K-S:   0.3133  0.000   0.000
  
```

```

. with logres meth if meth==1|meth==4: ksmirnov logres, by(meth)
  
```

Two-sample Kolmogorov-Smirnov test for equality of distribution functions:

```

Smaller group   D   P-value Corrected
-----
  
```

```
Original:      0.0267  0.726
MaxLIP1:      -0.3267  0.000
Combined K-S:  0.3267  0.000  0.000
```

```
. with logres meth if meth==1|meth==5: ksmirnov logres, by(meth)
```

Two-sample Kolmogorov-Smirnov test for equality of distribution functions:

Smaller group	D	P-value	Corrected
Original:	0.0978	0.014	
MaxLIP2:	-0.0133	0.923	
Combined K-S:	0.0978	0.027	0.022

```
. label list
method:
```

- 1 Original
- 2 Allender
- 3 Novigen
- 4 MaxLIP1
- 5 MaxLIP2
- 6 MaxLIP3
- 7 MaxLIP4
- 8 MaxLIP5

```
. label var logres 1 "Original"
invalid syntax
r(198);
```

```
. label var logres1 "Original"
```

```
. label var logres2 "Allender"
```

```
. label var logres3 "Novigen"
```

```
. label var logres4 "MaxLIP1"
```

```
. label var logres5 "MaxLIP2"
```

```
. qqplot logres1 logres1, xlab (-12(2) 2) ylab(-12(2) 2)
```

```
. qqplot logres1 logres1, xlab (-12(2) 2) ylab(-12(2) 2) saving(pic501)
```

```
. qqplot logres1 logres2, xlab (-12(2) 2) ylab(-12(2) 2) saving(pic502)
```

```
. qqplot logres1 logres3, xlab (-12(2) 2) ylab(-12(2) 2) saving(pic503)  
. qqplot logres1 logres4, xlab (-12(2) 2) ylab(-12(2) 2) saving(pic504)  
. qqplot logres1 logres5, xlab (-12(2) 2) ylab(-12(2) 2) saving(pic505)  
. graph using pic501 pic502 pic503 pic504 pic505, margin(15) saving(pic500)  
.
```

Q-Q PLOT: theo2dist(25%)_cv=1_cens.log

STATA LOG FILE/OUTPUT: theo2dist(10%)_cv=1 _cens.log

label list

method:

- 1 original
- 2 MaxLIP1
- 3 MaxLIP2
- 4 MaxLIP3
- 5 MaxLIP4
- 6 MaxLIP5
- 7 Novigen
- 8 Allender

. sort meth

. by meth: summarize residue, detail

-> meth=original

residue

Percentiles		Smallest		
1%	.013145	.006402		
5%	.025809	.010444		
10%	.035604	.010646	Obs	450
25%	.070851	.011391	Sum of Wgt.	450
50%		.2063645	Mean	.4797407
		Largest	Std. Dev.	.746337
75%	.60958	3.6846		
90%	1.19396	4.34091	Variance	.557019
95%	1.6318	5.13767	Skewness	4.601158
99%	3.58921	8.42393	Kurtosis	37.23031

-> meth= MaxLIP1

residue

Percentiles		Smallest		
1%	.00025	.0000573		
5%	.000949	.000111		
10%	.00214	.000154	Obs	450
25%	.008	.000207	Sum of Wgt.	450
50%		.03425	Mean	.4977525

		Largest	Std. Dev.	1.870777
75%	.149	12.2		
90%	.615	13.2	Variance	3.499808
95%	2.07	14.7	Skewness	5.631229
99%	11.3	16.7	Kurtosis	37.28558

-> meth= MaxLIP2

residue

	Percentiles	Smallest		
1%	.0203	.0103		
5%	.0339	.0149		
10%	.0466	.0177	Obs	450
25%	.0843	.0189	Sum of Wgt.	450
50%	.199		Mean	.4859113
		Largest	Std. Dev.	.7390395
75%	.581	4.04		
90%	1.23	4.52	Variance	.5461794
95%	1.84	5.03	Skewness	3.689396
99%	3.71	6.86	Kurtosis	22.47118

-> meth= MaxLIP3

residue

	Percentiles	Smallest		
1%	.0151	.00701		
5%	.0339	.0106		
10%	.05625	.0126	Obs	450
25%	.112	.0135	Sum of Wgt.	450
50%	.1805		Mean	.4896067
		Largest	Std. Dev.	.7602744
75%	.592	4.02		
90%	1.205	4.52	Variance	.5780172
95%	1.82	5.43	Skewness	4.116962
99%	3.72	7.68	Kurtosis	28.13415

-> meth= MaxLIP4

residue

	Percentiles	Smallest		
1%	7.47e-27	6.94e-30		
5%	1.83e-23	2.29e-28		
10%	1.86e-20	9.07e-28	Obs	450

25%	.067	2.30e-27	Sum of Wgt.	450
50%	.223		Mean	.4754802
		Largest	Std. Dev.	.5962599
75%	.728	2.84		
90%	1.255	3.1	Variance	.3555259
95%	1.58	3.56	Skewness	2.276724
99%	2.66	4.66	Kurtosis	11.01786

-> meth= MaxLIP5

residue

Percentiles	Smallest			
1%	.000682	.0000995		
5%	.00837	.00022		
10%	.0751	.000373	Obs	450
25%	.112	.000539	Sum of Wgt.	450
50%	.237		Mean	.5076794
		Largest	Std. Dev.	.6039606
75%	.749	2.97		
90%	1.145	3.26	Variance	.3647685
95%	1.55	3.78	Skewness	3.224579
99%	2.68	6.16	Kurtosis	22.79787

-> meth= Novigen

residue

Percentiles	Smallest			
1%	.0000169	4.69e-06		
5%	.0001228	7.30e-06		
10%	.0003898	.0000107	Obs	450
25%	.0034506	.0000137	Sum of Wgt.	450
50%	.0755196		Mean	.4644568
		Largest	Std. Dev.	.9707761
75%	.4803623	5.32036		
90%	1.261279	5.636536	Variance	.9424062
95%	2.099527	6.184605	Skewness	3.619737
99%	5.188283	6.280733	Kurtosis	17.46399

-> meth=Allender

residue

Percentiles	Smallest
-------------	----------

1%	.01152	.00751		
5%	.03316	.00899		
10%	.05105	.0102	Obs	450
25%	.11684	.01099	Sum of Wgt.	450
50%	.282035		Mean	.6501363
		Largest	Std. Dev.	1.121444
75%	.69361	6.15467		
90%	1.52257	8.66661	Variance	1.257638
95%	2.50073	9.71312	Skewness	4.558668
99%	5.90843	9.74456	Kurtosis	30.28356

. with logres meth if meth==1|meth==3: ksmirnov logres, by(meth)

Two-sample Kolmogorov-Smirnov test for equality of distribution functions:

Smaller group	D	P-value	Corrected
original:	0.0511	0.309	
MaxLIP2:	-0.0311	0.647	
Combined K-S:	0.0511	0.599	0.567

. with logres meth if meth==1|meth==7: ksmirnov logres, by(meth)

Two-sample Kolmogorov-Smirnov test for equality of distribution functions:

Smaller group	D	P-value	Corrected
original:	0.0244	0.764	
Novigen:	-0.3644	0.000	
Combined K-S:	0.3644	0.000	0.000

. with logres meth if meth==1|meth==8: ksmirnov logres, by(meth)

Two-sample Kolmogorov-Smirnov test for equality of distribution functions:

Smaller group	D	P-value	Corrected
original:	0.1311	0.000	
Allender:	-0.0044	0.991	
Combined K-S:	0.1311	0.001	0.001

. qqplot logres1 logres1, xlab(-13(1) 2) ylab(-13(1) 2) saving(pic601)

```
. qqplot logres1 logres8, xlab(-13(1) 2) ylab(-13(1) 2) saving(pic601)
file pic601.gph already exists
r(602);
```

```
. qqplot logres1 logres8, xlab(-13(1) 2) ylab(-13(1) 2) saving(pic602)
```

```
. qqplot logres1 logres7, xlab(-13(1) 2) ylab(-13(1) 2) saving(pic603)
```

```
. qqplot logres1 logres3, xlab(-13(1) 2) ylab(-13(1) 2) saving(pic604)
```

```
. graph using pic601 pic602 pic603 pic604, margin(15) saving(pic600)
```

Q-Q PLOT: theor_2dist(10%)_cv=1 _cens.log

STATA LOG FILE/OUTPUT: novartis_diazinon_peaches

label list

method:

- 1 field trial single-item
- 2 Allender
- 3 Novigen
- 4 MaxLIP1
- 5 MaxLIP2
- 6 MaxLIP3
- 7 MaxLIP4
- 8 MaxLIP5

. sort meth

. by meth: summarize residue, detail

-> meth=field trial single-item
residue

Percentiles		Smallest		
1%	.0035	.001		
5%	.006	.003		
10%	.01	.004	Obs	200
25%	.0195	.004	Sum of Wgt.	200
50%			Mean	.144605
		Largest	Std. Dev.	.2047197
75%	.1855	.829		
90%	.4175	.877	Variance	.0419101
95%	.51	1.069	Skewness	2.965827
99%	.973	1.499	Kurtosis	15.00825

-> meth= Allender
residue

Percentiles		Smallest		
1%	.01	0		
5%	.015	.01		
10%	.02	.01	Obs	200
25%	.04	.01	Sum of Wgt.	200
50%			Mean	.14705
		Largest	Std. Dev.	.1920997

75%	.17	.75		
90%	.36	.91	Variance	.0369023
95%	.525	1.14	Skewness	3.194047
99%	1.025	1.43	Kurtosis	16.80296

-> meth= Novigen
residue

Percentiles		Smallest		
1%	.0008437	.0003666		
5%	.0046175	.0005848		
10%	.0076326	.0011025	Obs	200
25%	.0242813	.0012014	Sum of Wgt.	200
50%		.0757128	Mean	.1432559
		Largest	Std. Dev.	.1753759
75%	.1751336	.7213647		
90%	.4211342	.755182	Variance	.0307567
95%	.5299276	.7655723	Skewness	1.770232
99%	.7603771	.7718232	Kurtosis	5.564711

-> meth= MaxLIP1
residue

Percentiles		Smallest		
1%	.00527	.00329		
5%	.01152	.00478		
10%	.01755	.00576	Obs	200
25%	.03457	.00676	Sum of Wgt.	200
50%		.07455	Mean	.14387
		Largest	Std. Dev.	.217439
75%	.160745	.89415		
90%	.317935	1.03781	Variance	.0472797
95%	.51104	1.32316	Skewness	4.298318
99%	1.180485	1.8706	Kurtosis	27.71191

-> meth= MaxLIP2
residue

Percentiles		Smallest		
1%	.00931	.0058		
5%	.017805	.00831		
10%	.025725	.01031	Obs	200
25%	.045515	.01164	Sum of Wgt.	200

50%	.083875		Mean	.1471731
		Largest	Std. Dev.	.2016268
75%	.16487	.80878		
90%	.32218	.96647	Variance	.0406534
95%	.48202	1.23865	Skewness	4.256404
99%	1.10256	1.755	Kurtosis	27.72849

-> meth= MaxLIP3
residue

	Percentiles	Smallest		
1%	.01082	.00693		
5%	.02087	.0098		
10%	.029765	.01184	Obs	200
25%	.05919	.01343	Sum of Wgt.	200

50%	.118755		Mean	.1468229
		Largest	Std. Dev.	.1105692
75%	.210635	.42206		
90%	.30757	.44664	Variance	.0122255
95%	.3528	.49029	Skewness	1.10568
99%	.468465	.62281	Kurtosis	4.193542

-> meth= MaxLIP4
residue

	Percentiles	Smallest		
1%	.023355	.01886		
5%	.037045	.02189		
10%	.048455	.02482	Obs	200
25%	.07965	.02728	Sum of Wgt.	200

50%	.11889		Mean	.1434092
		Largest	Std. Dev.	.120316
75%	.157125	.55377		
90%	.249195	.62339	Variance	.0144759
95%	.35951	.71483	Skewness	3.557626
99%	.66911	1.03541	Kurtosis	21.2153

-> meth= MaxLIP5
residue

	Percentiles	Smallest
1%	.030295	.02294

5%	.04658	.02847		
10%	.060685	.03212	Obs	200
25%	.08897	.03452	Sum of Wgt.	200
50%	.116055		Mean	.1451988
		Largest	Std. Dev.	.087273
75%	.178155	.38303		
90%	.287105	.39794	Variance	.0076166
95%	.33202	.41706	Skewness	1.300914
99%	.4075	.46759	Kurtosis	4.177967

. with logres meth if meth==1|meth==3: ksmirnov logres, by(meth)

Two-sample Kolmogorov-Smirnov test for equality of distribution functions:

Smaller group	D	P-value	Corrected
field trial sing:	0.0600	0.487	
Novigen:	-0.0400	0.726	
Combined K-S:	0.0600	0.864	0.837

. with logres meth if meth==1|meth==4: ksmirnov logres, by(meth)

Two-sample Kolmogorov-Smirnov test for equality of distribution functions:

Smaller group	D	P-value	Corrected
field trial sing:	0.1600	0.006	
MaxLIP1:	-0.0500	0.607	
Combined K-S:	0.1600	0.012	0.009

. with logres meth if meth==1|meth==2: ksmirnov logres, by(meth)

Two-sample Kolmogorov-Smirnov test for equality of distribution functions:

Smaller group	D	P-value	Corrected
field trial sing:	0.2048	0.000	
Allender:	-0.0347	0.787	
Combined K-S:	0.2048	0.000	0.000

. qqplot logres1 logres1, saving(picnov101) xlabel(-8(2) 0) ylabel(-8(2) 0)
file picnov101.gph already exists
r(602);

```
. qqplot logres1 logres1, saving(picnov11) xlab(-8(2) 0) ylab(-8(2) 0)
. qqplot logres1 logres1, saving(picnov12) xlab(-8(2) 0) ylab(-8(2) 0)
. qqplot logres1 logres2, saving(picnov13) xlab(-8(2) 0) ylab(-8(2) 0)
. qqplot logres1 logres3, saving(picnov14) xlab(-8(2) 0) ylab(-8(2) 0)
. qqplot logres1 logres4, saving(picnov15) xlab(-8(2) 0) ylab(-8(2) 0)
. graph using picnov11 picnov13 picnov14 picnov15, margin(15) saving(picnov10)
.
```

Q-Q PLOT: novartis_diazinon_peaches

STATA OUTPUT/LOGFILE: PDP Single-serving Special Study

label list

method:

- 1 original
- 2 Allender
- 3 MaxLIP4
- 4 Novigen

. sort meth

. by meth: summarize residue, detail

-> meth=original

residue

Percentiles		Smallest		
1%	.001816	.0011817		
5%	.0034675	.0015394		
10%	.0050123	.001816	Obs	229
25%	.0096883	.0020533	Sum of Wgt.	229
50%			Mean	.0346431
		Largest	Std. Dev.	.0385296
75%	.044	.15		
90%	.099	.16	Variance	.0014845
95%	.12	.17	Skewness	2.043471
99%	.16	.24	Kurtosis	7.641382

-> meth=Allender

residue

Percentiles		Smallest		
1%	.016251	.014212		
5%	.019556	.014937		
10%	.021986	.016251	Obs	231
25%	.026654	.016676	Sum of Wgt.	231
50%			Mean	.035152
		Largest	Std. Dev.	.0119166
75%	.042244	.067989		
90%	.050417	.06859	Variance	.000142
95%	.05794	.08377	Skewness	1.096623
99%	.06859	.083983	Kurtosis	4.739464

-> meth= MaxLIP4

residue

Percentiles		Smallest		
1%	.0000152	.0000119		
5%	.0000206	.0000143		
10%	.000025	.0000152	Obs	231
25%	.0000373	.0000162	Sum of Wgt.	231
50%			Mean	.0305996
		Largest	Std. Dev.	.0726232
75%	.0298	.277		
90%	.0735	.331	Variance	.0052741
95%	.131	.461	Skewness	5.824271
99%	.331	.74	Kurtosis	47.94944

-> meth= Novigen

residue

Percentiles		Smallest		
1%	6.43e-06	9.38e-07		
5%	.0000328	2.80e-06		
10%	.0001093	6.43e-06	Obs	231
25%	.0006945	7.99e-06	Sum of Wgt.	231
50%			Mean	.0348873
		Largest	Std. Dev.	.0673469
75%	.0339306	.2970301		
90%	.0963392	.3259095	Variance	.0045356
95%	.1882241	.3350351	Skewness	3.008914
99%	.3259095	.4361157	Kurtosis	13.11701

. with logres meth if meth==1|meth==2: ksmirnov logres by(meth)
time-series operators not allowed
r(101);

. with logres meth if meth==1|meth==2: ksmirnov logres, by(meth)

Two-sample Kolmogorov-Smirnov test for equality of distribution functions:

Smaller group	D	P-value	Corrected
original:	0.4808	0.000	

Allender: -0.1312 0.019
Combined K-S: 0.4808 0.000 0.000

. with logres meth if meth==1|meth==3: ksmirnov logres, by(meth)

Two-sample Kolmogorov-Smirnov test for equality of distribution functions:

Smaller group	D	P-value	Corrected
original:	0.0303	0.810	
MaxLIP4:	-0.4242	0.000	
Combined K-S:	0.4242	0.000	0.000

. with logres meth if meth==1|meth==4: ksmirnov logres, by(meth)

Two-sample Kolmogorov-Smirnov test for equality of distribution functions:

Smaller group	D	P-value	Corrected
original:	0.0562	0.484	
Novigen:	-0.3977	0.000	
Combined K-S:	0.3977	0.000	0.000

. qqplot logres1 logres1, saving(picpdp11) xlab(-14(2) 0) ylab(-14(2) 0)
file picpdp11.gph already exists
r(602);

. qqplot logres1 logres1, saving(picpdp1) xlab(-14(2) 0) ylab(-14(2) 0)

. qqplot logres1 logres2, saving(picpdp2) xlab(-14(2) 0) ylab(-14(2) 0)

. qqplot logres1 logres3, saving(picpdp3) xlab(-14(2) 0) ylab(-14(2) 0)

. qqplot logres1 logres4, saving(picpdp4) xlab(-14(2) 0) ylab(-14(2) 0)

. graph using picpdp1 picpdp2 picpdp3 picpdp4, margin(15) saving(pdppic0)

Q-Q PLOT: PDP Single-Serving Special Study

