The SAS System

Obs	BLK	TRT	SEVERITY	PROP	SQRTPROP	ARCSEV	LOGSEV
1	1	3	8	0.08	0.28284	0.28676	2.07944
2	1	1	88	0.88	0.93808	1.21705	4.47734
3	1	2	36	0.36	0.60000	0.64350	3.58352
4	2	1	75	0.75	0.86603	1.04720	4.31749
5	2	2	25	0.25	0.50000	0.52360	3.21888
6	2	3	15	0.15	0.38730	0.39770	2.70805
7	3	2	60	0.60	0.77460	0.88608	4.09434
8	3	1	85	0.85	0.92195	1.17310	4.44265
9	3	3	13	0.13	0.36056	0.36886	2.56495
10	4	2	64	0.64	0.80000	0.92730	4.15888
11	4	3	5	0.05	0.22361	0.22551	1.60944
12	4	1	91	0.91	0.95394	1.26610	4.51086

The SAS System

The Mixed Procedure

Model Information	
Data Set	WORK.A
Dependent Variable	SEVERITY
Covariance Structure	Variance Components
Estimation Method	REML
Residual Variance Method	Profile
Fixed Effects SE Method	Model-Based
Degrees of Freedom Method	Containment

Class Level Information		
Class	Levels	Values
BLK	4	1 2 3 4
TRT	3	1 2 3

Dimensions	
Covariance Parameters	2
Columns in X	4
Columns in Z	4
Subjects	1
Max Obs per Subject	12

Number of Observations	
Number of Observations Read	12
Number of Observations Used	12
Number of Observations Not Used	0

Iteration History			
Iteration	Evaluations	-2 Res Log Like	Criterion
0	1	74.23329497	
1	1	74.20732649	0.00000000

Convergence criteria met.

Covariance Parameter Estimates

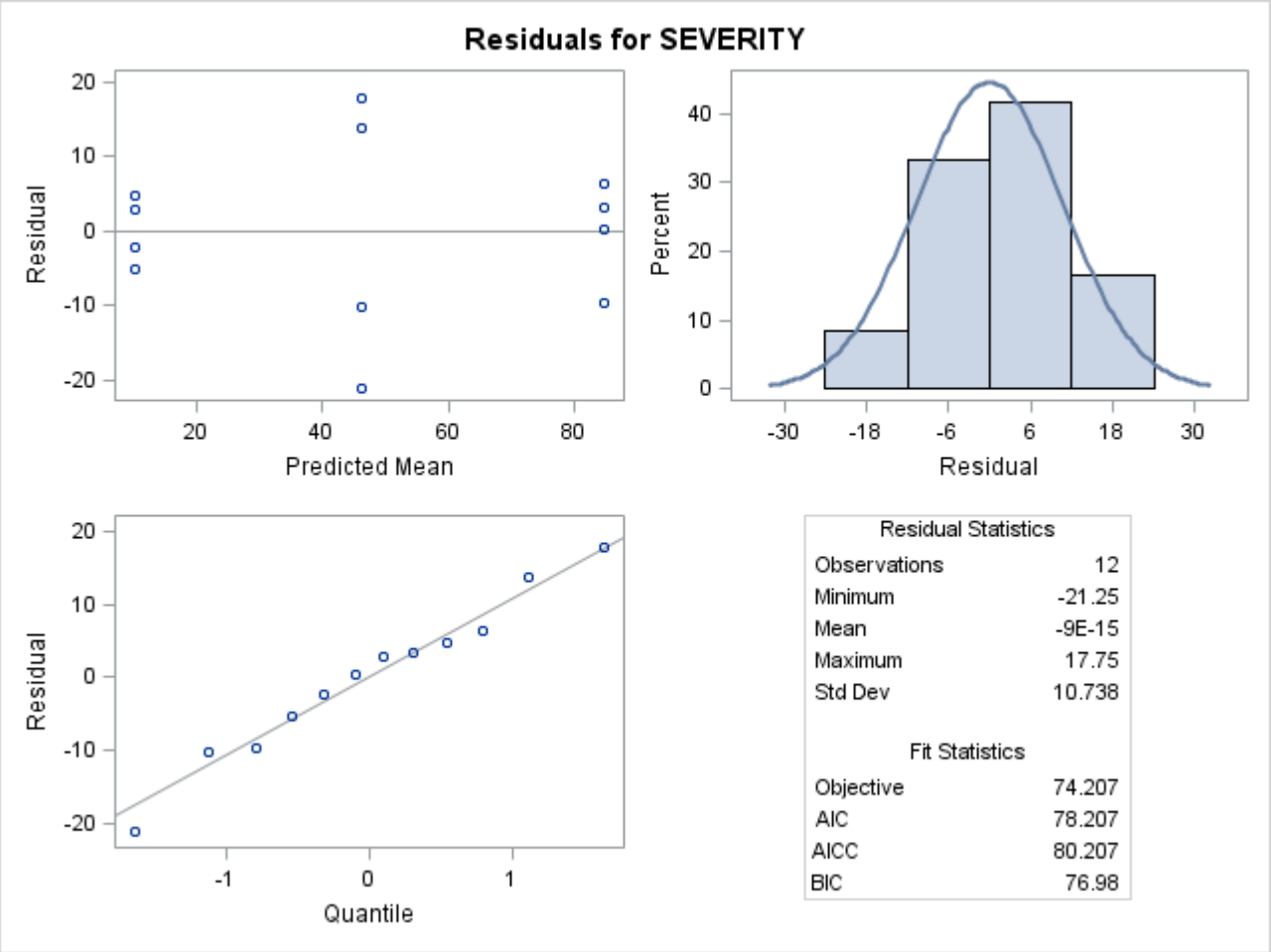
Cov Parm	Estimate	Standard Error	Z Value	Pr > Z
BLK	7.6944	49.6697	0.15	0.4384
Residual	133.22	76.9159	1.73	0.0416

Fit Statistics	
-2 Res Log Likelihood	74.2
AIC (Smaller is Better)	78.2
AICC (Smaller is Better)	80.2
BIC (Smaller is Better)	77.0

Type 3 Tests of Fixed Effects				
Effect	Num DF	Den DF	F Value	Pr > F
TRT	2	6	41.68	0.0003

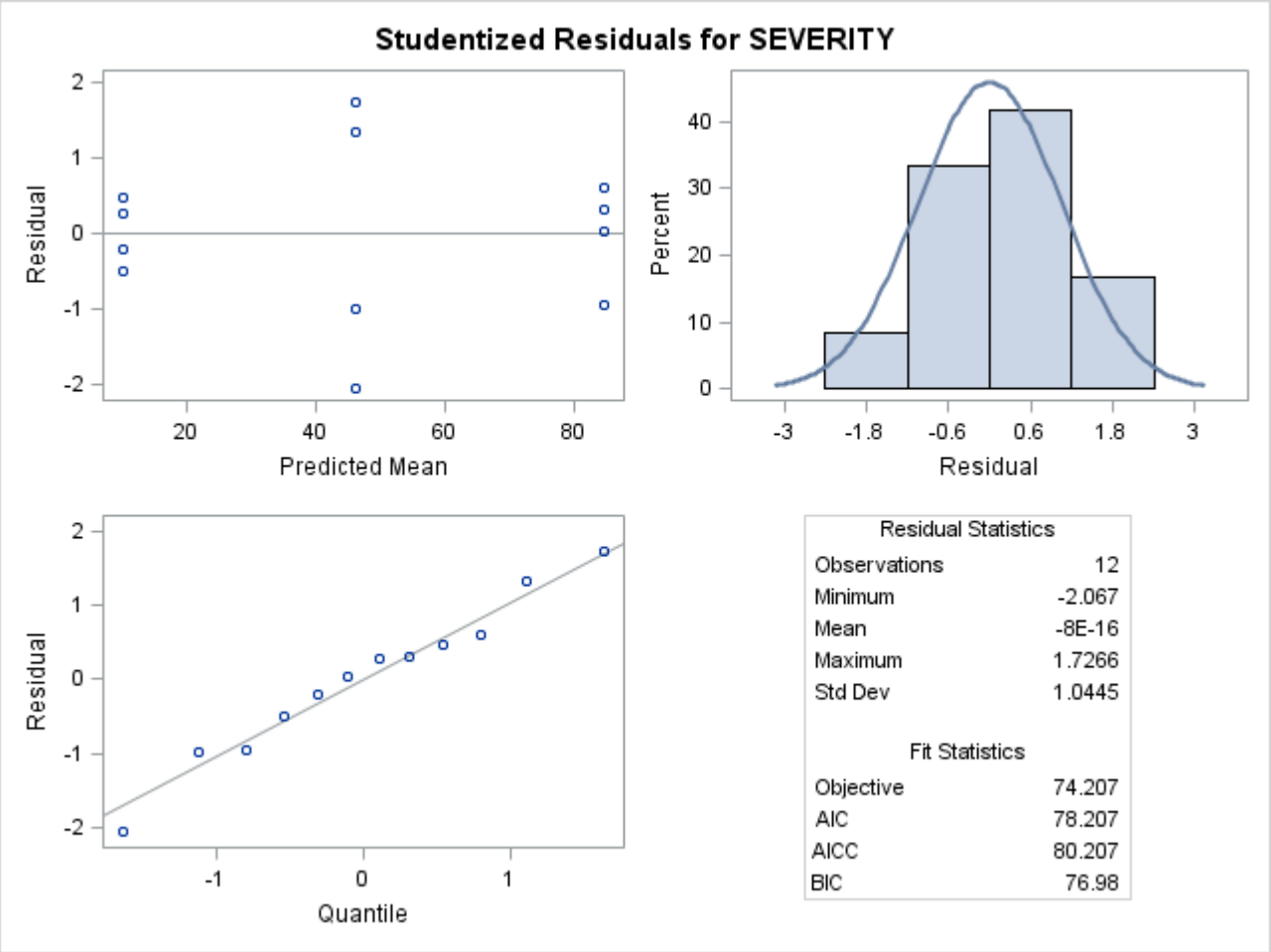
Least Squares Means						
Effect	TRT	Estimate	Standard Error	DF	t Value	Pr > |t|
TRT	1	84.7500	5.9354	6	14.28	<.0001
TRT	2	46.2500	5.9354	6	7.79	0.0002
TRT	3	10.2500	5.9354	6	1.73	0.1349

Differences of Least Squares Means							
Effect	TRT	_TRT	Estimate	Standard Error	DF	t Value	Pr > |t|
TRT	1	2	38.5000	8.1616	6	4.72	0.0033
TRT	1	3	74.5000	8.1616	6	9.13	<.0001
TRT	2	3	36.0000	8.1616	6	4.41	0.0045



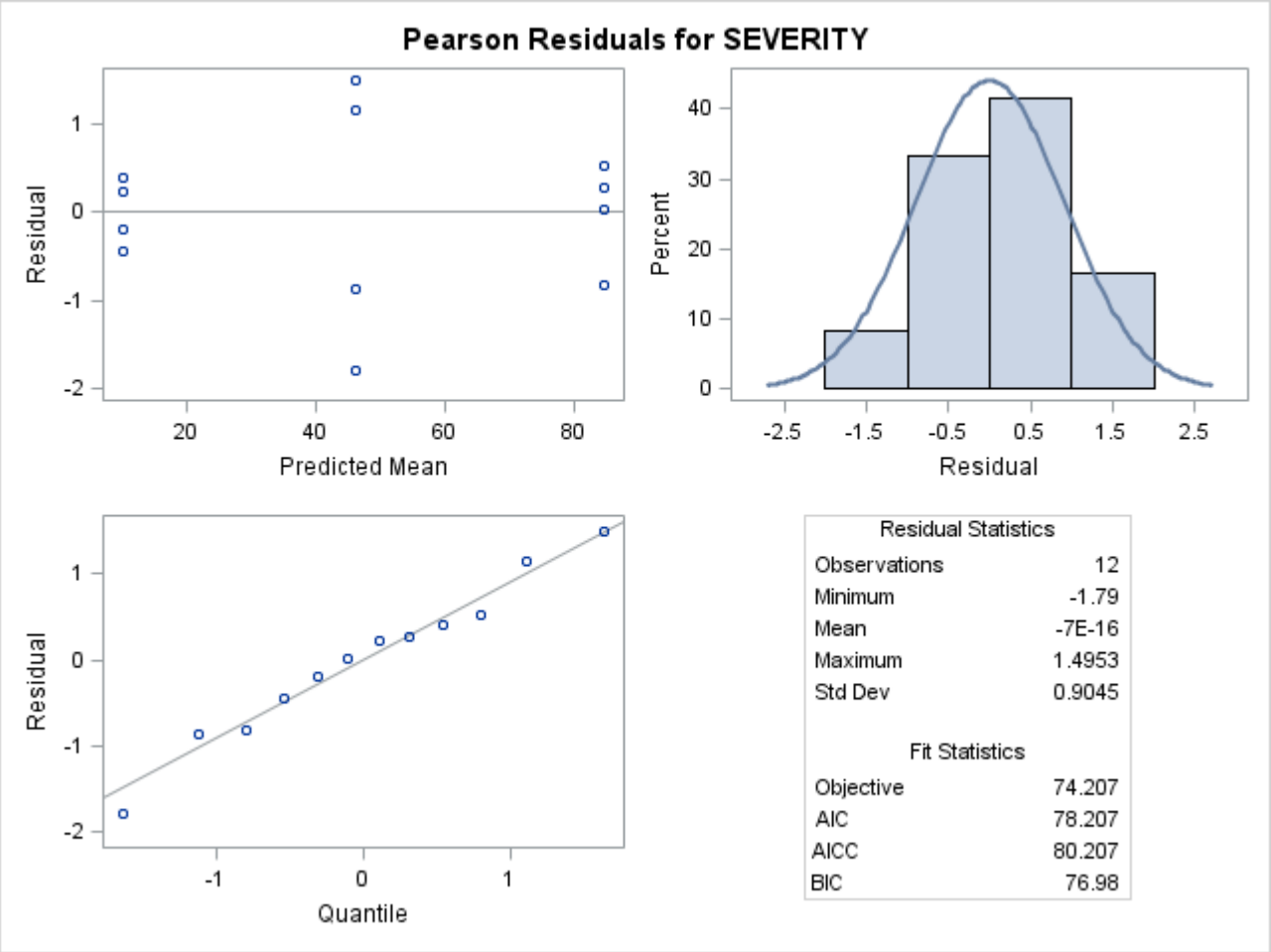
Residual Statistics	
Observations	12
Minimum	-21.25
Mean	-9E-15
Maximum	17.75
Std Dev	10.738

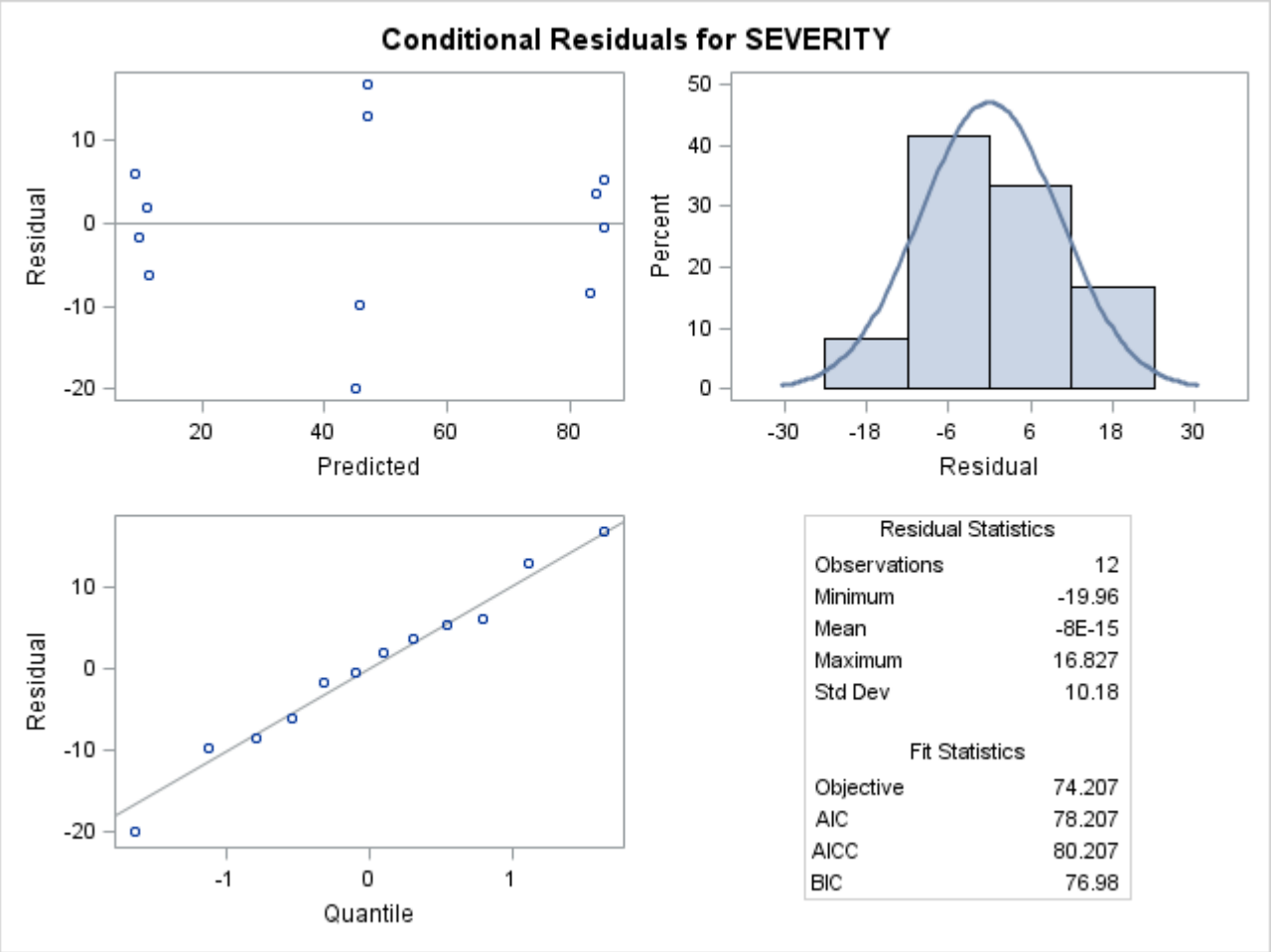
Fit Statistics	
Objective	74.207
AIC	78.207
AICC	80.207
BIC	76.98



Residual Statistics	
Observations	12
Minimum	-2.067
Mean	-8E-16
Maximum	1.7266
Std Dev	1.0445

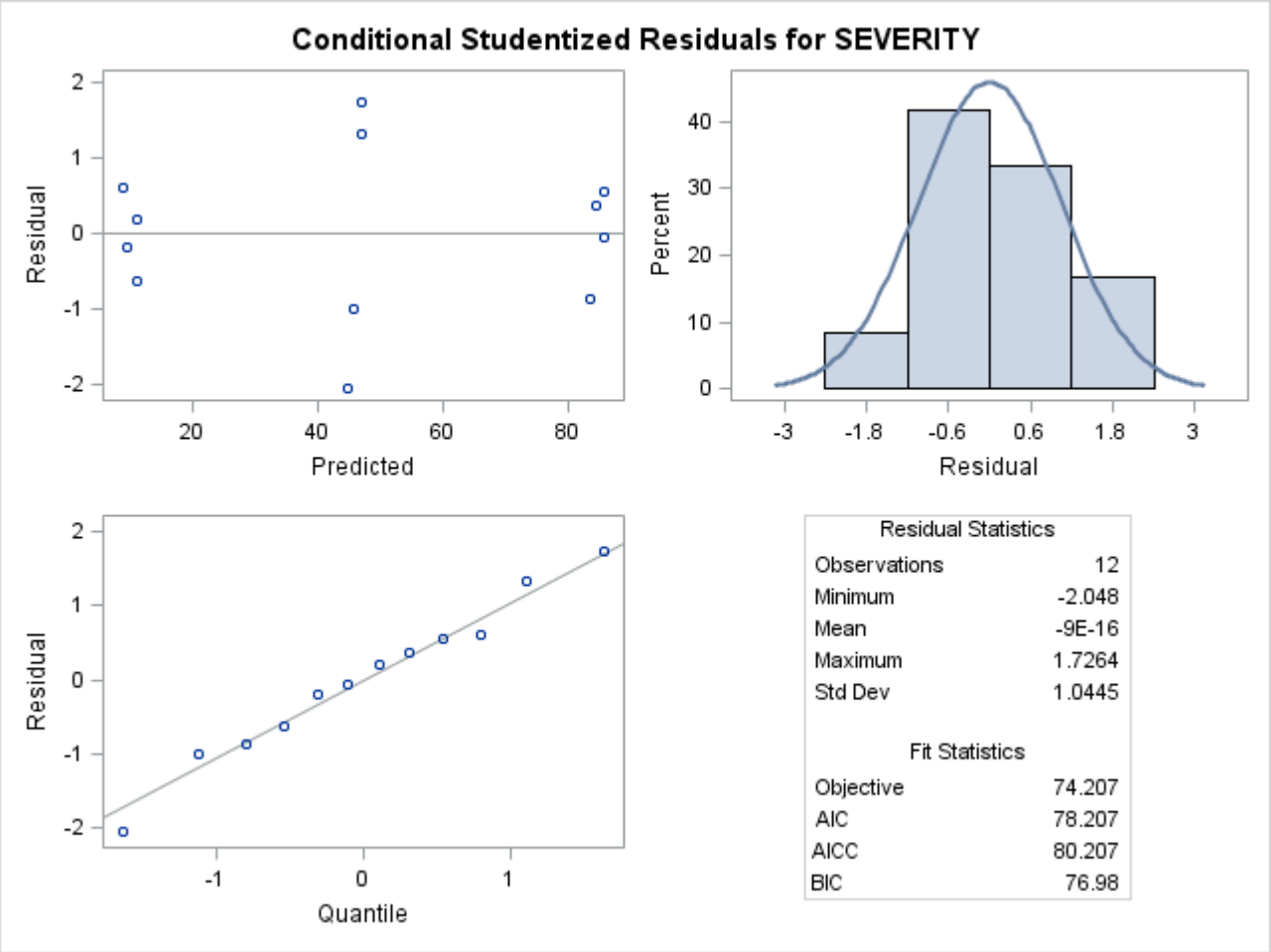
Fit Statistics	
Objective	74.207
AIC	78.207
AICC	80.207
BIC	76.98

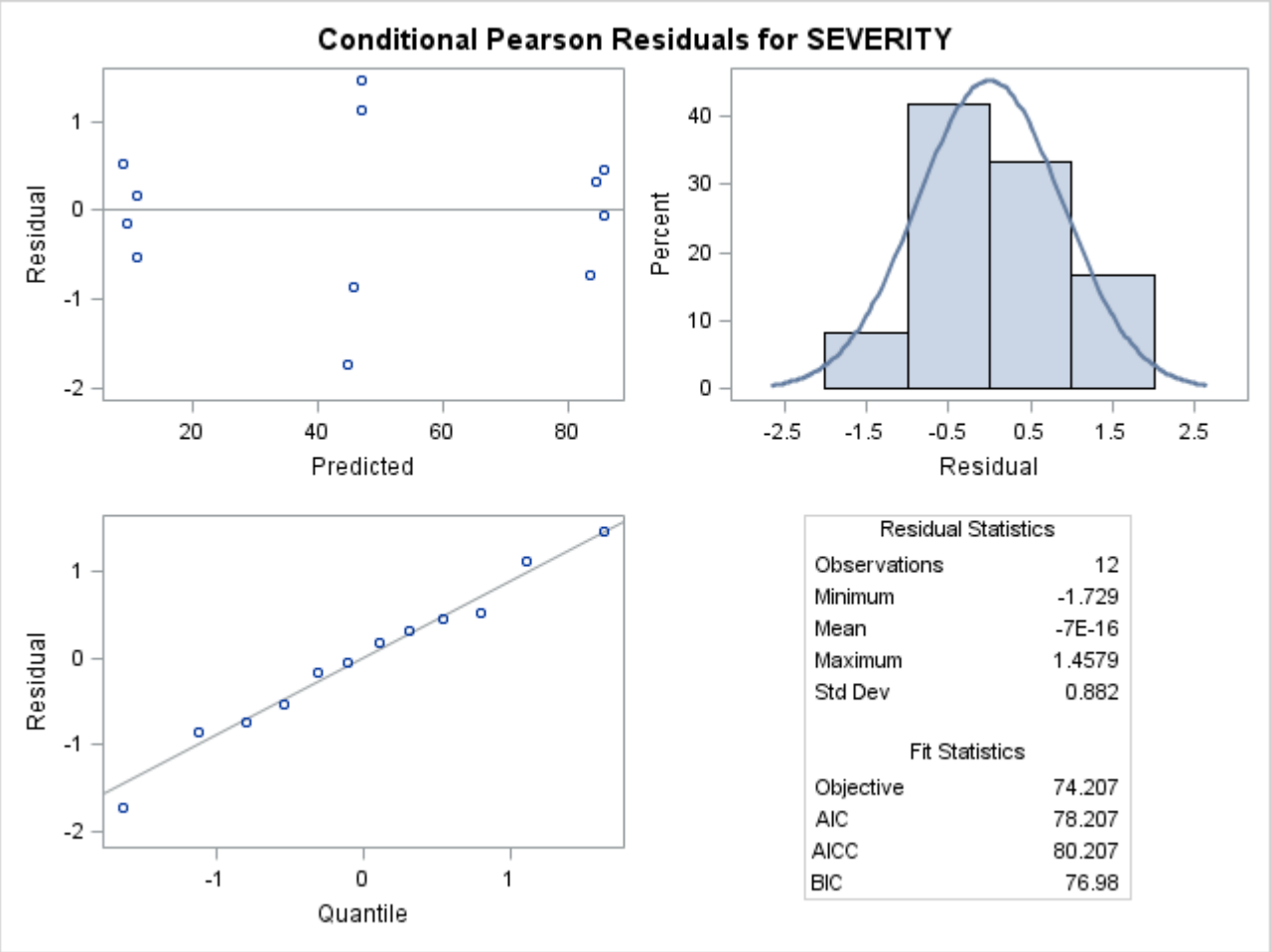

Pearson Residuals for SEVERITY
Residual
Predicted Mean
Percent
Residual
Residual
Quantile
Residual Statistics
Observations 12
Minimum -1.79
Mean -7E-16
Maximum 1.4953
Std Dev 0.9045
Fit Statistics
Objective 74.207
AIC 78.207
AICC 80.207
BIC 76.98



Residual Statistics	
Observations	12
Minimum	-19.96
Mean	-8E-15
Maximum	16.827
Std Dev	10.18

Fit Statistics	
Objective	74.207
AIC	78.207
AICC	80.207
BIC	76.98


Conditional Studentized Residuals for SEVERITY
Residual
Predicted
Percent
Residual
Residual
Quantile
Residual Statistics
Observations 12
Minimum -2.048
Mean -9E-16
Maximum 1.7264
Std Dev 1.0445
Fit Statistics
Objective 74.207
AIC 78.207
AICC 80.207
BIC 76.98


Conditional Pearson Residuals for SEVERITY
Residual
Predicted
Percent
Residual
Residual
Quantile
Residual Statistics
Observations 12
Minimum -1.729
Mean -7E-16
Maximum 1.4579
Std Dev 0.882
Fit Statistics
Objective 74.207
AIC 78.207
AICC 80.207
BIC 76.98

The SAS System

The GLIMMIX Procedure

Model Information	
Data Set	WORK.A
Response Variable	SEVERITY
Response Distribution	Poisson
Link Function	Log
Variance Function	Default
Variance Matrix	Not blocked
Estimation Technique	Residual PL
Degrees of Freedom Method	Containment

Class Level Information		
Class	Levels	Values
BLK	4	1 2 3 4
TRT	3	1 2 3

Number of Observations Read	12
Number of Observations Used	12

Dimensions	
G-side Cov. Parameters	1
Columns in X	4
Columns in Z	4
Subjects (Blocks in V)	1
Max Obs per Subject	12

Optimization Information	
Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Fixed Effects	Profiled
Starting From	Data

Iteration History					
Iteration	Restarts	Subiterations	Objective Function	Change	Max Gradient
0	0	4	15.201835863	0.17413419	0.000124
1	0	2	16.868598849	0.01532145	0.000165
2	0	2	16.934299787	0.00031073	0.000023
3	0	1	16.934495037	0.00000127	2.687E-8
4	0	0	16.934495372	0.00000000	2.291E-7

Convergence criterion (PCONV=1.11022E-8) satisfied.

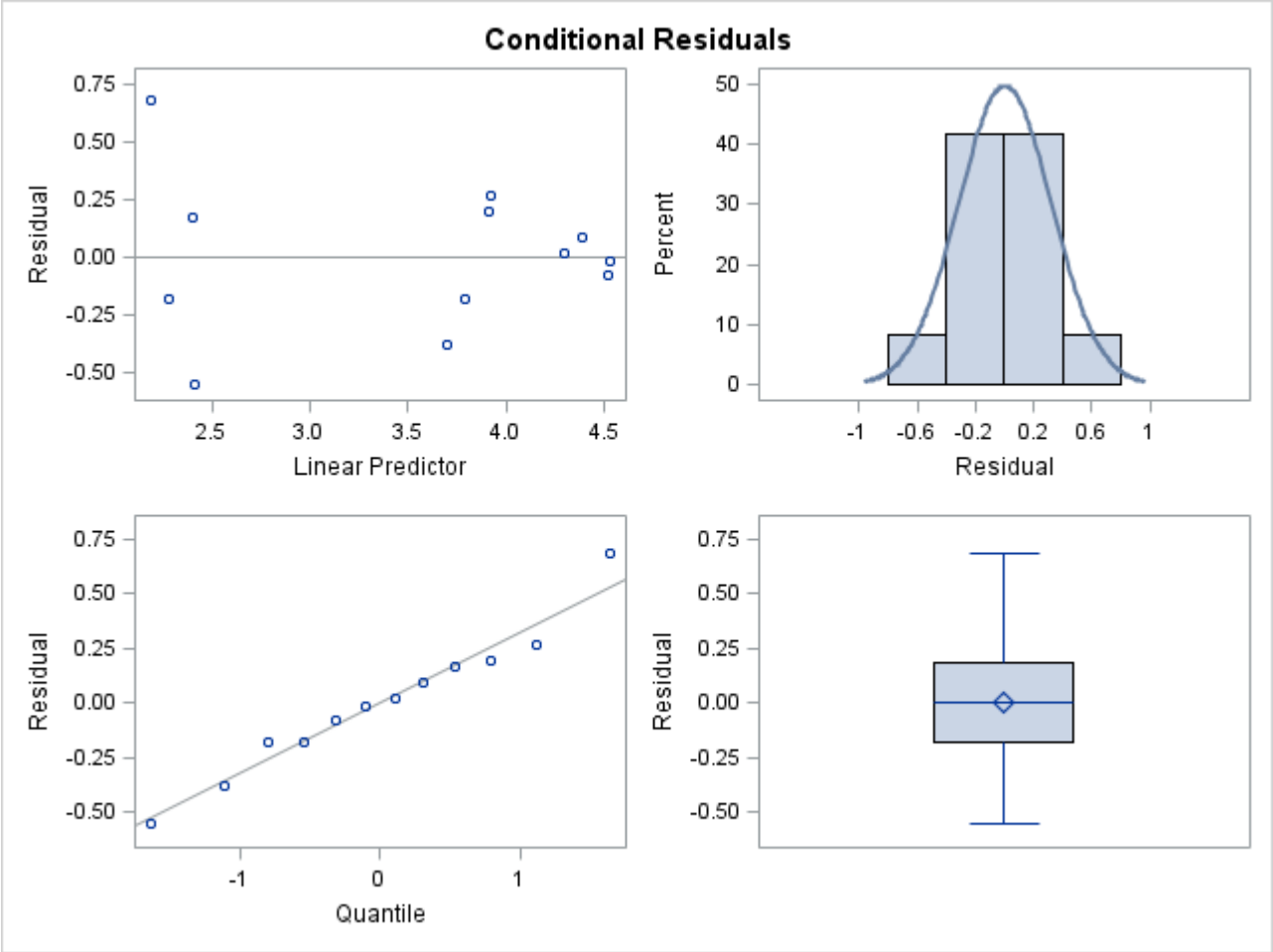
Fit Statistics	
-2 Res Log Pseudo-Likelihood	16.93
Generalized Chi-Square	24.32
Gener. Chi-Square / DF	2.70

Covariance Parameter Estimates		
Cov Parm	Estimate	Standard Error
BLK	0.01706	0.01995

Type III Tests of Fixed Effects				
Effect	Num DF	Den DF	F Value	Pr > F
TRT	2	6	90.48	<.0001

TRT Least Squares Means							
TRT	Estimate	Standard Error	DF	t Value	Pr > |t|	Mean	Standard Error Mean
1	4.4352	0.08500	6	52.18	<.0001	84.3729	7.1717
2	3.8296	0.09839	6	38.92	<.0001	46.0442	4.5303
3	2.3228	0.1693	6	13.72	<.0001	10.2044	1.7277

Differences of TRT Least Squares Means						
TRT	_TRT	Estimate	Standard Error	DF	t Value	Pr > |t|
1	2	0.6056	0.09141	6	6.63	0.0006
1	3	2.1124	0.1653	6	12.78	<.0001
2	3	1.5068	0.1726	6	8.73	0.0001


Conditional Residuals
Residual
Linear Predictor
Percent
Residual
Residual
Quantile
Residual

The SAS System

The GLIMMIX Procedure

Model Information	
Data Set	WORK.A
Response Variable	SEVERITY
Response Distribution	Negative Binomial
Link Function	Log
Variance Function	Default
Variance Matrix	Not blocked
Estimation Technique	Residual PL
Degrees of Freedom Method	Containment

Class Level Information		
Class	Levels	Values
BLK	4	1 2 3 4
TRT	3	1 2 3

Number of Observations Read	12
Number of Observations Used	12

Dimensions	
G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	4
Columns in Z	4
Subjects (Blocks in V)	1
Max Obs per Subject	12

Optimization Information	
Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	2
Lower Boundaries	2
Upper Boundaries	0
Fixed Effects	Profiled
Starting From	Data

Iteration History					
Iteration	Restarts	Subiterations	Objective Function	Change	Max Gradient
0	0	3	10.125539049	0.03218551	32.1041
1	0	4	9.8662095765	0.05537726	33.67302
2	0	3	9.8727138223	0.00107159	33.65009
3	0	0	9.8727153944	0.00000000	33.65008

Convergence criterion (PCONV=1.11022E-8) satisfied.

Estimated G matrix is not positive definite.

Fit Statistics	
-2 Res Log Pseudo-Likelihood	9.87
Generalized Chi-Square	9.67
Gener. Chi-Square / DF	1.07

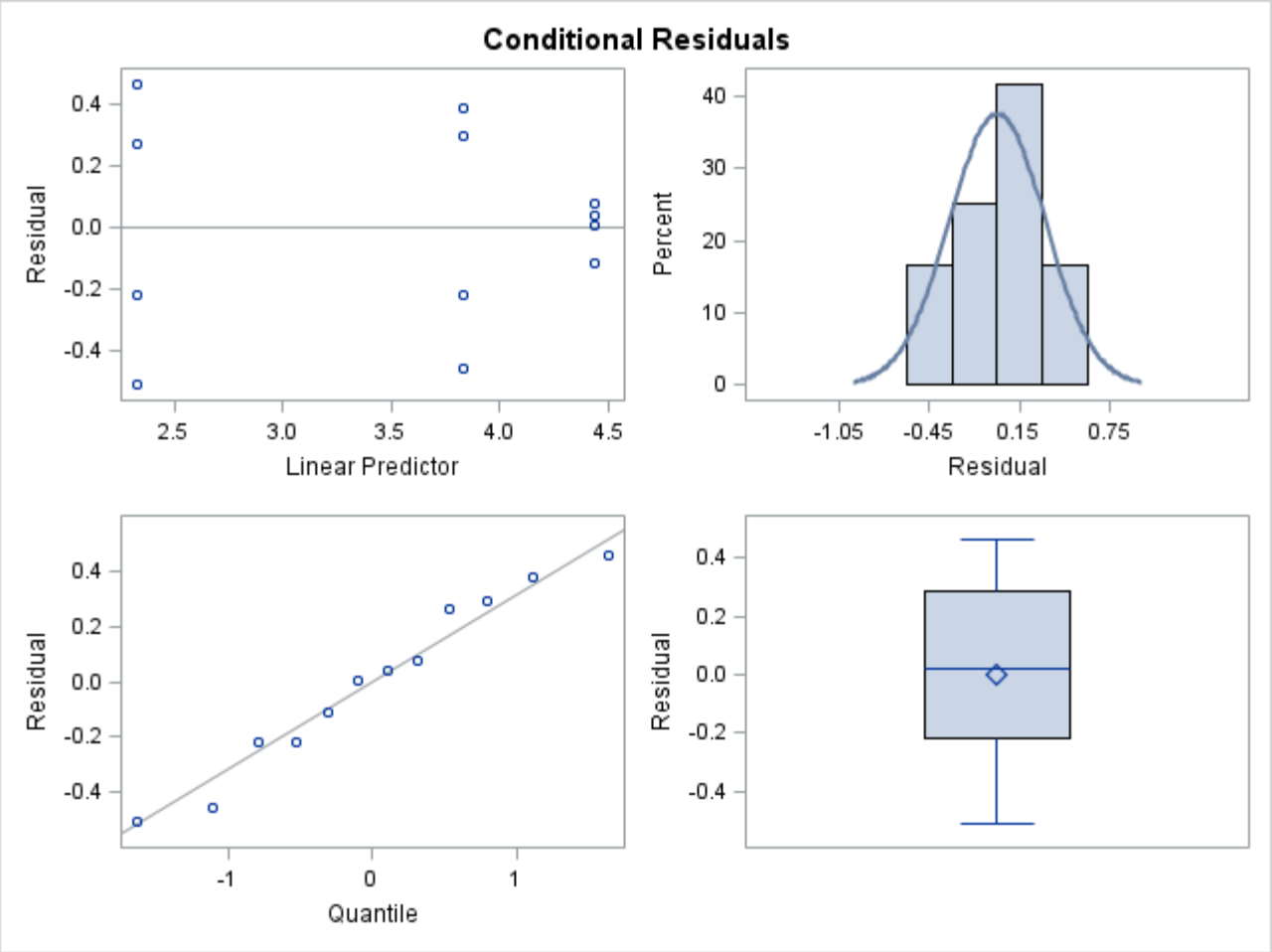
Covariance Parameter Estimates		
Cov Parm	Estimate	Standard Error
BLK	0	.
Scale	0.06495	0.04787

Type III Tests of Fixed Effects				
Effect	Num DF	Den DF	F Value	Pr > F
TRT	2	6	37.38	0.0004

TRT Least Squares Means							
TRT	Estimate	Standard Error	DF	t Value	Pr > |t|	Mean	Standard Error Mean
1	4.4397	0.1385	6	32.05	<.0001	84.7500	11.7395
2	3.8341	0.1471	6	26.06	<.0001	46.2500	6.8041
3	2.3273	0.2016	6	11.55	<.0001	10.2500	2.0660

Differences of TRT Least Squares Means						
TRT	_TRT	Estimate	Standard Error	DF	t Value	Pr > |t|
1	2	0.6056	0.2021	6	3.00	0.0241

1	3	2.1124	0.2446	6	8.64	0.0001
2	3	1.5068	0.2495	6	6.04	0.0009



The SAS System

The Mixed Procedure

Model Information	
Data Set	WORK.A
Dependent Variable	PROP
Covariance Structure	Variance Components
Estimation Method	REML
Residual Variance Method	Profile
Fixed Effects SE Method	Model-Based
Degrees of Freedom Method	Containment

Class Level Information		
Class	Levels	Values
BLK	4	1 2 3 4
TRT	3	1 2 3

Dimensions	
Covariance Parameters	2
Columns in X	4
Columns in Z	4
Subjects	1
Max Obs per Subject	12

Number of Observations	
Number of Observations Read	12
Number of Observations Used	12
Number of Observations Not Used	0

Iteration History			
Iteration	Evaluations	-2 Res Log Like	Criterion
0	1	-8.65976837	
1	1	-8.68573686	0.00000000

Convergence criteria met.

Covariance Parameter Estimates

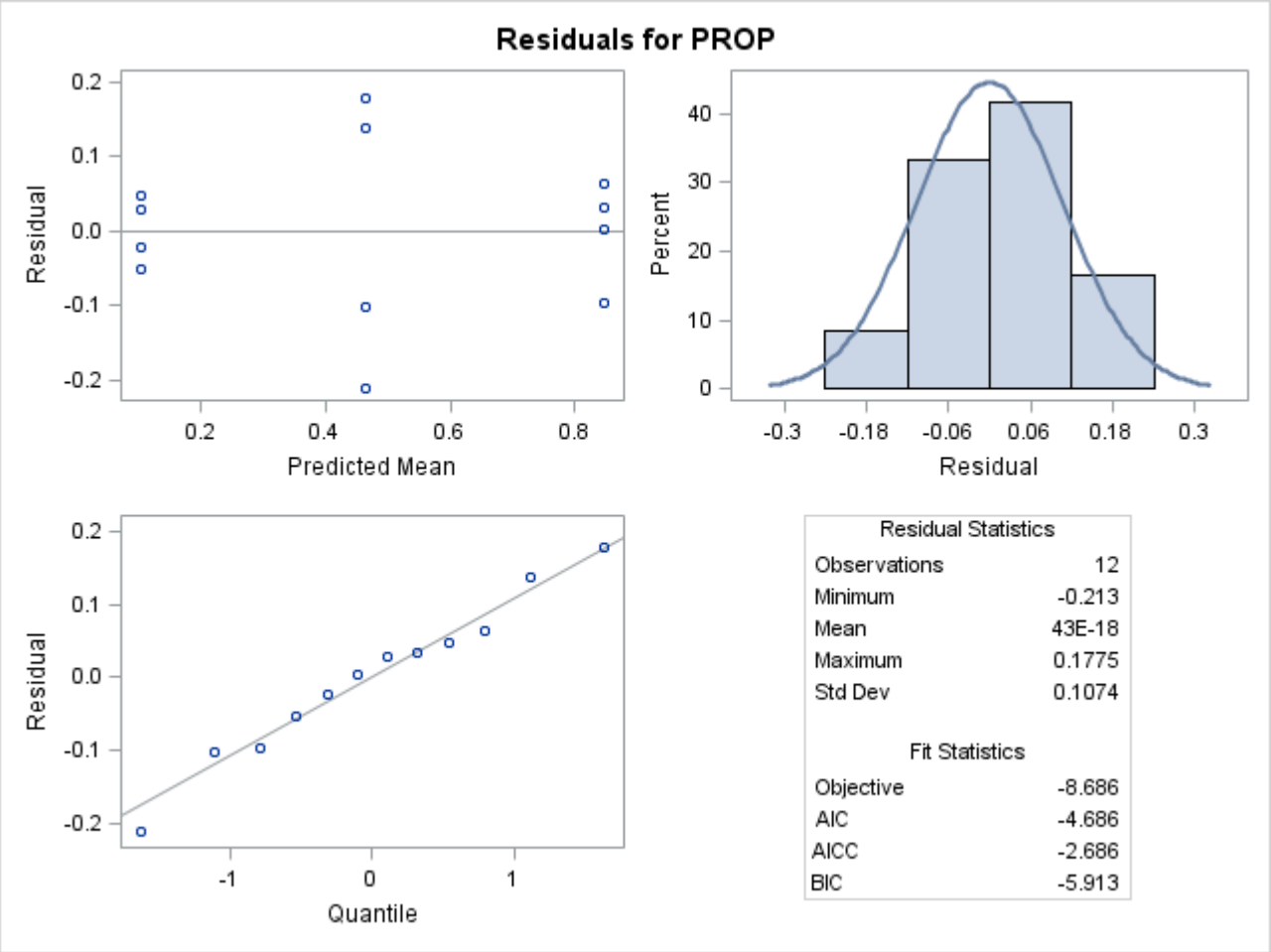
Cov Parm	Estimate	Standard Error	Z Value	Pr > Z
BLK	0.000769	0.004967	0.15	0.4384
Residual	0.01332	0.007692	1.73	0.0416

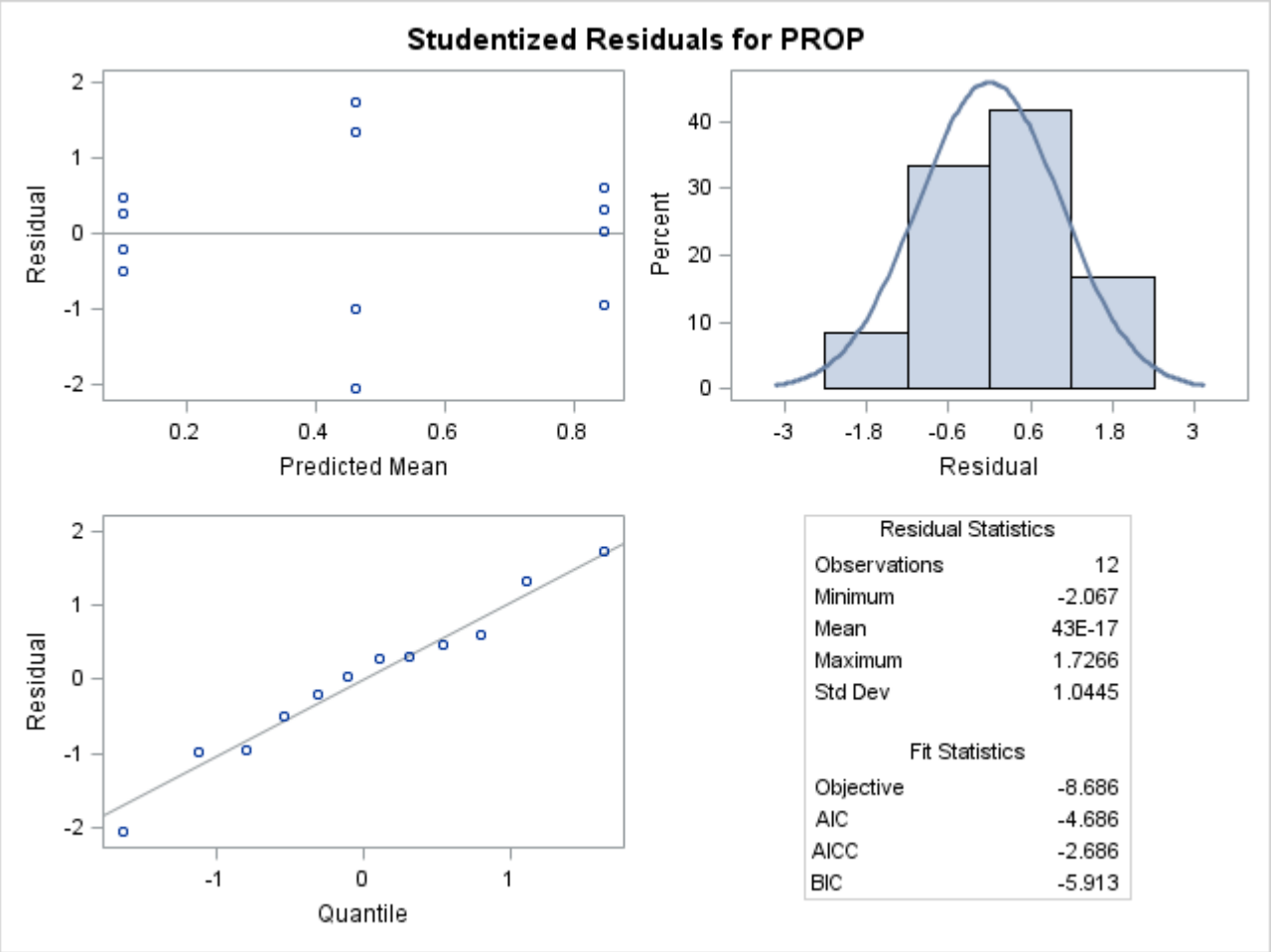
Fit Statistics	
-2 Res Log Likelihood	-8.7
AIC (Smaller is Better)	-4.7
AICC (Smaller is Better)	-2.7
BIC (Smaller is Better)	-5.9

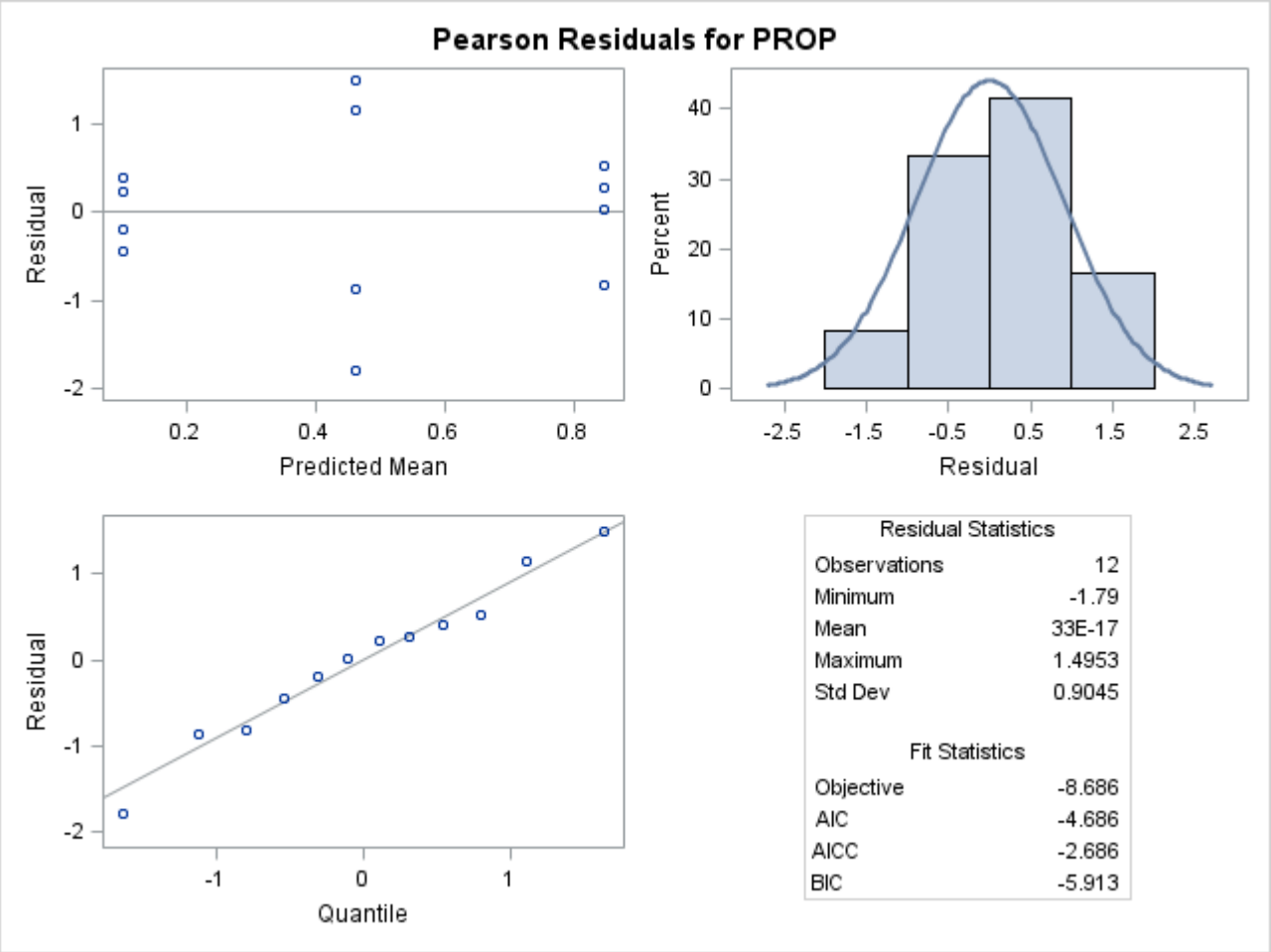
Type 3 Tests of Fixed Effects				
Effect	Num DF	Den DF	F Value	Pr > F
TRT	2	6	41.68	0.0003

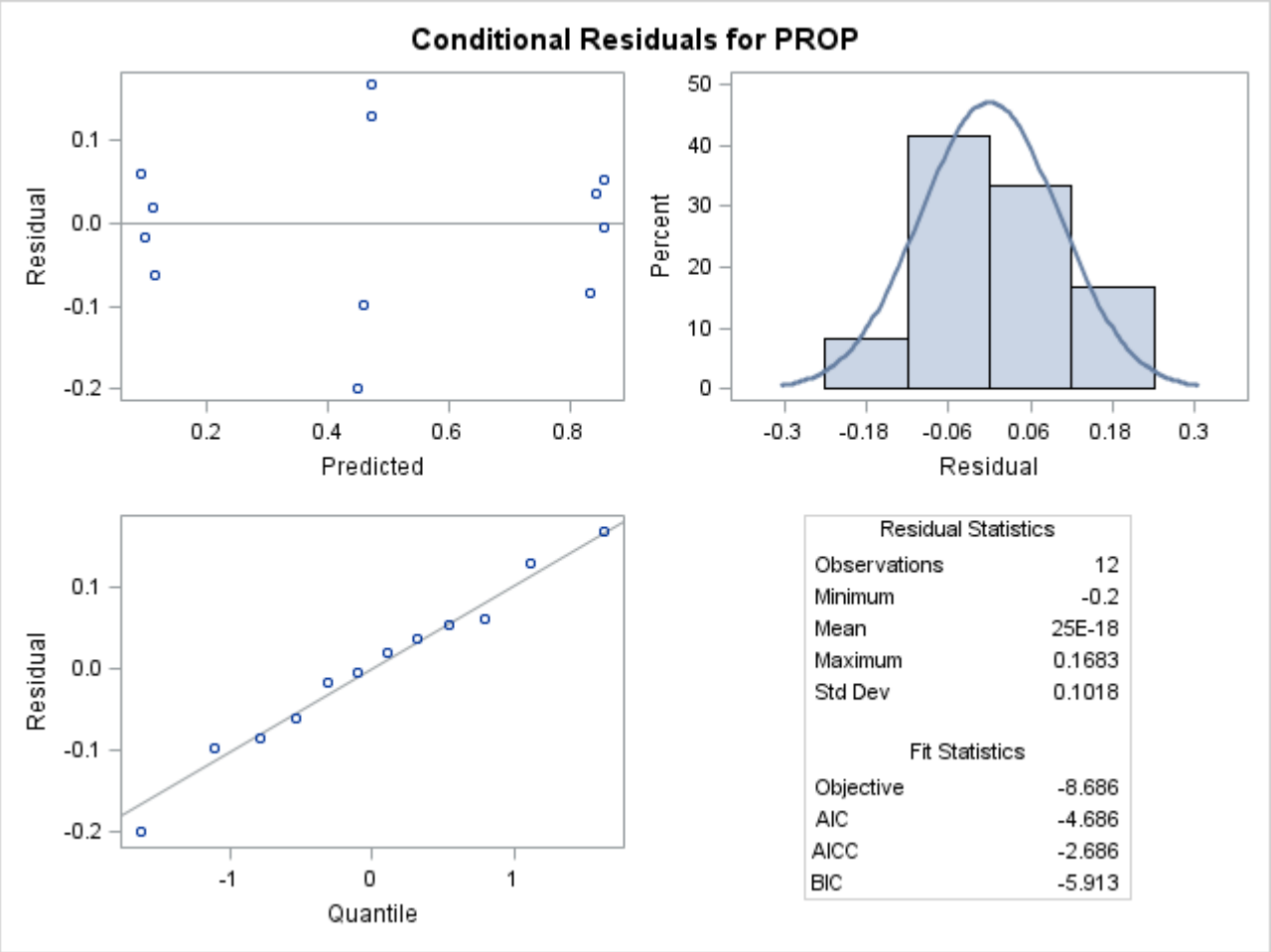
Least Squares Means						
Effect	TRT	Estimate	Standard Error	DF	t Value	Pr > |t|
TRT	1	0.8475	0.05935	6	14.28	<.0001
TRT	2	0.4625	0.05935	6	7.79	0.0002
TRT	3	0.1025	0.05935	6	1.73	0.1349

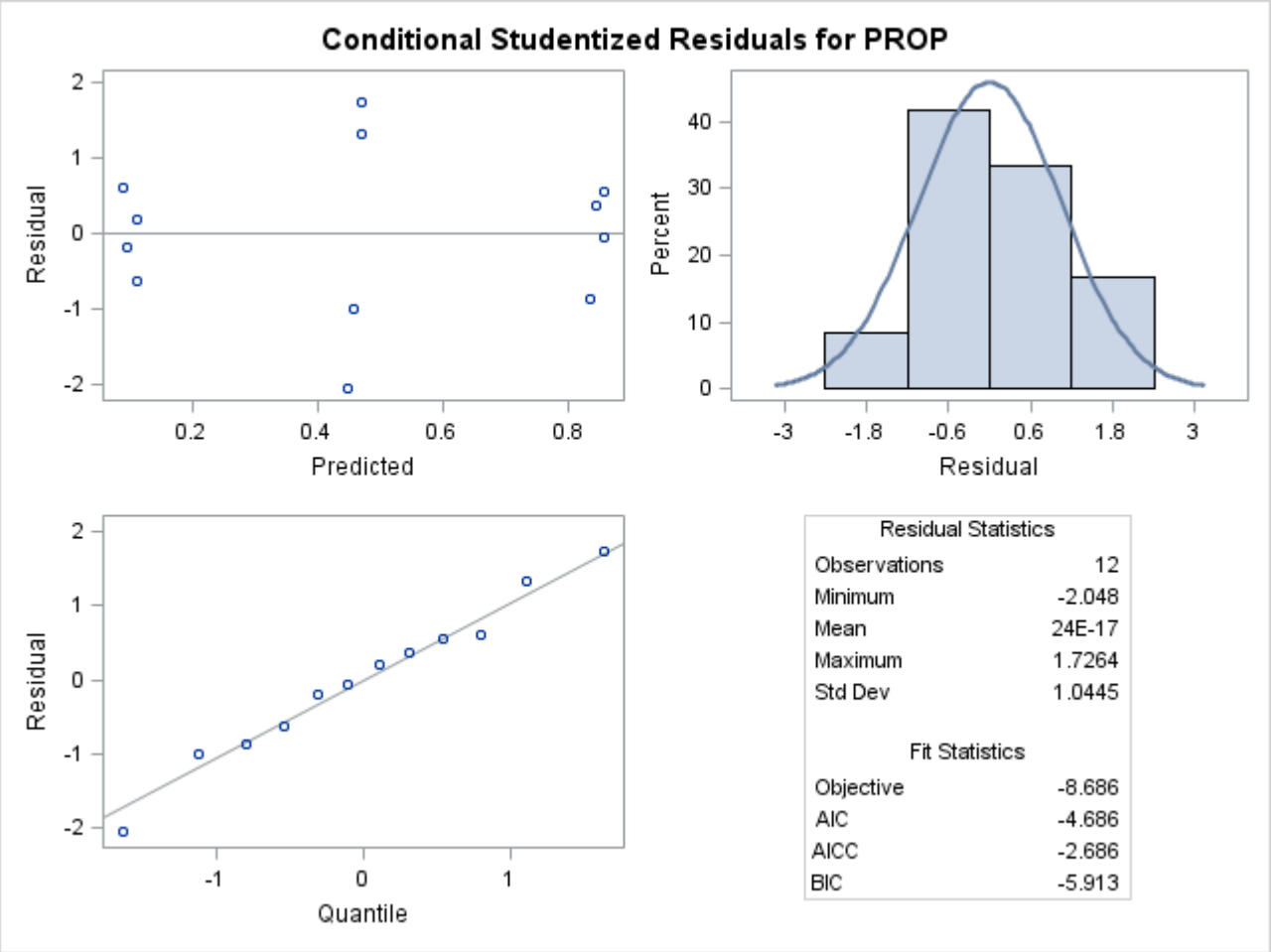
Differences of Least Squares Means							
Effect	TRT	_TRT	Estimate	Standard Error	DF	t Value	Pr > |t|
TRT	1	2	0.3850	0.08162	6	4.72	0.0033
TRT	1	3	0.7450	0.08162	6	9.13	<.0001
TRT	2	3	0.3600	0.08162	6	4.41	0.0045

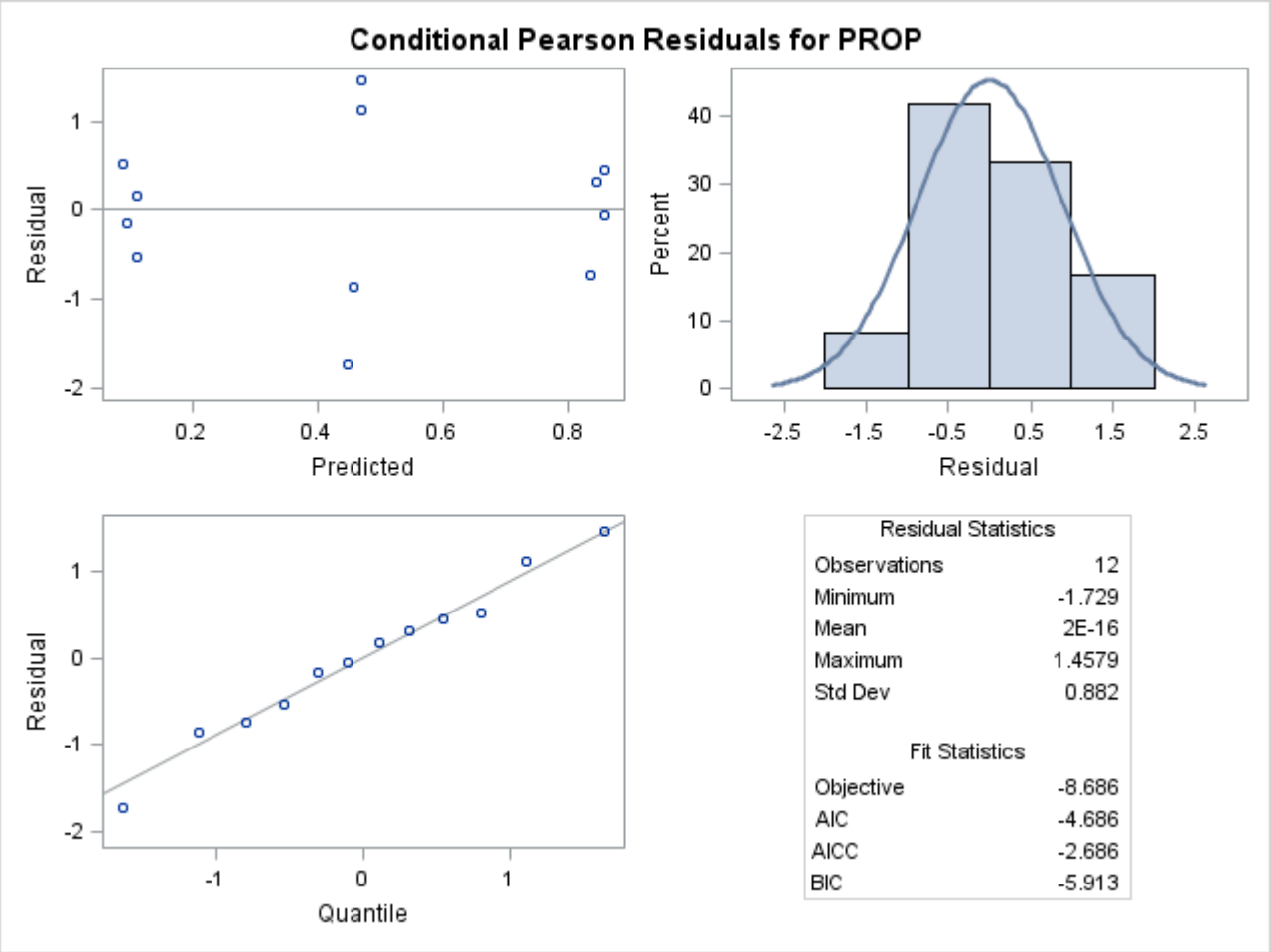

Residuals for PROP
Residual
Predicted Mean
0.2
0.1
0.0
-0.1
-0.2
0.2
0.4
0.6
0.8
Percent
Residual
40
30
20
10
0
-0.3
-0.18
-0.06
0.06
0.18
0.3
Residual
Quantile
-1
0
1
Residual Statistics
Observations 12
Minimum -0.213
Mean 43E-18
Maximum 0.1775
Std Dev 0.1074
Fit Statistics
Objective -8.686
AIC -4.686
AICC -2.686
BIC -5.913


Studentized Residuals for PROP
Residual
Predicted Mean
Percent
Residual
Residual
Quantile
Residual Statistics
Observations 12
Minimum -2.067
Mean 43E-17
Maximum 1.7266
Std Dev 1.0445
Fit Statistics
Objective -8.686
AIC -4.686
AICC -2.686
BIC -5.913


Pearson Residuals for PROP
Residual
Predicted Mean
Percent
Residual
Residual
Quantile
Residual Statistics
Observations 12
Minimum -1.79
Mean 33E-17
Maximum 1.4953
Std Dev 0.9045
Fit Statistics
Objective -8.686
AIC -4.686
AICC -2.686
BIC -5.913


Conditional Residuals for PROP
Residual
Predicted
0.1
0.0
-0.1
-0.2
0.2
0.4
0.6
0.8
Percent
Residual
50
40
30
20
10
0
-0.3
-0.18
-0.06
0.06
0.18
0.3
Residual
Quantile
-1
0
1
Residual Statistics
Observations 12
Minimum -0.2
Mean 25E-18
Maximum 0.1683
Std Dev 0.1018
Fit Statistics
Objective -8.686
AIC -4.686
AICC -2.686
BIC -5.913


Conditional Studentized Residuals for PROP
Residual
Predicted
Percent
Residual
Residual
Quantile
Residual Statistics
Observations 12
Minimum -2.048
Mean 24E-17
Maximum 1.7264
Std Dev 1.0445
Fit Statistics
Objective -8.686
AIC -4.686
AICC -2.686
BIC -5.913


Conditional Pearson Residuals for PROP
Residual
Predicted
Percent
Residual
Residual
Quantile
Residual Statistics
Observations 12
Minimum -1.729
Mean 2E-16
Maximum 1.4579
Std Dev 0.882
Fit Statistics
Objective -8.686
AIC -4.686
AICC -2.686
BIC -5.913

The SAS System

The GLIMMIX Procedure

Model Information	
Data Set	WORK.A
Response Variable	PROP
Response Distribution	Binomial
Link Function	Logit
Variance Function	Default
Variance Matrix	Not blocked
Estimation Technique	Residual PL
Degrees of Freedom Method	Containment

Class Level Information		
Class	Levels	Values
BLK	4	1 2 3 4
TRT	3	1 2 3

Number of Observations Read	12
Number of Observations Used	12

Dimensions	
G-side Cov. Parameters	1
Columns in X	4
Columns in Z	4
Subjects (Blocks in V)	1
Max Obs per Subject	12

Optimization Information	
Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Fixed Effects	Profiled
Starting From	Data

Iteration History					
Iteration	Restarts	Subiterations	Objective Function	Change	Max Gradient
0	0	1	37.476906149	2.00000000	1.416766
1	0	0	38.630813886	0.06230132	1.283298
2	0	0	38.776279095	0.00151422	1.269046
3	0	0	38.778759799	0.00000062	1.268819
4	0	0	38.778760712	0.00000000	1.268819

Convergence criterion (PCONV=1.11022E-8) satisfied.

Estimated G matrix is not positive definite.

Fit Statistics	
-2 Res Log Pseudo-Likelihood	38.78
Generalized Chi-Square	0.61
Gener. Chi-Square / DF	0.07

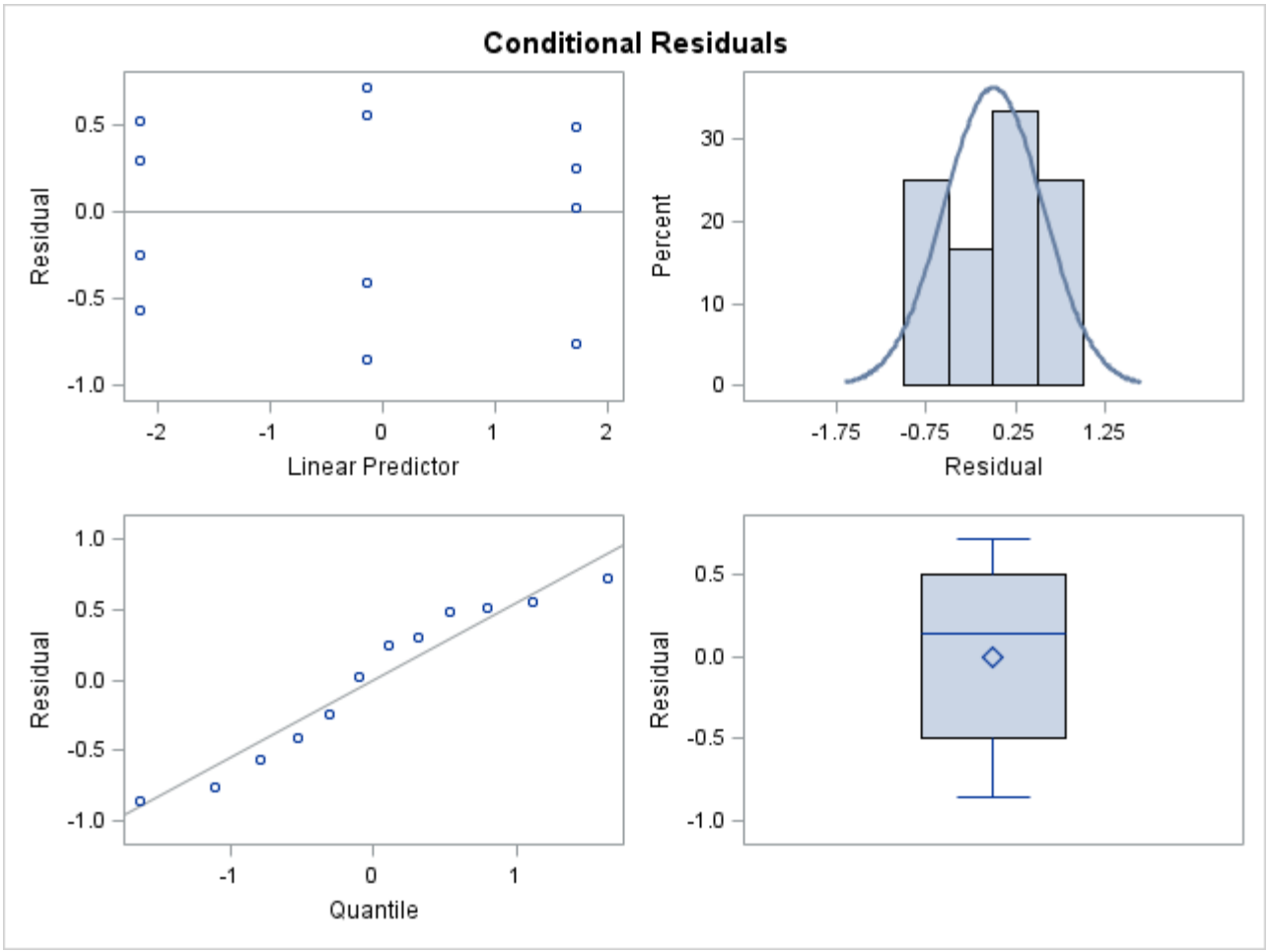
Covariance Parameter Estimates		
Cov Parm	Estimate	Standard Error
BLK	0	.

Type III Tests of Fixed Effects				
Effect	Num DF	Den DF	F Value	Pr > F
TRT	2	6	1.64	0.2708

TRT Least Squares Means							
TRT	Estimate	Standard Error	DF	t Value	Pr > |t|	Mean	Standard Error Mean
1	1.7151	1.3908	6	1.23	0.2636	0.8475	0.1798
2	-0.1503	1.0028	6	-0.15	0.8858	0.4625	0.2493
3	-2.1698	1.6485	6	-1.32	0.2362	0.1025	0.1517

Differences of TRT Least Squares Means						
TRT	_TRT	Estimate	Standard Error	DF	t Value	Pr > |t|
1	2	1.8654	1.7146	6	1.09	0.3184

1	3	3.8849	2.1568	6	1.80	0.1218
2	3	2.0195	1.9296	6	1.05	0.3356



The SAS System

The Mixed Procedure

Model Information	
Data Set	WORK.A
Dependent Variable	ARCSEV
Covariance Structure	Variance Components
Estimation Method	REML
Residual Variance Method	Profile
Fixed Effects SE Method	Model-Based
Degrees of Freedom Method	Containment

Class Level Information		
Class	Levels	Values
BLK	4	1 2 3 4
TRT	3	1 2 3

Dimensions	
Covariance Parameters	2
Columns in X	4
Columns in Z	4
Subjects	1
Max Obs per Subject	12

Number of Observations	
Number of Observations Read	12
Number of Observations Used	12
Number of Observations Not Used	0

Iteration History			
Iteration	Evaluations	-2 Res Log Like	Criterion
0	1	-6.72081049	
1	1	-6.72081049	0.00000000

Convergence criteria met.

Covariance Parameter Estimates

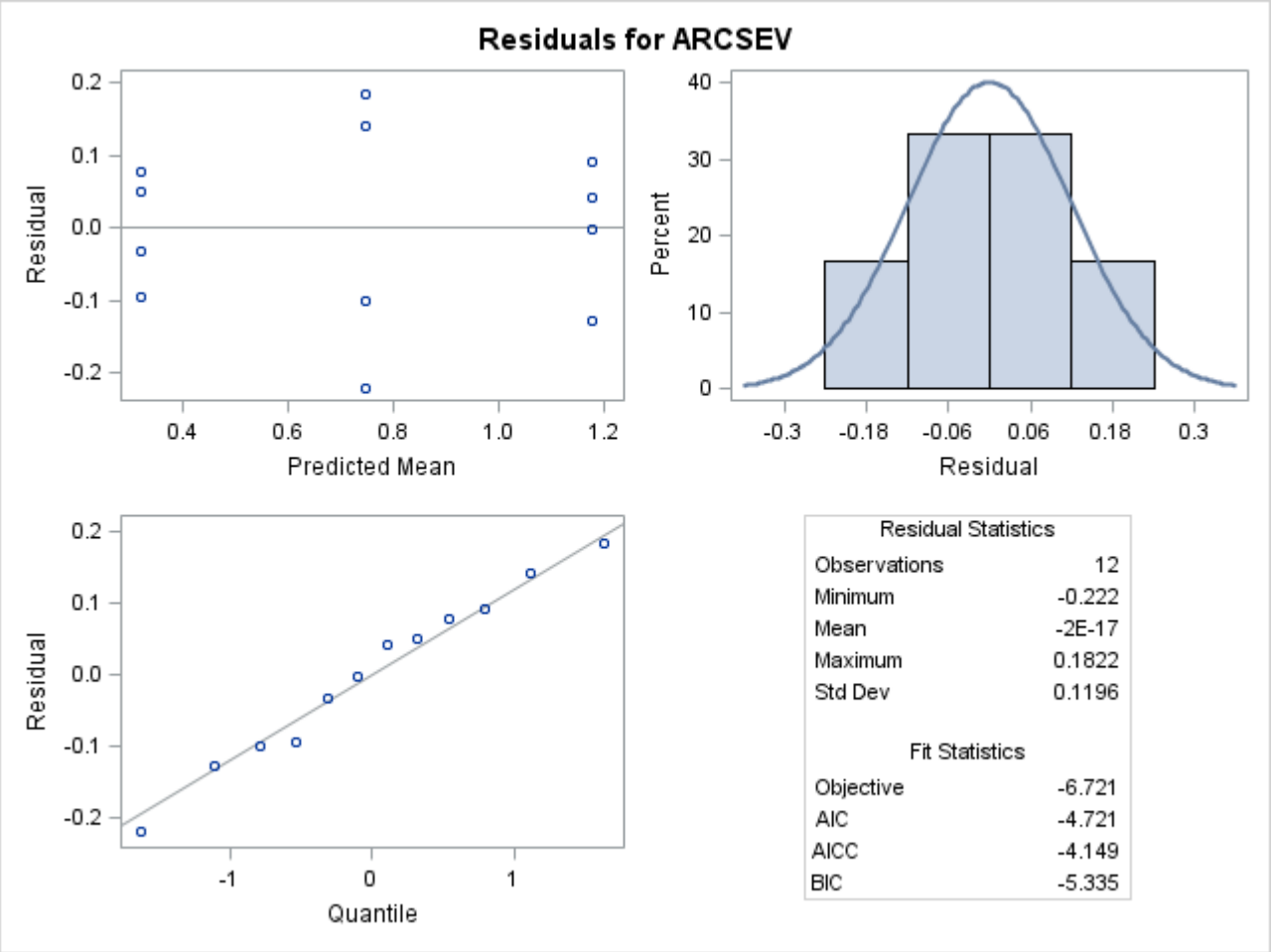
Cov Parm	Estimate	Standard Error	Z Value	Pr > Z
BLK	0	.	.	.
Residual	0.01748	0.008240	2.12	0.0169

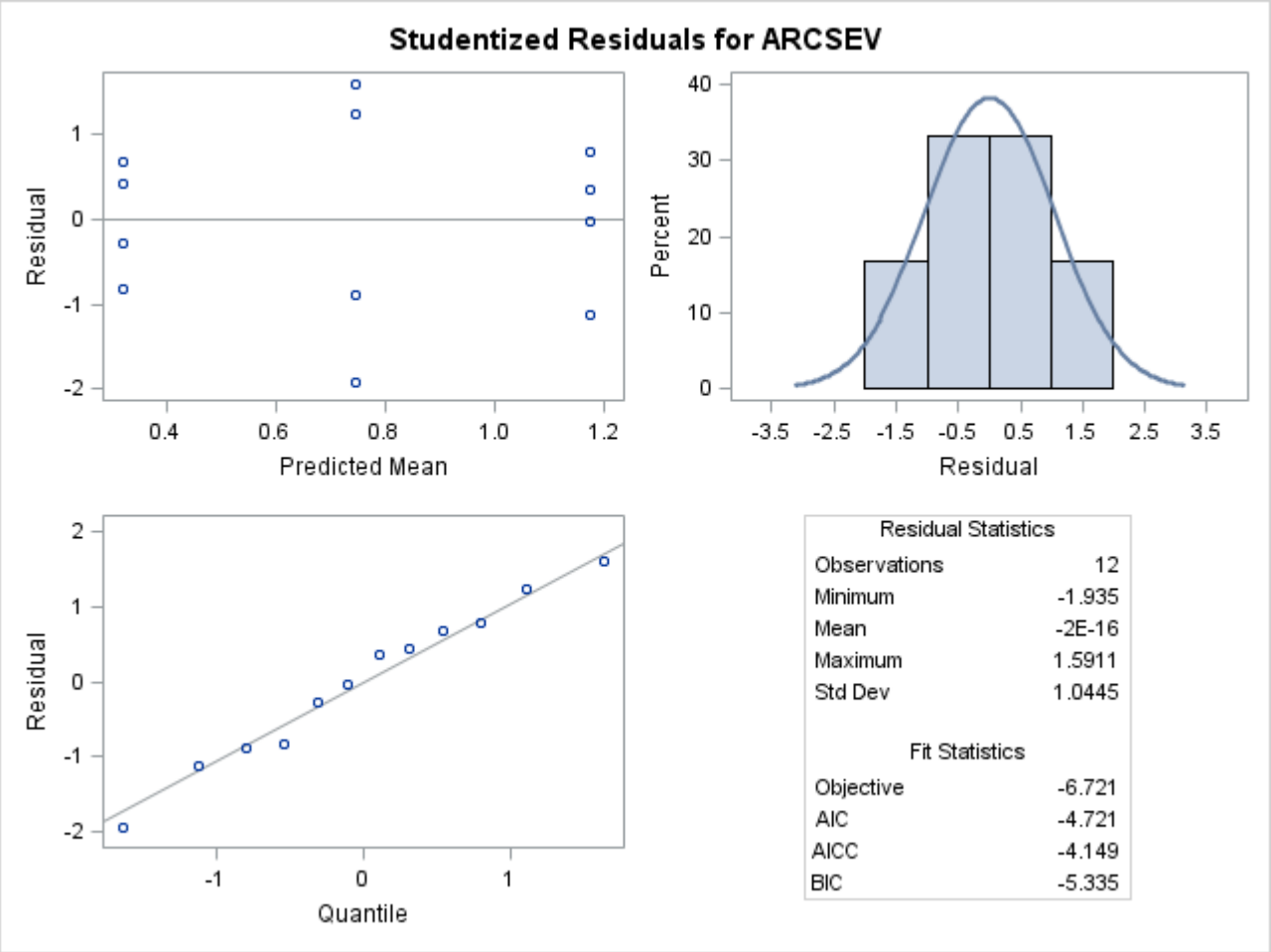
Fit Statistics	
-2 Res Log Likelihood	-6.7
AIC (Smaller is Better)	-4.7
AICC (Smaller is Better)	-4.1
BIC (Smaller is Better)	-5.3

Type 3 Tests of Fixed Effects				
Effect	Num DF	Den DF	F Value	Pr > F
TRT	2	6	41.94	0.0003

Least Squares Means						
Effect	TRT	Estimate	Standard Error	DF	t Value	Pr > |t|
TRT	1	1.1759	0.06610	6	17.79	<.0001
TRT	2	0.7451	0.06610	6	11.27	<.0001
TRT	3	0.3197	0.06610	6	4.84	0.0029

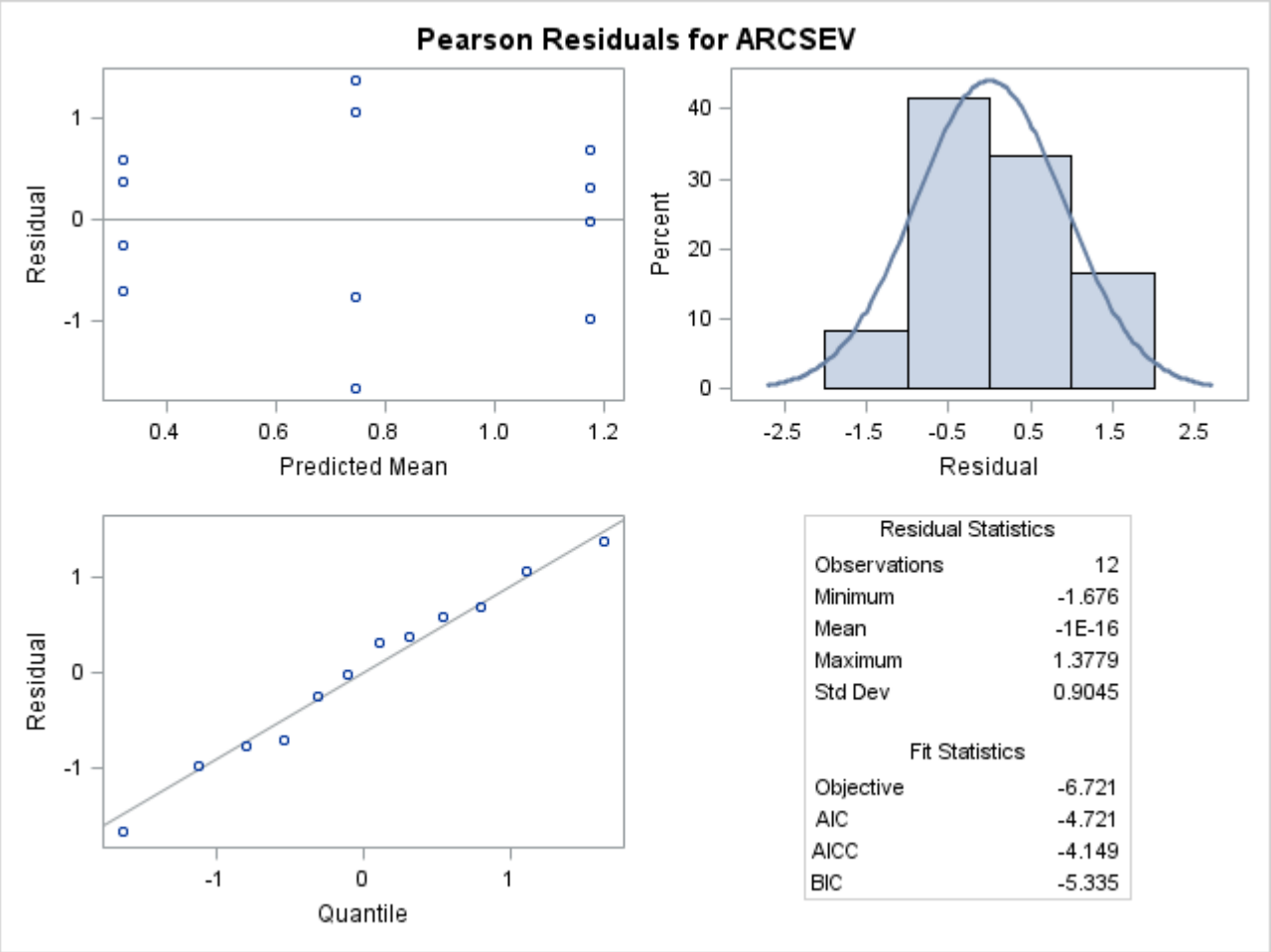
Differences of Least Squares Means							
Effect	TRT	_TRT	Estimate	Standard Error	DF	t Value	Pr > |t|
TRT	1	2	0.4307	0.09349	6	4.61	0.0037
TRT	1	3	0.8562	0.09349	6	9.16	<.0001
TRT	2	3	0.4254	0.09349	6	4.55	0.0039

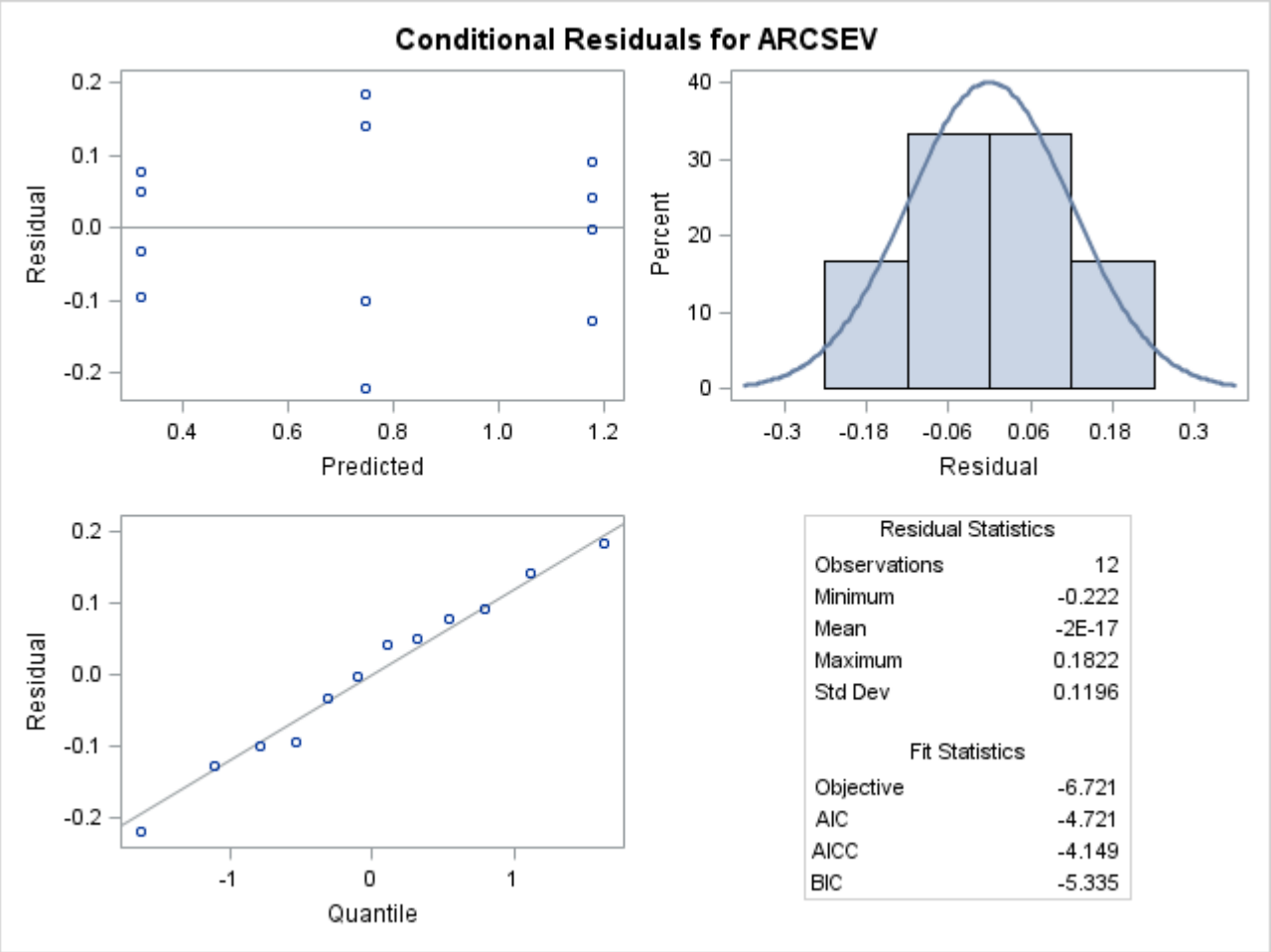

Residuals for ARCSEV
Residual
Predicted Mean
0.2
0.1
0.0
-0.1
-0.2
0.4
0.6
0.8
1.0
1.2
Percent
Residual
40
30
20
10
0
-0.3
-0.18
-0.06
0.06
0.18
0.3
Residual
Quantile
-1
0
1
Residual Statistics
Observations 12
Minimum -0.222
Mean -2E-17
Maximum 0.1822
Std Dev 0.1196
Fit Statistics
Objective -6.721
AIC -4.721
AICC -4.149
BIC -5.335

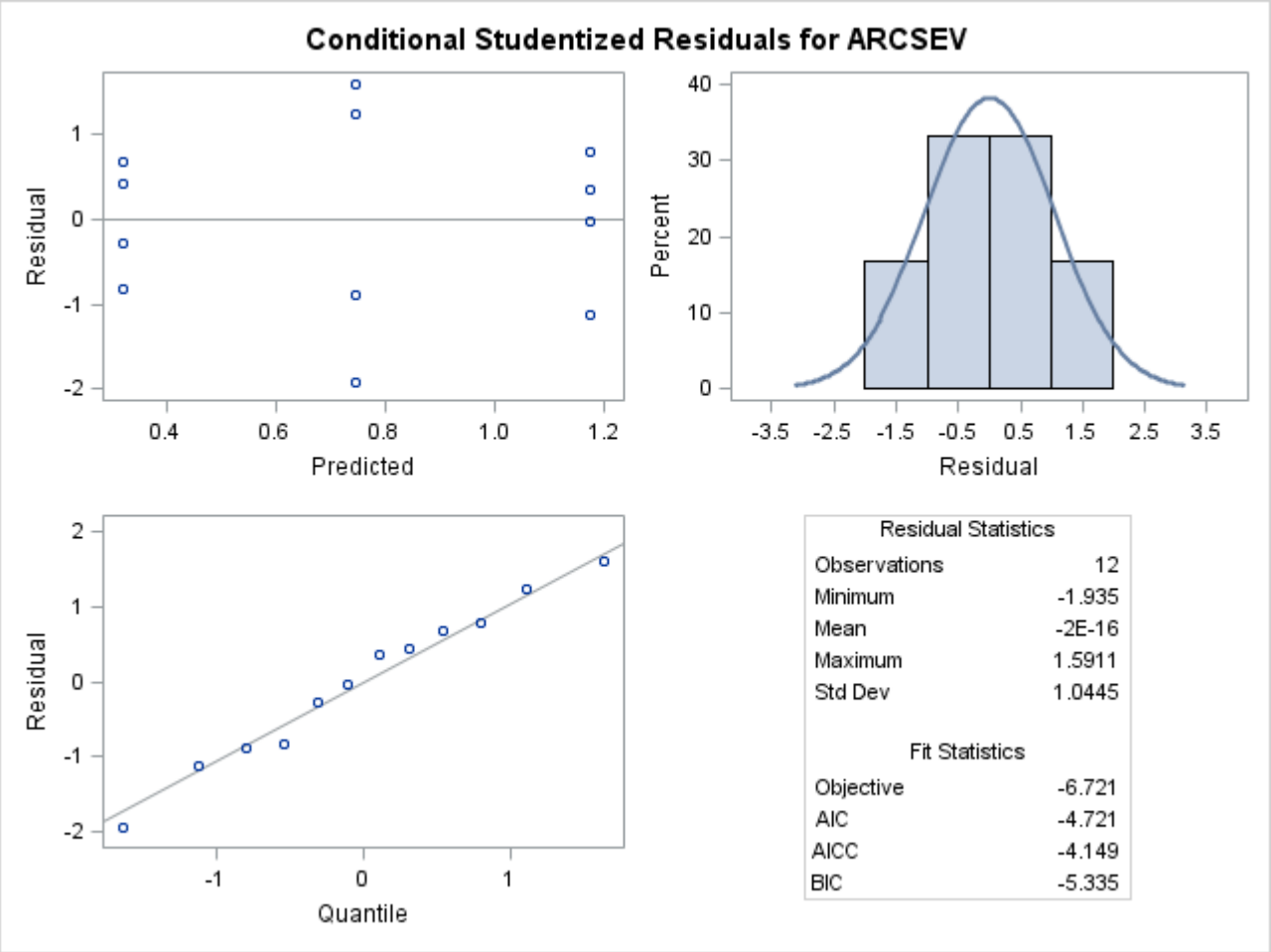


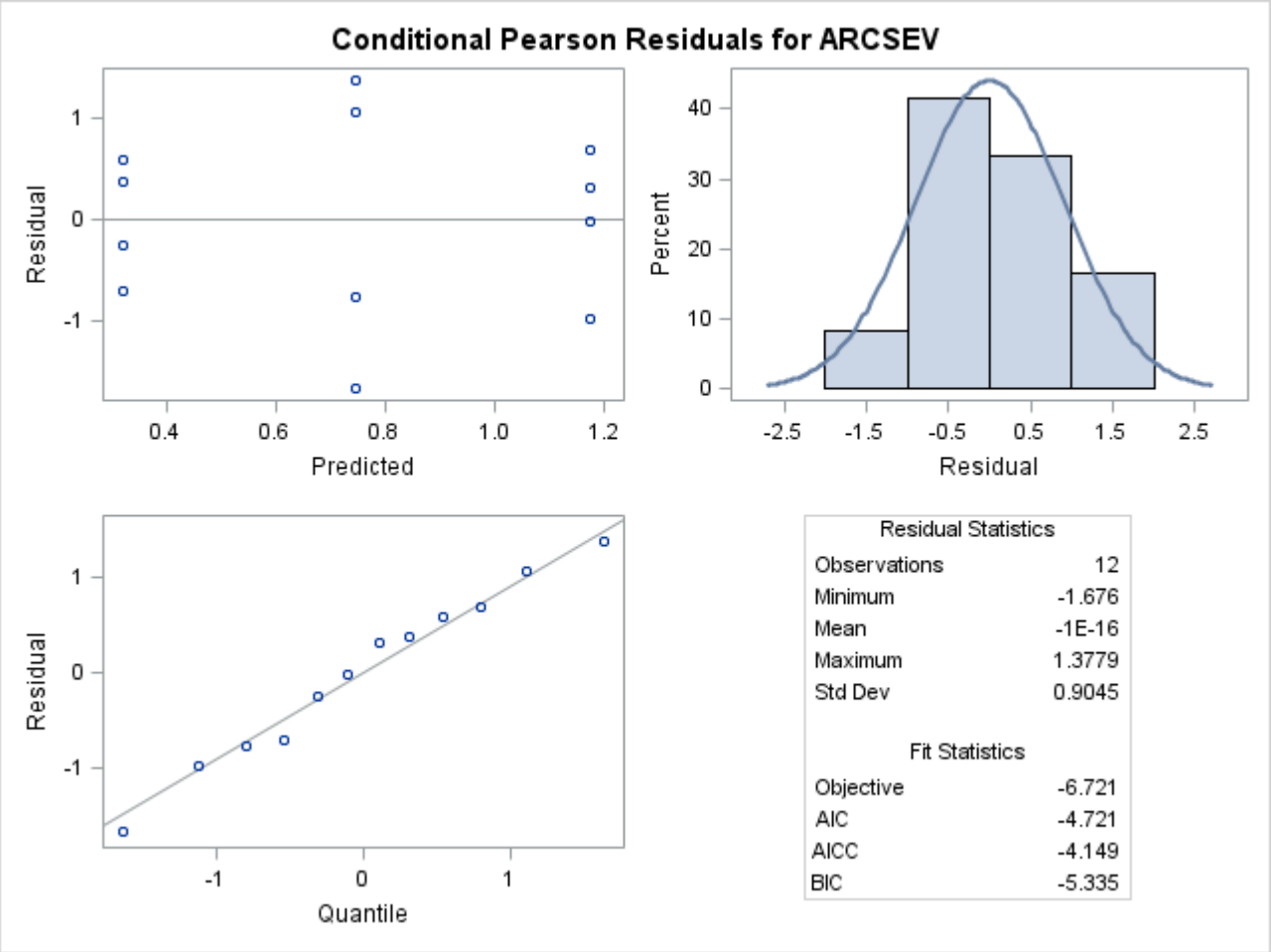
Residual Statistics	
Observations	12
Minimum	-1.935
Mean	-2E-16
Maximum	1.5911
Std Dev	1.0445

Fit Statistics	
Objective	-6.721
AIC	-4.721
AICC	-4.149
BIC	-5.335


Pearson Residuals for ARCSEV
Residual
Predicted Mean
Percent
Residual
Residual
Quantile
Residual Statistics
Observations 12
Minimum -1.676
Mean -1E-16
Maximum 1.3779
Std Dev 0.9045
Fit Statistics
Objective -6.721
AIC -4.721
AICC -4.149
BIC -5.335


Conditional Residuals for ARCSEV
Residual
Predicted
0.2
0.1
0.0
-0.1
-0.2
0.4
0.6
0.8
1.0
1.2
Percent
Residual
40
30
20
10
0
-0.3
-0.18
-0.06
0.06
0.18
0.3
Residual
Quantile
-1
0
1
Residual Statistics
Observations 12
Minimum -0.222
Mean -2E-17
Maximum 0.1822
Std Dev 0.1196
Fit Statistics
Objective -6.721
AIC -4.721
AICC -4.149
BIC -5.335


Conditional Studentized Residuals for ARCSEV
Residual
Predicted
Percent
Residual
Residual
Quantile
Residual Statistics
Observations 12
Minimum -1.935
Mean -2E-16
Maximum 1.5911
Std Dev 1.0445
Fit Statistics
Objective -6.721
AIC -4.721
AICC -4.149
BIC -5.335


Conditional Pearson Residuals for ARCSEV
Residual
Predicted
0.4
0.6
0.8
1.0
1.2
1
0
-1
Percent
Residual
-2.5
-1.5
-0.5
0.5
1.5
2.5
40
30
20
10
0
Residual
Quantile
-1
0
1
Residual Statistics
Observations 12
Minimum -1.676
Mean -1E-16
Maximum 1.3779
Std Dev 0.9045
Fit Statistics
Objective -6.721
AIC -4.721
AICC -4.149
BIC -5.335

The SAS System

The Mixed Procedure

Model Information	
Data Set	WORK.A
Dependent Variable	LOGSEV
Covariance Structure	Variance Components
Estimation Method	REML
Residual Variance Method	Profile
Fixed Effects SE Method	Model-Based
Degrees of Freedom Method	Containment

Class Level Information		
Class	Levels	Values
BLK	4	1 2 3 4
TRT	3	1 2 3

Dimensions	
Covariance Parameters	2
Columns in X	4
Columns in Z	4
Subjects	1
Max Obs per Subject	12

Number of Observations	
Number of Observations Read	12
Number of Observations Used	12
Number of Observations Not Used	0

Iteration History			
Iteration	Evaluations	-2 Res Log Like	Criterion
0	1	12.72013933	
1	1	12.72013933	0.00000000

Convergence criteria met.

Covariance Parameter Estimates

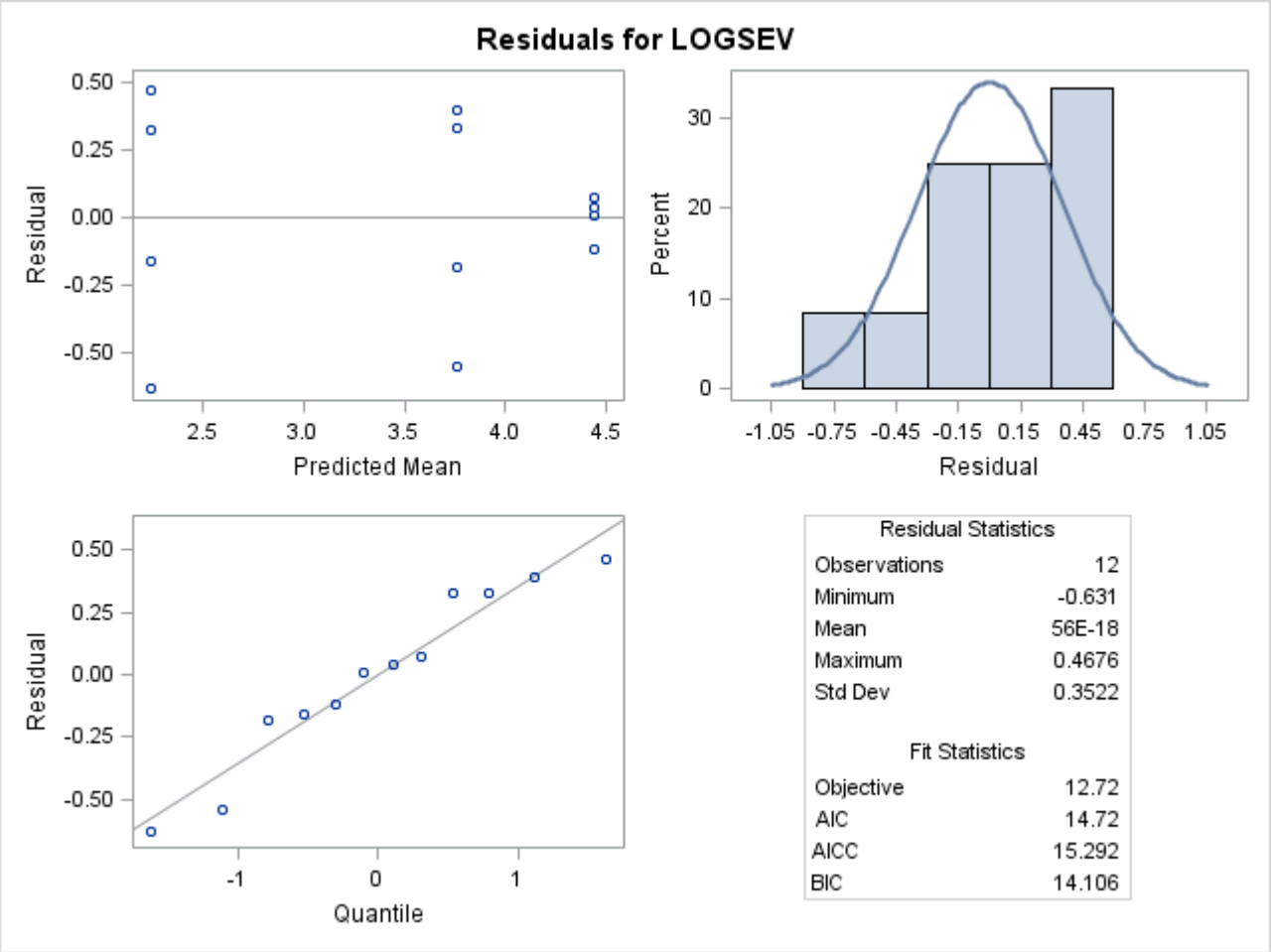
Cov Parm	Estimate	Standard Error	Z Value	Pr > Z
BLK	0	.	.	.
Residual	0.1516	0.07146	2.12	0.0169

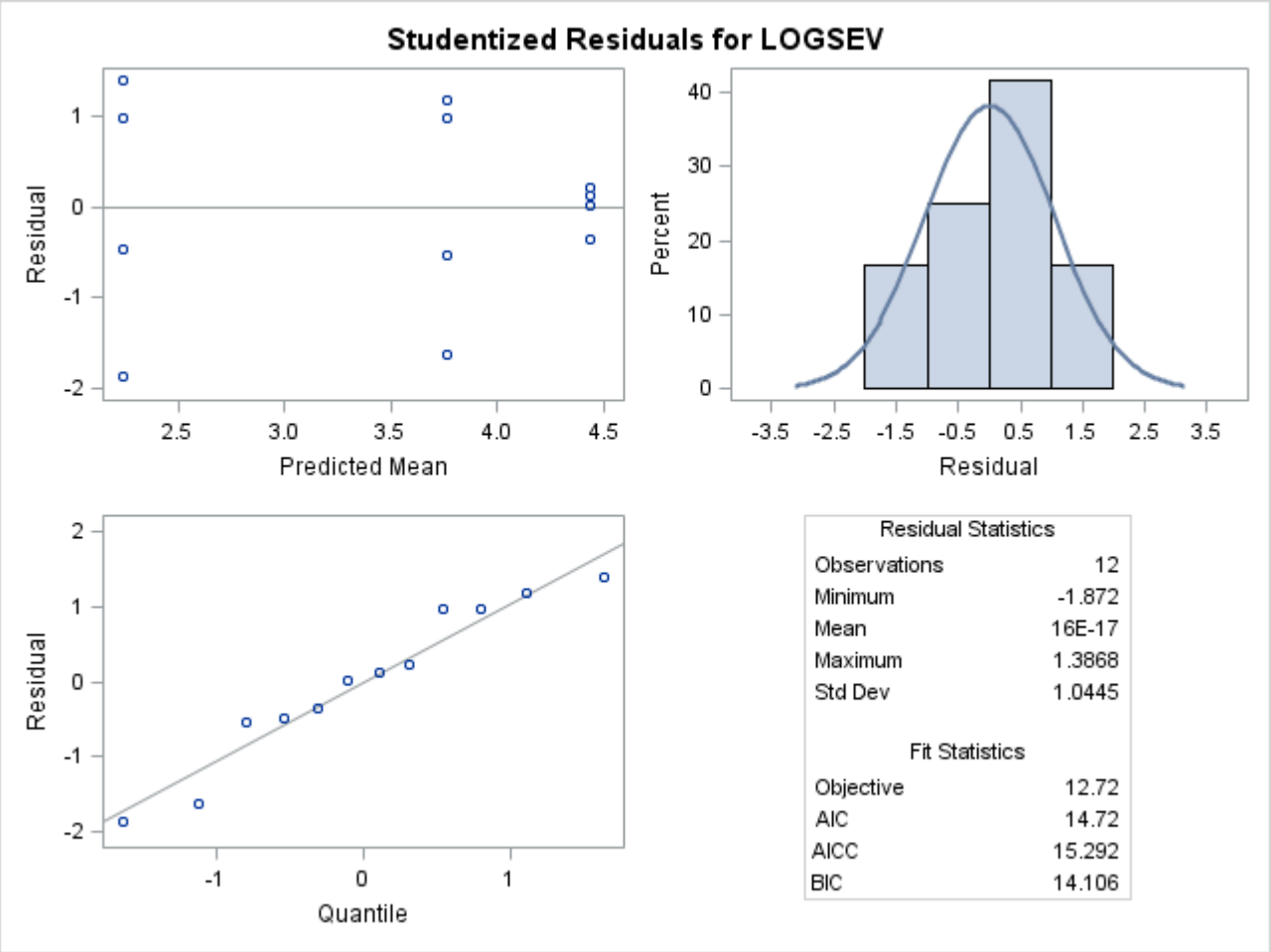
Fit Statistics	
-2 Res Log Likelihood	12.7
AIC (Smaller is Better)	14.7
AICC (Smaller is Better)	15.3
BIC (Smaller is Better)	14.1

Type 3 Tests of Fixed Effects				
Effect	Num DF	Den DF	F Value	Pr > F
TRT	2	6	33.42	0.0006

Least Squares Means						
Effect	TRT	Estimate	Standard Error	DF	t Value	Pr > |t|
TRT	1	4.4371	0.1947	6	22.79	<.0001
TRT	2	3.7639	0.1947	6	19.34	<.0001
TRT	3	2.2405	0.1947	6	11.51	<.0001

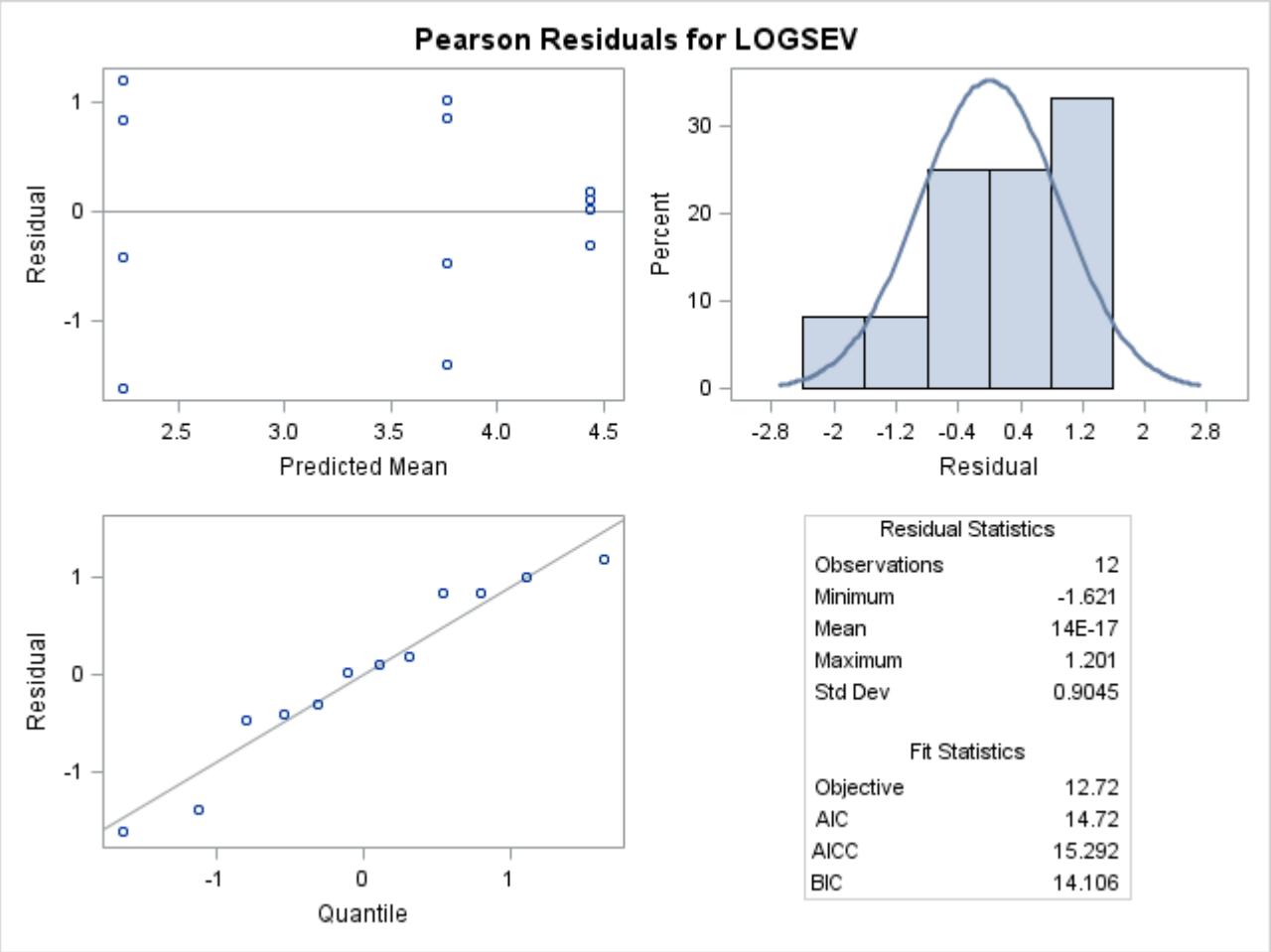
Differences of Least Squares Means							
Effect	TRT	_TRT	Estimate	Standard Error	DF	t Value	Pr > |t|
TRT	1	2	0.6732	0.2753	6	2.45	0.0501
TRT	1	3	2.1966	0.2753	6	7.98	0.0002
TRT	2	3	1.5234	0.2753	6	5.53	0.0015


Residuals for LOGSEV
Residual
Predicted Mean
Percent
Residual
Residual
Quantile
Residual Statistics
Observations 12
Minimum -0.631
Mean 56E-18
Maximum 0.4676
Std Dev 0.3522
Fit Statistics
Objective 12.72
AIC 14.72
AICC 15.292
BIC 14.106



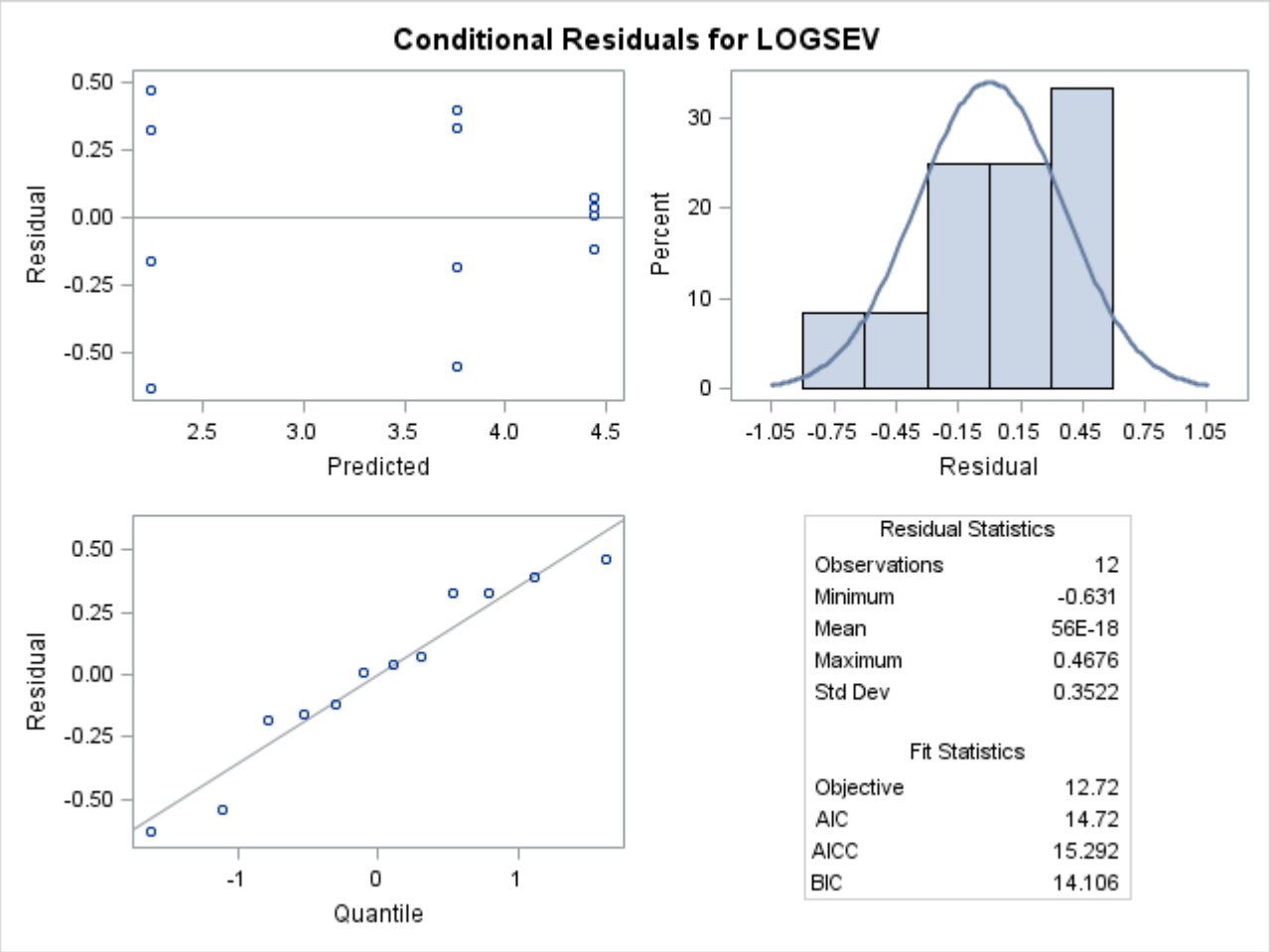
Residual Statistics	
Observations	12
Minimum	-1.872
Mean	16E-17
Maximum	1.3868
Std Dev	1.0445

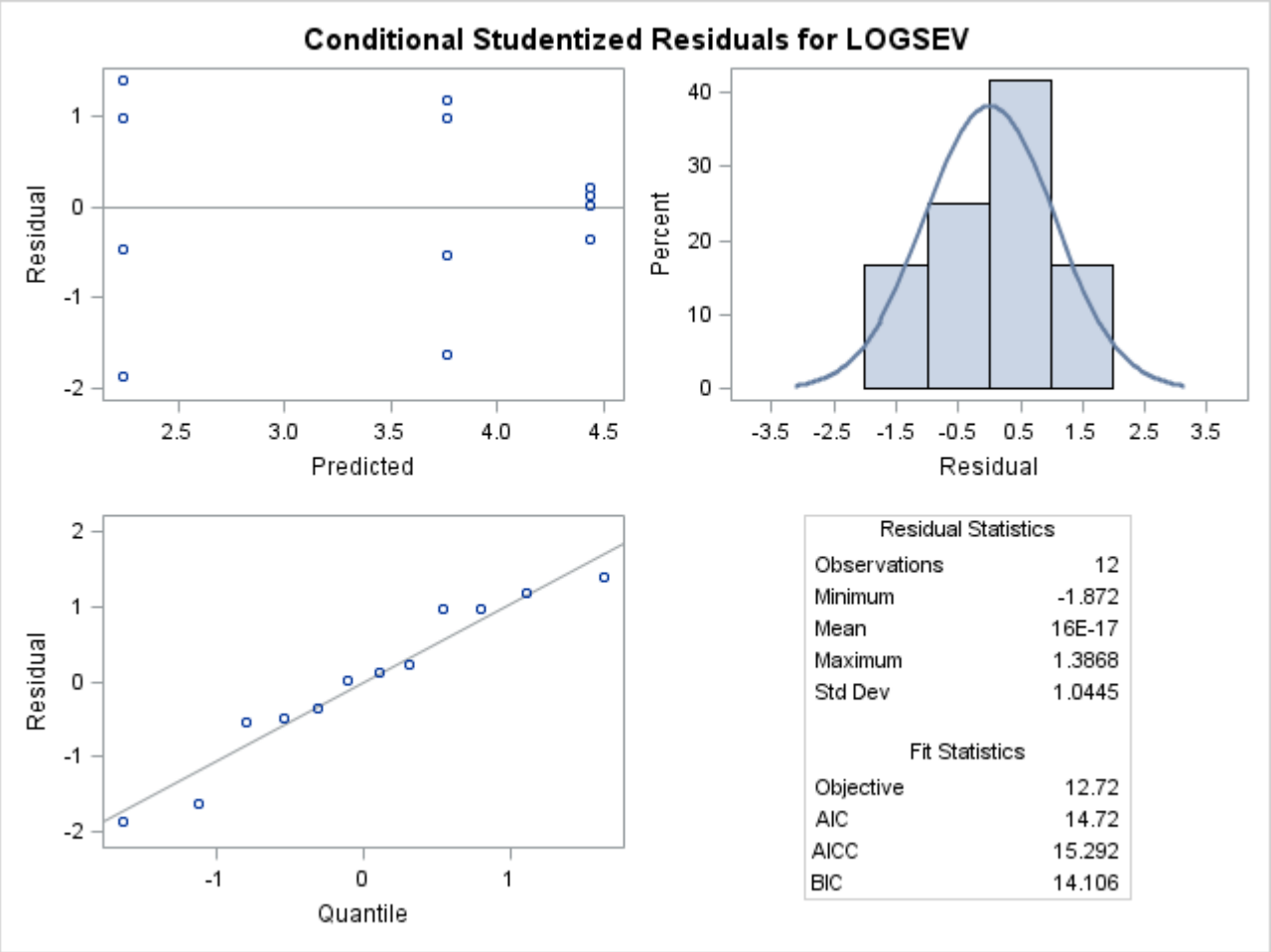
Fit Statistics	
Objective	12.72
AIC	14.72
AICC	15.292
BIC	14.106

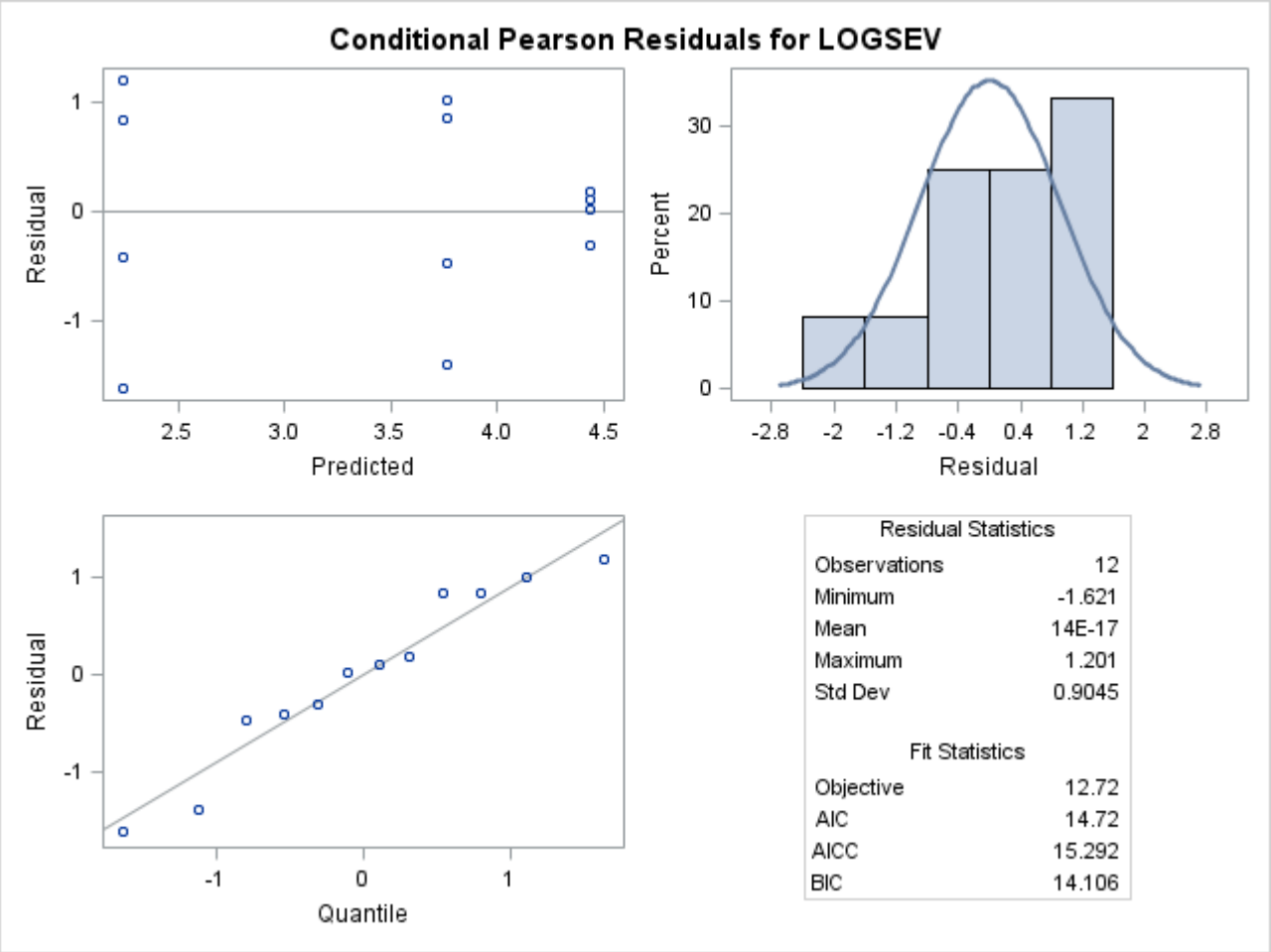


Residual Statistics	
Observations	12
Minimum	-1.621
Mean	14E-17
Maximum	1.201
Std Dev	0.9045

Fit Statistics	
Objective	12.72
AIC	14.72
AICC	15.292
BIC	14.106


Conditional Residuals for LOGSEV
Residual
Predicted
Percent
Residual
Residual
Quantile
Residual Statistics
Observations 12
Minimum -0.631
Mean 56E-18
Maximum 0.4676
Std Dev 0.3522
Fit Statistics
Objective 12.72
AIC 14.72
AICC 15.292
BIC 14.106


Conditional Studentized Residuals for LOGSEV
Residual
Predicted
Percent
Residual
Residual
Quantile
Residual Statistics
Observations 12
Minimum -1.872
Mean 16E-17
Maximum 1.3868
Std Dev 1.0445
Fit Statistics
Objective 12.72
AIC 14.72
AICC 15.292
BIC 14.106


Conditional Pearson Residuals for LOGSEV
Residual
Predicted
Percent
Residual
Residual
Quantile
Residual Statistics
Observations 12
Minimum -1.621
Mean 14E-17
Maximum 1.201
Std Dev 0.9045
Fit Statistics
Objective 12.72
AIC 14.72
AICC 15.292
BIC 14.106

The SAS System

The GLIMMIX Procedure

Model Information	
Data Set	WORK.A
Response Variable	SEVERITY
Response Distribution	Lognormal
Link Function	Identity
Variance Function	Default
Variance Matrix	Not blocked
Estimation Technique	Restricted Maximum Likelihood
Degrees of Freedom Method	Containment

Class Level Information		
Class	Levels	Values
BLK	4	1 2 3 4
TRT	3	1 2 3

Number of Observations Read	12
Number of Observations Used	12

Dimensions	
G-side Cov. Parameters	2
R-side Cov. Parameters	1
Columns in X	4
Columns in Z	16
Subjects (Blocks in V)	1
Max Obs per Subject	12

Optimization Information	
Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	2
Lower Boundaries	2
Upper Boundaries	0
Fixed Effects	Profiled
Residual Variance	Profiled

Starting From	Data

Iteration History					
Iteration	Restarts	Evaluations	Objective Function	Change	Max Gradient
0	0	4	12.720139332	.	3.12E-13

Convergence criterion (ABSGCONV=0.00001) satisfied.

Estimated G matrix is not positive definite.

Fit Statistics	
-2 Res Log Likelihood	12.72
AIC (smaller is better)	16.72
AICC (smaller is better)	18.72
BIC (smaller is better)	15.49
CAIC (smaller is better)	17.49
HQIC (smaller is better)	14.03
Generalized Chi-Square	1.14
Gener. Chi-Square / DF	0.13

Covariance Parameter Estimates		
Cov Parm	Estimate	Standard Error
BLK	0	.
BLK*TRT	0.02468	0.07146
Residual	0.1269	.

Type III Tests of Fixed Effects				
Effect	Num DF	Den DF	F Value	Pr > F
TRT	2	6	33.42	0.0006

TRT Least Squares Means							
TRT	Estimate	Standard Error	DF	t Value	Pr > |t|	Mean	Standard Error Mean
1	4.4371	0.1947	6	22.79	<.0001	4.4371	0.1947
2	3.7639	0.1947	6	19.34	<.0001	3.7639	0.1947

3	2.2405	0.1947	6	11.51	<.0001	2.2405	0.1947

Differences of TRT Least Squares Means

TRT	_TRT	Estimate	Standard Error	DF	t Value	Pr > |t|
1	2	0.6732	0.2753	6	2.45	0.0501
1	3	2.1966	0.2753	6	7.98	0.0002
2	3	1.5234	0.2753	6	5.53	0.0015