

## The GENMOD Procedure

Model Information	
Data Set	WORK.STRICTA_FRUIT
Distribution	Zero Inflated Poisson
Link Function	Log
Dependent Variable	Fruit_Flowers_t

Number of Observations Read	1626
Number of Observations Used	1626

Class Level Information		
Class	Levels	Values
CA_t_1	2	1 0
ME_t_1	2	1 0
Moth_Evidence_t_1	2	1 0
Clonal	2	1 0

Criteria For Assessing Goodness Of Fit			
Criterion	DF	Value	Value/DF
Deviance		345.9122	
Scaled Deviance		345.9122	
Pearson Chi-Square	1612	359.6684	0.2231
Scaled Pearson X2	1612	359.6684	0.2231
Log Likelihood		373.3079	
Full Log Likelihood		-172.9561	
AIC (smaller is better)		373.9122	
AICC (smaller is better)		374.1729	
BIC (smaller is better)		449.4265	

Algorithm converged.

Analysis Of Maximum Likelihood Parameter Estimates								
Parameter		DF	Estimate	Standard Error	Wald 95% Confidence Limits		Wald Chi-Square	Pr > ChiSq
Intercept		1	-1.1550	0.2753	-1.6945	-0.6154	17.60	<.0001
Ln_Size_t_1_st		1	2.1778	0.1707	1.8433	2.5123	162.79	<.0001
CA_t_1	1	1	0.3910	0.1458	0.1053	0.6767	7.20	0.0073
CA_t_1	0	0	0.0000	0.0000	0.0000	0.0000	.	.

## The GENMOD Procedure

Analysis Of Maximum Likelihood Parameter Estimates								
Parameter		DF	Estimate	Standard Error	Wald 95% Confidence Limits		Wald Chi-Square	Pr > ChiSq
ME_t_1	1	1	0.3104	0.3859	-0.4460	1.0668	0.65	0.4212
ME_t_1	0	0	0.0000	0.0000	0.0000	0.0000	.	.
Moth_Evidence_t_1	1	1	-0.6842	0.1948	-1.0661	-0.3024	12.34	0.0004
Moth_Evidence_t_1	0	0	0.0000	0.0000	0.0000	0.0000	.	.
Clonal	1	1	1.1606	0.8055	-0.4181	2.7393	2.08	0.1496
Clonal	0	0	0.0000	0.0000	0.0000	0.0000	.	.
cactus_density_per_p		1	0.1848	0.1960	-0.1994	0.5691	0.89	0.3458
Scale		0	1.0000	0.0000	1.0000	1.0000		

**Note:** The scale parameter was held fixed.

Analysis Of Maximum Likelihood Zero Inflation Parameter Estimates								
Parameter		DF	Estimate	Standard Error	Wald 95% Confidence Limits		Wald Chi-Square	Pr > ChiSq
Intercept		1	5.1708	0.7824	3.6374	6.7042	43.68	<.0001
Ln_Size_t_1_st		1	-4.1549	0.6831	-5.4937	-2.8161	37.00	<.0001
CA_t_1	1	1	1.5587	0.7885	0.0132	3.1041	3.91	0.0481
CA_t_1	0	0	0.0000	0.0000	0.0000	0.0000	.	.
ME_t_1	1	1	-0.7344	1.6397	-3.9481	2.4793	0.20	0.6542
ME_t_1	0	0	0.0000	0.0000	0.0000	0.0000	.	.
Moth_Evidence_t_1	1	1	0.0974	0.5812	-1.0417	1.2364	0.03	0.8669
Moth_Evidence_t_1	0	0	0.0000	0.0000	0.0000	0.0000	.	.
Clonal	1	1	2.7452	1.1199	0.5503	4.9401	6.01	0.0142
Clonal	0	0	0.0000	0.0000	0.0000	0.0000	.	.
cactus_density_per_p		1	-1.2321	0.5310	-2.2729	-0.1912	5.38	0.0203

### The GENMOD Procedure

Model Information	
Data Set	WORK.STRICTA_FRUIT
Distribution	Zero Inflated Poisson
Link Function	Log
Dependent Variable	Fruit_Flowers_t

Number of Observations Read	1626
Number of Observations Used	1626

Class Level Information		
Class	Levels	Values
CA_t_1	2	1 0
Moth_Evidence_t_1	2	1 0
Clonal	2	1 0

Criteria For Assessing Goodness Of Fit			
Criterion	DF	Value	Value/DF
Deviance		349.8273	
Scaled Deviance		349.8273	
Pearson Chi-Square	1617	626.8374	0.3877
Scaled Pearson X2	1617	626.8374	0.3877
Log Likelihood		371.3504	
Full Log Likelihood		-174.9136	
AIC (smaller is better)		367.8273	
AICC (smaller is better)		367.9387	
BIC (smaller is better)		416.3722	

Algorithm converged.

Analysis Of Maximum Likelihood Parameter Estimates								
Parameter		DF	Estimate	Standard Error	Wald 95% Confidence Limits		Wald Chi-Square	Pr > ChiSq
Intercept		1	-0.9734	0.2422	-1.4482	-0.4987	16.15	<.0001
Ln_Size_t_1_st		1	2.0305	0.1329	1.7700	2.2910	233.36	<.0001
CA_t_1	1	1	0.4374	0.1388	0.1653	0.7095	9.93	0.0016
CA_t_1	0	0	0.0000	0.0000	0.0000	0.0000	.	.

The GENMOD Procedure

Analysis Of Maximum Likelihood Parameter Estimates								
Parameter		DF	Estimate	Standard Error	Wald 95% Confidence Limits		Wald Chi-Square	Pr > ChiSq
Moth_Evidence_t_1	1	1	-0.6148	0.1882	-0.9837	-0.2459	10.67	0.0011
Moth_Evidence_t_1	0	0	0.0000	0.0000	0.0000	0.0000	.	.
Scale		0	1.0000	0.0000	1.0000	1.0000		

**Note:** The scale parameter was held fixed.

Analysis Of Maximum Likelihood Zero Inflation Parameter Estimates								
Parameter		DF	Estimate	Standard Error	Wald 95% Confidence Limits		Wald Chi-Square	Pr > ChiSq
Intercept		1	5.2961	0.7403	3.8452	6.7470	51.18	<.0001
Ln_Size_t_1_st		1	-4.1652	0.6525	-5.4440	-2.8864	40.75	<.0001
cactus_density_per_p		1	-1.2707	0.5275	-2.3046	-0.2368	5.80	0.0160
CA_t_1	1	1	1.4502	0.7283	0.0229	2.8776	3.97	0.0464
CA_t_1	0	0	0.0000	0.0000	0.0000	0.0000	.	.
Clonal	1	1	2.3873	1.1278	0.1767	4.5978	4.48	0.0343
Clonal	0	0	0.0000	0.0000	0.0000	0.0000	.	.

## The GLIMMIX Procedure

Model Information	
Data Set	WORK.STRICTA_FRUIT
Response Variable	Fruit_Flowers_t
Response Distribution	Poisson
Link Function	Log
Variance Function	Default
Variance Matrix	Not blocked
Estimation Technique	Maximum Likelihood
Likelihood Approximation	Laplace
Degrees of Freedom Method	Containment

Class Level Information		
Class	Levels	Values
CA_t_1	2	1 0
Moth_Evidence_t_1	2	1 0
Island	7	3 4 5 6 7 Roadway1 Roadway2
Clonal	2	1 0

Number of Observations Read	1626
Number of Observations Used	1626

Dimensions	
G-side Cov. Parameters	1
Columns in X	9
Columns in Z	7
Subjects (Blocks in V)	1
Max Obs per Subject	1626

Optimization Information	
Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	7
Lower Boundaries	1
Upper Boundaries	0
Fixed Effects	Not Profiled
Starting From	GLM estimates

## The GLIMMIX Procedure

Iteration History					
Iteration	Restarts	Evaluations	Objective Function	Change	Max Gradient
0	0	4	540.36471632	.	55.10636
1	0	2	534.52773834	5.83697798	14.58831
2	0	3	532.67178621	1.85595213	6.12589
3	0	3	531.44871254	1.22307368	7.55517
4	0	2	529.80710927	1.64160326	2.99548
5	0	2	529.65134821	0.15576106	3.700805
6	0	2	529.42420306	0.22714515	1.778333
7	0	3	529.36688809	0.05731497	1.53374
8	0	2	529.34842652	0.01846158	4.097578
9	0	4	529.27216673	0.07625978	0.711106
10	0	5	529.26080387	0.01136286	0.596699
11	0	3	529.25348711	0.00731676	0.060494
12	0	3	529.25341796	0.00006915	0.013711
13	0	3	529.25340956	0.00000841	0.002265
14	0	3	529.25340952	0.00000003	0.000252

Convergence criterion (GCONV=1E-8) satisfied.

Fit Statistics	
-2 Log Likelihood	529.25
AIC (smaller is better)	543.25
AICC (smaller is better)	543.32
BIC (smaller is better)	542.87
CAIC (smaller is better)	549.87
HQIC (smaller is better)	538.57

Fit Statistics for Conditional Distribution	
-2 log L(Fruit_Flowers_t   r. effects)	513.49
Pearson Chi-Square	1866.85
Pearson Chi-Square / DF	1.15

## The GLIMMIX Procedure

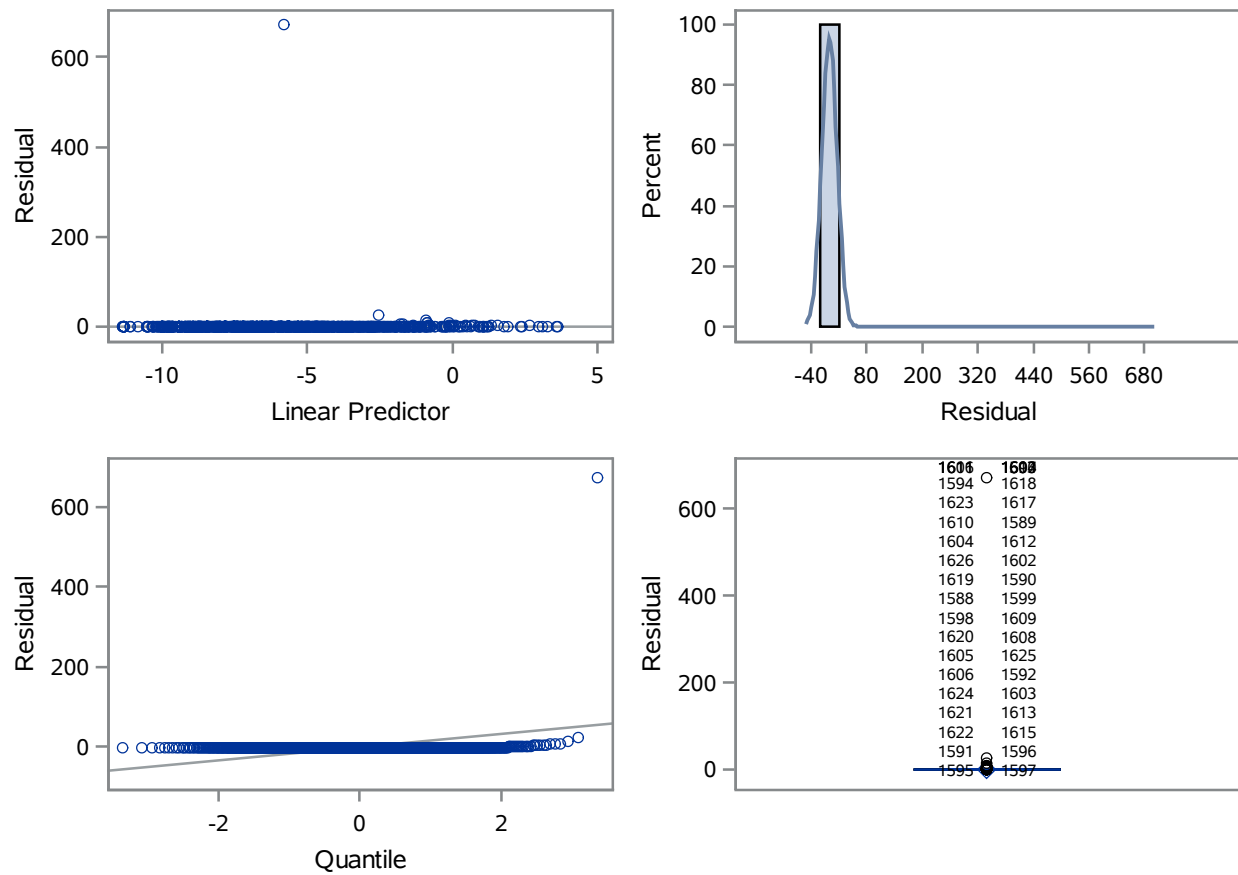
Covariance Parameter Estimates						
			Estimated Likelihood 95% Confidence Bounds			
Cov Parm	Estimate	Standard Error	Lower		Upper	
			Bound	Pr > Chisq	Bound	Pr > Chisq
Island	0.3335	0.2877	0.08440	0.0500	2.0954	0.0500

Solutions for Fixed Effects											
Effect	CA_t_1	Moth_Evidence_t_1	Clonal	Estimate	Standard Error	DF	t Value	Pr >  t	Alpha	Lower	Upper
Intercept				-4.0617	0.3702	6	-10.97	<.0001	0.05	-4.9674	-3.1560
Ln_Size_t_1_st				3.5072	0.1492	1614	23.50	<.0001	0.05	3.2145	3.7999
Clonal			1	-2.7802	0.7262	1614	-3.83	0.0001	0.05	-4.2045	-1.3559
Clonal			0	0	.	.	.	.	.	.	.
cactus_density_per_p				1.2746	0.3001	1614	4.25	<.0001	0.05	0.6860	1.8633
CA_t_1	1			0.5702	0.1485	1614	3.84	0.0001	0.05	0.2790	0.8614
CA_t_1	0			0	.	.	.	.	.	.	.
Moth_Evidence_t_1		1		-0.9757	0.2036	1614	-4.79	<.0001	0.05	-1.3751	-0.5764
Moth_Evidence_t_1		0		0	.	.	.	.	.	.	.

Type III Tests of Fixed Effects				
Effect	Num DF	Den DF	F Value	Pr > F
Ln_Size_t_1_st	1	1614	552.43	<.0001
Clonal	1	1614	14.66	0.0001
cactus_density_per_p	1	1614	18.04	<.0001
CA_t_1	1	1614	14.75	0.0001
Moth_Evidence_t_1	1	1614	22.97	<.0001

## The GLIMMIX Procedure

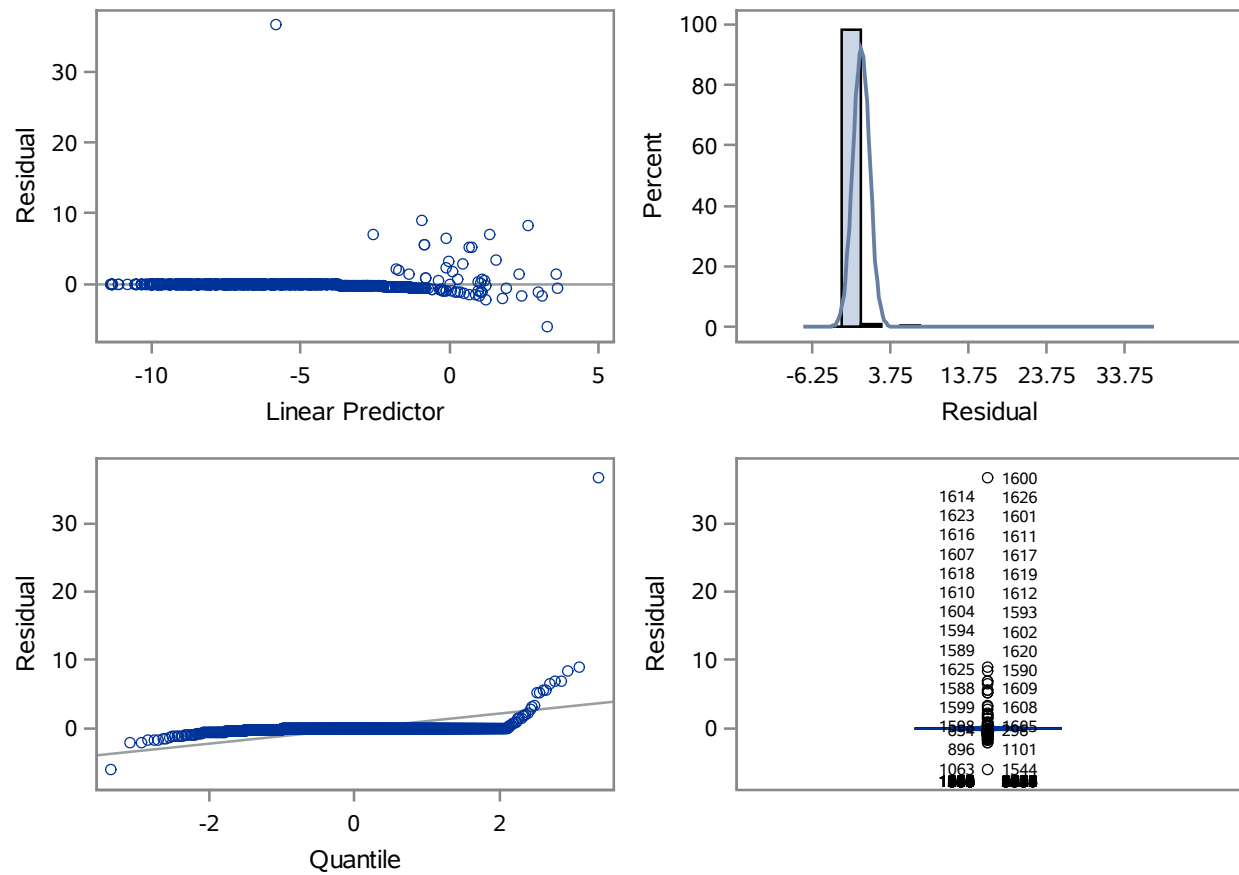
## Conditional Residuals



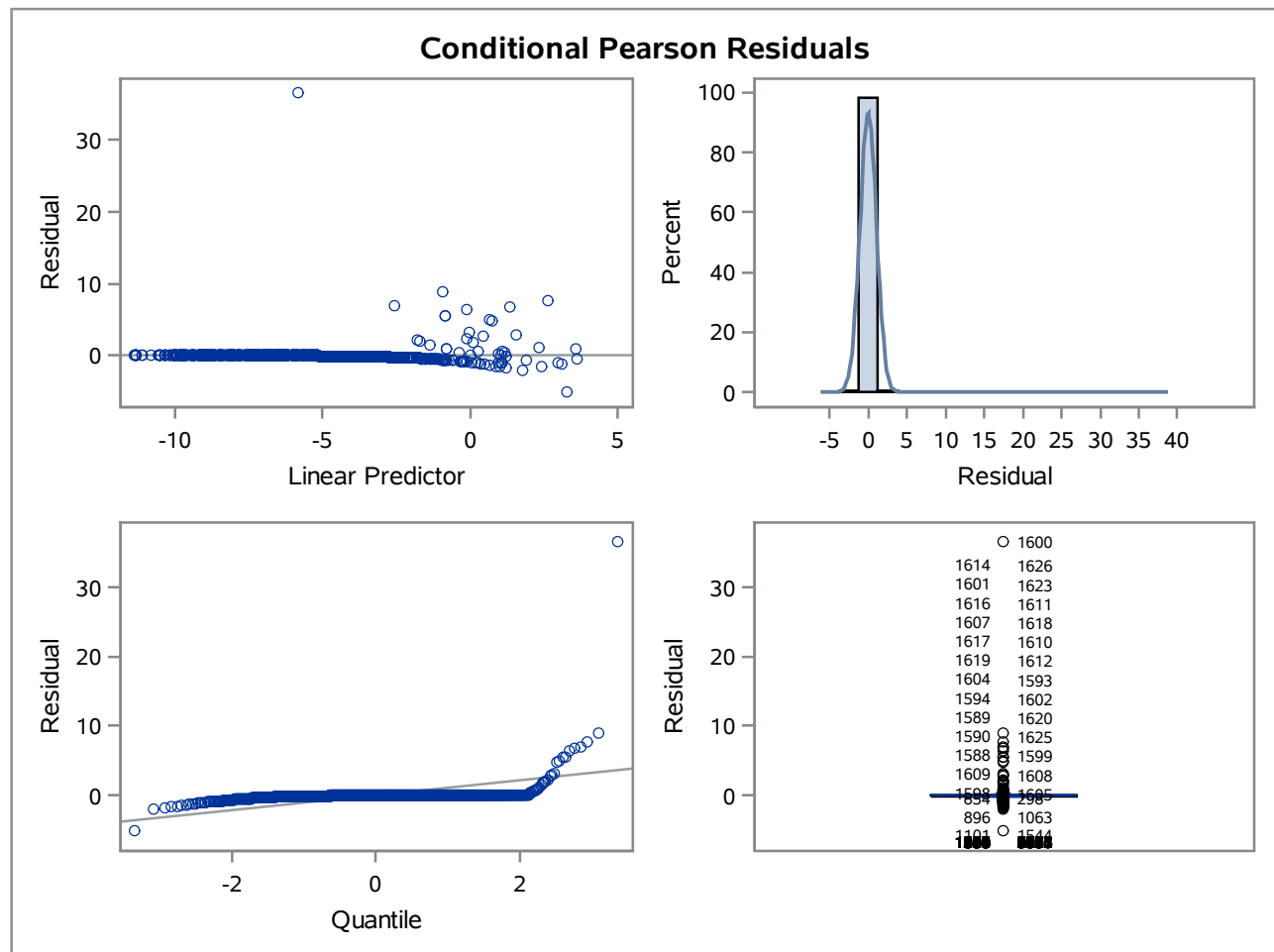


## The GLIMMIX Procedure

## Conditional Studentized Residuals



## The GLIMMIX Procedure



Tests of Covariance Parameters Based on the Likelihood					
Label	DF	-2 Log Like	ChiSq	Pr > ChiSq	Note
No G-side effects	1	552.29	23.04	<.0001	MI

**MI: P-value based on a mixture of chi-squares.**

## The GLIMMIX Procedure

Model Information	
Data Set	WORK.STRICTA_FRUIT
Response Variable	Fruit_Flowers_t
Response Distribution	Poisson
Link Function	Log
Variance Function	Default
Variance Matrix	Not blocked
Estimation Technique	Maximum Likelihood
Likelihood Approximation	Laplace
Degrees of Freedom Method	Containment

Class Level Information		
Class	Levels	Values
CA_t_1	2	1 0
Moth_Evidence_t_1	2	1 0
Network	33	84 106 113 116 134 138 139 146 147 178 179 183 186 197 207 208 209 225 226 248 264 267 282 308 433 575 685 910 969 1054 1064 1085 1099
Clonal	2	1 0

Number of Observations Read	1626
Number of Observations Used	1626

Dimensions	
G-side Cov. Parameters	1
Columns in X	9
Columns in Z	33
Subjects (Blocks in V)	1
Max Obs per Subject	1626

Optimization Information	
Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	7
Lower Boundaries	1
Upper Boundaries	0
Fixed Effects	Not Profiled
Starting From	GLM estimates

## The GLIMMIX Procedure

Iteration History					
Iteration	Restarts	Evaluations	Objective Function	Change	Max Gradient
0	0	4	493.49058293	.	39.02462
1	0	2	481.11586985	12.37471308	33.22498
2	0	2	468.51073786	12.60513200	16.37425
3	0	3	460.14236706	8.36837079	11.10424
4	0	3	456.86257863	3.27978843	4.370884
5	0	2	456.10804805	0.75453058	2.124942
6	0	3	455.91400987	0.19403818	2.037814
7	0	2	455.58562827	0.32838161	2.090047
8	0	2	455.25804134	0.32758693	1.736529
9	0	3	455.17747625	0.08056509	1.0064
10	0	3	455.16036738	0.01710886	0.112098
11	0	3	455.1588677	0.00149968	0.074611
12	0	3	455.15863436	0.00023335	0.009033
13	0	3	455.15862868	0.00000568	0.003829
14	0	3	455.1586283	0.00000038	0.000298

Convergence criterion (GCONV=1E-8) satisfied.

Fit Statistics	
-2 Log Likelihood	455.16
AIC (smaller is better)	469.16
AICC (smaller is better)	469.23
BIC (smaller is better)	479.63
CAIC (smaller is better)	486.63
HQIC (smaller is better)	472.68

Fit Statistics for Conditional Distribution	
-2 log L(Fruit_Flowers_t   r. effects)	395.35
Pearson Chi-Square	1090.25
Pearson Chi-Square / DF	0.67

## The GLIMMIX Procedure

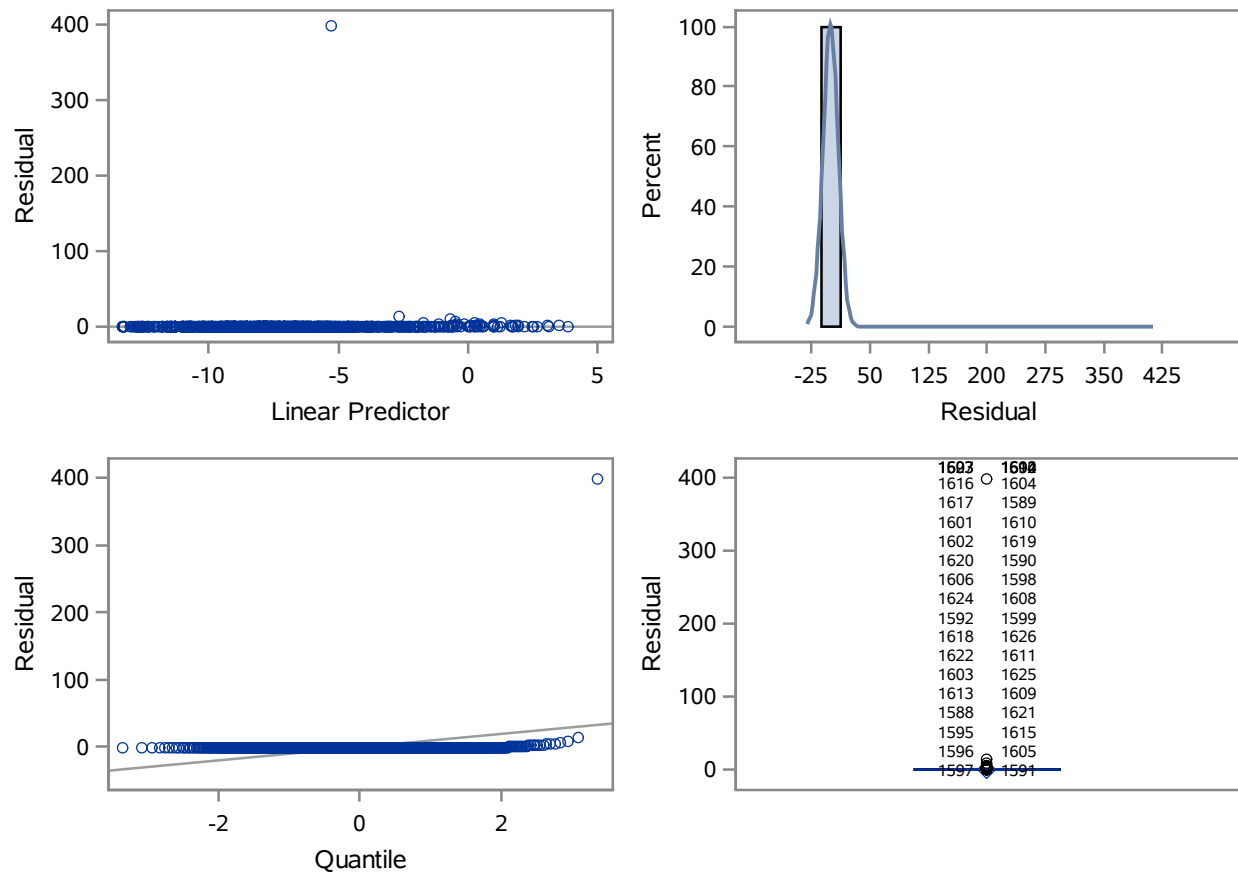
Covariance Parameter Estimates						
			Estimated Likelihood 95% Confidence Bounds			
Cov Parm	Estimate	Standard Error	Lower		Upper	
			Bound	Pr > Chisq	Bound	Pr > Chisq
Network	2.6397	1.4708	1.2361	0.0500	6.4061	0.0500

Solutions for Fixed Effects											
Effect	CA_t_1	Moth_Evidence_t_1	Clonal	Estimate	Standard Error	DF	t Value	Pr >  t	Alpha	Lower	Upper
Intercept				-4.9284	0.5440	32	-9.06	<.0001	0.05	-6.0364	-3.8204
Ln_Size_t_1_st				4.4821	0.2808	1588	15.96	<.0001	0.05	3.9314	5.0328
Clonal			1	-2.4689	0.7419	1588	-3.33	0.0009	0.05	-3.9241	-1.0136
Clonal			0	0	.	.	.	.	.	.	.
cactus_density_per_p				2.9882	0.7297	1588	4.09	<.0001	0.05	1.5569	4.4196
CA_t_1	1			-0.1587	0.1736	1588	-0.91	0.3606	0.05	-0.4992	0.1817
CA_t_1	0			0	.	.	.	.	.	.	.
Moth_Evidence_t_1		1		-0.7575	0.2333	1588	-3.25	0.0012	0.05	-1.2151	-0.3000
Moth_Evidence_t_1		0		0	.	.	.	.	.	.	.

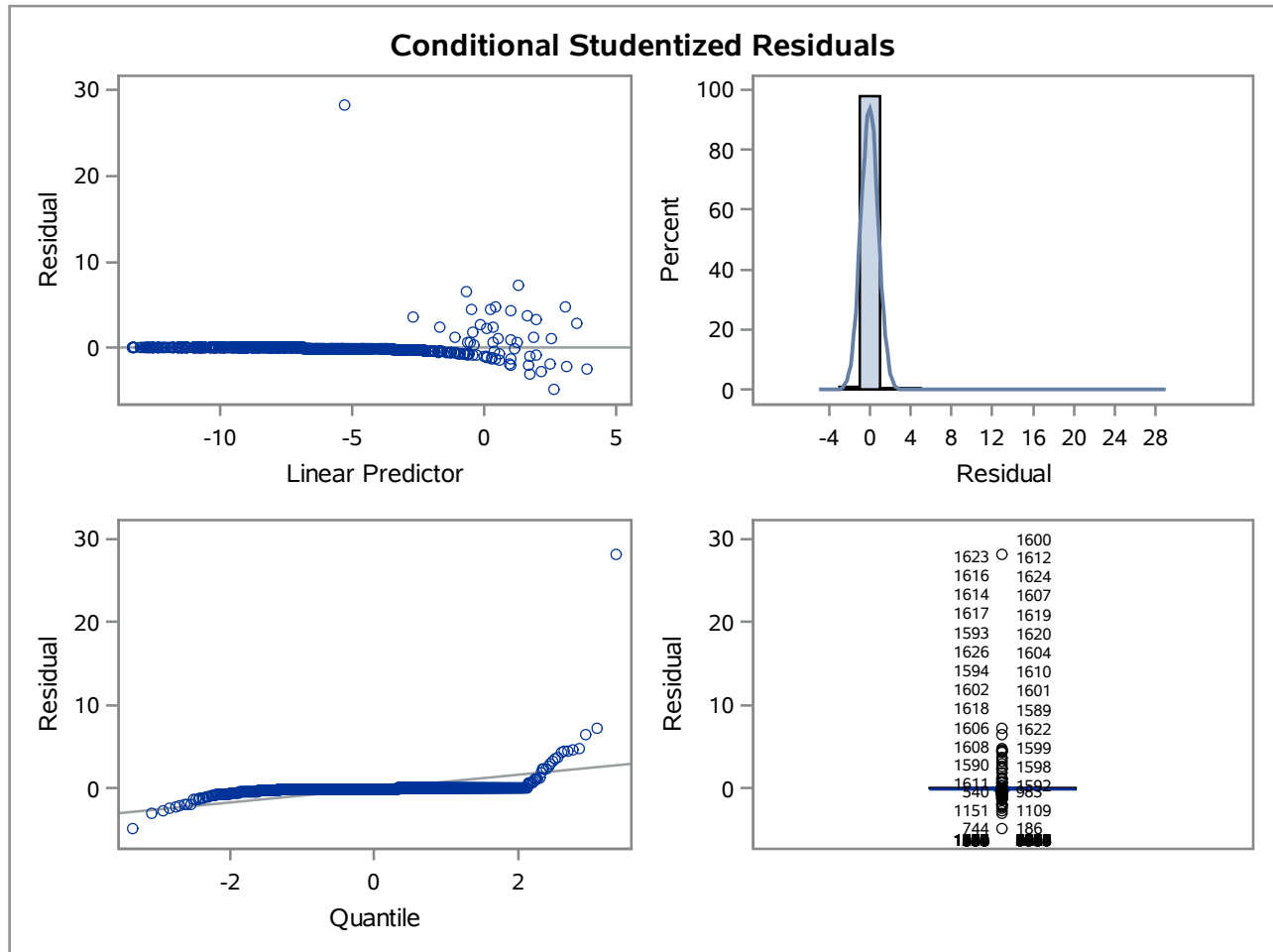
Type III Tests of Fixed Effects				
Effect	Num DF	Den DF	F Value	Pr > F
Ln_Size_t_1_st	1	1588	254.83	<.0001
Clonal	1	1588	11.07	0.0009
cactus_density_per_p	1	1588	16.77	<.0001
CA_t_1	1	1588	0.84	0.3606
Moth_Evidence_t_1	1	1588	10.54	0.0012

## The GLIMMIX Procedure

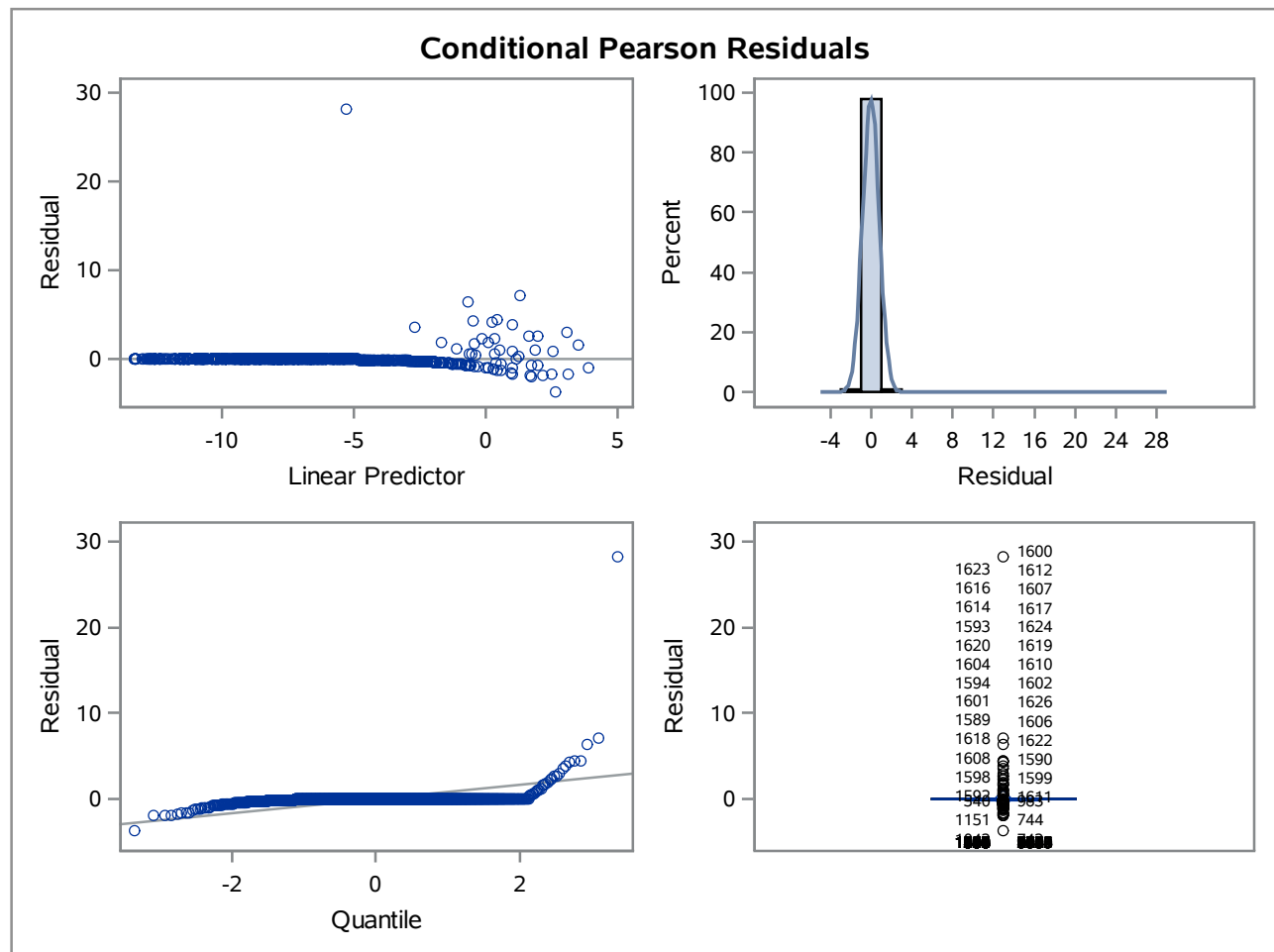
## Conditional Residuals



## The GLIMMIX Procedure



## The GLIMMIX Procedure



Tests of Covariance Parameters Based on the Likelihood					
Label	DF	-2 Log Like	ChiSq	Pr > ChiSq	Note
No G-side effects	1	552.29	97.14	<.0001	MI

**MI: P-value based on a mixture of chi-squares.**



## Network within Location - Get Covariance Parameter Estimates

### The GLIMMIX Procedure

Model Information	
Data Set	WORK.STRICTA_FRUIT
Response Variable	Fruit_Flowers_t
Response Distribution	Poisson
Link Function	Log
Variance Function	Default
Variance Matrix	Not blocked
Estimation Technique	Maximum Likelihood
Likelihood Approximation	Laplace
Degrees of Freedom Method	Containment

Class Level Information		
Class	Levels	Values
CA_t_1	2	1 0
Moth_Evidence_t_1	2	1 0
Network	33	84 106 113 116 134 138 139 146 147 178 179 183 186 197 207 208 209 225 226 248 264 267 282 308 433 575 685 910 969 1054 1064 1085 1099
Island	7	3 4 5 6 7 Roadway1 Roadway2
Clonal	2	1 0

Number of Observations Read	1626
Number of Observations Used	1626

Dimensions	
G-side Cov. Parameters	1
Columns in X	9
Columns in Z	33
Subjects (Blocks in V)	1
Max Obs per Subject	1626

Optimization Information	
Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	7
Lower Boundaries	1
Upper Boundaries	0
Fixed Effects	Not Profiled
Starting From	GLM estimates

## Network within Location - Get Covariance Parameter Estimates

### The GLIMMIX Procedure

Iteration History					
Iteration	Restarts	Evaluations	Objective Function	Change	Max Gradient
0	0	4	493.49058293	.	39.02462
1	0	2	481.11586985	12.37471308	33.22498
2	0	2	468.51073786	12.60513200	16.37425
3	0	3	460.14236706	8.36837079	11.10424
4	0	3	456.86257863	3.27978843	4.370884
5	0	2	456.10804805	0.75453058	2.124942
6	0	3	455.91400987	0.19403818	2.037814
7	0	2	455.58562827	0.32838161	2.090047
8	0	2	455.25804134	0.32758693	1.736529
9	0	3	455.17747625	0.08056509	1.0064
10	0	3	455.16036738	0.01710886	0.112098
11	0	3	455.1588677	0.00149968	0.074611
12	0	3	455.15863436	0.00023335	0.009033
13	0	3	455.15862868	0.00000568	0.003829
14	0	3	455.1586283	0.00000038	0.000298

Convergence criterion (GCONV=1E-8) satisfied.

Fit Statistics	
-2 Log Likelihood	455.16
AIC (smaller is better)	469.16
AICC (smaller is better)	469.23
BIC (smaller is better)	479.63
CAIC (smaller is better)	486.63
HQIC (smaller is better)	472.68

Fit Statistics for Conditional Distribution	
-2 log L(Fruit_Flowers_t   r. effects)	395.35
Pearson Chi-Square	1090.25
Pearson Chi-Square / DF	0.67

# Network within Location - Get Covariance Parameter Estimates

## The GLIMMIX Procedure

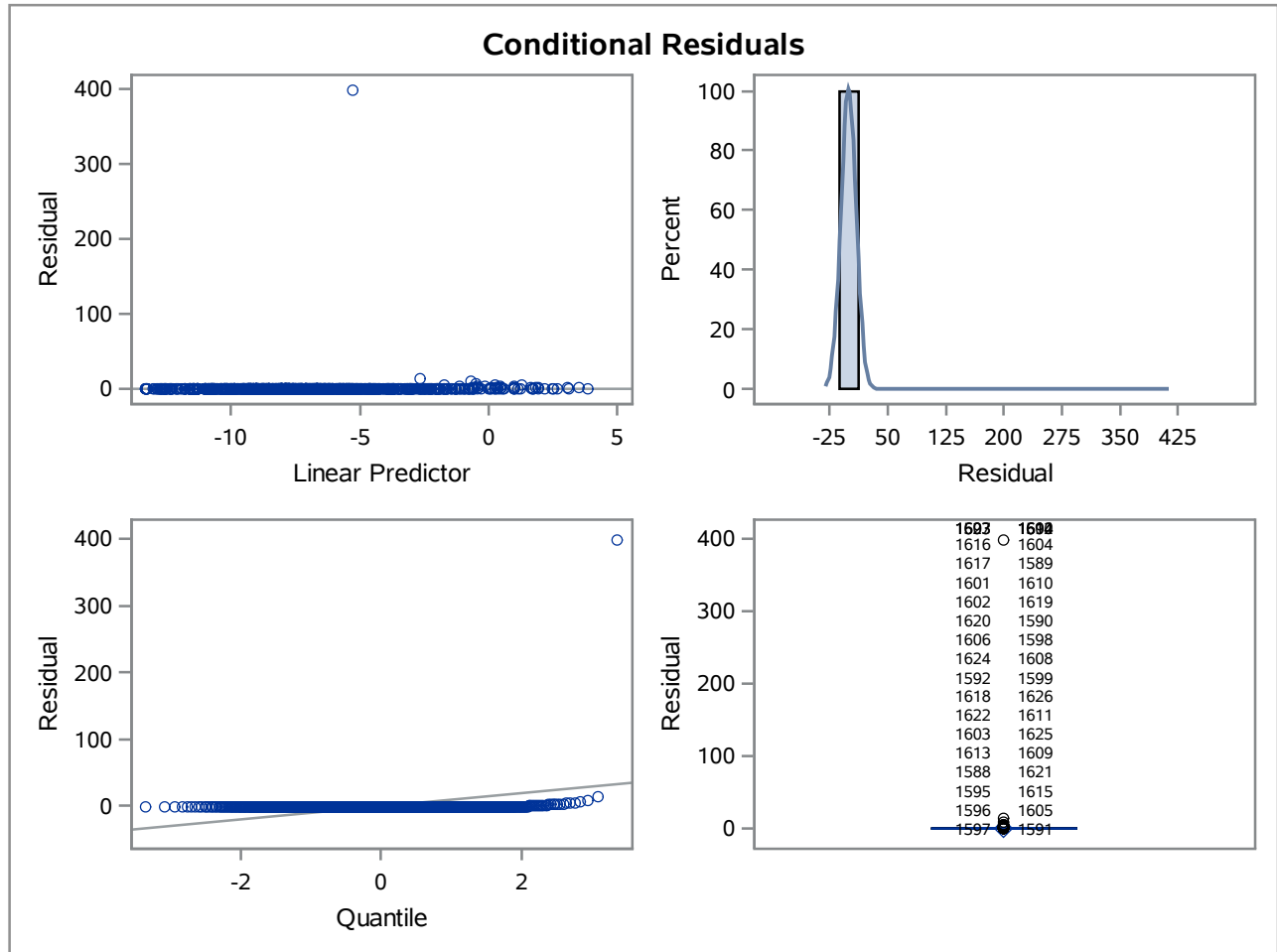
Covariance Parameter Estimates						
			Estimated Likelihood 95% Confidence Bounds			
Cov Parm	Estimate	Standard Error	Lower		Upper	
			Bound	Pr > Chisq	Bound	Pr > Chisq
Network(Island)	2.6397	1.4708	1.2361	0.0500	6.4061	0.0500

Solutions for Fixed Effects											
Effect	CA_t_1	Moth_Evidence_t_1	Clonal	Estimate	Standard Error	DF	t Value	Pr >  t	Alpha	Lower	Upper
Intercept				-4.9284	0.5440	32	-9.06	<.0001	0.05	-6.0364	-3.8204
Ln_Size_t_1_st				4.4821	0.2808	1588	15.96	<.0001	0.05	3.9314	5.0328
Clonal			1	-2.4689	0.7419	1588	-3.33	0.0009	0.05	-3.9241	-1.0136
Clonal			0	0	.	.	.	.	.	.	.
cactus_density_per_p				2.9882	0.7297	1588	4.09	<.0001	0.05	1.5569	4.4196
CA_t_1	1			-0.1587	0.1736	1588	-0.91	0.3606	0.05	-0.4992	0.1817
CA_t_1	0			0	.	.	.	.	.	.	.
Moth_Evidence_t_1		1		-0.7575	0.2333	1588	-3.25	0.0012	0.05	-1.2151	-0.3000
Moth_Evidence_t_1		0		0	.	.	.	.	.	.	.

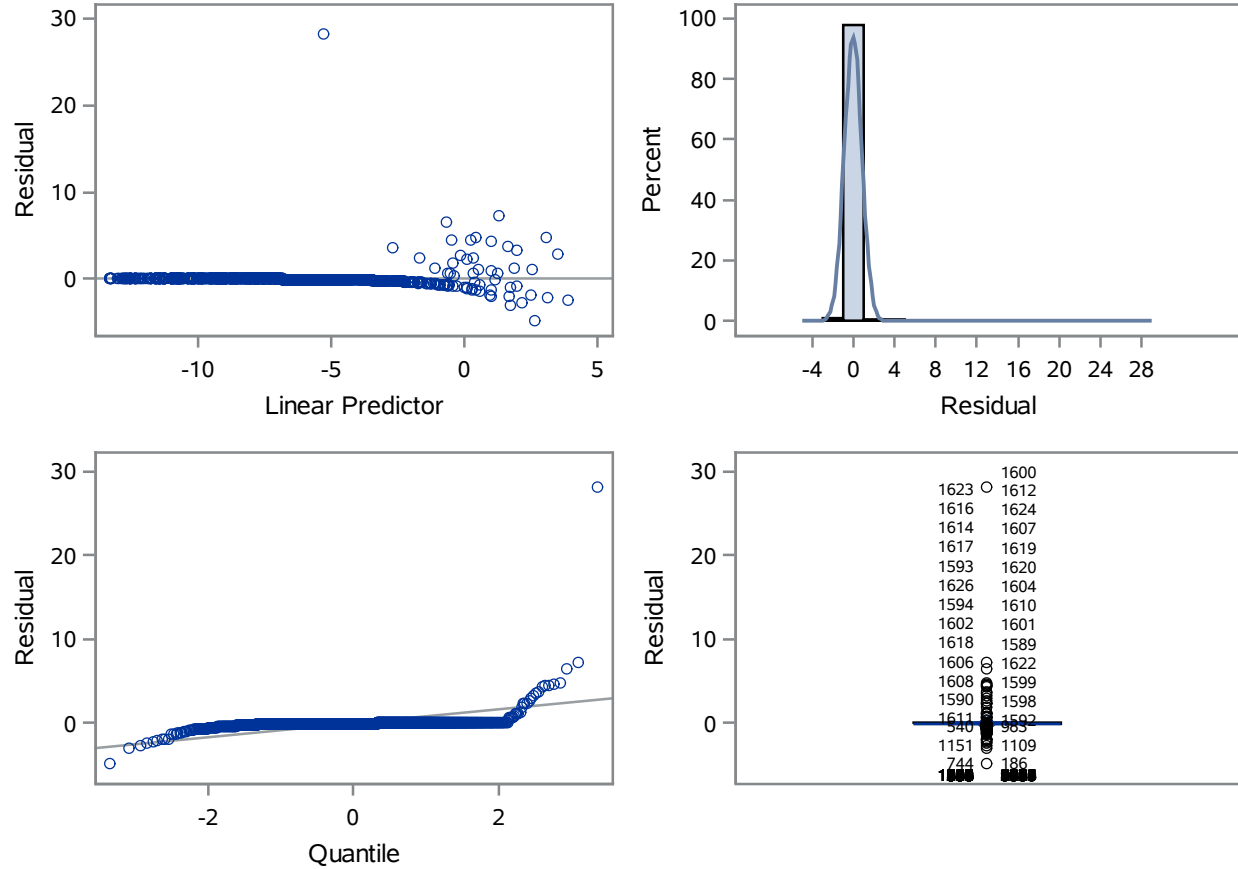
Type III Tests of Fixed Effects				
Effect	Num DF	Den DF	F Value	Pr > F
Ln_Size_t_1_st	1	1588	254.83	<.0001
Clonal	1	1588	11.07	0.0009
cactus_density_per_p	1	1588	16.77	<.0001
CA_t_1	1	1588	0.84	0.3606
Moth_Evidence_t_1	1	1588	10.54	0.0012

# Network within Location - Get Covariance Parameter Estimates

## The GLIMMIX Procedure

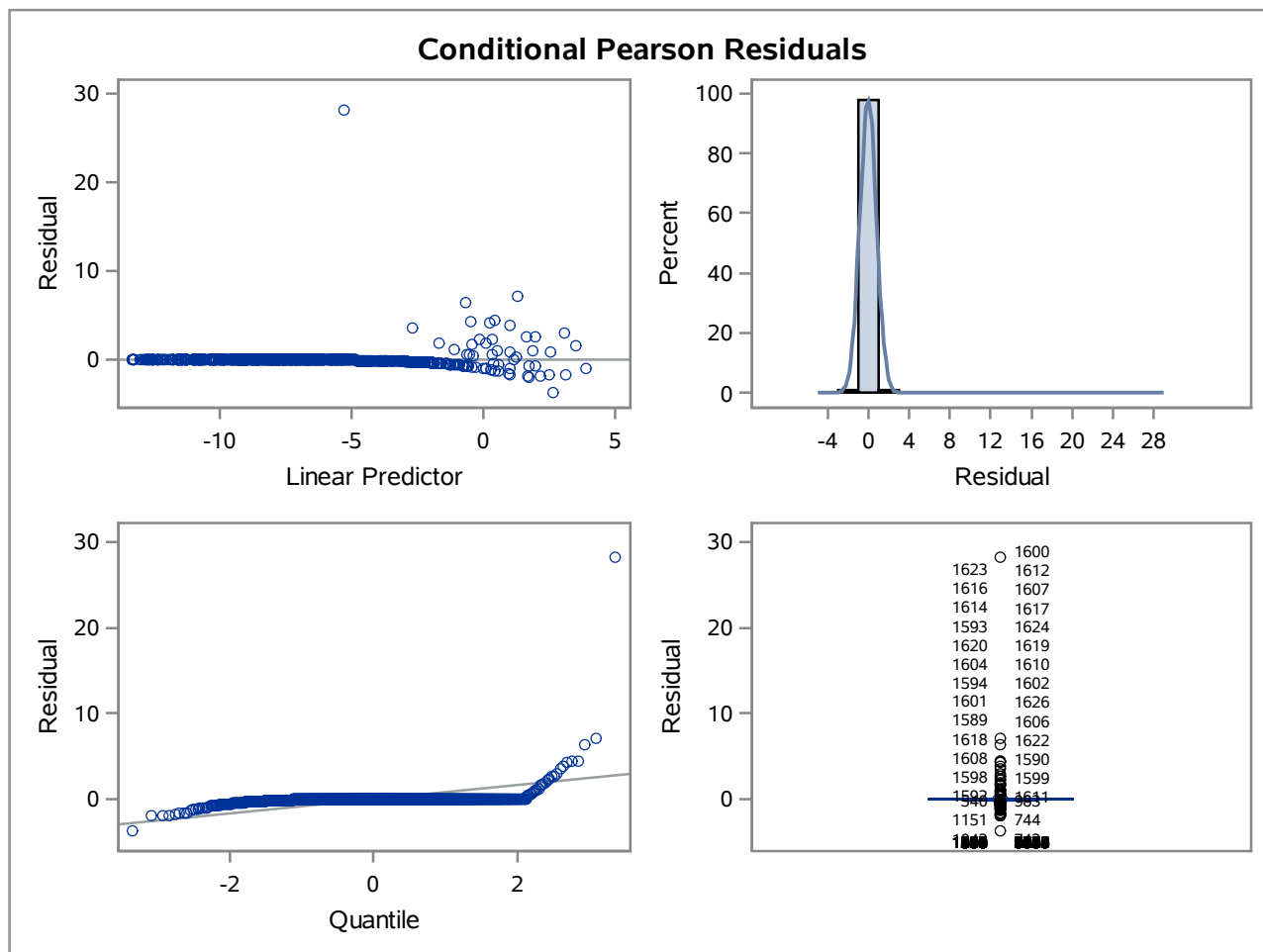


### Conditional Studentized Residuals



# Network within Location - Get Covariance Parameter Estimates

## The GLIMMIX Procedure



Tests of Covariance Parameters Based on the Likelihood					
Label	DF	-2 Log Like	ChiSq	Pr > ChiSq	Note
No G-side effects	1	552.29	97.14	<.0001	MI

**MI: P-value based on a mixture of chi-squares.**

## Habitat Type - Get Covariance Parameter Estimates

### The GLIMMIX Procedure

Model Information	
Data Set	WORK.STRICTA_FRUIT
Response Variable	Fruit_Flowers_t
Response Distribution	Poisson
Link Function	Log
Variance Function	Default
Variance Matrix	Not blocked
Estimation Technique	Maximum Likelihood
Likelihood Approximation	Laplace
Degrees of Freedom Method	Containment

Class Level Information		
Class	Levels	Values
CA_t_1	2	1 0
Moth_Evidence_t_1	2	1 0
Network	33	84 106 113 116 134 138 139 146 147 178 179 183 186 197 207 208 209 225 226 248 264 267 282 308 433 575 685 910 969 1054 1064 1085 1099
Island	7	3 4 5 6 7 Roadway1 Roadway2
Clonal	2	1 0
HabitatType	2	Barrier Island Habitat Intracoastal Waterway Is

Number of Observations Read	1626
Number of Observations Used	1626

Dimensions	
G-side Cov. Parameters	1
Columns in X	9
Columns in Z	2
Subjects (Blocks in V)	1
Max Obs per Subject	1626

Optimization Information	
Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	7
Lower Boundaries	1
Upper Boundaries	0

## Habitat Type - Get Covariance Parameter Estimates

### The GLIMMIX Procedure

Optimization Information	
Fixed Effects	Not Profiled
Starting From	GLM estimates

Iteration History					
Iteration	Restarts	Evaluations	Objective Function	Change	Max Gradient
0	0	4	556.20846664	.	80.62777
1	0	2	555.77544821	0.43301843	11.40128
2	0	2	555.49823791	0.27721029	139.2017
3	0	7	555.41117831	0.08705960	44.16333
4	0	4	554.22080143	1.19037689	28.8385
5	0	2	553.07991415	1.14088727	24.88293
6	0	8	553.07107427	0.00883988	11.2323
7	0	5	552.59769218	0.47338209	2.907053
8	0	6	552.5965851	0.00110708	7.275648
9	0	5	552.38590375	0.21068135	4.210582
10	0	3	552.3170853	0.06881845	4.935468
11	0	3	552.29845265	0.01863265	3.557621
12	0	3	552.29584837	0.00260428	2.245081
13	0	2	552.2944623	0.00138606	0.934422
14	0	3	552.29366132	0.00080098	0.083312
15	0	3	552.29365545	0.00000587	0.00045
16	0	3	552.29365545	0.00000000	1.837E-6

Convergence criterion (GCONV=1E-8) satisfied.

**Estimated G matrix is not positive definite.**

Fit Statistics	
-2 Log Likelihood	552.29
AIC (smaller is better)	564.29
AICC (smaller is better)	564.35
BIC (smaller is better)	556.45
CAIC (smaller is better)	562.45
HQIC (smaller is better)	547.90



## Habitat Type - Get Covariance Parameter Estimates

## The GLIMMIX Procedure

Fit Statistics for Conditional Distribution	
-2 log L(Fruit_Flowers_t   r. effects)	552.29
Pearson Chi-Square	1163.52
Pearson Chi-Square / DF	0.72

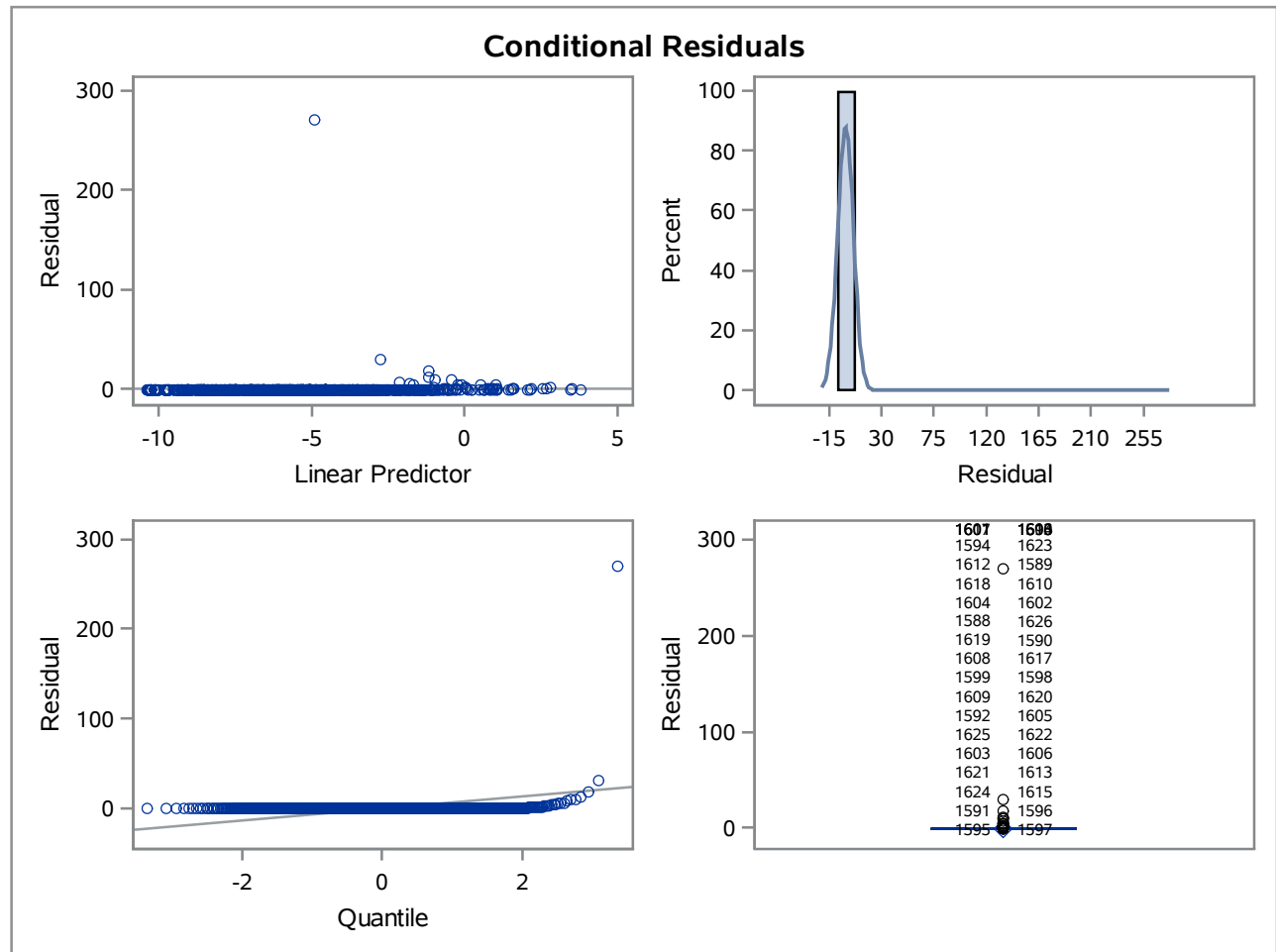
Covariance Parameter Estimates						
			Estimated Likelihood 95% Confidence Bounds			
Cov Parm	Estimate	Standard Error	Lower		Upper	
			Bound	Pr > Chisq	Bound	Pr > Chisq
HabitatType	0	.	0	1.0000	0.1117	0.0500

Solutions for Fixed Effects											
Effect	CA_t_1	Moth_Evidence_t_1	Clonal	Estimate	Standard Error	DF	t Value	Pr >  t	Alpha	Lower	Upper
Intercept				-3.6177	0.2051	1	-17.64	0.0361	0.05	-6.2239	-1.0115
Ln_Size_t_1_st				3.5074	0.1343	1619	26.12	<.0001	0.05	3.2440	3.7708
Clonal			1	-2.9161	0.7209	1619	-4.05	<.0001	0.05	-4.3300	-1.5021
Clonal			0	0	.	.	.	.	.	.	.
cactus_density_per_p				1.1424	0.1867	1619	6.12	<.0001	0.05	0.7762	1.5086
CA_t_1	1			0.3135	0.1443	1619	2.17	0.0299	0.05	0.03050	0.5965
CA_t_1	0			0	.	.	.	.	.	.	.
Moth_Evidence_t_1		1		-1.0746	0.2020	1619	-5.32	<.0001	0.05	-1.4708	-0.6783
Moth_Evidence_t_1		0		0	.	.	.	.	.	.	.

Type III Tests of Fixed Effects				
Effect	Num DF	Den DF	F Value	Pr > F
Ln_Size_t_1_st	1	1619	682.13	<.0001
Clonal	1	1619	16.36	<.0001
cactus_density_per_p	1	1619	37.44	<.0001
CA_t_1	1	1619	4.72	0.0299
Moth_Evidence_t_1	1	1619	28.29	<.0001

# Habitat Type - Get Covariance Parameter Estimates

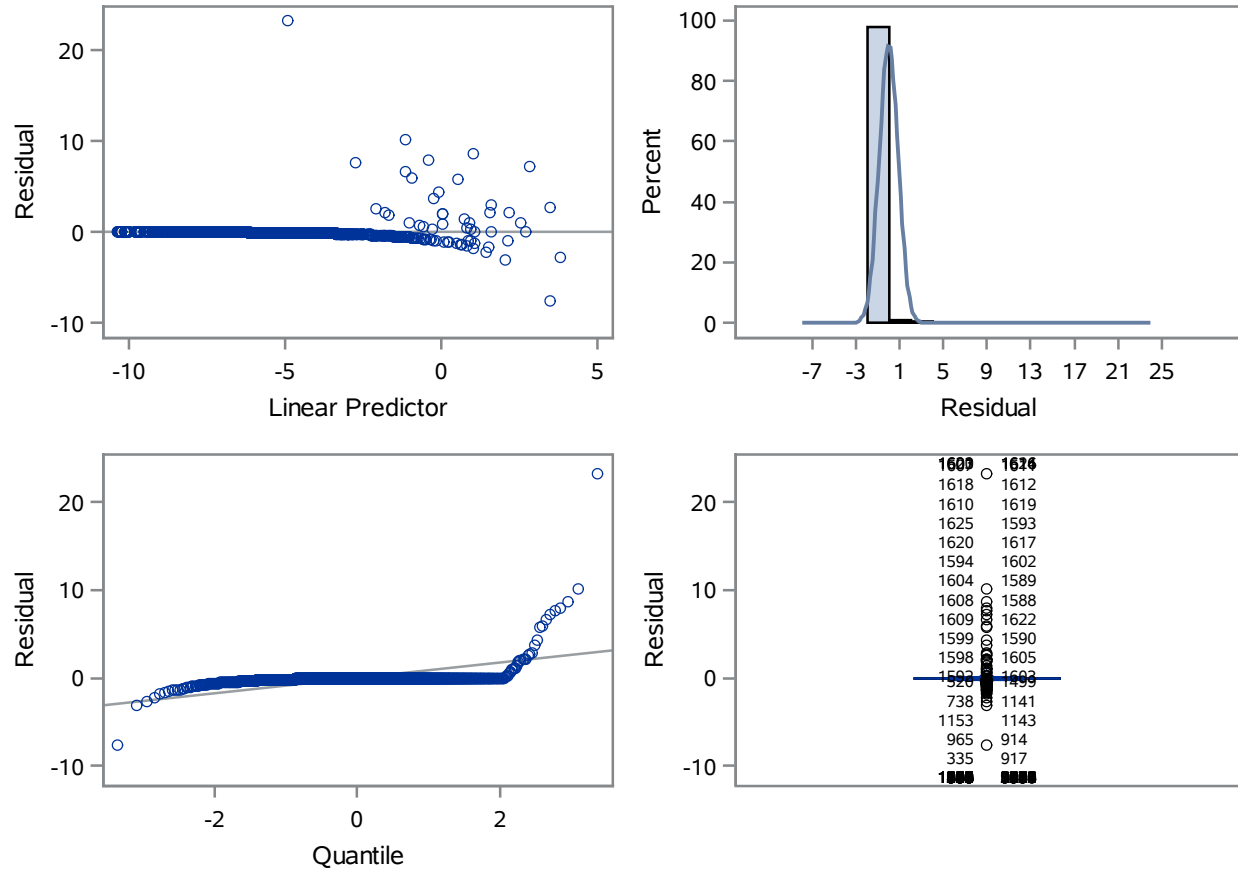
## The GLIMMIX Procedure



## Habitat Type - Get Covariance Parameter Estimates

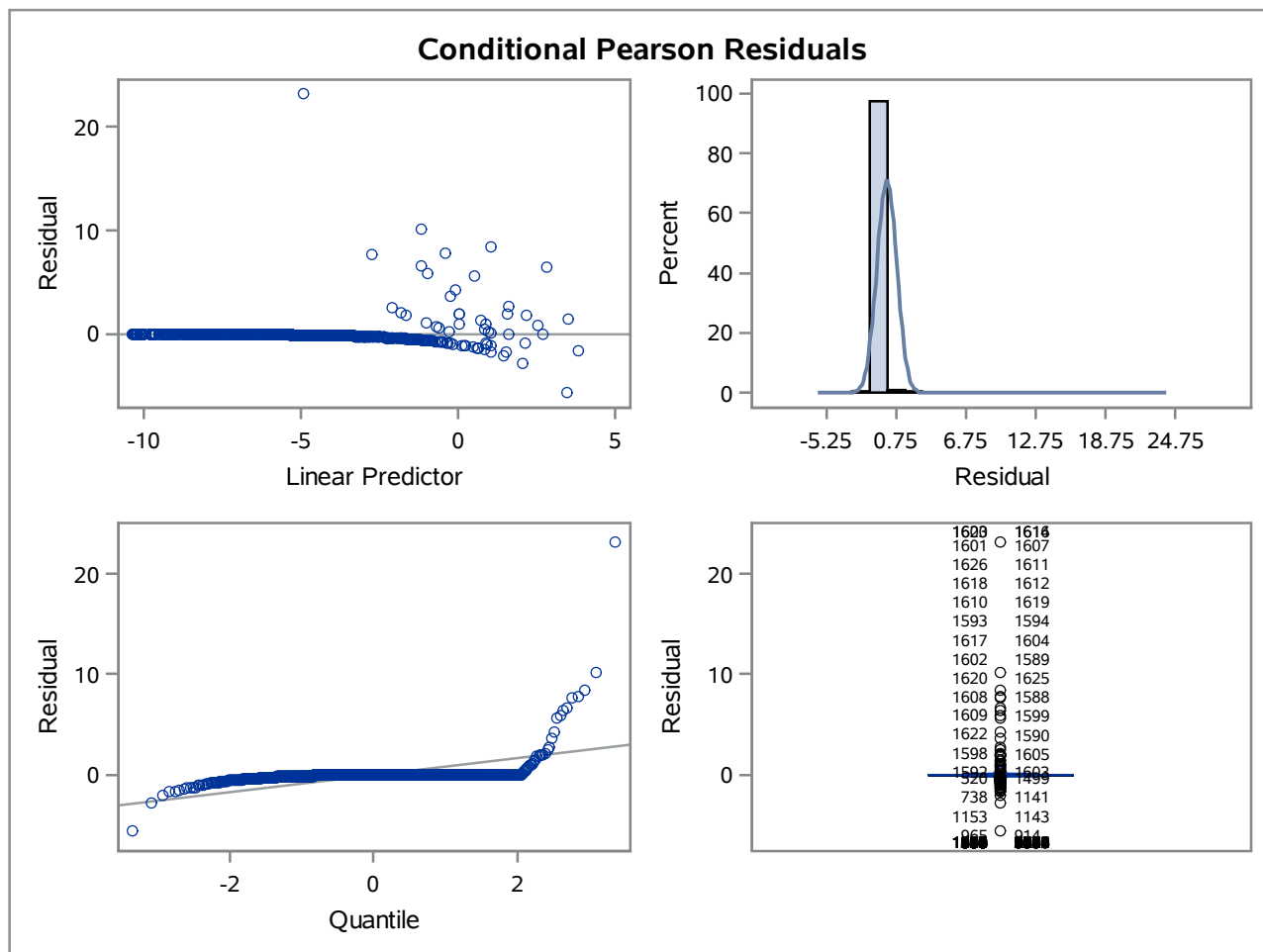
## The GLIMMIX Procedure

## Conditional Studentized Residuals



# Habitat Type - Get Covariance Parameter Estimates

## The GLIMMIX Procedure



Tests of Covariance Parameters Based on the Likelihood					
Label	DF	-2 Log Like	ChiSq	Pr > ChiSq	Note
No G-side effects	1	552.29	0.00	1.0000	MI

**MI: P-value based on a mixture of chi-squares.**