Softdrink Data - Final Model

The GLIMMIX Procedure

Model Information	
Data Set	MYDATA.SOFTDRINKS
Response Variable	Time
Response Distribution	Gamma
Link Function	Log
Variance Function	Default
Variance Matrix	Diagonal
Estimation Technique	Maximum Likelihood
Degrees of Freedom Method	Residual

Number of Observations Read	24
Number of Observations Used	24

Dimensions	
Covariance Parameters	1
Columns in X	4
Columns in Z	0
Subjects (Blocks in V)	1
Max Obs per Subject	24

Optimization Information	
Optimization Technique	Newton-Raphson
Parameters in Optimization	5
Lower Boundaries	1
Upper Boundaries	0
Fixed Effects	Not Profiled

Iteration History

Iteration	Restarts	Evaluations	Objective Function	Change	Max Gradient
0	**0**	4	76.194924302	.	46.84104
1	**0**	28	53.254401677	22.94052262	24.49645
2	**0**	5	53.248016251	0.00638543	0.233797
3	**0**	3	53.24792708	0.00008917	0.180337
4	**0**	3	53.247756729	0.00017035	0.128914
5	**0**	3	53.247481947	0.00027478	0.076112

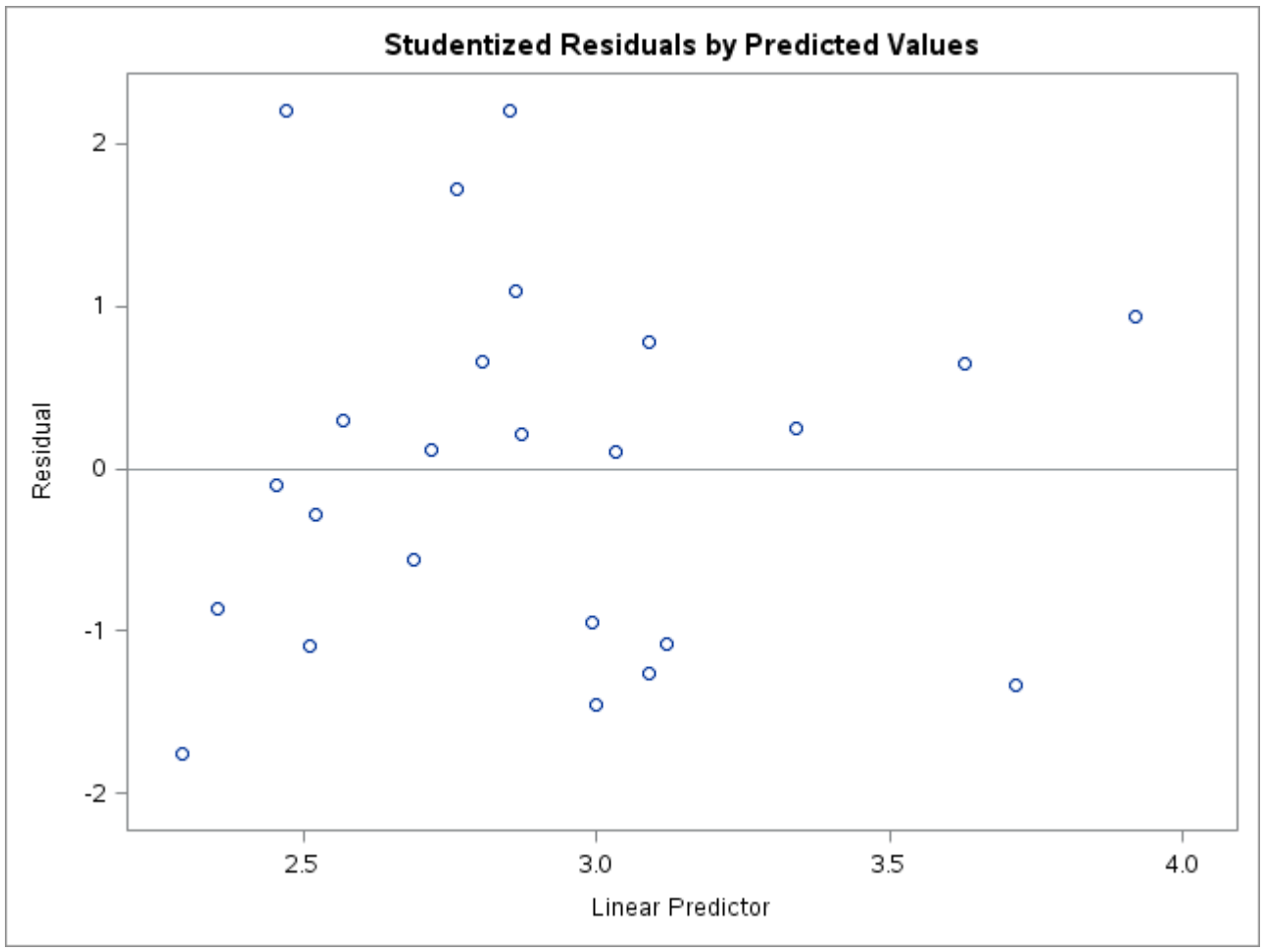
Iteration History					
Iteration	Restarts	Evaluations	Objective Function	Change	Max Gradient
6	0	3	53.247122369	0.00035958	0.043568
7	0	3	53.246733897	0.00038847	0.019532
8	0	3	53.246607776	0.00012612	0.005543
9	0	3	53.24660239	0.00000539	0.000441
10	0	3	53.24660232	0.00000007	0.000027

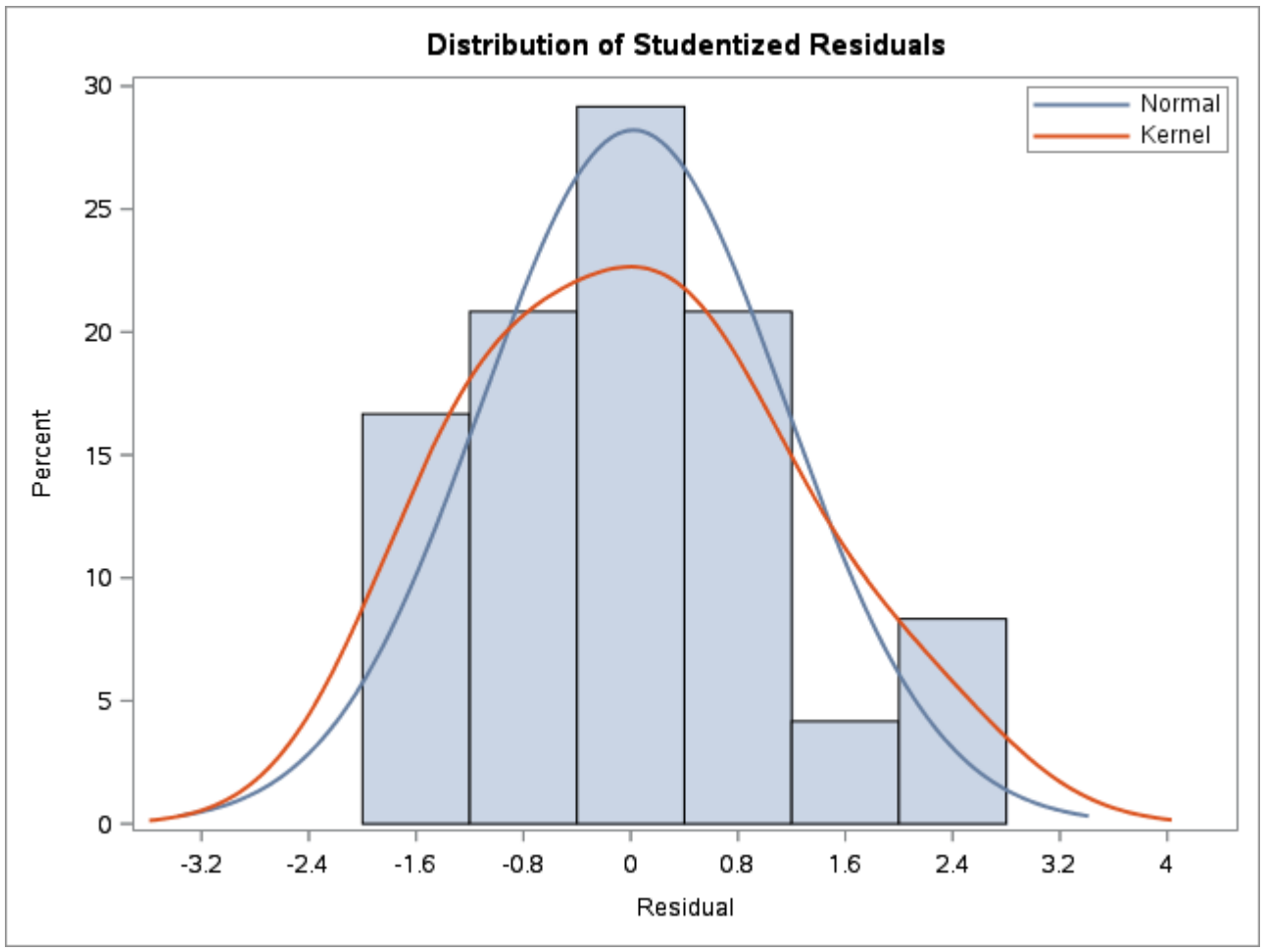
Convergence criterion (GCONV=1E-8) satisfied.

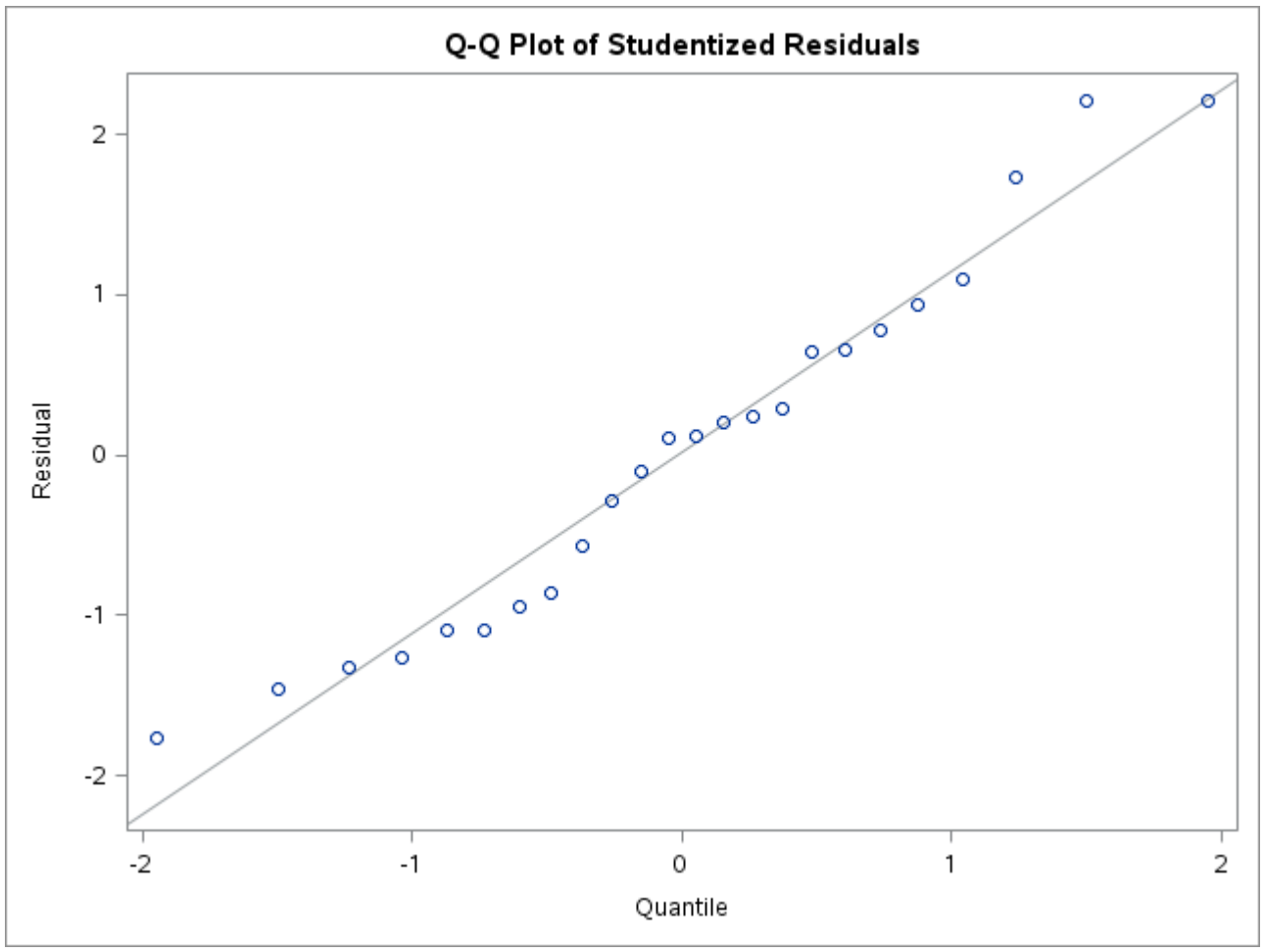
Fit Statistics	
-2 Log Likelihood	106.49
AIC (smaller is better)	116.49
AICC (smaller is better)	119.83
BIC (smaller is better)	122.38
CAIC (smaller is better)	127.38
HQIC (smaller is better)	118.06
Pearson Chi-Square	0.37
Pearson Chi-Square / DF	0.02

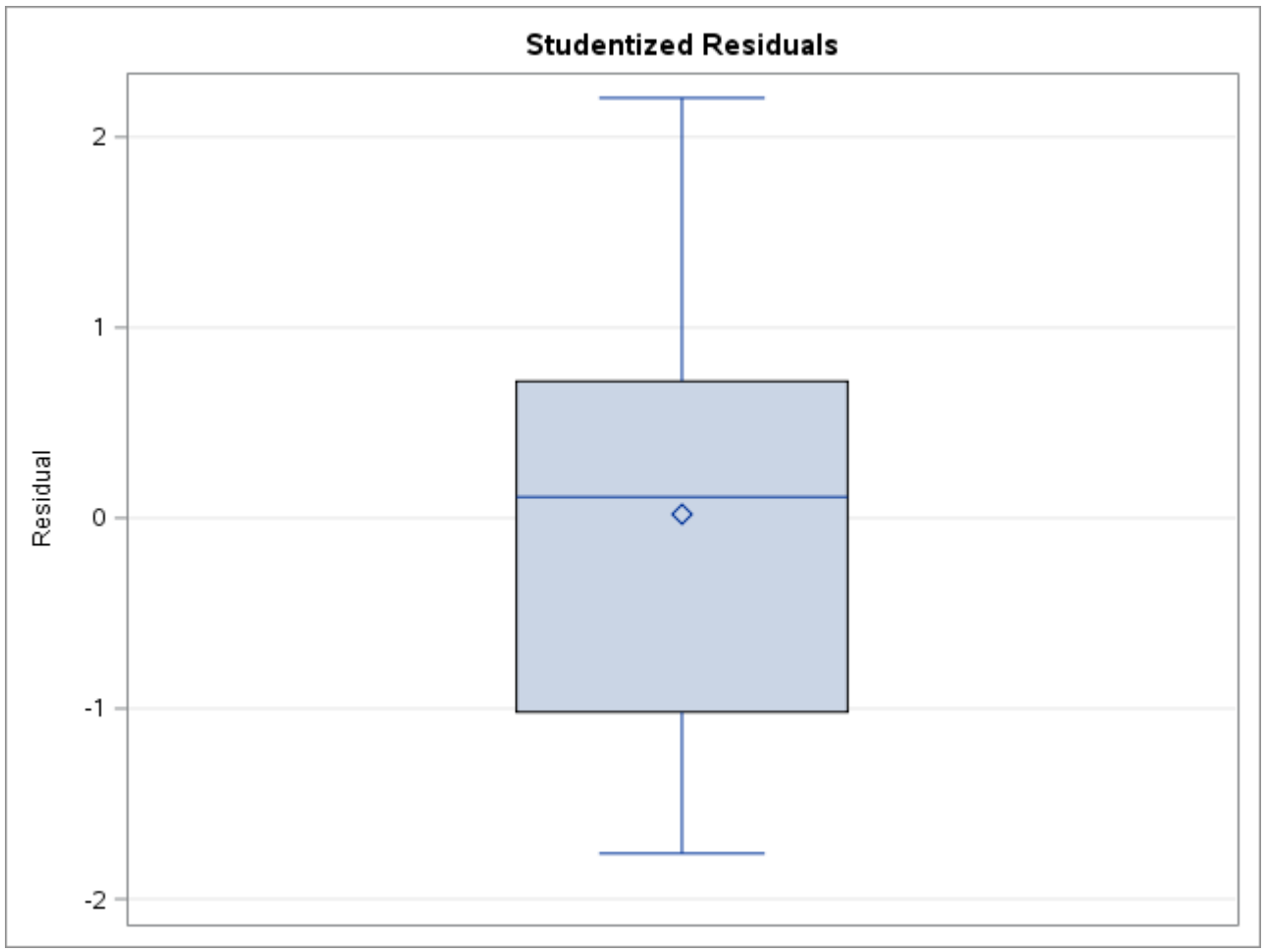
Parameter Estimates					
Effect	Estimate	Standard Error	DF	t Value	Pr > |t|
Intercept	2.0211	0.08300	20	24.35	<.0001
Cases	0.1103	0.01808	20	6.10	<.0001
Cases*Cases	-0.00209	0.000623	20	-3.36	0.0031
Distance	0.000550	0.000145	20	3.80	0.0011
Scale	0.01506	0.004336	.	.	.

Type III Tests of Fixed Effects				
Effect	Num DF	Den DF	F Value	Pr > F
Cases	1	20	37.21	<.0001
Cases*Cases	1	20	11.31	0.0031
Distance	1	20	14.40	0.0011


Studentized Residuals by Predicted Values
Residual
2
1
0
-1
-2
2.5
3.0
3.5
4.0
Linear Predictor


Distribution of Studentized Residuals
Normal
Kernel
Percent
30
25
20
15
10
5
0
-3.2
-2.4
-1.6
-0.8
0
0.8
1.6
2.4
3.2
4
Residual


Q-Q Plot of Studentized Residuals
Residual
Quantile
2
1
0
-1
-2
-2
-1
0
1
2


Studentized Residuals
Residual
2
1
0
-1
-2