

## The Mixed Procedure

Model Information	
Data Set	WORK.SACROMERE
Dependent Variable	Length
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
Subject	11	1 3 4 5 6 7 8 9 10 11 12
Image_ID	396	S1 S10 S100 S101 S102 S103 S104 S105 S106 S107 S108 S109 S11 S110 S111 S112 S113 S114 S115 S116 S117 S118 S119 S12 S120 S121 S122 S123 S124 S125 S126 S127 S128 S129 S13 S130 S131 S132 S133 S134 S135 S136 S137 S138 S139 S14 S140 S141 S142 S143 S144 S145 S146 S147 S148 S149 S15 S150 S151 S152 S153 S154 S155 S156 S157 S158 S159 S16 S160 S161 S162 S163 S164 S165 S166 S167 S168 S169 S17 S170 S171 S172 S173 S174 S175 S176 S177 S178 S179 S18 S180 S181 S182 S183 S184 S185 S186 S187 S188 S189 S19 S190 S191 S192 S193 S194 S195 S196 S197 S198 S199 S2 S20 S200 S201 S202 S203 S204 S205 S206 S207 S208 S209 S21 S210 S211 S212 S213 S214 S215 S216 S217 S218 S219 S22 S220 S221 S222 S223 S224 S225 S226 S227 S228 S229 S23 S230 S231 S232 S233 S234 S235 S236 S237 S238 S239 S24 S240 S241 S242 S243 S244 S245 S246 S247 S248 S249 S25 S250 S251 S252 S253 S254 S255 S256 S257 S258 S259 S26 S260 S261 S262 S263 S264 S265 S266 S267 S268 S269 S27 S270 S271 S272 S273 S274 S275 S276 S277 S278 S279 S28 S280 S281 S282 S283 S284 S285 S286 S287 S288 S289 S29 S290 S291 S292 S293 S294 S295 S296 S297 S298 S299 S3 S30 S300 S301 S302 S303 S304 S305 S306 S307 S308 S309 S31 S310 S311 S312 S313 S314 S315 S316 S317 S318 S319 S32 S320 S321 S322 S323 S324 S325 S326 S327 S328 S329 S33 S330 S331 S332 S333 S334 S335 S336 S337 S338 S339 S34 S340 S341 S342 S343 S344 S345 S346 S347 S348 S349 S35 S350 S351 S352 S353 S354 S355 S356 S357 S358 S359 S36 S360 S361 S362 S363 S364 S365 S366 S367 S368 S369 S37 S370 S371 S372 S373 S374 S375 S376 S377 S378 S379 S38 S380 S381 S382 S383 S384 S385 S386 S387 S388 S389 S39 S390 S391 S392 S393 S394 S395 S396 S4 S40 S41 S42 S43 S44 S45 S46 S47 S48 S49 S5 S50 S51 S52 S53 S54 S55 S56 S57 S58 S59 S6 S60 S61 S62 S63 S64 S65 S66 S67 S68 S69 S7 S70 S71 S72 S73 S74 S75 S76 S77 S78 S79 S8 S80 S81 S82 S83 S84 S85 S86 S87 S88 S89 S9 S90 S91 S92 S93 S94 S95 S96 S97 S98 S99
Side	2	L R
Stroke	2	Y N
Arm	2	N Y

Dimensions	
Covariance Parameters	3
Columns in X	9
Columns in Z	33
Subjects	1
Max Obs per Subject	3041

Number of Observations	
Number of Observations Read	3041
Number of Observations Used	3041
Number of Observations Not Used	0

## The Mixed Procedure

Iteration History			
Iteration	Evaluations	-2 Res Log Like	Criterion
0	1	1099.25448220	
1	3	-1206.91409769	0.00003552
2	1	-1207.05265879	0.00000268
3	1	-1207.06222828	0.00000002
4	1	-1207.06229553	0.00000000

Convergence criteria met.

Covariance Parameter Estimates	
Cov Parm	Estimate
Subject	0.02737
Side(Subject)	0.02669
Residual	0.03790

Fit Statistics	
-2 Res Log Likelihood	-1207.1
AIC (Smaller is Better)	-1201.1
AICC (Smaller is Better)	-1201.1
BIC (Smaller is Better)	-1199.9

Solution for Fixed Effects							
Effect	Stroke	Arm	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept			3.5450	0.1170	9	30.31	<.0001
Stroke	Y		0.003339	0.1465	3019	0.02	0.9818
Stroke	N		0	.	.	.	.
Arm		N	0.1047	0.1168	3019	0.90	0.3700
Arm		Y	0	.	.	.	.
Stroke*Arm	Y	N	-0.06049	0.1462	3019	-0.41	0.6791
Stroke*Arm	Y	Y	0	.	.	.	.
Stroke*Arm	N	N	0	.	.	.	.
Stroke*Arm	N	Y	0	.	.	.	.

## The Mixed Procedure

Type 3 Tests of Fixed Effects				
Effect	Num DF	Den DF	F Value	Pr > F
Stroke	1	3019	0.04	0.8321
Arm	1	3019	1.04	0.3084
Stroke*Arm	1	3019	0.17	0.6791

Coefficients for differences in differences			
Effect	Stroke	Arm	Row1
Intercept			
Stroke	Y		
Stroke	N		
Arm		N	
Arm		Y	
Stroke*Arm	Y	N	1
Stroke*Arm	Y	Y	-1
Stroke*Arm	N	N	-1
Stroke*Arm	N	Y	1

Estimates					
Label	Estimate	Standard Error	DF	t Value	Pr >  t
differences in differences	-0.06049	0.1462	3019	-0.41	0.6791

Least Squares Means										
Effect	Stroke	Arm	Estimate	Standard Error	DF	t Value	Pr >  t	Alpha	Lower	Upper
Stroke*Arm	Y	N	3.5926	0.08821	3019	40.73	<.0001	0.05	3.4196	3.7655
Stroke*Arm	Y	Y	3.5484	0.08818	3019	40.24	<.0001	0.05	3.3755	3.7213
Stroke*Arm	N	N	3.6497	0.1168	3019	31.25	<.0001	0.05	3.4207	3.8787
Stroke*Arm	N	Y	3.5450	0.1170	3019	30.31	<.0001	0.05	3.3157	3.7744

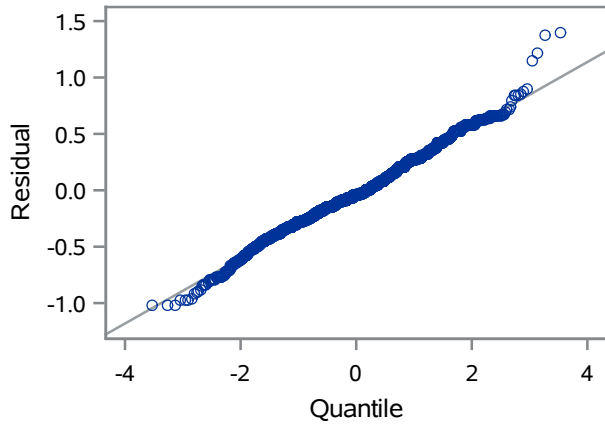
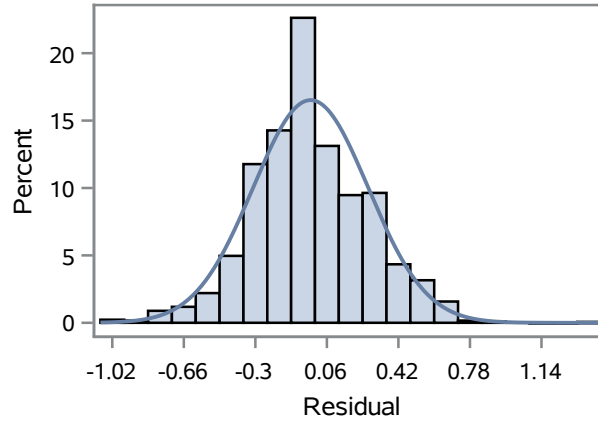
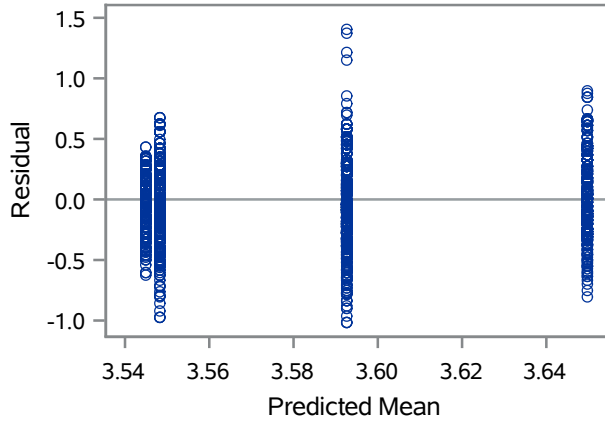
Differences of Least Squares Means												
Effect	Stroke	Arm	Stroke	_Arm	Estimate	Standard Error	DF	t Value	Pr >  t	Alpha	Lower	Upper
Stroke*Arm	Y	N	Y	Y	0.04422	0.08795	3019	0.50	0.6151	0.05	-0.1282	0.2167
Stroke*Arm	Y	N	N	N	-0.05715	0.1464	3019	-0.39	0.6962	0.05	-0.3441	0.2298
Stroke*Arm	Y	N	N	Y	0.04756	0.1465	3019	0.32	0.7455	0.05	-0.2397	0.3348
Stroke*Arm	Y	Y	N	N	-0.1014	0.1463	3019	-0.69	0.4886	0.05	-0.3883	0.1856

## The Mixed Procedure

Differences of Least Squares Means

Effect	Stroke	Arm	Stroke	_Arm	Estimate	Standard Error	DF	t Value	Pr >  t	Alpha	Lower	Upper
Stroke*Arm	Y	Y	N	Y	0.003339	0.1465	3019	0.02	0.9818	0.05	-0.2839	0.2906
Stroke*Arm	N	N	N	Y	0.1047	0.1168	3019	0.90	0.3700	0.05	-0.1243	0.3337

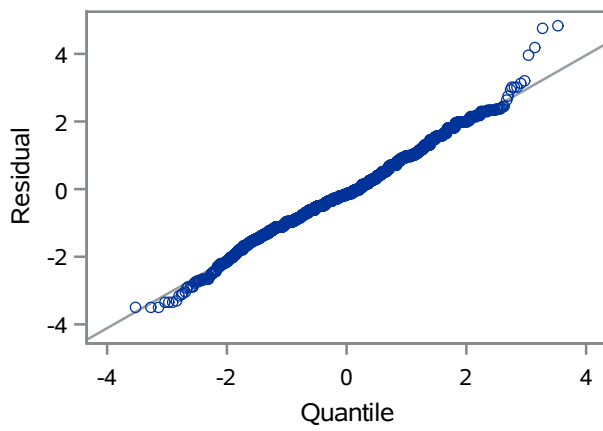
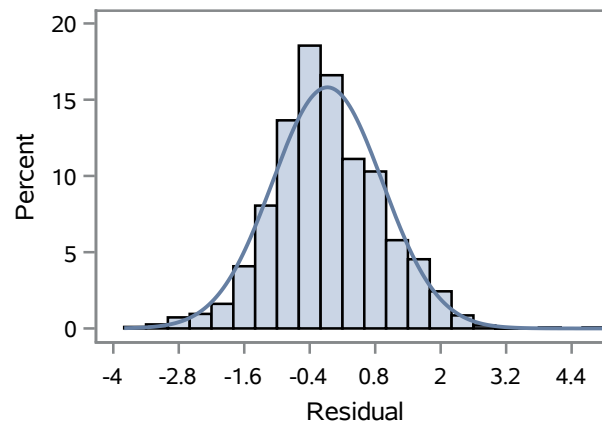
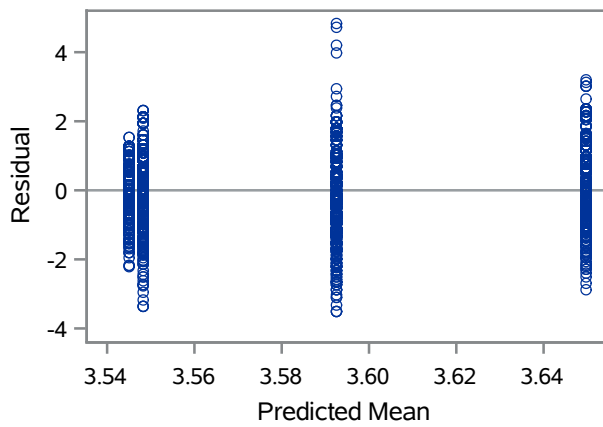
Residuals for Length



Residual Statistics	
Observations	3041
Minimum	-1.019
Mean	-0.022
Maximum	1.4022
Std Dev	0.2898
Fit Statistics	
Objective	-1207
AIC	-1201
AICC	-1201
BIC	-1200

## The Mixed Procedure

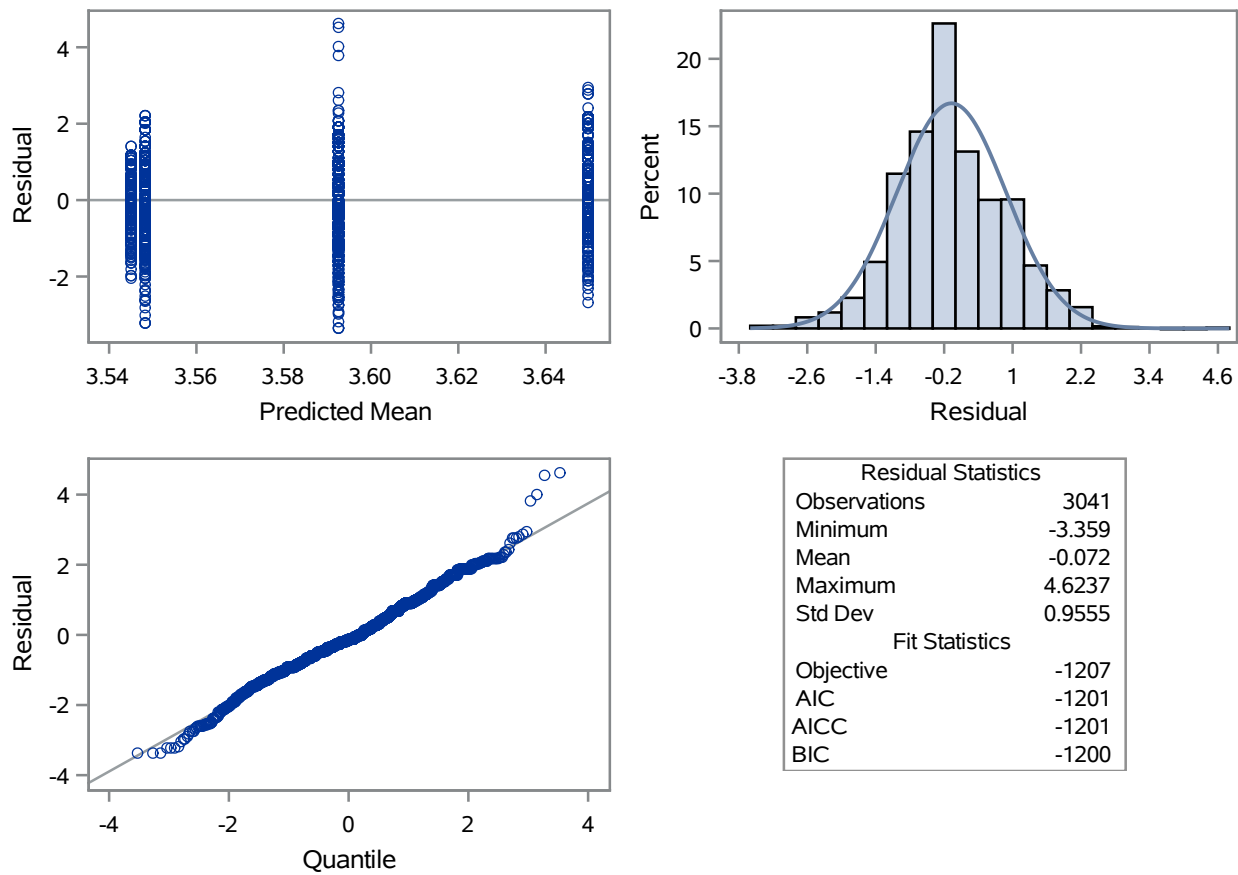
Studentized Residuals for Length



Residual Statistics	
Observations	3041
Minimum	-3.511
Mean	-0.075
Maximum	4.8326
Std Dev	1.0092
Fit Statistics	
Objective	-1207
AIC	-1201
AICC	-1201
BIC	-1200

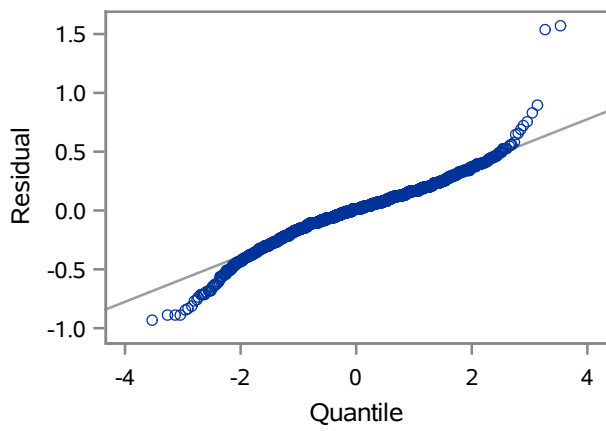
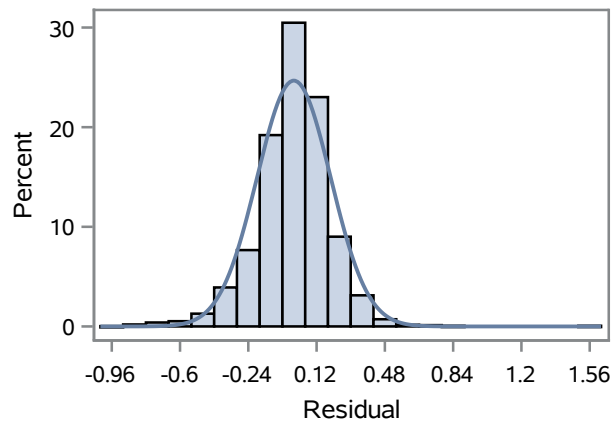
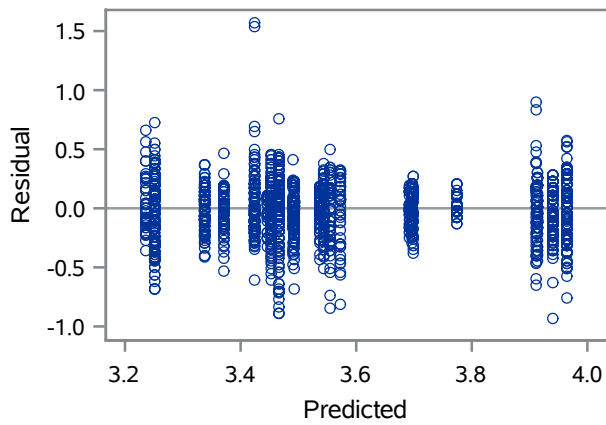
## The Mixed Procedure

Pearson Residuals for Length



## The Mixed Procedure

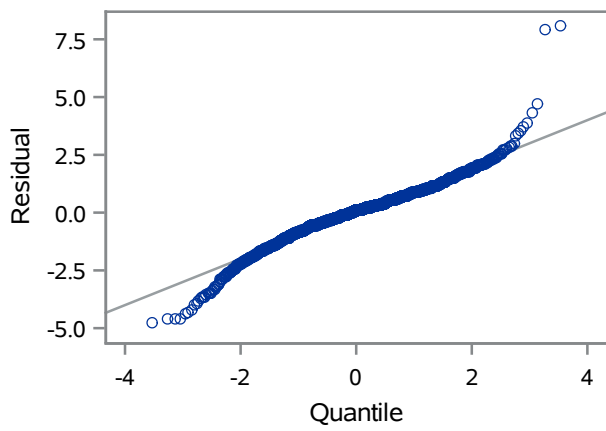
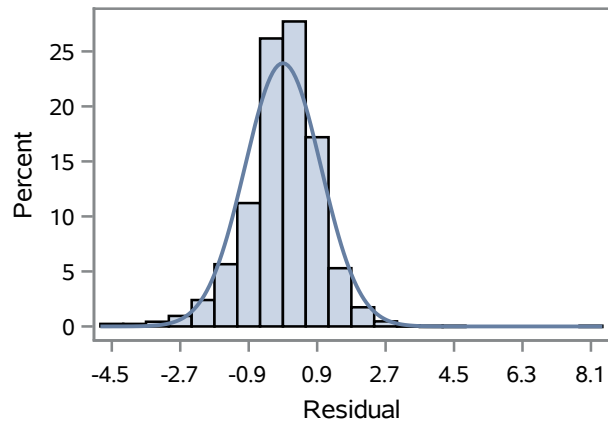
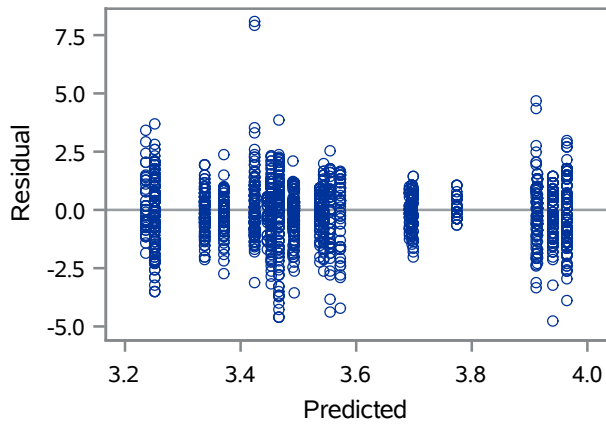
Conditional Residuals for Length



Residual Statistics	
Observations	3041
Minimum	-0.929
Mean	13E-15
Maximum	1.5707
Std Dev	0.194
Fit Statistics	
Objective	-1207
AIC	-1201
AICC	-1201
BIC	-1200

## The Mixed Procedure

Conditional Studentized Residuals for Length

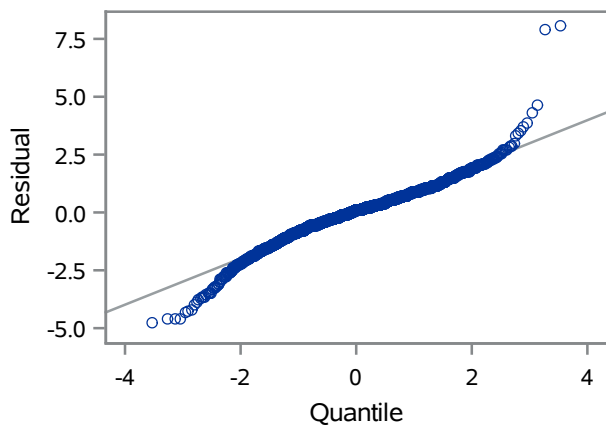
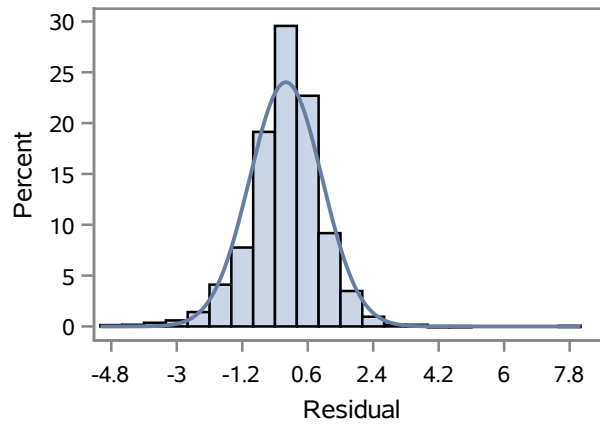
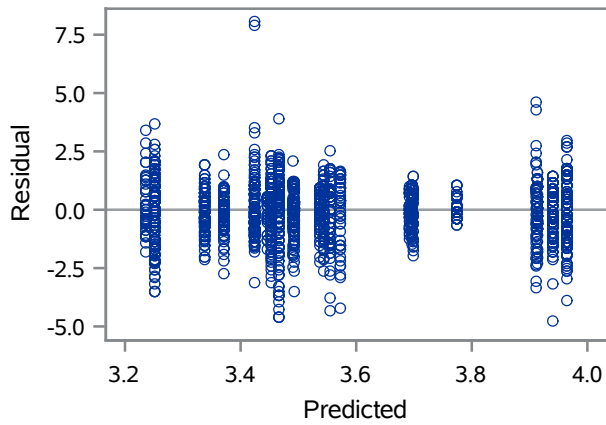


Residual Statistics	
Observations	3041
Minimum	-4.783
Mean	317E-8
Maximum	8.0875
Std Dev	1.0005
Fit Statistics	
Objective	-1207
AIC	-1201
AICC	-1201
BIC	-1200



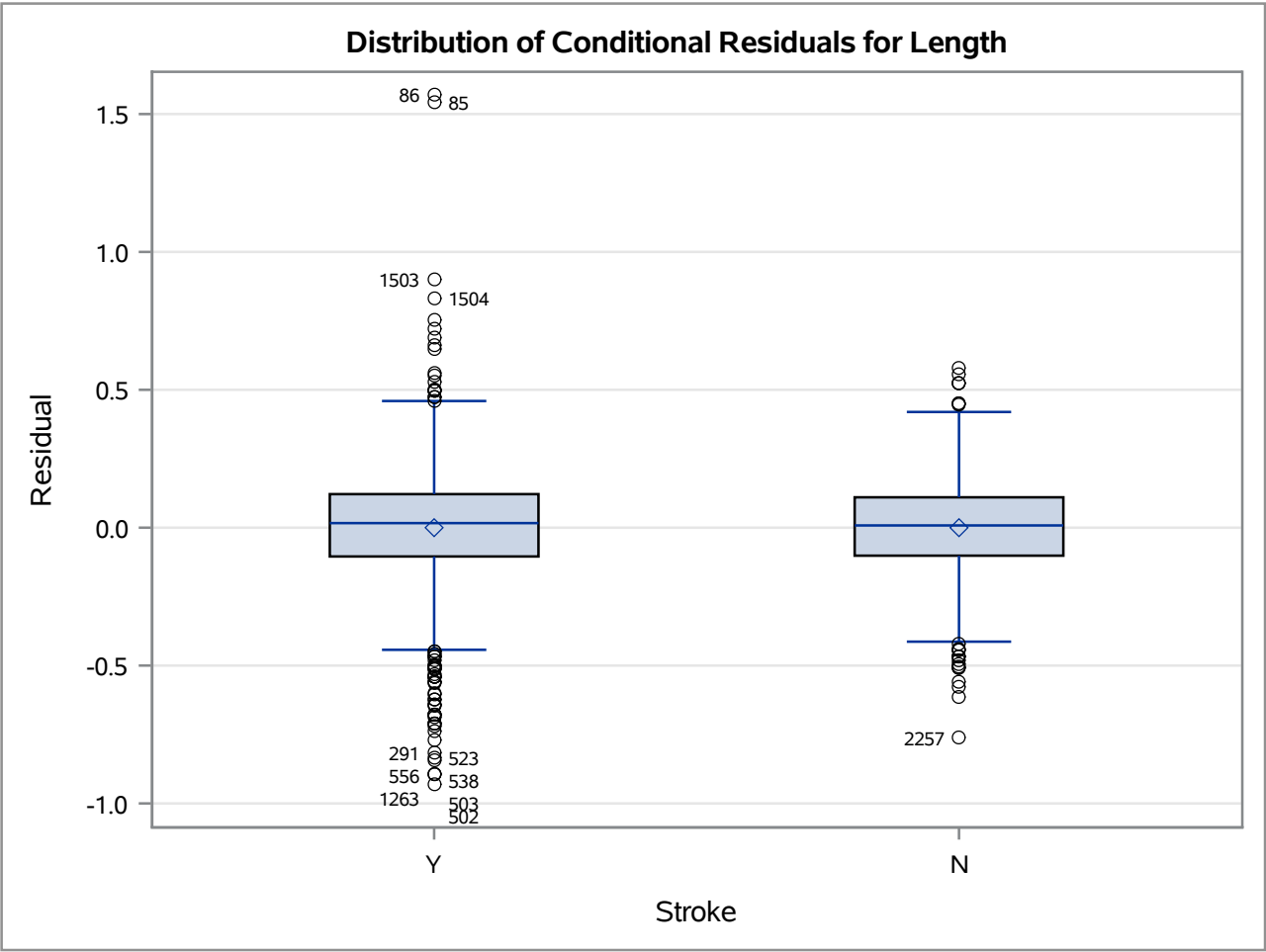
## The Mixed Procedure

Conditional Pearson Residuals for Length

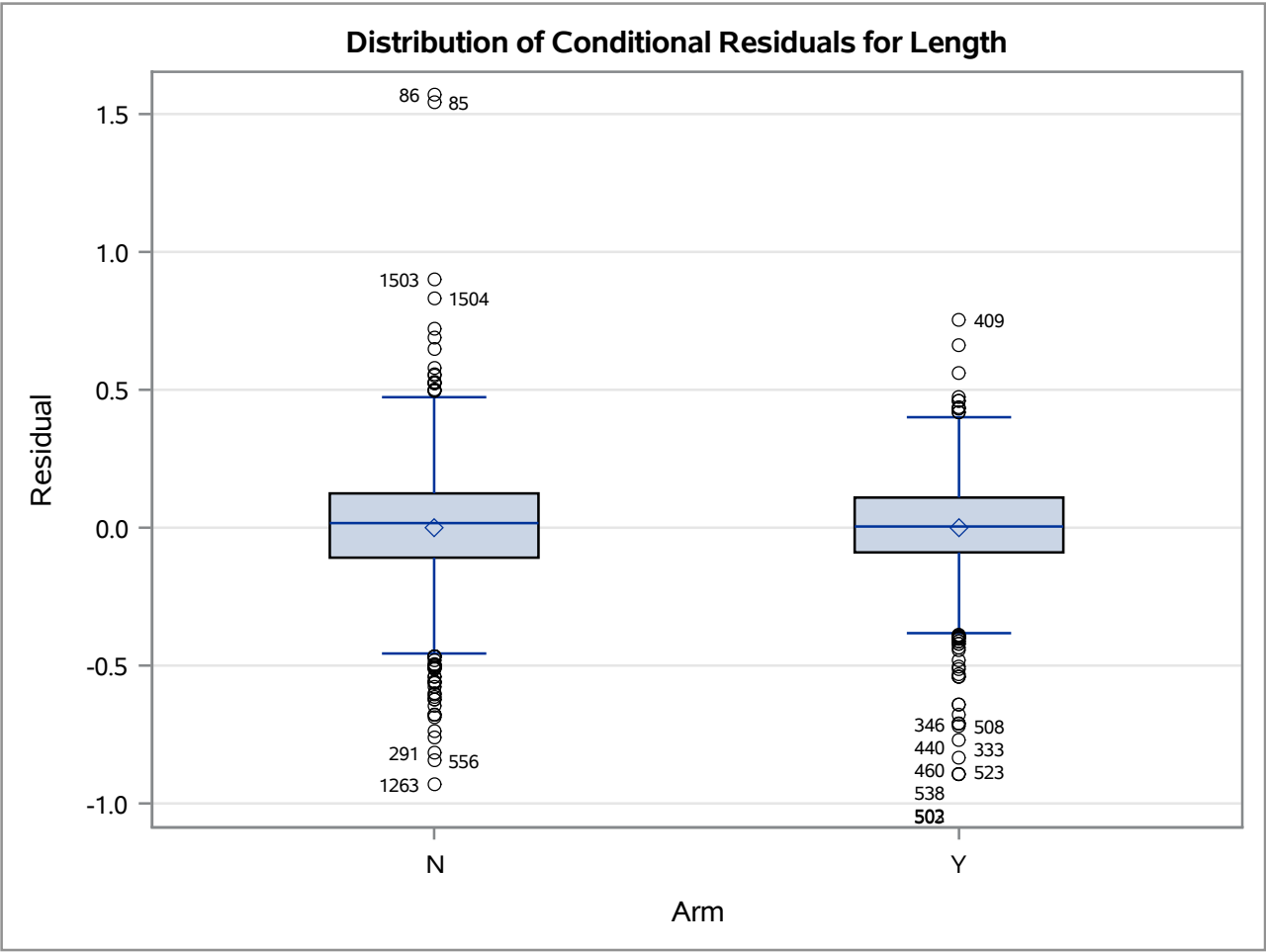


Residual Statistics	
Observations	3041
Minimum	-4.772
Mean	65E-15
Maximum	8.0682
Std Dev	0.9966
Fit Statistics	
Objective	-1207
AIC	-1201
AICC	-1201
BIC	-1200

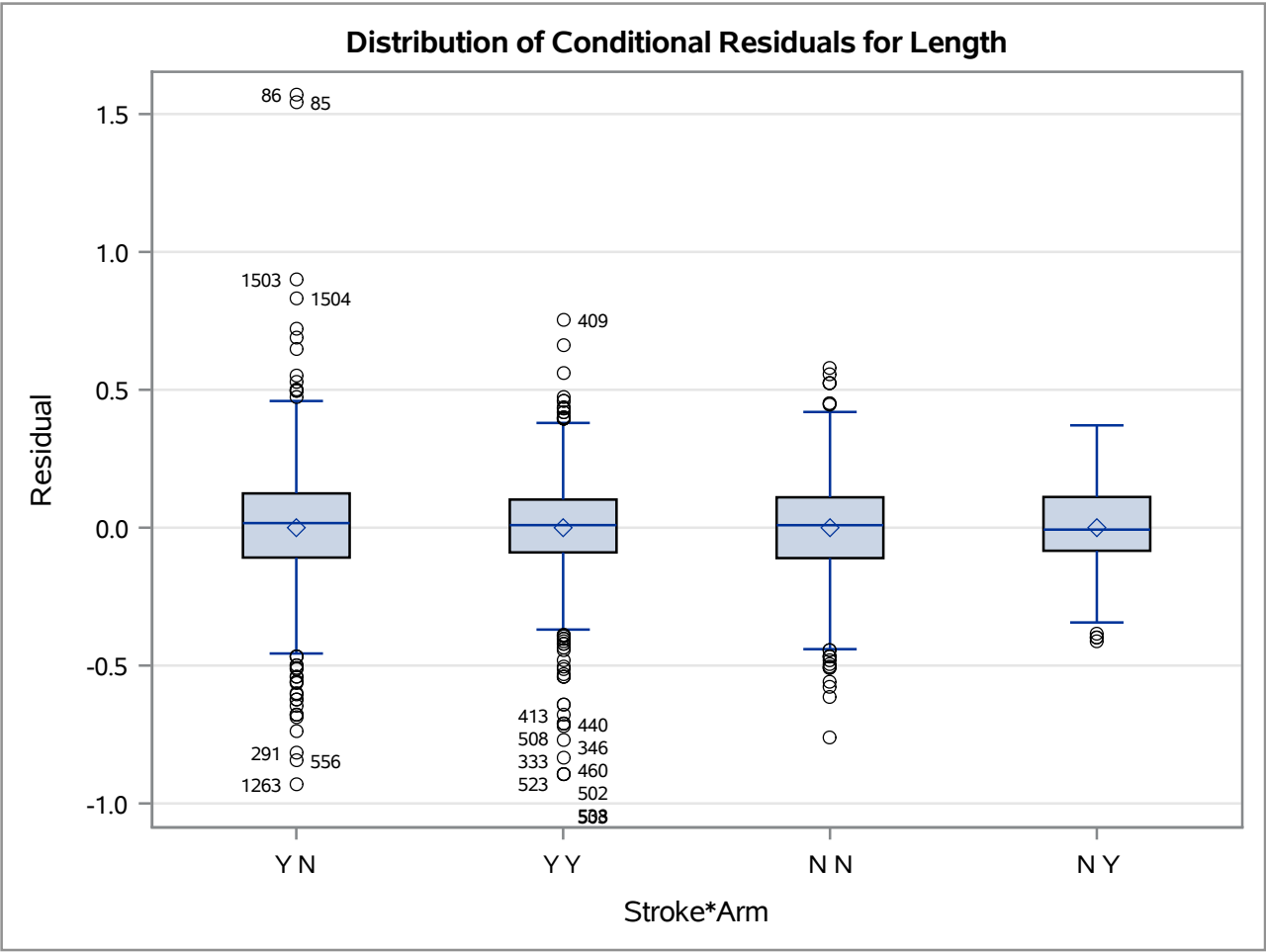
The Mixed Procedure



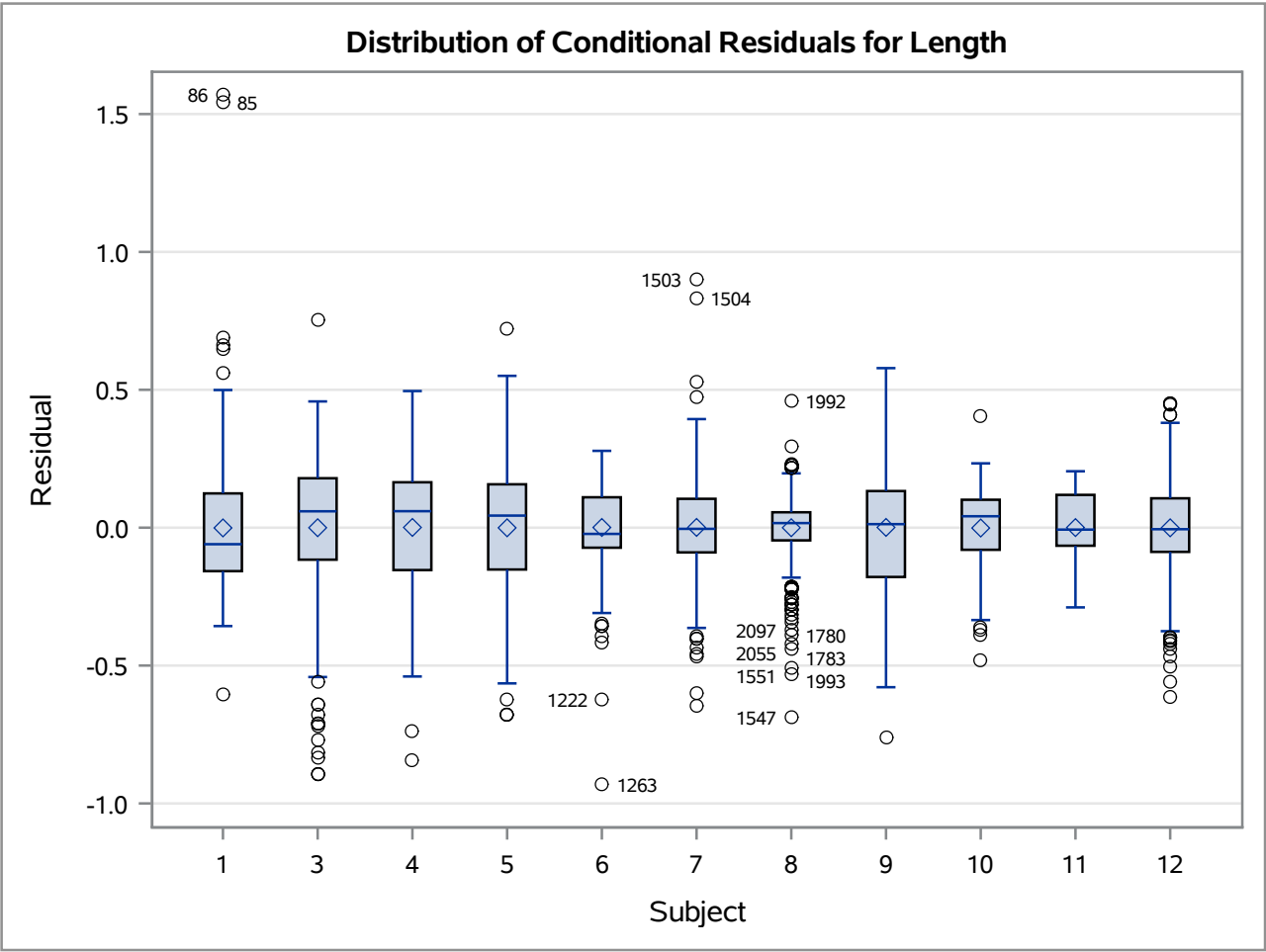
The Mixed Procedure



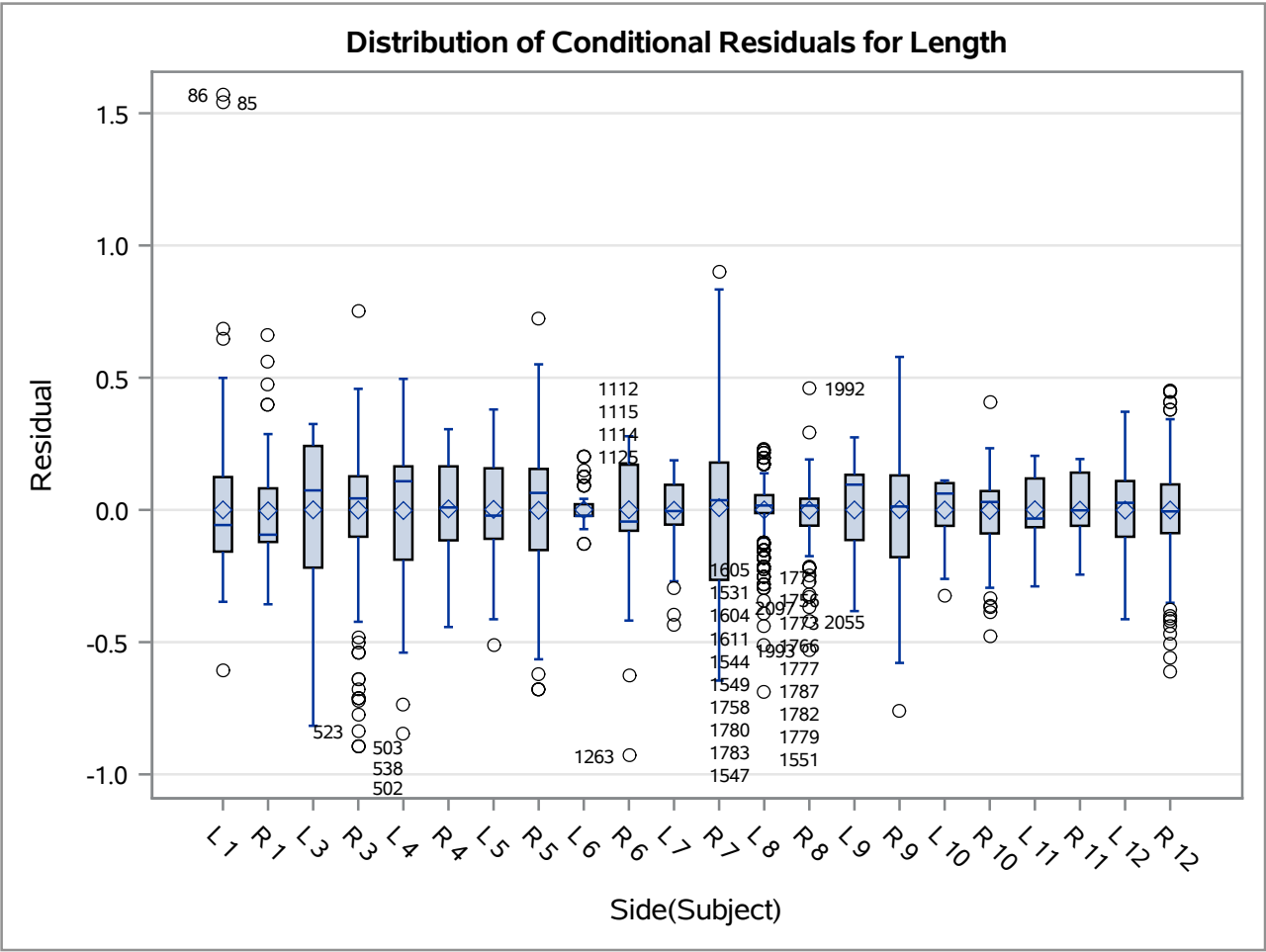
The Mixed Procedure



The Mixed Procedure



The Mixed Procedure



## The Mixed Procedure

Model Information	
Data Set	WORK.FASCICLE
Dependent Variable	Length
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
Subject	11	1 3 4 5 6 7 8 9 10 11 12
Image_ID	3	F1 F2 F3
Side	2	L R
Stroke	2	Y N
Arm	2	N Y

Dimensions	
Covariance Parameters	3
Columns in X	9
Columns in Z	33
Subjects	1
Max Obs per Subject	264

Number of Observations	
Number of Observations Read	264
Number of Observations Used	264
Number of Observations Not Used	0

Iteration History			
Iteration	Evaluations	-2 Res Log Like	Criterion
0	1	862.73031439	
1	1	568.37657511	0.00000000

Convergence criteria met.

## The Mixed Procedure

Covariance Parameter Estimates	
Cov Parm	Estimate
Subject	0.2790
Side(Subject)	1.0936
Residual	0.3763

Fit Statistics	
-2 Res Log Likelihood	568.4
AIC (Smaller is Better)	574.4
AICC (Smaller is Better)	574.5
BIC (Smaller is Better)	575.6

Solution for Fixed Effects							
Effect	Stroke	Arm	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept			14.1090	0.5924	9	23.81	<.0001
Stroke	Y		-3.1052	0.7427	242	-4.18	<.0001
Stroke	N		0	.	.	.	.
Arm		N	0.2113	0.7500	242	0.28	0.7784
Arm		Y	0	.	.	.	.
Stroke*Arm	Y	N	2.8142	0.9402	242	2.99	0.0030
Stroke*Arm	Y	Y	0	.	.	.	.
Stroke*Arm	N	N	0	.	.	.	.
Stroke*Arm	N	Y	0	.	.	.	.

Type 3 Tests of Fixed Effects				
Effect	Num DF	Den DF	F Value	Pr > F
Stroke	1	242	8.72	0.0035
Arm	1	242	11.85	0.0007
Stroke*Arm	1	242	8.96	0.0030



## The Mixed Procedure

Coefficients for differences in differences			
Effect	Stroke	Arm	Row1
Intercept			
Stroke	Y		
Stroke	N		
Arm		N	
Arm		Y	
Stroke*Arm	Y	N	1
Stroke*Arm	Y	Y	-1
Stroke*Arm	N	N	-1
Stroke*Arm	N	Y	1

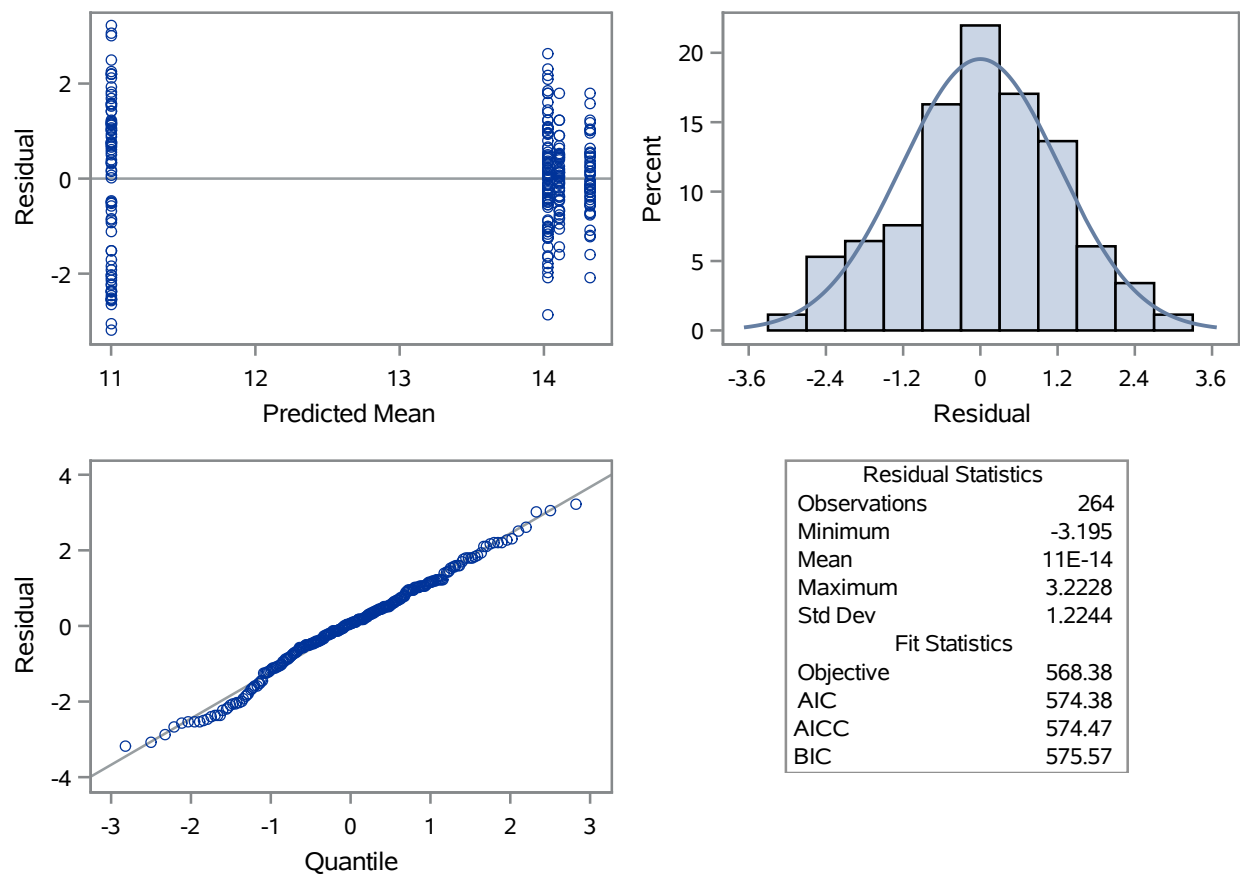
Estimates					
Label	Estimate	Standard Error	DF	t Value	Pr >  t
differences in differences	2.8142	0.9402	242	2.99	0.0030

Least Squares Means										
Effect	Stroke	Arm	Estimate	Standard Error	DF	t Value	Pr >  t	Alpha	Lower	Upper
Stroke*Arm	Y	N	14.0292	0.4478	242	31.33	<.0001	0.05	13.1471	14.9114
Stroke*Arm	Y	Y	11.0038	0.4478	242	24.57	<.0001	0.05	10.1216	11.8860
Stroke*Arm	N	N	14.3203	0.5924	242	24.17	<.0001	0.05	13.1533	15.4873
Stroke*Arm	N	Y	14.1090	0.5924	242	23.81	<.0001	0.05	12.9420	15.2760

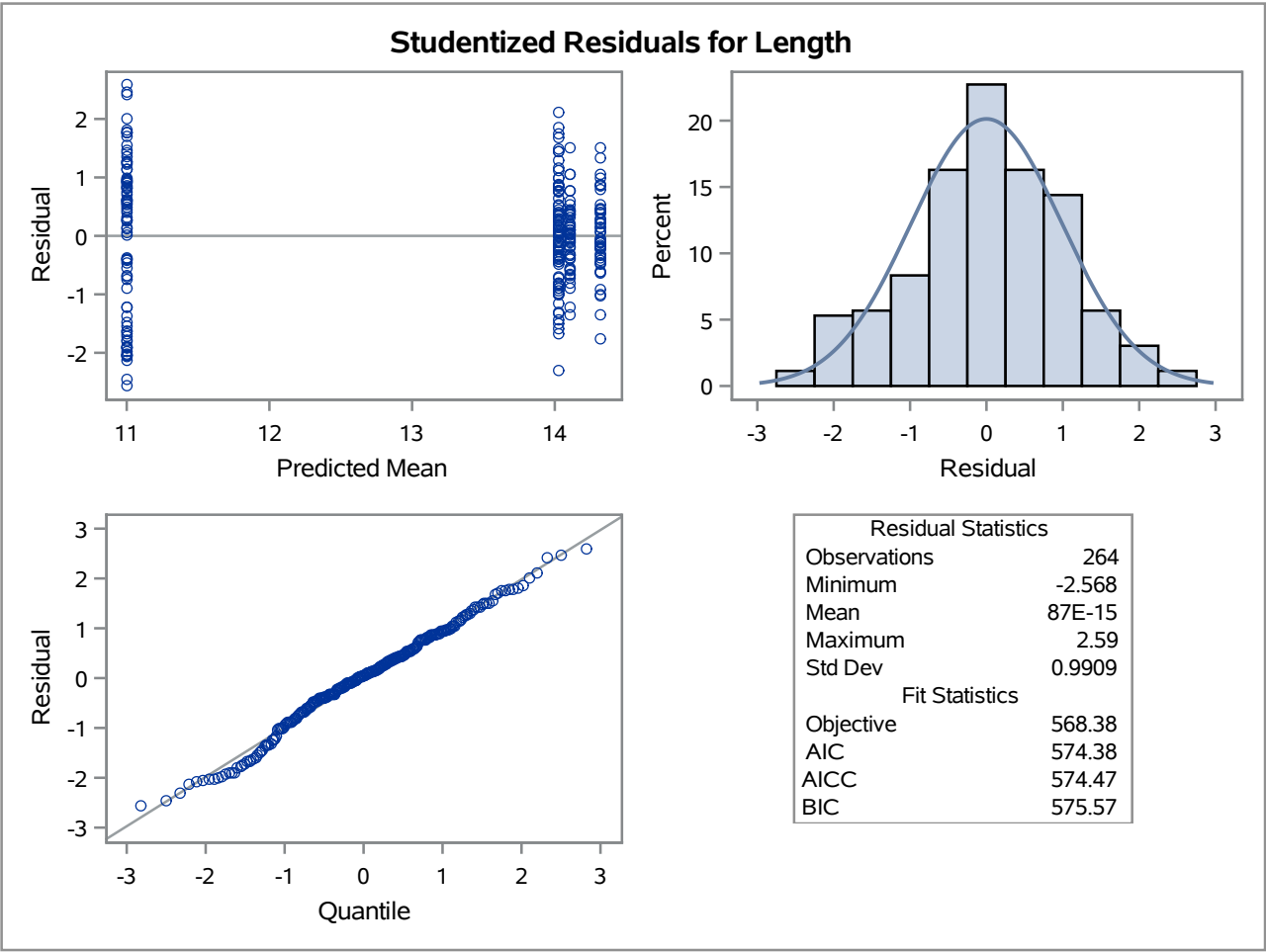
Differences of Least Squares Means												
Effect	Stroke	Arm	Stroke	_Arm	Estimate	Standard Error	DF	t Value	Pr >  t	Alpha	Lower	Upper
Stroke*Arm	Y	N	Y	Y	3.0254	0.5669	242	5.34	<.0001	0.05	1.9087	4.1422
Stroke*Arm	Y	N	N	N	-0.2910	0.7427	242	-0.39	0.6955	0.05	-1.7539	1.1719
Stroke*Arm	Y	N	N	Y	-0.07976	0.7427	242	-0.11	0.9146	0.05	-1.5427	1.3832
Stroke*Arm	Y	Y	N	N	-3.3165	0.7427	242	-4.47	<.0001	0.05	-4.7794	-1.8536
Stroke*Arm	Y	Y	N	Y	-3.1052	0.7427	242	-4.18	<.0001	0.05	-4.5681	-1.6423
Stroke*Arm	N	N	N	Y	0.2113	0.7500	242	0.28	0.7784	0.05	-1.2661	1.6886

The Mixed Procedure

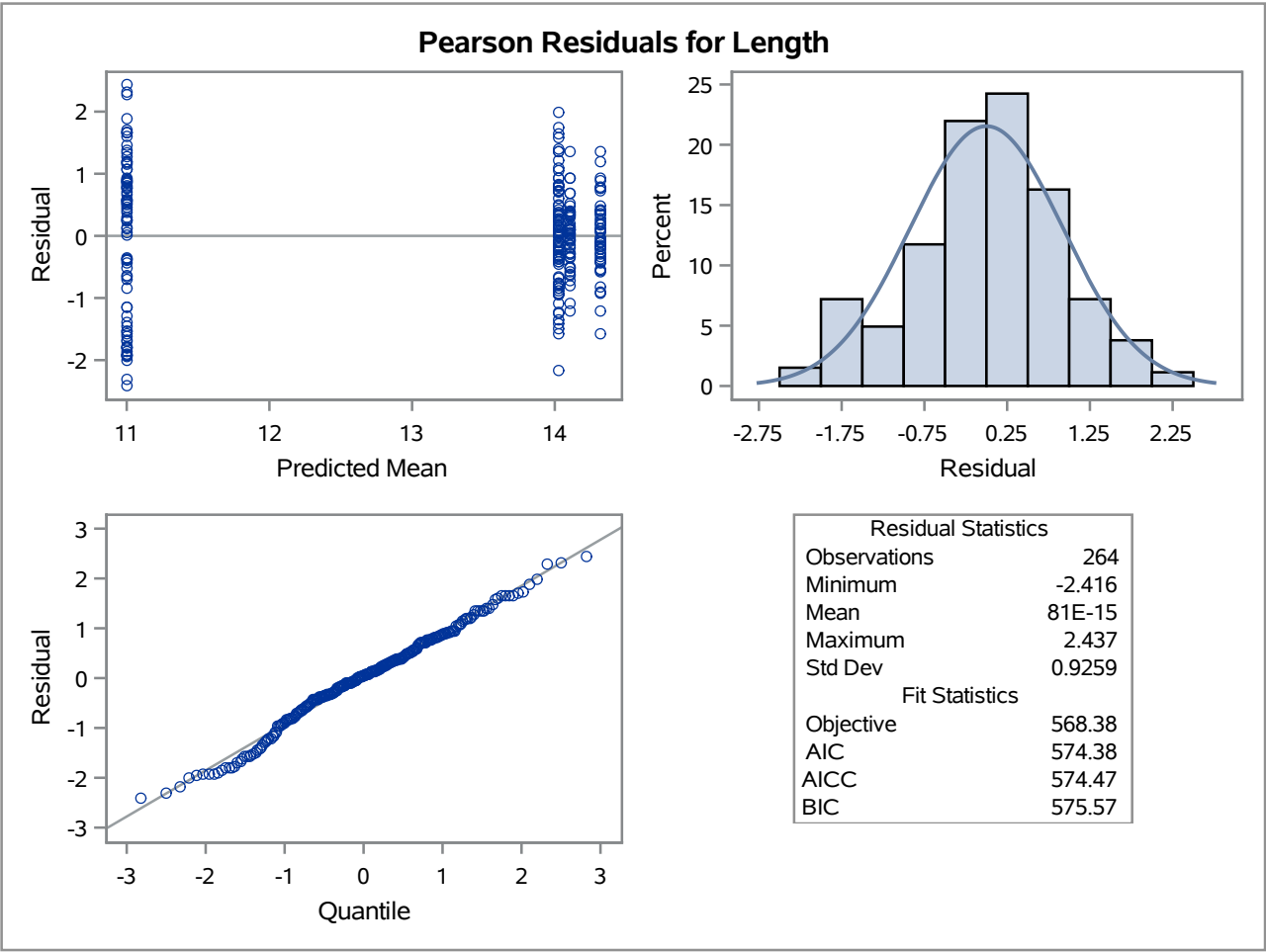
Residuals for Length



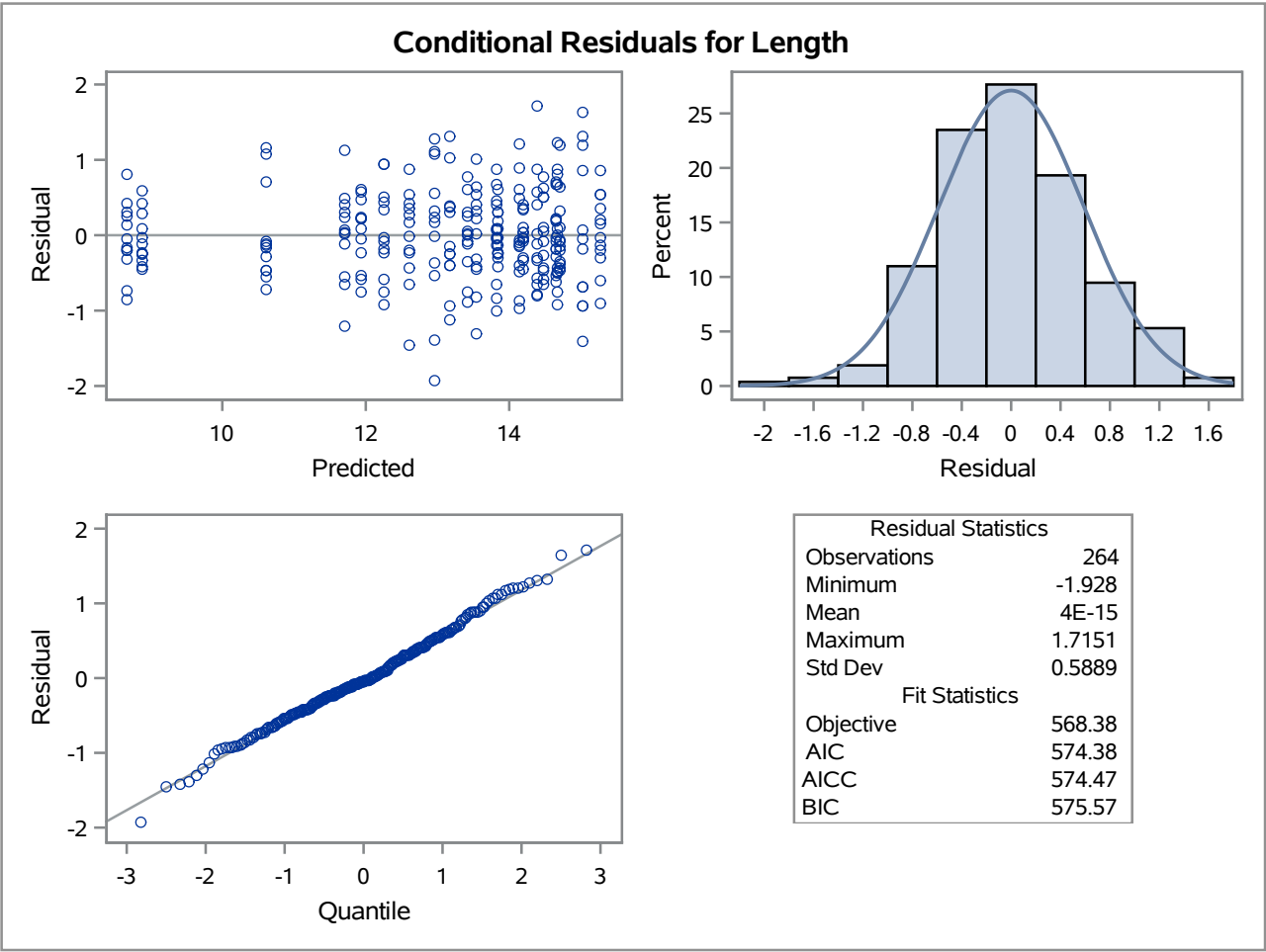
The Mixed Procedure



The Mixed Procedure

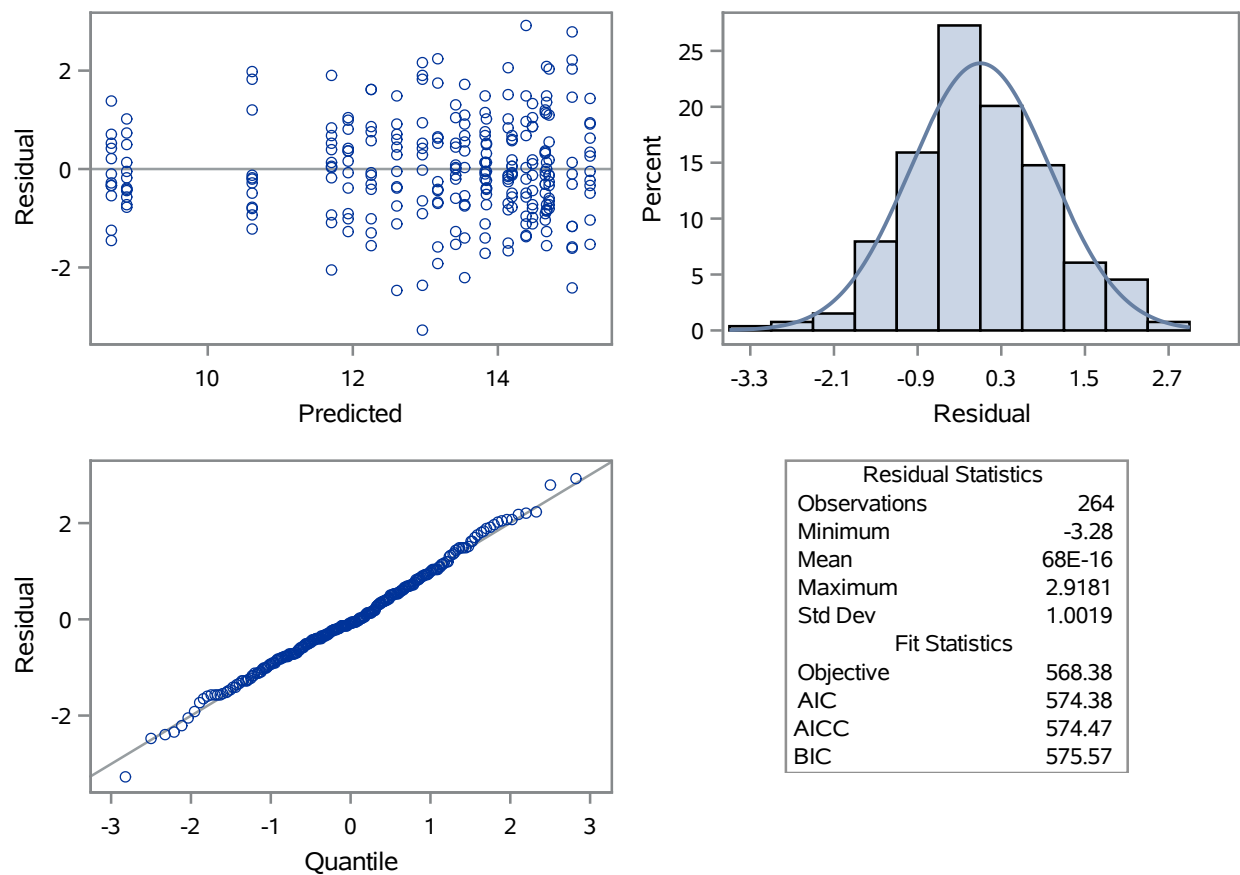


The Mixed Procedure



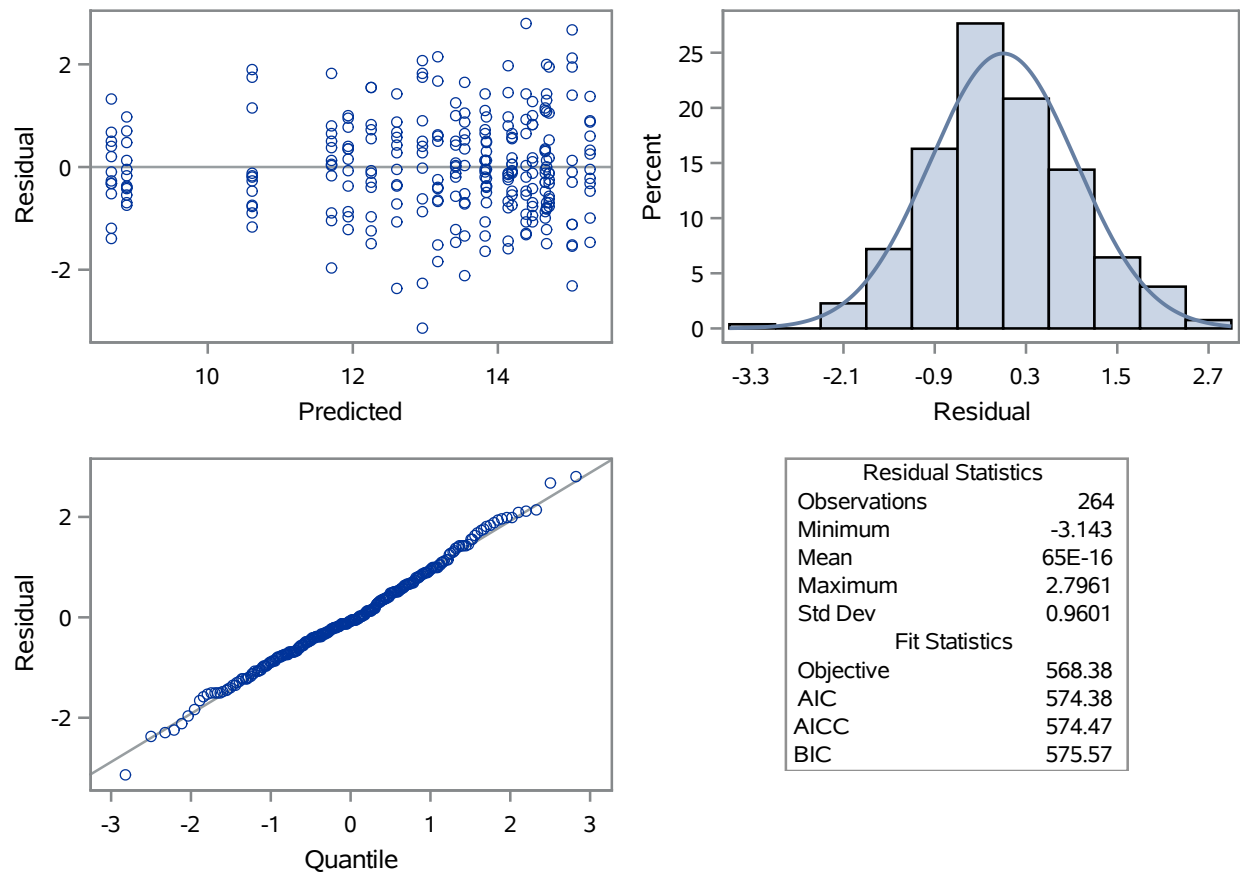
The Mixed Procedure

Conditional Studentized Residuals for Length

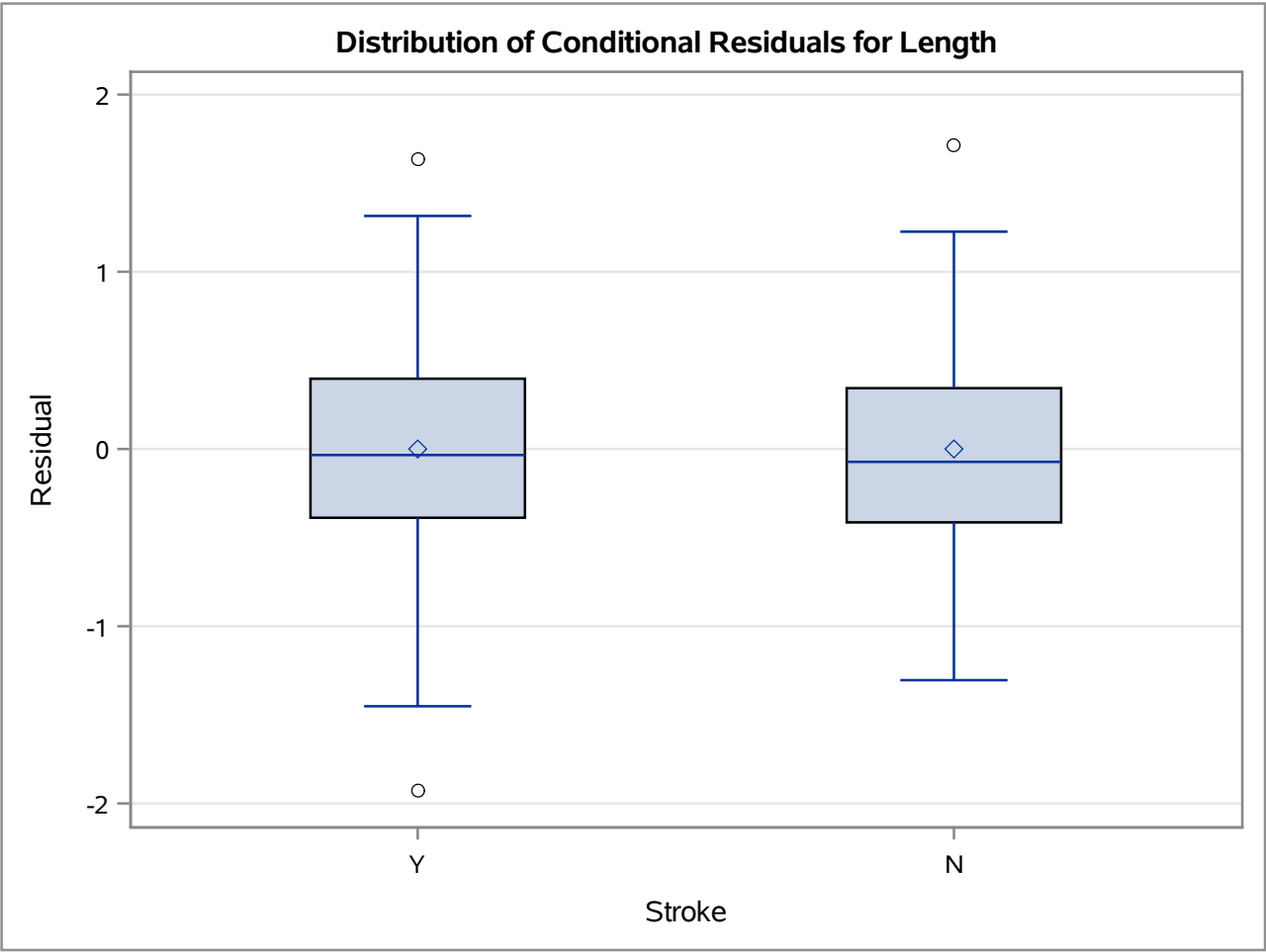


The Mixed Procedure

Conditional Pearson Residuals for Length

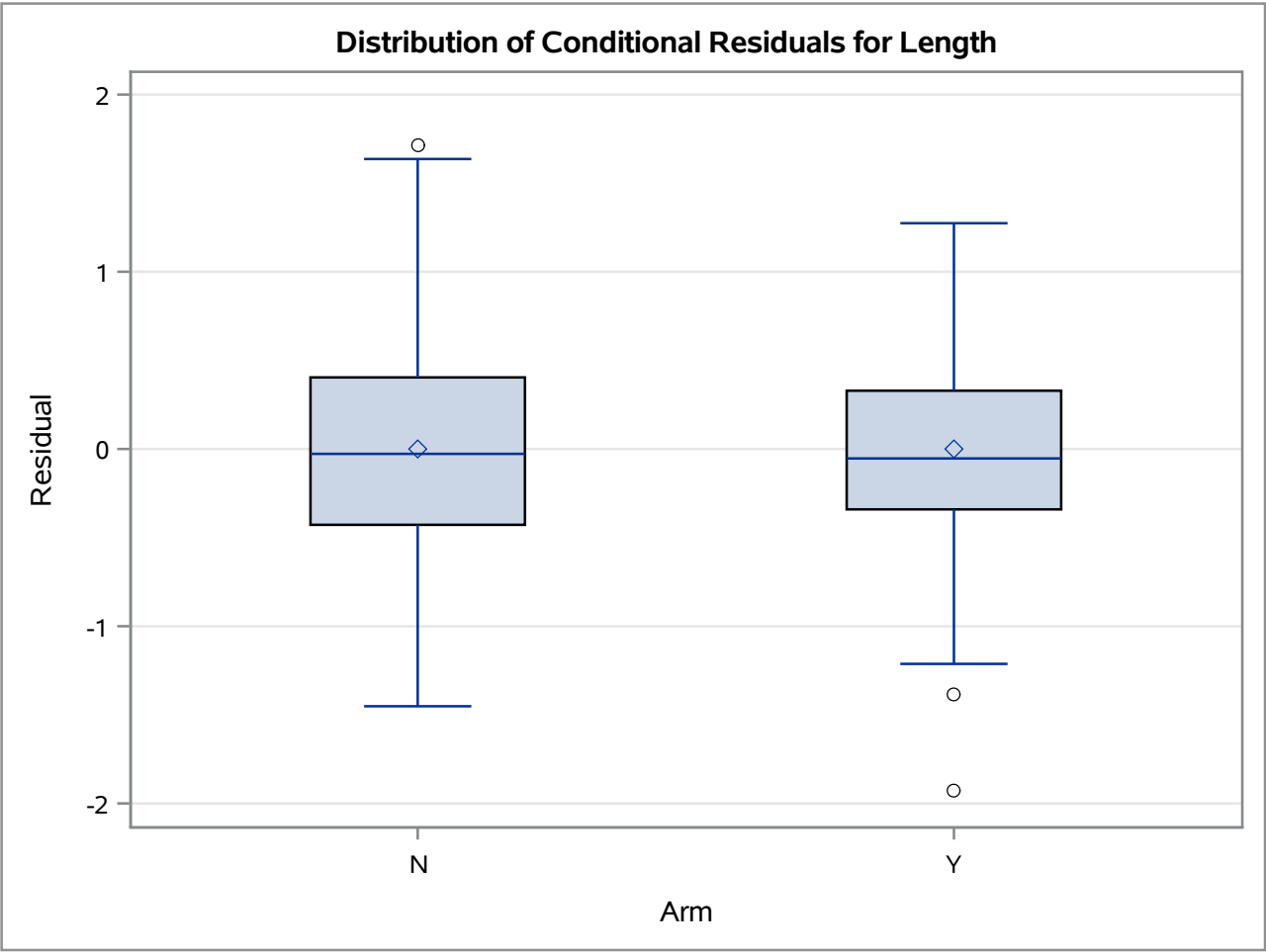


The Mixed Procedure

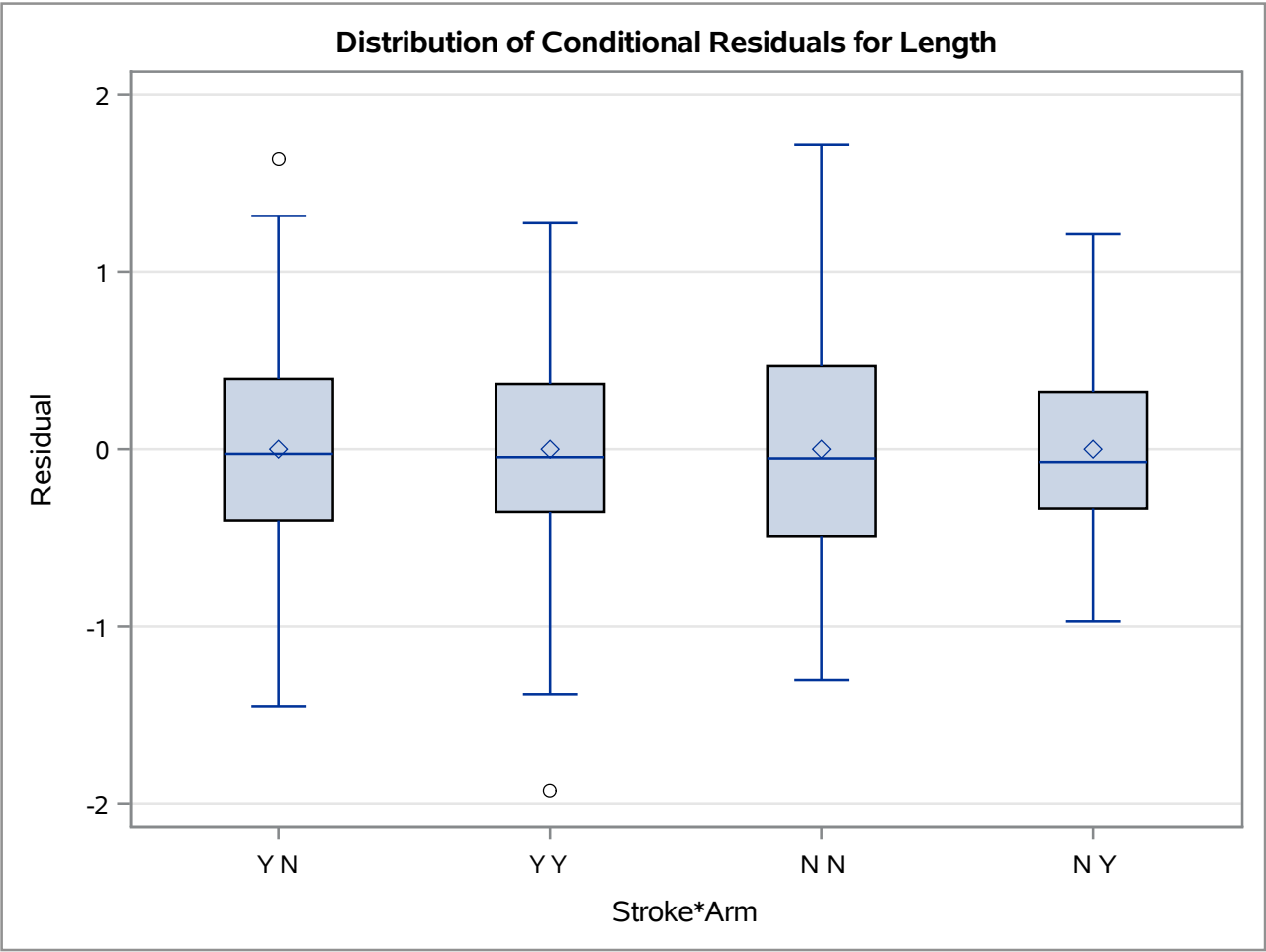




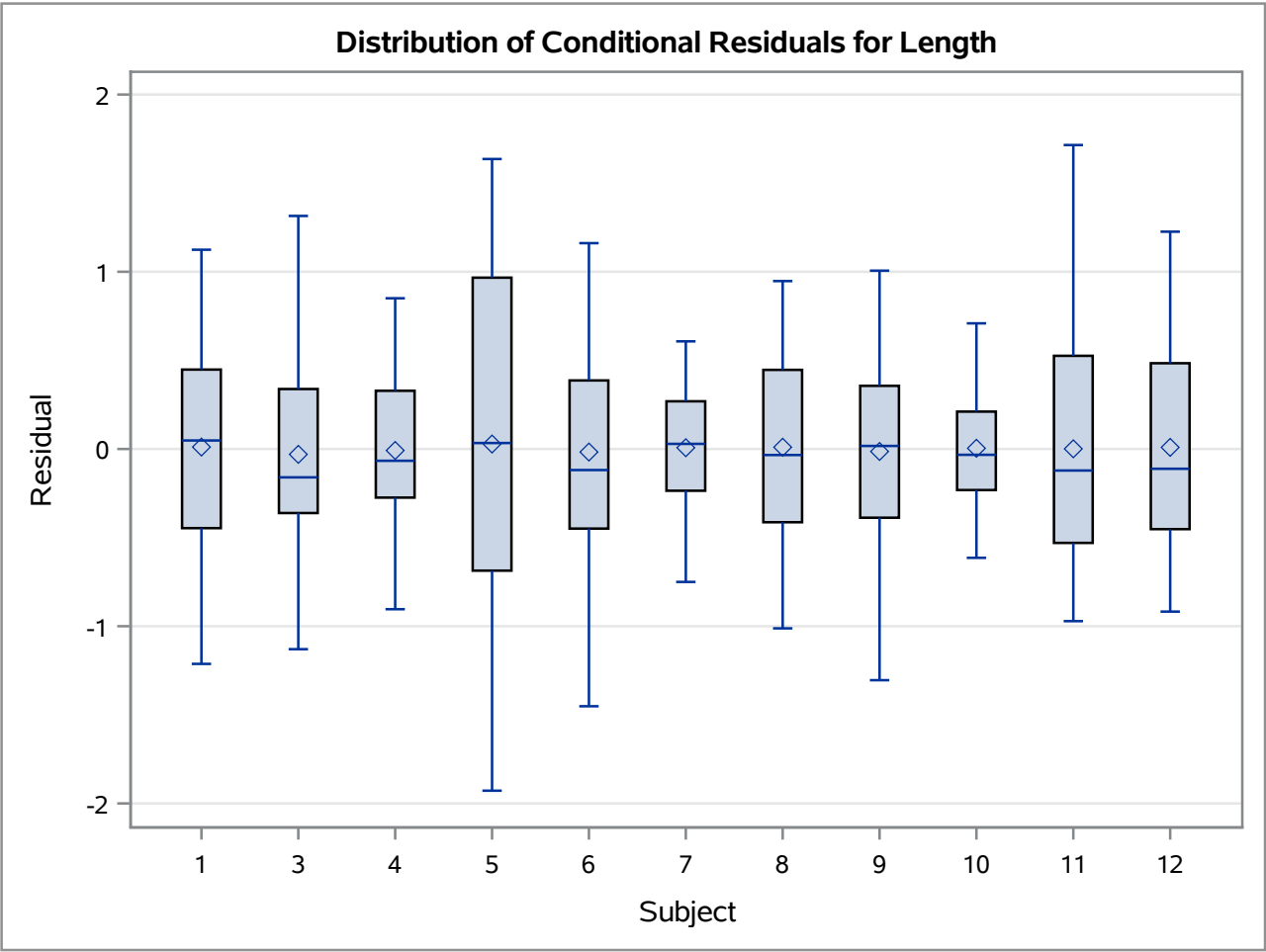
The Mixed Procedure



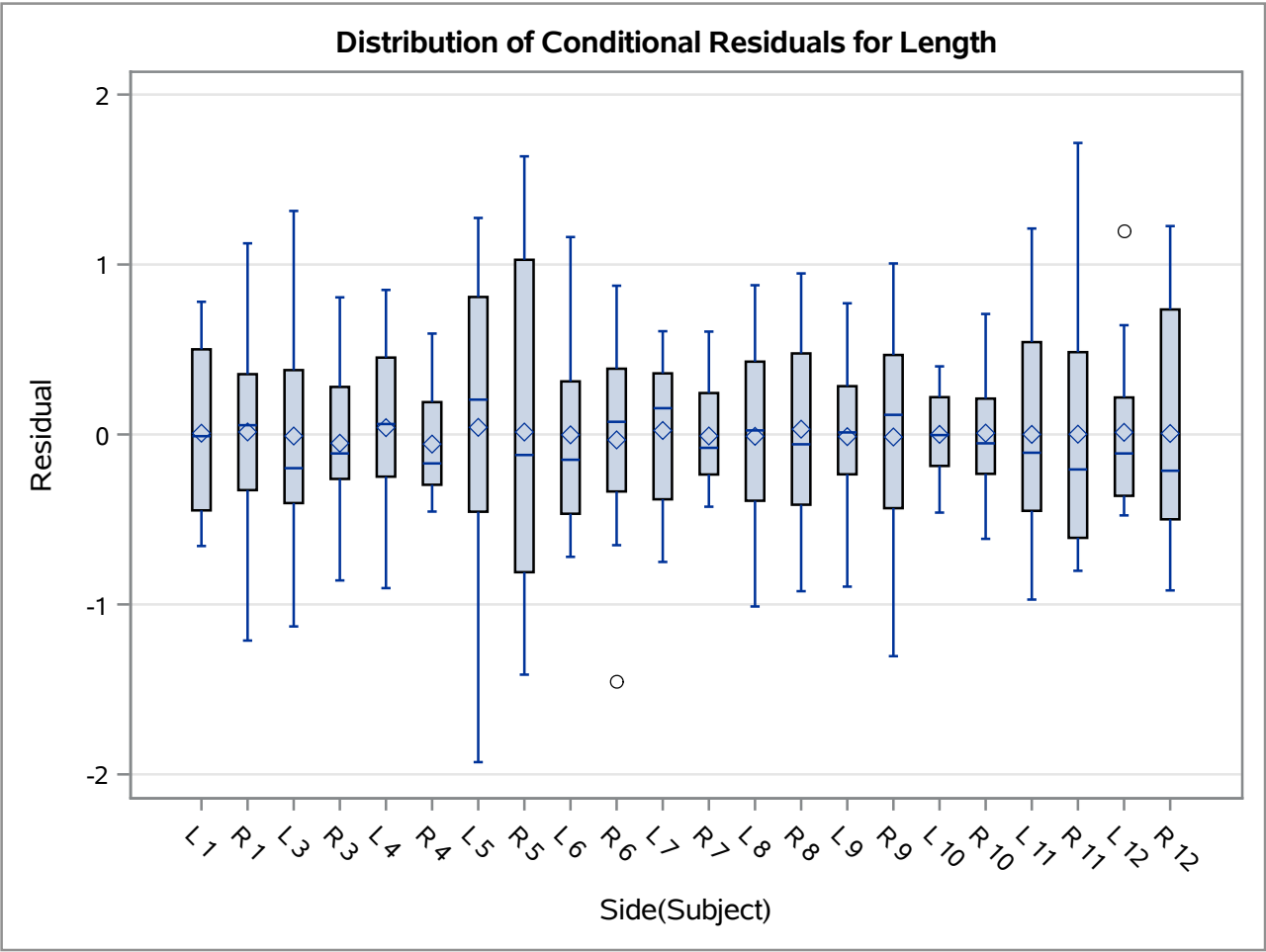
The Mixed Procedure



The Mixed Procedure



The Mixed Procedure



## The Mixed Procedure

Model Information	
Data Set	WORK.SACROMERE2
Dependent Variable	Overall_SSN
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
Subject	11	1 3 4 5 6 7 8 9 10 11 12
Image_ID	396	S1 S10 S100 S101 S102 S103 S104 S105 S106 S107 S108 S109 S11 S110 S111 S112 S113 S114 S115 S116 S117 S118 S119 S12 S120 S121 S122 S123 S124 S125 S126 S127 S128 S129 S13 S130 S131 S132 S133 S134 S135 S136 S137 S138 S139 S14 S140 S141 S142 S143 S144 S145 S146 S147 S148 S149 S15 S150 S151 S152 S153 S154 S155 S156 S157 S158 S159 S16 S160 S161 S162 S163 S164 S165 S166 S167 S168 S169 S17 S170 S171 S172 S173 S174 S175 S176 S177 S178 S179 S18 S180 S181 S182 S183 S184 S185 S186 S187 S188 S189 S19 S190 S191 S192 S193 S194 S195 S196 S197 S198 S199 S2 S20 S200 S201 S202 S203 S204 S205 S206 S207 S208 S209 S21 S210 S211 S212 S213 S214 S215 S216 S217 S218 S219 S22 S220 S221 S222 S223 S224 S225 S226 S227 S228 S229 S23 S230 S231 S232 S233 S234 S235 S236 S237 S238 S239 S24 S240 S241 S242 S243 S244 S245 S246 S247 S248 S249 S25 S250 S251 S252 S253 S254 S255 S256 S257 S258 S259 S26 S260 S261 S262 S263 S264 S265 S266 S267 S268 S269 S27 S270 S271 S272 S273 S274 S275 S276 S277 S278 S279 S28 S280 S281 S282 S283 S284 S285 S286 S287 S288 S289 S29 S290 S291 S292 S293 S294 S295 S296 S297 S298 S299 S3 S30 S300 S301 S302 S303 S304 S305 S306 S307 S308 S309 S31 S310 S311 S312 S313 S314 S315 S316 S317 S318 S319 S32 S320 S321 S322 S323 S324 S325 S326 S327 S328 S329 S33 S330 S331 S332 S333 S334 S335 S336 S337 S338 S339 S34 S340 S341 S342 S343 S344 S345 S346 S347 S348 S349 S35 S350 S351 S352 S353 S354 S355 S356 S357 S358 S359 S36 S360 S361 S362 S363 S364 S365 S366 S367 S368 S369 S37 S370 S371 S372 S373 S374 S375 S376 S377 S378 S379 S38 S380 S381 S382 S383 S384 S385 S386 S387 S388 S389 S39 S390 S391 S392 S393 S394 S395 S396 S4 S40 S41 S42 S43 S44 S45 S46 S47 S48 S49 S5 S50 S51 S52 S53 S54 S55 S56 S57 S58 S59 S6 S60 S61 S62 S63 S64 S65 S66 S67 S68 S69 S7 S70 S71 S72 S73 S74 S75 S76 S77 S78 S79 S8 S80 S81 S82 S83 S84 S85 S86 S87 S88 S89 S9 S90 S91 S92 S93 S94 S95 S96 S97 S98 S99
Side	2	L R
Stroke	2	Y N
Arm	2	N Y

Dimensions	
Covariance Parameters	3
Columns in X	9
Columns in Z	33
Subjects	1
Max Obs per Subject	3041

Number of Observations	
Number of Observations Read	3041
Number of Observations Used	3041
Number of Observations Not Used	0

## The Mixed Procedure

Iteration History			
Iteration	Evaluations	-2 Res Log Like	Criterion
0	1	60523.80209946	
1	3	55356.48278205	0.00000597
2	1	55356.31089782	0.00000051
3	1	55356.29734877	0.00000001

Convergence criteria met.

Covariance Parameter Estimates	
Cov Parm	Estimate
Subject	9504751
Side(Subject)	15225746
Residual	4610116

Fit Statistics	
-2 Res Log Likelihood	55356.3
AIC (Smaller is Better)	55362.3
AICC (Smaller is Better)	55362.3
BIC (Smaller is Better)	55363.5

Solution for Fixed Effects							
Effect	Stroke	Arm	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept			40005	2490.54	9	16.06	<.0001
Stroke	Y		-8669.97	3121.22	3019	-2.78	0.0055
Stroke	N		0	.	.	.	.
Arm		N	-477.82	2765.54	3019	-0.17	0.8628
Arm		Y	0	.	.	.	.
Stroke*Arm	Y	N	8655.74	3465.77	3019	2.50	0.0126
Stroke*Arm	Y	Y	0	.	.	.	.
Stroke*Arm	N	N	0	.	.	.	.
Stroke*Arm	N	Y	0	.	.	.	.

## The Mixed Procedure

Type 3 Tests of Fixed Effects				
Effect	Num DF	Den DF	F Value	Pr > F
Stroke	1	3019	2.80	0.0945
Arm	1	3019	4.94	0.0264
Stroke*Arm	1	3019	6.24	0.0126

Coefficients for differences in differences			
Effect	Stroke	Arm	Row1
Intercept			
Stroke	Y		
Stroke	N		
Arm		N	
Arm		Y	
Stroke*Arm	Y	N	1
Stroke*Arm	Y	Y	-1
Stroke*Arm	N	N	-1
Stroke*Arm	N	Y	1

Estimates					
Label	Estimate	Standard Error	DF	t Value	Pr >  t
differences in differences	8655.74	3465.77	3019	2.50	0.0126

Least Squares Means										
Effect	Stroke	Arm	Estimate	Standard Error	DF	t Value	Pr >  t	Alpha	Lower	Upper
Stroke*Arm	Y	N	39513	1881.44	3019	21.00	<.0001	0.05	35824	43202
Stroke*Arm	Y	Y	31335	1881.28	3019	16.66	<.0001	0.05	27646	35024
Stroke*Arm	N	N	39527	2489.54	3019	15.88	<.0001	0.05	34646	44409
Stroke*Arm	N	Y	40005	2490.54	3019	16.06	<.0001	0.05	35122	44888

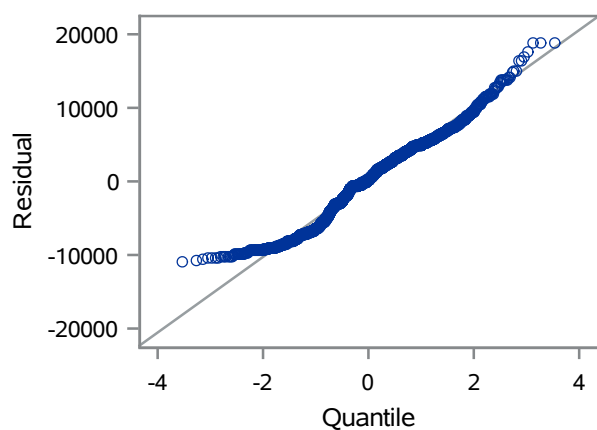
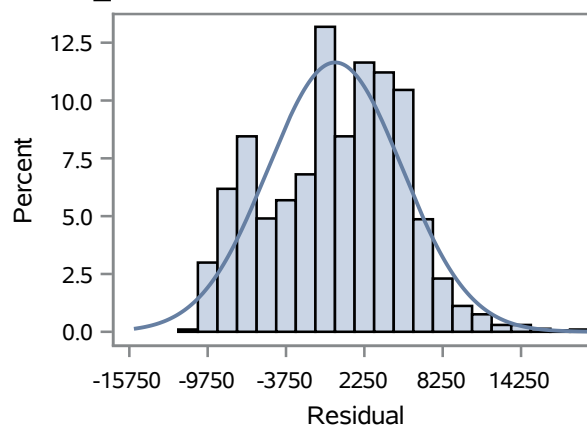
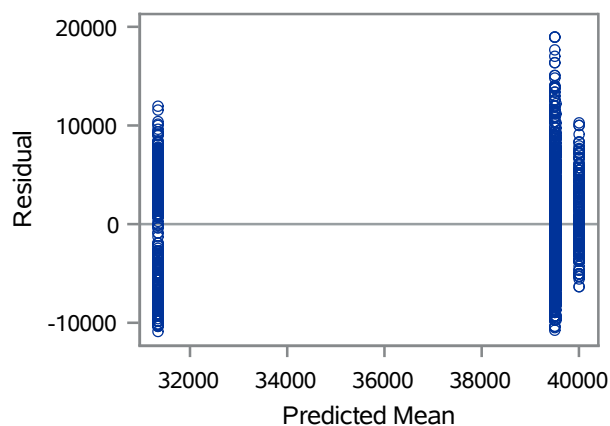
Differences of Least Squares Means												
Effect	Stroke	Arm	Stroke	_Arm	Estimate	Standard Error	DF	t Value	Pr >  t	Alpha	Lower	Upper
Stroke*Arm	Y	N	Y	Y	8177.92	2088.87	3019	3.91	<.0001	0.05	4082.17	12274
Stroke*Arm	Y	N	N	N	-14.2264	3120.51	3019	-0.00	0.9964	0.05	-6132.77	6104.32
Stroke*Arm	Y	N	N	Y	-492.05	3121.31	3019	-0.16	0.8747	0.05	-6612.17	5628.07
Stroke*Arm	Y	Y	N	N	-8192.15	3120.42	3019	-2.63	0.0087	0.05	-14311	-2073.79

## The Mixed Procedure

Differences of Least Squares Means

Effect	Stroke	Arm	Stroke	_Arm	Estimate	Standard Error	DF	t Value	Pr >  t	Alpha	Lower	Upper
Stroke*Arm	Y	Y	N	Y	-8669.97	3121.22	3019	-2.78	0.0055	0.05	-14790	-2550.04
Stroke*Arm	N	N	N	Y	-477.82	2765.54	3019	-0.17	0.8628	0.05	-5900.36	4944.71

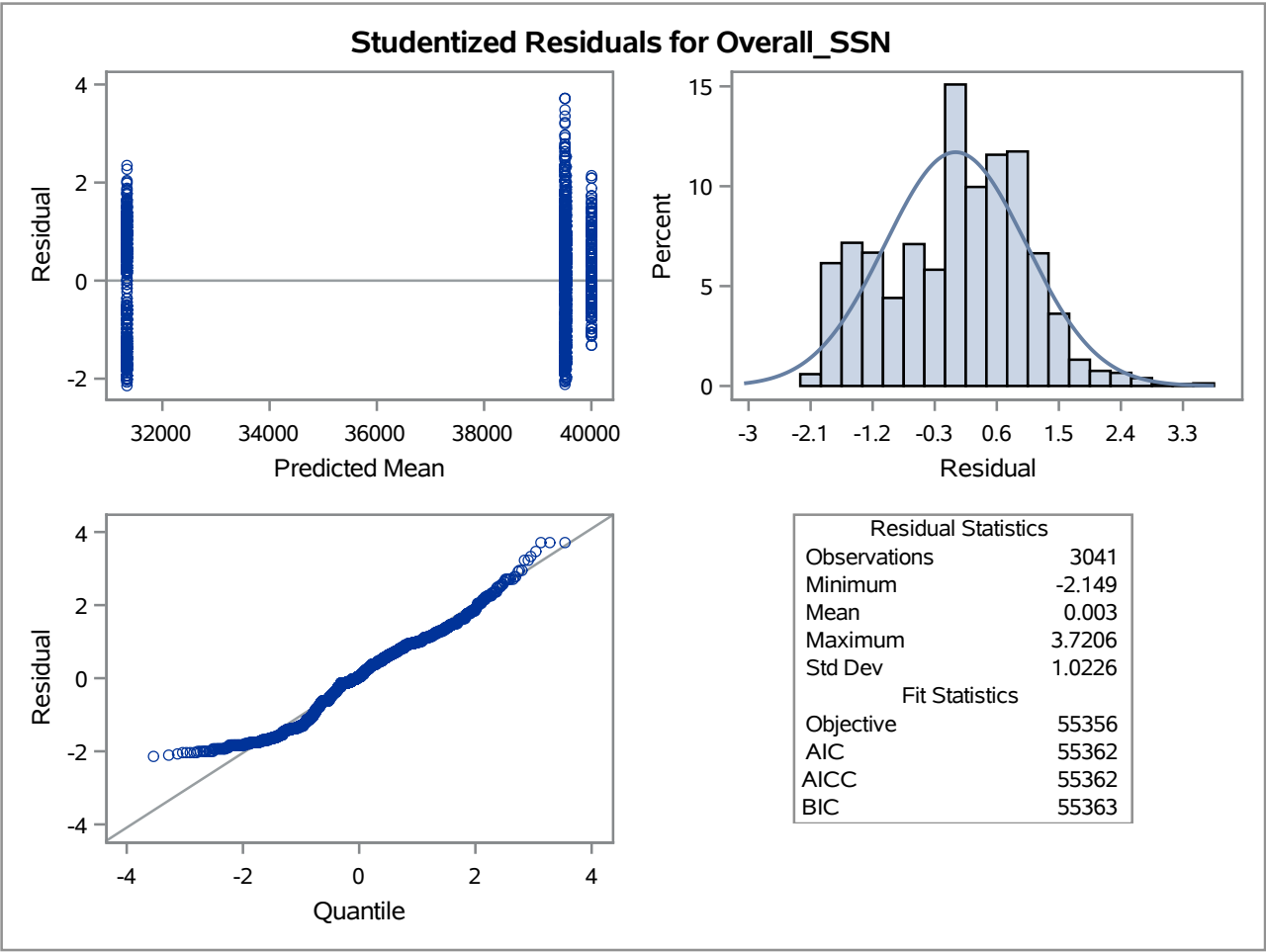
Residuals for Overall\_SSN



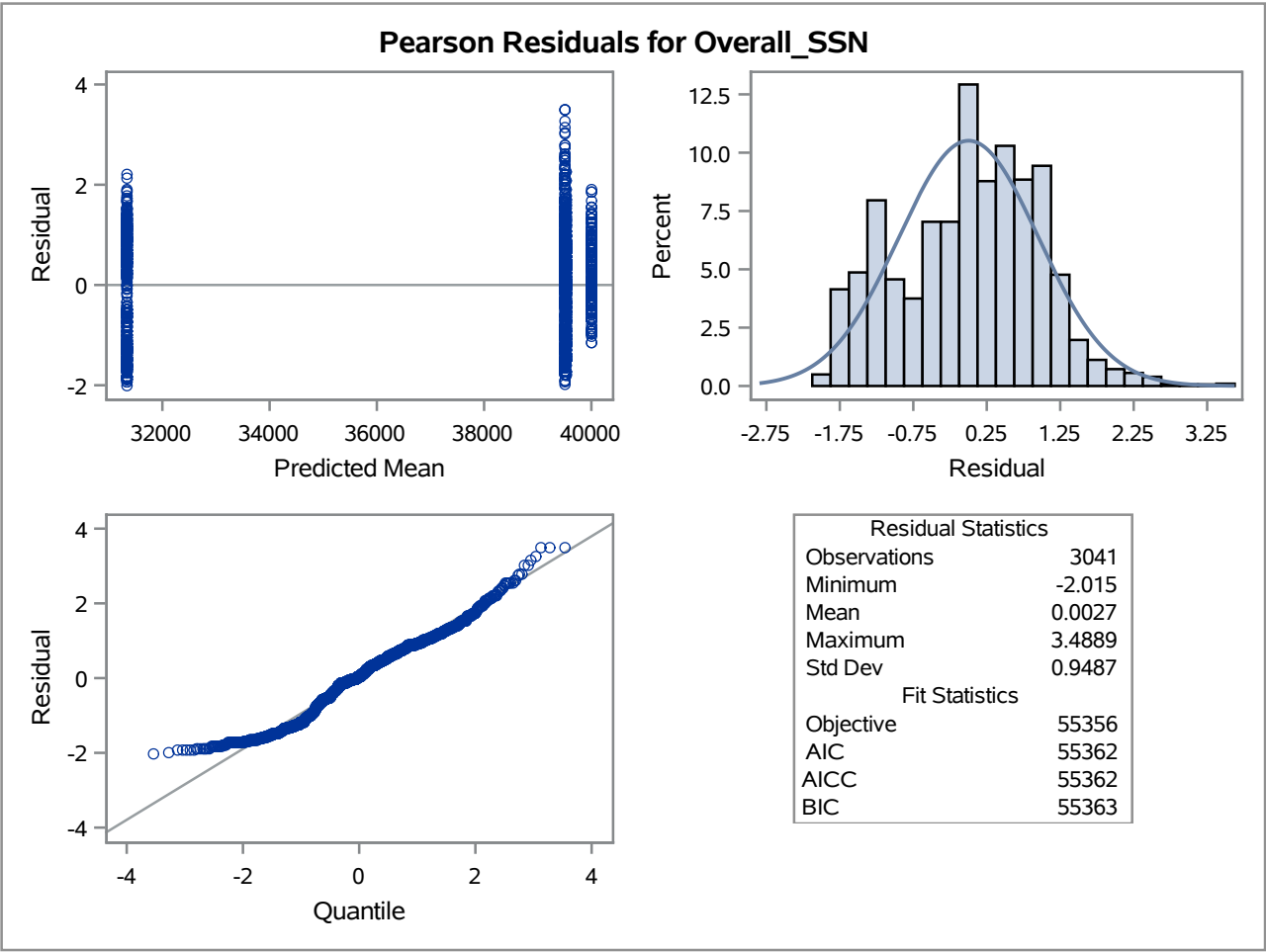
Residual Statistics	
Observations	3041
Minimum	-10914
Mean	14.833
Maximum	18899
Std Dev	5138.6
Fit Statistics	
Objective	55356
AIC	55362
AICC	55362
BIC	55363



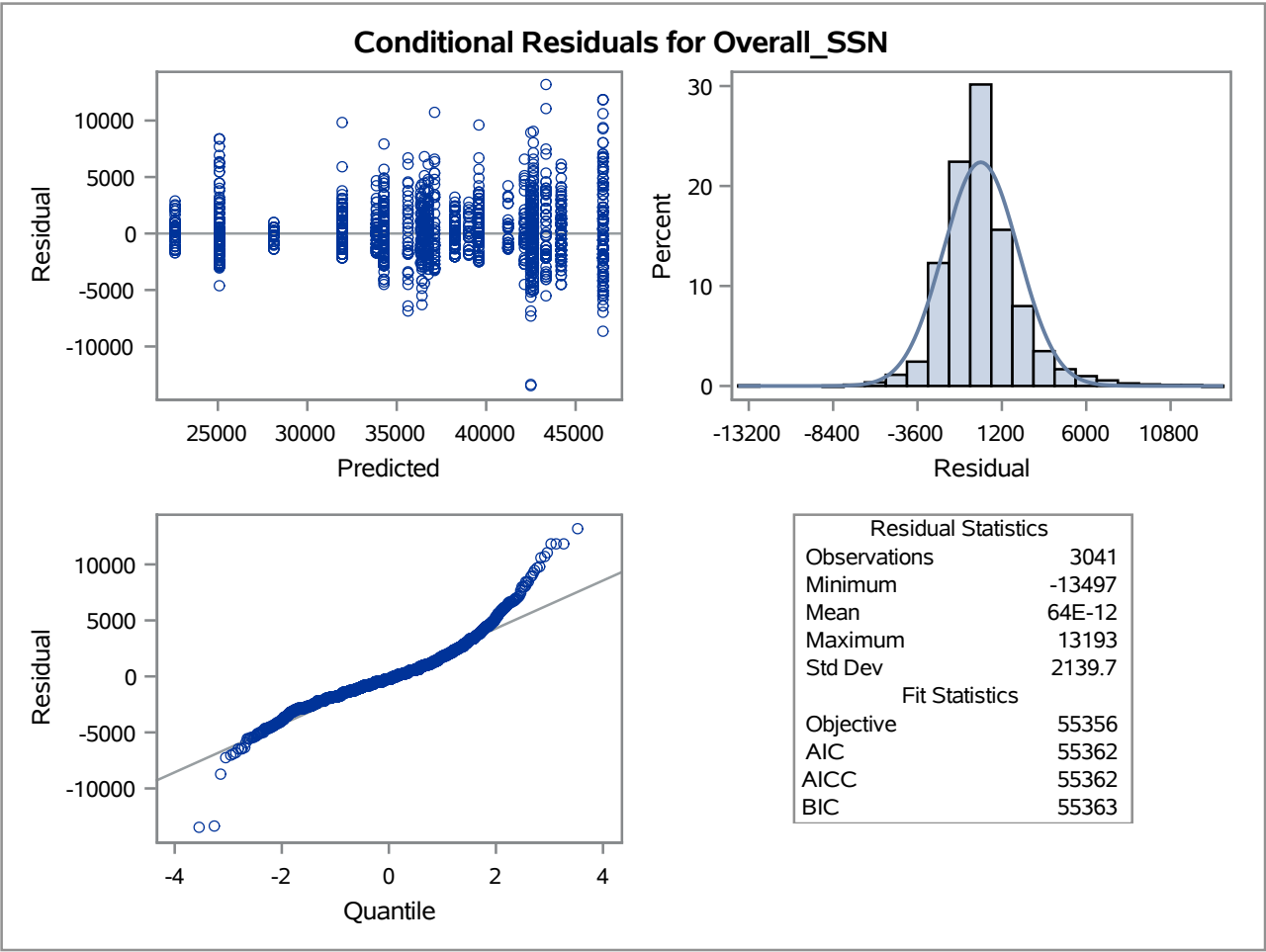
The Mixed Procedure



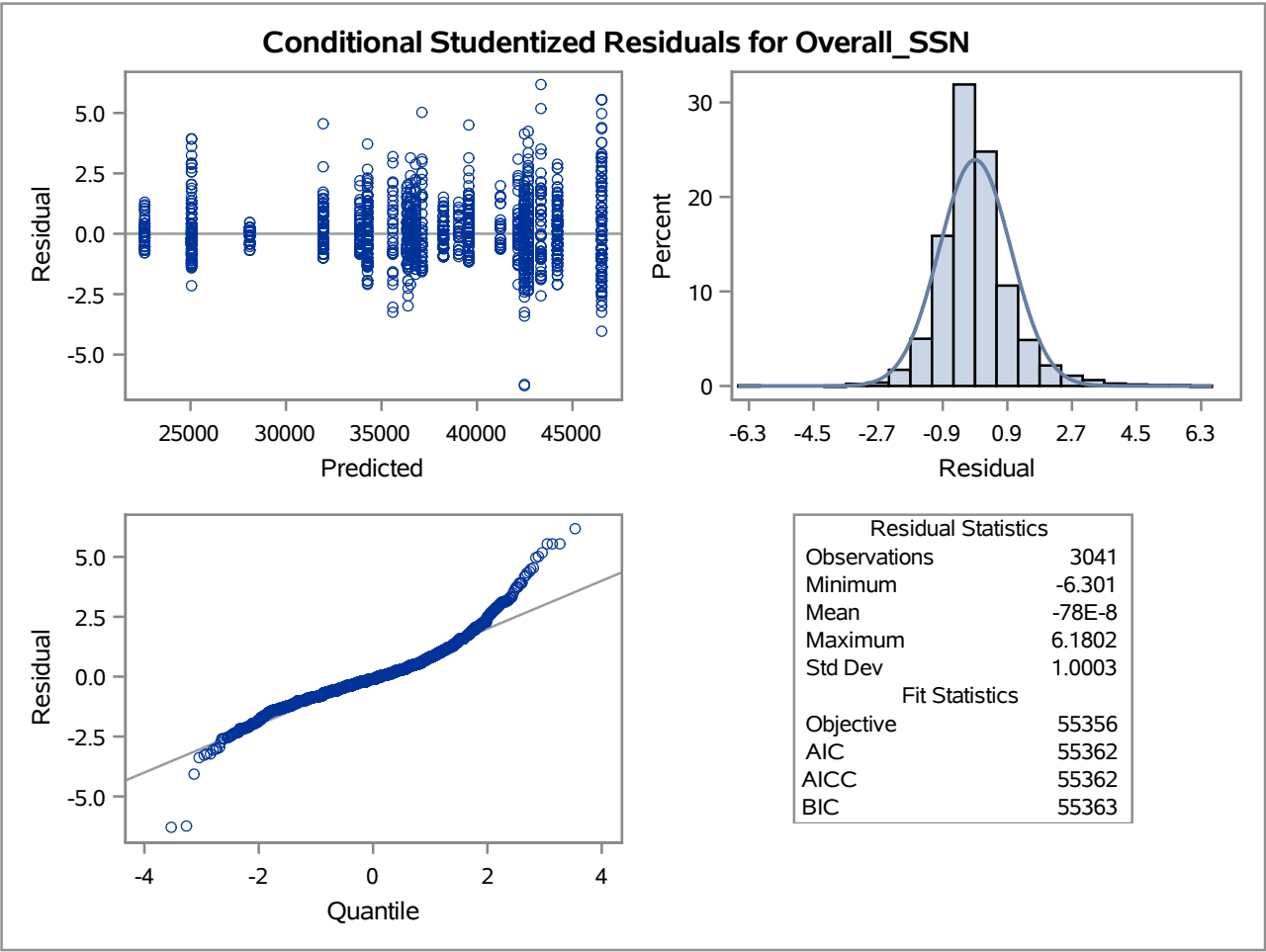
The Mixed Procedure



The Mixed Procedure

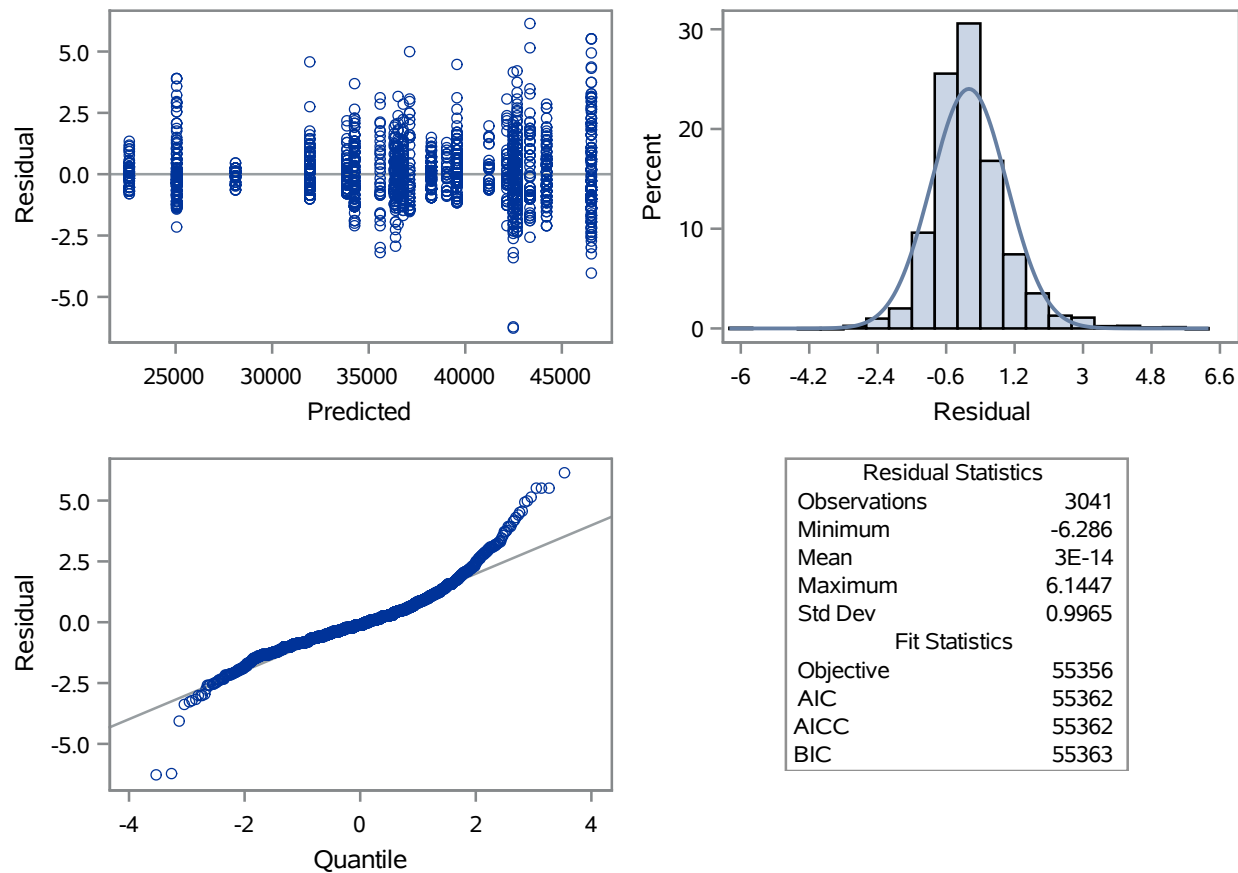


The Mixed Procedure

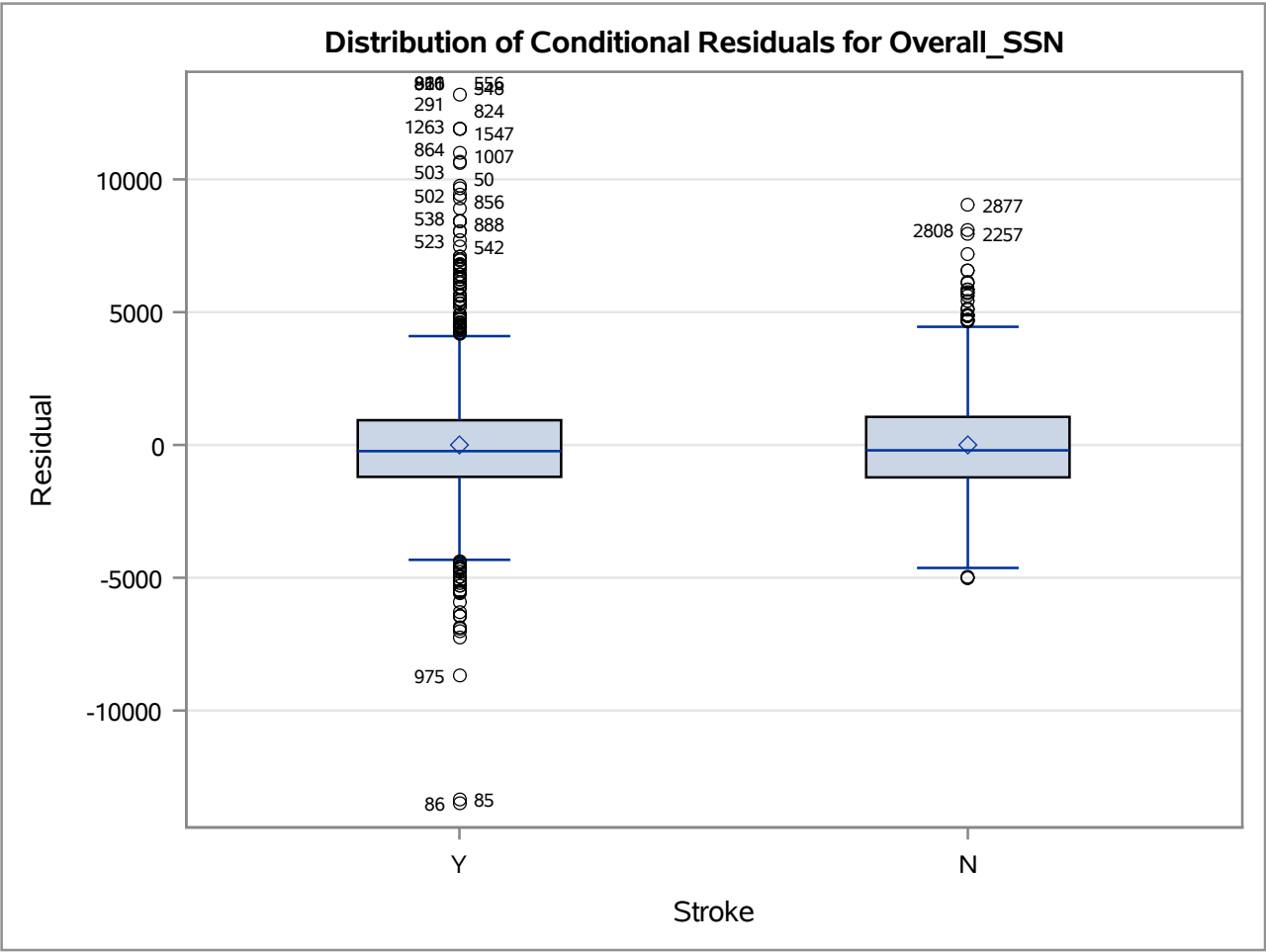


The Mixed Procedure

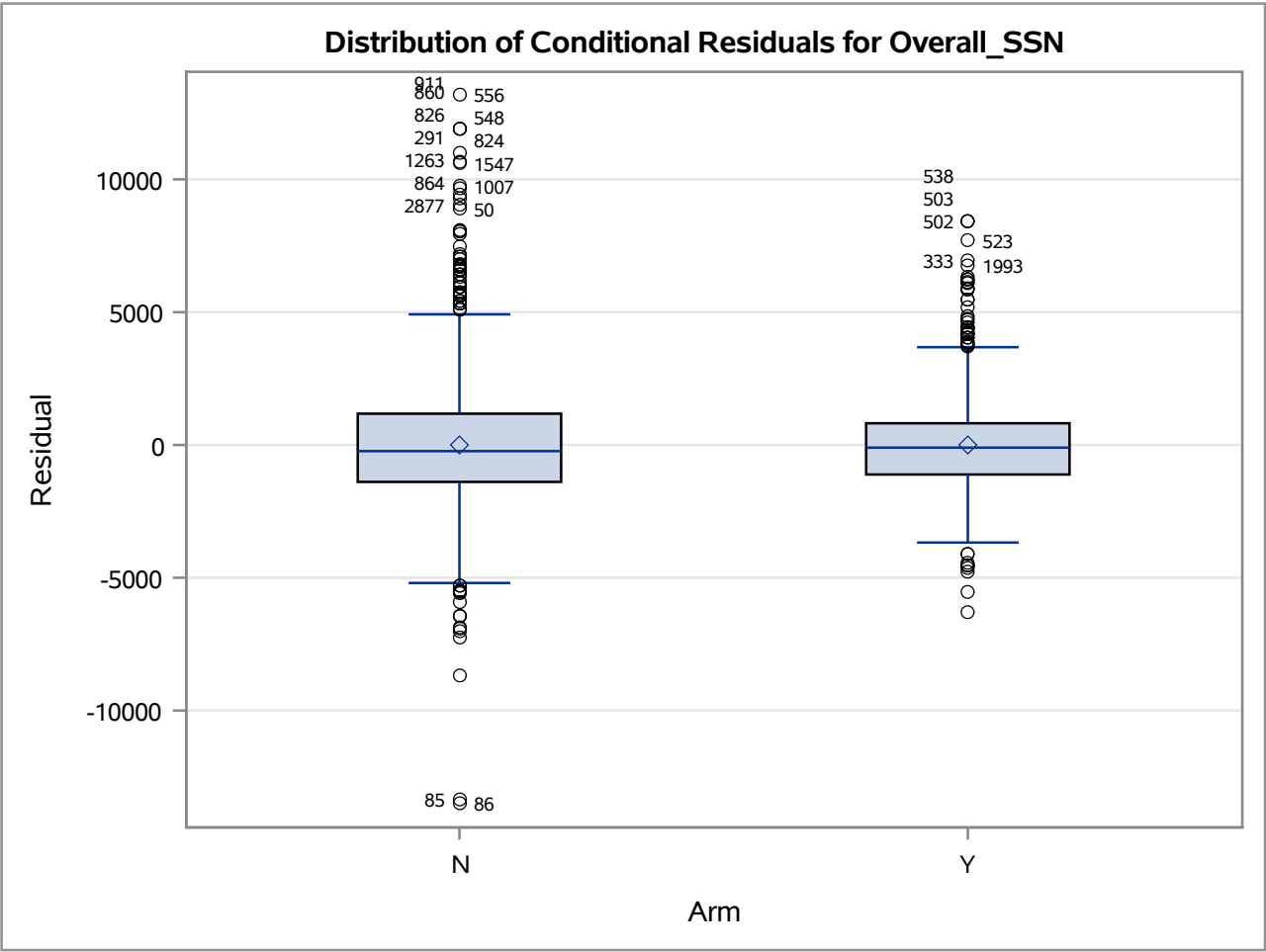
Conditional Pearson Residuals for Overall\_SSN



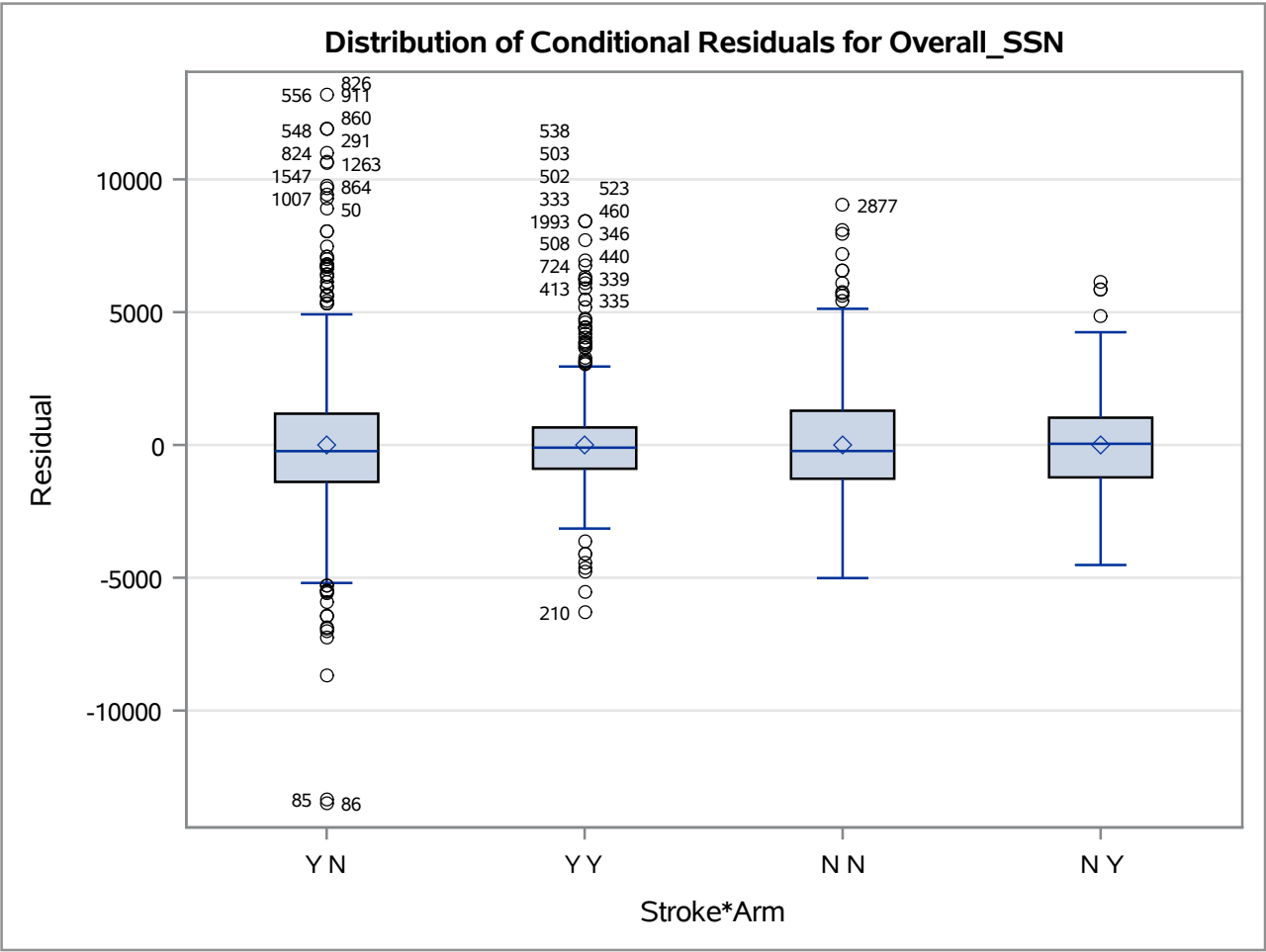
The Mixed Procedure



The Mixed Procedure

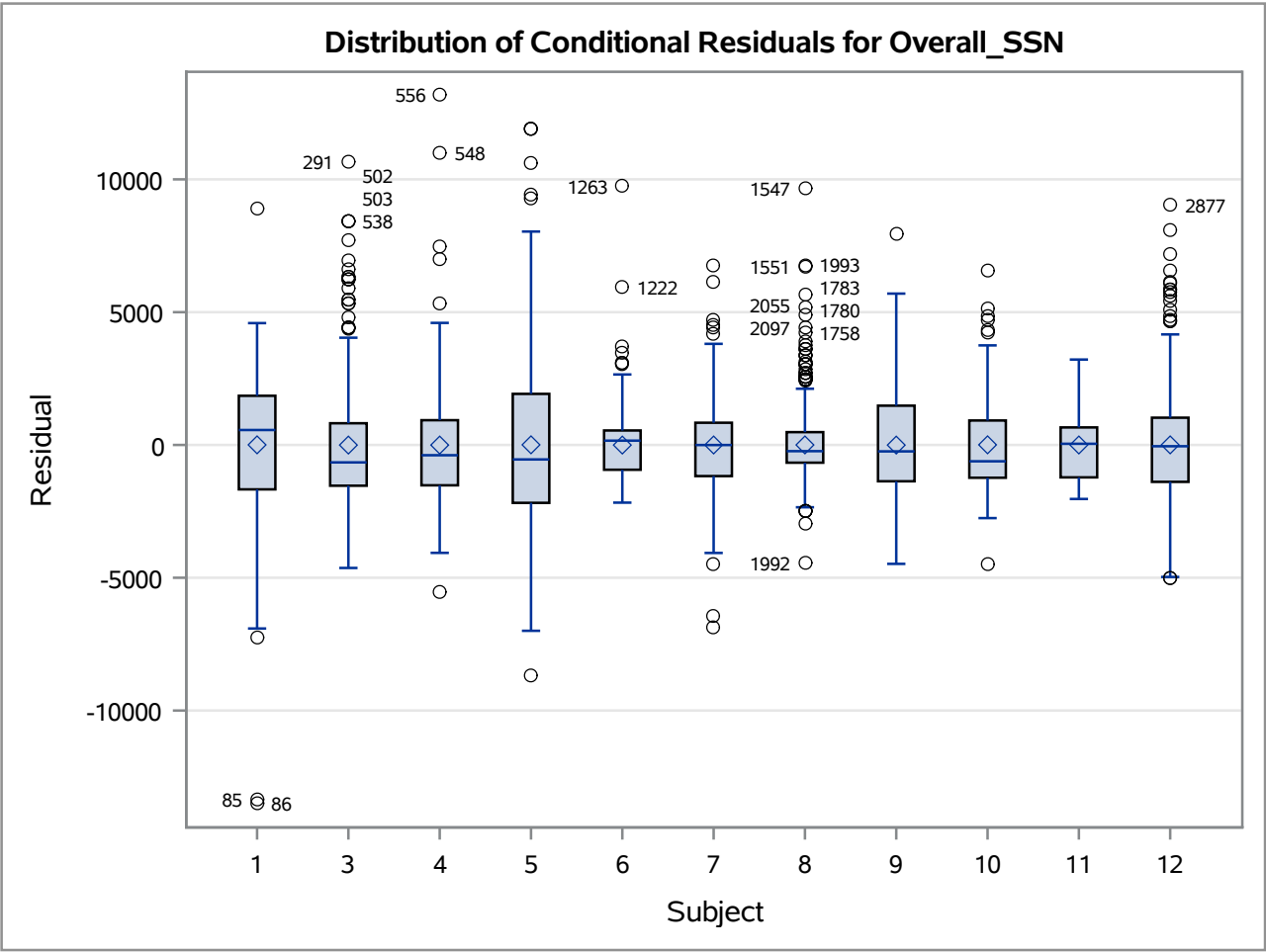


The Mixed Procedure

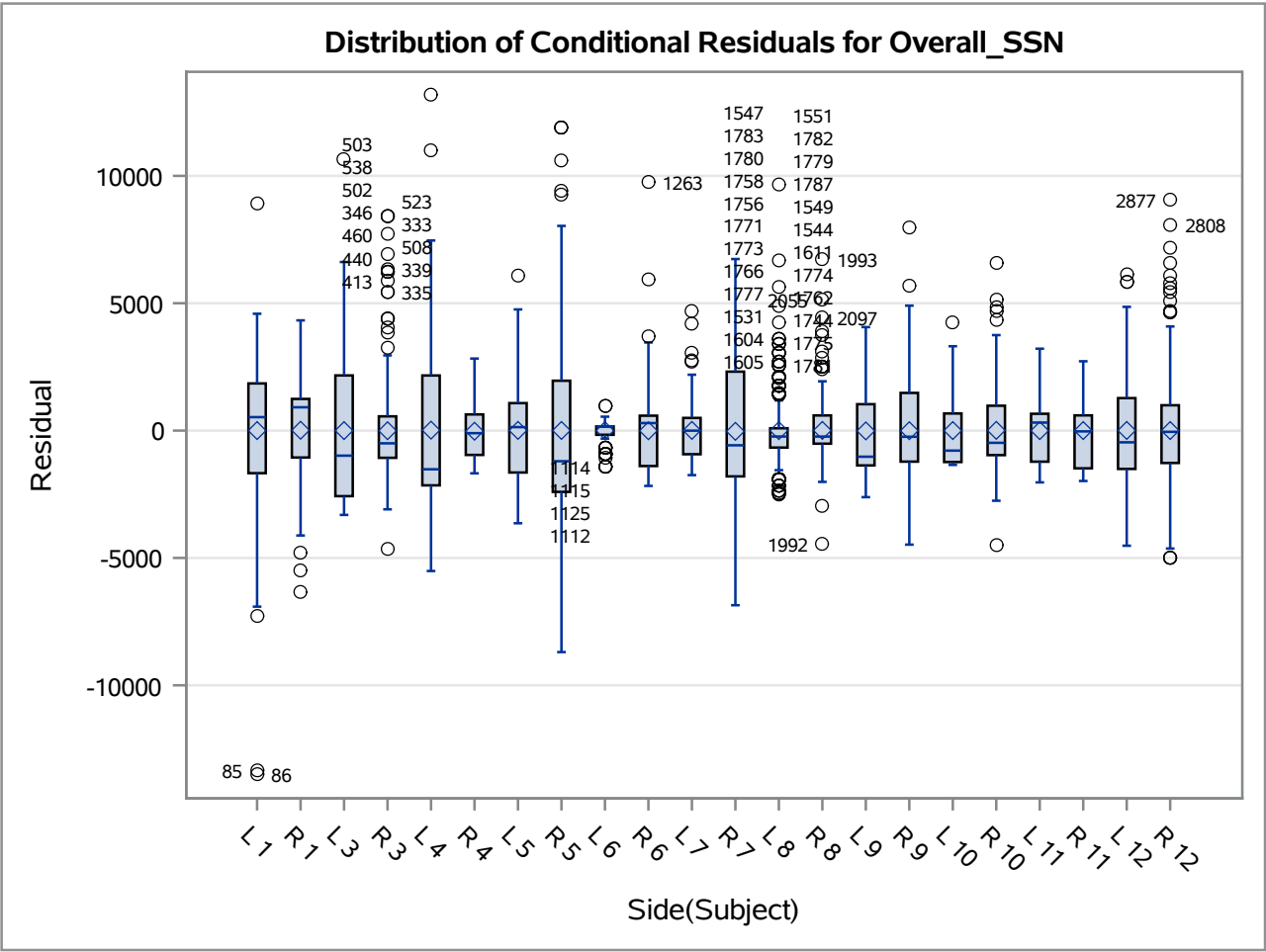




The Mixed Procedure



The Mixed Procedure



## The Mixed Procedure

Model Information	
Data Set	WORK.PCSA
Dependent Variable	PCSA
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
Subject	11	1 3 4 5 6 7 8 9 10 11 12
Image_ID	396	S1 S10 S100 S101 S102 S103 S104 S105 S106 S107 S108 S109 S11 S110 S111 S112 S113 S114 S115 S116 S117 S118 S119 S12 S120 S121 S122 S123 S124 S125 S126 S127 S128 S129 S13 S130 S131 S132 S133 S134 S135 S136 S137 S138 S139 S14 S140 S141 S142 S143 S144 S145 S146 S147 S148 S149 S15 S150 S151 S152 S153 S154 S155 S156 S157 S158 S159 S16 S160 S161 S162 S163 S164 S165 S166 S167 S168 S169 S17 S170 S171 S172 S173 S174 S175 S176 S177 S178 S179 S18 S180 S181 S182 S183 S184 S185 S186 S187 S188 S189 S19 S190 S191 S192 S193 S194 S195 S196 S197 S198 S199 S2 S20 S200 S201 S202 S203 S204 S205 S206 S207 S208 S209 S21 S210 S211 S212 S213 S214 S215 S216 S217 S218 S219 S22 S220 S221 S222 S223 S224 S225 S226 S227 S228 S229 S23 S230 S231 S232 S233 S234 S235 S236 S237 S238 S239 S24 S240 S241 S242 S243 S244 S245 S246 S247 S248 S249 S25 S250 S251 S252 S253 S254 S255 S256 S257 S258 S259 S26 S260 S261 S262 S263 S264 S265 S266 S267 S268 S269 S27 S270 S271 S272 S273 S274 S275 S276 S277 S278 S279 S28 S280 S281 S282 S283 S284 S285 S286 S287 S288 S289 S29 S290 S291 S292 S293 S294 S295 S296 S297 S298 S299 S3 S30 S300 S301 S302 S303 S304 S305 S306 S307 S308 S309 S31 S310 S311 S312 S313 S314 S315 S316 S317 S318 S319 S32 S320 S321 S322 S323 S324 S325 S326 S327 S328 S329 S33 S330 S331 S332 S333 S334 S335 S336 S337 S338 S339 S34 S340 S341 S342 S343 S344 S345 S346 S347 S348 S349 S35 S350 S351 S352 S353 S354 S355 S356 S357 S358 S359 S36 S360 S361 S362 S363 S364 S365 S366 S367 S368 S369 S37 S370 S371 S372 S373 S374 S375 S376 S377 S378 S379 S38 S380 S381 S382 S383 S384 S385 S386 S387 S388 S389 S39 S390 S391 S392 S393 S394 S395 S396 S4 S40 S41 S42 S43 S44 S45 S46 S47 S48 S49 S5 S50 S51 S52 S53 S54 S55 S56 S57 S58 S59 S6 S60 S61 S62 S63 S64 S65 S66 S67 S68 S69 S7 S70 S71 S72 S73 S74 S75 S76 S77 S78 S79 S8 S80 S81 S82 S83 S84 S85 S86 S87 S88 S89 S9 S90 S91 S92 S93 S94 S95 S96 S97 S98 S99
Side	2	L R
Stroke	2	Y N
Arm	2	N Y

Dimensions	
Covariance Parameters	3
Columns in X	9
Columns in Z	33
Subjects	1
Max Obs per Subject	3041

Number of Observations	
Number of Observations Read	3041
Number of Observations Used	3041
Number of Observations Not Used	0

## The Mixed Procedure

Iteration History			
Iteration	Evaluations	-2 Res Log Like	Criterion
0	1	17015.39650888	
1	2	7676.84009982	0.17377523
2	1	7433.99977012	0.13118313
3	1	7272.15601119	0.09459040
4	1	7165.78226965	0.06557051
5	1	7096.77861117	0.04386692
6	1	7052.70188507	0.02837848
7	1	7025.07487579	0.01777435
8	1	7008.13587926	0.01076282
9	1	6998.03449483	0.00618670
10	1	6992.31121613	0.00322699
11	1	6989.37808655	0.00141190
12	1	6988.12908707	0.00044069
13	1	6987.75758293	0.00006833
14	1	6987.70438412	0.00000235
15	1	6987.70269180	0.00000000

Convergence criteria met.

Covariance Parameter Estimates	
Cov Parm	Estimate
Subject	28.3816
Side(Subject)	0.5639
Residual	0.5560

Fit Statistics	
-2 Res Log Likelihood	6987.7
AIC (Smaller is Better)	6993.7
AICC (Smaller is Better)	6993.7
BIC (Smaller is Better)	6994.9

## The Mixed Procedure

Solution for Fixed Effects							
Effect	Stroke	Arm	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept			11.4306	2.6905	9	4.25	0.0021
Stroke	Y		1.6577	3.3726	3019	0.49	0.6231
Stroke	N		0	.	.	.	.
Arm		N	0.06313	0.5350	3019	0.12	0.9061
Arm		Y	0	.	.	.	.
Stroke*Arm	Y	N	1.9208	0.6700	3019	2.87	0.0042
Stroke*Arm	Y	Y	0	.	.	.	.
Stroke*Arm	N	N	0	.	.	.	.
Stroke*Arm	N	Y	0	.	.	.	.

Type 3 Tests of Fixed Effects				
Effect	Num DF	Den DF	F Value	Pr > F
Stroke	1	3019	0.61	0.4354
Arm	1	3019	9.33	0.0023
Stroke*Arm	1	3019	8.22	0.0042

Coefficients for differences in differences			
Effect	Stroke	Arm	Row1
Intercept			
Stroke	Y		
Stroke	N		
Arm		N	
Arm		Y	
Stroke*Arm	Y	N	1
Stroke*Arm	Y	Y	-1
Stroke*Arm	N	N	-1
Stroke*Arm	N	Y	1

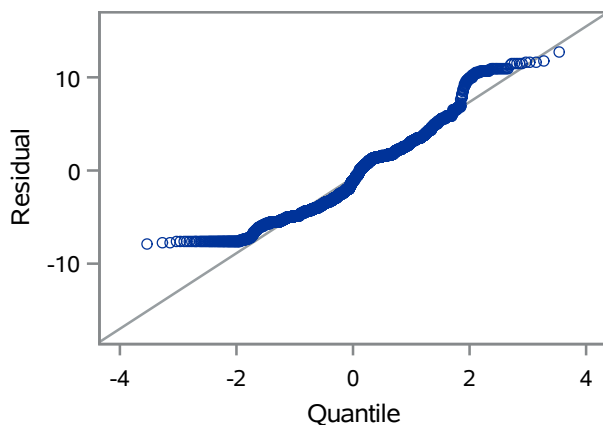
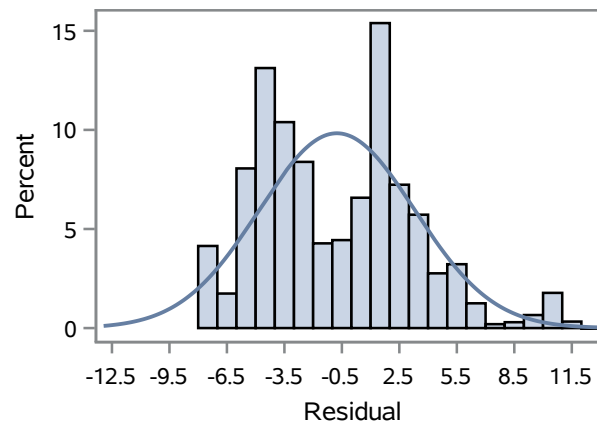
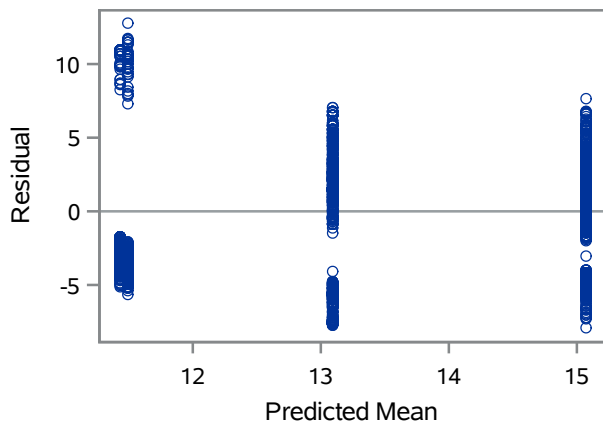
Estimates					
Label	Estimate	Standard Error	DF	t Value	Pr >  t
differences in differences	1.9208	0.6700	3019	2.87	0.0042

## The Mixed Procedure

Least Squares Means										
Effect	Stroke	Arm	Estimate	Standard Error	DF	t Value	Pr >  t	Alpha	Lower	Upper
Stroke*Arm	Y	N	15.0722	2.0337	3019	7.41	<.0001	0.05	11.0846	19.0598
Stroke*Arm	Y	Y	13.0883	2.0337	3019	6.44	<.0001	0.05	9.1008	17.0758
Stroke*Arm	N	N	11.4938	2.6904	3019	4.27	<.0001	0.05	6.2186	16.7689
Stroke*Arm	N	Y	11.4306	2.6905	3019	4.25	<.0001	0.05	6.1552	16.7060

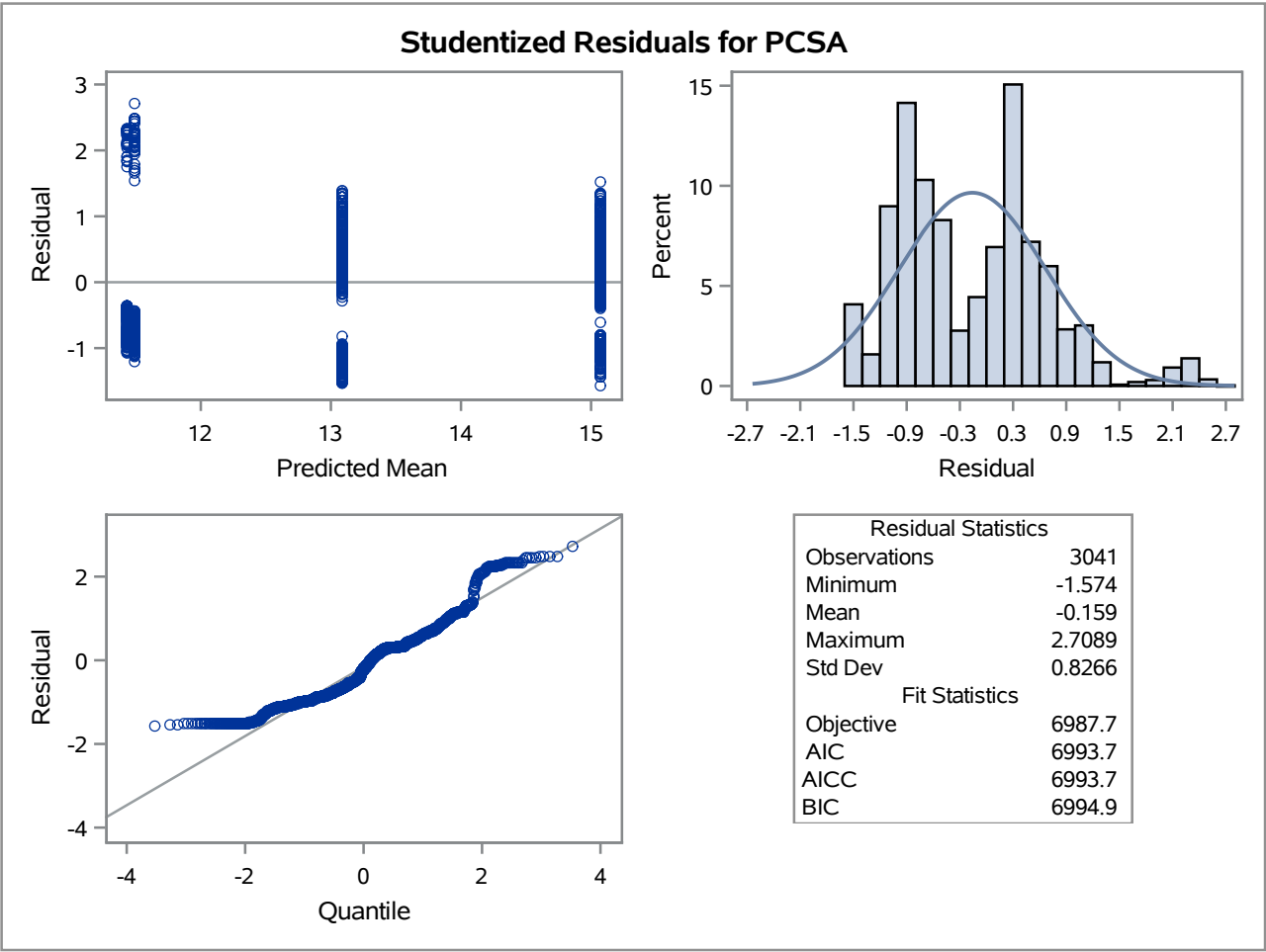
Differences of Least Squares Means												
Effect	Stroke	Arm	Stroke	_Arm	Estimate	Standard Error	DF	t Value	Pr >  t	Alpha	Lower	Upper
Stroke*Arm	Y	N	Y	Y	1.9839	0.4034	3019	4.92	<.0001	0.05	1.1930	2.7748
Stroke*Arm	Y	N	N	N	3.5784	3.3726	3019	1.06	0.2888	0.05	-3.0343	10.1912
Stroke*Arm	Y	N	N	Y	3.6416	3.3726	3019	1.08	0.2803	0.05	-2.9713	10.2545
Stroke*Arm	Y	Y	N	N	1.5946	3.3725	3019	0.47	0.6364	0.05	-5.0182	8.2073
Stroke*Arm	Y	Y	N	Y	1.6577	3.3726	3019	0.49	0.6231	0.05	-4.9552	8.2706
Stroke*Arm	N	N	N	Y	0.06313	0.5350	3019	0.12	0.9061	0.05	-0.9859	1.1121

## Residuals for PCSA



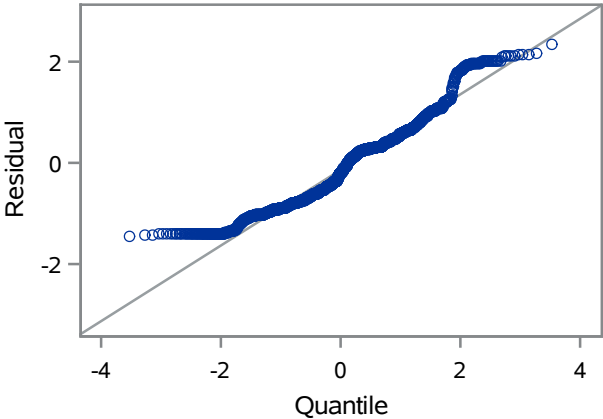
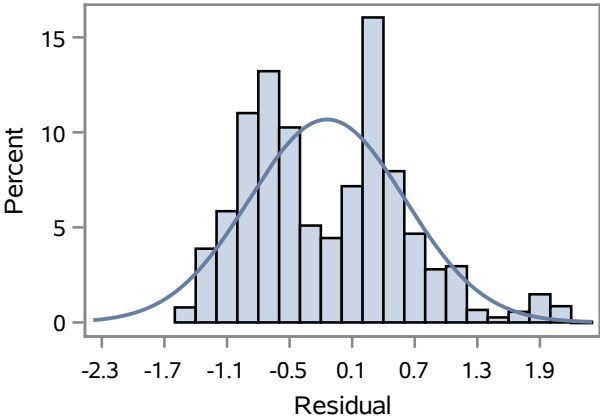
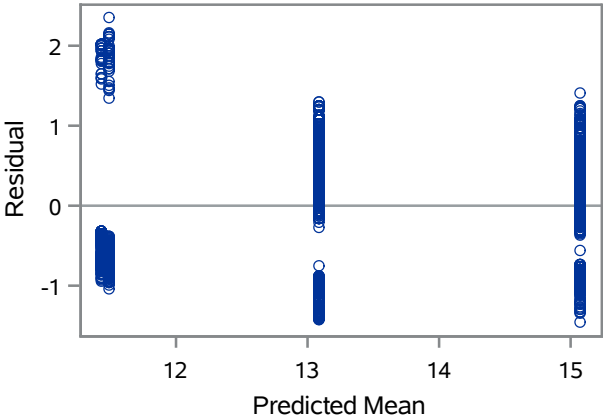
Residual Statistics	
Observations	3041
Minimum	-7.928
Mean	-0.76
Maximum	12.782
Std Dev	4.0582
Fit Statistics	
Objective	6987.7
AIC	6993.7
AICC	6993.7
BIC	6994.9

The Mixed Procedure



The Mixed Procedure

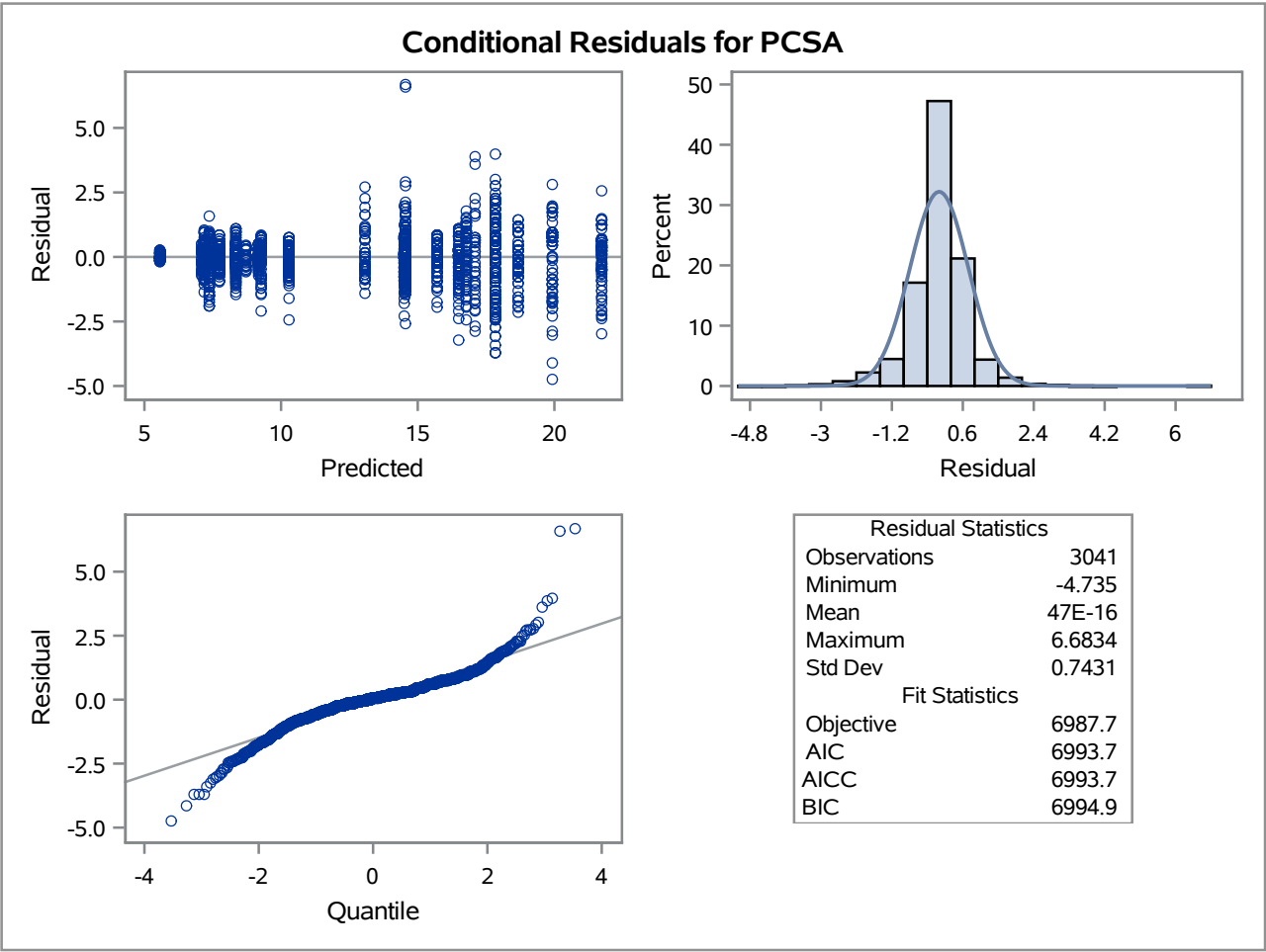
Pearson Residuals for PCSA



Residual Statistics	
Observations	3041
Minimum	-1.46
Mean	-0.14
Maximum	2.3533
Std Dev	0.7472
Fit Statistics	
Objective	6987.7
AIC	6993.7
AICC	6993.7
BIC	6994.9

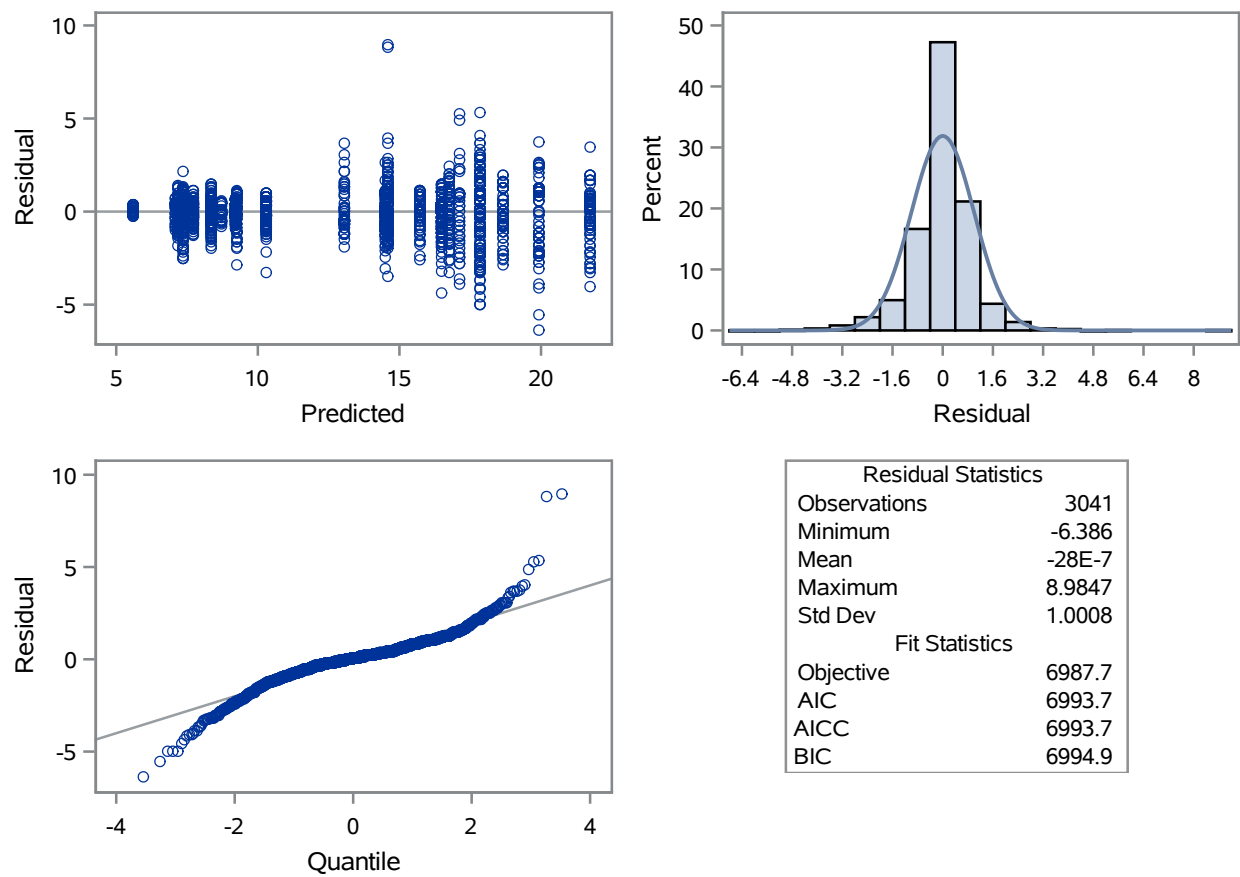


The Mixed Procedure

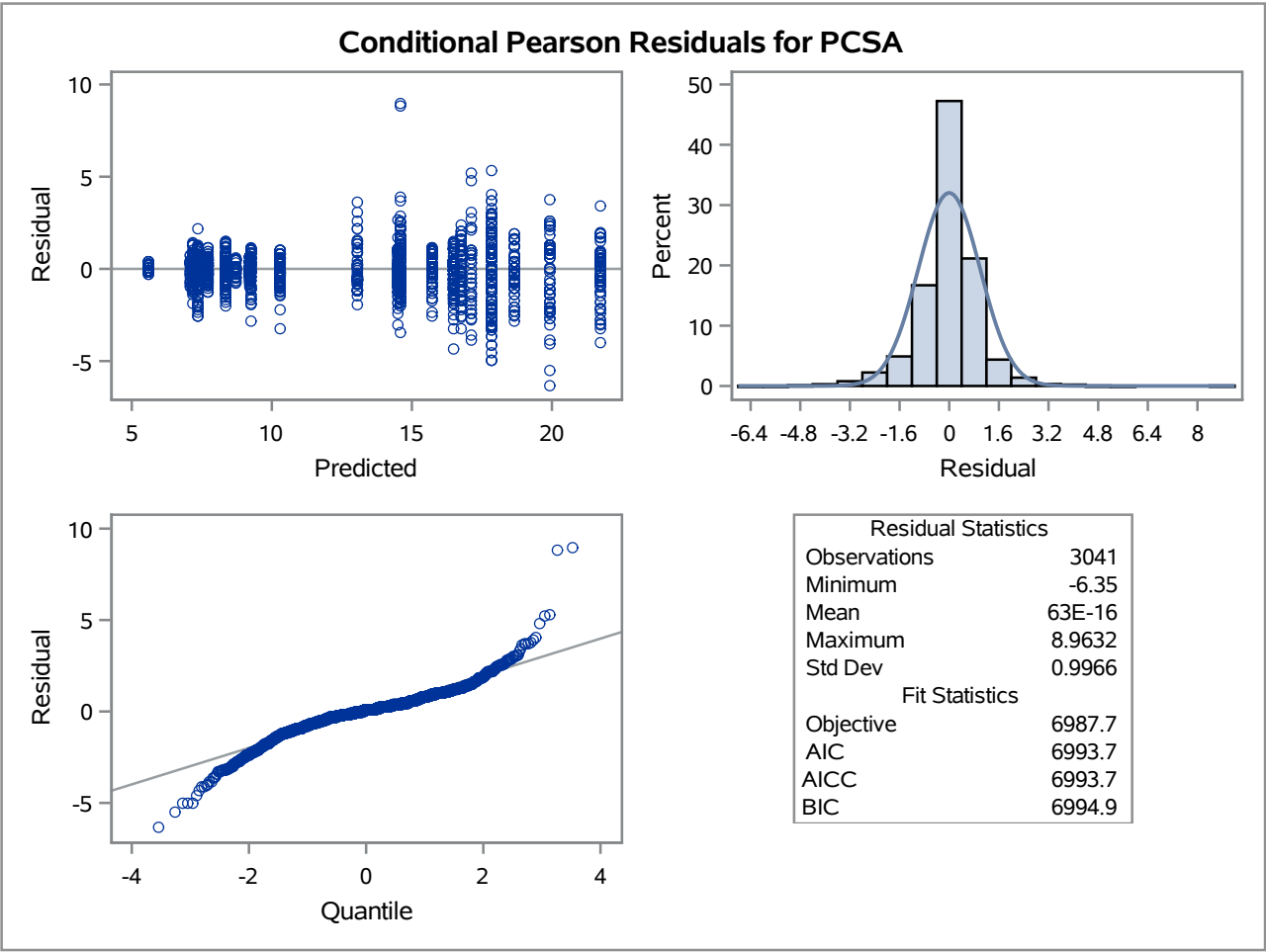


The Mixed Procedure

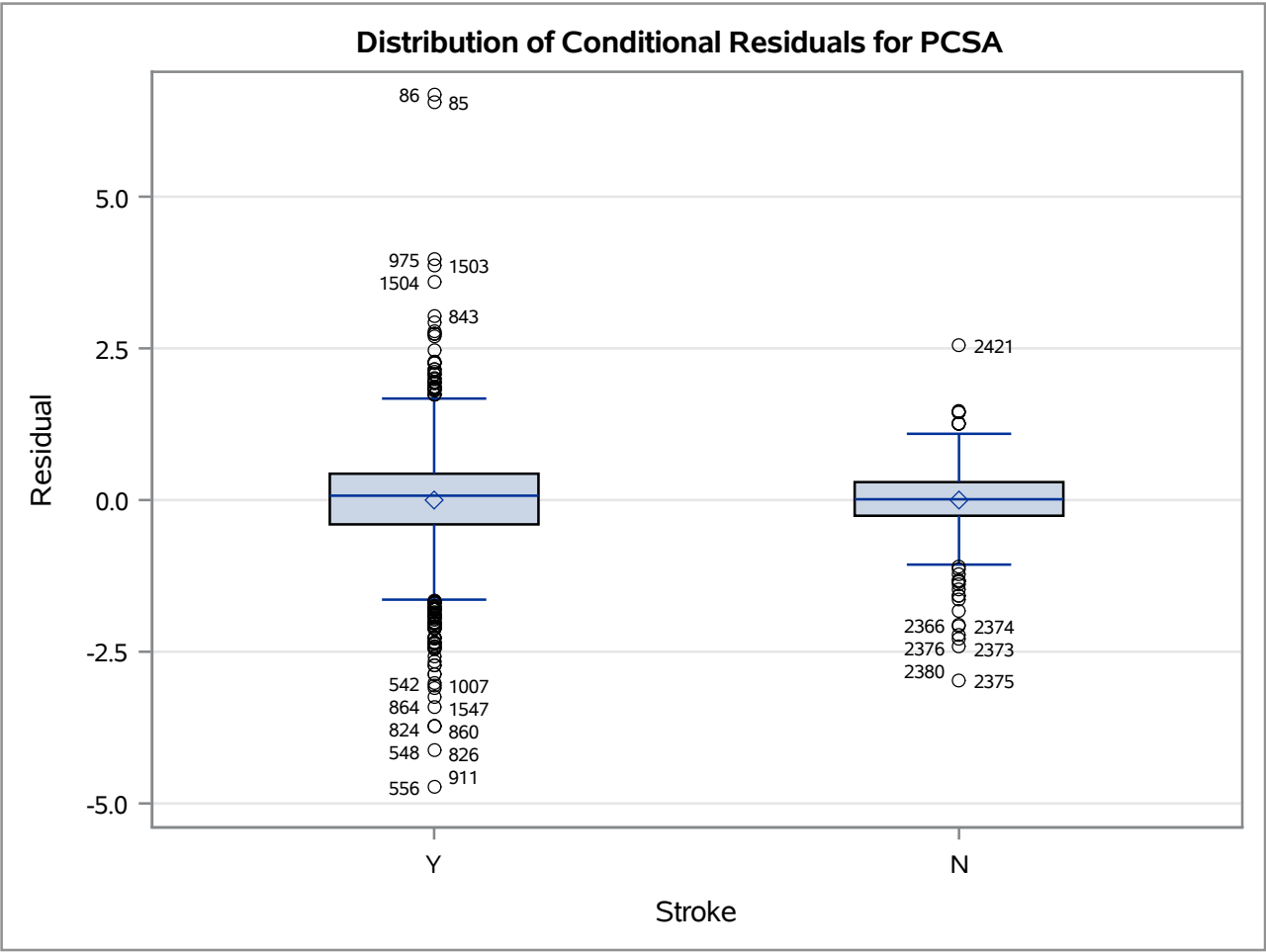
Conditional Studentized Residuals for PCSA



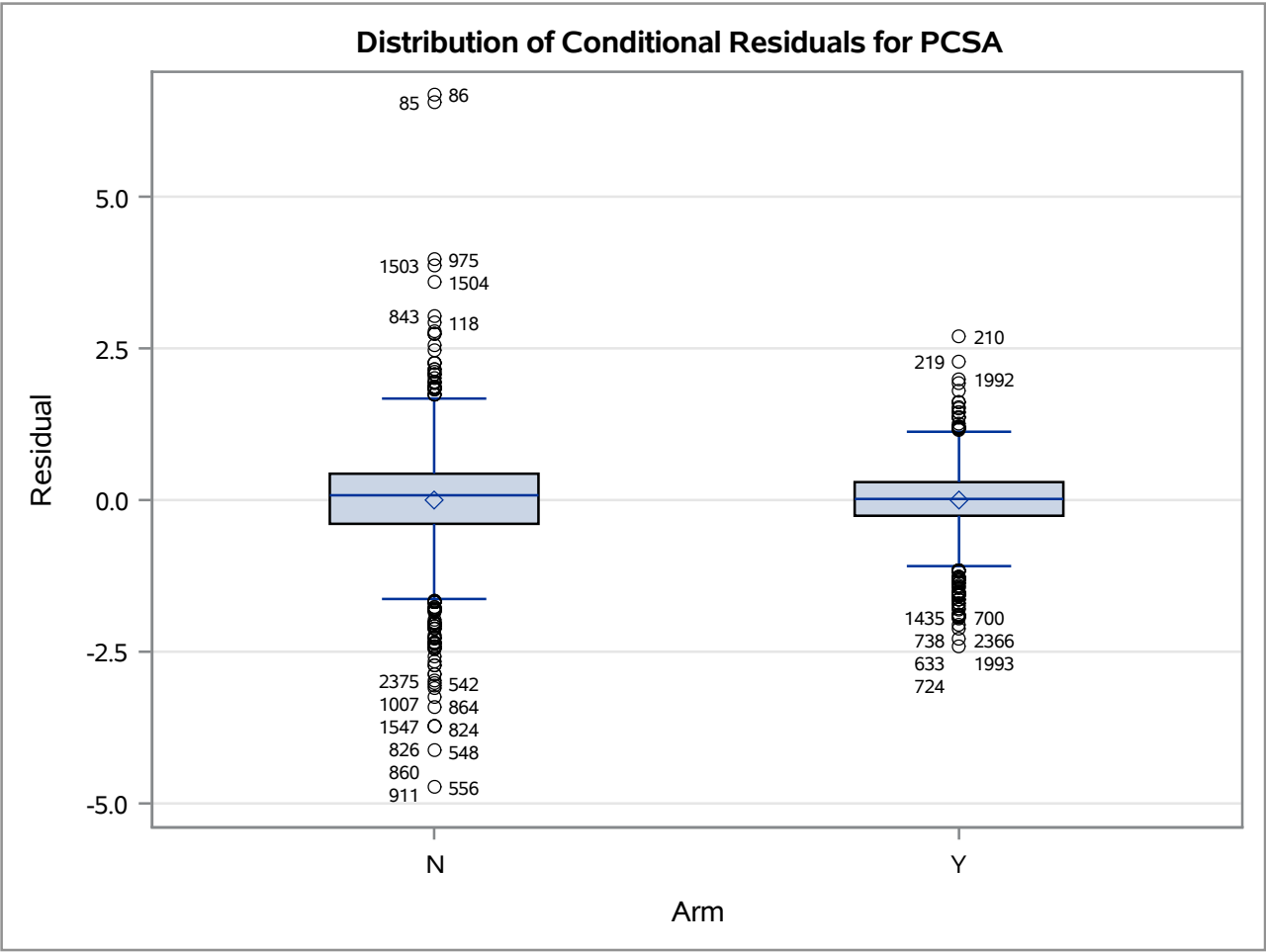
The Mixed Procedure



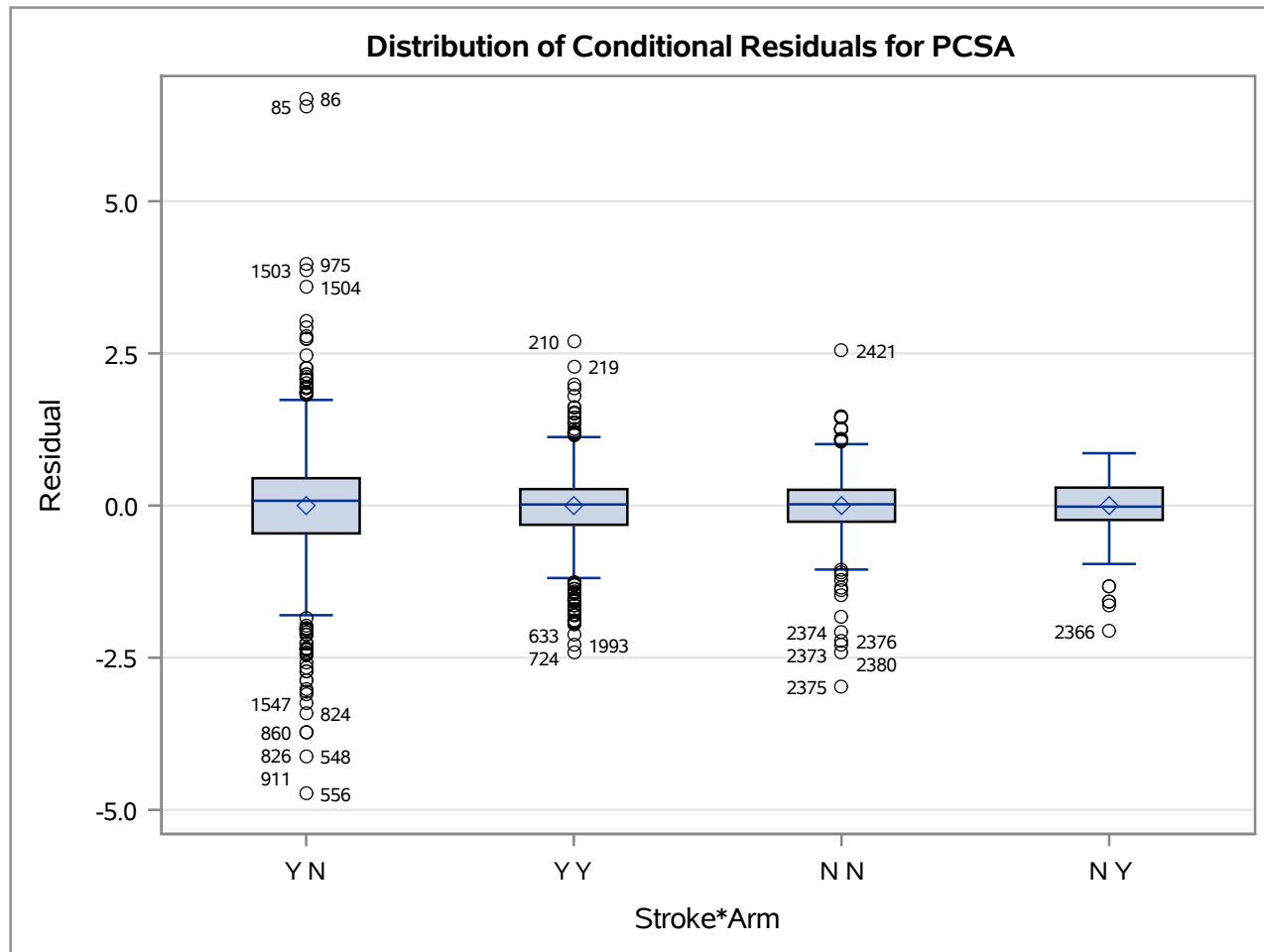
The Mixed Procedure



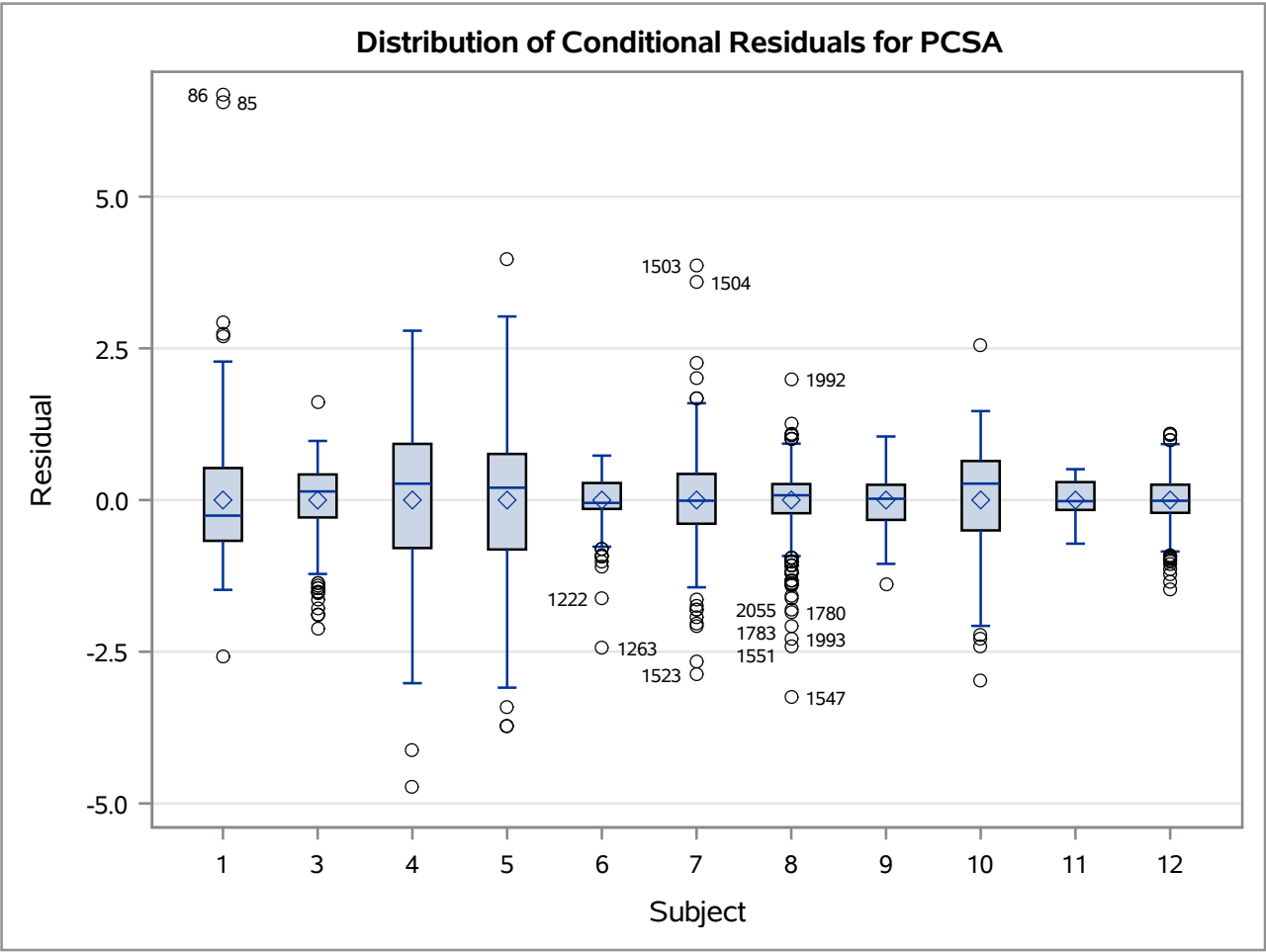
The Mixed Procedure



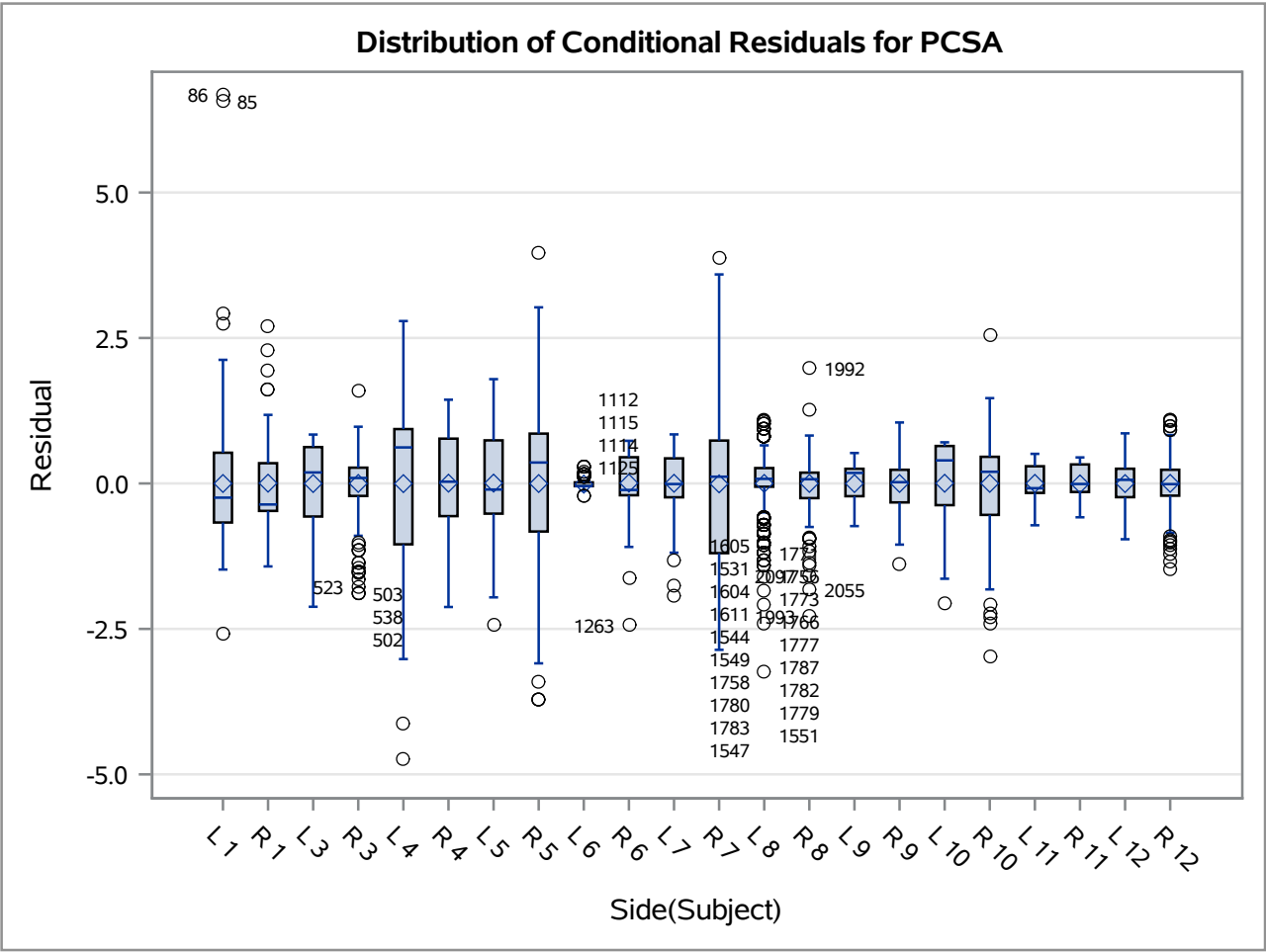
## The Mixed Procedure



The Mixed Procedure



The Mixed Procedure





## The MEANS Procedure

Analysis Variable : Difference										
Stroke	N Obs	N	N Miss	Mean	Std Dev	Std Error	Median	Minimum	Maximum	Quartile Range
N	4	4	0	0.6995	4.4601	2.2301	0.4800	-3.4000	5.2380	7.6490
Y	7	7	0	50.7936	32.0657	12.1197	42.6668	19.2800	118.5737	23.5427

## The NPAR1WAY Procedure

Wilcoxon Scores (Rank Sums) for Variable Difference Classified by Variable Stroke					
Stroke	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
Y	7	56.0	42.0	5.291503	8.00
N	4	10.0	24.0	5.291503	2.50

Wilcoxon Two-Sample Test					
Statistic	Z	Pr < Z	Pr >  Z	t Approximation	
				Pr < Z	Pr >  Z
10.0000	-2.5513	0.0054	0.0107	0.0144	0.0288
Z includes a continuity correction of 0.5.					

Kruskal-Wallis Test		
Chi-Square	DF	Pr > ChiSq
7.0000	1	0.0082

