AOV - MIXED FACTOR LEVELS

The Mixed Procedure

Model Information	
Data Set	WORK.RAW
Dependent Variable	Y
Covariance Structure	Variance Components
Estimation Method	Type 3
Residual Variance Method	Factor
Fixed Effects SE Method	Model-Based
Degrees of Freedom Method	Containment

Class Level Information		
Class	**Levels**	**Values**
D	5	1 2 3 4 5
M	3	1 2 3
G	8	1 2 3 4 5 6 7 8

Dimensions	
Covariance Parameters	4
Columns in X	36
Columns in Z	60
Subjects	1
Max Obs per Subject	120

Number of Observations	
Number of Observations Read	120
Number of Observations Used	120
Number of Observations Not Used	0

Type 3 Analysis of Variance								
Source	**DF**	**Sum of Squares**	**Mean Square**	**Expected Mean Square**	**Error Term**	**Error DF**	**F Value**	**Pr > F**
M	2	597615	298808	Var(Residual) + 8 Var(D*M) + Q(M,M*G)	MS(D*M)	8	9.07	0.0088
G	7	220338	31477	Var(Residual) + 3 Var(D*G) + Q(G,M*G)	MS(D*G)	28	4.22	0.0027
M*G	14	209773	14984	Var(Residual) + Q(M*G)	MS(Residual)	56	1.50	0.1403

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Type 3 Analysis of Variance								
Source	**DF**	**Sum of Squares**	**Mean Square**	**Expected Mean Square**	**Error Term**	**Error DF**	**F Value**	**Pr > F**
D	4	217576	54394	Var(Residual) + 3 Var(D*G) + 8 Var(D*M) + 24 Var(D)	MS(D*M) + MS(D*G) - MS(Residual)	6.6421	1.79	0.2403
D*M	8	263441	32930	Var(Residual) + 8 Var(D*M)	MS(Residual)	56	3.30	0.0037
D*G	28	208814	7457.652976	Var(Residual) + 3 Var(D*G)	MS(Residual)	56	0.75	0.7966
Residual	56	558258	9968.885119	Var(Residual)	.	.	.	.

D*M is the only significant interaction (D is random)

look at REML

Covariance Parameter Estimates				
Cov Parm	**Estimate**	**Alpha**	**Lower**	**Upper**
D	998.97	0.05	-2425.11	4423.05
D*M	2870.15	0.05	-1190.03	6930.34
D*G	-837.08	0.05	-2628.88	954.72
Residual	9968.89	0.05	7105.48	15002

$\sigma^2_\varepsilon > \sigma^2_{D*G}$

Fit Statistics	
-2 Res Log Likelihood	1203.2
AIC (Smaller is Better)	1211.2
AICC (Smaller is Better)	1211.6
BIC (Smaller is Better)	1209.6

Solution for Random Effects											
Effect	**DENTIST**	**CONDENSATION METHOD**	**GOLD ALLOW**	**Estimate**	**Std Err Pred**	**DF**	**t Value**	**Pr > |t|**	**Alpha**	**Lower**	**Upper**
D	1			21.3112	25.4306	56	0.84	0.4056	0.05	-29.6325	72.2548
D	2			18.9604	25.4306	56	0.75	0.4590	0.05	-31.9833	69.9040
D	3			2.0092	25.4306	56	0.08	0.9373	0.05	-48.9345	52.9528
D	4			-16.1542	25.4306	56	-0.64	0.5279	0.05	-67.0978	34.7895
D	5			-26.1266	25.4306	56	-1.03	0.3087	0.05	-77.0702	24.8171
D*M	1	1		9.1664	38.4671	56	0.24	0.8125	0.05	-67.8926	86.2253
D*M	1	2		5.2965	38.4671	56	0.14	0.8910	0.05	-71.7625	82.3554
D*M	1	3		46.7667	38.4671	56	1.22	0.2292	0.05	-30.2922	123.83
D*M	2	1		13.8587	38.4671	56	0.36	0.7200	0.05	-63.2003	90.9176
D*M	2	2		-5.3512	38.4671	56	-0.14	0.8899	0.05	-82.4101	71.7078

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Effect	**DENTIST**	**CONDENSATION METHOD**	**GOLD ALLOW**	**Estimate**	**Std Err Pred**	**DF**	**t Value**	**Pr > |t|**	**Alpha**	**Lower**	**Upper**
D*M	2	3		45.9680	38.4671	56	1.19	0.2371	0.05	-31.0909	123.03
D*M	3	1		-34.7407	38.4671	56	-0.90	0.3703	0.05	-111.80	42.3183
D*M	3	2		-15.7749	38.4671	56	-0.41	0.6833	0.05	-92.8338	61.2841
D*M	3	3		56.2881	38.4671	56	1.46	0.1490	0.05	-20.7708	133.35
D*M	4	1		6.7546	38.4671	56	0.18	0.8612	0.05	-70.3044	83.8135
D*M	4	2		9.1601	38.4671	56	0.24	0.8127	0.05	-67.8988	86.2191
D*M	4	3		-62.3276	38.4671	56	-1.62	0.1108	0.05	-139.39	14.7313
D*M	5	1		4.9611	38.4671	56	0.13	0.8978	0.05	-72.0979	82.0200
D*M	5	2		6.6694	38.4671	56	0.17	0.8630	0.05	-70.3896	83.7283
D*M	5	3		-86.6953	38.4671	56	-2.25	0.0281	0.05	-163.75	-9.6363
D*G	1		1	-4.3143	0	56	-Infty	<.0001	.	.	.
D*G	1		2	-14.4387	0	56	-Infty	<.0001	.	.	.
D*G	1		3	-5.2796	0	56	-Infty	<.0001	.	.	.
D*G	1		4	16.0468	0	56	Infty	<.0001	.	.	.
D*G	1		5	-11.4530	0	56	-Infty	<.0001	.	.	.
D*G	1		6	-31.6570	0	56	-Infty	<.0001	.	.	.
D*G	1		7	36.0262	0	56	Infty	<.0001	.	.	.
D*G	1		8	-2.7878	0	56	-Infty	<.0001	.	.	.
D*G	2		1	2.6666	0	56	Infty	<.0001	.	.	.
D*G	2		2	-2.8559	0	56	-Infty	<.0001	.	.	.
D*G	2		3	-4.0232	0	56	-Infty	<.0001	.	.	.
D*G	2		4	-6.8293	0	56	-Infty	<.0001	.	.	.
D*G	2		5	-5.9313	0	56	-Infty	<.0001	.	.	.
D*G	2		6	9.4461	0	56	Infty	<.0001	.	.	.
D*G	2		7	6.8645	0	56	Infty	<.0001	.	.	.
D*G	2		8	-15.2252	0	56	-Infty	<.0001	.	.	.
D*G	3		1	-8.3958	0	56	-Infty	<.0001	.	.	.
D*G	3		2	12.5713	0	56	Infty	<.0001	.	.	.
D*G	3		3	-12.6162	0	56	-Infty	<.0001	.	.	.
D*G	3		4	9.9448	0	56	Infty	<.0001	.	.	.
D*G	3		5	-3.5245	0	56	-Infty	<.0001	.	.	.
D*G	3		6	8.5979	0	56	Infty	<.0001	.	.	.

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Solution for Random Effects											
Effect	DENTIST	CONDENSATION METHOD	GOLD ALLOW	Estimate	Std Err Pred	DF	t Value	Pr > |t|	Alpha	Lower	Upper
D*G	3		7	-4.3102	0	56	-Infty	<.0001	.	.	.
D*G	3		8	-3.9510	0	56	-Infty	<.0001	.	.	.
D*G	4		1	7.5792	0	56	Infty	<.0001	.	.	.
D*G	4		2	13.0567	0	56	Infty	<.0001	.	.	.
D*G	4		3	11.7772	0	56	Infty	<.0001	.	.	.
D*G	4		4	-33.5694	0	56	-Infty	<.0001	.	.	.
D*G	4		5	16.4914	0	56	Infty	<.0001	.	.	.
D*G	4		6	-6.1819	0	56	-Infty	<.0001	.	.	.
D*G	4		7	-20.9981	0	56	-Infty	<.0001	.	.	.
D*G	4		8	25.3811	0	56	Infty	<.0001	.	.	.
D*G	5		1	2.4644	0	56	Infty	<.0001	.	.	.
D*G	5		2	-8.3335	0	56	-Infty	<.0001	.	.	.
D*G	5		3	10.1419	0	56	Infty	<.0001	.	.	.
D*G	5		4	14.4071	0	56	Infty	<.0001	.	.	.
D*G	5		5	4.4174	0	56	Infty	<.0001	.	.	.
D*G	5		6	19.7949	0	56	Infty	<.0001	.	.	.
D*G	5		7	-17.5824	0	56	-Infty	<.0001	.	.	.
D*G	5		8	-3.4172	0	56	-Infty	<.0001	.	.	.

Type 3 Tests of Fixed Effects				
Effect	Num DF	Den DF	F Value	Pr > F
M	2	8	9.07	0.0088
G	7	28	4.22	0.0027
M*G	14	56	1.50	0.1403

Least Squares Means										
Effect	CONDENSATION METHOD	GOLD ALLOW	Estimate	Standard Error	DF	t Value	Pr > |t|	Alpha	Lower	Upper
M	1		786.15	31.6563	8	24.83	<.0001	0.05	713.15	859.15
M	2		786.95	31.6563	8	24.86	<.0001	0.05	713.95	859.95
M	3		636.85	31.6563	8	20.12	<.0001	0.05	563.85	709.85

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Least Squares Means										
Effect	**CONDENSATION METHOD**	**GOLD ALLOW**	**Estimate**	**Standard Error**	**DF**	**t Value**	**Pr > |t|**	**Alpha**	**Lower**	**Upper**
G		1	727.47	29.8046	28	24.41	<.0001	0.05	666.41	788.52
G		2	715.07	29.8046	28	23.99	<.0001	0.05	654.01	776.12
G		3	724.93	29.8046	28	24.32	<.0001	0.05	663.88	785.99
G		4	709.27	29.8046	28	23.80	<.0001	0.05	648.21	770.32
G		5	688.27	29.8046	28	23.09	<.0001	0.05	627.21	749.32
G		6	820.60	29.8046	28	27.53	<.0001	0.05	759.55	881.65
G		7	794.27	29.8046	28	26.65	<.0001	0.05	733.21	855.32
G		8	713.33	29.8046	28	23.93	<.0001	0.05	652.28	774.39

Differences of Least Squares Means									
Effect	**CONDENSATION METHOD**	**GOLD ALLOW**	**CONDENSATION METHOD**	**GOLD ALLOW**	**Estimate**	**Standard Error**	**DF**	**t Value**	**Pr > |t|**
M	1		2		-0.8000	40.5772	8	-0.02	0.9848
M	1		3		149.30	40.5772	8	3.68	0.0062
M	2		3		150.10	40.5772	8	3.70	0.0061
G		1		2	12.4000	31.5334	28	0.39	0.6971
G		1		3	2.5333	31.5334	28	0.08	0.9365
G		1		4	18.2000	31.5334	28	0.58	0.5684
G		1		5	39.2000	31.5334	28	1.24	0.2241
G		1		6	-93.1333	31.5334	28	-2.95	0.0063
G		1		7	-66.8000	31.5334	28	-2.12	0.0431
G		1		8	14.1333	31.5334	28	0.45	0.6575
G		2		3	-9.8667	31.5334	28	-0.31	0.7567
G		2		4	5.8000	31.5334	28	0.18	0.8554
G		2		5	26.8000	31.5334	28	0.85	0.4026
G		2		6	-105.53	31.5334	28	-3.35	0.0023
G		2		7	-79.2000	31.5334	28	-2.51	0.0181
G		2		8	1.7333	31.5334	28	0.05	0.9566
G		3		4	15.6667	31.5334	28	0.50	0.6232
G		3		5	36.6667	31.5334	28	1.16	0.2547
G		3		6	-95.6667	31.5334	28	-3.03	0.0052
G		3		7	-69.3333	31.5334	28	-2.20	0.0363

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Differences of Least Squares Means									
Effect	CONDENSATION METHOD	GOLD ALLOW	CONDENSATION METHOD	GOLD ALLOW	Estimate	Standard Error	DF	t Value	Pr > |t|
G		3		8	11.6000	31.5334	28	0.37	0.7157
G		4		5	21.0000	31.5334	28	0.67	0.5109
G		4		6	-111.33	31.5334	28	-3.53	0.0015
G		4		7	-85.0000	31.5334	28	-2.70	0.0118
G		4		8	-4.0667	31.5334	28	-0.13	0.8983
G		5		6	-132.33	31.5334	28	-4.20	0.0002
G		5		7	-106.00	31.5334	28	-3.36	0.0023
G		5		8	-25.0667	31.5334	28	-0.79	0.4333
G		6		7	26.3333	31.5334	28	0.84	0.4107
G		6		8	107.27	31.5334	28	3.40	0.0020
G		7		8	80.9333	31.5334	28	2.57	0.0159

Differences of Least Squares Means									
Effect	CONDENSATION METHOD	GOLD ALLOW	CONDENSATION METHOD	GOLD ALLOW	Adjustment	Adj P	Alpha	Lower	Upper
M	1		2		Tukey-Kramer	0.9998	0.05	-94.3711	92.7711
M	1		3		Tukey-Kramer	0.0153	0.05	55.7289	242.87
M	2		3		Tukey-Kramer	0.0149	0.05	56.5289	243.67
G		1		2	Tukey-Kramer	0.9999	0.05	-52.1932	76.9932
G		1		3	Tukey-Kramer	1.0000	0.05	-62.0599	67.1265
G		1		4	Tukey-Kramer	0.9989	0.05	-46.3932	82.7932
G		1		5	Tukey-Kramer	0.9115	0.05	-25.3932	103.79
G		1		6	Tukey-Kramer	0.0993	0.05	-157.73	-28.5401
G		1		7	Tukey-Kramer	0.4282	0.05	-131.39	-2.2068
G		1		8	Tukey-Kramer	0.9998	0.05	-50.4599	78.7265
G		2		3	Tukey-Kramer	1.0000	0.05	-74.4599	54.7265
G		2		4	Tukey-Kramer	1.0000	0.05	-58.7932	70.3932
G		2		5	Tukey-Kramer	0.9882	0.05	-37.7932	91.3932
G		2		6	Tukey-Kramer	0.0420	0.05	-170.13	-40.9401
G		2		7	Tukey-Kramer	0.2316	0.05	-143.79	-14.6068
G		2		8	Tukey-Kramer	1.0000	0.05	-62.8599	66.3265
G		3		4	Tukey-Kramer	0.9996	0.05	-48.9265	80.2599
G		3		5	Tukey-Kramer	0.9359	0.05	-27.9265	101.26

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Differences of Least Squares Means									
Effect	**CONDENSATION METHOD**	**GOLD ALLOW**	**CONDENSATION METHOD**	**GOLD ALLOW**	**Adjustment**	**Adj P**	**Alpha**	**Lower**	**Upper**
G		3		6	Tukey-Kramer	0.0839	0.05	-160.26	-31.0735
G		3		7	Tukey-Kramer	0.3824	0.05	-133.93	-4.7401
G		3		8	Tukey-Kramer	0.9999	0.05	-52.9932	76.1932
G		4		5	Tukey-Kramer	0.9973	0.05	-43.5932	85.5932
G		4		6	Tukey-Kramer	0.0274	0.05	-175.93	-46.7401
G		4		7	Tukey-Kramer	0.1657	0.05	-149.59	-20.4068
G		4		8	Tukey-Kramer	1.0000	0.05	-68.6599	60.5265
G		5		6	Tukey-Kramer	0.0053	0.05	-196.93	-67.7401
G		5		7	Tukey-Kramer	0.0406	0.05	-170.59	-41.4068
G		5		8	Tukey-Kramer	0.9920	0.05	-89.6599	39.5265
G		6		7	Tukey-Kramer	0.9894	0.05	-38.2599	90.9265
G		6		8	Tukey-Kramer	0.0370	0.05	42.6735	171.86
G		7		8	Tukey-Kramer	0.2101	0.05	16.3401	145.53

Differences of Least Squares Means						
Effect	**CONDENSATION METHOD**	**GOLD ALLOW**	**CONDENSATION METHOD**	**GOLD ALLOW**	**Adj Lower**	**Adj Upper**
M	1		2		-116.74	115.14
M	1		3		33.3555	265.24
M	2		3		34.1555	266.04
G		1		2	-90.7211	115.52
G		1		3	-100.59	105.65
G		1		4	-84.9211	121.32
G		1		5	-63.9211	142.32
G		1		6	-196.25	9.9877
G		1		7	-169.92	36.3211
G		1		8	-88.9877	117.25
G		2		3	-112.99	93.2544
G		2		4	-97.3211	108.92
G		2		5	-76.3211	129.92
G		2		6	-208.65	-2.4123
G		2		7	-182.32	23.9211
G		2		8	-101.39	104.85

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Differences of Least Squares Means						
Effect	**CONDENSATION METHOD**	**GOLD ALLOW**	**CONDENSATION METHOD**	**GOLD ALLOW**	**Adj Lower**	**Adj Upper**
G		3		4	-87.4544	118.79
G		3		5	-66.4544	139.79
G		3		6	-198.79	7.4544
G		3		7	-172.45	33.7877
G		3		8	-91.5211	114.72
G		4		5	-82.1211	124.12
G		4		6	-214.45	-8.2123
G		4		7	-188.12	18.1211
G		4		8	-107.19	99.0544
G		5		6	-235.45	-29.2123
G		5		7	-209.12	-2.8789
G		5		8	-128.19	78.0544
G		6		7	-76.7877	129.45
G		6		8	4.1456	210.39
G		7		8	-22.1877	184.05

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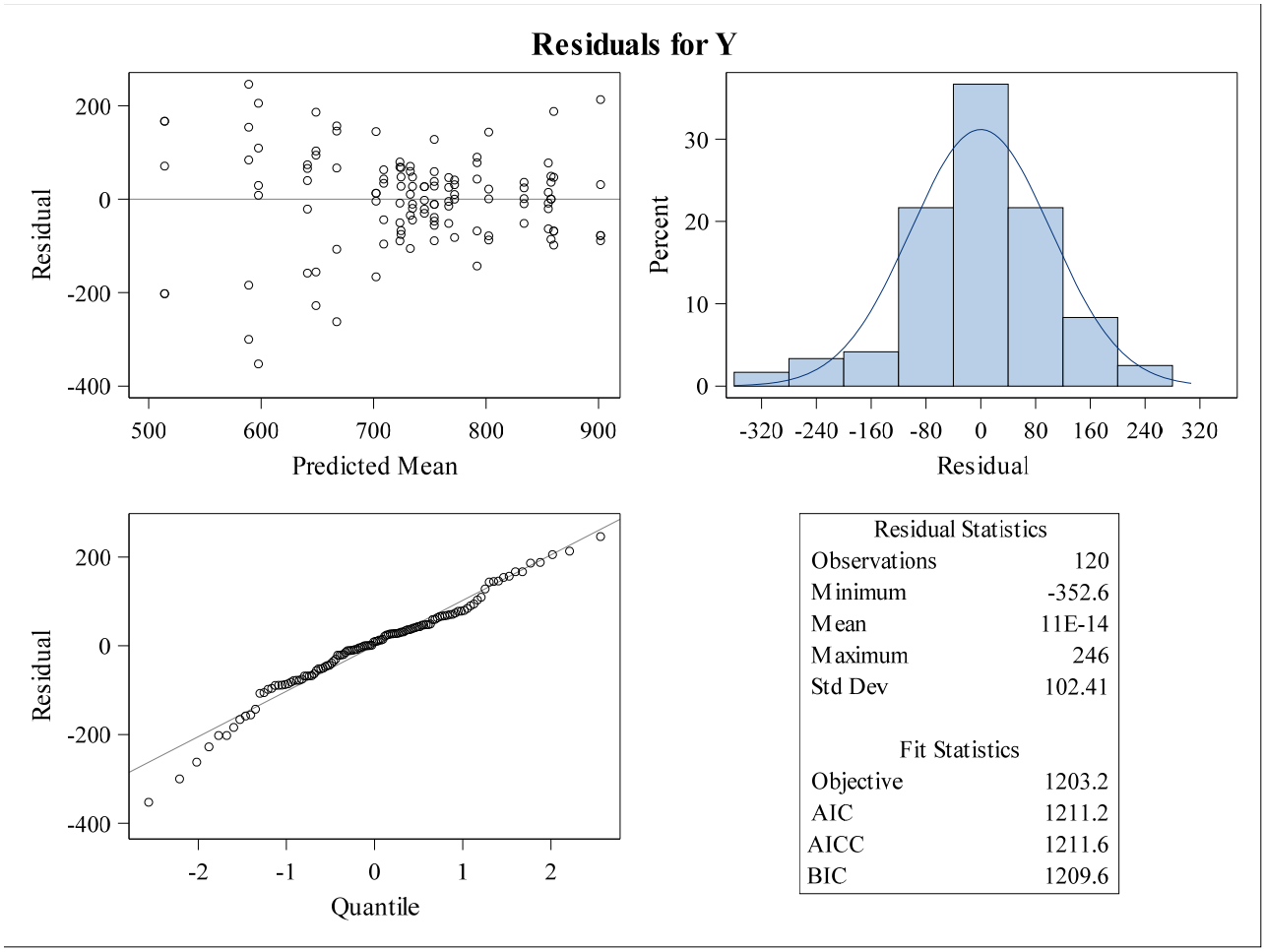

Residual Statistics	
Observations	120
Minimum	-352.6
Mean	11E-14
Maximum	246
Std Dev	102.41

Fit Statistics	
Objective	1203.2
AIC	1211.2
AICC	1211.6
BIC	1209.6

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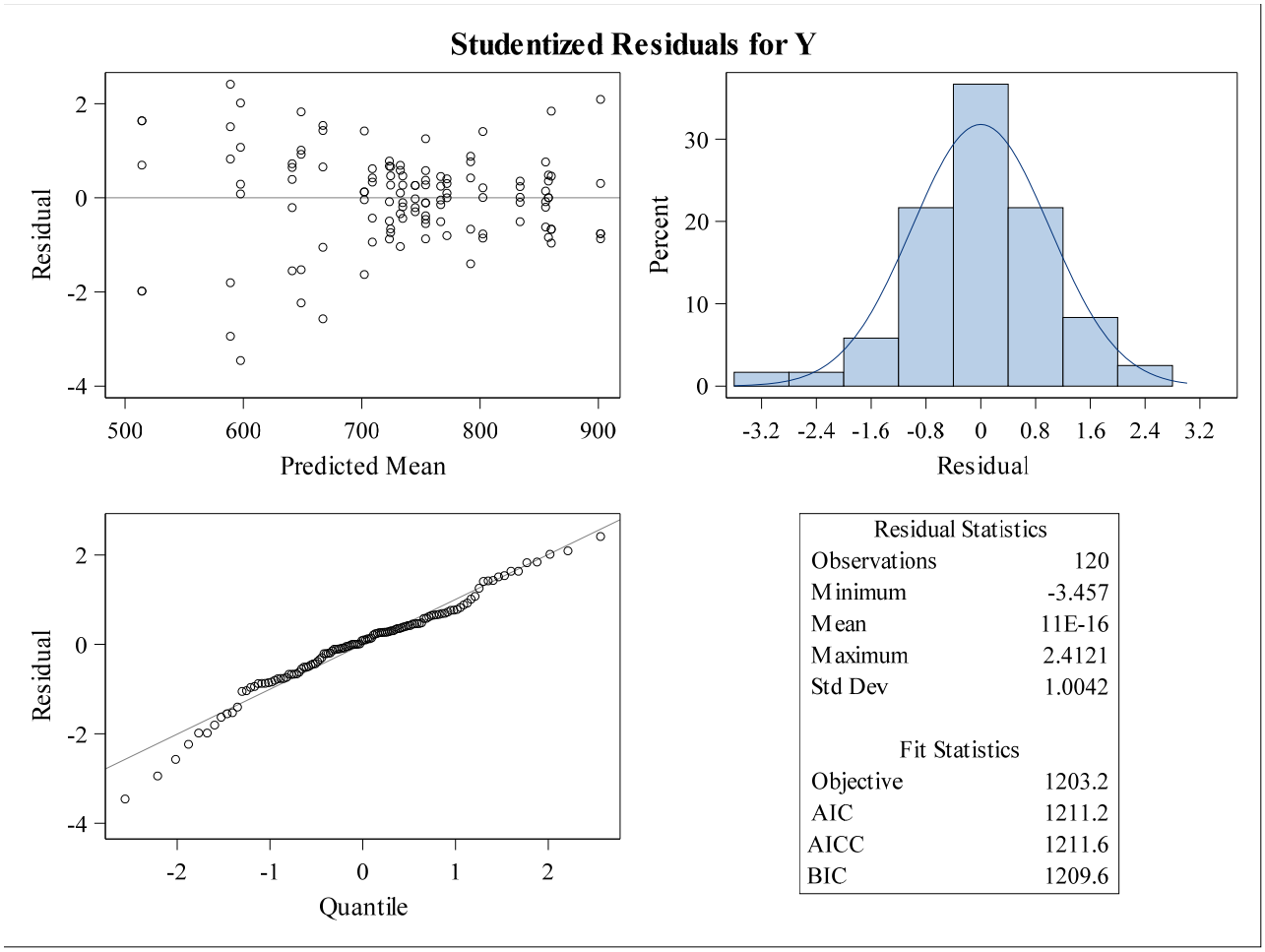

Residual Statistics	
Observations	120
Minimum	-3.457
Mean	11E-16
Maximum	2.4121
Std Dev	1.0042

Fit Statistics	
Objective	1203.2
AIC	1211.2
AICC	1211.6
BIC	1209.6

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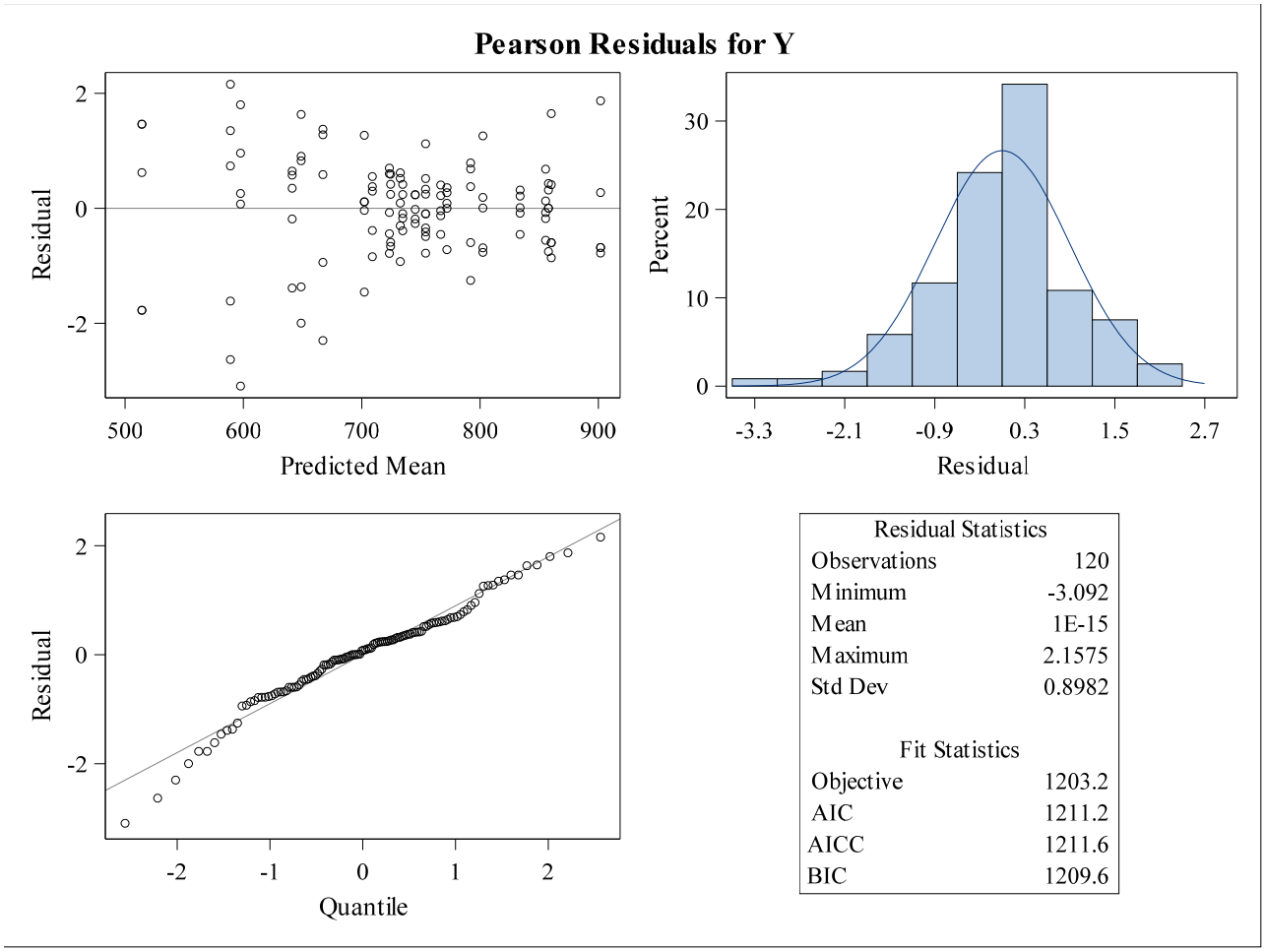

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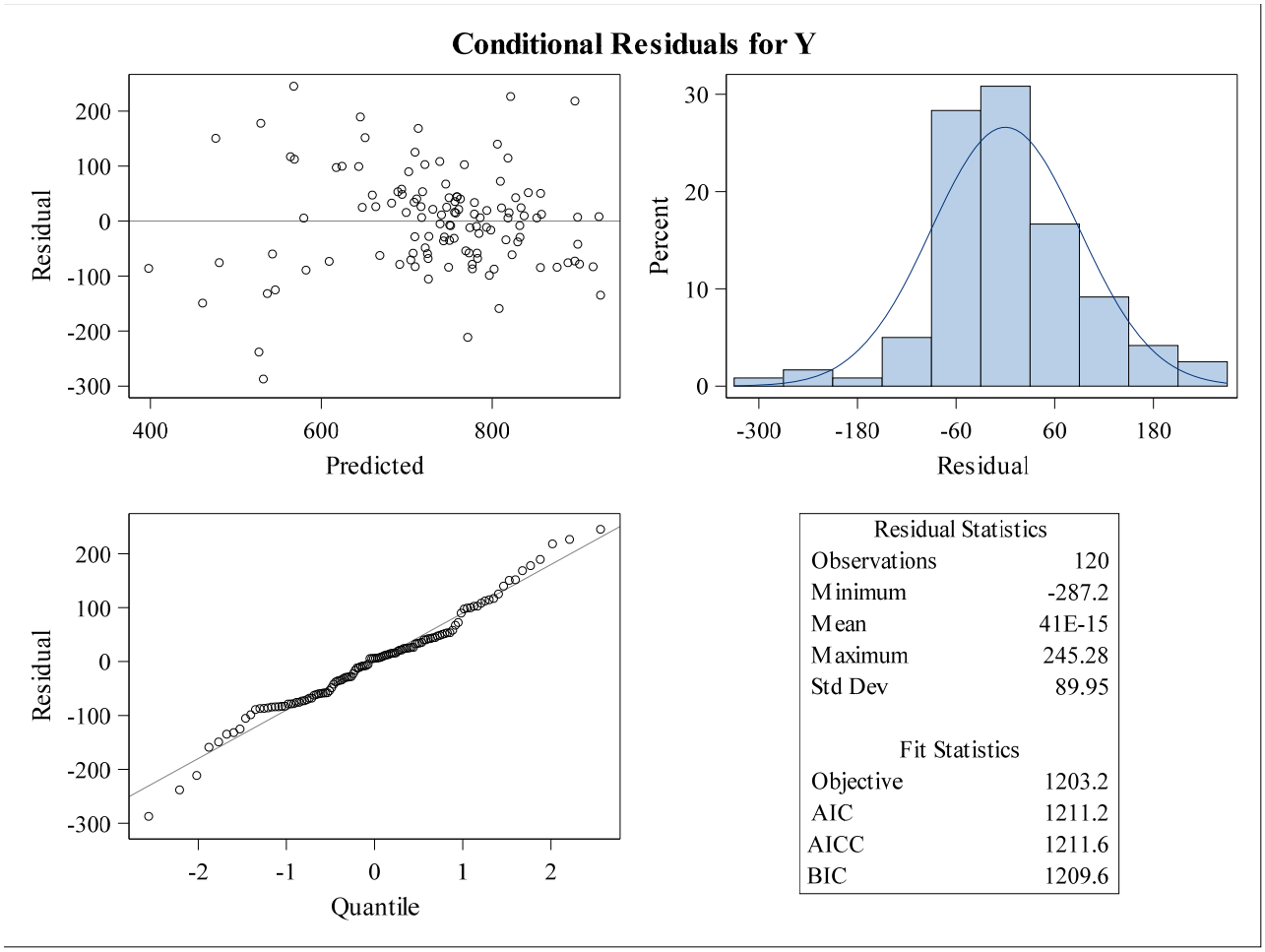
The Mixed Procedure



Residual Statistics	
Observations	120
Minimum	-287.2
Mean	41E-15
Maximum	245.28
Std Dev	89.95

Fit Statistics	
Objective	1203.2
AIC	1211.2
AICC	1211.6
BIC	1209.6

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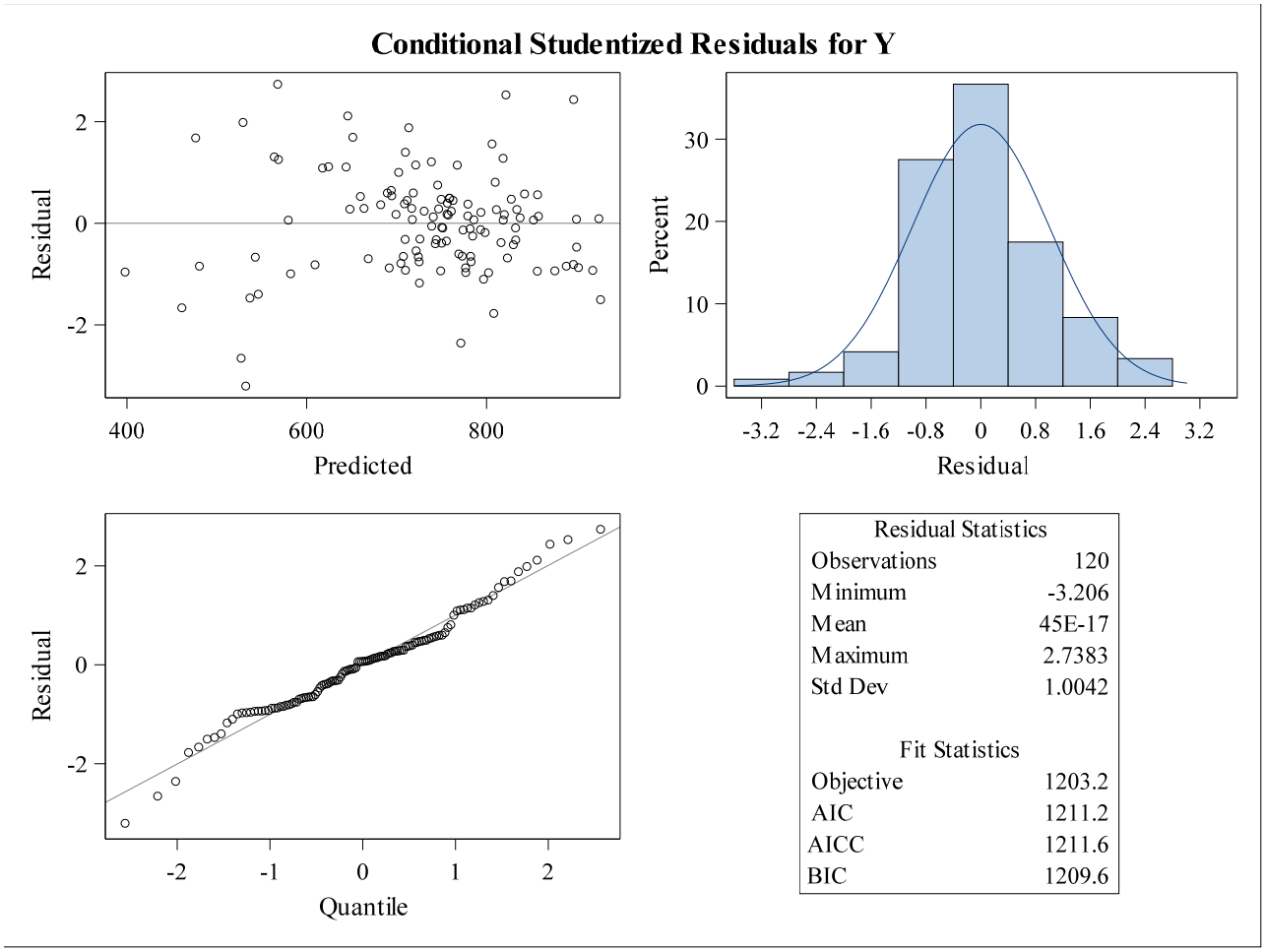
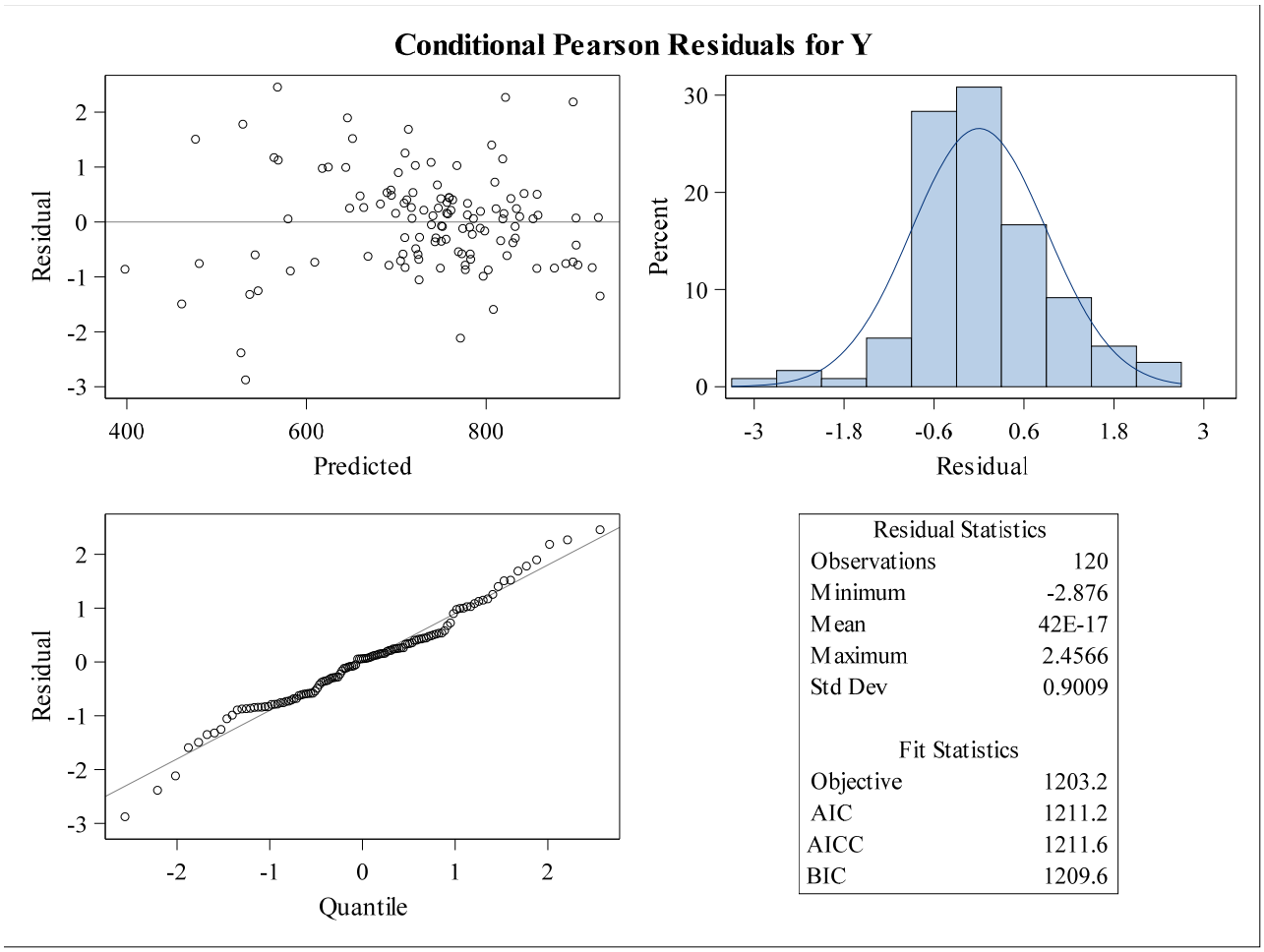


Residual Statistics	
Observations	120
Minimum	-3.206
Mean	45E-17
Maximum	2.7383
Std Dev	1.0042

Fit Statistics	
Objective	1203.2
AIC	1211.2
AICC	1211.6
BIC	1209.6

AOV - MIXED FACTOR LEVELS

The Mixed Procedure



AOV - MIXED FACTOR LEVELS

The Mixed Procedure

Model Information	
Data Set	WORK.RAW
Dependent Variable	Y
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**
D	5	1 2 3 4 5
M	3	1 2 3
G	8	1 2 3 4 5 6 7 8

Dimensions	
Covariance Parameters	4
Columns in X	36
Columns in Z	60
Subjects	1
Max Obs per Subject	120

Number of Observations	
Number of Observations Read	120
Number of Observations Used	120
Number of Observations Not Used	0

Iteration History			
Iteration	**Evaluations**	**-2 Res Log Like**	**Criterion**
0	1	1220.44921467	
1	2	1203.93606235	0.00000110
2	1	1203.93548863	0.00000000

AOV - MIXED FACTOR LEVELS

The Mixed Procedure

Convergence criteria met.

Covariance Parameter Estimates				
Cov Parm	**Estimate**	**Alpha**	**Lower**	**Upper**
D	894.69	0.05	133.33	4.1733E8
D*M	2973.69	0.05	1082.22	23204
D*G	0	.	.	.
Residual	9132.04	0.05	6895.68	12671

Fit Statistics	
-2 Res Log Likelihood	1203.9
AIC (Smaller is Better)	1209.9
AICC (Smaller is Better)	1210.2
BIC (Smaller is Better)	1208.8

Solution for Random Effects											
Effect	**DENTIST**	**CONDENSATION METHOD**	**GOLD ALLOW**	**Estimate**	**Std Err Pred**	**DF**	**t Value**	**Pr > |t|**	**Alpha**	**Lower**	**Upper**
D	1			19.0865	24.7414	56	0.77	0.4437	0.05	-30.4765	68.6496
D	2			16.9812	24.7414	56	0.69	0.4953	0.05	-32.5819	66.5442
D	3			1.7994	24.7414	56	0.07	0.9423	0.05	-47.7636	51.3625
D	4			-14.4679	24.7414	56	-0.58	0.5611	0.05	-64.0309	35.0952
D	5			-23.3993	24.7414	56	-0.95	0.3483	0.05	-72.9623	26.1638
D*M	1	1		9.4940	38.4816	56	0.25	0.8060	0.05	-67.5939	86.5819
D*M	1	2		5.4835	38.4816	56	0.14	0.8872	0.05	-71.6044	82.5714
D*M	1	3		48.4609	38.4816	56	1.26	0.2131	0.05	-28.6270	125.55
D*M	2	1		14.3575	38.4816	56	0.37	0.7105	0.05	-62.7304	91.4453
D*M	2	2		-5.5505	38.4816	56	-0.14	0.8858	0.05	-82.6384	71.5374
D*M	2	3		47.6337	38.4816	56	1.24	0.2209	0.05	-29.4542	124.72
D*M	3	1		-36.0037	38.4816	56	-0.94	0.3535	0.05	-113.09	41.0842
D*M	3	2		-16.3487	38.4816	56	-0.42	0.6726	0.05	-93.4366	60.7392
D*M	3	3		58.3333	38.4816	56	1.52	0.1352	0.05	-18.7546	135.42
D*M	4	1		7.0042	38.4816	56	0.18	0.8562	0.05	-70.0837	84.0921
D*M	4	2		9.4972	38.4816	56	0.25	0.8060	0.05	-67.5907	86.5851

AOV - MIXED FACTOR LEVELS

The Mixed Procedure

Solution for Random Effects											
Effect	**DENTIST**	**CONDENSATION METHOD**	**GOLD ALLOW**	**Estimate**	**Std Err Pred**	**DF**	**t Value**	**Pr > |t|**	**Alpha**	**Lower**	**Upper**
D*M	4	3		-64.5886	38.4816	56	-1.68	0.0988	0.05	-141.68	12.4993
D*M	5	1		5.1481	38.4816	56	0.13	0.8941	0.05	-71.9398	82.2360
D*M	5	2		6.9185	38.4816	56	0.18	0.8580	0.05	-70.1694	84.0064
D*M	5	3		-89.8393	38.4816	56	-2.33	0.0232	0.05	-166.93	-12.7514
D*G	1		1	0	.	.	.	.	.	.	.
D*G	1		2	0	.	.	.	.	.	.	.
D*G	1		3	0	.	.	.	.	.	.	.
D*G	1		4	0	.	.	.	.	.	.	.
D*G	1		5	0	.	.	.	.	.	.	.
D*G	1		6	0	.	.	.	.	.	.	.
D*G	1		7	0	.	.	.	.	.	.	.
D*G	1		8	0	.	.	.	.	.	.	.
D*G	2		1	0	.	.	.	.	.	.	.
D*G	2		2	0	.	.	.	.	.	.	.
D*G	2		3	0	.	.	.	.	.	.	.
D*G	2		4	0	.	.	.	.	.	.	.
D*G	2		5	0	.	.	.	.	.	.	.
D*G	2		6	0	.	.	.	.	.	.	.
D*G	2		7	0	.	.	.	.	.	.	.
D*G	2		8	0	.	.	.	.	.	.	.
D*G	3		1	0	.	.	.	.	.	.	.
D*G	3		2	0	.	.	.	.	.	.	.
D*G	3		3	0	.	.	.	.	.	.	.
D*G	3		4	0	.	.	.	.	.	.	.
D*G	3		5	0	.	.	.	.	.	.	.
D*G	3		6	0	.	.	.	.	.	.	.
D*G	3		7	0	.	.	.	.	.	.	.
D*G	3		8	0	.	.	.	.	.	.	.
D*G	4		1	0	.	.	.	.	.	.	.
D*G	4		2	0	.	.	.	.	.	.	.
D*G	4		3	0	.	.	.	.	.	.	.
D*G	4		4	0	.	.	.	.	.	.	.

AOV - MIXED FACTOR LEVELS

The Mixed Procedure

Solution for Random Effects											
Effect	DENTIST	CONDENSATION METHOD	GOLD ALLOW	Estimate	Std Err Pred	DF	t Value	Pr > |t|	Alpha	Lower	Upper
D*G	4		5	0	.	.	.	.	.	.	.
D*G	4		6	0	.	.	.	.	.	.	.
D*G	4		7	0	.	.	.	.	.	.	.
D*G	4		8	0	.	.	.	.	.	.	.
D*G	5		1	0	.	.	.	.	.	.	.
D*G	5		2	0	.	.	.	.	.	.	.
D*G	5		3	0	.	.	.	.	.	.	.
D*G	5		4	0	.	.	.	.	.	.	.
D*G	5		5	0	.	.	.	.	.	.	.
D*G	5		6	0	.	.	.	.	.	.	.
D*G	5		7	0	.	.	.	.	.	.	.
D*G	5		8	0	.	.	.	.	.	.	.

Type 3 Tests of Fixed Effects				
Effect	Num DF	Den DF	F Value	Pr > F
M	2	8	9.08	0.0088
G	7	28	3.45	0.0087
M*G	14	56	1.64	0.0964

not significant → we can look at marginal means => use adjusted - tukey p-vals

Least Squares Means										
Effect	CONDENSATION METHOD	GOLD ALLOW	Estimate	Standard Error	DF	t Value	Pr > |t|	Alpha	Lower	Upper
M	1		786.15	31.6540	8	24.84	<.0001	0.05	713.16	859.14
M	2		786.95	31.6540	8	24.86	<.0001	0.05	713.96	859.94
M	3		636.85	31.6540	8	20.12	<.0001	0.05	563.86	709.84
G		1	727.47	31.4004	28	23.17	<.0001	0.05	663.15	791.79
G		2	715.07	31.4004	28	22.77	<.0001	0.05	650.75	779.39
G		3	724.93	31.4004	28	23.09	<.0001	0.05	660.61	789.25
G		4	709.27	31.4004	28	22.59	<.0001	0.05	644.95	773.59
G		5	688.27	31.4004	28	21.92	<.0001	0.05	623.95	752.59
G		6	820.60	31.4004	28	26.13	<.0001	0.05	756.28	884.92

AOV - MIXED FACTOR LEVELS

The Mixed Procedure

Least Squares Means										
Effect	**CONDENSATION METHOD**	**GOLD ALLOW**	**Estimate**	**Standard Error**	**DF**	**t Value**	**Pr > |t|**	**Alpha**	**Lower**	**Upper**
G		7	794.27	31.4004	28	25.29	<.0001	0.05	729.95	858.59
G		8	713.33	31.4004	28	22.72	<.0001	0.05	649.01	777.65

Differences of Least Squares Means									
Effect	**CONDENSATION METHOD**	**GOLD ALLOW**	**CONDENSATION METHOD**	**GOLD ALLOW**	**Estimate**	**Standard Error**	**DF**	**t Value**	**Pr > |t|**
M	1		2		-0.8000	40.5719	8	-0.02	0.9848
M	1		3		149.30	40.5719	8	3.68	0.0062
M	2		3		150.10	40.5719	8	3.70	0.0060
G		1		2	12.4000	34.8942	28	0.36	0.7250
G		1		3	2.5333	34.8942	28	0.07	0.9426
G		1		4	18.2000	34.8942	28	0.52	0.6061
G		1		5	39.2000	34.8942	28	1.12	0.2708
G		1		6	-93.1333	34.8942	28	-2.67	0.0125
G		1		7	-66.8000	34.8942	28	-1.91	0.0658
G		1		8	14.1333	34.8942	28	0.41	0.6885
G		2		3	-9.8667	34.8942	28	-0.28	0.7794
G		2		4	5.8000	34.8942	28	0.17	0.8692
G		2		5	26.8000	34.8942	28	0.77	0.4489
G		2		6	-105.53	34.8942	28	-3.02	0.0053
G		2		7	-79.2000	34.8942	28	-2.27	0.0311
G		2		8	1.7333	34.8942	28	0.05	0.9607
G		3		4	15.6667	34.8942	28	0.45	0.6569
G		3		5	36.6667	34.8942	28	1.05	0.3023
G		3		6	-95.6667	34.8942	28	-2.74	0.0105
G		3		7	-69.3333	34.8942	28	-1.99	0.0568
G		3		8	11.6000	34.8942	28	0.33	0.7420
G		4		5	21.0000	34.8942	28	0.60	0.5521
G		4		6	-111.33	34.8942	28	-3.19	0.0035
G		4		7	-85.0000	34.8942	28	-2.44	0.0215
G		4		8	-4.0667	34.8942	28	-0.12	0.9081
G		5		6	-132.33	34.8942	28	-3.79	0.0007

AOV - MIXED FACTOR LEVELS

The Mixed Procedure

Differences of Least Squares Means									
Effect	CONDENSATION METHOD	GOLD ALLOW	CONDENSATION METHOD	GOLD ALLOW	Estimate	Standard Error	DF	t Value	Pr > |t|
G		5		7	-106.00	34.8942	28	-3.04	0.0051
G		5		8	-25.0667	34.8942	28	-0.72	0.4785
G		6		7	26.3333	34.8942	28	0.75	0.4568
G		6		8	107.27	34.8942	28	3.07	0.0047
G		7		8	80.9333	34.8942	28	2.32	0.0279

Differences of Least Squares Means									
Effect	CONDENSATION METHOD	GOLD ALLOW	CONDENSATION METHOD	GOLD ALLOW	Adjustment	Adj P	Alpha	Lower	Upper
M	1		2		Tukey-Kramer	0.9998	0.05	-94.3589	92.7589
M	1		3		Tukey-Kramer	0.0153	0.05	55.7411	242.86
M	2		3		Tukey-Kramer	0.0148	0.05	56.5411	243.66
G		1		2	Tukey-Kramer	1.0000	0.05	-59.0775	83.8775
G		1		3	Tukey-Kramer	1.0000	0.05	-68.9442	74.0108
G		1		4	Tukey-Kramer	0.9994	0.05	-53.2775	89.6775
G		1		5	Tukey-Kramer	0.9460	0.05	-32.2775	110.68
G		1		6	Tukey-Kramer	0.1742	0.05	-164.61	-21.6558
G		1		7	Tukey-Kramer	0.5530	0.05	-138.28	4.6775
G		1		8	Tukey-Kramer	0.9999	0.05	-57.3442	85.6108
G		2		3	Tukey-Kramer	1.0000	0.05	-81.3442	61.6108
G		2		4	Tukey-Kramer	1.0000	0.05	-65.6775	77.2775
G		2		5	Tukey-Kramer	0.9935	0.05	-44.6775	98.2775
G		2		6	Tukey-Kramer	0.0856	0.05	-177.01	-34.0558
G		2		7	Tukey-Kramer	0.3441	0.05	-150.68	-7.7225
G		2		8	Tukey-Kramer	1.0000	0.05	-69.7442	73.2108
G		3		4	Tukey-Kramer	0.9998	0.05	-55.8108	87.1442
G		3		5	Tukey-Kramer	0.9617	0.05	-34.8108	108.14
G		3		6	Tukey-Kramer	0.1517	0.05	-167.14	-24.1892
G		3		7	Tukey-Kramer	0.5076	0.05	-140.81	2.1442
G		3		8	Tukey-Kramer	1.0000	0.05	-59.8775	83.0775
G		4		5	Tukey-Kramer	0.9986	0.05	-50.4775	92.4775
G		4		6	Tukey-Kramer	0.0597	0.05	-182.81	-39.8558
G		4		7	Tukey-Kramer	0.2637	0.05	-156.48	-13.5225

AOV - MIXED FACTOR LEVELS

The Mixed Procedure

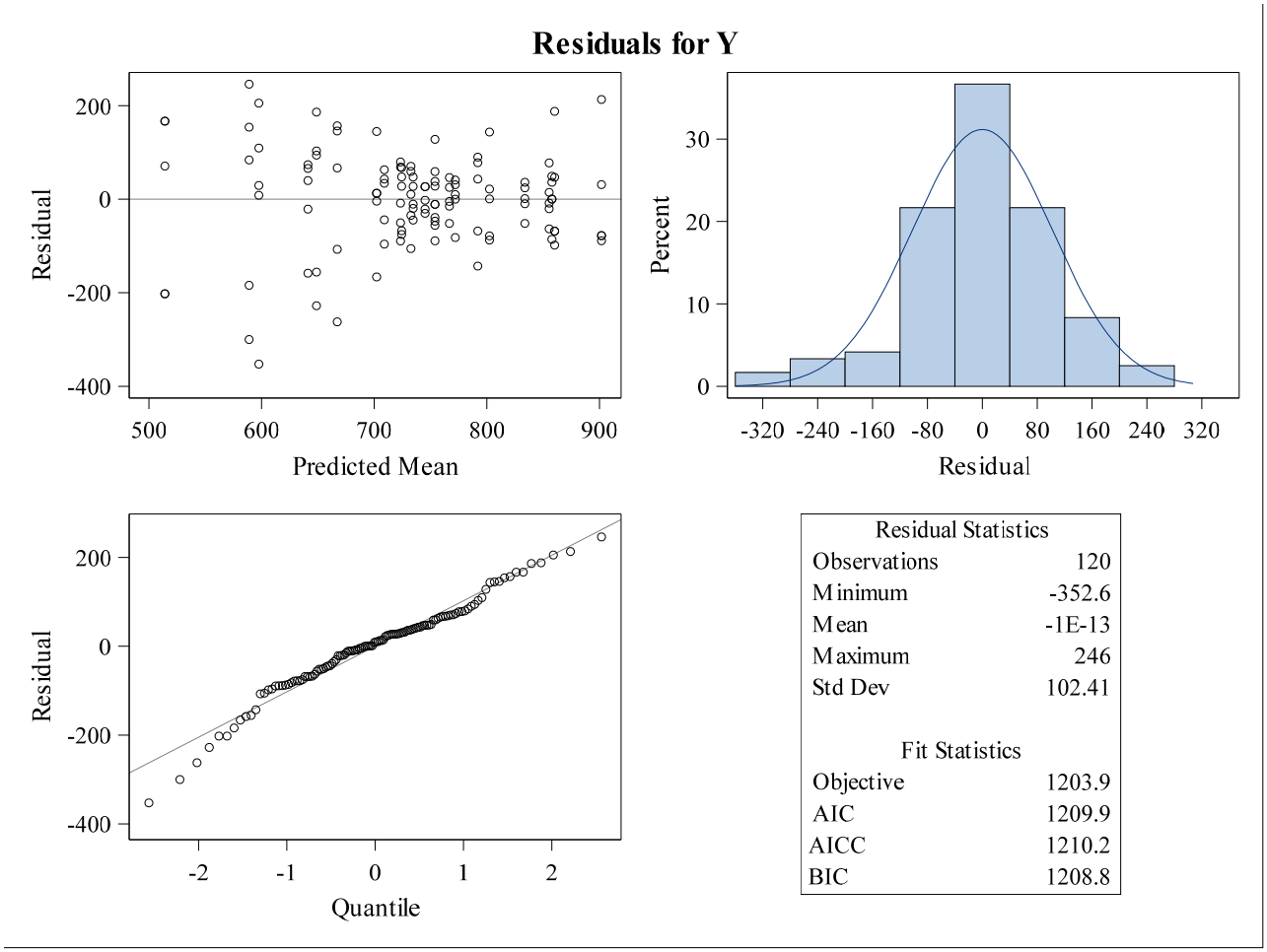
Differences of Least Squares Means									
Effect	CONDENSATION METHOD	GOLD ALLOW	CONDENSATION METHOD	GOLD ALLOW	Adjustment	Adj P	Alpha	Lower	Upper
G		4		8	Tukey-Kramer	1.0000	0.05	-75.5442	67.4108
G		5		6	Tukey-Kramer	0.0146	0.05	-203.81	-60.8558
G		5		7	Tukey-Kramer	0.0832	0.05	-177.48	-34.5225
G		5		8	Tukey-Kramer	0.9957	0.05	-96.5442	46.4108
G		6		7	Tukey-Kramer	0.9942	0.05	-45.1442	97.8108
G		6		8	Tukey-Kramer	0.0770	0.05	35.7892	178.74
G		7		8	Tukey-Kramer	0.3186	0.05	9.4558	152.41

Differences of Least Squares Means						
Effect	CONDENSATION METHOD	GOLD ALLOW	CONDENSATION METHOD	GOLD ALLOW	Adj Lower	Adj Upper
M	1		2		-116.73	115.13
M	1		3		33.3706	265.23
M	2		3		34.1706	266.03
G		1		2	-101.71	126.51
G		1		3	-111.58	116.65
G		1		4	-95.9117	132.31
G		1		5	-74.9117	153.31
G		1		6	-207.25	20.9784
G		1		7	-180.91	47.3117
G		1		8	-99.9784	128.25
G		2		3	-123.98	104.25
G		2		4	-108.31	119.91
G		2		5	-87.3117	140.91
G		2		6	-219.65	8.5784
G		2		7	-193.31	34.9117
G		2		8	-112.38	115.85
G		3		4	-98.4450	129.78
G		3		5	-77.4450	150.78
G		3		6	-209.78	18.4450
G		3		7	-183.45	44.7784
G		3		8	-102.51	125.71
G		4		5	-93.1117	135.11

AOV - MIXED FACTOR LEVELS

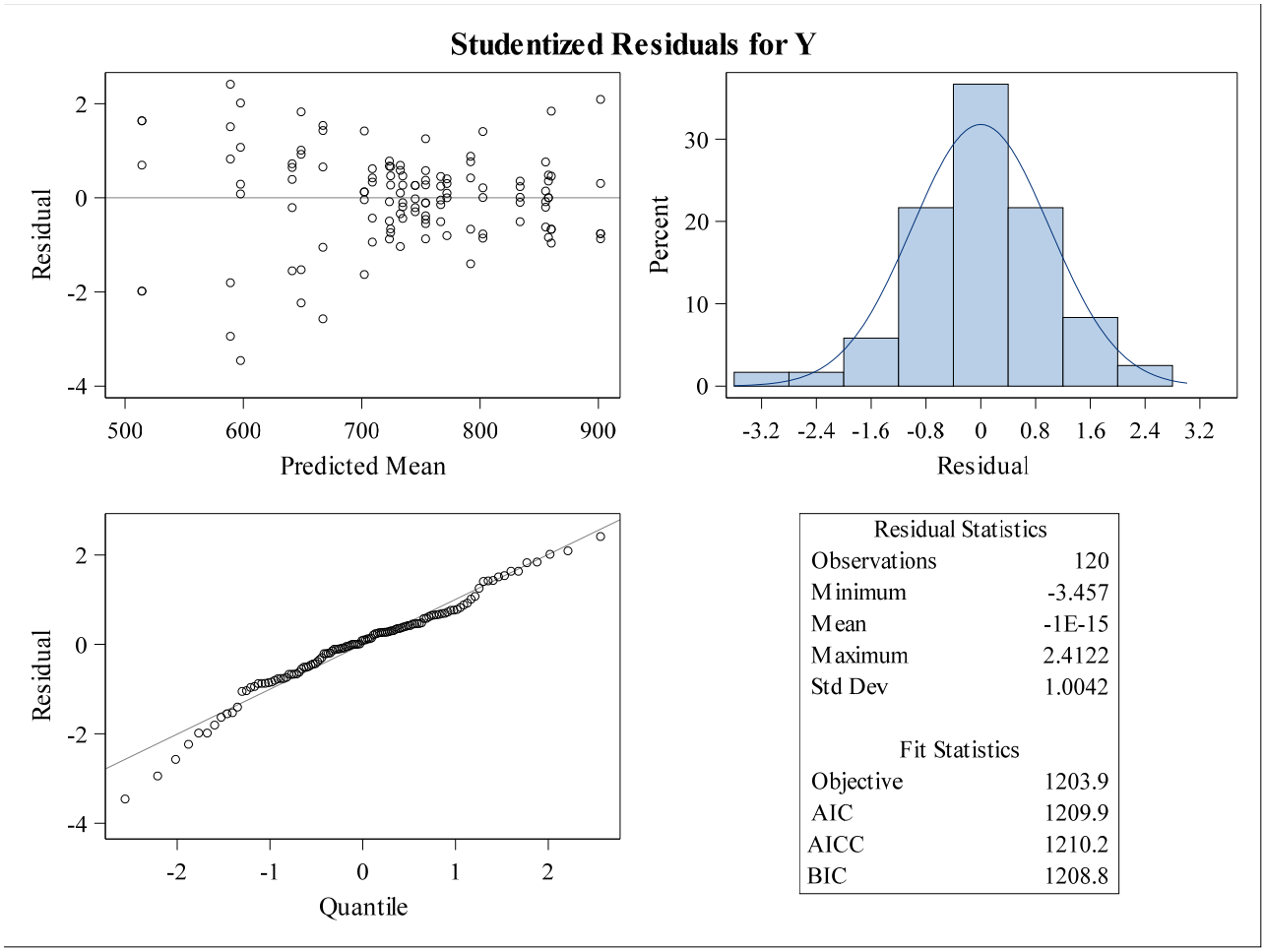
The Mixed Procedure

Differences of Least Squares Means						
Effect	**CONDENSATION METHOD**	**GOLD ALLOW**	**CONDENSATION METHOD**	**GOLD ALLOW**	**Adj Lower**	**Adj Upper**
G		4		6	-225.45	2.7784
G		4		7	-199.11	29.1117
G		4		8	-118.18	110.05
G		5		6	-246.45	-18.2216
G		5		7	-220.11	8.1117
G		5		8	-139.18	89.0450
G		6		7	-87.7784	140.45
G		6		8	-6.8450	221.38
G		7		8	-33.1784	195.05



AOV - MIXED FACTOR LEVELS

The Mixed Procedure

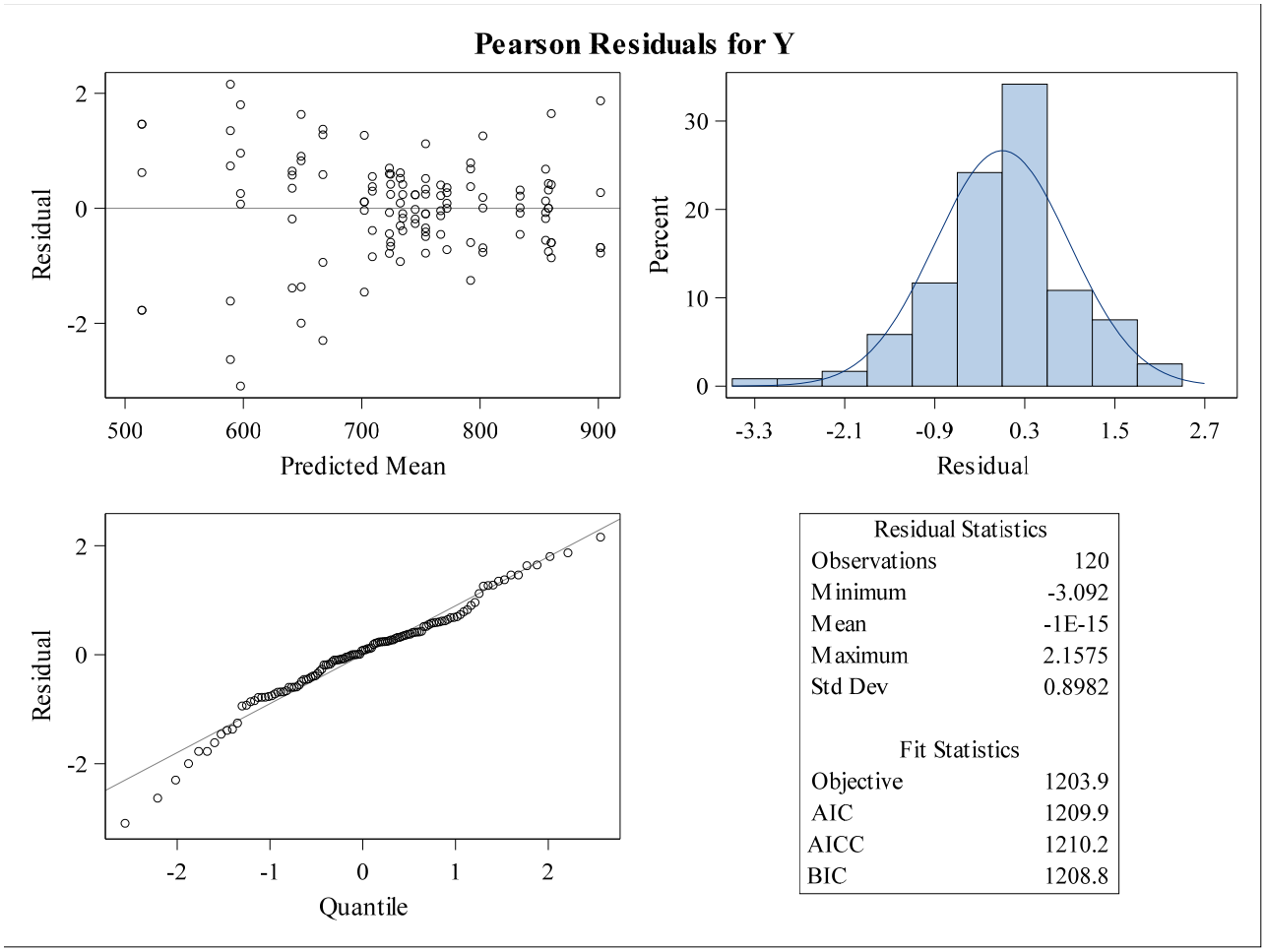


Residual Statistics	
Observations	120
Minimum	-3.457
Mean	-1E-15
Maximum	2.4122
Std Dev	1.0042

Fit Statistics	
Objective	1203.9
AIC	1209.9
AICC	1210.2
BIC	1208.8

AOV - MIXED FACTOR LEVELS

The Mixed Procedure

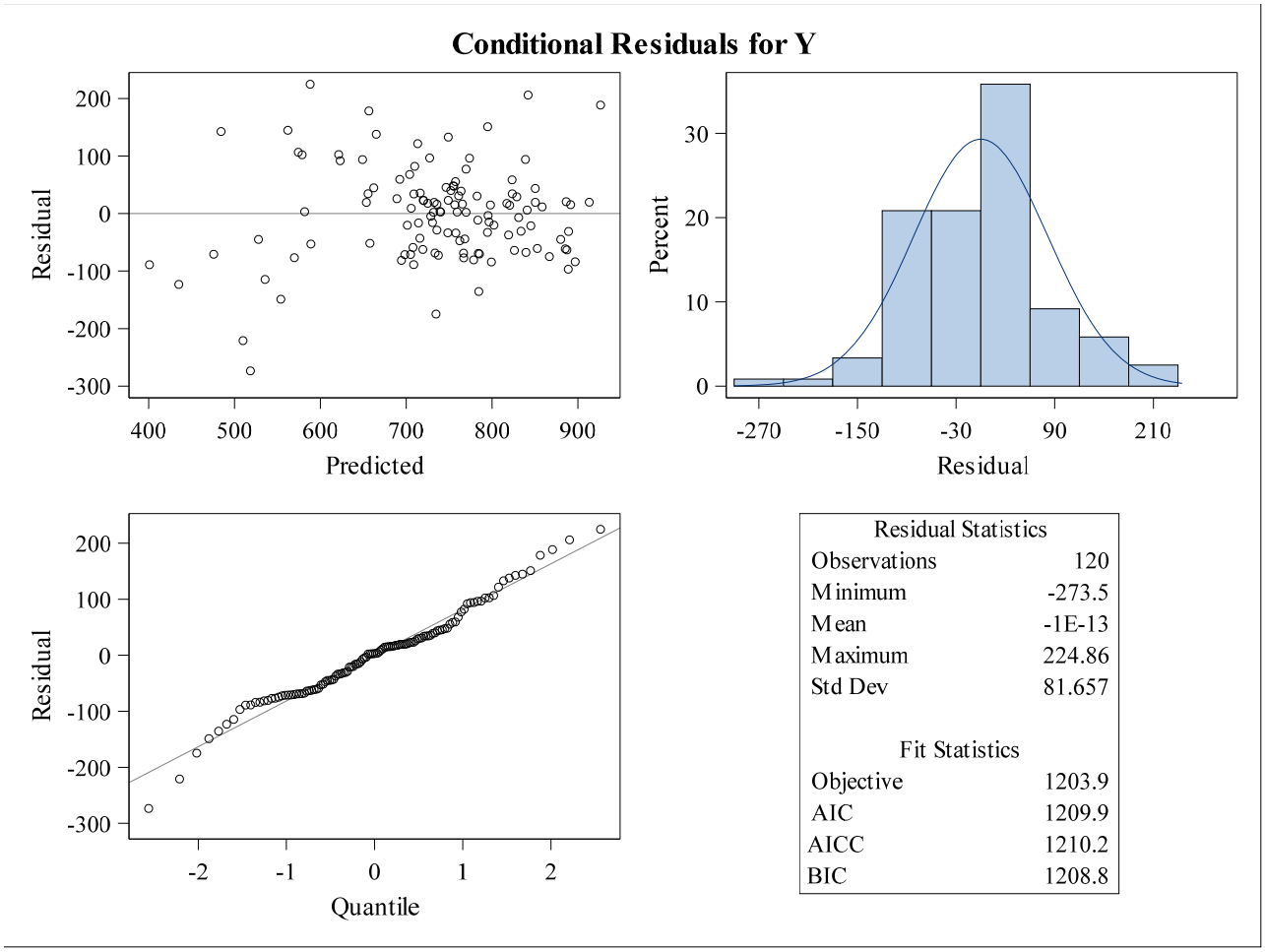


Residual Statistics	
Observations	120
Minimum	-3.092
Mean	-1E-15
Maximum	2.1575
Std Dev	0.8982

Fit Statistics	
Objective	1203.9
AIC	1209.9
AICC	1210.2
BIC	1208.8

AOV - MIXED FACTOR LEVELS

The Mixed Procedure

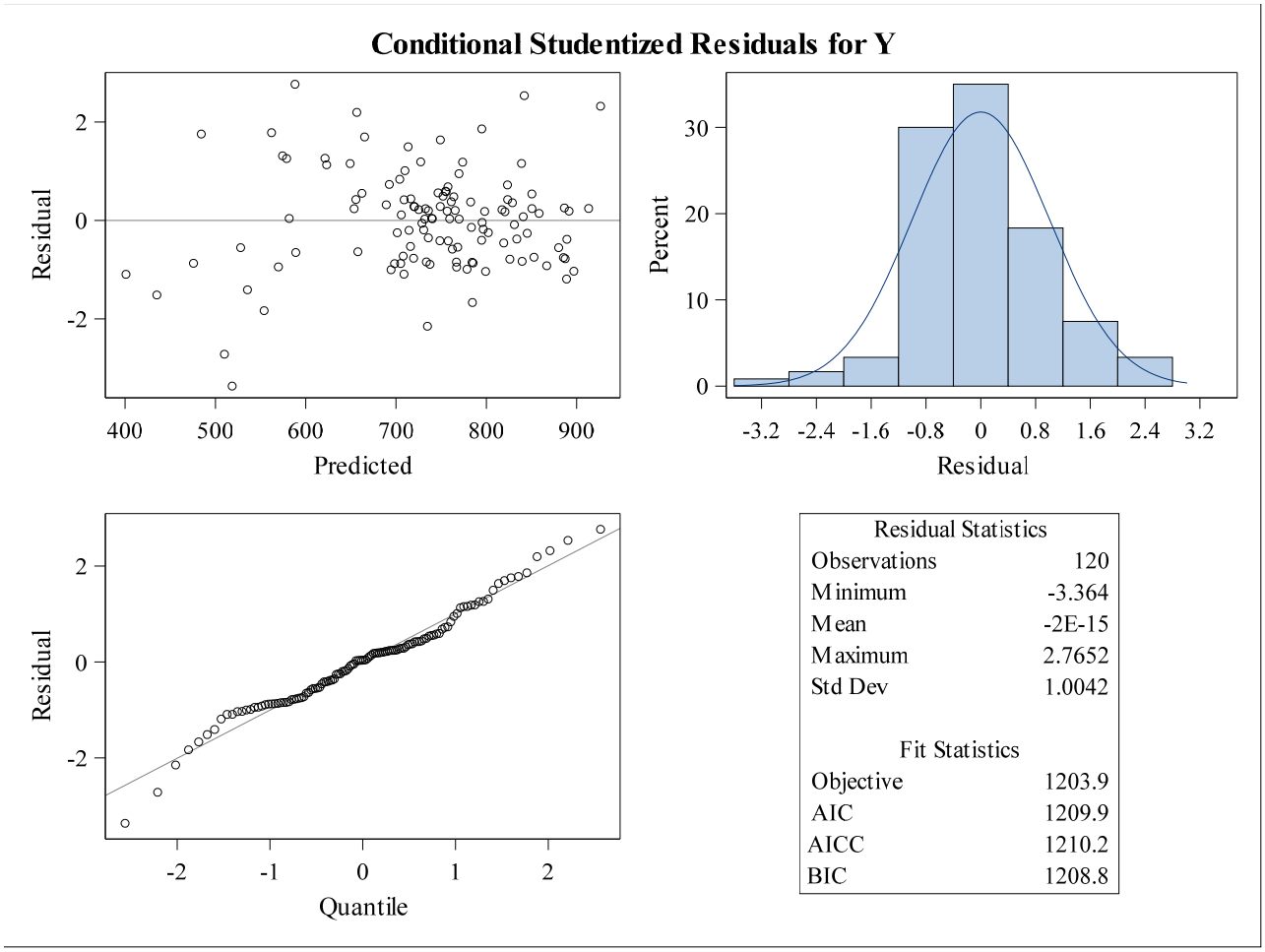


Residual Statistics	
Observations	120
Minimum	-273.5
Mean	-1E-13
Maximum	224.86
Std Dev	81.657

Fit Statistics	
Objective	1203.9
AIC	1209.9
AICC	1210.2
BIC	1208.8

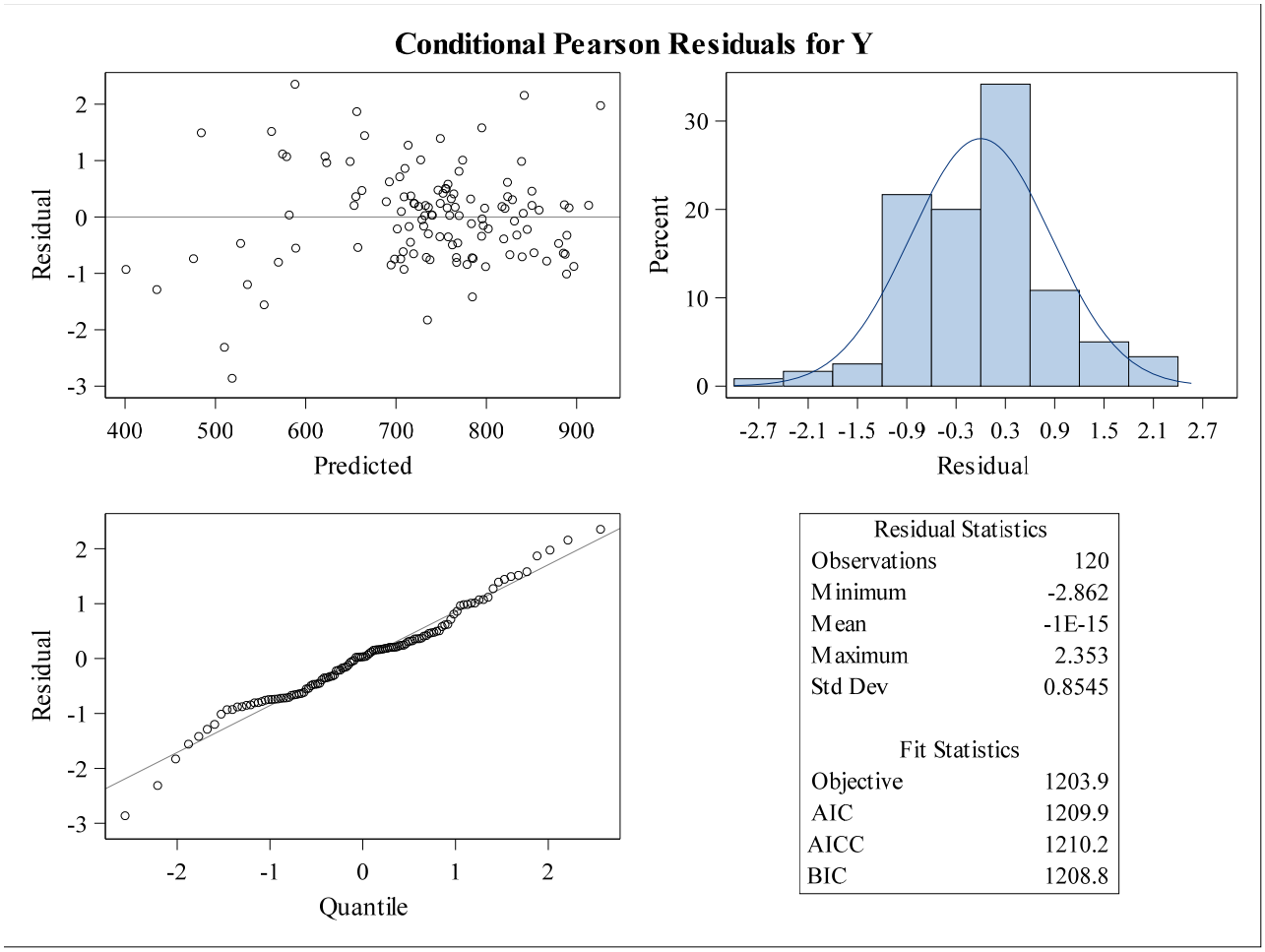
AOV - MIXED FACTOR LEVELS

The Mixed Procedure



AOV - MIXED FACTOR LEVELS

The Mixed Procedure



Residual Statistics	
Observations	120
Minimum	-2.862
Mean	-1E-15
Maximum	2.353
Std Dev	0.8545

Fit Statistics	
Objective	1203.9
AIC	1209.9
AICC	1210.2
BIC	1208.8

AOV - MIXED FACTOR LEVELS

The GLIMMIX Procedure

Model Information	
Data Set	WORK.RAW
Response Variable	Y
Response Distribution	Gaussian
Link Function	Identity
Variance Function	Default
Variance Matrix	Diagonal
Estimation Technique	Restricted Maximum Likelihood
Degrees of Freedom Method	Residual

Class Level Information		
Class	**Levels**	**Values**
D	5	1 2 3 4 5
M	3	1 2 3
G	8	1 2 3 4 5 6 7 8

Number of Observations Read	120
Number of Observations Used	120

Dimensions	
Covariance Parameters	1
Columns in X	36
Columns in Z	0
Subjects (Blocks in V)	1
Max Obs per Subject	120

Optimization Information	
Optimization Technique	None
Parameters	25
Lower Boundaries	1
Upper Boundaries	0
Fixed Effects	Not Profiled

AOV - MIXED FACTOR LEVELS

The GLIMMIX Procedure

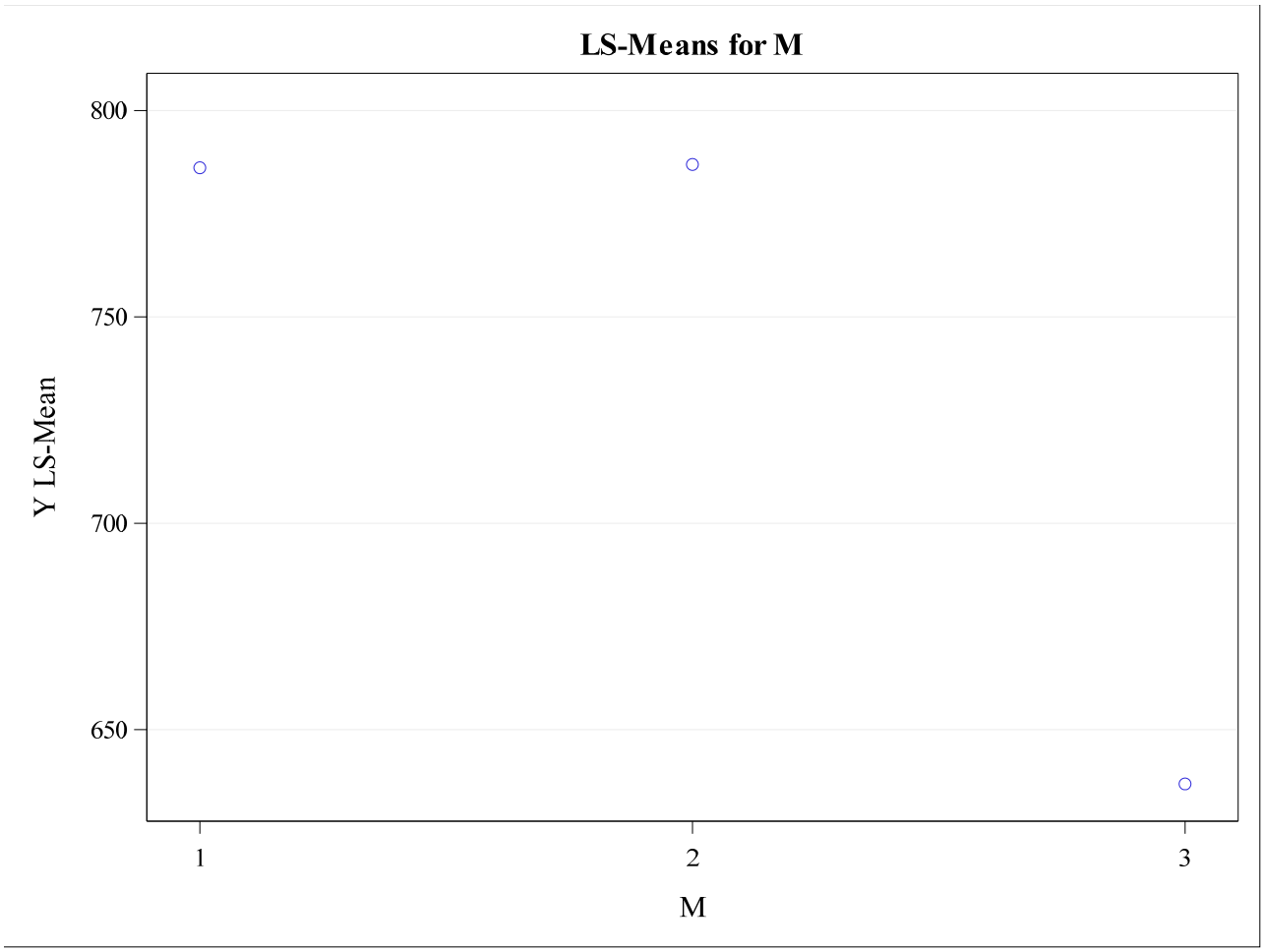
Fit Statistics	
-2 Res Log Likelihood	1220.45
AIC (smaller is better)	1270.45
AICC (smaller is better)	1289.02
BIC (smaller is better)	1334.56
CAIC (smaller is better)	1359.56
HQIC (smaller is better)	1296.36
Pearson Chi-Square	1248089
Pearson Chi-Square / DF	13000.93

Type III Tests of Fixed Effects				
Effect	**Num DF**	**Den DF**	**F Value**	**Pr > F**
M	2	96	22.98	<.0001
G	7	96	2.42	0.0251
M*G	14	96	1.15	0.3244

M Least Squares Means					
CONDENSATION METHOD	**Estimate**	**Standard Error**	**DF**	**t Value**	**Pr > |t|**
1	786.15	18.0284	96	43.61	<.0001
2	786.95	18.0284	96	43.65	<.0001
3	636.85	18.0284	96	35.32	<.0001

AOV - MIXED FACTOR LEVELS

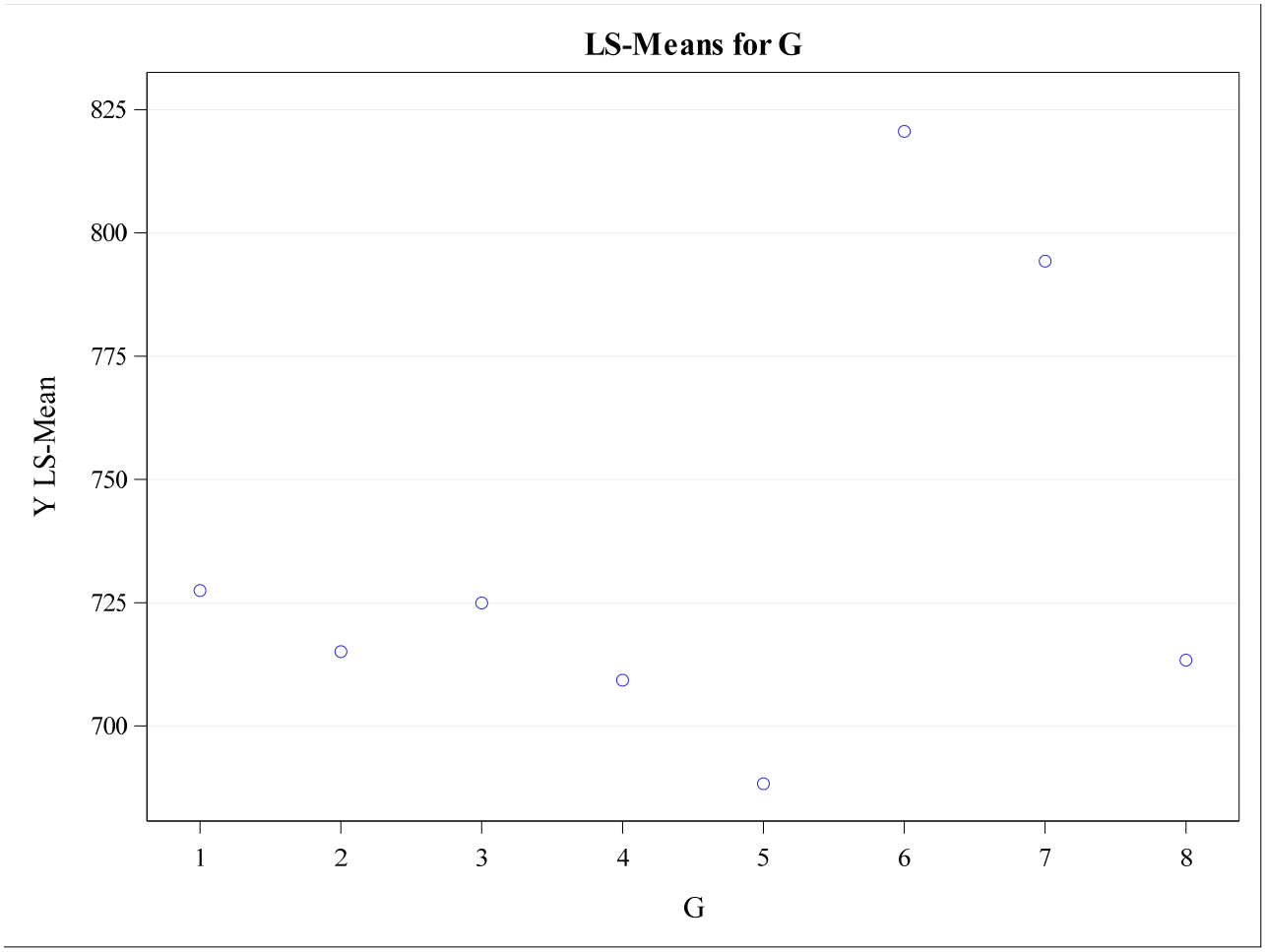
The GLIMMIX Procedure



G Least Squares Means					
GOLD ALLOW	Estimate	Standard Error	DF	t Value	Pr > |t|
1	727.47	29.4403	96	24.71	<.0001
2	715.07	29.4403	96	24.29	<.0001
3	724.93	29.4403	96	24.62	<.0001
4	709.27	29.4403	96	24.09	<.0001
5	688.27	29.4403	96	23.38	<.0001
6	820.60	29.4403	96	27.87	<.0001
7	794.27	29.4403	96	26.98	<.0001
8	713.33	29.4403	96	24.23	<.0001

AOV - MIXED FACTOR LEVELS

The GLIMMIX Procedure



M*G Least Squares Means						
CONDENSATION METHOD	GOLD ALLOW	Estimate	Standard Error	DF	t Value	Pr > |t|
1	1	723.40	50.9920	96	14.19	<.0001
1	2	802.40	50.9920	96	15.74	<.0001
1	3	754.00	50.9920	96	14.79	<.0001
1	4	732.60	50.9920	96	14.37	<.0001
1	5	766.80	50.9920	96	15.04	<.0001
1	6	857.80	50.9920	96	16.82	<.0001
1	7	860.20	50.9920	96	16.87	<.0001
1	8	792.00	50.9920	96	15.53	<.0001
2	1	724.40	50.9920	96	14.21	<.0001
2	2	745.20	50.9920	96	14.61	<.0001
2	3	772.00	50.9920	96	15.14	<.0001
2	4	754.00	50.9920	96	14.79	<.0001

AOV - MIXED FACTOR LEVELS

The GLIMMIX Procedure

M*G Least Squares Means						
CONDENSATION METHOD	GOLD ALLOW	Estimate	Standard Error	DF	t Value	Pr > |t|
2	5	709.00	50.9920	96	13.90	<.0001
2	6	901.80	50.9920	96	17.69	<.0001
2	7	855.40	50.9920	96	16.78	<.0001
2	8	833.80	50.9920	96	16.35	<.0001
3	1	734.60	50.9920	96	14.41	<.0001
3	2	597.60	50.9920	96	11.72	<.0001
3	3	648.80	50.9920	96	12.72	<.0001
3	4	641.20	50.9920	96	12.57	<.0001
3	5	589.00	50.9920	96	11.55	<.0001
3	6	702.20	50.9920	96	13.77	<.0001
3	7	667.20	50.9920	96	13.08	<.0001
3	8	514.20	50.9920	96	10.08	<.0001