

The GLIMMIX Procedure

Model Information	
Data Set	WORK.ATEL
Response Variable	Value
Response Distribution	Multinomial (ordered)
Link Function	Cumulative Logit
Variance Function	Default
Variance Matrix Blocked By	newID
Estimation Technique	Maximum Likelihood
Likelihood Approximation	Gauss-Hermite Quadrature
Degrees of Freedom Method	Containment

Class Level Information		
Class	Levels	Values
Attribute	6	LLL LLS LUS RLL RML RUL
rater	2	JW VH

Number of Observations Read	1464
Number of Observations Used	1464

Response Profile		
Ordered Value	Value	Total Frequency
1	0	1140
2	1	236
3	2	36
4	3	52
The GLIMMIX procedure is modeling the probabilities of levels of Value having lower Ordered Values in the Response Profile table.		

Dimensions	
G-side Cov. Parameters	2
Columns in X	9
Columns in Z per Subject	3
Subjects (Blocks in V)	244
Max Obs per Subject	6

Optimization Information	
Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	10
Lower Boundaries	2
Upper Boundaries	0
Fixed Effects	Not Profiled
Starting From	GLM estimates
Quadrature Points	5

Iteration History					
Iteration	Restarts	Evaluations	Objective Function	Change	Max Gradient
0	0	4	1734.4263044	.	165.4547
1	0	159	1734.173513	0.25279135	31.48256
2	0	4	1718.1920986	15.98141445	50.76615
3	0	2	1705.9076247	12.28447393	27.20242
4	0	3	1703.3553543	2.55227040	14.50086
5	0	2	1702.6294947	0.72585952	16.37933
6	0	4	1700.8061264	1.82336833	10.04842
7	0	3	1700.3986605	0.40746587	4.398075
8	0	2	1700.1490872	0.24957330	5.259556
9	0	2	1699.7590385	0.39004875	1.039737
10	0	3	1699.7064046	0.05263387	0.490113
11	0	3	1699.6987155	0.00768908	0.42138
12	0	3	1699.6977244	0.00099115	0.225626
13	0	2	1699.6976491	0.00007533	0.270437
14	0	4	1699.6971762	0.00047283	0.217429
15	0	6	1699.669657	0.02751919	0.102281
16	0	3	1699.6685899	0.00106718	0.332742
17	0	4	1699.664562	0.00402791	0.204922
18	0	3	1699.6641655	0.00039645	0.052385

Iteration History					
Iteration	Restarts	Evaluations	Objective Function	Change	Max Gradient
19	0	3	1699.6641536	0.00001188	0.001812
20	0	3	1699.6641534	0.00000018	0.000042

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

Fit Statistics	
-2 Log Likelihood	1699.66
AIC (smaller is better)	1719.66
AICC (smaller is better)	1719.82
BIC (smaller is better)	1754.64
CAIC (smaller is better)	1764.64
HQIC (smaller is better)	1733.75

Fit Statistics for Conditional Distribution	
-2 log L(Value   r. effects)	1367.82

Covariance Parameter Estimates			
Cov Parm	Subject	Estimate	Standard Error
Intercept	newID	1.2310	3.1118
rater	newID	0.5291	3.0985

Solutions for Fixed Effects							
Effect	Value	Attribute	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept	0		2.1370	0.2227	0	9.60	.
Intercept	1		4.2416	0.2747	0	15.44	.
Intercept	2		4.9399	0.2993	0	16.51	.
Attribute		LLL	0.8485	0.3056	1213	2.78	0.0056
Attribute		LLS	-1.7627	0.2391	1213	-7.37	<.0001
Attribute		LUS	0.9793	0.3190	1213	3.07	0.0022
Attribute		RLL	1.0936	0.3233	1213	3.38	0.0007
Attribute		RML	-2.2084	0.2466	1213	-8.96	<.0001
Attribute		RUL	0	.	.	.	.

Type III Tests of Fixed Effects				
Effect	Num DF	Den DF	F Value	Pr > F
Attribute	5	1213	46.97	<.0001

Estimates								
Label	Estimate	Standard Error	DF	t Value	Pr >  t	Alpha	Lower	Upper
RUL vs. RML	-2.2084	0.2466	1213	-8.96	<.0001	0.05	-2.6922	-1.7245
RUL vs. RLL	1.0936	0.3233	1213	3.38	0.0007	0.05	0.4593	1.7278
RUL vs. LUS	0.9793	0.3190	1213	3.07	0.0022	0.05	0.3535	1.6052
RUL vs. LLS	-1.7627	0.2391	1213	-7.37	<.0001	0.05	-2.2318	-1.2936
RUL vs. LLL	0.8485	0.3056	1213	2.78	0.0056	0.05	0.2489	1.4480
RML vs. RLL	3.3020	0.3162	1213	10.44	<.0001	0.05	2.6816	3.9223
RML vs. LUS	3.1877	0.3087	1213	10.33	<.0001	0.05	2.5821	3.7933
RML vs. LLS	0.4457	0.1922	1213	2.32	0.0205	0.05	0.06866	0.8226
RML vs. LLL	3.0568	0.2965	1213	10.31	<.0001	0.05	2.4750	3.6386
RML vs. RUL	2.2084	0.2466	1213	8.96	<.0001	0.05	1.7245	2.6922
RLL vs. LUS	-0.1143	0.3678	1213	-0.31	0.7561	0.05	-0.8359	0.6074
RLL vs. LLS	-2.8563	0.3084	1213	-9.26	<.0001	0.05	-3.4613	-2.2513
RLL vs. LLL	-0.2451	0.3554	1213	-0.69	0.4906	0.05	-0.9425	0.4523
LUS vs. LLS	-2.7420	0.3014	1213	-9.10	<.0001	0.05	-3.3334	-2.1507
LUS vs. LLL	-0.1309	0.3525	1213	-0.37	0.7105	0.05	-0.8225	0.5608
LLS vs. LLL	2.6112	0.2886	1213	9.05	<.0001	0.05	2.0450	3.1774

Significant Pairwise Comparisons for atel

Comparison	P-Value	Exponentiated Estimate (Odds Ratio)
RUL vs. RML	<.0001	0.1099
RUL vs. RLL	0.0007	2.9850
RUL vs. LUS	0.0022	2.6627

Comparison	P-Value	Exponentiated Estimate (Odds Ratio)
RUL vs. LLS	<.0001	0.1716
RUL vs. LLL	0.0056	2.3361
RML vs. RLL	<.0001	27.1656
RML vs. LUS	<.0001	24.2326
RML vs. LLS	0.0205	1.5615
RML vs. LLL	<.0001	21.2603
RML vs. RUL	<.0001	9.1008
RLL vs. LLS	<.0001	0.0575
LUS vs. LLS	<.0001	0.0644
LLS vs. LLL	<.0001	13.6152