

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 |