# The GLIMMIX Procedure

| Model Information | |
|---|---|
| **Data Set** | WORK.NONTARGET_YEARS12 |
| **Response Variable** | NonTarget |
| **Response Distribution** | Poisson |
| **Link Function** | Log |
| **Variance Function** | Default |
| **Variance Matrix** | Not blocked |
| **Estimation Technique** | Residual PL |
| **Degrees of Freedom Method** | Satterthwaite |

| Class Level Information | | |
|---|---|---|
| **Class** | **Levels** | **Values** |
| **Site** | 11 | Bowman Cretsinger Elkader Greving Kaldenberg McClellan NealSmith Peckumn Plunkett Sheller Sloan |
| **Year** | 2 | 1 2 |

| | |
|---|---|
| **Number of Observations Read** | 20 |
| **Number of Observations Used** | 20 |

| Dimensions | |
|---|---|
| **G-side Cov. Parameters** | 1 |
| **Columns in X** | 6 |
| **Columns in Z** | 11 |
| **Subjects (Blocks in V)** | 1 |
| **Max Obs per Subject** | 20 |

| Optimization Information | |
|---|---|
| **Optimization Technique** | Dual Quasi-Newton |
| **Parameters in Optimization** | 1 |
| **Lower Boundaries** | 1 |
| **Upper Boundaries** | 0 |
| **Fixed Effects** | Profiled |
| **Starting From** | Data |

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| Iteration History | | | | | |
|---|---|---|---|---|---|
| Iteration | Restarts | Subiterations | Objective Function | Change | Max Gradient |
| 0 | 0 | 4 | 89.052460019 | 0.19956158 | 3.139E-8 |
| 1 | 0 | 1 | 91.484181594 | 0.01341221 | 9.886E-7 |
| 2 | 0 | 1 | 91.588353758 | 0.00008081 | 9.154E-8 |
| 3 | 0 | 0 | 91.588681306 | 0.00000000 | 3.492E-6 |

Convergence criterion (PCONV=1.11022E-8) satisfied.

| Fit Statistics | |
|---|---|
| -2 Res Log Pseudo-Likelihood | 91.59 |
| Generalized Chi-Square | 53.25 |
| Gener. Chi-Square / DF | 3.33 |

| Covariance Parameter Estimates | | |
|---|---|---|
| Cov Parm | Estimate | Standard Error |
| Site | 1.5477 | 0.7501 |

| Solutions for Fixed Effects | | | | | | |
|---|---|---|---|---|---|---|
| Effect | Year | Estimate | Standard Error | DF | t Value | Pr > |t| |
| Intercept | | 3.1024 | 0.4236 | 13.53 | 7.32 | <.0001 |
| PercentCover | | 0.02886 | 0.01542 | 16 | 1.87 | 0.0797 |
| Year | 1 | -0.7863 | 0.2706 | 16 | -2.91 | 0.0103 |
| Year | 2 | 0 | . | . | . | . |
| PercentCover*Year | 1 | 0.06995 | 0.02430 | 16 | 2.88 | 0.0109 |
| PercentCover*Year | 2 | 0 | . | . | . | . |

| Type III Tests of Fixed Effects | | | | |
|---|---|---|---|---|
| Effect | Num DF | Den DF | F Value | Pr > F |
| PercentCover | 1 | 16 | 16.80 | 0.0008 |
| Year | 1 | 16 | 8.44 | 0.0103 |
| PercentCover*Year | 1 | 16 | 8.29 | 0.0109 |

**The GLIMMIX Procedure**



Conditional Studentized Residuals