Errata

Generalized Linear Models for Insurance Rating, 2nd Edition (2025 revision)

Date Approved: 1/28/2026

In the corrections below, the **boldface text** indicates the corrected wording.

Page 33

Top of page, under 3.4. Conducting Exploratory Data Analysis
- "Plotting each **predictor variable** versus the target variable to see what (if any) relationship exists. For continuous variables, such plots may help inform decisions on variable transformations."
- "Plotting continuous **predictor** variables versus each other, to see the correlation between them."

Under 3.5 Specifying Model Form
- "What is the target variable, and which **predictor** variables should be included?"
- "Should transformations be applied to the target variable or to any of the **predictor** variables?"

Page 65

6th paragraph

"How much greater than 1 is significant? Statistical theory says that the *F*-statistic follows an *F* distribution, with a numerator degrees of freedom equal to the number of added parameters and a denominator degrees of freedom equal to $n - p_B$, or the number of records minus the number of parameters in the big model. **Note, however, that we do not count the dispersion parameter as a parameter when calculating the denominator degrees of freedom for the *F*-test.** If the percentile of the *F*-statistic on the *F* distribution is sufficiently high, we may conclude that the added parameters are indeed significant."

7th paragraph

"As an example, suppose the auto GLM we built on 972 rows of data with **4** parameters yields an unscaled deviance of 365.8 and an estimated dispersion parameter of 1.42."

Page 66

2nd paragraph

"To assess the significance of this value, we compare it against an F distribution with 4 numerator degrees of freedom and 972 – **7 (3 original parameters not counting the dispersion parameter + 4 added parameters)** = **965** denominator degrees of freedom. An F distribution with those parameters has 2.412 at its 95.2 percentile, indicating a 4.8% probability of a drop in deviance of this magnitude arising by pure chance. As such, rating territory is found to be significant at the 95% significance level."

5th paragraph

"…where p is the number of parameters in the model.*"

[Add new footnote to this sentence.]

*Note that for AIC and BIC, unlike for the F-test, some GLM implementations, including R's glm(), count the dispersion parameter as an additional parameter when it is estimated, whereas others do not.

Page 96

Under 10.1. Generalized Linear Mixed Models (GLMMs)

End of the 2nd paragraph

"Thus, the GLMM is a useful means of introducing ~~classical~~ credibility concepts into a GLM for multi-level categorical variables.[23]"

Footnote 23

"[23]See Klinker (2011a) for a more detailed discussion on the relationship between ~~classical~~ credibility and GLMMs."