

ERRATA  
**Actuarial Statistics with R: Theory and Case Studies**

Page 47, section 3.4 heading, should be Ordinary Least Squares Estimation

Page 48, equation 3.10, replace  $\mathbf{X}\beta$  with  $\mathbf{X}\hat{\beta}$

Page 102, Table 6.1, The Density for Gamma Distribution should be  $\frac{1}{\lambda^\alpha \Gamma(\alpha)} y^{\alpha-1} e^{-y/\lambda}$

Page 102, Table 6.2, For Gamma Distribution,  $\theta = -\frac{1}{\lambda\alpha}$ ,  $b(\theta) = -\ln(-\theta)$ , and  $S(y, \phi) = -\frac{1}{\phi} \ln\left(\frac{1}{\phi}\right) - \ln \Gamma\left(\frac{1}{\phi}\right) + \left(\frac{1}{\phi} - 1\right) \ln y$

Page 104, Table 6.3, The canonical link function for the Gamma Distribution should be the inverse function  $\frac{1}{\mu}$ . The minus sign may be ignored since constants are usually omitted in the canonical link function.

Page 104, itemize (a) replace  $x_{in}$  with  $x_{ik}$

Page 106, line following equation 6.13, leave a space between “the” and “**maximum**”.

Page 109, the two equations below Equation (6.22) should be

$$L_{max} = \sum_{i=1}^n \ln f(y_i; \theta_{i,Sat}, \phi),$$

$$\frac{\partial}{\partial \theta_i} \ln f(y_i; \theta_i, \phi) = \frac{y_i - b'(\theta_i)}{\phi} = 0.$$

Page 120, equation 7.4, replace the standard normal distribution with  $\Phi(z) = \int_{-\infty}^z \frac{1}{\sqrt{2\pi}} e^{-x^2/2} dx$

Page 141, **Exercise 8.5**, 5th line, Replace “For a portfolio for a 3-year development period” with “For a portfolio with a 3-year development period”

Page 165, line 3, Replace “will close to zero” with “will be close to zero”

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