

Errata

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Thanks to: Chi Hing Ho, Gerardo Hurtado, Juvêncio Santos Nobre, Misha Salganik, Gang Chen, Jun Han.

1. p. 688. Typo in the reference: Rice, J.A. (1995). *Mathematical Statistics and Data Analysis*, 2nd ed. Belmont, CA: Duxbury Press. Should be: Rice, J.A. (1995). *Mathematical Statistics and Data Analysis*, 2nd ed. Belmont, CA: Duxbury Press.
2. p. 54. In the 10th line from the top instead $\mathbf{Z}_i^+ = (\mathbf{Z}_i' \mathbf{Z}_i)^{-1} \mathbf{Z}_i$ it should be $\mathbf{Z}_i^+ = (\mathbf{Z}_i' \mathbf{Z}_i)^{-1} \mathbf{Z}_i'$.
3. p. 59. \mathbf{V}^{-1} is missing in the second displayed equation from the bottom and equation (2.46). Thus they should be

$$l(\hat{\mathbf{e}}, \boldsymbol{\theta}) = -\frac{1}{2} [\ln |\mathbf{X}' \mathbf{V}^{-1} \mathbf{X}| + \ln |\mathbf{V}| + \hat{\mathbf{e}}' \mathbf{V}^{-1} \hat{\mathbf{e}}].$$

and

$$l_R(\boldsymbol{\beta}, \boldsymbol{\theta}) = -\frac{1}{2} [\ln |\mathbf{X}' \mathbf{V}^{-1} \mathbf{X}| + \ln |\mathbf{V}| + (\mathbf{y} - \mathbf{X} \boldsymbol{\beta})' \mathbf{V}^{-1} (\mathbf{y} - \mathbf{X} \boldsymbol{\beta})]$$

4. p. 66. In the second line from the bottom instead i th row it should be j th row.
5. p. 67. In the second displayed equation from the bottom instead m it should be n_i .
6. p. 80. The first displayed equation with $|\hat{\mathbf{D}}_{ML}|$ is incorrect. It should be

$$|\hat{\mathbf{D}}_{ML}| \leq \exp \left(\frac{N_T}{N} \ln \frac{\hat{\sigma}_{OLS}^2}{\hat{\sigma}_{XZ}^2} - \frac{1}{N} \sum \ln |\mathbf{z}_i' \mathbf{z}_i| \right).$$

7. p. 106. In Example, it was suggested to remove the row/column with maximum variance. Vice versa, the row/column with **minimum** variance should be removed.

8. p. 271. The two sums in the EFS equation should be removed because they are used in equations (5.45) and (5.46), it should be

$$\begin{bmatrix} \beta \\ \nu \end{bmatrix}_{s+1} = \begin{bmatrix} \beta \\ \nu \end{bmatrix}_s + \lambda_s \left(\begin{bmatrix} \frac{\partial l}{\partial \beta} \\ \frac{\partial l}{\partial \nu} \end{bmatrix} \begin{bmatrix} \frac{\partial l}{\partial \beta} \\ \frac{\partial l}{\partial \nu} \end{bmatrix}' \right)^{-1} \begin{bmatrix} \frac{\partial l}{\partial \beta} \\ \frac{\partial l}{\partial \nu} \end{bmatrix}.$$

9. p. 280. FIGURE 5.10. The horizontal dotted line starting at the left most point of the curve is missing. This line represents the variance of the univariate model at $\rho = 0$.
10. p. 289. Instead $\mathbf{C}_i^{-1} \mathbf{y}_i \sim \mathcal{N}(\mathbf{C}_i^{-1} \mathbf{X}_i \boldsymbol{\beta}, \mathbf{I})$ it should be $\mathbf{C}_i^{-1/2} \mathbf{y}_i \sim \mathcal{N}(\mathbf{C}_i^{-1/2} \mathbf{X}_i \boldsymbol{\beta}, \mathbf{I})$
11. p. 402-403. $\mathbf{G}_i = \mathbf{H}_i$.
12. p. 406. There should be **no** term $e^{\boldsymbol{\beta}' \mathbf{x}_{ij}}$ in the expression for v_{ijl} . Thus, the correct expression is

$$v_{ijl} = e^{\boldsymbol{\beta}'(\mathbf{x}_{ij} + \mathbf{x}_{il}) + (\mathbf{z}_{ij} + \mathbf{z}_{il})' \mathbf{D}_* (\mathbf{z}_{ij} + \mathbf{z}_{il})/2} - e^{\boldsymbol{\beta}'(\mathbf{x}_{ij} + \mathbf{x}_{il}) + \mathbf{z}_{ij}' \mathbf{D}_* \mathbf{z}_{ij}/2 + \mathbf{z}_{il}' \mathbf{D}_* \mathbf{z}_{il}/2}$$

13. p. 480 and p. 600. "Fixed Simulated Likelihood" should be "Fixed Sample Likelihood."
14. p. 523. The matrix inverse of \mathbf{X}_i in first formula is wrong. Thus instead $\mathbf{H} = \sum_{i=1}^N \mathbf{X}_i' \mathbf{V}_i^{-1} \mathbf{X}_i$ should be

$$\mathbf{H} = \sum_{i=1}^N \mathbf{X}_i' \mathbf{V}_i^{-1} \mathbf{X}_i.$$