ERRATA for "VARIANCE COMPONENTS"

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Page/Line

15/12: Interchange " and ?; i.e., "fixed or random?".

16/2 and 3 of third paragraph: the same interchange as 15/12.

17/7 lines below titles in 1.6a: In $E(e_{ij}\alpha_i) = \alpha_i$ $E(e_{ij}) = 0$ delete space before $E(e_{ij})$.

18/6, 7, 14 and 17: Each of the four sentences in lower case letters need a period; i.e., following the words fixed, random, effects, and effects.

35/8 up: non-zero should be non-negative.

36/7: unbaisedness should be unbiasedness.   [ias *not* ais]

63/1: $\chi^2(r,\lambda)$ should be $\chi^{2'}(4,\lambda)$.   [prime on χ^2]

64/Eq. (71): $-\sigma_e^2$ should be $-\sigma_e^4$.   [4'th power]

65/5 up: The right-hand $\dfrac{F}{F_U} - 1$ should be $\dfrac{F}{F_L} - 1$.   [L not U]

74/Eq. (96): $-2\sigma_e^2$ should be $-2\sigma_e^4$.

75/Eq. (102): $\Big]\sigma_\alpha^4$ should be $\sigma_\alpha^4\Big]$.

84/line below (118): from (115) should be (113).

87/Eq. (132c): The denominator λ_i^2 should be $2\lambda_i^2$.

89/3 of Table 3.10: $1_{\mu,\ \sigma_e^2}$ (the second one) should be $1_{\mu,\ \sigma_\alpha^2}$; i.e., the subscript e on σ^2 should be α.

91/ In, and 2 above, Eq. (140): in $L(\ \ )$, the $\bar{y}..$ should be $\bar{y}..,\lambda$.

100/6, last term of equation: $\log\lambda$ should be $\log\sigma_\alpha^2$. $\left[\sigma_\alpha^2\ \text{not}\ \lambda\right]$

116/2up: and variance should be of variance.   [of not and]

119, 4up: $-\ \bar{\gamma}..)$ <u>should be</u> $-\ \bar{\gamma}..)^2.$ $\qquad$ [superscript 2 on)]

144/last equation: interchange the 1 and 0 on the off-diagonal of each of the three matrices.

145/eqn (82): add a prime to the right-hand side after the square bracket.

145/eqn (83): interchange the -1 and 0 on the off-diagonal of each of the three matrices.

149/3, heading of middle column: $\bar{\sigma}^2_\beta$ <u>should be</u> $\tilde{\sigma}^2_\beta.$ $\qquad$ [tilde not bar]

153/7 up: two <u>should be</u> too.

165/2 in P: The 5 6 <u>should be</u> 8 6. (Change 5 to 8.)

177/3 of paragraph beginning "Notice ...: 0 <u>should be</u> bold.

211/16: k_1 <u>should be</u> k'_1 (add a prime).

245/Eqn (62): The first Py <u>should be</u> bold.

252/4: Section 6.5 <u>should be</u> 6.4.

253/1: the β' <u>should be</u> bold.

254/4 of 6.7: $\Sigma^t_{i=1}$ <u>should be</u> $\Sigma^r_{i=1}$ (change t to r).

254/Eq. (100): $\tilde{V}^{-1}$ <u>should be</u> V^{-1} (delete tilde).

256/1: var$(\tilde{\sigma})$ <u>should be</u> var$(\tilde{\sigma}^2)$ (add superscript 2).

257/E6.11(a): <u>add</u> for $y \sim \mathcal{N}(X\beta, V)$.

259/8: normally <u>should be</u> normal. $\qquad$ [delete ly]

261/4: DZ' <u>should be</u> $ZD.$

268/3 up: BLUP <u>should be</u> BLP.

272/Eqn. below (41): $B = L'X(X'V^{-1}X)^-$ <u>should be</u> $B = L'(X'V^{-1}X)^-$ (delete the X that follows L').

272/3 up: cov$(L\beta^0, u')$ <u>should be</u> L' not L (add a prime); and the final C <u>should be</u> $C'.$

283/2 before (89): The (80) <u>should be</u> (88).

287/2 up: $+\mathbf{D}$ <u>should be</u> $\mathbf{D}^{-1}$ (add superscript -1).

289/5: The (34) <u>should be</u> (33).

298/1 below (5): The (μ, Σ) <u>should be</u> $\mathcal{N}(\mu, \Sigma)$ (add a curly N).

300/2 up: on (12) <u>should be</u> on (11) and 12.

302/4 up from subsection f: $\mathbf{Z}_i\tilde{\mathbf{V}}^{-1}\mathbf{Z}'_i$ <u>should be</u> $\mathbf{Z}'_i\tilde{\mathbf{V}}^{-1}\mathbf{Z}_i$ (change the prime).

303/7 up: 0 <u>should be</u> bold.

329/expression immediately below (38): the $\frac{1}{2}\left(\text{not the } \frac{1}{2}N\right)$ in the denominator <u>should be</u> $-\frac{1}{2}$.

333/1 below (63): assume <u>should be</u> handle.

341/6: <u>Delete comma after</u> examples.

359/E 9.1(a): pΛ <u>should be</u> $p(1-p)\Lambda$.

361/1: <u>After (35) add</u> let $E(\mathbf{u}) = \mathbf{u}_0$ and.

363/7: 9.3d <u>should be</u> 9.3c (c <u>not</u> d).

363/E 9.20(b): <u>Before</u> $\mathbf{L}$ <u>add</u> log.

363/E 9.20(d): <u>Replace</u> show <u>with</u> calculate.

364/E 9.22(b): $= n_i$ <u>should be</u> $= b_i$.

367/9 of 2nd paragraph: P_i <u>should be</u> p_i (lower case).

393/Eqn (45): $\mathbf{X}\beta$ <u>should be</u> $\mathbf{X}\beta_0$ (subscript 0).

397/Eqn (59): $\left\{_d\right.$ <u>should be</u> $\left\{_c\right.$ (c not d).

398/Eqn (60): Same as 397/Eqn (59).

400/9-10: In $\left.\right\}_{i,\,i'\,=\,1}^{r}$ <u>delete</u> i'.

402/E 11.5(a), line 2: eignroots <u>should be</u> eigenroots.

404/below (72): MINQUE <u>should be</u> MINQUEO.

406/last: **y** <u>should be</u> curly y.

407/6: Same as 406/last: two places.

419/2 up: The last **V** <u>should be</u> **X**.

426/6: <u>delete</u>].

426/E 12.1: 8.2 <u>should be</u> 12.2. The first **y** <u>should be</u> curly y.

426/E 12.2: (45) <u>should be</u> (43b).

453/Eq. (27): $\begin{bmatrix} -\mathbf{A}^{-1} \\ \mathbf{0} \end{bmatrix}$ <u>should be</u> $\begin{bmatrix} -\mathbf{A}^{-1}\mathbf{B} \\ \mathbf{I} \end{bmatrix}$.

467/10: <u>Add</u> $+\, 4\mu'\mathbf{AVB}\mu$.