

Page(XV): Add to Abbreviations
 SSTR: SS(TR)
 LS: Left side
 ch.root: characteristic root
 Def: Definition
 Eqn: Equation
 Sec: Section
 Thm: Theorem
 cldots: ...

| Page | Line | Corrections |
|------|---------------|---|
| XV | -4 | $P[-\{f - \frac{1}{2}(p - m + 1)\} \log U_{p,m,f} > z]$ |
| 24 | -7 | $A_1 \mathbf{x}_i \rightarrow A_1 \mathbf{x}_1$ |
| 26 | 8 | $\sum_{j=1}^n \rightarrow \sum_{k=1}^n$ |
| 29 | 9 | Delte $\boldsymbol{\mu}$ |
| | 19 | $\mathbf{t} = (t_1, \dots, t_p)'$ |
| 31 | 14 | <i>Example 2.5.2</i> \rightarrow <i>Example 2.5.3</i> |
| | -5 | $\mathbf{1}'_+ \rightarrow \mathbf{1}' =$ |
| 35 | 3 | Thm 2.5.2 \rightarrow Thm 2.5.1 |
| | 14 | $V = \sum_{i=1}^n (\mathbf{x}_i - \bar{\mathbf{x}})(\mathbf{x}_i - \bar{\mathbf{x}})'$ |
| | -3 | $N_s(\boldsymbol{\mu}_2 + \Sigma'_{12} \Sigma_{11}^{-1} (\mathbf{x}_1 - \boldsymbol{\mu}_1), \Sigma_{2.1})$ |
| | -7 | $N_r(\boldsymbol{\mu}_1 + \Sigma_{12} \Sigma_{22}^{-1} (\mathbf{x}_2 - \boldsymbol{\mu}_2), \Sigma_{1.2})$ |
| 36 | -3 | $(\mu_1, \mu_2, \mu_3)' \rightarrow (\mu_2, \mu_1, \mu_3)'$ |
| 37 | 2 | $(\sigma_{12}, \sigma_{13}) \rightarrow (\sigma_{12}, \sigma_{23})$ |
| | 7 | <i>etc.</i> \rightarrow <i>etc.</i>) <i>may be</i> |
| | 11 | $n \rightarrow f$ in equation (2.5.4), both places |
| | 12 | <i>distrubution</i> \rightarrow <i>distribution</i> |
| | 13 | $V = \sum_{\alpha=2}^n \mathbf{y}_\alpha \mathbf{y}'_\alpha$ |
| 43 | -15 | $u \rightarrow \mathbf{u}$ |
| 46 | 17 | $\text{trac}(\mathbf{a}) \rightarrow \text{trace}(\mathbf{a})$ |
| 49 | -3 -12 | $S \rightarrow V$ |
| 51 | 2.9.9(a) | $AA' = AA' = I \rightarrow AA' = A'A = I$ |
| 52 | 2.9.14 | $\mathbf{a}'\mathbf{1} = \mathbf{0} \rightarrow \mathbf{a}'\mathbf{1} = 0$ |
| 54 | 2.9.23 line 1 | $u_{i+1} \rightarrow u_i$ |
| | 2.9.24(a) | <i>given</i> $y_3 \rightarrow$ <i>given</i> x_3 |

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| 55 | 2.9.27(c)(d) | $(x_1, x_2) \rightarrow (x_1, x_2)'$ |
| | 2.9.29 | $(\mathbf{1}'\mathbf{x}, C\mathbf{x}) \rightarrow (\mathbf{1}'\mathbf{x}, \mathbf{x}'C)'$ |
| 56 | 2.9.32 line 1 | $\mathbf{y} \rightarrow \mathbf{y}'$ |
| 58 | -3 | <i>observation</i> \rightarrow <i>observations</i> |
| 61 | -1 | <i>Table</i> \rightarrow <i>Table 3.4.1</i> |
| 63 | eqn 3.4.6 | $\int_{-\infty}^x e^{-\frac{1}{2}t^2} dt \rightarrow \int_{-\infty}^x e^{-\frac{t^2}{2}} dt$ |
| | -13 | Remove the prime on the last expression |
| 94 | -2 | 960 \rightarrow 900; 10 \rightarrow 26 |
| 96 | line 13 | $x_1 + \cdots, x_n \rightarrow x_1 + \cdots + x_n$ |
| 104 | 11 | $T_\alpha^2(\mathbf{a}'\mathbf{S}\mathbf{a})^{\frac{1}{2}} \rightarrow T_\alpha(\mathbf{a}'\mathbf{S}\mathbf{a})^{\frac{1}{2}}$ |
| 107 | -5 | 0.6031 \rightarrow 0.4932; SAS code on page 108 needs correction |
| | -9 | Denominator, last expression: $(0.0730, 0.0778)'$, prime added |
| | -10 | $(\mathbf{a}\mathbf{S}\mathbf{a})^{\frac{1}{2}} \rightarrow (\mathbf{a}'\mathbf{S}\mathbf{a})^{\frac{1}{2}}$ |
| 108 | 10 | $w_0 = \text{vecdiag}(\text{sqrt}(x' * x))$ |
| 112 | 1 | <i>insert</i> $F_0 = (f - p + 1)/(f * p) * T\text{asq}$ after first line |
| | 2 | <i>prob</i> $f(tsg, 2, 5) \rightarrow \text{prob}(F_0, 2, 5)$ |
| 113 | 11 | Delete "comma" between the two expression of \tilde{t} , that is |
| | | $\tilde{t} = \left(\frac{n_1 n_2}{n_1 + n_2}\right)^{\frac{1}{2}}, \frac{\tilde{\mathbf{a}}'(\tilde{\mathbf{x}} - \tilde{\mathbf{y}})}{(\tilde{\mathbf{a}}'S_p\tilde{\mathbf{a}})^{\frac{1}{2}}} \rightarrow \tilde{t} = \left(\frac{n_1 n_2}{n_1 + n_2}\right)^{\frac{1}{2}} \times \frac{\tilde{\mathbf{a}}'(\tilde{\mathbf{x}} - \tilde{\mathbf{y}})}{(\tilde{\mathbf{a}}'S_p\tilde{\mathbf{a}})^{\frac{1}{2}}}$ |
| 117 | 6,7 | $\tilde{\mathbf{x}} \rightarrow \tilde{\mathbf{d}}$ |
| 120 | -14 | (4.4.7) - (4.4.9) \rightarrow (4.4.8) and (4.4.9) |
| 133 | Sec 4.7 line 1 | 4.4.2 \rightarrow 4.4.3 |
| 135 | -8 | (4.4.2) \rightarrow (4.7.1) |
| 137 | -2 | $(CSC)'^{-1} \rightarrow (CSC')^{-1}$ |
| 138 | 13 | 6.922075 \rightarrow 6.92075 |
| 140 | 3 | $n^{\frac{1}{2}}\mathbf{A}\mathbf{y} \rightarrow n^{\frac{1}{2}}\mathbf{A}\bar{\mathbf{y}}$ |
| 142 | -1 | $L.S = \sum_{i=1}^n (\mathbf{x}_i - \boldsymbol{\mu})' \Sigma^{-1} (\mathbf{x}_i - \boldsymbol{\mu})$ |
| | 12 | $\hat{\boldsymbol{\mu}} = \hat{\mathbf{x}} \rightarrow \hat{\boldsymbol{\mu}} = \bar{\mathbf{x}}$ |
| 143 | -8 | $ \hat{\Sigma}_H ^{-\frac{1}{2}np} \rightarrow \hat{\Sigma}_H ^{-\frac{1}{2}n}$ |
| 144 | -2 | Table 4.9.1 \rightarrow Table 4.9.1 |
| 145 | -1 | $t_{404,0.125} \rightarrow t_{404,0.0125}$ |
| 147 | -5 | Table 1.2.3 \rightarrow Table 1.2.4 |
| 148 | 4.9.13 | 0.136 \rightarrow 1.136 |
| | 4.9.13(a) | As usual \rightarrow As usual |
| 149 | -6 | $\mu_i \geq 0$ for at least one $i \rightarrow \mu_i \geq 0$ with strict inequality for at least one i |
| 150 | -3 | p - value of 0.261 \rightarrow p - value of 0.324 |

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|-----|--------------|---|
| 151 | -3 | 59.4→55.1 in the entries of S; 1st row and 3rd column |
| 156 | 1 | second expression on the right side $x_{.j} \rightarrow \bar{x}_{.j}$ |
| 157 | 13 | 4.3.6 → 5.3.6 |
| | Table 5.3.3 | last row, 4th and 7th entry: 27 → 28; 168 → 169 |
| 158 | (-1,-2,-3) | 0.624 → 0.989, 0.161 → 0.255, $(3.89/6)^{\frac{1}{2}} \rightarrow (3.89/60)^{\frac{1}{2}}$ |
| 159 | -15 | $n * f * (n - 1) \rightarrow n * f * (p - 1)$ |
| 162 | 2 | <i>unknown</i> · $\gamma \rightarrow$ <i>unknown</i> γ |
| 176 | Table 5.7.4 | The entry (Average, Average) = 10.16 not 9.17 |
| 177 | 1 | corelated → correlated |
| | 1 | score → scores |
| 179 | 1 | $-n\bar{\mathbf{y}}\bar{\mathbf{y}}' \rightarrow -n\bar{\mathbf{y}}\bar{\mathbf{y}}'$ |
| | 7 | $\sum_{j=1}^J \sum_{i=1}^{n_j} (y_{ij} - y_{.j})(y_{ij} - y_{.j})' \rightarrow \sum_{j=1}^J \sum_{i=1}^{n_j} (\mathbf{y}_{ij} - \bar{\mathbf{y}}_{.j})(\mathbf{y}_{ij} - \bar{\mathbf{y}}_{.j})'$ |
| 184 | -1 | $\sum_{j=1}^J \rightarrow \sum_{j=1}^J$ |
| 220 | -12 | However, the hypothesis H_1 , and H_2 given H_1 |
| 224 | -5 | $t_{f-p+1,\alpha}^2 \rightarrow t_{f-p+1,\frac{\alpha}{2}}^2$ |
| 227 | -5 | $\tilde{\gamma} \rightarrow \hat{\gamma}$ |
| 230 | 7 | $\left(\frac{f-p+2}{f}\right) \rightarrow \left(\frac{f-p+1}{f}\right)$ |
| 232 | Table 7.3.1 | line 1 $U_{p,m,n} \rightarrow U_{p,m,f}$; $p, m, n \rightarrow p, m, f$ |
| 233 | Eqn(7.3.3) | right side $(\mathbf{1}'S^{-1}\mathbf{1} \rightarrow (\mathbf{1}'S^{-1}\mathbf{1})$, bracket missing |
| 234 | 6 | $\tilde{\gamma}$ in (7.3.3) → $\hat{\gamma}$ in (7.3.3) |
| 236 | 6 | $\lambda_2 = (V / V + H)/(CVC' / C(V + H)C')$, the expression given in the book is a simplified version of it |
| 244 | 7.4.8 line 1 | $\sigma \rightarrow \sigma^2$ |
| 247 | eqn(8.2.1) | $\frac{(\mathbf{a}'\delta)^2}{\mathbf{a}'\Sigma\mathbf{a}} = \frac{(\mathbf{a}'\Sigma^{\frac{1}{2}}\Sigma^{-\frac{1}{2}}\delta)^2}{\mathbf{a}'\Sigma\mathbf{a}}$ |
| 249 | -1 | MD ratio → MD |
| 251 | 2 | $T_i^{(2)} > Q_i^{(2)} \rightarrow T_i^{(2)} < Q_i^{(2)}$ |
| 258 | -18 | $m = \min(p, k) \rightarrow m = \min(p, k - 1)$ |
| 261 | 5-7 | Numerical errors; needs recalculation |
| 279 | 11 | Right side $\mathbf{ea} \rightarrow \mathbf{e}'\mathbf{a}$ |
| | -3 | $Y = (\mathbf{y}^{(1)}, \dots, \mathbf{y}^{(p)})$ last bracket missing |
| 280 | -5 | cloumn → column |
| 281 | (-1) | Denominator left $\mathbf{a} \rightarrow \mathbf{a}'$ in both expressions |
| | 3 | $Vec X\Xi \rightarrow Vec \Xi$ |
| 282 | -11 | $q1 + q2 = p \rightarrow q1 + q2 = q$ |

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| 283 | | -9 | $n_0 = f = n - q \rightarrow f = n - q$ |
| | After eqn (9.4.4) | | $\gamma_2 = l(p^2 + p - 5)/48 \rightarrow \gamma_2 = l(p^2 + m - 5)/48$ |
| 284 | | 4 | nuclei, and octaploid \rightarrow and octaploid nuclei |
| 285 | | 9 | Delete $\hat{y} =$ |
| 287 | | (-6,-7,-8) | Delete the two matrices and line -7 |
| 293 | | 2 | First eight entries in 3rd column is 0.0625 |
| 297 | | -8 | $gamma/n **2 \rightarrow gamma/f **2$ |
| 302 | 9,10,11,12 | | Delete these four lines |
| 305 | | -4 | Table B.5 \rightarrow Table B.7 |
| 308 | | 4 | $\mathbf{a}'_i \rightarrow \mathbf{b}', \mathbf{b}' \rightarrow \mathbf{a}'_i$ |
| 313 | | -5 | $\xi_k(x_{ik} - x_k) \rightarrow \xi_k(x_{ik} - \bar{x}_k)$ |
| 340 | | -6 | $\xi_0 - \Xi'x \rightarrow \xi_0 + \Xi'x$ |
| 347 | | -5 | $\mu \rightarrow \mu, \mu$ are not bold inside the bracket sign |
| 362 | | -3 | of \mathbf{x}_1 and $\mathbf{x}_2 \rightarrow$ of \mathbf{x}_2 given \mathbf{x}_1 |
| 363 | | -2 | $\bar{\mathbf{x}}_1 - S'_{12}S_{22}^{-1}\bar{\mathbf{x}}_2 \rightarrow \bar{\mathbf{x}}_2 - S'_{12}S_{11}^{-1}\bar{\mathbf{x}}_1$ |
| 391 | | 19 | $f = n - q \rightarrow f = n - q + m - p - 1$ |
| 412 | | -2 | aviable \rightarrow available |
| 413 | | 11 | 0.003 \rightarrow 0.03 |
| 414 | Table 11.5.1 | | last row and column, all k \rightarrow p |
| 443 | 12.6.7 and 12.6.8 | | $\log(\frac{R}{ \hat{R} }) \rightarrow \log(\frac{ R }{ \hat{R}_k })$ |
| 471 | 12.12.3 last line | | Variables measured are listed in the table on page 473 |
| 481 | eq(13.2.6) | | $ n^{-1}V ^{\frac{n}{2}} \rightarrow n^{-1}V ^{-\frac{n}{2}}$ |
| | | -14 | $V = nf \rightarrow V = fS$ |
| | | -3 | $A : \Sigma \neq \sigma I \rightarrow A : \Sigma \neq \sigma^2 I$ |
| 487 | | -9 | $\bar{\lambda} = 1 - \bar{r} \rightarrow \hat{\lambda} = 1 - \bar{r}$ |
| 488 | | 3 | $\bar{\lambda} \rightarrow \hat{\lambda},$ SAS code error |
| 490 | | 2 | $S = fV \rightarrow S = f^{-1}V$ |
| 497 | 13.12.5 | | $\bar{x} \rightarrow \bar{\mathbf{x}}$ |
| | 13.12.5 line 1 | | data set given by \rightarrow data set of 76 observations given by |
| 500 | | -1 | Section 12.5.2 \rightarrow Section 13.5.2 |
| 510 | | -16 | $(12 - 2)^{-\frac{1}{2}} \rightarrow (12 - 3)^{-\frac{1}{2}},$ in z_1 and z_2 |
| 516 | | 3 | eigenvalue $\hat{\beta} \rightarrow$ eigenvector $\hat{\beta}$ |
| | | 7 | $(\hat{\alpha}_i \mathbf{x}_1, \hat{\beta}_i \mathbf{x}_2) \rightarrow (\hat{\alpha}'_i \mathbf{x}_1, \hat{\beta}'_i \mathbf{x}_2)$ |

- 12 $(s_{11}^{-\frac{1}{2}}, \dots, s_{pp}^{-\frac{1}{2}}) \rightarrow \text{diag}(s_{11}^{-\frac{1}{2}}, \dots, s_{pp}^{-\frac{1}{2}})$
- 13 $(s_{p+1,q+1}^{-\frac{1}{2}}, \dots, s_{p+q,p+q}^{-\frac{1}{2}}) \rightarrow \text{diag}(s_{p+1,p+1}^{-\frac{1}{2}}, \dots, s_{p+q,p+q}^{-\frac{1}{2}})$
- 519 20 $\lambda = \frac{|S|}{|S_{21}||S_{12}|} \rightarrow \frac{|S|}{|S_{11}||S_{22}|}$
- 527 Row 17 or Row -6 There should have been seventeen entries but only sixteen appears. Thus, the last three entries 0.26, 0.18, 1.00 should be replaced by four entries 0.26,0.20,0.18,1.00
- 532 19 larger than P \rightarrow larger than p
- 552 -12 $\bar{x}_{1N} \rightarrow \bar{x}_{1N_1}$ in $\hat{\sigma}_{11}$
- 571 16.7.1, line 2 $\begin{pmatrix} \hat{\sigma}_{11} & \hat{\sigma}_{12} \\ \hat{\sigma}_{12} & \hat{\sigma}_{22} \end{pmatrix} \rightarrow \hat{\Sigma} = \begin{pmatrix} \hat{\sigma}_{11} & \hat{\sigma}_{12} \\ \hat{\sigma}_{12} & \hat{\sigma}_{22} \end{pmatrix}$
- 16.7.2, line 1 problem 8.12.1 \rightarrow problem 5.7.6
- 591 7 $(\bar{\mathbf{u}}_i^* - \bar{\mathbf{v}}_i^*)' S_{pi}^{*-1} (\bar{\mathbf{u}}_i^* - \mathbf{v}_i^*) \rightarrow (\bar{\mathbf{u}}_i^* - \bar{\mathbf{v}}_i^*)' S_{pi}^{*-1} (\bar{\mathbf{u}}_i^* - \bar{\mathbf{v}}_i^*)$
- 594 11 $Tisq = (50 - 4 + 1)^* \dots \rightarrow Tisq = (98 - 4 + 1)^* \dots$
- 628 6 2nd column and 3rd row of the third matrix: -3 \rightarrow 3
- 635 -4 $A^+ AA^+ = A \rightarrow A^+ AA^+ = A^+$
- 644 3 .0003 & .0005 \rightarrow .003 & .005
- 653 line 3 $n \rightarrow f$ through Table B.7