

Errata to “Asymptotic Statistics” by A.W. van der Vaart, first printing 1998.

The following are mistakes in the hard cover version that were corrected in the soft cover printing of 2000. For remaining mistakes (and mistakes in the corrections!), see the errata files for the later printings.

- 50,+22 REPLACE maximize the map $F \mapsto F_{F_0} m_F$ BY maximize the map $F \mapsto F_{F_0} m_F$, provided $F_0 \in \mathcal{F}_0$.
- 60,-20 REPLACE of the location parameter BY of the location estimator.
- 60,-12 REPLACE $(\hat{\mu}, \hat{\sigma})$ BY $(\hat{\theta}, \hat{\sigma})$.
- 60,-1 REPLACE $P\psi_{\theta_0, \hat{\eta}_n}$ by $\|P\psi_{\theta_0, \hat{\eta}_n}\|$.
- 65,+1 REPLACE such that BY such that, as $\theta \rightarrow \theta_0$, .
- 65,+8 REPLACE $p_\theta(X)$ BY $p_\theta(x)$.
- 65 In the second line of the proof of Theorem 5.39 REPLACE $V_{\theta_0} = I_{\theta_0}$ BY $V_{\theta_0} = -I_{\theta_0}$.
- 66,+10 Delete “with derivative bounded away from zero and infinity”.
- 68 Replace a number of occurrences (but not all) of ψ by Ψ .
- 73 In the last line of the Addendum REPLACE $\dot{\Psi}_0 = P_{\theta_0} \psi_{\theta_0} \dot{\ell}_{\theta_0}^T$ BY $\dot{\Psi}_0 = -P_{\theta_0} \psi_{\theta_0} \dot{\ell}_{\theta_0}^T$. [Similarly add a minus sign in line -7.]
- 95,+11 REPLACE $n\epsilon^{-2}E|A_{ni}|$ BY $\epsilon^{-2}E|A_{ni}|$.
- 95,-12 Replace ϵ in the probability on $\max |W_{ni}|$ by $\sqrt{2}\epsilon$. In the last line of the proof replace (7.1) by (7.4).
- 101,-6 REPLACE I_{θ_0} BY $-I_{\theta_0}$.
- 109,-17 Replace the superscript 0 on the wiggly arrow (in the second line of the display) by θ .
- 156,+2 REPLACE product measure BY σ -finite product measure.
- 156,+5 REPLACE $f_Y(y)$ BY $f_Y(Y)$.
- 170 In the third line of Example 12.11 replace “bases” by “basis”. In the third line of Example 12.12 replace $(X - \alpha_1)^2$ by $(X_1 - \alpha_1)^2$.
- 174 In (iii) add a factor N in front of the formula for the density.
- 208,-12 REPLACE $P(\bar{Y} \geq B_t)$ BY $P(\bar{Y} \in B_t)$.
- 231,+7 Add a minus sign on the right hand side of the display.
- 231 REPLACE last paragraph of section 16.2 BY In the case of a composite hypothesis, a Wald statistic is given in (16.4) and a score statistic can be obtained by substituting the approximation $n\hat{\theta}_{n,>l} \approx (I_\vartheta^{-1})_{>l,>l} \sum \dot{\ell}_{\hat{\theta}_{n,0,>l}}(X_i)$ in (16.4). (This approximation is obtainable from linearizing $\sum(\dot{\ell}_{\hat{\theta}_n} - \dot{\ell}_{\hat{\theta}_{n,0}})$.) In both cases we also replace the unknown parameter ϑ by an estimator.
- 232,-2 Replace the subscript ni by n_i , four times.
- 234 In the display on the middle of the page add the missing closing bracket] at the end.
- 236,+8 REPLACE one-to-one BY a homeomorphism.
- 236 At the end of Example 16.11 add the sentence “(We can use the rank theorem to give a precise definition of the differentiability of the map g^{-1} on the manifold $g(T)$.)”
- 236,-1 REPLACE but only on its distance BY but only on its codimension and its distance.
- 237,-7 REPLACE $Z_{\alpha/2}$ by $z_{\alpha/2}$.
- 237 In the caption of Figure 16.1 replace $\mu \mapsto P(\chi_k^2(\mu^2) > \chi_{k,\alpha}^2)$ BY $\mu^2 \mapsto P(\chi_k^2(\mu) > \chi_{k,\alpha}^2)$.
- 238,-2 REPLACE The claim in the preceding sections BY The claim in Section 16.4.
- 239,-4 REPLACE subuniformly BY superuniformly.

- 295,-12 Add an $o_P(1)$ term on the right side of the display.
- 344 In the first line of Theorem 24.1 add an integral sign before $|f''(x)|^2 dx$.
- 355,+16 REPLACE left side BY right side.
- 367 In the last sentence of the second full paragraph REPLACE $P\tilde{\psi}_P^2$ BY $P\tilde{\psi}_P\tilde{\psi}_P^T$.
- 375,-1 REPLACE $\exp(z^T t(x))$ BY $\exp(z^T x)$.
- 376 In the first display REPLACE dx BY $d\nu(x)$.
- 385,-7 REPLACE examples BY samples.
- 386,+3 REPLACE section (25.7) BY Section 25.7.
- 392,-4 REPLACE $\dot{\ell}_{\theta,\eta}$ BY $\tilde{\ell}_{\theta,\eta}$.
- 393 In the second display on the page replace $\tilde{\theta}_n+$ BY $\tilde{\theta}_n-$.
- 394,+1 REPLACE (25.8) BY (25.55).
- 404 At the end of Example 25.69 insert “We ignored the fact that jumps of hazard functions are smaller than 1 and have maximized over all measures Λ .”
- 411,+13 REPLACE vanishes BY is constant.
- 411,-8 REPLACE $\phi(y)$ by $y\phi(y)$.
- 423,+6 Add a minus sign to the right side of the second display on this page.
- 423 In the first line of Lemma 25.92, REPLACE $\ell^\infty(\mathcal{H})$ by $\ell^\infty(\mathcal{Z})$.
- 423-1 REPLACE $+a_0^T$ BY $-a_0^T$.
- 437 REPLACE Rodnitzky BY Rotnitzky.