Comments and corrections to
Statistical Inference and Simulation for Spatial Point Processes

(last updated: February 12 2007)

In the list below, p. n^l and p. n_l means page number n line number l from above or below, respectively, and $\rightarrow$ indicates how a piece of text should be corrected. We thank Anders Gorst Rasmussen who found most of the typos and errors during his careful reading of our book. We are also grateful to Dietrich Stoyan for his comments.

We regret that several places in the text we have written "V-uniform" where it should read "V-geometric". The list below shows hopefully all places where this should be corrected.

1. p. 10_7: The reference Schoenberg, Brillinger & Guttorp (2002) is missing in the list of references. The reference is
   Schoenberg, F.P., Brillinger, D.R., and Guttorp, P.M. (2002). Point processes, spatial-temporal. In *Encyclopedia of Environmetrics*, Abdel El-Shaarawi and Walter Piegorsch, editors. Wiley, New York, vol. 3, pp 1573–1577.
2. p. 15 Proposition 3.1: "...for all $B \subseteq S$ with $\mu(B) = \int_S \rho(\xi)\mathrm{d}\xi$ ..." $\rightarrow$ "...for all $B \subseteq S$ with $\mu(B) = \int_B \rho(\xi)\mathrm{d}\xi$ ...".
3. p. 18_2: $\exp(\rho\omega_d r^d)(\rho\omega_d r^d)^n/n! \rightarrow \exp(-\rho\omega_d r^d)(\rho\omega_d r^d)^n/n!$.
4. p. 20^4 $E \rightarrow \mathbb{E}$.
5. p. 20^7 $t \geq 0 \rightarrow l \geq 0$.
6. p. 20^{18}: $\xi_0 \in \mathbb{R}^d \rightarrow \xi_0 \in \mathbb{R}$.
7. p. 22 (3.9): wrong font for i and n in product.
8. p. 25_1: "conditional on Y, the marks" $\rightarrow$ "conditional on Y, the marks" (wrong font for Y).
9. p. 31 (4.3): $S \rightarrow X$.
10. p. 33^5: "we have that" $\rightarrow$ "we have from (C.2)".

11. p. 34 (4.6) and p. 18: it may be helpful to note that $\mathrm{d}\xi = \mathrm{d}\sigma\, r^{d-1}\mathrm{d}r$ where $\mathrm{d}\sigma$ denotes surface measure on the unit sphere in $\mathbb{R}^d$.

12. p. 35^4: $\phi \to \varphi$ (two places in expression for $B(\varphi, \psi, r)$).

13. p. 39 (4.15): that (4.15) is sufficient follows by consideration of the proof of Lemma 4.2.

14. p. 40^3: $\sum^{\neq}_{\xi\in x,\eta\in x\cap W_{\ominus r}} \frac{\mathbf{1}[\eta-\xi\in B]}{\rho(\xi)\rho(\eta)} \to \sum^{\neq}_{\xi\in x,\eta\in x\cap W_{\ominus r}} \frac{\mathbf{1}[\eta-\xi\in B]}{|W_{\ominus r}|\rho(\xi)\rho(\eta)}$.

15. p. 44 (4.21): omit $|W|$.

16. p. 44^{13}: omit $|W|$ in formula following "proof of Lemma 4.2".

17. p. 46 (4.25): it may be more efficient to replace $\hat{\rho}|W_{\ominus r}|$ by the number of points falling in $W_{\ominus r}$ (Dietrich Stoyan, personal communication).

18. p. 46_3: in simulation studies it has in fact been demonstrated that the reduced-sample estimator and the Hanisch estimator may be superior to the Kaplan-Meier estimators (Dietrich Stoyan, personal communication).

19. p. 52^4: $e_b(r - \|\eta - \xi\|) \to k_b(r - \|\eta - \xi\|)$ and omit $|W|$ (in formula for $\hat{g}_{ij}(r)$).

20. p. 63 (5.12): $\int \gamma k(c,\xi)\zeta(c,\gamma)\mathrm{d}c\mathrm{d}\gamma \to \iint \gamma k(c,\xi)\zeta(c,\gamma)\mathrm{d}c\mathrm{d}\gamma$.

21. p. 67^3: the statement concerning Jensen's inequality is not correct. Assume that $\rho(\xi)$ is finite and positive.

22. p. 71^2: $\kappa(1-e^{\tau\epsilon})/\tau \to \kappa(1-e^{\tau\epsilon})|B_{\mathrm{ext}}|/\tau$.

23. p. 73_8: $\sum_{i,j} a_i a_j r(\xi_i, \xi_j) \to \sum_{i,j} a_i a_j r(\xi_i - \xi_j)$.

24. p. 75^{14}: $\exp(\zeta + \sigma^2 t/2) \to \exp(\zeta t + \sigma^2 t^2/2)$ (Laplace transform for $N(\zeta, \sigma^2)$).

25. p. 75_{10}: $\log g(\xi,\eta) = \sum_1^m c_i(,\xi,\eta) \to \log g(\xi,\eta) = \sum_{i=1}^m c_i(\xi,\eta)$.

26. p. 80^{12}: $R^d \times (0,\infty) \to \mathbb{R}^d \times (0,\infty)$ (wrong font for $\mathbb{R}$).

27. p. 85 (6.13): $\phi_2(r) = \gamma^{1[r\leq R]} \to \phi_2(r) = \gamma^{\mathbf{1}[r\leq R]}$ (wrong font for indicator function).

28. p. 87_{12}: "linearly decreasing" $\rightarrow$ "linearly increasing".
29. p. 87 (6.18): $\phi_2(r) = \mathbf{1}[r \leq R]r/R \rightarrow \phi_2(r) = 1 - \mathbf{1}[r \leq R]r/R$.
30. p. 87 (6.19): $\phi_2(r) = \mathbf{1}[r \leq R](1 - (1 - r^2/R^2)) \rightarrow \phi_2(r) = 1 - \mathbf{1}[r \leq R](1 - r^2/R^2)^2$.
31. p. 94_2: "whenever $\|\xi - \eta\| \leq R$" $\rightarrow$ "whenever $\|\xi - \eta\| > R$".
32. p. 97_{8-9}: $\lambda^*(x, \xi) = \lambda(x - \xi, 0) \rightarrow \lambda^*(x, \xi) = \lambda^*(x - \xi, 0)$.
33. p. 123^{14}: V-uniform ergodicity $\rightarrow$ V-geometrical ergodicity.
34. p. 123^{19}: V-uniformly ergodic $\rightarrow$ V-geometrically ergodic.
35. p. 123^{22-23}: Theorems 15.0.1 and 16.0.2 $\rightarrow$ Theorem 15.0.1.
36. p. 124^3: V-uniformly ergodic $\rightarrow$ V-geometrically ergodic.
37. p. 130^8: V-uniformly ergodic $\rightarrow$ V-geometrically ergodic.
38. p. 131_2: V-uniform ergodicity $\rightarrow$ V-geometrical ergodicity.
39. p. 145^6: "continuous differentiable" $\rightarrow$ "continuously differentiable".
40. p. 163_4: V-uniformly ergodicity $\rightarrow$ V-geometric ergodicity.
41. p. 165 caption for Figure 9.2 and p. 165_3 and 165_2: $\theta(k/20) \rightarrow \theta'(k/20)$.
42. p. 187 (10.8): the right hand side should be multiplied by $\tilde{\zeta}(c, \gamma)/\zeta(c, \gamma)$ (note: typically, $\tilde{\zeta}(c, \gamma) = \zeta(c, \gamma)$).
43. p. 192^9: V-uniformly $\rightarrow$ V-geometrically.
44. p. 209^2: "... with probability $\delta(x \backslash x_i, x_i)/\alpha(x_i)$ ..." $\rightarrow$ "... with probability $d(x \backslash x_i, x_i)/\alpha(x_i)$ ...".
45. p. 213^9: "stochastic equivalent" $\rightarrow$ "stochastically equivalent".
46. p. 219^{3-4}: "the $\{-T \geq -s\}$" $\rightarrow$ "whether the event $\{-T \geq -s\}$ occurs or not".
47. p. 247 Definition C.1: $\alpha^{(n)}$ is the nth order factorial moment measure not the nth order reduced moment measure.
48. p. 252_1: $G(r) = P_0^!(N(b(0, r) > 0) \rightarrow G(r) = P_0^!(N(b(0, r)) > 0)$.