

Corrections, November 2009

The following corrections are for the 2008 3rd reprint of *Quantitative Finance and Risk Management: A Physicist's Approach* by J. W. Dash. Notation: Chapter C, Equation Eq, Page P, Paragraph Pr, Line L, Footnote F, Reference R.

(Ch11, P146 - 147): Note: $\$C$ and $\$C_{swt}$ are equivalent

(Ch13, P173, L13): Insert after $\$E_{1Upper}$: and lower strike $\$S_{Ind-1U}$

(Ch14, P192, L3,4, and 5): Replace S_λ^* by $S_\lambda^* - E_{H\lambda}$ ($\lambda = \alpha, \beta, 1, 2, 3$)

(Ch14, Eq7 and L6, P192): Replace S_0 by $S_{0\alpha}$

(Ch15, P206): Insert: The picture shows $\Delta = 0.04N[(x - 0.2)/0.08]$

(Ch15, P209, L1): Replace the word Principle by Principal

(Ch16, Eq5, P227): Insert 2nd integration: $\int_{x_E}^{\infty} dx^*$

(Ch16, Eq6 and L8, P227): Replace τ_E by $\tau_E^* = t^* - t_E$

(Ch16, P227, L6): Replace τ_E by $\tau_0^E = t_E - t_0$

(Ch16, Eq6, P227): Multiply this equation by $\exp(-y\tau_0^E)$

(Ch16, P228, L2): Replace t_E by τ_E^*

(Ch17, P248, F18): Change $t_{ab} = t_b - t_a$

(Ch21, P286): Figure caption: After Gaussian insert: with Average Vol

(Ch21, P287): Add footnote : Note $d_t x - \mu \approx d_t x$ at high CL

(Ch21, P288): Figure caption: After Gaussian insert: with Fat Tail Vol

(Ch22, Eq14, P304): 3rd line, last column: Replace $S_{\theta 2\beta}$ by $S_{\varphi 2\beta}$

(Ch22, P305): Add: A “point” on the N-sphere is actually the set $\{d_t \hat{y}_\alpha\}$ of points on the N-sphere.

(Ch24, P326, Pr2, L4): Replace book¹⁰ by bookⁱ

(Ch38, P473): Add: See Ingham, A. E., *Proc. Camb. Phil. Soc.*, 29 (1933), 271-276 for evaluation of the Fourier transform without using Cauchy's theorem.

(Ch42, P513, L7): $\Delta t = t_0 - t^*$ is printed twice

(Ch42, Eq28, P522): Replace $(2\pi/dt)^{-1/2}$ by $(2\pi\sigma_0^2 dt)^{-1/2}$

(Ch42, P539, L-2): Insert: cf. footnote 7, page 507

(Ch43, P567, L-1): 2nd term in Ξ_{\pm} : divide $\sigma^2 T_{0*} T_{*T}^2$ by 2

(Ch45, Eq4, P626): Multiply the exponent $-\frac{1}{2}(\eta_j^\alpha)^2$ by dt

(Ch45, L-3): $x_j^{\alpha=Flex}$ equation should read $\frac{1}{\sqrt{6}}(r_j^{2\text{yr}} - 2r_j^{5\text{yr}} + r_j^{10\text{yr}})$

(Ch51, P751, L-3): Replace the word “data” with “model”

Most of these items were discovered while teaching a course at the Courant Institute and some were discovered by students, whom I thank for their diligence. I also thank Alex Grossmann for a helpful conversation.