

Errata in second edition of Chebyshev and Fourier Spectral Methods by John P. Boyd, Dover (2001). The online version of the book will be periodically updated and thus will have fewer typos than the printed version.

Library of Congress Cataloguing-in-Publication data:

Author was born in 1951, not 1941.

In Eq. (1.9), pg. 2, the first parentheses should read $(2 a_2 - 2 a_0)$; the plus sign in the printed text is wrong.

pg. 20, unnumbered equation below (2.5): the subscripts of a_n and b_n in the lower line for $n < 0$ should have absolute value bars since the degree of the Fourier cosine and sine coefficients are defined only for non-negative n .

pg. 59, caption to Fig. 2.21. inset graph is of $-\tanh$, not \tanh .

pg. 60, Table 2.2: p is a function of a through Theorem 8, although this was not specified in the table.

pg.71: The text fails to mention that the first row in (3.50) has been divided by 2π while the rows have been divided by π .

pg. 75: λ_3 should be λ_2 [two different places, same page]

pg. 94-95: The a_n and b_n in Theorem 20 should be α_n , β_n

pg. 102: Eq.(5.12), (5.13) argument of sinc should have a factor of π in the denominator, thus, $\text{sinc}(N(x-x_j) / (2\pi))$

pg. 102: Eq.(5.14): $\sin(Nx) \cot(x/2)$ should be $\sin((N/2)x) \cot(x/2)$
corrected in the file C5.tex

pg. 152 eqn 7.58. The left hand side of the equation should be 'delta' not 'yc'.

pg. 196: top line of Eq.(10.27), $C_j(x_i)$ should be $C_j(x)$

pg. 227: The CFL limit is $\tau \lambda < -2$, not -1 .

pg. 506: Eq.(A74), gives an incorrect formula for $\psi_{n+1,x}$; the factor of $\sqrt{2n}$ should be $\sqrt{2n+2}$ so that the formula should read
$$\psi_{n+1,x} = -x \psi_{n+1} + \sqrt{2n+2} \psi_n$$

pg. 572: the signs for $\delta^{\{\text{Leg},1\}_{00}}$ and $\delta^{\{\text{Leg},1\}_{00}\$}$ in the top two lines of (F.55) are both incorrect.

pg. 600: The correct journal for Boyd(1981a) ["Sturm-Liouville eigenproblem ..."] is the J. Math. Phys. rather than J. Phys. Oceanogr.

pg. 631 (Bibliography):

1. the journal for Karageorghis, 1994c should be "J. Scientific Computing", not Mathematics and Computers in Simulation
2. Karageorghis and Paprzycki, 1996a: the correct year is 1998
3. Karageorghis and Paprzycki, 1996b: the correct year is 1996 without a letter, and the journal should be "Numerical Algorithms" rather than "Numerical Mathematics".