理工学のための数値計算法 [第３版]
(第３版第１刷・第２刷りの訂正)
2023 年 1 月 12 日

p. 173, 1 行目

$$k_1 = hf(0, 0.3) = 1 \times \left\{ \frac{0.3}{4} + 0.6 \exp \frac{0}{4} \cos\left(0 + \frac{\pi}{6}\right) \right\} = 0.594615,$$

を

$$k_1 = hf(x_0, y_0) = 1 \times \left\{ \frac{0.3}{4} + 0.6 \exp\left(\frac{0}{4}\right) \cos\left(0 + \frac{\pi}{6}\right) \right\} = 0.594615,$$

に訂正します.

p. 173, 3 行目

$$= 1 \times \left\{ \frac{0.597308}{4} + 0.6 \exp \frac{0.5}{4} \cos\left(0.5 + \frac{\pi}{6}\right) \right\} = 0.503070,$$

を

$$= 1 \times \left\{ \frac{0.3 + 0.594615/2}{4} + 0.6 \exp\left(\frac{0.5}{4}\right) \cos\left(0.5 + \frac{\pi}{6}\right) \right\} = 0.503070,$$

に訂正します.

p. 173, 5 行目

$$= 1 \times \left\{ \frac{0.503070}{4} + 0.6 \exp \frac{0.5}{4} \cos\left(0.5 + \frac{\pi}{6}\right) \right\} = 0.491627,$$

を

$$= 1 \times \left\{ \frac{0.3 + 0.503070/2}{4} + 0.6 \exp\left(\frac{0.5}{4}\right) \cos\left(0.5 + \frac{\pi}{6}\right) \right\} = 0.491627,$$

に訂正します.

p. 173, 7 行目

$$= 1 \times \left\{ \frac{0.791627}{4} + 0.6 \exp \frac{1}{4} \cos\left(1 + \frac{\pi}{6}\right) \right\} = 0.234255,$$

を

$$= 1 \times \left\{ \frac{0.3 + 0.491627}{4} + 0.6 \exp\left(\frac{1}{4}\right) \cos\left(1 + \frac{\pi}{6}\right) \right\} = 0.234255,$$

に訂正します.

p. 173, 9 行目

$$y_1 = y_0 + \frac{1}{6}(k_1 + 2k_2 + 2k_3 + k_4) = 0.767911.$$

を

$$y_1 = y_0 + \frac{1}{6}(k_1 + 2k_2 + 2k_3 + k_4) = 0.769711.$$

に訂正します.

p. 177, 式 (6.55)

$$y_{i,j+1} = y_{i,j} + hf_i(y_{1,j}, y_{2,j}, \cdots, y_{n,j}) \quad (i = 1, 2, \cdots, n) \quad (6.55)$$

を

$$y_{i,j+1} = y_{i,j} + hf_i(x_j, y_{1,j}, y_{2,j}, \cdots, y_{n,j}) \quad (i = 1, 2, \cdots, n) \quad (6.55)$$

に訂正します.

p. 177, 式 (6.56) の 2 行目から 4 行目

$$\begin{aligned}
k_{i,2} &= hf_i\left(x_i + \frac{h}{2}, y_{1,j} + \frac{1}{2}k_{1,1}, y_{2,j} + \frac{1}{2}k_{2,1}, \cdots, y_{n,j} + \frac{1}{2}k_{n,1}\right), \\
k_{i,3} &= hf_i\left(x_i + \frac{h}{2}, y_{1,j} + \frac{1}{2}k_{1,2}, y_{2,j} + \frac{1}{2}k_{2,2}, \cdots, y_{n,j} + \frac{1}{2}k_{n,2}\right), \\
k_{i,4} &= hf_i\left(x_i + h, y_{1,j} + k_{1,3}, y_{2,j} + k_{2,3}, \cdots, y_{n,j} + k_{n,3}\right),
\end{aligned}$$

を

$$\begin{aligned}
k_{i,2} &= hf_i\left(x_j + \frac{h}{2}, y_{1,j} + \frac{1}{2}k_{1,1}, y_{2,j} + \frac{1}{2}k_{2,1}, \cdots, y_{n,j} + \frac{1}{2}k_{n,1}\right), \\
k_{i,3} &= hf_i\left(x_j + \frac{h}{2}, y_{1,j} + \frac{1}{2}k_{1,2}, y_{2,j} + \frac{1}{2}k_{2,2}, \cdots, y_{n,j} + \frac{1}{2}k_{n,2}\right), \\
k_{i,4} &= hf_i\left(x_j + h, y_{1,j} + k_{1,3}, y_{2,j} + k_{2,3}, \cdots, y_{n,j} + k_{n,3}\right),
\end{aligned}$$

に訂正します.

p. 223, 式 (7.74)

$$u_j = \frac{1}{N} \sum_{k=0}^{N-1} \widehat{u}_k e^{i2\pi kj/N} \quad (j = 0, 1, \cdots, N-1) \tag{7.74}$$

を

$$u_j = \sum_{k=0}^{N-1} \widehat{u}_k e^{i2\pi kj/N} \quad (j = 0, 1, \cdots, N-1) \tag{7.74}$$

に訂正します.