

Wallace and Hobbs Errata: 8/28/08

- p. 5, right column, line 4: insert cm^{-2}
- p. 5, right column, line 9: replace "(hPa)" by "(1 hPa = 1 mb)"
- p. 5, right column: lines 10 and 11: replace $^{\circ}\text{C}$ by C°
- p. 9, right column, last line of text for Exercise 1.3: add: "Use $p_0 = 1000 \text{ hPa}$."
- p. 10, footnote, line 2: "ozone **and** other highly reactive trace species"
- p. 11, left column: insert minus sign before $\frac{\partial T}{\partial z}$ so that it reads

$$\Gamma \equiv -\frac{\partial T}{\partial z} \dots\dots$$

- p. 13, right column, line 11 "closely parallel the isobars" (delete "to")
- p. 19 footnote, line 2: "ambulance driver"
- p. 22, footnote # 16, first line: change "latitude" to "altitude"
- p. 32, footnote, bottom line: change "5.12" to "5.10"
- p. 37, footnote # 10, bottom line: change "Vladimir" to Wladimir"

- p. 38, Table 2.2, second column, top row, replace 0.01 by 0.03
- p. 41 Table 2.3, next to last line should read HCO_3^-
- p. 42, right column, line 6, replace A with Ar
- p. 50, In box 2.2 "Snowball Earth", line 13: Change : "low" to "high".

- p. 69, right column, 5th line from bottom: replace T_v by T
- p. 77, Section 3.4.1, first paragraph, next to last line: insert "by motions" before "with" so that the line reads: ".....by motions with horizontal dimensions...."
- p. 79, Fig. 37, caption, line 3: delete "that accompanies this book".

- p. 83 In Fig. 3.10, the label B should read $(p, T_d, w(A))$.
- p.87, right column, line 17: change "14°C" to "11°C"
- p. 87, right column, 5th line from bottom: change "14°C" to "11°C"
- p. 94, left column, 11th line up from bottom: replace "book web site" by "CD". [Note: CD refers to a line segment, not a compact disk]
- p. 103: Exercise 3.30: Eq. (3.104): change " $T_0 - \Gamma_z$ " to " $T_0 - \Gamma z$ "
- p. 103: Exercise 3.30 change " $T_0 - \Gamma_z$ " to " $T_0 - \Gamma z$ " in the second, third and fourth equations

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- p. 103, Exercise 3.22 gross **mass** (not weight)
- p. 110, Exercise 3.64, line 5: should read $1.66 \text{ m}^3\text{kg}^{-1}$ and $1.00 \times 10^{-3}\text{m}^3\text{kg}^{-1}$.

p. 118, Eq. 4.11: $2897 \mu\text{m K}$

p. 122, right column, 2nd line up from bottom: replace "KnNs" by $K_\lambda N \sigma$

p. 131, left column, third displayed equation: insert " $\sec \theta$ " after " $-\tau_\lambda$ " so that it reads

$$T_\lambda = e^{-\tau_\lambda \sec \theta} = e^{-k_\lambda u}$$

p. 131, left column, fourth displayed equation: " k_λ " should be italics

p. 131, left column, fifth displayed equation: insert " $\sec \theta$ " after " $-\tau_\lambda$ " so that it reads

$$\tau_\lambda \sec \theta = k_\lambda \sec \theta \int_{z_B}^{z_T} \rho r dz = k_\lambda u$$

p. 131, left column, table near bottom, at left margin insert " $\sec \theta$ " after " τ_λ " so that the line reads

$$\tau_\lambda \sec \theta \quad 0.02 \quad 2 \quad 20$$

p. 138, right column, line below second Eq. (4.56): replace " $\bar{\mu} = 1.66$ " by $1/\bar{\mu} = 1.66$ "

p. 163, right column, line 7: replace O_3 by OH

p. 232, caption of Fig. 6.28, lines 4 and 5: change "6.21" to "6.22" on both lines.

p. 280. eq. (7.10) τ should be boldfaced $\boldsymbol{\tau}$

p.290, third line after Eq. (7.31a) delete the word *isentropic*

p. 318. Restore color to color bar. If that's not possible, delete the gray bar and add to the caption, just before the credit: "Blue denotes ascent and tan denotes descent."

p. 385 The second equation in the left column should be:

$$\frac{V}{u^*} = 2.5 \left[\ln \left(\frac{z}{z_0} \right) + 8.1 \frac{z}{L} \right]$$

p. 391, Caption of Fig. 9.15, top line: Change "(dashed line)" to "(dashed green line)"

p. 394, Eq. (9.26) should be

$$\Phi_M = \left[1 - 15 \left(\frac{z}{L} \right) \right]^{-1/4}$$

p. 416, Exercise 9.27, line 2: Change "km" to "K m"

p. 423, left column, displayed equation. Printing error. Should read

$$\frac{dT}{dt} = \frac{239 \text{ W m}^{-2}}{10^7 \text{ J K}^{-1} \text{ m}^{-2}} = 239 \times 10^{-5} \text{ K s}^{-1}$$

p. 436, Right column, line 6: delete *it* so reads "...afternoon temperatures and lower humidity.."

p. 446, right column: line below first displayed equation: " $\tau = c\lambda$ " print symbols in italics

p. 450, Right column,

line 10 up from bottom: change T_3 to T_4

line 8 up from bottom: change T_3 to T_4

line 6 up from bottom: change σT_3^4 to $\sigma (T_4)^4$

p. 468, the three lines directly underneath "Acceleration due to gravity at sea level"

first line: print "Mass of the Earth"

second line: print "Mass of the Earth's Atmosphere" and delete the label m_e

p. 468, the line directly underneath "Rotation rate of the Earth"

print "Mass of the sun"