

Chapter 1

p. 7: “Where m_i is the molecular mass” should say “where m_i is the molar mass”. The corresponding change in terminology should also be made in Table 1.1.

p. 7: The equation defining the density ρ_i should be $\rho_i \equiv M_i/V$.

p. 54: The caption of Table 2.2 says that it shows “the surface radiative energy budget of the atmosphere.” The word “surface” should be deleted.

Chapter 3

p. 55: In the first sentence, “105” should be changed to “98”.

p. 86: “... CAPE is proportional to the area between the thick vertical line ..” should be changed to “... CAPE is proportional to the area between the thin vertical line ...”

Chapter 4:

p. 109: “..., most clearly in the Southern Hemisphere in both seasons and both hemispheres.” This is supposed to say, “..., most clearly in the Southern Hemisphere in both seasons and in the Northern Hemisphere in winter.”

p. 120: footnote at “upside-down” should be 3, not 4.

p. 121: footnote says “37,” but I think it should just be 4.

p. 135: “so Equation (A4.4) must be” should reference Equation (A4.1)

p. 135: In the formula for the angular velocity, there is a “ \neq ” sign instead of “ π ”. Also, the denominator should be the length of the sidereal day, which is 86164.1 seconds, instead of the length of the solar day.

Chapter 5

p. 141: Eq. 5.1 is supposed to be a copy of Eq. 2.14, but it’s not. So that’s a mistake.

p. 144: Eq. 5.3 should be

$$\frac{\Delta T_S}{T_0} = \frac{\frac{1}{4} \left(\frac{\Delta S}{S_0} - \frac{\Delta \epsilon}{\epsilon_0} \right)}{1 + \frac{1}{4} \left(\frac{T_0}{1 - \alpha_0} \right) \left(\frac{\partial \alpha}{\partial T_S} \right)_{ice}}$$

p. 149: On the left vertical axis of Fig. 5.2, the lower “20” should be “-20”.

p. 150: Eq. 5.5 should be

$$\frac{\Delta T_S}{T_0} = \frac{\frac{1}{4} \left(\frac{\Delta S}{S_0} - \frac{\Delta \epsilon_{CO2}}{\epsilon_0} \right)}{1 + \frac{1}{4} \left(\frac{T_0}{1 - \alpha_0} \right) \left(\frac{\partial \alpha}{\partial T_S} \right)_{ice} + \frac{T_0}{4\epsilon_0} \frac{\partial \epsilon_{H2O}}{\partial T_S}}$$

p. 157: Change “...the additional thermal energy be radiated...” to “...the additional thermal energy can be radiated...”.

p. 158: The variations of the moist adiabatic lapse rate with temperature are shown in Fig. 3.4, not Fig. 3.5.

Chapter 7

p. 194: “...the object shown in Figure 7.1...” should say “...the object shown in Figure 7.2...”.

p. 198-199: “The first is based on entirely on models...” should be changed to “The first is based entirely on models...”

p. 205: The caption of Figure 7.5 should refer to Equation (7.2), not just Equation (2).

Chapter 8

p. 211: Delete the sentence starting with “The red curve...”.

p. 223: “These results illustrate, in a very dramatic way, whey climate...” should be “These results illustrate, in a very dramatic way, why climate...”.