Mesoscale Meteorology in Midlatitudes **Errata**

last updated: June 14, 2015

Note that some of these errors were corrected in the second printing of the book in 2011 and may not be present in your copy. UPDATE: All of the errors below will be corrected in the fall, 2013 (4th or 5th?) printing.

1. p. 14, last paragraph of left column, after (2.31). In the case of unsaturated air, the T *in the exponential function* of (2.31) should be replaced with T^* [as opposed to both T's in (2.31)].

2. p. 43, equation (3.10). C_1 should be C_2.

3. p. 45, last sentence. The reference to (3.17) should be to (3.16).

4. p. 48, right column, text after (3.23). "Subtracting (3.24) from (3.22) gives . . . " should be "Subtracting (3.23) from (3.21) gives . . . "

5. p. 55, right column. (3.56) is missing a Δz in the last term in brackets.

6. p. 91, left column, last full sentence: ". . . for a neutral surface layer, $L = \infty$" (not $L = 0$). Note, however, that the AMS Glossary defines a neutral surface layer as having $L = 0$.

7. p. 122, left column. The definitions for u_{gw} and u_{gc} are missing an f in their respective expressions.

8. p. 147, right column, line 2. The reference to (5.39) should be a reference to (5.38).

9. p. 151, equation (5.48). There shouldn't be a minus sign in front of the R_d.

10. p. 158, Fig. 5.41 caption. The isobars are black and the isotherms are magenta.

11. Fig. 6.11, the labels for ridge axis and axis of inflection should be swapped (this was fixed in the 3rd or 4th printing circa 2013).

12. p. 173, column 2, line 9. The sentence should reference (6.64), not (6.53).

13. p. 196, Fig. 7.20. The figure shows the shear extending over a depth of 4 km, when in fact, the shear extends only over 2 km. The caption is correct.

14. p. 236, Fig. 8.36. In the streamwise vorticity case, ζ'_{min} should be ζ'_{max}.

15. p. 256, Fig. 9.15 caption. Numerals in parentheses are *equivalent* potential temperatures.

16. p. 264, Fig. 9.26. The ordinate should be labeled "north-south distance," not "east-west distance."

17. p. 274, Fig. 10.1. The first two labels on the abscissa should be "0" and "10," not "11" and "0," respectively.

18. p.282, Fig. 10.11. The labels (a)–(e) should be (i)–(v) to match the discussion in the text.

19. p. 321, Fig. 11.5. The figure shows a nocturnal drainage wind, according to Neff (1990). It's not clear to us what "shadowed area" means in the figure if it's nighttime. It's possible that "shadowed" refers to the region unobserved by the lidar rather than an area that is shaded from the sun. We need to research this further.

20. p. 323, left column, two lines after (11.5). The variables $A_{yz_{\text{valley}}}$ and $A_{yz_{\text{plain}}}$ should be $A_{xz_{\text{valley}}}$ and $A_{xz_{\text{plain}}}$. (It also might be good to make the labels in Fig. 11.9 match the convention used in the text, even though the Fig. 11.9 caption defines what the labels are.)

21. p. 336, right column, last paragraph. "...fluid will thin ($\partial h_t/\partial x < 0$)..." should be "...fluid will thin ($\partial D/\partial x < 0$)..."

22. p. 343, right column, line before (13.1). "cf. (2.147)" should be "cf. (2.146)."

23. p. 354. Fig. 13.13 caption. "undisturbed height" should be "undisturbed height $z/h_m \approx 0.35$".

24. p. 360, right column, line before (13.22). "(2.147)" should be "(2.146)."

25. p. 371, Fig. A.2 caption. The description of a and b are reversed.

26. p. 373, Fig. A.5, left panel. The label "dBZ" should be "m s^{-1}."

27. p. 385, equation (A.12). The second term on the rhs should be $v \cos\phi \cos\theta$ rather than "$v \cos\phi \sin\theta$".