

- Page 9, last line: replace clause “and $m\mathbf{x}$ is momentum” with ‘, the time derivative of velocity v , and $m\mathbf{v}$ is momentum”.
- Page 10, second line before (2.3): change “acceleration of a fluid parcel” to “time derivative”
- Page 20, Fig. 24: the sign symbol should be changed from “+” to “-” in the right panel and “positive χ ” should be changed to “negative χ ” in the caption.
- Page 28, line 5: the pressure unit is equal to 10^5 Pa not 1 Pa.
- Page 54, equation (3.17), last line, and equation (3.18): insert minus sign on right-hand side.
- Page 65, equation (3.60): the final right-hand parenthesis in the third line should be deleted to become:

$$\begin{aligned}\zeta(\mathbf{x}, t) &= \sum_{\alpha=1}^N C_{\alpha} \delta(\mathbf{x} - \mathbf{x}_{\alpha}) \\ \psi(\mathbf{x}, t) &= \frac{1}{2\pi} \sum_{\alpha=1}^N C_{\alpha} \ln |\mathbf{x} - \mathbf{x}_{\alpha}| \\ \mathbf{u}(\mathbf{x}, t) &= \frac{1}{2\pi} \sum_{\alpha=1}^N \frac{C_{\alpha}}{|\mathbf{x} - \mathbf{x}_{\alpha}|^2} [-(y - y_{\alpha})\hat{\mathbf{x}} + (x - x_{\alpha})\hat{\mathbf{y}}] .\end{aligned}\quad (3.60)$$

- Page 66, equation (3.67): replace it with

$$p_{\alpha} = |C_{\alpha}|^{1/2} x_{\alpha}, \quad q_{\alpha} = |C_{\alpha}|^{-1/2} C_{\alpha} y_{\alpha} .\quad (3.67)$$

- Page 73, first line after equation (3.72): the sentence should begin “Introducing (3.72) and (3.30) and ...”; i.e., the reference previously was (3.24), but should be (3.30).
- Page 74-75, bottom and top lines: replace parenthetical remark with “(since the point in x where $\partial_x \bar{\zeta} = 0$ in a parallel flow is an inflection point for the velocity profile, $\partial_{xx} \bar{v} = 0$)”
- Page 77, equation (3.90): there is a typographic error, and after its removal the formula is

$$s^2 = \left(\frac{kU}{2}\right)^2 \left(2 \frac{1 + (1 - [kD]^{-1}) \tanh[kD]}{kD(1 + \tanh[kD])} - 1\right) .\quad (3.91) \quad (1)$$

- Page 85, equation (3.106): a ∇ symbol needs to be inserted into the second left-side term to become:

$$\frac{\partial \bar{\tau}}{\partial t} + \bar{\mathbf{u}} \cdot \nabla \bar{\tau} = -\nabla \cdot (\bar{\mathbf{u}}' \bar{\tau}') .$$

- Page 85, equations (3.107)-(3.108): move last line in the former to start of latter and put a factor of 1/2 into the final line to become:

$$\begin{aligned}\overline{\mathbf{u}'\tau'} &\approx -\overline{\mathbf{u}'(\mathbf{r}' \cdot \nabla)\bar{\tau}} \\ &= -\frac{d\overline{\mathbf{r}'}}{dt}(\mathbf{r}' \cdot \nabla)\bar{\tau} .\end{aligned}$$

and

$$\frac{d\overline{r^{i'}}}{dt}r^{j'} = \frac{1}{2} \frac{d}{dt} \overline{r^{i'}r^{j'}} = \kappa_e \delta_{i,j} ,$$

- Page 126-126, equations (4.92) and (4.97): In the expressions for \mathbf{u}_h and \mathbf{r}'_h , cancel the g factors in numerator and denominator, and change the sign of the term $\propto f$.
- Page 135, second line following equation (4.124): The symbol R should be formatted the same as the first symbol in (4.124) and as on the fifth line following equation (4.124), i.e., approximately drawn as \mathcal{R} .
- Page 151, equation (5.37): the prefactors for $\tilde{\psi}_1$ should have square roots:

$$\begin{aligned}\psi_1 &= \tilde{\psi}_0 + \sqrt{\frac{H_2}{H_1}} \tilde{\psi}_1 \\ \psi_2 &= \tilde{\psi}_0 - \sqrt{\frac{H_1}{H_2}} \tilde{\psi}_1 .\end{aligned}\tag{5.37}$$

- Page 156, first line in equation (5.52): The exponent should be n , not $n + 1$:

$$\bar{\psi}_n = (-1)^n U y$$

- Page 181, equation (5.103): The sign convention here for \mathbf{E} is the opposite of that used in Andrews, D.G., J.R. Holton, and C.B. Leovy, 1987: *Middle Atmosphere Dynamics*. Academic Press.
- Page 161, Fig. 5.6: remove the tilde symbols from the layer streamfunctions at the bottom of the figure.
- Pages 198 (equation (6.30)), 199 (equation (6.33)), and 202 (equation (6.38), first line): the symbol f should be replaced by $|f|$ in these specific formulas.
- Page 202, equation (6.38): the equation for $\bar{v}(z)$ should swap $\cos[\lambda z]$ and $\sin[\lambda z]$.
- Page 238, Rotating shallow-water and wave dynamics, problem 7, fourth line: insert "zonal" before "velocity patch" so it becomes "; (c) a zonal velocity patch".
- Page 239, Baroclinic and jet dynamics, problem 5, second line: insert "quasigeostrophic," before "baroclinic instability" so it becomes "quasigeostrophic, baroclinic instability of a mean flow."

- Page 239-240, problem 8: We rotate the flow orientation to be consistent with the Answers. The equation in the third line should be changed from

$$\mathbf{u} = Sz\hat{\mathbf{y}}, \quad b = N^2z + fSx ,$$

to

$$\mathbf{u} = Sz\hat{\mathbf{x}}, \quad b = N^2z - fSy ,$$

The mean advection in the top two equations on p. 240 should be changed from $V\partial_y$ to $Sz\partial_x$, and the factor in the last term in the vertical boundary condition should be changed from $\partial_y\psi'$ to $\partial_x\psi'$.

- Page 243, reference Holland, W.R. (1986), second line: The editor's name should be J.J. O'Brien.