

**Errata for
'Essentials of Atmospheric and Oceanic Dynamics'
by G K. Vallis**

Below are various errata and a few clarifications for the book 'Essentials of Atmospheric and Oceanic Dynamics'. If you find more please email me at g.vallis@exeter.ac.uk. I am grateful to many readers for their comments, especially Tim Dowling for his careful reading.

- p. 15, (1.50): Strictly speaking c_v and c_p may vary with temperature, even in an ideal gas. Here they are treated as constant. That is generally appropriate for Earth, but might not be for other planetary atmospheres.
- p. 35, below (2.51): $\text{g/kg}^{-1} \rightarrow \text{g/kg}$ and $\text{m s}^{-2} \text{kg}^{-1} \rightarrow \text{m s}^2 \text{kg}^{-1}$.
- p. 40: "geostrophic relations" are not defined at that point. Don't worry, they come in Chapter 3.
- p. 41: (2.79): $-p/RT \rightarrow -RT/p$
- p. 62: Exercise 3.2 is the same as Exercise 2.10 on page 46.
- p. 64: Caption to Fig 4.1: "The quantity η_B " \rightarrow "The quantity η_T ".
- p. 79: For clarity, on the first line, $\sqrt{gH} = 1$ is in the nondimensional units described in the caption for Fig. 4.8
- p. 110: (6.20) $q'(x, y, t) \rightarrow q'(x, y, z, t)$, (to be consistent with $\psi'(x, y, z, t)$ in the same line.
- p. 136: (7.45c) $u' \rightarrow b'$, but the subsequent equations are not affected.