

Wandering Stars: About Planets And Exo-planets, An Introductory Notebook, G. H. A. Cole (Imperial College Press): Errata

Harold Erbin*¹

¹Sorbonne Universités, UPMC Univ Paris 06, UMR 7589, LPTHE, F-75005, Paris, France

¹CNRS, UMR 7589, LPTHE, F-75005, Paris, France

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Open bullets are for syntax errors and typos, closed are for physics and formulas errors and dash are general comments; question mark in parentheses means that I'm not sure of the correction but I know that the text is wrong. Some remarks are present for my own understanding such that you may not find them useful. These errata have not been reviewed by the author nor the editor and I can have made some mistakes.

29/09/2012

- p. 25 (§ below 2.3): plant → planet
- p. 29 (last §): circualr → circular
- p. 37 (bottom): $s(\text{Jup}) = 4.5 \times 10^6 \text{ m} \rightarrow s(\text{Jup}) = 4.5 \times 10^7 \text{ m}$
- p. 39 (last §): $m_3 r_3 + \rightarrow m_3 r_3 + \dots$
- p. 42 (before eq. (3.1)): eq (2.16) → eq (2.20)
- p. 49 (§2): A is not defined here (it is few chapters later, but to be comprehensive it should be there also)
- p. 49 (§2): $\varepsilon_2 = \frac{G A m_p}{r_2} \rightarrow \varepsilon_2 = \frac{G A m_p m_2}{r_2}$
- p. 52 (§2): $R = 6 \times 10^6 \rightarrow R = 6 \times 10^6 \text{ m}$
- p. 63 (§3): comic → cosmic
- p. 66 (§2): plot., → plot,
- p. 67 (bottom): $1.5 \times 10^3 \text{ k/gm}^3 \rightarrow 1.5 \times 10^3 \text{ kg/m}^3$
- p. 68 (bottom): time scale less than $10^{-11} \rightarrow 10^{-11} \text{ s}$
- p. 70 (list: (2)): $x'_i = \sum \rightarrow x'_i = \sum_j$
- p. 71 (§2): three numbers → four numbers

*erbin@lpthe.jussieu.fr

- p. 71 (§2): speed and viscosity have not the same notations in text and table: $(v, \mu) \rightarrow (U, \eta)$.
- p. 72 (before last §): $\Pi_4 = \frac{\rho U^2}{p} \rightarrow \Pi_4 = \frac{\rho U^2}{p}$
- pp. 72/75: $\Pi_2 = \text{St}$ and $\Pi_{12} = \text{St}$ have the same abbreviation
- 81 (§1 below 5.9): Re_M must not be too high $\rightarrow \text{Re}_M$
- p. 95 (below 6.5): considerable rotational \rightarrow considerable orbital
- p. 96 (tab. 6.8): last column is empty
- p. 108 (§1): wold arise \rightarrow would arise
- p. 112 (§4): liophilic \rightarrow lithophilic
- p. 114 (tab. 8.3): Iron: trace- \rightarrow Iron: trace
- p. 123 (§1): $N = (A - Z), = Z, :$ $\rightarrow N = (A - Z)$.
- p. 124 (§2): (0.005 %) \rightarrow ${}^{234}_{92}\text{U}$ (0.005 %)
- p. 125 (below eq. (9.2)): " N_τ are the daughter atoms" \rightarrow " N_τ are the number of parent atoms after time τ "
- p. 138 (§3): precession \rightarrow precession
- p. 140 (eq. (10.7)): $dP/dR \rightarrow dP/dr$
- p. 144 (§1): onee time \rightarrow one time
- p. 147 (§1): characte ristic \rightarrow characteristic
- p. 149 (§3, before eq. (10.18)): using (9.8b) \rightarrow using (10.8b)
- p. 149 (eq. (10.18) and in all the page): P, B, C, D not in math mode
- p. 149 (eq. (10.18)): $\rho \frac{\partial P}{\partial \rho} + \kappa_0 \rightarrow \rho \frac{\partial P}{\partial \rho} = \kappa_0$
- p. 149 (eq. (10.19)): $P = \frac{\kappa_0}{B} \left[\frac{\rho}{\rho_0} - 1 \right] \rightarrow P = \frac{\kappa_0}{B} \left[\left(\frac{\rho}{\rho_0} \right)^B - 1 \right]$
- p. 150 (§1): (9.24) and 9.8b) \rightarrow (10.18) (?) and (10.8b)
- p. 162: depth of 3 m \rightarrow 3 km (?)
- p. 164 (below 11.5): out core \rightarrow outer core
- p. 206 (§2): and the f_2 values \rightarrow and the J_2 values
- p. 211 (tab. 14.4): 27 km \rightarrow 27
- p. 212 (§2): closer to 10 ME \rightarrow 10 M_E
- p. 216 (§1): 19,500 showing that ... than for Earth times that for Earth \rightarrow 19,500 times that for Earth showing that ... than for Earth
- Part II: ellipticity is written f and not anymore e
- p. 262 (§2): octapole contribution \rightarrow octopole

- p. 263 (§4): it is written "measured in μT " but the value is given in gauss
- p. 278 (§3): "ruby emission ... 63 and 6364" \rightarrow 6300 and 6364
- p. 281 (below sec. 18.6): "protons with energies in excess of 10 Me and electrons with energies in excess of 500,000 eV (0.5 eV)" \rightarrow 10 MeV, 500,000 eV, 0.5 MeV
- p. 306 (caption of fig. 20.2): general main sequece \rightarrow sequence
- p. 313 (item (i)): as any level \rightarrow at
- p. 313 (eq. 21.1): R should be written in roman font, as below to avoid confusion with the radius R
- p. 314 (eq. 21.4): $p = \sim \dots \rightarrow p \sim \dots$
- p. 320 (eq. 21.17): $n^{5/3} \rightarrow n_e^{5/3}$
- Chap. 22: the positron is the antiparticle of the electron, not a positive charged electron (moreover the term of antiparticle have been introduced so it's not a problem to speak about it)
- p. 326 (§2): $m_p = 1.007,825 \text{ mu} \rightarrow m_u$ or amu
- p. 327 (§4): for very kilogram \rightarrow every
- p. 328 (§1): T is not in math mode at the end
- p. 330 (§2): flourine \rightarrow fluorine
- p. 336 (tab. 23.1): 1,409 \rightarrow 1.409
- p. 338 (fig. 23.3): bad legend for y axis, it should be something like "Solar temperature [10^6 K]"
- p. 343 (§1): hundred degrees K \rightarrow hundred K
- p. 345 (below sec. 23.3): days per latitude are false, at least for 60° , for which it should be around 31 days
- p. 381-382 (sec. 27.1): list numbers are not coherent: (1), (2), (c), (d)
- p. 383 (sec. 27.3, §2): $F_s = \dots = 3.21 \text{ m} \dots 8.56 \text{ m}/3.21 \text{ m} \rightarrow$ units are mN
- p. 384 (§2): focus of the eclipse \rightarrow ellipse
- p. 395 (§4): the possibility that that the initial \rightarrow the possibility that the initial
- p. 400 (§2): more advance life \rightarrow advanced