Errata Planetary Sciences, Second Edition,

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p. 5, Section 1.1.6, line 15: change 16 km → 26 km

p. 6. "Semimajor axis" should be labeled "Equatorial Radius (km)" in Table 1.2

p. 6. Table 1.2 lists the Polar Gravity first followed by the Equatorial Gravity. Table 1.3 does the reverse. Put Equatorial first in both tables!

p. 6, Table 1.3: Sidereal rotation period of Saturn: change 13^{cl} → 13^a

p. 7, top: change ~15-20 km s^{-1} → 22 (for H) – 26 (for He) km s^{-1}.

p. 10, Table 1.5, Mimas: change 109 → 209

p. 27,   (29+sqrt(621))/2 ~ 27   →   (25+sqrt(621))/2 ~ 25.

p. 37, footnote, near end: would have -> would also have

p. 58; figure 3.2a: y-axis should be Brightness (ergs/s/cm^2/Hz/sr), and numbers should decrease by factor 2.44E12

p. 58, fig. 3.2 figure caption, lines 2 and 3: move "(eq. 3.5)" from line 3 to line 2, after 30 000 K; and change 3.5 → 3.3

p.59, just below eq. 3.13: change first sentence to:
with r_o the heliocentric distance (in cm) and L_o the solar luminosity

(r_o: the subscript is the sun symbol \odot in tex; the symbol for L_o in the original text is right)

p. 60, RHS of eq. 3.18a: Change $L_o/4$ pi r_o^2 → $(F_o)_v$ / 4 pi r_{oAU}^2
(in Tex: ${(F_\odot)_\nu \over 4 \pi r_{\rm \odot_{AU}}}$

p. 63: Section 3.2.2.1, line 9: change "increase in pressure" → "change in pressure"

p. 90, Table 4.6: footnote c: should read: the protosolar values for the elements are from Grevesse et al (2007).

p. 93, paragraph just above 4.3.3.2 should read (for some reason this was not changed before publication).

The detection of methane gas in Mars's atmosphere by Mars Express and several ground-based telescopes is puzzling. Observed abundances range from 10 ppb up to 250 ppb, and reveal large variations both in time (over time scales of weeks-months) and place. With an average lifetime of 300-600 years, the presence and reported variations in CH_4 require both a strong source and sink. Hot debates continue as to whether or not the detections are real; and if so, what might be its cause: volcanic activity, microbial life, or low-temperature `serpentinization', a metamorphic process ($5.1.2.3) where (ultra)mafic rocks (e.g., olivine) are converted into serpentinite via hydration and oxidation, thereby releasing methane gas. Potential sinks for CH_4 are oxidation and condensation, both of which are difficult to reconcile with the observations.

p. 99, Fig. 4.15 panel a): print JUPITER in bold like in other panels.

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p. 175, caption of fig 5.24: cross section → cross-section

p. 180: E_k shows up twice; both times should be: E_K

p. 184, Sec 5.4.3, 1st para: believed -> thought

p. 194, Section 5.5, line 16: insert "orbiters":
line should read: flybys, orbiters, or landers

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p. 238, one line under further reading: 5 -> 1

p. 294, Table 7.2: R_p → R (drop the subscript p in all three cases).

p. 295, eq. 7.39: insert R^3 → $= R^3$ \sqrt(---)

p. 295, eq. 7.41: replace 360° by 180°

p. 297, just above eq. 7.50: change "energy" → "kinetic energy"

p. 297. Eq. 7.47b, change   qB/mc → IqB/mcl   (I here is the absolute value symbol, on either side of qB/mc)

p. 298, just above Eq. 7.55. change "their ratio" --> "the following combination"

p. 333, left column, second paragraph. Change the following sentence:
whereas the higher order terms must have an origin closer to the surface.
→ whereas strong high order terms imply a source closer to the surface (Uranus

and Neptune).

Delete the next sentence: "the magnetic fields of Uranus and Neptune --- Jupiter and Saturn."
p. 334, Problem 7.7E: line 2, change 0.264 → 0.264 gauss.

p. 334, problem 7.9I: change (eq. 7.47) → (eq. 7.48)

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p. 406: parent molecules, both words should be in italics, not just 1st

p. 411, Table 10.1: should have units: insert in table: (^{o} is degree symbol)

   a (AU)   e (^{o})   i(^{o})

p. 426, Fig. 10.19: Rewrite first 2 sentences of Caption → Population inversion, $i=(n_u - n_l)/(n_u+n_l)$, for the Λ-levels of the OH ground state as a function of a comet's heliocentric velocity (in km s^{-1}). When the inversion measure is positive, OH is seen in emission (maser); when the inversion measure is negative, OH is observed in absorption (see Figs. 10.20 and 10.21). The result ----

p. 496, col 2: Figs -> Figs. (add period)

p. 501, caption to 12.13: delete 'giant'

p. 505, Table 12.1
    mass of planet c is 0.83, not 0.23
    footnote: 6.3 M → 6.3 M$_{Earth}$ (earth should be the earth symbol)

p. 607, Bouchez reference: spectrescopy → spectroscopy

p. 628: Hally-family → Halley-family

p. 632. elsticity -> elasticity