

Errata for "Physics and Chemistry of Clouds" (Published 2011)
by Dennis Lamb and Johannes Verlinde

Last Updated: 31-Dec-2012

Page	Location	Correction
29	Line 2, near end	Change "is" to "in".
47	Eq. (2.20)	Change " $4\pi n_v$ " to " $4\pi n$ ".
60	3rd line from bottom	Change "severe" to "sever".
67	Line 12	Change "surface" to "atmosphere".
96	3rd line below Eq. (2.59)	Insert "4" before " σ " in equation for $T_{sfc,0}$.
96	Eq. (2.60)	Right-hand expression should be raised to 1/4 power: $[2/(2-\epsilon)]^{1/4}$.
115	Last line of top paragraph	Change "stratopause" to "tropopause".
213	Line 11	Change units from "nm" to " μm ".
227	Eq. (5.24)	Change subscript of ϕ from "v" to "l".
227	Eq. (5.27)	In first two terms on right, move subscript "s" to other variable: $y_{vs} l_v$.
228	Eq. (5.31)	Add subscript "s" to the vapor mixing ratio: y_{vs} .
228	5th line below Eq. (5.31)	Move subscript "s" to other variable: $y_{vs} l_v$.
233	Eq. (5.46)	Change signs of " Γ_d " in expanded form and of the expression on far right.
233	Eq. (5.47)	Change sign of right-hand side: $\gamma - \Gamma_d$.

Errata for "Physics and Chemistry of Clouds" (Published 2011)
by Dennis Lamb and Johannes Verlinde

Last Updated: 31-Oct-2012

Page	Location	Correction
60	Fig 2.18, top panel	Circle (i.e., a molecule) is missing in back, lower right corner of perspective diagram.
151	Fig. 3.10, caption	Replace "toward the right" with "downward".
151	Fig. 3.10, abscissa scale	Label "0" should be moved one tick mark toward left.
155	Eq. (3.70)	"A " should be " A_K ".
155	Eq. (3.71)	"B " should be " B_K ".
174	Prob. 7	Definition of Δg should read " $\Delta g = g_v - g_L$ ".
234	Eq. (5.54)	Change "<" to "> 0;". (Should read $d\theta_v/dz > 0$; $d\theta_{es}/dz < 0$.)
236	Eq. (5.60)	Change "-" to "+" before the left parenthesis.
248	2nd line after Eq. (6.18)	Change "it" to "its".
248	Eq. (6.20)	Change " p " to " e/e_s " in the last term.
261	Fig. 6.7	The x-axis labels are incorrect. Move "35" one tick to right; delete "40".
261	Fig. 6.7	Units of equivalent potential temperature are wrong. Change "K" to " $^{\circ}\text{C}$ ".
283	Eq. (7.8)	Make subscripts of " n_v " upper case (V), in two places. (Should read " n_V ".)
284	First line	Change " n_v " to " n_V ".
284	Eq. (7.9)	Change " n_v " to " n_V " in both equations.
286	Eq. (7.10)	Delete from middle expression: exponent "2" and "(1-m)". (Integrand is $2\pi x'rd\theta'$)
290	Second full paragraph	Replace last three sentences (starting with "Turning a solid ...") with "Deliquescence is well approximated as an equilibrium process."
306	Eq. (7.32)	Ambiguity may be reduced by replacing " T_f " with " $T_f(a_w)$ ".
307	Fig. 7.22, caption	Insert after "particles": "that freeze with frequency $\omega_t = 1 \text{ min}^{-1}$ ".
326	Eq. (8.11)	Change the "+" sign after " S_K " to a "-" sign.
327	3rd line above Eq. (8.14)	Replace " dm_p/dt " with " dm_d/dt " for consistency.
327	Eq.(8.14)	Replace " Φ_q " with " Φ_T " for consistency.
328	1st line and Eq (8.15)	Replace " dm_p/dt " with " dm_d/dt " for consistency.
403	Eq. (9.42)	Change " ρ_{LV} " to " ρ_L ".
412	Line 7 from bottom	Change "that" to "than".
430	Mid-page	Units are incorrect for w ; should read $w = 0.8 \text{ m s}^{-1}$.
455	Problem 3 (a), line 2	Insert "-" into exponent of "m" in units: 1.5 g m^{-3} .
455	Problem 3 (b), lines 1, 2	Insert "-" into exponent of "m" in units: 0.5 g m^{-3} , 2.5 g m^{-3} .
466	Fig. 12.7, caption	Add at end, just before final period: "and Korolev and Mazin (2003)".
486	Fig. 13.4, lower panel	Add to ordinate: A second label, " $dV/d\log D$ ", and a second set of scale values, ranging from 10^{-2} to 10^2 , associated with the existing tick marks.
499	Fig. 13.13, near top	Units for "Drop radius" in upper left corner are incorrect. Change "m" to " μm ".

Errata for "Physics and Chemistry of Clouds" (Published 2011)

by Dennis Lamb and Johannes Verlinde

- Cumulative List -

Last Updated: 31-Dec-2012

Page	Location	Correction
29	Line 2, near end	Change "is" to "in".
47	Eq. (2.20)	Change " $4\pi n_v$ " to " $4\pi n$ ".
60	Fig 2.18, top panel	Circle (i.e., a molecule) is missing in back, lower right corner of perspective diagram.
60	3rd line from bottom	Change "severe" to "sever".
67	Line 12	Change "surface" to "atmosphere".
96	3rd line below Eq. (2.59)	Insert "4" before " σ " in equation for $T_{sfc}, 0$.
96	Eq. (2.60)	Right-hand expression should be raised to 1/4 power: $[2/(2-\epsilon)]^{1/4}$.
115	Last line of top paragraph	Change "stratopause" to "tropopause".
151	Fig. 3.10, caption	Replace "toward the right" with "downward".
151	Fig. 3.10, abscissa scale	Label "0" should be moved one tick mark toward left.
155	Eq. (3.70)	"A" should be " A_K ".
155	Eq. (3.71)	"B" should be " B_K ".
174	Prob. 7	Definition of Δg should read " $\Delta g = g_v - g_L$ ".
213	Line 11	Change units from "nm" to " μm ".
227	Eq. (5.24)	Change subscript of ϕ from " v " to " l ".
227	Eq. (5.27)	In first two terms on right, move subscript " s " to other variable: $y_{vs} l_v$.
228	Eq. (5.31)	Add subscript " s " to the vapor mixing ratio: y_{vs} .
228	5th line below Eq. (5.31)	Move subscript " s " to other variable: $y_{vs} l_v$.
233	Eq. (5.46)	Change signs of " Γ_d " in expanded form and of the expression on far right.
233	Eq. (5.47)	Change sign of right-hand side: $\gamma - \Gamma_d$.
234	Eq. (5.54)	Change "<" to "> 0;". (Should read $d\theta_v/dz > 0$; $d\theta_{es}/dz < 0$.)
236	Eq. (5.60)	Change "-" to "+" before the left parenthesis.
248	2nd line after Eq. (6.18)	Change "it" to "its".
248	Eq. (6.20)	Change " p " to " e/e_s " in the last term.
261	Fig. 6.7	The x-axis labels are incorrect. Move "35" one tick to right; delete "40".
261	Fig. 6.7	Units of equivalent potential temperature are wrong. Change "K" to " $^{\circ}\text{C}$ ".
283	Eq. (7.8)	Make subscripts of " n_v " upper case (V), in two places. (Should read " n_V ".)
284	First line	Change " n_v " to " n_V ".
284	Eq. (7.9)	Change " n_v " to " n_V " in both equations.
286	Eq. (7.10)	Delete from middle expression: exponent "2" and "(1-m)". (Integrand is $2\pi x'rd\theta$)
290	Second full paragraph	Replace last three sentences (starting with "Turning a solid ...") with "Deliquescence is well approximated as an equilibrium process."

Page	Location	Correction
306	Eq. (7.32)	Ambiguity may be reduced by replacing " T_f " with " $T_f(a_w)$ ".
307	Fig. 7.22, caption	Insert after "particles": "that freeze with frequency $\omega_t = 1 \text{ min}^{-1}$ ".
326	Eq. (8.11)	Change the "+" sign after " S_K " to a "-" sign.
327	3rd line above Eq. (8.14)	Replace " dm_p/dt " with " dm_d/dt " for consistency.
327	Eq.(8.14)	Replace " Φ_q " with " Φ_T " for consistency.
328	1st line and Eq (8.15)	Replace " dm_p/dt " with " dm_d/dt " for consistency.
403	Eq. (9.42)	Change " ρ_{LV} " to " ρ_L ".
412	Line 7 from bottom	Change "that" to "than".
430	Mid-page	Units are incorrect for w ; should read $w = 0.8 \text{ m s}^{-1}$.
455	Problem 3 (a), line 2	Insert "-" into exponent of "m" in units: 1.5 g m^{-3} .
455	Problem 3 (b), lines 1, 2	Insert "-" into exponent of "m" in units: 0.5 g m^{-3} , 2.5 g m^{-3} .
466	Fig. 12.7, caption	Add at end, just before final period: "and Korolev and Mazin (2003)".
486	Fig. 13.4, lower panel	Add to ordinate: A second label, " $dV/d\log D$ ", and a second set of scale values, ranging from 10^{-2} to 10^2 , associated with the existing tick marks.
499	Fig. 13.13, near top	Units for "Drop radius" in upper left corner are incorrect. Change "m" to " μm ".