Errata

1) Page 21, Figure 2.13 caption, line 2, "(Equation 2.24)" should be: "(Equation 2.23)".

2) Page 31, Equation 2.39 should be: " $\nabla \times \vec{E} = -\frac{\partial \vec{B}}{\partial t}$."

3) Page 37, Equation 2.58 should be: " ε " = $\frac{(\varepsilon_s - \varepsilon_\infty)(\lambda_s / \lambda)}{1 + (\lambda / \lambda)^2} + \frac{\sigma \lambda}{2\pi c \varepsilon_0}$."

4) Page 44, Figure 2.24 caption, the citation in line 3-4 should be: "(From Brandes et al. 2004b, Journal of Applied Meteorology, 43, 461-475)."

5) Page 49, the first line after Equation 2C.10: "m and Λ " should be " μ and Λ ".

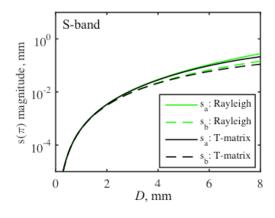
6) Page 50, line 3: " M_0 and Λ " should be " N_0 and Λ ".

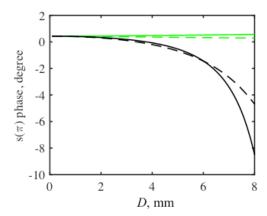
7) Page 50, line 15: "M₃ (M₂,M₄)" should be "M₃, (M₂,M₄)".

8) Page 54, line 2: "(Equation 2.14)" should be "(Equation 2.39-2.42)".

9) Page 57, Equation 3.19 should be: " $\vec{E}(x,t) = (A_y \hat{y} \pm A_z \hat{z}) \cos(\omega t - kx + \phi_{01})$ "

10) Page 79, Figure 3.20(a) should be replaced with the following





11) Page 83, Equation (3.105) should be

$$\tilde{\overline{S}} = \overline{\overline{R}}(\varphi)\overline{\overline{S}}^{(b)}\overline{\overline{R}}^{-1}(\varphi) = \begin{bmatrix} s_a \cos^2 \varphi + s_b \sin^2 \varphi & (s_a - s_b) \sin \varphi \cos \varphi \\ (s_a - s_b) \sin \varphi \cos \varphi & s_a \sin^2 \varphi + s_b \cos^2 \varphi \end{bmatrix},$$

- 12) Page 85, " $\overline{\overline{C}}_{i}$ " in Equation (3.112) should be " $\overline{\overline{P}}_{i}$ "
- 13) Page 87, in the lower-right term of Equation (3.127): " θ_b " should be " φ "
- 14) Page 88, the line above Equation (3.129): "subscript b" should be "subscript B"
- Page 134, the first line of Problem 4.3f: change " $SD(\sigma_h) = SD(\sigma_v) = 5^\circ$ " to " $SD(\delta_h) = SD(\delta_v) = 5^\circ$ ".
- 16) Page 92, the 3rd line of Problem 3.3 should be $\gamma = b/a = 0.9951 + 0.0251D 0.03644D^2 + 0.005303D^3 0.0002492D^4.$
- 17) Page 140, Equation 5.30 should be:

"
$$P_{tp} = \left\langle \left| V_{pq} \right|^2 \right\rangle = \frac{\lambda^2 G^2}{(4\pi)^2 r^4} \int dv \left\langle n \left| s_{pq}' \right|^2 \right\rangle P_{tq} = P_{tq} \frac{\lambda^2 G^2 \pi \theta_1^2 c \tau}{(4\pi)^3 r^2 16 \ln 2} \eta_{pq}.$$
"

- 18) Page 145, Equation 5.30 should be: "SD($\hat{\rho}_{hv}$) = $\frac{1 \rho_{hv}^2}{\sqrt{2M_I}}$."
- 19) Page 166, the forth line from bottom: the observational discriminant vector should be: " $\mathbf{y} = \left(\widehat{PR}_{H}, \widehat{PR}_{V}, \hat{Z}_{DR}, \hat{\rho}_{hv}\right)$ "
- 20) Page 207, line 3: "Appendix 6A" should be "Appendix of Zhang et al. (2006)".
- 21) Page 208, Equation 6.27 should be:

"
$$W = 1.023 \times 10^{-3} Z_h \times 10^{(-0.0742 Z_{DR}^3 + 0.511 Z_{DR}^2 - 1.511 Z_{DR})}$$
"
."

- 22) Page 211, Figure 6.20 caption: "C-band (b,d)" should be "X-band(b, d)".
- 23) Page 223, line 6, "Problem 4.4" should be: "Problem 4.5c".