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CORRIGENDUM

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Equations (C2) and (C3) in appendix C of “A spatially distributed model to simulate water, energy, and vegetation dynamics using information from regional climate models” by Maneta and Silverman (Maneta and Silverman 2013) were incorrectly presented in the paper. Equations (C2) and (C3) and the text between these two equations should read as follows:

$$\begin{aligned}
 d\theta &= \int_0^{d_u} \left(\frac{\psi_{ae}}{H_u - z} \right)^\lambda (\eta - \theta_r) + \theta_r dz + \eta(d - d_u), \\
 &= \frac{(\eta - \theta_r)\psi_{ae}^\lambda [(H_u - d_u)H_u^\lambda - H_u(H_u - d_u)^\lambda]}{(\lambda - 1)(H_u - d_u)^\lambda H_u^\lambda} + d_u\theta_r + \eta(d - d_u), \quad (C2)
 \end{aligned}$$

where H_u is the depth to the local subsurface saturated layer, d_u equals soil depth d if $(H_u - d) > \psi_{ae}$; otherwise, $d_u = (H_u - \psi_{ae})$ (i.e., integrate from 0 to d if the depth to soil water content at ψ_{ae} is below d ; otherwise, integrate to depth of soil water content at ψ_{ae}). Since we know the running average soil moisture content in the soil θ , Equation (C2) is solved for H_u to obtain the depth to saturation of the hydrostatic equilibrium profile corresponding to θ . The estimated depth to saturation \hat{H}_u is used to calculate the average soil moisture of the top 10 soil centimeters of the hydrostatic soil moisture profile,

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$$\theta_{10} = \frac{1}{0.1} \int_{z=0}^{0.1} \left(\frac{\psi_{ae}}{\hat{H}_u - z} \right)^\lambda (\eta - \theta_r) + \theta_r dz. \quad (C3)$$

Also four other corrections should be noted:

Equation (10): The integral sign preceding the equation is a typo and should be removed. The equation should read as follows:

$$RH_{\theta[p]} = \beta e_s^*(T_s)_{[p]} + (1 - \beta)e_a(T_a). \quad (10)$$

Equation (11): The exponent erroneously appears inside the square brackets. The equation should read as follows:

$$\beta = \min \left\{ 1.0, \frac{1}{4} \left[1 - \cos \left(\frac{\theta_{10}}{\theta_{fc}} \pi \right) \right]^2 \right\}. \quad (11)$$

Equation (34): An “=0” erroneously appears in the right-hand side of this equation. The equation should read as follows:

$$Q_g = K_{\text{eff}} h_g \sin S_x. \quad (34)$$

Equation (40): The integral sign preceding the equation is a typo and should be removed. The equation should read as follows:

$$GPP_{[p]} = \sqrt{\xi_{c[p]} R_{\text{par}} \xi_{w[p]} T_{p_{c[p]}}} f_{\text{GPP}}(\text{age}_{[p]}) f_{\text{GPP}}(T_a). \quad (40)$$

Reference

Maneta, M. P., and N. L. Silverman, 2013: A spatially distributed model to simulate water, energy, and vegetation dynamics using information from regional climate models. *Earth Interact.*, **17**, doi:[10.1175/2012EI000472.1](https://doi.org/10.1175/2012EI000472.1).

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