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Corrigendum to
"Understanding the effects of revegetated shrubs on fluxes of energy, water, and gross primary productivity in a desert steppe ecosystem using the STEMMUS–SCOPE model" published in Biogeosciences, 21, 893–909, 2024

Enting Tang[1], Yijian Zeng[1], Yunfei Wang[1,4], Zengjing Song[1,5], Danyang Yu[1], Hongyue Wu[2,3], Chenglong Qiao[2,3], Christiaan van der Tol[1], Lingtong Du[2,3], and Zhongbo Su[1]

[1]Faculty of Geo-Information Science and Earth Observation (ITC), University of Twente, 7500 AE Enschede, the Netherlands
[2]Breeding Base for State Key Laboratory of Land Degradation and Ecological Restoration in Northwest China, Ningxia University, Yinchuan, China
[3]Key Laboratory for Restoration and Reconstruction of Degraded Ecosystem in Northwest China of Ministry of Education, Ningxia University, Yinchuan 750021, China
[4]School of Water Conservancy and Transportation, Zhengzhou University, Zhengzhou 450001, China
[5]Chongqing Jinfo Mountain Karst Ecosystem National Observation and Research Station, School of Geographical Sciences, Southwest University, Chongqing 400715, China

Correspondence: Yijian Zeng (y.zeng@utwente.nl), Lingtong Du (dult80@nxu.edu.cn), and Zhongbo Su (z.su@utwente.nl)

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The Supplement to the abovementioned paper, as originally submitted by the authors, has been updated to address typographical and mathematical errors in the following equations. Equation (S6) in the Supplement has been corrected as below:

$$G(t) = \frac{\Gamma}{\sqrt{\pi}} \int_{-\infty}^{t} \frac{\mathrm{d}T(0,s)}{\sqrt{t-s}}, \tag{S6}$$

where t is the current time step; $T(0,s)$ represents the skin temperature at the soil surface (at depth $zr = 0\,\mathrm{cm}$); and s is the integration variable, supposing the skin temperature was simulated at discrete time $s_0, s_1, \ldots, s_n$ over the period (t_{i-12}, t_i).

Equation (S12) in the Supplement should read as follows:

$$\begin{aligned} q_L &= q_{Lh} + q_{LT} + q_{La} \\ &= -\rho_L \left[K_{Lh} \left(\frac{\partial h}{\partial z} + 1 \right) + (K_{LT} + D_{Ta}) \frac{\partial T_s}{\partial z} \right. \\ &\quad \left. + \frac{K_{Lh}}{\gamma_w} \frac{\partial P_g}{\partial z} \right], \\ q_V &= q_{Vh} + q_{VT} + q_{Va} \\ &= -\left(D_{Vh} \frac{\partial h}{\partial z} + D_{VT} \frac{\partial T_s}{\partial z} + D_{Va} \frac{\partial P_g}{\partial z} \right). \end{aligned} \tag{S12}$$

K_{Lh} is the isothermal hydraulic conductivity [$\mathrm{m\,s^{-1}}$], while K_{LT} is the thermal hydraulic conductivity [$\mathrm{m^2\,s^{-1}\,{}^\circ C^{-1}}$]. h is the capillary pressure head [m]. T_s is the soil temperature [°C]. P_g is the mixed pore-air pressure [Pa]. γ_w is the specific weight of water [$\mathrm{kg\,m^{-2}\,s^{-2}}$]. D_{Ta} is the transport coefficient for adsorbed liquid flow caused by the temperature gradient [$\mathrm{m^2\,s^{-1}\,{}^\circ C^{-1}}$].

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Equation (S14) in the Supplement has been revised to incorporate a negative symbol preceding the entire term on the right-hand side of the equation:

$$q_a = -\left(D_e \frac{\partial \rho_{da}}{\partial z} + \rho_{da} K_g \frac{\partial P_g}{\partial z} - H_c \rho_{da} \frac{q_L}{\rho_L} + \theta_a D_{Vg} \frac{\partial \rho_{da}}{\partial z} \right). \quad \text{(S14)}$$

Equation (S19) in the Supplement has been corrected as follows:

$$V_e = \frac{J(C_i - \Gamma^*)}{5(C_i + 2\Gamma^*)}. \quad \text{(S19)}$$

Equation (S22) in the Supplement is to be presented as follows:

$$A_n = \min(V_c, V_e) = A_g - R_d. \quad \text{(S22)}$$