

Variable	Response function	Response function parameters
V_{cmax} (C ₃ plants) ^a	$V_{\text{cmax}} = V_{\text{cmax},0} \left[1 + \exp \left[\frac{(S_v T_{\text{ref}} - H_d)}{(RT_{\text{ref}})} \right] \right] \frac{\exp \left[\frac{(H_a/RT_{\text{ref}})(1-T_{\text{ref}}/T)}{1 + \exp \left[\frac{(S_v T - H_d)}{(RT)} \right]} \right]}{1 + \exp \left[\frac{(S_v T - H_d)}{(RT)} \right]}$	$R = 8.314 \text{ J mol}^{-1} \text{ K}^{-1}$ $H_a = 73\,647 \text{ J mol}^{-1}$ $H_d = 14\,9252 \text{ J mol}^{-1}$ $S_v = 486 \text{ J mol}^{-1}$
J_{max} (C ₃ plants) ^a	$J_{\text{max}} = J_{\text{max},0} \left[1 + \exp \left[\frac{(S_v T_{\text{ref}} - H_d)}{(RT_{\text{ref}})} \right] \right] \frac{\exp \left[\frac{(H_a/RT_{\text{ref}})(1-T_{\text{ref}}/T)}{1 + \exp \left[\frac{(S_v T - H_d)}{(RT)} \right]} \right]}{1 + \exp \left[\frac{(S_v T - H_d)}{(RT)} \right]}$	$H_a = 50\,300 \text{ J mol}^{-1}$ $H_d = 152\,044 \text{ J mol}^{-1}$ $S_v = 495 \text{ J mol}^{-1}$
V_{cmax} (C ₄ plants) ^b	$V_{\text{cmax}} = \frac{V_{\text{cmax},0} Q_{10}^{(T-298)/10}}{(1 + \exp[c_1(c_2 - (T - 273))]) (1 + \exp[c_3(T - 273 - c_4)])}$	$Q_{10} = 2.0$ $c_1 = 0.3$ $c_2 = 13.0$ $c_3 = 0.2$ $c_4 = 38$
Γ_*^c	$\Gamma_* = \Gamma_{*,0} \left[1 + \gamma_1 (T - T_{\text{ref}}) + \gamma_2 (T - T_{\text{ref}})^2 \right]$	$\Upsilon_1 = 0.0509$ $\Upsilon_2 = 0.001$
MM constant of Rubisco (CO ₂) ^c	$K_c = K_{C,0} e^{(E_{k,c}/(RT_{\text{ref}}))(1-T_{\text{ref}}/T)}$	
MM constant of Rubisco (O ₂) ^c	$K_o = K_{O,0} e^{(E_{k,o}/(RT_{\text{ref}}))(1-T_{\text{ref}}/T)}$	