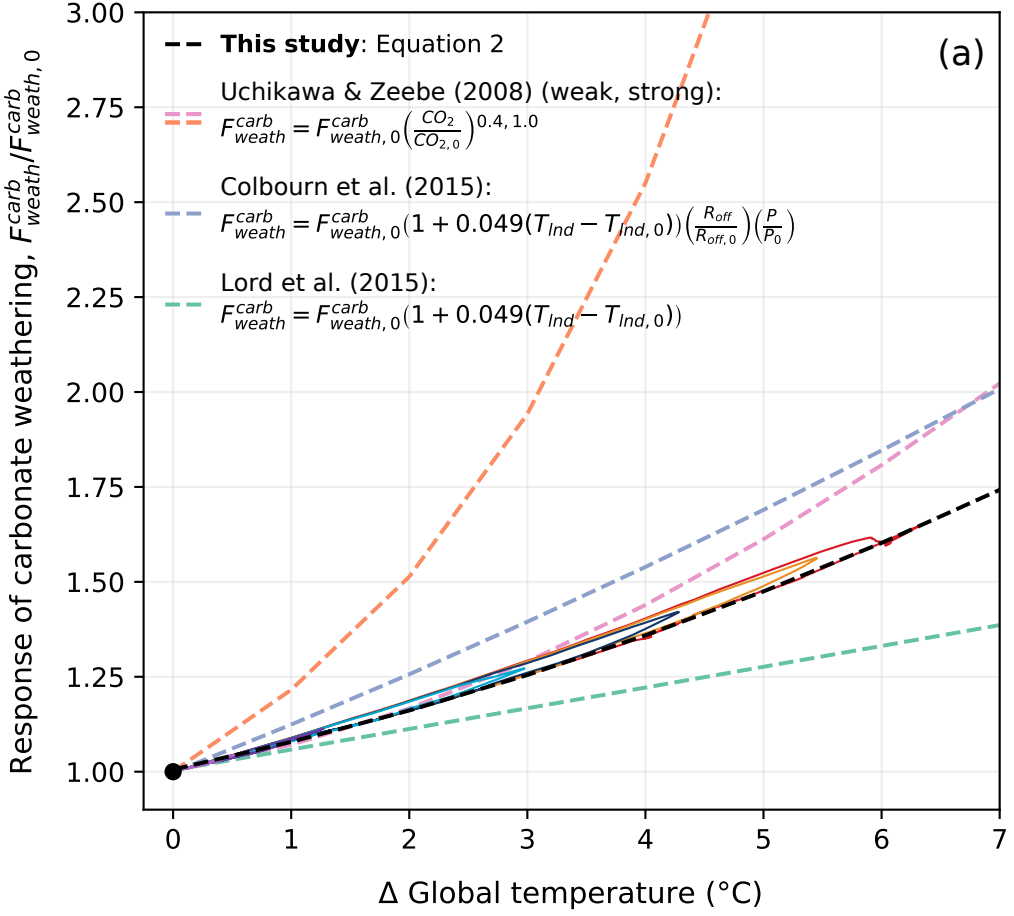
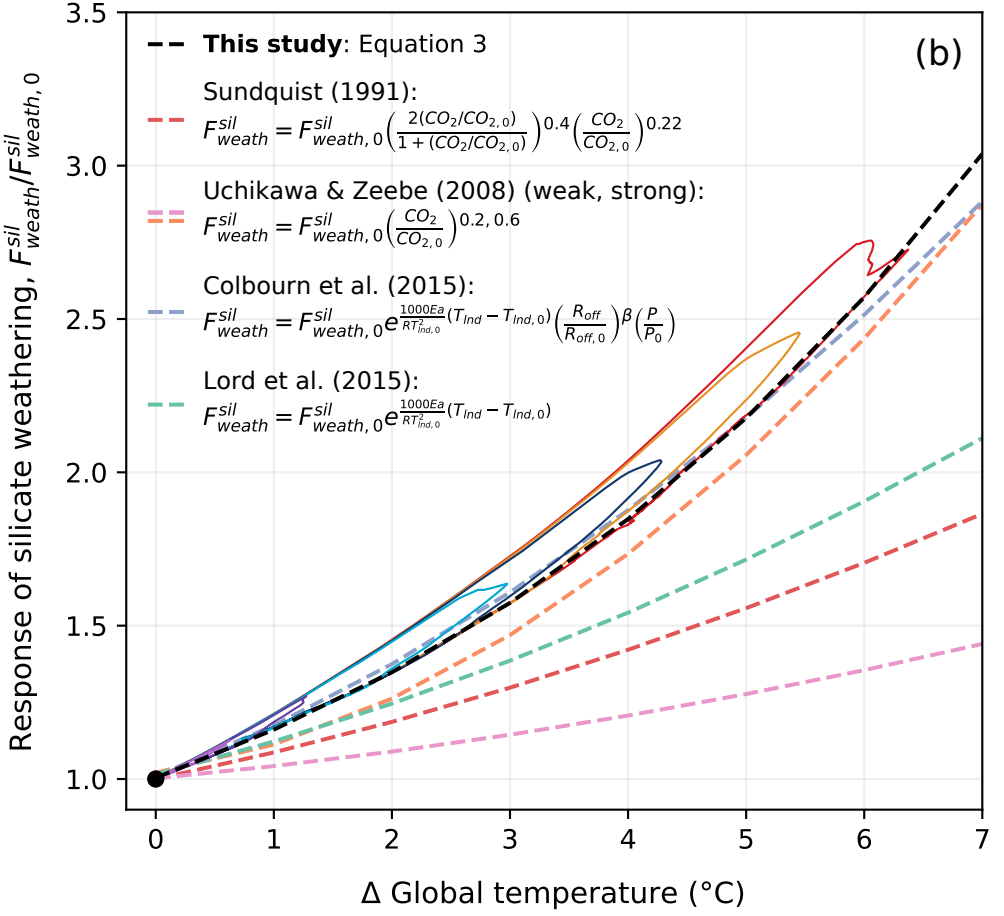

(a)
This study: Equation 2
Uchikawa & Zeebe (2008) (weak, strong):
$F^{carb}_{weath} = F^{carb}_{weath,0}\left(\frac{CO_2}{CO_{2,0}}\right)^{0.4,1.0}$
Colbourn et al. (2015):
$F^{carb}_{weath} = F^{carb}_{weath,0}(1+0.049(T_{Ind}-T_{Ind,0}))\left(\frac{R_{off}}{R_{off,0}}\right)\left(\frac{P}{P_0}\right)$
Lord et al. (2015):
$F^{carb}_{weath} = F^{carb}_{weath,0}(1+0.049(T_{Ind}-T_{Ind,0}))$
Response of carbonate weathering, $F^{carb}_{weath}/F^{carb}_{weath,0}$
Δ Global temperature (°C)


(b)
This study: Equation 3
Sundquist (1991):
$F^{sil}_{weath} = F^{sil}_{weath,0}\left(\frac{2(CO_2/CO_{2,0})}{1+(CO_2/CO_{2,0})}\right)^{0.4}\left(\frac{CO_2}{CO_{2,0}}\right)^{0.22}$
Uchikawa & Zeebe (2008) (weak, strong):
$F^{sil}_{weath} = F^{sil}_{weath,0}\left(\frac{CO_2}{CO_{2,0}}\right)^{0.2,0.6}$
Colbourn et al. (2015):
$F^{sil}_{weath} = F^{sil}_{weath,0}e^{\frac{1000Ea}{RT^2_{Ind,0}}(T_{Ind}-T_{Ind,0})}\left(\frac{R_{off}}{R_{off,0}}\right)^{\beta}\left(\frac{P}{P_0}\right)$
Lord et al. (2015):
$F^{sil}_{weath} = F^{sil}_{weath,0}e^{\frac{1000Ea}{RT^2_{Ind,0}}(T_{Ind}-T_{Ind,0})}$
Response of silicate weathering, $F^{sil}_{weath}/F^{sil}_{weath,0}$
Δ Global temperature (°C)