

Concentrations

HCO ₃ ⁻ from silicate weathering (mg L ⁻¹)	0.29/0.49 ± 0.56 (0.001–3.44)
CO ₂ [*] dissolved in water (mg L ⁻¹)	1.04/1.09 ± 0.44 (0.37–2.36)
CO ₂ loss ^a (mg L ⁻¹)	1.93/6.35 ± 12.43 (0.01–72.52)
CO ₂ loss ^b (mg L ⁻¹)	1.34/7.47 ± 14.99 (0.003–85.40)
Total DIC exported from land ^a (mg L ⁻¹)	3.72/7.93 ± 12.72 (0.38–74.64)
Total DIC exported from land ^b (mg L ⁻¹)	2.88/9.04 ± 15.37 (0.38–87.73)
Modelled soil pCO ₂ ^a (pCO ₂ ^{init.}) (ppmV)	2790/7670 ± 16 490 (460–106 770)
Modelled soil pCO ₂ ^b (pCO ₂ ^{init.}) (ppmV)	2730/10360 ± 22 910 (460–131 050)

Fluxes (normalised to the catchment area)

HCO ₃ ⁻ from silicate weathering (mg C m ⁻² d ⁻¹)	0.36/0.40 ± 0.35 (0.02–1.63)
CO ₂ [*] dissolved in water (mg C m ⁻² d ⁻¹)	1.27/1.91 ± 1.89 (0.26–11.68)
CO ₂ outgassed to the atmosphere ^a (mg C m ⁻² d ⁻¹)	1.92/5.10 ± 8.37 (0.03–57.07)
CO ₂ outgassed to the atmosphere ^b (mg C m ⁻² d ⁻¹)	1.66/4.93 ± 8.42 (0.02–49.74)
Total DIC exported from land ^a (mg C m ⁻² d ⁻¹)	4.89/7.42 ± 8.26 (1.38–58.61)
Total DIC exported from land ^b (mg C m ⁻² d ⁻¹)	4.04/7.24 ± 8.18 (1.28–51.10)

Fluxes (normalised to the stream surface area)

HCO ₃ ⁻ from silicate weathering (g C m ⁻² d ⁻¹)	0.43/0.48 ± 0.42 (0.03–1.95)
CO ₂ [*] dissolved in water (g C m ⁻² d ⁻¹)	1.53/2.29 ± 2.26 (0.31–13.98)
CO ₂ outgassed to the atmosphere ^a (g C m ⁻² d ⁻¹)	2.29/6.10 ± 10.02 (0.03–68.29)
CO ₂ outgassed to the atmosphere ^b (g C m ⁻² d ⁻¹)	1.99/5.90 ± 10.08 (0.02–59.52)
Total DIC exported from land ^a (g C m ⁻² d ⁻¹)	5.85/8.87 ± 9.88 (1.65–70.13)
Total DIC exported from land ^b (g C m ⁻² d ⁻¹)	4.83/8.67 ± 9.79 (1.54–61.15)

k_{600}^a (m d⁻¹) 2.8/3.1 ± 1.4 (0.5–7.9)

k_{600}^b (m d⁻¹) 1.9/2.1 ± 1.0 (0.1–5.4)