## **ERRATUM**



## Erratum to: The carbon dioxide evasion cycle of an intermittent first-order stream: contrasting water-air and soil-air exchange

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## Erratum to: Biogeochemistry (2017) 132:87–102 DOI 10.1007/s10533-016-0289-2

Our paper, published in *Biogeochemistry* (Vol. 132, 2017, pp. 87–102), contains a calculation error in the determination of the C-gas flux rates. To correct this error all CO<sub>2</sub> flux rates should be multiplied by 3.66, and all CH<sub>4</sub> flux rates multiplied by 1.34. As a result, the sustained global warming potentials of mean daily

water-air CH<sub>4</sub> contributions to total C-gas emissions from the S1 study segment were 39% the sustained global warming potentials of mean soil CO<sub>2</sub> emissions over the 20-year time frame and 29% the measured background water-air emissions over the 100-year time frame. The revised Table 2 below reports correct values for the paper. This does not alter any of the statistical analyses, other interpretations, or general conclusions of the manuscript.

The online version of the original article can be found under doi:10.1007/s10533-016-0289-2.

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**Table 2** Comparison summary of mean CO<sub>2</sub> concentration and fluxes for temporary ponds, perennial flowing rivers and streams, seasonally ephemeral watercourses, lakes, and wetlands worldwide (±SD; ranges shown in parentheses)

Location/watercourse type	Flux wet <sup>f</sup> (mmol m <sup>-2</sup> d <sup>-1</sup> )	Flux wet <sup>s</sup> (mmol m <sup>-2</sup> d <sup>-1</sup> )	Flux dry (mmol m <sup>-2</sup> d <sup>-1</sup> )	References
River Fluvià, Spain/seasonally ephemeral	79 <sup>*</sup>	24*	212*	von Schiller et al. (2014)
	(41–96)	(22–41)	(36–455)	
Iberia, Spain/seasonally ephemeral	$306\pm206$	_	$781 \pm 390$	Gómez-Gener et al. (2016)
			(342–1533)	
Tucson, Arizona/seasonally ephemeral	_	_	$44 \pm 8^{p,se,v}$	Gallo et al. (2013)
			(20-3173)	
Worldwide/small ponds <0.001 km <sup>2</sup>	_	$35 \pm 5^{m,se}$	_	Holgerson & Raymond (2016)
Mediterranean/temporary ponds	_	$10^{*v}$	(7–526)*v	Catalán et al. (2014)
		(1–70)		
Worldwide/flowing waters	766 <sup>m</sup>	_	_	Raymond et al. (2013)
Conterminous USA/flowing waters	$541 \pm 182^{m}$	_	_	Butman & Raymond (2011)
	(201-914)			
Boreal/lakes	_	33 <sup>m</sup>	_	Weyhenmeyer et al. (2015)
Worldwide/lakes and reservoirs	_	24 <sup>m</sup>	_	Raymond et al. (2013)
Tropical/wetlands <sup>¶</sup>	_	$107\pm50^{\rm v}$	$255 \pm 111^{p,v}$	Sjögersten et al. (2014, Table 4)
		(20–141)	(69–493)	
Boreal/fen¶¶	_	117 <sup>v</sup>	144 <sup>p,v</sup>	Sonnentag et al. (2010)
This study	$244 \pm 140^{m,v}$	$111 \pm 75^{\rm v}$	$264\pm101^{\rm v}$	
	(-34 to 1278)	(0-206)	(101–420)	

f Flowing waters, s stagnant waters, m modelled fluxes, p considers partial soil rewetting and/or fluctuating water table depth, typically <0m



<sup>\*</sup> Median values, se ±standard error, v includes vegetated and/or non-vegetated soils

 $<sup>\</sup>P$  Excludes floodplains,  $\P\P$  Considers fluxes during the snow-free period