



Supplement of

Greenhouse gas fluxes in mangrove forest soil in an Amazon estuary

Saúl Edgardo Martínez Castellón et al.

Correspondence to: José Henrique Cattanio (cattanio@ufpa.br)

The copyright of individual parts of the supplement might differ from the article licence.

Supplement S1. Monthly and seasonal (dry and rainy seasons) fluxes of CO₂ and CH₄ (g CO₂ or CH₄ m⁻² d⁻¹) at the high and low topographies. Numbers represent the mean (standard error). Lower case letters compare topographies in the same month (n = 16). Upper case letters compare stations at each topography (n = 96). Different boldface letters have statistically significant variation (Kruskal Wallis, p < 0.05).

	CO ₂ flux (g m ⁻² d ⁻¹)		CH ₄ flux (g m ⁻² d ⁻¹)	
	High topography	Low topography	High topography	Low topography
July/2017	10.166±1.555^a	4.036±1.027^b	0.0724±0.0518 ^a	0.2129±0.2087 ^a
August	8.513±2.672 ^a	12.462±3.400 ^a	0.0033±0.0016 ^a	0.1270±0.1185 ^a
September	11.506±2.515 ^a	6.020±1.207 ^a	0.0014±0.0008 ^a	0.1738±0.1608 ^a
October	4.147±0.653 ^a	3.993±0.731 ^a	0.0000±0.0000 ^a	-0.0004±0.0056 ^a
November	7.648±1.064^a	0.007±0.002^b	-0.0004±0.0001^b	0.1395±0.0708^a
December	5.302±1.176 ^a	7.622±2.505 ^a	0.0009±0.0009^b	0.1210±0.0575^a
Dry period	7.902±0.803 ^{aA}	6.202±0.895 ^{aA}	0.0141±0.010^{bB}	0.1280±0.053^{aA}
January/2018	6.697±1.717^a	2.995±0.493^b	0.0007±0.0004 ^a	0.0294±0.0183 ^a
February	9.053±2.650 ^a	6.384±1.428 ^a	0.0049±0.0022 ^a	0.8743±0.7024 ^a
March	5.225±1.135 ^a	5.970±1.534 ^a	0.0077±0.0056 ^a	0.3736±0.2197 ^a
April	14.077±4.695 ^a	4.785±0.711 ^a	0.1968±0.1304 ^a	0.0372±0.2841 ^a
May	3.299±0.587 ^a	3.565±0.472 ^a	0.0014±0.0019 ^a	0.0218±0.5648 ^a
June	8.796±2.053 ^a	4.704±1.183 ^a	0.0226±0.0191 ^a	0.6739±0.6665 ^a
Rainy period	7.858±1.058^{aA}	4.734±0.440^{bA}	0.0390±0.023^{bA}	0.3350±0.194^{aA}