Figure S1. Picture of each termite mound taken in April 2017.
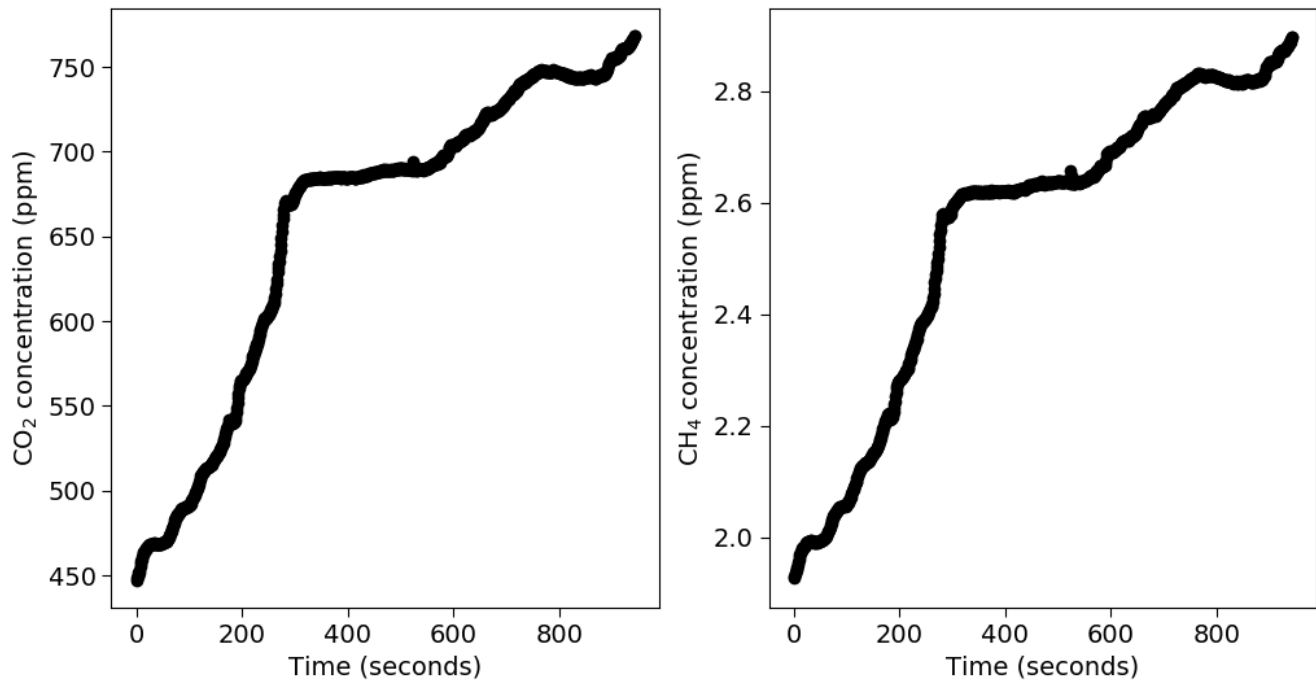
Figure S2. Example of nonlinear CO₂ and CH₄ concentration series measured at the S5 mound which could not fit inside the chamber.
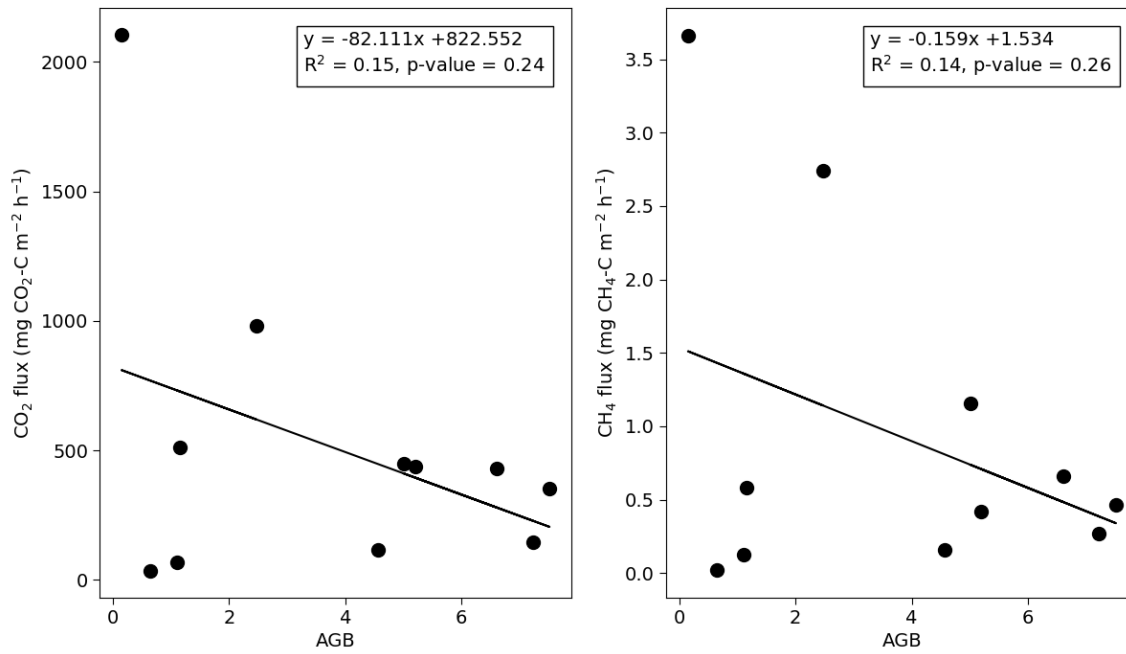
Figure S3. The relationship between AGB and dry season mean mound CO₂ and CH₄ fluxes.
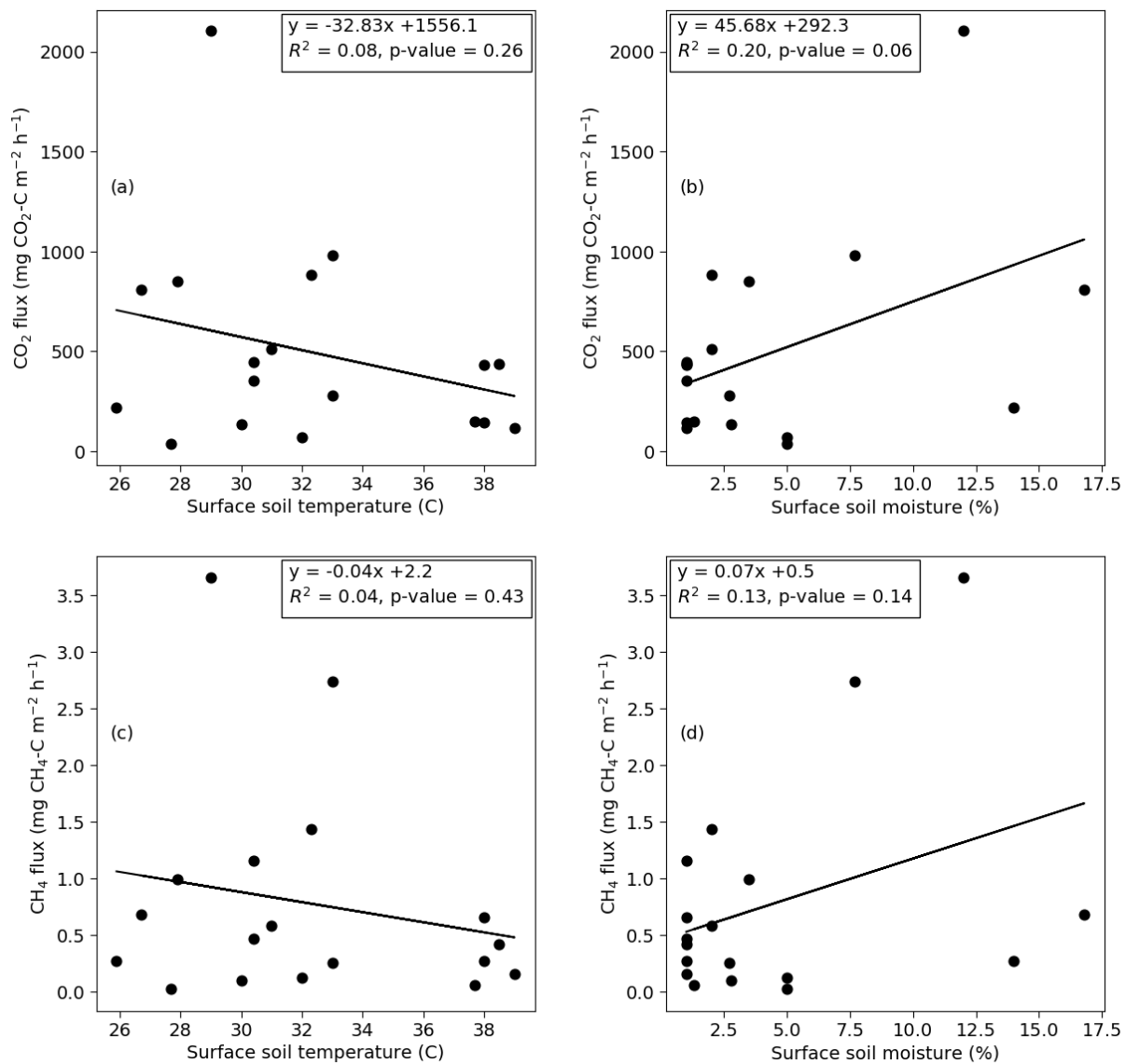
Figure S4. The relationship between mean CO₂ flux and (a) surface soil temperature and (b) soil moisture. The relationship between mean CH₄ flux and (c) surface soil temperature and (d) soil moisture.
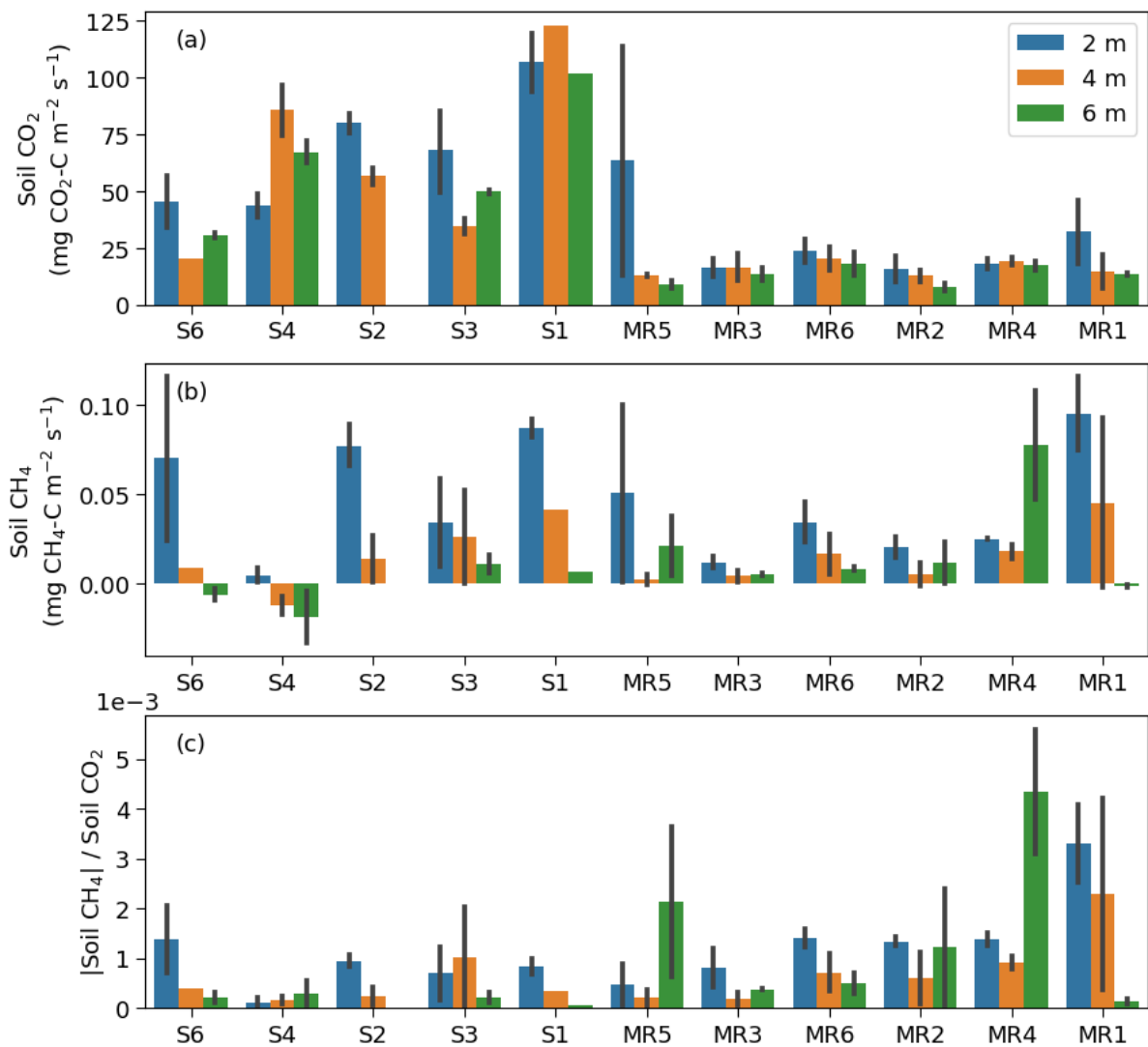
Figure S5. Mean soil CO_2 and CH_4 fluxes around the termite mounds for 2, 4, and 6 m distances from the perimeter of the mound during the dry season. Error bars indicate standard error. (c) The ratio of the absolute value of soil CH_4 and CO_2 flux.
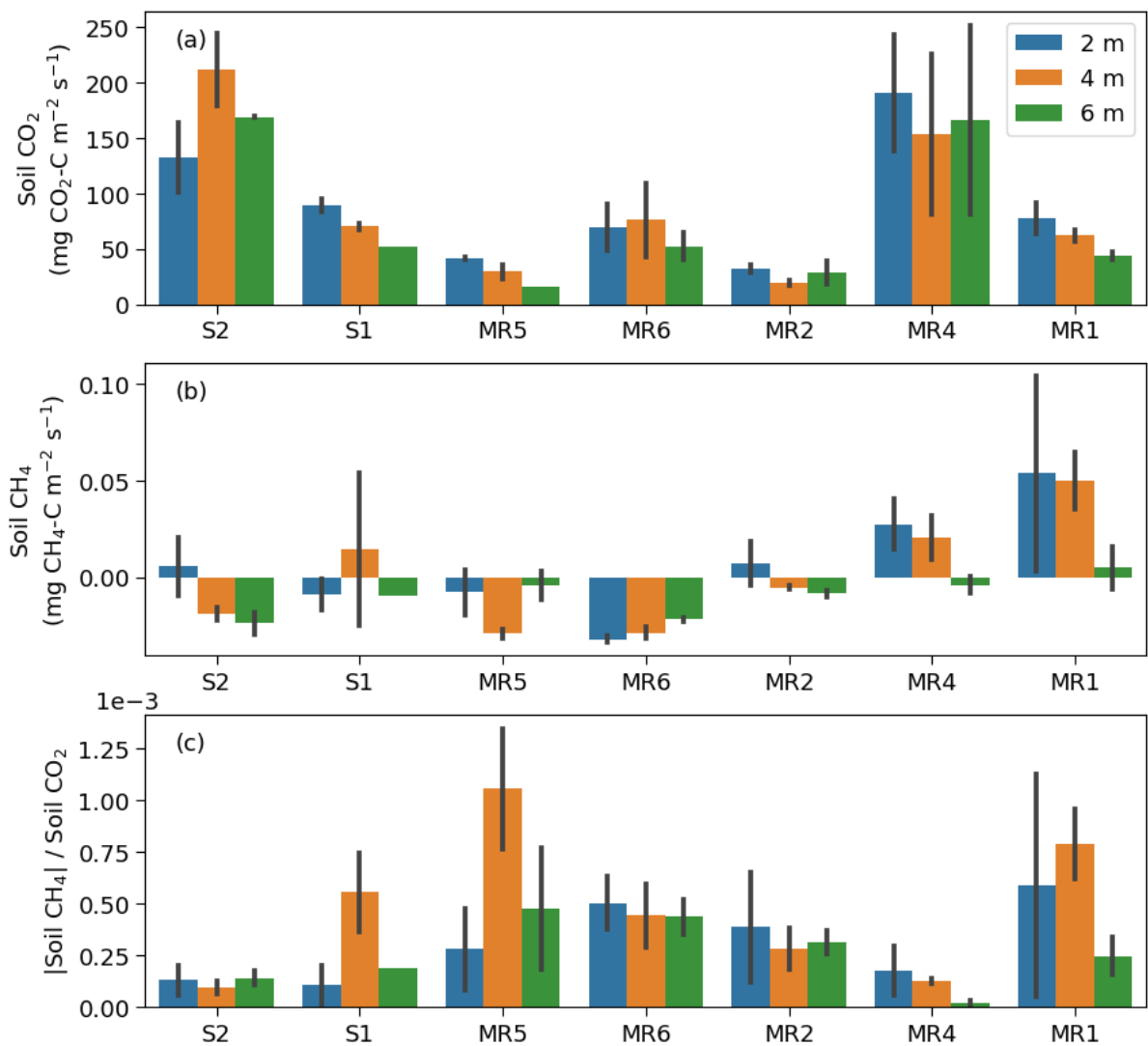
Figure S6. Mean soil CO₂ and CH₄ fluxes around the termite mounds for 2, 4, and 6 m distances from the perimeter of the mound during the wet season. Error bars indicate standard error. (c) The ratio of the absolute value of soil CH₄ and CO₂ flux.

10

Table S1. List of termite mounds for which the volume was estimated using the photogrammetric method.

Mound id	Mean Width (m)	Height (m)	V_{photo} (m³)	V_{cone} (m³)
TM36	1.4	0.25	0.130	0.128
TR09	1.3	0.20	0.100	0.088
TR172	0.8	0.10	0.010	0.017
TR184	1.1	0.15	0.020	0.048
TR185	0.8	0.15	0.010	0.025
S1[a]	2.2	0.70	0.259	0.887
S2	1.3	0.35	0.106	0.155
S3[a]	1.1	0.30	0.217	0.095
S4	0.7	0.40	0.074	0.051
S5[a]	2.0	0.40	0.193	0.419

[a] These mounds were not used in the fitting due to a shape that is different from a cone.