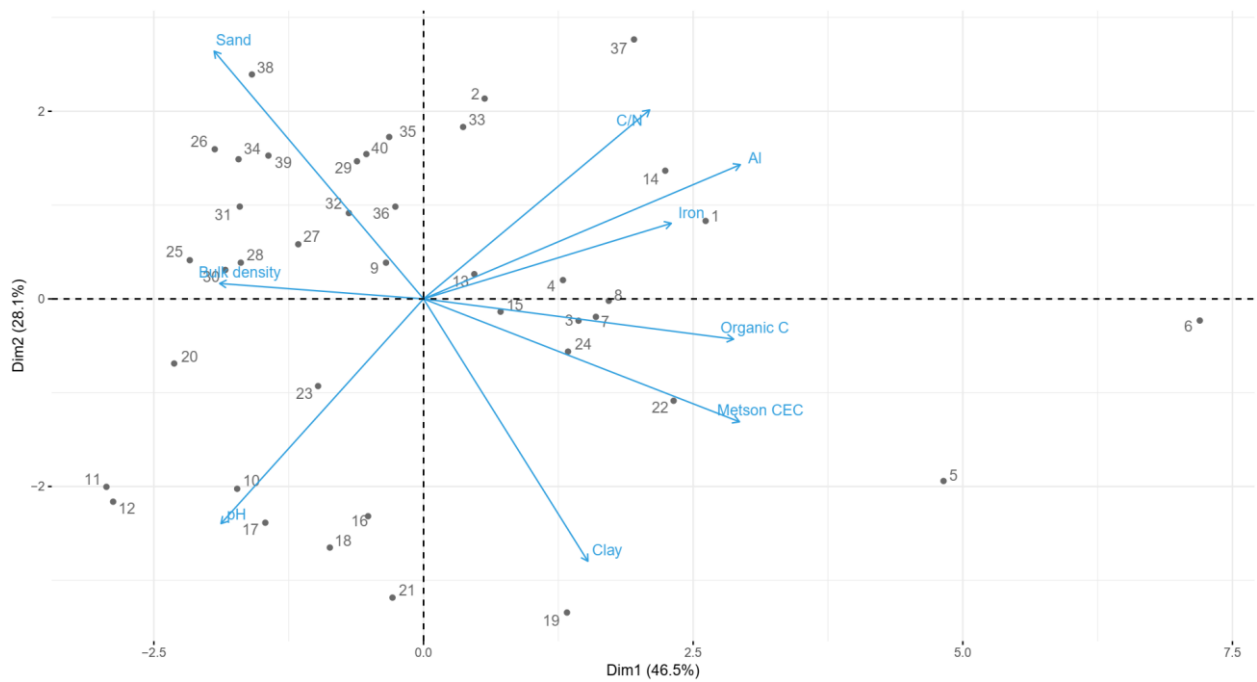


1 **SUPPLEMENTARY**

2

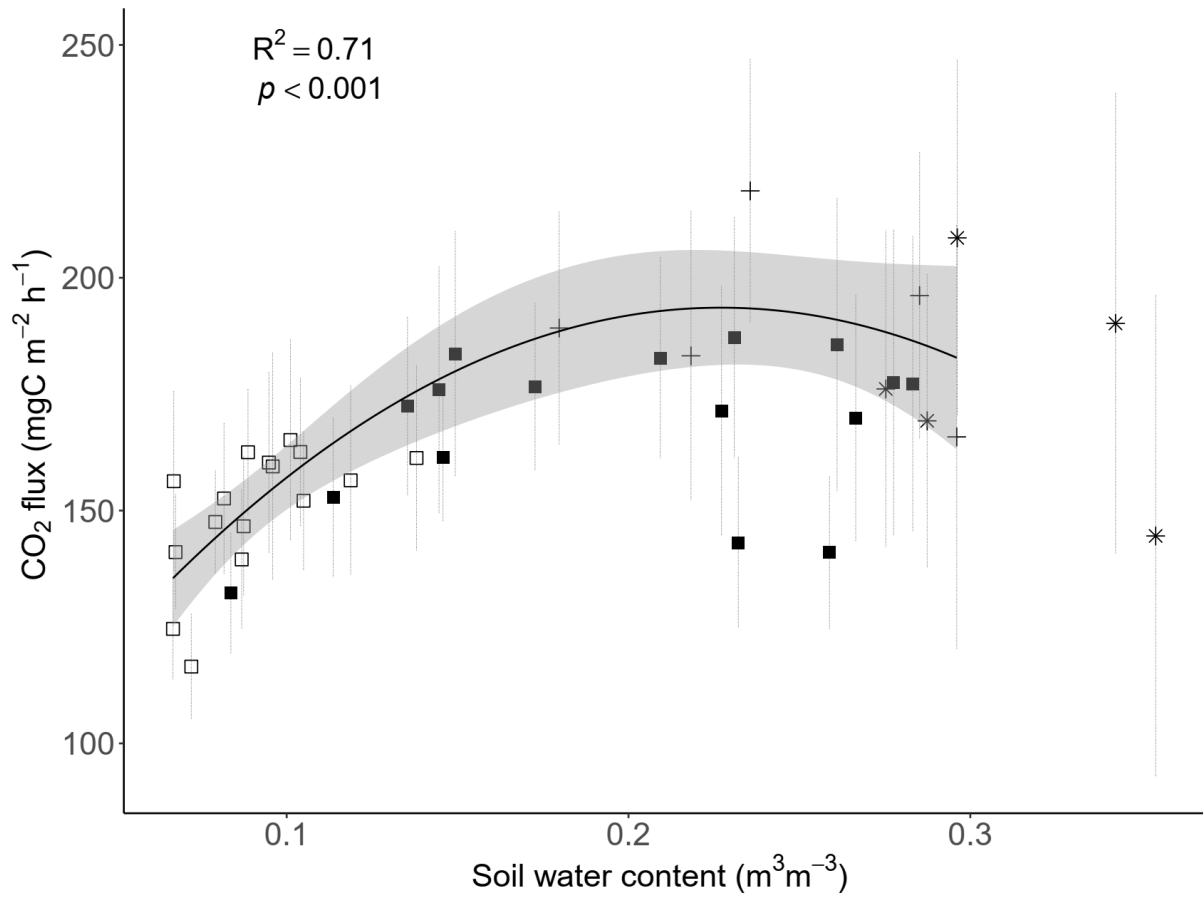


3

4 **FIGURE S1:** Projections of the correlations between the soil variables and the plots and the
5 first (“Dim1”) and second (“Dim2”) principal components in unit circles for a tropical forest,
6 French Guiana.

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9

10 **FIGURE S2:** Relationships between soil CO₂ fluxes and soil water content (SWC) in the
 11 control (closed square and black star) and dry plots (open square and black cross; *SoilFluxes* =
 12 $-0.23SWC^2 + 10.26SWC + 77.05$) for the entire study period (n = 21 sampling campaigns;
 13 18/09/2017 - 28/06/2018) in a tropical forest, French Guiana. The roof removal period is
 14 symbolized by the black stars and crosses.

15

16 **TABLE S1:** Soil texture and soil properties (n = 40; mean +/- standard error, SE) across the
 17 plots before a drought and fertilization treatments (September 2017) in a tropical forest, French
 18 Guiana.
 19

	Mean	SE
Clay (%)	16.63	0.50
Sand (%)	77.84	0.67
Silt (%)	5.52	0.22
Carbon (%)	1.71	0.05
Nitrogen (%)	0.12	3.0 10 ⁻³
C / N	14.38	0.12
Phosphorus (%)	0.022	1.0 10 ⁻³
CEC Metson (cmol+ kg ⁻¹)	4.64	0.18
Aluminium (Al) (cmol+ kg ⁻¹)	1.47	0.07
Iron (Fe) (cmol+ kg ⁻¹)	0.02	1.0 10 ⁻³
Soil bulk density (g cm ⁻³)	1.29	0.02
pH	3.88	0.02
Root density (g cm ⁻³)	0.03	3.0 10 ⁻³

20