

Organic matter cycling along geochemical, geomorphic and disturbance gradients in vegetation and soils of African tropical forests and cropland - Project TropSOC DATABASE_v1.0

2.1.9. Forest – Vegetation – Root biomass aggregated to seasonal values

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Introduction

The data set comprises a unique plot identifier, information on the season which the collected data represents, followed by 18 variables that provide data regarding the root biomass aggregated for each season at the plot level for TropSOC's forest plots.

Data structure

No.	Variable	Explanation	Unit
1	plotID	unique identifier of each plot and point where data were collected	-
2	season	season represented by the data. main seasons divided by precipitation; weak_dry: Dec – Feb; strong_rain: March – May; strong_dry: June – Aug; weak_rain: Sep – Nov	-
3	layer	soil layer from which samples were collected with 0 = "O horizon"; 1 = 0–10 cm; 2 = 10 – 20 cm; 3 = 20 – 30 cm; 4 = 30 - 50 cm	-
4	o_hor	depths of O horizon	cm
5	min_fr_liv	minimum living fine roots (< 2 mm)	mg cm ⁻³
6	max_fr_liv	maximum living fine roots (< 2 mm)	mg cm ⁻³
7	mean_fr_liv	mean living fine roots (< 2 mm)	mg cm ⁻³
8	sd_fr_liv	standard deviation of mean living fine roots (< 2 mm)	mg cm ⁻³
9	min_fr_dead	minimum dead fine roots (< 2 mm)	mg cm ⁻³
10	max_fr_dead	maximum dead fine roots (< 2 mm)	mg cm ⁻³
11	mean_fr_dead	mean dead fine roots (< 2 mm)	mg cm ⁻³
12	sd_fr_dead	standard deviation of mean dead fine roots (< 2 mm)	mg cm ⁻³
13	min_cr_liv	minimum living coarse roots (> 2 mm)	mg cm ⁻³
14	max_cr_liv	maximum living coarse roots (> 2 mm)	mg cm ⁻³
15	mean_cr_liv	mean living coarse roots (> 2 mm)	mg cm ⁻³
16	sd_cr_liv	standard deviation of mean living coarse roots (> 2 mm)	mg cm ⁻³
17	min_cr_dead	minimum dead coarse roots (> 2 mm)	mg cm ⁻³
18	max_cr_dead	maximum dead coarse roots (> 2 mm)	mg cm ⁻³
19	mean_cr_dead	mean dead coarse roots (> 2 mm)	mg cm ⁻³
20	sd_cr_dead	standard deviation of mean dead coarse roots (> 2 mm)	mg cm ⁻³
21	no	total number of observations considered in the calculations	-

Methods

This dataset comprises a seasonal aggregation of root biomass data (*218_root_biomass.csv*) described in detail in *218_root_biomass.pdf*. The data were aggregated at the plot level in four seasons, which were categorized based on the average precipitation for each period: weak dry season (December-February), strong rain season (March-May), strong dry season (June-August) and weak rain season (September-November).

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