

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

2.1.2. Forest – Vegetation – Forest inventory aggregated

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Introduction

The data set comprises a unique plot identifier and 15 aggregated variables that describe forest vegetation properties based on two forest inventories carried out in 2018/19 and 2020. Missing values are indicated by -9999.

Data structure

No.	Variable	Explanation	Unit
1	plotID	unique identifier of each plot and point where data were collected	-
2	mean_dbh18	plot mean stem diameter at breast height 2018	cm
3	sd_dbh18	standard deviation of plot mean stem diameter at breast height 2018	cm
4	mean_dbh20	plot mean stem diameter at breast height 2020	cm
5	sd_dbh20	standard deviation of plot mean stem diameter at breast height 2020	cm
6	avg_treeH18	predicted mean tree height per plot for 2018	m
7	sd_treeH18	standard deviation of predicted mean tree height per plot for 2018	m
8	agb18	above-ground biomass per unit area per plot for 2018; calculated as the sum of the biomass of a plot's individual trees	mg ha ⁻¹
9	agc18	above-ground carbon stock per unit area per plot for 2018; assumed to be 50% of the total biomass	mg ha ⁻¹
10	agb20	above-ground biomass per unit area per plot for 2020; calculated as the sum of the biomass of a plot's individual trees	mg ha ⁻¹
11	agc20	above-ground carbon stock per unit area per plot for 2020; assumed to be 50% of the total biomass	mg ha ⁻¹
12	period	Monitoring period (time between forest inventories). 1 = 12 months; 2 = 24 months; 2.3 = 28 months.	yr
13	productivity	annual biomass productivity per unit area and time	mg ha ⁻¹ yr ⁻¹
14	stems18	number of living stems per plot in 2018	-
15	stems20	number of living stems per plot in 2020	-
16	lambda	mortality rate	%

Methods

This aggregated dataset is based on two conducted forest inventories done in 2018/19 and 2020 (*211_forest_invent.csv*). Details regarding this inventory are given in *211_forest_invent.pdf*. Aggregation is done at the plot level and for both forest inventories separately.

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