

data homogenization processing summary and QC check results: UMBS_DIRT_C_N_by_Plot_2004_2014

notes included with key file:

source	Var_long	var	var_notes
location	Google Directory		UMBS_DIRT_C_N_by_Plot_2004_2014
location	Network (e.g. LTER, CZO, DIRT, NutNet, etc)	network	DIRT
location	Site code (e.g. LUQ) or name	site_code	UMBS
location	Location name	location_name	University of Michigan Biological Station
location	Depth to Water Table	depth_water	>5 m
location	Fine Litterfall Carbon	lit_c	SE = ± 17.0
location	Fine Litterfall Nitrogen	lit_n	SE = ± 0.3
location	Fine Litterfall C:N	lit_cn	SE = ± 3.9
location	bnpp notes (ingrowth, sequential coring, etc)	bnpp_notes	Number derived from belowground wood production (coarse roots) and fine root production. Belowground wood production is about 20% of fine root production. See Table 1 in reference.
location	aboveground biomass	agb	Estimated from Fig 2, ~100-yr-old forest biomass on glacial outwash soils
location	root biomass C	bgb_c	SE = ± 80
location	root biomass N	bgb_n	SE = ± 0.5
location	root biomass C:N	bgb_cn	SE = ± 7.8
location	includes time-series data	time_series	Repeat measures of DIRT plots
location	control samples identifier	control_id	REF = reference plots compare to other sites, C = DIRT control with understory removed, comparable to other DIRT treatments / sites.
profile	Treatment_1_level	tx_L1	REF= Samples from outside control plots with no treatment; NI=No above or below ground inputs; C=Control plots treated by removing all ground vegetation as done for all treatment plots; DL=Double aboveground litter inputs (extra litter inputs from removal plots); DLF=Double litter + N fertilizer (3 g KNO ₃ -N/m ² three applications spaced across growing season; F = N fertilizer (3 g KNO ₃ -N/m ² three applications spaced across growing season; NR=No root inputs; W=Wood addition equal to annual litterfall C.
profile	Layer Top	layer_top	Used -1 to 0 cm represent organic layer
profile	Layer Bottom	layer_bot	Used -1 to 0 cm represent organic layer

files processed:

type	filename
provided data	UMBS_DIRT_C_N_2004_2014
homogenized data	UMBS_DIRT_C_N_2004_2014_HMGZD

variable conversion

source	var	Var_long	given_unit	target_unit	factor	varNotes
location	npp	net primary productivity	g/m2/y	kgDM/ha/y	0.05	converted
location	anpp	aboveground net primary productivity	g/m2/y	kgDM/ha/y	0.05	converted
location	bnpp	belowground net primary productivity	g/m2/y	kgDM/ha/y	0.05	converted
location	bgb_lowerdiam	root biomass lower diameter cutoff	mm	cm	10	converted
location	bgb_upperdiam	root biomass upper diameter cutoff	mm	cm	10	converted
location	bgb_c	root biomass C	g kg-1	mg g-1		NOT converted
location	bgb_n	root biomass N	g kg-1	mg g-1		NOT converted
location	lit_c	Fine Litterfall Carbon	g kg-1	mg g-1		NOT converted
location	lit_n	Fine Litterfall Nitrogen	g kg-1	mg g-1		NOT converted
location	depth_water	Depth to Water Table	m	m		NOT converted
location	map	Mean Annual Precipitation	mm	mm		NOT converted
location	clay	Clay	percent	percent		NOT converted
location	sand	Sand	percent	percent		NOT converted
location	silt	Silt	percent	percent		NOT converted
location	agb	aboveground biomass	tDM ha-1	g m-2		NOT converted
location	bgb	root biomass	tDM ha-1	gDM m-2		NOT converted
profile	lyr_n_tot	Bulk Layer Total Nitrogen concentration	%	percent		NOT converted
profile	lyr_soc	Bulk Layer Organic Carbon (CN analyzer) concentration, inorganic C removed or not present	%	percent		NOT converted
profile	layer_bot	Layer Bottom	cm	cm		NOT converted
profile	layer_top	Layer Top	cm	cm		NOT converted
profile	lyr_n_tot_stock	Bulk Layer Total Nitrogen stock	g m-2	g N m-2		NOT converted

source	var	Var_long	given_unit	target_unit	factor	varNotes
profile	lyr_soc_stock	Bulk Layer Organic Carbon (CN analyzer) stock	g m-2	g C m-2		NOT converted

QC results: location data

dataset	source	var	error
UMBS_DIRT_C_N_by_Plot_2004_2014	location	agb	out of range
UMBS_DIRT_C_N_by_Plot_2004_2014	location	bgb_c	out of range

QC results: profile data, data range

profile data range checks passed

QC results: profile data, data type

profile data type checks passed