

## data homogenization processing summary and QC check results: CDR\_E141\_BioCON

notes included with key file:

source	Var_long	var	var_notes
location	Google Directory		CDR_E141_BioCON
location	Network (e.g. LTER, CZO, DIRT, NutNet, etc)	network	LTER
location	Site code (e.g. LUQ) or name	site_code	CDR
location	Location name	location_name	Cedar Creek BioCON
location	alignment notes for profile data 1	align_1	group data by “Ring”, exp. blocks
location	alignment notes for profile data 2	align_2	Then by plot and Time, if available
profile	Treatment_4_level	tx_L4	species count
profile	Treatment_5_level	tx_L5	species group
profile	Soil pH Other	ph_other	no method described, but more samples / plot
profile	Net N mineralization	n_min	We only measure this for a one-month period in the mid-summer. But in one year, we compared this to an annual rate, and determined that this is equal to one-third the annual rate. So, multiply this rate by 3 to get an annual rate.
profile	Fine Litterfall Carbon	lit_c	Since this is a grassland system, we don't have litterfall data, and this concentration is actually that of live aboveground biomass
profile	Fine Litterfall Nitrogen	lit_n	Since this is a grassland system, we don't have litterfall data, and this concentration is actually that of live aboveground biomass
profile	Fine Litterfall C:N	lit_cn	Since this is a grassland system, we don't have litterfall data, and this concentration is actually that of live aboveground biomass
profile	root biomass type	bgb_type	live
profile	aboveground net primary productivity	anpp	This is the same as aboveground biomass, since this is a perennial herbaceous system, where the aboveground biomass dies back each year.

files processed:

type	filename
provided data	e141_1996 Ring soil texture pH and CEC
provided data	e141_Plant aboveground biomass data
provided data	e141_Root biomass data
provided data	e141_Root ingrowth biomass

type	filename
provided data	e141_Soil bulk density
provided data	e141_Soil percent nitrogen and carbon
provided data	e141_Soil pH
homogenized data	e141_1996 Ring soil texture pH and CEC_HMGZD
homogenized data	e141_Plant aboveground biomass data_HMGZD
homogenized data	e141_Root biomass data_HMGZD
homogenized data	e141_Root ingrowth biomass_HMGZD
homogenized data	e141_Soil bulk density_HMGZD
homogenized data	e141_Soil percent nitrogen and carbon_HMGZD
homogenized data	e141_Soil pH_HMGZD

#### variable conversion

source	var	Var_long	given_unit	target_unit	factor	varNotes
profile	bnpp	belowground net primary productivity	g/m2/y	gDM/m2/y	0.5	converted
profile	p_ex_1	Extractable Phosphorus_1	mgP/g	mg kg-1	0.001	converted
profile	agb	aboveground biomass	g m-2	gDM m-2	0.5	converted
location	map	Mean Annual Precipitation	mm	mm		NOT converted
profile	clay	Clay	%	percent		NOT converted
profile	lit_c	Fine Litterfall Carbon	%	mg g-1		NOT converted
profile	lit_n	Fine Litterfall Nitrogen	%	mg g-1		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	sand	Sand	%	percent		NOT converted
profile	silt	Silt	%	percent		NOT converted
profile	layer_bot	Layer Bottom	cm	cm		NOT converted
profile	layer_top	Layer Top	cm	cm		NOT converted
profile	bgb	root biomass	gDM m-2	gDM m-2		NOT converted

#### QC results: location data

location data checks passed

**QC results: profile data, data range**

var	min	max	minValue	maxValue	error
bd_samp	0.5501	2.038	0.1	2	out of range

**QC results: profile data, data type**

profile data type checks passed