# data homogenization processing summary and QC check results: NEON\_initialChar notes included with key file: $\frac{1}{2}$

source	Var_long	var	var_notes
location	Google Directory		NEON_initialChar
location	Network (e.g. LTER, CZO, DIRT, NutNet, etc)	network	NEON
profile	Site code (e.g. LUQ) or name	site_code	siteID is the unique location identifier, can be used to join to climate data (I already did this)
profile	Location name	location_name	WW created this, also useful to use siteID for location name
profile	Experimental Level 1(top level)	L1	plotID is the unique plot/profile identifier, can be used to join to physiographic data (I already did this)
profile	Mean Annual Precipitation	map	PRISM 30-yr normal averaged for entire NEON site, calculated May 2017
profile	Mean Annual Temperature	mat	PRISM 30-yr normal averaged for entire NEON site, calculated May 2017
profile	Coarse Fraction Size Threshold Used	coarse_tot	ww created this column to read in profile data

## files processed:

type	filename
provided data	initialChar_all
homogenized data	initialChar_all_HMGZD

### variable conversion

source	var	Var_long	given_unit	$target\_unit$	factor	varNotes
profile	lyr_c_tot	Bulk Layer Total Carbon, not acid treated to	percent	g kg-1	0.1	converted
profile	lyr_soc	remove inorganic C Bulk Layer Organic Carbon (CN analyzer) concentration, inorganic	percent	g kg-1	0.1	converted
profile	lyr_n_tot	C removed or not present Bulk Layer Total Nitrogen concentration	percent	g kg-1	0.1	converted
profile	caco3	Calcium Carbonate	percent	g kg-1	0.1	converted
profile	$p_ex_1$	Extractable	mgP/g	${ m mg~kg-1}$	0.001	converted
profile	p_ex_2	Phosphorus_1 Extractable Phosphorus 2	mgP/g	mg kg-1	0.001	converted
profile	p_ex_3	Extractable Phosphorus_3	mgP/g	mg kg-1	0.001	converted

source	var	Var_long	given_unit	target_unit	factor	varNotes
profile	p_ex_4	Extractable	ble $mgP/g$ $mg kg-1$ 0.001		0.001	converted
		Phosphorus_4				
profile	$lyr\_fe\_ox$	Oxalate Extractable Fe	mg/g	%	10	converted
profile	$lyr\_al\_ox$	Oxalate Extractable Al	mg/g	%	10	converted
profile	$lyr\_si\_ox$	Oxalate Extractable Si	mg/g	%	10	converted
profile	$lyr\_fe\_dith$	Dithionite Extractable Fe	mg/g	%	10	converted
profile	$lyr\_al\_dith$	Dithionite Extractable Al	mg/g	%	10	converted
profile	$lyr\_si\_dith$	Dithionite Extractable Si	mg/g	% 10		converted
profile	clay	Clay	%	percent		NOT
						converted
profile	$coarse\_frac$	Coarse Fraction	%	percent		NOT
						converted
profile	sand	Sand	%	percent		NOT
						converted
profile	silt	Silt	%	percent		NOT
						converted
profile	$layer\_bot$	Layer Bottom	$\mathrm{cm}$	$\mathrm{cm}$		NOT
						converted
profile	$layer\_top$	Layer Top	$\mathrm{cm}$	$\mathrm{cm}$		NOT
						converted
profile	$coarse\_tot$	Coarse Fraction Size	mm	mm		NOT
		Threshold Used				converted
profile	map	Mean Annual	mm	mm		NOT
		Precipitation				converted

# QC results: location data

location data checks passed

### QC results: profile data, data range

var	$\min$	max	minValue	$\max$ Value	error
bd_samp	0.06	1.97	0.1	2	out of range
$coarse\_tot$	20	20	0	10	out of range
caco3	0	104	0	100	out of range

## QC results: profile data, data type

profile data type checks passed