data homogenization processing summary and QC check results: NEON_megapitSOIL_all

notes included with key file:

source	Var_long	var	var_notes
location	Google Directory		NEON_megapitSOIL_all
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 use to join with 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 2	L2	horizonID is the unique layer idenitifier, can use to join across chem and phys tables (I already did this), ww I'm not sure it's necessary for our purposes here
profile	Mean Annual Precipitation	map	PRISM 30-yr normal averaged for entire NEON site
profile	Mean Annual Temperature	mat	PRISM 30-yr normal averaged for entire NEON site
profile	Bulk Layer Organic Carbon (CN analyzer) concentration, inorganic C removed or not present	lyr_soc	carbonTot (measured on an EA) minus caco3Conc (converted to mg C/kg). If there is no calcium carbonate, carbonTot and estimatedOC are the same
profile	Coarse Fraction Size Threshold Used	coarse_tot	ww created this column to read in profile data

files processed:

type	filename
provided data	megapit_soils_all
homogenized data	megapit_soils_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 remove inorganic C	percent	g kg-1	0.1	converted
profile	lyr_soc	Bulk Layer Organic Carbon (CN analyzer) concentration, inorganic C removed or not present	percent	g kg-1	0.1	converted
profile	lyr_n_tot	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 Phosphorus_1	mgP/g	mg kg-1	0.001	converted

source	var	Var_long	given_unit	target_unit	factor	varNotes
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	cm	cm		NOT converted
profile	layer_top	Layer Top	cm	cm		NOT converted
profile	coarse_tot	Coarse Fraction Size Threshold Used	mm	mm		NOT converted
profile	map	Mean Annual Precipitation	mm	mm		NOT converted

QC results: location data

`location data checks passed`

QC results: profile data, data range

var	min	max	minValue	maxValue	error
bd_samp	0.0226	2.271	0.1	2	out of range
coarse_tot	20	20	0	10	out of range

QC results: profile data, data type

profile data type checks passed