

# data homogenization processing summary and QC check results: Calhoun

## notes included with key file:

source	Var_long	var	var_notes
location	Google Directory		Calhoun
location	Network (e.g. LTER, CZO, DIRT, NutNet, etc)	network	CZO
location	Site code (e.g. LUQ) or name	site_code	CCZO
location	Location name	location_name	Calhoun CZO
location	Bibliographical Reference	bibliographical_reference	This is the most recent publication; note that data on soil characteristics reach back to 1957 and are published in many outlets, some cited in this recent one.
location	Digital Object Identifier (DOI) Number	doi_number	This is the most recent publication; note that data on soil characteristics reach back to 1957 and are published in many outlets, some cited in this recent one.
location	Depth to Water Table	depth_water	Greater than 5m
profile	Experimental Level 1(top level)	L1	Not really watershed, but research area
profile	Treatment_1_level	tx_L1	Hardwood refers to old-growth hardwood forests, pine refers to regenerating forests after long-term cultivation, and cultivated means under the plow since early 1800s
profile	Treatment_2_level	tx_L2	Not really a treatment, but individual feature of each sampling location
profile	Treatment_3_level	tx_L3	Not really a treatment, but individual feature of each sampling location
profile	Treatment_4_level	tx_L4	Dominant species; not really a treatment, but individual feature of each sampling location
profile	Observation Date	observation_date	Note that excel automatically corrects two-digit months and days to single digits
profile	Bulk Layer d15N	lyr_15n	Values should be used with caution, especially for subsoils where [SON] was lower than ideal for quantification via EA.
profile	Layer middle	layer_mid	note that “var” is missing here
profile	Soil pH CaCl2	ph_cacl	2 g fresh weight soil, 10 mL salt solution
profile	Soil pH in water	ph_h2o	2 g fresh weight soil, 10 mL water

source	Var_long	var	var_notes
profile	Land Cover Category	land_cover	note that all sites are forested except those labeled as cultivated in Treatment 1 level "landcover"; I select forest here because it represents the potential vegetation.
profile	Latitude	lat	W. Wieder duplicated columns to get lat-lon data for sites (also used for plot ID)
profile	Longitude	long	W. Wieder duplicated columns to get lat-lon data for sites (also used for plot ID)

#### files processed:

type	filename
provided data	Calhoun CZO data.csv
homogenized data	Calhoun CZO data_HMGZD

#### variable conversion

source	var	Var_long	given_unit	target_unit	factor	varNotes
profile	lyr_soc	Bulk Layer Organic Carbon (CN analyzer) concentration, inorganic C removed or not present	percent	ug g-1	1e-04	converted
profile	lyr_n_tot	Bulk Layer Total Nitrogen concentration	percent	ug g-1	1e-04	converted
location	depth_water	Depth to Water Table	m	m		NOT converted
profile	layer_mid	Layer middle	cm	cm		NOT converted

#### QC results: location data

location data checks passed

#### QC results: profile data, data range

profile data range checks passed

#### QC results: profile data, data type

profile data type checks passed