

site: four letter site code to describe NEON site
year_mo: year and month of sample collection
year: year of sample collection
plotID: plot identification number that includes the site and a three digit number for the plot
easting: Easting refers to the eastward-measured distance (or the x-coordinate) of the geographic Cartesian coordinates of the plot centroid
northing: Northing refers to the northward-measured distance (or the y-coordinate) of the geographic Cartesian coordinates of the plot centroid
latitude: measurement of the location north or south of the equator of the plot centroid
longitude: measurement of the location east or west of the prime meridian of the plot centroid
Dominant_NLCD_Classes: dominant classes of vegetation as reported at the site level
NLCD_Classes: abbreviation of dominant classes of vegetation as reported at the site level
NLCD_code_plot: Plot scale NLCD class code from NLCD data
NLCD_plot_des: description of plot scale NLCD class as of NLCD data description
shannon_exotic: Shannon-Weaver diversity metric of exotic species from field data of plant cover within a plot
evenness_exotic: Pielou's evenness diversity metric of exotic species from field data of plant cover within a plot
nspp_exotic: number of exotic species from field data of plant cover within a plot
shannon_notexotic: Shannon-Weaver diversity metric of species that are not exotic from field data of plant cover within a plot
evenness_notexotic: Pielou's evenness diversity metric of species that are not exotic from field data of plant cover within a plot
nspp_notexotic: number of species that are not exotic from field data of plant cover within a plot
shannon_native: Shannon-Weaver diversity metric of native species from field data of plant cover within a plot
evenness_native: Pielou's evenness diversity metric of native species from field data of plant cover within a plot
nspp_native: number of native species from field data of plant cover within a plot
shannon_unknown: Shannon-Weaver diversity metric of unknown species from field data of plant cover within a plot
evenness_unknown: Pielou's evenness diversity metric of unknown species from field data of plant cover within a plot
nspp_unknown: number of unknown species from field data of plant cover within a plot
rel_cover_native: the relative cover of native species within a plot
rel_cover_unknown: the relative cover of unknown species within a plot
rel_cover_exotic: the relative cover of exotic species within a plot
cover_native: the absolute cover of native species within a plot
cover_unknown: the absolute cover of unknown species within a plot
cover_exotic: the absolute cover of exotic species within a plot
rel_cover_notexotic: the relative cover of species that are not exotic within a plot
cover_notexotic: the absolute cover of species that are not exotic within a plot

shannon_total: Shannon-Weaver diversity metric of all species from field data of plant cover within a plot

evenness_total: Pielou's evenness diversity metric of all species from field data of plant cover within a plot

nspp_total: number of all species from field data of plant cover within a plot

shannon_family: Shannon-Weaver diversity metric of all families from field data of plant cover within a plot

evenness_family: Pielou's evenness diversity metric of all families from field data of plant cover within a plot

nfamilies: number of families from field data of plant cover within a plot

scale: the scale of aggregation of field plant cover data

invaded: if there is at least one exotic species present within the plot, it is recorded as invaded, otherwise not_invaded

turnover: species turnover according to `vegan::nestedbetajac()` (Baselga 2012) from field plant cover data

nestedness: nestedness according to `vegan::nestedbetajac()` (Baselga 2012) from field plant cover data

mean.max.canopy.ht.aop: mean outer canopy height from AOP data

max.canopy.ht.aop: max canopy height from AOP data

rumple.aop: rumple, a ratio of outer canopy surface area to ground surface area, from AOP data

deepgap.fraction.aop: the number of deep gaps in the canopy height model relative to the total number of canopy height model pixels, from the AOP data

cover.fraction.aop: the inverse of deep gap fraction from the AOP data

top.rugosity.aop: the standard deviation of pixel values in the canopy height model and is a measure of outer canopy roughness from the AOP data

vert.sd.aop: height standard deviation- the standard deviation of height values for all points in the point cloud from AOP data

vertCV.aop: the coefficient of variation of heights in the canopy height model, calculated as then height standard deviation divided by the mean height, from AOP data

sd.sd.aop: the standard deviation of vert.sd.aop- a measure of internal and external canopy complexity

entropy.aop: quantifies diversity and evenness of point cloud heights from AOP data by partitioning the point cloud in 1 m tall horizontal slices; value ranges are from 0-1, with 1 being more evenly distributed points across the 1 m tall slices

GFP.AOP.aop: calculates the mean gap fraction profile in each 1 m horizontal slice from AOP data

VAI.AOP.aop: vegetation area index, sum of leaf area density values for all horizontal slices from AOP data

VCI.AOP.aop: vertical complexity index, fixed normalization of entropy, from AOP data

q25.aop: 25th quantile of heights from the canopy height model from AOP data

q50.aop: 50th quantile of heights from the canopy height model from AOP data

plotType: plot type as of NEON plot centroid data V8

subtype: plot sub type as of NEON plot centroid data V8

minElev: Min plot elevation as of NEON plot centroid data V8

maxElev: Max plot elevation as of NEON plot centroid data V8

slope: average plot slope as of NEON plot centroid data V8
aspect: Plot aspect as of NEON plot centroid data V8
soilOrder: plot soil type as of NEON plot centroid data V8