



Title: NEON Level 1, Level 2 and Level 3 Data Products Catalog		Date: 12/12/2014
NEON Doc #: NEON.DOC.002652	Author: C. Lunch	Revision: A

## NEON LEVEL 1, LEVEL 2 AND LEVEL 3 DATA PRODUCTS CATALOG

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See configuration management system for approval history.

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## RELATED DOCUMENTS

### Applicable Documents

AD[01]	
AD[01]	
AD[01]	
AD[01]	

### Reference Documents

RD[01]	NEON.DOC.000008 NEON Acronym List
RD[01]	NEON.DOC.000243 NEON Glossary of Terms
RD[01]	NEON.DOC.005003 NEON Scientific Data Products Catalog
RD[01]	NEON.DOC.005004 NEON Level 1-3 Data Products Catalog

### External References

ER[01]	
ER[01]	
ER[01]	
ER[01]	

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This workbook contains Configured Item Lists for NEON L1, L2, and L3 Data Products; it contains tabs for each subsystem/team producing data products. Each tab includes the Data Product ID, Data Product Name, Data Product Description, Processing Level, and the subsystem/team responsible for developing the sampling design and algorithm/processing approach to produce the product. The Data Product ID (Identification Code) is the first five fields of the full data product number; the remainder of the data product number will identify subproducts and spatial and temporal resolutions within the product.

Claire Lunch

12/9/2014

Identification Code	Name	Description	Category	Supplier	Applicable Specification	Themes
NEON.DOM.SITE.DP1.00001	2D Wind Speed and Direction	Two-dimensional wind speed and direction, available as one- and thirty-minute aggregations of 1 Hz observations. Observations are made by 2-D sonic anemometer sensors located at multiple heights on the tower infrastructure and by 2-D sonic anemometer sensors located on the aquatic meteorological station.	Level 1 Data Product	TIS	NEON.DOC.000780	Atmosphere
NEON.DOM.SITE.DP1.00002	Single Aspirated Air Temperature	Air temperature, available as one- and thirty-minute averages of 1 Hz observations. Observations are made by sensors located at multiple heights on the tower infrastructure and by sensors located on the aquatic meteorological station. Temperature observations are made using platinum resistance thermometers, which are housed in a fan aspirated shield to reduce radiative bias.	Level 1 Data Product	TIS	NEON.DOC.000646	Atmosphere
NEON.DOM.SITE.DP1.00003	Triple Aspirated Air Temperature	Air temperature, available as one- and thirty-minute averages derived from triplicate 1 Hz temperature observations. Observations are made by sensors located at the top of the tower infrastructure. Temperature observations are made by three platinum resistance thermometers, which are housed together in a fan aspirated shield to reduce radiative biases.	Level 1 Data Product	TIS	NEON.DOC.000654	Atmosphere
NEON.DOM.SITE.DP1.00004	Barometric Pressure	Barometric pressure, available as one- and thirty-minute averages for both station pressure and pressure reduced to sea level, determined from 0.1 Hz observations. Observations are made by a single digital barometer located on the tower infrastructure and a single digital barometer located on the aquatic meteorological station.	Level 1 Data Product	TIS	NEON.DOC.000653	Atmosphere
NEON.DOM.SITE.DP1.00005	IR Biological Temperature	Infrared temperature, available as one- and thirty-minute averages of 1 Hz observations. Biological temperature (i.e. surface temperature) is measured via IR temperature sensors located in the soil array and at multiple heights on the tower infrastructure.	Level 1 Data Product	TIS	NEON.DOC.000652	Atmosphere Land Use, Land Cover, and Land Processes
NEON.DOM.SITE.DP1.00006	Precipitation	Precipitation is observed using one of two sensors. Primary precipitation is observed using a weighing gauge housed within a small double fence intercomparison reference, which is generally located within 0.5 km of the tower infrastructure. Secondary precipitation is observed using a tipping bucket located on the top of the tower infrastructure. Ground level precipitation (also known as throughfall) is also observed using tipping buckets at 3 of 5 soil array locations. Bulk precipitation is determined at five- and fifteen-minute intervals for primary precipitation and at one- and thirty-minute intervals for secondary precipitation. AIS sites only include Primary (DFIR at Core Aquatic sites; currently only 2 or 3) or Secondary (tipping buckets at relocatable sites; currently about 8). No AIS sites have both; no AIS sites have the equivalent of throughfall.	Level 1 Data Product	TIS	NEON.DOC.000816 NEON.DOC.000898	Atmosphere Ecohydrology
NEON.DOM.SITE.DP1.00007	3D Wind Speed, Direction and Sonic Temperature	Three-dimensional windspeed and direction measured by sonic anemometer; air temperature measured by the 3-D sonic anemometer	Level 1 Data Product	TIS	tbd	Atmosphere Biogeochemistry

NEON.DOM.SITE.DP1.00010	3D Wind Attitude and Motion Reference	Measurement of 3D anemometer attitude and motion	Level 1 Data Product	TIS	tbd	Atmosphere
NEON.DOM.SITE.DP1.00013	Wet deposition chemical analysis	Total dissolved chemical ion concentrations of SO42-, NO3-, Cl-, Br-, NH4+, PO43-, Ca2+, Mg2+, K+, Na+, and pH/Conductivity in precipitation water; collected at TIS and AIS sites.	Level 1 Data Product	TIS	tbd	Atmosphere Biogeochemistry Ecohydrology
NEON.DOM.SITE.DP1.00014	Shortwave Radiation (Direct and Diffuse Pyranometer)	Total, direct, and diffuse shortwave radiation, available as one- and thirty-minute averages of 1 Hz observations. Observations are made by a sensor located at the top of the tower infrastructure.	Level 1 Data Product	TIS	NEON.DOC.000815	Atmosphere
NEON.DOM.SITE.DP1.00017	Dust and Particulate Size Distribution	Near real-time measurements of PM1.0, PM2.5, PM10 and TSP in the atmosphere using an optical sensor.	Level 1 Data Product	TIS	tbd	Atmosphere Land Use, Land Cover, and Land Processes
NEON.DOM.SITE.DP1.00018	Ozone Concentration	Ozone concentrations measured on tower at the same measurement level where eddy-covariance turbulent exchange is measured.	Level 1 Data Product	TIS	tbd	Atmosphere
NEON.DOM.SITE.DP1.00019	Nitrogen Concentration	Reactive nitrogen (NO/NOy) concentrations measured on tower at the same measurement level where eddy-covariance turbulent exchange is measured.	Level 1 Data Product	TIS	tbd	Atmosphere Biogeochemistry
NEON.DOM.SITE.DP1.00022	Shortwave Radiation (Primary Pyranometer)	Total shortwave radiation, available as one- and thirty-minute averages of 1 Hz observations. The primary pyranometer is housed in a heated and aspirated ventilation unit and observes incoming shortwave radiation at the top of the tower infrastructure.	Level 1 Data Product	TIS	NEON.DOC.000810	Atmosphere
NEON.DOM.SITE.DP1.00023	Shortwave and Longwave Radiation (Net radiometer)	Net radiation is composed of incoming and outgoing shortwave and longwave radiation. These data products are available as one- and thirty-minute averages of 1 Hz observations. Observations of net shortwave and longwave radiation are made by a sensor located at the top of the tower infrastructure, while only net longwave radiation is observed in the soil array. Observations of net shortwave and longwave radiation are made by a four-component sensor located on the aquatic meteorological station.	Level 1 Data Product	TIS	NEON.DOC.000809	Atmosphere
NEON.DOM.SITE.DP1.00024	Photosynthetically Active Radiation (PAR)	Photosynthetically Active Radiation (PAR) observations represent the radiation flux at wavelengths between 400-700 nm, which constitute the wavelengths that drive photosynthesis. This data product is available as one- and thirty-minute averages of 1 Hz observations. Observations are made by sensors located at multiple heights on the tower infrastructure and by sensors located on the aquatic meteorological station.	Level 1 Data Product	TIS	NEON.DOC.000781	Atmosphere

NEON.DOM.SITE.DP1.00029	Soil water content sensor calibration curves (Megapit)	Site- and depth-specific calibration equation used to convert sensor reading of soil water content to gravimetrically-derived volumetric water content. Data were derived from a sampling location expected to be representative of the area where the Instrumented Soil Plots per site are located and were collected once during site construction.	Level 1 Data Product	TIS	tbd	Ecohydrology
NEON.DOM.SITE.DP1.00032	Minirhizotron images	Belowground images of roots obtained from minirhizotrons located within the soil array. These images may be used to estimate the turnover of belowground biomass. Images are collected to a depth of 1m on a bi-weekly basis.	Level 1 Data Product	TIS	tbd	Biogeochemistry Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.00033	Phenology images	RGB and IR images of the plant canopy taken from an automated camera on the tower top and at 3m above the ground. Images are collected every 15 minutes and closely follow protocols of the Phenocam Network	Level 1 Data Product	TIS	tbd	Land Use, Land Cover, and Land Processes Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.00034	CO2 Concentration - Turbulent	Concentration of CO2 at the top of the tower; used in calculation of turbulent terms in eddy covariance calculations of carbon exchange	Level 1 Data Product	TIS	tbd	Atmosphere Biogeochemistry
NEON.DOM.SITE.DP1.00035	H2O Concentration - Turbulent	Concentration of H2O at the top of the tower; used in calculation of turbulent terms in eddy covariance calculations of water vapor exchange	Level 1 Data Product	TIS	tbd	Atmosphere Biogeochemistry Ecohydrology
NEON.DOM.SITE.DP1.00036	Atmospheric CO2 Isotope	Profile measurements of CO2 isotope concentration, 13C stable isotope ratio in CO2, and water vapor concentration at each tower level	Level 1 Data Product	TIS	tbd	Atmosphere Biogeochemistry
NEON.DOM.SITE.DP1.00037	Atmospheric 18O Isotope	Profile measurements of water vapor isotope concentration, 18O and 2H stable isotope ratio in water vapor at each tower level	Level 1 Data Product	TIS	tbd	Atmosphere Biogeochemistry Ecohydrology
NEON.DOM.SITE.DP1.00038	Stable isotope concentrations in precipitation	Stable isotope ratios of 18O and 2H in precipitation water	Level 1 Data Product	TIS	tbd	Atmosphere Biogeochemistry Ecohydrology

NEON.DOM.SITE.DP1.00040	Soil heat flux	The amount of thermal energy moving by conduction across an area of soil in a unit of time. Measured as part of the soil array.	Level 1 Data Product	TIS	NEON.DOC.000814	Biogeochemistry Land Use, Land Cover, and Land Processes
NEON.DOM.SITE.DP1.00041	Soil temperature	Temperature of the soil at various depth below the soil surface from 2 cm up to 200 cm at non-permafrost sites (up to 300 cm at Alaskan sites). Data are from all five Instrumented Soil Plots per site and presented as 1-minute and 30-minute averages.	Level 1 Data Product	TIS	NEON.DOC.001571	Land Use, Land Cover, and Land Processes
NEON.DOM.SITE.DP1.00042	Snow depth	Depth of snow averaged across three snow depth stakes located within 15 m of the tower. Depth measurements are derived from automated camera images using an algorithm which calculates snow depth to within 1 cm.	Level 1 Data Product	TIS	tbd	Land Use, Land Cover, and Land Processes
NEON.DOM.SITE.DP1.00043	Spectral Sun Photometer - Calibrated Sky Radiances	Calibrated Sky Radiances; Raw Alucantars, Raw Principal Planes	Level 1 Data Product	TIS	NEON.DOC.001455	Atmosphere
NEON.DOM.SITE.DP1.00066	Photosynthetically active radiation (Quantum Line)	The Quantum line sensor provides spatially averaged observations of Photosynthetically Active Radiation (PAR), i.e., wavelengths between 400-700 nm, at the soil surface over a one meter length. This data product is available as one- and thirty-minute averages of 1 Hz observations. Observations are obtained by sensors located throughout the soil array.	Level 1 Data Product	TIS	NEON.DOC.000813	Atmosphere
NEON.DOM.SITE.DP1.00094	Soil water and salinity	Soil volumetric water content and an index of salinity at various depth below the soil surface from 2 cm up to 200 cm at non-permafrost sites (up to 300 cm at Alaskan sites). Data are from all five Instrumented Soil Plots per site and presented as 1-minute and 30-minute averages.	Level 1 Data Product	TIS	NEON.DOC.000007	Ecohydrology
NEON.DOM.SITE.DP1.00095	Soil CO2 concentration	CO2 concentration in soil air at various depth below the soil surface starting at 2 cm. Data are from all five Instrumented Soil Plots per site and presented as 1-minute and 30-minute averages.	Level 1 Data Product	TIS	NEON.DOC.011083	Biogeochemistry
NEON.DOM.SITE.DP1.00096	Soil physical properties (Megapit)	Soil taxonomy, horizon names, horizon depths, as well as soil bulk density, porosity, texture (sand, silt, and clay content) in the ≤2 mm soil fraction for each soil horizon. Data were derived from a sampling location expected to be representative of the area where the Instrumented Soil Plots per site are located and were collected once during site construction. Also see distributed soil data products.	Level 1 Data Product	TIS	tbd	Biogeochemistry Land Use, Land Cover, and Land Processes



NEON.DOM.SITE.DP1.00097	Soil chemical properties (Megapit)	Total content of a range of chemical elements, pH, and electrical conductivity in the ≤2 mm soil fraction for each soil horizon. Data were derived from a sampling location expected to be representative of the area where the Instrumented Soil Plots per site are located and were collected once during site construction. Also see distributed soil data products.	Level 1 Data Product	TIS	tbd	Biogeochemistry
NEON.DOM.SITE.DP1.00098	Relative Humidity	Relative humidity, temperature, and dew or frost point temperature, available as one- and thirty-minute averages of 1 Hz observations. Observations are made by sensors located at the top of the tower infrastructure, in the soil array, and on the aquatic meteorologic station.	Level 1 Data Product	TIS	tbd	Atmosphere Ecohydrology
NEON.DOM.SITE.DP1.00099	CO2 Concentration - Storage	Concentration of CO2 in profile of tower; used in calculation of storage terms in eddy covariance calculations of carbon exchange	Level 1 Data Product	TIS	NEON.DOC.001246	Atmosphere Biogeochemistry
NEON.DOM.SITE.DP1.00100	H2O Concentration - Storage	Concentration of H2O in profile; used in calculation of storage terms in eddy covariance calculations of water vapor exchange	Level 1 Data Product	TIS	tbd	Atmosphere Biogeochemistry Ecohydrology
NEON.DOM.SITE.DP1.00101	Particulate Mass	Dust mass and density measured by a high volume dust sampler and quart filters; subproducts include Density, Total Mass, Filter Mass	Level 1 Data Product	TIS	tbd	Atmosphere Land Use, Land Cover, and Land Processes
NEON.DOM.SITE.DP2.00002	Temporally Interpolated Soil Water Content and Salinity	Temporally interpolated (i.e., to gap fill missing data) soil volumetric water content and an index of salinity at various depth below the soil surface from 2 cm up to 200 cm at non-permafrost sites (up to 300 cm at Alaskan sites). Data are from all five Instrumented Soil Plots per site and presented as 1-minute and 30-minute averages.	Level 2 Data Product	TIS	NEON.DOC.000007 NEON.DOC.000784	Ecohydrology
NEON.DOM.SITE.DP2.00003	Temporally Interpolated 2D Tower Winds	Temporally interpolated (i.e., to gap fill missing data) horizontal wind speed and wind direction at each measurement level along the vertical tower profile and sensor located on the aquatic meteorology station.	Level 2 Data Product	TIS	NEON.DOC.000784 NEON.DOC.000780	Atmosphere
NEON.DOM.SITE.DP2.00004	Temporally Interpolated Biological Temperature	Temporally interpolated (i.e., to gap fill missing data) biological temperature (i.e. surface temperature) measured via IR temperature sensors located in the soil array and at multiple heights on the tower infrastructure.	Level 2 Data Product	TIS	NEON.DOC.000652 NEON.DOC.000780	Atmosphere Land Use, Land Cover, and Land Processes

NEON.DOM.SITE.DP2.00005	Temporally interpolated Photosynthetically Active Radiation	Temporally interpolated (i.e., to gap fill missing data) Photosynthetically Active Radiation (PAR). Observations are made by sensors located at multiple heights on the tower infrastructure and a single sensor located on the aquatic meteorology station.	Level 2 Data Product	TIS	NEON.DOC.000781 NEON.DOC.000784	Atmosphere
NEON.DOM.SITE.DP2.00006	Temporally Interpolated Soil Temperature	Temporally interpolated (i.e., to gap fill missing data) soil temperature at various depth below the soil surface from 2 cm up to 200 cm at non-permafrost sites (up to 300 cm at Alaskan sites). Data are from all five Instrumented Soil Plots per site and presented as 1-minute and 30-minute averages.	Level 2 Data Product	TIS	NEON.DOC.001571 NEON.DOC.000784	Atmosphere Land Use, Land Cover, and Land Processes
NEON.DOM.SITE.DP2.00007	Temporally Interpolated Single Aspirated Tower Temperature	Temporally Interpolated (i.e., to gap fill missing data) air temperature, available as one- and thirty-minute averages. Observations are made by sensors located on the TIS tower and a single sensor located on the aquatic meteorology station. Temperature observations are made using platinum resistance thermometers, which are housed in a fan aspirated shield to reduce radiative bias.	Level 2 Data Product	TIS	NEON.DOC.000646 NEON.DOC.000654 NEON.DOC.000784	Atmosphere
NEON.DOM.SITE.DP2.00008	Temporally Interpolated CO2 Concentration	Temporally interpolated (i.e., to gap fill missing data) of CO2 concentration at each measurement level along the vertical tower profile	Level 2 Data Product	TIS	NEON.DOC.000784	Atmosphere Biogeochemistry
NEON.DOM.SITE.DP2.00009	Temporally Interpolated H2O Concentration	Temporally interpolated (i.e., to gap fill missing data) H2O concentration at each measurement level along the vertical tower profile	Level 2 Data Product	TIS	NEON.DOC.000784	Atmosphere Biogeochemistry Ecohydrology
NEON.DOM.SITE.DP2.00010	Temporally Interpolated Atmospheric CO2 Isotope	Temporally interpolated (i.e., to gap fill missing data) 13C stable isotopic ratio in atmospheric CO2 at each measurement level along the vertical tower profile	Level 2 Data Product	TIS	NEON.DOC.000784	Atmosphere Biogeochemistry
NEON.DOM.SITE.DP2.00011	Temporally Interpolated Atmospheric H2O Isotope	Temporally interpolated (i.e., to gap fill missing data) 18O and 2H stable isotopic ratio in atmospheric water vapor at each measurement level along the vertical tower profile	Level 2 Data Product	TIS	NEON.DOC.000784	Atmosphere Biogeochemistry Ecohydrology
NEON.DOM.SITE.DP2.00013	Temporally Interpolated Soil CO2 Concentration	Temporally interpolated (i.e., to gap fill missing data) soil CO2 concentration starting at 0 cm. Data are from all five Instrumented Soil Plots per site and presented as 1-minute and 30-minute averages and at 1 cm depth increments.	Level 2 Data Product	TIS	NEON.DOC.011083 NEON.DOC.000784	Biogeochemistry
NEON.DOM.SITE.DP2.00015	Temporally Interpolated Soil Heat Flux	Temporally interpolated(i.e., to gap fill missing data) soil heat flux; measured as part of the soil array.	Level 2 Data Product	TIS	tbd	Biogeochemistry Land Use, Land Cover, and Land Processes
NEON.DOM.SITE.DP2.00016	Temporally Interpolated PAR-Line	Temporally interpolated (i.e., to gap fill missing data) Photosynthetically Active Radiation (PAR). Observations are made by sensors at the soil surface covering a one meter length.	Level 2 Data Product	TIS	tbd	Atmosphere

NEON.DOM.SITE.DP2.00018	Temporally Interpolated Barometric Pressure	Temporally interpolated (i.e., to gap fill missing data) barometric pressure. Observations are made by a single digital barometer located on the tower infrastructure and a single digital barometer located on the aquatic meteorological station.	Level 2 Data Product	TIS	tbd	Atmosphere
NEON.DOM.SITE.DP2.00019	Temporally Interpolated Direct and Diffuse Pyranometer	Temporally interpolated (i.e., to gap fill missing data) total, direct, and diffuse shortwave radiation. Observations are made by a sensor located at the top of the tower infrastructure.	Level 2 Data Product	TIS		Atmosphere
NEON.DOM.SITE.DP2.00020	Temporally Interpolated Shortwave and Longwave Radiation (Net radiometer)	Temporally interpolated (i.e., to gap fill missing data) net radiation that is composed of incoming and outgoing shortwave and longwave radiation. These data products are available as one- and thirty-minute averages from sensors located on the TIS tower and located on the aquatic meteorology station.	Level 2 Data Product	TIS	tbd	Atmosphere
NEON.DOM.SITE.DP2.00021	Temporally Interpolated Primary Pyranometer	Temporally interpolated (i.e., to gap fill missing data) total shortwave radiation. The primary pyranometer is housed in a heated and aspirated ventilation unit and observes incoming shortwave radiation at the top of the tower infrastructure.	Level 2 Data Product	TIS	tbd	Atmosphere
NEON.DOM.SITE.DP2.00022	Temporally Interpolated Relative Humidity	Temporally interpolated (i.e. to gap fill missing data) relative humidity measurements collected from the TIS sensor and the aquatic meteorology station.	Level 2 Data Product	TIS	tbd	Atmosphere Ecohydrology
NEON.DOM.SITE.DP2.00023	Temporally Interpolated Triple Aspirated Tower Temperature	Temporally interpolated (i.e. to gap fill missing data) air temperature, derived from triplicate 1 Hz temperature observations. Observations are made by sensors located at the top of the tower infrastructure. Temperature observations are made by three platinum resistance thermometers, which are housed together in a fan aspirated shield to reduce radiative biases.	Level 2 Data Product	TIS	tbd	Atmosphere
NEON.DOM.SITE.DP2.00024	Temporally Interpolated 3D Tower Winds	Temporally interpolated (i.e. to gap fill missing data) three-dimensional windspeed and direction measured by sonic anemometer.	Level 2 Data Product	TIS	tbd	Atmosphere Biogeochemistry
NEON.DOM.SITE.DP3.00002	Spatially and temporally interpolated soil temperature profile	Spatially- (i.e., across depths) and temporally-interpolated soil temperature from 0 cm up to 200 cm at non-permafrost sites (up to 300 cm at Alaskan sites). Data are from all five Instrumented Soil Plots per site and presented as 1-minute and 30-minute averages and at 1 cm depth increments.	Level 3 Data Product	TIS	NEON.DOC.001571 NEON.DOC.000784	Atmosphere Land Use, Land Cover, and Land Processes

NEON.DOM.SITE.DP3.00003	Spatially and temporally interpolated soil CO2 profile	Spatially- (i.e., across depths) and temporally-interpolated soil CO2 concentration starting at 0 cm. Data are from all five Instrumented Soil Plots per site and presented as 1-minute and 30-minute averages and at 1 cm depth increments.	Level 3 Data Product	TIS	NEON.DOC.011083 NEON.DOC.000784	Biogeochemistry
NEON.DOM.SITE.DP3.00004	Spatially and temporally interpolated soil water content profile	Spatially- (i.e., across depths) and temporally-interpolated soil volumetric water content from 0 cm up to 200 cm at non-permafrost sites (up to 300 cm at Alaskan sites). Data are from all five Instrumented Soil Plots per site and presented as 1-minute and 30-minute averages and at 1 cm depth increments.	Level 3 Data Product	TIS	NEON.DOC.000007 NEON.DOC.000784	Ecohydrology
NEON.DOM.SITE.DP3.00005	Tower Wind Profile	Spatially interpolated wind profile generated from temporally interpolated individual wind measurements on the tower; includes 2D and 3D temporally interpolated Level 2 products	Level 3 Data Product	TIS	tbd	Atmosphere
NEON.DOM.SITE.DP3.00007	Photosynthetically Active Radiation Profile	Spatially interpolated Photosynthetically Active Radiation (PAR) profile generated from temporally interpolated PAR measurements at different heights on the tower.	Level 3 Data Product	TIS	tbd	Atmosphere
NEON.DOM.SITE.DP3.00008	Tower Temperature Profile	Spatially interpolated temperature profile generated from temporally interpolated individual temperature measurements on the tower; includes Single and Triple Temporally interpolated Level 2 products	Level 3 Data Product	TIS	tbd	Atmosphere
NEON.DOM.SITE.DP3.00009	CO2 Concentration Profile	CO2 concentration at each measurement level along the vertical tower profile	Level 3 Data Product	TIS	tbd	Atmosphere Biogeochemistry
NEON.DOM.SITE.DP3.00010	H2O Concentration Profile	H2O concentration at each measurement level along the vertical tower profile	Level 3 Data Product	TIS	tbd	Atmosphere Biogeochemistry Ecohydrology
NEON.DOM.SITE.DP3.00011	Atmospheric CO2 Isotope Profile	13C stable isotopic ratio in atmospheric CO2 at each measurement level along the vertical tower profile	Level 3 Data Product	TIS	tbd	Atmosphere Biogeochemistry
NEON.DOM.SITE.DP3.00012	Atmospheric H2O Isotope Profile	18O and 2H stable isotopic ratio in atmospheric water vapor at each measurement level along the vertical tower profile	Level 3 Data Product	TIS	tbd	Atmosphere Biogeochemistry Ecohydrology

Identification Code	Name	Description	Category	Supplier	Applicable Specification	Themes
NEON.DOM.SITE.DP1.10001	Belowground biomass	Total belowground plant biomass derived from coarse roots (via allometric estimation), fine roots from soil core sampling, and fine roots from soil pit sampling	Level 1 Data Product	TOS	tbd	Biogeochemistry Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.10002	Breeding bird community composition and proportion nonnative	Absolute and relative abundances of native and non-native taxa observed in breeding landbird communities	Level 1 Data Product	TOS	tbd	Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.10003	Breeding bird point counts	Count, distance from observer, and taxonomic identification of breeding landbirds observed during point counts	Level 1 Data Product	TOS	NEON.DOC.001245 NEON.DOC.001247	Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.10004	Breeding bird reference images	Digital images of select birds taken during implementation of breeding bird protocol; not comprehensive of all birds observed	Level 1 Data Product	TOS	NEON.DOC.001245 NEON.DOC.001247	Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.10005	Breeding bird taxonomic diversity	Diversity indices for breeding landbirds	Level 1 Data Product	TOS	tbd	Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.10006	Camera quadrat intercept sampling for LAI	Optical upward-facing canopy point-intercept data for individual tree species	Level 1 Data Product	TOS	NEON.DOC.001247	Biogeochemistry Land Use, Land Cover, and Land Processes Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.10007	Scaled soil chemical properties	Soil chemical properties scaled to the square meter. Data are for the top 30 cm of the soil profile and are separated by organic and mineral horizons.	Level 1 Data Product	TOS	NEON.DOC.001241	Biogeochemistry
NEON.DOM.SITE.DP1.10008	Soil chemical properties (Distributed initial characterization)	Soil chemical properties of a soil core that was sampled by the NRCS as part of initial site characterization activities at the NEON site. Data are reported by horizon for the top $\leq$ 1m of the soil profile. Also see distributed periodic and megapit soil data.	Level 1 Data Product	TOS	tbd	Biogeochemistry
NEON.DOM.SITE.DP1.10010	Coarse woody debris log survey	Tally and raw measurement of coarse woody debris, > 2 cm diameter	Level 1 Data Product	TOS	tbd	Biogeochemistry
NEON.DOM.SITE.DP1.10011	Coarse woody debris log volume	Coarse woody debris volume by decay class and species type (hardwood, softwood)	Level 1 Data Product	TOS	NEON.DOC.001247	Biogeochemistry
NEON.DOM.SITE.DP1.10012	Coarse woody debris mass, volume and density	Mass and density of coarse woody debris by decay class and species type (hardwood, softwood)	Level 1 Data Product	TOS	tbd	Biogeochemistry
NEON.DOM.SITE.DP1.10013	Coarse woody debris plug mass	Dry weight of coarse woody debris bulk density plugs	Level 1 Data Product	TOS	NEON.DOC.001247	Biogeochemistry
NEON.DOM.SITE.DP1.10014	Coarse woody debris plug sampling	Bulk-density plug dimension measurements	Level 1 Data Product	TOS	tbd	Biogeochemistry
NEON.DOM.SITE.DP1.10015	Coarse woody debris void volume	Internal volume of hollow spaces within decaying logs, derived from digital images of log cross sections	Level 1 Data Product	TOS	NEON.DOC.001247	Biogeochemistry
NEON.DOM.SITE.DP1.10016	Coarse woody debris void volume images	Digital images of cross-cut sections of decayed logs for calculating void spaces	Level 1 Data Product	TOS	tbd	Biogeochemistry

NEON.DOM.SITE.DP1.10017	Digital hemispheric photos of Plot Vegetation	Upward and/or downward facing digital 180-degree images of vegetation in plots used to calculate leaf area index	Level 1 Data Product	TOS	NEON.DOC.001236	Biogeochemistry Land Use, Land Cover, and Land Processes
NEON.DOM.SITE.DP1.10018	Ground beetle community composition	Absolute and relative abundances of taxa observed in ground beetle communities	Level 1 Data Product	TOS	tbd	Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.10019	Ground beetle reference images	Digital images of select beetles taken during implementation of ground beetle protocol; not comprehensive of all beetles sampled	Level 1 Data Product	TOS	NEON.DOC.001238 NEON.DOC.001247	Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.10020	Ground beetle sequences DNA barcode	CO1 DNA sequences from select ground beetles	Level 1 Data Product	TOS	NEON.DOC.001238	Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.10021	Ground beetle taxonomic diversity	Diversity indices for ground beetles	Level 1 Data Product	TOS	tbd	Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.10022	Ground beetles sampled from pitfall traps	Taxonomically identified ground beetles and the plots and times from which they were collected.	Level 1 Data Product	TOS	NEON.DOC.001238 NEON.DOC.001247	Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.10023	Herbaceous clip harvest	Dry weight of herbaceous vegetation harvested from individual clip strips, by functional type	Level 1 Data Product	TOS	NEON.DOC.001247	Biogeochemistry
NEON.DOM.SITE.DP1.10024	Herbaceous production	Annual, herbaceous biomass production (kg per ha)	Level 1 Data Product	TOS	tbd	Biogeochemistry
NEON.DOM.SITE.DP1.10025	Leaf Area Index derived from digital hemispheric photos of Plot Vegetation	Total leaf area index derived from digital hemispheric photos	Level 1 Data Product	TOS	tbd	Biogeochemistry Land Use, Land Cover, and Land Processes
NEON.DOM.SITE.DP1.10026	Plant foliar physical and chemical properties	Plant sun-lit canopy foliar physical (e.g., leaf mass per area) and chemical properties reported at the level of the individual.	Level 1 Data Product	TOS	tbd	Biogeochemistry Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.10027	Liana aboveground biomass	Aboveground biomass of lianas derived from allometric equations	Level 1 Data Product	TOS	tbd	Biogeochemistry; Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.10028	Liana basal area	Cross-sectional area of liana stems, square meters per hectare	Level 1 Data Product	TOS	tbd	Biogeochemistry; Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.10029	Liana density	Count of lianas per hectare	Level 1 Data Product	TOS	tbd	Biogeochemistry; Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.10030	Liana vegetation structure	Field measurements of individual lianas	Level 1 Data Product	TOS	NEON.DOC.001247	Biogeochemistry; Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.10031	Litter chemical properties	Field collection metadata describing the sampling of bulk litter chemical properties reported at the scale of the plot. Also includes raw data returned from the laboratory. Litter was sorted to and reported by functional group.	Level 1 Data Product	TOS	NEON.DOC.001241 NEON.DOC.001247	Biogeochemistry
NEON.DOM.SITE.DP1.10032	Litterfall and fine woody debris production	Annual production (kg per ha) of litter and fine woody debris from trees and tall shrubs	Level 1 Data Product	TOS	tbd	Biogeochemistry
NEON.DOM.SITE.DP1.10033	Litterfall and fine woody debris sampling	Dry weight of litterfall and fine woody debris collected from litter traps, by functional type	Level 1 Data Product	TOS	NEON.DOC.001247	Biogeochemistry
NEON.DOM.SITE.DP1.10034	Loreys height	Mean height of forest canopy, weighted by basal area, forested sites only	Level 1 Data Product	TOS	tbd	Land Use, Land Cover, and Land Processes; Organisms, Populations, and Communities

NEON.DOM.SITE.DP1.10035	Mat-forming bryophyte clip harvest	Dry weight of mat-forming bryophyte biomass samples	Level 1 Data Product	TOS	NEON.DOC.001247	Biogeochemistry
NEON.DOM.SITE.DP1.10036	Mat-forming bryophyte productivity	Annual biomass production of mat-forming bryophytes (kg per ha)	Level 1 Data Product	TOS	NEON.DOC.001246	Biogeochemistry
NEON.DOM.SITE.DP1.10037	Mosquito community composition and proportion nonnative	Absolute and relative abundances of native and non-native taxa observed in mosquito communities	Level 1 Data Product	TOS	tbd	Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.10038	Mosquito sequences DNA barcode	CO1 DNA sequences from select mosquitoes	Level 1 Data Product	TOS	NEON.DOC.001239	Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.10039	Mosquito taxonomic diversity	Diversity indices for mosquitoes	Level 1 Data Product	TOS	tbd	Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.10040	Mosquito-borne pathogen prevalence	Prevalence of infection by pathogens across multiple mosquito samples (pools)	Level 1 Data Product	TOS	tbd	Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.10041	Mosquito-borne pathogen status	Presence/absence of a pathogen in a single mosquito sample (pool)	Level 1 Data Product	TOS	NEON.DOC.001247	Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.10042	Mosquitos reference images	Digital images of select mosquitoes taken during implementation of mosquito protocol; not comprehensive of all mosquitoes sampled	Level 1 Data Product	TOS	NEON.DOC.001239 NEON.DOC.001247	Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.10043	Mosquitos sampled from CO2 traps	Taxonomically identified mosquitoes and the plots and times from which they were collected	Level 1 Data Product	TOS	NEON.DOC.001239 NEON.DOC.001247	Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.10044	Non-herbaceous perennial vegetation biomass	Calculated biomass of non-herbaceous perennial plants	Level 1 Data Product	TOS	tbd	Biogeochemistry
NEON.DOM.SITE.DP1.10045	Non-herbaceous perennial vegetation structure	Field measurements of individual non-herbaceous perennial plants	Level 1 Data Product	TOS	tbd	Biogeochemistry
NEON.DOM.SITE.DP1.10046	Scaled plant canopy chemical properties	Plant sun-lit canopy foliar chemical properties scaled to the square meter.	Level 1 Data Product	TOS	NEON.DOC.001241	Biogeochemistry Land Use, Land Cover, and Land Processes
NEON.DOM.SITE.DP1.10047	Soil physical properties (Distributed initial characterization)	Soil physical properties of a soil core that was sampled by the NRCS as part of initial site characterization activities at the NEON site. Data are reported by horizon for the top $\leq$ 1m of the soil profile. Also see distributed periodic and megapit soil data.	Level 1 Data Product	TOS	tbd	Biogeochemistry Land Use, Land Cover, and Land Processes
NEON.DOM.SITE.DP1.10048	Plant canopy leaf mass per area	Measured leaf mass per area (g per square meter) for canopy tree species	Level 1 Data Product	TOS	tbd	Biogeochemistry Land Use, Land Cover, and Land Processes Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.10049	Plant community composition and proportion nonnative	Absolute and relative percent cover of native and non-native taxa observed in terrestrial plant communities	Level 1 Data Product	TOS	tbd	Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.10051	Plant foliar physical and chemical properties	Field collection metadata describing the sampling of plant sun-lit canopy foliar physical (e.g., leaf mass per area) and chemical properties reported at the level of the individual. Also includes raw data returned from the laboratory.	Level 1 Data Product	TOS	NEON.DOC.001241 NEON.DOC.001247	Biogeochemistry Organisms, Populations, and Communities

NEON.DOM.SITE.DP1.10053	Plant foliar stable isotopes	Field collection metadata describing the sampling of sun-lit canopy foliar tissues for stable isotope compositions. Also includes raw data returned from the laboratory.	Level 1 Data Product	TOS	NEON.DOC.001242 NEON.DOC.001247	Biogeochemistry Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.10054	Plant phenology observation reference images	Digital images of select plants taken during implementation of phenology protocol; not comprehensive of all phenology observations	Level 1 Data Product	TOS	NEON.DOC.001246 NEON.DOC.001247	Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.10055	Plant phenology observations	Phenophase status and intensity of tagged plants	Level 1 Data Product	TOS	NEON.DOC.001246 NEON.DOC.001247	Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.10056	Plant phenometric summary statistics	Spatially averaged phenological transition dates and intensities	Level 1 Data Product	TOS		Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.10057	Plant phenophase transition dates	Dates when phenophases began and ended per tagged plant	Level 1 Data Product	TOS	NEON.DOC.001246	Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.10058	Plant presence and percent cover	Plant species presence as observed in multi-scale plots: species and associated percent cover at 1-m <sup>2</sup> and plant species presence at 10-m <sup>2</sup> , 100-m <sup>2</sup> and 400-m <sup>2</sup>	Level 1 Data Product	TOS	NEON.DOC.001237	Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.10060	Plant taxonomic diversity	Diversity indices for plants	Level 1 Data Product	TOS	tbd	Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.10062	Rodent-borne pathogen prevalence	Prevalence of infection by pathogens across multiple rodent samples	Level 1 Data Product	TOS	NEON.DOC.001240	Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.10063	Rodent-borne pathogen reference images	Digital images of select test results taken in laboratory during pathogen processing	Level 1 Data Product	TOS	NEON.DOC.001240 NEON.DOC.001247	Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.10064	Rodent-borne pathogen status	Presence/absence of a pathogen (or antibodies to a pathogen) in each single rodent sample	Level 1 Data Product	TOS	NEON.DOC.001240 NEON.DOC.001247	Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.10065	Root biomass proportion at depth	Proportion of fine root biomass at depth from soil pit sampling	Level 1 Data Product	TOS	tbd	Biogeochemistry Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.10066	Root sampling soil pit	Fine root biomass in 10cm increments (first 1m depth) and 20cm increments (up to 2m depth) from soil pit sampling	Level 1 Data Product	TOS	tbd	Biogeochemistry Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.10067	Root sampling tower plots	Fine root biomass to 30cm depth via soil core sampling	Level 1 Data Product	TOS	NEON.DOC.001247	Biogeochemistry Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.10068	Sapling and shrub basal area	Cross-sectional area of saplings and shrubs, square meter per hectare	Level 1 Data Product	TOS	tbd	Land Use, Land Cover, and Land Processes Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.10069	Sapling and shrub density	Count of saplings and shrubs per hectare	Level 1 Data Product	TOS	tbd	Land Use, Land Cover, and Land Processes Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.10070	Sapling and shrub height	Summary statistics for sapling and shrub height	Level 1 Data Product	TOS	tbd	Land Use, Land Cover, and Land Processes Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.10071	Sapling and shrub vegetation structure	Field vegetation structure measurements of individual saplings and shrubs, including stem diameter, canopy diameter, height, and others	Level 1 Data Product	TOS	NEON.DOC.001247	Land Use, Land Cover, and Land Processes Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.10072	Small mammal box trapping	Individual- and trap-level data collected using box traps designed to capture small mammals	Level 1 Data Product	TOS	NEON.DOC.001244 NEON.DOC.001247	Organisms, Populations, and Communities



NEON.DOM.SITE.DP1.10073	Small mammal community composition and proportion nonnative	Absolute and relative abundances of native and non-native taxa observed in small mammal communities	Level 1 Data Product	TOS	tbd	Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.10074	Small mammal population structure	Population metrics that describe the distribution of age, sex, and reproductive condition observed in small mammal communities	Level 1 Data Product	TOS	tbd	Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.10075	Small mammal reference images	Digital images of select small mammals taken during implementation of small mammal protocol; not comprehensive of all small mammal sampling	Level 1 Data Product	TOS	NEON.DOC.001244 NEON.DOC.001247	Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.10076	Small mammal sequences DNA barcode	CO1 DNA sequences from select small mammals	Level 1 Data Product	TOS	NEON.DOC.001244	Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.10077	Small mammal taxonomic diversity	Diversity indices for small mammals	Level 1 Data Product	TOS	tbd	Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.10078	Soil chemical properties (Distributed periodic)	Field collection metadata describing the sampling of soil chemical properties at the scale of the soil core, as well as raw data returned from the laboratory. Samples were collected for the top 30cm of the soil profile and separated by organic and mineral horizons. Also see initial characterization and megapit soil data.	Level 1 Data Product	TOS	NEON.DOC.001241 NEON.DOC.001247	Biogeochemistry
NEON.DOM.SITE.DP1.10079	Soil core reference images	Digital images of select soil cores taken during implementation of soil sampling protocol; not comprehensive of all soil samples	Level 1 Data Product	TOS	NEON.DOC.001241 NEON.DOC.001247	Biogeochemistry
NEON.DOM.SITE.DP1.10080	Soil inorganic nitrogen pools and transformations	Rates of net nitrogen mineralization and net nitrification in soils, reported at the scale of a soil core. Samples were collected from the top 30cm of the soil profile and separated by organic and mineral horizons.	Level 1 Data Product	TOS	NEON.DOC.001247	Biogeochemistry
NEON.DOM.SITE.DP1.10081	Soil microbe community composition	Absolute and relative abundances of taxa observed in soil microbial communities	Level 1 Data Product	TOS	NEON.DOC.001243	Biogeochemistry Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.10082	Soil microbe functional alpha diversity	Select diversity indices based on microbial functional groups; also see NEON.DP4.00031	Level 1 Data Product	TOS	tbd	Biogeochemistry Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.10083	Soil microbe functional composition	mRNA sequence data from soil samples	Level 1 Data Product	TOS	NEON.DOC.001243	Biogeochemistry Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.10084	Soil microbe sequences	DNA sequence data from soil samples	Level 1 Data Product	TOS	NEON.DOC.001243 NEON.DOC.001247	Biogeochemistry Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.10085	Soil microbe taxonomic diversity	Diversity indices for soil microbes	Level 1 Data Product	TOS	tbd	Biogeochemistry Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.10086	Soil physical properties (Distributed periodic)	Field collection metadata describing the sampling of soil physical properties at the scale of the soil core and raw data returned from the laboratory. Samples were collected for the top 30cm of the soil profile and separated by organic and mineral horizons. Also see initial characterization and megapit soil data.	Level 1 Data Product	TOS	NEON.DOC.001241 NEON.DOC.001247	Biogeochemistry
NEON.DOM.SITE.DP1.10087	Species specific leaf area index camera quadrat	The calculated Leaf Area Index attributable to individual tree species, and the proportion of total Leaf Area Index for individual tree species.	Level 1 Data Product	TOS	tbd	Land Use, Land Cover, and Land Processes Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.10088	Tick community composition	Absolute and relative abundances of taxa observed in tick communities	Level 1 Data Product	TOS	tbd	Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.10089	Tick reference images	Digital images of select ticks taken during implementation of tick protocol; not comprehensive of all ticks sampled	Level 1 Data Product	TOS	NEON.DOC.001247	Organisms, Populations, and Communities

NEON.DOM.SITE.DP1.10090	Tick-borne pathogen prevalence	Prevalence of infection by pathogens across multiple tick samples	Level 1 Data Product	TOS	tbd	Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.10091	Tick-borne pathogen sequences	Genomic sequences for each single tick sample generated during pathogen testing	Level 1 Data Product	TOS	tbd	Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.10092	Tick-borne pathogen status	Presence/absence of a pathogen in each single tick sample	Level 1 Data Product	TOS	NEON.DOC.001247	Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.10093	Ticks sampled using drag cloths	Abundance and density of ticks collected by drag and/or flag sampling (by species and/or lifestage)	Level 1 Data Product	TOS	NEON.DOC.001247	Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.10094	Tree aboveground biomass	Biomass of trees, calculated using allometric equations	Level 1 Data Product	TOS	tbd	Biogeochemistry Land Use, Land Cover, and Land Processes Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.10095	Tree basal area	Cross-sectional area of tree boles, square meters per hectare	Level 1 Data Product	TOS	tbd	Biogeochemistry Land Use, Land Cover, and Land Processes Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.10096	Tree density	Count of trees per hectare	Level 1 Data Product	TOS	tbd	Biogeochemistry Land Use, Land Cover, and Land Processes Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.10097	Tree height	Summary statistics for tree height	Level 1 Data Product	TOS	tbd	Biogeochemistry Land Use, Land Cover, and Land Processes Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.10098	Tree vegetation structure	Structure measurements, including height, canopy diameter, and stem diameter, as well as mapped position of individual trees	Level 1 Data Product	TOS	NEON.DOC.001247	Land Use, Land Cover, and Land Processes; Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.10099	Root stable isotopes	Field collection metadata describing the sampling of root biomass for stable isotope compositions, as well as raw data returned from the laboratory.	Level 1 Data Product	TOS	NEON.DOC.001242 NEON.DOC.001247	Biogeochemistry
NEON.DOM.SITE.DP1.10100	Soil stable isotopes (Distributed periodic)	Field collection metadata describing the sampling of soil for stable isotope compositions at the scale of the soil core, as well as raw data returned from the laboratory. Samples were collected from the top 30cm of the soil profile and separated by organic and mineral horizons.	Level 1 Data Product	TOS	NEON.DOC.001242 NEON.DOC.001247	Biogeochemistry
NEON.DOM.SITE.DP1.10101	Litter stable isotopes	Field collection metadata describing the sampling of bulk litter for analysis of stable isotope compositions, reported at the scale of the plot. Also includes raw data returned from the laboratory. Litter was sorted to and reported by functional group.	Level 1 Data Product	TOS	NEON.DOC.001242 NEON.DOC.001247	Biogeochemistry
NEON.DOM.SITE.DP1.10102	Root chemical properties	Field collection metadata describing the sampling of root biomass for chemical properties. Also includes raw data returned from the laboratory. Data are reported at the scale of the soil core.	Level 1 Data Product	TOS	NEON.DOC.001241 NEON.DOC.001247	Biogeochemistry
NEON.DOM.SITE.DP1.10104	Soil microbe biomass	Quantitative abundance of different groups of soil microbes	Level 1 Data Product	TOS	tbd	Biogeochemistry Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.10105	Sapling and shrub aboveground biomass	Aboveground biomass of saplings and shrubs	Level 1 Data Product	TOS	tbd	Biogeochemistry Land Use, Land Cover, and Land Processes Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.10106	Total biomass and necromass (Field)	Sum of live and dead biomass pools	Level 1 Data Product	TOS	tbd	Biogeochemistry Organisms, Populations, and Communities

Identification Code	Name	Description	Category	Supplier	Applicable Specification	Themes
NEON.DOM.SITE.DP1.20002	Aquatic phenology photos	RGB and IR images of the stream surface and riparian vegetation taken from an automated camera. Images are collected every 15 minutes and closely follow protocols of the Phenocam Network	Level 1 Data Product	AIS	tbd	Ecohydrology Land Use, Land Cover, and Land Processes Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.20004	Barometric pressure at lakes on-buoy	Barometric pressure, available as one- and thirty-minute averages for both station pressure and pressure reduced to sea level. Observations are made on the meteorology station on the buoy in lakes.	Level 1 Data Product	AIS	tbd	Atmosphere Ecohydrology
NEON.DOM.SITE.DP1.20005	Chlorophyll a in surface water	In situ sensor-based concentration of chlorophyll a, available as one-, five-, and thirty-minute averages in surface water of lakes, wadeable and non-wadeable streams.	Level 1 Data Product	AIS	tbd	Biogeochemistry Ecohydrology
NEON.DOM.SITE.DP1.20008	Specific Conductivity of surface water	In situ sensor-based specific conductivity, available as one-, five-, and thirty-minute averages in surface water of lakes, wadeable and non-wadeable streams	Level 1 Data Product	AIS	tbd	Ecohydrology
NEON.DOM.SITE.DP1.20012	Dissolved oxygen in surface water	In situ sensor-based dissolved oxygen content, available as one-, five-, and thirty-minute averages in surface water in lakes, wadeable and non-wadeable streams	Level 1 Data Product	AIS	tbd	Biogeochemistry Ecohydrology
NEON.DOM.SITE.DP1.20015	Specific Conductivity in groundwater	In situ sensor-based measurements of specific conductance of groundwater in wells	Level 1 Data Product	AIS	NEON.DOC.001328	Ecohydrology
NEON.DOM.SITE.DP1.20016	Elevation of surface water	Measurements of water surface elevation, available as one-, five-, and thirty-minute averages in lakes, wadeable streams, and non-wadeable streams. Based on sensor measurements of water pressure	Level 1 Data Product	AIS	NEON.DOC.001198	Ecohydrology
NEON.DOM.SITE.DP1.20217	Temperature of groundwater	Sensor based measurement of groundwater temperature in each well.	Level 1 Data Product	AIS	NEON.DOC.001328	Ecohydrology
NEON.DOM.SITE.DP1.20019	Fluorescent dissolved organic matter (fDOM) in surface water	Sensor based measurements of fDOM concentration, available as one-, five-, and thirty-minute averages in surface water at lake sites, wadeable, and non-wadeable streams	Level 1 Data Product	AIS	tbd	Biogeochemistry Ecohydrology
NEON.DOM.SITE.DP1.20022	Ice & leaf cover	Cover of ice on the water surface and the nearshore leaf canopy, calculated from automated camera images; images collected over lakes, wadeable streams, and non-wadeable streams.	Level 1 Data Product	AIS	tbd	Ecohydrology Land Use, Land Cover, and Land Processes
NEON.DOM.SITE.DP1.20032	Shortwave and longwave radiation on lakes on-buoy (Net radiometer)	Net radiation is composed of incoming and outgoing shortwave and longwave radiation. These data products are available as one- and thirty-minute averages. Observations of net shortwave and longwave radiation are made by a sensor located on the meteorology station on the buoy in lakes.	Level 1 Data Product	AIS	tbd	Atmosphere Ecohydrology

NEON.DOM.SITE.DP1.20033	Nitrate in surface water	In situ sensor-based nitrate concentration, available as fifteen- and sixty-minute averages in surface water in lakes, wadeable and non-wadeable streams	Level 1 Data Product	AIS	tbd	Biogeochemistry Ecohydrology
NEON.DOM.SITE.DP1.20039	pH in surface water	In situ sensor-based pH, available as one-, five-, and thirty-minute averages in surface water in lakes, wadeable and non-wadeable streams	Level 1 Data Product	AIS	tbd	Biogeochemistry Ecohydrology
NEON.DOM.SITE.DP1.20042	Photosynthetically active radiation at water surface	Photosynthetically Active Radiation (PAR) observations represent the radiation flux at wavelengths between 400-700 nm, which constitute the wavelengths that drive photosynthesis. This data product is available as one-, five-, and thirty-minute averages. Observations are made at the aquatic sensor set location at lakes, non-wadeable streams, and wadeable streams.	Level 1 Data Product	AIS	NEON.DOC.001333	Atmosphere Ecohydrology
NEON.DOM.SITE.DP1.20046	Air temperature of lakes on-buoy	Air temperature, available as one- and thirty-minute averages. Observations are made by a sensor located on the meteorology station on the buoy in lakes. Temperature observations are made using platinum resistance thermometers, which are housed in a passive shield to reduce radiative bias.	Level 1 Data Product	AIS	tbd	Atmosphere Ecohydrology
NEON.DOM.SITE.DP1.20053	Temperature (PRT) in surface water	Surface water temperature, available as one-, five-, and thirty-minute averages, measured by a platinum resistance thermometer at the sensor location in-lakes, wadeable and non-wadeable streams	Level 1 Data Product	AIS	NEON.DOC.001316	Ecohydrology
NEON.DOM.SITE.DP1.20056	Turbidity in surface water	Sensor based measurements of surface water turbidity, available as one-, five-, and thirty-minute averages at the sensor location in lakes, wadeable streams, and non-wadeable streams	Level 1 Data Product	AIS	tbd	Ecohydrology
NEON.DOM.SITE.DP1.20059	Windspeed and direction on lakes on-buoy	Wind speed and direction; observations are made by 2-D sonic anemometer sensors located on the lake buoy	Level 1 Data Product	AIS	tbd	Atmosphere Ecohydrology
NEON.DOM.SITE.DP1.20100	Elevation of groundwater	Sensor based measurement of groundwater elevation calculated from pressure transducer readings in each well	Level 1 Data Product	AIS	NEON.DOC.001328	Ecohydrology
NEON.DOM.SITE.DP1.20261	Photosynthetically active radiation below water surface	Photosynthetically Active Radiation (PAR) observations represent the radiation flux at wavelengths between 400-700 nm, which constitute the wavelengths that drive photosynthesis. This data product is available as one- and thirty-minute averages. Observations are made at the aquatic sensor sets at the lake inlet, lake outlet, and lake buoy.	Level 1 Data Product	AIS	tbd	Atmosphere Ecohydrology
NEON.DOM.SITE.DP1.20264	Temperature at specific depth in lakes	Sensor based measurements of water temperature in lake sites. Temperature is measured at specific depths by a profiling multisonde	Level 1 Data Product	AIS	tbd	Ecohydrology
NEON.DOM.SITE.DP1.20267	Gauge Height	Gauge height, in meters, measured at lakes, wadeable streams and non-wadeable streams.	Level 1 Data Product	AIS	tbd	Ecohydrology
NEON.DOM.SITE.DP1.20271	Relative Humidity of the air above lakes on buoy	Relative humidity, temperature, and dew or frost point temperature, available as one- and thirty-minute averages of 1 Hz observations. Observations are made by sensors located on the buoy in lakes	Level 1 Data Product	AIS	tbd	Atmosphere Ecohydrology

NEON.DOM.SITE.DP2.20003	Temporally Interpolated Barometric pressure above lakes on-buoy	Temporally Interpolated (i.e., to gap fill missing data) barometric pressure, available as one- and thirty-minute averages for both station pressure and pressure reduced to sea level. Observations are made on the meteorology station on the buoy in lakes.	Level 2 Data Product	AIS	tbd	Atmosphere Ecohydrology
NEON.DOM.SITE.DP2.20005	Temporally Interpolated relative humidity above lakes on-buoy	Temporally Interpolated (i.e., to gap fill missing data) relative humidity, available as one- and thirty-minute averages for both station pressure and pressure reduced to sea level. Observations are made on the meteorology station on the buoy in lakes.	Level 2 Data Product	AIS	tbd	Atmosphere Ecohydrology
NEON.DOM.SITE.DP2.20006	Temporally Interpolated Chlorophyll a in surface water	Temporally Interpolated (i.e., to gap fill missing data) in situ sensor-based concentration of chlorophyll a in surface water of lakes, wadeable and non-wadeable streams	Level 2 Data Product	AIS	tbd	Biogeochemistry Ecohydrology
NEON.DOM.SITE.DP2.20007	Temporally Interpolated Specific Conductivity in surface water	Temporally Interpolated (i.e., to gap fill missing data) in situ sensor-based specific conductivity in surface water of lakes, wadeable and non-wadeable streams	Level 2 Data Product	AIS	tbd	Ecohydrology
NEON.DOM.SITE.DP2.20008	Temporally Interpolated Dissolved oxygen in surface water	Temporally Interpolated (i.e., to gap fill missing data) in situ sensor-based dissolved oxygen content in surface water in lakes, wadeable and non-wadeable streams	Level 2 Data Product	AIS	tbd	Biogeochemistry Ecohydrology
NEON.DOM.SITE.DP2.20009	Temporally Interpolated Conductivity in groundwater	Temporally Interpolated (i.e., to gap fill missing data) in situ sensor-based measurements of specific conductance of groundwater in wells	Level 2 Data Product	AIS	tbd	Ecohydrology
NEON.DOM.SITE.DP2.20010	Temporally Interpolated Elevation of surface water	Temporally Interpolated (i.e., to gap fill missing data) measurements of water surface elevation in lakes, wadeable streams, and non-wadeable streams. Based on sensor measurements of water pressure	Level 2 Data Product	AIS	tbd	Ecohydrology
NEON.DOM.SITE.DP2.20011	Temporally Interpolated temperature of groundwater	Temporally Interpolated (i.e., to gap fill missing data) sensor based measurement of groundwater temperature in each well.	Level 2 Data Product	AIS	tbd	Ecohydrology
NEON.DOM.SITE.DP2.20012	Temporally Interpolated Fluorescent dissolved organic matter in surface water	Temporally Interpolated (i.e., to gap fill missing data) sensor based measurements of fDOM concentration in surface water at lake sites, wadeable and non-wadeable streams	Level 2 Data Product	AIS	tbd	Biogeochemistry Ecohydrology
NEON.DOM.SITE.DP2.20014	Temporally Interpolated Shortwave and longwave radiation on lakes on-buoy (Net radiometer)	Temporally Interpolated (i.e., to gap fill missing data) net radiation that is composed of incoming and outgoing shortwave and longwave radiation. These data products are available as one- and thirty-minute averages. Observations of net shortwave and longwave radiation are made by a sensor located on the meteorology station on the buoy in lakes.	Level 2 Data Product	AIS	tbd	Atmosphere Ecohydrology
NEON.DOM.SITE.DP2.20015	Temporally Interpolated Nitrate in surface water	Temporally Interpolated (i.e., to gap fill missing data) in situ sensor-based nitrate concentration in surface water in lakes, wadeable and non-wadeable streams	Level 2 Data Product	AIS	NEON.DOC.001246	Biogeochemistry Ecohydrology

NEON.DOM.SITE.DP2.20016	Temporally Interpolated pH in surface water	Temporally Interpolated (i.e., to gap fill missing data) in situ sensor-based pH in surface water in lakes, wadeable and non-wadeable streams	Level 2 Data Product	AIS	tbd	Biogeochemistry Ecohydrology
NEON.DOM.SITE.DP2.20017	Temporally Interpolated Photosynthetically active radiation at Water Surface	Temporally Interpolated (i.e., to gap fill missing data) photosynthetically Active Radiation (PAR) observations that represent the radiation flux at wavelengths between 400-700 nm, which constitute the wavelengths that drive photosynthesis. This data product is available as one- and thirty-minute averages. Observations are made at the aquatic sensor set location at lakes, non-wadeable streams, and wadeable streams.	Level 2 Data Product	AIS	tbd	Atmosphere Ecohydrology
NEON.DOM.SITE.DP2.20019	Temporally Interpolated air temperature of lakes on-buoy	Temporally Interpolated (i.e., to gap fill missing data) air temperature, available as one- and thirty-minute averages. Observations are made by a sensor located on the meteorology station on the buoy in lakes. Temperature observations are made using platinum resistance thermometers, which are housed in a fan aspirated shield to reduce radiative bias.	Level 2 Data Product	AIS	tbd	Atmosphere Ecohydrology
NEON.DOM.SITE.DP2.20020	Temporally Interpolated Stream discharge	Temporally Interpolated (i.e., to gap fill missing data) continuous measurements of stream discharge calculated from a stage-discharge rating curve and sensor-based measurements of water surface elevation.	Level 2 Data Product	AIS	tbd	Ecohydrology
NEON.DOM.SITE.DP2.20021	Temporally Interpolated Temperature (PRT) in surface water	Temporally Interpolated (i.e., to gap fill missing data) surface water temperature measured by a platinum resistance thermometer at the sensor location in lakes, wadeable streams, and non-wadeable streams	Level 2 Data Product	AIS	tbd	Ecohydrology
NEON.DOM.SITE.DP2.20022	Temporally Interpolated Turbidity in surface water	Temporally Interpolated (i.e., to gap fill missing data) sensor based measurements of surface water turbidity at the sensor location in lakes, wadeable and non-wadeable streams	Level 2 Data Product	AIS	tbd	Ecohydrology
NEON.DOM.SITE.DP2.20023	Temporally Interpolated 2D Windspeed and direction on lakes on-buoy	Temporally Interpolated (i.e., to gap fill missing data) two-dimensional wind speed and direction; observations are made by 2-D sonic anemometer sensors located on the lake buoy.	Level 2 Data Product	AIS	tbd	Atmosphere Ecohydrology
NEON.DOM.SITE.DP2.20024	Temporally Interpolated Elevation of groundwater	Temporally Interpolated (i.e., to gap fill missing data) sensor based measurement of groundwater elevation calculated from pressure transducer readings in each well.	Level 2 Data Product	AIS	tbd	Ecohydrology
NEON.DOM.SITE.DP2.20025	Temporally Interpolated Photosynthetically active radiation below Water Surface	Temporally Interpolated (i.e., to gap fill missing data) photosynthetically Active Radiation (PAR) observations that represent the radiation flux at wavelengths between 400-700 nm, which constitute the wavelengths that drive photosynthesis. This data product is available as one- and thirty-minute averages. Observations are made at the aquatic sensor set location at lakes, non-wadeable, and wadeable streams.	Level 2 Data Product	AIS	tbd	Atmosphere Ecohydrology
NEON.DOM.SITE.DP2.20026	Temporally Interpolated Temperature at specific depth in lakes	Temporally Interpolated (i.e., to gap fill missing data) sensor based measurements of surface water temperature in lake sites. Temperature is distributed vertically through the water column using a chain of temperature sensors located at fixed depths from the buoy surface.	Level 2 Data Product	AIS	tbd	Ecohydrology

Identification Code	Name	Description	Category	Supplier	Applicable Specification	Themes
NEON.DOM.SITE.DP1.20060	Aquatic plant bryophyte macroalgae biomass	Dry biomass and ash-free dry mass of aquatic plant, bryophyte, and macroalgae from benthic collections in lakes, non-wadeable streams, and wadeable streams	Level 1 Data Product	AOS	tbd	Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.20063	Aquatic plant bryophyte chemical properties	C and N concentrations of aquatic plant and bryophytes from benthic collections in lakes, non-wadeable streams, and wadeable streams	Level 1 Data Product	AOS	tbd	Biogeochemistry Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.20066	Aquatic plant bryophyte macroalgae clip harvest	Clip-harvest of aquatic plant, bryophyte, and macroalgae from benthic quadrats in lakes, non-wadeable streams, and wadeable streams	Level 1 Data Product	AOS	NEON.DOC.001626	Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.20069	Aquatic plant percent cover	Percent cover of aquatic plants from bathymetry mapping in lakes and non-wadeable streams	Level 1 Data Product	AOS	tbd	Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.20071	Aquatic plant, bryophyte, lichen, and macroalgae percent cover in wadeable streams	Percent cover of aquatic plants, bryophytes, lichens, and macroalgae from point transect measurements in wadeable streams	Level 1 Data Product	AOS	tbd	Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.20072	Aquatic plant, bryophyte, lichen, and macroalgae point counts in wadeable streams	Point counts of aquatic plants, bryophytes, lichens, and macroalgae from transects in wadeable streams	Level 1 Data Product	AOS	NEON.DOC.001626	Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.20073	Aquatic plant community composition and proportion nonnative by percent cover in wadeable streams	Absolute and relative percent cover of native and non-native taxa observed in aquatic plant communities in in wadeable streams	Level 1 Data Product	AOS	tbd	Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.20074	Aquatic plant community composition and proportion nonnative by biomass	Absolute and relative biomass of native and non-native taxa observed in aquatic plant communities in lakes, non-wadeable streams, and wadeable streams	Level 1 Data Product	AOS	tbd	Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.20077	Aquatic plant reference images	Digital images of select aquatic plants taken during implementation of aquatic plant protocol in lakes, non-wadeable streams, and wadeable streams; not comprehensive of all aquatic plants sampled	Level 1 Data Product	AOS	tbd	Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.20080	Aquatic plant taxonomic diversity by biomass	Diversity indices based on biomass proportions for aquatic plants in lakes, non-wadeable streams, and wadeable streams	Level 1 Data Product	AOS	tbd	Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.20083	Aquatic plant taxonomic diversity by percent cover in wadeable streams	Diversity indices based on point counts for aquatic plants in wadeable streams	Level 1 Data Product	AOS	tbd	Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.20086	Benthic microbe community composition	Absolute and relative abundances of taxa observed in benthic microbial communities	Level 1 Data Product	AOS	tbd	Biogeochemistry Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.20088	Benthic microbe functional alpha diversity	Select diversity indices based on microbial functional groups; also see NEON.DP4.00021	Level 1 Data Product	AOS	tbd	Biogeochemistry Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.20089	Benthic microbe functional composition	mRNA sequence data from benthic samples	Level 1 Data Product	AOS	NEON.DOC.001243	Biogeochemistry Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.20090	Benthic microbe sequences	DNA sequence data from benthic+C128 samples	Level 1 Data Product	AOS	NEON.DOC.001243	Biogeochemistry Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.20091	Benthic microbe taxonomic diversity	Diversity indices for benthic microbes	Level 1 Data Product	AOS	tbd	Biogeochemistry Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.20092	Chemical properties of groundwater	Grab samples of groundwater chemistry including, general chemistry, anions, cations, and nutrients.	Level 1 Data Product	AOS	NEON.DOC.001626	Biogeochemistry Ecohydrology
NEON.DOM.SITE.DP1.20093	Chemical properties of surface water	Grab samples of surface water chemistry including, general chemistry, anions, cations, and nutrients.	Level 1 Data Product	AOS	NEON.DOC.001626 NEON.DOC.001694	Biogeochemistry Ecohydrology

NEON.DOM.SITE.DP1.20097	Dissolved gases in surface water	Grab samples of surface water dissolved gases including carbon dioxide, methane, and nitrous oxide	Level 1 Data Product	AOS	NEON.DOC.001626 NEON.DOC.001694	Biogeochemistry Ecohydrology
NEON.DOM.SITE.DP1.20101	Fish biomass	Wet mass of fish in lakes and wadeable streams	Level 1 Data Product	AOS	tbd	Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.20103	Fish community composition and proportion nonnative	Absolute and relative abundances of native and non-native taxa observed in fish communities in lakes and wadeable streams	Level 1 Data Product	AOS	tbd	Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.20105	Fish DNA barcode	CO1 DNA sequences from select fish in lakes and wadeable streams	Level 1 Data Product	AOS	tbd	Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.20107	Fish electrofishing, gill netting, and/or fyke netting counts	Counts of fish from electrofishing, gill netting, and/or fyke netting surveys in lakes and wadeable streams. Includes fish standard length and individual mass	Level 1 Data Product	AOS	NEON.DOC.001626 NEON.DOC.001694	Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.20109	Fish population size	Population size of fish calculated from multiple fishing methods in lakes and wadeable streams	Level 1 Data Product	AOS	tbd	Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.20113	Fish reference images	Digital images of select fish taken during implementation of fish protocol in lakes and wadeable streams; not comprehensive of all fish sampled	Level 1 Data Product	AOS	tbd	Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.20115	Fish taxonomic diversity	Diversity indices for fish in lakes and wadeable streams	Level 1 Data Product	AOS	tbd	Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.20117	Macroinvertebrate biomass	Biomass of macroinvertebrates using length-mass regression from benthic samples in lakes, wadeable streams, and non-wadeable streams	Level 1 Data Product	AOS	NEON.DOC.001488	Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.20120	Macroinvertebrate collection	Collection of benthic macroinvertebrates using multiple sampling methods in lakes, non-wadeable streams, and wadeable streams	Level 1 Data Product	AOS	NEON.DOC.001626 NEON.DOC.001491 NEON.DOC.001694	Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.20123	Macroinvertebrate community composition and proportion nonnative	Absolute and relative abundances of native and non-native taxa observed in macroinvertebrate communities in lakes, non-wadeable streams, and wadeable streams	Level 1 Data Product	AOS	NEON.DOC.001491	Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.20126	Macroinvertebrate DNA barcode	CO1 DNA sequences from select macroinvertebrates in lakes, non-wadeable streams, and wadeable streams	Level 1 Data Product	AOS	NEON.DOC.001491	Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.20132	Macroinvertebrate reference images	Digital images of select macroinvertebrates taken during implementation of macroinvertebrate protocol in lakes, non-wadeable streams, and wadeable streams; not comprehensive of all macroinvertebrates sampled	Level 1 Data Product	AOS	tbd	Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.20135	Macroinvertebrate taxonomic diversity	Diversity indices for macroinvertebrates in lakes, non-wadeable streams, and wadeable streams	Level 1 Data Product	AOS	NEON.DOC.001491	Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.20138	Surface water microbe cell count	Cell counts from surface water microbial collection in lakes, wadeable streams, and non-wadeable streams	Level 1 Data Product	AOS	tbd	Biogeochemistry Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.20141	Surface water microbe community composition	Absolute and relative abundances of taxa observed in surface water microbial communities in lakes, non-wadeable streams, and wadeable streams	Level 1 Data Product	AOS	tbd	Biogeochemistry Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.20147	Surface water microbe functional alpha diversity	Select diversity indices based on microbial functional groups; also see NEON.DP4.00021	Level 1 Data Product	AOS	NEON.DOC.001246	Biogeochemistry Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.20150	Surface water microbe functional composition	mRNA sequence data from surface water samples	Level 1 Data Product	AOS	NEON.DOC.001243	Biogeochemistry Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.20153	Surface water microbe sequences	DNA sequence data from surface water samples	Level 1 Data Product	AOS	NEON.DOC.001243	Biogeochemistry Organisms, Populations, and Communities



NEON.DOM.SITE.DP1.20156	Surface water microbe taxonomic diversity	Diversity indices for microbes in lakes, non-wadeable streams, and wadeable streams	Level 1 Data Product	AOS	tbd	Biogeochemistry Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.20158	Normalized oxygen gas transfer velocity rating curve	Relational curve between stream velocity and normalized oxygen gas transfer velocity calculated from reaeration measurement data	Level 1 Data Product	AOS	tbd	Biogeochemistry Ecohydrology
NEON.DOM.SITE.DP1.20159	Oxygen reaeration rate coefficient rating curve	Relational curve between stream velocity and oxygen reaeration rate coefficient calculated from reaeration measurement data	Level 1 Data Product	AOS	tbd	Biogeochemistry Ecohydrology
NEON.DOM.SITE.DP1.20160	Periphyton biomass	Biomass of periphyton from benthic samples in lakes, non-wadeable streams, and wadeable streams	Level 1 Data Product	AOS	tbd	Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.20163	Periphyton chemical properties	C, N, P, isotopes, chlorophyll a, and phaeophytin of periphyton from benthic samples in lakes, non-wadeable streams, and wadeable streams	Level 1 Data Product	AOS	tbd	Biogeochemistry Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.20166	Periphyton collection	Collection of periphyton using multiple benthic sampling methods in lakes, non-wadeable streams, and wadeable streams	Level 1 Data Product	AOS	NEON.DOC.001626 NEON.DOC.001697 NEON.DOC.001694	Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.20169	Periphyton community composition	Absolute and relative abundances of taxa in periphytic algae communities in lakes, non-wadeable streams, and wadeable streams	Level 1 Data Product	AOS	NEON.DOC.001697	Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.20172	Periphyton reference images	Digital images of select periphyton taken during laboratory processing; not comprehensive of all periphyton sampled	Level 1 Data Product	AOS	tbd	Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.20175	Periphyton taxonomic diversity	Diversity indices for periphyton	Level 1 Data Product	AOS	NEON.DOC.001697	Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.20178	Phytoplankton biomass	Biomass of phytoplankton from water column samples in lakes and non-wadeable streams	Level 1 Data Product	AOS	NEON.DOC.001697	Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.20180	Phytoplankton chemical properties	C, N, P, isotopes, chlorophyll a, and phaeophytin of phytoplankton water column samples in lakes and non-wadeable streams	Level 1 Data Product	AOS	NEON.DOC.001697	Biogeochemistry Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.20182	Phytoplankton collection	Collection of phytoplankton from water column samples in lakes and non-wadeable streams	Level 1 Data Product	AOS	NEON.DOC.001626 NEON.DOC.001697 NEON.DOC.001694	Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.20184	Phytoplankton community composition	Absolute and relative abundances of taxa in phytoplankton communities in lakes and non-wadeable streams	Level 1 Data Product	AOS	NEON.DOC.001697	Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.20186	Phytoplankton reference images	Digital images of select phytoplankton taken during laboratory processing; not comprehensive of all phytoplankton sampled	Level 1 Data Product	AOS	tbd	Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.20188	Phytoplankton taxonomic diversity	Diversity indices for phytoplankton in lakes and non-wadeable streams	Level 1 Data Product	AOS	NEON.DOC.001697	Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.20190	Reaeration field and lab collection	Field and external laboratory data from the salt-tracer and gas injection field reaeration measurements, including stream widths, inert gas concentrations, gas loss rate calculations, and travel time calculations.	Level 1 Data Product	AOS		Biogeochemistry Ecohydrology
NEON.DOM.SITE.DP1.20191	Riparian vegetation % Cover	Mapping of riparian vegetation % cover in lakes, non-wadeable streams, and wadeable streams	Level 1 Data Product	AOS	tbd	Land Use, Land Cover, and Land Processes Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.20193	Salt-based stream discharge	Discharge measured using a constant-rate addition salt tracer during reaeration measurements	Level 1 Data Product	AOS	tbd	Ecohydrology

NEON.DOM.SITE.DP1.20194	Sediment chemical properties	Inorganic, organic, and metal analyses of non-wadeable stream, wadeable stream, and lake bed sediments.	Level 1 Data Product	AOS	NEON.DOC.001626 NEON.DOC.001694	Biogeochemistry
NEON.DOM.SITE.DP1.20197	Sediment physical properties	Size analysis of non-wadeable stream, wadeable stream, and lake bed sediments.	Level 1 Data Product	AOS	NEON.DOC.001626 NEON.DOC.001694	Biogeochemistry
NEON.DOM.SITE.DP1.20200	Seston biomass	Biomass of seston from water column samples in wadeable streams	Level 1 Data Product	AOS	tbd	Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.20201	Seston chemical properties	C, N, P, isotopes, chlorophyll a, and phaeophytin of seston from water column samples in wadeable streams	Level 1 Data Product	AOS	tbd	Biogeochemistry Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.20202	Seston collection	Collection of seston from water column samples in wadeable streams	Level 1 Data Product	AOS	NEON.DOC.001626 NEON.DOC.001697	Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.20203	Seston community composition	Absolute and relative abundances of taxa in sestonic algae communities	Level 1 Data Product	AOS	NEON.DOC.001697	Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.20204	Seston reference images	Digital images of select seston taken during laboratory processing; not comprehensive of all seston sampled	Level 1 Data Product	AOS	tbd	Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.20205	Seston taxonomic diversity	Diversity indices for seston	Level 1 Data Product	AOS	NEON.DOC.001697	Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.20206	Stable isotope concentrations in surface waters	Grab samples for stable isotope chemistry including water, nitrate, and organic matter, in lakes, non-wadeable streams, and wadeable streams	Level 1 Data Product	AOS	NEON.DOC.001626	Biogeochemistry Ecohydrology
NEON.DOM.SITE.DP1.20210	Stream depth rating curve	Relational curve between stream velocity and calculated mean stream depth from reaeration measurement data	Level 1 Data Product	AOS	tbd	Ecohydrology
NEON.DOM.SITE.DP1.20212	Stream reaeration modeled physical properties	Reaeration models based on physical properties of a stream reach	Level 1 Data Product	AOS	tbd	Ecohydrology
NEON.DOM.SITE.DP1.20213	Stream reaeration physical properties	Calculated physical properties derived from field and laboratory reaeration data such as mean wetted width, mean stream depth, travel time, and reach velocity.	Level 1 Data Product	AOS	tbd	Ecohydrology
NEON.DOM.SITE.DP1.20214	Stream travel time rating curve	Relational curve between stream velocity and travel time calculations from salt-tracer reaeration measurement data	Level 1 Data Product	AOS	tbd	Ecohydrology
NEON.DOM.SITE.DP1.20215	Stream wetted width rating curve	Relational curve between stream velocity and measured mean stream width from reaeration measurement data	Level 1 Data Product	AOS	tbd	Ecohydrology
NEON.DOM.SITE.DP1.20218	Zooplankton biomass	Biomass of zooplankton using length-mass regression from water column samples in lakes	Level 1 Data Product	AOS	tbd	Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.20219	Zooplankton collection	Collection of zooplankton from water column samples in lakes	Level 1 Data Product	AOS	NEON.DOC.001626 NEON.DOC.001694	Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.20220	Zooplankton community composition	Absolute and relative abundances of taxa in zooplankton communities	Level 1 Data Product	AOS	tbd	Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.20221	Zooplankton DNA barcode	CO1 DNA sequences from select zooplankton	Level 1 Data Product	AOS	tbd	Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.20222	Zooplankton reference images	Digital images of select zooplankton taken during laboratory processing; not comprehensive of all zooplankton sampled	Level 1 Data Product	AOS	tbd	Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.20223	Zooplankton taxonomic diversity	Diversity indices for zooplankton	Level 1 Data Product	AOS	tbd	Organisms, Populations, and Communities

NEON.DOM.SITE.DP1.20252	Secchi depth	Measurement of water column Secchi depth in non-wadeable streams and lakes	Level 1 Data Product	AOS	NEON.DOC.001694	Ecohydrology
NEON.DOM.SITE.DP1.20254	Depth profile at specific depths	Measurements of water column temperature and depth profile in non-wadeable streams and lakes	Level 1 Data Product	AOS	NEON.DOC.001694	Ecohydrology
NEON.DOM.SITE.DP1.20256	Benthic microbe biomass	Quantitative abundance of different groups of microbes in benthic samples	Level 1 Data Product	AOS	tbd	Biogeochemistry Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.20257	Surface water microbe biomass	Quantitative abundance of different groups of microbes in surface water of lakes, non-wadeable streams, and wadeable streams	Level 1 Data Product	AOS	tbd	Biogeochemistry Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.20272	Benthic microbe cell count	Cell counts from select benthic microbial collection in lakes, wadeable streams, and non-wadeable streams	Level 1 Data Product	AOS	tbd	Biogeochemistry Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.20275	Riparian Vegetation Composition	Mapping of riparian vegetation general composition and structure in lakes, non-wadeable streams, and wadeable streams	Level 1 Data Product	AOS	tbd	Land Use, Land Cover, and Land Processes Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.20276	Stable isotope concentrations in Groundwater	Grab samples for stable isotope chemistry, including water and nitrate, in groundwater	Level 1 Data Product	AOS	tbd	Biogeochemistry Ecohydrology
NEON.DOM.SITE.DP1.20048	Stream discharge field collection	Stream discharge measurements from manual wading surveys	Level 1 Data Product	AOS	tbd	Ecohydrology

Identification Code	Name	Description	Category	Supplier	Applicable Specification	Themes
NEON.DOM.SITE.DP1.20224	STREON basket aquatic plant bryophyte lichen macroalgae biomass	Dry biomass and ash-free dry mass of aquatic plant, bryophyte, and macroalgae from STREON sediment basket collections in wadeable streams	Level 1 Data Product	STR	tbd	Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.20225	STREON basket aquatic plant bryophyte lichen macroalgae chemical properties	C and N concentrations of aquatic plant and bryophytes from STREON sediment basket collections in wadeable streams	Level 1 Data Product	STR	tbd	Biogeochemistry Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.20226	STREON basket aquatic plant bryophyte lichen macroalgae clip harvest	Clip-harvest of aquatic plant, bryophyte, and macroalgae from STREON baskets in wadeable streams	Level 1 Data Product	STR	tbd	Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.20227	STREON basket aquatic plant community composition and proportion nonnative by biomass	Absolute and relative biomass of native and non-native taxa observed in aquatic plant communities in STREON baskets	Level 1 Data Product	STR	tbd	Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.20228	STREON basket aquatic plant taxonomic alpha diversity by biomass	Diversity indices based on biomass proportions for aquatic plants in STREON baskets	Level 1 Data Product	STR	tbd	Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.20229	STREON basket macroinvertebrate biomass	Biomass of macroinvertebrates using length-mass regression from STREON sediment baskets in wadeable streams	Level 1 Data Product	STR	NEON.DOC.001488	Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.20230	STREON basket macroinvertebrate collection	Collection of benthic macroinvertebrates from STREON sediment baskets in wadeable streams	Level 1 Data Product	STR	NEON.DOC.001491	Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.20231	STREON basket macroinvertebrate community composition & proportion nonnative	Absolute and relative biomass of native and non-native taxa observed in aquatic plant communities in STREON baskets	Level 1 Data Product	STR	NEON.DOC.001491	Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.20232	STREON basket macroinvertebrate taxonomic alpha diversity	Diversity indices for macroinvertebrates in STREON baskets	Level 1 Data Product	STR	NEON.DOC.001491	Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.20233	STREON basket periphyton biomass	Biomass of periphyton from STREON sediment baskets in wadeable streams	Level 1 Data Product	STR	NEON.DOC.001697	Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.20234	STREON basket periphyton chemical properties	C, N, P, isotopes, chlorophyll, and pheophytin of periphyton from STREON sediment baskets in wadeable streams	Level 1 Data Product	STR	NEON.DOC.001697	Biogeochemistry Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.20235	STREON basket periphyton collection	Collection of periphyton from STREON sediment baskets in wadeable streams	Level 1 Data Product	STR	NEON.DOC.001697	Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.20236	STREON basket periphyton community composition	Absolute and relative abundances of taxa observed in periphytic algae communities in STREON baskets	Level 1 Data Product	STR	NEON.DOC.001697	Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.20237	STREON basket periphyton taxonomic alpha diversity	Diversity indices for periphyton in STREON baskets	Level 1 Data Product	STR	NEON.DOC.001697	Organisms, Populations, and Communities

NEON.DOM.SITE.DP1.20238	STREON basket sediment chemical properties	Trace element, organic, and metal analyses of sediments collected from STREON baskets	Level 1 Data Product	STR	tbd	Biogeochemistry
NEON.DOM.SITE.DP1.20239	STREON basket sediment microbe community composition	Absolute and relative abundances of taxa observed in microbial communities in sediment in STREON baskets	Level 1 Data Product	STR	tbd	Biogeochemistry Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.20241	STREON basket sediment microbe functional alpha diversity	Select diversity indices based on microbial functional groups; also see NEON.DP4.00021	Level 1 Data Product	STR	tbd	Biogeochemistry Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.20242	STREON basket sediment microbe functional composition	mRNA sequence data from STREON basket sediment	Level 1 Data Product	STR	NEON.DOC.001242	Biogeochemistry Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.20243	STREON basket sediment microbe sequences	DNA sequence data from STREON basket sediment	Level 1 Data Product	STR	NEON.DOC.001242	Biogeochemistry Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.20244	STREON basket sediment microbe taxonomic alpha diversity	Diversity indices for microbes in STREON basket sediment	Level 1 Data Product	STR	tbd	Biogeochemistry Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.20245	STREON basket sediment physical properties	Size analysis of sediments collected from STREON baskets	Level 1 Data Product	STR	tbd	Biogeochemistry Organisms, Populations, and Communities
NEON.DOM.SITE.DP1.20246	STREON chamber PAR	Photosynthetically active radiation recorded during the STREON recirculation chamber incubation period	Level 1 Data Product	STR	tbd	Atmosphere Biogeochemistry Ecohydrology
NEON.DOM.SITE.DP1.20247	STREON chamber water dissolved oxygen	Dissolved oxygen concentrations recorded during the STREON recirculation chamber incubation period within the STREON recirculation chambers	Level 1 Data Product	STR	tbd	Biogeochemistry Ecohydrology
NEON.DOM.SITE.DP1.20248	STREON chamber water sample chemical properties	Ammonium concentration of water within the STREON recirculation chamber during the incubation period	Level 1 Data Product	STR	tbd	Biogeochemistry Ecohydrology
NEON.DOM.SITE.DP1.20249	STREON chamber water temperature	Water temperature in the STREON recirculation chamber during the incubation period	Level 1 Data Product	STR	tbd	Biogeochemistry Ecohydrology
NEON.DOM.SITE.DP1.20260	STREON basket sediment microbe biomass	Quantitative abundance of different groups of microbes in STREON basket sediment	Level 1 Data Product	STR	tbd	Biogeochemistry Organisms, Populations, and Communities
NEON.DOM.SITE.DP2.20027	Temporally Interpolated STREON chamber PAR	Temporally Interpolated (i.e., to gap fill missing data) photosynthetically active radiation recorded during the STREON recirculation chamber incubation period	Level 2 Data Product	STR	tbd	Atmosphere Biogeochemistry Ecohydrology
NEON.DOM.SITE.DP2.20028	Temporally Interpolated STREON chamber water dissolved oxygen	Temporally Interpolated (i.e., to gap fill missing data) dissolved oxygen concentrations recorded during the STREON recirculation chamber incubation period within the STREON recirculation chambers	Level 2 Data Product	STR	tbd	Biogeochemistry Ecohydrology
NEON.DOM.SITE.DP2.20030	Temporally Interpolated STREON chamber water temperature	Temporally Interpolated (i.e., to gap fill missing data) water temperature in the STREON recirculation chamber during the incubation period	Level 2 Data Product	STR	tbd	Biogeochemistry Ecohydrology

Identification Code	Name	Description	Category	Supplier	Applicable Specification	Themes
NEON.DOM.SITE.DP1.30001	LiDAR Slant Range Waveform	Outgoing pulse and slant range return waveform with geolocation information provided but no spatial resampling; data are mosaicked over AOP footprint	Level 1 Data Product	AOP	NEON.DOC.001293	Land Use, Land Cover, and Land Processes
NEON.DOM.SITE.DP1.30003	Discrete Return LiDAR Point Cloud	LAS format with data for each discrete LiDAR return; data are mosaicked over AOP footprint	Level 1 Data Product	AOP	NEON.DOC.001292	Land Use, Land Cover, and Land Processes
NEON.DOM.SITE.DP1.30005	Spectrometer Surface Directional Reflectance	Pixels in sensor format (ex: # samples x # bands x # lines) and geolocation information provided but no spatial resampling; data are provided by flightline	Level 1 Data Product	AOP	NEON.DOC.001288	Land Use, Land Cover, and Land Processes
NEON.DOM.SITE.DP1.30006	Spectrometer Orthorectified Surface Directional Reflectance	Data is orthorectified and output onto a fixed, uniform spatial grid using nearest-neighbor resampling. Fixed spatial grid is based on the native spatial resolution which is driven by the aircraft altitude; data are provided by flightline.	Level 1 Data Product	AOP	NEON.DOC.001290	Land Use, Land Cover, and Land Processes
NEON.DOM.SITE.DP1.30007	Spectrometer Calibrated at-Sensor Radiance	Calibrated data (pixels) in sensor format (ex: # samples x # bands x # lines); geolocation information provided but no spatial resampling; data are provided by flightline	Level 1 Data Product	AOP	NEON.DOC.001210	Land Use, Land Cover, and Land Processes
NEON.DOM.SITE.DP1.30008	Spectrometer Orthorectified at-Sensor Radiance	Data is orthorectified and output onto a fixed, uniform spatial grid using nearest-neighbor resampling. Fixed spatial grid is based on the native spatial resolution which is driven by the aircraft altitude; data are provided by flightline.	Level 1 Data Product	AOP	NEON.DOC.001290	Land Use, Land Cover, and Land Processes
NEON.DOM.SITE.DP1.30009	High-resolution at-Sensor Camera Imagery	Pixels in sensor format (ex: # columns x # rows x 3 bands) and geolocation information (center and corners plus rotation) provided but no spatial resampling	Level 1 Data Product	AOP	NEON.DOC.001211	Land Use, Land Cover, and Land Processes
NEON.DOM.SITE.DP1.30010	High-resolution Orthorectified camera imagery	Data are orthorectified and output onto a fixed, uniform spatial grid using bi-linear resampling. Fixed spatial grid is based on the native spatial resolution which is driven by the aircraft altitude.	Level 1 Data Product	AOP	NEON.DOC.001211	Land Use, Land Cover, and Land Processes
NEON.DOM.SITE.DP1.30012	Field Spectral Data	Data collected using an ASD Field Spectrometer	Level 1 Data Product	AOP	tbd	Biogeochemistry Land Use, Land Cover, and Land Processes Organisms, Populations, and Communities
NEON.DOM.SITE.DP2.30011	Albedo - Spectrometer	Total amount of solar radiation in the 0.4 to 2.5 micron band reflected by the Earth's surface into an upward hemisphere divided by the total amount incident from this hemisphere; data are provided by flightline	Level 2 Data Product	AOP	NEON.DOC.001290	Atmosphere Land Use, Land Cover, and Land Processes

NEON.DOM.SITE.DP2.30012	LAI - Spectrometer	The ratio of upper leaf surface area to ground area (for broadleaf canopies), or projected conifer needle surface area to ground area (for coniferous plants) for a given unit area; data are provided by flightline	Level 2 Data Product	AOP	NEON.DOC.001290	Biogeochemistry Land Use, Land Cover, and Land Processes
NEON.DOM.SITE.DP2.30014	fPAR - Spectrometer	The fraction of incident photosynthetically active radiation (400--700 nm) absorbed by the green elements of a vegetation canopy; data are provided by flightline	Level 2 Data Product	AOP	NEON.DOC.001290	Land Use, Land Cover, and Land Processes
NEON.DOM.SITE.DP2.30016	Total Biomass Map - Spectrometer	Mass of all above ground organic matter per unit area at particular time; estimate of biomass derived from correlation with NDVI and LAI parameters; data are provided by flightline	Level 2 Data Product	AOP	NEON.DOC.001290	Biogeochemistry Land Use, Land Cover, and Land Processes
NEON.DOM.SITE.DP2.30018	Canopy Nitrogen	Measure of canopy nitrogen concentration in remotely sensed data; data are provided by flightline	Level 2 Data Product	AOP	NEON.DOC.001290	Biogeochemistry Land Use, Land Cover, and Land Processes
NEON.DOM.SITE.DP2.30019	Canopy Water Content	Measure of canopy water concentration in remotely sensed data; data are provided by flightline	Level 2 Data Product	AOP	NEON.DOC.001290	Ecohydrology Land Use, Land Cover, and Land Processes
NEON.DOM.SITE.DP2.30020	Canopy Xanthophyll Cycle	Normalized ratio of xanthophyll concentration; data are provided by flightline	Level 2 Data Product	AOP	NEON.DOC.001290	Biogeochemistry Land Use, Land Cover, and Land Processes
NEON.DOM.SITE.DP2.30021	Canopy Chlorophyll	Normalized ratio of canopy chlorophyll concentration; data are provided by flightline	Level 2 Data Product	AOP	NEON.DOC.001290	Biogeochemistry Land Use, Land Cover, and Land Processes
NEON.DOM.SITE.DP2.30022	Canopy Lignin	Normalized ratio of canopy lignin concentration; data are provided by flightline	Level 2 Data Product	AOP	NEON.DOC.001290	Biogeochemistry Land Use, Land Cover, and Land Processes
NEON.DOM.SITE.DP2.30023	Canopy Cellulose	Normalized ratio of canopy cellulose in concentration; data are provided by flightline	Level 2 Data Product	AOP	NEON.DOC.001290	Biogeochemistry Land Use, Land Cover, and Land Processes

NEON.DOM.SITE.DP2.30026	Vegetation Indices - Spectrometer	NDVI - Normalized ratio of NIR and IR bands; characterizes the "red edge" in vegetation spectra; includes heritage MODIS/VIIRS and Landsat products; data are provided by flightline. EVI - Normalized ratio of NIR and IR bands (red edge characterization); includes Blue channel for better aerosol characterization; includes heritage MODIS/VIIRS and Landsat products; data are provided by flightline	Level 2 Data Product	AOP	NEON.DOC.001290	Biogeochemistry Land Use, Land Cover, and Land Processes
NEON.DOM.SITE.DP3.30004	Discrete Return LiDAR Pseudo Waveform	Percentage of "points" per bin; data are mosaicked over AOP footprint	Level 3 Data Product	AOP	NEON.DOC.001292	Land Use, Land Cover, and Land Processes
NEON.DOM.SITE.DP3.30006	Spectrometer Orthorectified Surface Directional Reflectance	Surface reflectance per pixel; data are orthorectified and output onto a fixed, uniform spatial grid using nearest-neighbor resampling (tbr). Level 2 flight lines over a given site are mosaiced into single product; spatial resolution is 1m. Surface reflectance 1m mosaic is resampled to 10m using nearest-neighbor (tbr) resampling.	Level 3 Data Product	AOP	NEON.DOC.001288 NEON.DOC.001290	Land Use, Land Cover, and Land Processes
NEON.DOM.SITE.DP3.30008	Spectrometer Orthorectified at-Sensor Radiance	Radiance per pixel at the sensor (no atmospheric correction applied); data are orthorectified and output onto a fixed, uniform spatial grid using nearest-neighbor resampling (tbr). Level 2 flight lines over a given site are mosaiced into single product; spatial resolution is 1m. Radiance 1m mosaic is resampled to 10m using nearest-neighbor (tbr) resampling.	Level 3 Data Product	AOP	NEON.DOC.001290	Land Use, Land Cover, and Land Processes
NEON.DOM.SITE.DP3.30010	High-resolution Orthorectified camera imagery mosaic	Data are orthorectified and output onto a fixed, uniform spatial grid using nearest-neighbor resampling (tbr). Level 2 flight lines over a given site are mosaiced into single product; spatial resolution is 1m. High resolution imagery 1m mosaic is resampled to 10m using nearest-neighbor (tbr) resampling.	Level 3 Data Product	AOP	NEON.DOC.001211	Land Use, Land Cover, and Land Processes
NEON.DOM.SITE.DP3.30011	Albedo - Spectrometer	Total amount of solar radiation in the 0.4 to 2.5 micron band reflected by the Earth's surface into an upward hemisphere divided by the total amount incident from this hemisphere	Level 3 Data Product	AOP	NEON.DOC.001290	Atmosphere Land Use, Land Cover, and Land Processes
NEON.DOM.SITE.DP3.30012	LAI - Spectrometer	The ratio of upper leaf surface area to ground area (for broadleaf canopies), or projected conifer needle surface area to ground area (for coniferous plants) for a given unit area	Level 3 Data Product	AOP	NEON.DOC.001290	Biogeochemistry Land Use, Land Cover, and Land Processes
NEON.DOM.SITE.DP3.30013	LAI - LiDAR	The ratio of upper leaf surface area to ground area (for broadleaf canopies), or projected conifer needle surface area to ground area (for coniferous plants) for a given unit area; data are mosaicked over AOP footprint	Level 3 Data Product	AOP	NEON.DOC.001292	Biogeochemistry Land Use, Land Cover, and Land Processes
NEON.DOM.SITE.DP3.30014	fPAR - Spectrometer	The fraction of incident photosynthetically active radiation (400--700 nm) absorbed by the green elements of a vegetation canopy	Level 3 Data Product	AOP	NEON.DOC.001290	Land Use, Land Cover, and Land Processes
NEON.DOM.SITE.DP3.30015	Ecosystem Structure	Includes Canopy Height (Height of vegetation above bare earth), Stratification Complexity (Height of individual vegetation layers; crown, understory, shrubs), Height to First Branch (height above bare earth); data are mosaicked over AOP footprint	Level 3 Data Product	AOP	NEON.DOC.001292	Land Use, Land Cover, and Land Processes



NEON.DOM.SITE.DP3.30016	Total Biomass Map - Spectrometer	Mass of all above ground organic matter per unit area at particular time; estimate of biomass derived from correlation with NDVI and LAI parameters	Level 3 Data Product	AOP	NEON.DOC.001290	Biogeochemistry Land Use, Land Cover, and Land Processes
NEON.DOM.SITE.DP3.30017	Biomass - LiDAR	Includes Total Biomass Map (Mass of all above ground organic matter per unit area at particular time), Above Ground Biomass (Shrub; mass of all above ground organic matter per unit area at particular time within areas of identified shrubs), and Above Ground Biomass (Tree; mass of all above ground organic matter per unit area at particular time within areas of identified trees); data are mosaicked over AOP footprint	Level 3 Data Product	AOP	NEON.DOC.001292	Biogeochemistry Land Use, Land Cover, and Land Processes
NEON.DOM.SITE.DP3.30018	Canopy Nitrogen	Measure of canopy nitrogen concentration in remotely sensed data. Level 2 products derived from individual flight lines over a given site are mosaiced into single product; spatial resolution is 1m.	Level 3 Data Product	AOP	NEON.DOC.001290	Biogeochemistry Land Use, Land Cover, and Land Processes
NEON.DOM.SITE.DP3.30019	Canopy Water Content	Measure of canopy water concentration in remotely sensed data. Level 2 products derived from individual flight lines over a given site are mosaiced into single product; spatial resolution is 1m.	Level 3 Data Product	AOP	NEON.DOC.001246	Ecohydrology Land Use, Land Cover, and Land Processes
NEON.DOM.SITE.DP3.30020	Canopy Xanthophyll Cycle	Normalized ratio of xanthophyll concentration. Level 2 products derived from individual flight lines over a given site are mosaiced into single product; spatial resolution is 1m.	Level 3 Data Product	AOP	NEON.DOC.001290	Biogeochemistry Land Use, Land Cover, and Land Processes
NEON.DOM.SITE.DP3.30021	Canopy Chlorophyll	Normalized ratio of canopy chlorophyll concentration. Level 2 products derived from individual flight lines over a given site are mosaiced into single product; spatial resolution is 1m.	Level 3 Data Product	AOP	NEON.DOC.001290	Biogeochemistry Land Use, Land Cover, and Land Processes
NEON.DOM.SITE.DP3.30022	Canopy Lignin	Normalized ratio of canopy lignin concentration. Level 2 products derived from individual flight lines over a given site are mosaiced into single product; spatial resolution is 1m.	Level 3 Data Product	AOP	NEON.DOC.001290	Biogeochemistry Land Use, Land Cover, and Land Processes
NEON.DOM.SITE.DP3.30023	Canopy Cellulose	Normalized ratio of canopy cellulose concentration. Level 2 products derived from individual flight lines over a given site are mosaiced into single product; spatial resolution is 1m.	Level 3 Data Product	AOP	NEON.DOC.001290	Biogeochemistry Land Use, Land Cover, and Land Processes
NEON.DOM.SITE.DP3.30024	Elevation - LiDAR	Bare earth elevation (topographic information with vegetation and man-made structures removed)	Level 3 Data Product	AOP	NEON.DOC.001292	Land Use, Land Cover, and Land Processes
NEON.DOM.SITE.DP3.30025	Slope and Aspect - LiDAR	Slope is a ratio of rise over run (height over distance); Aspect is the direction the slope faces (north, east, south, west)	Level 3 Data Product	AOP	NEON.DOC.001292	Land Use, Land Cover, and Land Processes
NEON.DOM.SITE.DP3.30026	Vegetation Indices - Spectrometer	NDVI - Normalized ratio of NIR and IR bands; characterizes the "red edge" in vegetation spectra; includes heritage MODIS/VIIRS and Landsat products. Level 2 products derived from individual flight lines over a given site are mosaiced into single product; spatial resolution is 1m. EVI - Normalized ratio of NIR and IR bands (red edge characterization); includes Blue channel for better aerosol characterization; includes heritage MODIS/VIIRS and Landsat products. Level 2 products derived from individual flight lines over a given site are mosaiced into single product; spatial resolution is 1m.	Level 3 Data Product	AOP	NEON.DOC.001290	Biogeochemistry Land Use, Land Cover, and Land Processes