**NGEE Arctic Core Locations, Sampling Characteristics, Collection, and Contacts, Barrow, Alaska, USA**

**Review and follow the current NGEE Data and Fair-Use Policies prior to using these data (**[**http://ngee-arctic.ornl.gov/content/ngee-arctic-data-management-policies-and-plans**](http://ngee-arctic.ornl.gov/content/ngee-arctic-data-management-policies-and-plans)**).**

**Summary:**

This dataset includes associated information about individual core samples (e.g. collection date, storage location, core length, thaw depth). This information is supplemental to the "NGEE Instrumentation and Sample Site Coordinates, Barrow, Alaska USA" dataset. Boxes with no data indicate the data are not available or unknown.

**Data Dictionary**

**Data Files:**

NGEE\_Core\_Locations\_Supplemental\_Information\_Barrow\_Alaska\_USA\_20160502.xlsx

| **column\_name** | **units/format** | **Description**  |
| --- | --- | --- |
| **Locale\*** |  | Regional sample location |
| **Site\*** |  | Sample location within the Barrow Environmental Observatory (BEO) |
| **Area\*** |  | Area name within the BEO (if applicable) |
| **Transect\*** |  | Transect name within the BEO (if applicable) |
| **Location description** |  | Combination name that includes the site + area or transect |
| **Object** |  | Core collection equipment that was used to collect the core  |
| **Object\_ID** |  | Core label used in field notebooks during the time of sampling |
| **Easting, Northing** |  | Recorded in latitude/longitude using a hand-held GPS, later transformed into Easting and Northing using ArcINFO software. Coordinate system is Universal Transverse Mercator (UTM) Zone 4. Horizontal datum as NAD83, vertical datum is NAVD88 using GEOID09.  |
| **Latitude, Longitude**  |  | Recorded using a hand-held GPS in WGS84  |
| **Elevation** | m | Elevation (m) as determined from LiDAR elevation data |
| **Investigator** |  | Contact for permission to obtain core materials; core owner; person overseeing investigations |
| **Contact** |  | Investigator's email address |
| **Co-Investigator** |  | Core collector and custodian; contact regarding the core at its' stored location  |
| **Co-I Contact** |  | Co-investigator's email  |
| **Last Update** | yyyy-mm-dd | Date of the most recent update to spreadsheet |
| **Processed core name** |  | Name used in publication |
| **Collection date** | yyyy-mm-dd | Date of core collection |
| **Purpose** |  | The reason for the core's collection, e.g. hydrothermal, vegetation root depth, biogeochemistry |
| **Polygon type** |  | Description of the type of polygon sampled. High-centered polygon (HCP), low-centered polygon (LCP), transitional polygon (trans poly), unknown  |
| **Polygon feature** |  | Description of the part of the polygon that was sampled. Center, rim, or trough |
| **Drilled by** |  | Name of the lab/university that collected the core  |
| **Storage location** |  | Name of the lab/university where core is being stored |
| **Collection type** |  | Status of the core during collection. Frozen, thawed, or mixed.  |
| **Core collection protocols** |  | Protocols that describe the steps or methods for the collection of the core |
| **Subsampled** |  | Indicates if the core has been processed or cut. Yes or no.  |
| **GPS waypoint name** |  | Name that the core was given in hand-held GPS unit |
| **DGPS elevation** |  | Elevation as determined by dGPS |
| **Core hole depth** | cm | Depth of hole drilled for core collection |
| **Core length** | cm | Core length as measured in the field |
| **Core length lab** | cm | Core length as measured in the lab |
| **Thaw depth** | cm | Measured thaw depth near core |
| **Thaw depth date** | yyyy-mm-dd | Date thaw depth recorded. Estimated date as specific date is not available.  |
| **Thaw depth technique** |  | Technique used to measure thaw depth (e.g. tile probe) |
| **Photo** |  | Indicates if there are photographs of the core. No value = unknown |
| **CT scan** |  | Indicates if there are CT scans of the core. No value = unknown |
| **Physical properties** |  | Physical properties analyses including bulk density, gravimetric water content, sample weight, sample volume, dry weight, skeleton density, thermal conductivity, organic fraction, loss on ignition (LOI), mineral fraction, texture, ice content, cryostructure description. C (complete), IP (in process), P (planned), blank (not planned or unknown). |
| **Aqueous chemistry** |  | Soil solution chemistry or anything salt-extracted, dissolved particles, and soil pore water and/or ice chemistry. C (complete), IP (in process), P (planned), blank (not planned or unknown). |
| **Hydraulic properties** |  | Hydraulic property analyses, including hydraulic conductivity, permeability, pore volume, soil moisture curve. C (complete), IP (in process), P (planned), blank (not planned or unknown). |
| **Bulk soil chemistry** |  | Bulk soil chemistry, including acid extracted or organic chemical/mineral analyses. C (complete), IP (in process), P (planned), blank (not planned or unknown). |
| **Microbial** |  | Microbial characterization analyses. C (complete), IP (in process), P (planned), blank (not planned or unknown). |
| **Vegetation characterization** |  | Vegetation characterization analyses. C (complete), IP (in process), P (planned), blank (not planned or unknown). |
| **Notes** |  | Any additional information about the core |

\* Values for these location fields have been standardized for NGEE Arctic and are required fields for all data dictionaries. (<http://ngee-arctic.ornl.gov/content/metadata-entry-data-upload-and-data-management-help>)

## Data Access:

This data set is available through the Oak Ridge National Laboratory (ORNL) NGEE Arctic Data Search and Access Tool - <http://ngee-arctic.ornl.gov/data>.

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