SBC LTER: DATA DOWNLOAD PROTOCOL

Overview: A protocol to find and download data packages from the SBC LTER website.

SBC LTER Website

SBC LTER organizes its data into collections which represent sampling activities or experiments. Each data collection is composed of one to several data files.

There are two options to access data:

Data Catalog

1. Browsing by Habitat, Measurement Type or Core Research Area: http://sbclter.msi.ucsb.edu/data/catalog/

Search data: Search datasets ... Search Filter By Habitat and Measurement Type: Filter By Research Area: **Habitats Measurement Types LTER Core Research** Areas ☐ Watershed □ Meteorology □ Primary Production □ Beach ☐ Hydrology Population Studies - OR □ Reef/Kelp Forest □ Biogeochemistry Organic Matter ☐ Inshore Ocean ☐ Physical Oceanography ☐ Inorganic Matter ☐ Offshore Ocean □ Ecosystem Processes Disturbance Patterns Community Structure ☐ Human Dimensions Remote Sensing □ Genomics

2. Browse All Datasets and search by the data package attributes: http://sbclter.msi.ucsb.edu/data/catalog/search/

Data Package Search

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Enter searc	h term	Search	h
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	With no search To search any ("kelp forest") search engines Identific DOI or ID filter or refine arch features. mplete metada dvanced Creator Name Year Start 1955 ③ Data cov Publish Location Site Name	To search anywhere in the da "kelp forest"), and a minus s search engines. To Identifier DOI or ID filter or refine the search bas arch features. Datasets from a mplete metadata and data do dvanced Creator Name Year Start End 1955 2019 2 Data coverage Publish year Location Site Name	With no search terms, all SBC LTER dataset of search anywhere in the dataset, enter ("kelp forest"), and a minus sign to exclude search engines. Identifier DOI or ID filter or refine the search based on specific arch features. Datasets from the SBC LTER mplete metadata and data download (in the dvanced Creator Name Year Start End 1955 © 2019 © Data coverage Publish year Location Site Name

<u>Data Collection:</u> this includes the title of the data collection, a brief description of the data project and a list of all of the data (with associated metadata).

• Clicking a dataset will send you to the Data Package Summary page on EDI.

The EDI Data Portal: This website is curated by the Environmental Data Initiative (EDI). The EDI Data Portal contains environmental and ecological data packages contributed by a number of participating organizations. Data and metadata derived from publicly funded research are made available through this website.



<u>Data Package Summary:</u> a full synopsis of the selected data package generated by the EDI data portal. This page provides information about the title, citation, publication dates, abstract and allows data package and metadata downloads.

<u>Package ID:</u> This section displays the most recent version with the most recent upload date. To find previous versions, select the 'previous revision' or 'all revisions option'.

Package ID: knb-lter-sbc.30.17 (Uploaded 2019-01-16)

previous revision all revisions

Resources: This section displays the entire data package: the most updated dataset, its associated metadata file and a data package report from EDI.

Resources: View Full Metadata (1138 views)

View Data Package Report

Download Data

 Name: Benthic community survey, giant kelp abundance, all years File: Annual Kelp All Years 20181127.csv (4.4M; 12 downloads)

Download Zip Archive

- **View Data Package Report:** EDI evaluation of the metadata for the package. A review of data identifiers and their descriptions.
- **Download Zip Archive:** includes XML and XML report, metadata text file and a CSV data file.
- **View Full Metadata:** includes abstract, data entities, methods, protocols, site descriptions. This function will send you to the EDI Data Portal repository which is where all LTER sites store their data. The metadata on this site is essential to understand the variables of a dataset.

Resources:

View Full Metadata (1140 views)

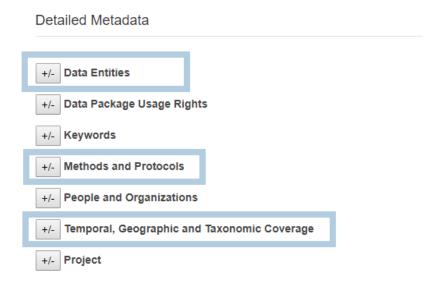
View Data Package Report

Download Data

 Name: Benthic community survey, giant kelp abundance, all years File: Annual_Kelp_All_Years_20181127.csv (4.4M; 12 downloads)

Download Zip Archive

- Data Entities: includes the column titles and descriptions. This is extremely helpful to understand what the data means.
- Methods and Protocols: includes a short description of the projects methods and a link to download a PDF with a complete method/protocol description.
- Temporal, Geographic and Taxonomic Coverage: a detailed description of sampling sites and time period for this dataset.



<u>Code Generation:</u> This option is used to download data directly to a data processing software. By selecting the 'Code Generation" faction, a code will be downloaded to the computer.



- 1. Select the type of data processing software
- 2. Download the package
- 3. Open the data code package in data processing software
- 4. Run code to directly download to data processing software

ADDITIONAL NOTES

Available Datasets: The most up-to-date datasets are available online at the SBC LTER website. If a dataset is not listed, it is not available yet.... meaning that it is still being processed/cleaned and cannot be accessed.

Can't view all of the data in Excel? As with most of the SBC LTER long term datasets, most of these files are extremely LARGE. If opened in excel, most of the records will not show because excel cannot display large datasets. If this is the case, open the dataset in a different statistical software program (R, Matlab, SAS etc) and you will have visual access to all records.