# **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:

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

Data Catalog		Show All Collections		Reset	Search Datasets Individually		
Filter SBC Data Collections by Habitat and Measurement Type:				Filter By Research Area:			
				LTER Core Research Areas			
Habitats	Measurement T	ypes		<ul> <li>Primary Production</li> <li>Population Studies</li> <li>Organic Matter</li> </ul>			
Watershed	Meteorology						
🗆 Beach	Hydrology						
Reef/Kelp Forest	Biogeochemist	ry					
□ Inshore Ocean	Physical		OR	<ul> <li>Inorganic Matter</li> <li>Disturbance Patterns</li> </ul>			
□ Offshore Ocean	Oceanography						
	Ecosystem Pro	cesses					
	Community St	ructure					
	Remote Sensin	ng					
	Genomics	5					

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

Enter search term	To search anywhere in the dataset, enter a term. Use quotes for an exact	Identifier	
	phrase ("kelp forest"), and a minus	DOI or ID	
	sign to exclude terms (cruise -nitrate), as for other search engines.		
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efine or filter the search above by	Creator and/or Year.		
efine or filter the search above by	曲 Year	OR	
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Le Creator	曲 Year	OR Browse datasets in collections by biome,	
Le Creator	<b>苗 Year</b> Start End	Browse datasets in	

**Data Collection:** If you are in the data catalog page, you can select the habitat, measurement, or core area to filter the data in SBCLTER. The data collections will appear on your screen. The information includes the title of the data collection, a brief description and all data packages listed in this collection.

Collection	Description	Metadata and Data
SBC LTER: Ongoing time- series of giant kelp forest community dynamics (KFCD)	Data on the abundance (density or percent cover), size and biomass of ~250 species of kelp forest algae, invertebrates and fish, and the type and percent cover of bottom substrate are collected annually in summer within replicate 40 m x 2 m permanent transects at 11 sites in the Santa Barbara Channel ( $n = 2$ to 8 transects per site). Data collection began in the summer of 2000 and continues annually to provide information on community structure, population dynamics and species change. Measurements of the bottom topography of each transect collected on a single occasion are also included.	KFCD percent cover of algae, invertebrates and bottom substrate KFCD percent cover of bottom substrate and sand depth KFCD abundance and size of reef fish KFCD abundance and size of giant kelp KFCD abundance of algae and invertebrates KFCD - Biomass of algae, invertebrates and fish KFCD bottom topography Master species list

### Data package:

Clicking a dataset will guide you to the data package summary page. This page provides information about the title, citation, publication dates, abstract, package

ID, DOI, and temporal coverage. You can click the tabs on top to review full metadata for this dataset.

## SBC LTER: Reef: Kelp Forest Community Dynamics: Cover of sessile organisms, Uniform Point Contact



Summary	Sur	nmary	
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People and Organizations Temporal, Geographic and Taxonomic Coverage Methods and Protocols Files and Data Links

**Data citation:** If you need to cite this data package, copy the citation and paste into your document.

-		-1.0		
Dat	ta S	et Ci	tati	on

Reed, D, R. Miller. 2021. SBC LTER: Reef: Kelp Forest Community Dynamics: Cover of sessile organisms, Uniform Point Contact ver 29. Environmental Data Initiative. https://doi.org/10.6073/pasta/adab61f8b0da4504a389c63fee17f866. Accessed 2021-09-10.

**Package ID:** This parameter displays the most recent version. If you cite a previous version of the data package and want to find it, go into the EDI page (use the EDI logo on the top right corner, see instruction below) and select the 'previous revision' or 'all revisions option'.

Package ID: knb-lter-sbc.30.17 (Uploaded 2019-01-16) previous revision all revisions

**Temporal, Geographic and Taxonomic Coverage**: a detailed description of sampling sites and time period for this dataset. If taxonomic information presented in the metadata, it will display here as well.

**Methods and Protocols:** This tab includes a description of the data collection methods. If protocol presented, you will be able to download it in PDF.

**Data download:** To download the data file, please click the "Files and Data Links" to review the dataset titles and descriptions. This is extremely helpful to understand what the data means. Then, you can review column information for the data table (for csv or txt files), as well as download the data files. The metadata on this tab is essential to understand the variables of a dataset.

**<u>Code Generation</u>**: This option can only be accessed on the EDI portal (redirect to the EDI page). It is used to download data directly to a data processing software.

By selecting the "Code Generation", a code will be available if you want to read the data file directly into your processing software (e.g. R).



- 1. Select the type of data processing software
- 2. Copy the code and paste into the data processing software
- 3. Run code to directly read the data into the software

**The EDI Data Portal:** Click the EDI logon on the top right corner and this will bring you to 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.

### ADDITIONAL NOTES

**Available Datasets:** The most up-to-date datasets are available online at the SBC LTER website, by browsing the data catalog or locating it through the "search" window. If a dataset can't be located in either way, it is not available yet. Please be patient and we will post it ASAP.

**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, you might not be able to see all records due to the Excel subsetting the records when the file is too large. 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.