Environmental and ecological controls of coral community metabolism on Palmyra Atoll

Koweek et al 2012

11/03/2021

Please **revise and fill in** as much information as possible. Fields highlighted in yellow must be completed.

The information in this document will be used to create the EML of the data package to be published on the [Environmental Data Initiative (EDI) repository](https://portal.edirepository.org/nis/home.jsp).

## 1. Data Package Title

Environmental and ecological controls of coral community metabolism on Palmyra Atoll

## 2. Dataset Title

* 2012\_Koweek\_et\_al\_physical\_data
* 2012\_Koweek\_et\_al\_eulerian\_SIB\_coords
* 2012\_Koweek\_et\_al\_biogeochem\_data
* 2012\_Koweek\_et\_al\_pca\_data
* 2012\_Koweek\_et\_al\_offshore\_ctd\_cast\_coords
* 2012\_Koweek\_et\_al\_LD\_coords

## 3. Abstract

*Please provide an abstract specifically of the dataset. This is different from the abstract of an associated publication. Include what, why, where, when, and how*

[See example here](https://docs.google.com/document/d/1KdHJObHl5Bxxr9t0LISTwX0cCSVvx7NPUjz5T_P9JEc/edit#)

These data describes Palmyra Atoll coral reef Environmental and ecological controls of coral community metabolism. Data was collected on September 20, 21, 22 and 25, 2012. Data in this package was published under: Koweek, D., R. Dunbar, J. Rogers, G. Williams, N. Price, D. Mucciarone, and L. Teneva, Environmental and ecological controls of coral community metabolism on Palmyra Atoll Coral Reefs.

There are six data files associated with Koweek et al.

1. Physical oceanographic data from Eulerian measurements at the SIB site (data in Fig. 3 of the paper)
2. SIB site coordinates for Eulerian measurements.
3. Biogeochemical data from Eulerian measurements at the SIB site (data in Fig. 4 of the paper)
4. Metabolic rate data (NCC, NCP) from Lagrangian and Eulerian methods along with associated environmental and ecological conditions (data in Figs. 2, 5, and 6 of the paper).
5. Southern offshore CTD cast GPS coordinates (cast locations shown in Fig. 1 of the paper)
6. GPS coordinates for all points along all Lagrangian Drift tracks (drift tracks shown in Fig. 1 of the paper)

## 4. Creators

*These are the people who will show up as authors in the dataset citation. These are the individuals who have provided intellectual or other significant contributions to the creation of this dataset.* ***Please add a row with the information of each individual that should be part of the authorship of this dataset.***

**We highly encourage you to create an ORCID if you don’t already have one.** [Find more information here.](https://info.orcid.org/what-is-orcid/)

| **First Name** | **Middle Initial** | **Last Name** | **Organization** | **email address** | **ORCID ID** |
| --- | --- | --- | --- | --- | --- |
| David |  | Koweek | Department of Environmental Earth System Science, Stanford University | dkoweek@stanford.edu |  |
|  |  |  |  |  |  |

## 5. Other personnel names and roles

*Who should a data user contact with questions about this data?* *There must be at least one person or organization name to serve as the contact for this dataset.* *You may also list other personnel who participated in the project (such as field crew, lab tech, data entry, etc.) in this table with optional fields, email addresses, organization, and ORCID ID.*

**We highly encourage you to create an ORCID if you don’t already have one.** [Find more information here.](https://info.orcid.org/what-is-orcid/)

| **First Name** | **Middle Initial** | **Last Name** | **Organization** | **email address** | **ORCID ID** | **Role in project** |
| --- | --- | --- | --- | --- | --- | --- |
| David |  | Koweek | Department of Environmental Earth System Science, Stanford University | dkoweek@stanford.edu |  | contact |
| Camila |  | Vargas Poulsen | PADL Data Manager, University of California Santa Barbara | camilavargas@ucsb.edu |  | associated party |
|  |  |  |  |  |  |  |

## 6. License

***Please highlight*** *the license for the release of your data. Click on the license name for more information.*

[CCO](https://creativecommons.org/publicdomain/zero/1.0/)

**Default**

Public Domain Dedication, aka “No Rights Reserved.” This one means, “If I hold copyright in this, I waive it. And if we’re dealing with a country where we can’t waive copyright, here’s a broad public license with no attribution requirement. And just as a backup, I also promise not to sue you for copyright or related stuff if you use this.”

**Message for user:** Please keep the dataset creators informed of any plans to use the dataset. Consultation with the original investigators is strongly encouraged. Publications and data products that make use of the dataset should include proper acknowledgement.

or

[CC BY](https://creativecommons.org/licenses/by/4.0/)

Attribution is required. CC licenses require that those who reuse a work provide attribution to the work’s creator by retaining “identification of the creator(s) of the Licensed Material and any others designated to receive attribution, in any reasonable manner requested by the Licensor (including by pseudonym if designated).”

**Message for user:** Data user is required to cite it appropriately in any publication that results from its use. The Data User should realize that these data may be actively used by others for ongoing research and that coordination may be necessary to prevent duplicate publication. The Data User is urged to contact the authors of these data if any questions about methodology or results occur. Where appropriate, the Data User is encouraged to consider collaboration or co-authorship with the authors. The Data User should realize that misinterpretation of data may occur if used out of context of the original study. While substantial efforts are made to ensure the accuracy of data and associated documentation, complete accuracy of data sets cannot be guaranteed. All data are made available “as is.” The Data User should be aware, however, that data are updated periodically and it is the responsibility of the Data User to check for new versions of the data. The data authors and the repository where these data were obtained shall not be liable for damages resulting from any use or misinterpretation of the data.

## 7. Keywords

*Using keywords from a controlled vocabulary (CV) will improve your data’s future discovery and reuse. The LTER CV is a good source for keywords. Access the* [*LTER CV here*](https://vocab.lternet.edu/vocab/vocab/index.php)*. Also, please determine one or two keywords that best describe your lab, station, and/or project (e.g., Trout Lake Station, NTL LTER).). Add as many rows to this table as needed*

* Palmyra Atoll
* Net community calcification
* Net community production
* Lagrangian drifts
* Eulerian measurements
* Coral reefs
* Coral ecology

## 8. Funding of this work

*List only the main PI of a grant that supported this project, starting with the main grant first. Add rows to the table if several grants were involved.*

| **PI First Name** | **PI Middle Initial** | **PI Last Name** | **PI email** | **PI ORCID ID** | **Title of Grant** | **Funding Agency** | **Funding Identification Number** |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |

## 9. Timeframe

| **Information** | **Description** |
| --- | --- |
| Begin date | September 20 2012 |
| End date | September 25 2012 |
| Is data collection ongoing or completed? | Completed |

## 10. Geographic location

*Use decimal degrees to define a point or a bounding box.* Every point you add will be displayed on a map once the data package is published. [See example here](https://portal.edirepository.org/nis/mapbrowse?scope=knb-lter-sbc&identifier=108)

**Verbal description:** Palmyra Atoll

| **Directions** | **Coordinate** |
| --- | --- |
| Northbound | 5.88333 |
| Southbound | 5.87100 |
| Eastbound | -162.04300 |
| Westbound | -162.08300 |

**Copy this block to add multiple points or areas.**\_

**Verbal description:**

| **Directions** | **coordinate** |
| --- | --- |
| Northbound |  |
| Southbound |  |
| Eastbound |  |
| Westbound |  |

## 11. Methods

*Be specific about the study design and field and lab methods for collecting and processing the data. Include instrument descriptions and protocol citations.*

Find an example [in this link](https://docs.google.com/document/d/1KdHJObHl5Bxxr9t0LISTwX0cCSVvx7NPUjz5T_P9JEc/edit#)

## 12. Data Provenance

*Is this data derived from other data? If so, you will want to document this information, so users know where this data came from. Please specify the source datasets used in the below provenance table, preferably with their DOI or URL.* [*Here is an example of a dataset derived from several others*](https://portal.edirepository.org/nis/mapbrowse?packageid=edi.101.3)*.*

| **Dataset title** | **Dataset DOI or URL** | **Creator Name** | **Contact Email** |
| --- | --- | --- | --- |
| Coral Community Metabolism Data From the Palmyra Atoll, from 2012-08-01 to 2012-10-01 | gov.noaa.nodc:0121946 | David Koweek | dkoweek@stanford.edu |
|  |  |  |  |

## 13. Data Table

Each row in the below table describes one column in your data table. Complete each row as follows:

* **Description:** Please give a specific definition of the column name. This can be lengthy.
* **Unit:** Identify units for all numeric variables. All rows where there is an \* under the unit column must be filled in with a unit.
* **Date format:** Please tell us exactly how the date and time are formatted: e.g., mm/dd/yyyy hh:mm:ss, plus the time zone and whether daylight savings were observed. ISO date format of YYYY-MM-DD or YYYY-MM-DD hh:mm:ss is preferred.
* **Missing value code:** If a code for ‘no data’ is used, please specify: e.g., -99999, NA
* **Missing value code Explanation:** Why are these values missing? e.g.: value not available, value not recorded.

**Table name:** (Add a short name for this table) **Table description:** (Add brief description of table contents)

1. 2012\_Koweek\_biogeochemical\_data

| **attributeName** | **attributeDefinition** | **class** | **unit** | **dateTimeFormatString** | **missingValueCode** | **missingValueCodeExplanation** |
| --- | --- | --- | --- | --- | --- | --- |
| Time |  | Date |  | !Add datetime specifier here! |  |  |
| date |  | Date |  | !Add datetime specifier here! |  |  |
| tube |  | character |  |  |  |  |
| DIC |  | numeric | \* |  |  |  |
| DOuM |  | numeric | \* |  |  |  |
| Omega |  | numeric | \* |  |  |  |
| pCO2 |  | numeric | \* |  |  |  |
| pH |  | numeric | \* |  |  |  |
| S |  | numeric | \* |  |  |  |
| sDIC |  | numeric | \* |  |  |  |
| sTA |  | numeric | \* |  |  |  |
| TA |  | numeric | \* |  |  |  |

1. 2012\_Koweek\_eulerian\_SIB\_coords

| **attributeName** | **attributeDefinition** | **class** | **unit** | **dateTimeFormatString** | **missingValueCode** | **missingValueCodeExplanation** |
| --- | --- | --- | --- | --- | --- | --- |
| tube |  | character |  |  |  |  |
| site.lat |  | numeric | \* |  |  |  |
| site.lon |  | numeric | \* |  |  |  |

1. 2012\_Koweek\_LD\_coords

| **attributeName** | **attributeDefinition** | **class** | **unit** | **dateTimeFormatString** | **missingValueCode** | **missingValueCodeExplanation** |
| --- | --- | --- | --- | --- | --- | --- |
| LD\_num |  | character |  |  |  |  |
| measurment\_num |  | categorical |  |  |  |  |
| lat |  | numeric | \* |  |  |  |
| long |  | numeric | \* |  |  |  |

4. 2012\_Koweek\_offshore\_ctd\_cast\_coords

| **attributeName** | **attributeDefinition** | **class** | **unit** | **dateTimeFormatString** | **missingValueCode** | **missingValueCodeExplanation** |
| --- | --- | --- | --- | --- | --- | --- |
| ctd\_num |  | character |  |  |  |  |
| lat |  | numeric | \* |  |  |  |
| lon |  | numeric | \* |  |  |  |

1. 2012\_Koweek\_pca\_data

| **attributeName** | **attributeDefinition** | **class** | **unit** | **dateTimeFormatString** | **missingValueCode** | **missingValueCodeExplanation** |
| --- | --- | --- | --- | --- | --- | --- |
| ld\_eu |  | character |  |  |  |  |
| ncc |  | numeric | \* |  |  |  |
| ncc\_sd |  | numeric | \* |  |  |  |
| ncp |  | numeric | \* |  |  |  |
| ncp\_sd |  | numeric | \* |  |  |  |
| ncc\_ncp |  | numeric | \* |  |  |  |
| fractional\_day |  | Date |  | !Add datetime specifier here! |  |  |
| water\_temperature |  | numeric | \* |  |  |  |
| air\_temperature |  | numeric | \* |  |  |  |
| par |  | numeric | \* |  |  |  |
| precipitation |  | numeric | \* |  |  |  |
| hard\_coral |  | numeric | \* |  |  |  |
| macroalgae |  | numeric | \* |  |  |  |
| cca |  | numeric | \* |  |  |  |
| halimeda |  | numeric | \* |  |  |  |
| turf\_algae |  | numeric | \* |  |  |  |
| calcifiers\_non\_calcifiers |  | numeric | \* |  |  |  |
| hard\_coral\_macroalgae |  | numeric | \* |  |  |  |

1. 2012\_Koweek\_physical\_data

| **attributeName** | **attributeDefinition** | **class** | **unit** | **dateTimeFormatString** | **missingValueCode** | **missingValueCodeExplanation** |
| --- | --- | --- | --- | --- | --- | --- |
| timestamp |  | Date |  | !Add datetime specifier here! |  |  |
| tube |  | character |  |  |  |  |
| depth |  | numeric | \* |  |  |  |
| U.mag |  | numeric | \* |  |  |  |
| U.heading |  | numeric | \* |  |  |  |
| Temp.bot |  | numeric | \* |  |  |  |
| Temp.mid |  | numeric | \* |  |  |  |
| Temp.top |  | numeric | \* |  |  |  |
| tr.fr.sib |  | numeric | \* |  |  |  |
| Eta.avg |  | numeric | \* |  |  |  |
| airT |  | numeric | \* |  |  |  |
| precip |  | numeric | \* |  |  |  |
| PAR |  | numeric | \* |  |  |  |
| wind.mag |  | numeric | \* |  |  |  |
| wind.dir |  | numeric | \* |  |  |  |
| density |  | numeric | \* |  |  |  |
| tr.fr.sd |  | numeric | \* |  |  |  |

## 14. Attributes code

*If you use codes in your column, please define each code in the following table.* ***Fill in only if necessary***

| **attributeName** | **code** | **definition** |
| --- | --- | --- |
| measurment\_num | n1 |  |
| measurment\_num | n10 |  |
| measurment\_num | n11 |  |
| measurment\_num | n2 |  |
| measurment\_num | n3 |  |
| measurment\_num | n4 |  |
| measurment\_num | n5 |  |
| measurment\_num | n6 |  |
| measurment\_num | n7 |  |
| measurment\_num | n8 |  |
| measurment\_num | n9 |  |
| measurment\_num |  |  |

## 15. Scripts/code (software)

*List any software scripts/code you would like to archive along with your data. These may include processing scripts you wrote to create, clean, or analyze the data.*

| **Filename** | **Description** | **Scripting language** |
| --- | --- | --- |
|  |  |  |

## 16. Other objects (misc.)

*List any other objects (e.g., .zip, .pdf, etc.) you would like to archive.*

**Note:** At the moment, we are not including any photographic data.

| **Filename** | **Description** | **Data type** |
| --- | --- | --- |
|  |  |  |

## 17. Articles

*List articles citing this dataset. Add as many rows as necessary*

| **Article DOI or URL (DOI is preferred)** | **Article title** | **Journal title** |
| --- | --- | --- |
| 10.1007/s00338-014-1217-3 | Environmental and ecological controls of coral community metabolism on Palmyra Atoll | Coral Reefs |

## Notes, Comments, and Questions

*Please let us know if you have any additional comments or questions about your data or the EML information. THANK YOU!*