# EDI Metadata Template (2019)[[1]](#footnote-1)

Data should be in csv text file. If starting with an Excel spreadsheet, please make sure it does not contain any formulas and comments on cells. If you need comments put them in their own column. If data were used in a database and major table linking is necessary to analyze, please de-normalize into a flat file, not just database table exports.

## Dataset Title

Pelagic, epilimnetic production estimates in Sparkling, Trout, Acton, and Castle Lakes

## Short name or nickname you use to refer to this dataset:

Free-water and 14C production estimates

## Abstract

Concurrent daily estimates of pelagic, eplilimnetic production (mmol C m3 d) generated from 14C incubations and diel changes in high frequency dissolved oxygen data (free-water). Original data derived from the North Temperate Lakes Long Term Ecological Research program (Sparkling [2007-2013], Trout [2007-2012] Lakes), Castle Lake Research Station (Castle Lake [2014-2017]), and Center for Aquatic & Watershed Sciences (Acton Lake [2010-2014]). 14C production estimates were generated as part of each research programs core data collection. Free-water production estimates generated using high frequency sensor data provided by research programs and Phillips (2020) time-varying, Bayesian metabolism model.

## Investigators

(list in order as for a paper with e-mail addresses, organization and preferably ORCID ID, if you don’t have one, get it, it’s easy and free: <http://orcid.org/>) add table rows as needed

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| First Name | Middle Initial | Last Name | Organization | e-mail address | ORCID ID (optional) |
| Noah | R | Lottig | University of Wisconsin Center for Limnology | nrlottig@wisc.edu |  |
| Sudeep |  | Chandra | University of Nevada Reno |  |  |
| Emily | H | Stanley | University of Wisconsin Center for Limnology | ehstanley@wisc.edu |  |
| Mike |  | Vanni | University of Miami Ohio |  |  |
| Facundo |  | Scordo | University of Nevada, Reno |  |  |
| Williamson |  | Tanner | University of Miami Ohio |  |  |

## Other personnel names and roles

(dataset creators & contact, field crew, data entry etc. with e-mail addresses, organization and ORCID ID)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| First Name | Middle Initial | Last Name | Organization | e-mail address | ORCID ID (optional) | Role in project |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

## License

(Select a license for release of your data. We have 2 recommendations: [CCO – most accommodating of data reuse](https://creativecommons.org/publicdomain/zero/1.0/), & [CCBY – requires attribution](https://creativecommons.org/licenses/by/4.0/))

## Keywords

(List keywords and separate with commas. Using keywords from a controlled vocabulary (CV) will improve the future discovery and reuse of your data. The LTER CV is effective at describing ecological and environmental data. [Access the LTER CV here](http://vocab.lternet.edu/vocab/vocab/index.php). [Try this text mining service to extract LTER CV keywords from your abstract or methods](http://vocab.lternet.edu/keywordDistiller/). Additionally, please determine one or two keywords that best describe your lab, station, and/or project (e.g., Trout Lake Station, NTL LTER). This will help others discover your data by site/project).

## Funding of this work:

Add rows to table if several grants were involved, list only the main PI, start with main grant first:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| PI First Name | PI Middle Initial | PI Last Name | PI ORCID ID (optional) | Title of Grant | Funding Agency | Funding Identification Number |
| Paul |  | Hanson |  | RCN: Advancing Lake Ecology by Building an International Community to Exploit Innovations in Sensor Network Technology | National Science Foundation | DBI-0639229 |
| Emily |  | Stanley |  | LTER: Comparative Study of a Suite of Lakes in Wisconsin | National Science Foundation | DEB-0822700 |
| Noah |  | Lottig |  | Next-generation instrumented buoys for the University of Wisconsin Trout Lake Station | National Science Foundation | DBI-1418698 |
| Emily |  | Stanley |  | LTER: Comparative Study of a Suite of Lakes in Wisconsin | National Science Foundation | DEB-1440297 |
| Chris |  | Solomon |  | Collaborative research: Regulation of lake productivity by terrestrial dissolved organic matter | National Science Foundation | DEB-1754363 |
| Paul |  | Hanson |  |  | Gordon and Betty Moore Foundation | 1182 |

## Timeframe

* Begin date: 2007
* End date: 2017
* Data collection ongoing/completed: completed

## Geographic location

* Verbal description: Wisconsin, Ohio, California
* North bounding coordinates (decimals)
* South bounding coordinates (decimals)
* East bounding coordinates (decimals)
* West bounding coordinates (decimals)

## Taxonomic species or groups

## Methods

(please be specific, include instrument descriptions, or point to a protocol online, if this is a data compilation please specify datasets used, preferably their DOI or URL plus general citation information)

## Data Table

* Column name: exactly as it appears in the dataset. Please avoid special characters, dashes and spaces.
* Description: please be specific, it can be lengthy
* Unit: please avoid special characters and describe units in this pattern: e.g. microSiemenPerCentimeter, microgramsPerLiter, absoptionPerMolePerCentimeter
* Code explanation: if you use codes in your column, please explain in this way: e.g. LR=Little Rock Lake, A=Sample suspect, J=Nonstandard routine followed
* Data format: please tell us exactly how the date and time is formatted: e.g. mm/dd/yyyy hh:mm:ss plus the time zone and whether or not daylight savings was observed.
* If a code for ‘no data’ is used, please specify: e.g. -99999

Please add rows as needed

**Table description:** Add a description for each table

|  |  |  |  |
| --- | --- | --- | --- |
| Column name | Description | Unit or  code explanation or date format | Empty value code |
| lake | Name of lake | Text | NA |
| year | Year | Integer | NA |
| yday | Day of Year | Integer | NA |
| date | Date | YYYY-MM-DD | NA |
| o2\_pp\_mmolcm3d | Production (millimolscarbonpercubicmeterperday) estimated from high frequency dissolved oxygen time series. | Numeric | NA |
| o2\_pp\_025\_ci | Lower credible interval (0.025 percent) of production (millimolscarbonpercubicmeterperday) estimated from high frequency dissolved oxygen time series. | Numeric | NA |
| o2\_pp\_975\_ci | Upper credible interval (0.975 percent) of production (millimolscarbonpercubicmeterperday) estimated from high frequency dissolved oxygen time series. | Numeric | NA |
| c14\_pp\_mmolcm3d | Production (millimolscarbonpercubicmeterperday) estimated from 14C radio isotope incubations | Numeric | NA |
| avg\_o2\_pp\_mmolcm3d | Average (median value) production (millimolscarbonpercubicmeterperday) over a 7 day time period centered on the day of observation estimated from high frequency dissolved oxygen time series . | Numeric | NA |

## Articles

(List articles citing this dataset)

|  |  |  |
| --- | --- | --- |
| Article DOI or URL (DOI is preferred) | Article title | Journal title |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

## 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.)

|  |  |  |
| --- | --- | --- |
| File name | Description | Scripting language |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

## Data provenance

(Were these data derived from other data? If so, you will want to document this information so users know where these data come from.)

|  |  |  |  |
| --- | --- | --- | --- |
| Dataset title | Dataset DOI or URL | Creator (name & email) | Contact (name & email) |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

## Notes and Comments

1. This document liberally borrows from similar documents at SBC and GCE [↑](#footnote-ref-1)