

OSU TH-Line Seaglider

Please provide the following information and submit to the NOAA DM Plan Repository.

Reference to Master DM Plan (if applicable)

URL of higher-level DM Plan (if any) as submitted to DM Plan Repository:

NANOOS DMP: <https://www.nanoos.org/documents/certification/DMP/2023/NANOOS-DMP.pdf>

1. General Description of Data to be Managed

1.1. Name of the Data, data collection Project, or data-producing Program:

IOOS Oregon State University Seaglider sampling off Trinidad Head, California

1.2. Summary description of the data:

OSU Glider Research Group collects near real-time physical, chemical, and bio-optical data as part of NANOOS/CeNCOOS in the coastal US Pacific northwest. Gliders collect observations along cross-shelf transect from nearshore to the deep ocean on the Trinidad Head historical line in the North Pacific Ocean (41° 3.5'N, 124.2° – 129°W). Data are transmitted from the glider to Oregon State University in Corvallis, OR, where the data are processed and disseminated.

1.3. Is this a one-time data collection, or an ongoing series of measurements?

The line is continuously occupied, with gliders being swapped out every 5-7 months.

1.4. Actual or planned temporal coverage of the data:

November 2014 - ongoing, continuous operations

1.5. Actual or planned geographic coverage of the data:

Transect from 41° 3.5'N, 124° 3.5'W to 41° 3.5'N, 129°W.

1.6. Type(s) of data:

(e.g., digital numeric data, imagery, photographs, video, audio, database, tabular data, etc.)

Digital numeric data in NetCDF format:

subsurface temperature, salinity, pressure, chlorophyll fluorescence, CDOM (colored dissolved organic matter) fluorescence, light backscatter, dissolved oxygen, and depth-averaged water-column velocity measurements from an autonomous underwater vehicle glider platform.

1.7. Data collection method(s):

(e.g., satellite, airplane, unmanned aerial system, radar, weather station, moored buoy, research vessel, autonomous underwater vehicle, animal tagging, manual surveys, enforcement activities, numerical model, etc.)

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1.8. If data are from a NOAA Observing System of Record, indicate name of system:

NANOOS/CeNCOOS

1.8.1. If data are from another observing system, please specify: N/A

2. Point of Contact for this Data Management Plan (author or maintainer)

2.1. Name: Jack Barth

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- 2.2. Title: Professor
- 2.3. Affiliation or facility: Oregon State University
- 2.4. E-mail address: jack.barth@oregonstate.edu
- 2.5. Phone number: 541-737-1607

3. Responsible Party for Data Management

Program Managers, or their designee, shall be responsible for assuring the proper management of the data produced by their Program. Please indicate the responsible party below.

- 3.1. Name: Jack Barth
- 3.2. Position Title: Professor
- 3.3. Name of current Position holder:

4. Resources

Programs must identify resources within their own budget for managing the data they produce.

- 4.1. Have resources for management of these data been identified? Yes
- 4.2. Approximate percentage of the budget for these data devoted to data management (specify percentage or "unknown"): unknown

5. Data Lineage and Quality

NOAA has issued Information Quality Guidelines¹ for ensuring and maximizing the quality, objectivity, utility, and integrity of information which it disseminates.

- 5.1. Processing workflow of the data from collection or acquisition to making it publicly accessible (*describe or provide URL of description*):

Data are uploaded by the glider at the end of every dive cycle. Initial processing takes place immediately and automated QC'd data are uploaded to the IOOS Glider Data Acquisition Center. At the end of every mission, additional QC procedures are applied over the entire mission and final data sets are uploaded.

- 5.1.1. If data at different stages of the workflow, or products derived from these data, are subject to a separate data management plan, provide reference to another plan: N/A

- 5.2. Quality control procedures employed (*describe or provide URL of description*):

https://gliderfs2.coas.oregonstate.edu/sgliderweb/Seaglider_Quality_Control_Manual.html

6. Data Documentation

The EDMC Data Documentation Procedural Directive² requires that NOAA data be well documented, specifies the use of ISO 19115 and related standards for documentation of new data, and provides links to resources and tools for metadata creation and validation.

- 6.1. Does metadata comply with EDMC Data Documentation directive?

Yes. Glider data are submitted to IOOS Glider DAC with DAC compliant metadata attached.

¹ http://www.cio.noaa.gov/services_programs/IQ_Guidelines_030414.html

² <https://www.nosc.noaa.gov/EDMC/PD.DD.php>

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6.1.1. If metadata are non-existent or non-compliant, please explain: N/A

6.2. Name of organization or facility providing metadata hosting:

IOOS Glider DAC

6.2.1. If service is needed for metadata hosting, please indicate:

6.3. URL of metadata folder or data catalog, if known: <https://gliders.ioos.us/>

6.4. Process for producing and maintaining metadata (*describe or provide URL of description*):

Following IOOS DAC guidelines, the OSU glider research group produces and maintains metadata associated with glider sampling.

7. Data Access

NAO 212-15 states that access to environmental data may only be restricted when distribution is explicitly limited by law, regulation, policy (such as those applicable to personally identifiable information or protected critical infrastructure information or proprietary trade information) or by security requirements. The EDMC Data Access Procedural Directive³ contains specific guidance, recommends the use of open-standard, interoperable, non-proprietary web services, provides information about resources and tools to enable data access, and includes a Waiver to be submitted to justify any approach other than full, unrestricted public access.

7.1. Do these data comply with the Data Access directive? Yes

7.1.1. If the data are not to be made available to the public at all, or with limitations, has a Waiver (Appendix A of Data Access directive) been filed? N/A

7.1.2. If there are limitations to public data access, describe how data are protected from unauthorized access or disclosure: N/A

7.2. Name of organization of facility providing data access: OSU-CEOAS; IOOS Glider DAC; NANOOS/CeNCOOS

7.2.1. If data hosting service is needed, please indicate:

7.2.2. URL of data access service, if known: <https://gliders.ioos.us/>

7.3. Data access methods or services offered:

IOOS Glider DAC ERDDAP. NANOOS provides visualization of near-real time and past missions of the Trinidad Head glider on the NANOOS Visualization System: <https://nvs.nanoos.org/GliderTrinidadHead>. CeNCOOS provides visualization of near-real time data from the Trinidad Head glider on <https://www.cencoos.org/trinidad-glider/>.

7.4. Approximate delay between data collection and dissemination:

None, near-real time transmission to IOOS Glider DAC ERDDAP

7.4.1. If delay is longer than latency of automated processing, indicate under what authority data access is delayed:

8. Data Preservation and Protection

The NOAA Procedure for Scientific Records Appraisal and Archive Approval describes how to identify, appraise and decide what scientific records are to be preserved in a NOAA archive.

³ Data Access Directive currently in review; URL to be added.

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- 8.1. Actual or planned long-term data archive location:
(Specify NODC, NCDC, NGDC, World Data Center (WDC) facility, Other, To Be Determined, Unable to Archive, or No Archiving Intended)

IOOS Glider DAC, NCEI

- 8.1.1. If World Data Center or Other, specify:

- 8.1.2. If To Be Determined, Unable to Archive or No Archiving Intended, explain:

- 8.2. Data storage facility prior to being sent to an archive facility (if any):

Data/File Server at Oregon State University

- 8.3. Approximate delay between data collection and submission to an archive facility:

None

- 8.4. How will the data be protected from accidental or malicious modification or deletion prior to receipt by the archive? Discuss data back-up, disaster recovery/contingency planning, and off-site data storage relevant to the data collection:

Data/File Server is backed up to 2 different backup servers. Glider data is pushed to IOOS Glider DAC immediately upon receipt at control server.

9. Additional Line Office or Staff Office Questions

Line and Staff Offices may extend this template by inserting additional questions in this section.