

Data Management Plan: OR Shelf Mooring

I. Type of data and information created

1. What data will you collect or create in the research?

Contextual statement describing what data are collected and relevant URL (IOOS Certification, f 2)

This program measures time-series of ocean properties at a mid-shelf location off Oregon.

2. What data types will you be creating or capturing?

We capture time series of ocean and meteorological data at a fixed mid-shelf location off Oregon. A typical setting lasts six months, and measures vertical profiles of ocean currents, temperature and salinity at locations in the water column, and meteorological data (wind speed and direction, air temperature, barometric pressure, etc.).

3. How will you capture or create the data?

Describe how the data are ingested (IOOS Certification, f 2.)

Data for the in-water instruments are recorded in the instruments, and downloaded upon mooring recovery. Real-time cellular modem transmission of some data is also made, including the meteorological data and selected ocean data with the results archived at Oregon State University.

Describe how data are managed (IOOS Certification, f 2.)

Data are stored on hard disk drives at Oregon State University, with multiple backups.

Describe the data quality control procedures that have been applied to the data. (IOOS Certification, f 3.)

The first use of the data is from the real-time stream. These data are examined for gaps, inspected for out-of-bounds values, compared with nearby measurements where appropriate (e.g. barometric pressure, sea surface temperature, etc); data streams which fail this QC are not put forward.

At present, data in our long-term archives is awaiting quality control review. This process will require considerable analyst time, which is not presently available. All data requests are filled with raw data and the user is advised to use the data with care because additional quality control may be required.

4. If you will be using existing data, state that fact and include where you got it. What is the relationship between the data you are collecting and the existing data?

N/A

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II. Expected schedule for data sharing

Adheres to the NOAA Data Sharing Procedural Directive. The System is an operational system; therefore the RICE should strive to provide as much data as possible, in real-time or near real-time, to support the operation of the System. (IOOS Certification, f. 4.)

Real-time data are shared as soon as received. The buoy reports to the National Data Buoy Center, as station 46097. Mooring post-recovery data are available to share as soon as downloaded and inspected, typically a month after recovery.

1. **How long will the original data collector/creator/principal investigator retain the right to use the data before opening it up to wider use?**

N/A

2. **How long do you expect to keep the data private before making it available? Explain if different data products will become available on different schedules (Ex: raw data vs processed data, observations vs models, etc.)**

N/A

3. **Explain details of any embargo periods for political/commercial/patent reasons? When will you make the data available?**

N/A

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III. Standards for format and content

1. Which file formats will you use for your data, and why?

How can the information be accessed? (IOOS Certification, f 2)

Raw data are stored in native format, so as to preserve all data and metadata. ADCP data are processed to geographically referenced data, and stored in Matlab format.

2. What file formats will be used for data sharing?

All of the Above.

3. What metadata/ documentation will be submitted alongside the data or created on deposit/ transformation in order to make the data reusable?

Metadata are included in the headers of each data file, typically detailing instrument serial number and set-up parameters. Data files from Seabird instruments include calibration constants used. We also record the mooring deployment location, start and end date/time.

4. What contextual details (metadata) are needed to make the data you capture or collect meaningful?

These are the metadata in the files noted in the preceding section.

5. How will you create or capture these details?

These are incorporated as part of the data files.

6. What form will the metadata describing/documenting your data take?

Please see above

7. Which metadata standards will you use and why have you chosen them? (e.g. accepted domain-local standards, widespread usage)

The metadata are the manufacturer and de-facto community standards.

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IV. Polices for stewardship and preservation

1. What is the long-term strategy for maintaining, curating and archiving the data?

Points of contact- Individuals responsible for the data management and coordination across the region (CV's attached); (IOOS Certification f 1. i)

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Identify the procedures used to evaluate the capability of the individual (s) identified in subsection 997.23(f)(1) to conduct the assigned duties responsibly. (IOOS Certification, f 1. iii)

Oregon State University has a process in place for personnel evaluation. These evaluations are on file with Oregon State University Human Resources. All personnel listed have received excellent evaluations.

2. Which archive/repository/database have you identified as a place to deposit data?

Documents of the RICE's data archiving process or describes how the RICE intends to archive data at the national archive center (e.g., NODC, NGDC, NCDC) in a manner that follows guidelines outlined by that center. Documentation shall be in the form of a Submission Agreement, Submission Information Form (SIF) or other, similar data producer-archive agreement (IOOS Certification, f 6.).

Plans are being developed to archive data with NCEI monthly (including historical data), to be guided by the procedures laid out by the NANOOS SATURN (OHSU CMOP) archiving project and corresponding NCEI Submission Agreement.

3. What procedures does your intended long-term data storage facility have in place for preservation and backup?

Locally, triply-redundant geographically-distributed HDD archives at OSU, and ultimately NCEI once the submission procedures for these assets are in place and implemented.

4. How long will/should data be kept beyond the life of the project?

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Data will be stored indefinitely.

5. What data will be preserved for the long-term?

All data are publicly available and preserved.

6. What transformations will be necessary to prepare data for preservation / data sharing?

Raw data are decoded and formatted, analyzed and quality controlled.

7. What metadata/ documentation will be submitted alongside the data or created on deposit/ transformation in order to make the data reusable?

Documentation currently provided to NDBC will be adapted and submitted alongside the data. Additional instrument and deployment metadata will be included as well.

8. What related information will be deposited?

V. Procedures for providing access

1. What are your plans for providing access to your data? (on your website, available via ftp download, via e-mail, or another way)

Describe how data are distributed including a description of the flow of data through the RICE data assembly center from the source to the public dissemination/access mechanism. (IOOS Certification, f. 2 and 4)

Real-time data are accessible via the NANOOS Visualization System (NVS, <http://nvs.nanoos.org>), via the NDBC data site <http://www.ndbc.noaa.gov>. We plan to provide access to raw, downloaded data from NANOOS data servers.

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2. Will any permission restrictions need to be placed on the data?

NANOOS data and products are freely available for public use.

Examples:

1) Standard html:

Data courtesy of NANOOS Oregon Shelf Mooring

2) Offline references, choose the appropriate form from the recommended acknowledgements below.

- Short form (figure captions, etc.)
“... data from NANOOS Oregon Shelf Mooring, Oregon State University.”
- Longer form (in text)
“.. measurements were made by the NANOOS Oregon shelf mooring group, operated by Oregon State University, under the sponsorship of NOAA’s IOOS program.

3. With whom will you share the data, and under what conditions?

Data are publicly available.

4. Will a data sharing agreement be required?

In general, a data sharing agreement will not be required. However, data should be properly acknowledged.

5. Are there ethical and privacy issues? If so, how will these be resolved?

N/A

6. Who will hold the intellectual property rights to the data and how might this affect data access?

The funding agency, NANOOS, and Oregon State University.