

**Request to Archive
With The National Centers for Environmental Information
For AOOS/CenCOOS/SECOORA non-Federal station data
Provided by Axiom**

2017-02-16

This information will be used by NCEI to conduct an appraisal and make a decision on the request.

1. Who is the primary point of contact for this request?

Kyle Wilcox
Axiom Data Science
kyle@axiomdatascience.com
preferred method: e-mail

2. Name the organization or group responsible for creating the dataset.

IOOS > Integrated Ocean Observing System, NOAA, U.S. Department of Commerce, SECOORA, AOOS, CeNCOOS

3. Provide an overview summarizing the scope of data you want to archive. Describe the outputs, data variables, including their measurement resolution and coverage.

Axiom will be acting as a Data Assembly Center to submit the non-Federal station assets from the following three Regional Associations :

SECOORA - Southeast Coastal Ocean Observing System
CeNCOOS - Central and Northern California Coastal Ocean Observing System
AOOS - Alaska Ocean Observing System

There are 11 Regional Associations established nationwide through the NOAA Integrated Ocean Observing System (IOOS). IOOS coordinates the multi-agency, cooperative effort to routinely collect realtime data and manage historical information based on a continuously operating network of buoys, ships, satellites, underwater vehicles, and other platforms. These data are needed for many purposes which include rapid detection and prediction of changes in our nation's ocean and coastal waters.

Axiom will be starting the automation process with a group of non-federal in-situ data sets from each of the three RAs.

To collect realtime data and manage historical information based on a continuously operating network of buoys..

These are netCDF format in-situ buoy data collected in conjunction with SECOORA, AOOS, and CeNCOOS.

4. What is the time period covered by the dataset? (YYYY-MM-DD, YYYY-MM or YYYY)

From 2013-11-08
Ongoing as continuous updates to the data record

5. Edition or version number(s) of the dataset:

N/A

6. Approximate date when the dataset was or will be released to the public:

2014-05-29

7. Who are the expected users of the archived data? How will the archived data be used?

Oceanographers. Integrated Ocean Observing System affiliates.

8. Has the dataset undergone user evaluation and/or an independent review process? Did NCEI participate in design reviews?

No

9. Describe the dataset's relationship to other archived datasets, such as earlier versions or related source data. If this is a new version, how does it improve upon the previous version(s)?

This data is similar to the NANOOS, PacIOOS, and SCCOOS data as it will be coming from an IOOS RA.

10. List the input datasets and ancillary information used to produce the data.

open source database, The data is minimally processed by the individual PI.

11. List web pages and other links that provide information on the data.

http://secoora.org/data/data_feeds

<http://portal.secoora.org/#module-metadata/ff69a8ca-c75c-11e4-b5fd-00265529168c/50c39f3c-c75d-11e4-a389-00265529168c>

<http://data.aos.org/maps/sensors/#>

<http://www.cencoos.org/data/shore>

<http://www.cencoos.org/data/shore/guide>

12. List the kinds of documents, metadata and code that are available for archiving. For example, data format specifications, user guides, algorithm documentation, metadata compliant with a standard such as ISO 19115, source code, platform/instrument metadata, data/process flow diagrams, etc.

1. CF compliance, and ACDD conventions.

13. Indicate the data file format(s).

1. netCDF-4

2. NCEI netCDF Templates v2.0 timeSeries

14. Are the data files compressed?

No

15. Provide details on how the files are named and how they are organized (e.g., file_name_pattern_YYYYMM.tar in monthly aggregations).

Submission Information Packages (SIP) will be organized into 'bags'. Each 'bag' will contain data, metadata, and manifest files which fully document the files intended to be submitted. The 'bags' will be sub-folders on <https://ncei.axiomdatascience.com/> which correspond to the name of the Regional Association and the platform. E.g. cencoos/, secoora/, and aos/. Within the Regional Association folder there will be folders for each station. E.g. cencoos_humboldt/, cencoos_indianisland/, cencoos_monterey/, etc.

Within the station folder (or 'bag') there will be four standard files with the following names: bag-into.txt, bagit.txt, manifest-sha256.txt, and tagmanifest-sha256.txt as well as a data/ directory which will contain all of the netCDF files

to be submitted for that RA platform. Each of the files within the data directory will be one measured phenomena. E.g. turbidity.nc, sea_water_temperature.nc, sea_water_pressure.nc, etc..

Each data file is composed of ~1 month of data.

16. Explain how to access sample data files and/or a file listing for previewing. If it is not available now, when will it be available?

Axiom has posted the bag packages, including the netCDF files and their associated md5 checksum files, onto their https server at <https://ncei.axiomdatascience.com/>. Only using the aaos/, cencoos/, and secoora/ directories.

17. What is the total data volume to be submitted?

Historic Data: all historic data or data submitted as a completed collection.

Total Data Volume: 700MB

Number of Data Files: 621

Continuous Data: data volume rate for a continuous data production.

Total Data Volume Rate: 20MB per Month

Data File Frequency: 621 per Month

Data Production Start: 2003-11-08

18. Are later updates, revisions or replacement files anticipated? If so, explain the conditions for submitting these additional data to the archive.

The packages will be established as follows:

New, never-before seen data files will be archived based on which buoy they are: each buoy will be assigned an accession number.

New, data from a previously submitted buoy: The AIP for that buoy will be updated (NODC's major-revision) with the new data file.

Revised, data that was previously submitted that needs to be updated: If the naming conventions match and the checksums do not match, then the most recent submission of that file will be assumed to be the latest and greatest submission and will replace the previous file.

19. Describe the server that will connect to the ingest server at NCEI for submitting the data.

Physical Location: The Pittock Internet Exchange, Portland, OR, USA

System Name: ncei01

System Owner: Shane StClair (shane@axiomdatascience.com)

Additional Information:

20. What are the possible methods for submitting the data to NCEI? Select all that apply.

1. FTP PULL

Data Provider will post the data on the Web Accessible Folder for NCEI to pull from.

21. Identify how you would like NCEI to distribute the data. Web access support depends on the resources available for the dataset.

1. Direct download links

2. Advanced web services (e.g., THREDDS Catalog Service)

22. Will there be any distribution, usage, or other restrictions that apply to the data in the archive?

No known constraints apply to the data.

23. Discuss the rationale for archiving the dataset and the anticipated benefits. Mention any risks associated with not archiving the dataset at NCEI.

Data Set fits within NOAA's mission. OSTP: Increasing Access to the Results of Federally Funded Scientific Research.

24. Are the data archived at another facility or are there plans to do so? Please explain.

No

25. Is there an existing agreement or requirement driving this request to archive? Have you already contacted someone at NCEI?

We've been in contact with Mathew Biddle at NCEI.

26. Do you have a data management plan for your data?

No

27. Have funds been allocated to archive the data at NCEI?

Through the Integrated Ocean Observing System Data Discover, Access, and Archiving Project. An SLA has been in place between the IOOS Program Office and NCEI to archive these data.

28. Identify the affiliated research project, its sponsor, and any project/grant ID as applicable.

Integrated Ocean Observing System Regional Associations AOOS/CenCOOS/SECOORA.

29. Is there a desired deadline for NCEI to archive and provide access to the data?

Archive by: 2014-05-29

Accessible by: 2014-05-29

30. Add any other pertinent information for this request.

Please allow Mathew Biddle to attend the review meeting.