# Request to Archive With The National Centers for Environmental Information For Gulf Coast Ocean Observing System (GCOOS) Local Data Nodes Provided by GCOOS

## 2016-06-14

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?

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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, Gulf of Mexico Coastal Ocean Observing System (GCOOS)

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

GCOOS is one of 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.

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

From 2008-07-01

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:
- 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?

NCEI has reviewed the netCDF files for compliance with current Climate and Forecast (CF) conventions, Attribute Conventions for Dataset Discovery (ACDD), and NCEI netCDF template.

# 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)?

COMPS data is also currently being managed by both GCOOS and SECOORA. Both regional associations will be archiving these data sets. See

http://data.nodc.noaa.gov/geoportal/rest/find/document?searchText=%22COMPS%22%20AND%20%22SECOORA%22&start=1&max=25&contentOption=intersecting&f=searchPage for the currently archived SECOORA thread.

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

Input datasets are CSV which are converted to netCDF through matlab/python. The python code can be found at https://github.com/GCOOS/csv2nc.

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

https://github.com/GCOOS/csv2nc

- 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. https://github.com/GCOOS/csv2nc
- 2. http://data.gcoos.org/data/waf/README
- 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).

The folder of interest to NCEI will be the 'ldn' folders on both the 'atm' and 'ocn' subfolders of the 'nc\_by\_platform' folder. Specifically, http://data.gcoos.org/data/waf/nc\_by\_platform/atm/ldn/ and http://data.gcoos.org/data/waf/nc\_by\_platform/ocn/ldn/.

Each folder contains subfolders for each year (eg. 2008, 2009, 2010, 2011, etc). GCOOS also reports data from federal sources

such as the buoys maintained by the National Data Buoy Center, National Ocean Service, National Estuarine Research Reserve System and Everglades National Park. NCEI will not be archiving the federal source data sets. Data collected and reported are in the 'federal' folder and those that are contributed by various GCOOS partners in the Gulf region or referred

to as Local Data Nodes (LDN), are in the 'ldn' folder.

The data are summarized monthly and segregated by year. GCOOS started its operation in July of 2008. New platforms and capacity were increased throughout the years of operation providing the community with more data as the operations progresses. A manifest (SHA384SUM) is generated for each folder to facilitate the harvest of the files formatted in netCDF 4 classic and validated to remain compliant to community agreed standards. The files are labeled according to the following syntax:

'gcoos-' + registered URN + reporting year in 'yyyy' format + reporting month in 'mm' format +'.nc'

All files are prefixed with 'gcoos\_' to indicate the origin of the file. Due to issues related to the inclusion of colon to filenames, colons and periods that are typically found in URNs, are replaced by an underscore (' ').

# 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?

Web Accessible Folder: http://data.gcoos.org/data/waf/nc\_by\_platform/

#### 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: 5GB Number of Data Files: 5500

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

Total Data Volume Rate: 1510.9KB per Month

Data File Frequency: 84 per Month
Data Production Start: 2008-07-01

# 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 station they are: each station will be assigned an accession number.

New, data from a previously submitted station: The AIP for that station will be updated (NCEI'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: College Station, TX

System Name: Identification of the system supplying the data to the Archive.

System Owner:

Additional Information: Add comments as needed on applicable data types, etc.

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

#### 1. FTP PULL

Data Provider will FTP push to their own FTP server for us to FTP 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.

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

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

No deadlines for archive or access.

### 30. Add any other pertinent information for this request.

Please contact Mathew Biddle for any questions/concerns regarding this data stream.