

## **Rhode Island Data Discovery Center (RIDDC)**

### **Funded by NSF EPSCoR C-AIM**

**Mission:** To be the public go-to-website for historical (at least 20 years) and current data on Narragansett Bay (NB) organized with respect to location and time. Our value added is a single website where integration of different data sets can occur by observationists and modelers. It will take over for the [www.narrbay.org](http://www.narrbay.org) site, which is no longer maintained. And with time, effort and your support can grow to have more capabilities. Future capabilities may include interfaces with other publicly available, relevant data such as NERACOOS, MARACOOS, NOAA, DEM, Rutgers, UMass, and weather (NWS, ECMWF).

**Website vision:** The user interface will be accessible to a variety of users. One interface will be a map of NB showing the locations of where data was or is being collected. Another interface will be a timeline of when data was or is being collected, and the frequency of collection. There will be a menu of the kinds of data collected. By clicking on this menu, the map or timeline will show you where and when this kind of data was collected and by clicking on a specific location it will show the data or take you to a page where the data is presented, with publication-quality graphics, or for easy download in standardized formats including meta-data. Alongside any graphics or data downloads, the website will provide correct citation information in a form that is easy to cut and paste into papers for properly crediting the data sources. Relevant simulation results may also be shown alongside the observations.

#### **Why should you contribute your data to RIDDC?**

1. You are an expert that has dedicated your career to studying NB.
2. The larger community of observationalists need your data.
3. Your data can be used as a reality check for models of NB.
4. You'll have early access to the website and its tools (e.g. tool to make figures, download standardized data), and find context for your data from other sources (e.g., winds, tides, & other observations during your experiment).
5. We will credit you as the source of data. This will be automated for any user accessing your data, providing them with the citation information you provide.
6. You may find new collaborators.
7. You'll have input as we build the site.
8. You might be able to get support for an undergraduate (SURF) or support via a competitive STAC application. This undergraduate might help do data entry, quality-control, and uploading for example.
9. We broadcast your research and help preserve your legacy.

## **What do we need from you and what do we expect you to do?**

1. You decide which data you would like to share.
2. You provide us with the correct citation(s) for your data.
3. You tell us the format of the data. We do not post or store raw data. You keep your raw data and take charge of the quality control. The data that is shared will be converted to a standardized format. Depending on the data, it may need to be reduced (e.g., hourly, daily) in order to be most useful to others. We work with you on this topic.
4. You must provide basic meta data such as longitude, latitude, time of observation, and instrument type. Other meta data may also be useful such as estimated precision and accuracy. We work with you on this topic
5. Our preferred formats are CSV (comma-separated value text (ASCII) file, easily produced from Excel or Google spreadsheets) or NetCDF. We will convert CSV into NetCDF format, which makes for easy manipulation and sharing. NetCDF format is easily opened with most analysis software (e.g., python, R, Matlab), and will underpin the online presentation of data using standard tools. NetCDF data also has built-in metadata, so the correct citations for your work are part of every downloaded file and will be shared along with any downloaded data. The website will offer the option of downloading text files (which are easily reproduced from NetCDF on demand).
6. After we post your data, you validate that what we posted is accurate by making figures, e.g., reproducing figures from your publications with the online tools and checking any metadata such as citation and location data.
7. You let us know all is good with the data posted and we make your data public and give you credit. The method of sharing will be consistent with grant requirements for open data access (e.g., NSF), and the standards for metadata will make it easy to share with other data hubs (e.g., those required by some funding agencies).
8. You understand that we are funded by NSF (EPSCoR C-AIM) for 5 years (start ~10/17) and that the only firm commitment we can make is to host the data for the duration of the grant. However, if enough people contribute their data and RIDDC becomes a valuable resource to the community, then it may attract other sources of funding to sustain the site.
9. You stay in contact and enjoy the fame of having provided a popular dataset.
10. You understand and agree to our policy. Our policy has three parts. 1. Our policy is the ten steps you just read. 2. Our policy is that you comply with the policies of your home institution and your funding agency before you share data with us. 3. Our policy is that because we are funded by NSF we must follow NSF's policy for data management and so if you provide us with data you also agree to follow NSF's policy.