

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

### Reference to Master DM Plan (if applicable)

As stated in Section IV, Requirement 1.3, DM Plans may be hierarchical. If this DM Plan inherits provisions from a higher-level DM Plan already submitted to the Repository, then this more-specific Plan only needs to provide information that differs from what was provided in the Master DM Plan.

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

## 1. General Description of Data to be Managed

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

AFSC/NMML with NPRB: Location-only satellite telemetry data for North Pacific Right Whales, Bering Sea, 2008 - 2009

### 1.2. Summary description of the data:

This dataset contains ARGOS location data (latitude and longitude in decimal format) and associated time (date and time) and location quality (as defined by Argos System, [www.argos-system.org](http://www.argos-system.org)) information. Data were collected using Wildlife Computers PTT-only SPOT 5 satellite transmitters and PTT identification is also provided with the data. Satellite transmitters were deployed on North Pacific right whales (*Eubalaena japonica*) in the eastern Bering Sea. This project was funded by the North Pacific Research Board (<http://www.nprb.org/>).

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

One-time data collection

### 1.4. Actual or planned temporal coverage of the data:

2008-08 to 2009-09

### 1.5. Actual or planned geographic coverage of the data:

W: -166.37, E: -162.37, N: 57.79, S: 56.29  
Southeastern Bering Sea Continental Shelf including Bristol Bay

### 1.6. Type(s) of data:

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

### 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.)

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

**1.8.1. If data are from another observing system, please specify:****2. Point of Contact for this Data Management Plan (author or maintainer)****2.1. Name:****2.2. Title:**

Metadata Contact

**2.3. Affiliation or facility:****2.4. E-mail address:****2.5. Phone number:****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:**

Alexandre Zerbini

**3.2. Title:**

Data Steward

**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?**

No

**4.2. Approximate percentage of the budget for these data devoted to data management (specify percentage or "unknown"):**

0

**5. Data Lineage and Quality**

*NOAA has issued Information Quality Guidelines 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):*

Process Steps:

- 2010-01-01 00:00:00 - Satellite transmitters were attached to the body of North

Pacific right whales using a pneumatic delivery system. Whales were tagged with the implantable configuration of the SPOT 5 transmitters produced by Wildlife Computers (Redmond, WA). Transmitters were duty-cycled to optimize data collection in the feeding grounds and for maximizing tag longevity. Tags were programmed to transmit every day for 6 hours (14-21hs UTC) during daytime and 6 hours (2-9hs UTC) during night time for the months of August and September. Beginning in October, when migration likely begins, transmitters were programmed to transmit every other day, following the same alternate 6hr on/off periods. Satellite tags were monitored by Argos Data Collection and Location Service receivers on NOAA TIROS-N weather satellites in sun-synchronous polar orbits. Locations were calculated by Argos from Doppler-shift data when multiple messages were received during a satellites passage overhead. Argos codes locations in quality classes (LQ) labeled B, A, 0, 1, 2, 3, in order of increasing accuracy. Argos locations were processed using the software R. The SDA Argos filter (Freitas et al., 2008) was applied to all location qualities in software R in order to remove locations that implied unlikely deviations from the tracks path as well as unrealistic travel rates. This filter requires two main parameters: turning angles and maximum speed of travel. The default value of turning angles (Freitas et al., 2008) was used and the maximum speed was assumed to be 15km/h (e.g. Mate et al., 1997). Exploratory analysis showed that the use of different maximum speed limits (12 and 18km/h) did not influence the results. Distances between filtered locations were calculated assuming a great circle route. Methods are described in the published manuscript: A. N. Zerbini, Baumgartner, M. F., Kennedy, A. S., Rone, B. K., Wade, P. R., and Clapham, P. J. Space use patterns of the Endangered North Pacific right whale *Eubalaena japonica* in the Bering Sea. *Marine Ecology Progress Series*. doi: 10.3354/meps11366

**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 other plan:**

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

See Metadata Accuracy field

## **6. Data Documentation**

*The EDMC Data Documentation Procedural Directive 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?**

No

**6.1.1. If metadata are non-existent or non-compliant, please explain:**

Missing/invalid information:

- 1.7. Data collection method(s)
- 2.1. Point of Contact Name

- 2.4. Point of Contact Email

**6.2. Name of organization or facility providing metadata hosting:**

NMFS Office of Science and Technology

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

**6.3. URL of metadata folder or data catalog, if known:**

<https://www.fisheries.noaa.gov/inport/item/25633>

**6.4. Process for producing and maintaining metadata**

*(describe or provide URL of description):*

Metadata produced and maintained in accordance with the NOAA Data Documentation Procedural Directive:

[https://nosc.noaa.gov/EDMC/DAARWG/docs/EDMC\\_PD-Data\\_Documentation\\_v1.pdf](https://nosc.noaa.gov/EDMC/DAARWG/docs/EDMC_PD-Data_Documentation_v1.pdf)

**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 Directive 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?**

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

**7.2. Name of organization of facility providing data access:**

North Pacific Research Board (NPRB)

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

**7.2.2. URL of data access service, if known:**

<http://projects.nprb.org/#metadata/c221e182-14e1-431a-8e04-5861a7b9c448/project/files>

**7.3. Data access methods or services offered:**

Data is available at NPRB. This link will download a zip file with the metadata and data file: <http://s3.nprb.org/data/2007/20/NPRB.2007.20.zip>.

**7.4. Approximate delay between data collection and dissemination:**

Unknown

**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.*

**8.1. Actual or planned long-term data archive location:**

*(Specify NCEI-MD, NCEI-CO, NCEI-NC, NCEI-MS, World Data Center (WDC) facility, Other, To Be Determined, Unable to Archive, or No Archiving Intended)*

OTHER

**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):**

National Marine Mammal Laboratory - Seattle, WA

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

Unknown

**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*

IT Security and Contingency Plan for the system establishes procedures and applies to the functions, operations, and resources necessary to recover and restore data as hosted in the Western Regional Support Center in Seattle, Washington, following a disruption.

**9. Additional Line Office or Staff Office Questions**

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