

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/RACE/GAP/McConnaughey: South Arctic Reconnaissance-2012-SCS

### 1.2. Summary description of the data:

A custom designed Klein 7180 towed sonar was deployed from the NOAA Ship FAIRWEATHER to determine its value of acoustic backscatter as a habitat defining character. A Sonardyne Fusion USBL system was used to estimate underwater positioning of the towfish using an omnidirectional Wideband submini beacon operating in external trigger mode. Navigation data were logged in QINSy and exported into a text file. The towfish positions were then smoothed in Matlab using a custom script that implemented a weighted Hamming filter, using a window of 11 data points. These points represent the smoothed USBL navigation data for the Klein 7180 towfish during the Arctic reconnaissance transit from Dutch Harbor to Kotzebue. These smoothed towfish navigation data, however, will NOT ultimately be reinserted back into the sonar files for mosaicking and analysis. Rather, another navigation smoothing routine will be used for the final product.

### 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:

2012-08-02 to 2012-08-04

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

W: -175.318433, E: -165.798705, N: 61.404316, S: 12.068817

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

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

Steve Intelmann

**2.2. Title:**

Metadata Contact

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

steve.intelmann@noaa.gov

**2.5. Phone number:**

(206) 526-4157

**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:**

Bob McConnaughey

**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"):**

Unknown

**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:**

- 2012-10-11 00:00:00 - A Klein 7180 towfish was operated at the 500m-range scale and towed at roughly 7-8 knots from the NOAA Ship FAIRWEATHER while attempting to maintain a constant altitude of roughly 50 percent water depth. A Sonardyne Fusion USBL system was used to estimate underwater positioning of the towfish using an omnidirectional Wideband submini beacon operating in external trigger mode. A DWS fiber-optic winch was used to deploy and retrieve the towfish and positioning was obtained by USBL. An Applanix POS/MV was used to reference the Sonardyne XYZ coordinates which were controlled in QINSy. The REDAS driver in QINSy was used to pass both ship and towfish position to Sonarpro, which logged the sonar packets in SDF2 format. A T-Count was also used to capture cable out information and was also captured by QINSy. Navigation data were exported from QINSy into a text file. The towfish positions were then smoothed in Matlab using a custom script that implemented a weighted Hamming filter, using a window of 11 data points. The smoothed towfish navigation data were NOT reinserted back in to the raw sonar files for mosaicking. Point data from the text file were finally imported into ArcGIS.

**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 Process Steps

**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)

**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/32494>

#### **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?**

No

##### **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?**

No

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

None

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

Alaska Fisheries Science Center (AFSC)

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

Yes

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

[https://access.afsc.noaa.gov/data-zips/32494\\_GAP\\_2012\\_Arctic-2012-SCS.zip](https://access.afsc.noaa.gov/data-zips/32494_GAP_2012_Arctic-2012-SCS.zip)

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

unknown

##### **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:**

no delay

#### **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)*

NCEI\_MD

**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):**

Alaska Fisheries Science Center - 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.*