

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:

Bering-Okhotsk Seal Survey (BOSS) Identified Hot Spots (2012-13)

1.2. Summary description of the data:

US surveys were conducted of the Bering Sea pack ice for bearded, spotted, ribbon, and ringed seals using digital cameras and thermal imagers mounted in the belly ports of two fixed-wing aircraft from 6 April to 23 May 2012 and 4 April to 9 May 2013. U.S. flights were flown at a target altitude of 1,000 ft (300 m) to maximize the area surveyed while maintaining the required imaging resolution and minimizing the chance of disturbance to seals and other wildlife. A NOAA Twin Otter (N56RF) aircraft housed three FLIR SC645 thermal imagers, which recorded continuous data in the 7.5-13.0 μm wavelength. Each thermal imager was paired with a Canon Mark III 1Ds digital single-lens reflex camera fitted with a 100-mm Zeiss lens. All six instruments were mounted in an open-air belly port. The combined thermal swath width was approximately 1,500 ft (470 m) at an altitude of 1,000 ft. A contracted Aero Commander aircraft carried two sets of paired thermal imagers (SC645) and digital SLR cameras (Nikon D3X) and surveyed a maximum swath width of approximately 900 ft (280 m). Color cameras collected images at a 1-1.2 second interval. In 2013 the two aircraft flew a total of 36 surveys covering more than 17,000 nmi (32,090 km) of trackline and collected about 913,000 images. Combined with the 2012 survey effort, the U.S. BOSS team covered 31,000 nmi of trackline and collected 1.8 million images.

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:

2012-04-06 to 2012-05-23, 2013-04-04 to 2013-05-09

1.5. Actual or planned geographic coverage of the data:

W: -180, E: -155, N: 66, S: 55

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.)

Instrument: Thermal Imager

Platform: Airplane

Physical Collection / Fishing Gear: N/A

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:**

Josh London

2.2. Title:

Metadata Contact

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

josh.london@noaa.gov

2.5. Phone number:

206-526-4296

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:

Erin Moreland

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):

Lineage Statement:

Hot spots that may be seals were detected in thermal video files using one of two methods. The "manual" method involved evaluating the maximum pixel temperature of each video frame and applying a temperature threshold to identify frames to evaluate for hot spots that may be seals. The "Skeyes 2.0" method involved post-processing the video files with custom software that extracts frames with hot spots identified by an outlier algorithm.

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):

These data have not been checked for accuracy or completeness at this point. File name accuracy (time, camera position, flight info) is complete and cuing/disturbance response was measured in flight.

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?

Yes

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

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/28316>

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

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?

Yes

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

The data set is in the process of being archived with the NOAA National Centers for Environmental Information. Once the archival process is complete and verified, the data set will be publicly available.

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:

not needed; planned for NCEI-MD

7.2.2. URL of data access service, if known:

http://www.nmfs.noaa.gov/data_not_yet_available

7.3. Data access methods or services offered:

The data set is in the process of being archived with the NOAA National Centers for Environmental Information. Once the archival process is complete and verified, the data set will be publicly available.

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:

data are not automatically processed

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.