

*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:**

Cetacean visual observations using line-transect survey methods onboard the NOAA Ship Gordon Gunter in the Gulf of Mexico, January through March 2018, GoMMAPPS survey (GU1801)

**1.2. Summary description of the data:**

As part of the GoMMAPPS, the SEFSC conducted shipboard surveys of the oceanic waters of the Gulf of Mexico out to the U.S. Exclusive Economic Zone (EEZ) between 14 January and 16 March 2018. The survey was designed for a two independent visual observer teams approach with Distance sampling to estimate the detection probabilities for marine mammal sightings. This dataset includes marine mammal visual observation data and effort points with surveying conditions that can be used in abundance and density modeling per visual line-transect survey protocols. This dataset also includes opportunistic marine mammal photographs and non-marine mammal sightings such as sea turtles. Raw and processed files from Conductivity, temperature and depth (CTD) casts performed on a daily basis during the survey are also available.

**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:**

2018-01-14 to 2018-03-15

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

W: -96.4715, E: -81.83917, N: 29.95483, S: 23.82317

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

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

Multimedia (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: Big Eye Binocular

Platform: Gordon Gunter (GU)

**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:**

Laura A Dias

**2.2. Title:**

Metadata Contact

**2.3. Affiliation or facility:**

**2.4. E-mail address:**

laura.dias@noaa.gov

**2.5. Phone number:**

(305) 361-4269

**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:**

Jenny Litz

**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:**

- Parameter or Variable: CETACEANS, VISUAL OBSERVATIONS (measured); Units: NA; Observation Category: In Situ/Laboratory Instruments, SPECIES DISTRIBUTION MODELS, POPULATION ABUNDANCE; Sampling Instrument: SHIPS, LINE-TRANSECT SURVEY, DISTANCE SAMPLING, BIG EYE BINOCULAR; Sampling and Analyzing Method: The goal of the research was to conduct line-transect surveys using the Distance sampling approach to estimate the abundance and spatial distribution of marine mammals in the oceanic waters of the U.S. Gulf of Mexico. A two-team independent observer approach using pedestal-mounted 25x150 mm “big eye” binoculars was used to correct for perception bias in resulting abundance estimates. Survey tracklines were oriented perpendicular to bathymetry lines and followed a “sawtooth” pattern from approximately the 100m-isobath to the Exclusive Economic Zone. <https://www.boem.gov/sites/default/files/environmental-stewardship/Environmental-Studies/GOMR/Oceanography/GoMAPPS/NOAA-Ship-Survey-January-March-2018.pdf>; Data Quality Method: Data auditing consisted of making corrections based on error log notes from the field, plotting trackline points to identify errors made when recording effort status, and verifying sighting data based on data sheets from the field. (Citation: NOAA Ship Gordon Gunter Cruise Report GU18-01)
- Parameter or Variable: CONDUCTIVITY, OCEAN TEMPERATURE, WATER DEPTH, SALINITY/DENSITY, OXYGEN, FLUORESCENCE, ACOUSTIC VELOCITY (measured); Units: See below in Method; Observation Category: In Situ/Laboratory Instruments, SPECIES/POPULATION INTERACTIONS; Sampling Instrument: SHIPS, CTD; Sampling and Analyzing Method: Environmental data were collected at predetermined stations using a conductivity, temperature and depth sensor (CTD) unit. CTD casts recorded vertical profiles of salinity, temperature, and oxygen content to a maximum depth of 500 m. CTD casts were made daily, typically at the end of the mammal survey day. <https://www.boem.gov/sites/default/files/environmental-stewardship/Environmental-Studies/GOMR/Oceanography/GoMAPPS/NOAA-Ship-Survey-January-March-2018.pdf> Units: Temperature [ITS-90, deg C]; Fluorescence, WET Labs WETstar [mg/m<sup>3</sup>]; Beam Transmission, WET Labs C-Star [%]; Sound Velocity [Chen-Millero, m/s]; Oxygen, SBE 43 [mg/l]; Oxygen, SBE 43 [% saturation]; Depth [salt water, m]; Salinity, Practical [PSU]; Density [density, kg/m<sup>3</sup>]; Data Quality Method: None. (Citation: NOAA Ship Gordon Gunter Cruise Report GU18-01)

**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):**

Data auditing consisted of making corrections based on error log notes from the field, plotting trackline points to identify errors made when recording effort status, and

verifying sighting data based on data sheets from the 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:

- 7.3. Data access methods or services offered
- 7.4. Approximate delay between data collection and dissemination
- 8.3. Approximate delay between data collection and submission to an archive facility
- 8.4. How will the data be protected from accidental or malicious modification or deletion prior to receipt by the archive?

### 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/65428>

### 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:**

NOAA National Centers for Environmental Information (NCEI)

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

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

<https://doi.org/10.25921/8c6q-g618>

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

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

**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)*

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):**

National Centers for Environmental Information - Silver Spring, Maryland - Silver Spring, MD

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

**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*

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

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