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:

2002 Upper Texas Coast Lidar Point Data, Gulf of Mexico Shoreline in the Northeast 3.75-Minute Quadrant of the Lake Como 7.5-Minute Quadrangle: Post Fay Survey

1.2. Summary description of the data:

This data set contains elevation data derived from a lidar survey approximately 300m wide of the Gulf of Mexico shoreline in the

Northeast Lake Como quarter-quadrangle on Galveston Island Texas. The geographic extent of the data set is equivalent to the

quarter-quadrangle plus 30 meters of overedge. The data is created by combining data collected using an Optech Inc. Airborne Laser

Terrain Mapper (ALTM) 1225 in combination with geodetic quality Global Positioning System (GPS) airborne and ground-based receivers.

The Bureau of Economic Geology, the University of Texas at Austin owns and operates an ALTM 1225 system (serial number 99d118).

This system is installed in a single engine Cessna 206 (tail number N4589U) owned and operated by the Texas State Aircraft Pooling

Board. The lidar data described by this document was collected on 18 September 2002 (26102) between 20:34 and 00:08 UTC

(actual data collection). Conditions on that day were low clouds at 335m Above Ground Level (AGL), haze, and occasional showers.

99d118 instrument settings for this flight were; laser pulse rate: 25kHz, scanner rate: 26Hz, scan angle: +/-20deg, beam divergence:

wide, altitude: 300-490m AGL, and ground speed: 70-106kts. Three GPS base stations, 2 Ashtech and 1 Trimble 4000SSI receivers (backup),

were operating during the survey. The three base stations were at the following locations: one 3.5km south of San Luis Pass, one at the

Scholes International Airport Galveston, and one on the seawall at Rollover Pass. This data set consists of 1687100 records of x,y,

and z values. The data set was generated from a larger data set and includes all valid points within the requested geographic bounds.

Original contact information:

Contact Name: Jim Gibeaut

Contact Org: Bureau of Economic Geology University of Texas at Austin

Title: Research Associate

Phone: 512-471-0344

Email: jim.gibeaut@beg.utexas.edu

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:
2002-09-18

1.5. Actual or planned geographic coverage of the data:
W: -95.568694, E: -93.831419, N: 29.688483, S: 28.797218

1.6. Type(s) of data:
(e.g., digital numeric data, imagery, photographs, video, audio, database, tabular data, etc.)

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:
NOAA Office for Coastal Management (NOAA/OCM)

2.2. Title:
Metadata Contact

2.3. Affiliation or facility:

NOAA Office for Coastal Management (NOAA/OCM)

2.4. E-mail address:
coastal.info@noaa.gov

2.5. Phone number:
(843) 740-1202

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:

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?

4.2. Approximate percentage of the budget for these data devoted to data management (specify percentage or "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:
- 2002-09-18 00:00:00 - Transfer raw ALTM 1225 flight data, airborne GPS data collected at 1 Hz using Ashtech receiver, and ground-based GPS data collected at 1 Hz using Ashtech and Trimble 4000SSI receivers to NT workstation. Generate decimated lidar point file from above three data sets using Optech's Realm 2.27 software. This is a 9-column ASCII data set with the following format: time tag; first pulse Easting, Northing, HAE; last pulse Easting, Northing, HAE; first pulse intensity; and last pulse intensity. View decimated lidar point file to check data coverage (i.e. sufficient overlap of flight lines and point spacing). Compute base station coordinates using National Geodetic Survey's PAGES software. Computed aircraft trajectories for both base stations using National Geodetic Survey's KINPOS software. Coordinates for base stations and trajectories are in the International Terrestrial Reference Frame of 2000 (ITRF2000) datum. Trajectories from both base

stations were merged into one. Weighting for trajectory merge is based upon baseline length (distance from base station) and solution RMS. Transformed trajectory solution from ITRF2000 to North American Datum of 1983 (NAD83). Use NAD83 trajectories and aircraft inertial measurement unit data in Applanix's POSProc version 2.1.4 to compute an optimal 50Hz inertial navigation solution. Substitute the aircraft position and attitude information from the inertial navigation solution into Realm 2.27. Extract calibration area data set from lidar point file for quality control and instrument calibration checks. If necessary, use multiple iterations to adjust calibration parameters (pitch, roll, and scale) and reprocess sample data set. Then generate entire lidar point file (9-column ASCII file). Transfer point file from NT workstation to UNIX workstation. Parse the 9-column lidar point file into 3.75-minute quarter-quadrangle components and apply elevation bias correction (determined during calibration step). There are some points in the file that only contain 5-columns. These are points that either the first or last pulse was not recorded. Processing occurred 20020918-20030211.
- 2003-02-24 00:00:00 - The 9-column post-processed data from University of Texas were provided in UTM projection (Zone 15) referenced to NAD83 with vertical elevations in meters referenced to the Geodetic Reference System 80 (GRS80) ellipsoid. The xyz values for the last return were extracted from the 9-column file. The data were converted to geographic coordinates using General Cartographic Transformation Program software developed by the United States Geological Survey. A vertical datum transformation was performed to convert vertical elevations referenced to GRS80 ellipsoid to NAVD88 using National Geodetic Survey (NGS) GEOID99 grids. The data were then converted to a binary format and loaded into the LIDAR Data Retrieval Tool (LDART) database.

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):

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:
- 1.6. Type(s) of data
- 1.7. Data collection method(s)

- 3.1. Responsible Party for Data Management
- 4.1. Have resources for management of these data been identified?
- 4.2. Approximate percentage of the budget for these data devoted to data management
- 5.2. Quality control procedures employed
- 7.1. Do these data comply with the Data Access directive?
- 7.1.1. If data are not available or has limitations, has a Waiver been filed?
- 7.1.2. If there are limitations to data access, describe how data are protected
- 7.4. Approximate delay between data collection and dissemination
- 8.1. Actual or planned long-term data archive location
- 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/50121

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?

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 Office for Coastal Management (NOAA/OCM)

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

7.2.2. URL of data access service, if known:
https://coast.noaa.gov/dataviewer/#/lidar/search/where:ID=13
https://noaa-nos-coastal-lidar-pds.s3.amazonaws.com/laz/geoid18/13/index.html

7.3. Data access methods or services offered:
This data can be obtained on-line at the following URL:

https://coast.noaa.gov/dataviewer

;

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)

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):
Office for Coastal Management - Charleston, SC

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.