

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:

2014 Mobile County, AL Bare Earth DEM

1.2. Summary description of the data:

Atlantic was contracted to acquire high resolution topographic lidar (Light Detection and Ranging) data located in Mobile County, Alabama. The intent was to collect one (1) Area of Interest (AOI) that encompasses Mobile County. The total client defined AOI was 1,402 square miles or 3,361 square kilometers. Digital Elevation Models (DEMs) created from the lidar data

Original contact information:

Contact Name: Scott Kearney

Contact Org: City of Mobile

Phone: (251) 208-7942

Email: kearney@cityofmobile.org

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

1.4. Actual or planned temporal coverage of the data:

1.5. Actual or planned geographic coverage of the data:

W: -88.441916, E: -87.919427, N: 31.203599, S: 30.194669

1.6. Type(s) of data:

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

Image (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:

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:

- 2014-05-10 00:00:00 - Ground Control This Geodetic Control Survey was conducted to support Light Detection and Ranging (LiDAR) data in accordance with the National Digital Elevation Program (NDEP) and the American Society for Photogrammetry and Remote Sensing (ASPRS) guidelines. A GPS control network was performed for the purposes of establishing a three-dimensional coordinates on each of the base station locations. The control network included a combination of a National Geodetic Survey (NGS) Control Monument (MOB AP STA A1), National Geodetic Survey (NGS) CORS (AL84, AL90, AL92, ALDI, ALM) ,Mobile Control Monuments (MCC1062, MCC1067, MCC1070, MCC1072, MCC1073, MOB1000, MOB1008, MOB1009, MOB1011, MOB1023, MOB1031, MOB1034) and a capped iron found (CIPF). GPS observations at all ground control points in the network were made with Leica System 500 dual frequency GPS-receivers w/ Leica AT502 antenna and a NovAtel DL 4=L1L2 receiver w/ NovAtel NOV702 3.00 antenna between April 30, 2014 and May 2, 2014.
- 2014-01-22 00:00:00 - Aerial LiDAR Acquisition: Aerial data collection was acquired, in one (9) mission, using the ALS70 SN# 7123 at an altitude of 5500 ft. MSL. This was to support a 2.0 ppm² LiDAR point cloud. Airborne GPS and IMU data was collected during the acquisition and supported by Topcon Viper GPS base station that occupied NGS monument MOBARP. Data acquisition was collected January 12th 2014 through January 22th 2014.
- 2014-10-20 00:00:00 - LIDAR PROCESSING: LiDAR Calibration: Initial processing of the GPS data was processed using Inertial Explorer. The solution file was generated and ALSPP software was used to generate georeferenced laser returns which were then processed in strip form allowing for the QC of the overlap between strips (lines). The data from each line were combined and automated classification routines run to determine the initial surface model. This initial surface model was then verified to the LiDAR test points. LiDAR Classification: The calibrated LiDAR data was run through automated classification routines and then manually checked. The data was classified into the following classes: 1-unclassified, 2-ground, 3-low-points/noise, 9-water
- 2014-11-25 00:00:00 - GIS Development Products: -Hydro-line Collection: Hydro breaklines were compiled using LiDAR Intensity data and surface model of the project area. After the completion of breaklines, they were validated and encoded into the LiDAR surface and used to hydro-enforce/flatten all significant water bodies. -Terrain Creation: Terrain surface was created using hydro breaklines and bare ground LiDAR. -ESRI DEM Creation: ESRI DEMs were created from the breaklines and bare-earth (ground) LiDAR data. DEM were created at 2ft resolution and tiled to client Index. Mobile county bare-earth DEM dataset produced from algorithmically thinned bare-earth ground classified lidar point cloud.

- 2016-12-14 00:00:00 - The NOAA Office for Coastal Management (OCM) received the files from the City of Mobile GIS office. The files were ingested into the Digital Coast Data Access Viewer (DAV) system and this metadata record was modified to correct errors and reflect distribution through the DAV system. (Citation: Mobile County LiDAR & Bare Earth DEM)
- 2023-08-15 00:00:00 - Data were converted to cloud optimized geotiff format to support streaming. Georeferencing for the vertical was added.

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:

- 1.3. Is this a one-time data collection, or an ongoing series of measurements?
- 1.4. Actual or planned temporal coverage of the 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/49414>

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=5169>

https://noaa-nos-coastal-lidar-pds.s3.us-east-1.amazonaws.com/dem/Mobile_DEM_2014_5169/index.h

7.3. Data access methods or services offered:

This data can be obtained on-line at the following URL:

<https://coast.noaa.gov/dataviewer/#/lidar/search/where:ID=4966>

The data set is dynamically generated based on user-specified parameters.;

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.