

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:

2018 NOAA NGS Ortho-rectified 4-band Mosaic of Texas: Galveston to Mustang Island

1.2. Summary description of the data:

This data set contains ortho-rectified mosaic tiles, created by Fugro in support of the national shoreline mapping program for NOAA NGS. The source imagery was acquired using an ADS100 pushbroom camera. The original images were acquired at a higher resolution to support the final ortho-rectified mosaic.

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:

2018-12-04 to 2018-12-20

1.5. Actual or planned geographic coverage of the data:

W: -97.23352, E: -94.44196, N: 29.56227, S: 27.669849

1.6. Type(s) of data:

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

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:

National Geodetic Survey (NGS)

2.2. Title:

Metadata Contact

2.3. Affiliation or facility:

National Geodetic Survey (NGS)

2.4. E-mail address:**2.5. Phone number:****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):

Lineage Statement:

Fugro collected ADS derived orthos in December 2018 for the TX1803-TB-C AOI with 30cm GSD. Data was collected when environmental conditions meet the criteria specified. Digital imaging shall not be conducted when clouds or cloud shadow obscure the land-water interface or features of navigational significance in the scene. The landwater interface shall not be obscured by snow, ice, smoke, haze, etc. Storm systems and events (e.g. hurricanes, northeasters, and frontal boundaries) that may cause an

increase in water levels, tidal heights, and wave activity shall be avoided. Efforts to avoid sun glare shall be taken. Time of day for digital camera imagery is determined by the sun angle which shall not be less than 25 degrees above the horizon at the time of exposure. If imagery is collected between the months of November and February, the sun angle requirement shall not be less the 20 degrees. This data was collected in 22 planned lines, 31 altogether with reflights. Lines are presented below as Line Number - Date Acquired - Universal Time Coordinated (Zulu Time) of Line Beginning - Universal Time Coordinated (Zulu Time) of line Ending: 1 - 12/10/18 - 16:26:24 - 16:49:17 2 - 12/10/18 - 19:48:43 - 20:10:26 3 - 12/13/18 - 17:03:08 - 17:16:02 3 - 12/20/18 - 16:06:20 - 16:15:42 4 - 12/13/18 - 17:35:56 - 17:37:37 4 - 12/13/18 - 17:45:16 - 17:54:56 4 - 12/20/18 - 16:21:41 - 16:29:49 5 - 12/13/18 - 17:58:52 - 18:06:40 5 - 12/20/18 - 16:33:24 - 16:41:28 6 - 12/13/18 - 18:11:06 - 18:18:49 6 - 12/20/18 - 16:44:33 - 16:51:21 7 - 12/13/18 - 18:22:40 - 18:30:41 7 - 12/13/18 - 18:35:58 - 18:37:14 7 - 12/20/18 - 16:55:37 - 17:09:27 8 - 12/13/18 - 18:40:13 - 18:47:22 9 - 12/10/18 - 16:08:54 - 16:11:52 10 - 12/10/18 - 15:39:54 - 15:48:44 11 - 12/10/18 - 17:29:37 - 17:35:44 11 - 12/10/18 - 19:03:00 - 19:29:04 12 - 12/04/18 - 16:35:38 - 16:44:17 13 - 12/04/18 - 16:22:42 - 16:30:50 14 - 12/04/18 - 16:50:50 - 16:54:15 15 - 12/04/18 - 16:59:29 - 17:01:15 16 - 12/10/18 - 16:57:30 - 17:25:21 16 - 12/10/18 - 17:38:40 - 17:39:40 17 - 12/10/18 - 15:13:52 - 15:34:39 18 - 12/04/18 - 15:07:27 - 15:11:37 19 - 12/04/18 - 15:17:54 - 15:31:54 20 - 12/04/18 - 15:36:44 - 15:51:41 21 - 12/04/18 - 15:59:03 - 16:02:00 22 - 12/04/18 - 16:05:42 - 16:07:28

Process Steps:

- 2019-08-01 00:00:00 - The full resolution aerial imagery was color balanced and mosaicked inside of Inpho's Orthovista platform. The imagery was radiometrically balanced one flight line to another using the rectified ADS 16-bit 4 band (RGB-IR) imagery. No individual manipulation took place with the near-infrared band to maintain as much band integrity as possible. Once the imagery was processed through Inpho's workflow Fugro Land imported the Orthovista output into their proprietary image database software and completed any additional image feature cleanup. Fugro Land created a Tone Contrast Curve (TTC) to complete the 16-bit to 8-bit image conversion. The final image format delivered was Stripped TIFs that were geo-referenced and accompanied by TIF World Files.
- Under Fugro's direction, all surveying activities were performed by Fugro's approved ID/IQ subcontractor Terrasurv, Inc. A total of 20 ground control points to support the lidar collection, along with 35 checkpoints were collected. The National Spatial Reference System (NSRS) was used to provide control for the network. Two Continuously Operating Reference Stations (CORS) were included in the network, as well as thirteen existing NSRS benchmarks. The horizontal datum was the North American Datum of 1983 – NAD83 (2011), epoch 2010.0.

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):

Compliance with the accuracy standard was ensured by the placement of GPS ground control. The following checks were performed. 1. The ground control and airborne GPS data stream were validated through a fully analytical bundle aerotriangulation adjustment in both UTM 14N and UTM15N. The residuals of the adjustment met the required standards for accuracy which are 1 part in 10,000 of the flying height for the horizontal position (X and Y) and 1 part in 9,000 or better of the flying height in elevation (Z). 2. The DTM (Digital Terrain Model) data was checked against the project control. The technician visited and confirmed the accuracy of the project mass points during initial compilation. 3. Any topographic data was checked for edge match, consistency of attribution, and cartographic quality through visual inspection. 4. Digital orthophotography was validated through an inspection of edge matching and visual inspection for image quality.

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)
- 2.4. Point of Contact Email
- 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
- 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/63293>

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/#/imagery/search/where:ID=9212>

https://coastalimagery.blob.core.windows.net/digitalcoast/CoastalTX_2018_9212/index.html

7.3. Data access methods or services offered:

Data is available online for custom downloads

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.