

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:

2013 Pacific Gas and Electric Diablo Canyon Power Plant (DCPP): San Simeon, CA Central Coast

1.2. Summary description of the data:

The Diablo Canyon Power Plant (DCPP) LiDAR and Imagery datasets are comprised of three separate LiDAR surveys: Diablo Canyon (2010), Los Osos (2011), and San Simeon (2013). The DCPP San Simeon project study area is located primarily in San Luis Obispo County, California, encompasses approximately 195,000 acres (801 km²), and measures 75 miles in length. Watershed Sciences, Inc. (WSI) collected Light Detection and Ranging (LiDAR) data and orthophotography across the DCPP San Simeon survey area from 29 January 2013 to 25 February 2013. For optimal capture of the intertidal zone, WSI acquired LiDAR data of the coastline during seasonal low tides between 7 February 2013 and 10 February 2013. The LiDAR survey utilized a Leica ALS70 sensor in a Cessna Caravan, and an Optech Orion sensor in a Bell Long Ranger. The Leica system was used for acquisition of the inland portion of the study area. It was set to acquire 240,000 laser pulses per second (i.e., 240 kHz pulse rate) and flown at 1,100 meters above ground level (AGL), capturing a scan angle of +/- 15 degrees from nadir. The Orion system was used to acquire the intertidal portion of the study area. It was set to acquire 175,000 laser pulses per second and flown at 300 meters AGL; capturing a scan angle of +/- 13 degrees from nadir. Both laser systems were programmed to yield an average native pulse density of more than 8 pulses per sq meter over terrestrial surfaces. Digital orthophotos were collected using a 260 megapixel ultra large format digital aerial camera. Image radiometric values were calibrated to specific gain and exposure settings associated with each capture using Microsoft's UltraMap software suite. The calibrated images were saved in TIFF format for input to subsequent processes. Photo position and orientation were calculated by linking the time of image capture, the corresponding aircraft position and attitude, and the smoothed best estimate of trajectory (SBET) data in POSPAC. Within the Inpho software suite, automated aerial triangulation was performed to tie images together and to align with ground control. The orthophotos were delivered in 0.375 USGS tiles with a 3 inch pixel resolution. This survey was flown in conjunction with the DCPP Senior Seismic Hazard Analysis Committee (SSHAC) Level

3 process and as part of the DCP Long-Term Seismic Program (LTSP). In addition to aerial LiDAR data, DEM and orthophotography raster data are available for this area: San Simeon DEMs and Orthophotos.

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:

2013-02-07 to 2013-02-25

1.5. Actual or planned geographic coverage of the data:

W: -121.41154597, E: -120.40001924, N: 35.875414528, S: 35.117630114

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:

- Classify ground-level features and create the ground model. After the ground model has been created and examined for correctness, vegetation points above 8 feet are then classified using a combination of automated and manual techniques. Once vegetation is classified in the LiDAR point cloud, automated techniques are used to delineate individual units of vegetation. These automated techniques utilize the unique point geometry of vegetation to segment the individual units of vegetation and create crown polygons representing them. The polygons representing individual units of vegetation (crown) are then aggregated with adjacent polygons to produce polygons representing stands. Classify remaining points as default and check for accuracy before finalizing the point classification portion of the project.
- 2014-05-01 00:00:00 - The NOAA Office for Coastal Management (OCM) received the files in laz format via download from the OpenTopography online repository. The files contained lidar elevation and intensity measurements. The data were in UTM Zone 10, NAVD88 (orthometric) heights in feet. OCM performed the following processing for data storage and Digital Coast provisioning purposes: 1. The data were converted from UTM 10 coordinates to geographic coordinates. 2. The data were converted from NAVD88 (orthometric) heights in feet to GRS80 (ellipsoid) heights in meters using Geoid 12A. 3. The LAS data were sorted by latitude and the headers were updated.

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/49650>

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=3652>

<https://noaa-nos-coastal-lidar-pds.s3.amazonaws.com/laz/geoid18/3652/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/#/lidar/search/where:ID=3652>

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.