

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:

Hawaii Atlantis model input files calibrated for testing CMIP6 climate scenarios

1.2. Summary description of the data:

The files described here are the Main Hawaiian Islands (MHI) Atlantis Ecosystem model input files used in for testing CMIP6 climate scenarios developed by main Hawaiian Islands ROMS. These input files were used to run forecast simulations under three different CMIP6 climate change scenarios: low-emission (SSP1-2.6), moderate-emission (SSP2-4.5), and high-emission (SSP3-7.0). Files included are parameter (.prm), initial conditions (.nc), and land-based source pollutants (LBSP) forcing files. The parameter files include a run file, biological parameters, forcing parameters (list climate and pollution forcing files), harvest parameters (fishing mortality), and physics parameters. The LBSP forcing files are time series files representing spatial deposition of nutrients and sediments from land to the nearshore regions covered by Hawaii Atlantis. In recalibrating the current model based on updated climate forcing files (ROMS projections), the parameter and initial conditions files have been adjusted since initial model development. The ROMS projections used to force Hawaii Atlantis are not included in this data set, as they are from a different project.

Hawaii Atlantis was initially developed at PIFSC and further details regarding the model, as well as outputs of a model run based on older inputs, are hosted as InPort catalog item 55245. The LBSP forcing files hosted here were developed based on Ocean Tipping Points project data as part of initial model development.

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:

2020-01-01 to 2020-12-31

1.5. Actual or planned geographic coverage of the data:

W: -160.5, E: -154.806, N: 23.185, S: 18.919

Main Hawaiian Islands (MHI), including Hawaii, Kahoolawe, Kauai, Maui, Oahu, Molokai, Niihau, and Lanai.

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:

Kirsten M Leong

2.2. Title:

Metadata Contact

2.3. Affiliation or facility:

2.4. E-mail address:

kirsten.leong@noaa.gov

2.5. Phone number:

(808)725-5398

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:

Kirsten M Leong

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?

Yes

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):

Lineage Statement:

The Atlantis Ecosystem Model framework (developed by CSIRO: <http://atlantis.cmar.csiro.au/>) was used as the model platform.

Process Steps:

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):**

Sensitivity analysis and model skill assessments have been performed. These showed that the model is sensitive to plankton and shark biomass.

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)
- 7.3. Data access methods or services offered
- 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

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/72380>

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?

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:**

Pacific Islands Fisheries Science Center (PIFSC)

7.2.1. If data hosting service is needed, please indicate:**7.2.2. URL of data access service, if known:**

https://oceanwatch.pifsc.noaa.gov/xfer/PIFSC_PIRO_bulk_data_download_InPort_72380.tgz

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)

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):

Pacific Islands Fisheries Science Center - Honolulu, HI

IRC

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

PIFSC ITS performs scheduled backups

9. Additional Line Office or Staff Office Questions

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