
Plan Overview

A Data Management Plan created using DMPTool

Title: Life history constraints and spatial responses of marine fish to climate change

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Life history constraints and spatial responses of marine fish to climate change

Products of research

Describe the types of data and products that will be generated in the research, such as physical samples, space and/or time-dependent information on chemical and physical processes, images, spectra, final or intermediate numerical results, theoretical formalisms, computational strategies, software, and curriculum materials.

The data analyzed for this project are being collected by the National Oceanographic and Atmospheric Administration (NOAA) and include:

1. Long-term collections of ichthyoplankton (fish eggs and larvae) abundance and distribution from the Gulf of Alaska, Bering Sea, and California Bight regions. These three sites have been chosen for their contrasting oceanographic features, and for having some of the best ichthyoplankton sampling programs currently available nationally and internationally. Ichthyoplankton data go back to the 1950s in the California region and to the late 1970s in the Gulf of Alaska and Bering Sea regions.
2. Station oceanographic data collected during the ichthyoplankton surveys, including profiles of water temperature, salinity, density, nutrients, and dissolved oxygen.
3. Long term collections of pelagic and groundfish abundance from annual groundfish and midwater trawl surveys conducted by NOAA in the Gulf of Alaska, Bering Sea, and US West Coast regions

All of the data listed above are available at the NOAA Southeast, Northwest and Alaska regional science centers. Our project team include NOAA collaborators from each of these centers who can help us to access and prepare the data for the analyses described in the proposal.

Data format

Describe the format in which the data or products are stored (e.g. hardcopy logs and/or instrument outputs, ASCII, XML files, HDF5, CDF, etc). What metadata will be part of the data sets produced?

The data used for analyses will be placed in comma-separated-values in plain ASCII format, which are readable over long time periods. The final data file will contain dates for each observation (time, day, month and year), geographic coordinates, oceanographic variables (temperature, salinity, etc), and the abundance of ichthyoplankton or adult stages of fish standardized either by volume filtered or area swept. The final data product will occupy 5-10 GB, once oceanographic information is also included.

Metadata is available as contextual information about the data in a text based document.

Access to data, and data sharing practices and policies

Describe your plans for providing access to data, including websites maintained by your research group and contributions to public databases. If maintenance of a web site or database is the direct responsibility of your group, provide information about the period of time the web site or database is expected to be maintained. Also describe your practice or policies regarding the release of data—for example whether data are available before or after formal publication and the approximate duration of time that the data will be kept private. Describe your policies (where applicable) for protection of propriety data, privacy and confidentiality, intellectual property, or other rights or requirements.

The data used for analyses are being collected and maintained by NOAA regional centers in the Alaska, Northwest and Southeast regions. The data are already available to the public either through data portals or upon request. Example of data portals for the California region are shown here: <http://calcofi.org/data.html>, for the Alaska region are shown here: <http://access.afsc.noaa.gov/ichthyo/>.

Policies and provisions for re-use, re-distribution and production of derivatives

Describe your policies regarding the use of data provided via general access or sharing. If you plan to provide data on a website, will the site contain disclaimers, or conditions regarding the use of the data in other publications or products? If the data or products are copyrighted, how will this be noted on the website?

The data products are already available to the public either through data portals or upon request. We will comply to the policies of the NOAA regional centers.

Archiving of data

Describe whether and how data will be archived and how preservation of access will be handled. For example, will hardcopy logs, instrument outputs, and physical samples be stored in a location where there are safeguards against fire or water damage? Is there a plan to transfer digitized information to new storage media or devices as technological standards or practices change? Will there be an easily accessible index that documents where all archived data are stored and how they can be accessed? If the data will be archived by a third party, please refer to their preservation plans (if available).

Ichthyoplankton and adult fish abundance, and oceanographic data are archived and available to the general public through the NOAA regional centers. The subset of data downloaded and used in our analyses will also be made available to the general public upon publication, or no later than two years after the termination of this project. We will archive the subset of data through the OSU data archiving site XXXXXX