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:
    Grand Seasonal Median Chlorophyll Geotifs of Stellwagen Bank National Marine Sanctuary

1.2. Summary description of the data:
    Inter-annual Median seasonal Chlorophyll imagery - Each image represents one three month Season

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:
    1998 to 2005

1.5. Actual or planned geographic coverage of the data:
    W: -72.195988, E: -65.013835, N: 45.46229, S: 39.482066

1.6. Type(s) of data:
    (e.g., digital numeric data, imagery, photographs, video, audio, database, tabular data, etc.)
    geotif

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:
2.2. Title:
Metadata Contact

2.3. Affiliation or facility:

2.4. E-mail address:
NCCOS.data@noaa.gov

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:
NCCOS Scientific Data Coordinator

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:
- 2005-01-01 00:00:00 - An EASI program was run on the daily Chlorophyll geotifs of the SeaWiFS northeast region to create Seasonal Median geotifs for the specified region of the Gulf of Maine. These images were created using the following months: Winter= December, January, February Fall= September, October, November Spring= March, April, May Summer= June, July, August. These seasonal Median chlorophyll geotifs were used to make grand seasonal Median images, which consist of the average of all Median images for each season in the time series.(ex: spring ‘98,
The new geotifs were reprojected from their original SIN E019 projection to Albers ConicEqual Area, NAD 83, GRS 80. These images are scaled down from 16 bit data to 8 bit data. In order to get the Chlorophyll values from the 8 bit geotifs, the following formula should be applied to the 8 bit data values: \( CHL = 10^{(((8\text{bit} \# - 1) \times (3/250)) - 1.3)} \)

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:
- 1.7. Data collection method(s)
- 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
- 7.2. Name of organization of facility providing data access
- 7.2.1. If data hosting service is needed, please indicate
- 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/39091

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:

   7.2.1. If data hosting service is needed, please indicate:

   7.2.2. URL of data access service, if known:

7.3. Data access methods or services offered:
   Please contact the Stellwagen Banks NMS Research Coordinator for additional
   information on data access (david.wiley@noaa.gov);

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):
National Centers for Coastal Ocean Science - Silver Spring, MD

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.