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:
EmpiricalValues_Chlorophyll_GrandComposite

1.2. Summary description of the data:
This personal geodatabase contains raster images of chlorophyll concentrations in the Gulf of Maine. These raster images are a composite of several years (1997-2005) binned by season or by month, and were calculated as means or as medians. For those images binned by month, all of the months for the time series were averaged together to make one mean image. For example, Jan '98, Jan '99, Jan 00, Jan 01, Jan 02, Jan 03, Jan 04 = Grand Monthly Mean for January. For those images binned by season, the seasons were defined as the following: 1) Fall= September, October, November; 2) Winter= December, January, February; 3) Spring= March, April, May; 4) Summer= June, July, August. All chlorophyll geotifs binned by year and season were then averaged again to create a grand mean for each season. For example, spring '98, spring '99, spring 00, spring 01, spring 02, spring 03, spring 04 = Grand Seasonal Mean for Spring. These images were also reprocessed to remove land and no data values (value = 252 and value = 0, 253, 251 respectively), as well as to calculate the real world values for chlorophyll in micrograms per liter.

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:
1997 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.)
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:
   NCCOS Scientific Data Coordinator

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 - CREATING REMOTELY SENSED IMAGES: An EASI program was run on the previously created grand monthly chlorophyll geotifs of the SeaWiFS northeast region to create geotifs for the specified region of the Gulf of Maine. The new geotifs were also reprojected from their original SIN E019 projection to Albers Conical Equal Area, GCS NAD 83. These images are scaled down from 16 bit data to 8 bit data. 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 average chlorophyll geotifs were used to make grand seasonal Mean images, which consist of the average of all Mean images for each season in the time series (ex: spring '98, spring '99, spring 00, spring 01, spring 02, spring 03, spring 04 = SW1998200401_GrdSSN_AvgCHL.tif). The new geotifs were reprojected from their original SIN E019 projection to Albers Conic Equal Area, NAD 83, GRS 80. These images are scaled down from 16 bit data to 8 bit data.
- 2006-05-01 00:00:00 - REPROCESS REMOTELY SENSED IMAGERY: These remotely sensed images were reprocessed to remove land and no-data values as well as to calculate the real world values for chlorophyll. To do so, a script was written in VB 6.0 and run as a macro in ArcGIS 9.1, which reclassed the land (8 bit value = 252) and no-data values (8 bit value = 0, 253 and 251) as no data. A second macro also written in VB 6.0 calculated the real world value of chlorophyll (in micrograms per liter) using the following algorithm: CHL = 10^(((8bit # -1)*(3/250))-1.3) The resulting ERDAS Imagine files were subsequently imported into personal geodatabases.

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/39293

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.*