

INTERAGENCY AGREEMENT

BETWEEN

THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL MARINE FISHERIES SERVICE

AND

THE NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

FOR

U.S. COASTAL BLENDED *IN SITU* AND REMOTELY-SENSED
OCEAN CHLOROPHYLL DATA SETS

I. PURPOSE AND SCOPE

This agreement between the National Aeronautics and Space Administration (NASA) and the National Oceanic and Atmospheric Administration (NOAA) provides a framework for the Northeast Fisheries Science Center (NEFSC) to participate in a NASA funded research project: “U.S. Coastal Blended *in situ* and Remotely-Sensed Ocean Chlorophyll Data Sets”

The objectives of this project are to develop a high-quality chlorophyll data set of the U.S. coastal waters through the blending of *in situ* chlorophyll data and remotely-sensed data. The blending effort will provide a temporally coherent data set that combines the strengths of each observational platform.

Large alterations in the structure of key components of the Northeast Shelf ecosystem have occurred during the past several decades. NEFSC is conducting studies which provide information and assessments on the probability for rapid recovery of depressed demersal stocks of the Northeast Shelf ecosystem in general, and cod and haddock stocks on Georges Bank in particular, in relation to oceanographic and ecosystem changes. NEFSC has an ongoing research program to use shipboard data and ocean color satellite data to monitor the seasonal, annual and decadal variability of phytoplankton biomass and phytoplankton primary productivity of the Northeast United States continental shelf ecosystem and understand its relationship to fisheries productivity and living marine resources.

As part of NEFSC’s program to quantify decadal changes in northeast US coastal water, extensive *in situ* chlorophyll data collected during NEFSC’s shipboard monitoring surveys from 1977 to present are being analyzed. Additionally, ocean color satellite data from the Coastal Zone Color Scanner (CZCS) and the Sea-viewing Wide Field-of-view Sensor (SeaWiFS) are being used to develop a better understanding of natural oceanographic/environmental variability on fishery food chains. Ocean color satellites provide synoptic, frequent (daily) and high resolution (1km) data but these data are limited to the upper one-fifth of the productive euphotic

layer. Shipboard *in situ* data sample the entire productive layer and are more accurate but are spatially limited. Combining and blending the strengths of shipboard and satellite data will allow us to minimize regional biases present in the satellite data and provide for a more comprehensive and accurate time series product.

NASA's purpose relative to this agreement relates to NASA's Pathfinder Data Set and Associated Science Program (PDSP) which seeks an understanding of biogeochemical processes by emphasizing regional studies and the use of combined satellite and *in situ* data sets (NASA Research Announcement 99-OES-04).

II. REFERENCES AND AUTHORITY

The programmatic authority under which the National Marine Fisheries Service (NMFS) enters into this agreement is the Magnuson Fishery Conservation and Management Act (16 U.S.C. 1854[e]) which states "The Secretary shall initiate and maintain a comprehensive program of fishery research to carry out and further the purposes, policy, and provisions of this Act. Such program shall be designed to acquire knowledge and information, including statistics, on fishery conservation and management and on the economics and social characteristics of the fisheries".

The National Oceanic and Atmospheric Administration (NOAA) has statutory authority to enter into this agreement and receive funding pursuant to the Economy in Government Act (15 U.S.C. Sec. 1535).

III. SUBSTANCE

Responsibilities of the Northeast Fisheries Science Center

NEFSC will be responsible for conducting applied research during a three-year study on the Program. At the completion of this Program, the NEFSC will provide a final report that documents and summarizes all work completed under this agreement. Interim progress reports will be submitted at NASA's request. All Special Terms and Conditions for NASA Intragovernmental Procurements will be followed. All data and research products developed by NEFSC as part of this agreement will be made available to NASA.

Responsibilities of the National Aeronautics and Space Administration

NASA will provide high resolution (1km) satellite ocean color data acquired by the SeaWiFS for the Northeast United States coastal waters and satellite data processing software (SEADAS). Data will be provided by the Ocean Color Data Support Team, NASA Goddard Space Flight Center, under a SeaWiFS Authorized User arrangement with the NEFSC's program manager responsible for the research conducted under this agreement. NASA will provide

funding for research conducted under this agreement for three years, but such funding is dependent on future appropriations.

Reports and Documentation

A report documenting results will be prepared at the conclusion of the study and progress reports will be prepared as required by NASA.

Funding

NASA will provide funding to cover the full costs of this Program as identified on the attached budget. Funding beyond the first year will be dependent upon the availability of NASA funds.

IV. PERIOD

The agreement is effective upon the signature of the approving officials of the respective parties entering into this agreement and will remain in effect for five years or until terminated by (1) mutual agreement, (2) sixty day advanced written notice by either party, or (3) the operation/terms of this agreement, whichever shall first occur.

V. MODIFICATION/CANCELLATION PROVISION

NASA will be kept apprized of all activities conducted by NMFS, and any diversion from the agreed upon program will be by the mutual consent of both parties. The agreement may be amended at any time by the mutual consent of the parties concerned. This agreement will be reviewed periodically, but not less than annually.

VI. OTHER PROVISIONS

Nothing herein is intended to conflict with current NOAA or NASA directives. If the terms of this agreement are inconsistent with existing directives of either of the parties entering into this agreement, then those portions of the agreement which are determined to be inconsistent shall be invalid; but the remaining terms and conditions not affected by the inconsistency shall remain in full force and effect. At the first opportunity for review of the agreement, all necessary changes will be accomplished by either an amendment or by entering into a new agreement, whichever is deemed most expedient to the interest of both parties.

Should disagreement arise on the interpretation of the provisions of this agreement, or amendments and/or revisions thereto, that cannot be resolved at the operating level, the area(s) of disagreement shall be stated in writing by each party and presented to the other for consideration. If agreement on interpretation is not reached within thirty days, the parties shall forward the written presentation of the disagreement to respective higher officials for appropriate resolution.

VII. SIGNATURE OF EACH PARTY

National Marine Fisheries
Service

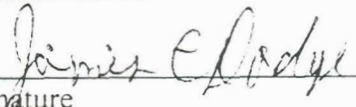
Signature

Michael P. Sissenwine
Name

Science and Research Director
Northeast Fisheries Science Center
Title

Date

National Aeronautics and Space
Administration


Signature

James C. Dodge
Name

NASA Technical Monitor
Title


Date