

**SUBMISSION AGREEMENT
BETWEEN
THE ALASKA FISHERIES SCIENCE CENTER
AND
THE NATIONAL CENTERS FOR ENVIRONMENTAL INFORMATION
FOR IMAGES OF CORALS, SPONGES, AND FISHES FROM THE MIDWATER
ASSESSMENT AND CONSERVATION ENGINEERING PROGRAM 2019 SURVEY**

2024-06-25

Introduction

This document represents the agreement that the Alaska Fisheries Science Center (NMFS>AKFSC) (the "Provider") and the National Centers for Environmental Information (NCEI) (the "Archive") have reached for submitting the Provider's data, Images of corals, sponges, and fishes from the Midwater Assessment and Conservation Engineering Program 2019 Survey, to the Archive for long-term preservation. It represents a joint effort between the Provider and the Archive to accurately document the agreement and the expectations between the two groups.

In order to ensure that the quality and integrity of the archived data is not compromised, the Provider and the Archive agree to maintain this agreement with accurate and up-to-date information through the life of the data submission.

Add comments as needed

Contacts

Persons included in all communications regarding the data submission.

Provider Contacts

Point of Contact, Research Biologist

Pamela Goddard

AKFSC

Research Biologist

206-795-3922

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Archive Contacts

Data Acquisition, Ingest, Storage

Arvind Shantharam

DOC/NOAA/NESDIS/NCEI > National

Centers for Environmental Information,

NESDIS, NOAA, U.S. Department of

Commerce

Data Manager

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Data Overview

134 Stereo Camera Deployments or Transects

Images were collected using a Lowered Stereo Camera system or LSC Each deployments contains approximately 1,000-2,000 images per camera.

In general, the camera samples consist of transects

with the speed and direction determined by the vessel movement with prevailing currents. On occasion when the current velocity was too low, the vessel engaged a small amount of propulsion to achieve speeds of approximately 1 knot (0.51 m/s) over ground. Each deployment lasted for 15 minutes, starting from when the benthos was first visible in the camera. Stereo image pairs were saved locally on the camera platform at a rate of ~ 1 frame-per-second (fps), however, a compressed single image was transmitted to the vessel at the rate of ~ 8 fps to allow for dynamic control of the vertical position of the camera. The LSC was calibrated using a standard checkerboard technique described in Williams

et al (2010). The key concept in stereo analysis is that a corresponding point that is identified in the synchronous left and right camera images can be used along with the known calibration parameters to solve for the 3D position of that point in space. An initial analysis was performed to quantify faunal density by species.

Applicable and Reference Documents

Documents applicable to or referenced from this agreement.

None

Submission Scope

Active Submission Period

2024-08-01 - 2024-09-30

Data Types

Below is a summary of the data sizing and submission schedule by data type group. Enter information on at least one data type.

Data Type Name	Data Sizing	Submission Schedule
JPEG	Data volume: 40 GB File count: 532	1 month

Reviews and Testing

No reviewing or testing required. QA/QC already completed

Providing System

Identification of the system providing the data to NCEI.

System Name: 5009Tern.nesdis.ms.noaa.gov

System Owner: DOC/NOAA/NESDIS/NCEI > National Centers for Environmental Information, NESDIS, NOAA, U.S. Department of Commerce

Physical Location: Asheville, NC

Additional Information: Add comments as needed on applicable data types, etc.

Transfer Interface

SFTP

Submission File Inventory

Information on each submitted file type from the Provider. Information on multiple file types can be added below.

File Type Name: tarball zipped files		
File Name Pattern: MACE2019_haul2_CM3-U3-31S4C_d20190422_t19_c20231012.tar.gz		
File Name Field Definitions: MACE2019 - The project acronym Haul2 - Haul #(01-266) CM3-U3-31S4C - Camera model d20190422 - year and day t19 - hour time stamp c20231012 - compression date		
Example File Name: MACE2019_haul2_CM3-U3-31S4C_d20190422_t19_c20231012.tar.gz		
File Format: JPG		
File Compression: 7z		
File Size Average: 15KB		
File Size Range: 15KB to 2GB		
File Count (Rate): 532		
Data Volume (Rate): 20GB		
Submission Schedule: 1 week to 1 month		
Additional Information: Add comments as needed for this file type		
Descriptive Information Attributes:		
Attribute	Source	Use
Name of attribute	Source of attribute value, e.g., file name	For search, results display, and/or cross-referencing

Submission Manifest

A submission manifest file with a 32-character MD5 checksum value is required for each submitted file in order to ensure the integrity of the submitted data.

File Content Specification:

A submission manifest file contains a comma delimited list of submitted file names and associated checksums for one or more submitted files

File Transmission:

SFTP - bulk transfer

File Name Pattern:

MACE2019_haul2_CM3-U3-31S4C_d20190422_t19_c20231012.tar.gz.mnf

File Name Definitions:

Look at the tarball definitions

Example File Name:

MACE2019_haul2_CM3-U3-31S4C_d20190422_t19_c20231012.tar.gz.mnf

Archive Ingest

Ingest processing steps at the Archive and communication with the Provider.

Receipt Verification:

The Archive will use the provided file name and 32-character MD5 checksum value to verify the integrity of a delivered file.

Error Reconciliation:

The Archive will report any problems or errors with file integrity, file name, checksum validation, or other errors that inhibit the data ingest and archive to the Provider. A new corresponding submission manifest will be required for files re-submitted by the Provider.

Receipt Confirmation:

The Archive will provide an inventory of the data ingested once it is completed or as requested by the Provider.

Quality Assurance:

No quality checks on the submitted data are planned.

Archive File Packaging:

Description of file packaging or re-naming by the Archive upon ingest.

Archive Storage

Archive attributes of each archived file type.

Archive File Type Name: Descriptive name for this archive file type	
Archive File Attributes/IDs:	
Attribute/ID Type	Value
Attribute/ID value	Attribute/ID value

Archive Updates

None planned.

Retention Schedule

The data will be retained in the Archive for long-term preservation in accordance with NOAA data management standards. Information on data usage and archive value may be used for making decisions on continuing the duration

of the archive.

(Notional) Disposition: Unknown/TBD

Constraints

No constraints apply or will apply to the archived data.

User Community

North Pacific Research Board (NPRB)

Alaska Fisheries Science Center: Alaska Coral and Sponge Initiative, Untrawable Habitat Team

Researchers independent and academic.

User Documentation and Metadata

The Provider will supply information to the Archive for writing and maintaining standard archive metadata, which includes data discovery information, references and data archive access links for users. The following published documents and archived items will be referenced from the metadata and made available to users.

Representation Information Items

For data to be useful to users, present and future, its format specification and characteristics must be documented and preserved with the data. Representation Information provides users with syntax (structure) and/or semantics (meaning) to decode the encoded data.

Item	Description
Item name or citation	Item description or intended use

Preservation Descriptive Information Items

Preservation Descriptive Information items contain context, provenance, and/or quality information for the data.

Item	Description
Item name or citation	Item description or intended use

Access and Dissemination

The Archive will provide access services for the data and supporting information to the designated user community.

Additional Terms

None.