

**SUBMISSION AGREEMENT
BETWEEN
THE CENTER FOR OPERATIONAL OCEANOGRAPHIC PRODUCTS AND SERVICES
AND
THE NATIONAL CENTERS FOR ENVIRONMENTAL INFORMATION
FOR CO-OPS 1-MINUTE RAW TSUNAMI WATER LEVEL DATA**

2016-06-07

Introduction

This document represents the agreement that the Center for Operational Oceanographic Products and Services (NOAA>NOS>CO-OPS) (the "Provider") and the National Centers for Environmental Information (NCEI) (the "Archive") have reached for submitting the Provider's data, CO-OPS 1-minute Raw Tsunami Water level Data, 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.

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Data Overview

The Center for Operational Oceanographic Products and Services (CO-OPS) of the National Ocean Service (NOS), an organizational element of NOAA, operates and maintains a network of approximately 200 long-term National Water Level Observation Network (NWLON) stations as part of the National Water Level Program (NWLP) for the United States coast and in the Great Lakes. CO-OPS installs and operates short-term water level stations in support of a variety of programs including hydrographic surveys, marine boundary determination, habitat restoration, dredging, climate change, and long-term sea level rise studies. CO-OPS collects current data as a part of the National Currents Observation Program (NCOP) at locations throughout the United States. The data collected and predictions derived are used to ensure safe, efficient, and environmentally sound maritime commerce. CO-OPS provides a set of water level and coastal current products. These include data and products required by NOAA's National Weather Service (NWS) to meet flood and tsunami warning responsibilities and a national network of Physical Oceanographic Real-Time Systems (PORTS) in major United States harbors. The 1 minute tsunami data is collected either from the Aquatrak acoustic or Paroscientific pressure sensor and is used to detect, notify, monitor tsunamis once an earthquake or a landslide is reported. The water level data is collected every 1 minute and averaged using special algorithm but the data is transmitted every 6 minutes via Geostationary Observing Environmental Satellites (GOES) utilizing special data collection platforms. These installations and recent upgrades allow NOAA tidal stations to become an integral part of the Pacific and Atlantic tsunami detection and warning network. CO-OPS also has developed a web page for providing the tsunami information to the NOAA's National Weather Service Alaska and Pacific tsunami Warning Centers.

Applicable and Reference Documents

Documents applicable to or referenced from this agreement.

1. Citation for applicable/reference document, e.g., an archive appraisal or project requirements document

Submission Scope

Active Submission Period

2007-01 - 2050

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
Coastal Water Level Data	Each submitted file consists of one day of observations from a single coastal water level station at 1-minute intervals.	Files are staged daily on data provider's ftp site for daily pickup by NCEI.

Reviews and Testing

Describe the reviewing and testing procedures done by the Archive for the Provider's data, transfer interface, etc., prior to the data submission.

Providing System

Identification of the system providing the data to NCEI.

System Name: tidepool.nos.noaa.gov
System Owner: NOAA>NOS>CO-OPS
Physical Location: Silver Spring, MD
Additional Information: Add comments as needed on applicable data types, etc.

Transfer Interface

Data are pulled from server via ftp. Data files are rotated off the provider's server when they reach 30 days of age.

Submission File Inventory

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

File Type Name: Coastal water level data		
File Name Pattern: [nos_id]_[start_date]TO[end_date].xml		
File Name Field Definitions: nos_id = 7-digit unique ID assigned to the station by NOS start_date = day on which this file begins [YYYYMMDD] end_date = day on which this file ends [YYYYMMDD]		
Example File Name: 1630000_20150612TO20150612.xml		
File Format: XML		
File Compression: None		
File Size Average: 100KB		
File Count (Rate): 200 files per day		
Data Volume (Rate): 20 MB per day		
Submission Schedule: Data staged by mid-afternoon on the day after data collection		
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

File Type Name: Coastal water level metadata

File Name Pattern:

[nos_id]_metadata_[date].xml

File Name Field Definitions:

nos_id = 7-digit unique ID assigned to the station by NOS

date = day to which metadata applies [YYYY-MM-DD]

Example File Name:

1630000_metadata_2015-06-12.xml

File Format: XML

File Compression: None

File Size Average: 31KB

File Count (Rate): 200 files per day

Data Volume (Rate): 6.2 MB per day

Submission Schedule: Data staged by mid-afternoon on the day after data collection

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 space-delimited list of checksums and submitted file names for one or more submitted files.

File Transmission:

The frequency and mechanism of a submission manifest transmission.

ftp://tidepool.nos.noaa.gov/pub/outgoing/NGDC_tsunami_data/[YYYYMMDD]

ftp://tidepool.nos.noaa.gov/pub/outgoing/NGDC_tsunami_data/[YYYYMMDD]/checksum_[YYYYMMDD].txt

ftp://tidepool.nos.noaa.gov/pub/outgoing/NGDC_tsunami_data/[YYYYMMDD]/[nos_id]

File Name Pattern:

checksum_[YYYYMMDD].txt

File Name Definitions:

YYYYMMDD = date on which manifest was created

Example File Name:

checksum_20150612.txt

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:

If necessary, a duplicate file is sent from the producer. In the case that some of the data is corrupt. The record will be archived in order to preserve the portion of the data that is meaningful.

Receipt Confirmation:

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

Quality Assurance:

At this time there is no QA/QC protocol in place for the one-minute tsunami data.

Archive File Packaging:

The archive package consists of 7 files (1 file per day), bundled into a tar.gz file every following Monday.

Archive Storage

Archive attributes of each archived file type.

Archive File Type Name: Gzipped tar file	
Archive File Attributes/IDs:	
Attribute/ID Type	Value
Storage System	/stornext/ngdc/archive/insitu_ocean/tide_gauge/nos_coops/data/[YYYY]/[MM]/[nos_id]_[end_date]TO[start_date].tar.gz

Archive Updates

Data submissions intended to update an existing archive record require adequate notification and justification. Updates can supersede previous data submissions as a newer or improved version, however any previously submitted data will not be removed from the archive for the purpose maintaining version control and traceability in the archive.

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

Description of the user groups and how the archived data will likely be used.

User Documentation and Metadata

For the DCP Xpert tsunami water level stations, metadata will be created for each station. The metadata will be standard FGDC with Remote Sensing Extensions. The metadata will be created by the producer in xml format and downloaded by the archive. The archive branch will ingest the metadata into the NOAA Metadata Manager and Repository (NMMR) for public distribution.

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

These raw data have not been subjected to the National Ocean Service's quality control or quality assurance procedures and do not meet the criteria and standards of official National Ocean Service data. They are released for limited public use as preliminary data to be used only with appropriate caution.

Access URL: <http://www.ngdc.noaa.gov/hazard/tide.shtml>

Additional Terms

None.