



National Centers for Environmental Information

ARCHIVE COLLECTING POLICY: NCEI DATA ARCHIVE CONSIDERATIONS

August 22, 2022

OPR: Archive Branch

Prepared by:
National Centers for Environmental information (NCEI)

Document Change Record

VERSION N	DATE	CCR #	SECTIONS AFFECTED	DESCRIPTION
1.0	March 1, 2018		All	Initial version
2.0	April 15, 2019		3, 5, Attachments	Center-wide review
2.1	October 18, 2019		3.a	Restored mistakenly deleted content in last version
2.2	August 5, 2022		3, Attachments	Center-wide review
2.3	August 22, 2022		1, 5	Reference new NOAA Strategic Plan

1. PURPOSE

This directive defines the types of data that will be acquired for long-term preservation and states limitations that may affect the acceptance of environmental and geospatial data at NOAA's National Centers for Environmental Information (NCEI). It establishes guidelines and parameters for data acquisition to help meet the NOAA priority of "Building a Climate Ready Nation by establishing NOAA as the primary federal authoritative provider of climate information and services."

2. SCOPE

This directive applies to data producers who seek to archive data for preservation and access at NCEI. It also applies to NCEI staff as they evaluate data proposed or submitted for archive at NCEI. This directive does not apply to published reports and papers, which fall under the domain of the NOAA Institutional Repository.

3. GENERAL POLICY AND GUIDANCE

- a. NCEI archives data in accordance with the NOAA Procedure for Scientific Records Appraisal and Archive Approval (See 4a) and the scope of the NCEI archives as documented in this policy. NCEI considers the following characteristics in its archive decisions:
 - NOAA or NESDIS mandate
 - Relevance and criticality to NOAA or NESDIS mission
 - Archive-ready data (well-structured and adheres to established NCEI standards)
 - User base
 - Relevance to NCEI development of use-inspired products
 - Multiple uses (i.e., research, monitoring, relevant to a variety of sectors/users)
 - Uniqueness
 - Completeness
 - Intrinsic value
- b. NCEI maintains, processes, distributes, and provides long-term stewardship for most of NOAA's environmental and geospatial data, and provides a broad range of user services. NCEI is operated by NESDIS and performs data preservation and stewardship on behalf of the entire agency. NCEI supports U.S. environmental, societal, and economic well-being through stewardship of the Nation's weather, climate, coastal, ocean and Great Lakes, space weather and geophysical information.
- c. NCEI seeks to ensure that environmental data collected by NOAA observing systems are preserved for future use. In addition, NCEI acquires data that directly complements these data, including data, metadata, and products (and their inputs) produced by NCEI. To this end, NCEI enters into agreements to archive and steward data to meet its mission and to preserve the global environmental data record. This includes participation in the World Data System. Taken together, the data archived at NCEI informs user communities and the public, benefiting an array of scientific disciplines and sectors of the U.S. economy.
- d. NCEI recognizes that other United States federal agencies are responsible for data collection and research in various environmental disciplines. Seeking to

complement the archives and missions of other agencies rather than provide redundant archival and information services to the public, NCEI acquires observations, information products, model data/output, and correlative data as appropriate, pertaining to the following general categories:

Disciplines for Which Data Are Appropriate for Archive at NCEI		
Surface Atmosphere	Upper Atmosphere	Storm Events
Atmospheric Chemistry	Climate/Atmosphere Indices	Paleoclimate Indicators
Tropical Cyclones	Clouds	Vegetation Indices
Land Surface Fluxes	Cryosphere	Soil Temperature/Moisture
Bathymetry/Seafloor Topography	Ocean Physical & Chemical Properties	Marine Geology & Geophysics
Ocean Acoustics	Ocean Circulation	Ocean Optics
Coastal Processes	Ocean Waves	Space Weather
Geologic Events	Geomagnetism	Sun-Earth Interactions
Marine Biology	Marine Fisheries	Sea Level
Related Socioeconomic Data	Ocean Microplastics	

- e. Given the abundance of environmental data and information collected and produced, NCEI must carefully consider each acquisition. This is especially true given current automated data collection processes, the sheer volume of modeled datasets, and high-resolution remote-sensed data. NCEI will, where appropriate and feasible, attempt to assist NOAA and partner scientists in meeting federal open data initiatives. Archival decisions are made after careful consideration of the factors in this policy, as well as a complete consideration of the human, technical, and financial inputs required and the availability and prioritization of limited resources.

4. AUTHORITY

- a. NOAA Procedure for Scientific Records Appraisal and Archive Approval, 2008. https://nosc.noaa.gov/EDMC/documents/NOAA_Procedure_document_final_12-16-1.pdf
- b. NOAA Administrative Order (NAO) 212-15, Management of Environmental Data and Information, 2010. https://nosc.noaa.gov/EDMC/nao_212-15.php

- c. NOAA/NESDIS Environmental Data Management Planning Policy.
http://prod.nesdis.acsitefactory.com/sites/g/files/anmtlf151/files/2021-08/npd_6010_01a.pdf
- d. NESDIS Environmental Data Management Planning Procedural Directive, Version 2.0.1. 2015. <https://nosc.noaa.gov/EDMC/PD.DMP.php>

5. APPLICABLE DOCUMENTS

- a. NOAA FY22-26 Strategic Plan, 2022.
<https://www.noaa.gov/organization/budget-finance-performance/value-to-society/noaa-fy22-26-strategic-plan>
- b. NESDIS Strategic Plan, 2016.
https://www.nesdis.noaa.gov/s3/2021-09/NESDIS_Strategic_Plan_2016_1.pdf

6. APPROVAL

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ATTACHMENT A: Definitions

Environmental data: Recorded and derived observations and measurements of the physical, chemical, biological, geological, and geophysical properties and conditions of the oceans, atmosphere, space environment, sun, and solid earth, as well as correlative data, such as socioeconomic data, related documentation, and metadata. Media, including voice recordings, video, and photographs, may be included. (From NOAA Administrative Order 212-15: Management of Environmental Data and Information. See 4b of this policy).

Geospatial Data: Information that identifies the geographic location and characteristics of natural or constructed features and boundaries on the Earth. This information may be derived from, among other things, remote sensing, mapping, and surveying technologies. Statistical data may be included in this definition at the discretion of the collecting agency. (From OMB Circular A-16: Coordination of Geographic Information and Related Spatial Data Activities, <https://www.whitehouse.gov/wp-content/uploads/2017/11/Circular-016.pdf>)

Intrinsic value: The usefulness or significance of a record derived from its physical or associational qualities, inherent in its original form and generally independent of its content, that are integral to its material nature and would be lost in reproduction. (From Society of American Archivists dictionary, <https://dictionary.archivists.org/entry/intrinsic-value.html>)

Archive: n. a physical or digital collection of historical records
v. to transfer records of continuing value to a repository and to preserve and manage those records (From Society of American Archivists dictionary, <https://dictionary.archivists.org/entry/archive.html>)