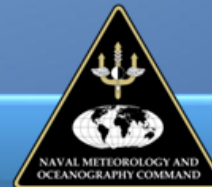


Marine Spatial Data Infrastructure Working Group

United States of America (USA) National Report



POLICY AND GOVERNANCE

United States of America, MSDI



US - International MSDI Participation

- IHO MSDIWG
- IHO Arctic Regional Hydrographic Commission (ARHC)
 - Arctic Regional MSDIWG (ARMSDIWG)
- IHO Meso American & Caribbean Sea Hydrographic Commission (MACHC)
 - MACHC MSDIWG (MMSDIWG)
- IHO South-West Pacific Hydrographic Commission (SWPHC)
 - SWPHC MSDIWG
- UN-GGIM Working Group on Marine Geospatial Information (WG-MGI)
- OGC Marine Domain Working Group (Marine DWG)
- IHO-OGC Marine Spatial Data Infrastructure Concept Development Study (MSDI-CDS)
- OGC-IHO Federated MSDI Pilot – *Connecting Land and Sea Across Nations*
 - Call for sponsors



National Policies and Legislation

- ***Presidential Executive Order 13840*** – Ocean Policy to Advance the Economic, Security, and Environmental Interests of the United States.
- ***Foundations for Evidence-Based Policymaking Act of 2017***
 - Title II – Open Government Data Act
- ***Geospatial Data Act of 2018 (GDA)***
- ***National Spatial Data Infrastructure Strategic Plan 2021-2024***
 - ***Federal Geographic Data Committee***

H. R. 302

One Hundred Fifteenth Congress

of the

United States of America

AT THE SECOND SESSION

*Begun and held at the City of Washington on Wednesday,
the third day of January, two thousand and eighteen*

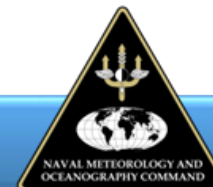
An Act

To provide protections for certain sports medicine professionals, to reauthorize Federal aviation programs, to improve aircraft safety certification processes, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

As it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

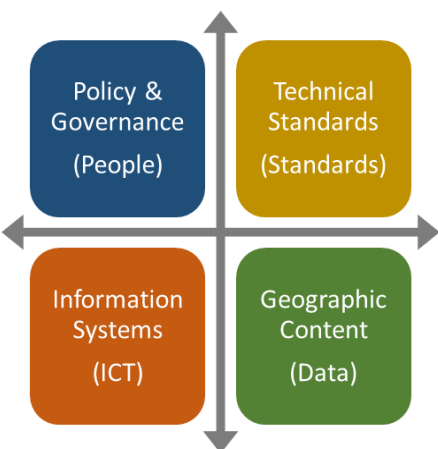
the President of the United States of America do hereby certify that



NOAA Office of Coast Survey MARINE SPATIAL DATA INFRASTRUCTURE (MSDI) STRATEGY

Marine Spatial Data Infrastructure (MSDI) -

From shipping to energy exploration, activities at sea have increased, just as they do on land. In order to ensure sustainable use of the oceans, prioritizing marine activities is essential and relies on a vast amount of Geospatial Information. MSDI is a tool that enables easier and more convenient access to various Marine Spatial Data. It is comprised of data, technical standards, information systems, policy and people. Coast Survey plays a pivotal role in the development of the United State's MSDI.



Why Marine Spatial Data Infrastructure?

- Blue Economy** - Support sustainable use of ocean resources through data access.
- Open Data** - Compliance with U.S. Federal Open Data Policies and the G8 Open Data Charter, among others.
- Efficiency** - Reduce manual data creation and enable machine to machine analytics to improve timeliness of data delivery.
- Decision Making** - Unlock the power of Geospatial Information that exist within Navigational Charts in order to better inform decision makers.

Coast Survey's MSDI Strategy

- Develop core datasets from the Coast Survey Nautical Information System.
- Deliver core datasets via web-enabled services.
- Collaborate with Federal, State, Local, and Private partners on data dissemination.
- Develop internal Data Policy & Governance to ensure the integrity of core datasets.
- Engage with International partners through the International Hydrographic Organization (IHO) MSDI Working Group (MSDIWG).

What constitutes an MSDI ?

Policy & Governance (People) - Builds a linkage to regional, national, or organizational strategy for sharing and exchanging information.

Requires willingness to cooperate between various organizations that create, share, and use information to implement policy.

Technical Standards - International Standards for geographic information exist or are being developed and , in many areas, sector-based standards are being put in place that depend on these over-arching standards.

Information Systems - Technical Infrastructure (both hardware and software) enable the delivery of data and services to allow the viewing, sharing, transformation and downloading of data.

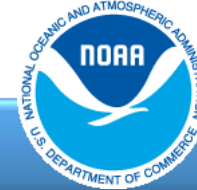
Geographic Content - Arguably the most important component of MSDI. Data can be broken into two main categories: **Reference Information** including any geographic feature that is used as a location reference for other information (often referred to as the data that "most people use most of the time") and **Application Information** known as the outer layer information which is generally application or business specific.



Office of Coast Survey
NAUTICALCHARTS.NOAA.GOV



Office of Coast Survey
National Oceanic and Atmospheric Administration



INFORMATION SYSTEMS

United States of America, MSDI



Information Systems

- Charting Information / Production Databases
 - Nautical Information System (NIS)
 - National Bathymetric Source (NBS)
- Server Infrastructure
 - GIS Servers (Internal & External)
 - Database Servers (Internal & External)
 - Physical vs. Virtual....
- Software
 - Esri
 - Caris
 - SevenCs
 - Etc.



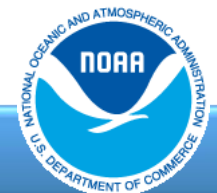
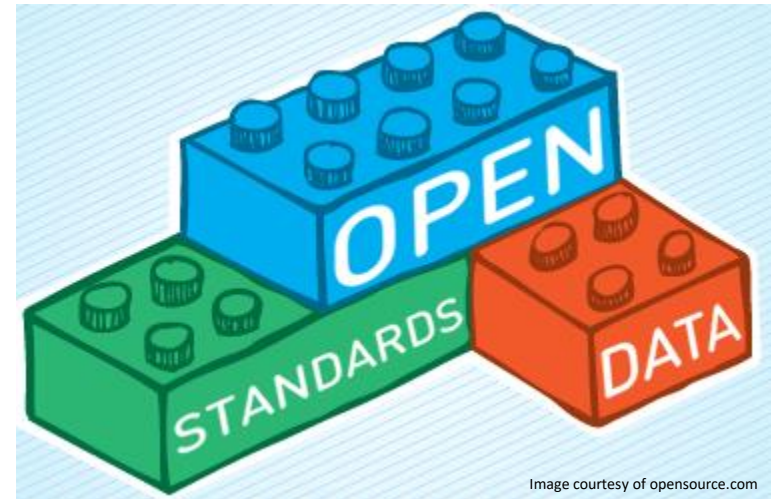
TECHNICAL STANDARDS

United States of America, MSDI



Technical Standards

- *IHO S-100 Standard*
- *Open Geospatial Consortium (OGC) Standards*
- *Federal Geographic Data Committee (FGDC) Metadata Standards*

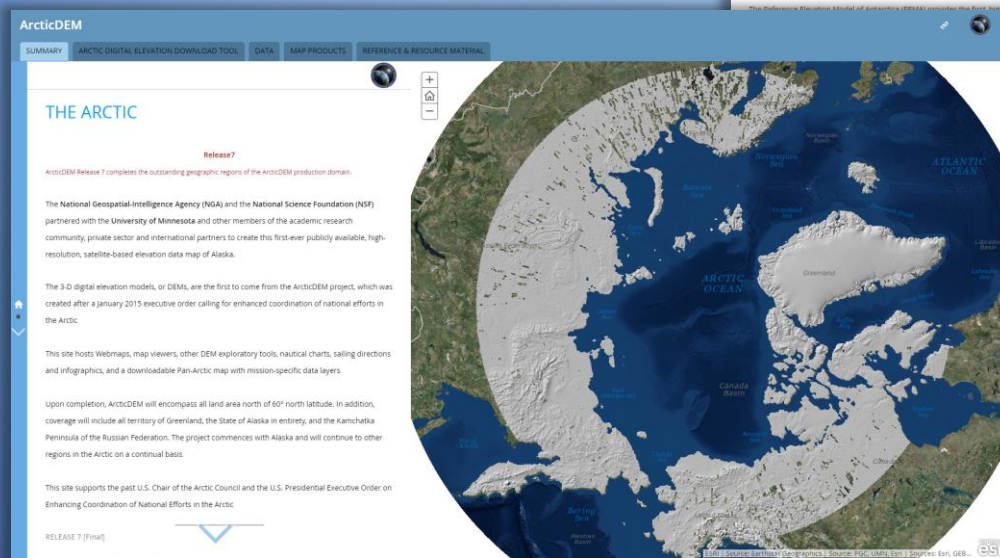
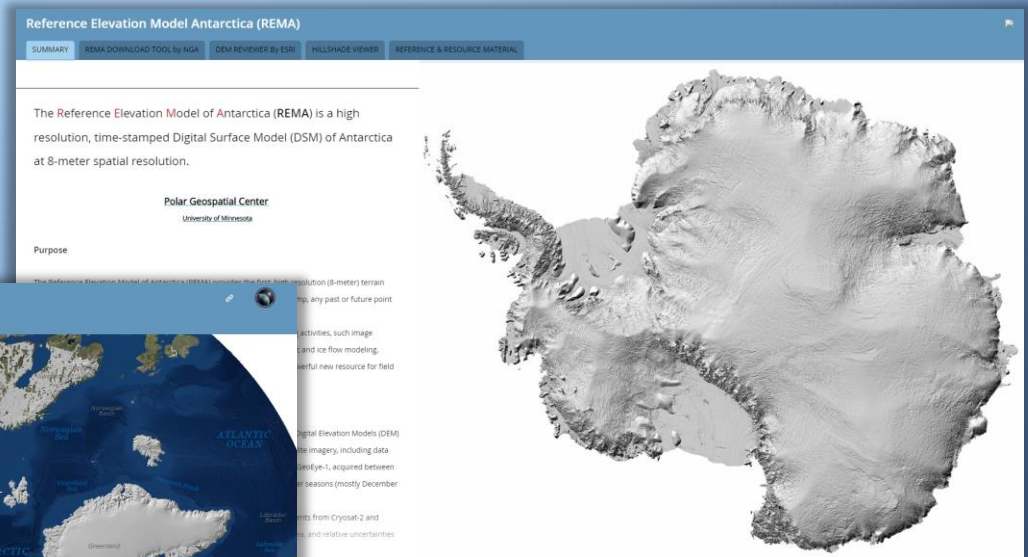


GEOGRAPHIC CONTENT

United States of America, MSDI



NGA GEOINT Services - Digital Elevation Models (DEMs)



NGA Data Integrity Project

NGA ISSUES SOLICITATION FOR DATA TRUSTWORTHINESS PROPOSALS; CHAD FILES QUOTED

Matthew Nelson December 17, 2020 News, Press Releases, Technology




Data Integrity

The National Geospatial-Intelligence Agency (NGA) plans to award \$300,000 in funds to technical proposals that seek to maintain the trustworthiness and integrity of data.

The funding opportunity is a part of the Chain of Custody – Data Integrity Competition, a project that aims to develop a prototype to secure fingerprints from end users throughout the entire data collection process to prevent potential data manipulation, NGA said Wednesday.



National SDI

 DATA.GOV


DATA TOPICS ▾ IMPACT APPLICATIONS DEVELOPERS CONTACT


The home of the U.S. Government's open data


Here you will find data, tools, and resources to conduct research, develop web and mobile applications, design data visualizations, and [more](#).


GET STARTED
SEARCH OVER 245,897 DATASETS


BROWSE TOPICS



Agriculture



Climate



Consumer



Ecosystems



Education


Agriculture


Climate


Consumer


Ecosystems


Education

BROWSE TOPICS


GeoPlatform Data.gov Search


Help Sign In


155884 results 25 per page

Search Results

Popular



Pittsburgh Wards Map
County Allegheny County / City of Pittsburgh / Western PA Regional Data Center
Allows users to look up City of Pittsburgh Wards
HTML


1 meter Digital Elevation Models (DEMs) - USGS National Map 3DEP Downloadable Data Collection
Federal U.S. Geological Survey, Department of the Interior
This is a tiled collection of the 3D Elevation Program (3DEP) and is one meter resolution. The 3DEP data holdings serve as the elevation layer of The National Map, and provide foundational elevation information
WAP IMGJ Esri REST WMS HTML + 1 more


U.S. Hourly Precipitation Data
Federal National Oceanic and Atmospheric Administration, Department of Commerce
Hourly Precipitation Data (HPD) is digital data set DSI-3240, archived at the National Climatic Data Center (NCDC). The primary source of data for this file is approximately 5,500 US National Weather
HTML HTML HTML HTML Esri REST + 12 more

Enter keywords and press 'Enter'
Surround phrases with quotations ("")

Search by geography

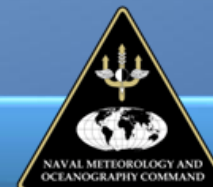

United States
Leaflet | Map data (c) OpenStreetMap contributors

SELECTED FACETS CLEAR ALL

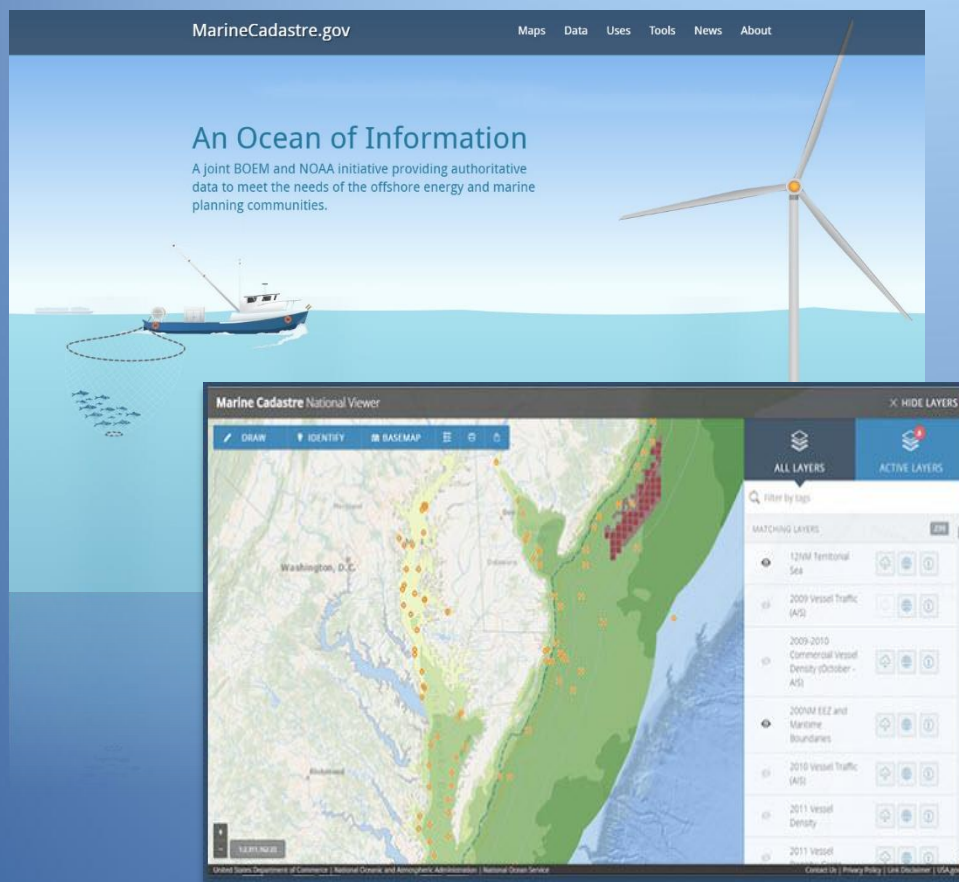
Dataset Type "geospatial"

ORGANIZATIONS show all

National Oceanic and Atmospheric Administration, 75140
Department of Commerce



Marine Cadastre

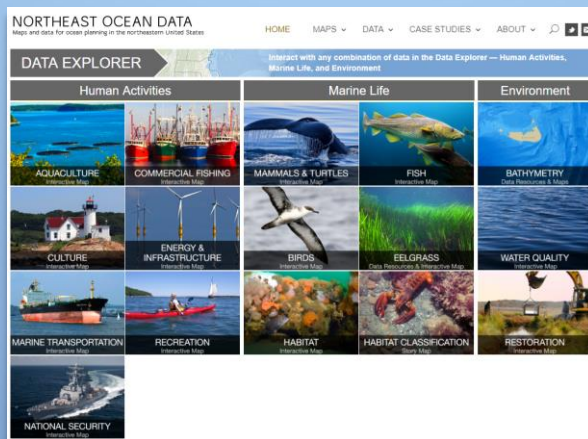


- MarineCadastre.gov provides direct access to authoritative and trusted datasets.
 - Provides data , tools, and technical support for US Ocean Planning
 - 27+ data providers contributing over 280 data layers
 - Downloadable and Service Enabled
 - National Data Viewer

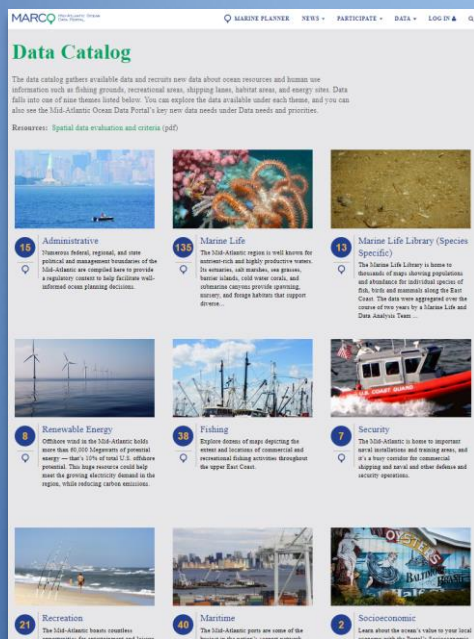


US Regional Ocean Data Catalogs/Portals

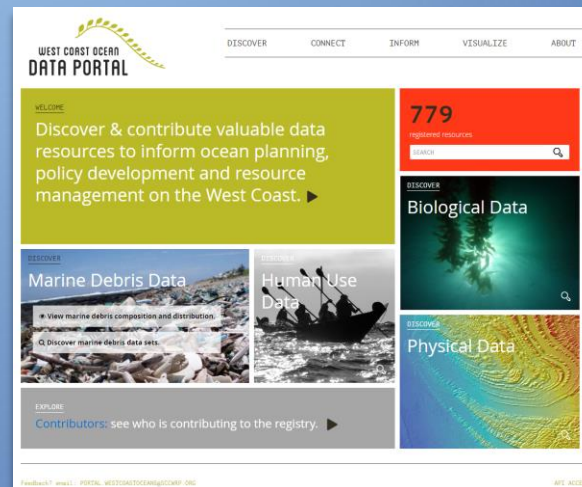
<http://www.northeastoceanandata.org/>



<http://portal.midatlanticocean.org>



<http://portal.westcoastoceans.org/>



Thank You

