

NOAA Web Mapping Applications Policy Implementation Guidance June 24, 2010

Guidance and examples for implementing the [NOAA Web mapping applications policy](#) are described in this document.

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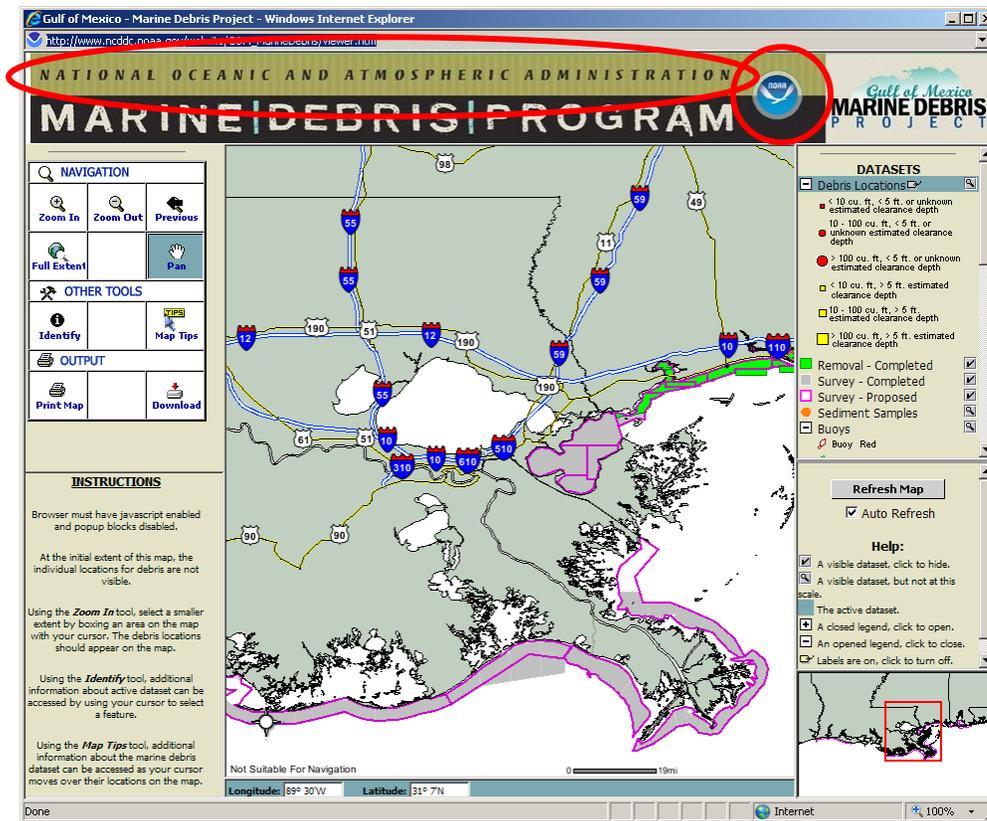
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NOAA Logo:

Policy: The [NOAA logo](#) must be included on all NOAA Web mapping applications, where feasible. If including the NOAA logo is not technically feasible, NOAA must be credited by including the text, "NOAA" or "National Oceanic and Atmospheric Administration" prominently on the Web mapping application. This also applies to print (including pdf) and graphic outputs.

Guidance: The NOAA logo (or "NOAA" text) must be included on all NOAA web pages and, where feasible, on maps produced from web mapping applications. The NOAA Logo is often found in the upper right or left hand corner of the webpage banner, but can be located elsewhere on the webpage. If the NOAA logo cannot be physically placed on the website or map, then NOAA must be credited in text somewhere on the web site.

Example 1:



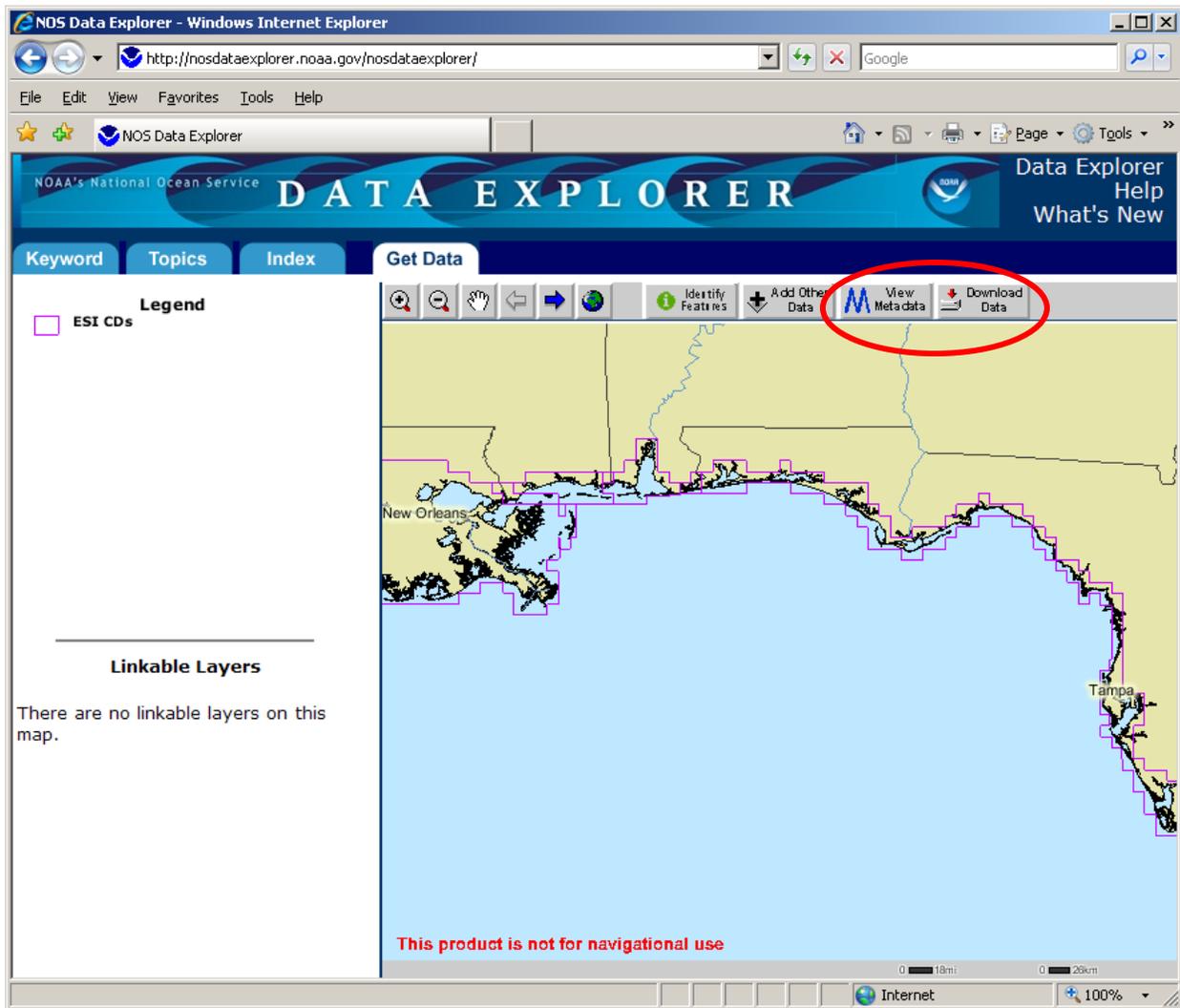
http://www.ncddc.noaa.gov/website/GOM_MarineDebris/viewer.htm

Metadata for Downloadable NOAA Data:

Policy: All NOAA data that is available for download (excluding illustrative graphics or background data that is not critical for map interpretation) must include metadata that complies with the [Federal Geographic Data Committee \(FGDC\) Metadata Standard](#). A link titled "metadata" must be provided on the Web mapping application website that directs users to the detailed metadata documentation. Metadata records may document Web mapping applications (as a single entity or application) or may document individual data layers.

Guidance: FGDC compliant metadata should be used at all times where NOAA data is available for download. Other acceptable metadata formats may include International Standards Organization (ISO), or other metadata standards used in Communities of Practice. On-line examples of FGDC and ISO metadata are available through the [NOAA Metadata Wiki site](#).

Example #1: ESRI GIS example. NOAA Data is available for download, and a link to the FGDC Metadata is available on the website where the data is downloaded.



Data Will Be Made Available in Industry Standard Formats:

Policy: All NOAA data that is available for download will be made available in appropriate Industry Standard Formats.

Guidance: Industry Standard Formats include ESRI shape files, netCDF, HDF, KML, KMZ, ASCII text, CSV, and others. See http://www.cio.noaa.gov/Policy_Programs/industry_standard_formats.html for more information.

Identifying Map Data Layers:

Policy: When interpretation, analysis, or measurement is the purpose of a Web mapping application, the primary layers of the map should be identified, either via a legend or by interactive identification tools that can display, when "clicked", the type and attributes of a feature or layer. The determination of "primary" layers is left to the discretion of the mapmaker. In some cases where the purpose of the map is narrow and the number of layers is small, the relationship between layers and symbols on a map may be self-explanatory, and no additional identifying information is required.

Guidance: The data displayed on the map (the primary layers) must be identified by a legend, caption, title, text, or by interactive identification tools that can display, when "clicked" or "moused over," the type and attributes of a feature or data layer.

Example 1: NOAA's nowCOAST (ESRI example)

The screenshot shows the NOAA's nowCOAST web mapping application. The interface is divided into several sections:

- Navigation and Controls:** Includes a search bar, navigation buttons (Zoom In, Zoom Out, Pan, etc.), and a "Link to Data" button.
- Map Area:** Displays a satellite-style map of the Atlantic Tropical Region with various data overlays. A red circle highlights a specific data point on the map.
- Map Layers Panel:** Located on the right side, it lists various data layers that can be toggled on or off. The layers include:
 - Active Layer: Station ID
 - Observations - In-Situ Stations:
 - Surface Meteorological/Ocean
 - Air Temp (deg F): 76
 - Dew Point Temp (deg F): 72
 - Wind (knots): 10
 - Mean Sea Level Pressure (mb): 1014.7
 - Visibility (miles): 4.1
 - Sea Surface Temp (deg F): 8.5
 - Significant Wave Height (feet): 1.4
 - Observations - Remote Sensors:
 - Weather Radar Mosaic
 - GOES Visible Image
 - GOES IR Image
 - Analysis/Nowcasts:
 - Extreme Wind
 - Flash Flood
 - Flood
 - Severe Thunderstorm
 - Special Marine
 - Tornado

Example 2: NOAA Center for Tsunami Research (Google Maps API example).

Tsunami Event - April 6, 2010 Sumatra - Mozilla Firefox

File Edit View History Bookmarks Tools Help

http://nctr.pmel.noaa.gov/sumatra20100406/sumatra20100406-modeldata.html

Tsunami Event - April 6, 2010 Sumatra

National Oceanic and Atmospheric Administration Pacific Marine Environmental Laboratory

NOAA Center for Tsunami Research

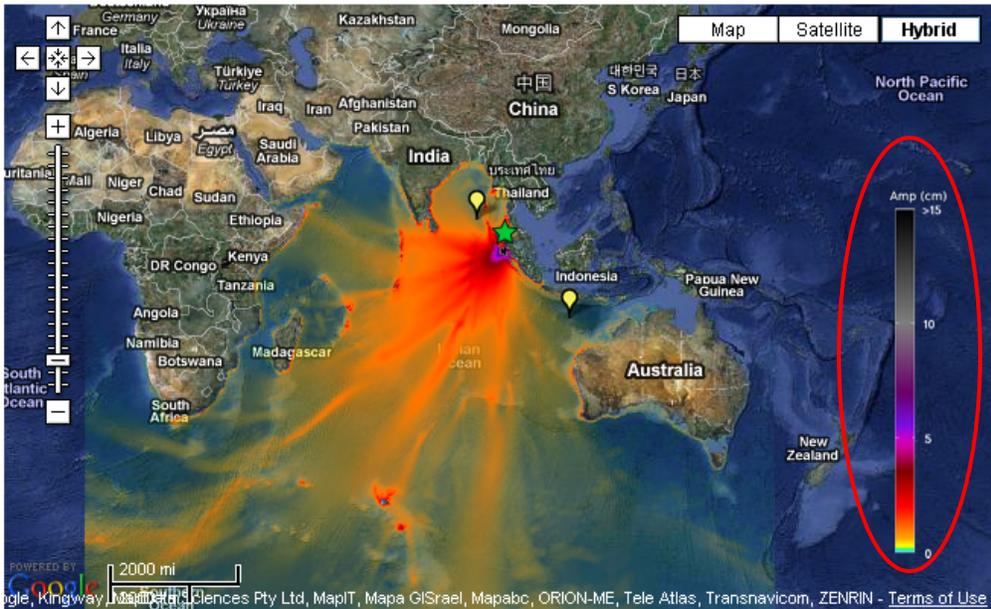
Developing methods and tools to reduce tsunami hazard and protect life

Home Tsunami Forecasting Hazard Assessment Research DART Events Info

Tsunami Event - April 6, 2010 Sumatra

Model and Data Comparison Plots

[Sumatra Tsunami Event Page](#)



Map Satellite Hybrid

North Pacific Ocean

Amp (cm) >15 10 5 0

2000 mi

Model vs Data Comparison Interactive Map with links to comparison plots and sea level data websites.
Overlaid colors show the energy propagation pattern computed with the MOST forecast model.*

DART@ buoys Earthquake epicenter

Model results comparison with sea level data composite plots (available individually from map above)

- [DART 23401 and 56001](#)

* Disclaimer: These modeling results are based on a preliminary tsunami source definition and preliminary bathymetric and topographic data that is not fully verified and has known inaccuracies. Therefore the model results are subject to revision. Click to see [NCTR metadata](#).

Data Layers Provided by Non-Federal Agencies:

Policy: Data layers provided by sources other than federal agencies (third-parties, parties outside of the federal government, non-governmental organizations, or other entities) and displayed on NOAA Web pages must be used judiciously, because these situations present special challenges with respect to maintaining agency Information Quality (IQ) Act standards. Such data layers must meet NOAA IQ requirements for NOAA use of third-party information. Thus they must be of known quality and consistent with [NOAA IQ Guidelines](#) for ensuring the quality of information disseminated by federal agencies, and any limitations, assumptions, collection methods, or uncertainties must be taken into account and disclosed. In addition, any external data from third-party providers must meet the following criteria:

- The data must be necessary for, and material to, the presentation of agency information or the delivery of agency services, and the map must credit the contributing source of the data or provide a direct link back to the third-party source data provider.
- The data must be relevant and timely, and complete steps must have been taken to ensure that data layers are actively updated to achieve the highest level of quality possible.

Guidance: No additional guidance is needed, but if you have questions about NOAA Information Quality, please contact your line office representative or visit the [NOAA Information Quality Website](#).

NOAA Information Quality Representatives:

- NESDIS – Zachary.Goldstein@noaa.gov, Peter.Grimm@noaa.gov
- NMFS – Robert.Brock@noaa.gov
- NOS – Kim.Jenkins@noaa.gov
- NWS – Asghar.Noor@noaa.gov
- OAR – Mark.Vincent@noaa.gov
- OMAO – Douglas.A.Perry@noaa.gov

Research and Development (R&D) or “Non-Operational” Web Mapping Applications:

Policy: NOAA Web mapping applications that exist for R&D or "non-operational" purposes may be publicly available to allow project partners to view the development status or to obtain end user feedback. NOAA R&D Web mapping applications must be annotated as such and are not subject to this policy until the application becomes operational.

Guidance: The website owner is best positioned to determine if the website is Operational or non-Operational. You may also contact your [NOAA Web Committee representative](#) for additional guidance.

Purpose:

Policy: The purpose of this policy is to provide direction on the use of publicly-available, operational NOAA Web mapping applications and to ensure that these applications are developed and made available to the public consistent with existing NOAA and federal agency policies and best practices.

Guidance: No further guidance required.

Scope:

Policy: This policy applies to all Web mapping applications available to the public via NOAA websites.

Guidance: No further guidance required.

Exceptions:

Policy: Websites in production operation on the effective date of this policy are exempted, provided that, within 90 days of the effective date of this policy, a list of such exempted Web mapping applications is given to the NOAA CIO by the line office CIO or, in the case of staff and corporate offices, by the staff or corporate office director.

A waiver or partial waiver from the provisions of this policy may be granted by a line office CIO or, in the case of staff and corporate offices, by the staff or corporate office director. A justification for the waiver must be submitted to the NOAA CIO and will be accepted or rejected within three weeks.

Guidance: Websites in production operation on the effective date of this policy are exempted, provided that, by October 1, 2010, a list of such exempted Web mapping applications is given to the NOAA CIO. This list will be generated from the NOAA annual Web site certification conducted through the Department of Commerce and NOAA's Office of the CIO. NOAA GIS and Web Committee line office representatives will determine which, if any, of the websites are mapping applications and whether or not they comply with the policy. A list of those that do not comply will be provided to the CIO as the official list of web mapping applications that are exempt from the policy. Web sites that do comply with the policy will also be reported.

It is up to the discretion of the web mapping application owner whether or not they will seek a waiver from the provisions of this policy. No further guidance needed on the waiver.

Deadline for Implementation:

Policy: Web mapping applications must implement this policy no later than December 31, 2010.

Guidance: No further guidance required.

Terms:

Policy: Web Mapping Application: A software application that provides, serves or displays data by creating, using, or disseminating maps via the Web. Web Mapping Applications are typically third party applications which integrate servers, software, and data in the course of serving, capturing, managing, analyzing, and displaying geographically referenced (map-based) information.

Guidance: Examples of Web Mapping Applications include Google Maps API applications, Bing Maps applications, ESRI ArcIMS applications, etc. Use of a simple graphics package such as IDL or Matlab to generate graphics for the web is NOT considered a Web mapping application