

CSDGM to ISO

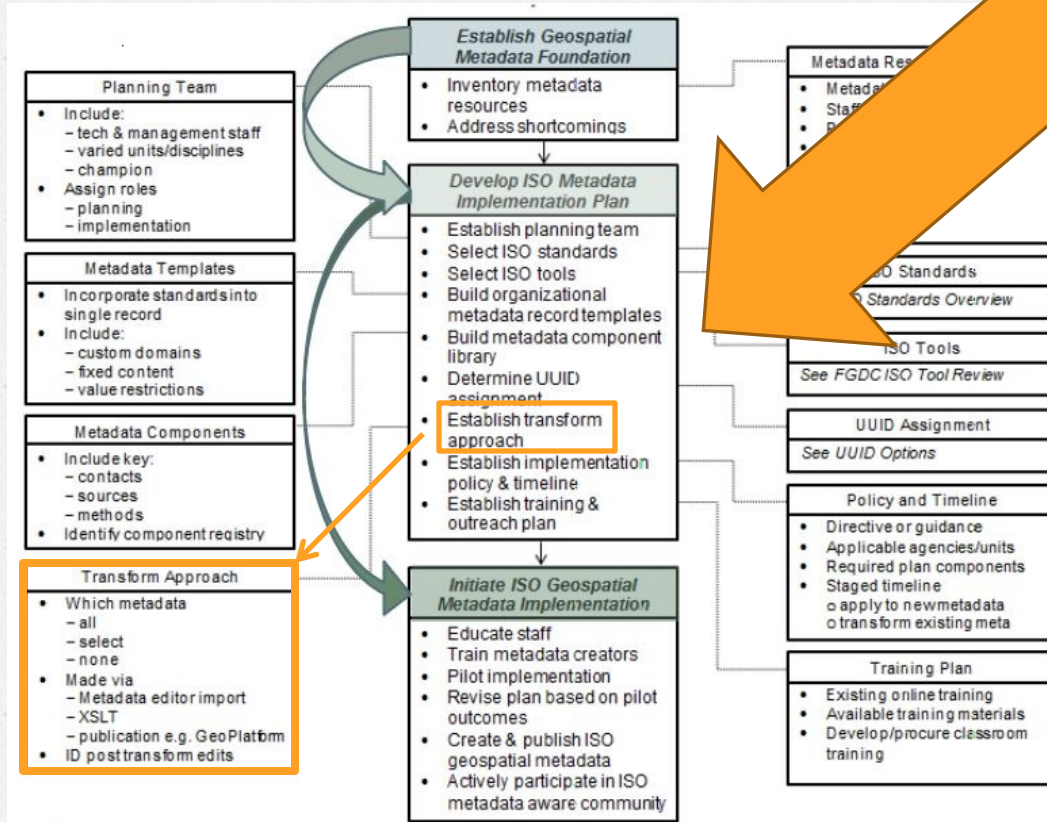
Metadata Transformations and Examples

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Workflow Model



XML Transformations

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XML Transformations

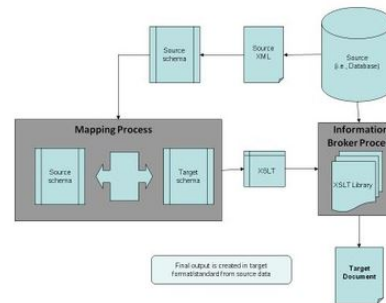
The production, validation, and management of metadata records can be challenging and time consuming. A number of content sources, formats, storage structures and standards exist and change over time. Metadata creation is often further impeded by complex of metadata standards and a variety of available tool-sets.

Point of Contact
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Metadata 'the documentation of data' can be represented in a number of standards and formats apart from the Federal Geographic Data Committee (FGDC) Content Standard for Digital Geospatial Metadata (CSDGM) and its profiles. Some standards predate the FGDC CSDGM, and others were created to meet the specific needs of particular communities. To support data management and data discovery systems, and to capture and convey information to users, many discipline-specific or community-specific metadata standards have been developed. Examples include Directory Interchange Format (DIF), Ecological Metadata Language (EML), Sensor Model Language (SensorML), Climate Science Modeling Language (CSML), and NetCDF Markup Language (NcML). Additionally, the **International Organization for Standardization (ISO)** developed a series of standards to describe geographic information. This collection of standards has created interoperability and compatibility issues. Many existing conventional metadata creation and validation methods do not address these issues.

The ability to take the necessary information and render it in a form and standard that the client/user/consumer needs is critical for the data's discovery, access, use, and preservation. Extensible Markup Language (XML) techniques are being applied to automate metadata creation and translation and to provide a way to overcome numerous obstacles to producing and maintaining relevant metadata.

The process for using XML includes developing a representative document of what a source (e.g., a data model) contains, and mapping that source to a representative document of a desired output, or target. These representative documents are called schemas (e.g. xsd file extension). This mapping between the source schema and the target schema defines a transform (xslt file extension). The transform is then applied to the source XML to create the desired output. Programmatic metadata generation provides many other benefits, such as reduced effort, consistency, enhanced accuracy,



<http://www.ncddc.noaa.gov/metadata-standards/metadata-xml/>

Available Transforms

For	Use
FGDC CSDGM	FGDC CSDGM to ISO 19115-2
FGDC Biological Profile	FGDC BIO to ISO 19115-2
FGDC Remote Sensing Extensions	FGDC RSE to ISO 19115-2
CSDGM Entity and Attribute	FGDC Section 5 to ISO 19110
HTML View (FGDC Classic style)	ISO XML to HTML view

Workflow for Transform

CSDGM
Validation
and Review

Transform
Process

ISO
Validation
and Review

ISO Transforms in MERMAid

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Metadata Enterprise Resource Management Aid

MERMAid (**M**etadata **E**nterprise **R**esource **M**anagement **A**id) is a secure, online Web-based application that allows users to establish unlimited metadata databases to organize their metadata records any way they see fit (i.e., by project, data type, personnel, etc.). NCCDC developed MERMAid as a mechanism for its data partners to generate, validate, manage, and publish their metadata. NCCDC's MERMAid is also an effective tool for providing hands-on training and support for coastal data providers who want to learn to create valid CSDGM metadata. Through MERMAid, NCCDC is making data more accessible, through the use of standard metadata.

Point of Contact

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Standards Supported

MERMAid natively supports the FGDC-authored standards. The XML transforms have been added to MERMAid to aid in the transition to ISO metadata. Records can be exported as ISO 19115-2 xml records; and Entity and Attribute section can be exported as a Feature Catalogue record.



- FGDC Content Standard for Digital Geospatial Metadata (CSDGM)
- FGDC Biological Profile
- FGDC Shoreline Profile
- FGDC Remote Sensing Extensions
- Ecological Metadata Language (EML)
- MACHine-Readable Cataloging (MARC)

Getting Started

To request a user account on MERMAid, please use the link below to provide your information, and to select a "Resource Folder" for your account. The Resource Folder will be the starting point of the management structure for your records.

- [Request an Account](#)
- [Getting Started Guide \(7.15 MB\)](#)
- [Getting Started Guide \(6.8 MB\)](#)

<http://www.ncddc.noaa.gov/metadata-standards/mermaid/>

Single Record Transform

MERMAid Hierarchical Setup

© Zope Corporation
Refresh Navigation Frame

Logged in as
Set Preferences ▼
Go

Directory of Records Properties Ingest Files Ownership Manage User Account

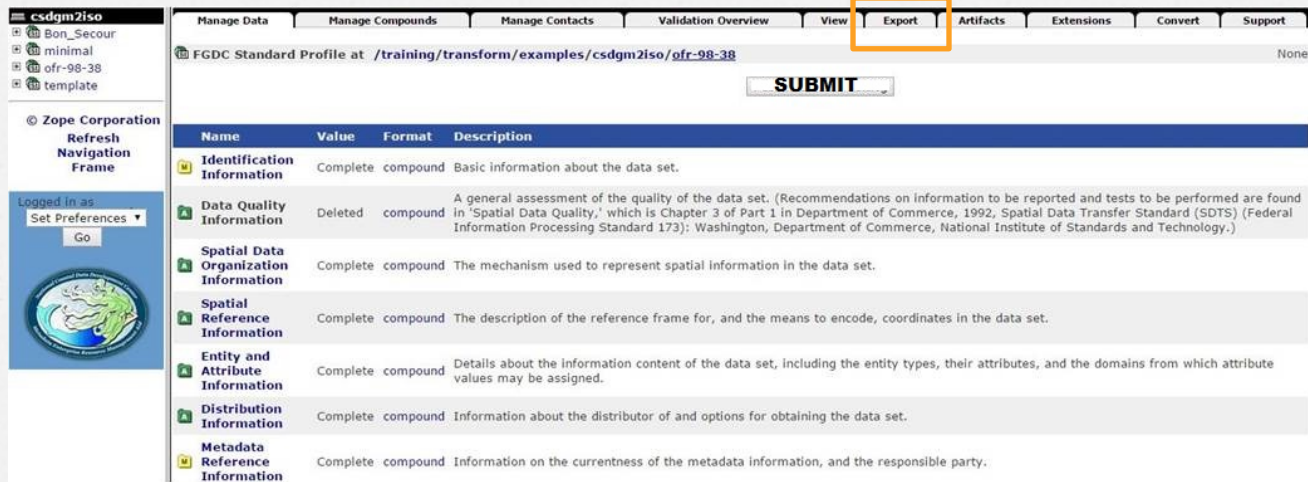
Database at /training/transform/examples **csdgm2iso**

Select type to add... Add








Type Name	Title	Status	Last Modified
<input type="checkbox"/> Bon_Secour	Bon_Secour Standard Profile	Complete	2014-10-28 11:58
<input type="checkbox"/> acl_users	User Folder		2014-10-28 10:35
<input type="checkbox"/> minimal	minimal Standard Profile	Complete	2014-10-28 10:44
<input type="checkbox"/> ofr-98-38	ofr-98-38 Standard Profile	Complete	2014-10-28 10:52
<input type="checkbox"/> template	template Standard Profile	In Progress	2014-10-28 10:37

Change ID/Title Cut Copy Delete Prune Select All

Single Record Transform



The screenshot shows a web application interface for 'csdgm2iso'. The top navigation bar includes 'Manage Data', 'Manage Compounds', 'Manage Contacts', 'Validation Overview', 'View', 'Export' (highlighted with an orange box), 'Artifacts', 'Extensions', 'Convert', and 'Support'. The main content area displays the 'FGDC Standard Profile at /training/transform/examples/csdgm2iso/gfr-98-38' with a 'SUBMIT' button. Below this is a table with the following data:

Name	Value	Format	Description
 Identification Information	Complete	compound	Basic information about the data set.
 Data Quality Information	Deleted	compound	A general assessment of the quality of the data set. (Recommendations on information to be reported and tests to be performed are found in 'Spatial Data Quality,' which is Chapter 3 of Part 1 in Department of Commerce, 1992, Spatial Data Transfer Standard (SDTS) (Federal Information Processing Standard 173); Washington, Department of Commerce, National Institute of Standards and Technology.)
 Spatial Data Organization Information	Complete	compound	The mechanism used to represent spatial information in the data set.
 Spatial Reference Information	Complete	compound	The description of the reference frame for, and the means to encode, coordinates in the data set.
 Entity and Attribute Information	Complete	compound	Details about the information content of the data set, including the entity types, their attributes, and the domains from which attribute values may be assigned.
 Distribution Information	Complete	compound	Information about the distributor of and options for obtaining the data set.
 Metadata Reference Information	Complete	compound	Information on the currentness of the metadata information, and the responsible party.

Single Record Transform

The screenshot displays the 'csdgm2iso' web application interface. The top navigation bar includes tabs for 'Manage Data', 'Manage Compounds', 'Manage Contacts', 'Validation Overview', 'View', 'Export', 'Artifacts', 'Extensions', 'Convert', and 'Support'. The breadcrumb trail indicates the current page is 'FGDC Standard Profile at /training/transform/examples/csdgm2iso/ofr-98-38'. The main heading is 'Export FGDC Record'. Below this, instructions are provided for exporting record content, followed by a list of export formats. The 'ISO 19115-2 (experimental)' option is selected and highlighted with an orange box. A 'Produce View' button is located below the list.

csdgm2iso

- Bon_Secour
- minimal
- ofr-98-38
- template

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Refresh Navigation Frame

Logged in as **kathy**
Set Preferences ▾
Go

FGDC Standard Profile at /training/transform/examples/csdgm2iso/ofr-98-38

Export FGDC Record

To export the *Record* content, first view the *Record*:

1. Select the radio button next to the desired format.
2. Click on the 'Produce View' button.
3. The view will display in a new browser window or tab.
4. If the view does not display, check for minimized windows or open browser tabs that may contain the view.
5. **IMPORTANT: Use of the ISO 19115-2 export may result in loss of data.** The ISO 19115-2 export works best if the input metadata is 100% compliant with the FGDC Standard Profile specification. **This export does not guarantee the creation of compliant ISO metadata;** additional post-export editing may be necessary to achieve ISO 19115-2 compliant metadata.

- Text
- HTML
- XML
- MARC Standard
- MARC - NOAA Central Library Format
- ISO 19115-2 (experimental)
- ISO 19110 Feature Catalogue (experimental; more info [here](#))

Produce View

ISO 191115-2 export

This XML file does not appear to have any style information associated with it. The document tree is shown below.

```
<gmi:MI_Metadata xmlns:gss="http://www.isotc211.org/2005/gss" xmlns:gts="http://www.isotc211.org/2005/gts" xmlns:gml="http://www.opengis.net/gml/3.2" xmlns:xlink="http://www.w3.org/1999/xlink"
xmlns:gco="http://www.isotc211.org/2005/gco" xmlns:gmd="http://www.isotc211.org/2005/gmd" xmlns:gmi="http://www.isotc211.org/2005/gmi" xmlns:gmx="http://www.isotc211.org/2005/gmx"
xmlns:gsr="http://www.isotc211.org/2005/gsr" xmlns:gtr="http://www.isotc211.org/2005/gtr" xmlns:gva="http://www.isotc211.org/2005/gva" xmlns:gvt="http://www.isotc211.org/2005/gvt"
http://www.ngdc.noaa.gov/metadata/published/xsd/schema.xsd">
  <gmd:fileIdentifier>
    <gco:CharacterString>gov.noaa.nodc.ncddc.</gco:CharacterString>
  </gmd:fileIdentifier>
  <gmd:language>
    <gco:CharacterString>eng; USA</gco:CharacterString>
  </gmd:language>
  <gmd:characterSet>
    <gmd:MD_CharacterSetCode codeList="http://www.isotc211.org/2005/resources/Codelist/gmxCodelists.xml#MD_CharacterSetCode" codeListValue="utf8" codeSpace="004">utf8</gmd:MD_CharacterSetCode>
  </gmd:characterSet>
  <gmd:hierarchyLevel>
    <gmd:MD_ScopeCode codeList="http://www.isotc211.org/2005/resources/Codelist/gmxCodelists.xml#MD_ScopeCode" codeListValue="dataset" codeSpace="005">dataset</gmd:MD_ScopeCode>
  </gmd:hierarchyLevel>
  <gmd:contact>
    <gmd:CI_ResponsibleParty>
      <gmd:organisationName>
        <gco:CharacterString>Dauphin Island Sea Lab</gco:CharacterString>
      </gmd:organisationName>
      <gmd:positionName>
        <gco:CharacterString>Data Management Specialist</gco:CharacterString>
      </gmd:positionName>
      <gmd:contactInfo>
        <gmd:CI_Contact>
          <gmd:phone>
            <gmd:CI_Telephone>
              <gmd:voice>
                <gco:CharacterString>251-861-2141</gco:CharacterString>
              </gmd:voice>
            </gmd:CI_Telephone>
          </gmd:phone>
          <gmd:address>
            <gmd:CI_Address>
              <gmd:deliveryPoint>
                <gco:CharacterString>101 Bienville Blvd.</gco:CharacterString>
              </gmd:deliveryPoint>
              <gmd:city>
                <gco:CharacterString>Dauphin Island</gco:CharacterString>
              </gmd:city>
              <gmd:administrativeArea>
                <gco:CharacterString>Alabama</gco:CharacterString>
              </gmd:administrativeArea>
              <gmd:postalCode>
                <gco:CharacterString>36528</gco:CharacterString>
              </gmd:postalCode>
              <gmd:country>
                <gco:CharacterString>USA</gco:CharacterString>
              </gmd:country>
            </gmd:CI_Address>
          <gmd:electronicMailAddress>
            <gco:CharacterString>metadata@disl.org</gco:CharacterString>
          </gmd:electronicMailAddress>
        </gmd:CI_Contact>
      </gmd:contactInfo>
    </gmd:CI_ResponsibleParty>
  </gmd:contact>

```

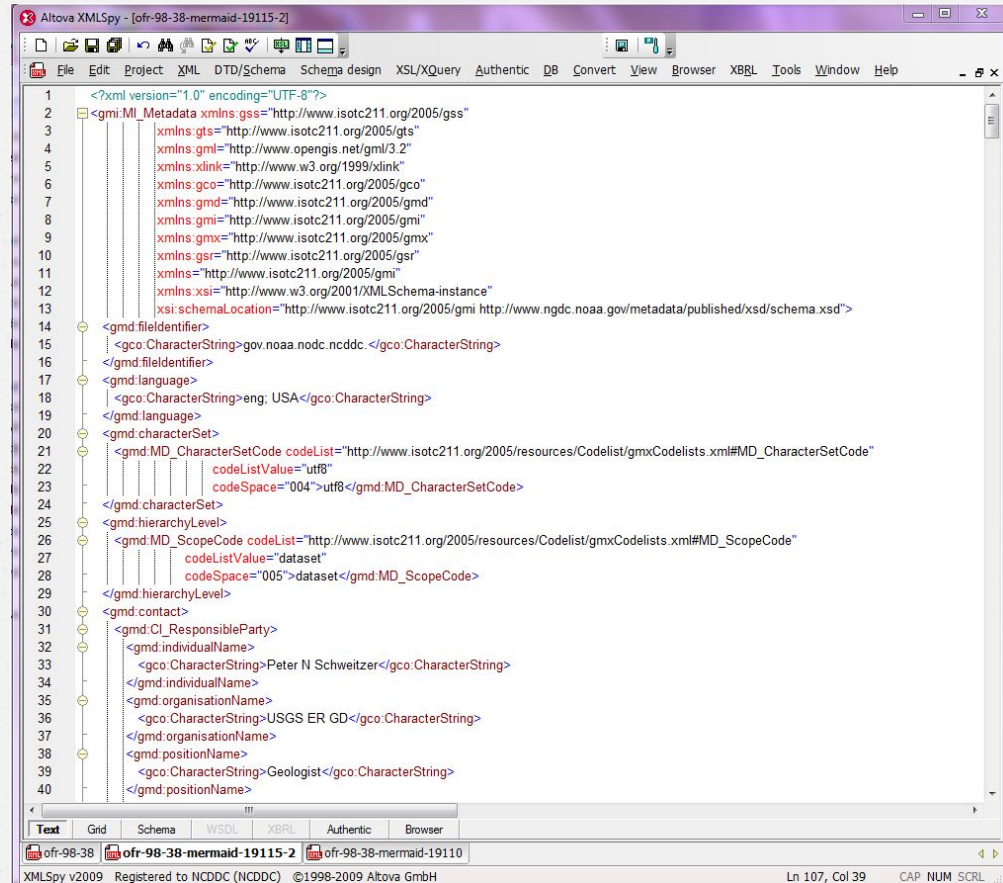
ISO 19110 export

This XML file does not appear to have any style information associated with it. The document tree is shown below.

```
<?xml version="1.0" encoding="UTF-8" ?>
<gfc:FC_FeatureCatalogue xmlns:gss="http://www.isotc211.org/2005/gss" xmlns:gts="http://www.isotc211.org/2005/gts" xmlns:gml="http://www.opengis.net/gml/3.2"
xmlns:xlink="http://www.w3.org/1999/xlink" xmlns="http://www.isotc211.org/2005/gfc" xmlns:gco="http://www.isotc211.org/2005/gco" xmlns:gfc="http://www.isotc211.org/2005/gfc"
xmlns:gmd="http://www.isotc211.org/2005/gmd" xmlns:gmx="http://www.isotc211.org/2005/gmx" xmlns:gsr="http://www.isotc211.org/2005/gsr" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="http://www.isotc211.org/2005/gfc http://www.ngdc.noaa.gov/metadata/published/xsd/schema/gfc/gfc.xsd" id="FC001">
  <gmx:name>
    <gco:CharacterString>
      Feature Catalogue for Monitoring Data Collected at Dauphin Island Station from 1998 to 1999
    </gco:CharacterString>
  </gmx:name>
  <gmx:scope gco:nilReason="unknown"/>
  <gmx:versionNumber gco:nilReason="unknown"/>
  <gmx:versionDate gco:nilReason="unknown"/>
  <gmx:language>
    <gco:CharacterString>eng; US</gco:CharacterString>
  </gmx:language>
  <gmx:characterSet>
    <gmd:MD_CharacterSetCode codeList="http://www.isotc211.org/2005/resources/CodeList/gmxCodeLists.xml#MD_CharacterSetCode" codeListValue="utf8" codeSpace="004"/>
  </gmx:characterSet>
  <gfc:producer>
    <gmd:CI_ResponsibleParty>
      <gmd:organisationName>
        <gco:CharacterString>Dauphin Island Sea Lab</gco:CharacterString>
      </gmd:organisationName>
      <gmd:positionName>
        <gco:CharacterString>Data Management Specialist</gco:CharacterString>
      </gmd:positionName>
      <gmd:contactInfo>
        <gmd:CI_Contact>
          <gmd:phone>
            <gmd:CI_Telephone>
              <gmd:voice>
                <gco:CharacterString>251-861-2141</gco:CharacterString>
              </gmd:voice>
            </gmd:CI_Telephone>
          </gmd:phones>
          <gmd:address>
            <gmd:CI_Address>
              <gmd:deliveryPoint>
                <gco:CharacterString>101 Bienville Blvd.</gco:CharacterString>
              </gmd:deliveryPoint>
              <gmd:city>
                <gco:CharacterString>Dauphin Island</gco:CharacterString>
              </gmd:city>
              <gmd:administrativeArea>
                <gco:CharacterString>Alabama</gco:CharacterString>
              </gmd:administrativeArea>
              <gmd:postalCode>
                <gco:CharacterString>36528</gco:CharacterString>
              </gmd:postalCode>
              <gmd:country>
                <gco:CharacterString>USA</gco:CharacterString>
              </gmd:country>
            </gmd:CI_Address>
          </gmd:electronicMailAddress>
        </gmd:CI_Contact>
      </gmd:contactInfo>
    </gmd:CI_ResponsibleParty>
  </gfc:producer>

```

Validate ISO XML



The screenshot displays the Altova XMLSpy interface with the following XML content:



```
<?xml version="1.0" encoding="UTF-8"?>
1 <gmi:MI_Metadata xmlns:gss="http://www.isotc211.org/2005/gss"
2   xmlns:gts="http://www.isotc211.org/2005/gts"
3   xmlns:gmi="http://www.opengis.net/gmi/3.2"
4   xmlns:xlink="http://www.w3.org/1999/xlink"
5   xmlns:gco="http://www.isotc211.org/2005/gco"
6   xmlns:gmd="http://www.isotc211.org/2005/gmd"
7   xmlns:gml="http://www.isotc211.org/2005/gml"
8   xmlns:gmx="http://www.isotc211.org/2005/gmx"
9   xmlns:gssr="http://www.isotc211.org/2005/gssr"
10  xmlns:gmi="http://www.isotc211.org/2005/gmi"
11  xmlns="http://www.isotc211.org/2005/gmi"
12  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
13  xsi:schemaLocation="http://www.isotc211.org/2005/gmi http://www.ngdc.noaa.gov/metadata/published/xsd/schema.xsd">
14   <gmd:fileIdentifier>
15     <gco:CharacterString>gov.noaa.nodc.ncddc.</gco:CharacterString>
16   </gmd:fileIdentifier>
17   <gmd:language>
18     <gco:CharacterString>eng; USA</gco:CharacterString>
19   </gmd:language>
20   <gmd:characterSet>
21     <gmd:MD_CharacterSetCode codeList="http://www.isotc211.org/2005/resources/Codelist/gmx/Codelists.xml#MD_CharacterSetCode"
22       codeListValue="utf8"
23       codeSpace="004">utf8</gmd:MD_CharacterSetCode>
24   </gmd:characterSet>
25   <gmd:hierarchyLevel>
26     <gmd:MD_ScopeCode codeList="http://www.isotc211.org/2005/resources/Codelist/gmx/Codelists.xml#MD_ScopeCode"
27       codeListValue="dataset"
28       codeSpace="005">dataset</gmd:MD_ScopeCode>
29   </gmd:hierarchyLevel>
30   <gmd:contact>
31     <gmd:CI_ResponsibleParty>
32       <gmd:individualName>
33         <gco:CharacterString>Peter N Schweitzer</gco:CharacterString>
34       </gmd:individualName>
35       <gmd:organisationName>
36         <gco:CharacterString>USGS ER GD</gco:CharacterString>
37       </gmd:organisationName>
38       <gmd:positionName>
39         <gco:CharacterString>Geologist</gco:CharacterString>
40       </gmd:positionName>
```

The interface includes a menu bar (File, Edit, Project, XML, DTD/Schema, Schema design, XSL/XQuery, Authentic, DB, Convert, View, Browser, XBRL, Tools, Window, Help) and a status bar at the bottom showing "Ln 107, Col 39" and "CAP NUM SCRL".

Evaluate Transform Output

Type	Remedy
Output not specific enough to my file: <gmd:fileIdentifier>	Update or remove; update transform
Excess or outdated information in file: <keywords> <gco:CharacterString>007</gco:CharacterString>	Check input; you may want to edit the CSDGM if easy to do so.
Don't like format of information: thesaurusName - <gco:CharacterString>ISO Topic</gco:CharacterString>	Check input; you may want to edit the CSDGM if easy to do so.
ISO includes more info than CSDGM such as CI_OnlineResource	Add additional information to ISO record. Example: CI_OnlineResource +linkage : URL +protocol:CharacterString +applicationProfile:CharacterString +name:CharacterString +description:CharacterString +function:CI_OnlineFunctionCode

Discussion : Sample Set



**Mobile Bay
National Estuary Program**
Environmental Monitoring

- Environmental Monitoring
 - Bon Secour
 - Cedar Point
 - Dauphin Island
 - Grand Bay
 - Katrina Cut
 - Meaher Park
 - Middle Bay Light
 - Perdido Pass
 - Weeks Bay
- Metadata
- Download Data
- Station Information
 - Air Monitoring Program
 - Beach Monitoring
 - GCOOS
 - Intellicast (Radar)
 - Marine Forecast
 - National Data Buoy Center
 - National Hurricane Center
 - National Weather Service
 - Rip Currents
 - Tides
 - USGS Water Data
- MBNEP Home
- DISL Home
- Contact Us

Metadata

Bon Secour

Cedar Point

Dauphin Island

Katrina Cut

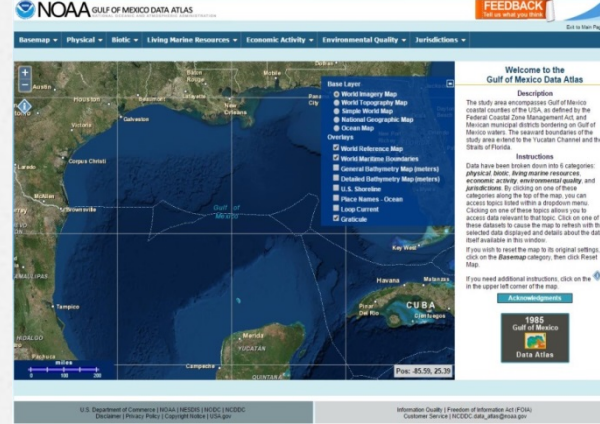
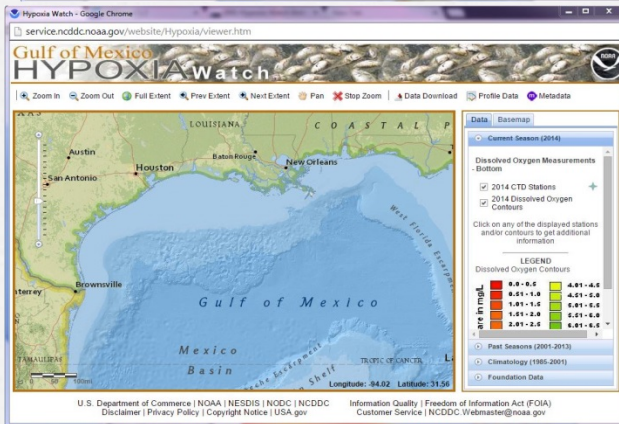
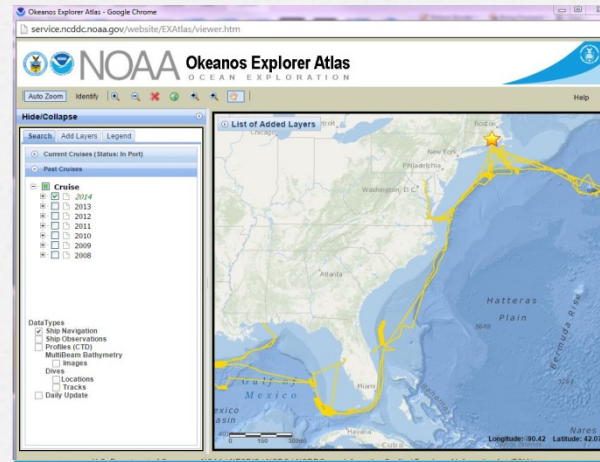
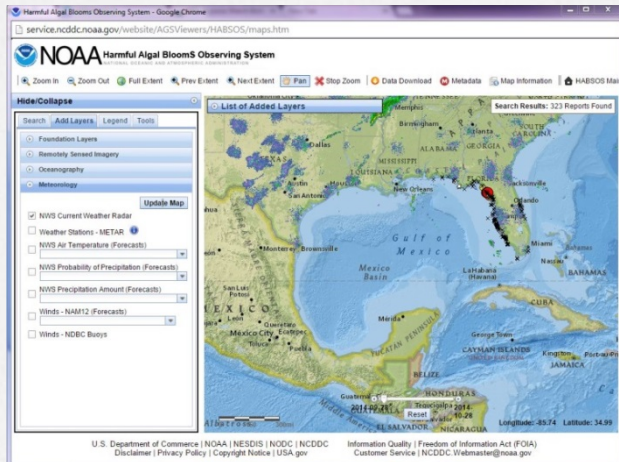
Meaher Park

Middle Bay Lighthouse

Perdido Pass





























This site is maintained by the Mobile Bay National Estuary Program.
© 2004, Dauphin Island Sea Lab.

What if I have many files? (varied)



Records in MERMAid

Items 1 through 233 of 234

Type	Name	Title	Status	Last Modified
<input type="checkbox"/>	 2001contours	2001 Hypoxia Contours	Published	2013-07-01 11:20
<input type="checkbox"/>	 2001stations	2001 Hypoxia Stations	Published	2012-11-16 10:10
<input type="checkbox"/>	 2002contours	2002 Hypoxia Contours	Published	2012-11-16 13:06
<input type="checkbox"/>	 2002stations	2002 Hypoxia Stations	Published	2012-11-14 12:24
<input type="checkbox"/>	 2003contours	2003 Hypoxia Contours	Published	2012-11-14 12:24
<input type="checkbox"/>	 2003stations	2003 Hypoxia Stations	Published	2012-11-14 12:24
<input type="checkbox"/>	 2004contours	2004 Hypoxia Contours	Published	2012-11-14 12:24
<input type="checkbox"/>	 2004stations	2004 Hypoxia Stations	Published	2012-11-14 12:28
<input type="checkbox"/>	 2005contours	2005 Hypoxia Contours	Published	2012-11-13 15:36
<input type="checkbox"/>	 2005stations	2005 Hypoxia Stations	Published	2012-11-15 15:51
<input type="checkbox"/>	 2006contours	2006 Hypoxia Contours	Published	2012-11-14 13:51
<input type="checkbox"/>	 2006stations	2006 Hypoxia Stations	Published	2012-11-15 15:47
<input type="checkbox"/>	 2007contours	2007 Hypoxia Contours	Published	2012-11-15 15:39
<input type="checkbox"/>	 2007stations	2007 Hypoxia Stations	Published	2012-11-14 12:29
<input type="checkbox"/>	 2008fall_contours	2008 Fall Hypoxia Contours	Published	2014-01-24 09:43
<input type="checkbox"/>	 2008fall_stations	2008 Fall Hypoxia Stations	Published	2012-11-14 12:22
<input type="checkbox"/>	 2008summer_contours	2008 Summer Hypoxia Contours	Published	2012-11-15 15:36
<input type="checkbox"/>	 2008summer_stations	2008 Summer Hypoxia Stations	Published	2012-11-14 12:32
<input type="checkbox"/>	 2009contours	2009 Hypoxia Contours	Published	2012-11-15 15:42
<input type="checkbox"/>	 2009stations	2009 Hypoxia Stations	Published	2012-11-16 10:16
<input type="checkbox"/>	 2010contours	2010 Hypoxia Contours	Published	2012-11-16 10:21
<input type="checkbox"/>	 2010stations	2010 Hypoxia Stations	Published	2013-03-15 10:55
<input type="checkbox"/>	 2011contours	2011 Hypoxia Contours	Published	2012-11-16 10:42
<input type="checkbox"/>	 2011stations	2011 Hypoxia Stations	Published	2012-11-16 10:42
<input type="checkbox"/>	 2012contours	2012 Hypoxia Contours	Published	2012-11-16 10:26
<input type="checkbox"/>	 2012stations	2012 Hypoxia Stations	Published	2012-11-16 10:25
<input type="checkbox"/>	 2013contours	2013 Hypoxia Contours	Published	2013-07-23 13:29
<input type="checkbox"/>	 2013stations	2013 Hypoxia Stations	Published	2013-07-23 13:54

Project Setup Example

The screenshot displays the Altova XMLSpy interface with a project named '2001contours'. The project tree on the left shows a folder 'GISRecords' containing 'XSL Files' (with a green box around it) and 'HTML Files'. The 'XSL Files' folder contains several XSL files. The 'Properties' dialog is open, showing the following settings:

- Name: Directory Path to XML Records (CSDGM)
- File extensions: xml
- Validation: Validate with: Path to XSD (schema)
- XSL transformation of XML files: Use this XSL: Path to XSLT (transforms)
- XSL:FO transformation of XML files: Use this XSL:
- XSL transformation of XSL files: Use this XML:
- Destination files of XSL transformation: Save in folder: Output Directory for ISO XML Records; File extension: .xml
- Authentic view: Use config.:

Annotations on the image include a vertical orange bar with the text 'Dir' and a horizontal orange bar at the bottom with the text '-Combined'. The XML editor shows a snippet of XML code with line numbers 1 through 41.

XMLSpy v2009 Registered to NCDDC (NCDDC) ©1998-2009 Altova GmbH
Ln 1, Col 1 CAP NUM SCRL

Bulk Record Setup

Properties

Name: Directory Path to XML Records (CSDGM) OK

File extensions: xml Cancel

Validation

Validate with: Path to XSD (schema) Browse... Window...

XSL transformation of XML files

Use this XSL: Path to XSLT (transforms) Browse... Window...

XSL:FO transformation of XML files

Use this XSL: Browse... Window...

XSL transformation of XSL files

Use this XML: Browse... Window...

Destination files of XSL transformation

Save in folder: Output Directory for ISO XML Records Browse...

File extension: .xml

Authentic view

Use config: Browse... Window...

Workflow for Transform

CSDGM
Validation
and Review

Transform
Process

ISO
Validation
and Review

Validation Error

```
31 </timeperd>
32 <status>
33 <progress>Complete</progress>
34 <update>As needed</update>
35 </status>
36 <spdom>
37 <descqgeog>Estuaries and coastal waters of Massachusetts, Virginia, Maryland, North Carolina, South Carolina, Georgia, Florida, Alabama, Texas, Hawaii, and USVI St. Thomas.<
38 <bounding>
39 <westbc>-156.46</westbc>
40 <eastbc>-62.0</eastbc>
41 <northbc>42.05</northbc>
42 <southbc>18.21</southbc>
43 </bounding>
44 </spdom>
45 <keywords>
46 <theme>
47 <themekt>None</themekt>
48 <themekey>marine</themekey>
49 <themekey>estuarine</themekey>
50 <themekey>tidal freshwater</themekey>
51 <themekey>phytoplankton</themekey>
52 <themekey>harmful algal bloom</themekey>
53 <themekey>species</themekey>
```

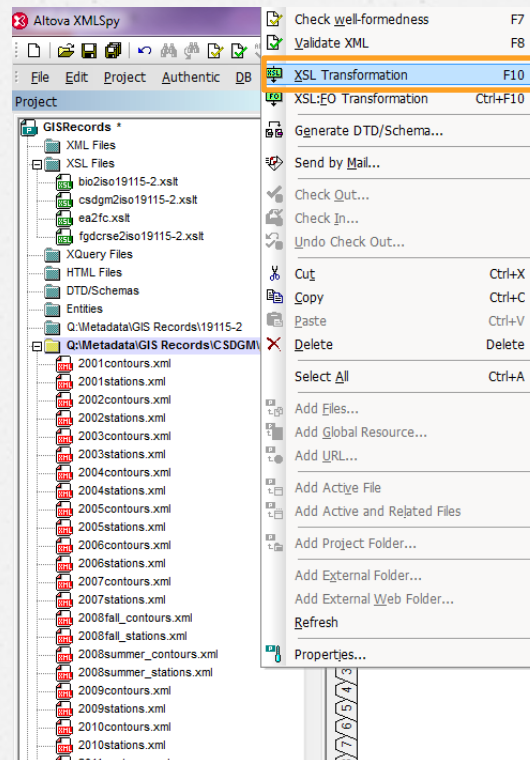
Messages

File Q:\Metadata\GIS Records\ICSDGM\published\sepmn_analysis.xml is not valid.

- Element `<descqgeog>` is not allowed under element `<spdom>`.
- Reason: The following elements are expected at this location (see below)
- Error location: `metadata / idinfo / spdom / descqgeog`
- Details

Messages Find in Files Find in Schemas XSL Outline

Bulk Transformation



Transform Output

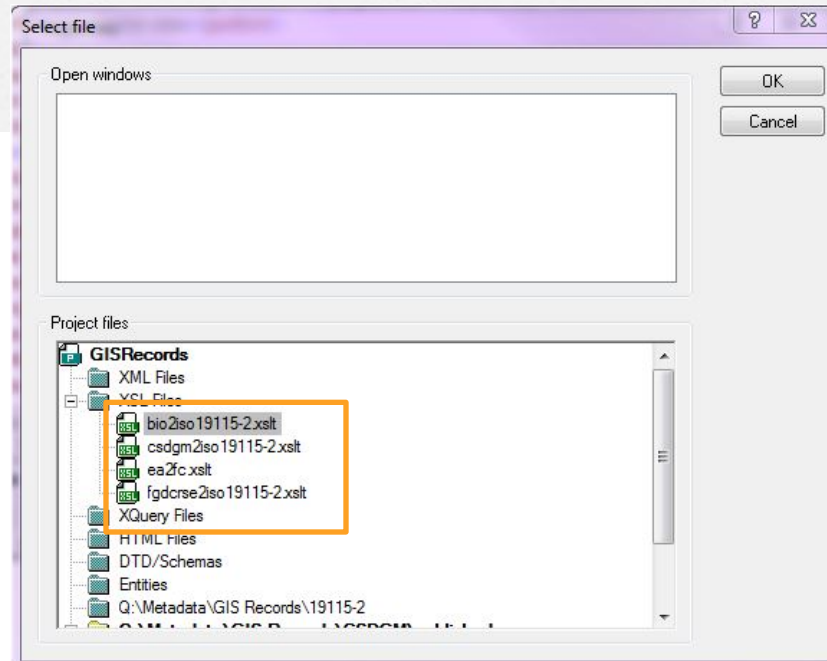
The screenshot shows the Altova XMLSpy interface with the following components:

- Project Panel (Left):** Displays a tree structure under 'GISRecords *'. The expanded path is 'Q:\Metadata\GIS Records\CSDGM\published', showing a list of XML files from '2001contours.xml' to '2014contours.xml' and '2014hypoxia_contours.xml'.
- Main Window:** Displays XML code for '2001contours.xml'. A yellow box highlights the following XML elements:

```
<gmd:fileIdentifier>  
<gco:CharacterString>gov.noaa.nodc.ncddc.file:///Q:/Metadata/GIS%  
2001contours/CSDGM/published/2001contours</gco:CharacterString>  
</gmd:fileIdentifier>  
<gmd:language>  
<gco:CharacterString>eng; USA</gco:CharacterString>  
</gmd:language>  
<gmd:characterSet>  
<gmd:MD_CharacterSetCode  
codeList=<a href='http://www.isotc211.org/2005/resources/Codelist/gmxCodeLists.xml#MD_CharacterSetCode'>http://www.isotc211.org/2005/resources/Codelist/gmxCodeLists.xml#MD_CharacterSetCode</a>  
codeSpace='004'>utf8</gmd:MD_CharacterSetCode>  
</gmd:characterSet>  
<gmd:hierarchyLevel>  
<gmd:MD_ScopeCode codeList=<a href='http://www.isotc211.org/2005/resources/Codelist/gmxCodeLists.xml#MD_ScopeCode'>http://www.isotc211.org/2005/resources/Codelist/gmxCodeLists.xml#MD_ScopeCode</a>  
codeListValue='dataset' codeSpace='005'>dataset</gmd:MD_ScopeCode>  
</gmd:hierarchyLevel>  
<gmd:contact>  
<gmd:CI_ResponsibleParty>  
<gmd:organisationName>  
<gco:CharacterString>NOAA/NESDIS/NODC/NCDDC-National Coastal Data Development Center</gco:CharacterString>  
</gmd:organisationName>  
<gmd:contactInfo>  
<gmd:CI_Contact>  
<gmd:phone>  
<gmd:CI_Telephone>  
<gmd:voice>  
<gco:CharacterString>866-732-2382</gco:CharacterString>  
</gmd:voice>  
<gmd:facsimile>  
<gco:CharacterString>228-688-2968</gco:CharacterString>  
</gmd:facsimile>  
</gmd:CI_Telephone>  
</gmd:phone>  
<gmd:address>  
<gmd:CI_Address>
```
- Bottom Panel:** Shows the active document as '2001contours' and the current view as 'XSL Output.html'.

Use Correct Transform

- NWS_AirTemperatures_24hr.xml
- NWS_AirTemperatures_48hr.xml
- NWS_AirTemperatures_72hr.xml
- NWS_PrecipitationAmts_24hr.xml
- NWS_PrecipitationAmts_48hr.xml
- NWS_PrecipitationAmts_72hr.xml
- NWS_PrecipitationProbability_24hr.xml
- NWS_PrecipitationProbability_48hr.xml
- NWS_PrecipitationProbability_72hr.xml
- NWS_Radar_Mosaic.xml
- OkeanosCTDs.xml
- OkeanosShipObs.xml
- OkeanosShipTrk.xml
- OkeanosShipTrkTh.xml
- Physical_ocean_obs.xml
- pink_shrimp_LMRA.xml
- Pipelines.xml
- Platforms.xml
- ports.xml
- red_drum_LMRA.xml
- red_group_LMRA.xml
- red_snapper_LMRA.xml
- sepmn_analysis.xml
- sepmn_sites.xml
- shippingroutines.xml
- spanish_mackere_LMRA.xml
- spiny_lobster_LMRA.xml
- StatesHigh.xml
- streamflow_usgs.xml
- Surface_marine_obs.xml
- surficial_sediments_ngdc.xml
- TABS_buoys.xml
- tilefish_LMRA.xml
- vermillion_snapper_LMRA.xml
- WCBathy.xml
- white_shrimp_LMRA.xml
- woa_salinity.xml
- woa_temperature.xml
- yellowtail_snapper_LMRA.xml
- _sampleCSDGM.xml



Evaluate Transform Output

Type	Remedy
Hardcoded information	Update or remove
Mapping does not suit needs	Check input; you may want to edit the CSDGM
Content does not map as expected	Post-edit the ISO record or tweak the transform
ISO includes more info than CSDGM	Add additional information to ISO
Extension info does not map	Be sure to select correct transform

Other Resources



The screenshot shows the NOAA National Geophysical Data Center Record Services page. The page header includes the NOAA logo and the text "NATIONAL GEOPHYSICAL DATA CENTER" and "BY ATMOSPHERIC ADMINISTRATION". There is also an "EMA" logo in the top right corner. The main content area is titled "Record Services" and describes a suite of tools for creating, validating, resolving, and improving ISO 19115-2 metadata records. It includes a "For help, see Enterprise Metadata Tools" link and an "Input Type" section with a "File" button and a "Choose File" link. Below this is a "Choose Service:" section with a list of services and their descriptions. The "ISO To Rubric" service is highlighted with an orange box. A "Submit" button is located at the bottom of the form area.

NOAA NATIONAL GEOPHYSICAL DATA CENTER BY ATMOSPHERIC ADMINISTRATION

EMA

Home Log In

Record Services

A suite of tools for creating, validating, resolving and improving ISO 19115-2 metadata records.

For help, see [Enterprise Metadata Tools](#)

Input Type: File [Choose File](#) No file chosen

URI:

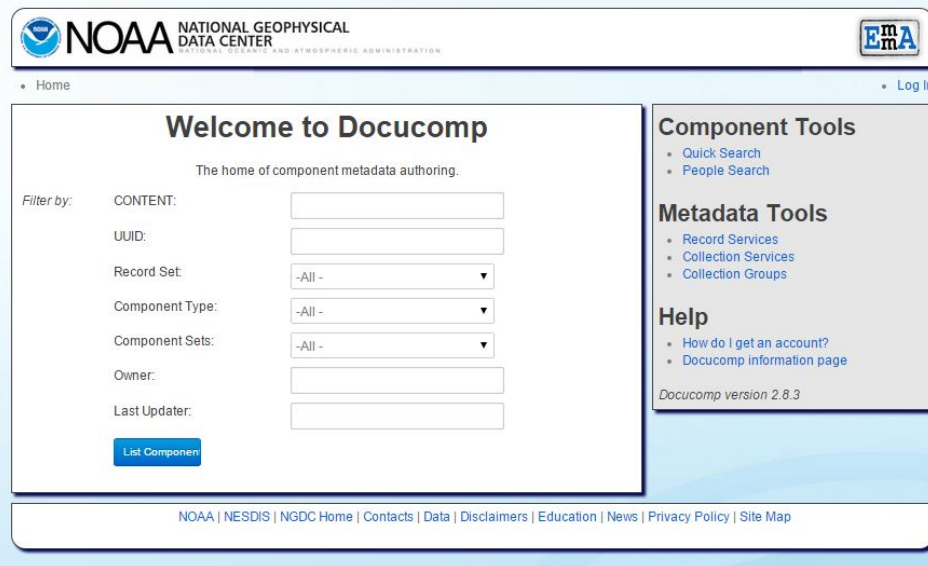
Choose Service:

- Well Formed XML
- Resolve
- Link Check(slow)
- ISO Validate
- Schematron
- NCMML To Rubric
- NCMML To ISO
- ISO To Rubric

Check for well formed xml
Resolve uri references to external metadata content
Verify online resource links are valid
Validate ISO 19115-2 metadata with xml schema
Validate ISO 19115-2 metadata with schematron
Generate quality assessment report for NCMML
Create ISO 19115-2 metadata record from NCMML
Create ISO 19115-2 metadata record from FODC
Generate quality assessment report for ISO 19115-2

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Home Log In



The screenshot shows the NOAA National Geophysical Data Center Docucomp page. The page header includes the NOAA logo and the text "NATIONAL GEOPHYSICAL DATA CENTER" and "NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION". There is also an "EMA" logo in the top right corner. The main content area is titled "Welcome to Docucomp" and describes the home of component metadata authoring. It includes a "Filter by:" section with several input fields and dropdown menus. A "List Component" button is located at the bottom of the filter section. On the right side, there are three sections: "Component Tools" with links for "Quick Search" and "People Search"; "Metadata Tools" with links for "Record Services", "Collection Services", and "Collection Groups"; and "Help" with links for "How do I get an account?" and "Docucomp information page". The version number "Docucomp version 2.8.3" is displayed at the bottom of the help section. The footer includes a navigation bar with links for "NOAA | NESDIS | NGDC Home | Contacts | Data | Disclaimers | Education | News | Privacy Policy | Site Map".

NOAA NATIONAL GEOPHYSICAL DATA CENTER NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

EMA

Home Log In

Welcome to Docucomp

The home of component metadata authoring.

Filter by:

CONTENT:

UUID:

Record Set:

Component Type:

Component Sets:

Owner:

Last Updater:

Component Tools

- [Quick Search](#)
- [People Search](#)

Metadata Tools

- [Record Services](#)
- [Collection Services](#)
- [Collection Groups](#)

Help

- [How do I get an account?](#)
- [Docucomp information page](#)

Docucomp version 2.8.3

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Questions?

email - ncddcmetadata@noaa.gov