



The USGS Coastal and Marine Geology Data Catalog: Using controlled vocabulary keywords for filters

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USGS Coastal/Marine Hazards and Resources Program



Image Credit: Discovery

Mission. The **USGS** serves the Nation by providing reliable scientific information to describe and understand the Earth; minimize loss of life and property from natural disasters; manage water, biological, energy, and mineral resources; and enhance and protect our quality of life.

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USGS Coastal and Marine Geology Data Catalog

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Data Search



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We use controlled vocabularies
to define and label
categories of data
so you can find the data you need.

Today's topics

1. What's a controlled vocabulary?
2. What's the USGS CMG Catalog?
3. How controlled vocabularies can be used to find data in the catalog.
4. The controlled vocabulary keywords are in the metadata records.
5. This approach scales.

A ***controlled vocabulary*** is an established list of standardized terminology for use in indexing and retrieval of information.

OECD Glossary of Statistical Terms,

<https://stats.oecd.org/glossary/detail.asp?ID=6260>



Local forecast by "City, St" or ZIP code

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The National Weather Service issued forecasts for sky condition, temperature, wind and precipitation on a routine basis. The terminology used in these forecasts is quite variable. Listed below are descriptors of regularly used weather terms and their meanings to help give a better understanding of each forecast.

Sky Condition

The sky condition describes the predominant/average sky cover based on percent of the sky covered by opaque (not transparent) clouds. If a high probability of precipitation (60% or greater) is expected, then the sky condition may be omitted since it is inferred from the precipitation forecast.

Sky Condition	Opaque Cloud Coverage
Clear/Sunny	1/8 or less
Mostly Clear/Mostly Sunny	1/8 to 3/8
Partly Cloudy/Partly Sunny	3/8 to 5/8
Mostly Cloudy	5/8 to 7/8
Cloudy	7/8 to 8/8

Temperature

The temperature in a forecast is used to describe the forecast maximum and minimum temperature, or in some cases, the temperature at a specific time.

Temperature Description	Forecast Meaning
Around 50/Near 50	A range of temperatures from 48 to 52
Lower 50s	Temperatures of 50, 51, 52, 53, 54
Mid 50s	Temperatures of 53, 54, 55, 56, 57
Upper 50s	Temperatures of 56, 57, 58, 59
50s	A range of temperatures from 50 to 59





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Data Search



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Search Results

Filter By:

USGS Thesaurus Keywords

- marine geophysics (1531)
- geospatial datasets (1349)
- sea-floor characteristics (1120)
- coastal processes (694)
- navigational data (689)
- bathymetry (624)

< 1 2 3 ... 448 449 >

Results: 10 Sort By: Relevance

Displaying 1 to 10 of 4484

30-m Hillshaded relief image produced from swath interferometric, multibeam, and lidar datasets (navd_bath_30m.tif GeoTIFF Image; UTM, Zone 19N, WGS 84)

Data Source: Coastal and Marine Geoscience Data System (CMGDS)

Begin Year: 1994



Filter By:

USGS Thesaurus Keywords

- marine geophysics (1531)
- geospatial datasets (1349)
- sea-floor characteristics (1120)
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- navigational data (689)
- bathymetry (624)
- image mosaics (585)
- marine geology (583)
- sea-floor acoustic reflectivity (538)
- sidescan sonar (486)
- erosion (318)
- multibeam sonar (297)
- topography (297)
- shoreline accretion (276)
- bathymetry measurement (268)

[more](#)

Marine Realms Information Bank Keywords

- marine geophysics (632)
- seabed (573)
- sidescan sonar (384)
- shoreline erosion (377)
- coastal processes (376)
- shoreline accretion (334)
- effects of coastal change (323)
- exclusive economic zone (eez) (288)
- waves (206)

Data Categories for Marine Planning

- distributions (1019)
- physical habitats and geomorphology (646)
- bathymetry and elevation (537)
- substrate (209)
- habitat (59)
- assessments (48)
- physical/chemical features (40)
- predictions (34)
- water column features (25)
- sand resources (15)
- ecological functions and services (3)
- biological occurrence (2)
- biodiversity (1)
- mammals (1)
- natural gas resources (1)

[more](#)

Data Source

- Coastal and Marine Geoscience Data System (CMGDS) (4374)
- Marine Realms Information Bank (MRIB) (110)

Author

- VeeAnn A. Cross (269)
- Peter Dartnell (186)
- Patrick Barnard (181)
- Li Erikson (180)
- Amy Foxgrover (179)

[Get Data](#)

[California State Waters Map Series--Offshore of Scott Creek Web Services](#)

Data Source: Coastal and Marine Geoscience Data System (CMGDS)
Publication Date: 20150101

In 2007, the California Ocean Protection Council initiated the California Seafloor Mapping Project to create a comprehensive seafloor map of high-resolution bathymetry, marine benthic [more](#)

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[Interferometric Swath Bathymetric Data Collected in 2012 from the Chandeleur Louisiana \(U.S. Geological Survey Field Activity Number 12BIM03\)](#)

Data Source: Coastal and Marine Geoscience Data System (CMGDS)
Publication Date: 2014

As part of the Barrier Island Evolution Research Project, scientists from the U.S. Geological Survey Coastal and Marine Science Center conducted nearshore geophysical surveys off the [more de](#)

[Get Data](#)

[Location of grab samples from inner continental shelf of North Carolina during Survey research cruises 1999-045-FA, 2001-005-FA, 2002-013-FA, 2004-005-FA \(grabsamples.shp, geographic, WGS 84\)](#)

Data Source: Coastal and Marine Geoscience Data System (CMGDS)
Publication Date: 2013

The northeastern North Carolina coastal system, from False Cape, Virginia, to Cape Lookout, has been studied by a cooperative research program that mapped the Quaternary geologic frame

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Keyword finder

Help

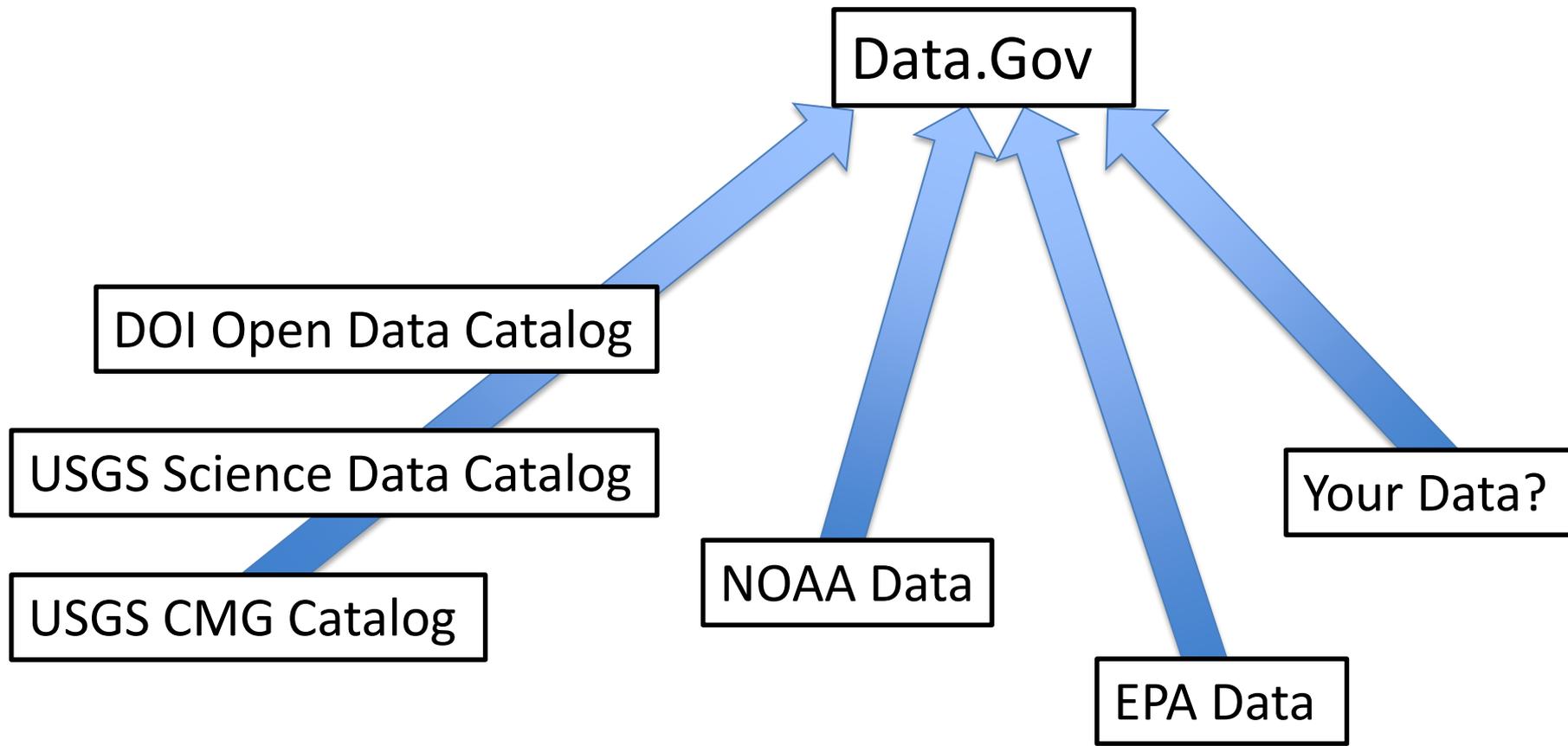
Vocabularies

CommonGeographicAreas USGSThesaurus iso19115 DCMP MRIB keywords

CMECS

- Common geographic areas**
Names and identifiers of commonly-known geographic areas including oceans, continents, countries, states and provinces in North America, counties in the United States, USGS map quadrangles, and hydrologic units, nested and cross-referenced by overlap.
Characteristics: hierarchical, transitive, place, ambiguous labels
- USGS Thesaurus**
Topics and methods of scientific study carried out by USGS, with product types, scientific disciplines, geologic time, and types of institutional structure and activities. Broad and shallow, used to help people find scientific information.
Characteristics: hierarchical, transitive, disciplines, methods, organizational functions, temporal, theme, distinct labels
- Alexandria Digital Library Feature Type Thesaurus**
Types of named geographic features. Applicable also to many unnamed features but reflects the level of detail traditionally shown on maps, so some feature types specified in scientific studies may not be well represented here. Not highly specific.
Characteristics: hierarchical, transitive, theme, distinct labels





Summary

- A ***controlled vocabulary*** is an established list of standardized terminology for use in indexing and retrieval of information.*
- The ***USGS CMG Catalog*** is the authoritative list of data available from the USGS Coastal/Marine Hazards and Resources Program.
- Terms from controlled vocabularies can be used to discover data in the Catalog.
- The controlled vocabulary keywords are in the keyword fields of metadata records.
- We could work together to use this approach for all our data.

* Definition from OECD Glossary of Statistical Terms, <https://stats.oecd.org/glossary/detail.asp?ID=6260>

Address List

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CMG Catalog

<https://data.usgs.gov/cmgp/>

USGS Science Data Catalog

<https://data.usgs.gov/datacatalog/>

USGS Thesaurus Term Finder

<https://www2.usgs.gov/science/tab-term.html>