



# CatMDEdit – Metadata editor

```

<meta name="HTTP-EQUIV"
  <dem/>
content="text/html;charset=iso-8859-1">
href="http://iaaa.index.html/1/hi.html" shape="RECT" />
<meta name="Headline" content="Introduction">
<area alt="AAA" "AAA" coords="7,9,167,32" />
<meta name="Section" content="Diseño_Gráfico">
<"panor"="emau dem" />
<meta name="Description" content="Some enterprises
urgent re-ingeneering, let's take over." />
<meta name="Banner" />
<meta name="Description" content="Some enterprises
urgent re-ingeneering, let's take over." />
<meta name="Introduction" content="Diseño_Gráfico">
<meta name="AAA" coords="7,9,167,32" />
<meta name="AAA" coords="7,9,167,32" />
<meta name="AAA" coords="7,9,167,32" />
<meta name="AAA" coords="7,9,167,32" />
</pre>

```

University of Zaragoza  
Computer Science and Systems Engineering Department  
Advanced Information Systems Laboratory (IA3)  
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GeoSpatiumLab S.L.  
<http://www.geoslab.com/>

# Outline

- Introduction
- Capabilities
- Conclusions

```
</map>
<meta name="HTTP-EQUIV"
content="refresh=180;url=http://www.gencolab.com/
index.php?option=com_content&view=article&id=101" />
<meta name="Headline" content="Introduction">
<meta name="Section" content="Diseno_Grafico">
<meta name="Description" content="Some enterprises
need an image urgent re-engineering, let's take over.">
<!-- GEMaps-->
<map name="Banner">
<meta name="Section" content="Diseno_Grafico">
<meta name="Description" content="Some enterprises
need an image urgent re-engineering, let's take over.">
<!-- GEMaps-->
</map>
<meta name="HTTP-EQUIV"
content="refresh=180;url=http://www.gencolab.com/
index.php?option=com_content&view=article&id=101" />
<meta name="Headline" content="Introduction">
<meta name="Section" content="Diseno_Grafico">
<meta name="Description" content="Some enterprises
need an image urgent re-engineering, let's take over.">
<!-- GEMaps-->
<map name="Banner">
<meta name="Section" content="Diseno_Grafico">
<meta name="Description" content="Some enterprises
need an image urgent re-engineering, let's take over.">
<!-- GEMaps-->
</map>
```





# Capabilities

- ❑ Definition and management of repositories
- ❑ Metadata edition in conformance with different metadata standards and profiles
  - ❖ ISO19115 and its profiles
  - ❖ Dublin Core
  - ❖ Customization to support new standards and profiles
- ❑ Tools to facilitate the edition of metadata
  - ❖ On-line description of standards and profiles
  - ❖ Contact directory, thesaurus repository
  - ❖ Selection of geographic extent
  - ❖ Automatic metadata generation
  - ❖ Description of content information through feature catalogues
- ❑ Exchange of metadata records
  - ❖ Formats for encoding and presentation
- ❑ Connection to data management applications

```
<meta name="HTTP-EQUIV" data-bbox="680 455 715 905"/>
<meta alt="IAAA" coords="79.167 32" data-bbox="715 455 750 905"/>
<meta name="Headline" content="Introduction" data-bbox="750 455 785 905"/>
<meta name="Banner" data-bbox="785 455 820 905"/>
<meta name="Section" content="Diseño Gráfico" data-bbox="820 455 855 905"/>
<meta name="Description" content="Some enterprises need an image urgent re-engineering, let's take over." data-bbox="855 455 900 905"/>
<!-- GENMaps -->
<meta name="Section" content="Diseño Gráfico" data-bbox="900 455 935 905"/>
<!-- GENMaps -->
<meta name="Description" content="Some enterprises need an image urgent re-engineering, let's take over." data-bbox="935 455 985 905"/>
```





# Resource Browser – Management of repositories



CatMDEdit

File Tools Window Help

Resource Browser

Repositories

- metadata
- cartography

Standard	Unique Id	Language	Title	Hierarchy Level...
ISO19115 (C...	ign-bcn2000	Spanish	Base Cartográfica Numérica 1:2.000.000	Conjunto de da... Centro Nacional
ISO19115 (C...	ign-bdl1200	Spanish	Base de datos de Líneas Límite 1:200.000	Conjunto de da... Centro Nacional
ISO19115 (C...	ign-me2m	Spanish	España, el Estado Autonómico	Conjunto de da... Centro Nacional
ISO19115 (C...	ign-me500	Spanish	Mapa de España a escala 1:500.000	Conjunto de da... Centro Nacional
ISO19115 (C...	ign-mp200	Spanish	Mapa Provincial de España a escala 1:200.000	Conjunto de da... Centro Nacional
ISO19115 (C...	ign-mtn25_raster	Spanish	Mapa Topográfico Nacional de España 1:25.000	Conjunto de da... Centro Nacional
ISO19115 (C...	ign-mtn25_papel	Spanish	Mapa Topográfico Nacional de España 1:25000 (papel)	Conjunto de da... Centro Nacional
ISO19115 (C...	ign-maut	Spanish	Mapas Autonómicos de España a diversas escalas	Conjunto de da... Centro Nacional
ISO19115 (C...	ign-mgyt	Spanish	Mapas-guía y mapas turísticos a diversas escalas	Conjunto de da... Centro Nacional
ISO19115 (C...	ign-ne1m	Spanish	Península Ibérica, Baleares y Canarias	Conjunto de da... Centro Nacional
ISO19115 (C...	ign-red_balear98	Spanish	Red Balear 98	Conjunto de da...
ISO19115 (C...	ign-roi	Spanish	Red geodésica de orden inferior	Conjunto de da...
ISO19115 (C...	red_iberia95	Spanish	Red Iberia 95	Conjunto de da...
ISO19115 (C...	ign-red_regcan95	Spanish	Red Regcan 95	Conjunto de da...
ISO19115 (C...	ign-red_regente	Spanish	Red Regente	Conjunto de da...
*				

```

<meta name="HTTP-EQUIV"
content="text/html"
<meta name="He
<meta name="Sec
<meta name="Des
<java applet ja
need an image ur
sesid=entire.amo
<!-- GENMAPS-->
</office">
<map name="ban
to_Gráfico">
</office">
  
```

Repository Manager

metadata

Load

Repository Creation

Directory D:\papers\manual catMDEdit 4.0\cartography Select

Create Dataset Collection

Spatial Serie

General Description (metadata template) Select

Spatial Pattern (coverage) Select

OK Cancel

```

<meta name="HTTP-EQUIV"
content="text/html"
<meta name="He
<meta name="Sec
<meta name="Des
<java applet ja
need an image ur
sesid=entire.amo
<!-- GENMAPS-->
</office">
<map name="ban
to_Gráfico">
</office">
  
```

# Resource Browser – Management of resources - list



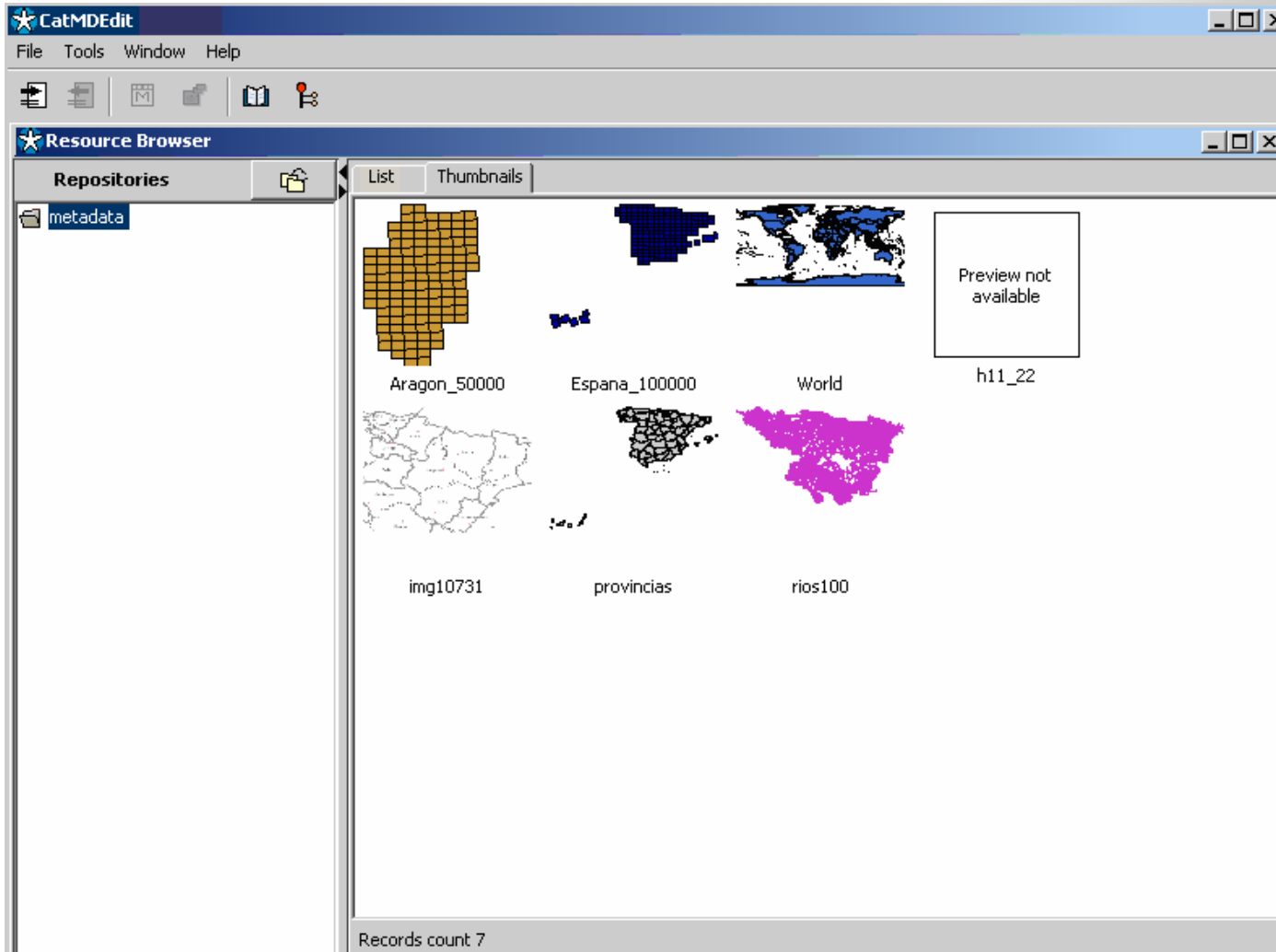
- Different viewers: list, thumbnails, geographic selector

The screenshot shows the 'Resource Browser' application window. On the left, a 'Repositories' pane shows 'metadata' and 'cartography'. The main area is titled 'List' and contains a table of resource records. An 'Insert' dialog box is open, with a red arrow pointing to its title bar and another red circle highlighting an asterisk in the list below. The dialog has a 'Record' tab and sections for 'Identification' (with radio buttons for 'Use next identification' and 'Autogenerate identification'), 'Extract metadata from data file' (with a 'File name' field), 'Select Language:' (set to 'English'), and 'Select Standard:' (set to 'ISO19115'). 'OK' and 'Cancel' buttons are at the bottom.

Standard	Unique Id	Language	Title	Hiera
UNKNOWN	idee_779	UNKNOWN		
UNKNOWN	idee_786	UNKNOWN		
UNKNOWN	idee_796	UNKNOWN		
ISO19115 ...	ign-bcn2000	Spanish	Base Cartográfica Numérica 1:2.000.000	Conji
ISO19115 ...	ign-bdll200	Spanish	Base de datos de Líneas Límite 1:200.000	Conji
ISO19115 ...	ign-maut	Spanish	Mapas Autonómicos de España a diversas escalas	Conji
ISO19115 ...	ign-me2m	Spanish	España, el Estado Autonómico	Conji
ISO19115 ...	ign-me500	Spanish	Mapa de España a escala 1:500.000	Conji
ISO19115 ...	igr			Conji
ISO19115 ...	igr			Conji
ISO19115 ...	igr			Conji
ISO19115 ...	igr			Conji
ISO19115 ...	igr			Conji
ISO19115 ...	igr			Conji
ISO19115 ...	igr			Conji
ISO19115 ...	igr			Conji
ISO19115 ...	igr			Conji
ISO19115 ...	re			Conji

```
<meta name="HTTP-EQUIV" value="refresh" />
<meta name="Section" content="<!---
<meta name="Description" content="Some enterpris
<meta name="HeadFiles" content="
<meta name="HTTP-EQUIV" value="refresh" />
<meta name="Section" content="<!---
<meta name="Description" content="Some enterpris
<meta name="HeadFiles" content="
<meta name="HTTP-EQUIV" value="refresh" />
</map>
```

# Resource Browser – Management of resources - thumbnails

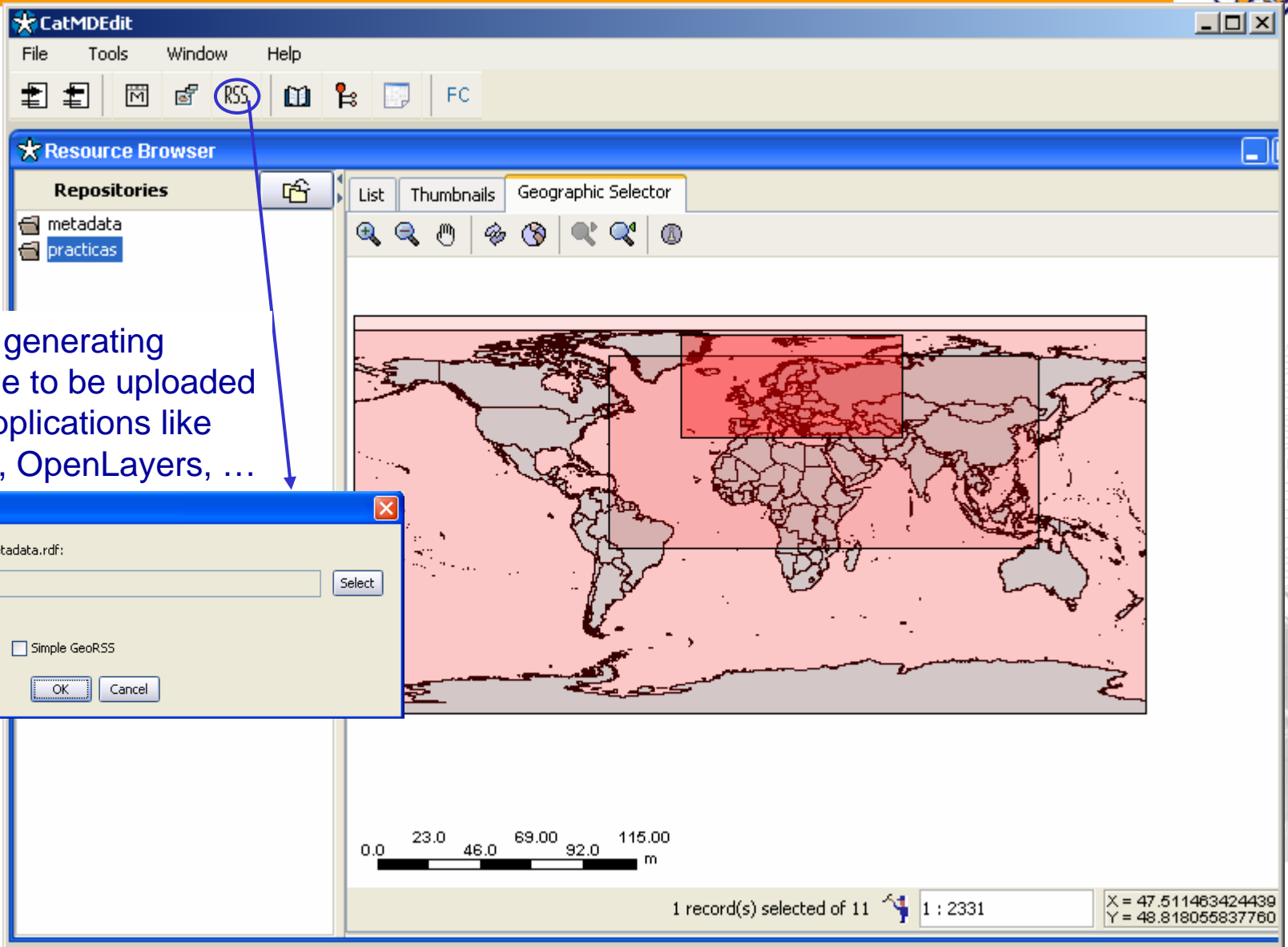


Records count 7

```
<meta name="HTTP-EQUIV" content="refresh; url=http://iaa.ingeniering.net" />
<meta name="Section" content="Diseno_Graphico" />
<meta name="Description" content="Some enterpris&#x2014; need an image urgent re-ingeniering, let's take over." />
<img alt="map" data-bbox="900 640 1000 900"/>
</img>
```



# Resource Browser – Management of resources – geographic selector



Possibility of generating a GeoRSS file to be uploaded in external applications like GoogleMaps, OpenLayers, ...

meta\_name="HTTP-EQUIV" map

# Metadata edition in conformance with ISO19115

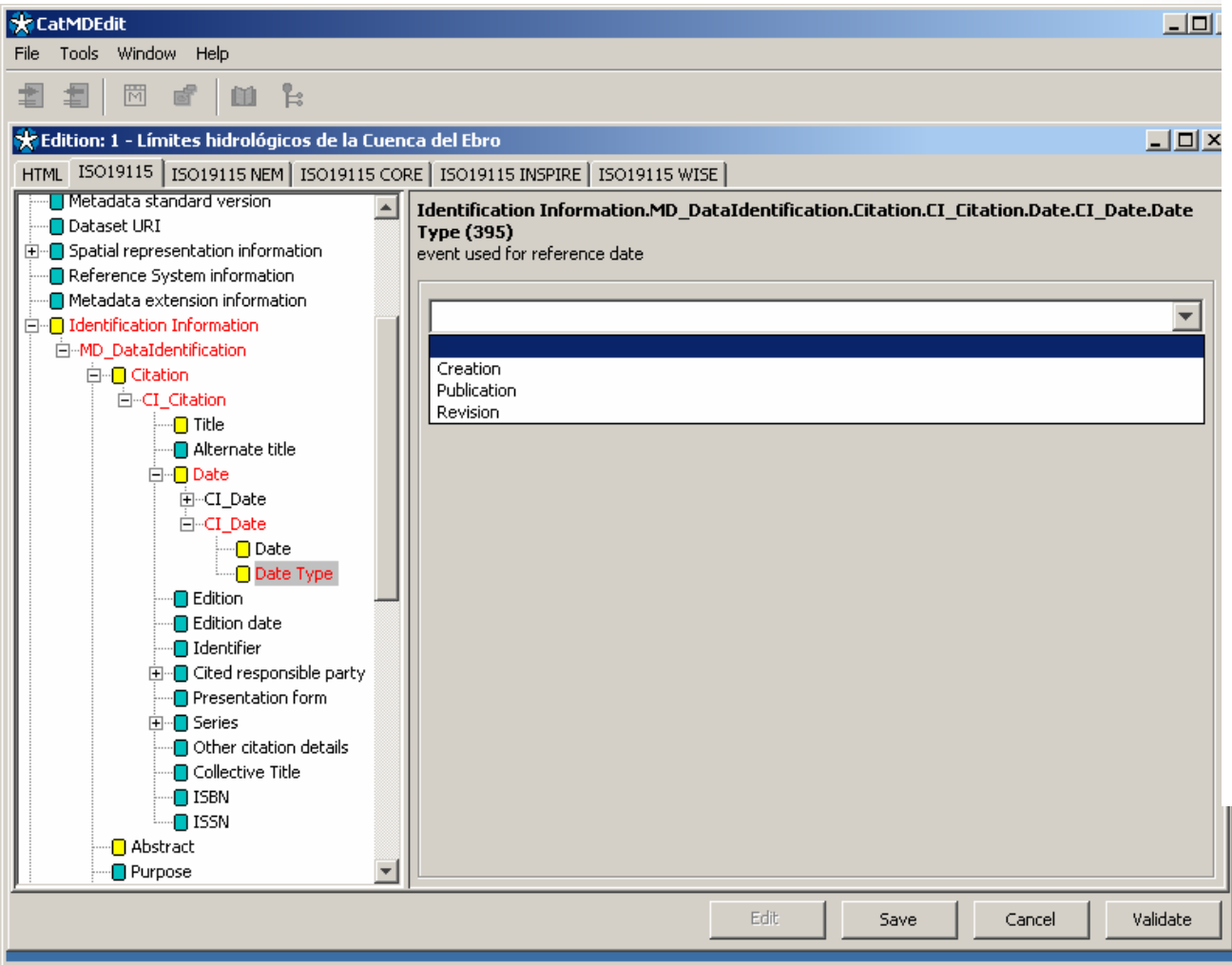
- ❑ Metadata edition in conformance with "ISO19115. Geographic Information - Metadata" standard
- ❑ Edition interfaces adapted to different metadata profiles:
  - ❖ ISO19115 comprehensive metadata model
  - ❖ ISO19115 Core metadata for geographic datasets
  - ❖ NEM ("Núcleo Español de Metadatos") metadata profile
    - Defined by the [Spanish National Geographical High Board \("Consejo Superior Geográfico"\)](#) for the minimum description of datasets
  - ❖ [Draft INSPIRE implementing rules for metadata and their correspondence with the standard ISO19115](#)
  - ❖ WISE metadata profile
    - customized to meet the guidelines for metadata in the implementation of the Water Framework Directive and the development of the ["Water Information System for Europe \(WISE\)"](#).

```

<meta name="HTTP-EQUIV" content="refresh; url=http://taea.irf6688.net/taea/taea.html" />
<meta name="Section" content="Diseño Gráfico" />
<meta name="Description" content="Some enterprises in image urgent re-engineering, let's take over." />
<meta name="Some enterprises" content="Some enterprises" />
<meta name="Diseño Gráfico" />
<meta name="Section" content="Diseño Gráfico" />
<meta name="Description" content="Some enterprises in image urgent re-engineering, let's take over." />
<meta name="Some enterprises" content="Some enterprises" />
</!-- GENMAPS -->
<map name="Diseño Gráfico" />
</map>
    
```



# Metadata edition in conformance with ISO19115



- On-line description of standards and profiles
  - definition
  - examples
  - obligation

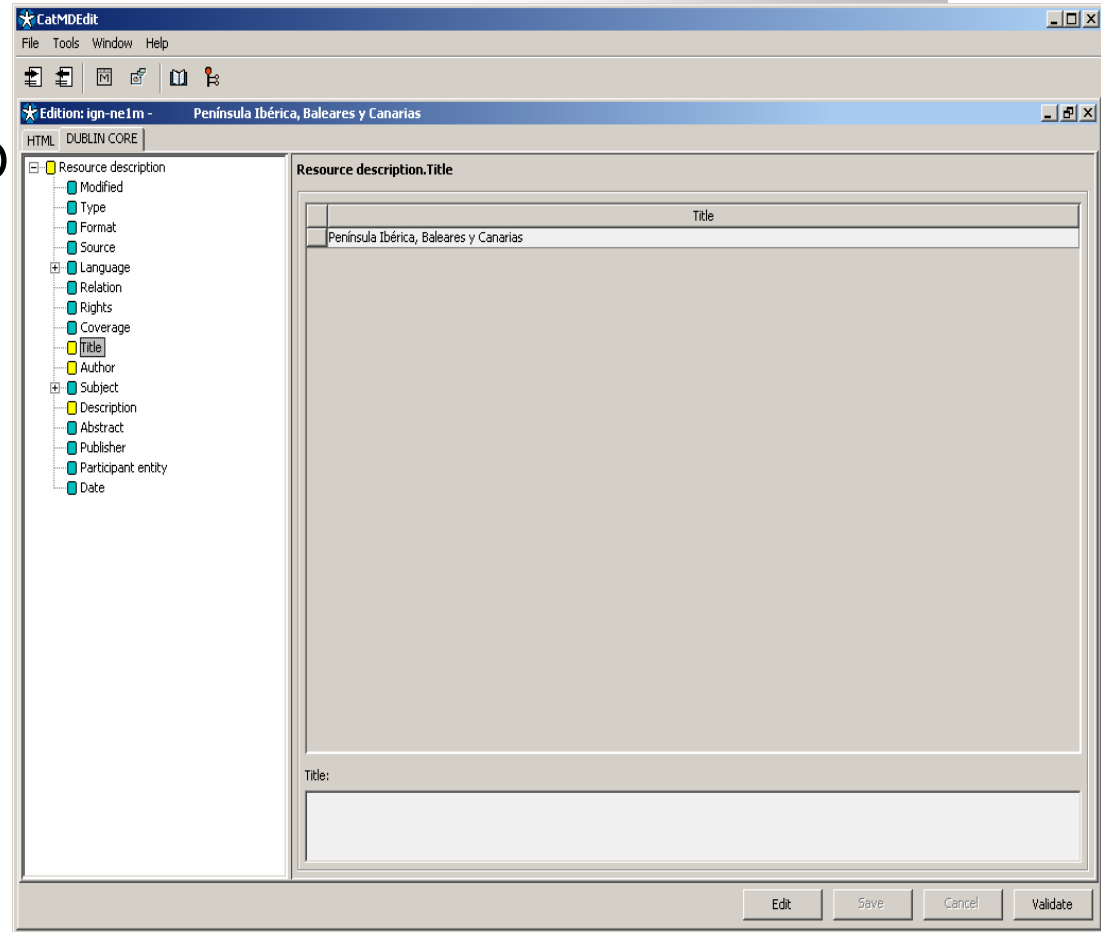
Colour	Description
Yellow	Mandatory
Green	Conditional (mandatory if applicable)
Cyan	Optional

- Metadata validation
  - Check incomplete elements....



# Metadata edition in conformance with ISO19115

- ❑ Metadata edition in conformance with the [Dublin Core](#) metadata standard (ISO 15836).
- ❑ This tool follows the guidelines for [expressing Dublin Core metadata using the Resource Description Framework](#)







# Contact directory

- ❑ Contact information (e.g. name, address, telephone...) is required in many metadata elements (creator, publisher, contributor ...)
- ❑ Contact directory allows the reuse of contact information

The screenshot shows the CatMDEdit software interface. The main window displays a metadata editor with a tree view on the left and a central workspace. The 'Contact Directory' dialog box is open, showing a list of contact information for 'Instituto Geográfico Nacional'. The dialog box has a 'Title' field and a list of values: 'John Smith' and 'Juan Perez'. The 'Organization' section is expanded, showing a tree view of organization-related metadata elements. The 'Organization.Complete name' field is highlighted, showing the full name of the organization: 'Instituto Geográfico Nacional'. The dialog box also includes a 'Language' dropdown menu and an example of contact information: 'Advanced Information Systems Group of the University of Zaragoza'. The 'Select' button is visible at the bottom of the dialog box.

**Contact Directory**

Title
Instituto Geográfico Nacional
John Smith
Juan Perez

1 record(s) selected of 3

**Organization**

- Complete name
- Name
- Acronym
- Alternative Name
- Formatted name
- Director
- Date of creation
- Subject
- Description
- Type
- Phone/Fax
- Email
- Web Page
- Postal address
- Identifier
- Is part of
- Coverage
- Hours of service
- Contact instructions
- Scope
- Metadata Date
- Metadata Contact
- Resource type

**Organization.Complete name**  
Full name of the organization

Complete name:  
Instituto Geográfico Nacional

Language: [dropdown]

Example: Advanced Information Systems Group of the University of Zaragoza

Select

# Thesaurus repository

- ❑ In some cases, standards specify/recommend a metadata element to be filled with a controlled vocabulary (codelist, thesaurus)
- ❑ CatMDEdit integrates a thesaurus management tool [see ThManager]

The screenshot shows the CatMDEdit application with the Thesaurus Repository window open. The main window displays a tree view of metadata elements, with 'Descriptive keywords' selected. The Thesaurus Repository window shows a table of thesaurus entries, with 'GEMET 4.0' selected. The right pane shows the details for 'NATURAL ENVIRONMENT, ANTHROPIC ENVIRONMENT', including broader and narrower terms.

Thesaurus Name	Hierarchy Level Code
ADL-FTT	TYPE
AGROVOC	THEME
CEODiscipline	THEME
CEOLocation	PLACE
EUROVOC 4.1	THEME
EuropeanTerritorial...	PLACE
GCMD	THEME
GEMET 4.0	THEME
INSPIRE_SpatialTh...	THEME
ISO3166	PLACE
ISOC-GEOGRAFIA	THEME
UNESCO	THEME
URBISOC	THEME
cartografiaCHE	THEME

Language: English Term: NATURAL ENVIRONMENT, ANTHROPIC ENVIRONMENT

TERM  
<http://www.eionet.eu.int/gemet/supergroup/54>  
 99  
**NATURAL ENVIRONMENT, ANTHROPIC ENVIRONMENT**

BROADER TERMS  
[TOP TERMS](#)

NARROWER TERMS  
[ANTHROSPHERE \(built environment, human settlements, land setup\)](#)  
[ATMOSPHERE \(air, climate\)](#)  
[BIOSPHERE \(organisms, ecosystems\)](#)  
[ENVIRONMENT \(natural environment, anthropic environment\)](#)  
[HYDROSPHERE \(freshwater, marine water, waters\)](#)  
[LAND \(landscape, geography\)](#)



# Selection of geographic extent

- ❑ Graphic selection of geographic extent through map viewers
  - ❖ The user may add new maps for browsing
- ❑ Coordinate conversion between different coordinate reference systems

The screenshot displays the CatMDEdit application window. The main window shows a metadata editor for 'Edition - ign-bcn2000 - Base Cartográfica Numérica 1:2.000.000'. The left sidebar contains a tree view of metadata elements, with 'Extent' expanded to show 'EX\_Extent' and 'Geographic element'. The main area shows a table of values for 'EX\_GeographicBoundingBox' with coordinates: -19.75/4.51/26.23/44.48. A dialog box titled 'Geographic bounding box' is overlaid, with a note: 'Note: Geographic Coordinates (latitude/longitude)'. The dialog contains four input fields: North (44.48), West (-19.75), East (4.51), and South (26.23). A blue arrow points from the 'Geographic element' in the tree view to the 'Convert' button in the dialog. Other buttons include 'Graphic selection', 'OK', and 'Cancel'.

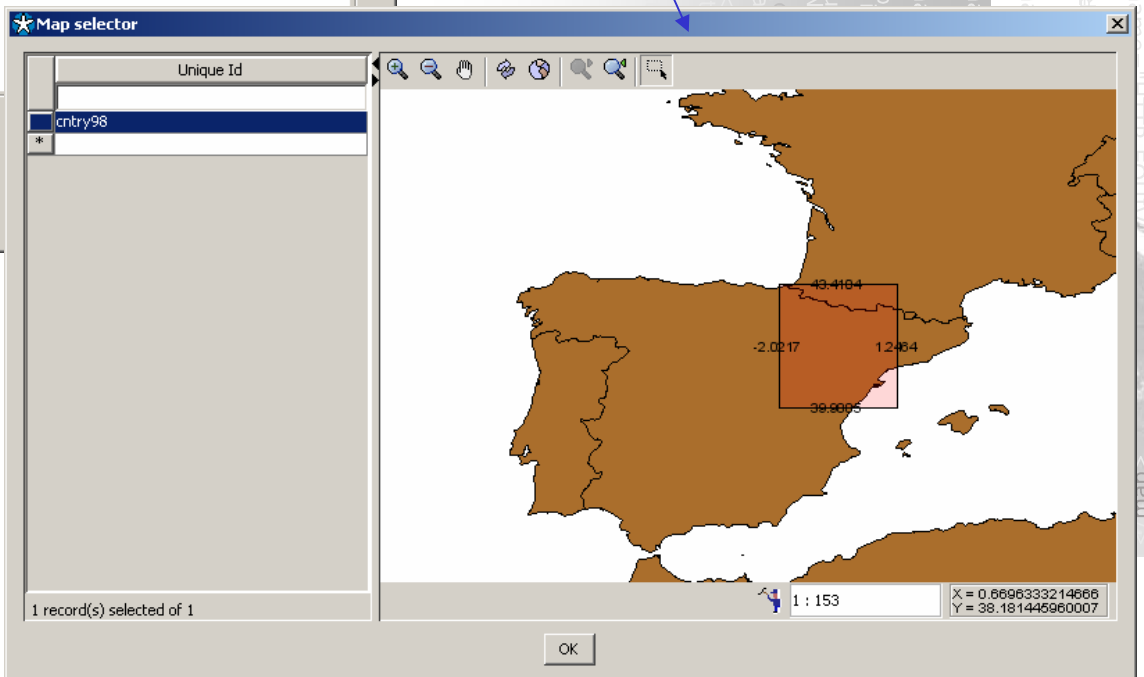
### Geographic bounding box

Note: Geographic Coordinates (latitude/longitude)

North	44.48		
West	-19.75	East	4.51
South	26.23		

### Coordinate conversor

Source		Destination	
North	48.30284	East	-16.30189
South	32.00095	West	9.50943
Time zone		Time zone	
EPSG:32600 - Grid system WGS 84 / UTM northern hemisp...		EPSG:4326 - Geographic system ellipsoid WGS84	
Reference system UTM with ellipsoid World Geodetic System 1984, northern hemisphere		Reference system of geographical coordinates 2D with ellipsoid World Geodetic System 1984	



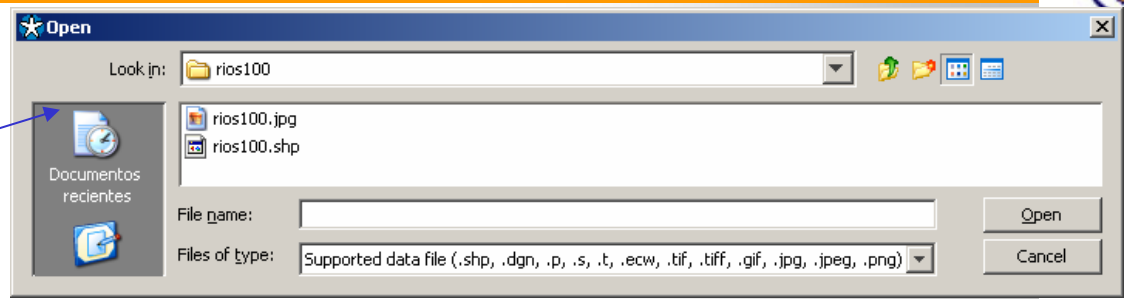
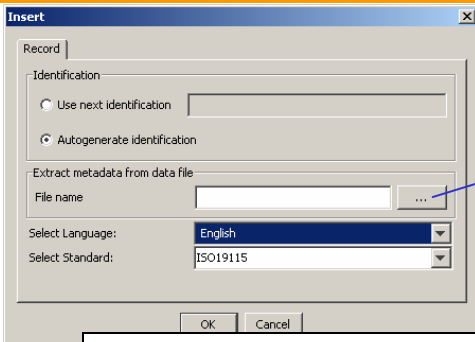
# Automatic metadata generation

- Automatic metadata generation for some data file formats
  - ❖ Shapefile, DGN, ECW, FICC, GeoTiff, GIF/GFW, JPG/JGW, PNG/PGW
- Automatic creation of metadata for collections of related resources
  - ❖ CatMDEdit allows the automatic creation of metadata for collections of related resources
  - ❖ In particular, spatial series arisen as a result of the fragmentation of geometric resources into datasets of manageable size and similar scale
  - ❖ Example:
    - mosaics of orthoimages
    - tiles 1:50,000



```
<meta name="HTTP-EQUIV" data-bbox="965 450 990 670"/>
<meta name="Headline" data-bbox="935 450 960 910"/>
<meta name="Section" content="Diseño_Gráfico" data-bbox="885 450 910 910"/>
<meta name="Description" content="Some enterprises need a page urgent re-engineering, let's take over." data-bbox="835 450 880 910"/>
<!-- GENMAPS -->
</map>
```

# Automatic metadata generation for some data file formats



ISO 19115 metadata elements	SHP	DGN	ECW	FICC	GeoTIFF	GIF/ GFW	JPG/ JGW	PNG/ PGW
MD_Metadata.identificationInfo> MD_DataIdentification.spatialRepresentationType	X	X	X	X	X	X	X	X
MD_Metadata.identificationInfo> MD_DataIdentification.extent> EX_Extent.geographicElement	X	X	X	X	X	X	X	X
MD_Metadata.contentInfo> MD_FeatureCatalogueDescription.featureType	X	X		X				
MD_Metadata.applicationSchemaInfo> MD_ApplicationSchemaInformation.schemaAscii	X							
MD_Metadata.spatialRepresentationInfo> MD_VectorSpatialRepresentation.geometricObjects	X	X		X				
MD_Metadata.spatialRepresentationInfo> MD_GridSpatialRepresentation. numberofDimensions axisDimensionProperties			X		X	X	X	X
MD_Metadata.distributionInfo> MD_Distribution.transferOptions> MD_DigitalTransferOptions.onLine> CI_OnlineResource.linkage	X	X	X	X	X	X	X	X
MD_Metadata.distributionInfo> MD_Distribution.transferOptions> MD_DigitalTransferOptions.transferSize	X	X	X	X	X	X	X	X
MD_Metadata.distributionInfo> MD_Distribution.distributionFormat> MD_Format.name	X	X	X	X	X	X	X	X

<meta name="HTTP-EQUIV" value="refresh" content="30;url=http://iaa.irg.ac.cn/arcgis/arcgis.htm" />

# Automatic creation of metadata for collections of related resources

## □ Steps to be followed

- ❖ Activate functionality while creating a repository

- ❖ Describe the spatial series

  - Select metadata that will describe the general features of the collection, shared among the components

  - Select the spatial pattern that explains the spatial distribution of the components in the collection

    - <Shapefile + DBF> that will dictate the geographic extent of the collection and the specific features of each component

- ❖ Customize the generation of metadata records describing each component in the collection

```
<meta name="HTTP-EQUIV" content="refresh" />
<meta name="Headline" content="L'essai de l'Internet" />
<meta name="Section" content="Section" />
<meta name="Description" content="Some enterprises need an image urgent re-imaging, let's take over." />
<!-- GENMAPS -->
<!-- GENMAPS -->
<map name="Graphic" />
<meta name="HTTP-EQUIV" content="refresh" />
<meta name="Headline" content="L'essai de l'Internet" />
<meta name="Section" content="Section" />
<meta name="Description" content="Some enterprises need an image urgent re-imaging, let's take over." />
<!-- GENMAPS -->
<!-- GENMAPS -->
<map name="Graphic" />
```



# Activate functionality and select general metadata

**Repository Creation**

Directory:

Create Dataset Collection

Spatial Serie

General Description (metadata template)

Spatial Pattern (coverage)

**Template Selector**

Title

Provincias de España \*

1 record(s) selected of 1

HTML ISO19115 ISO19115 NEM ISO19115 CORE ISO19115 INSPIRE ISO19115 WISE

- Metadata file identifier
- Language
- Character set
- Parent identifier
- Hierarchy level
- Hierarchy level name
- Contact
  - Metadata date stamp
  - Metadata standard name
  - Metadata standard version
  - Dataset URI
- Locale
- Spatial representation information
- Reference System information
- Metadata extension information
- Identification Information
  - MD\_DataIdentification
    - Citation
      - CI\_Citation
        - Title
        - Alternate title

**Identification Information.MD\_DataIdentification.Citation.CI (360)**  
name by which the cited resource is known

Provincias de España

# Select the spatial pattern

**Repository Creation** [X]

Directory:  [Select]

Create Dataset Collection

Spatial Serie

General Description (metadata template)  [Select]

Spatial Pattern (coverage)  [Select]

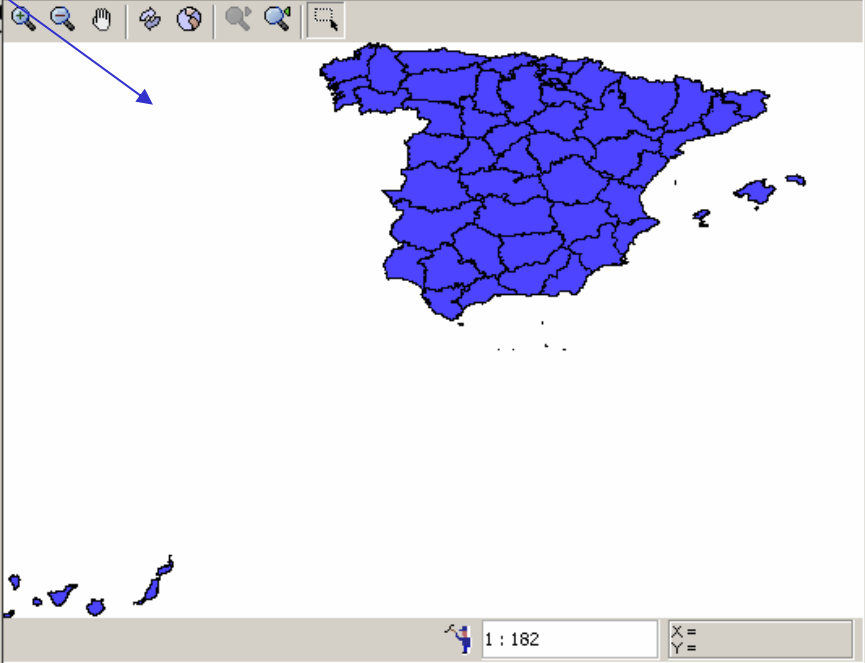
[OK] [Cancel]

**Map selector** [X]

Unique Id

España 100
España 25
España 50
<b>España provincias</b>
*

1 record(s) selected of 4



[OK]

# Customize the generation of metadata records for each component



Repository Creation

Directory: D:\papers\manual catMDEdit 4.0\cartography [Select]

Create Dataset Collection

Spatial Serie

General Description (metadata template) [Select]

Spatial Pattern (coverage) [Select]

OK Cancel

Attribute information of the spatial pattern (DBF) can be inserted as part of a metadata element value

General metadata is used as a template for the metadata records of each component

Unit Metadata Creation

MD\_Metadata

- [-] Metadata file identifier
- [-] Language
- [-] Metadata standard name
- [-] Metadata standard version
- [-] Dataset URI
- [-] Identification Information
  - [-] MD\_DataIdentification
    - [-] Citation
      - [-] CI\_Citation
        - [-] Title
          - CharacterString

NOMBRE

IDSTD\_TXT

IDSTD\_NUM

##NOMBRE##: provincia de España

OK Cancel



# Final layout of the repository

- Example: Collection of resources following the spatial distribution of provinces in Spain

Resource Browser

Repositories

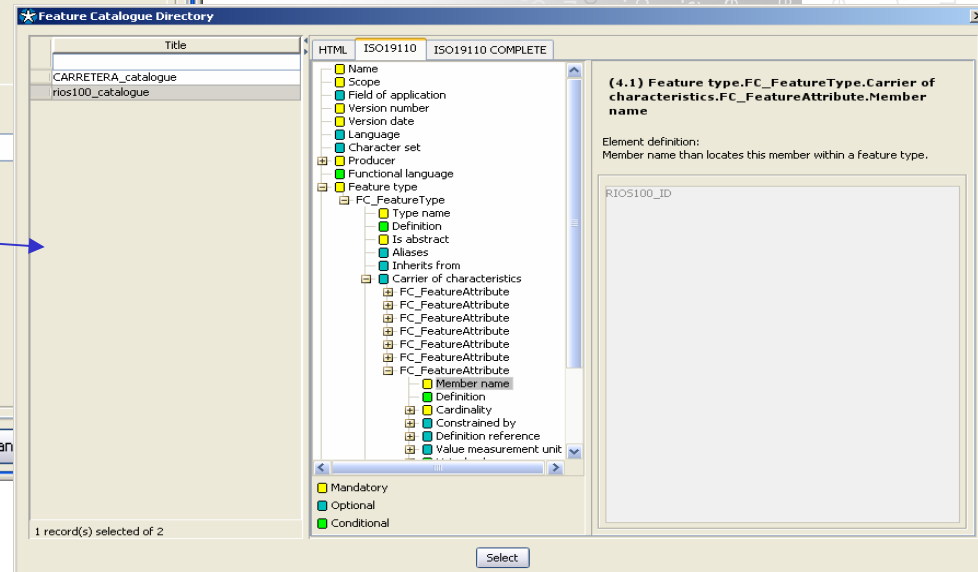
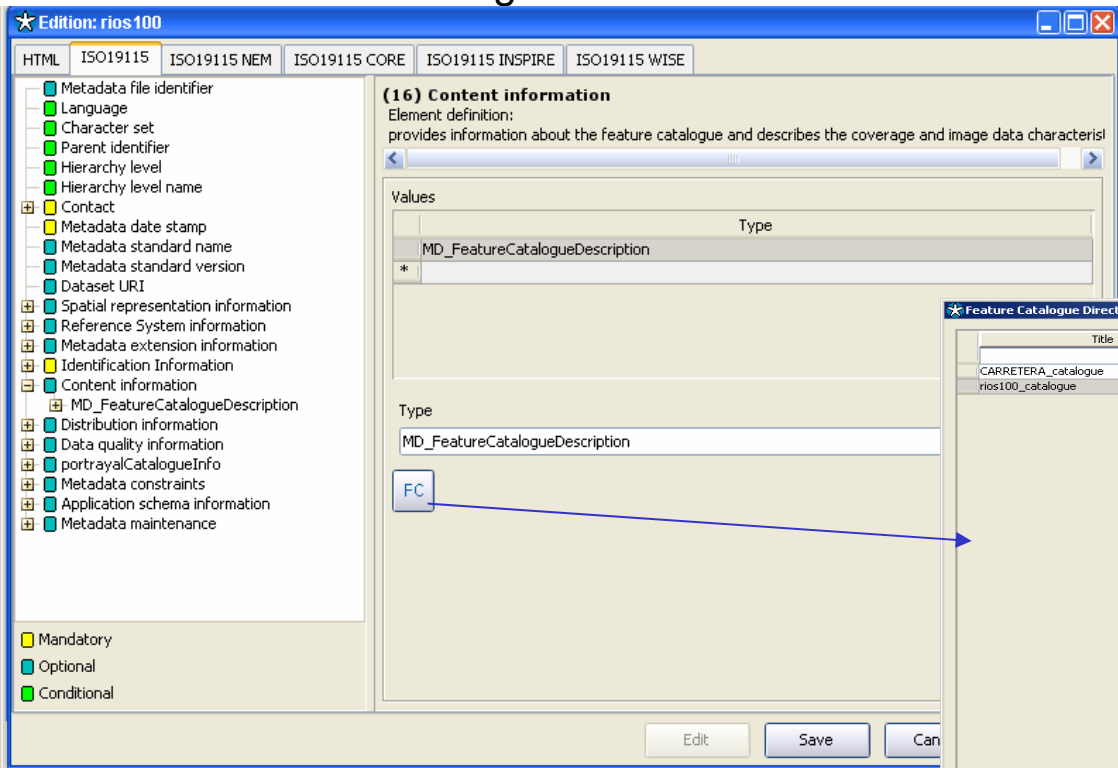
- metadata
- cartography

Standard	Unique Id	Language	Title	Hierarchy Level...
ISO19115	a80bfbef-c070-...	Spanish	Provincias de España	series
ISO19115	a80bfbef-c070-...	Spanish	Illes Balears: provincia de España	
ISO19115	a80bfbef-c070-...	Spanish	Las Palmas: provincia de España	
ISO19115	a80bfbef-c070-...	Spanish	Santa Cruz de Tenerife: provincia de España	
ISO19115	a80bfbef-c070-...	Spanish	Álava: provincia de España	
ISO19115	a80bfbef-c070-...	Spanish	Albacete: provincia de España	
ISO19115	a80bfbef-c070-...	Spanish	Alicante: provincia de España	
ISO19115	a80bfbef-c070-...	Spanish	Almería: provincia de España	
ISO19115	a80bfbef-c070-...	Spanish	Ávila: provincia de España	
ISO19115	a80bfbef-c070-...	Spanish	Badajoz: provincia de España	
ISO19115	a80bfbef-c070-...	Spanish	Barcelona: provincia de España	
ISO19115	a80bfbef-c070-...	Spanish	Burgos: provincia de España	
ISO19115	a80bfbef-c070-...	Spanish	Cáceres: provincia de España	
ISO19115	a80bfbef-c070-...	Spanish	Cádiz: provincia de España	
ISO19115	a80bfbef-c070-...	Spanish	Castellón: provincia de España	
ISO19115	a80bfbef-c070-...	Spanish	Ciudad Real: provincia de España	
ISO19115	a80bfbef-c070-...	Spanish	Córdoba: provincia de España	
ISO19115	a80bfbef-c070-...	Spanish	A Coruña: provincia de España	
ISO19115	a80bfbef-c070-...	Spanish	Cuenca: provincia de España	
ISO19115	a80bfbef-c070-...	Spanish	Girona: provincia de España	
ISO19115	a80bfbef-c070-...	Spanish	Granada: provincia de España	
ISO19115	a80bfbef-c070-...	Spanish	Guadalajara: provincia de España	
ISO19115	a80bfbef-c070-...	Spanish	Guipúzcoa: provincia de España	
ISO19115	a80bfbef-c070-...	Spanish	Huelva: provincia de España	
ISO19115	a80bfbef-c070-...	Spanish	Huesca: provincia de España	
ISO19115	a80bfbef-c070-...	Spanish	Jaén: provincia de España	

<meta name="Section" content="Diseno\_Grafico">  
<meta name="HTTP-EQUIV" content="Refresh;URL=http://iaaa.inf65889.net/.../map">

# Description of content information through feature catalogues

- ❑ Content information for feature-based datasets must be described referencing a feature catalogue
- ❑ CatMDEdit includes a tool for the management of “Feature Catalogues”
  - ❖ Feature catalogues are automatically updated in parallel to the automatic metadata generation



# Exchange of metadata records

- ❑ Exchange of metadata records according to different standards in XML and RDF:
  - ❖ XML format in compliance with the [ISO19139 technical specification](#). (ISO19115 metadata)
  - ❖ XML format in conformance with the standard [CSDGM](#) (Content Standard for Digital Geospatial Metadata), defined by U.S. FGDC
  - ❖ RDF format according to the [encoding rules for Dublin Core in RDF](#)
  - ❖ XML format according to the [SDIGER - Dublin Core Metadata Application Profile for geographical data mining](#)
  - ❖ XML format according to the [XML-Schemas](#) established in the [OGC Catalogue Services Specification for the HTTP protocol binding](#) (Catalogue Services for the Web, CSW)

```
<meta name="HTTP-EQUIV" content="refresh;url=http://www.fgdl.gov/fgdl/eng/eng.html" />
<meta name="Section" content="Introduction" />
<meta name="Description" content="This is the introduction to the SDIGER metadata application profile. It's take over." />
<!-- GENMAPS -->
<meta name="Description" content="Some examples" />
<!-- GENMAPS -->
<map name="http://www.fgdl.gov/fgdl/eng/eng.html" />
</map>
```



# Exchange of metadata records



**Export** [X]

Metadata to export:

Selected metadata	Standard	Output file name
Base Cartográfica Numérica ...	ISO 19115	ign-bcn2000es
Base de datos de Líneas Lími...	ISO 19115	ign-bdII200es

Output directory:

Default format  
 User selection

Standard:

Format:

**Import** [X]

Metadata to import:

Selected metadata
idee_779_ES.xml
idee_786_ES.xml

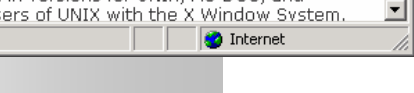
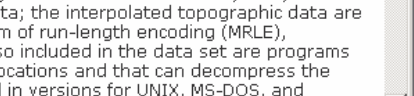
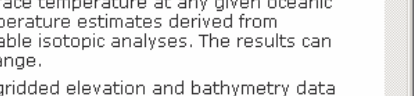
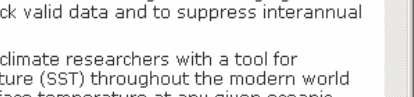
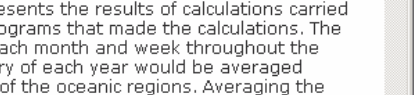
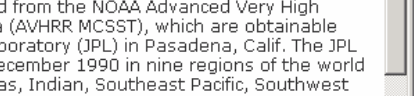
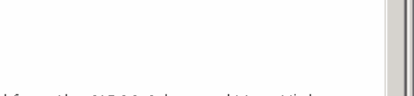
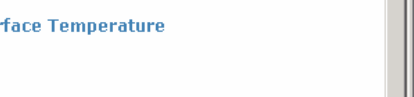
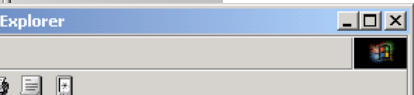
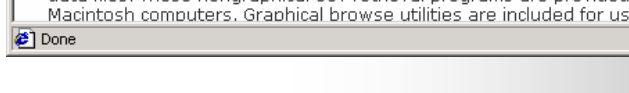
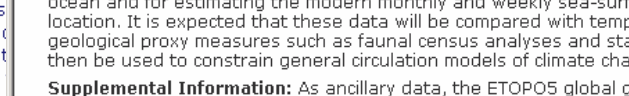
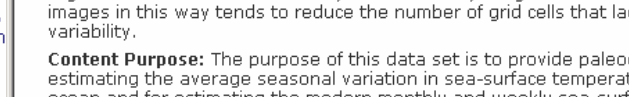
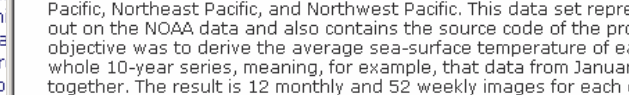
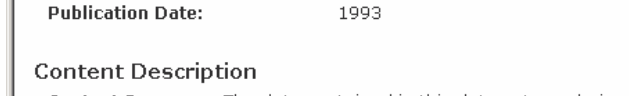
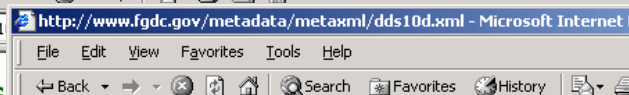
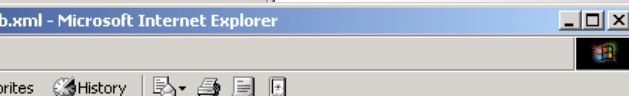
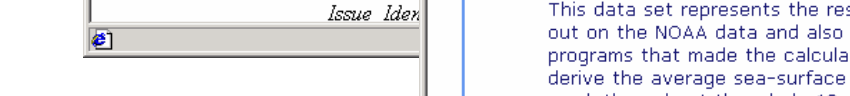
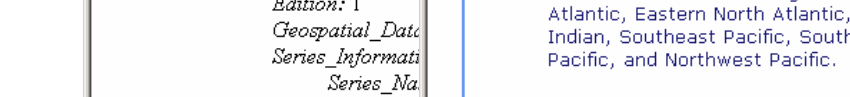
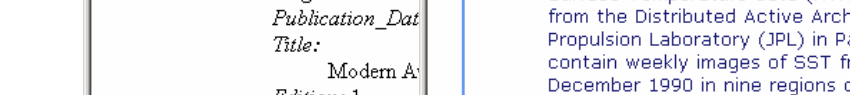
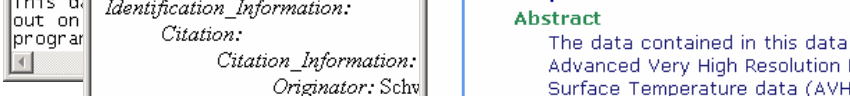
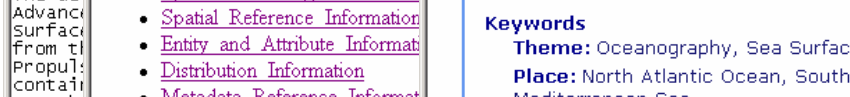
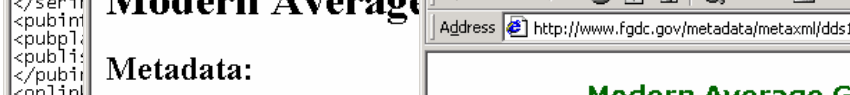
Create new file identifier

Default format  
 User selection

Standard:



# Different styles of presentations



## Modern Average Global Sea-Surface Temperature

### Metadata:

- [Identification Information](#)
- [Data Quality Information](#)
- [Spatial Data Organization Information](#)
- [Spatial Reference Information](#)
- [Entity and Attribute Information](#)
- [Distribution Information](#)
- [Metadata Reference Information](#)

*Identification Information:*  
*Citation:*  
*Citation Information:*  
*Originator:* Schwab  
*Publication Date:*  
*Title:*  
Modern Average Global Sea-Surface Temperature  
*Edition:* 1  
*Geospatial Data Series Name:*  
*Issue Identifier:*

## Modern Average Global Sea-Surface Temperature

### Description Spatial Attributes

**Keywords**  
**Theme:** Oceanography, Sea Surface Temperature  
**Place:** North Atlantic Ocean, South Atlantic Ocean, Mediterranean Sea  
**Temporal:** Present

### Description Abstract

The data contained in this data set are derived from the NOAA Advanced Very High Resolution Radiometer Multichannel Sea Surface Temperature data (AVHRR MCSST), which are obtainable from the Distributed Active Archive Center at the Jet Propulsion Laboratory (JPL) in Pasadena, Calif. The JPL tapes contain weekly images of SST from October 1981 through December 1990 in nine regions of the world ocean: North Atlantic, Eastern North Atlantic, South Atlantic, Agulhas, Indian, Southeast Pacific, Southwest Pacific, Northeast Pacific, and Northwest Pacific. This data set represents the results of calculations carried out on the NOAA data and also contains the source code of the programs that made the calculations. The objective was to derive the average sea-surface temperature of each month and week throughout the whole 10-year series, meaning, for example, that data from January of each year would be averaged together. The result is 12 monthly and 52 weekly images for each of the oceanic regions. Averaging the images in this way tends to reduce the number of grid cells that lack valid data and to suppress interannual variability.

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### Content Citation

**Title of Content:** Modern Average Global Sea-Surface Temperature  
**Content Publisher:** Schweitzer, Peter N.  
**Publication Place:** Reston, Virginia  
**Publication Date:** 1993

### Content Description

**Content Summary:** The data contained in this data set are derived from the NOAA Advanced Very High Resolution Radiometer Multichannel Sea Surface Temperature data (AVHRR MCSST), which are obtainable from the Distributed Active Archive Center at the Jet Propulsion Laboratory (JPL) in Pasadena, Calif. The JPL tapes contain weekly images of SST from October 1981 through December 1990 in nine regions of the world ocean: North Atlantic, Eastern North Atlantic, South Atlantic, Agulhas, Indian, Southeast Pacific, Southwest Pacific, Northeast Pacific, and Northwest Pacific. This data set represents the results of calculations carried out on the NOAA data and also contains the source code of the programs that made the calculations. The objective was to derive the average sea-surface temperature of each month and week throughout the whole 10-year series, meaning, for example, that data from January of each year would be averaged together. The result is 12 monthly and 52 weekly images for each of the oceanic regions. Averaging the images in this way tends to reduce the number of grid cells that lack valid data and to suppress interannual variability.

**Content Purpose:** The purpose of this data set is to provide paleoclimate researchers with a tool for estimating the average seasonal variation in sea-surface temperature (SST) throughout the modern world ocean and for estimating the modern monthly and weekly sea-surface temperature at any given oceanic location. It is expected that these data will be compared with temperature estimates derived from geological proxy measures such as faunal census analyses and stable isotopic analyses. The results can then be used to constrain general circulation models of climate change.

**Supplemental Information:** As ancillary data, the ETOPO5 global gridded elevation and bathymetry data (Edwards, 1989) were interpolated to the resolution of the SST data; the interpolated topographic data are included. The images are provided in three formats: a modified form of run-length encoding (MRLE), Graphics Interchange Format (GIF), and Macintosh PICT format. Also included in the data set are programs that can retrieve seasonal temperature profiles at user-specified locations and that can decompress the data files. These nongraphical SST retrieval programs are provided in versions for UNIX, MS-DOS, and Macintosh computers. Graphical browse utilities are included for users of UNIX with the X Window System.

# Links to data management applications (I)

- ❑ Connection with applications that are able to open/view resources' data
  - ❖ Shapefile, ECW, GeoTiff, GIF, JPG, BMP, PDF, HTML, ...
  - ❖ 2 options for GI formats: internal viewer, external viewer (gvSIG, ...)

The screenshot shows the CatMDEdit application with a 'Resource Browser' window displaying a table of metadata records. A blue arrow points from the 'World countries in 1998' record to a map window displaying a world map with country boundaries.

Standard	Unique Id	Language	Title	Hierarchy Level...
ISO19115	cntry98	English	World countries in 1998	
ISO19115 (C...	ign-red_regente	Spanish	Red Regente	Conjunto de da...
ISO19115 (C...	ign-red_regcan95	Spanish	Red Regcan 95	Conjunto de da...
ISO19115 (C...	red_iberia95	Spanish	Red Iberia 95	Conjunto de da...
ISO19115 (C...	ign-roi	Spanish	Red geodésica de orden inferior	Conjunto de da...
ISO19115 (C...	ign-red_balear98	Spanish	Red Balear 98	Conjunto de da...
ISO19115 (C...	ign-ne1m	Spanish	Península Ibérica, Baleares y Canarias	Conjunto de da...
ISO19115 (C...	ign-movt	Spanish	Manas-niúa y manas turísticas a diversas escalas	Conjunto de da... Centro Nacional

The map window shows a world map with country boundaries, titled 'D:\CATMDEdit\CatMDEdit\_4.0\repository\maps\cntry98.shp'. The map is displayed in a green color scheme. The status bar at the bottom right shows coordinates: X = -37.97260273972, Y = 36.446513999625, and a scale of 1:1315.

```

<meta name="HTTP-EQUIV
content="refresh" value="30" />
<meta name="Header" content="
<meta name="Section" content="
<map
  
```

# Links to data management applications (II)

## Integration with gvSIG

The screenshot illustrates the integration between CatMDEdit and gvSIG. The CatMDEdit Resource Browser window displays a table of metadata records. A dialog box titled 'Open resource' asks 'Do you want to open the resource with gvSIG?'. The gvSIG window shows the 'Aragon Administrative Units' map.

Standard	Unique Id	Language	Title	Format	Reference Date
ISO19115	7f42e048-b0ae...	English	Ebro hydrographic basin cartographic distribution at 1:200....	shp	1996-03-31
ISO19115	7f6905e9-b0ae...	English	Ebro river basin surface water quality	shp	1991-06-15
ISO19115	7f8c8a89-b0ae...	English	Water points inventory: IPA database	shp	2000-09-15
ISO19115	b8212cec-b0af...	English	Aragon Administrative Units	SHP	1999-04-16

gvSIG:CatMDEdit\_gvSIG.gvp

View : Aragon Administrative Units

Creation date: 22-abr-2008

Application started 1:2,897,804 Meters X = 713,404.68 Y = 4,726,720.7 EPSG:23030

<meta name="HTTP-EQUIV...>  
<meta name="Section" content="Diseno\_Garho">  
<meta name="HeadFile" content="http://iaa...>  
<meta name="Title" content="Aragon Administrative Units" />  
</meta>



