

Desarrollo de un prototipo para el Geoportal del Centro Temático Europeo de Usos del Suelo e Información Espacial de la Agencia Europea del Medio Ambiente

Proyecto Final
Máster en Tecnologías de la
Información Geográfica, 10^a.
Edición

UAB
Universitat Autònoma de Barcelona
Departament de Geografia

10mtig 2008
10^a Edició del Màster en Tècnologies de la Informació Geogràfica



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Presentación

Este proyecto es un producto realizado en colaboración con el
LIGIT (Laboratorio de Información Geográfica y de Teledetección),
ETC LUSI (European Topic Center Land Use and Spatial Information),

Lo cual trabaja por cuenta de la EEA,

Agencia Europea de Medio Ambiente, que es un organismo de la Unión Europea.

Su labor es ofrecer información sólida e independiente sobre el medio ambiente.

Es también la fuente principal de información para los responsables del desarrollo,
la aprobación, la ejecución y la evaluación de las políticas medioambientales.

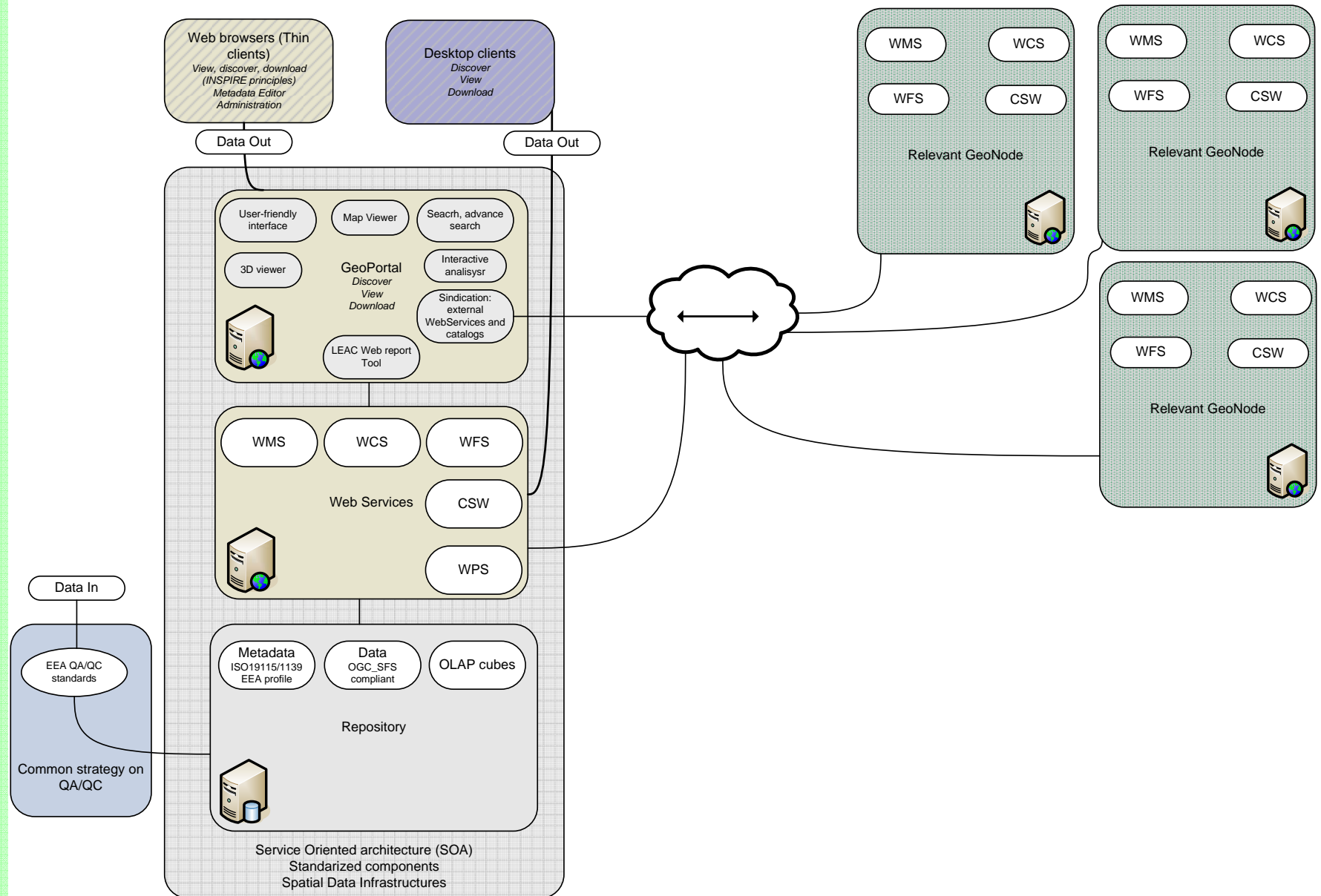
Objetivo

Desarrollar e implementar un GeoPortal con funcionalidad de gestionar Metadatos, publicándolos en la Web, permitiendo operaciones de consulta y de descarga.

El software utilizado es el GeoNetwork opensource.



Arquitectura conceptual



Objetivos específicos

A. Catalogo

Incorporar a la base de datos interna del software (Mckoi):

- Metadatos del ETC
- Harvesting de metadatos externos (conexión a servicios OGC_CSW externos)

B. Edición y Visualización de los Metadatos

- Realizar la conexión de los Metadatos a su propio servicio WMS

Funcionalidades a adjuntar a los Metadatos:

- Permitir la vista a travez el botón “mapa interactivo”
- Añadir la posibilidad de enseñar los Metadatos por Google Earth.
- Enseñar y dar la posibilidad de guardar la estructura como *.XML*

Objetivos específicos

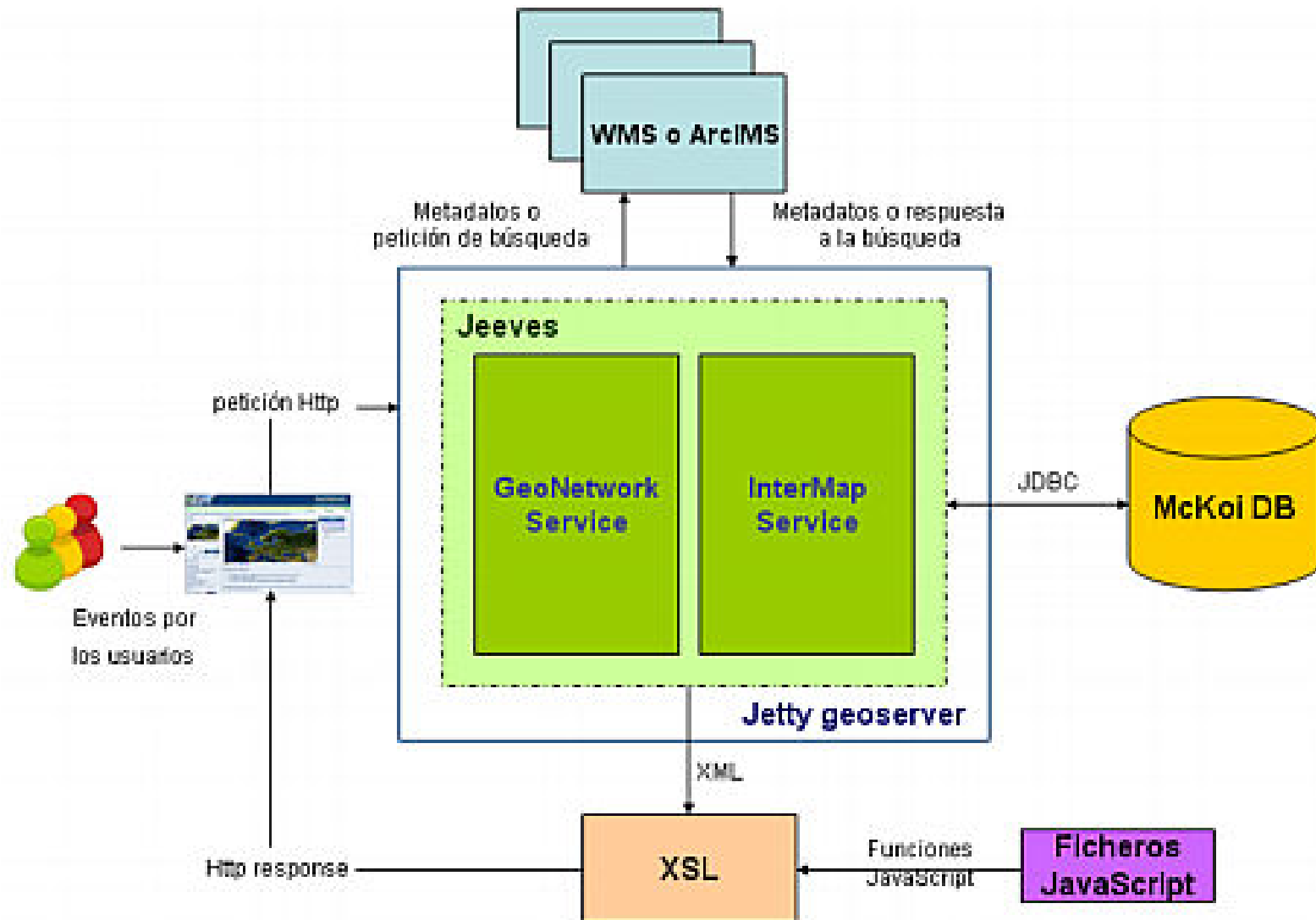
C. Aspecto gráfico

- Reemplazar los “banners” y los logos originarios con los del ETC.
- Mejorar y adaptar la barra de menú y de login al estilo del Geoportal.
- Añadir y/o editar iconos y comentarios.

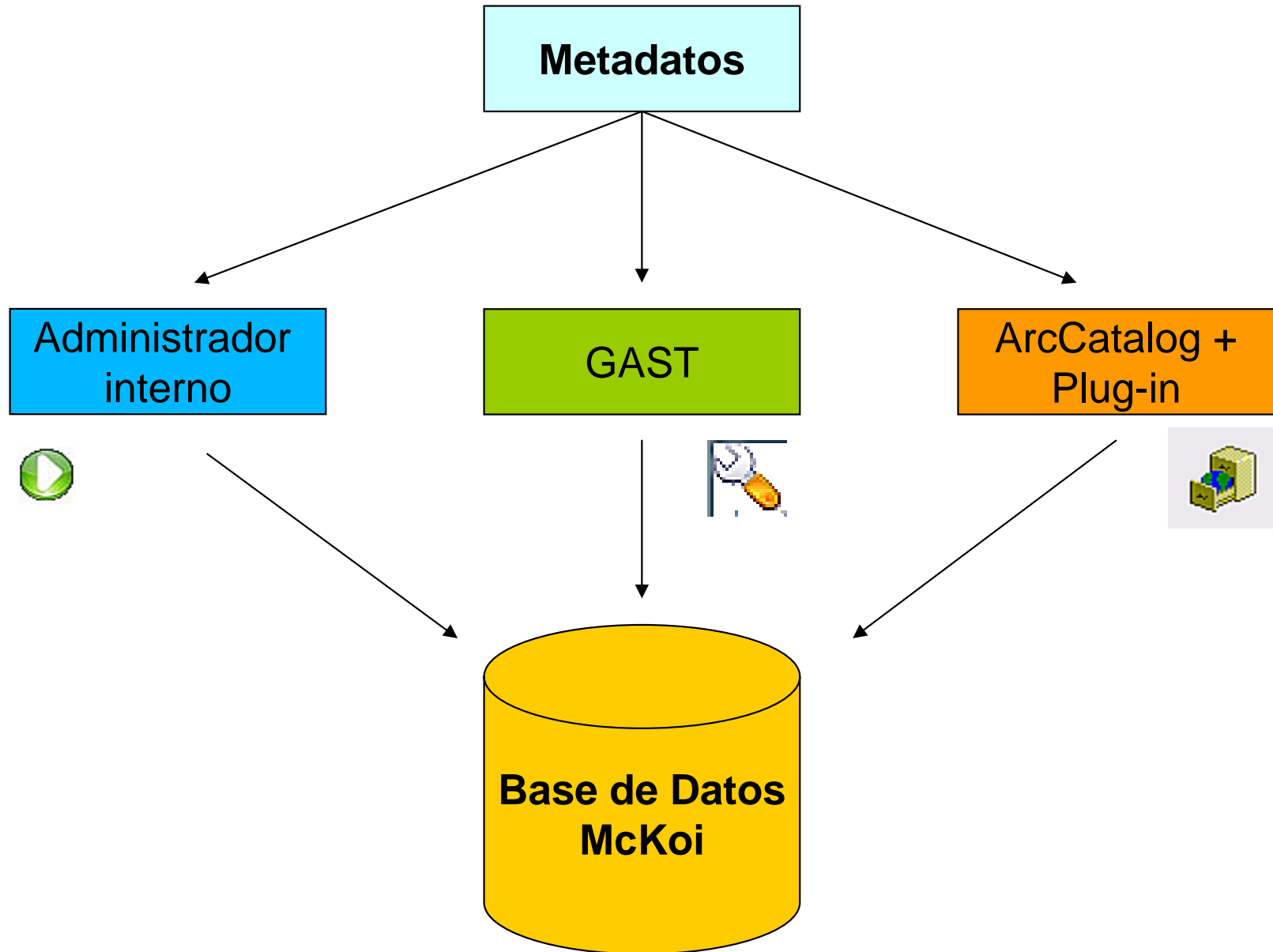
D. Funcionalidades de implementar al visor

- Fijar la extensión del visor al área de interés (en este caso Europa), por los dos mapas, al arrancar del programa.
- Restablecer el botón “*zoom a la capa*”
- Añadir un botón de zoom a la área de interés (“*zoom a Europa*”).
- Activar el botón “*imprimir*”
- Editar la plantilla de exportación a *.pdf*

Arquitectura del Software



Implementación datos internos



Catalogo

Implementación datos externos

Catalogo

Harvesting management

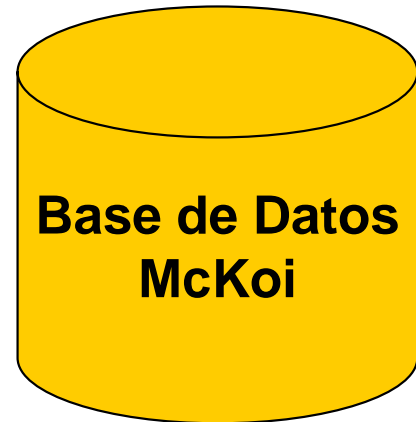
Type:

Remote GeoNode
WebDav
Web CSW 2.0
OAI-PMH

HARVESTING MANAGEMENT

Select	Name	Type	Status	Errors	Every	Last run	Operation
<input type="checkbox"/>	FAO	GeoNetwork	⊗	✓	0:1:30	2008-12-11 13:09:53	Edit
<input type="checkbox"/>	ESA	GeoNetwork	⊗	✓	0:1:30	2008-12-11 11:43:23	Edit
<input type="checkbox"/>	Italia IDEUnivers	GeoNetwork	⊗	✓	0:1:30	2008-12-31 12:18:37	Edit
<input type="checkbox"/>	Greece IDEUnivers	GeoNetwork	⊗	✓	0:1:30	2008-12-11 13:07:13	Edit
<input type="checkbox"/>	INSPIRE csw	CSW/2.0	⊗	⚠	0:1:30		Edit

.mef
UUID



Aspecto grafico

Logos, Barra, Strings, Banners..



geonetwork.css
Cascading Style Sheet Document
15 KB



header.xsl
Foglio di stile XSL
3 KB



banner.xsl
Foglio di stile XSL
9 KB

Mejoras de funcionalidad

Extensión a Europa, Zoom a la capa y a Europa, imprimir..



im_minimap.js
JScript Script File
6 KB



intermap.js
JScript Script File
14 KB



index-embedded.xsl
Foglio di stile XSL
9 KB



ExportPDF.java



10mtig 2008
10th Mountain International Geomatics Symposium



Resultados

The screenshot shows a web-based GIS application interface. At the top, there is a green banner with the text "FOR TESTING ONLY" in a red diagonal box, "PROTOTYPE Land use geo node Provided by EEA/ETC LUSI" with a logo, and the word "Banner" in blue. Below the banner is a navigation menu with links: Home, Models, Interactive Online Processing, Links, Contact us, About, Help. On the right of the menu are language options: Español, Français, English, and a login section with fields for Username and Password, and a Login button. The main content area features a search interface on the left with "What?" and "Where?" labels, a search bar, and a "Search" button. Below the search bar are "Reset", "Advanced", and "Options" links. A "CATEGORIES" list includes Applications, Audio/Video, Case studies, best practices, Conference proceedings, Datasets, Directories, Interactive resources, and Maps & graphics. The central part of the interface is a map viewer showing a satellite-style map of Europe with a land cover overlay in green and yellow. A "LAYERS" panel on the right lists: Country boundaries, Corine Land Cover 2000 version 9 at 250m, WMS Global Mosaic, not pan sharpened, and Blue Marble world image. Several icons (a globe, a hand, a magnifying glass, a power button, and a refresh button) are circled in orange. A red box highlights the login and menu area. A green box highlights the search and category sections. A green text label "Extensión del los visores a Europa" is positioned at the bottom right of the map area.

FOR TESTING ONLY

PROTOTYPE
Land use geo node
Provided by EEA/ETC LUSI

Banner

Home Models Interactive Online Processing Links Contact us About Help

Español Français English

Username Password Login

What? Where?

Iconos

Close Map Viewer

- Any -

Search

Reset Advanced Options

CATEGORIES

- Applications
- Audio/Video
- Case studies, best practices
- Conference proceedings
- Datasets
- Directories
- Interactive resources
- Maps & graphics

LAYERS

- Country boundaries
- Corine Land Cover 2000 version 9 at 250m
- WMS Global Mosaic, not pan sharpened
- Blue Marble world image

Extensión del los visores a Europa

Vista de los datos almacenados después una búsqueda



EU MOUNTAIN AREAS



☆☆☆☆☆ Rate It

Abstract Mountain mask derived from 1 km DEM based on rules following the rules defined in the DG Regio-study conducted by Nordregio/UNEP-WCMC. The mountain mask includes the mountains of Europe (inc...

Keywords Mountains, Elevation



[Metadata](#)

[Interactive Map](#)



URBAN MORPHOLOGICAL ZONES 1990 V. 2006 (VECTOR)



☆☆☆☆☆ Rate It

Abstract A UMZ is defined as a "set of urban areas laying less than 200 m apart". Urban areas have been selected from Corine Land Cover 1990, version 08/2005, by means of a complex methodology explai...

Keywords Urban, Population and Economy, Environmental reporting, Households



[Metadata](#)

[Interactive Map](#)



BIOGEOGRAPHICAL REGIONS, 2005



☆☆☆☆☆ Rate It

Abstract The bio-geographic regions dataset contains the official delineations used in the Habitats Directive (92/43/EEC) and for the EMERALD Network set up under the Convention on the Conservation o...

Keywords Macaronesia, Mediterranean, Pannonic, Steppic, Natlan, ETC/NPB, DISMED, Alpine, Anatolian, Arctic, Atlantic, Black Sea, Boreal, Continental, geographic, regions, Biogeographical regions



[Metadata](#)

[Interactive Map](#)



Detalles del Metadato

Logo



EU MOUNTAIN AREAS

Abstract Mountain mask derived from 1 km DEM based on rules following the rules defined in the DG
Regio-study conducted by Nordregio/UNEP-WCMC. The mountain mask includes the mountains of
Europe (inc...
Keywords Mountains, Elevation

Guardar .XML



Thumbnail



Vista en GoogleEarth

Mapa interactiva





Estructura del Metadato

Mapa Interactivo

MiniMap

BigMap

What?

Where?    

Close Map Viewer


- Any -

Search ▶

Advanced Options




CATEGORIES

- Applications
- Audio/Video
- Case studies, best practices
- Conference proceedings
- Datasets
- Directories
- Interactive resources
- Maps & graphics
- OGC compliant Web Services
- Other information resources
- Photo


RECENT CHANGES 

- Reference Grid 100km
- Dominant Land Cover Types 1990 (5 Km)
- Urban Morphological Zones, pages for 1990-2000

LAYERS

- Dominant Landscape Type 2000 Radius 5km
- Country boundaries
- WMS Global Mosaic, not pan sharpened
- Opaque   
- Blue Marble world image

Aggregate Results matching search criteria : 1-10/20 (page 1) Sort by

 **DOMINANT LAND COVER TYPES 2000 (5 KM)**

Abstract Dominant Land Cover Types are defined by classification of the resulting values of CORILIS (smoothing of CORINE Land Cover) into dominant classes.

Keywords Generalisation, CORILIS methodology, CORINE Land Cover, Gaussian smoothing, Dominance, Dominant Land Cover

Interactive Map

Enlace a Google Earth

CORINE LAND COVER (CLC1990) 100 M - VERSION 9/2

Abstract CLC1990 for protection
Keywords landcover

Metadata

Apertura di google.kml

È stato scelto di aprire

google.kml
che è un: File KML

☆☆☆☆☆ Rate It

Luoghi

- Alfa scoperta del pianeta
- corine land use
- hydrological basins in Africa
- Luoghi temporanei
- Corine land cover (CLC1990) 100 M
- Corine land cover (CLC1990)...

Livelli

- Database principale
- Web geografico
- Strade
- Edifici 3D
- Street View
- Confini ed etichette
- Tempo meteorologico
- Galleria
- Consapevolezza globale
- Luoghi di interesse
- Altro
- Terreno 3D

Legend:

- Urban fabric
- Commercial units
- Transportation networks and associated land
- Industrial areas
- Construction sites
- Urban areas
- Green and leisure facilities
- Irrigated arable land
- Permanently irrigated land
- Cereals
- Orchards
- Plantations
- Live groves
- Pastures
- Annual crops associated with permanent crops
- Complex cultivation patterns
- Agriculture mosaics with significant natural vegetation
- Pro-forestry areas
- Broad-leaved forest
- Coniferous forest
- Mixed forest
- Rural grassland
- Wetlands and heathland
- Non-woody vegetation
- Seasonal woodland shrubs
- Sandy dunes and sand plains
- Barren
- Highly vegetated areas
- Perpetual snow

©2008 Europa Technologies
©2008 Tele Atlas
Image ©2008 TerraMetrics
Data SIO, NOAA, U.S. Navy, NGA, GEBCO

7373.24 km Alt

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Conexion a servicios Web

Add new layer

1:64.476.080

ADD A NEW LAYER

PLEASE CHOOSE ONE OR MORE MAP SERVICES FROM THE LIST BELOW

WEB MAP SERVICE.EUROPEAN TOPIC CENTRE ON LAND USE AND SPATIAL INFORMATION. EUROPEAN ENVIRONMENT AGENCY (EEA)

Abstract WMS maintained by European Topic Centre on Land Use and Spatial Information. This services includes information about Corine Land Cover at different resolutions among other reference datasets at European scale.

Keywords: WMS, EEA, UAB

Home page: <http://158.109.55.144/cgi-bin/wms?>

Contact information:
Primary contact person: etclusi@uab.es (European Topic Centre on Land Use and Spatial Information)
Position: GIS Team Leader
Address Universitat Autònoma de Barcelona (UAB).Facultat de Ciències, Edifici C5, 4ª Planta, Bellaterra Bellaterra (Barcelona) E-08193 Spain, EU
email: etclusi@uab.cat

Web Map Service.European Topic Centre on Land Use and Spatial Information. European Environment Agency (EEA)

- ▶ **Euroasion**
 - Geology, Geomorphology and Erosion Trend Version 2.1 layer ⓘ
- ▶ **Biogeographical Regions**
 - Biogeographical regions, Europe 2008 ⓘ
 - Biogeographical regions, Europe 2005 ⓘ
- ▶ **EU Mountain Areas**
 - Mountain Areas ⓘ
- ▶ **Urban Morphological Zones**
 - Green Urban Areas within urban morphological zones 1990 ⓘ
 - Green Urban Areas within urban morphological zones 2000 ⓘ
- ▶ **Urban Morphological Zones**
 - Urban Morphological Zones (UMZ) 1990

Ok


Todos las capas disponibles por el servicio seleccionado

Seleccionando uno o mas datos y presurizando el botón OK, añadiremos los datos a la vista

MiniMap

What?

Where?



Close Map Viewer

- Any -

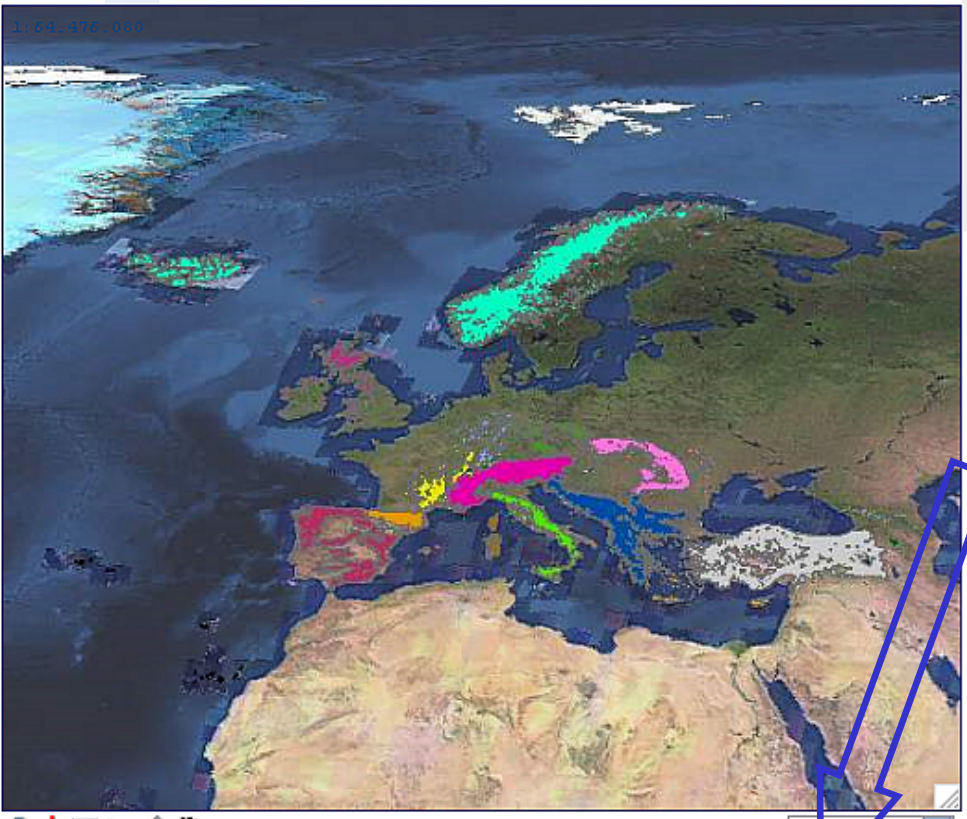
Search ▶

Reset Advanced Options

CATEGORIES

- ▶ Applications
- ▶ Audio/Video
- ▶ Case studies, best practices
- ▶ Conference proceedings
- ▶ Datasets
- ▶ Directories
- ▶ Interactive resources
- ▶ Maps & graphics
- ▶ OGC compliant Web Services
- ▶ Other information resources
- ▶ Photo

BigMap



LAYERS

- Mountain Areas
- WMS Global Mosaic, not pan sharpened
- Blue Marble world image

Opaque

Propiedades de las capas

Activar leyenda y visualizar el Metadato

Titulo y resumen

Leyenda

LAYER INFORMATION

Title Mountain Areas

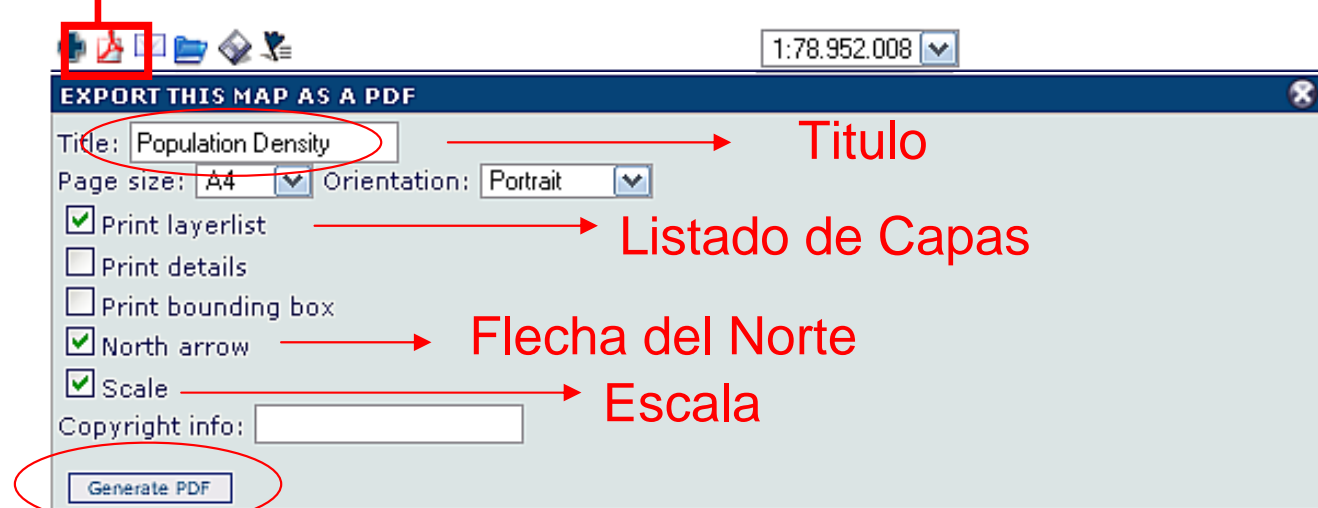
Abstract The mountain massives were created from the EEA-mountain mask (based on a 1*1 km DEM and the rules according to the DG Regio/Nordregio /UNEP-WCMC project). The main geographic entities of mountain massives were delineated. In total 15 massives were differentiated. The massives follow rather socio-economic parameters than detailed biogeographic ones. The purpose of the delineation was to reveal comparable massives for european wide socio-economic spatial analysis. The underlying mountain mask was generated from the mountain mask GRID using the (simplify polygon) option. Therefore the borders do not match the 1*1km GRID. The delineation of mountain massives were made manually using mainly NUTS 3 units to differentiate between the massives.

Legend

- Alps
- Carpathian mountains
- Apennines
- French/Swiss middle mountains
- Central European middle mountains 1 (BE+GE)
- Central European middle mountains 2 (CZ, AT, GE)
- Pyrenees
- Iberian mountains
- Western Mediterranean islands
- Eastern Mediterranean islands
- Turkey
- Balkans/Southeast Europe
- British Isles
- Nordic mountains
- Atlantic islands
- Lakes

Plantilla para crear un documento PDF

Activar Ventana de dialogo



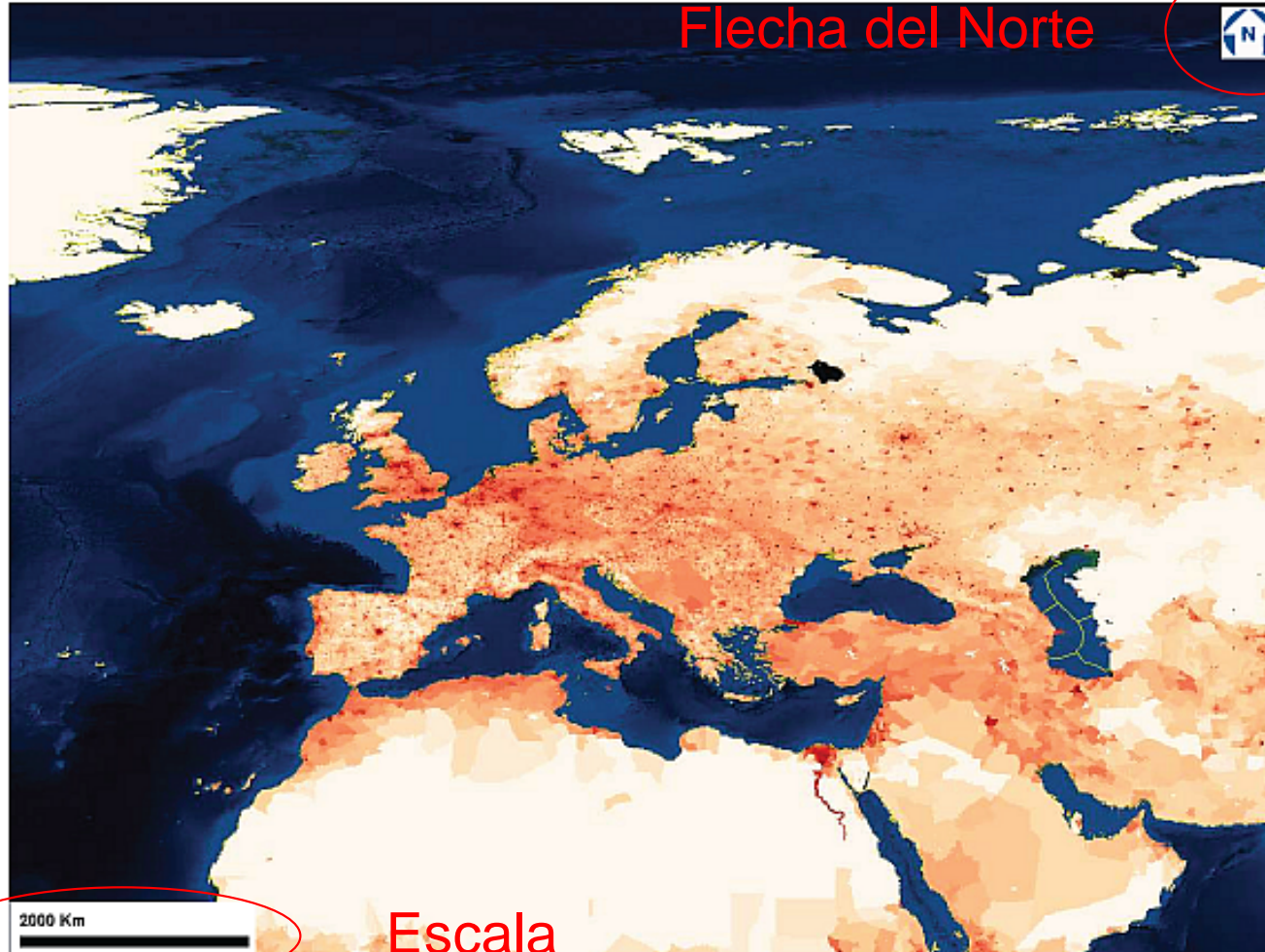
Crear PDF

Ventana Activa

Logo del Agencia Population Density



Flecha del Norte



Escala

Layers list:

1. Population Density
2. Country boundaries
3. Blue Marble world image

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Conclusiones

Ha tenido un éxito positivo. Se ha logrado cumplir todos los objetivos.

El GeoNetwork está disponible en la red, cataloga los Metadatos del ETC, permite visualizarlos con distintas opciones y interactuar con esos.

Con la utilización de programas opensource, se ha dado un paso más, a favor de la causa del software libre y de código abierto.

Perfeccionamiento del conocimiento personal sobre visores y servidores Web, metadatos y sus estándares, lenguaje de programación JavaScript, Java, XML, XSL, tecnología AJAX.

...gracias a todos!!!

10mtig 2008

10 años de la creación del LUSI



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