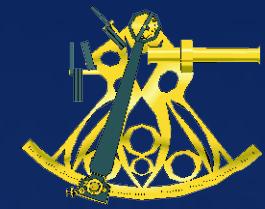




Sextant



French Spatial Data Infrastructure for Marine Environments

IMDIS 2013

Session 3 – Data Services in ocean science

Lucca (Italia), September 23-25, 2013

C. Satra-Le Bris, E. Quimbert, M. Treguer, A. Louarit

Centre de Bretagne
CS10070, Plouzané 29280 France
E-mail: catherine.satra@ifremer.fr

Ifremer

Sextant Web portal

- Sextant web portal interface
 - <http://www.ifremer.fr/sextant>

➤ Objectives

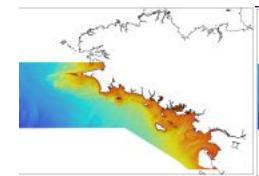
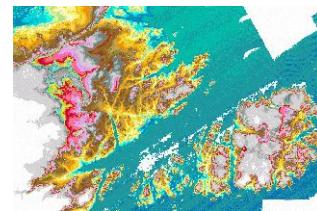
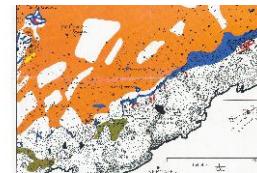
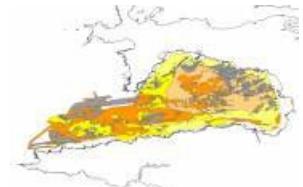
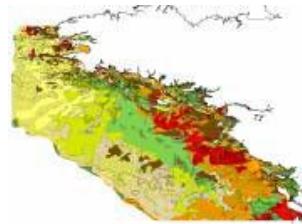
- Manage and share geographical marine information data sets, in order to support marine studies and decision making
- Make available vector and raster spatial data produced by Ifremer and its partners
- Web GIS providing discovery, viewing and download online services
- Designed according to the European INSPIRE directive for interoperability and according to the OGC and ISO TC 211 standards





Multi thematic data holdings

- Aggregated and finalised data products
- Environment
 - Water quality (coastal networks)
 - Marine habitats
 - Aquaculture
- Halieutics
 - Fishing activities
 - Resources
 - Economical aspects
- Geoscience
 - Bathymetry
 - Sedimentology
 - Acoustic imagery (sonar)
- Ocean physics
 - Hydrodynamics (temperature, salinity, currents)
- Historic data
 - Archive photos and historic habitats maps





Sextant : the web services functions

Sextant: the French marine spatial data infrastructure

From the editorial page, you can access the main functions of Sextant

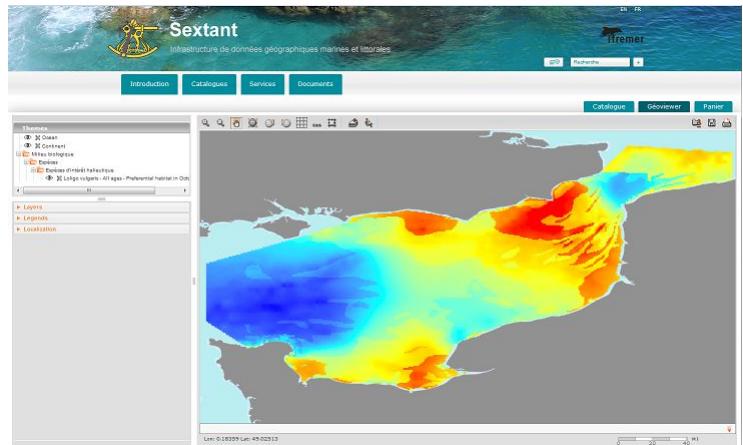
Discovery Services

The Metadata Catalogue

Ifremer

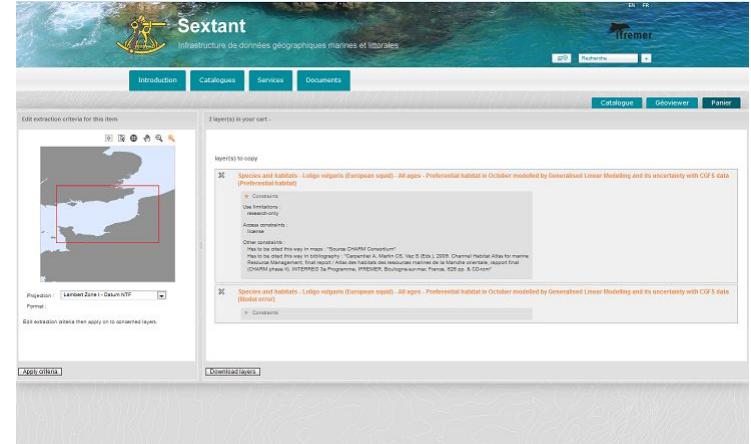
View Services

The Geoviewer



Download Services

The Basket



Sextant : the metadata catalogue



- Sextant is organised into thematic catalogues:
 - They bring together data sets related to scientist departments, or projects, or geographical areas
 - One metadata can be associated to many catalogues
 - Each catalogue can have its own CSW address
- The thematic catalogues warrant:
 - A users rights management associated to the data
 - A secured distribution of the information
 - And give the choice of a website to present the associated project





Sextant : the metadata catalogue

Sextant: the French marine spatial data infrastructure

➤ Catalogue user's interface

The screenshot illustrates the Sextant metadata catalogue user interface. On the left, the 'Criteria of search' panel shows a map of the French coast with a yellow rectangular selection box. Below the map are search fields for 'Full text search' and 'Catalogue', and a list of themes including 'Sextant' (selected) and 'INSPIRE'. A sidebar lists categories like Human Activities, Seascapes Maps, Imagery, Biological Environment, Chemical Environment, Physical Environment, and Regulation and Management. At the bottom are 'Reset' and 'Search' buttons. On the right, the 'Results page' displays four search results, each with a thumbnail map, a title, a detailed description, a 'Source' field, and 'Download' and 'View' buttons. The results are:

- Species and habitats - *Loligo vulgaris* (European squid) - All ages - Mean abundance in October, standard deviation and summed kriging error maps during CGFS [1993-2006]
- Species and habitats - *Loligo vulgaris* (European squid) - All ages - Preferential habitat in October modelled by Generalised Linear Modelling and its uncertainty with CGFS data
- Species and habitats - *Loligo forbesii* (Northern/Veined squid) - All ages - Potential habitat in October modelled by Quantile Regression and its uncertainty with CGFS data
- Species and habitats - *Lotidae* (Rocklings) - Eggs - Abundance in January (IBTS survey 2007)

Criteria of search

Results page

- More than 3000 public metadata on-line describing more than 5000 geographical information layers

Sextant : the metadata catalogue



[Simples selection](#)

Where

What

Full text search:

Catalogue:

Themes: Sextant INSPIRE

- Human Activities
- Scanned Maps
- Imagery
- Biological Environment
- Chemical Environment
- Physical Environment
- Regulation and Management

Who

Companies:

When

Begin date:

End date:

Reset Search

- You can choose many different criteria to search a metadata
 - Where : to search a metadata according to its localization
 - What : to search a metadata according to its content
 - Full-text search
 - ✓ All the words in the metadata are taking into account
 - Catalogue
 - ✓ You can choose one or more thematic catalogue
 - Themes
 - ✓ You can select one ore more themes in the checkboxes
 - Who : to search a metadata according to its producers
 - When : to search a metadata according to its date

Sextant : the metadata catalogue



➤ Search results

Where

Map showing the British Isles and surrounding continental shelf, with a yellow rectangular selection box over the English Channel and North Sea area.

What

- Full text search:
- Catalogue: **ATLAS_CHARM**
- Themes:
 - Sextant
 - INSPIRE
- Human Activities
- Biological Environment
- Physical Environment
- Regulation and Management

Who

Companies:

When

Simple selection

< | >> | 1-20 result(s) / 1332 |

Sort by: Relevance

Species and habitats - Merlangius merlangus (Whiting) - Larvae Stage 3 - Preferential habitat in April/May modelled by Generalised Linear Modelling and its uncertainty for Reise1, Reise2 and BCD surveys

Modelled abundance of larvae of several species or prediction uncertainty.

Sources : Université du Littoral Côte d'Opale, CHARM consortium

Download | **View**

Species and habitats - Merlangius merlangus (Whiting) - Larvae Stage 3 - Potential habitat in April/May modelled by Quantile Regression and its uncertainty for Reise1, Reise2 and BCD surveys

Modelled abundance of larvae stages of several species or prediction uncertainty.

Sources : Université du Littoral Côte d'Opale, CHARM consortium

Download | **View**

Species and habitats - Merlangius merlangus (Whiting) - Nurseries British coasts - Multi-annual abundance in September Kriging error map

Abundance of several species in coastal nurseries along british coasts. Kriging error (v) resulting from the interpolation of these data was mapped.

Sources : CEFAS, CHARM consortium

Download | **View**

Species and habitats - Merlangius merlangus - Immature - Potential habitat in July modelled by Quantile Regression and its uncertainty with BTS data

Modelled abundance of species or prediction uncertainty.

Sources : CEFAS, CHARM consortium

Download | **View**

A large blue starburst with the word "click" in the center points to the "View" button for the first search result.



Sextant : the metadata catalogue

➤ Search results : metadata display

Simple selection << | >> | 1-20 result(s) / 1332 | Sort by Relevance

Where

Species and habitats - Merlangius merlangus (Whiting) - Larvae Stage 3 - Preferential habitat in April/May modelled by Generalised Linear Modelling and its uncertainty for Reise1, Reise2 and BCD surveys

Modelised abundance of larval stages of several species or prediction uncertainty.

Species and habitats - Merlangius merlangus (Whiting) - Larvae Stage 3 - Preferential habitat in April/May modelled by Generalised Linear Modelling and its uncertainty for Reise1, Reise2 and BCD surveys

Modelised abundance of larval stages of several species or prediction uncertainty.

OGC Web Map Service (ver 1.1.1) Preferential habitat Model error

Web address (URL) <http://www.ifremer.fr/charm/>

Identification info

Title	Species and habitats - Merlangius merlangus (Whiting) - Larvae Stage 3 - Preferential habitat in April/May modelled by Generalised Linear Modelling and its uncertainty for Reise1, Reise2 and BCD surveys
Alternate title	BCD-Reise_species_model
Alternate title	CHARM_LIMALIM_LARV3_GLM
Date	2009-12-31T00:00:00
Date type	Publication: Data identifies when the resource was issued
Code	CHARM_MERNMER_LARV3_GLM_MOD_ERR_R
Presentation form	Digital map: Map represented in raster or vector form
Other citation details	Source CHARM Consortium
Abstract	Modelised abundance of larval stages of several species or prediction uncertainty.
Credit	Université du Littoral Côte d'Opale
Credit	CHARM consortium
Status	Completed: Production of the data has been completed

Point of contact

Individual name	Philippe Koubbi	Electronic mail address	koubbi@obs-vlfr.fr
Organisation name	UPMC Univ Paris 06, UMR 7093, Laboratoire d'Océanographie de Villefranche		
Role	Point of contact: Party who can be contacted for acquiring knowledge about or acquisition of the resource		

View September View

ed by Quantile

View

Session and its

View

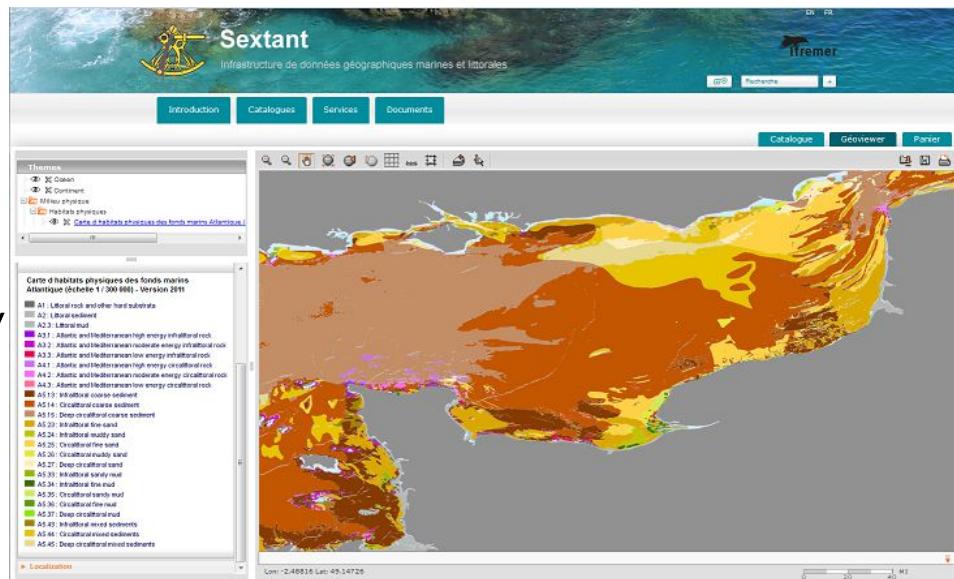
European Regional Development Fund The European Union, investing in your future

French regional development project L'Union européenne investit dans votre avenir

Sextant : the Geoviewer



- The Web GIS interface allows end-users
 - to create maps including several layers from internal and external sources
 - the portal access to local and remote OGC services
 - to consult and explore data
 - Navigation, zoom tools
 - Query a layer
 - Print the map in PDF file
 - to manage layer display
 - Layer order
 - Transparency
 - Symbology (grid data)



Sextant : the Geoviewer



Sextant
Infrastructure de données géographiques marines et littorales

EN FR

Ifremer

Introduction Catalogues Services Documents Catalogue Géoviewer Panier

Themes

- Ocean
- Continent
- Milieu physique
 - Habitats physiques
 - [Carte d'habitats physiques des fonds marins Atlantique](#)
- Milieu biologique
 - Espèces
 - Espèces d'intérêt halieutique

Layers

Ocean

Legends

0m - 10000m

Continent

gris

Carte d'habitats physiques des fonds marins Atlantique (échelle 1 / 300 000) - Version 2011

Code	Description
A1	Littoral rock and other hard substrata
A2	Littoral sediment
A2.3	Littoral mud
A3.1	Atlantic and Mediterranean high energy infralitoral rock
A3.2	Atlantic and Mediterranean moderate energy infralitoral rock
A3.3	Atlantic and Mediterranean low energy infralitoral rock
A4.1	Atlantic and Mediterranean high energy circalitoral rock
A4.2	Atlantic and Mediterranean moderate energy circalitoral rock
A4.3	Atlantic and Mediterranean low energy circalitoral rock
A5.13	Infralitoral coarse sediment
A5.14	Circalitoral coarse sediment
A5.15	Deep circalitoral coarse sediment
A5.23	Infralitoral fine sand
A5.24	Infralitoral muddy sand
A5.25	Circalitoral fine sand

Lon: -1.19809 Lat: 49.01749

0 20 40 MI

Géoviewer

European Regional Development Fund
The European Union, investing in your future

France (manche) régional Interreg
Fonds européen de développement régional
L'Union européenne investit dans votre avenir

Ifremer

Sextant : the Geoviewer



Sextant
Infrastructure de données géographiques marines et littorales

EN | FR | Recherche |

Introduction Catalogues Services Documents Catalogue Géoviewer Panier

Navigation tools

Add a WMS layer

Choose a WMS server :
- or -
Enter the URL of a WMS server :

- Benthologie**
 - Formations superficielles du précontinent
 - Formations superficielles du précontinent
 - Carte géomorphologique du précontinent
 - Carte géomorphologique du précontinent
 - Faciès sédimentaires superficiels de la baie
 - Faciès sédimentaires superficiels de la baie
 - Figures sédimentaires superficielles de la baie de Douarnenez (1988)
- Ifremer - Géosciences marines**
 - Ifremer - Océanographie physique
 - Ifremer - MNT
 - Ifremer - Granulats marins
 - Ifremer - Géosciences marines
 - Ifremer - Biologie
 - Ifremer - Surveillance littorale
 - Agence des parcs marins protégés
 - BRGM Géologie
 - BRGM Risques naturels et industriels
 - BRGM Observatoire des matériaux
 - CartoRisque
 - Forum des marais Atlantique
 - Geolitoral
 - Geosignal
 - Ifen
 - MNHN-INPN
 - Marine Regions
 - Sandre Ouvrage
 - Sandre Stations
 - Sandre Zonage

WMS services access

Layers management

Themes

- Ocean
- Continent
- Milieu physique
 - Carte d'habitats physiques des fonds marins Atlantique** (échelle 1 / 300 000) - Version 2011
- Milieu biologique
 - Espèces
 - Loligo forbesi - All ages - Potential habitat in October**

Layers

Carte d'habitats physiques des fonds marins Atlantique (échelle 1 / 300 000) - Version 2011

Opacity : 100%

Style :

Loligo forbesi - All ages - Potential habitat in October (RQ)

Continent

Ocean

Legends

Lon: -1.26298 Lat: 49.75032

0 20 40 MI

Sextant Web portal – The Basket



➤ Choose the extraction parameters

- Formats
 - Vector (Shapefile, MapInfo, MIF/MID, GML/ KML)
 - Raster (Ecw, GeoTiff, Jpeg)
- Coordinate system (WGS84, ETRS89...)
- Geographical extraction extent
- Read and agree the usage rules
- Reception of an email indicating that your extraction zip is ready to be downloaded

Edit extraction criteria for this item

✖ ✖ ✖ ✖ ✖ ✖



Projection : Lambert Zone I - Datum NTF

Format :

- raster
- vector

Edit extraction criteria then apply on to concerned layers.

Define extraction criteria for all layers

6 layer(s) in your cart - Global volume estimation: 0 MB / 1000 MB

Raster layer(s)

- ✖ Species and habitats - *Trisopterus luscus* - All ages - Multi-annual abundance Kriging error maps during BTS (1989 - 2006) ()
- ▶ Constraints
- ▶ Edit extraction criteria for this item

Vector layer(s)

- ✖ Fishing activities - Fishing frequency (number of fishing trips) in 2006 for French vessels. Concern : netter, longliner, multipurpose
- ▶ Constraints
- ▶ Edit extraction criteria for this item
- ✖ CHARM 1 and 2 official zones and CHARM 3 suggested zone (CHARM 1)
- ▶ Constraints
- ▶ Edit extraction criteria for this item
- ✖ CHARM 1 and 2 official zones and CHARM 3 suggested zone (CHARM 2)
- ▶ Constraints
- ▶ Edit extraction criteria for this item

Define extraction criteria for each layer



Interoperability and Inspire

- Metadata normalized
 - ISO 19115 and ISO 19139 standards compliant
 - OGC standard – Catalogue Services Web (CSW 2.0.2)
 - <http://www.ifremer.fr/geonetwork/srv/fre/csw?SERVICE=CSW&REQUEST=GetCapabilities&VERSION=2.0.2>
- Viewing data
 - OGC standard - Web Map Service (WMS)
 - <http://www.ifremer.fr/services/biologie>
 - <http://www.ifremer.fr/services/geologie>
 - http://www.ifremer.fr/services/oceanographie_physique
- Data extraction
 - OGC standard - Web Feature Service (WFS)
 - <http://www.ifremer.fr/services/wfs1>
 - OGC standard - Web Coverage Service (WCS)
 - <http://www.ifremer.fr/services/wcs1>



OGC

Interoperability and Inspire



➤ Sextant harvesting, from the National Geocatalogue

Recherche simplifiée

Où

Quoi

Recherche libre: REBENT

Catalogue: REBENT

Thèmes:

- Sextant
- INSPIRE
- Cartes scannées
- Imagerie
- Milieu biologique
- Milieu physique

Qui

Quand

<< | >> | 1-20 résultat(s) / 67 | Trier par Titre

Carte des habitats benthiques du secteur de l'archipel des Glénan (REBENT, 2006) à une échelle comprise entre le 1/5000 et le 1/10000 sous forme de polygones

Cette carte des habitats benthiques de l'archipel des Glénan est le résultat du traitement, de l'analyse et de l'agrégation de données d'auteurs et d'organismes multiples M. Le Hir, S. Chauvaud, G. Robert, du bureau d'études Télédétection et Biologie Marine (TBM) en 2005, A. Ehrhold, A. Blanchet, D. Hamon de l'Ifremer en 2006, CEVA en 2004 et...

Sources : Rebent

Visualiser

Carte des habitats benthiques du secteur de Saint-Brieuc (multisource REBENT, 2006) - Echelle : 1/10000 à 1/25000

Cette carte des habitats benthiques du secteur de Saint-Brieuc est le résultat du traitement, de l'analyse et de l'agrégation de données d'auteurs et d'organismes multiples P. Gros, en 1988, D. Hamon, en 1988 et 1990, C. Augris, en 1996, P. Le Mao en 2002, de l'Ifremer, données IGN de 1998, ORTHOLITTORALE 2000In Vivo en 2001C. Bonnot-Courtois, A....

Sources : Rebent

Visualiser

Carte des habitats benthiques du secteur des Abers Zone intertidale (multisource Rebent, 2010) - Echelle : 1 / 10 000

Cette carte des habitats benthiques du secteur des Abers a été réalisée dans le cadre du REseau de surveillance BENthique (REBENT). Elle a été élaborée à partir de l'orthophotographie littorale 2000, d'une image satellite SPOT-5, de données LIDAR, d'un MNT, du cadastre conchylicole et de données complémentaires provenant de travaux antérieurs....

Sources : Rebent

Visualiser

➤ A dedicated CSW for the Geonational Catalogue

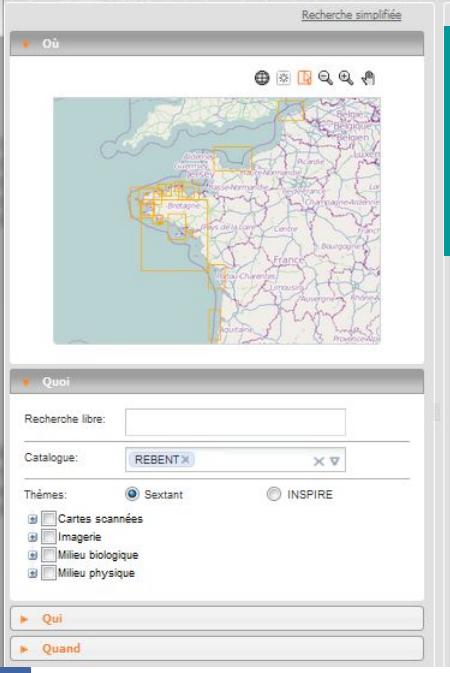


Interoperability and Inspire



➤ Sextant harvesting, from the National Geocatalogue

[FR](#) | [EN](#) | [ES](#) | [DE](#)



Où

Recherche simplifiée

Quoi

Recherche libre:

Catalogue: **REBENT**

Thèmes: Sextant INSPIRE

- Cartes scannées
- Imagerie
- Milieu biologique
- Milieu physique

Qui

Quand

géo catalogue

ACCUEIL VOIR RECHERCHER CATALOGUER SERVICES PARTENAIRES S'INFORMER

[Visualiser ma carte](#) [Ma sélection](#) 0 données [Mes préférences](#)

Résultats de la recherche

Mot(s)-clé(s) : rebent Nature de l'information : Tout le catalogue

Emprise (Long/Lat) : 38.180 (S), 54.758 (N), -7.957 (W), 14.015 (E)

[Modifier ma recherche](#)

Résultats : 6 à 10 sur 64 Triés par: Titre Résultats par page: 5 | 10 | 20 | 50

Carte des habitats benthiques du secteur des Abers Zone intertidale (multisource Rebent, 2010) - Echelle : 1 / 10 000

Web ISO OGC Serv CAT

Ifremer

Cette carte des habitats benthiques du secteur des Abers a été réalisée dans le cadre du REseau de surveillance BENthique (REBENT). Elle a été élaborée à partir de l'orthophotographie littorale 2000, d'une image satellite SPOT-5, de données LiDAR, d'un MNT, du cadastre conchylicole et de données complémentaires provenant de travaux antérieurs. Les données issues de campagnes de terrain constituent

Catalogue de provenance : Sextant

Propriétaire(s) de la donnée : Ifremer

[Voir fiche](#) [Prévisualiser](#) [Télécharger](#) [Site Web](#)

Carte des habitats benthiques du secteur de l'archipel des Glénan (REBENT, 2006) à une échelle comprise entre le 1/5000 et le 1/10000 sous forme de polygones

Web ISO OGC Serv CAT

Ifremer

Cette carte des habitats benthiques de l'archipel des Glénan est le résultat du traitement, de l'analyse et de l'agrégation de données d'auteurs et d'organismes multiples : - M. Le Hir, S. Chauvaud, G. Robert, du bureau d'études Télédétection et Biologie Marine (TBM) en 2005, - A. Ehrhold, A. Blanchet, D. Hamon de Ifremer en 2006, - CEVA en 2004 et 2005 (zone rocheuse subtidale), - I. Peuziat et

Catalogue de provenance : Sextant

Propriétaire(s) de la donnée : Ifremer

[Voir fiche](#) [Prévisualiser](#) [Télécharger](#) [Site Web](#)

Carte des habitats benthiques du secteur du Croisic - zone intertidale (multisource Rebent, 2010) - Echelle 1/10000

Web ISO OGC Serv CAT

Ifremer

Cette cartographie des habitats benthiques du secteur du Croisic est réalisée dans le cadre du REseau de surveillance BENthique (REBENT). Elle a été élaborée à partir de l'orthophotographie littorale 2000, de campagnes de validation de terrain entre 2002 et 2004 et de données Lidar acquises en 2002. L'analyse combinée de ces données permet d'établir une cartographie correspondant à la répartition

Precisez votre recherche

Catégories

- Flore et faune (57)
- Ressources et gestion de l'environnement (7)
- Océans (7)
- Géosciences (1)

Thèmes INSPIRE

- Habitats et biotopes (55)
- Géologie (1)
- Répartition des espèces (1)

Résolution spatiale

- 1/10000 (15)
- 1/50000 (10)
- 1/100000 (9)
- 1/5000 (8)
- 1/25000 (5)
- 1/20000 (3)
- 1/250000 (2)
- 1/650000 (2)
- 1/300000 (2)
- 1/14400 (1)

Type de représentation

- Vecteur (43)
- Raster (18)

Légende

- Web Existence d'un site web
- ISO Métdonnées conformes à l'ISO 19139
- OGC Données conformes aux normes d'échanges internationales
- Serv Existence de services associés (téléchargement, ...)
- CAT Métdonnées provenant du moissonnage d'un catalogue



Interoperability and Inspire



➤ ... to the European Inspire Catalogue

Contact | Search | Legal notice English

 INSPIRE GEOPORTAL
Enhancing access to European spatial data

EUROPEAN COMMISSION > INSPIRE > INSPIRE GEOPORTAL > Discovery / Viewer What's

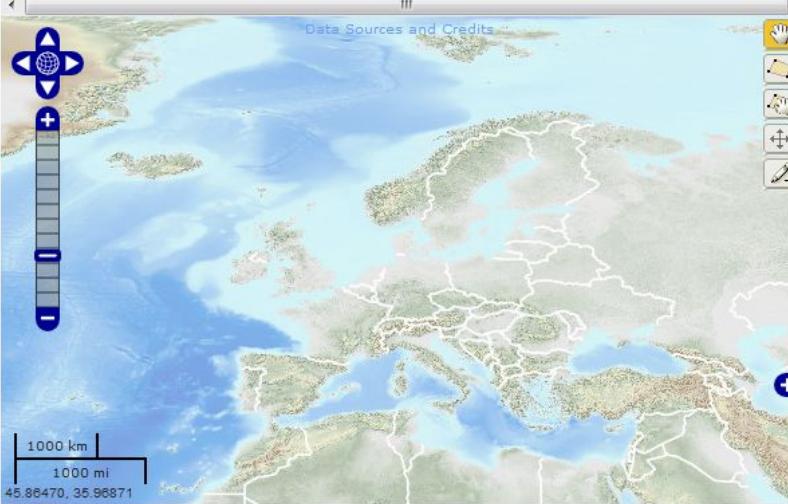
Find a place in: Europe Powered by GeoName

reblast

sorted by resource title A-Z displaying 1 to 10 out of 66 results

< 1 2 3 ... 6 7 >

Active Layers: 0



[dataset] Carte des habitats benthiques du secteur de l'archipel des Glénan (REBENT, 2006) à une échelle comprise entre le 1/5000 et le 1/10000 sous forme de polygones
Cette carte des habitats benthiques de l'archipel des Glénan ...[\(show more\)](#)

[dataset] Carte des habitats benthiques du secteur des Abers Zone intertidale (multisource Rebent, 2010) - Echelle : 1 / 10 000
Cette carte des habitats benthiques du secteur des Abers a é ...[\(show more\)](#)

[dataset] Carte des habitats benthiques du secteur de Saint-Brieuc (multisource REBENT, 2006) - Echelle : 1/10000 à 1/25000
Cette carte des habitats benthiques du secteur de Saint-Brie ...[\(show more\)](#)

[dataset] Carte des habitats benthiques du secteur du Croisic - zone intertidale (multisource Rebent, 2010) - Echelle 1/10000
Cette cartographie des habitats benthiques du secteur du Cro ...[\(show more\)](#)

[dataset] Carte des habitats benthiques du secteur Quiberon (source : Ehrhold A., Hamon D. et al., 2010) - Echelle : 1/2000 à 1/10000
Cette carte des peuplements benthiques du secteur Quiberon e ...[\(show more\)](#)

Sextant into Interreg projects



- CHARM (CHannel integrated Approach for marine Resource Management)
 - The CHARM project offers a status report of the Channel ecosystem and a range of tools based on scientific knowledge for the sustainable management of living marine resources.

The screenshot shows the CHARM web portal interface. On the left, there is a 'Thematic Catalogue' section with a tree view of categories: Category, Aquaculture, Benthic, Fish, Marine Mammals and Seabirds, Geosciences and Models, Hydrography, Coastal Zones, Environment, Energy, Pollution, Management, and Specific Areas. On the right, there is a 'Personalized Webportal' section with a preview of the portal's homepage featuring a coastal landscape image and various menu items.

- 1300 metadata describing layers related to benthic habitats, fisheries resources and environment
- one CSW url and one WMS service, which allow interoperability with the MEDIN portal in UK
- The CHARM project has been selected within the scope of the INTERREG IV A France (Channel) – England cross-border European cooperation programme, co-financed by the ERDF.

Sextant into Interreg projects

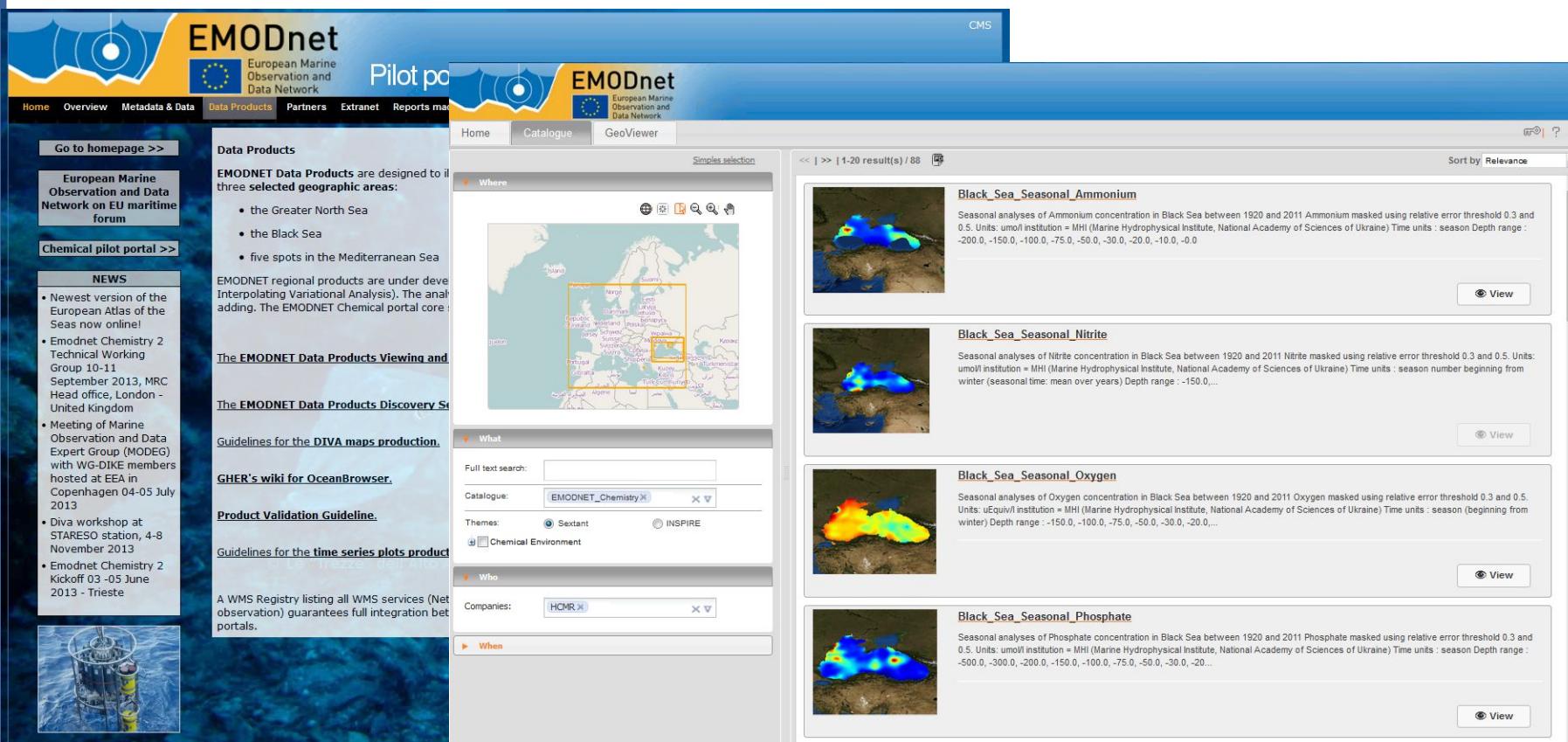


- PANACHE (Protected Area Network Across the Channel) and VALMER (Valuing ecosystem services in the western Channel)
 - Together both projects will focus on better management, sustainable use and protection of the Channel marine area.
 - They will use specially the data available from CHARM.
 - The Web GIS tool will access both Sextant and MEDIN catalogues through a unique web portal (in progress).
- The PANACHE and VALMER projects have been selected within the scope of the INTERREG IV A France (Channel) – England cross-border European cooperation programme, co-financed by the ERDF.



Sextant into European projects

- A catalogue data products for Emodnet Chemistry
 - 90 metadata describing the chemical characteristics of the water column
 - <http://www.emodnet-chemistry.eu/portal/portal/emodnet/Data+Products>
 - http://www.ifremer.fr/sextant/en/web/emodnet_chemistry



The screenshot shows the EMODnet Data Products portal interface. The left sidebar contains links for the homepage, overview, metadata, data products (which is the active tab), partners, extranet, reports, news, chemical pilot portal, and a link to the Sextant project. The main content area has tabs for Home, Catalogue, and GeoViewer. The Catalogue tab is active, showing a search interface with filters for Where (Black Sea), What (Ammonium, Nitrite, Oxygen, Phosphate), Who (HCMR), and When (1920-2011). The results list four items under 'Black_Sea_Seasonal_Ammonium', 'Black_Sea_Seasonal_Nitrite', 'Black_Sea_Seasonal_Oxygen', and 'Black_Sea_Seasonal_Phosphate'. Each result includes a thumbnail map, a title, a brief description, and a 'View' button.

Data Products

EMODNET Data Products are designed to illustrate three selected geographic areas:

- the Greater North Sea
- the Black Sea
- five spots in the Mediterranean Sea

EMODNET regional products are under development (Interpolating Variational Analysis). The analysis is adding. The EMODNET Chemical portal core is:

The EMODNET Data Products Viewing and Discovery System

The EMODNET Data Products Discovery System

Guidelines for the DIVA maps production.

GHER's wiki for OceanBrowser.

Product Validation Guideline.

Guidelines for the time series plots production.

A WMS Registry listing all WMS services (Net observation) guarantees full integration between portals.

Where

Where: Black Sea

What

Full text search:

Catalogue: EMODNET_Chemistry

Themes: Sextant, INSPIRE, Chemical Environment

Who

Companies: HCMR

When

When: 1920-2011

Black_Sea_Seasonal_Ammonium

Seasonal analyses of Ammonium concentration in Black Sea between 1920 and 2011 Ammonium masked using relative error threshold 0.3 and 0.5. Units: umol/l institution = MHI (Marine Hydrophysical Institute, National Academy of Sciences of Ukraine) Time units : season Depth range : -200.0, -150.0, -100.0, -75.0, -50.0, -30.0, -20.0, -10.0, -0.0

Black_Sea_Seasonal_Nitrite

Seasonal analyses of Nitrite concentration in Black Sea between 1920 and 2011 Nitrite masked using relative error threshold 0.3 and 0.5. Units: umol/l institution = MHI (Marine Hydrophysical Institute, National Academy of Sciences of Ukraine) Time units : season number beginning from winter (seasonal time: mean over years) Depth range : -150.0...

Black_Sea_Seasonal_Oxygen

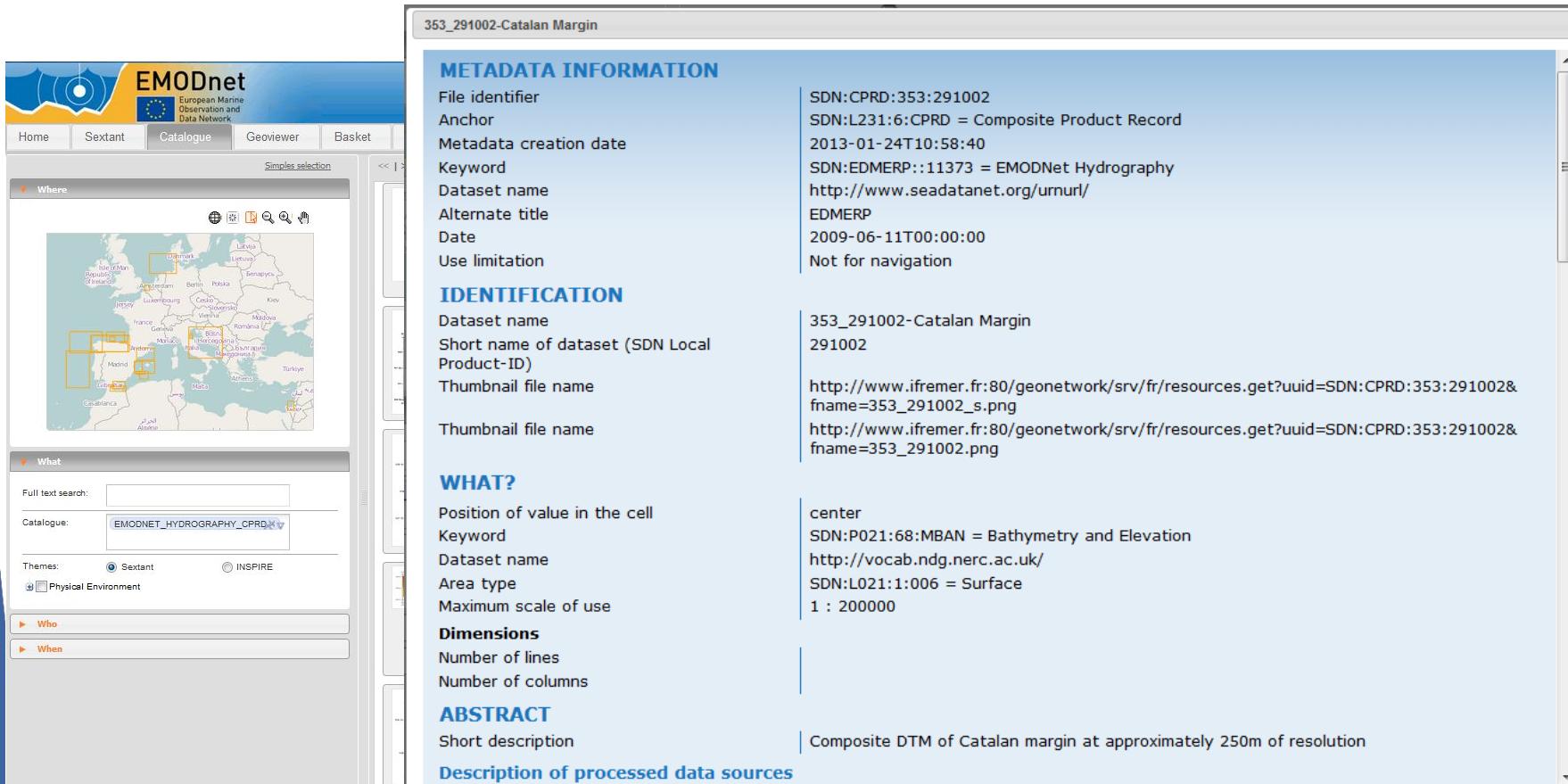
Seasonal analyses of Oxygen concentration in Black Sea between 1920 and 2011 Oxygen masked using relative error threshold 0.3 and 0.5. Units: uEquival/l institution = MHI (Marine Hydrophysical Institute, National Academy of Sciences of Ukraine) Time units : season (beginning from winter) Depth range : -150.0, -100.0, -75.0, -50.0, -30.0, -20.0, -10.0, -0.0

Black_Sea_Seasonal_Phosphate

Seasonal analyses of Phosphate concentration in Black Sea between 1920 and 2011 Phosphate masked using relative error threshold 0.3 and 0.5. Units: umol/l institution = MHI (Marine Hydrophysical Institute, National Academy of Sciences of Ukraine) Time units : season Depth range : -500.0, -300.0, -200.0, -150.0, -100.0, -75.0, -50.0, -30.0, -20.0, -10.0, -0.0

Sextant into European projects

- A catalogue data products for Emoodnet Hydrography CPRD
 - 35 metadata describing bathymetric composite products, using a personalized template and the SeaDataNet metadata profile
 - http://www.ifremer.fr/sextant/en/web/emodnet_hydrography_cprd



The screenshot shows the EMODnet Catalogue interface. On the left, there's a map of Europe with several regions highlighted in orange, indicating where bathymetric data is available. The right side displays a detailed metadata record for a specific dataset:

METADATA INFORMATION

- File identifier: SDN:CPRD:353:291002
- Anchor: SDN:L231:6:CPRD = Composite Product Record
- Metadata creation date: 2013-01-24T10:58:40
- Keyword: SDN:EDMERP::11373 = EMODNet Hydrography
- Dataset name: http://www.seadatanet.org/urnurl/EDMERP
- Alternate title: 2009-06-11T00:00:00
- Date: Not for navigation

IDENTIFICATION

- Dataset name: 353_291002-Catalan Margin
- Short name of dataset (SDN Local Product-ID): 291002
- Thumbnail file name: http://www.ifremer.fr:80/geonetwork/srv/fr/resources.get?uuid=SDN:CPRD:353:291002&fname=353_291002_s.png
- Thumbnail file name: http://www.ifremer.fr:80/geonetwork/srv/fr/resources.get?uuid=SDN:CPRD:353:291002&fname=353_291002.png

WHAT?

- Position of value in the cell: center
- Keyword: SDN:P021:68:MBAN = Bathymetry and Elevation
- Dataset name: http://vocab.ndg.nerc.ac.uk/
- Area type: SDN:L021:1:006 = Surface
- Maximum scale of use: 1 : 200000

Dimensions

- Number of lines:
- Number of columns:

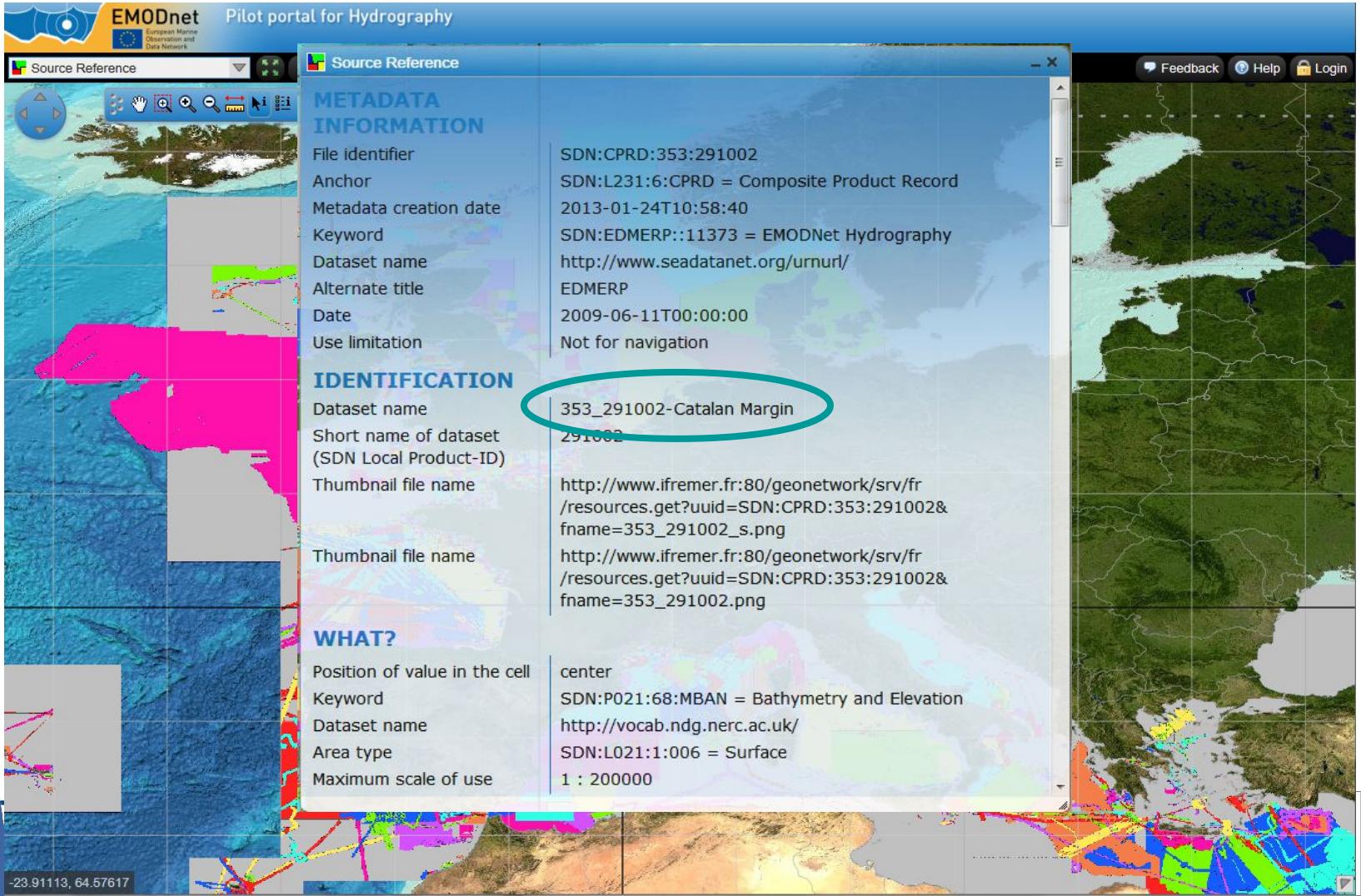
ABSTRACT

- Short description: Composite DTM of Catalan margin at approximately 250m of resolution

Description of processed data sources

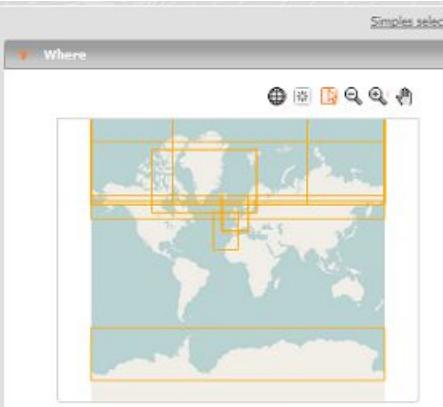
Sextant into European projects

- A catalogue data products for Emmodnet Hydrography CPRD
 - <http://www.emodnet-hydrography.eu/>



Sextant into European projects

- To manage the metadata for MyOcean data products
 - using common vocabulary lists and metadata template



Where

Full text search:

Catalogue: MYOCEAN-CORE-PRODUCTS

Themes: Sextant INSPIRE

- Human Activities
- Scanned Maps
- Imagery
- Biological Environment
- Chemical Environment
- Physical Environment
- Regulation and Management

Reset Search

Atlantic - European North West Shelf - Ocean Physics Analysis and Forecast

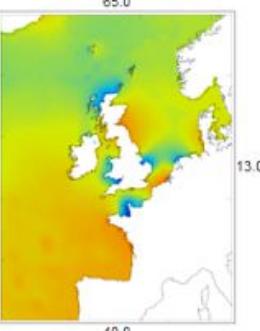
Essential metadata Full metadata

Atlantic - European North West Shelf - Ocean Physics Analysis and Forecast

Keywords

numerical-model, eastward_sea_water_velocity, northward_sea_water_velocity, sea_surface_height_above_geoid, sea_water_salinity, sea_water_temperature, nrt-forecast, marine-resources, coastal-marine-environment, weather-climate-and-seasonal-forecasting, marine-safety, north-west-shelf-seas, Level 4

Description



Summary

Short description:

The Forecasting Ocean Assimilation Model 7km Atlantic Margin model (FOAM AMM7) is a coupled hydrodynamic-ecosystem model, nested in a series of one-way nests to the Met Office global ocean model. The hydrodynamics are supplied by the Nucleus for European Modelling of the Ocean (NEMO) with an Optimal Interpolation (OI) data assimilation scheme for sea surface temperature. This is coupled to the European Regional Seas Ecosystem Model (ERSEM), developed at Plymouth Marine Laboratory (PML).

Detailed description:

The model is located on the European North-West continental Shelf (NWS) and from 40°S, 20°W to 65°N, 13°E. The model is on a regular lat-lon grid of resolution 1/15° latitude by 1/9° longitude.

Sextant into European projects



- Using the MyOcean web portal to discover the metadata
 - <http://www.myocean.eu>



OCEAN MONITORING and FORECASTING
Providing PRODUCTS and SERVICES

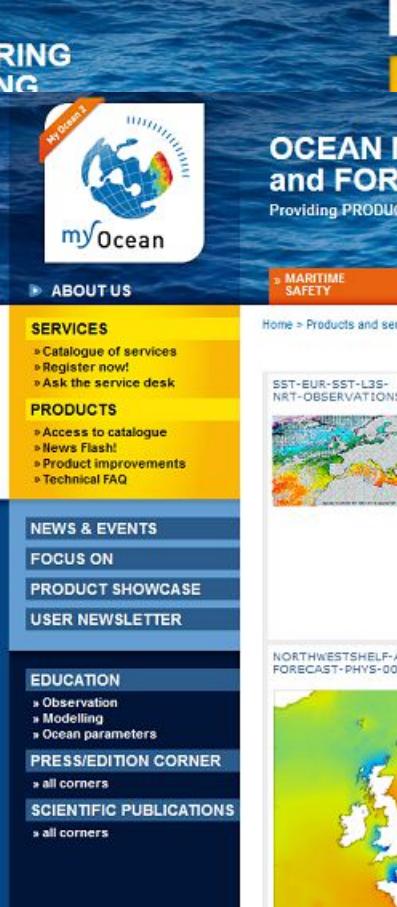
MYOCEAN INTERACTIVE

Search mode: multi-criteria or full catalog
Please note you have to register first before using the service.

1 ▶ AN AREA

- All areas
- Global Ocean
- Arctic Ocean
- Baltic Sea
- Atlantic-European North West Shelf-Ocean
- Atlantic-Iberian Biscay Irish-Ocean
- Mediterranean Sea
- Black Sea

Download MyOcean catalogues
» download PDF



OCEAN MONITORING and FORECASTING
Providing PRODUCTS and SERVICES for all marine applications.

USER CORNER

SEARCH

SEARCH

USER CORNER

SEARCH

SEARCH

1 2 3 4 5

INFO
DATA ACCESS
VIEW

INFO
DATA ACCESS
VIEW

INFO
DATA ACCESS
VIEW

INFO
DATA ACCESS
VIEW



Conclusion

Due to its interoperability, using the ISO standards and the OCG protocols, and its capacity to be adapted at many national and international profiles, using Seadatanet vocabulary lists,

Sextant becomes one of the major marine spatial data infrastructures used in national projects,

and also plays an important role for products management in European projects (ie the products catalogue).





Thank you for your attention

sextant@ifremer.fr

 ifremer

www.ifremer.fr/sextant

