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Growing of the Arctic Marine Ecosystem



WP5.2 Data base and data visualisation

Joanna Pardus
Marcin Wichorowski

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WP5.2 Data base and data visualisation

The aim of this task is to design and deploy storage and enable accessibility of the data collected within project frame.

As the project shall demonstrate the potential of IO PAN research team in international networks, all data are intended to be available free within one year after the project completion.

Georeferenced data will be visualized in the form of GIS maps (Geographic Information System) and raw data will supply ZSPDO (Integrated Ocean Data and Information Processing System)



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1. Archival meteorological data from Hornsund and Kongsfjorden – for the model
Tomasz Petelski/Przemek Makuch Data from NyAlesund, Hornsund meteo stations 2000-2012, digitilised
2. Hydrological data from 2013 spring/summer;
Agnieszka Promińska Data from CTD profiles
3. Archival hydrological data 2000- 2012
Małgorzata Cisek Data from fjords cross sections
4. GIS maps of Hornsund and Kongsfjorden – bathymetry
Joanna Pardus Maps ready to be used and presented on the web page
5. Microplankton spring and summer 2013 data
Józef Wiktor Taxa lists, density and biomass from stations
6. Mesozooplankton spring & summer 2013 data
Sławek Kwaśniewski Taxa lists, density and biomass from stations
7. Bacterial production 2013
Anetta Ameryk Production value in water column and sediment



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8. Bacterial density/biomass 2013

Katarzyna Jankowska/Agnieszka Kalinowska Density and biomass data
Water column & sediment

9. Benthos density and biomass 2013

Maria Wlodarska- Kowalczuk Taxa lists, density and biomass from stations

10. Respiration measurements 2013

Lech Kotwicki Data on sediment and taxa respiration

11. Fish hydroacoustic survey

Joanna Szczucka Data on fish density on profiles

12. Euphotic layer measurements

Mirek Darecki Data on surface suspensions, satellite imagery of suspensions
distribution in two fjords, calculation of euphotic layer thickness

13. Sedimentation rates

Marek Zajączkowski Data from two stations in two fjords, summer

14. Sediment & water column biogeochemistry

Alicja Kosakowska/Agata Zaborska Data from two stations in two fjords,
summer



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GAME :: Formularz opisu metainformacji

A. Dostawca

A.1	<u>Provider.Akronim</u>	Nazwa instytucji / akronim
A.2	<u>Provider.Name</u>	Angielska nazwa instytucji
A.3	<u>Provider.Affiliation</u>	Afilacja
A.4	<u>Provider.Address</u>	Adres do korespondencji
A.5	<u>Provider.URI</u>	Adres strony www

B. Osoba tworząca kolekcję danych

B.1	<u>Person.Name</u>	
B.2	<u>Person.LastName</u>	
B.3	<u>Person.eMail</u>	
B.4	<u>Person.Department</u>	Nazwa jednostki organizacyjnej do afiliacji

C. Opis zestawu danych (sekcja wielokrotnie użyta dla każdego zestawu)

C.1	<u>Dataset.UniqueID</u>	Identyfikator kolekcji danych
C.2	<u>Dataset.SpatialDistribution</u>	[Point, Transect, Polygon]
C.3	<u>Dataset.Extension</u>	[2D, 3D]
C.4	<u>Dataset.Geo</u>	System geodezyjny użyty do oznaczenia koordynat
C.5	<u>Dataset.Format</u>	Format danych: ascii, binarny, DRDS, NetCDF, SHP, etc.
C.6	<u>Dataset.Volume</u>	Rozmiar zestawu w b
C.7	<u>Dataset.FreqAvailability</u>	Częstotliwość dostarczania
C.8	<u>Dataset.QualityAssurance</u>	Używane procedury zapewnienia jakości danych.
C.9	<u>Dataset.Citation</u>	Sposób cytowania

D. Opis parametru (sekcja wielokrotna dla każdego parametru)

D.1	<u>Parameter.DatasetID</u>	Jak C.1
D.2	<u>Parameter.Name</u>	n.p. Seabed layer water temperature
D.3	<u>Parameter.PhysicalValue</u>	n.p. Celcius
D.4	<u>Parameter.Denomination</u>	n.p. stopień
D.5	<u>Parameter.OuterNameVoc</u>	Nazwa używanego standardu (n.p. BODC)
D.6	<u>Parameter.OuterName</u>	Nazwa parametru w używanym

		standardzie
D.7	<u>Parameter.Instrument</u>	Nazwa przyrządu pomiarowego
D.8	<u>Parameter.AddInfo</u>	Inne istotne informacje

E. Wymagania funkcjonalne

...czyli w jaki sposób informacja ma być udostępniana (format, protokół), do jakich innych systemów ma być przekazywana w sposób automatyczny, w jaki sposób ma być sprawdzane prawo dostępu do informacji, etc..

F. Wymagania niefunkcjonalne

Pozostałe wymagania co do bazy danych – źródła map podkładowych, linii brzegowej, etc..



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INSPIRE Part			Example
B 1	Identification		
B 1.1	Resource Title	Title	Image2000 Product 1 (n2l) Multispectral
B 1.2	Resource	Description	IMAGE2000 product 1 individual orthorectified scenes. IMAGE2000 was produced from ETM+ Landsat 7 satellite data
B 1.3	Resource Type		Dataset
B 1.4	Resource Locator	Location of the Data	http://image2000.jrc.it
B 1.5.	Resource Unique Identifier		
	Code		image2000_1_nl2_multi
	CodeSpace	URL	http://image2000.jrc.it
B 1.7	Resource language*	Language abbreviation, code list* (i.e.: Danish - dan, English - eng, Estonian - est, Finnish - fin, German - ger, Latvian - lav, Lithuania - lit, Polish - pol, Swedish - swe)	eng
B 2	Classification of data and services		
B 2.1	Topic Category*	choose from GEMET Thesaurus	imageryBaseMapsEarthCover
B 3	Keyword		
B 3.1	Keyword Value	choose from GEMET Thesaurus	Land cover
B 3.2	Originating Controlled Vocabulary		
	title*	GEMET Thesaurus, INSPIRE themes	GEMET Thesaurus version 1.0



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INSPIRE Part			Example
B 4	Geographic Location		
B 4.1	Bounding Box	define a rectangle containing the area covered by data	
	West	westBoundLongitude	+3,93
	East	eastBoundLongitude	+7,57
	North	northBoundLatitude	+52,1
	South	southBoundLatitude	+54,1
B 5	Temporal Reference		
B 5.1	Temporal extent		(for example: From 77-03-10T11:45:30 to 2005-01-15T09:10:00)
B 5.2	Date of publication		2000-01-01
B 6	Quality and validity		
B 6.1	Lineage	General explanation of the data producer's knowledge about the lineage/quality aspects of the dataset	Product 1 scenes correspond to the path/row of the Sandsat orbit. All Image2000 product 1 scenes are ortho-corrected
B 6.2	Spatial Resolution		25.0
B 7			
B 7.1	Specification		
	title		INSPIRE Implementing rules laying down technical arrangements for the interoperability and harmonisation of orthoimagery
	publication date		2011-05-15
B 7.2	Degree	Information about the degree of conformity with the	true



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INSPIRE Part			Example
B 8	Constraints related to access and use		
B 8.1	Conditions applying to access and use	description of terms and conditions, including where applicable, the corresponding fees (i.e. link)	no conditions apply
B 8.2	Limitation on public access		no limitations
B 9	Responsible Organisation		
B 9.1.	Responsible party organisation		Joint Research Centre
	e-mail		image2000@jrc.it
B 9.2	Responsible party role		custodian
B 10	Metadata		
B 10.1	Metadata point of contact organisation		Joint Research Centre
	e-mail		image2000@jrc.it
B 10.2	Metadata date format		2005-04-18
B 10.3	Metadata language	see B 1.5	English



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The British Oceanographic Data Centre (BODC) Parameter Dictionary for marine data - Mozilla Firefox

Plik Edycja Widok Historia Zakładki Narzędzia Pomoc

The British Oceanographic Data Cent... x +

https://www.bodc.ac.uk/data/codes_and_formats/parameter_codes/

Google

http://localhost/ mBank Pekao24 - Bankowość ... ZSPDO Citibank Online - Mój ...

Wyłącz Ciasteczka CSS Formularze Obrazki Informacja Różne Wyróżnianie Rozmiar Narzędzia Pokaż źródła Opcje

British Oceanographic Data Centre
NATURAL ENVIRONMENT RESEARCH COUNCIL

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BODC parameter codes

During the exchange of data communication problems may arise between scientists. Parameter dictionaries are used to label parameters with a standard description rather than allowing personal interpretation.

The development of parameter dictionaries is by no means new to oceanographic data management. In the 1980s, when we first started managing oceanographic data our dictionary contained less than twenty parameters. Our involvement, in the 1990s, in the Joint Global Ocean Flux Study (JGOFS) led to its rapid expansion to 9000 parameters and today we have entries for almost 22,000 physical, chemical, biological and geological parameters. Our Data Scientists assign these parameter codes to all data held in our National Oceanographic Database ([NODB](#)) or [Project Database](#).

The BODC Parameter Dictionary

The BODC Parameter Dictionary is a collection of controlled vocabularies for parameter management. The BODC [Parameter Usage Vocabulary](#) (8 MB) contains almost 19,000 terms that are designed to label data values. These have been systematically constructed using a semantic model.

Navigation through such a large number of parameters is a daunting task. To help with this, a 3-layer hierarchy of discovery keywords is provided. The top level is the SeaDataNet [Parameter Disciplines](#), followed by the SeaDataNet [Agreed Parameter Groups](#) and the BODC [Parameter Discovery Vocabulary](#).

All the above hot links deliver plain XML documents designed for machine processing and not human-readable display. The following are links to formatted versions of the vocabularies.

- [BODC Parameter Usage Vocabulary](#) (8 MB)
- [SeaDataNet Parameter Disciplines](#)
- [SeaDataNet Agreed Parameter Groups](#)
- [BODC Parameter Discovery Vocabulary](#)

Simple Knowledge Organisation Systems ([SKOS](#)) mappings between these vocabularies are available as XML documents.

- [SeaDataNet Parameter Disciplines to SeaDataNet Agreed Parameter Groups](#)
- [SeaDataNet Agreed Parameter Groups to BODC Parameter Discovery Vocabulary](#)
- [BODC Parameter Discovery Vocabulary to BODC Parameter Usage Vocabulary](#)

Where to find data
Online delivery>
Online request>
Published Data Library>
Information and inventories>
Code and format definitions>
BODC parameter codes
BODC request (ASCII) format
Ocean Data View (ODV) format
QXF (a netCDF) format
CF netCDF format
AXF (historical) format
Sea level formats>
NTSLF format
ESLD format
WOCE format
SeaVoX
Vocabulary editor
Submitting data to BODC
Portals and links>

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https://www.bodc.ac.uk/data/codes_and_formats/parameter_codes/