Dataservices LifeWatch

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Introduction

- Web application to analyse biodiversity & environmental data (http://www.lifewatch.be/data-services)
- User uploads data file (txt or xlsx) in which data are organized in columns.
- ➤ Columns headers → matched with fields from biological dataformat used in Lifewatch
- Application adds information in new colums and rows based on selected webservices and data in the inputfile
- The result of the analysis is a result file and a result report
- User has to log in to start a job and to see the result of previously executed jobs



Upload file

1. Upload your file

Select one of the demo data files and choose from several web services, models and applications to process the data. To work with other data files, please log in.

To work with other data files, p	-	
If you are new to this service, p	ScientificName Latitude Longitude Eventdate	
	Abludomelita obtusata 51.14 2.376667 2009/03/03T10:48:00Z	
File Bladeren Geen besta	anAbra 51.29117 2.524167 2009/03/03T10:48:00Z	
	Abra alba 51.12267 2.53333 2009/03/03T10:48:00Z	
Use demo file: Marine	Abra prismatica 51.12183 2.603333 2009/03/03T10:48:00Z	
Allowed filetynes: Plain text [7	Acanthomysis longicornis 51.12183 2.603333 2009/03/03T10	:48:00
Maximum rows in file:10000	Acari 51.09076 2.370717 2009/03/03T10:48:00Z	
<u></u>	Acartia clausi 51.30833 2.626333 2009/03/03T10:48:00Z	
	Achelia 51.185 2.701167 2009/03/03T10:48:00Z	
	Achelia hispida 51.185 2.701167 2009/03/03T10:48:00Z	
Row delimiter Return & line	Acidostoma obesum 51.27917 2.616667 2009/03/03T10:48:00Z	
Column delimiter Tab	Acrocnida brachiata 51.27083 2.905 2009/03/03T10:48:00Z	
	Actinaria 51.23617 2.8555 2009/03/03T10:48:00Z	
Decimal symbol Point(.)	oint(.) Aeolidia papilosa 51.33333 2.7 2009/03/03T10:48:00Z	
Data format lifewatch 📥	Aeolidiidae 51.325 3.05 2009/03/03T10:48:00Z	
obis ▼	Aequipecten opercularis 51.325 3.05 2009/03/03T10:48:00Z	
	Agonus cataphractus 51.27783 2.913167 2009/03/03T10:48:00Z	
	Alcyonium digitatum 51.283 2.9213 2009/03/03T10:48:00Z	
	Alloteuthis subulata 51.283 2.9213 2009/03/03T10:48:00Z	
	Alosa alosa 51.27783 2.913167 2009/03/03T10:48:00Z	
	Alosa fallax 51.66033 2.85217 2009/03/03T10:48:00Z	
	Ammodytes 51.33333 2.683333 2009/03/03T10:48:00Z	
VLIZ	Ammodytes lanceolatus 51.46 2.791667 2009/03/03T10:48:00Z	
	Ammodytes marinus 51.41667 3.4 2009/03/03T10:48:00Z	
	Ammodytes tobianus 51.41667 3.4 2009/03/03T10:48:00Z	

Choose & order webservices

2. Select webservices

	Name	Source	Description	Environment	Status					
□ Data validation and QC services										
■ Marineregions gazetteer services										
□ Taxon observations										
	Number of observations	OBIS	Returns all observation points (latitude and longitude) in	marine	Good					
	of a marine taxon		the Ocean Biogeographic Information Syste Read more							
V	Number of observations	OBIS	Gives the number of observations of a taxon in a radius	marine	Good					
	in a 1000m radius		of 1000 meter around a point.							
	around a point									
	Taxon list of a certain	OBIS	Gives a taxon list based on observations from the obis	marine	Good					
	region		database for a certain region (mrgid as input Read							
			more							
□ Taxon services										
□ Tidal services										
Geographical services - Administrative boundaries										
☐ Geographical services - Bathymetry ☐ Geographical services - Bathymetry										
Geographical services - Biogeographical classification										
Geographical services - Environmental data										
Geographical services - Features										
Geographical services - Protected areas										
• (Geographical services - Total biological valuation									

3. Verify order, change order if necessary and run

Selected services

Match with data format fields

Preview of the file 'demofile_lifewatch_marine.txt' (first 20 records)

Please select a columnname from the dataformat term that corresponds to your column and click 'Start'.

column 0	column 1	column 2	column 3	_
ScientificName	Latitude	Longitude	▼ EventDate	-
ScientificName	Latitude	Longitude	Eventdate	
Abludomelita obtusata	51.14	2.376667	2009/03/03T10:48:00Z	
Abra	51.29117	2.524167	2009/03/03T10:48:00Z	
Abra alba	51.12267	2.53333	2009/03/03T10:48:00Z	
Abra prismatica	51.12183	2.603333	2009/03/03T10:48:00Z	
Acanthomysis longicornis	51.12183	2.603333	2009/03/03T10:48:00Z	
Acari	51.09076	2.370717	2009/03/03T10:48:00Z	
Acartia clausi	51.30833	2.626333	2009/03/03T10:48:00Z	
Achelia	51.185	2.701167	2009/03/03T10:48:00Z	
Achelia hispida	51.185	2.701167	2009/03/03T10:48:00Z	
Acidostoma obesum	51.27917	2.616667	2009/03/03T10:48:00Z	
Acrocnida brachiata	51.27083	2.905	2009/03/03T10:48:00Z	
Actinaria	51.23617	2.8555	2009/03/03T10:48:00Z	•
4				•

Your concatenated webservices are stated below.

▶ 1. Number of observations in a 1000m radius around a point



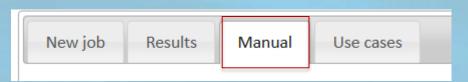
View result

Below you wil Report Below you wil Job pr<mark>operties</mark> jobs Name: Waumans Filip Number job: 7522 date ▼ nent 2014-06-02 09:(Comment: demofile Inputfile: demofile lifewatch marine.txt Resultfile: 7522 demofile lifewatch marine.tab Requested Services (1) scientificname vation radiu Abludomelita (• Number of observations in a 1000m radius around a point Abra Abra alba Abra prismatica Resultfile Acanthomysis I Acari Acartia clausi Results - Number of observations in a 1000m radius around a point Achelia Number of error(s):0 Achelia hispida Acidostoma ob Acrocnida brac Legend - added fields latitude check Validation of the latitude value (1=ok, 0=not ok) longitude check Validation of the longitude value (1=ok, 0=not ok) num observation radius Total number of observations in radius of 1000 meter around the point found in OBIS required fields check Are the required fields present and completed? (1=yes, 0=no)

Available webservices

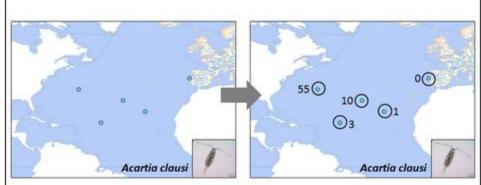
- Data validation and QC services (3)
- Marineregions gazetteer services (4)
- Taxon observations (3)
- Taxon services (3)
- Tidal services (3)
- Geographical services Administrative boundaries (5)
- Geographical services Bathymetry (3)
- Geographical services Biogeographical classification (5)
- Geographical services Environmental data (20)
- Geographical services Protected areas (1)
- Geographical services Total biological valuation (2)







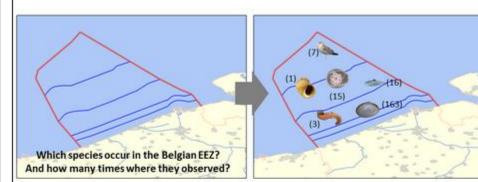
Marine species observations in a 1000m radius around your own observation points





USE CASE 2:

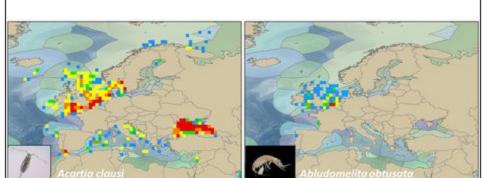
Marine species list and number of observations per geographical area





USE CASE 3:

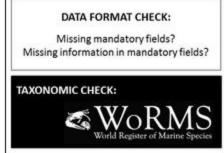
List of geographical areas per marine species



LIFEWATCH Regional portal

USE CASE 4:

Quality control of biodiversity datasets





Demonstration

- ✓ Number of observations in a 1000m radius around a point
- ✓ Taxon match
- ✓ Use case: species list of EEZ of Belgium
- ✓ Manual and description of use cases

