

ISRAMAR Work Flow for SeaDataNet

Major Steps:

- Creating ODV files
- Importing data into database
- Generating CDIs and coupling table

Step 1: Creating data files in ODV format

- Generating .cnv and .btl files by SeaBird
- Auto import .cnv / .btl files into Excel template
- Auto export from excel to ODV

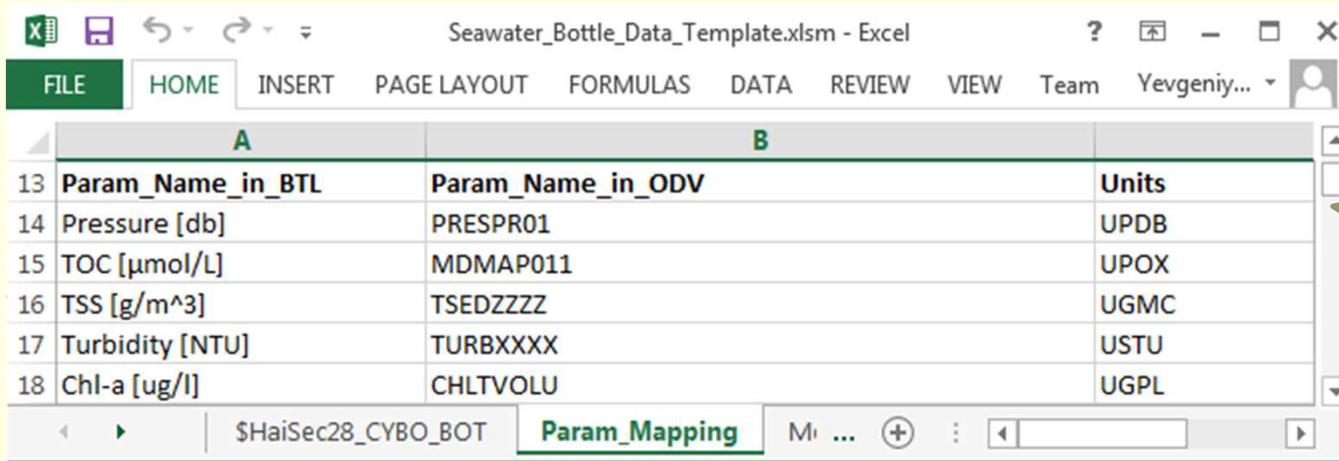
Download link:

http://isramar.ocean.org.il/isramar_data/TextTemplates/Convertors/Data_Template.zip

1	Cruise	Station	Type	Date	Time	Lon (°E)	Lat (°N)	Bot. Depth	Pressure [TOC [
2	HaiSec28	H01	B	Oct 28 2012	10:52:24	34.9215	32.89767	54	0.5	3.19
3	HaiSec28	H01	B	Oct 28 2012	10:52:24	34.9215	32.89767	54	15.002	3.95
4	HaiSec28	H01	B	Oct 28 2012	10:52:24	34.9215	32.89767	54	34.923	4.46
5	HaiSec28	H01	B	Oct 28 2012	10:52:24	34.9215	32.89767	54	53.447	4.53
6	HaiSec28	H02	B	Oct 28 2012	11:37:25	34.88283	32.91783	232	0.5	3.19

Fill Data

Step 1: Creating data files in ODV format



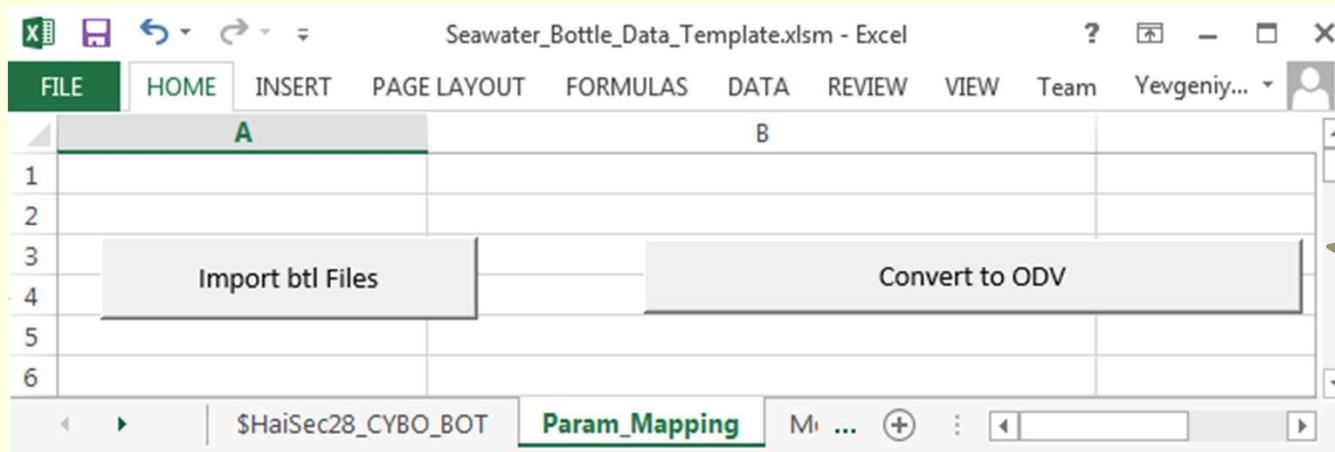
Seawater_Bottle_Data_Template.xlsm - Excel

	A	B	
13	Param_Name_in_BTL	Param_Name_in_ODV	Units
14	Pressure [db]	PRESPR01	UPDB
15	TOC [$\mu\text{mol/L}$]	MDMAP011	UPOX
16	TSS [g/m^3]	TSEDZZZZ	UGMC
17	Turbidity [NTU]	TURBXXXX	USTU
18	Chl-a [$\mu\text{g/l}$]	CHLTVOLU	UGPL

FILE HOME INSERT PAGE LAYOUT FORMULAS DATA REVIEW VIEW Team Yevgeniy...

\$HaiSec28_CYBO_BOT Param_Mapping Mi ...

Add mapping to P01



Seawater_Bottle_Data_Template.xlsm - Excel

	A	B
1		
2		
3		
4	Import btl Files	Convert to ODV
5		
6		

FILE HOME INSERT PAGE LAYOUT FORMULAS DATA REVIEW VIEW Team Yevgeniy...

\$HaiSec28_CYBO_BOT Param_Mapping Mi ...

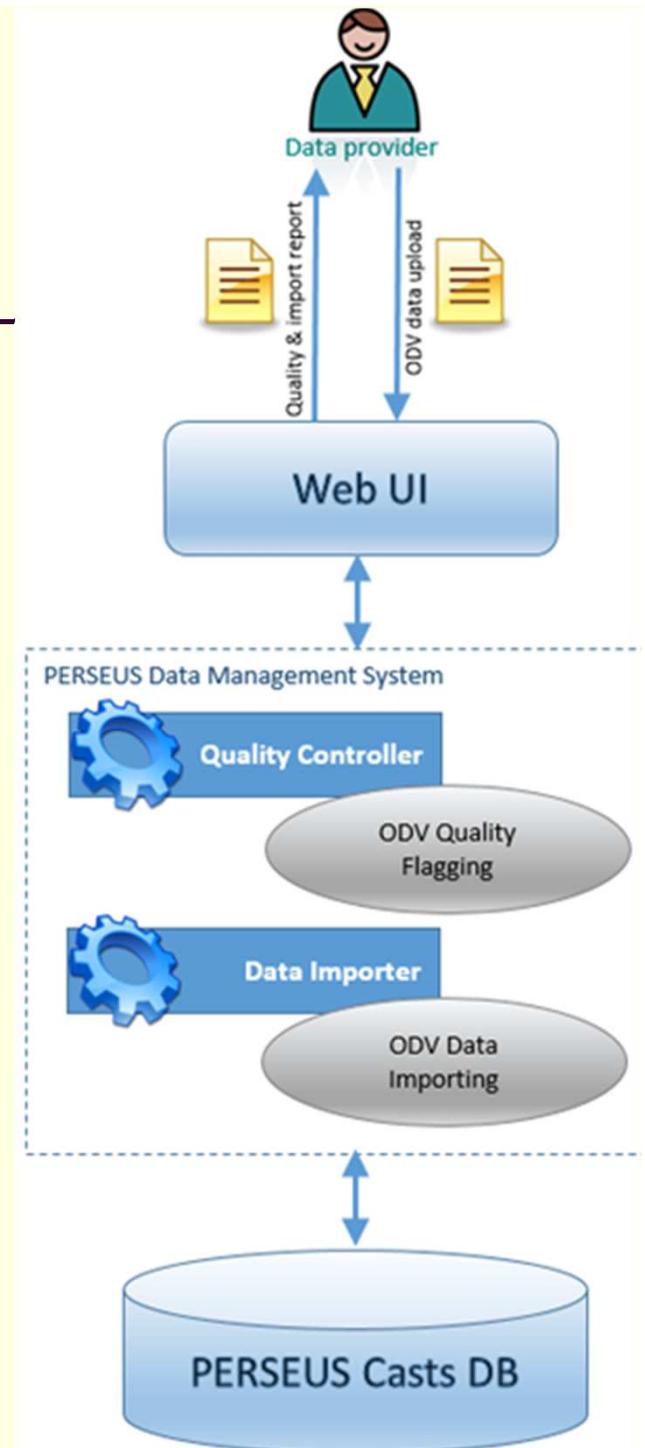
Convert to ODV

Step 2: Importing data into database

ODV files can be uploaded through the on-line data management system:

http://isramar.ocean.org.il/isramar_data/DataSubmission.aspx

18/5/2014



Step 2: On-line submission steps

1. Uploading ODV file and format validation

ODV Data Submission

1 Upload Data File 2 Parameters Setting 3 Fill Cruise Metadata 4 Finish

Select your local file in ODV format (tab separated with .txt or .zip extension) to upload a cruise data. The dataset file size should be less than 5 MB. Please compress your data into a .zip file if the original data file is larger than 5 MB. Compressed .zip file should include only one .txt file inside. Click 'Upload' for validation and uploading file. Click 'Continue' for continuing data submission.

Browse... Upload

Cancel Continue

Step 2: On-line submission steps

2. Add parameters mapping to P01

ODV Data Submission



Parameters Validation failed. Please fix the errors.

Local Name	P01 Code	P06 Code	For Import
PRES	<input type="text" value="PRESR01"/>	<input type="text" value="UPDB"/>	<input checked="" type="checkbox"/>
PSAL	<input type="text" value="PSALZZXX"/>	<input type="text" value="UPPT"/>	<input checked="" type="checkbox"/>
TEMP	<input type="text" value="TEMPPR01"/>	<input type="text" value="UPAA"/>	<input checked="" type="checkbox"/>
DOXYZZXX_UPOX	<input type="text" value="DOXYZZXX"/>	<input type="text" value="UPOX"/>	<input checked="" type="checkbox"/>
SLCAAATX_UPOX	<input type="text"/> Missed	<input type="text"/> Missed	<input checked="" type="checkbox"/>
H2SXZZXX_UPOX	<input type="text" value="H2SXZZXX"/>	<input type="text" value="UPOX"/>	<input checked="" type="checkbox"/>
TPHSDSZZ_UPOX	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>

Step 2: On-line submission steps

To help with parameters mapping to P01 there are:

- Links to BODC search services
- Previous mappings list of the user
- Frequently used mappings

Parameters Code Search

P02 Parameters Search

P01 Parameters Search

P06 Units Search

Parameters From Your Data Sets

P01 Code	P01 Term
PRESPR01	Pressure (spatial co-ordinate) exerted by the water body by profiling pressure sensor and corrected to read zero at sea level
TEMPPR01	Temperature of the water body

18/5/2014

Frequently Used Parameters

P01 Code	P01 Term	P06 Code	P06 Term
PRESPR01	Pressure (spatial co-ordinate) exerted by the water body by profiling pressure sensor and corrected to read zero at sea level	UPDB	Decibars
TEMPPR01	Temperature of the water body	UPAA	Degrees Celsius
PSALZZXX	Practical salinity of the water body by computation using UNESCO 1983 algorithm	UPPT	Parts per thousand
DOXYZZXX	Concentration of oxygen (O2) per unit volume of the water body [dissolved phase]	UPOX / UPPT	Micromoles per litre / Parts per thousand

Step 2: On-line submission steps

3. Fill meta data which is not a part of ODV format

ODV Data Submission

1 Upload Data File 2 Parameters Setting 3 Fill Cruise Metadata 4 Finish

Dataset Name *:	<input type="text" value="test_bot"/>
Project *:	<input type="text"/>
Summary:	<input type="text"/>
Ship *:	<input type="text" value="type text to filter list..."/> <input type="button" value="Q"/> <input type="button" value="Choose"/>
Data Center *:	<input type="text" value="P.P.Shirshov Institute of Oceanology, RAS"/> <input type="button" value="Q"/> <input type="button" value="P.P.Shirshov Institute of Oceanology, RAS"/>
Country *:	<input type="button" value="Choose"/> <input type="button" value="Availability *:"/> <input type="button" value="Choose"/> <input type="button" value="unrestricted"/> <input type="button" value="by negotiation"/>
Comments:	<input type="text"/>

(*) Required field

Quality Control

We use MHI software for QC developed for PERSEUS

PERSEUS ODV QC V.0.01 Test

SELECT

Single File

Directory

OPEN

Selected File(s)

C:\...\haisec27.txt

EXECUTE

VISUALIZE

Add P011

location

date/time

depth

pressure

climat/range

density inversion

spikes

gradients

Use relief check

Minimum elevation

PERSEUS ODV QC V.0.01 Test

EXECUTE

VISUALIZE

lat: 33.254 Lon: 29.186 Pres: 80.353 Prm: 38.199

Stations info

H03	306	1	39.146800994873	2
H04	307	1	39.146900177002	2
H05	308	1	39.1460990905762	2
	309	1	39.1453013168477	2
	310	1	39.1451988220215	2
	311	1	39.1450996398926	2
	312	1	39.1442985534668	2

Params info

P021_P061	
ATTN_UPRM	
DOXY_KGUM	
FVLT_LKWN	
PSAL_UPPT	
TEMP_UPAA	

Profile info

306	1	39.146800994873	2
307	1	39.146900177002	2
308	1	39.1460990905762	2
309	1	39.1453013168477	2
310	1	39.1451988220215	2
311	1	39.1450996398926	2
312	1	39.1442985534668	2

Sigt_Prev: 28.9070110321045

Sigt_Curr: 28.9089832305908

Metadata.XML

Status

sub-regions

The Mediterranean sea SESAN	200
The Mediterranean sea MEDAF	500
	400
	500
	600
	700
	800
ann	ann

current sub-region:DL4

Climat

PAVG:	38.9589996337891
PSTD:	0.0520000010728836
StrictMin:	38.7967910766602
StrictMax:	39.1095390319824
SoftMin:	38.6925430297852
SoftMax:	39.2137870788574

Regional Ranges

MinVal: 0

MaxVal: 40

Step 2: On-line submission steps

- Once the import process is finished, user receives a detailed report about the import, any parsing or quality errors, link to the on-line meta data view
- User can manage his data submissions on-line

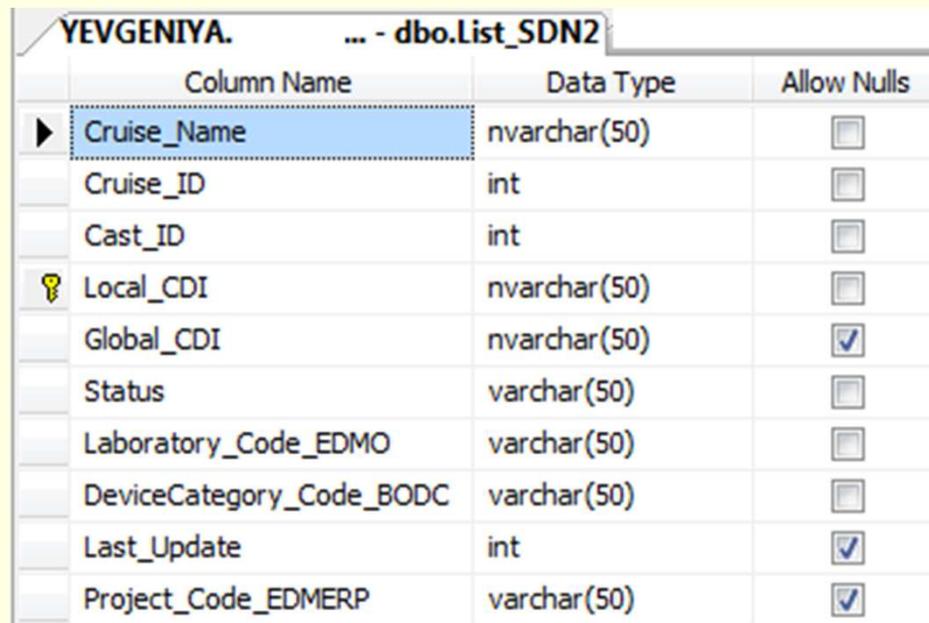
Data Management

Account Data Sets

	Data Set Name	Last Update Time	Status	Submissions	Actions	Log
Select	cruise_bot	08/05/2014 12:33	Imported	1	<input type="button" value="Delete"/> <input type="button" value="Resubmit"/>	Log

Step 3: Generating CDIs

- To manage the data for SDN, there is a special table in the database
- When new data should be send to SDN, new rows added to this table with Status = 'New'

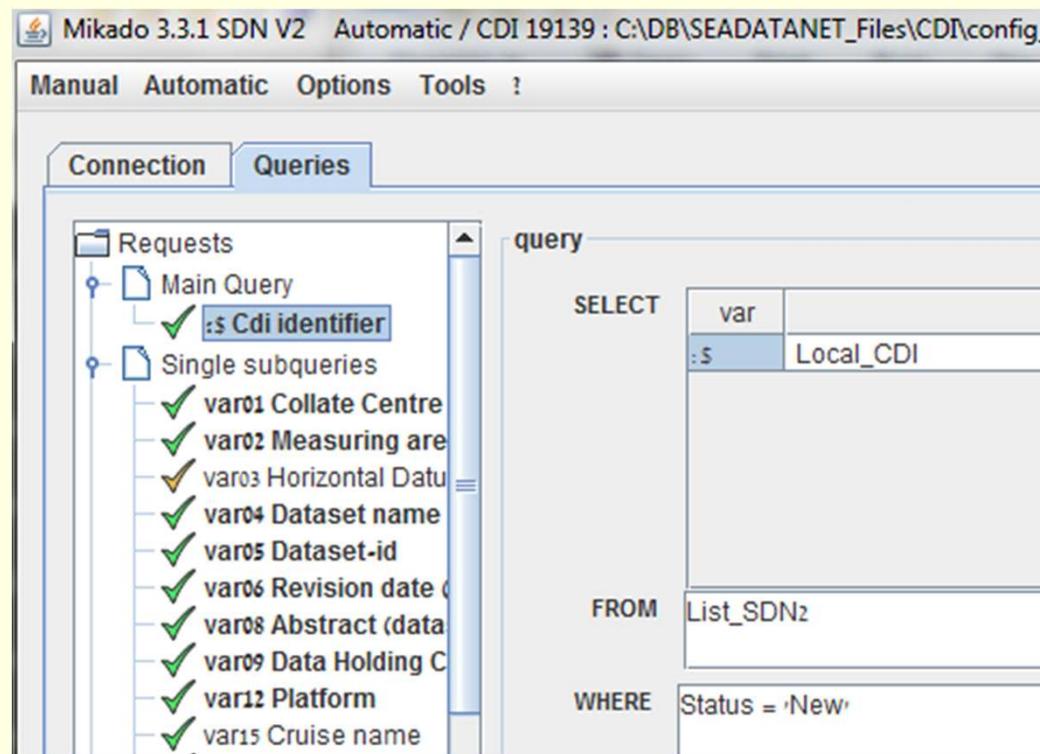


The screenshot shows the table definition for 'dbo.List_SDN2' in the 'YEVGENIYA.' database. The table has the following columns and properties:

Column Name	Data Type	Allow Nulls
Cruise_Name	nvarchar(50)	<input type="checkbox"/>
Cruise_ID	int	<input type="checkbox"/>
Cast_ID	int	<input type="checkbox"/>
Local_CDI	nvarchar(50)	<input type="checkbox"/>
Global_CDI	nvarchar(50)	<input checked="" type="checkbox"/>
Status	varchar(50)	<input type="checkbox"/>
Laboratory_Code_EDMO	varchar(50)	<input type="checkbox"/>
DeviceCategory_Code_BODC	varchar(50)	<input type="checkbox"/>
Last_Update	int	<input checked="" type="checkbox"/>
Project_Code_EDMERP	varchar(50)	<input checked="" type="checkbox"/>

Step 3: Generating CDIs

We use the status flag in Mikado for generating new CDIs



Step 3: Generating Coupling Table

- ISRAMAR has RESTful web service which responds data in ODV format.
- We use Mikado to generate coupling table with unique link for each Local CDI ID

