



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

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	FILE HO	OME INS	ERT PAGE	LAYOUT FO	ORMULAS	DATA R	EVIEW VIE	W Team	Yevgeniy		
1	Α	В	С	D	E	F	G	Н	I	J 🔺	
1	Cruise	Station	Туре	Date	Time	Lon (°E)	Lat (°N)	Bot. Depti	Pressure [тос	
2	HaiSec28	H01	B	Oct 28 2012	10:52:24	34.9215	32.89767	54	0.5	3.19	Eill Doto
3	HaiSec28	H01	В	Oct 28 2012	10:52:24	34.9215	32.89767	54	15.002	3.95	FIII Dala
4	HaiSec28	H01	В	Oct 28 2012	10:52:24	34.9215	32.89767	54	34.923	4.465	
5	HaiSec28	H01	В	Oct 28 2012	10:52:24	34.9215	32.89767	54	53.447	4.536	
6	HaiSec28	H02	В	Oct 28 2012	11:37:25	34.88283	32.91783	232	0.5	3.19 👻	
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Step 1: Creating data files in ODV format

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FILE HOME INSERT PAGE	LAYOUT FORMULAS DATA REVIEW VIEW Team	Yevgeniy • 🔍 🗛 🗛 🗛
A	В	
13 Param_Name_in_BTL	Param_Name_in_ODV	Units Mapping
14 Pressure [db]	PRESPR01	UPDB to P01
15 TOC [μmol/L]	MDMAP011	UPOX
16 TSS [g/m^3]	TSEDZZZZ	UGMC
17 Turbidity [NTU]	TURBXXXX	USTU
18 Chl-a [ug/l]	CHLTVOLU	UGPL
 \$HaiSec28_CYBO 	BOT Param_Mapping M (+) : (
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FILE HOME INSERT PAGE	LAYOUT FORMULAS DATA REVIEW VIEW Team B	Vevgeniy Yevgeniy Convert to ODV
FILE HOME INSERT PAGE	ELAYOUT FORMULAS DATA REVIEW VIEW Team B Convert to ODV	Yevgeniy Yevgeniy Convert to ODV
FILE HOME INSERT PAGE A 1 2 3 4 5	ELAYOUT FORMULAS DATA REVIEW VIEW Team B Convert to ODV	Yevgeniy Yevgeniy Convert to ODV
FILE HOME INSERT PAGE A 1 2 3 4 Import btl Files 5 6	ELAYOUT FORMULAS DATA REVIEW VIEW Team B Convert to ODV	Yevgeniy Yevgeniy 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/Data Submittion.aspx



1. Uploading ODV file and format validation

ODV Data Submission

1 Upload Data File 2 Parameters Setting	3 Fill Cruise N	Metadata	4 Finish		
Select your local file in <u>ODV format (tab separat</u> The dataset file size should be less than 5 MB. P data file is larger than 5 MB. Compressed .zip fil Click 'Upload' for validation and uploading file. Click 'Continue' for continuing data submission.	ed with .txt o lease compres le should inclu	r .zip exter ss your dat ude only o	ntion) to upl a into a .zip ne .txt file in	oad a cruise file if the or nside.	data. iginal
	Browse	Upload			
		Cancel	Continue		

2. Add parameters mapping to P01

ODV Data Submission

1 Upload Data File	2 Parameters Setting 3 Fill C	Cruise Metadata 🕢 👍 Finish	
Parameters Validatio	n failed. Please fix the errors.		
Local Name	P01 Code	P06 Code	For Import
PRES	PRESPR01	UPDB	
PSAL	PSALZZXX	UPPT	
TEMP	TEMPPR01	UPAA	
DOXYZZXX_UPOX	DOXYZZXX	UPOX	
SLCAAATX_UPOX	Missed	Missed	
H2SXZZXX_UPOX	H2SXZZXX	UPOX	
TPHSDSZZ_UPOX			
		Cancel	alidate

To help with parameters mapping to P01 there are:

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

P02 Parameters Search	P01 Parameters Search	P06 Units Search

Parameters From Your Data Sets

P01 Town	P06	DOC T.			
rol lerm	Frequently	Used Paramete	ers		
Pressure (spatial co-ordinate) exerted by the water body by profiling pressure and corrected to read zero at sea level	P01 Code	P01 Term		P06 Code	P06 Term
Temperature of the water body	PRESPR01	Pressure (spatial co-ordi pressure sensor and corr	nate) exerted by the water body by profiling rected to read zero at sea level	UPDB	Decibars
	TEMPPR01	Temperature of the wate	er body	UPAA	Degrees Celsius
	PSALZZXX	Practical salinity of the v 1983 algorithm	water body by computation using UNESCO	UPPT	Parts per thousand
	DOXYZZXX	Concentration of oxygen [dissolved phase]	{O2} per unit volume of the water body	UPOX / UPPT	Micromoles per litre / Parts per thousand
	P01 Term Pressure (spatial co-ordinate) exerted by the water body by profiling pressure and corrected to read zero at sea level Temperature of the water body	P01 Term P06 Frequently Pressure (spatial co-ordinate) exerted by the water body by profiling pressure and corrected to read zero at sea level P01 Code Temperature of the water body PRESPR01 TEMPPR01 PSALZZXX DOXYZZXX POXYZZXX	P01 Term P06 D0 C T and the second seco	P01 Term P06 DOC T. Pressure (spatial co-ordinate) exerted by the water body by profiling pressure and corrected to read zero at sea level Frequently Used Parameters P01 Code P01 Term remperature of the water body PRESPR01 PRESPR01 Pressure (spatial co-ordinate) exerted by the water body by profiling pressure sensor and corrected to read zero at sea level 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 P03 Code P01 Term P04 Code P01 Term P05 R01 Pressure (spatial co-ordinate) exerted by the water body by profiling pressure sensor and corrected to read zero at sea level P04 Code P01 Term P05 R01 Pressure (spatial co-ordinate) exerted by the water body by computation using UNESCO P08 R02 P18 R02 P18 R03 P08 R03 P18 R04 P18 R04 P08 R04 P18 R04 P18 R04 P18	P01 Term P06 Dot T Pressure (spatial co-ordinate) exerted by the water body by profiling pressure and corrected to read zero at sea level Frequently Used Parameters P06 Code Point code P01 Code P01 Term P06 Code PRESPR01 Pressure (spatial co-ordinate) exerted by the water body by profiling pressure sensor and corrected to read zero at sea level P06 Code PRESPR01 Pressure (spatial co-ordinate) exerted by the water body by profiling pressure sensor and corrected to read zero at sea level P01 Dece PRESPR01 Pressure (spatial co-ordinate) exerted by the water body by profiling pressure sensor and corrected to read zero at sea level P01 Dece PRESPR01 Pressure (spatial co-ordinate) exerted by the water body by profiling pressure sensor and corrected to read zero at sea level P04 Dece PRESPR01 Pressure (spatial co-ordinate) exerted by the water body by computation using UNESCO UPAA PS × LZZXX Practical salinity of the water body by computation using UNESCO UPOX / UPPT

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

ODV Data Submission

filter list			
filter list			
filter list			
mor not		<u> </u>	~
v Institute of C v Institute of O	Oceanology, RAS Oceanology, RAS	Q	
~	Availability *	Choose	
		by negotiation Se The data are witheld PE disclosure but acces	d from general circulat
	v Institute of C	v Institute of Oceanology, RAS v Institute of Oceanology, RAS v Availability *:	v Institute of Oceanology, RAS

Cancel Finish

Quality Control

We use MHI software for QC developed for

PERSEUS PERSEUS ODV QC V.0.01 Test SELECT EXECUTE VISUALIZE Single File Add P011 O Directory 17 ✓ date/time C OPEN ✓ depth Use relief check V pressure Selected File(s) ✓ dimat/range Minimum elevation density inversion - 0 X V spikes REPERSEUS ODV QC V.0.01 Test ✓ gradients EXECUTE VISUALIZE 🔍 🖳 4 🚔 0 +Climat Metadata.XML Status <?xml version="1.0"?? <MetaData xmlns:xsi= <Errors /> <IsValid>true</IsVali <Parameters> < III lat: 33.254 Lon: 29.186 Pres: 80.353 Prm: 38.199 Profile info Stations info Params info H03 306 1 39.146800994873 2 P021_P061 307 1 39.146900177002 2 ATTN_UPRM H05 308 1 39.1460990905762 2 DOXY_KGUM 310 1 39,1451988220215 2 Lat: 32.94584 Lat flag: 1 311 1 39,1450996398926 2 TEMP_UPAA Long: 34.75933 312 1 39.1442985534668 2 Long flag:1 Sigt_Prev: 28.9070110321045 Date/Time:03.04.2012/10:51:00 Sigt_Curr: 28.9089832305908 Metadata.XML Status sub-regions 200 Regional Ranges Climat 250 PAVG: 38,9589996337891 MinVal: 0 The Mediterranean sea MEDAF PSTD: 0.0520000010728836 400 MaxVal: 40 -StrictMin: 38.7967910766602 500 StrictMax: 39.1095390319824 600 SoftMin: 38.6925430297852 700 SoftMax: 39.2137870788574 800 . current sub-region:DL4 900



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

Data Management

Account Data Sets

	Data Set Name	Last Update Time	Status	Submis sions	Actions	Log
Select	cruise bot	08/05/2014 12:33	Imported	1	Delete	Log
		00.00.201112.000	mporreo	-	Resubmit	<u> </u>

Upload New Data Set

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'

	/EVGENIYA dbo.L	ist_SDN2	
	Column Name	Data Type	Allow Nulls
Þ	Cruise_Name	nvarchar(50)	
	Cruise_ID	int	
	Cast_ID	int	
P	Local_CDI	nvarchar(50)	
	Global_CDI	nvarchar(50)	V
	Status	varchar(50)	
	Laboratory_Code_EDMO	varchar(50)	
	DeviceCategory_Code_BODC	varchar(50)	
	Last_Update	int	
	Project_Code_EDMERP	varchar(50)	V

Step 3: Generating CDIs

We use the status flag in Mikado for generating new CDIs

Manual Automatic Options To	ols	1	
Connection Queries			
 Requests Main Query ✓ :S Cdi identifier ✓ Single subqueries ✓ var01 Collate Centre ✓ var02 Measuring are ✓ var03 Horizontal Datu ✓ var04 Dataset name 		query SELECT	var :s Local_CDI
var06 Revision date (√ var08 Abstract (data √ var09 Data Holding C √ var12 Platform √ var15 Cruise name		FROM	List_SDN2 Status = 'New'

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

Connection	Main query Modus 2 Modus 1 or Modus 3 Modus 4 Modus 4 and 5
File format	
● ODV ○	Medatlas 🔾 NetCDF 🔾 Png 🔾 Tiff 🔾 Segy 🔾 UkoaP190
● ODV ○ query	Medatlas 🔾 NetCDF 🔾 Png 🔾 Tiff 🔾 Segy 🔾 UkoaP190