

NEMO – Reformating tool



Michèle Fichaut - Ifremer

EMODnet Chemistry 3 Kick-off meeting, Trieste, Italy, 18-19 May 2017 sdn-userdesk@seadatanet.org – www.seadatanet.org



# NEMO [current version 1.6.3]

- Can be downloaded from SeaDataNet Web site <a href="https://www.seadatanet.org/Software/NEMO">https://www.seadatanet.org/Software/NEMO</a>
- Written in Java Language (Version >= 1.7)
- Bilingual (French, English)
- Available under multiple environments :
  - Microsoft : Windows
  - Unix Solaris
  - Linux
- Interactive and batch modes available
- Use of SeaDataNet common vocabularies web services
  - to update lists of values of the SeaDataNet common vocabularies
    - need network connections in order to have up to date lists of values.
    - But NEMO works offline once the lists are up-to-date



## **NEMO** main features

- Reformat ASCII text file of vertical profiles, time-series or trajectories to a SeaDataNet ASCII format (ODV, NetCDF, MEDATLAS).
- The input ASCII files can be:
  - one file per station for vertical profiles or time series
  - one file for one cruise for vertical profiles, time series or trajectories
- Interact with Mikado, to be able to generate ISO-19139 XML descriptions of the data
- Generate a coupling table that can be used with the Download manager



# **NEMO** principles

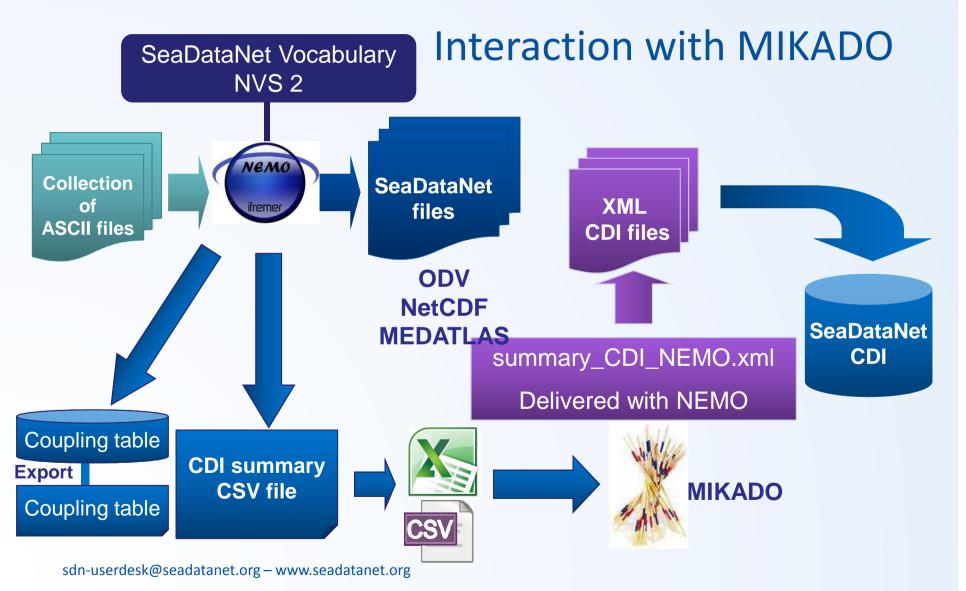
- NEMO able to read almost any ASCII format to translate it to SeaDataNet formats
- Users of NEMO describe the entry files format → NEMO able to find information necessary for SeaDataNet formats
- Mandatory pre-requirement : set of input files must be homogeneous
  - be located at the same position : same line in the file, same position on the line or same column if CSV format
  - be in the same format
  - For example the measured temperature is:
    - In the second column of the measured parameters,
    - from character 10 to character 14



# Files which cannot be converted by NEMO

- Binary format : like EXCEL, WORD ...
  - File have to be first reformatted to text file
- Files which do not respect NEMO pre-requirements
  - be located at the same position : same line in the file, same position on the line or same column if CSV format
  - be in the same format
- Files which are not:
  - Vertical profiles (with depth or pressure as vertical reference)
  - Time series (with time as reference)
  - Trajectories (with latitude, longitude and time as reference)





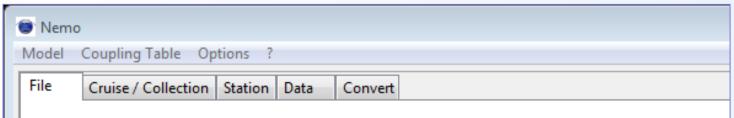


# **Running NEMO**



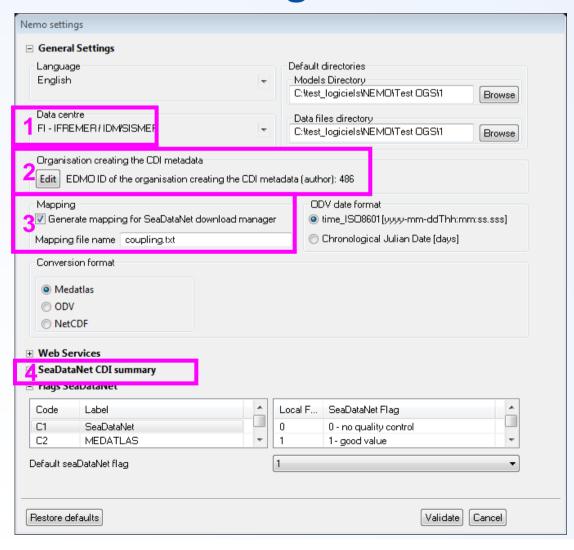
- 1 step to configure NEMO
- 5 steps to convert the entry files to a SeaDataNet format
  - 1. Describe the type of file(s)
  - 2. [Describe the cruise, if the files are related to 1 cruise]

    NEMO is able to read XML CSR generated with MIKADO
  - Describe the station information
  - 2. Describe the measured parameters
  - 3. Convert the file
- One more step to
  - Save the description of the format (Model)





# **NEMO** settings





- 1 Only for MedAtlas conversion
- 2 Mandatory: EDMO\_CODE of the CDI\_Partner
- 3 If user needs to generate a coupling file
- 4 If user wants to generate a csv file used by MIKADO



# **NEMO - Description of input files**



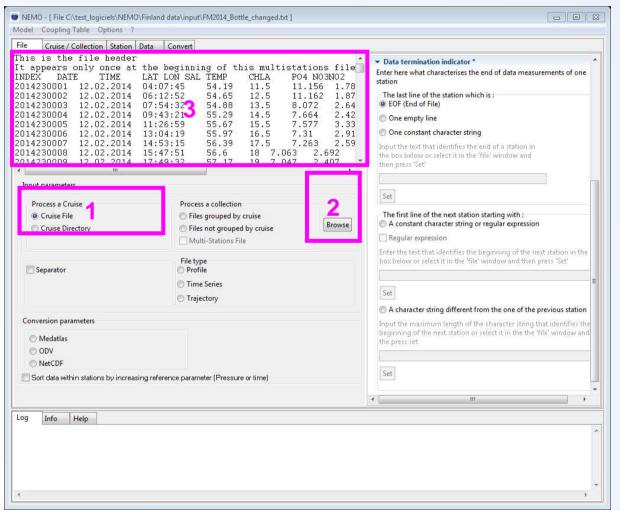
Cruise / Collection Stat	on Data Convert
Process a Cruise  Cruise File  Cruise Directory	Process a collection  Files grouped by cruise  Files not grouped by cruise  Multi-Stations File
	File type  Profile
Separator	<ul><li>Time Series</li><li>Trajectory</li></ul>
Separator	Time Series

- Where are the files?
- Is it a cruise?
  - Is it one file per cruise or one file per station ?
- Is it a collection of station files?
  - grouped by cruises or not?
- Are the files with separators?
  - Tabulations? Semicolon?Comma?
- Are they vertical profiles, time series or trajectories data?



# NEMO – Open the file



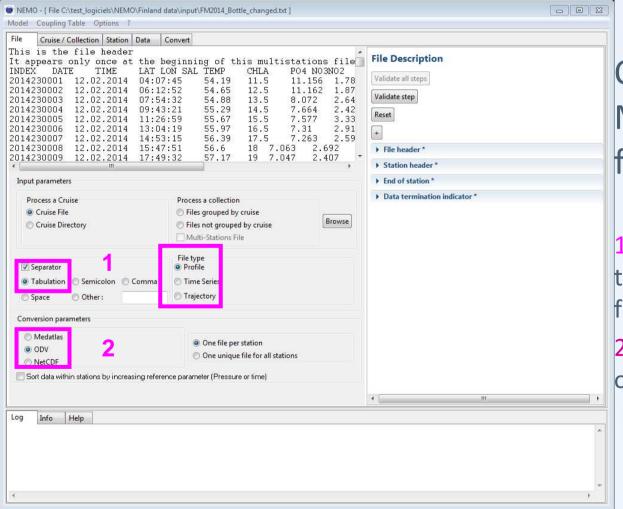


### Multistation file

- 1 Select the type of file
- 2 Browse the file
- 3 File to convert is displayed in NEMO window







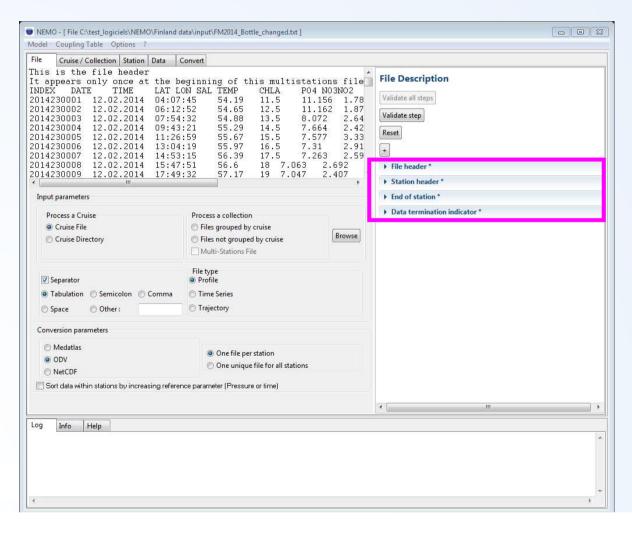
One Multistation file

- 1 describe the type of the input file
- 2 select the output format



# NEMO - Describe the input file(s) -2 Multi-station file





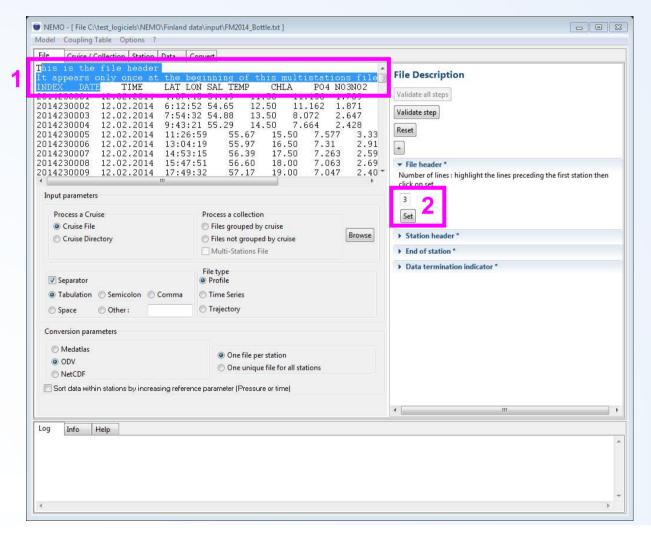
Describe how the file is organised:

File header

- Station header
- End of station
- Data termination







• File header

For multi-station files

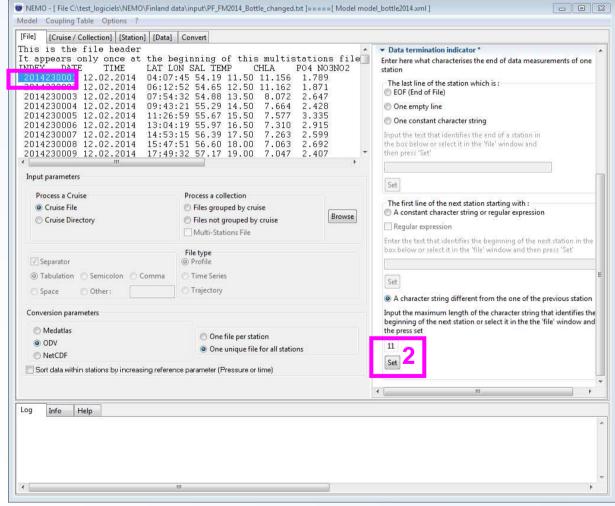
Lines which appear once at the beginning of the file

- 1. Select
- 2. Set
- Station header

If there are line(s) with no measurements before each station data







• End of station:

If there is a (or more) specific line after the data in each station

• Data termination:

If no specific line, then how does NEMO knows that we change station

- 1. Select the indicator
- 2. Set





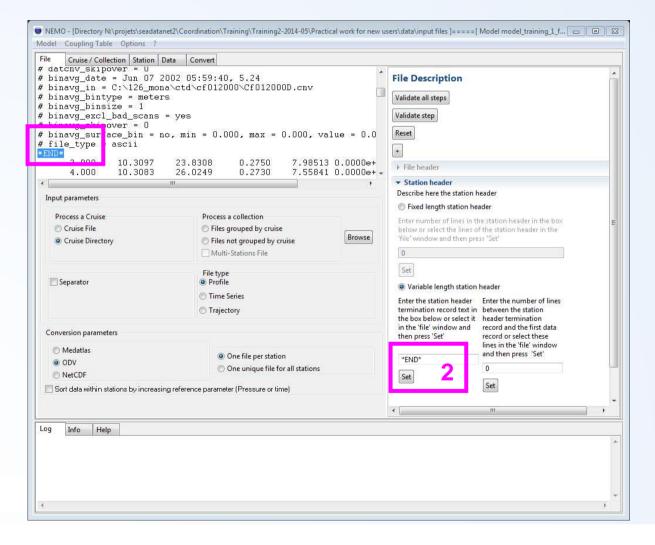
e Cruise / Collection Station E	Data Convert			
binavg_bintype = meters binavg_binsize = 1 binavg_excl_bad_scans = yes binavg_skipover = 0 binavg_surface bin = no, min = 0.000, max = 0.000, value = 0.0			File Description  Validate all steps	
file_type - asc11 ND* 3.000	23.8308	7.98513 0.0000e+ 7.55841 0.0000e+ 7.16248 0.0000e+ 7.23136 0.0000e+ 7.26112 0.0000e+		
Process a Cruise  Cruise File	Process a collection  Files grouped by cruise	Browse	Fixed length station header     Fixed length station header     Enter number of lines in the station header in the box below or select the lines of the station header in the 'file' window and then press 'Set'	
© Cruise Directory	Files not grouped by crui  Multi-Stations File  File type Profile Time Series	2	Set variable length station header	
Conversion parameters	○ Trajectory		Enter the station header termination record text in between the station the box below or select it header termination in the file' window and then press 'Set' record and the first data then press 'Set' income the file' window window.	
Medatlas     ODV     NetCDF  Sort data within stations by increasing the stations of the	One file per station     One unique file for a		and then press 'Set'  O  Set	
g Info Help	7: X X X	<u> </u>	<b>∢</b> [	•
S INC				

N monostation files with a constant number of lines for the station header

- 1. Select the lines if the station header
- 2. Set



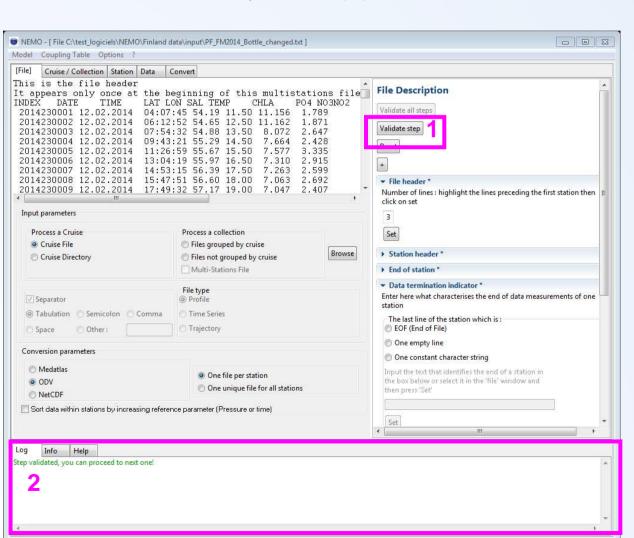




N monostation files with a non constant number of lines for the station header

- 1. Select the text which identifies the end of the station header
- 2. Set





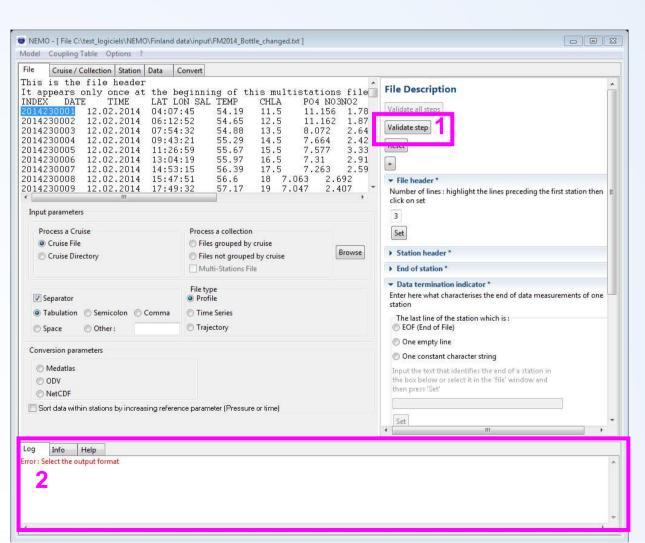


#### When finished

- 1. Validate the step
- 2. Look at the log

Green:OK, move to the next step







### When finished

- 1. Validate the step
- 2. Look at the log
  Green:OK,
  move to the

next step Red: KO, correction needed



## Cruise/collection description

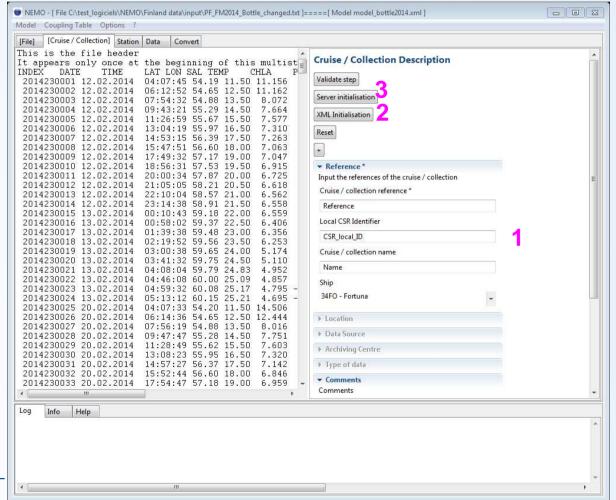


#### Can be:

- 1 -Manually input
- 2 Imported from a SeaDataNetXML CSR
- 3 Imported from a database(IFREMER only)

Mandatory fields depend on the output format

sdn-userdesk@seadatanet.org-



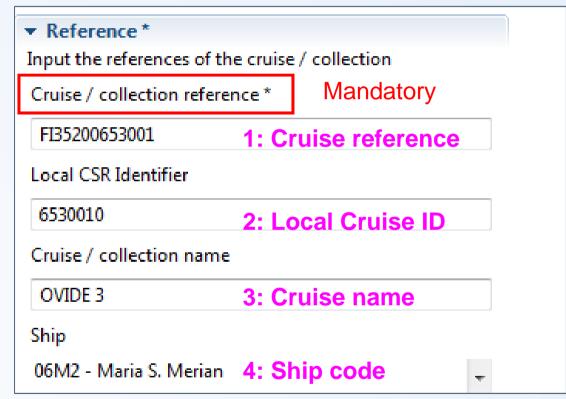


## Cruise/collection description

#### Can be:

- 1 -Manually input
- 2 Imported from aSeaDataNet XML CSR
- 3 Imported from a database (IFREMER only)

Mandatory fields depend on the output format





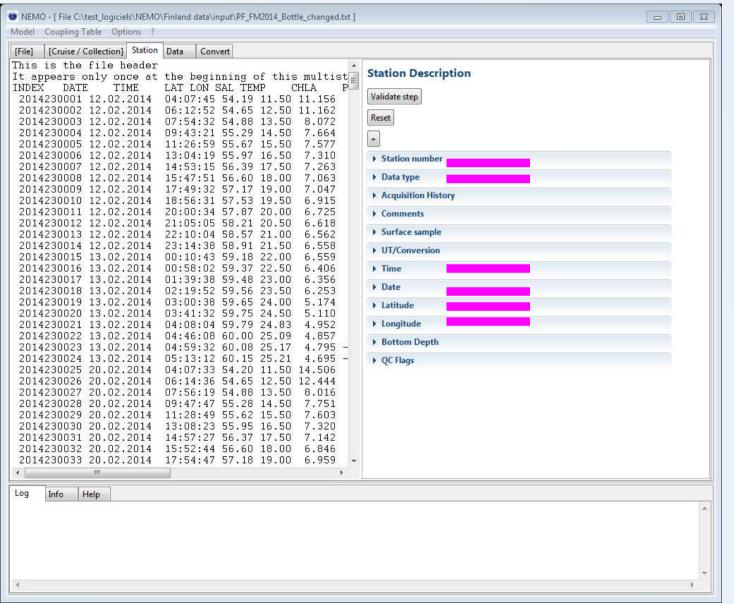
## Cruise/collection description in output ODV

4 : Ship code, 2: Local Cruise ID ///sdn reference xlink:href="http://seadata.bsh.de/cgi-csr/XML/xmlDown and V2.pl edmo=486&identifier=6530010" xlink:role="isObservedBy" xlink:type="SDN:L23::CSR"/> //<sdn\_reference\_xlink:href="http://vocab.nerc.ac.uk/collection/C17/curren\_/06M2" xlink:role="isObservedBy" xlink:type="SDN:L23::NVS2CON"/> //<sdn reference xlink:href="http://seadatanet.maris2.nl/v cdi v3/print xml.asp?edmo=486&identifier=FI35200653001 00001 H10" xlink:role="isDescribedBy" xlink:type="SDN:L23:: //<sdn reference xlink:href="http://seadatanet.maris2.nl/v cdi v3/print xml.asp?edmo=486&identifier=FI35200653001 00002 H10" xlink:role="isDescribedBy" xlink:type="SDN:L23:: //SDN parameter mapping //<subject>SDN:LOCAL:DEPHPR01</subject><object>SDN:P01::DEPHPR01</object><units>SDN:P06::ULAA</units> //<subject>SDN:LOCAL:Pressure</subject>SDN:P01::PRESPR01</object><units>SDN:P06::UPDB</units>instrument>SDN:L22::TOOL0409</instrument> //<subject>SDN:LOCAL:Temperature</subject><object>SDN:P01::TEMPPR01</object><units>SDN:P06::UPAA</units><instrument>SDN:L22::TOOL0409</instrument> //<subject>SDN:LOCAL:Salinity</subject><object>SDN:P01::PSLTZZ01</object><units>SDN:P06::UUUU</units><instrument>SDN:L22::TOOL0409</instrument> //<subject>SDN:LOCAL:Oxygen</subject><object>SDN:P01::DOXMZZXX</object><units>SDN:P06::KGUM</units><instrument>SDN:L22::TOOL0036</instrument> yyyy-mm-dd Longitude [d Latitude [de LOCAL\_CDI\_ID EDMO code Bot. Depth [ DEPHPR01 [ n QV:S Pressure [ I QV:S Temperature QV:S Cruise Station Type DVIDE 3 1 C 2006-05-24T1 -10.7 38.43333 FI35200653001 00001 H10 4915 16.512 2 1 16.512 3: Cruise name 16.512 1: Cruise reference 16.512 5 1 16.512 16.512



# Station description

**Mandatory** information

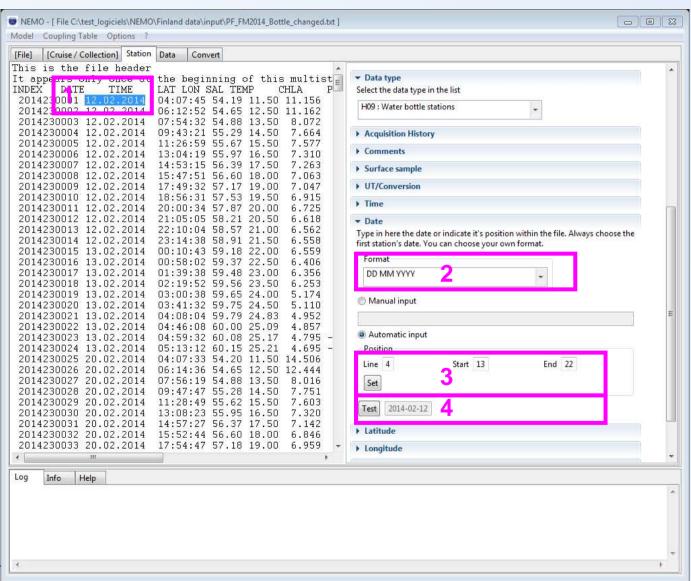


sdn-userdesk@seadatan



# Station description

- 1- Select the date in the file
- 2 Input the date format
- 3 Set
- 4 –Test and check

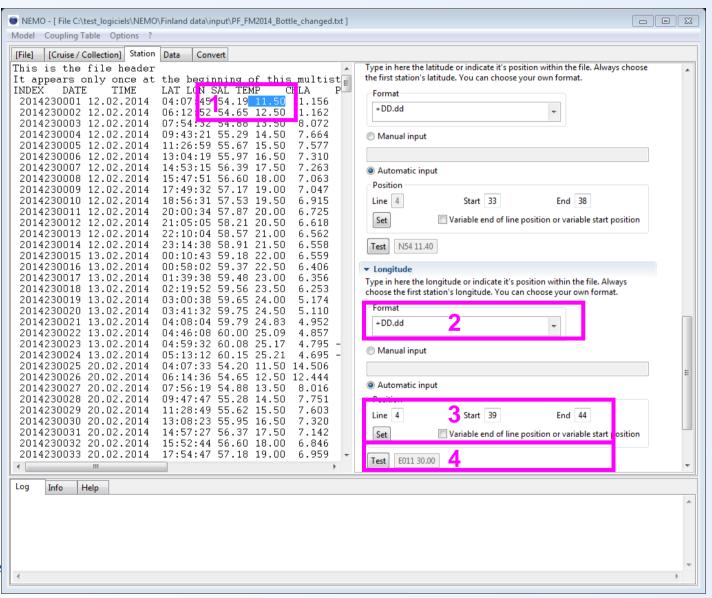


sdn-userdesk@seadatanet.or



# Station description

- 1- Select the LON in the file
- 2 Input the LON format
- 3 Set
- 4 –Test and check

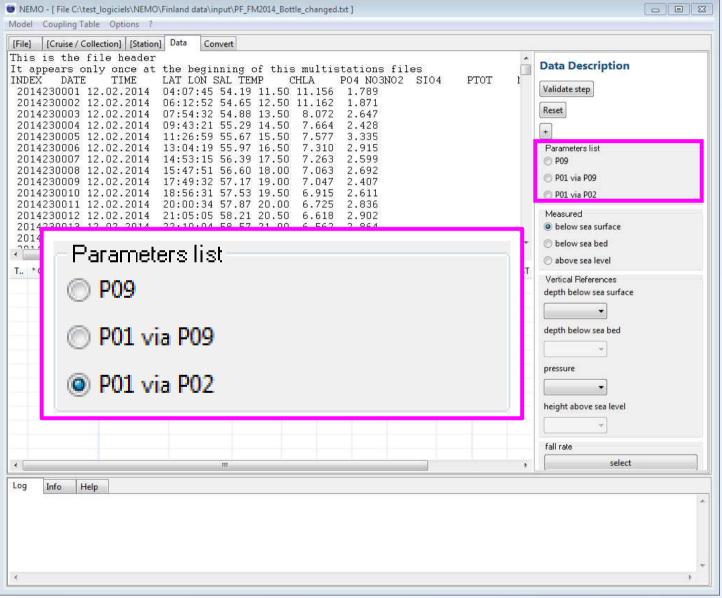


sdn-userdesk@seadatane



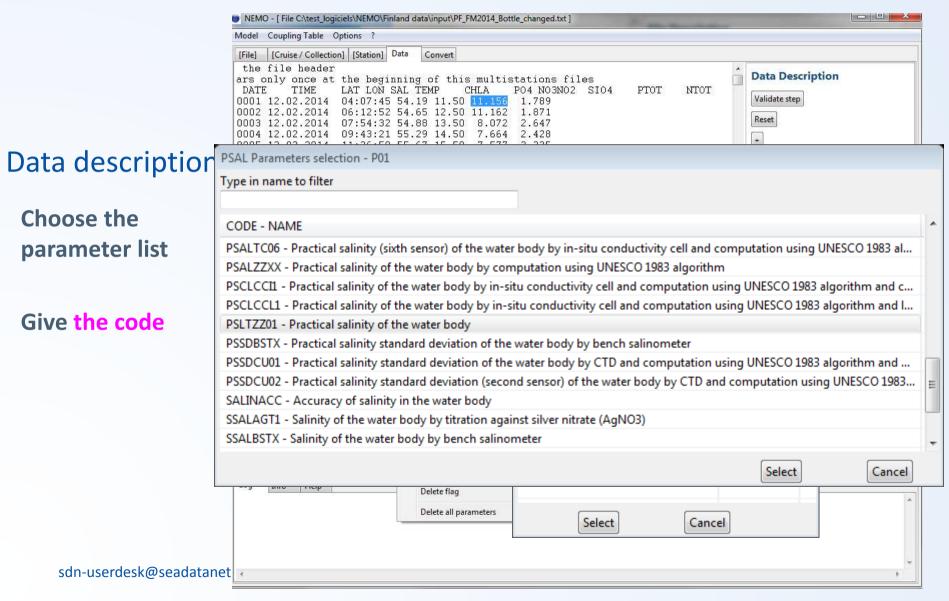
## Data description

Choose the parameter list



sdn-userdesk@seadatan



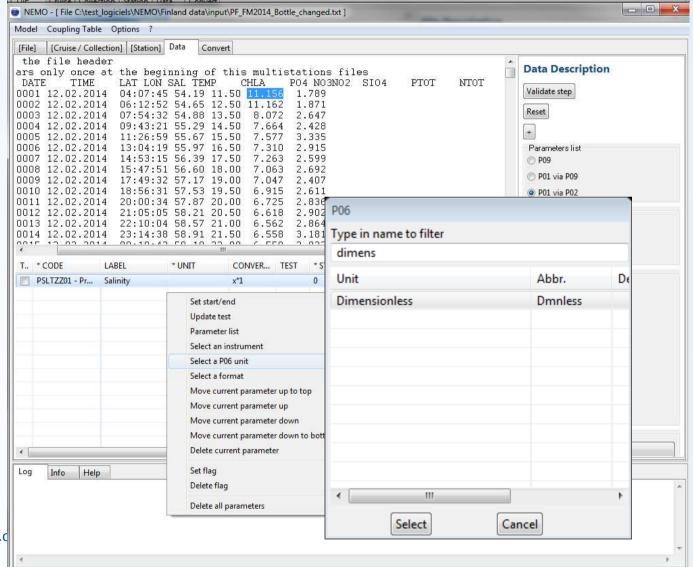




## Data description

Choose the parameter list

Give the code, the unit



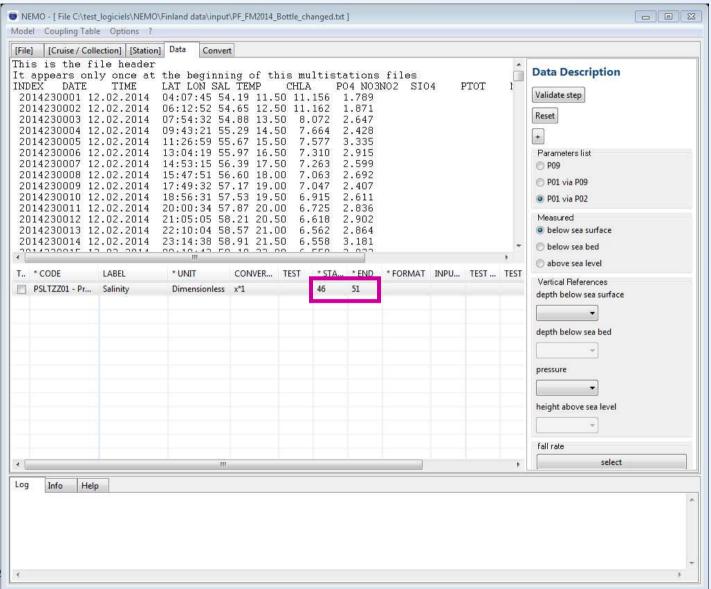
sdn-userdesk@seadatanet.c



## Data description

Choose the parameter list

Give the code, the unit, the position in the line



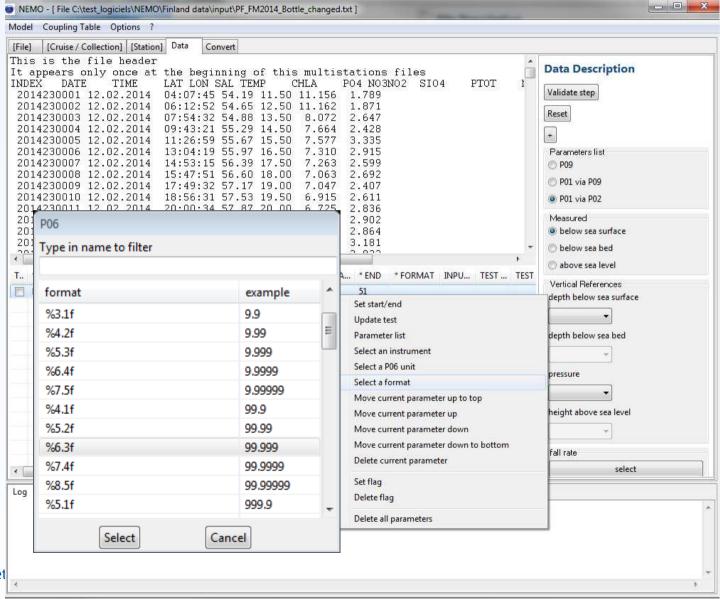
sdn-userdesk@seadatane



## Data description

Choose the parameter list

Give the code, the unit, the position in the file, the format



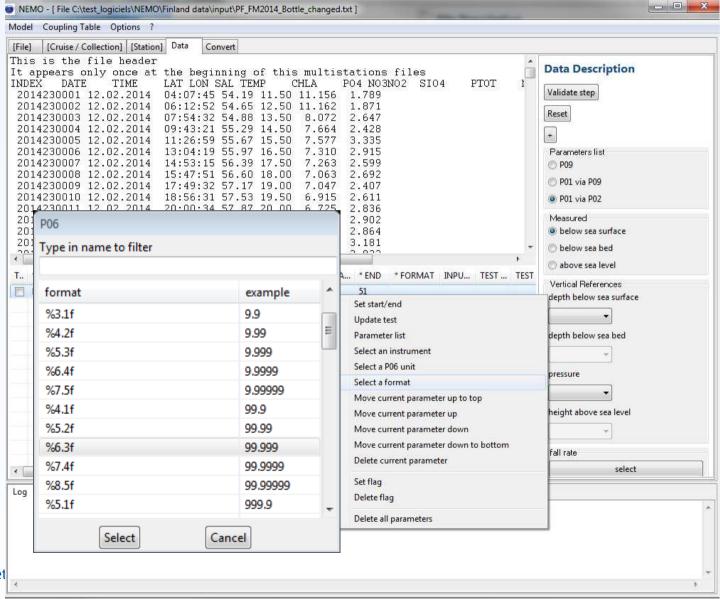
sdn-userdesk@seadatanet



## Data description

Choose the parameter list

Give the code, the unit, the position in the file, the format



sdn-userdesk@seadatanet

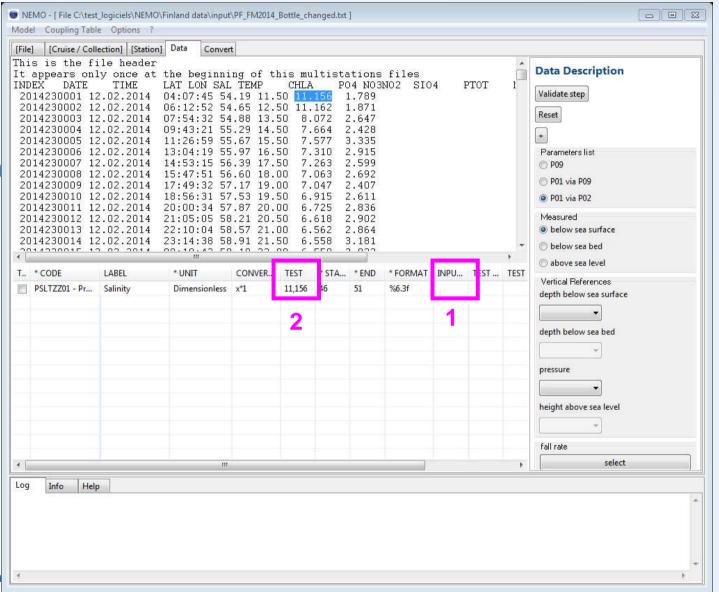




## Data description

# Choose the parameter list

Give the code, the unit, the position in the file, the format, the default value (1) Then check (2)



sdn-userdesk@seadatan



- P X



## Data description

Add all the measured parameters

Validate the step

Error!!

Depth missing

Coupling Table Options [Cruise / Collection] [Station] \*\*\* Data \*\*\* Convert der **Data Description** at the beginning of this multistations files LAT LON SAL TEMP CHLA PO4 NO3NO2 SIO4 NTOT Validate step 04:07:45 54.19 11.50 11.156 1.789 06:12:52 54.65 12.50 11.162 Reset 09:43:21 55.29 14.50 11:26:59 55.67 15.50 13:04:19 55.97 16.50 Parameters list 14:53:15 56.39 17.50 15:47:51 56.60 18.00 P01 via P09 18:56:31 57.53 19.50 P01 via P02 20:00:34 57.87 20.00 Measured 21:05:05 58.21 20.50 6.618 22:10:04 58.57 21.00 below sea surface 6.562 23:14:38 58.91 21.50 below sea bed above sea level LABEL \* UNIT CONVER. \* FORMAT INPU... TEST ... TEST T., \* CODE TEST \* STA... \* END Vertical References PSLTZZ01 - Pr... Salinity Dimensionless x\*1 11,156 46 51 %6.3f depth below sea surface 58 TEMPPR01 - T... Temperature Degrees Cels... x\*1 53 %6.3f CPHLZZXX - C... Chlorophylle Millilitres pe... x\*1 60 64 %5.2f PHOSZZXX - ... Micromoles ... x\*1 %4.2f depth below sea bed MTRZZZXX - C... NO3NO2 Micromoles ... x\*1 71 75 %5.2f SLCAZZXX - C... SIO4 Micromoles ... x\*1 77 %5.2f pressure height above sea level fall rate select Help Error: You must select depth below sea surface or pressure reference (AHGT / AHGT)

NEMO - [ File C:\test\_logiciels\NEMO\Finland data\input\PF\_FM2014\_Bottle\_changed.txt ]

sdn-userdesk@seadata





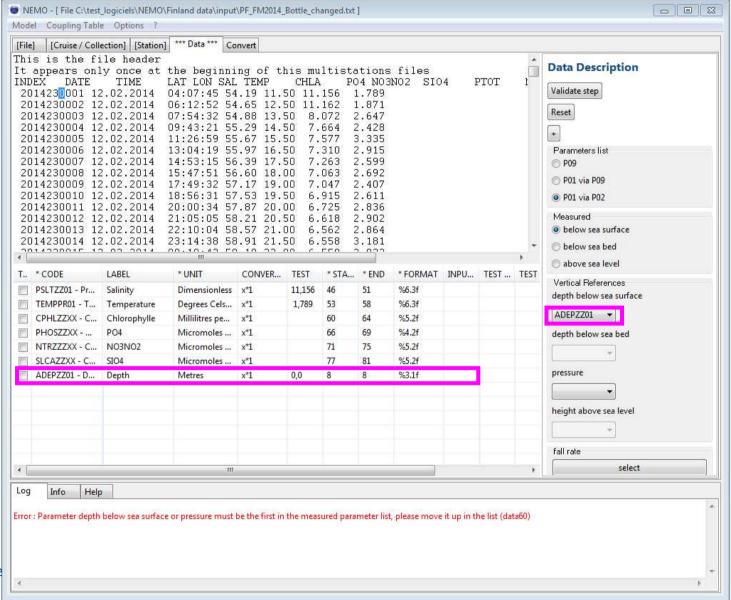
## Data description

Add depth = 0 (surface)

Validate the step

Error!!

Depth must be in the 1<sup>st</sup> position



sdn-userdesk@seadatane





### Data description

Add depth = 0 (surface)

Validate the step

Error!!

Depth must be in the 1<sup>st</sup> position

NEMO - [ File C:\test\_logiciels\NEMO\Finland data\input\PF\_FM2014\_Bottle\_changed.txt ] - E X Model Coupling Table Options ? [Cruise / Collection] [Station] [Data] Convert This is the file header **Data Description** It appears only once at the beginning of this multistations files LAT LON SAL TEMP INDEX DATE TIME CHLA PO4 NO3NO2 SIO4 PTOT Validate step 2014230001 12.02.2014 04:07:45 54.19 11.50 11.156 1.789 2014230002 12.02.2014 06:12:52 54.65 12.50 11.162 Reset 07:54:32 54.88 13.50 2014230004 12.02.2014 09:43:21 55.29 14.50 2014230005 12.02.2014 11:26:59 55.67 15.50 2014230006 12.02.2014 13:04:19 55.97 16.50 7.310 Parameters list 2014230007 12.02.2014 14:53:15 56.39 17.50 7.263 @ P09 2014230008 12.02.2014 15:47:51 56.60 18.00 P01 via P09 17:49:32 57.17 19.00 2014230010 12.02.2014 18:56:31 57.53 19.50 2.611 P01 via P02 20:00:34 57.87 20.00 2014230011 12.02.2014 Measured 2014230012 12.02.2014 21:05:05 58.21 20.50 2014230013 12.02.2014 22:10:04 58.57 21.00 6.562 2.864 below sea surface 23:14:38 58.91 21.50 2014230014 12.02.2014 below sea bed above sea level \* FORMAT INPU... TEST ... TEST T., \* CODE LABEL \* UNIT CONVER... TEST \* STA... \* END Vertical References ADEPZZ01 - D... Depth Metres 0.0 %3.1f depth below sea surface 51 11,156 %6.3f PSLTZZ01 - Pr... Dimensionless x\*1 ADEPZZ01 ▼ TEMPPR01 - T... Temperature Degrees Cels... x\*1 53 %6.3f Chlorophylle Millilitres pe... %5.2f depth below sea bed %4.2f Micromoles ... x\*1 NO3NO2 75 NTRZZZXX - C... Micromoles ... x\*1 71 %5.2f pressure SLCAZZXX - C... Micromoles ... x\*1 77 %5.2f height above sea level fall rate select Info Help Step validated, you can proceed to next one!

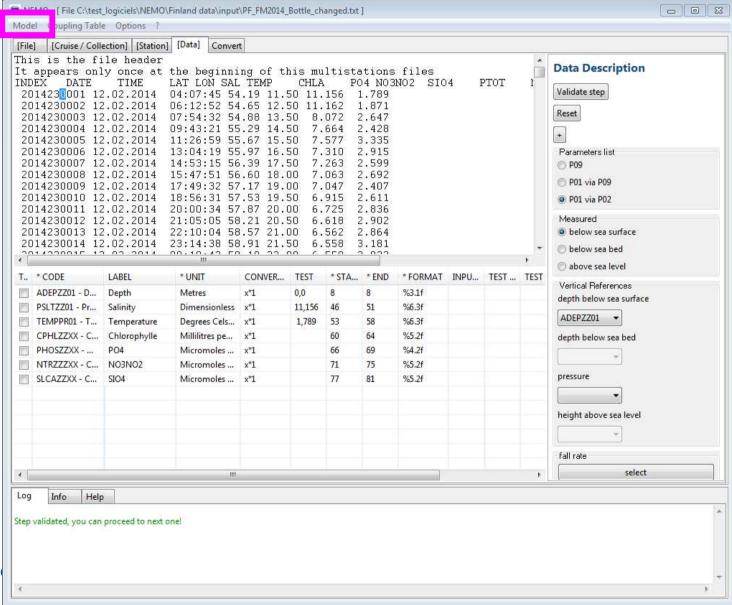
sdn-userdesk@seadatan





## Data description

Save the model
Using Menu –
Model > Save

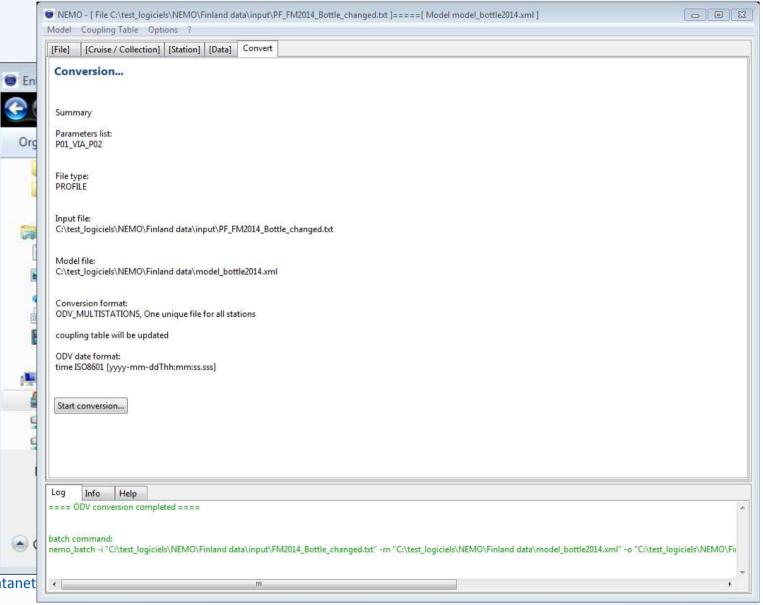


sdn-userdesk@seadatan





### File conversio



sdn-userdesk@seadatanet



fall rate

select



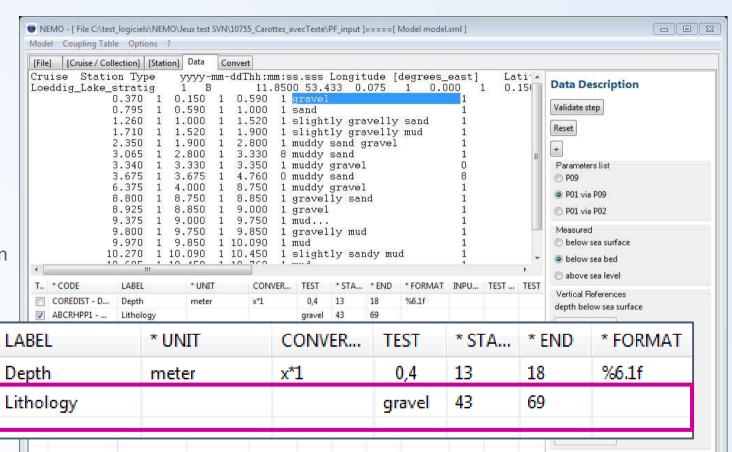
# Non numeric parameters

For sediment description in Sediment Core

\* CODE

COREDIST - D...

ABCRHPP1 - ...



Compatible with ODV

sdn-userdesk@seadatanet.d

Info

Help



#### Other additional information

- Instrument used for the measured parameters can be added
- Quality flags already existing in the file => if not
   SeaDataNet flag, mapping is necessary

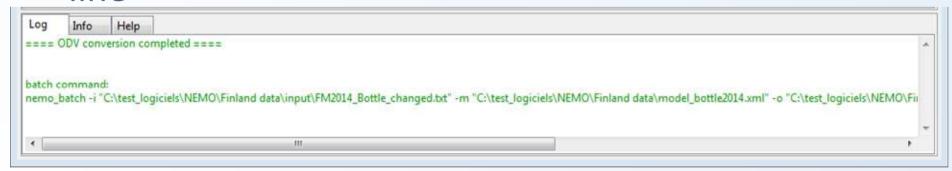
4														
Т	* CODE	LABEL	* UNIT	CONVER	TEST	* STA	* END	* FORMAT	INPU	TEST (INPUT)	TEST (OUTPUT)	START FLAG	END FLAG	INSTRUMENT
	ADEPZZ01 - D	Depth	Metres	x*1	0,0	8	8	%3.1f						
	PSLTZZ01 - Pr	Salinity	Dimensionless	x*1	11,156	46	51	%6.3f						
	TEMPPR01 - T	Temperature	Degrees Cels	x*1	1,789	53	58	%6.3f						
	CPHLZZXX - C	Chlorophylle	Millilitres pe	x*1		60	64	%5.2f						
	PHOSZZXX	PO4	Micromoles	x*1		66	69	%4.2f						
	NTRZZZXX - C	NO3NO2	Micromoles	x*1		71	75	%5.2f						
	SLCAZZXX - C	SIO4	Micromoles	x*1		77	81	%5.2f						



#### NEMO in batch mode



- NEMO can be run in batch mode, from NEMO install directory, using existing models
- Several arguments can be added on the command line





#### NEMO - User manual

User manual is provided on line on SeaDataNet website:

https://www.seadatanet.org/Software/NEMO

- Detailed explanation for NEMO installation and use, lots of snapshots
- Available also on this page
  - zip file of examples of vertical profiles, time series and trajectories with corresponding NEMO
  - FAQ
  - This presentation of NEMO

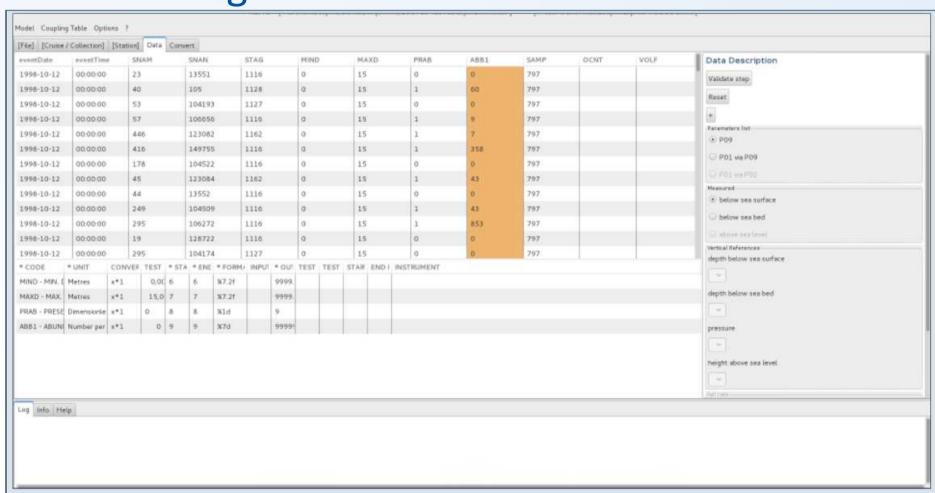


#### Next release of NEMO

- New management of <u>CSV files</u> as input files of NEMO
  - Will manage the column number and the "PF\_" temporary files will not exist any more
- Management of <u>deprecated parameters</u>: replacement by the new parameter defined by the 'Replaced by' attributes in the vocabulary
- Bug corrections
- Planned released date: Summer 2017



## New management of the CSV files





NEMO and MIKADO interaction— CDI summary file

NEMO and SDN Download Manager — coupling table



EMODnet Chemistry 3 Kick-off meeting, Trieste, Italy, 18-19 May 2017 sdn-userdesk@seadatanet.org – www.seadatanet.org



### While converting ...

- NEMO is able to
- Generate a SeaDataNet CDI Summary
  - Text file containing the minimum mandatory information needed in the CDI ISO-19139 description
  - This file can be converted to an Excel file
  - Which can be read by MIKADO to generate the XML CDI files
- Generate a coupling table that will be used by the Download manager of SeaDataNet
  - It is the link between the LOCAL\_CDI\_ID and the file



### **CDI** summary

Nemo settings □ SeaDataNet CDI summary Generate SeaDataNet CDI summarv 📝 Edit EDMO ID of the data originator: 0 EDMO ID of the organisation Edit managing the data set (custodian): 0 EDMO ID of the organisation Edit distributing the data set (distributor): 0 Data Distribution Website http://www.sdn-taskmanager.org/ CDIMTH02 - web data access with registration Data distribution method Platform type LS - SeaDataNet licence Data set access ODV Version 0.4MEDATLAS Version 2.0 CFPOINT Version 1.0

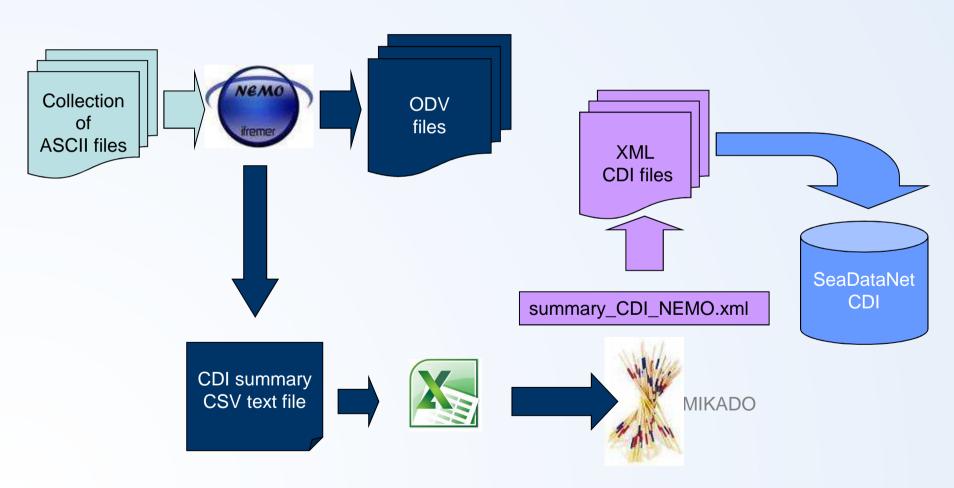


# CDI SUMMARY text File (.txt)

OCAL CDI ID EDMO AUTHOR	AREA TY	PE DATASET NAME	DATASET ID	DATASE	T REV DATE	EDMO	ORIGINATO	DATA	SET ABS	EDMO CUSTODIAN	PO2 CODE	PLATFORM TYPE	DATASET ACCESS CRU
TI35200653001 00001 H10 486	Point	OVIDE 3 F135200653001	2014-08-22	32	Not Specified	9	AHGT	31	LS	OVIDE 3 001	+38.433333	-010.700000	2006-05-24T14:28:00
TI35200653001 00001 H10 486	Point	OVIDE 3 FI35200653001	2014-08-22	32	Not Specified	9	AHGT	31	LS	OVIDE 3 001	+38.433333	-010.700000	2006-05-24T14:28:00
TI35200653001 00001 H10 486	Point	OVIDE 3 FI35200653001	2014-08-22	32	Not Specified	9	TEMP	31	LS	OVIDE 3 001	+38.433333	-010.700000	2006-05-24T14:28:00
TI35200653001_00001 H10 486	Point	OVIDE 3 F135200653001	2014-08-22	32	Not Specified	9	TEMP	31	LS	OVIDE 3 001	+38.433333	-010.700000	2006-05-24T14:28:00
TI35200653001 00001 H10 486	Point	OVIDE 3 FI35200653001	2014-08-22	32	Not Specified	9	PSAL	31	LS	OVIDE 3 001	+38.433333	-010.700000	2006-05-24T14:28:00
TI35200653001_00001 H10 486	Point	OVIDE 3 F135200653001	2014-08-22	32	Not Specified	9	PSAL	31	LS	OVIDE 3 001	+38.433333	-010.700000	2006-05-24T14:28:00
TI35200653001_00001_HI0 486	Point	OVIDE 3 F135200653001	2011-08-22	32	Not Specified	9	DOXY	31	LS	OVIDE 3 001	+38.433333	-010.700000	2006-05-24T14:28:00
TI35200653001_00001_HI0 486	Point	OVIDE 3 F135200653001	2014-08-22	32	Not Specified	9	DOXY	31	LS	OVIDE 3 001	+38.433333	-010.700000	2006-05-24T14:28:00
TI35200653001_00001_HI0 486	Point	OVIDE 3 F135200653001	2014-08-22	32	Not Specified	9	AHGT	31	LS	OVIDE 3 001	+40.333333	-010.700000	2006-05-25T05:39:00
TI35200653001_00002_H10 486	Point	OVIDE 3 F135200653001	2014-08-22	32	Not Specified	9	AHGT	31	LS	OVIDE 3 002	+40.333333	-009.459333	2006-05-25T05:39:00
T135200653001_00002_H10 486		OVIDE 3 F135200653001		32		9	TEMP	31	LS	OVIDE 3 002	+40.333333	-009.459333	2006-05-25T05:39:00
	Point		2014-08-22		Not Specified		TEMP	31					
TI35200653001_00002_H10 486	Point	OVIDE 3 FI35200653001	2014-08-22	32	Not Specified	9			LS	OVIDE 3 002	+40.333333	-009.459333	2006-05-25T05:39:00
TI35200653001_00002_H10 486	Point	OVIDE 3 FI35200653001	2014-08-22	32	Not Specified	9	PSAL	31	LS	OVIDE 3 002	+40.333333	-009.459333	2006-05-25T05:39:00
TI35200653001_00002_H10 486	Point	OVIDE 3 FI35200653001	2014-08-22	32	Not Specified	9	PSAL	31	LS	OVIDE 3 002	+40.333333	-009.459333	2006-05-25T05:39:00
TI35200653001_00002_H10 486	Point	OVIDE 3 FI35200653001	2014-08-22	32	Not Specified	9	DOXY	31	LS	OVIDE 3 002	+40.333333	-009.459333	2006-05-25T05:39:00
TI35200653001_00002_H10 486	Point	OVIDE 3 FI35200653001	2014-08-22	32	Not Specified	9	DOXY	31	LS	OVIDE 3 002	+40.333333	-009.459333	2006-05-25T05:39:00
TI35200653001_00003_H10 486	Point	OVIDE 3 FI35200653001	2014-08-22	32	Not Specified	9	AHGT	31	LS	OVIDE 3 003	+40.333333	-009.642833	2006-05-25T10:17:0
TI35200653001_00003_H10 486	Point	OVIDE 3 FI35200653001	2014-08-22	32	Not Specified	9	AHGT	31	LS	OVIDE 3 003	+40.333333	-009.642833	2006-05-25T10:17:0
TI35200653001_00003_H10 486	Point	OVIDE 3 FI35200653001	2014-08-22	32	Not Specified	9	TEMP	31	LS	OVIDE 3 003	+40.333333	-009.642833	2006-05-25T10:17:0
TI35200653001_00003_H10 486	Point	OVIDE 3 FI35200653001	2014-08-22	32	Not Specified	9	TEMP	31	LS	OVIDE 3 003	+40.333333	-009.642833	2006-05-25T10:17:0
TI35200653001_00003_H10 486	Point	OVIDE 3 FI35200653001	2014-08-22	32	Not Specified	9	PSAL	31	LS	OVIDE 3 003	+40.333333	-009.642833	2006-05-25T10:17:0
135200653001_00003_H10 486	Point	OVIDE 3 FI35200653001	2014-08-22	32	Not Specified	9	PSAL	31	LS	OVIDE 3 003	+40.333333	-009.642833	2006-05-25T10:17:0
I35200653001_00003_H10 486	Point	OVIDE 3 FI35200653001	2014-08-22	32	Not Specified	9	DOXY	31	LS	OVIDE 3 003	+40.333333	-009.642833	2006-05-25T10:17:0
I35200653001 00003 H10 486	Point	OVIDE 3 FI35200653001	2014-08-22	32	Not Specified	9	DOXY	31	LS	OVIDE 3 003	+40.333333	-009.642833	2006-05-25T10:17:0
I35200653001 00004 H10 486	Point	OVIDE 3 FI35200653001	2014-08-22	32	Not Specified	9	AHGT	31	LS	OVIDE 3 004	+40.334333	-009.764167	2006-05-25T12:17:0
135200653001 00004 H10 486	Point	OVIDE 3 FI35200653001	2014-08-22	32	Not Specified	9	AHGT	31	LS	OVIDE 3 004	+40.334333	-009.764167	2006-05-25T12:17:0
135200653001 00004 H10 486	Point	OVIDE 3 FI35200653001	2014-08-22	32	Not Specified	9	TEMP	31	LS	OVIDE 3 004	+40.334333	-009.764167	2006-05-25T12:17:0
135200653001 00004 H10 486	Point	OVIDE 3 FI35200653001	2014-08-22	32	Not Specified	9	TEMP	31	LS	OVIDE 3 004	+40.334333	-009.764167	2006-05-25T12:17:0
I35200653001 00004 H10 486	Point	OVIDE 3 FI35200653001	2014-08-22	32	Not Specified	9	PSAL	31	LS	OVIDE 3 004	+40.334333	-009.764167	2006-05-25T12:17:0
135200653001 00004 H10 486	Point	OVIDE 3 FI35200653001	2014-08-22	32	Not Specified	9	PSAL	31	LS	OVIDE 3 004	+40.334333	-009.764167	2006-05-25T12:17:0
I35200653001 00004 H10 486	Point	OVIDE 3 FI35200653001	2014-08-22	32	Not Specified	9	DOXY	31	LS	OVIDE 3 004	+40.334333	-009.764167	2006-05-25T12:17:0
T35200653001 00004 H10 486	Point	OVIDE 3 FI35200653001	2014-08-22	32	Not Specified	9	DOXY	31	LS	OVIDE 3 004	+40.334333	-009.764167	2006-05-25T12:17:0
T35200653001 00005 H10 486	Point	OVIDE 3 FI35200653001	2014-08-22	32	Not Specified	9	AHGT	31	LS	OVIDE 3 005	+40.333333	-009.783333	2006-05-25T15:36:0
TI35200653001 00005 H10 486	Point	OVIDE 3 FI35200653001	2014-08-22	32	Not Specified	9	AHGT	31	LS	OVIDE 3 005	+40.333333	-009.783333	2006-05-25T15:36:0
T35200653001_00005_H10_486	Point	OVIDE 3 F135200653001	2014-08-22	32	Not Specified	9	TEMP	31	LS	OVIDE 3 005	+40.333333	-009.783333	2006-05-25T15:36:0
I35200653001_00005_H10 486	Point	OVIDE 3 F135200653001	2014-08-22	32	Not Specified	9	TEMP	31	LS	OVIDE 3 005	+40.333333	-009.783333	2006-05-25T15:36:0
135200653001_00005_H10 486	Point	OVIDE 3 F135200653001	2014-08-22	32	Not Specified	9	PSAL	31	LS	OVIDE 3 005	+40.333333	-009.783333	2006-05-25T15:36:0
T35200653001_00005_H10 486	Point	OVIDE 3 F135200653001	2014-08-22	32	Not Specified	9	PSAL	31	LS	OVIDE 3 005	+40.333333	-009.783333	2006-05-25T15:36:0
I35200653001_00005_HI0 486	Point	OVIDE 3 F135200653001	2014-08-22	32	Not Specified	9	DOXY	31	LS	OVIDE 3 005	+40.3333333	-009.783333	2006-05-25T15:36:0
			2014-08-22			_	DOXY	31	LS	OVIDE 3 005			
135200653001_00005_H10 486	Point	OVIDE 3 FI35200653001		32	Not Specified	9	AHGT	31	LS	OVIDE 3 005	+40.333333	-009.783333	2006-05-25T15:36:0
I35200653001_00006_H10 486	Point	OVIDE 3 F135200653001	2014-08-22	32	Not Specified	_					+40.333333	-009.801500	2006-05-25T17:46:0
I35200653001_00006_H10 486	Point	OVIDE 3 F135200653001	2014-08-22	32	Not Specified	9	AHGT	31	LS	OVIDE 3 006	+40.333333	-009.801500	2006-05-25T17:46:0
I35200653001_00006_H10 486	Point	OVIDE 3 F135200653001	2014-08-22	32	Not Specified	9	TEMP	31	LS	OVIDE 3 006	+40.333333	-009.801500	2006-05-25T17:46:0
T35200653001_00006_H10 486	Point	OVIDE 3 FI35200653001	2014-08-22	32	Not Specified	9	TEMP	31	LS	OVIDE 3 006	+40.333333	-009.801500	2006-05-25T17:46:0
I35200653001_00006_H10 486	Point	OVIDE 3 FI35200653001	2014-08-22	32	Not Specified	9	PSAL	31	LS	OVIDE 3 006	+40.333333	-009.801500	2006-05-25T17:46:0
I35200653001_00006_H10 486	Point	OVIDE 3 FI35200653001	2014-08-22	32	Not Specified	9	PSAL	31	LS	OVIDE 3 006	+40.333333	-009.801500	2006-05-25T17:46:0
I35200653001_00006_H10 486	Point	OVIDE 3 FI35200653001	2014-08-22	32	Not Specified	9	DOXY	31	LS	OVIDE 3 006	+40.333333	-009.801500	2006-05-25T17:46:0
I35200653001_00006_H10 486	Point	OVIDE 3 FI35200653001	2014-08-22	32	Not Specified	9	DOXY	31	LS	OVIDE 3 006	+40.333333	-009.801500	2006-05-25T17:46:0
I35200653001_00007_H10 486	Point	OVIDE 3 FI35200653001	2014-08-22	32	Not Specified	9	AHGT	31	LS	OVIDE 3 007	+40.333333	-009.876000	2006-05-25T20:37:0
I35200653001_00007_H10 486	Point	OVIDE 3 FI35200653001	2014-08-22	32	Not Specified	9	AHGT	31	LS	OVIDE 3 007	+40.333333	-009.876000	2006-05-25T20:37:0
135200653001_00007_H10 486	Point	OVIDE 3 FI35200653001	2014-08-22	32	Not Specified	9	TEMP	31	LS	OVIDE 3 007	+40.333333	-009.876000	2006-05-25T20:37:0
135200653001 00007 H10 486	Point	OVIDE 3 FI35200653001	2014-08-22	32	Not Specified	9	TEMP	31	LS	OVIDE 3 007	+40.333333	-009.876000	2006-05-25T20:37:0
135200653001 00007 H10 486	Point	OVIDE 3 FI35200653001	2014-08-22	32	Not Specified	9	PSAL	31	LS	OVIDE 3 007	+40.333333	-009.876000	2006-05-25T20:37:0
		III											



### Interaction with MIKADO





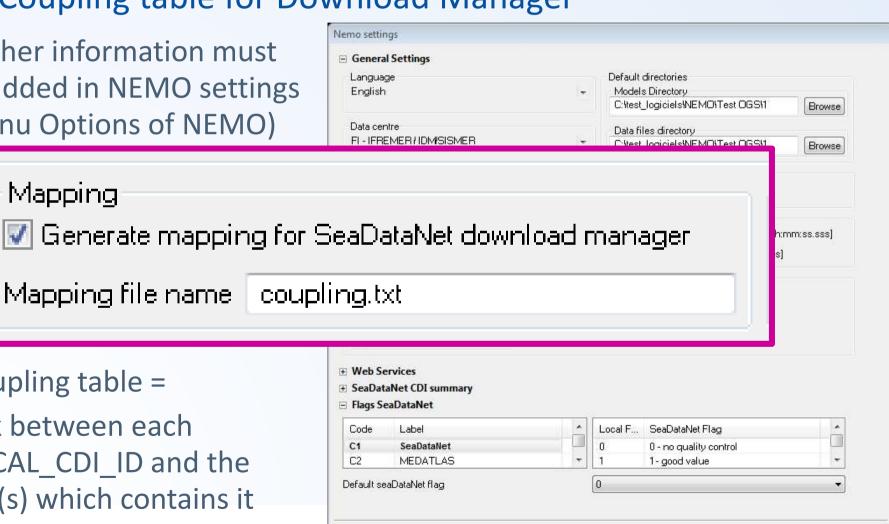
Mapping

EMODnet Chemistry 3 Kick-off meeting, Trieste, Italy, 18-19 May 2017

#### Coupling table for Download Manager

Restore defaults

Further information must be added in NEMO settings (menu Options of NEMO)



Validate

Cancel

Coupling table = link between each LOCAL CDI ID and the file(s) which contains it



# Coupling table

- If the "Generate mapping" option is clicked:
- NEMO will insert a record in the coupling table for each vertical profile, time series or trajectory that it converts.
- The coupling table is managed by a local database imbedded in NEMO
- The coupling table can be :
  - Edited (for modification, insertion or deletion)
  - exported (to be used by the download manager)
  - imported (from previous version of NEMO, for example)



# Coupling table content (1)

LOCAL\_CDI\_ID

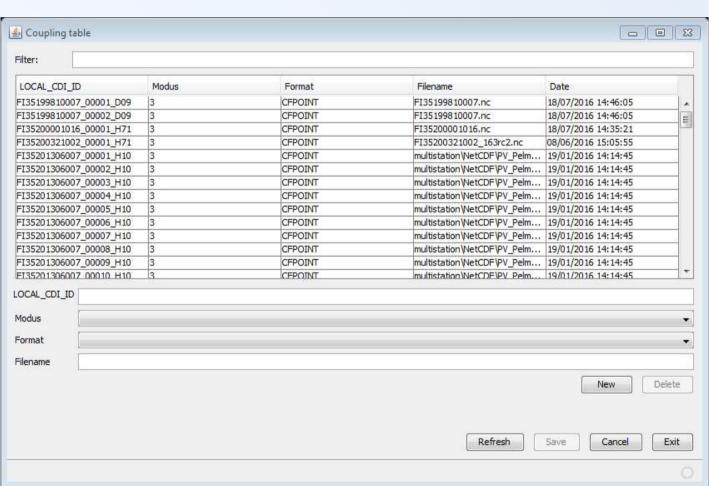
Modus

1: mono-station

3 multi-station

Filename

Date of creation





# Coupling table content (2)

LOCAL_CDI_ID	Modus	Format	Filename	Date
FI35200220004_00024_H10	1	ODV	FI35200220004_00024_H10.txt	21/10/2009 11:35:29
MLML199700971_00010_H09	3	MEDATLAS	output_med_COM1997.CPM	21/10/2009 11:19:28
MLML199700971_00010_H09	1	ODV	MLML199700971_00010_H09.txt	21/10/2009 11:07:55
		LIEBATI LE	The state of the s	0.4 (4.0 (0.000 4.4 4.0 0.00

- One unique LOCAL\_CDI\_ID in one mono-station ODV file
- The same LOCAL\_CDI\_ID in 2 different files :
  - One multi-station MEDATLAS file
  - One mono-station ODV file



# Any questions?

