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Visualization of Ferrybox, glider and research vessel observations with Ocean Data View software

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Ocean Data View software

Ocean Data View

http://odv.awi.de

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Originally from SeaDataNet project

SeaDataNet

ODV format and software also used in EMODnet project

EMODnet

European Marine Observation and Data Network

ODV format is also recommended in other project such as Jerico

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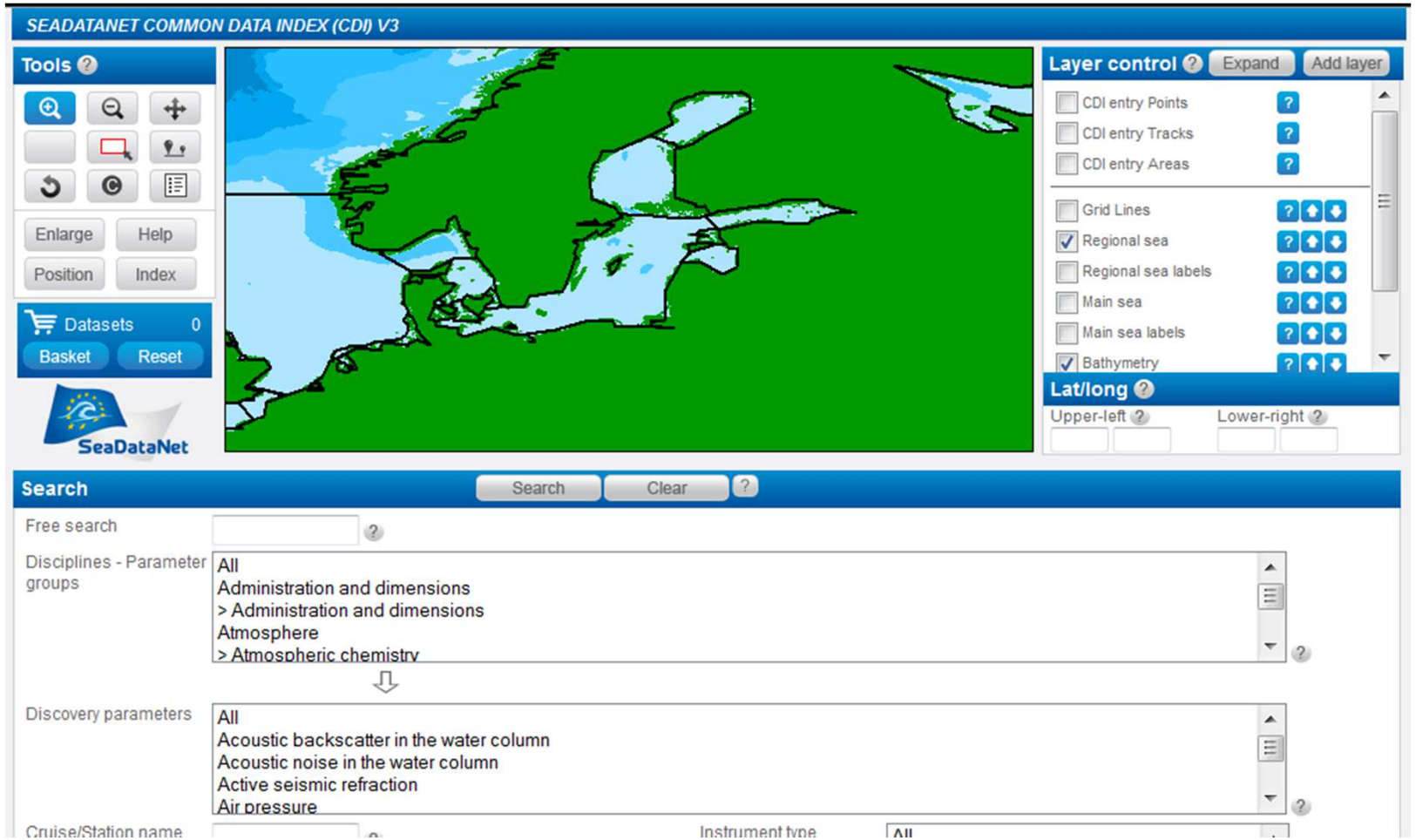
From SDN portal you can fetch the data in ODV format



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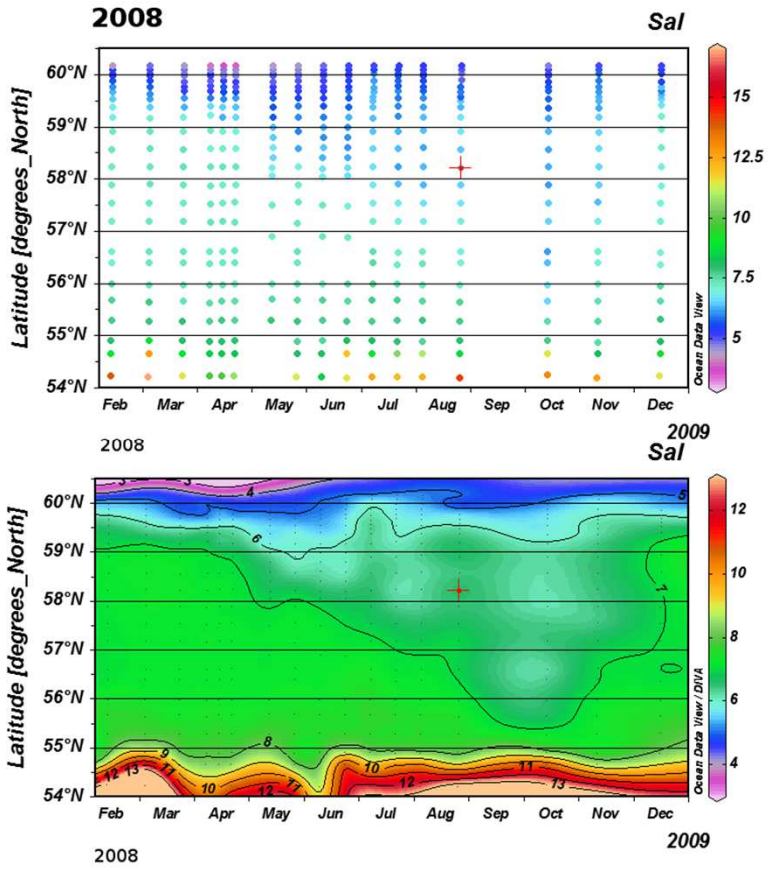
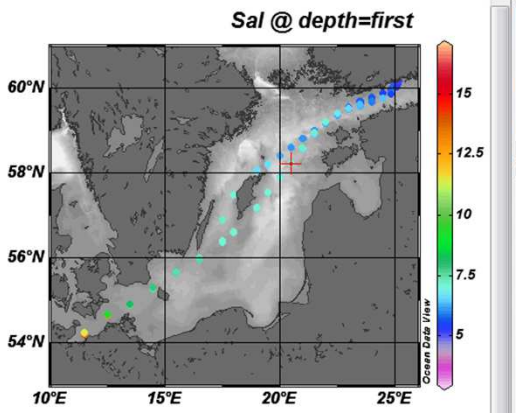
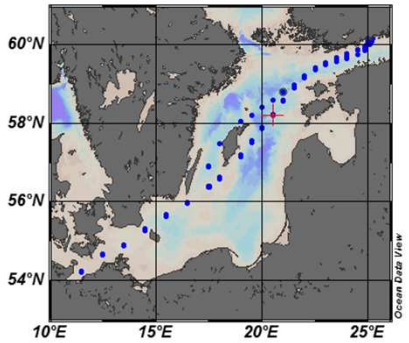
Finnmaid bottle samples in 2008







Station ID: 541

Cruise	FM080826
Station	2008230541 (B)
Position	20.501°E / 58.21°N
Date	26 August 2008
Time	19:11:06.000
depth R...	[5.00 - 5.00]

Sample: 1 / 1

1: depth	5.00	1
2: Sal	6.72	1
3: Temp	17.06	1
4: CHLA	3.34	1
5: PO4	0.13	1
6: NO3NO2	0.13	1
7: SiO4	6.97	1
8: PTOT	0.50	1
9: NTOT	16.39	1
drvd: Time (stat...	2008.65	1
drvd: Latitude [...	58.21	1

Isosurface Values

Longitude	20.501
Latitude	58.210
Time [yr]	2008.652
Day of Year	239
Sal @ depth=first	6.72
Temp @ depth=first	17.06
CHLA @ depth=first	3.34
PO4 @ depth=first	0.13

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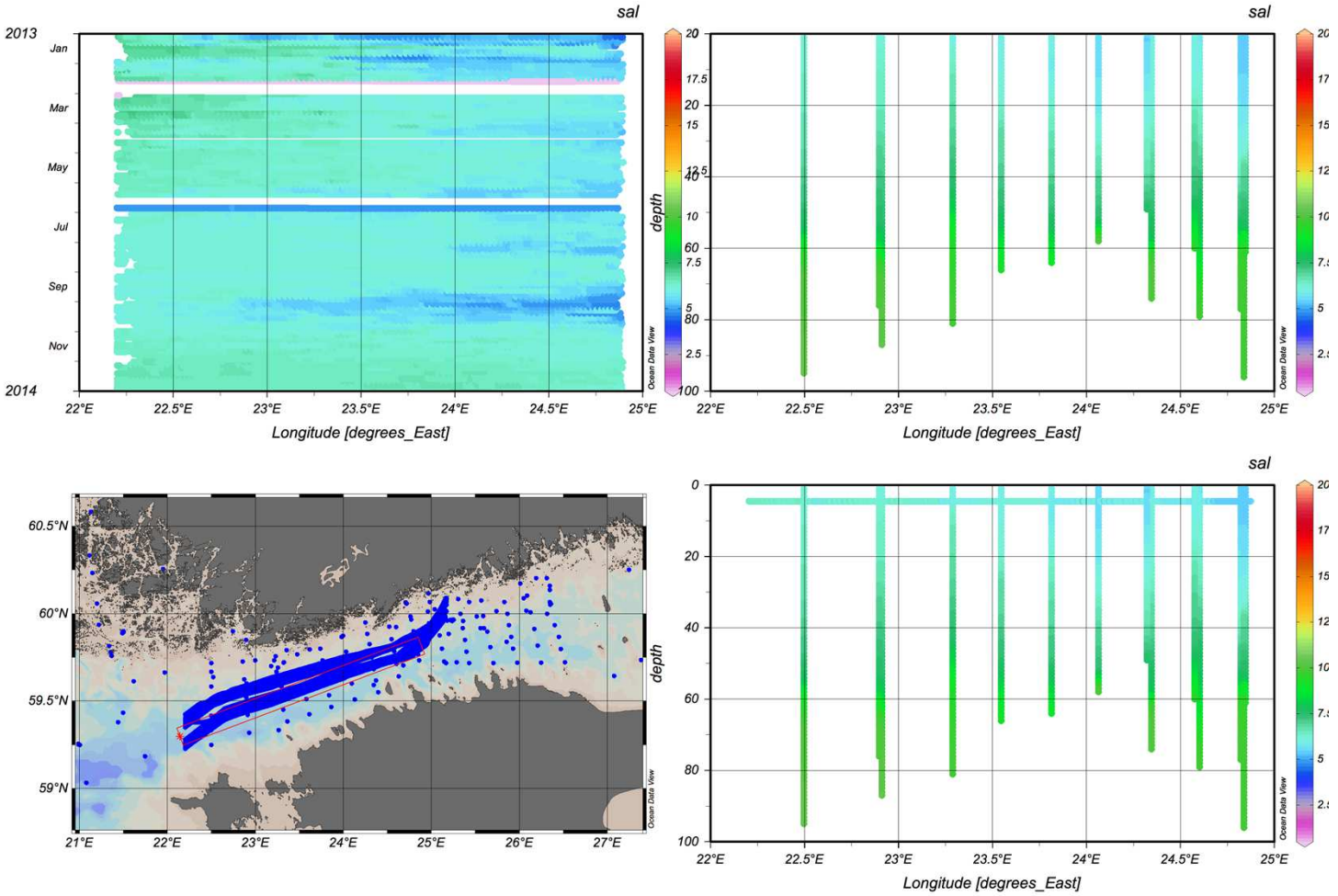
Combining R/V Aranda and Finnmaid ferrybox flow data for the year 2014 (especially May)



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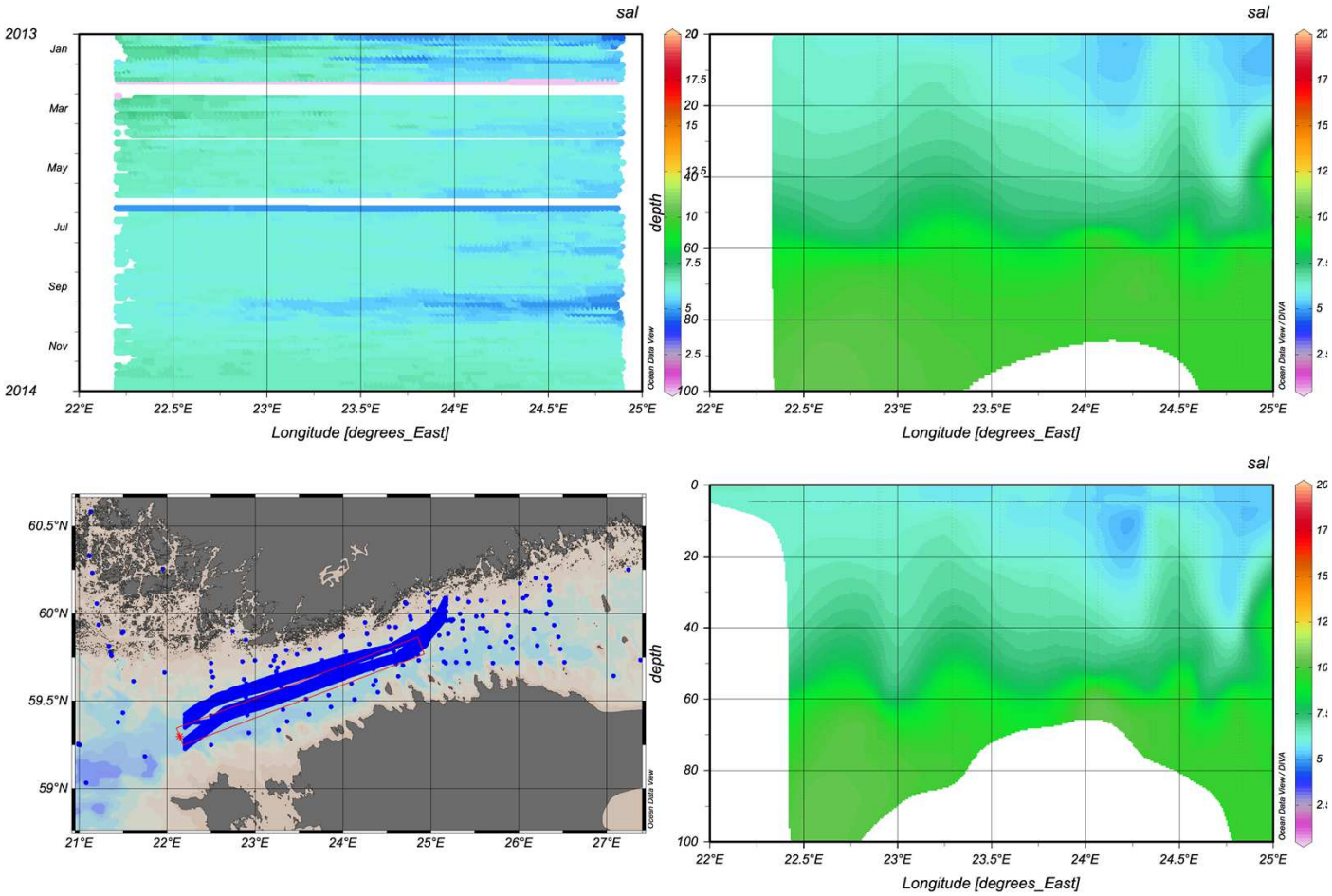
Data interpolation with ODV-DIVA option



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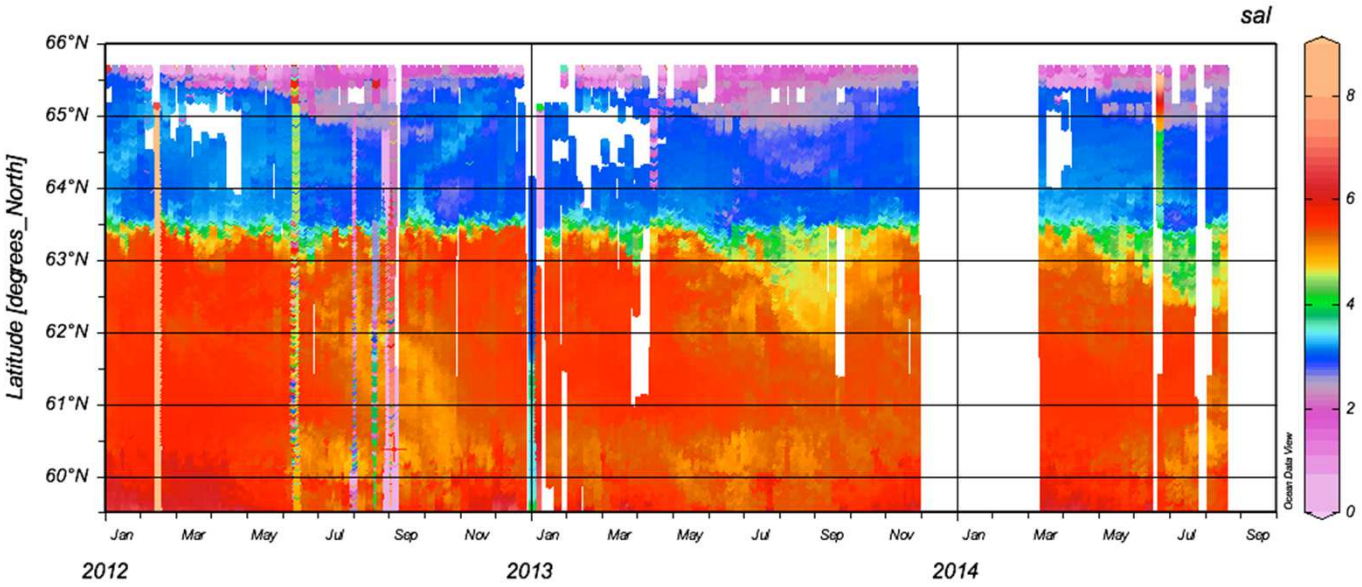
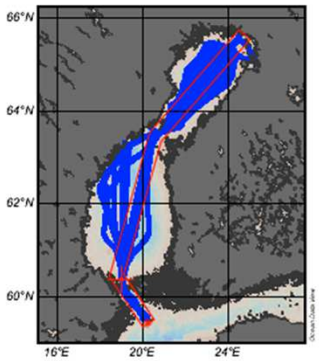
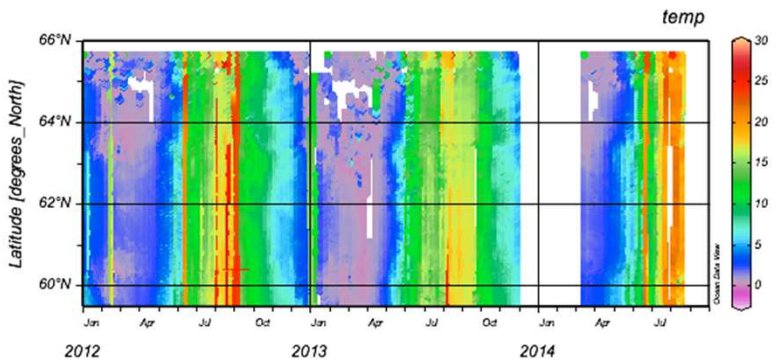
Transpaper ferry data for the Gulf of Bothnia 2012-2014, salinity and temperature







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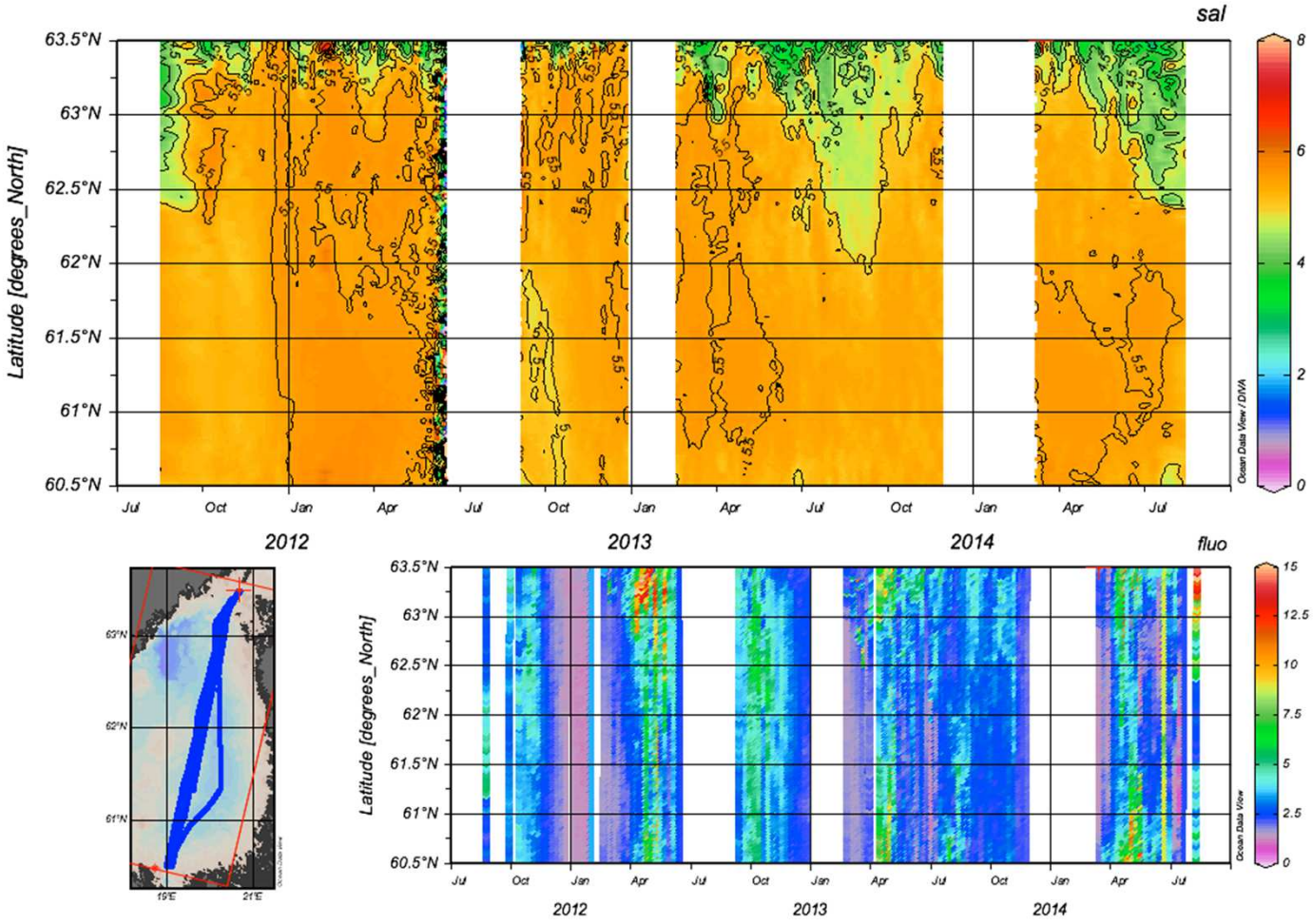
Transpaper ferry data for the Bothnian Sea 2012-2014, salinity and and chlorophyll fluorescence



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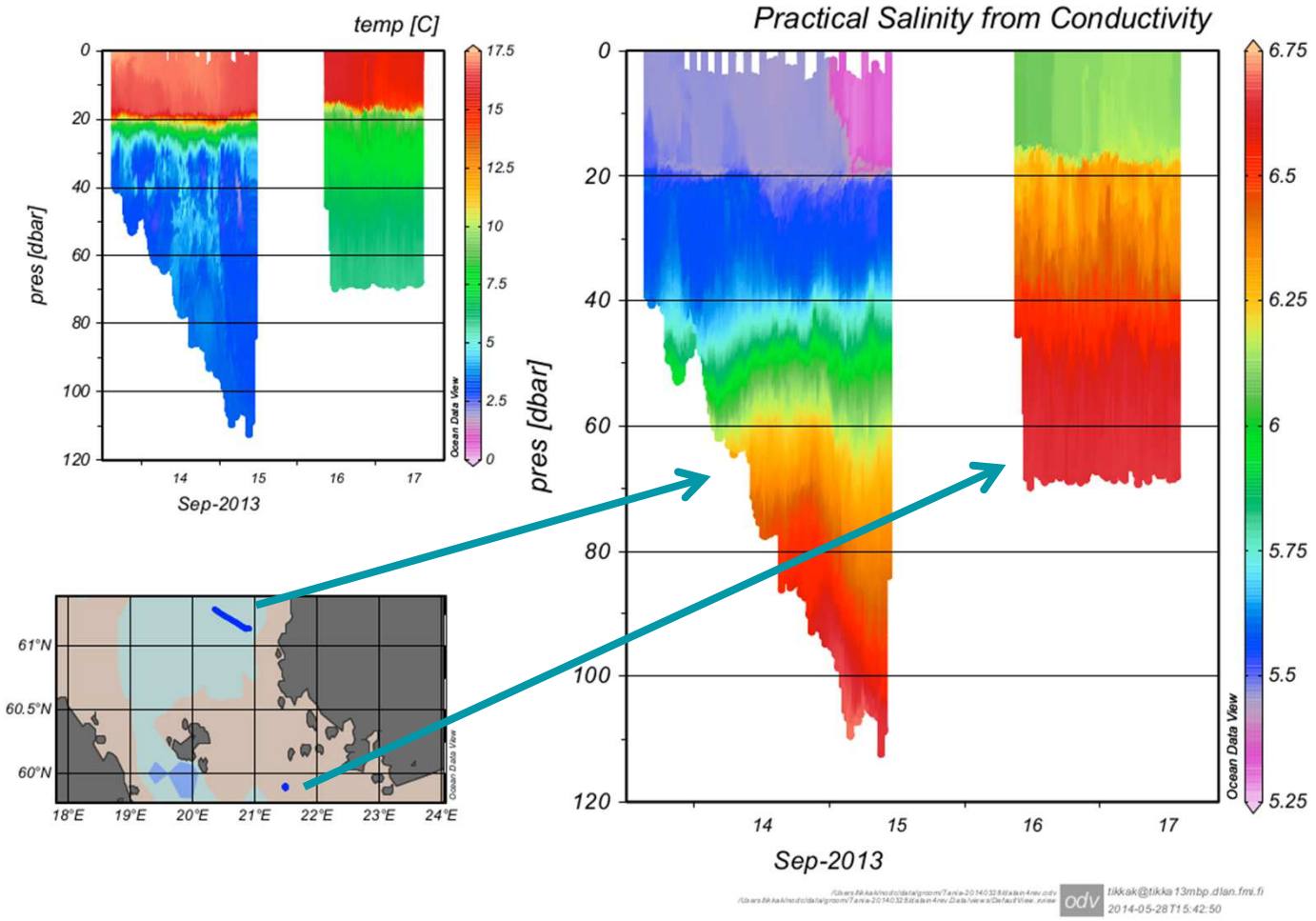
Glider data visualization in Groom experiment 13-17, Sep., 2013.



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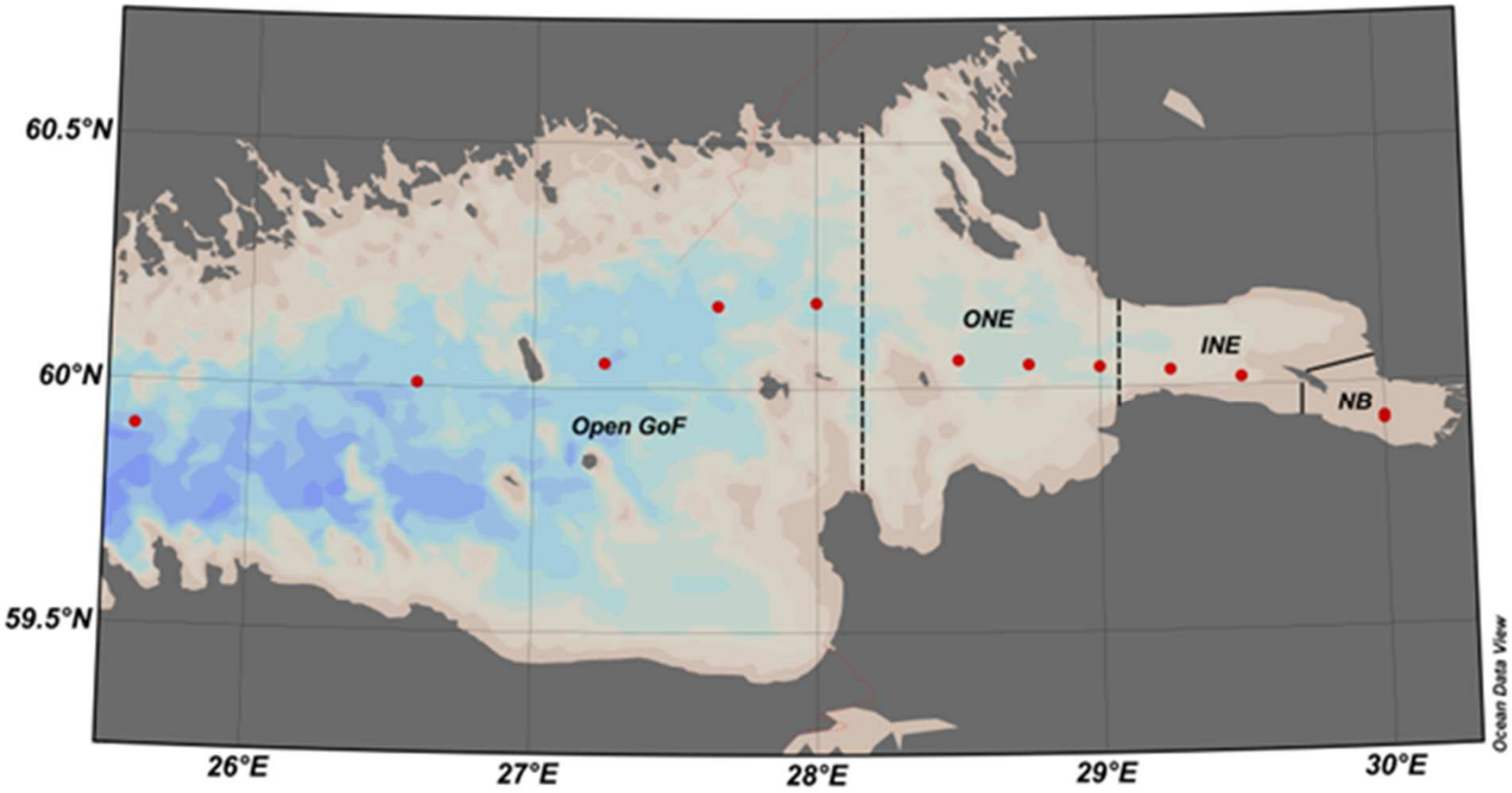
MS Silja Opera: Water samples from mid-April till mid-October, 2005, by Pasi Ylöstalo et al.



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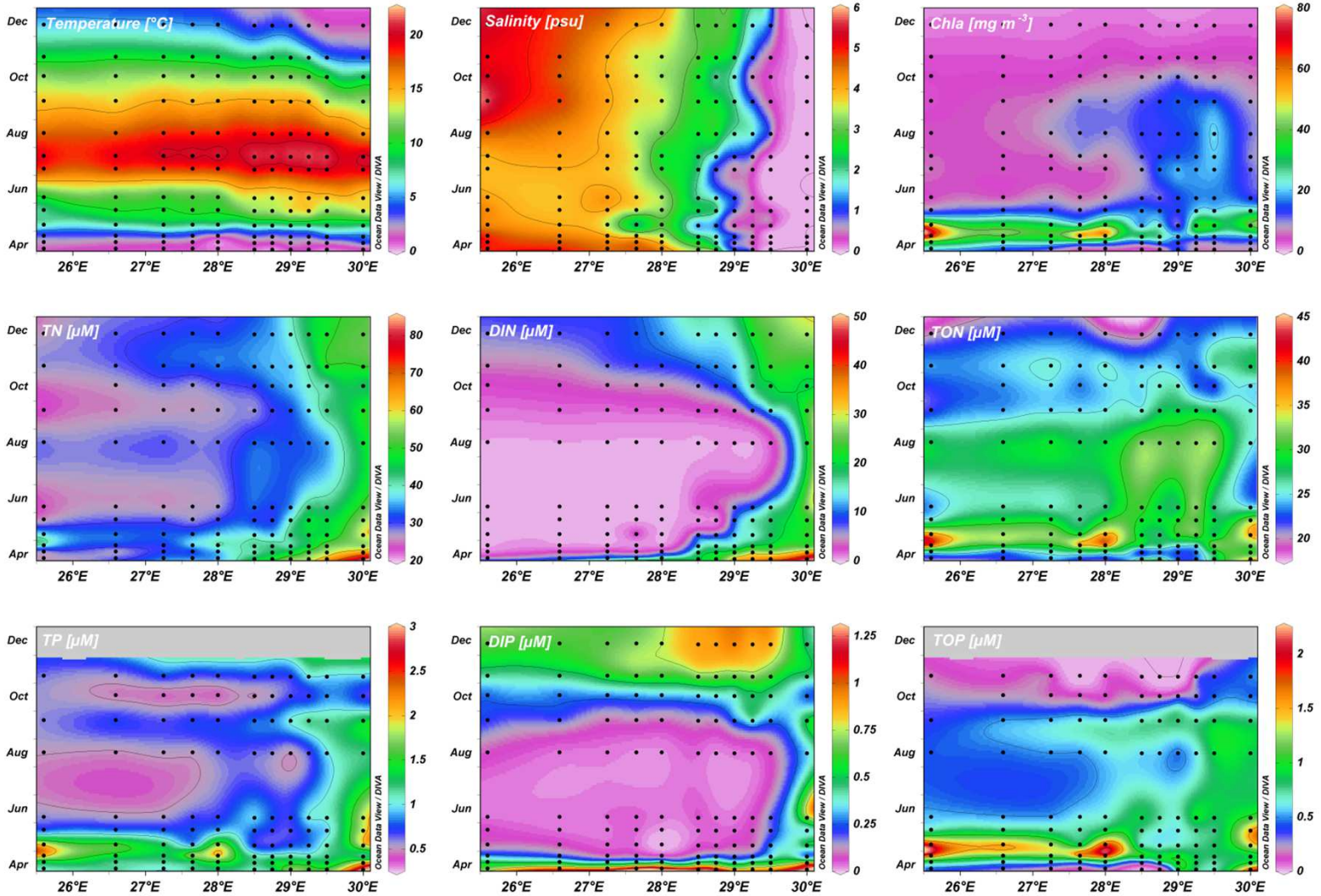
Neva Bay: Spatial and seasonal variation of temperature, salinity, Chla, and various nutrient fractions: TN, DIN, TON, TP, DIP, and TOP



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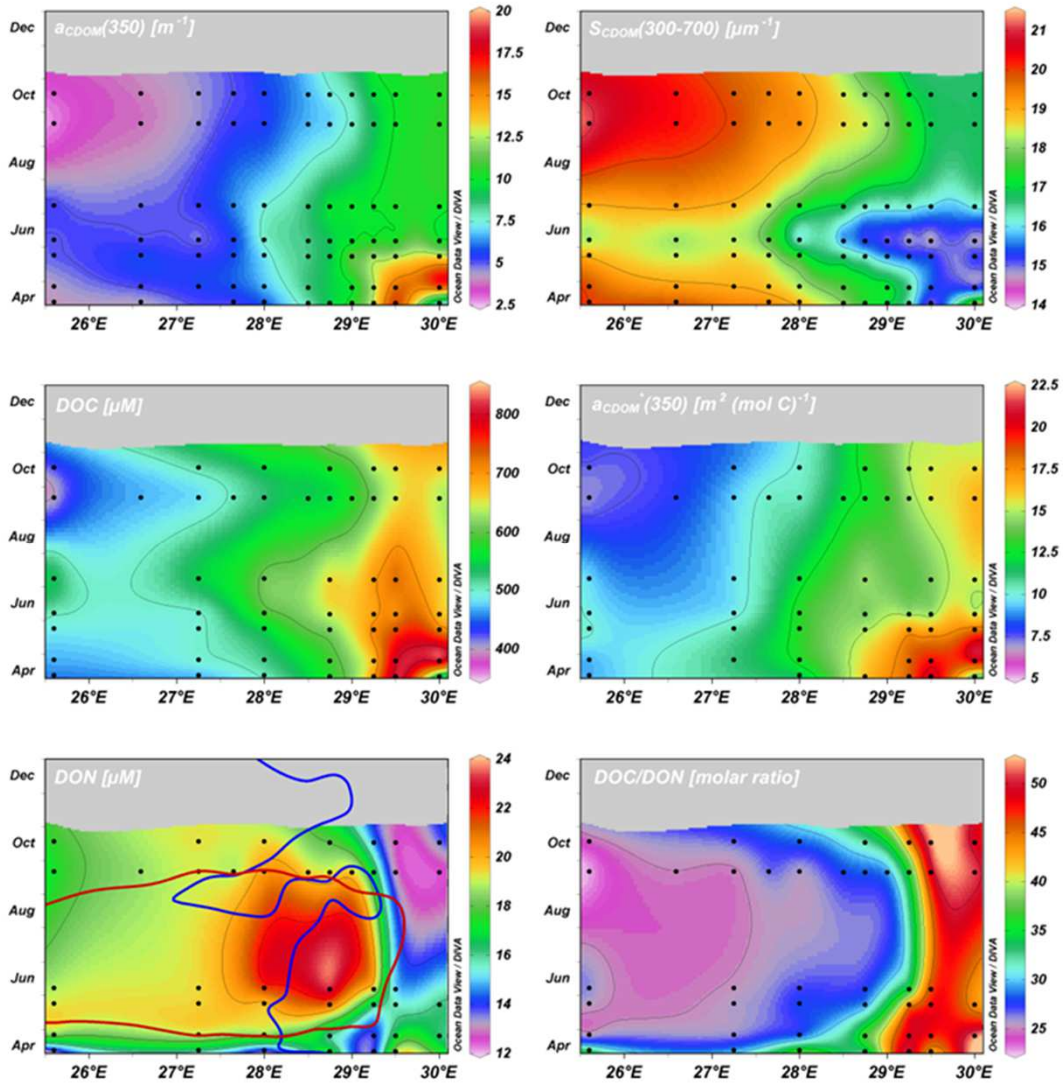
Neva Bay: Spatial and seasonal variation of $a_{CDOM}(350)$, $S_{CDOM}(300\text{-}700)$, DOC, $a_{CDOM}^{*}(350)$, DON, and molar DOC/DON. Potential phosphorus limitation is defined to conditions where molar DIN/DIP ratio > 16 (blue line) and DIP concentration < 0.2 µM (redline) according to Fisher et al, 1992



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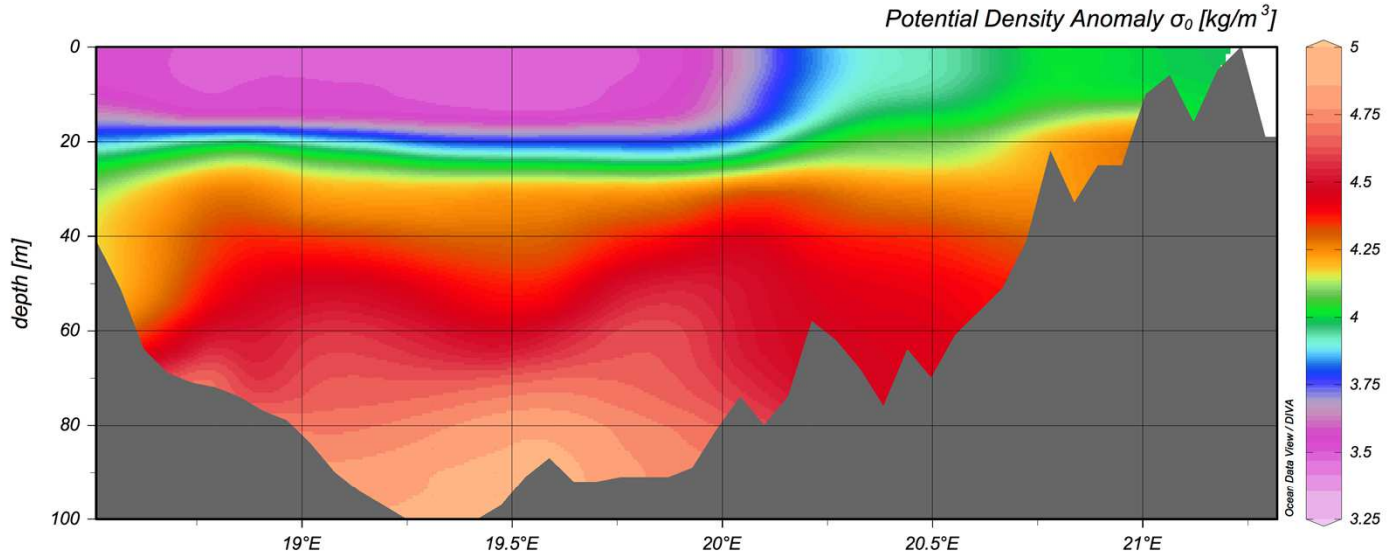
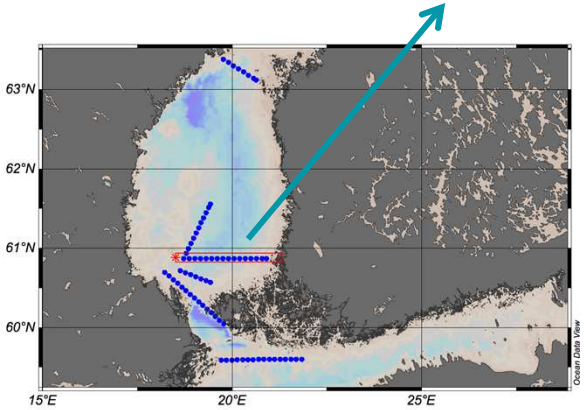
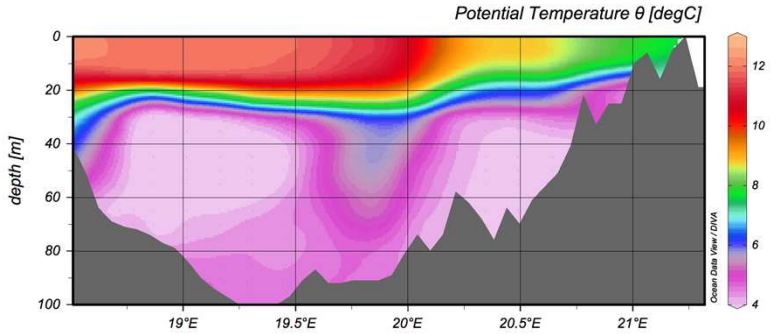
Visualization of operational HBM model 3th July, 2014







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Conclusions

ODV is excellent tool for visualization of oceanographic monitoring data

ODV should be used to evaluate different kind of data sources in combination

Regional cooperation is needed for data handling, evaluation and visualization

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Thank You for Your attention