

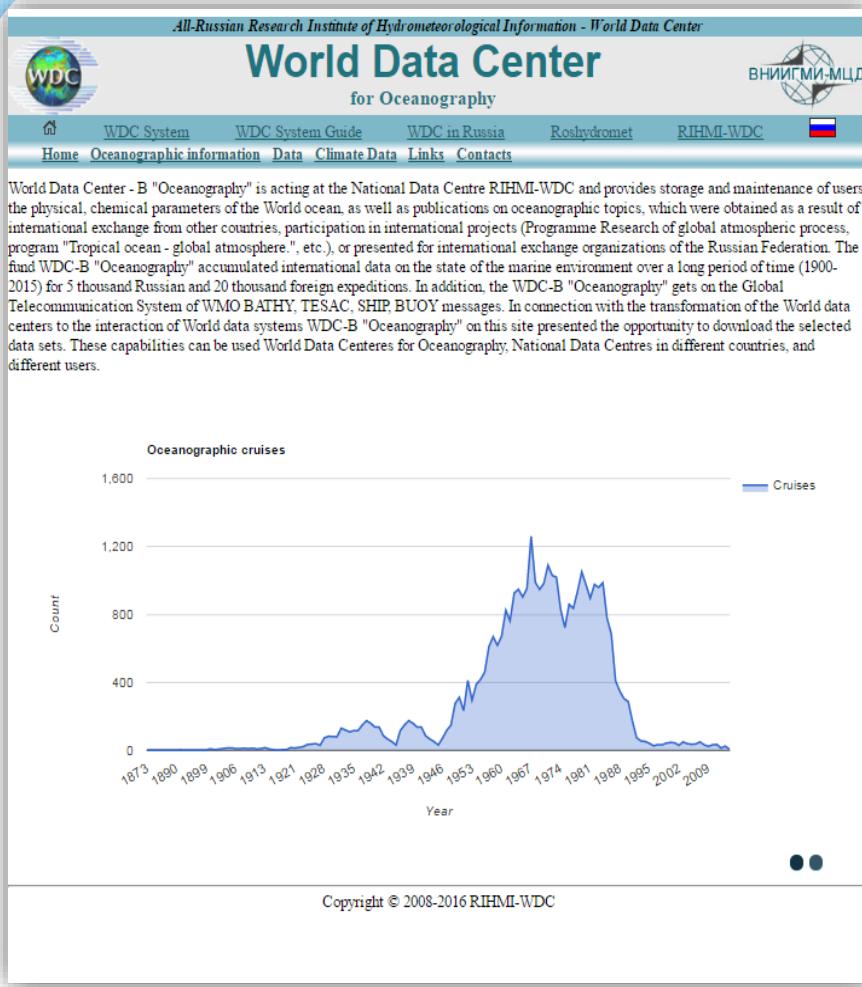
Russian contribution to international oceanographic data exchange



Alexander Mikheev, Alexander Vorontsov, Evgenii Viazilov
RIHMI-WDC



About WDC-B

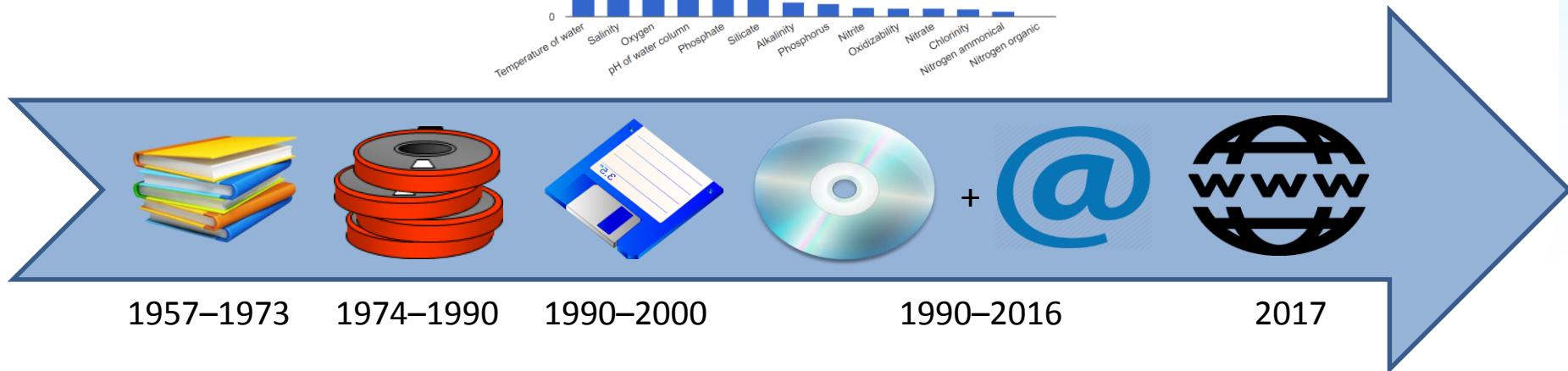
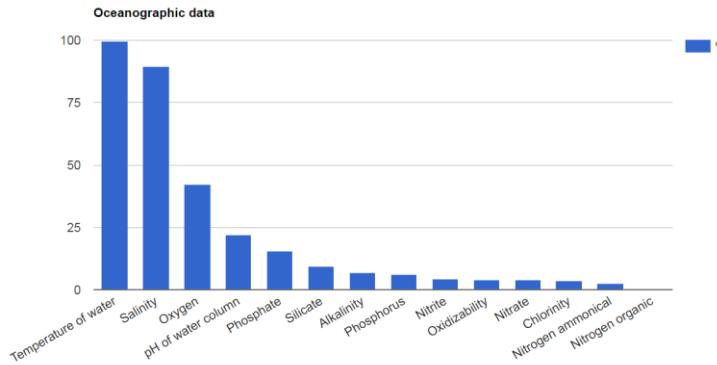


**World Data Center - B
"Oceanography" is acting at the
National Oceanographic Data
Centre of RIHMI-WDC and provides
storage and maintenance of users
the physical, chemical parameters
of the World ocean, which were
obtained as a result of international
exchange from different countries,
participation in international
projects, or presented for
international exchange**



Purpose

To facilitate and promote the discovery, exchange of, and access to, oceanographic data and information including metadata, products and information in real-time, near real time and delayed mode, through the use of international standards, and in compliance with the WDS Policy, the IOC Oceanographic Data Exchange Policy for the ocean research and observation community and other stakeholders



Schema of Data exchange, proposing RF

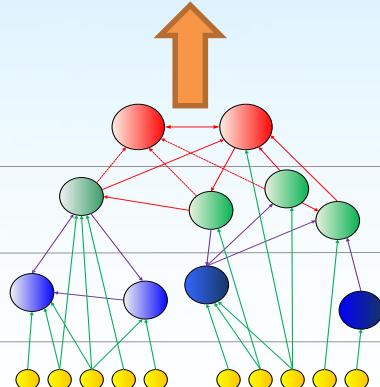
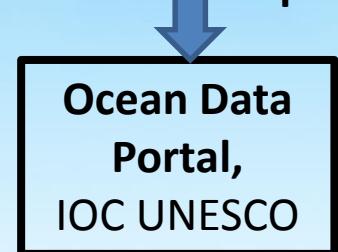
The main idea: The using a integrated, distributed, heterogeneous oceanographic data

National systems of France

(IFREMER), Canada (ISDM),

Japan (MIRC), USA (NODC),

International project: EMODNET



Work Stations



MINISTRY OF NATURE
OF THE RUSSIAN
FEDERATION



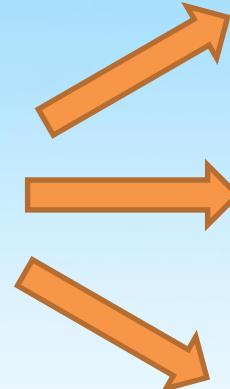
The Global Ocean
Observing System



Data using



Users

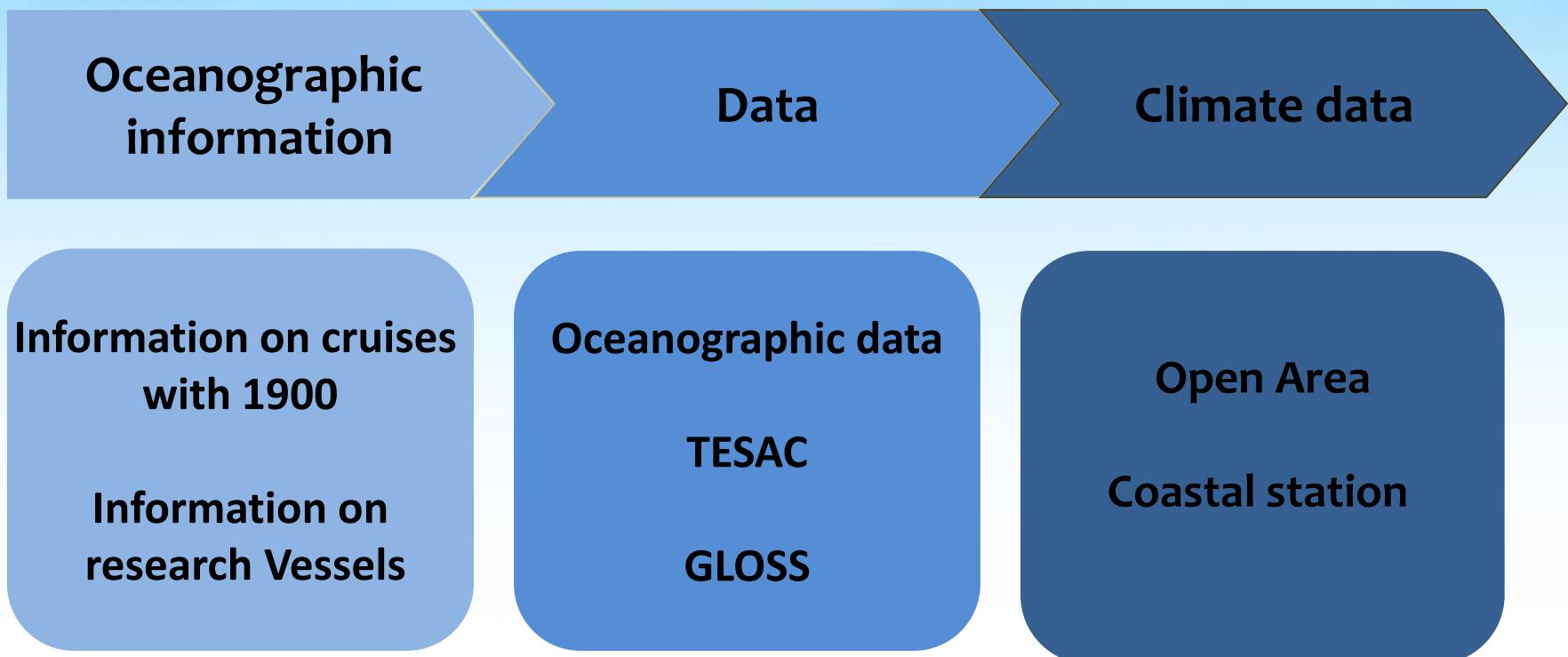


Russian national system ESIMO: 37 Data Providers
(RIHMI-WDC, FFRI, SOI, FERHRI, HMC, ...)

WDC-B «Oceanography» site (<http://meteo.ru/mcd/ewdcoce.html>)

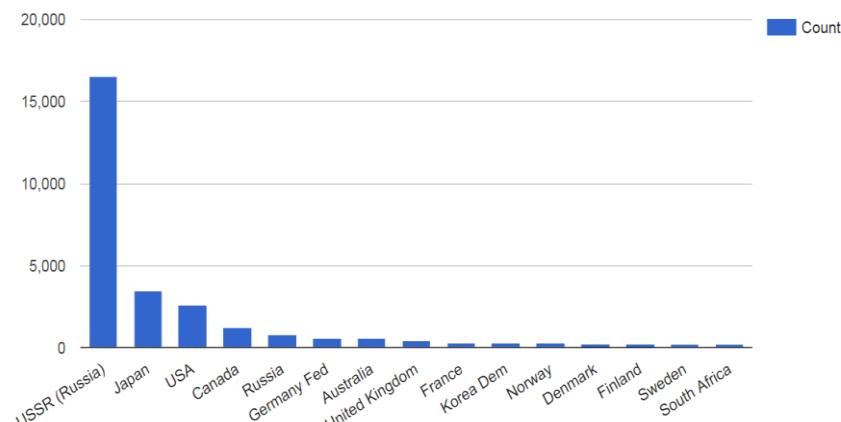
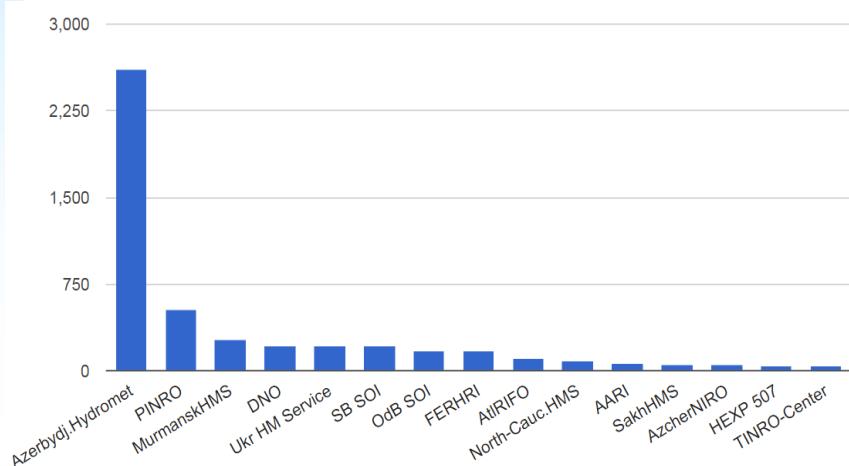
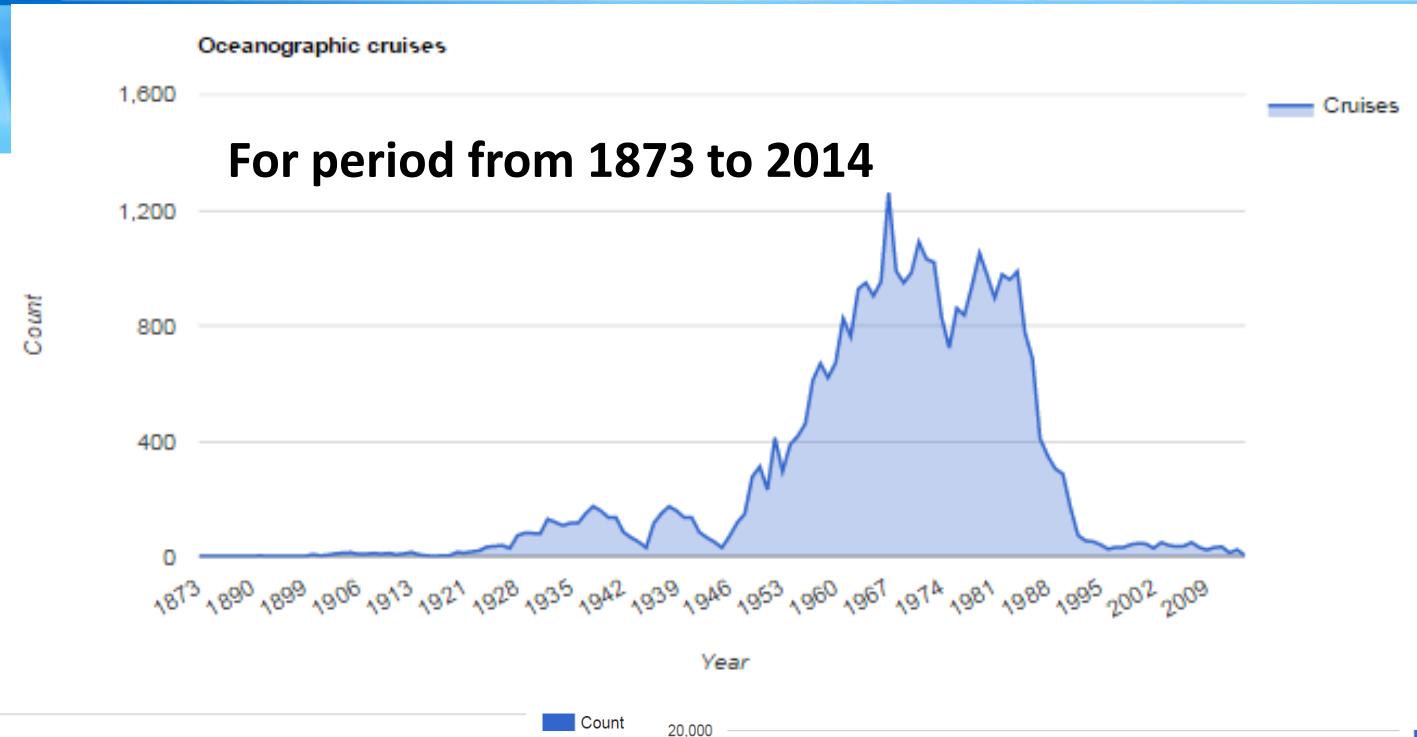
In 2016 RIHMI-WDC developed the new WDC-B «Oceanography» site, using the WDS principles:

- open access,
- data download users
- metadata availability





Information on cruises of research vessels





Access to oceanographic Data

The fund WDC-B "Oceanography" accumulated international data on the state of the marine environment over a long period of time (1900-2015) for 5 thousand Russian expeditions

Historical research vessels cruise database for 1900 - 2015 (RU_RNODC_100)

Tools Reset all selections

Search, visualization metadata and data

Organisation: name	#
AARI	64
ACHMS	2
Acoustics Institute	8
Aral.HM Obs.	1
Astrachan.HMO	15
AtRIFO	103
AzcherNIRO	53
Azerbydj.Hydromet	
Balt.RIF	
CaspianRIFO	

Geographical

Observation level: measured

Temperature water x Salinity x

Tools Type Export

Rebuild for current extent

Tw, degC

S, promille

Temperature water Salinity

An orange arrow points from the 'Reset all selections' button in the main toolbar to the 'Reset all selections' button in the sub-toolbar of the chart area.

Data download

Historical research vessels cruise database for 1900 - 2015 (RU_RNODC_100)

Tools Reset all selections

Dataset description

Access raw data

Export dataset to CSV

Export dataset to XLS

Открытие «data.xls»

Вы собираетесь открыть:

data.xls

являющийся: Microsoft Excel 97-2003 Worksheet (1,4 МБ)
из <http://www.oceanodataportal.net>

Как Firefox следует обработать этот файл?

Открыть в Microsoft Excel (по умолчанию)

Сохранить файл

Выполнять автоматически для всех файлов данного типа.

OK Отмена

1-10 / 45

USSR (Russia) AKADEMIK KNIPOVICH

Green Sea, No Ocean, sea

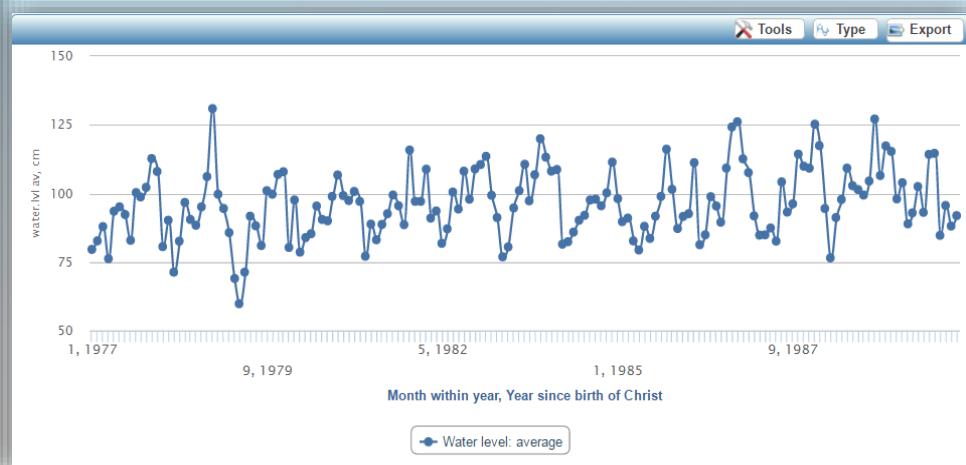
A file dialog box titled 'Открытие «data.xls»' is displayed, showing the file 'data.xls' is being opened by Microsoft Excel (the default option). Other options include 'Сохранить файл' (Save file) and 'Выполнять автоматически для всех файлов данного типа' (Automatically execute for all files of this type).



GLOSS (sea level)

8 Russian the GLOSS stations:
**TUAPSE, KALININGRAD,MURMANSK,
RUSSKAIA GAVAN, DIKSON,TIKSI, NAGAEVO,
YUZHNO KURILSK, PROVIDENIA**

Platform ID	year, number	MNTH, number	waterlvl av, cm
DIKSON	2008	7	130.1
DIKSON	2010	8	150.7
DIKSON	2010	4	96.4
DIKSON	2008	8	127.0
DIKSON	2011	5	114.0
DIKSON	2010	5	98.0
DIKSON	2008	6	135.1
DIKSON	2008	9	133.8
DIKSON	2010	9	126.6
DIKSON	2010	6	119.3
DIKSON	2011	3	141.2
DIKSON	2011	4	108.6
DIKSON	2011	9	106.6
DIKSON	2011	10	151.4
DIKSON	2008	4	121.3
DIKSON	2008	5	121.7
KALININGRAD	1977	4	490.2
KALININGRAD	1977	3	484.0
KALININGRAD	1977	2	474.9
KALININGRAD	1977	1	475.9



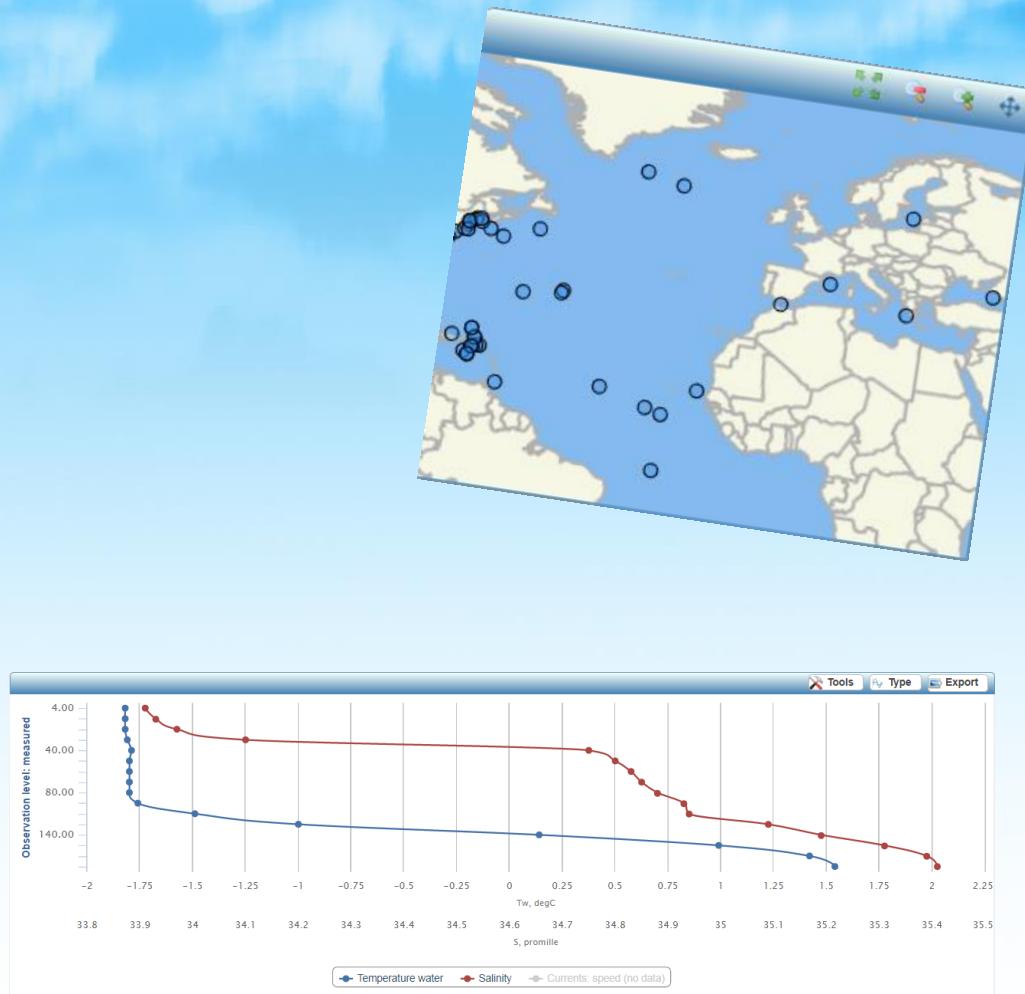


Real-time data - TESAK

Functions:

- Data collect
- Data download to data base
- Data visualisation
- Data using

	meas.level/m	date.time,	Platform ID	date.time,	latit.point, deg-min	long.point, deg-min	Tw, degC	S, promille	Vel, cm/s	dddt, deg
4.00	2016-09-23T03:21:00	Q3901149	2016-09-23T03:21:00	-2.758000	-97.208000	22.370	34.990			
6.00	2016-09-23T03:21:00	Q3901149	2016-09-23T03:21:00	-2.758000	-97.208000	22.320	34.990			
8.00	2016-09-23T03:21:00	Q3901149	2016-09-23T03:21:00	-2.758000	-97.208000	22.290	34.990			
10.00	2016-09-23T03:21:00	Q3901149	2016-09-23T03:21:00	-2.758000	-97.208000	22.160	35.000			
12.00	2016-09-23T03:21:00	Q3901149	2016-09-23T03:21:00	-2.758000	-97.208000	21.990	35.010			
14.00	2016-09-23T03:21:00	Q3901149	2016-09-23T03:21:00	-2.758000	-97.208000	21.860	35.020			
16.00	2016-09-23T03:21:00	Q3901149	2016-09-23T03:21:00	-2.758000	-97.208000	21.730	35.030			
18.00	2016-09-23T03:21:00	Q3901149	2016-09-23T03:21:00	-2.758000	-97.208000	21.610	35.040			
20.00	2016-09-23T03:21:00	Q3901149	2016-09-23T03:21:00	-2.758000	-97.208000	21.460	35.040			
22.00	2016-09-23T03:21:00	Q3901149	2016-09-23T03:21:00	-2.758000	-97.208000	21.010	35.030			
24.00	2016-09-23T03:21:00	Q3901149	2016-09-23T03:21:00	-2.758000	-97.208000	20.090	35.060			
26.00	2016-09-23T03:21:00	Q3901149	2016-09-23T03:21:00	-2.758000	-97.208000	19.520	35.060			
28.00	2016-09-23T03:21:00	Q3901149	2016-09-23T03:21:00	-2.758000	-97.208000	18.930	35.070			
30.00	2016-09-23T03:21:00	Q3901149	2016-09-23T03:21:00	-2.758000	-97.208000	18.160	35.100			
32.00	2016-09-23T03:21:00	Q3901149	2016-09-23T03:21:00	-2.758000	-97.208000	17.900	35.100			
34.00	2016-09-23T03:21:00	Q3901149	2016-09-23T03:21:00	-2.758000	-97.208000	17.560	35.110			
36.00	2016-09-23T03:21:00	Q3901149	2016-09-23T03:21:00	-2.758000	-97.208000	17.420	35.100			
38.00	2016-09-23T03:21:00	Q3901149	2016-09-23T03:21:00	-2.758000	-97.208000	17.030	35.110			
40.00	2016-09-23T03:21:00	Q3901149	2016-09-23T03:21:00	-2.758000	-97.208000	16.780	35.110			
42.00	2016-09-23T03:21:00	Q3901149	2016-09-23T03:21:00	-2.758000	-97.208000	16.300	35.100			
	meas.level/m	date.time,	Platform ID	date.time,	latit.point, deg-min	long.point, deg-min	Tw, degC	S, promille	Vel, cm/s	dddt, deg



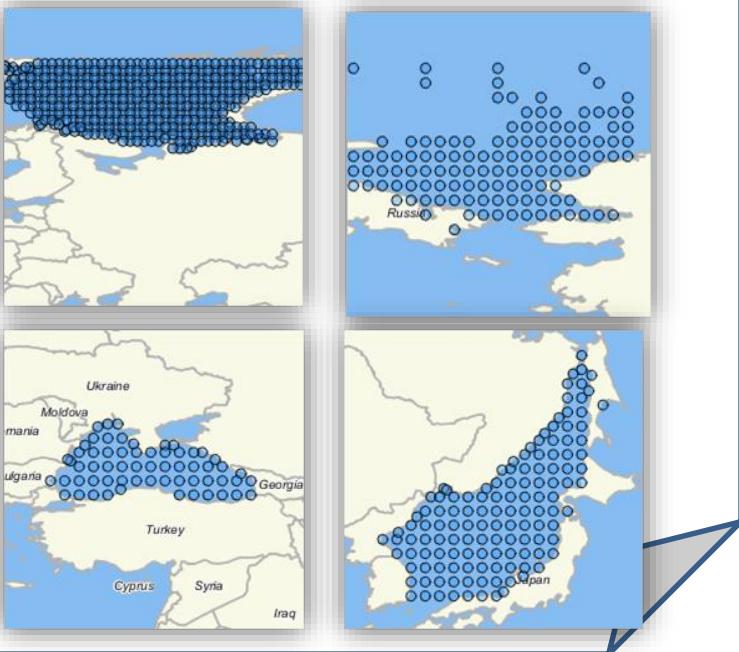


Climatic Data for Russian Seas

Parameters: temperature of water, salinity, wave height, wind speed, sea level, ...

Coastal station

- The Sea of Japan
- Barents Sea
- Chukchee Sea
- Black Sea



Open sea

- The Sea of Japan
- Barents Sea
- Chukchee Sea
- Black Sea





More detailed information is on the site
<http://meteo.ru/mcd/ewdcoce.html>

THANK YOU!