

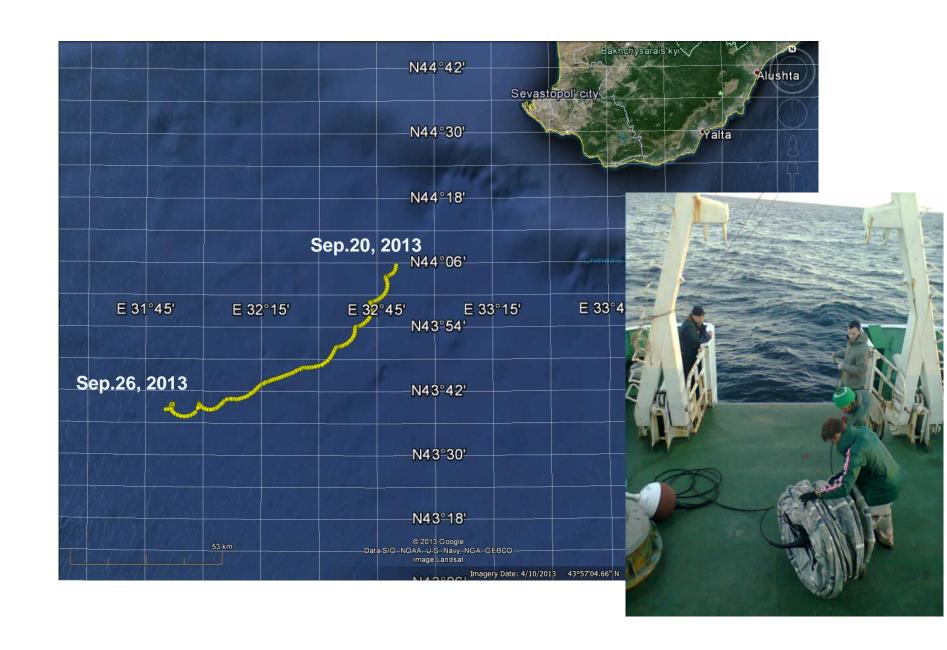
CURRENT PROGRAMME "Drifter technology" (2011-2013):

Agency or programme				
Number and type of buoys	(a) deployed during the year 2 Iridium SVP-BTC80/RTC/GPS			
	(b) operational as of 31 August	0		
	(c) reporting on GTS as of 31 August	0		
Purpose of programme	(a) operational	Date were on GTS		
(check/uncheck boxes using ☐ or [x] as appropriate)	(b) met / ocean research	Heat exchange and transfer		
	(c) developmental	Updated type of buoy with thermistor chain		
Main deployment areas	The Black Sea	-		
Vandalism incidents				

Winter deployments of drifters WMO61689 (yellow) and 61690 (green) in the Black Sea (Dec.2012 – Aug.2013):



Re-deployment of WMO61690 on Sep.20, 2013



PLANNED PROGRAMME "Operational Observations" (2014-2016):

Main deployment areas	The Black Sea					
Number and type of buoys	planned for deployment in the next	4 Iridium SVP-				
	12 months	BTC80/RTC/GPS drifters				
Purpose of programme	(a) operational	Data will be on GTS				
(check/uncheck boxes using	(b) met / ocean research	Heat exchange and				
☐ or [x] as appropriate)		transfer				
	(c) developmental	Updated type of the buoy				
		with thermistor chain				

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Types of drifters, deployed in the Black Sea

Type\Year	99	00	01	02	03	04	05	06	07	08	09	10	11	12	13	Total
XAN-3			10													10
SVP	4		4													8
SVP-B		4	14	7	14	6										45
SVP-BT							2	2								4
SVP-B/GPS mini								2								2
SVP-B/RTC mini									2		2					4
SVP-BTC60						4	2									6
SVP-BTC80								4	2							6
SVP-BTC80 RTC/GPS										3				2	4	9
Total	4	4	28	7	14	10	4	8	4	3	2			2	4	94

International cooperation

Participants	Buoys	Data traffic	Deployments
MHI NASU, Ukraine	9		94
IO RAS, Russia	18		
NAVOCEANO, USA	49	53	
OGS, Triest, Italy	4	22	
NATO, Science for piece	6	6	
STCU, Ukraine	4		
Meteo-France, France		9	
DBCP Iridium PP	2	2	
DBCP Argos-3 PP	2	2	
Total	94	94	94

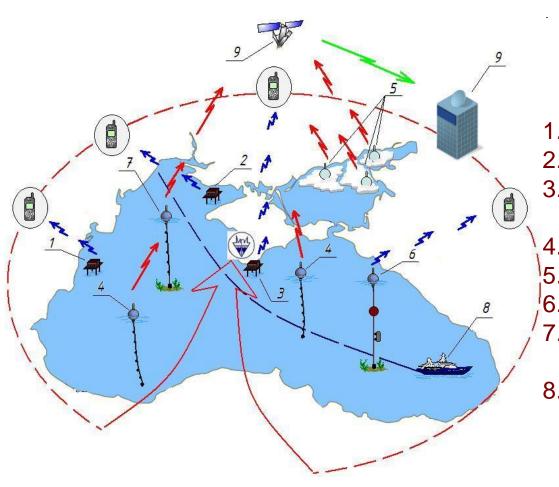
Data traffic

Type of telemetry	Buoys
Argos-2	81
Argos-3	2
Iridium	11
Total	94

Lifetime (days)

Mean	200
Maximum	687
Minimum	8

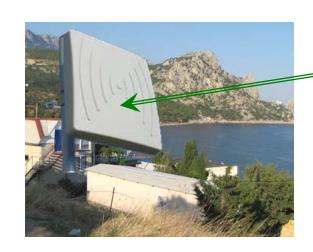
<u>PLANNED PROGRAMME "Operational Observations"</u> (2014-2016):



The system for operational observations in the Black Sea

- 1. Sea platform "Galata", Bulgaria.
- 2. Oil platform "Golitsino-4", Ukraine.
- MHI experimental platform, Ukraine.
- 4. Drifters with thermistor chains.
- 5. Ice buoys (probably).
- 6. Buoy "Aqualog" with radio buoy.
- 7. Mooring buoy with thermistor chain.
- Ferry Odessa (Ukraine) Batumi (Georgia).

25-m thermistor chain for thermodynamic study of water layer from surface to bottom, mounted on MHI oceanographic platform in Jan. 2013

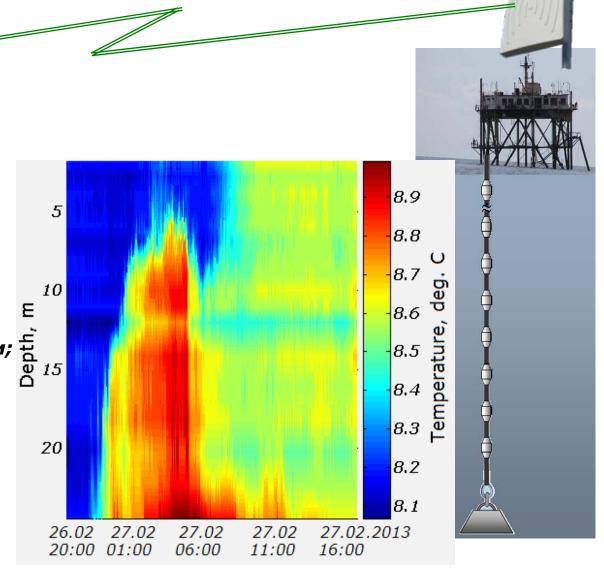


Water temperature:

Accuracy - 0.1 ℃; Resolution - 0.04 ℃; Distance between sensors - 1 м; Period of samples - 60 s.

Air pressure:

Accuracy - 0.1 hPa; Resolution - 0,1 hPa; Period of samples - 60 s.



Meteo observations from ferry "Odessa-Batumi"



