

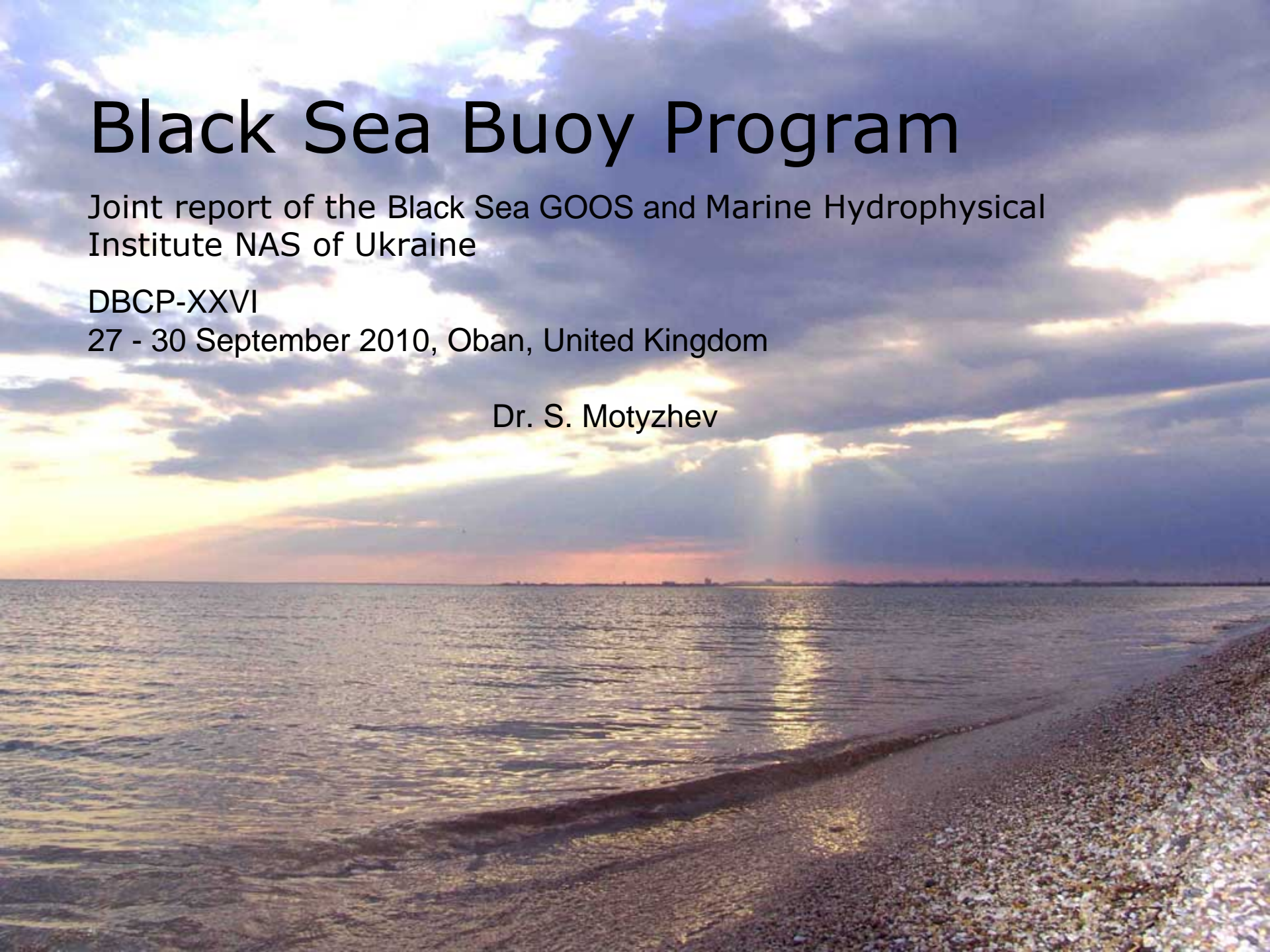
Black Sea Buoy Program

Joint report of the Black Sea GOOS and Marine Hydrophysical
Institute NAS of Ukraine

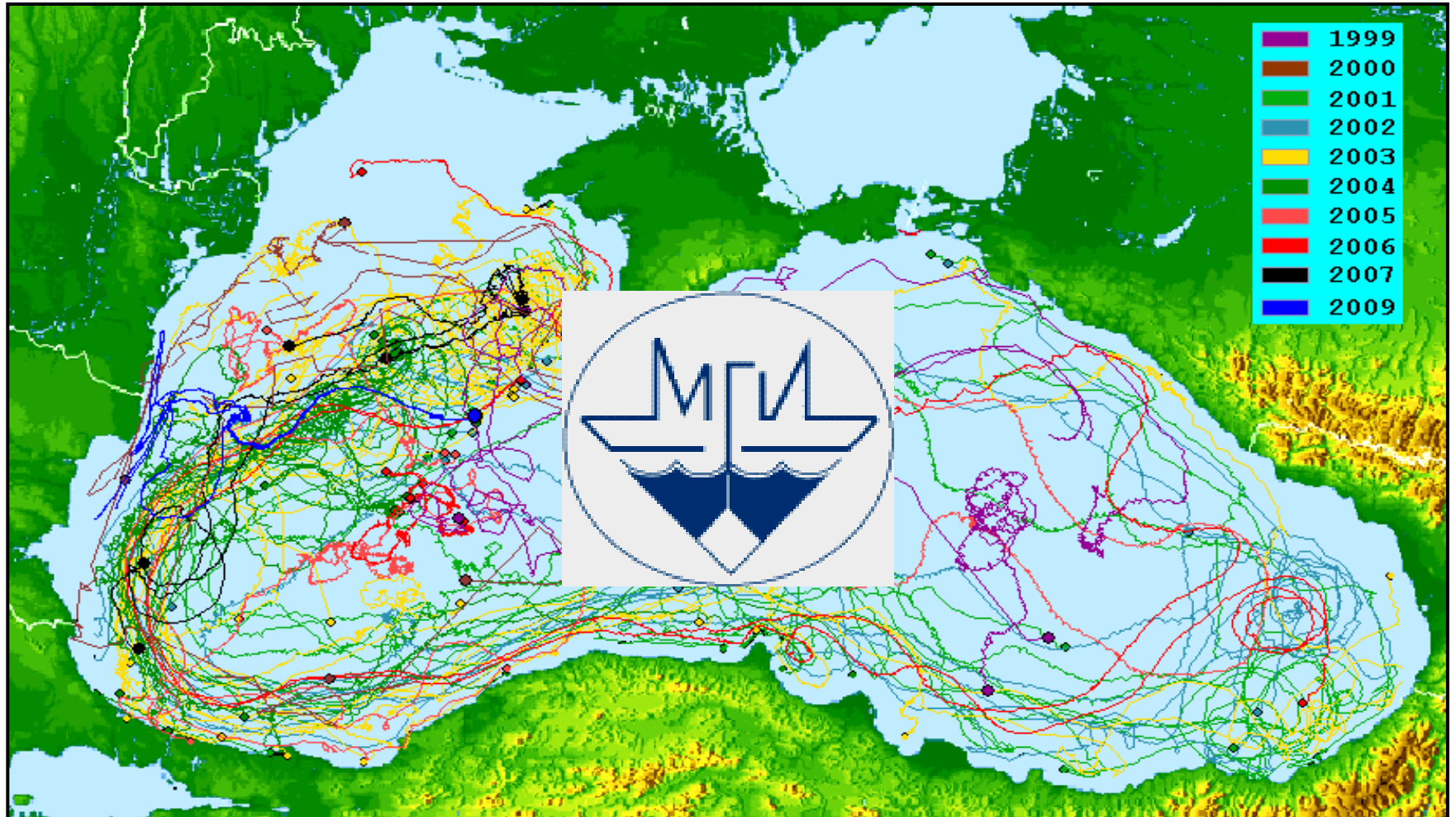
DBCP-XXVI

27 - 30 September 2010, Oban, United Kingdom

Dr. S. Motyzhev



88 drifters from 1999 to 2010



International Participation in BSBP

Participants	Buoys	Data Traffic	Deploym.
IO RAS, Russia	18		
MHI NAS of Ukraine	3		88
NAVOCEANO, USA	49	53	
OGS, Italy	4	22	
NATO, Science for Piece	6	6	
S&TC in Ukraine	4		
Meteo-France		3	
Iridium Pilot Project	2	2	
Argos-3 Pilot Project	2	2	
Total	88	88	88

Types of Drifters

Kind	99	00	01	02	03	04	05	06	07	08	09	10	Total
XAN-3 (Metocean)			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/GPS/RTC										3			3
Total	4	4	28	7	14	10	4	8	4	3	2		88

Communication Systems

Used links for data transfer	Buoys
Argos-2	81
Argos-3	2
Iridium	5
Total	88

Lifetime (days)

Mean	200
Maximum	687
Minimum	8

Use of Data

Oceanography

Currents, horizontals and vertical water exchange, thermodynamics within active layer, ocean-atmosphere interaction, etc.

Hydrometeorology

Data distribution via GTS, climate modeling, weather forecasting.

Remote Sensing

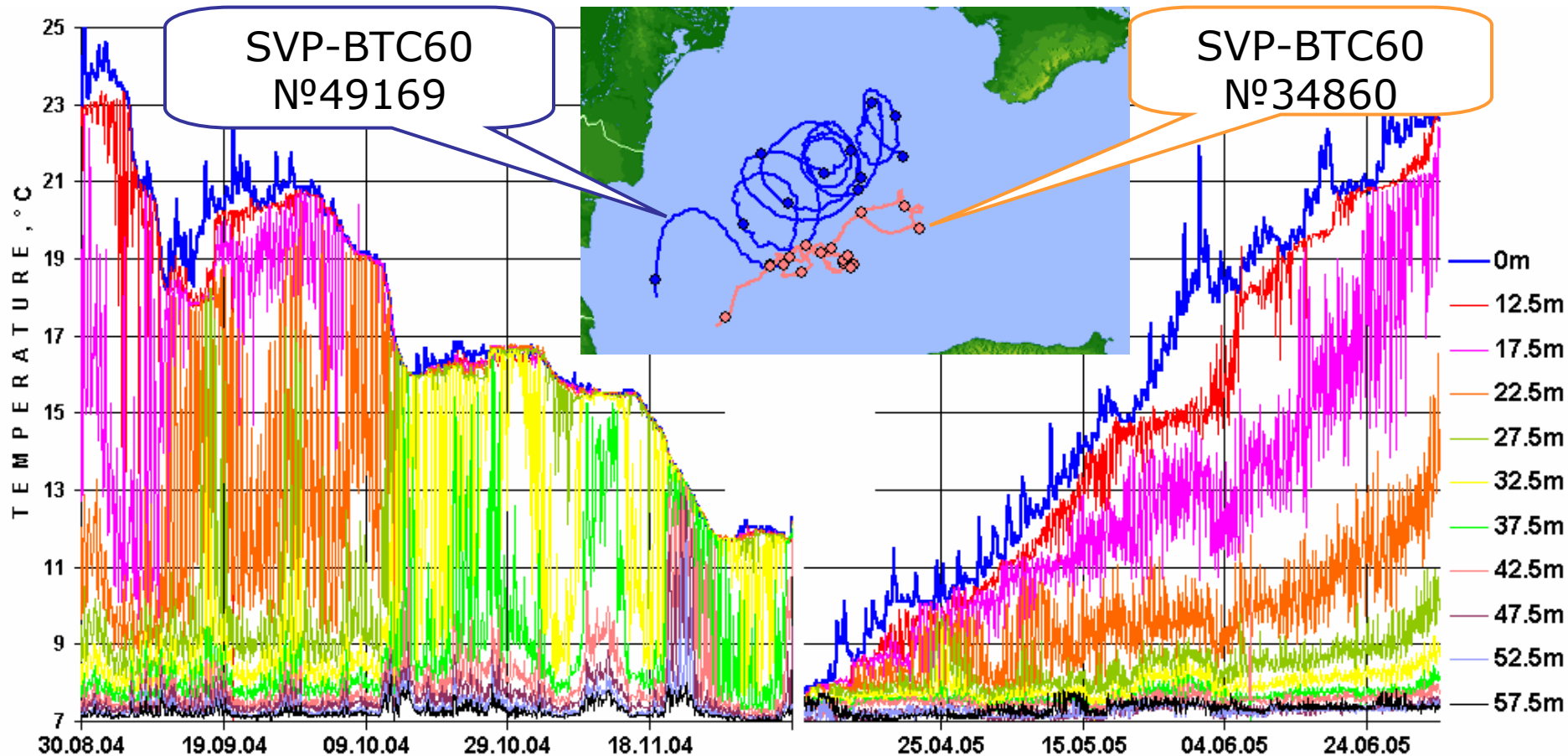
Calibration of remote observation, validation of models.

Technological

Evaluation of new and updated technical solutions, sensors, drifters as a whole, data formats, investigations for the DBCP Pilot Projects.

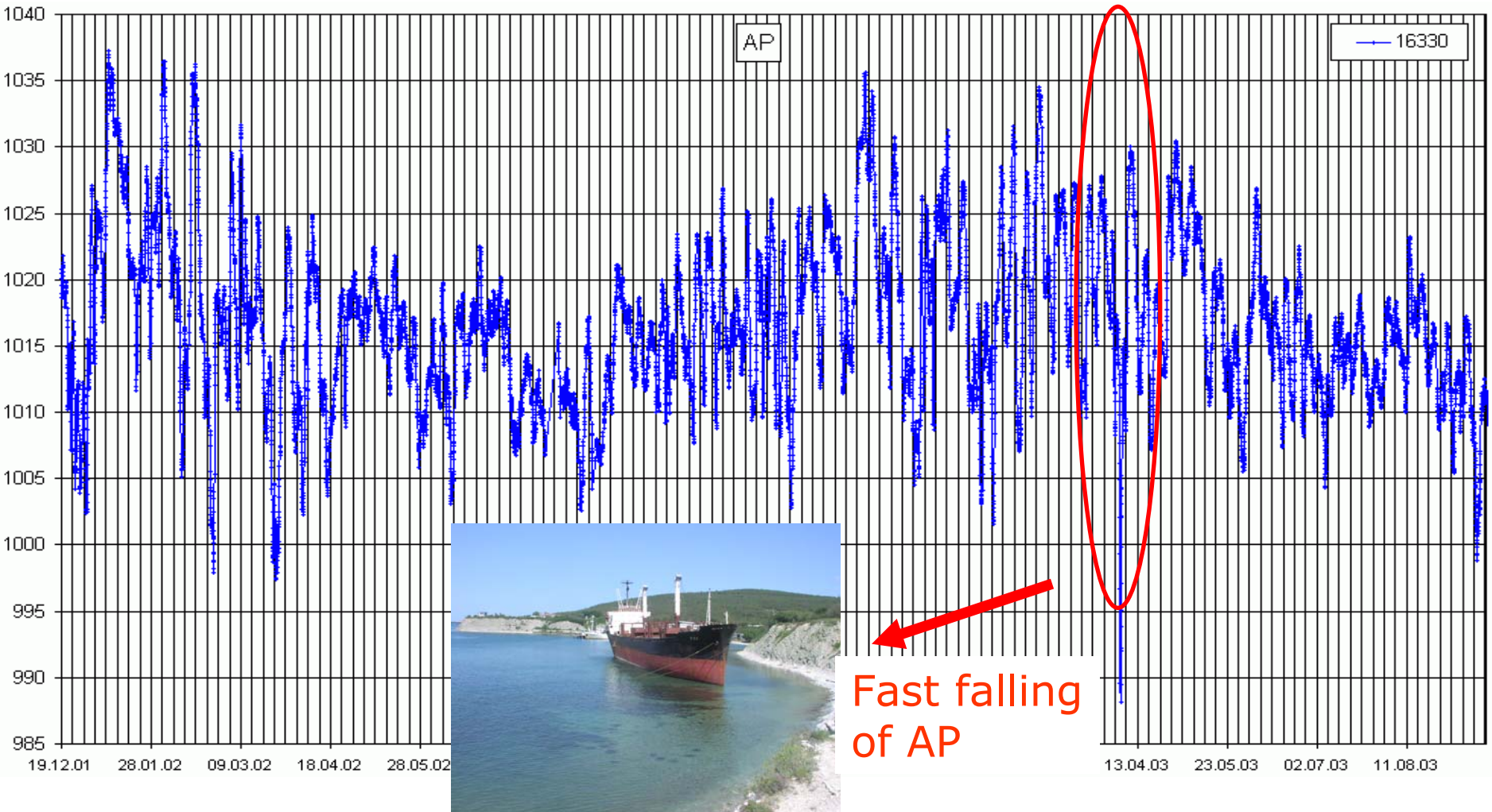
Example of Oceanography Use

Cooling and heating within active layer



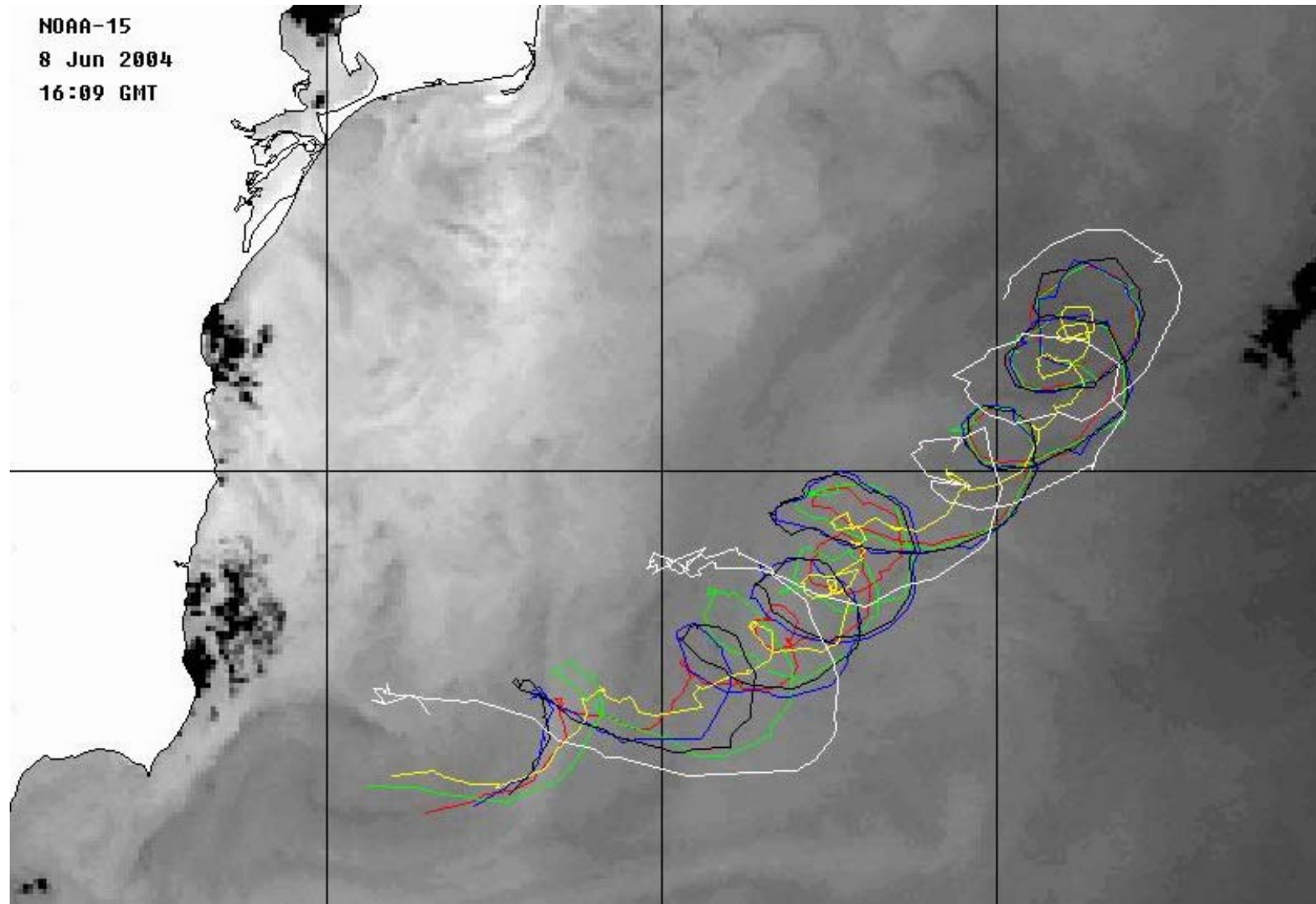
Example of Hydrometeorology Use

Near 2-year AP observations (ID16330/WMO61525)



Example of Remote Sensing Use

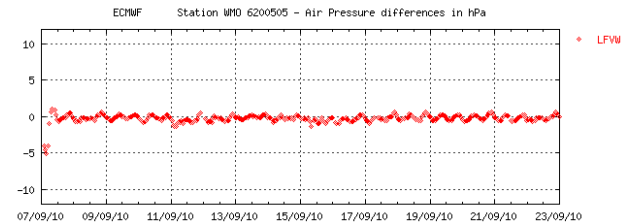
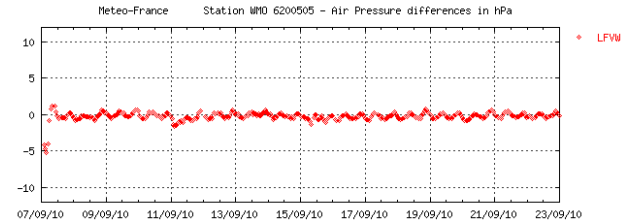
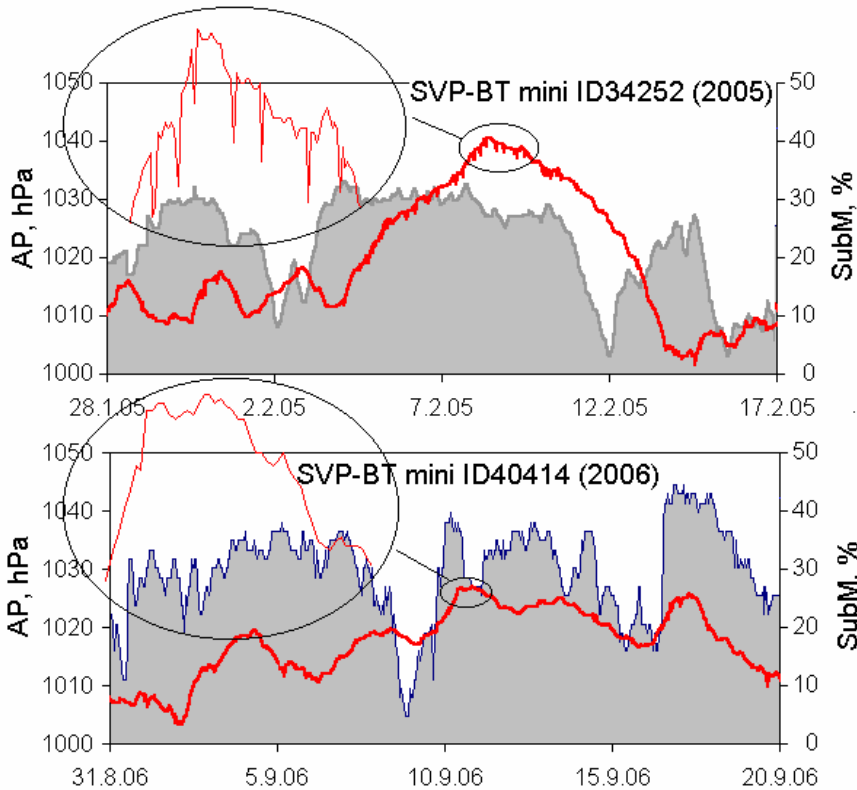
Study of Sevastopol Anticyclone with drifters and AVHAA



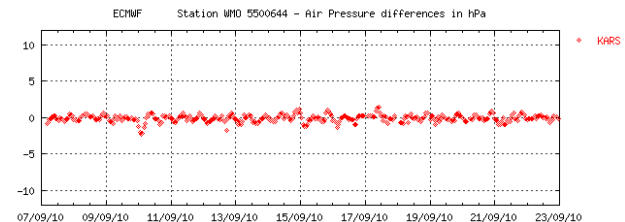
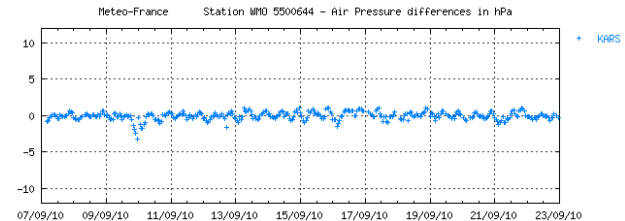
Examples of Technological Use

High quality AP measurement with SVP-B mini buoy

WMO 6200505 after 830 days in operation in Bay of Biscay

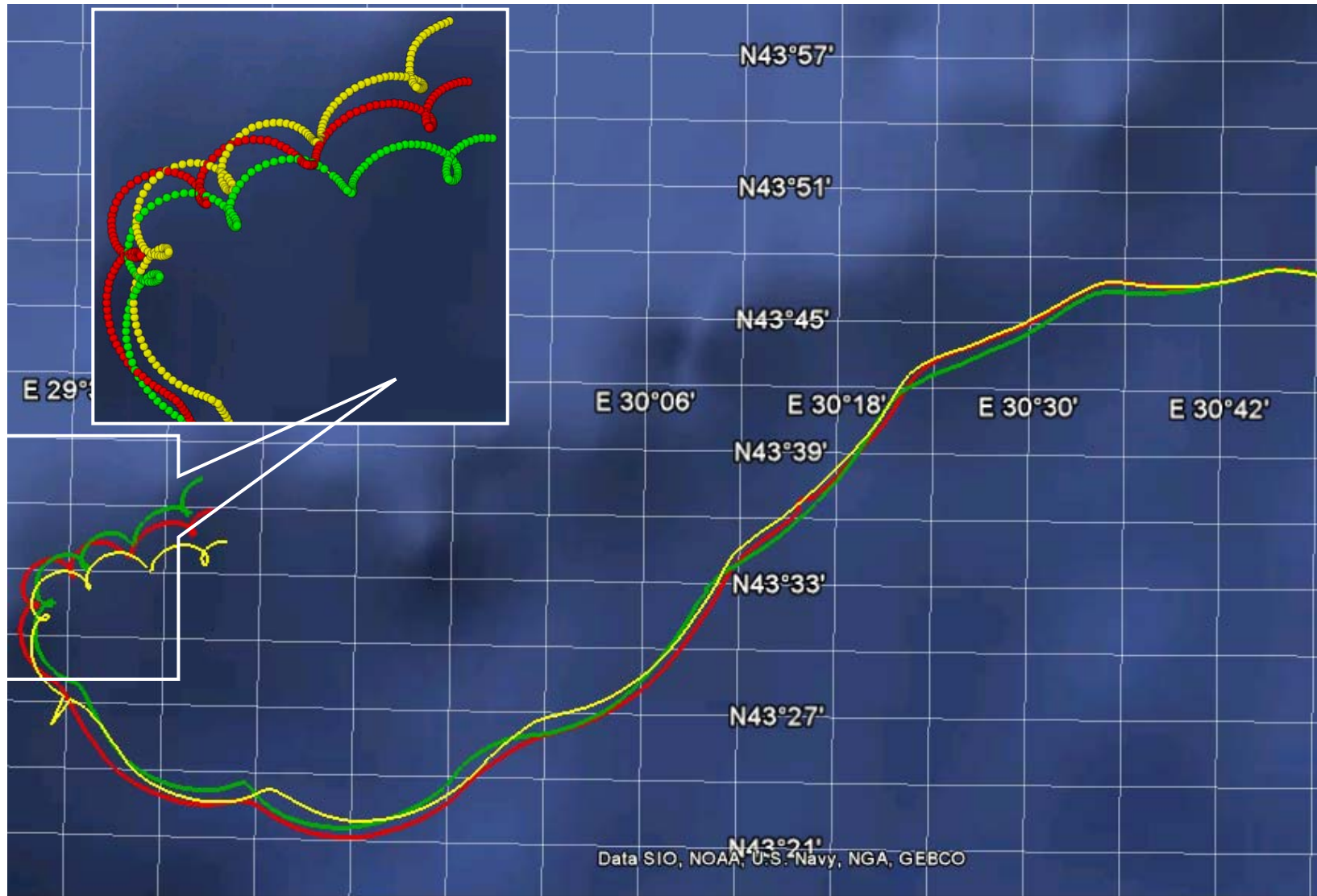


WMO 6100986 deployed in the Tasman Sea



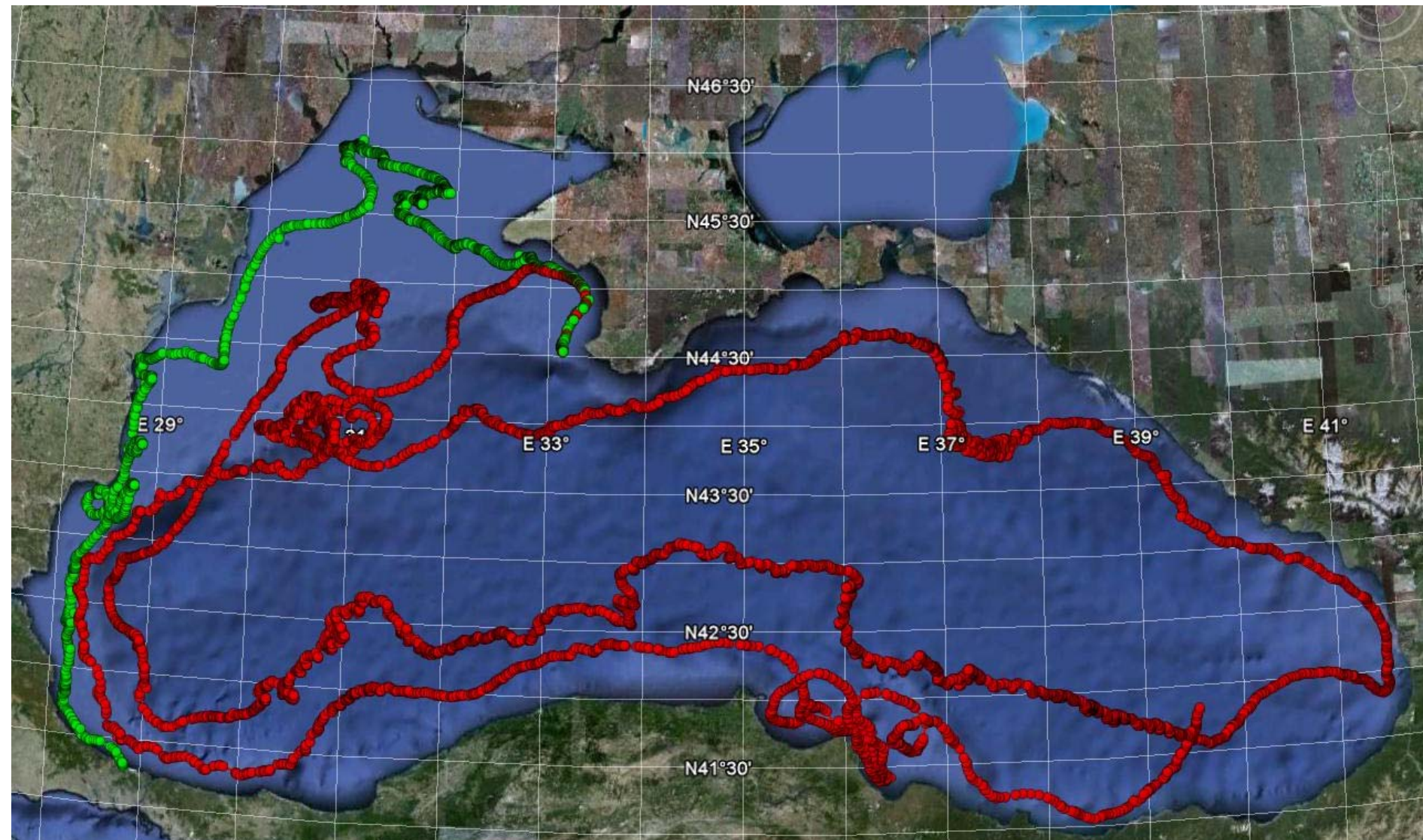
Investigations in 2009-2010

Evaluation of Iridium drifters of 3-d prototype

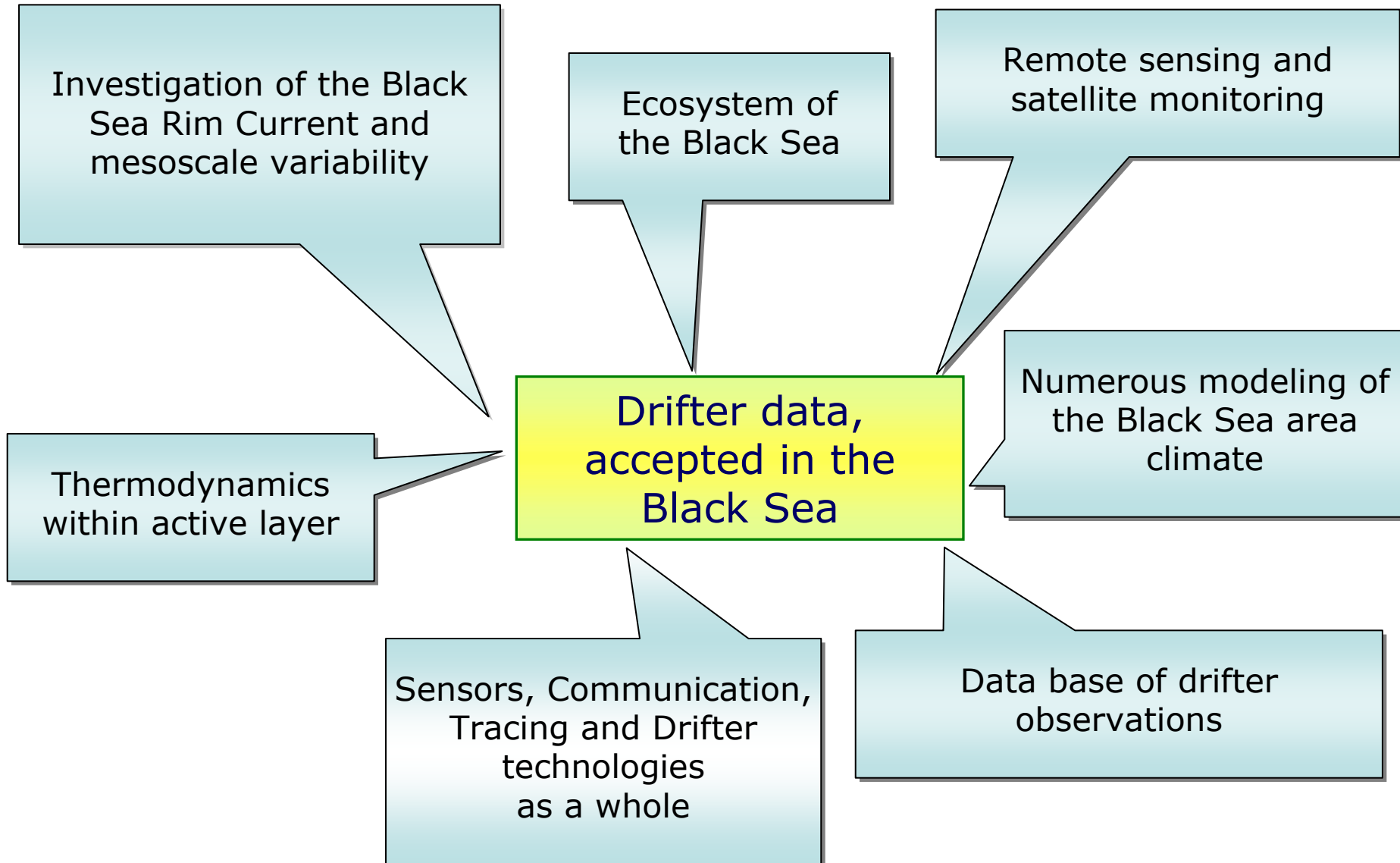


Investigations in 2009-2010

Evaluation of Argos-3 drifters of 1-st prototype



Publications on base of drifter investigation of the Black Sea



Further Drifter Deployments

1. Support of observational network on basis of the DBCP Implementation Strategy
2. Different national and international projects
3. The DBCP Pilot Projects
4. Data distribution via GTS and accumulation in MHI data base

Thanks a lot!

