

## Glider Mission Summary Report

2012 - 2015 SOCIB (CSIC)

SOCIB\_CANALES\_JUL2014\_1stDeployment (GR-MR-0029)



Balearic Islands Coastal Observing and Forecasting System







Mission Name		SOCIB_CANALES_JUL2014_1stDeployment (GR-MR-0029)
Platform Model		Slocum 1000 G2
Platform ID / Name / WMO Code		U244 / SDEEP01 / 68967
Related Platforms / Missions		
Start Date		2014-07-03
	End Date	2014-07-13
Total Days	s 10	Total distance (Km / Nm) 178 / 96
	Survey Area	Mallorca and Eïvissa Channels (Western Mediterranean sea)
	(NODC or SDN region)	, , , , , , , , , , , , , , , , , , ,
	Objective(s)	Establishing the variability of the N/S exchange of water masses that occur through the Ibiza Channel.  Sampling a standard transect across the Ibiza Channel several times using physical and biogeochemical sensors.  No greater than 1 month gap in between consecutive iterations.  The Mallorca Channel is also sampled when operationally practical.
Scientific Sensors (name & model / serial_number / calibration date)		GPCTD -SBE- / sn 0107 / 01-Apr-2012 FLNTU -WetLabs- / sn2279 / 15-Jul-2011 OPTODE -Aandera- / sn 1410 / 11-Feb-2011
N	lumber of Profiles	421 (CTD), 261 (FLNTU), 261 (OXY)
Significant Events	Glider with Lithium factory pack on-board Altimeter exhibiting considerably high number of false bottom hits Spontaneous abduction of the U244 glider by Valencian fisherman Glider was rescued by Valencia's Guardia Civil (Spanish military force ) SOCIB glider technician picked-up SDEEP00 from Guardia Civil Station in Oliva (Valencia)	
Mission Summary	This mission stands for the 3rd iteration of the Canales Campaign 2014, carried out by SOCIB's glider SDEEP01 (Unit 244). However, this iteration was interrupted by an external actor thus splitting the execution in 2 different and consecutive deployments.  For this mission, U244 was mounting U243's GPCTD and FLNTU sensors for technical reasons. The launching operation was executed by a 2-member field-team on board SOCIB-I Professional RIB. Due to rough weather conditions, U244 was released closer (N39.4294° E2.3033°) to departure port than the standard/official Canales starting waypoint (N39.4933° E2.181°).  During the execution of this mission 1 Mallorca-Eivissa transect was completed successfully. Overall performance of mechanical and sampling devices, until the unexpected extraction, was acceptable but the ALTIMETER (providing false bottom hits that caused the Glider to inflect to soon to the surface and not reaching to the channels bottoms). There also was 1 mission interruption due to DE_PUMP failure and some oddities coming from DIGIFIN, IRIDIUM and GPS. After some innovative altimeter's configuration, bottom detection worked properly. Additionally, Communications were stable and fluent allowing proper near-real-time data sending and ARGOS messaging. Navigation was also successful provoking traced route to match fairly well with commanded path.  Suddenly, on July-12th@09:57am,utc (N38.9924° E0.595°), SDEEP01 called in reporting not being able to sink and therefore having aborted the execution of the mission (obvious, it was on a fisherman's ship). That same night, SDEEP01 reported being on-land which turned out to be the fisherman's private property. SOCIB contacted local military forces that quickly rescued the vehicle. The next day, SOCIB glidertech picked-up the Glider from this force's station in Oliva (Valencia). SDEEP01 was put on the bench, revised and considered ready to go for a second deployment within this GF-MR-0029 mission. Gathered dataset was fully backed-up and uploaded to SOCIB's FTP for	

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Institute	SOCIB in collaboration with IMEDEA
Project Affiliation (web-site)	http://www.socib.eu
Partnership / Participation	SOCIB (internal long-term project of sustained monitoring line) IMEDEA (in-kind contribution of material and infrastructures)
Glider Software Version	v7.13 Acomms
<b>Data Retrieval</b> (real-time [ RT ] / delayed-mode [ DM ] )	Real-time sub-set via satellite link every 6 hours every day Delayed-mode direct download of full gathered data sets
Compass Calibration (specify procedure)	Error measurement revealed no necessity to perform a compass calibration
Battery Type	Manufacturer's original Lithium batt.pack (700Ah-nominal cap.)
Battery Consumption (Ah)	53.077Ah (reading from 187.116Ah to 240.193Ah)
Data Available From	http://thredds.socib.es/thredds/dodsC/auv/glider/sdeep01- scb_sldeep001/L1/2014/dep0014_sdeep01_scb-sldeep001_L1_2014- 07-03_data_dt.nc
Full Mission Report From	glidertech@socib.es
Technical Contact	glidertech@socib.es

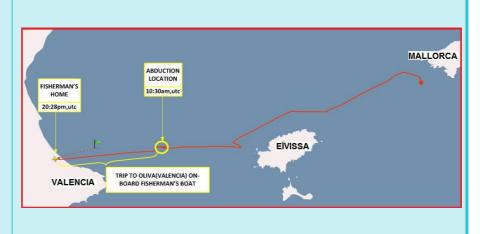
## Figure 1

(Map providing general overview of Survey Area)



## Mission Summary

(Map providing detailed overview of Survey Area and traced Flight Path with surface points if possible)



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