

## Glider Mission Summary Report

2012 - 2015 SOCIB (CSIC)

SOCIB\_CANALES\_JUN2014 (GR-MR-0028)



Balearic Islands Coastal Observing and Forecasting System







Mission Name		SOCIB_CANALES_JUN2014 (GR-MR-0028)	
Platform Model		Slocum 1000 G2	
Platform ID / Name / WMO Code		U243 / SDEEP00 / 68457	
Related Platforms / Missions			
Start Date		2014-06-10	
End Date		2014-06-17	
Total Day	s 8	Total distance (Km / Nm) 41/22	
	Survey Area (NODC or SDN region)	Mallorca and Eïvissa Channels (Western Mediterranean s	ea)
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 se 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 0064 / 19-May-2011 FLNTU -WetLabs- / sn2280 / 15-Jul-2011 OPTODE -Aandera- / sn 1410 / 11-Feb-2011 (*) (*): sensor borrowed from U244 due to U243's foil breach	
Number of Profiles		202 (CTD), 102 (FLNTU), 102 (OXY)	
Significant Events	Glider with Lithium factory pack on-board Aborted mission due to a series of water leaks occurred during the 3 consecutive attempts of deployment After this attempts, SDEEP00 was considered in need for factory repair, refurbishment and re-calibration		
Mission Summary	This mission does not stand for a valid iteration of the Canales Campaign 2014 considering that SDEEP00 (Unit 243) did not accomplish the objectives associated to this Endurance Line. For this mission, U243 was mounting U244's GPCTD and FLNTU sensors for technical reasons. Deployment operation took place in three different non-consecutive days due to water-leak aborts forcing the recovery of the vehicle, an attempt of repair and a consequent new attempt. All of them were executed by a 2-member field-team on board SOCIB-I Professional RIB. The used launching waypoint was N39.5095° E2.1818°.  Overall performance of mechanical and sampling devices, obviously when the glider could perform before being affected by the leaks, was excellent. However, it leaked in three different occasions at the various depths of 850m, 500m, and, lastly, 80m.  Neither Mallorca-Eïvissa nor Eïvissa-Valencia transects were successfully sampled during this mission and, therefore, it is not formally considered a valid iteration of Canales Campaign 2014. Emergency recoveries were executed by the same team on board SOCIB-I and, in the first two, leaving the glider drifting at the surface while waiting for extraction was needed. In order of occurrence, recovery locations were N39.4386° E2.0268°, N39.4095° E1.9731° and N39.5073° E2.1881°  Upon completion, SDEEP00 was received at IMEDEA's glider-lab, put on the bench, revised and its status set to 'out-of-service'. Since that moment, arrangements to ship the Glider back to factory for repair/refurbishment/recalibration were made. Gathered dataset was fully backed-up and uploaded to SOCIB's FTP for subsequent processing and diffusion via SOCIB's public repository. Although its scientific value is considered to be null.		

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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)	17.691Ah (reading from 168.288Ah to 185.979Ah)
Data Available From	http://thredds.socib.es/thredds/dodsC/auv/glider/sdeep00- scb_sldeep000/L1/2014/dep0010_sdeep00_scb-sldeep000_L1_2014- 02-06_data_dt.nc
Full Mission Report From	glidertech@socib.es
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## 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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