



Glider Mission Summary Report

2012 - 2015
SOCIB (CSIC)

SOCIB_CANALES_AUG2015_(GR-MR-0038)



Balearic Islands
Coastal Observing
and Forecasting
System



MINISTERIO
DE ECONOMÍA
Y COMPETITIVIDAD



Govern de les Illes Balears

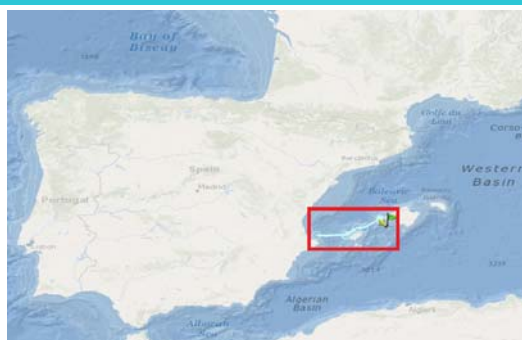


Mission Name		SOCIB_CANALES_AUG2015(GR-MR-0038)	
Platform Model		Slocum 1000 G2	
Platform ID / Name / WMO Code		U243 / SDEEP00 / 68457	
Related Platforms / Missions		SCB-SVP018 (deployed 13-07-2015)	
Start Date		2015-08-19	
End Date		2014-09-14	
Total Days	27	Total distance (Km / Nm)	579 / 313
Survey Area (NODC or SDN region)		Mallorca and Eivissa Channels (Western Mediterranean sea)	
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 0064 / 24-Nov-2014 FLNTUSLC -WetLabs- / sn3711 / 22-Oct-2014 OPTODE -Aandera- / sn 1409 / 18-Jun-2014	
Number of Profiles		794 (CTD), 302 (FLNTU), 300 (OXY)	
Significant Events	2nd mission in 2015 by SDEEP00 (Unit 243). G2 glider powered by TWR Lithium battery pack. Last mission using this pack. Very good overall performance (no mission aborts, no device errors). 516 oddities from SCIENCE_SUPER (oxy3835 error code 558) in two different segments. Digifin and Iridium raised the majority of the oddities. This glider used 2 long-hull sections borrowed from Unit 244 (due to U243's original-hulls suffering from corrosion).		
Mission Summary	This mission stands for the 5th iteration of the Canales Campaign 2015 and, in this case, carried out by SOCIB's glider SDEEP00 (Unit 243). Launching operation (in N39.5057° E2.1829°) was executed by a 2-member field-team on board SOCIB-I 9m Professional RIB departing from CALANOVA harbor. This location is at SW of Dragonera Island (Mallorca) and coincides with Canales standard initial waypoint. During the execution of this mission 4 Eivissa-Valencia and 2 Mallorca-Eivissa transects were completed successfully. Overall performance of mechanical and sampling devices was satisfactory. This time DE_PUMP behaved correctly (no aborts and only 2 warnings). DIGIFIN and IRIDIUM devices exhibited acceptable oddities. Additionally, Communications were stable and fluent allowing proper near-real-time data sending and ARGOS messaging. Navigation was very adjusted to commanded route and there were no evidences of currents (nor other origin) deviation. Finally, <u>OPTODE sensor caused multiple oddities due to Proqlet Error #558 (segments #03330053, #03330055 and #03330057).</u> Recovery took place in N39.3888° E2.2824°, by a 2-member field-team on board SOCIB-I 9m Professional RIB departing from CALANOVA harbor. Glider was intercepted after having completed the mission the day before at 08:32am,utc and cruising towards Palma's bay. The recovery took place later than programmed due to the Glider skipping the ending UTC-surface (programmed at 8am,lt) thus finishing due to Overtime abort at 10:39am,lt. Upon completion, SDEEP00 was received at IMEDEA's glider-lab, put on the bench, revised and properly stored. Gathered dataset was fully backed-up and uploaded to SOCIB's FTP for subsequent processing and diffusion via SOCIB's public repository. This glider, with a new battery pack, will most likely be the executor of ABACUS2 mission (October to December 2015).		

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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
Data Retrieval (real-time [RT] / delayed-mode [DM])	Real-time sub-set via satellite link every 24 hours every day during 12am, It control-call. Delayed-mode direct download of full gathered data sets
Compass Calibration (specify procedure)	Error measurement during mission preparation revealed no necessity to perform a compass calibration
Battery Type	ELECTROCHEM factory Lithium Pack (700Ah-nominal cap.)
Battery Consumption (Ah)	141.389Ah (reading from 482.211Ah to 623.600Ah)
Data Available From	http://thredds.socib.es/thredds/dodsC/auv/glider/sdeep00-scb_sldeep000/L1/2015/dep0014_sdeep00_scb-sldeep000_L1_2015-06-18_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)

