



Glider Mission Summary Report

2012 - 2015
SOCIB (CSIC)

SOCIB_CANALES_NOV2013 (GR-MR-0022)



Balearic Islands
Coastal Observing
and Forecasting
System



MINISTERIO
DE ECONOMÍA
Y COMPETITIVIDAD



Govern de les Illes Balears



Mission Name		SOCIB_CANALES_NOV2013 (GR-MR-0022)	
Platform Model		Slocum 1000 G2	
Platform ID / Name / WMO Code		U243 / SDEEP00 / 68457	
Related Platforms / Missions			
Start Date		2013-11-01	
End Date		2013-11-12	
Total Days	11	Total distance (Km / Nm)	224 / 121
Survey Area (NODC or SDN region)		Mallorca and Eivissa Channels (Western Mediterranean sea)	
Objective(s)		<p>Establishing the variability of the N/S exchange of water masses that occur through the Ibiza Channel.</p> <p>Sampling a standard transect across the Ibiza Channel several times using physical and biogeochemical sensors.</p> <p>No greater than 1 month gap in between consecutive iterations.</p> <p>The Mallorca Channel is also sampled when operationally practical.</p>	
Scientific Sensors (name & model / serial_number / calibration date)		<p>GPCTD -SBE- / sn 0107 / 04-Jan-2012</p> <p>FLNTU -WetLabs- / sn2279 / 15-Jul-2011</p> <p>OPTODE -Aandera- / sn 1409 / 15-Feb-2011</p>	
Number of Profiles		423 (CTD), 311 (FLNTU), 300 (OXY)	
Significant Events		<p>7th operational mission performed by SDEEP00 (Slocum G2).</p> <p>Glider still powered by first-ever-used Lithium factory pack.</p> <p>Glider aborted the operation due to low battery level.</p> <p>Emergency recovery by SASEMAR rescue vessel.</p> <p>Glider picked-up in Xàtiva (Valencia) by SOCIB technical staff.</p> <p>Pitch battery disconnected (origin of the abort).</p>	
Mission Summary		<p>This mission stands for the 6th iteration of the Canales Campaign 2013, carried out by SOCIB's glider SDEEP00 (Unit 243).</p> <p>Launching was performed by a 2-member field-team on board SOCIB-I professional RIB at location N39.4245° E2.2865° (closer than usual due to rough weather conditions).</p> <p>During the time the glider remained deployed 1 Mallorca-Eivissa and 1 Eivissa-Valencia channels were surveyed.</p> <p>Overall performance of mechanical and sampling devices was excellent. Only quite a few oddities coming from DIGIFIN and IRIDIUM devices. Couple of warnings from GPS. Navigation and traced route were also a success. Communications were stable and fluent allowing the transmission of both near-real-time data and telemetry, including ARGOS messages. Only 1 call (expected at 10am,utc) was missed.</p> <p>On Nov-11th, SDEEP00 interrupted the mission reporting low battery. This situation could not be solved remotely so the Glider was recovered (N38.9921° E0.2141°) by SASEMAR emergency vessel. A member of SOCIB tech-staff drove to Xàtiva(Valencia) to pick-up the glider from SASEMAR's head-quarters.</p> <p>Upon completion, SDEEP00 was received at IMEDEA's glider-lab, put on the bench, revised and properly stored. At the end, the origin of the low-battery event was the total disconnection of the Pitch-Battery from the Glider's electrical supply circuitry.</p> <p>Gathered dataset was fully backed-up and uploaded to SOCIB's FTP for subsequent processing and diffusion via SOCIB's public repository.</p>	

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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	v7.7 GAMMA_RAD5
Data Retrieval (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)	58,813Ah (reading from 381,841Ah to 440,654Ah)
Data Available From	http://thredds.socib.es/thredds/dodsC/auv/glider/sdeep00-scb_sldeep000/L1/2013/dep0008_sdeep00_scb-sldeep000_L1_2013-11-01_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)

