



# Glider Mission Summary Report

2012 - 2015  
SOCIB (CSIC)

*SOCIB\_CANALES\_MAY2013 (GR-MR-0017)*



Balearic Islands  
Coastal Observing  
and Forecasting  
System



MINISTERIO  
DE ECONOMÍA  
Y COMPETITIVIDAD



Govern de les Illes Balears



<b>Mission Name</b>		SOCIB_CANALES_MAY2013 (GR-MR-0017)	
<b>Platform Model</b>		Slocum 1000 G2	
<b>Platform ID / Name / WMO Code</b>		U243 / SDEEP00 / 68457	
<b>Related Platforms / Missions</b>			
<b>Start Date</b>		2013-05-20	
<b>End Date</b>		2013-06-14	
<b>Total Days</b>	26	<b>Total distance (Km / Nm)</b>	587 / 317
<b>Survey Area</b> (NODC or SDN region)		Mallorca and Eivissa Channels (Western Mediterranean sea)	
<b>Objective(s)</b>		<p>Testing the first Lithium-Primary pack (factory part) used by SOCIB gliders.</p> <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>	
<b>Scientific Sensors</b> (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>	
<b>Number of Profiles</b>		777 (CTD), 252 (FLNTU), 249 (OXY)	
<b>Significant Events</b>		<p>First Lithium powered Glider deployed by SOCIB</p> <p>During the first transect in the Mallorca-Eivisa channel, the Glider was commanded to repeat a 8Km transect in the middle of the channel in order to complete a second deep dive to max. depth</p> <p>This execution of the Canales mission was, in tactical terms, perfect. The programmed route, the official for Canales-2013, was 100% completed.</p>	
<b>Mission Summary</b>		<p>This mission stands for the 3rd 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 7m RIB at location N39.5303° E2.2698°.</p> <p>The segment in between N39.3614° E1.924° and N39.338° E1.8837° was repeated in the deepest area of the 1<sup>st</sup> Mallorca-Eivissa channel to perform a second deep-dive to max. depth (975m).</p> <p>During the time the glider remained deployed 2 Mallorca-Eivissa and 4 Eivissa-Valencia channels were surveyed. All of them fully completed.</p> <p>Overall performance of mechanical and sampling devices was excellent. Only quite a few oddities coming from DIGIFIN and IRIDIUM devices. Navigation and traced route were optimal and adjusted to what was commanded and expected.</p> <p>Upon completion, SDEEP00 was received at IMEDEA's glider-lab, put on the bench, revised and properly stored. The 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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<b>Institute</b>	SOCIB in collaboration with IMEDEA
<b>Project Affiliation</b> (web-site)	<a href="http://www.socib.eu">http://www.socib.eu</a>
<b>Partnership / Participation</b>	SOCIB (internal long-term project of sustained monitoring line) IMEDEA (in-kind contribution of material and infrastructures)
<b>Glider Software Version</b>	v7.7 GAMMA_RAD5
<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
<b>Compass Calibration</b> (specify procedure)	Error measurement revealed no necessity to perform a compass calibration
<b>Battery Type</b>	Manufacturer's original Lithium batt.pack (700Ah-nominal cap.)
<b>Battery Consumption (Ah)</b>	113,858Ah (reading from 0,123Ah to 113,981Ah)
<b>Data Available From</b>	<a href="http://thredds.socib.es/thredds/dodsC/auv/glider/sdeep00-scb_sldeep000/L1/2013/dep0004_sdeep00_scb-sldeep000_L1_2013-05-20_data_dt.nc">http://thredds.socib.es/thredds/dodsC/auv/glider/sdeep00-scb_sldeep000/L1/2013/dep0004_sdeep00_scb-sldeep000_L1_2013-05-20_data_dt.nc</a>
<b>Full Mission Report From</b>	<i>glidertech@socib.es</i>
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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)

