



# Glider Mission Summary Report

2012 - 2015  
SOCIB (CSIC)

*SOCIB\_CANALES\_OCT2014 (GR-MR-0031)*



Balearic Islands  
Coastal Observing  
and Forecasting  
System



MINISTERIO  
DE ECONOMÍA  
Y COMPETITIVIDAD



Govern de les Illes Balears



<b>Mission Name</b>		SOCIB_CANALES_OCT2014 (GR-MR-0031)	
<b>Platform Model</b>		Slocum 1000 G2	
<b>Platform ID / Name / WMO Code</b>		U184 / IDEEP00 / 68452	
<b>Related Platforms / Missions</b>			
<b>Start Date</b>		2014-10-07	
<b>End Date</b>		2014-10-24	
<b>Total Days</b>	18	<b>Total distance (Km / Nm)</b>	370 / 200
<b>Survey Area</b> (NODC or SDN region)		Mallorca and Eivissa Channels (Western Mediterranean sea)	
<b>Objective(s)</b>		<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>	
<b>Scientific Sensors</b> (name & model / serial_number / calibration date)		<p>CTD -SBE- / sn 0195 / 23-Dec-2009</p> <p>FLNTU -WetLabs- / sn 2128 / 01-Feb-2011</p> <p>OPTODE -Aandera- / sn 0841 / 01-May-2013</p>	
<b>Number of Profiles</b>		615 (CTD), 143 (FLNTU), 143 (OXY)	
<b>Significant Events</b>		<p>Survey area limited to the Eivissa-Valencia channel.</p> <p>Significant uncoupling between traced and commanded route (presumably due to strong currents).</p> <p>Glider failing to get a first GPS fix during in-mission surfaces.</p> <p>Backwards navigation upon completion of 4th transect.</p> <p>Mission interrupt due to low battery charge available.</p> <p>Recovery on-board Eivissa's Local Governmental vessel.</p>	
<b>Mission Summary</b>		<p>This mission stands for the 4th iteration of the Canales Campaign 2014, carried out by SOCIB's glider IDEEP00 (Unit 184). This G1 was selected since U244 was assigned to ABACUS mission.</p> <p>Deployment was executed by a 3-member field-team on board SOCIB-I Professional RIB. Chosen location was N38.9954° E1.0936° (Eivissa's N-W) due to tactical and logistical issues involving also SOCIB's ETD division.</p> <p>During the execution of this mission 4 Eivissa-Valencia transects were completed successfully.</p> <p>Overall performance of mechanical and sampling devices was acceptable. Nevertheless, OCEAN_PRESSURE sensor exhibited a relatively high drift very close to the surface causing the Glider to turn on GPS still underwater. There also were some oddities coming from DIGIFIN, SCIENCE_SUPER, IRIDIUM and GPS. Additionally, Communications were stable (but with some call-drops) allowing proper near-real-time data sending and ARGOS messaging. Navigation was characterized by a changing deviation (2.5Km in average) of traced route with respect to commanded path. This is attributed to the presence of strong currents.</p> <p>The previous night to the recovery, IDEEP00 interrupted the execution of the mission reporting a low remaining battery charge (20%). As this happened at late night, the Glider remained holding the position until a Pilot resumed the mission.</p> <p>Recovery took place also in Eivissa waters by a Glider technician on board a vessel of Eivissa's local government fishery control office. It happened in N38.8881° E1.0758°. This point was setup to reduce the navigation of the vessel as it departed from Eivissa city (South to the island of Eivissa).</p> <p>Upon completion, IDEEP00 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.</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>	v7.13 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
<b>Compass Calibration</b> (specify procedure)	Error measurement revealed no necessity to perform a compass calibration
<b>Battery Type</b>	Manufacturer's original Alkaline batt.pack (143Ah-nominal cap.)
<b>Battery Consumption (Ah)</b>	74.732Ah (reading from 38.156Ah to 112.888Ah)
<b>Data Available From</b>	<a href="http://thredds.socib.es/thredds/dodsC/auv/glider/ideep00-ime_sldeep000/L1/2014/dep0013_ideep00_ime-sldeep000_L1_2014-10-07_data_dt.nc">http://thredds.socib.es/thredds/dodsC/auv/glider/ideep00-ime_sldeep000/L1/2014/dep0013_ideep00_ime-sldeep000_L1_2014-10-07_data_dt.nc</a>
<b>Full Mission Report From</b>	<a href="mailto:glidertech@socib.es">glidertech@socib.es</a>
<b>Technical Contact</b>	<a href="mailto:glidertech@socib.es">glidertech@socib.es</a>

**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)

