



Glider Mission Summary Report

2012 - 2015
SOCIB (CSIC)

SOCIB_CANALES_MAR2012 (GR-MR-0006)



Balearic Islands
Coastal Observing
and Forecasting
System



MINISTERIO
DE ECONOMÍA
Y COMPETITIVIDAD



Govern de les Illes Balears



Mission Name		SOCIB_CANALES_MAR2012 (GR-MR-0006)	
Platform Model		Sea-Glider 1000m (iRobot version)	
Platform ID / Name / WMO Code		U538 / SDEEP02 / 68965	
Related Platforms / Missions			
Start Date		2015-03-12	
End Date		2014-04-27	
Total Days	46	Total distance (Km / Nm)	567 / 307
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> <p>Gaining experience and know-how on Sea-Glider operations & piloting.</p> <p>Testing new capabilities and tools for tracking & processing at D.C.</p>	
Scientific Sensors (name & model / serial_number / calibration date)		<p>CT-Sail -SBE- / sn 0168 / 20-Feb-2011 (*)</p> <p>BBFL2VMT -WetLabs- / sn0778 / 13-Oct-2013</p> <p>OPTODE -Aandera- / sn 0464 / 14-Dec-2010</p> <p>(*) with Paine's pressure sensor sn264060 calibrated 09-Feb-2011</p>	
Number of Profiles		854 (CTD), 854 (FLNTU), 854 (OXY)	
Significant Events		<p>First scientific mission using SOCIB's Sea-Glider U538 and first one also using a Sea-Glider.</p> <p>Engineering trial prior to scientific mission from Port Sòller heading West towards initial waypoint of the Canales 2012 standard mission route.</p> <p>Deployment using 7-m RIB launched from Port de Sòller.</p>	
Mission Summary		<p>This mission stands for the 1st iteration of the Canales Campaign 2012, carried out by SOCIB's glider SDEEP02 (Unit 538).</p> <p>Launching operation (in N39.9061° E2.5346°) was executed by a 3-member field-team on board IMEDEA's 7m RIB launched from Port de Sòller.</p> <p>During the execution of this mission 1 Trial, 2 Eivissa-Valencia and 1 Mallorca-Eivissa transects were completed successfully.</p> <p>Overall performance of mechanical and sampling devices was satisfactory. There were not relevant issues with any particular devices. Additionally, Communications were stable and fluent allowing proper near-real-time data sending. External ARGOS tag behaved as expected and messages were received by the CLS servers. Navigation was correct over the Canales track although SDEEP02 suffered the influence of light currents in the Eivissa-Valencia channel. Finally, due to a piloting mistake (due to inexperience mostly), SDEEP02 drifted at the surface during the night of April-7th without negative consequences.</p> <p>Recovery took place in N39.4315° E2.0925° by a 2-member field-team on board SOCIB-I 9m Professional RIB.</p> <p>Upon completion, SDEEP02 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>	

Principal Investigator (e-mail or contact phone/address)	Prof. Joaquim Tintoré jtintore@socib.es (+34 971439821)
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	V66.06
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	Electrochem's Lithium Prim. 24V (mechanics) & 10V (electronics)
Battery Consumption (Ah)	54.716Ahr (24V pack) & 33.541Ahr (12V pack)
Data Available From	http://thredds.socib.es/thredds/dodsC/auv/glider/sdeep02-scb_sgdeep002/L1/2012/dep0001_sdeep02_scb-sgdeep002_L1_2012-03-12_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)

