



Glider Mission Summary Report

2012 - 2015
SOCIB (CSIC)

SOCIB_CANALES_JAN2014 (GR-MR-0024)



Balearic Islands
Coastal Observing
and Forecasting
System



MINISTERIO
DE ECONOMÍA
Y COMPETITIVIDAD



Govern de les Illes Balears



Mission Name		SOCIB_CANALES_JAN2014 (GR-MR-0024)	
Platform Model		Slocum 1000 G2	
Platform ID / Name / WMO Code		U243 / SDEEP00 / 68457	
Related Platforms / Missions			
Start Date		2014-02-02	
End Date		2014-02-27	
Total Days	22	Total distance (Km / Nm)	480 / 259
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 0064 / 19-May-2011 (*)</p> <p>FLNTU -WetLabs- / sn2280 / 15-Jul-2011 (*)</p> <p>OPTODE -Aandera- / sn 1409 / 15-Feb-2011</p> <p>(*): original sensors from U244</p>	
Number of Profiles		824 (CTD), 199 (FLNTU), 197 (OXY)	
Significant Events		<p>Glider still powered by first-ever-used Lithium factory pack.</p> <p>Last mission on used Lithium factory pack.</p> <p>Glider deployed in front of St.Antoni's (Eivissa) bay from hired vessel.</p> <p>Glider interrupted mission execution twice due to NO_COP_TICKLE.</p> <p>Trying to avoid a low-battery situation, SDEEP00 was commanded to return to Mallorca following the shortest way possible, without following the standard route to sample the Eivissa-Mallorca channel.</p>	
Mission Summary		<p>This mission stands for the 1st iteration of the Canales Campaign 2014, carried out by SOCIB's glider SDEEP00 (Unit 243). This mission also marked the beginning of year 2014 for the Glider Facility.</p> <p>For this mission, U243 was mounting U244's GPCTD and FLNTU sensors for technical reasons.</p> <p>Launching was performed in front of St.Antoni's (Eivissa) bay on-board a rental vessel (crew: captain and SOCIB-tech) at location N39.0384° E1.2504°. This was done in order to optimize battery usage and also conditioned by rough weather in area. SDEEP00 needed 2 days to get to the beginning of the Eivissa-Valencia transect. Then, scientific survey started.</p> <p>Overall performance of mechanical and sampling devices was acceptable (SCIENCE_SUPER raised 4 warnings during one segment). Only quite a few oddities coming from DIGIFIN and IRIDIUM devices. Couple of warnings from GPS. Navigation and traced route were also adequate (average mismatch of 2Km with commanded route and North drift near Valencia). Communications were stable and fluent allowing the transmission of both near-real-time data and telemetry, including ARGOS messages.</p> <p>During the time the glider remained deployed 4 Eivissa-Valencia channels were surveyed. No Eivissa-Mallorca channels since SDEEP00 was directly sent, not following the scientific route, towards the recovery waypoint to avoid low-battery problems during return home. The Glider was finally recovered by a 2-member team on-board SOCIB-I Professional RIB in N39.4023° E2.2337°.</p> <p>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.</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	v7.13 Acomms
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)	110,087Ah (reading from 518,987Ah to 629,074Ah)
Data Available From	http://thredds.socib.es/thredds/dodsC/auv/glider/sdeep00-scb_sldeep000/L1/2014/dep0010_sdeep00_scb-sldeep000_L1_2014-02-06_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)

