



# Glider Mission Summary Report

2012 - 2015  
SOCIB (CSIC)

*SOCIB\_CANALES\_JUL2014\_1stDeployment*  
*(GR-MR-0029)*



Balearic Islands  
Coastal Observing  
and Forecasting  
System



MINISTERIO  
DE ECONOMÍA  
Y COMPETITIVIDAD



Govern de les Illes Balears



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| <b>Mission Name</b>  |  | SOCIB_CANALES_JUL2014_1stDeployment (GR-MR-0029)   |          |
| <b>Platform Model</b>  |  | Slocum 1000 G2   |          |
| <b>Platform ID / Name / WMO Code</b>   |  | U244 / SDEEP01 / 68967   |          |
| <b>Related Platforms / Missions</b>  |  |  |          |
| <b>Start Date</b>  |  | 2014-07-03   |          |
| <b>End Date</b>  |  | 2014-07-13   |          |
| <b>Total Days</b>  | 10   | <b>Total distance (Km / Nm)</b>  | 178 / 96 |
| <b>Survey Area</b><br>(NODC or SDN region)                                     |  | Mallorca and Eivissa Channels (Western Mediterranean sea)  |          |
| <b>Objective(s)</b>  |  | Establishing the variability of the N/S exchange of water masses that occur through the Ibiza Channel.<br>Sampling a standard transect across the Ibiza Channel several times using physical and biogeochemical sensors.<br>No greater than 1 month gap in between consecutive iterations.<br>The Mallorca Channel is also sampled when operationally practical. |          |
| <b>Scientific Sensors</b><br>(name & model / serial_number / calibration date) |  | GPCTD -SBE- / sn 0107 / 01-Apr-2012<br>FLNTU -WetLabs- / sn2279 / 15-Jul-2011<br>OPTODE -Aandera- / sn 1410 / 11-Feb-2011  |          |
| <b>Number of Profiles</b>  |  | 421 (CTD), 261 (FLNTU), 261 (OXY)  |          |
| <b>Significant Events</b>  | Glider with Lithium factory pack on-board<br>Altimeter exhibiting considerably high number of false bottom hits<br>Spontaneous abduction of the U244 glider by Valencian fisherman<br>Glider was rescued by Valencia's Guardia Civil (Spanish military force )<br>SOCIB glider technician picked-up SDEEP00 from Guardia Civil Station in Oliva (Valencia)   |  |          |
| <b>Mission Summary</b>   | <p>This mission stands for the 3rd iteration of the Canales Campaign 2014, carried out by SOCIB's glider SDEEP01 (Unit 244). However, this iteration was interrupted by an external actor thus splitting the execution in 2 different and consecutive deployments.</p> <p>For this mission, U244 was mounting U243's GPCTD and FLNTU sensors for technical reasons. The launching operation was executed by a 2-member field-team on board SOCIB-I Professional RIB. Due to rough weather conditions, U244 was released closer (N39.4294° E2.3033°) to departure port than the standard/official Canales starting waypoint (N39.4933° E2.181°).</p> <p>During the execution of this mission 1 Mallorca-Eivissa transect was completed successfully. Overall performance of mechanical and sampling devices, until the unexpected extraction, was acceptable but the ALTIMETER (providing false bottom hits that caused the Glider to inflect to soon to the surface and not reaching to the channels bottoms). There also was 1 mission interruption due to DE_PUMP failure and some oddities coming from DIGIFIN, IRIDIUM and GPS. After some innovative altimeter's configuration, bottom detection worked properly. Additionally, Communications were stable and fluent allowing proper near-real-time data sending and ARGOS messaging. Navigation was also successful provoking traced route to match fairly well with commanded path.</p> <p>Suddenly, on July-12th @09:57am,utc (N38.9924° E0.595°), SDEEP01 called in reporting not being able to sink and therefore having aborted the execution of the mission (obvious, it was on a fisherman's ship). That same night, SDEEP01 reported being on-land which turned out to be the fisherman's private property. SOCIB contacted local military forces that quickly rescued the vehicle. The next day, SOCIB glidertech picked-up the Glider from this force's station in Oliva (Valencia). SDEEP01 exhibited neither damages nor visible defects.</p> <p>Upon return home, SDEEP01 was put on the bench, revised and considered ready to go for a second deployment within this GF-MR-0029 mission. Gathered dataset was fully backed-up and uploaded to SOCIB's FTP for subsequent processing and diffusion via SOCIB's public repository. Although its scientific value is considered to be null.</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)<br>IMEDEA (in-kind contribution of material and infrastructures)  |
| <b>Glider Software Version</b>                                     | v7.13 Acomms  |
| <b>Data Retrieval</b><br>(real-time [ RT ] / delayed-mode [ DM ] ) | Real-time sub-set via satellite link every 6 hours every day<br>Delayed-mode direct download of full gathered data sets   |
| <b>Compass Calibration</b><br>(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>                                    | 53.077Ah (reading from 187.116Ah to 240.193Ah)  |
| <b>Data Available From</b>   | <a href="http://thredds.socib.es/thredds/dodsC/auv/glider/sdeep01-scb_sldeep001/L1/2014/dep0014_sdeep01_scb-sldeep001_L1_2014-07-03_data_dt.nc">http://thredds.socib.es/thredds/dodsC/auv/glider/sdeep01-scb_sldeep001/L1/2014/dep0014_sdeep01_scb-sldeep001_L1_2014-07-03_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)

