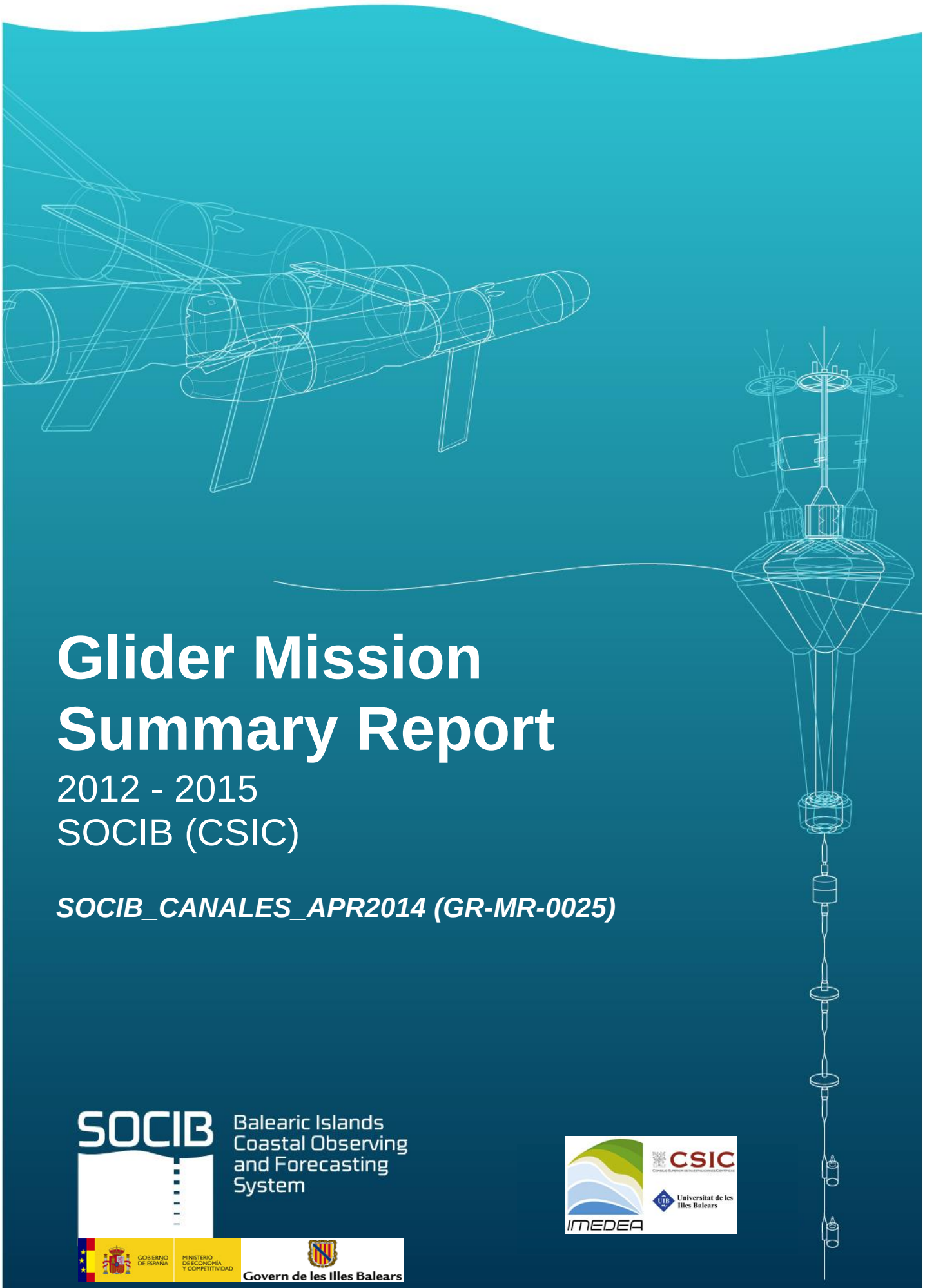

Glider Mission Summary Report

2012 - 2015

SOCIB (CSIC)

SOCIB_CANALES_APR2014 (GR-MR-0025)

SOCIB Balearic Islands Coastal Observing and Forecasting System

GOBIERNO DE ESPAÑA · MINISTERIO DE ECONOMÍA Y COMPETITIVIDAD · Govern de les Illes Balears

IMEDEA · CSIC · Universitat de les Illes Balears

Mission Name	*SOCIB_CANALES_APR2014 (GR-MR-0025)*
Platform Model	*Slocum 1000 G2*
Platform ID / Name / WMO Code	*U243 / SDEEP00 / 68457*
Related Platforms / Missions	
Start Date	*2014-04-07*
End Date	*2014-05-09*
Total Days *33*	**Total distance (Km / Nm)** *579 / 313*
Survey Area (NODC or SDN region)	*Mallorca and Eïvissa Channels (Western Mediterranean sea)*
Objective(s)	*Establishing the variability of the N/S exchange of water masses that occur through the Ibiza Channel.* *Sampling a standard transect across the Ibiza Channel several times using physical and biogeochemical sensors.* *No greater than 1 month gap in between consecutive iterations.* *The Mallorca Channel is also sampled when operationally practical.*
Scientific Sensors (name & model / serial_number / calibration date)	*GPCTD -SBE- / sn 0064 / 19-May-2011* *FLNTU -WetLabs- / sn2280 / 15-Jul-2011* *OPTODE -Aandera- / sn 1410 / 11-Feb-2011 (*)* *(*): sensor borrowed from U244 due to U243's foil breach*
Number of Profiles	*1103 (CTD), 318 (FLNTU), 318 (OXY)*
Significant Events	*Glider with new Lithium factory pack on-board (2nd ever used)* *First deployment attempt aborted due to glider being excessively light (bad ballasting)* *Traced path altered by intense currents near Valencia's waypoint (Eïvissa-Valencia transect).* *Very important deviation from program route during return home trip (N-E of Eïvissa) prior to start of Eïvissa-Mallorca transect.* *Return home transect (Eïvissa-Mallorca) not completed. Glider recovered by SOCIB-R/V while executing RADMED cruise and coinciding with SDEEP00 at a given location of this transect.*
Mission Summary	*This mission stands for the 2nd iteration of the Canales Campaign 2014, carried out by SOCIB's glider SDEEP00 (Unit 243).* *For this mission, U243 was mounting U244's GPCTD and FLNTU sensors for technical reasons.* *Deployment operation needed two attempts. First one failed due to an incorrect ballasting (glider too light, could not sink). Second attempt was executed perfectly. Both of them from SOCIB-I Professional RIB vessel with 2-member crew. SDEEP00 was successfully launched at location N39.5173° E2.1922°.* *Overall performance of mechanical and sampling devices was excellent. Only quite a few oddities coming from DIGIFIN, DE_PUMP and IRIDIUM devices. Couple of warnings from GPS. Navigation and traced route were also adequate although it was affected by strong currents near Valencia's shore. Additionally, when almost leaving Eïvissa waters, during the return trip, SDEEP00 suffered a super deviation from route (17Km to South) that conditioned the execution of the Eïvissa-Mallorca transect. Communications were stable and fluent allowing the transmission of both near-real-time data and telemetry, including ARGOS messages. However, 4 missing calls were registered.* *During the time the glider remained deployed 4 Eïvissa-Valencia and 1 Mallorca-Eïvissa channels were surveyed. No Eïvissa-Mallorca channels since SDEEP00 was directly recovered by SOCIB-R/V. This vessel was in the vicinity of the Glider on May-9th@10am,utc while performing RADMED cruise. Consequently, SOCIB disposes of precise CTD casts near-by Glider's sampling for inter-comparison and calibration. Recovery took place at location N39.3996° E2.0434°.* *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.*

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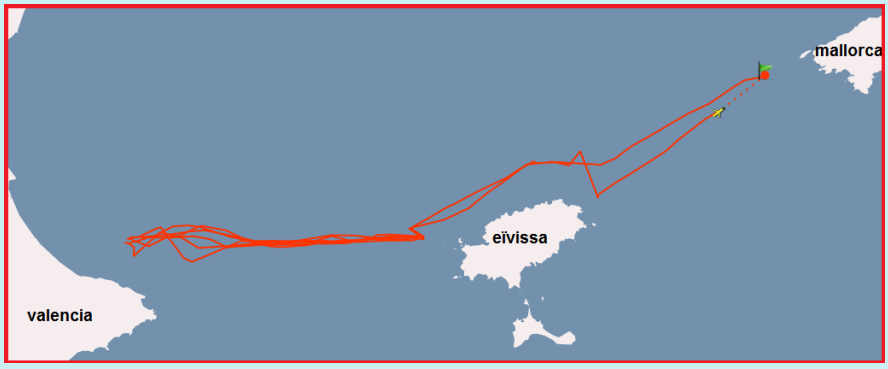
Principal Investigator (e-mail or contact phone/address)	*Prof. Joaquim Tintoré* *jtintore@socib.es (+34 971439821)*
Institute	*SOCIB in collaboration with IMEDEA*
Project Affiliation (web-site)	*http://www.socib.eu*
Partnership / Participation	*SOCIB (internal long-term project of sustained monitoring line)* *IMEDEA (in-kind contribution of material and infrastructures)*
Glider Software Version	*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)	*Compass calibration after installing new battery pack*
Battery Type	*Manufacturer's original Lithium batt.pack (700Ah-nominal cap.)*
Battery Consumption (Ah)	*163.752Ah (reading from 3.406Ah to 167.158Ah)*
Data Available From	*http://thredds.socib.es/thredds/dodsC/auv/glider/sdeep00-scb_sldeep000/L1/2014/dep0011_sdeep00_scb-sldeep000_L1_2014-04-07_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)



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