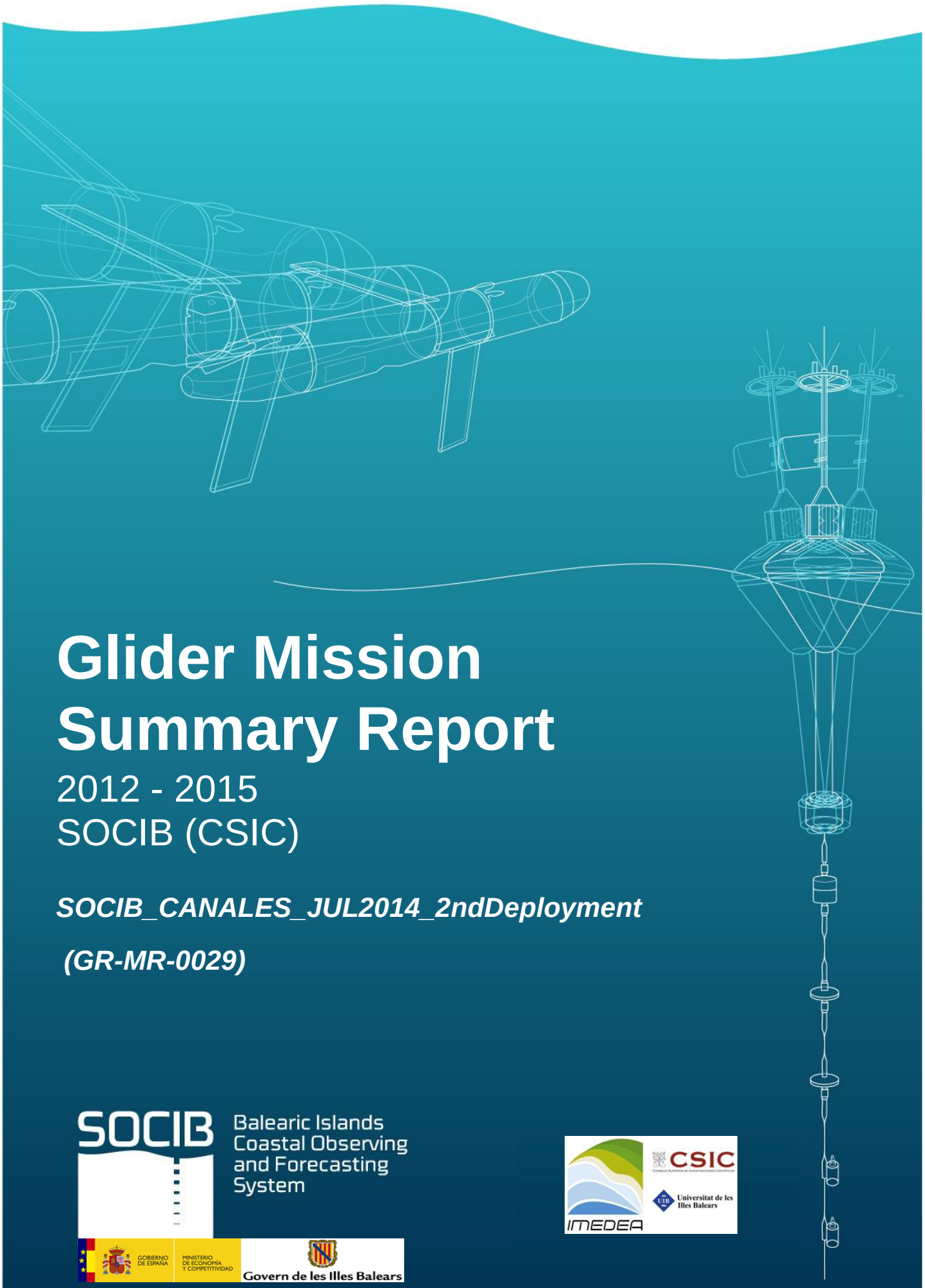


Glider Mission Summary Report

2012 - 2015
SOCIB (CSIC)

SOCIB_CANALES_JUL2014_2ndDeployment

(GR-MR-0029)

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_JUL2014_2ndDeployment (GR-MR-0029)*		
Platform Model	*Slocum 1000 G2*		
Platform ID / Name / WMO Code	*U244 / SDEEP01 / 68967*		
Related Platforms / Missions			
Start Date	*2014-07-21*		
End Date	*2014-08-05*		
Total Days	*16*	**Total distance (Km / Nm)**	*330 / 178*
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 0107 / 01-Apr-2012* *FLNTU -WetLabs- / sn2279 / 15-Jul-2011* *OPTODE -Aandera- / sn 1410 / 11-Feb-2011*		
Number of Profiles	*480 (CTD), 273 (FLNTU), 273 (OXY)*		
Significant Events	*Glider with Lithium factory pack on-board.* *GF-MR-0029 resume after fisherman's abduction.* *Survey area limited to Eïvissa-Valencia channel.* *Altimeter raising false bottom hits persisted, although it could be gotten around again.*		
Mission Summary	*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.* *For this mission, U244 was mounting U243's GPCTD and FLNTU sensors for technical reasons.* *This second launching operation was executed by a 2-member field-team on board SOCIB-I Professional RIB. Due to tactical reasons (summer holidays ahead), U244 was released directly from Eïvissa's N-E coast (N38.9969° E1.0996°). Field-team stood-by in St.Antoni (Eïvissa) for two days until the glider proved to perform optimally.* *During the execution of this mission 4 Eïvissa-Valencia transects were completed successfully.* *Overall performance of mechanical and sampling devices was acceptable but the ALTIMETER (providing false bottom hits that caused the Glider to inflect too soon to the surface and not reaching to the channel bottom). There also were some oddities coming from DIGIFIN, IRIDIUM and GPS. After some 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.* *Recovery took place also in Eïvissa waters by the same field-team and vessel. It happened in N38.9946° E1.0975°.* *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.*		

Parc Bit. Ctra. Valldemossa, Km 7,4 · Edifici Naorte, Bloc A, Planta 2ª, Porta 3 · 07121 Palma (Illes Balears, Espanya) · Tel. +34 971 43 99 98 · Fax +34 971 43 99 79

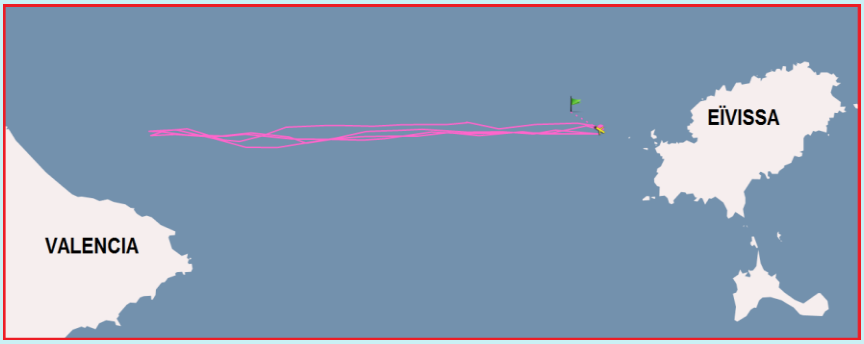
Principal Investigator (e-mail or contact phone/address)	*Prof. Joaquim Tintoré* *jtintore@socib.es (+34 971439821)*
Institute	*SOCIB in collaboration with IMEDEA*
Project Affiliation (web-site)	*http://www.socib.eu*
Partnership / Participation	*SOCIB (internal long-term project of sustained monitoring 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)	*Error measurement revealed no necessity to perform a compass calibration*
Battery Type	*Manufacturer's original Lithium batt.pack (700Ah-nominal cap.)*
Battery Consumption (Ah)	*87.421Ah (reading from 243.674Ah to 331.095Ah)*
Data Available From	*http://thredds.socib.es/thredds/dodsC/auv/glider/sdeep01-scb_sldeep001/L1/2014/dep0015_sdeep01_scb-sldeep001_L1_2014-07-21_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)



Parc Bit. Ctra. Valldemossa, Km 7,4 · Edifici Naorte, Bloc A, Planta 2ª, Porta 3 · 07121 Palma (Illes Balears, Espanya) · Tel. +34 971 43 99 98 · Fax +34 971 43 99 79