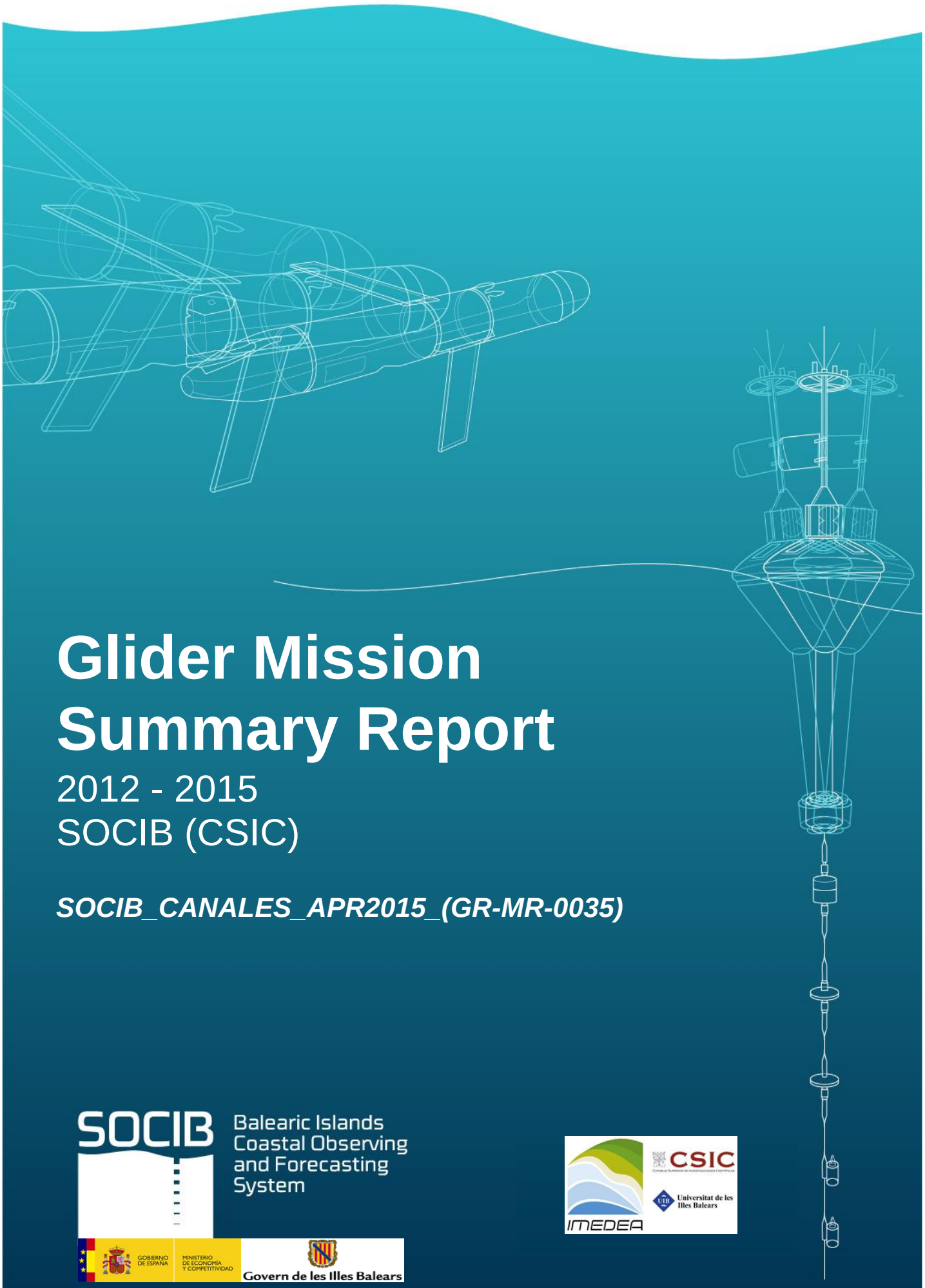

Glider Mission Summary Report

2012 - 2015
SOCIB (CSIC)

SOCIB_CANALES_APR2015_(GR-MR-0035)

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_APR2015(GR-MR-0035)*		
Platform Model	*Slocum 1000 G1*		
Platform ID / Name / WMO Code	*U132 / IDEEP02 / 68966*		
Related Platforms / Missions			
Start Date	*2015-04-22*		
End Date	*2014-05-28*		
Total Days	*37*	**Total distance (Km / Nm)**	*766 / 414*
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.* *Testing SAFT Lithium Primary battery pack with in-house ballasting chassis*		

Scientific Sensors (name & model / serial_number / calibration date)	*GPCTD -SBE- / sn 0195 / 10-Apr-2013 (*)* *FLNTUSLC -WetLabs- / sn3710 / 06-Oct-2014* *OPTODE -Aandera- / sn 0994 / 21-Nov-2014* *(*) Spare CTD in substitution of failing sn0129(CanalesMAR2014 gf-mr-0034)*
Number of Profiles	*1455 (CTD), 445 (FLNTU), 445 (OXY)*
Significant Events	*Second mission of IDEEP02 after extensive refurbishment and calibration. (First mission ended prematurely due to a CTD-sn0129 pressure sensor defect).* *G1 glider powered by Lithium batteries.* *Deployment using 7-m RIB launched from Port d'Andratx (SOCIB vessels not available).* *Mission aborted due to the Glider interrupting its execution due to various and non-coherent device errors (at the end, it was all probably a low battery level).*
Mission Summary	*This mission stands for the 3rd iteration of the Canales Campaign 2015, carried out by SOCIB's glider IDEEP02 (Unit 132).* *After the CTD error experienced during the last mission, IDEEP02 was mounting a spare CTD for this one. The optical sensors were the same as the ones used in GF-MR-0034.* *Launching operation (in N39.5339° E2.2562°) was executed by a 2-member field-team on board IMEDEA's 7m RIB launched from Port d'Andratx (SOCIB vessels not available).* *During the execution of this mission 4 Eïvissa-Valencia and 1 Mallorca-Eïvissa transects were completed successfully.* *Overall performance of mechanical and sampling devices was satisfactory. There were some oddities coming from DIGIFIN, IRIDIUM and GPS. Additionally, Communications were stable and fluent allowing proper near-real-time data sending and ARGOS messaging. Navigation was correct although IDEEP02 suffered the influence of light currents in the Eïvissa-Valencia channel.* *During the 5th Eïvissa-Valencia transect IDEEP02 reported having interrupted the sampling due to a series of device errors that were not very coherent (m_depth and m_vacuum not updating, low battery remaining,…).* *Recovery took place in N38.9865° E0.7477°, as part of an emergency operation, by a 2-member field-team on board SOCIB-I 9m Professional RIB without which such a fast response could never have been possible.* *Upon completion, IDEEP02 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.* *The intensive analysis of the telemetry revealed that only the low-battery error made any sense. The others were probably a consequence of some electronics devices not functioning properly due to an excessively low voltage.*

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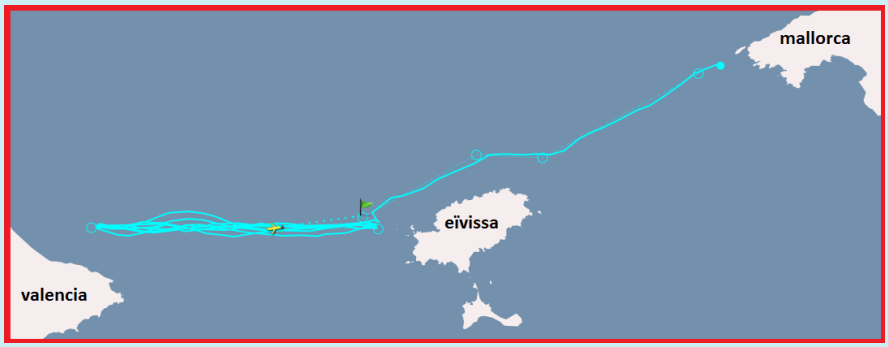
Principal Investigator (e-mail or contact phone/address)	*Prof. Joaquim Tintoré* *jtintore@socib.es (+34 971439821)*
Institute	*SOCIB in collaboration with IMEDEA*
Project Affiliation (web-site)	*http://www.socib.eu*
Partnership / Participation	*SOCIB (internal long-term project of sustained monitoring line)* *IMEDEA (in-kind contribution of material and infrastructures)*
Glider Software Version	*v7.14 Echo*
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	*SAFT Lithium batt. pack with custom ballast (453Ah-nominal cap.)*
Battery Consumption (Ah)	*182.085Ah (reading from 132.854Ah to 314.939Ah)*
Data Available From	*http://thredds.socib.es/thredds/dodsC/auv/glider/ideep02-ime_sldeep002/L1/2015/dep0007_ideep02_ime-sldeep002_L1_2015-04-22_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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