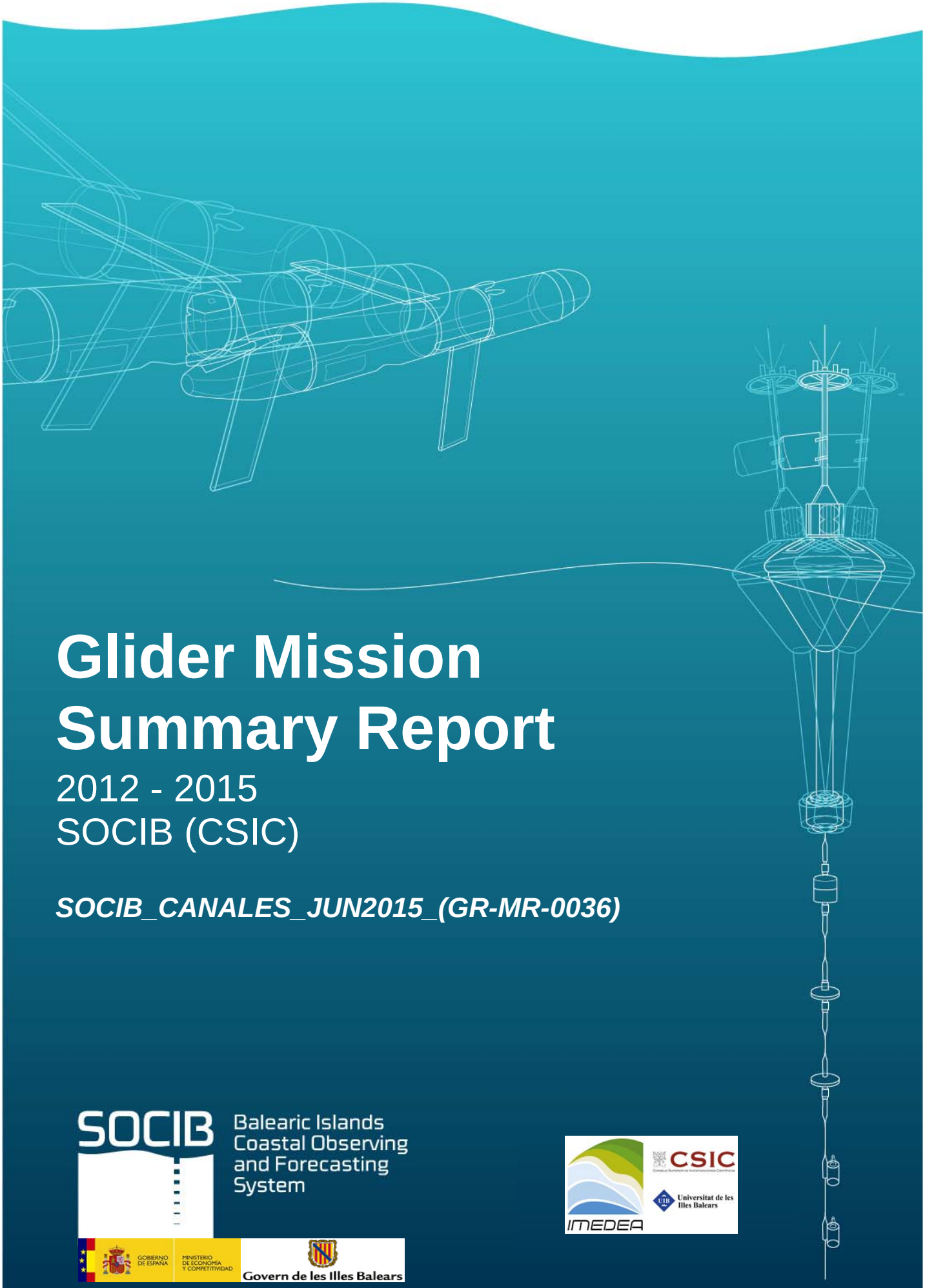

Glider Mission Summary Report

2012 - 2015
SOCIB (CSIC)

SOCIB_CANALES_JUN2015_(GR-MR-0036)

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_JUN2015(GR-MR-0036)*
Platform Model	*Slocum 1000 G2*
Platform ID / Name / WMO Code	*U243 / SDEEP00 / 68457*
Related Platforms / Missions	*SOCIB-R/V (Canales July 2015 Mission)*
Start Date	*2015-06-18*
End Date	*2014-07-15*
Total Days *28*	**Total distance (Km / Nm)** *615 / 332*
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 overall performance of U243 during the first 48hr. of mission being first deployment since factory refurbishment*

Scientific Sensors (name & model / serial_number / calibration date)	*GPCTD -SBE- / sn 0064 / 24-Nov-2014* *FLNTUSLC -WetLabs- / sn3711 / 22-Oct-2014* *OPTODE -Aandera- / sn 1409 / 18-Jun-2014*
Number of Profiles	*1131 (CTD), 433 (FLNTU), 432 (OXY)*
Significant Events	*First mission executed by SDEEP00 (U243) since it returned from undergoing a factory refurbishment and re-calibration. Last mission was in June-2014.* *G2 glider powered by TWR Lithium battery pack. The same pack it left unfinished when shipped for factory refurbishment.* *2 Mission interruptions due to hydraulic pump errors.* *>200 oddities from hydraulic pump during a specific mission segment.* *OPTODE 3835 oddities in 4 segments due to PROGLET-ERROR 558*
Mission Summary	*This mission stands for the 4th iteration of the Canales Campaign 2015 and, in this case, carried out by SOCIB's glider SDEEP00 (Unit 243). This mission is also the first one after the factory refurbishment that took place in 2014. Specially motivated by the water-leak problems suffered during this unit's attempt to execute Canales-JUN2014 (gf-mr-0028).* *Launching operation (in N39.2968° E2.5039°) was executed by a 2-member field-team on board SOCIB-I 9m Professional RIB departing from CALANOVA harbor. This location is in front of Palma's Bay and that distance to the start of Mallorca chan. was to be used as initial 48hrs. of performance test prior to scientific mission.* *During the execution of this mission 4 Eïvissa-Valencia and 2 Mallorca-Eïvissa transects were completed successfully.* *Overall performance of mechanical and sampling devices was satisfactory. Only DE_PUMP behaved oddly (2 aborts and 240 oddities in segment #03210054). DIGIFIN and IRIDIUM devices exhibited acceptable oddities. Additionally, Communications were stable and fluent allowing proper near-real-time data sending and ARGOS messaging. Navigation was very adjusted to commanded route and there were no evidences of currents (nor other origin) deviation. Finally, OPTODE sensor caused multiple oddities due to Proglet Error #558 (segments #03180008, #03180040, #03180041 and #03190011).* *Recovery took place in N39.4553° E2.2134°, by a 2-member field-team on board SOCIB-I 9m Professional RIB departing from CALANOVA harbor. Glider was intercepted after having completed the mission at 6am,lt and cruising to Palma's bay.* *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.* *This glider, with the same battery pack, will attempt to perform the 5th iteration of the Canales Campaign 2015 and therein will sit on the shelf until the moment of entering that preparation.*

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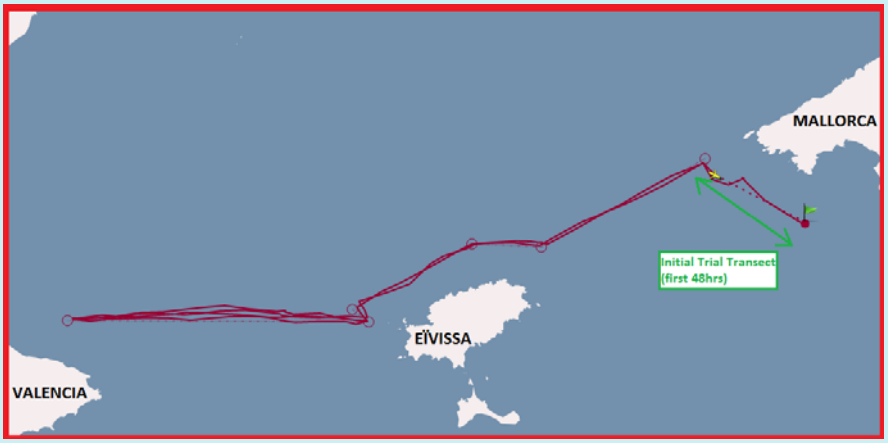
Principal Investigator (e-mail or contact phone/address)	*Prof. Joaquim Tintoré* *jtintore@socib.es (+34 971439821)*
Institute	*SOCIB in collaboration with IMEDEA*
Project Affiliation (web-site)	*http://www.socib.eu*
Partnership / Participation	*SOCIB (internal long-term project of sustained monitoring 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 24 hours every day during 12am,lt control-call. Delayed-mode direct download of full gathered data sets*
Compass Calibration (specify procedure)	*Error measurement during mission preparation revealed no necessity to perform a compass calibration*
Battery Type	*ELECTROCHEM factory Lithium Pack (700Ah-nominal cap.)*
Battery Consumption (Ah)	*147.361Ah (reading from 333.671Ah to 481.032Ah)*
Data Available From	*http://thredds.socib.es/thredds/dodsC/auv/glider/sdeep00-scb_sldeep000/L1/2015/dep0014_sdeep00_scb-sldeep000_L1_2015-06-18_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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