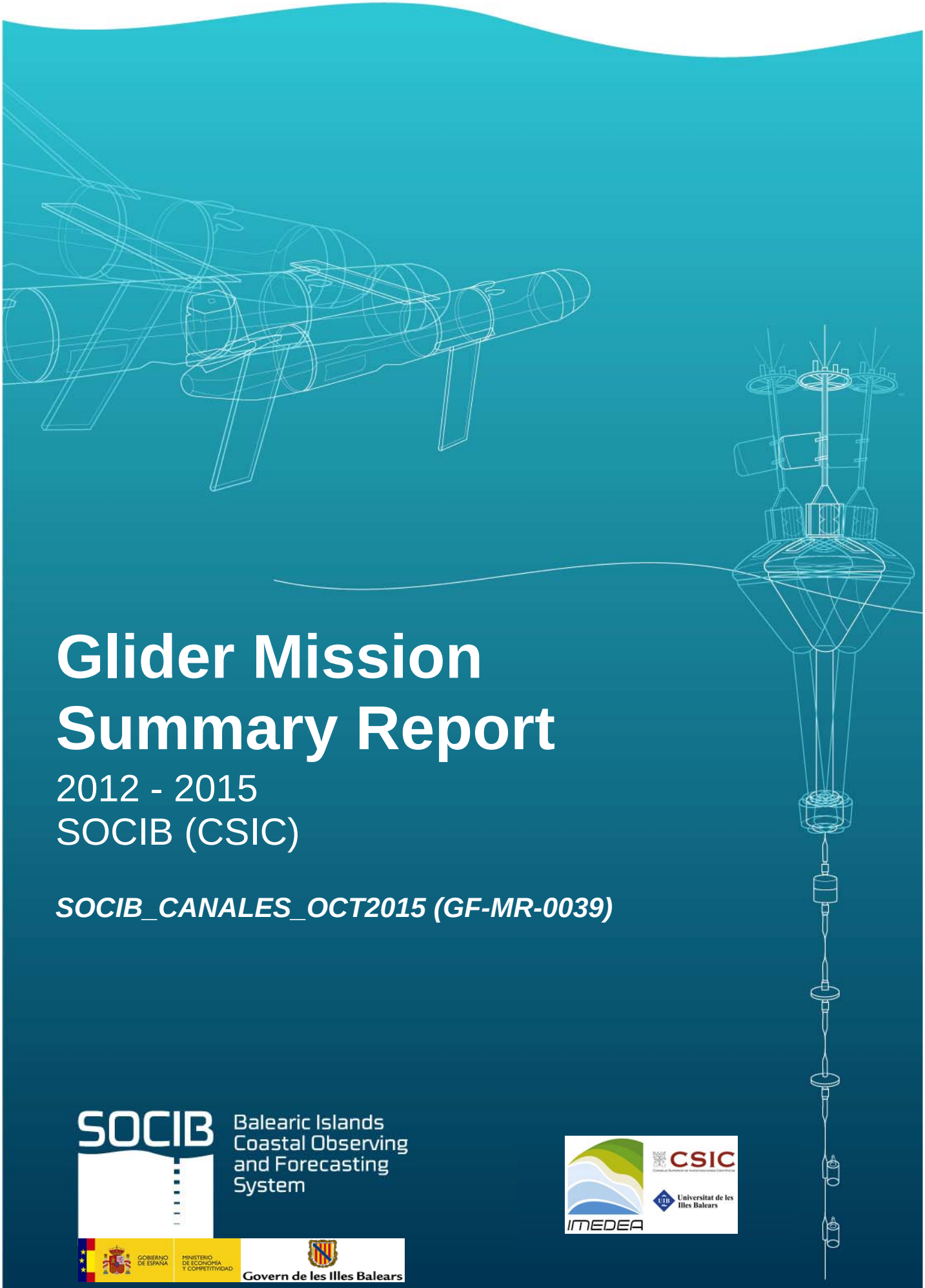

Glider Mission Summary Report

2012 - 2015

SOCIB (CSIC)

SOCIB_CANALES_OCT2015 (GF-MR-0039)

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_OCT2015(GF-MR-0039)*		
Platform Model	*Slocum 1000 G1*		
Platform ID / Name / WMO Code	*U132 / IDEEP02 / 68966*		
Related Platforms / Missions	*ABACUS2 (SDEEP00), Surface drifter OGS-SVP002*		
Start Date	*2015-10-05 (2nd attempt)*		
End Date	*2014-10-27*		
Total Days	*22*	**Total distance (Km / Nm)**	*439 / 237*
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)	***CTD-SBE / sn 0195 / 2013-04-10*** *Note: Previous CTD (sn129) throwing negative pressure reading. Wires from transducer were reversely soldered* ***FLNTUSLK -WLabs- / sn 3710 (former sn 988) / 2014-10-06*** *Note: Factory upgraded passing from sn 988 to sn 3710* ***OPTODE_3830 -Aandera- / sn 0841 / 2013-05-01*** *Note: Borrowed from U184. U132's original needs repair*
Number of Profiles	*769 (CTD), 333 (FLNTU), 333 (OXY)*
Significant Events	*4th mission in 2015 by IDEEP02 (Unit 132) and concurrent to U243's ABACUS2 mission.* *First deployment attempt (SOCIB-R/V) aborted due to rough sea-state and wind (which made the buoy to pull and prevent glider from sinking during pre-mission tests)* *It was impossible to reach Valencia's waypoint after the two attempts. Glider's velocity decreased as approaching and the vehicle was pushed South. Probably due to currents.* *Excellent overall performance (no mission aborts, no device errors).* *Spanish time was adjusted from UTC+2 to UTC+1 during the last part of this mission*
Mission Summary	*This mission stands for the 6th iteration of the Canales Campaign 2015 and, in this case, carried out by IMEDEA's glider IDEEP02 (Unit 132).* *Effective launching operation (in N39° 30.538' E2° 10.485') was executed by a 2-member field-team on board SOCIB-I 9m Professional RIB departing from CALANOVA harbor. This location is at SW of Dragonera Island (Mallorca) and coincides with Canales standard initial waypoint.* *During the execution of this mission 4 Eïvissa-Valencia and 1 Eïvissa-Mallorca transects were completed successfully. Although strong currents in front of Valencia imposed a hit-a-wpt distance of 3Km instead of the habitual 1Km.* *Overall performance of mechanical and sampling devices was satisfactory. Compared to previous missions undertaken by this unit, very few oddities were detected (digifin:460, ocean_pressure:243, iridium:133, coulomb:38, pitch_motor:10 and science_super:1), only 1 harmless warning (gps:1) and no errors at all.. Additionally, Communications were stable and fluent allowing proper near-real-time data sending and ARGOS messaging. Navigation was acceptable but with strong evidences of currents that supposedly prevented the glider to hit the Valencia wpt the two times it was attempted.* *Recovery took place in N38.9974° E1.0657°, by a 3-member field-team on board SOCIB-I 9m Professional RIB availing a maintenance operation of the Ibiza-channel Socib Buoy. The extraction operation was performed extremely quickly and efficiently although anticipating the glider achievement of the 2nd Valencia-Eïvissa transect finalization (3,2Km away from target wpt). It was done this way so the field-team could have enough time to get back to Mallorca and not catching the important storm that was approaching them rapidly after servicing the buoy. Upon arrival to Mallorca, 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.* *This glider is not intended to be deployed again until the 2nd Canales mission of Campaign 2016.*

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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 glider, material and infrastructures)*
Glider Software Version	*v7.14 Echo (nav), 3.18 (sci)*
Data Retrieval (real-time [RT] / delayed-mode [DM])	*Real-time sub-set via satellite link every 24 hours every day during 12am,It 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	*Manufacturer Alkaline Pack (143Ah of nominal capacity)*
Battery Consumption (Ah)	*112.149Ah (reading from 2.035Ah to 114.184Ah)*
Data Available From	*http://thredds.socib.es/thredds/dodsC/auv/glider/ideep02-ime_sldeep002/L1/2015/dep0008_ideep02_ime-sldeep002_L1_2015-10-05_data_dt.nc*
Full Mission Report From	*glidertech@socib.es*
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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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