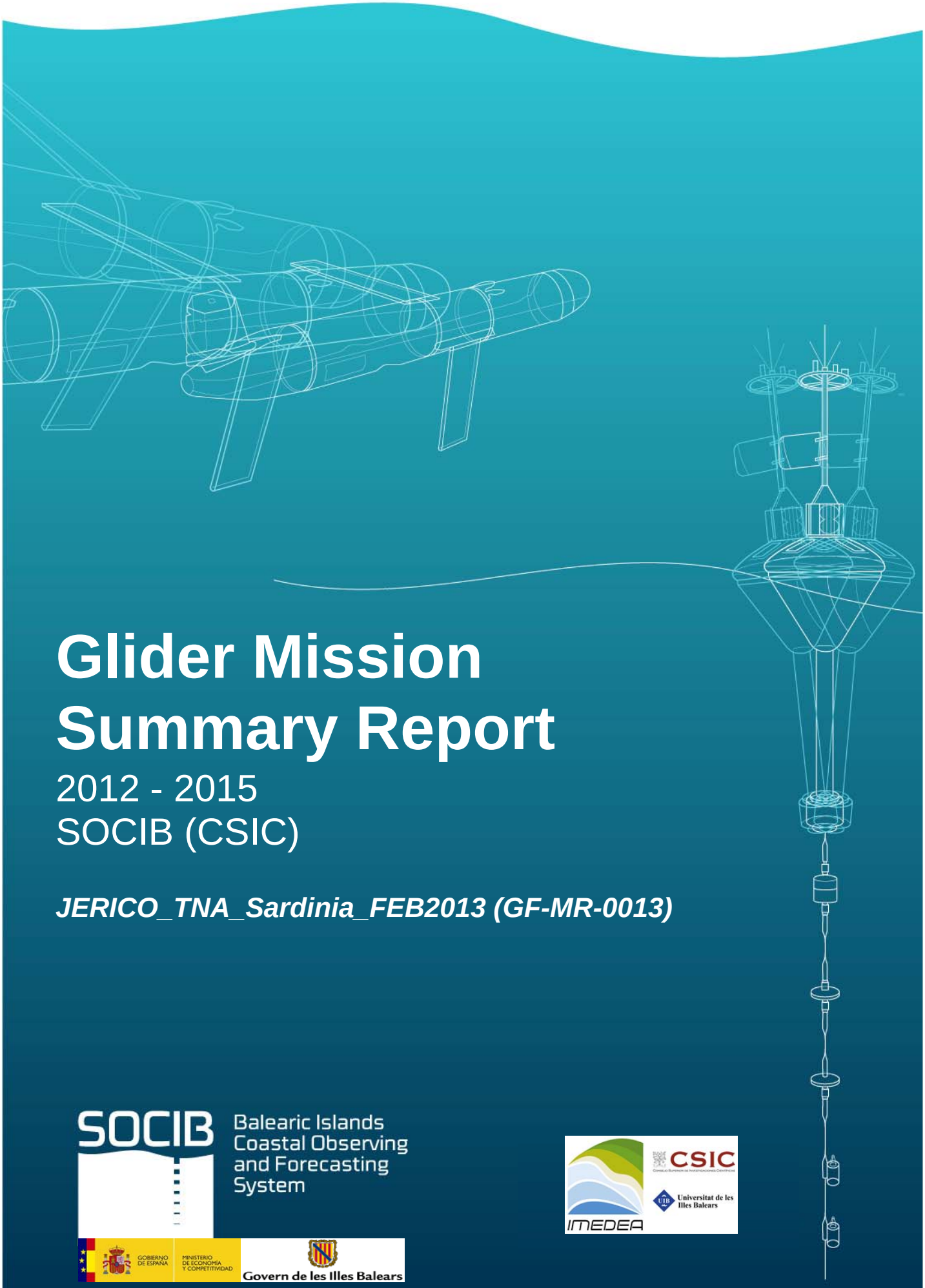

Glider Mission Summary Report

2012 - 2015

SOCIB (CSIC)

JERICO_TNA_Sardinia_FEB2013 (GF-MR-0013)

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	*JERICO_TNA_Sardinia_FEB2013 (GF-MR-0013)*
Platform Model	*Sea-Glider 1000m (iRobot version)*
Platform ID / Name / WMO Code	*U541 / SDEEP03 / 68969*
Related Platforms / Missions	
Start Date	*2013-01-31*
End Date	*2013-03-16*
Total Days *45*	**Total distance (Km / Nm)** *780 / 421*
Survey Area (NODC or SDN region)	*Menorca to Sardinia channel (Western Mediterranean sea)*
Objective(s)	*the proposed research wants to identify the physical properties of the surface and intermediate water masses between Baleares and Sardinia with the aim of:* *i) study the variability of the physical properties of surface and intermediate water masses between the Algerian and the Provencal sub-basins;* *ii) evaluate the transport of water, salt and heat through the area and verify if the interannual variability of the surface and intermediate water masses is due to climatic changes;* *iii) validate the operational hydrodynamic numerical model of the western Mediterranean (http://www.seaforecast.cnr.it/en/fl/wmed.php) through the use of in-situ and satellite data*

Scientific Sensors (name & model / serial_number / calibration date)	*CT-Sail -SBE- / sn 0173 / 28-Mar-2011 (*)* *BBFL2VMT -WetLabs- / sn0777 / 13-Oct-2010* *OPTODE -Aandera- / sn 0470 / 15-Dec-2010* *(*) with Paine's pressure sensor sn264065 calibrated 01-Feb-2011*
Number of Profiles	*452 (CTD), 452 (FLNTU), 452 (OXY)*
Significant Events	*First scientific mission using SOCIB's Sea-Glider U541.* *First mission in the frame of JERICO-TNA program.* *Initial deployment failed due to 24V. battery issues.* *Deployment departing from Maó (Menorca).* *Recovery in front of Porto-Colom (Mallorca).*
Mission Summary	*This mission stands for the 1st iteration of the Menorca-Sardinia JERICO-TNA mission, carried out by SOCIB's glider SDEEP03 (Unit 541).* *Launching operation (in N39.8439 E4.407°) was executed by a 2-member field-team displaced to Maó (Menorca). Used vessel was a 7-m RIB property of IMEDEA.* *During the execution of this mission 2 Menorca-Sardinia and 1 Menorca-Mallorca (travel for recovery) transects were completed successfully.* *Overall performance of mechanical and sampling devices was satisfactory. There were not relevant issues with any particular devices. Additionally, Communications were stable and fluent allowing proper near-real-time data sending. External ARGOS tag behaved as expected and messages were received by the CLS servers. Navigation was correct over the Men-Sar channel track although SDEEP03 suffered the influence of light currents especially in the middle of that channel. For logistical reasons, upon return to Menorca, SDEEP03 was sent to the coast of Mallorca over the 500m isobath.* *Recovery took place in N39.3409° E3.3843° by a 2-member field-team on board SOCIB-I 9m Professional RIB.* *Upon completion, SDEEP03 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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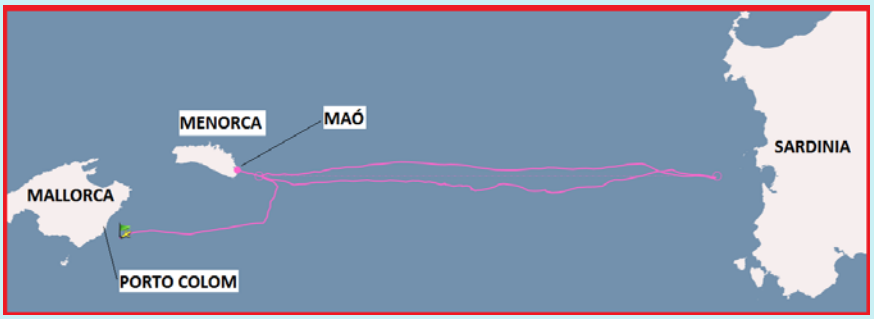
Principal Investigator (e-mail or contact phone/address)	*Dr. Alberto Ribotti – CNR, GOO, Oristano – Alberto.ribotti@cnr.it (+39.0783.229137)*
Institute	*CNR-GOO, Oristano (Italy)*
Project Affiliation (web-site)	*http://www.jerico-fp7.eu/tna*
Partnership / Participation	*CNR-GOO-Oristano (JERICO-TNA call solicitor&granted institution)* *CSIC-IMEDEA (accessed infrastructure and service provider)* *SOCIB (in-kind contribution of material and infrastructures)*
Glider Software Version	*V66.06*
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	*Electrochem's Lithium Prim. 24V (mechanics) & 10V (electronics)*
Battery Consumption (Ah)	*24,34Ahr (24V pack) & 41,72Ahr (10V pack)*
Data Available From	*http://thredds.socib.es/thredds/dodsC/auv/glider/sdeep03-scb_sgdeep003/L1/2013/dep0002_sdeep03_scb-sgdeep003_L1_2013-01-31_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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