



# Glider Mission Summary Report

2012 - 2015  
SOCIB (CSIC)

*JERICO\_TNA\_Sardinia\_OCT2013 (GF-MR-0020)*



Balearic Islands  
Coastal Observing  
and Forecasting  
System



MINISTERIO  
DE ECONOMÍA  
Y COMPETITIVIDAD



Govern de les Illes Balears



<b>Mission Name</b>		JERICO_TNA_Sardinia_OCT2013 (GF-MR-0020)	
<b>Platform Model</b>		Sea-Glider 1000m (iRobot version)	
<b>Platform ID / Name / WMO Code</b>		U538 / SDEEP02 / 68965	
<b>Related Platforms / Missions</b>			
<b>Start Date</b>		2013-10-15	
<b>End Date</b>		2013-11-29	
<b>Total Days</b>	46	<b>Total distance (Km / Nm)</b>	909 / 491
<b>Survey Area</b> (NODC or SDN region)		Menorca to Sardinia channel (Western Mediterranean sea)	
<b>Objective(s)</b>	<i>the proposed research wants to identify the physical properties of the surface and intermediate water masses between Balears and Sardinia with the aim of:</i> <i>i) study the variability of the physical properties of surface and intermediate water masses between the Algerian and the Provencal sub-basins;</i> <i>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;</i> <i>iii) validate the operational hydrodynamic numerical model of the western Mediterranean (<a href="http://www.seaforecast.cnr.it/en/fl/wmed.php">http://www.seaforecast.cnr.it/en/fl/wmed.php</a>) through the use of in-situ and satellite data</i>		
<b>Scientific Sensors</b> (name & model / serial_number / calibration date)		CT-Sail -SBE- / sn 0168 / 04-Jun-2013 (*) BBFL2VMT -WetLabs- / sn0778 / 26-Jul-2013 OPTODE -Aandera- / sn 0464 / 03-Jun-2013  (*) with Paine's pressure sensor sn264060 calibrated 04-Jun-2013	
<b>Number of Profiles</b>		675 (CTD), 364 (FLNTU), 364 (OXY)	
<b>Significant Events</b>		First mission after U538's factory refurbishment. Second iteration of the JERICO-TNA mission Menorca-Sardinia granted with reference CALL 1_8. Deployment and Recovery in front of Porto-Colom (Mallorca). First Sea-Glider mission after departure of Sea-Glider expert at IMEDEA.	
<b>Mission Summary</b>		<i>This mission stands for the 2nd iteration of the Menorca-Sardinia JERICO-TNA mission, carried out by SOCIB's glider SDEEP02 (Unit 538).</i> <i>Launching operation was performed in front of the coast of Porto-Colom (Mallorca, in N39.3316° E3.4228 °) by a 2-member field-team on board SOCIB-I Professional RIB.</i> <i>During the execution of this mission 2 Menorca-Sardinia and 2 Menorca-Mallorca (travel for recovery) transects were completed successfully.</i> <i>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 and Mall-Men track although SDEEP02 suffered the influence of light currents especially in the Men-Sar channel. For logistical reasons, upon return to Menorca, SDEEP02 was sent to the coast of Mallorca over the 500m isobath.</i> <i>Recovery took place in N39.3422° E3.3861° by a 2-member field-team on board SOCIB-I 9m Professional RIB.</i> <i>Upon completion, SDEEP02 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.</i>	

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<b>Institute</b>	<i>CNR-GOO, Oristano (Italy)</i>
<b>Project Affiliation</b> (web-site)	<i><a href="http://www.jerico-fp7.eu/tna">http://www.jerico-fp7.eu/tna</a></i>
<b>Partnership / Participation</b>	<i>CNR-GOO-Oristano (JERICO-TNA call solicitor&amp;granted institution) CSIC-IMEDEA (accessed infrastructure and service provider) SOCIB (in-kind contribution of material and infrastructures)</i>
<b>Glider Software Version</b>	<i>V66.06</i>
<b>Data Retrieval</b> (real-time [ RT ] / delayed-mode [ DM ] )	<i>Real-time sub-set via satellite link every 6 hours every day Delayed-mode direct download of full gathered data sets</i>
<b>Compass Calibration</b> (specify procedure)	<i>Error measurement revealed no necessity to perform a compass calibration</i>
<b>Battery Type</b>	<i>Electrochem's Lithium Prim. 24V (mechanics) &amp; 10V (electronics)</i>
<b>Battery Consumption (Ah)</b>	<i>48.698Ahr (24V pack) &amp; 39.892Ahr (10V pack)</i>
<b>Data Available From</b>	<i><a href="http://thredds.socib.es/thredds/dodsC/auv/glider/sdeep02-scb_sgdeep002/L1/2013/dep0003_sdeep02_scb-sgdeep002_L1_2013-10-15_data_dt.nc">http://thredds.socib.es/thredds/dodsC/auv/glider/sdeep02-scb_sgdeep002/L1/2013/dep0003_sdeep02_scb-sgdeep002_L1_2013-10-15_data_dt.nc</a></i>
<b>Full Mission Report From</b>	<i><a href="mailto:glidertech@socib.es">glidertech@socib.es</a></i>
<b>Technical Contact</b>	<i><a href="mailto:glidertech@socib.es">glidertech@socib.es</a></i>

**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)

