



Glider Mission Summary Report

2012 - 2015
SOCIB (CSIC)

*JERICO_TNA_Abacus_Sep2014_4thDeployment
(GF-MR-0030)*



Balearic Islands
Coastal Observing
and Forecasting
System



MINISTERIO
DE ECONOMÍA
Y COMPETITIVIDAD



Govern de les Illes Balears



Mission Name		JERICO_TNA_Abacus_Sep2014_4thDeployment (GF-MR-0030)	
Platform Model		Slocum 1000m G2	
Platform ID / Name / WMO Code		U244 / SDEEP01 / 68967	
Related Platforms / Missions		R/V-Tethys-II, EUDOXUS & IDEEP02 / SOMBA, MUSICS & CANALES	
Start Date		2014-11-18	
End Date		2014-12-19	
Total Days	32	Total distance (Km / Nm)	712.3 / 385.1
Survey Area (NODC or SDN region)		Algerian BASIN (Western Med.)	
Objective(s)		<p>1.To identify the physical and biological properties of the surface and intermediate water masses between Balearic islands and Algerian coasts;</p> <p>2.To understand sub-basins dynamics and the complex interactions due to eddies;</p> <p>3.To assess the ocean description capabilities of several satellite products when approaching coastal areas, also comparing them to glider and ship collected in situ data.</p>	
Scientific Sensors (name & model / serial_number / calibration date)		<p>GPCTD -S.B.E.- / sn 0107 / 04-Jan-2012</p> <p>FLNTUSLK -WetLabs- / sn2279 / 15-Jul-2015</p> <p>OPTODE_5013 -Aandera- / sn 1410 / 10-Feb-2011</p>	
Number of Profiles		<p>425 (CTD), 425 (FLNTU), 425 (OXY)</p> <p>(majority of the profiles at full depth range - 20m to 975m-)</p>	
Significant Events		<ul style="list-style-type: none"> - W-shaped track planed to accomplish Saral/Altika swath sampling - Launching location: same as 1st and 2nd deployments - Altimeter false hits occurring again - Successful glider-sampling of 2 Saral/Altika satellite swaths #773 and #329 - Abacus glider joined IMEDEA's IDEEP02 while waiting for a dual recovery that was finally executed without a problem 	
Mission Summary		<p>Fourth/Last deployment attempt within ABACUS mission (in the frame of the JERICO-TNA program).</p> <p>Deployment location: North-West of 'Cabrera' island (N39° 14.062' E2° 26.756').</p> <p>The first leg was executed without adverse issues. The altimeter detected false bottom hits at the beginning but it was not a problem once the glider entered deep-diving mode. On Nov-26th the first Saral-Altika over-flight occurred near N39° 35.760' E3° 07.770'. At the end of this leg, no influence of Algerian Current was noticed and a 'W' intermediate transect executed to move from current Saral/Altika track #773 to the next one (#329).</p> <p>The second leg coincided with Saral/Altika trace #329 and a second over-flight of this satellite (over the glider) occurred near location N39° 54.462' E3° 23.328' on Dec-12th.</p> <p>Upon completion of the second leg, SDEEP01 was commanded to navigate to the launching waypoint and to navigate in-line with a 'Canales glider', IDEEP02, while waiting for a double recovery that took place on Dec-19th.</p> <p>That extraction marked the end of the water-works of ABACUS-2014 and, after the in-lab mission conclusion, all data was uploaded to SOCIB's FTP to be processed and publicly diffused for further scientific analysis.</p>	

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Institute	PARTHENOPE (Univ. of Napoli, Italy)
Project Affiliation (web-site)	http://www.jerico-fp7.eu/tna
Partnership / Participation	PARTHENOPE (JERICO-TNA call solicitor&granted institution) CSIC-IMEDEA (accessed infrastructure and service provider) SOCIB (in-kind contribution of material and infrastructures)
Glider Software Version	v7.13 (Navigation), v3.17 (Science)
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)	Heading error measurement. Coefficient re-calibration not needed
Battery Type	Manufacturer's original Lithium batt.pack (720Ah-nominal cap.)
Battery Consumption (Ah)	134.975Ah (187.643Ah up to 322.618Ah of battery consumption)
Data Available From	http://thredds.socib.es/thredds/catalog/auv/glider/sdeep01-scb_sldeep001/L2/2014/catalog.html
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)

