



Glider Mission Summary Report

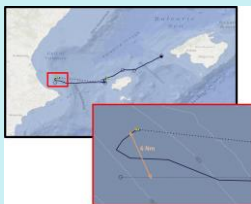
CAMPAIGN 2018
SOCIB GLIDER FACILITY

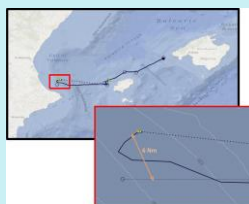
SOCIB_CANALES_JAN2018 (GF-MR-0067)



Balearic Islands
Coastal Observing
and Forecasting
System



Mission Name		SOCIB_CANALES_JAN2018 (GF-MR-0067)	
Platform Model		Slocum 1000 G2	
Platform ID / Name / WMO Code		U567 / SDEEP04 / 68997	
Related Platforms / Missions		None	
Start Date		2018-01-15	
End Date		2018-02-05	
Total Days	20.8	Total distance (Km / Nm)	430.7/ 232.5
Survey Area (NODC or SDN region)		Mallorca and Eivissa Channels (Western Mediterranean Sea)	
Objective(s)	<ul style="list-style-type: none">Establishing the variability of the N/S exchange of water masses that occur through the Ibiza Channel(IC). Sampling standard transects 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)		<ul style="list-style-type: none">CTD -SBE- / sn 9289 / 23/feb/2015FLNTU -WetLabs- / sn 3934 / 25/mar/2015OPTODE -Aandera- / sn 0411 / 21/jul/2014 (calibration sheets available upon request to glidertech@socib.es)	
Number of Profiles		658 (CTD), 591 (FLNTU), 658 (OXY)	
Significant Events	<ul style="list-style-type: none">Leak on first deployment daySome hard currents during Eivissa channelEmergency recovery due premature battery waste		
Mission Summary	<p><u>Preparation</u> phases were executed between 21/12/2017 to 02/01/2018</p> <p>The first deployment failed due to a leak at the very first mission day. A pressure test was performed during the preparation stage with good results. No explanation for this leak.</p> <p>A second deployment was tried in 10/01/2018 but cancelled due to weather conditions.</p> <p>Finally a third deployment was successfully done on 15/01/2018. <u>Launching operation</u> was executed by 1 ETD and 1 GF facility members on board SOCIB I. Glider was released in N N 39°29.2446' E 02°10.6941' at 2018-01-15 11:00:00-utc. The deployment was an operative and tactical success. Pilot was onshore. Glider executed successful test dives prior to the first survey dive.</p> <p>17/01/2018 new sampling strategy. CTD and OXY was changed from climbing and diving sampling to just diving.</p> <p>25/01/2018 Some drifting currents</p> <div></div>		



03/02/2018 SCI not reporting. Solved

05/02/2018 Abort No-Input. The origin of the abort was a premature battery wasting. The voltage read was 4-5 volts aprox. After that, glider was set in low power drift mode for its recovery. The totally consumption was 108.518 Ah (reading from 128.65to 237.168Ah). The battery nominal capacity is 310Ah.

Recovery operation

(06/02/2018) was executed by 2 GF facility members on board of Sasemar vessel. Read recovery report for more information Glider was recovered in 38°53.739N 00°23.599 E at 11:33-utc.



Principal Investigator (e-mail or contact phone/address)	<ul style="list-style-type: none"> Prof. Joaquim Tintoré jtintore@socib.es (+34 971439821)
Institute	SOCIB in collaboration with IMEDEA
Project Affiliation (web-site)	http://www.socib.eu
Partnership / Participation	<ul style="list-style-type: none"> SOCIB IMEDEA (in-kind contribution of infrastructures)
Glider Software Version	Nav : v7.18 Acomms, Payload: 3.17
Data Retrieval (real-time [RT] / delayed-mode [DM])	<ul style="list-style-type: none"> RT: sub-set via satellite link every 8 hours every day. DM: direct download of full gathered data sets (flash-cards backup)
Compass Calibration (specify procedure)	Compass error was avoided. See previous report 20171114_U567_CEM_GF-MR-0066_SOCIB-EXT-ABACUS4-NOV2017_sdeep04.pdf
Battery Type	Eltec lithium batteries (310Ah-nominal capacity)
Battery Consumption (Ah)	108.518 (reading from 128.65to 237.168Ah)
Data Available From	http://thredds.socib.es/thredds/dodsC/auv/glider/sdeep04-scb_sldeep004/L0/2018/dep0011_sdeep04_scb-sldeep004_L0_2018-01-15_data_dt.nc
Further Details	glidertech@socib.es

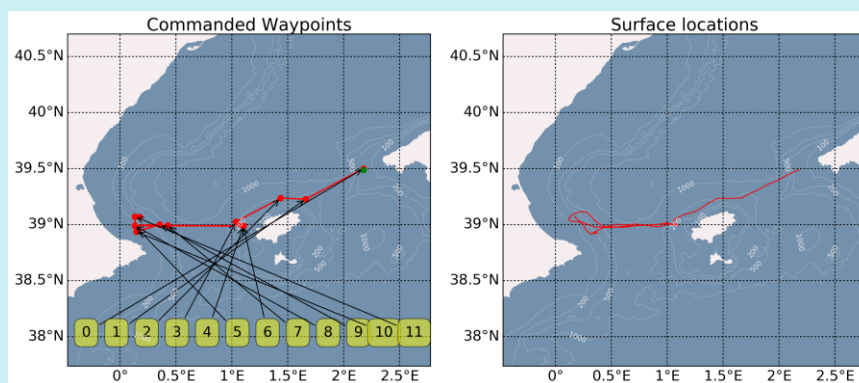
Figure 1

(Map providing general overview of Survey Area)

On-line Track

**Figure 2**

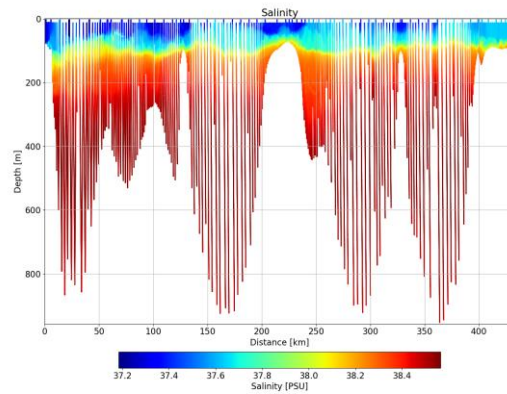
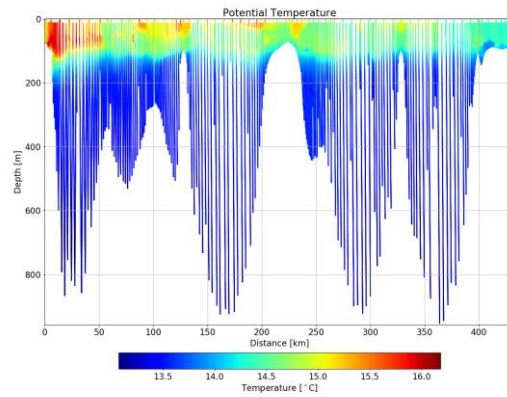
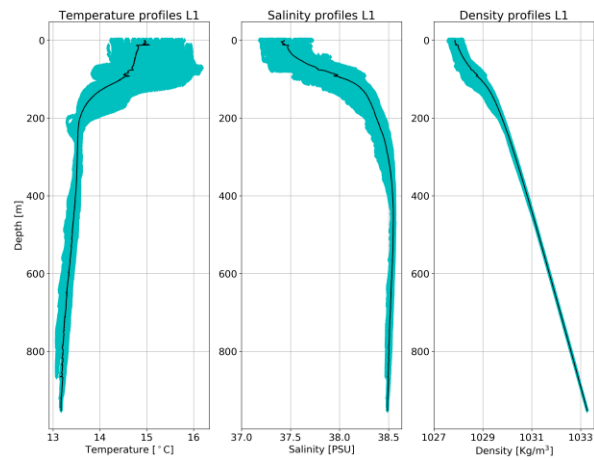
(Map providing detailed overview of Survey Area and traced Flight Path with surface points if possible)

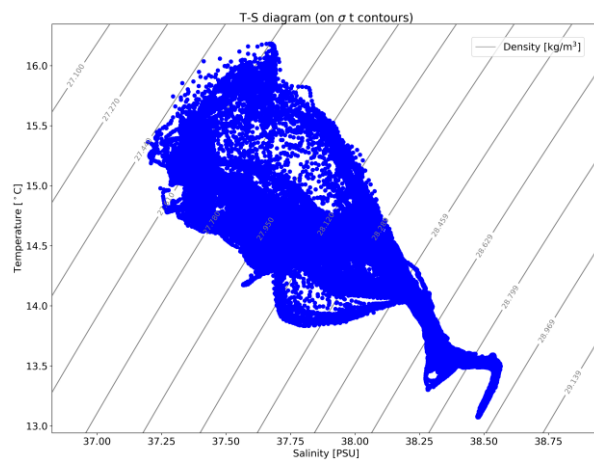
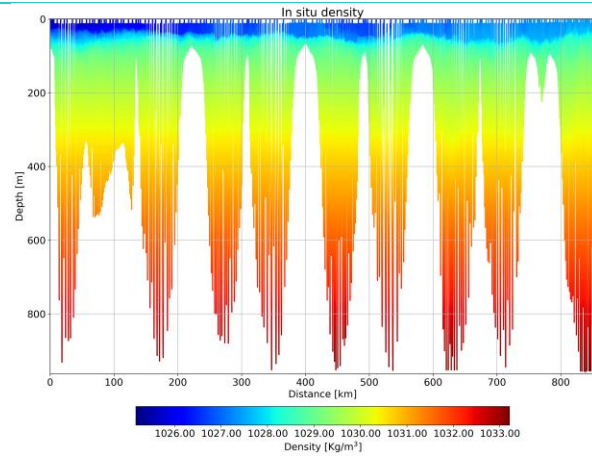


Scientific Preliminary Review

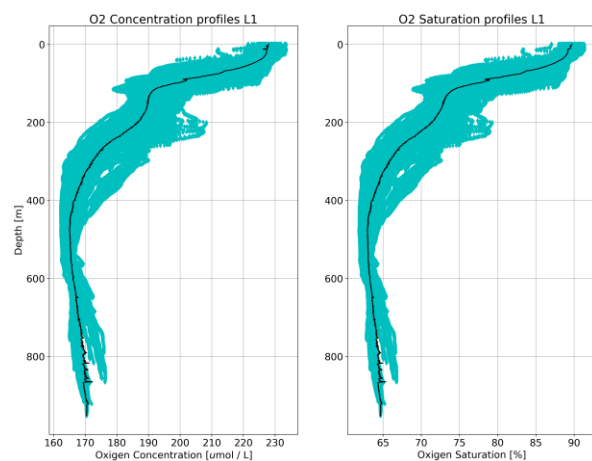
CTD

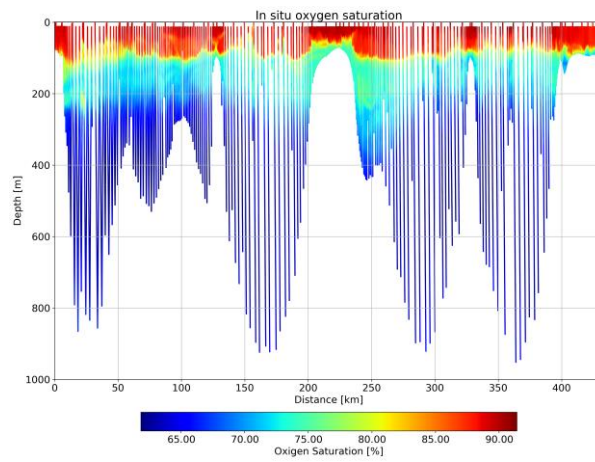
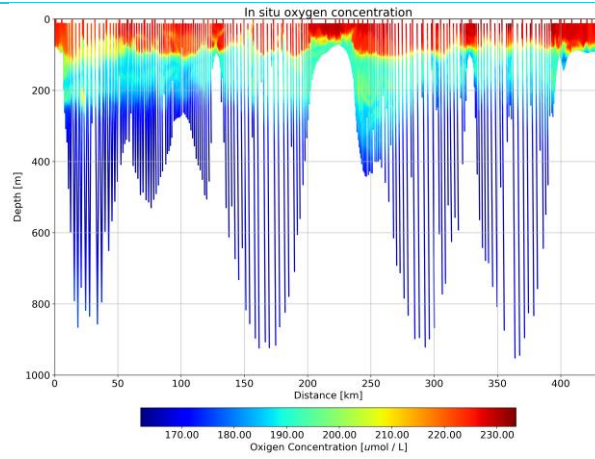
(Compilation of preliminary post-processing plots provided by SOCIB's data-center glider-toolbox and processing services. Contact data.center@socib.es for further info. Plots available through DAPP)



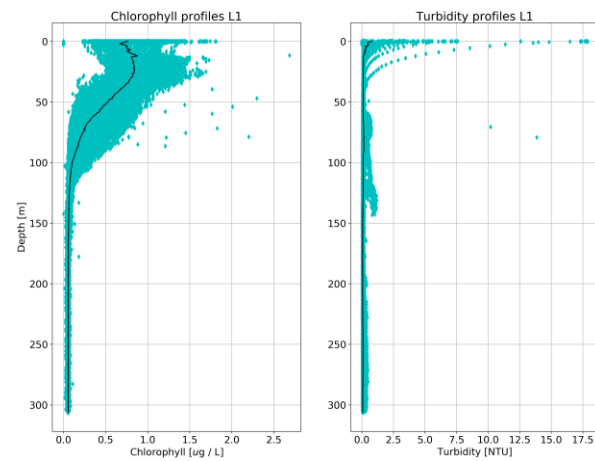


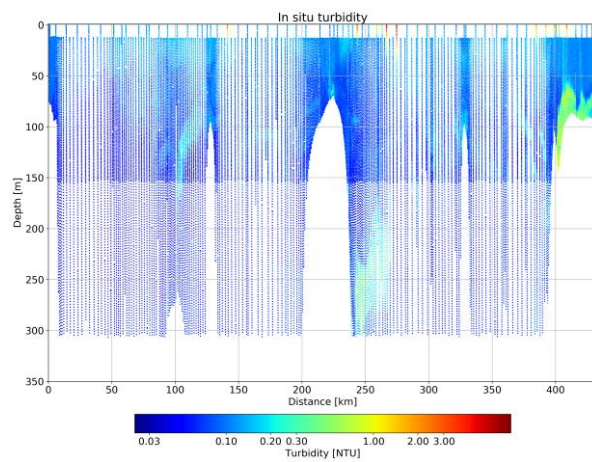
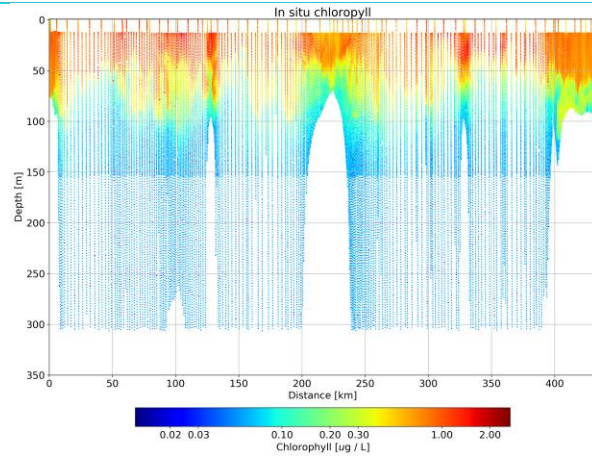
OXYGEN





TURBIDITY & CHLOROPHYLL





CURRENTS

