



Quick Look Cruise Report

Document No.: 3202-00502

Deployment Name: Irminger Sea 5 Deployment		Cruise Plan Doc. No.: 3202-00501	Cruise Plan Rev.: 1-00	Cruise Plan Date: 2018-05-30
Ship Name, Cruise Number: R/V Neil Armstrong AR 30-03		Cruise Dates: 5 June – 24 June, 2018		
Cruise Report Reviewed & Approved By				
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				Date 2018-07-05

Cruise Description

The Irminger 5 Deployment was the fifth deployment of the OOI Global Irminger Sea Array. Principal objectives were to: 1) deploy the Global Irminger Surface Mooring (GI01SUMO-00005), the Global Hybrid Profiler Mooring (GI02HYPM-00005), the Global Irminger Flanking Moorings A and B (GI03FLMA-00005, GI03FLMB-00005); 2) recover the 4 existing moorings (GI01SUMO-00004, GI02HYPM-00004, GI03FLMA-00004, GI03FLMB-00004); 3) deploy 1 Open Ocean Glider; and 4) collect in-situ observations from the ship, including CTD profiles and water samples, and EK-80 data to assess functionality of the platforms.

Ancillary objectives were to: 1) deploy 4 OSNAP moorings, carry out CTD casts at and between the OSNAP mooring sites, and recover 2 OSNAP sound sources; 2) deploy one adapted OOI glider to include an oxygen sensor to measure the atmosphere simultaneously with the ocean oxygen content; and 3) obtain samples from the shipboard underway system and shallow CTD casts to measure particulate organic carbon to investigate environmental lipidomics in upper ocean suspended and sinking particles.

(NOTE: Local time is UTC.)

Issue/Objective	Description	Results	Comments / Corrective Action
CTD Cast #001	Test CTD cast w/ acoustic releases	Successful CTD cast from 08:10 to 09:45 on 6 June 2018. Cast location: 62° 46.314' N, 28° 39.368' W (at max depth)	Water depth 1858 m. Cast to 1000 m, ~20-minute soak. Acoustic releases 46257, 50124, 50672. Water sampling for Lipids.
CTD Cast #002 & Cast #002b	Test CTD cast w/ acoustic releases	Successful CTD cast from 13:14 to 14:40 on 6 June 2018. CTD shutdown/lost comms at ~858 m on descent (someone hit the SIGNAL SOURCE button on the deck box in the lab), restarted on upcast at 786 m as Cast #002b. Cast location: 62° 29.867' N, 29° 47.898' W (at max depth)	Water depth 1956 m. Cast to 1000 m, ~20-minute soak. Acoustic releases 34817, 45608, 46367. Water sampling for Lipids & BCP.
CTD Cast #003	OSNAP cal-dip cast	Successful CTD cast from 08:15 to 11:33 on 7 June 2018. Cast location: 60° 53.389' N, 35° 21.359' W (at max depth)	Water depth 3000 m. Cast to 2950 m. 15 MicroCAT CTDs
CTD Cast #004	OSNAP cal-dip cast	Successful CTD cast from 15:10 to 17:57 on 7 June 2018. Cast location: 60° 38.249' N, 36° 30.843' W (at max depth)	Water depth 2997 m. Cast to 2500 m. 15 MicroCAT CTDs
GI01SUMO-00004 Inspection	Check for signs of/status of "missing" Surface Mooring	05:00 on 8 June 2018. No visual sign of the surface buoy. Acoustic release S/N 50453 successfully pinged (2646 m slant range). No sign of the mooring using the EK-80 (18 kHz)	Mooring went silent on 12 October 2017.
GI01SUMO-00005 Deployment	Deploy Global Irminger Surface Mooring	Successful deployment from 9:57 to 17:21 on 8 June 2018. Surveyed Anchor Position: 59° 55.9769' N, 39° 27.9296' W Depth: 2693 m (corrected)	WT "Fuse blown" error prior to deployment; WT hubs removed and shaft spun with a hand drill to confirm charging functionality. FDCHP damaged on deployment.
CTD Cast #005	CTD Cast at GI01SUMO site center	Successful CTD cast from 18:10 to 20:30 on 8 June 2018. Cast location: 59° 56.458' N, 39° 31.442' W (at max depth)	Water depth 2701 m. Cast to 2500 m. OOI water sampling down to 1500m, BCP water sampling down to 2500 m, and Lipids.
GI02HYPM-00004 Evaluation	Acoustically download subset of data from the currently deployed GI02HYPM mooring.	Successful downloaded 40 kilobytes from the last couple of days on 8 June 2018.	The CTDMO was at the expected 150 m depth and the profiler was still profiling. Successfully used the ship's transducers.

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Issue/Objective	Description	Results	Comments / Corrective Action
GI02HYPM-00005 Deployment	Deploy Global Hybrid Profiler Mooring	Successful deployment from 08:25 to 12:55 on 9 June 2018. Surveyed Anchor Position: 59° 58.1841' N, 39° 29.4003' W Depth: 2669 m (corrected)	No issues.
CTD Cast #006	CTD Cast at GI02HYPM site center	Successful CTD cast from 13:34 to 16:10 on 9 June 2018. Cast location: 59° 57.435' N, 39° 30.899'W (at max depth)	Water depth 2696 m. Cast depth 2650 m (altimeter 23 m). OOI & BCP/Lipids water sampling. Acoustic releases (46259, 46267, 50778) tested at 2500 m. Ship drifted 2.08 nm south of starting spot during CTD.
Glider 453 Deployment	Deployment of Open Ocean Glider 453	Successful deployment at 19:19 on 9 June 2018. Deployment ship position: 59° 55.3708' N, 39° 18.0742' W.	No issues on deployment. Deployed off the fantail using A-frame and a tugger reeved through the center block.
Glider 363 Deployment	Deployment of Open Ocean Glider 363	Successful deployment at 19:49 on 9 June 2018. Deployment ship position: 59° 55.1989' N, 39° 18.1906' W.	No issues on deployment. Deployed off the fantail using A-frame and a tugger reeved through the center block.
EK80 Survey	EK80 survey past GI02HYPM-00004 and GI02HYPM-00005	22:25 on 9 June 2018 to ~01:00 on 10 June 2018.	~5 nm line past both deployed HYPM moorings. Speed ~ 2 kts; ADCP, Knudsen, speed log and fathometer turned off. Started with 5 minutes of passive data.
GI03FLMA-00005 Deployment	Deploy Global Flanking Mooring A	Successful deployment from 08:12 to 13:59 on 10 June 2018. Surveyed Anchor Position: 59° 46.0830' N, 39° 50.5510' W Depth: 2700 m (corrected)	No inductive comms to anything above the EM Chain (sphere bio-package – CTDMO, DOSTA, FLORT, PHSEN); those instruments are self-powered and self-logging. EM Chain was nicked, but tested okay on shore.
CTD Cast #007	CTD Cast at GI03FLMA site center	Successful CTD cast from 14:33 to 16:52 on 10 June 2018. Cast location: 59° 46.280' N, 39° 51.350' W (at max depth)	Water depth 2720 m. Cast depth 2650 m (altimeter 44 m). OOI & BCP/Lipids water sampling. Acoustic releases (46255, 50459) tested at 2200 m.
GI03FLMA-00004 Evaluation	Acoustically download subset of data from the currently deployed GI03FLMA mooring.	Successfully downloaded 40 kilobytes from the last couple of days on 10 June 2018.	Used the ship's transducers. Top CTDMO is at ~37 m; no secondary controller or ADCP data (must have stopped/died at some point during the deployment).
GI03FLMB-00005 Deployment	Deploy Global Flanking Mooring B	Successful deployment from 08:09 to 14:35 on 11 June 2018. Surveyed Anchor Position: 59° 42.8561' N, 39° 18.7976' W Depth: 2829 m (corrected)	The lower 1000 m shot for the OSNAP instruments was not marked. Had to hand measure to mount the CTDMO/VELPT pairs at 1000, 700, 400, and 100 m above the seafloor.
CTD Cast #008	CTD Cast at GI03FLMB site center	CTD cast started at 15:10 on 11 June 2018. Cast location: 59° 43.088' W, 39° 21.282' N (at max depth) CTD cast aborted. CTD recovered and wire cut along with recovery of the FLMB-4 mooring. CTD on deck at 20:51.	Knudsen SSV changed from 1500 to 1488 to provide better depth readings (good to about 4 m). Water depth 2820 m. Cast to 2793 m (altimeter 24 m). OOI & BCP/Lipids water sampling. OSNAP acoustic releases tested. Drifted west during CTD; snagged on FLMB-4.
GI03FLMB-00004 Recovery	Recovery of the CTD rosette and Global Flanking Mooring B	Successful recovery on 11 June 2018. Mid-water and lower releases were fired at 19:36 and 19:42. Top half recovery completed at 23:55 on 11 June 2018. Bottom half recovery completed at 02:00 on 12 June 2018.	After the CTD was recovered and the CTD wire cut to free the mooring, the mooring recovery proceeded as normal with no issues.
MET Comparison	Ship vs. GI01SUMO-00005 MET comparison	Successful MET comparison from 04:00 to 11:30 on 12 June 2018. Ship held station ~0.25 nm from buoy.	Winds below 12 kts. (The CTD was re-terminated during this time.)
CTD Cast #009	CTD Test cast	CTD cast from 17:58 to 18:24 on 12 June 2018.	Water depth 2802 m. Cast depth 133 m. Lipids water sampling

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Issue/Objective	Description	Results	Comments / Corrective Action
CTD Cast #010	CTD Cast in vicinity of deployed gliders	CTD cast from 19:47 to 21:37 on 12 June 2018. Cast location: 59° 50.588' N, 39° 11.981' W (at max depth)	Water depth 2799 m. Cast depth 998 m. OOI & BCP/Lipids water sampling.
OSNAP M4 Deployment	Deployment of OSNAP mooring	Successful deployment from 08:10 to 10:56 on 13 June 2018 Surveyed anchor position: 59° 40.637' N 38° 34.121' W Depth: 2984 m (corrected)	
CTD Cast #011	OSNAP CTD at M4	CTD cast from 13:07 to 15:32 on 13 June 2018. Cast location: 59° 39.565' N, 38° 36.822' W (at max depth)	Water depth 2974 m. Cast depth 2946 m (altimeter 25 m). OSNAP and Lipids water sampling.
CTD Cast #012	OSNAP CTD at CB4 (between FLMB and M4)	CTD cast from 16:56 to 19:08 on 13 June 2018. Cast location: 59° 40.825' N, 38° 56.484' W (at max depth)	Water depth 2915 m. Cast depth 2897 m (altimeter 13 m). OSNAP and Lipids water sampling.
MET Comparison	Ship vs. GI01SUMO-00005 MET comparison	Successful MET comparison overnight from 22:30 on 13 June to 07:00 on 14 June. Ship held station ~0.25 nm from buoy.	Winds below 15 kts.
GI01SUMO-00004 Recovery	Recovery of Global Surface Mooring from the seafloor (no buoy)	Successful recovery on 14 June 2018. Release fired at 08:02. Recovery completed at 16:20.	CTDMOs, CTDBP-F, DOSTA, ADCP instrumentation full ocean depth rated and survived. All other instrumentation imploded or flooded. Cause of buoy loss appears to be HW between the U-Joint and the buoy.
GI03FLMA-00005 Evaluation	Acoustically download data from the newly deployed GI03FLMA mooring.	Successfully downloaded ~33 kilobytes from the last couple of days on 14 June 2018.	The inductive line is noisy so data from the CTDs is not coming through clearly. The inductive line above the EM Chain has not worked since deployment.
CTD Cast #013	CTD Test cast	CTD cast from 20:15 to 20:37 on 14 June 2018. Cast location: 59° 46.815' N, 39° 49.611' W	Cast depth 130 m. Primary CTD pump was swapped out prior to cast. Water sampling for Lipids.
GI03FLMA-00004 Recovery	Recovery of Global Flanking Mooring A	Successful recovery on 15 June 2017 Mid-water release fired at 07:59, top half recovery completed at 09:23. Lower release fired at 09:51, bottom half recovery completed at 12:49.	No issues on recovery.
GI03FLMA-00005 Evaluation	Acoustically downloaded a subset of data from the newly deployed GI03FLMA mooring.	Successfully downloaded ~36 kB	Noisy inductive line. No good data recovered.
CTD Cast #014	OSNAP CTD at CAB (between FLMA and FLMB)	CTD cast from 15:50 to 18:27 on 15 June 2018. Cast location: 59° 44.790' N, 39° 35.131' W (at max depth)	Water depth 2761 m. Cast depth 2750 m (altimeter 7 m). OSNAP and Lipids water sampling. Tested OSNAP acoustic releases.
GI02HYPM-00004 Recovery	Recovery of Global Hybrid Profiler Mooring	Successful recovery on 16 June 2018 Release fired at 06:32. Recovery completed at 09:50.	No issues.
GI02HYPM-00005 Evaluation	Acoustically downloaded data from the newly deployed GI02HYPM mooring.	Successfully downloaded ~92 kB of data from the last week on 16 June 2018.	The mooring is fully functional. WFP has 6 profiles so far (180 to 2550 m). CTDMO depth is varies between 165 and 239 dbar (08:00 on 15 June). ZPLSG instruments both functional.
CTD Cast #015	CTD Cast at GI03FLMB site center	CTD cast from 13:49 to 16:20 on 16 June 2018. Cast location: 59° 43.087' N, 39° 20.368' W (at max depth)	Water depth 2824 m. Cast depth 2800 m (18 m). OOI & BCP/Lipids water sampling. Tested OSNAP acoustic releases.
GI03FLMB-00005 Evaluation	Acoustically download data from the newly deployed GI03FLMB mooring.	Successfully downloaded ~45 kB of data from the last week on 16 June 2018.	Mooring is good; all instruments sending data (except for self-logging PHSEN). Top CTDMO is between 34 and 36 dbar.

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Issue/Objective	Description	Results	Comments / Corrective Action
OSNAP M1 Deployment	Deployment of OSNAP mooring	Successful deployment from 08:07 to 11:25 on 17 June 2018. Surveyed anchor position: 59° 54.154' N, 41° 06.762' W Depth: 2086 m (corrected)	No issues.
CTD Cast #016	CTD near newly deployed M1 mooring	CTD cast from 11:56 to 13:46 on 17 June 2018. Cast location: 59° 52.715' N, 41° 08.308' W (at max depth)	Water depth 2055 m (Knudsen SSV=1482). Cast depth 2043 m (altimeter 8 m). OSNAP and Lipids water sampling.
OSNAP SS4	Recovery of OSNAP Sound Source Mooring 4	Successfully recovered 17:36 to 19:34 on 17 June 2018.	No issues.
OSNAP M2 Deployment	Deployment of OSNAP mooring	Successful deployment from 08:03 to 10:50 on 18 June 2018. Surveyed anchor position: 59° 51.417' N, 40° 41.741' W Depth: 2436 m (corrected)	No issues.
CTD Cast #017	CTD near newly deployed OSNAP M2 mooring	CTD cast from 12:59 to 15:08 on 18 June 2018. Cast location: 59° 50.890' N, 40° 42.528' W (at max depth)	Water depth 2488 m (Knudsen SSW=1484). Cast depth 2452 m (altimeter 35 m).
CTD Cast #018	CTD at OSNAP C12 (between M1 and M2)	CTD cast from 16:01 to 18:02 on 18 June 2018. Cast location: 59° 52.868' N, 40° 53.937' W (at max depth)	Water depth 2296 m. Cast depth 2286 m (altimeter 17 m).
CTD Cast #019	CTD at OSNAP C01 (east of M1)	CTD cast from 20:01 to 21:39 on 18 June 2018. Cast location: 59° 55.734' N, 41° 18.743' W (at max depth)	Water depth 1945 m. Cast depth 1930 m (altimeter 14 m).
OSNAP M3 Deployment	Deployment of OSNAP mooring	Successful deployment from 08:03 to 11:12 on 19 June 2018. Surveyed anchor position: 59° 49.021' N, 40° 16.710' W Depth: 2557 m (corrected)	No issues.
CTD Cast #020	CTD near newly deployed M3 mooring	CTD cast from 11:45 to 13:53 on 19 June 2018. Cast location: 59° 48.339' N, 40° 16.914' W (at max depth)	Water depth 2565 m. Cast depth 2542 m (altimeter 18 m). OSNAP and Lipids water sampling.
CTD Cast #021	CTD in vicinity of Glider 363	CTD cast from 18:17 to 19:31 on 19 June 2018. Cast location: 59° 51.399' N, 39° 13.317' W (at max depth)	Water depth 2788 m. Cast depth 1002 m. OOI & BCP water sampling.
MET Comparison	Ship vs. GI01SUMO-00005 MET comparison	Successful MET comparison from 20:55 on 19 June to 17:30 on 20 June, 2018. Ship held station ~0.25 nm from buoy.	Winds up to ~30 kts.
GI03FLMB-00005 Evaluation	Acoustically downloaded data from the newly deployed GI03FLMB mooring.	Successfully downloaded ~29 kB of data on 21 June 2018.	The mooring remains fully functional with all instruments (except the self-logging PHSEN) reporting EK-80 confirmed mid-water sphere at ~500 m (couldn't see any CTDMOs above 180 m)
GI02HYPM-00005 Evaluation	Acoustically downloaded data from the newly deployed GI02HYPM mooring.	Successfully downloaded ~60 kB of data from the last week on 21 June 2018.	Everything looks good and all instruments reporting. Last profile was 21 June 00:00. The CTDMO was blown down at 00:00 21 June to ~191 db.
CTD Cast #022	CTD at CL1 (near OSNAP SS11)	CTD cast from 13:43 to 14:10 on 22 June 2018. Cast Location: 61° 39.374' N, 33° 58.995' W (at max depth)	Water depth 2955 m. Cast depth 154 m. Lipids water sampling.
CTD Cast #023	CTD at CL2	CTD cast from 20:04 to 20:29 on 22 June 2018. Cast Location: 62° 03.51' N, 32° 13.9' W (at max depth)	Water depth 2400 m. Cast depth 153 m. Lipids water sampling.

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TABLES

Table 1 – Mooring Deployment Locations

Mooring S/N	Deployment Date / Time**	Surveyed Position			Notes/Issues
		Latitude	Longitude	Depth***	
GI01SUMO-00005	8 June 2018 17:21 UTC	59° 55.9769' N	39° 27.9296' W	2693 m	FDCHP damaged on deployment. WAVSS possible configuration issue. Intermittent data from PHSEN1 and PCO2W3. METBK2-PRC reading zero. CTDMO5 initially had no/bad pressure data (fixed 17 June 2018).
GI02HYPM-00005	9 June 2018 12:55 UTC	59° 58.1841' N	39° 29.4003' W	2669 m	No issues.
GI03FLMA-00005	10 June 2018 13:59 UTC	59° 46.0830' N	39° 50.5510' W	2700 m	No inductive comms above the EM Chain. Sphere instruments (CTDMO, DOSTA, FLORT, PHSEN) assumed to be functioning; self-powered and logging. Entire IM line is noisy – little to no data getting through.
GI03FLMB-00005	11 June 2018 14:35 UTC	59° 42.8561' N	39° 18.7976' W	2829 m	No issues. Lower 1000 m wire shot was not marked for OSNAP instrument locations.

**NOTE: For Moorings, deployment time typically refers to "anchor drop" time; specify if some other time is used.

***NOTE: Depths corrected using Carter Tables in Matlab

Table 2 – Mooring Recovery Information

Mooring S/N	Recovery Date / Time*	Notes/Issues
GI01SUMO-00004	14 June 2018 08:02 UTC	Buoy "disappeared" on 12 October 2017. Mooring riser on seafloor. Buoy parted mooring at top of U-joint.
GI02HYPM-00004	16 June 2018 06:32 UTC	No issues.
GI03FLMA-00004	15 June 2018 07:59 UTC (mid-water release)	No issues.
GI03FLMB-00004	11 June 2018 19:36 UTC (mid-water release)	Snagged by the CTD rosette at ~16:50. Rosette and mooring recovered together.

*NOTE: For Moorings, recovery time typically refers to "anchor release" time; specify if some other time is used.

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Table 3 – Glider Deployment Locations

Glider S/N*	Glider Type	Deployment Date / Time**	Latitude***	Longitude***	Notes
453	1000 Open Ocean Glider	9 June 2018 19:19	59° 55.388' N	39° 18.014' W	No deployment issues. DOSTA mounted on top. Sampling plan differs from baseline.
363	1000 Open Ocean Glider	9 June 2018 19:49	59° 55.240' N	39° 18.050' W	No deployment issues. DOSTA mounted on top. Sampling plan differs from baseline.

***NOTE:** All Moorings planned to be deployed should be listed, note if something is not deployed.

****NOTE:** For Gliders, deployment time typically refers to "in water" time; specify if some other time is used.

*****NOTE:** Glider launch positions take from the Glider documentation (different than ship position in the chronology above)

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Table 4 – Deployed GI01SUMO-00005 System Status (as of 17 June 2018)

Irminger 5 GI01SUMO System Status:

Pressure **psi**
DCL16 5.1

% Operational Sensors:	97%
% Operational Telemetry	100%
% Operational Power	100%

	Sensor	Port	N/C	Fail	Eng Pass	Science Pass	Comment
DCL11	MOPAK	1			1		
	IMM	2			0.95		Inductive sensors are checked below
	HYD1	3			1		
	DOSTA1	4			1		
	SPKIR1	5			1		
	METBK1	6			1		
	METHTR1	7			1		
	NUTNR1	8			1		
DCL12	OPTAA1	1			1		
	FLORT1	2			1		
	HYD2	3			1		
	PCO2A	4			1		
	WAVSS	5			1	0.75	Wave period suspect after "correcting" sampling duration during burn-in
	METBK2	6			1		
	METHTR2	7			1		
	FDCHP	8			0.5	0	Bent during deployment; producing (bad) data
DCL13	VICSHTR	1			1		
	VICS	3			1		
DCL16	OPTAA2	1			1		
	FLORT2	2			1		
	CTDBP	3			1		
	VELPT	4			1		
	PCO2W	5			1		Data started 00:00 9 June 2018
	DOSTA2	6			1		
	NUTNR2	7			1		
	SPKIR2	8			1		

Telemetry	Pass	Fail	N/C	Comment
FBB1	1			
FBB2	1			
ISU1	1			
ISU2	1			
SBD1	1			
SBD2	1			
XEOS 1	1			Rover Tower 1
XEOS 2	1			Rover Tower 2
XEOS 3	1			Kilo Buoy Bottom
XEOS 4	1			Rover Buoy Deck
GPS 1	1			
GPS 2	1			
WiFi	1			
FW 1	1			
FW 2	1			

Power	Pass	Fail	N/C	Comment
BT1	1			Battery Temperature, Voltage, Current
BT2	1			Battery Temperature, Voltage, Current
BT3	1			Battery Temperature, Voltage, Current
BT4	1			Battery Temperature, Voltage, Current
PV1	1			
PV2	1			
PV3	1			
PV4	1			
WT1	1			
WT2	1			

	Inductive Sensor	ID	N/C	Fail	Eng Pass	Science Pass	Comment
Inductive	ADCP	10			1		Data every 3 hrs
	CTDMO01	11			1		
	CTDMO02	12			1		
	CTDMO03	13			1		
	CTDMO04	14			1		
	CTDMO05	15			1		Pressure issue corrected on 17 June 2018
	CTDMO06	16			1		
	CTDMO07	17			1		
	CTDMO08	18			1		
	CTDMO09	19			1		
	CTDMO10	20			1		
	CTDBP01	31			1		
	CTDBP02	32			1		
	CTDBP03	33			1		
	pHSEN1	41			0.8		Data started 00:00 9 June 2018; Missing some data
	pHSEN2	42			1		Data started 00:00 9 June 2018
	pCO2W1	51			1		Data started 00:00 9 June 2018
	pCO2W2	52			1		Data started 00:00 9 June 2018
	pCO2W3	53			0.3		Data started 00:00 9 June 2018; Getting intermittent data

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Table 5 – Deployed GI02HYPM-00005 System Status (as of 19 June 2018)

Deployed GI02HYPM-00005 System Status

System	Passed Burn In	Deployed	Validation Data Collected	Passed Validation Check	Comments
Main Controller	Yes	Yes	Yes	Yes	
Acoustic Modem	Yes	Yes	Yes	Yes	
Inductive Modem	Yes	Yes	Yes	Yes	
ZPLSG (Upper)	Yes	Yes	Yes	Yes	
ZPLSG (Lower)	Yes	Yes	Yes	Yes	
CTDMO (160m)	Yes	Yes	Yes	Yes	
MMP (161m - 2560m)	Yes	Yes	Yes	Yes	
Inductive Modem	Yes	Yes	Yes	Yes	
CTD	Yes	Yes	Yes	Yes	
ACM	Yes	Yes	Yes	Yes	
FLORT	Yes	Yes	Yes	Yes	
DOSTA	Yes	Yes	Yes	Yes	
	100%	100%	100%	100%	

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Table 6 – Deployed GI03FLMA-00005 System Status (as of 22 June 2018)

Deployed GI03FLMA-00005 System Status

System	Passed Burn In	Deployed	Validation Data Collected	Passed Validation Check	Comments
Main Controller	Yes	Yes	Yes	Yes	
Acoustic Modem	Yes	Yes	Yes	Yes	
Inductive Modem	Yes	Yes	Yes	No	Data is corrupted due to noise in the inductive line. Suspect flooded EM chain.
Secondary Controller	Yes	Yes	No	No	
Inductive Modem	Yes	Yes	No	No	No inductive communication above EM chain. Suspect flooded EM chain.
FLORT	Yes	Yes	No	No	
DOSTA	Yes	Yes	No	No	
PHSEN	Yes	Yes	N/A	N/A	PHSEN is not connected to the secondary controller. Data will be collected upon recovery.
CTDMO (30m)	Yes	Yes	No	No	No inductive communication above EM chain. Suspect flooded EM chain.
CTDMO (40m)	Yes	Yes	Yes	No	
CTDMO (60m)	Yes	Yes	Yes	No	
CTDMO (90m)	Yes	Yes	Yes	No	
CTDMO (130m)	Yes	Yes	Yes	No	Data is corrupted due to noise in the inductive line. Suspect flooded EM chain.
CTDMO (180m)	Yes	Yes	Yes	No	
CTDMO (250m)	Yes	Yes	Yes	No	
CTDMO (350m)	Yes	Yes	Yes	No	
CTDMO (500m)	Yes	Yes	Yes	Yes	
CTDMO (750m)	Yes	Yes	Yes	Yes	
CTDMO (1000m)	Yes	Yes	Yes	Yes	
CTDMO (1500m)	Yes	Yes	Yes	Yes	
ADCPS	Yes	Yes	Yes	Yes	
	100%	100%	75%	35%	

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Table 7 – Deployed GI03FLMB-00005 System Status (as of 19 June 2018)

Deployed GI03FLMB-00005 System Status

System	Passed Burn In	Deployed	Validation Data Collected	Passed Validation Check	Comments
Main Controller	Yes	Yes	Yes	Yes	
Acoustic Modem	Yes	Yes	Yes	Yes	
Inductive Modem	Yes	Yes	Yes	Yes	
Secondary Controller	Yes	Yes	Yes	Yes	
Inductive Modem	Yes	Yes	Yes	Yes	
FLORT	Yes	Yes	Yes	Yes	
DOSTA	Yes	Yes	Yes	Yes	
PHSEN	Yes	Yes	N/A	N/A	PHSEN is not connected to the secondary controller. Data will be collected upon recovery.
CTDMO (30m)	Yes	Yes	Yes	Yes	
CTDMO (40m)	Yes	Yes	Yes	Yes	
CTDMO (60m)	Yes	Yes	Yes	Yes	
CTDMO (90m)	Yes	Yes	Yes	Yes	
CTDMO (130m)	Yes	Yes	Yes	Yes	
CTDMO (180m)	Yes	Yes	Yes	Yes	
CTDMO (250m)	Yes	Yes	Yes	Yes	
CTDMO (350m)	Yes	Yes	Yes	Yes	
CTDMO (500m)	Yes	Yes	Yes	Yes	
CTDMO (750m)	Yes	Yes	Yes	Yes	
CTDMO (1000m)	Yes	Yes	Yes	Yes	
CTDMO (1500m)	Yes	Yes	Yes	Yes	
ADCPS	Yes	Yes	Yes	Yes	
	100%	100%	100%	100%	

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Table 8 – Recovered Surface Mooring (GI01SUMO-00004) Data Download Summary

Global Surface Mooring Data Recovery Checklist			GI01SUMO-00004	2018-06-14		3406-20001		
Platform Location	Instrument	Serial Number	Preferred Offload Method	Data Recovery Method		Location of Data Saved	Checked / Initials	Notes
				DCL Offload	Instrument			
Halo	FDCHP	164402	DCL 12			instruments/dcl12 cg_data/dcl12/fdchp		Adrift, not recovered
Buoy Well	METBK 1 - Logger	LGR019	DCL 11			cg_data/dcl11/metbk1		Adrift, not recovered
Bottom of Buoy	METBK 1 - CT	37-11003	DCL 11			instruments/dcl11		Adrift, not recovered
Halo	METBK 1 - BPR	BPR242	DCL 11					Adrift, not recovered
Halo	METBK 1 - HRH	HRH264	DCL 11					Adrift, not recovered
Halo	METBK 1 - LWR	LWR246	DCL 11					Adrift, not recovered
Halo	METBK 1 - PRC	PRC233	DCL 11					Adrift, not recovered
Halo	METBK 1 - SWR	SWR250	DCL 11					Adrift, not recovered
Halo	METBK 1 - WND	SWND249	DCL 11					Adrift, not recovered
Buoy Well	METBK 2 - Logger	LGR021	DCL 12			cg_data/dcl12/metbk2		Adrift, not recovered
Bottom of Buoy	METBK 2 - CT	37-13545	DCL 12			instruments/dcl12		Adrift, not recovered
Halo	METBK 2 - BPR	BPR264	DCL 12					Adrift, not recovered
Halo	METBK 2 - HRH	HRH265	DCL 12					Adrift, not recovered
Halo	METBK 2 - LWR	LWR313	DCL 12					Adrift, not recovered
Halo	METBK 2 - PRC	PRC261	DCL 12					Adrift, not recovered
Halo	METBK 2 - SWR	SWR252	DCL 12					Adrift, not recovered
Halo	METBK 2 - WND	SWND254	DCL 12					Adrift, not recovered
Buoy Well	WAVSS	TAS06431	DCL 12 and Instrument			instruments/dcl12		Adrift, not recovered
Halo	SPKIR	301	DCL 11			cg_data/dcl11/spkir1		Adrift, not recovered
Bottom of Buoy	DOSTA	495	DCL 11		N/A	cg_data/dcl11/dosta1		Adrift, not recovered
Bottom of Buoy	FLORT	1222	DCL 12		N/A	cg_data/dcl12/flort1		Adrift, not recovered
Bottom of Buoy	NUTNR	271	DCL 11			instruments/dcl11 cg_data/dcl11/nutnr1		Adrift, not recovered
Bottom of Buoy	OPTAA	165	DCL 12		N/A	cg_data/dcl12/optaa1		Adrift, not recovered
Bottom of Buoy	PCO2A	35-261-50A	DCL 12			cg_data/dcl12/pco2a		Adrift, not recovered
NSIF	NUTNR	274	DCL 16			instruments/dcl16 cg_data/dcl16/nutnr2		instrument damaged, data unrecoverable
NSIF	SPKIR	288	DCL 16		N/A	cg_data/dcl16/spkir2		
NSIF	CTDBP	16-50142	DCL16 and Instrument		AS	instruments/dcl16 cg_data/dcl16/ctdbp		instrument: 2 files, 2.09MB
NSIF	VELPT	AQD12231	DCL16 and Instrument			instruments/dcl16 cg_data/dcl16/velpt		instrument damaged, data unrecoverable
NSIF	OPTAA	189	DCL 16		N/A	cg_data/dcl16/optaa2		instrument damaged
NSIF	PCO2W	C0113	DCL 16			instruments/dcl16 cg_data/dcl16/pco2w		instrument damaged, data unrecoverable
NSIF	DOSTA	497	DCL 16		N/A	cg_data/dcl16/dosta2		
NSIF	FLORT	1296	DCL 16		N/A	cg_data/dcl16/flort2		instrument damaged

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Global Surface Mooring Data Recovery Checklist				GI01SUMO-00004	2018-06-14	3406-20001		
Platform Location	Instrument	Serial Number	Preferred Offload Method	Data Recovery Method		Location of Data Saved	Checked / Initials	Notes
				DCL Offload	Instrument			
Inductive Wire	CTDMO-Q (20)	37-12590	DCL 11 and Instrument		AS	instruments/dcl11/imm cg_data/dcl11/imm/ctdmo01		instrument: 3 files, 3.98MB
Inductive Wire	PHSEN-E (20)	P0070	DCL 11 and Instrument			instruments/dcl11/imm cg_data/dcl11/imm/phsen1		instrument damaged, data unrecoverable
Inductive Wire	CTDBP-P (40)	16-50069	DCL 11 and Instrument			instruments/dcl11/imm cg_data/dcl11/imm/ctdbp01		instrument damaged, data unrecoverable
Inductive Wire	DOSTA-D (40)	498	DCL 11		N/A	instruments/dcl11/imm		
Inductive Wire	FLORD-G (40)	3417	DCL 11		N/A	instruments/dcl11/imm		instrument damaged
Inductive Wire	PCO2W-C (40)	C0128	DCL 11 and Instrument			instruments/dcl11/imm cg_data/dcl11/imm/pco2w1		instrument damaged, data unrecoverable
Inductive Wire	CTDMO-Q (60)	37-13555	DCL 11 and Instrument		AS	instruments/dcl11/imm cg_data/dcl11/imm/ctdmo02		instrument: 3 files, 3.73MB
Inductive Wire	CTDBP-P (80)	16-50074	DCL 11 and Instrument			instruments/dcl11/imm cg_data/dcl11/imm/ctdbp02		instrument damaged, data unrecoverable
Inductive Wire	DOSTA-D (80)	502	DCL 11		N/A	instruments/dcl11/imm		
Inductive Wire	FLORD-G (80)	3967	DCL 11		N/A	instruments/dcl11/imm		instrument damaged
Inductive Wire	PCO2W-C (80)	C0129	DCL 11 and Instrument			instruments/dcl11/imm cg_data/dcl11/imm/pco2w2		instrument damaged, data unrecoverable
Inductive Wire	CTDMO-Q (100)	37-12935	DCL 11 and Instrument		AS	instruments/dcl11/imm cg_data/dcl11/imm/ctdmo03		instrument: 3 files, 3.98MB
Inductive Wire	PHSEN-E (100)	P0146	DCL 11 and Instrument			instruments/dcl11/imm cg_data/dcl11/imm/phsen2		instrument damaged, data unrecoverable
Inductive Wire	CTDBP-P (130)	16-50198	DCL 11 and Instrument			instruments/dcl11/imm cg_data/dcl11/imm/ctdbp03		instrument damaged, data unrecoverable
Inductive Wire	DOSTA-D (130)	519	DCL 11		N/A	instruments/dcl11/imm		
Inductive Wire	FLORD-G (130)	3968	DCL 11		N/A	instruments/dcl11/imm		instrument damaged
Inductive Wire	PCO2W-C (130)	C0130	DCL 11 and Instrument			instruments/dcl11/imm cg_data/dcl11/imm/pco2w3		instrument damaged, data unrecoverable
Inductive Wire	CTDMO-Q (180)	37-12936	DCL 11 and Instrument		AS	instruments/dcl11/imm cg_data/dcl11/imm/ctdmo04		instrument: 3 files, 3.98MB
Inductive Wire	CTDMO-Q (250)	37-12937	DCL 11 and Instrument		AS	instruments/dcl11/imm cg_data/dcl11/imm/ctdmo05		instrument: 3 files, 3.98MB
Inductive Wire	CTDMO-Q (350)	37-12938	DCL 11 and Instrument		AS	instruments/dcl11/imm cg_data/dcl11/imm/ctdmo06		instrument: 3 files, 3.98MB
Inductive Wire	CTDMO-Q (500)	37-12939	DCL 11 and Instrument		AS	instruments/dcl11/imm cg_data/dcl11/imm/ctdmo07		instrument: 3 files, 3.98MB
Inductive Wire	ADCPS-N (500)	23579	DCL 11 and Instrument		AS	instruments/dcl11/imm cg_data/dcl11/imm/adcp		instrument: 1 file, 2.78MB
Inductive Wire	CTDMO-R (750)	37-13376	DCL 11 and Instrument		AS	instruments/dcl11/imm cg_data/dcl11/imm/ctdmo08		instrument: 3 files, 3.98MB
Inductive Wire	CTDMO-R (1000)	37-13377	DCL 11 and Instrument		AS	instruments/dcl11/imm cg_data/dcl11/imm/ctdmo09		instrument: 3 files, 3.98MB
Inductive Wire	CTDMO-R (1500)	37-11486	DCL 11 and Instrument		AS	instruments/dcl11/imm cg_data/dcl11/imm/ctdmo10		instrument: 3 files, 4.06MB
Buoy Well	CPM1		CPM		N/A	cg_data/cpm1		Adrift, not recovered
Buoy Well	DCL11		DCL		N/A	cg_data/dcl11		Adrift, not recovered
Buoy Well	DCL12		DCL		N/A	cg_data/dcl12		Adrift, not recovered
NSIF	DCL16		DCL		N/A	cg_data/dcl16		

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Table 9 – Recovered Profiler Mooring (GI02HYPM-00004) Data Download Summary

Global Hybrid Profiler Mooring Data Recovery Checklist			GI02HYPM-00004			3406-20002		
Platform Location	Instrument	Serial Number	Preferred Offload Method	Data Recovery Method		Location of Data Saved	Checked / Initials	Notes
				Controller Offload	Instrument			
64" Sphere	CTDMO-G	37-10219	Instrument	DB	AS	instruments/CTDMO_sn... cg_data/MISOC_sn.../CTD		Instrument: 3 files, 1.84 MB cg_data: 315 files, 824KB
64" Sphere	ZPLSG-A	55107	Instrument	DB	DB	instruments/ZPLSG_sn... cg_data/MISOC_sn.../ZPLSG		Instrument: 8,626 files, 10.5GB cg_data: 315 files, 78.7MB
64" Sphere	ZPLSG-A	55108	Instrument	DB	DB	instruments/ZPLSG_sn... cg_data/MISOC_sn.../ZPLSG		Instrument: 8,615 files, 10.7GB cg_data: combined with above
Inductive Wire	GWFP (Upper)	12774-01	Profiler	DB	DB	instruments/GWFP cg_data/MISOC_sn.../WFP		Instrument: 1,532 files, 516MB cg_data: 1,134 files, 266MB
Inductive Wire	GWFP (Lower)	N/A	Profiler	N/A	N/A	instruments/GWFP cg_data/MISOC_sn.../WFP		
Load Cage	MSIOC		Controller	DB	N/A	cg_data/MSIOC_sn...		cg_data: 3,211 files, 64.7MB

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Table 10 – Recovered Flanking Mooring A (GI03FLMA-00004) Data Download Summary

Global Flanking Mooring Data Recovery Checklist			GI03FLMA-00004				3406-20003	
Platform Location	Instrument	Serial Number	Preferred Offload Method	Data Recovery Method		Location of Data Saved	Checked / Initials	Notes
				Controller Offload	Instrument			
64" Sphere	FLORT	1299	Controller	DB	N/A	cg_data/SSIOC_sn.../FLORT		cg_data: 108 files, 910KB
64" Sphere	DOSTA	457	Controller	DB	N/A	cg_data/SSIOC_sn.../DOSTA		cg_data: 108 files, 1.09MB
64" Sphere	PHSEN	P0081	Instrument / Controller	DB	AS	instruments/PHSEN_sn... cg_data/SSIOC_sn.../PHSEN		Instrument: 1 file, 1.98MB cg_data: 120 files, 701KB
64" Sphere	CTDMO-G (30)	37-13438	Instrument / Controller	DB	AS	instruments/CTDMO_sn... cg_data/MSIOC_sn.../CTD		Instrument: 3 files, 1.87MB cg_data (all CTD): 313 files, 9.47MB
Inductive Wire	CTDMO-G (40)	37-10261	Instrument / Controller	DB	AS	instruments/CTDMO_sn... cg_data/MSIOC_sn.../CTD		Instrument: 3 files, 1.83MB cg_data (all CTD): 313 files, 9.47MB
Inductive Wire	CTDMO-G (60)	37-10257	Instrument / Controller	DB	AS	instruments/CTDMO_sn... cg_data/MSIOC_sn.../CTD		Instrument: 3 files, 1.83MB cg_data (all CTD): 313 files, 9.47MB
Inductive Wire	CTDMO-G (90)	37-12337	Instrument / Controller	DB	AS	instruments/CTDMO_sn... cg_data/MSIOC_sn.../CTD		Instrument: 3 files, 1.83MB cg_data (all CTD): 313 files, 9.47MB
Inductive Wire	CTDMO-G (130)	37-13439	Instrument / Controller	DB	AS	instruments/CTDMO_sn... cg_data/MSIOC_sn.../CTD		Instrument: 3 files, 1.83MB cg_data (all CTD): 313 files, 9.47MB
Inductive Wire	CTDMO-G (180)	37-13437	Instrument / Controller	DB	AS	instruments/CTDMO_sn... cg_data/MSIOC_sn.../CTD		Instrument: 3 files, 1.83MB cg_data (all CTD): 313 files, 9.47MB
Inductive Wire	CTDMO-G (250)	37-13436	Instrument / Controller	DB	AS	instruments/CTDMO_sn... cg_data/MSIOC_sn.../CTD		Instrument: 3 files, 1.83MB cg_data (all CTD): 313 files, 9.47MB
Inductive Wire	CTDMO-G (350)	37-10224	Instrument / Controller	DB	AS	instruments/CTDMO_sn... cg_data/MSIOC_sn.../CTD		Instrument: 3 files, 1.83MB cg_data (all CTD): 313 files, 9.47MB
Inductive Wire	CTDMO-G (500)	37-11607	Instrument / Controller	DB	AS	instruments/CTDMO_sn... cg_data/MSIOC_sn.../CTD		Instrument: 3 files, 1.83MB cg_data (all CTD): 313 files, 9.47MB
62" Sphere	ADCPS-L (500)	23381	Instrument / Controller	DB	AS	instrumentsADCPS_sn... cg_data/MSIOC_sn.../ADCPS		instrument: 1 file, 9.38MB cg_data: 313 files, 2.28MB
Inductive Wire	CTDMO-H (750)	37-13451	Instrument / Controller	DB	AS	instruments/CTDMO_sn... cg_data/MSIOC_sn.../CTD		Instrument: 3 files, 1.83MB cg_data (all CTD): 313 files, 9.47MB
Inductive Wire	CTDMO-H (1000)	37-11681	Instrument / Controller	DB	AS	instruments/CTDMO_sn... cg_data/MSIOC_sn.../CTD		Instrument: 3 files, 1.83MB cg_data (all CTD): 313 files, 9.47MB
Inductive Wire	CTDMO-H (1500)	37-13452	Instrument / Controller	DB	AS	instruments/CTDMO_sn... cg_data/MSIOC_sn.../CTD		Instrument: 3 files, 1.83MB cg_data (all CTD): 313 files, 9.47MB
Inductive Wire	CTDMO-H (1000 off bottom)	37-10229	Instrument	N/A	AS	instruments/CTDMO_sn...		Irrminger Only Instrument: 3 files, 3.65MB
Inductive Wire	VELPT-B (1000 off bottom)	AQD11981	Instrument	N/A	AS	instruments/VELPT_sn...		Irrminger Only Instrument: 1 file, 840KB
Inductive Wire	CTDMO-H (700 off bottom)	37-12218	Instrument	N/A	AS	instruments/CTDMO_sn...		Irrminger Only Instrument: 3 files, 3.65MB
Inductive Wire	VELPT-B (700 off bottom)	AQD12236	Instrument	N/A	AS	instruments/VELPT_sn...		Irrminger Only Instrument: 1 file, 840KB
Inductive Wire	CTDMO-H (400 off bottom)	37-12225	Instrument	N/A	AS	instruments/CTDMO_sn...		Irrminger Only Instrument: 3 files, 3.65MB
Inductive Wire	VELPT-B (400 off bottom)	AQD12652	Instrument	N/A	AS	instruments/VELPT_sn...		Irrminger Only Instrument: 1 file, 840KB
Inductive Wire	CTDMO-H (100 off bottom)	37-13447	Instrument	N/A	AS	instruments/CTDMO_sn...		Irrminger Only Instrument: 3 files, 3.65MB
Inductive Wire	VELPT-B (100 off bottom)	AQD12663	Instrument	N/A	AS	instruments/VELPT_sn...		Irrminger Only Instrument: 1 file, 840KB
Load Cage	MSIOC	104	Controller	DB	N/A	cg_data/MSIOC_sn...		cg_data: 1,256 files, 314MB
64" Sphere	SSIOC	8	Controller	DB	N/A	cg_data/SSIOC_sn...		cg_data: 462 files, 9.22MB

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Table 11 – Recovered Flanking Mooring B (GI03FLMB-00004) Data Download Summary

Global Flanking Mooring Data Recovery Checklist			GI03FLMB-00004			3406-20003		
Platform Location	Instrument	Serial Number	Preferred Offload Method	Data Recovery Method		Location of Data Saved	Checked / Initials	Notes
				Controller Offload	Instrument			
64" Sphere	FLORT	1318	Controller	DB	N/A	cg_data/SSIOC_sn.../FLORT		cg_data: 66 files, 545KB
64" Sphere	DOSTA	456	Controller	DB	N/A	cg_data/SSIOC_sn.../DOSTA		cg_data: 66 files, 667KB
64" Sphere	PHSEN	P0102	Instrument / Controller	DB	AS	instruments/PHSEN_sn... cg_data/SSIOC_sn.../PHSEN		Instrument: 1 file, 2.01MB cg_data: 74 files, 419KB
64" Sphere	CTDMO-G (30)	37-12638	Instrument / Controller	DB	AS	instruments/CTDMO_sn... cg_data/MSIOC_sn.../CTD		Instrument: 3 files, 1.88MB cg_data (all CTD): 311 files, 9.40MB
Inductive Wire	CTDMO-G (40)	37-13435	Instrument / Controller	DB	AS	instruments/CTDMO_sn... cg_data/MSIOC_sn.../CTD		Instrument: 3 files, 1.82MB cg_data (all CTD): 311 files, 9.40MB
Inductive Wire	CTDMO-G (60)	37-13433	Instrument / Controller	DB	AS	instruments/CTDMO_sn... cg_data/MSIOC_sn.../CTD		Instrument: 3 files, 1.82MB cg_data (all CTD): 311 files, 9.40MB
Inductive Wire	CTDMO-G (90)	37-13434	Instrument / Controller	DB	AS	instruments/CTDMO_sn... cg_data/MSIOC_sn.../CTD		Instrument: 3 files, 1.82MB cg_data (all CTD): 311 files, 9.40MB
Inductive Wire	CTDMO-G (130)	37-13431	Instrument / Controller	DB	AS	instruments/CTDMO_sn... cg_data/MSIOC_sn.../CTD		Instrument: 3 files, 1.82MB cg_data (all CTD): 311 files, 9.40MB
Inductive Wire	CTDMO-G (180)	37-13432	Instrument / Controller	DB	AS	instruments/CTDMO_sn... cg_data/MSIOC_sn.../CTD		Instrument: 3 files, 1.82MB cg_data (all CTD): 311 files, 9.40MB
Inductive Wire	CTDMO-G (250)	37-11639	Instrument / Controller	DB	AS	instruments/CTDMO_sn... cg_data/MSIOC_sn.../CTD		Instrument: 3 files, 1.82MB cg_data (all CTD): 311 files, 9.40MB
Inductive Wire	CTDMO-G (350)	37-12378	Instrument / Controller	DB	AS	instruments/CTDMO_sn... cg_data/MSIOC_sn.../CTD		Instrument: 3 files, 1.82MB cg_data (all CTD): 311 files, 9.40MB
Inductive Wire	CTDMO-G (500)	37-11647	Instrument / Controller	DB	AS	instruments/CTDMO_sn... cg_data/MSIOC_sn.../CTD		Instrument: 3 files, 1.82MB cg_data (all CTD): 311 files, 9.40MB
62" Sphere	ADCPS-L (500)	21450	Instrument / Controller	DB	AS	instruments/ADCPS_sn... cg_data/MSIOC_sn.../ADCPS		Instrument: 1 file, 9.29MB cg_data (all CTD): 311 files, 2.73MB
Inductive Wire	CTDMO-H (750)	37-13446	Instrument / Controller	DB	AS	instruments/CTDMO_sn... cg_data/MSIOC_sn.../CTD		No comms w instrument cg_data (all CTD): 311 files, 9.40MB
Inductive Wire	CTDMO-H (1000)	37-11598	Instrument / Controller	DB	AS	instruments/CTDMO_sn... cg_data/MSIOC_sn.../CTD		Instrument: 3 files, 1.82MB cg_data (all CTD): 311 files, 9.40MB
Inductive Wire	CTDMO-H (1500)	37-12224	Instrument / Controller	DB	AS	instruments/CTDMO_sn... cg_data/MSIOC_sn.../CTD		Instrument: 3 files, 1.82MB cg_data (all CTD): 311 files, 9.40MB
Inductive Wire	CTDMO-H (1000 off bottom)	37-13454	Instrument	N/A	AS	instruments/CTDMO_sn...		Irringer Only Instrument: 3 files, 3.63MB
Inductive Wire	VELPT-B (1000 off bottom)	AQD12095	Instrument	N/A	AS	instruments/VELPT_sn...		Irringer Only Instrument: 1 file, 837KB
Inductive Wire	CTDMO-H (700 off bottom)	37-13455	Instrument	N/A	AS	instruments/CTDMO_sn...		Irringer Only Instrument: 3 files, 3.63MB
Inductive Wire	VELPT-B (700 off bottom)	AQD12197	Instrument	N/A	AS	instruments/VELPT_sn...		Irringer Only Instrument: 1 file, 837KB
Inductive Wire	CTDMO-H (400 off bottom)	37-13456	Instrument	N/A	AS	instruments/CTDMO_sn...		Irringer Only Instrument: 3 files, 3.63MB
Inductive Wire	VELPT-B (400 off bottom)	AQD12459	Instrument	N/A	AS	instruments/VELPT_sn...		Irringer Only Instrument: 1 file, 837KB
Inductive Wire	CTDMO-H (100 off bottom)	37-13457	Instrument	N/A	AS	instruments/CTDMO_sn...		Irringer Only Instrument: 3 files, 3.63MB
Inductive Wire	VELPT-B (100 off bottom)	AQD12673	Instrument	N/A	AS	instruments/VELPT_sn...		Irringer Only Instrument: 1 file, 837KB
Load Cage	MSIOC	10	Controller	DB	N/A	cg_data/MSIOC_sn...		cg_data: 1,248 files, 13.0MB
64" Sphere	SSIOC	15	Controller	DB	N/A	cg_data/SSIOC_sn...		cg_data: 286 files, 5.77MB

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FIGURES

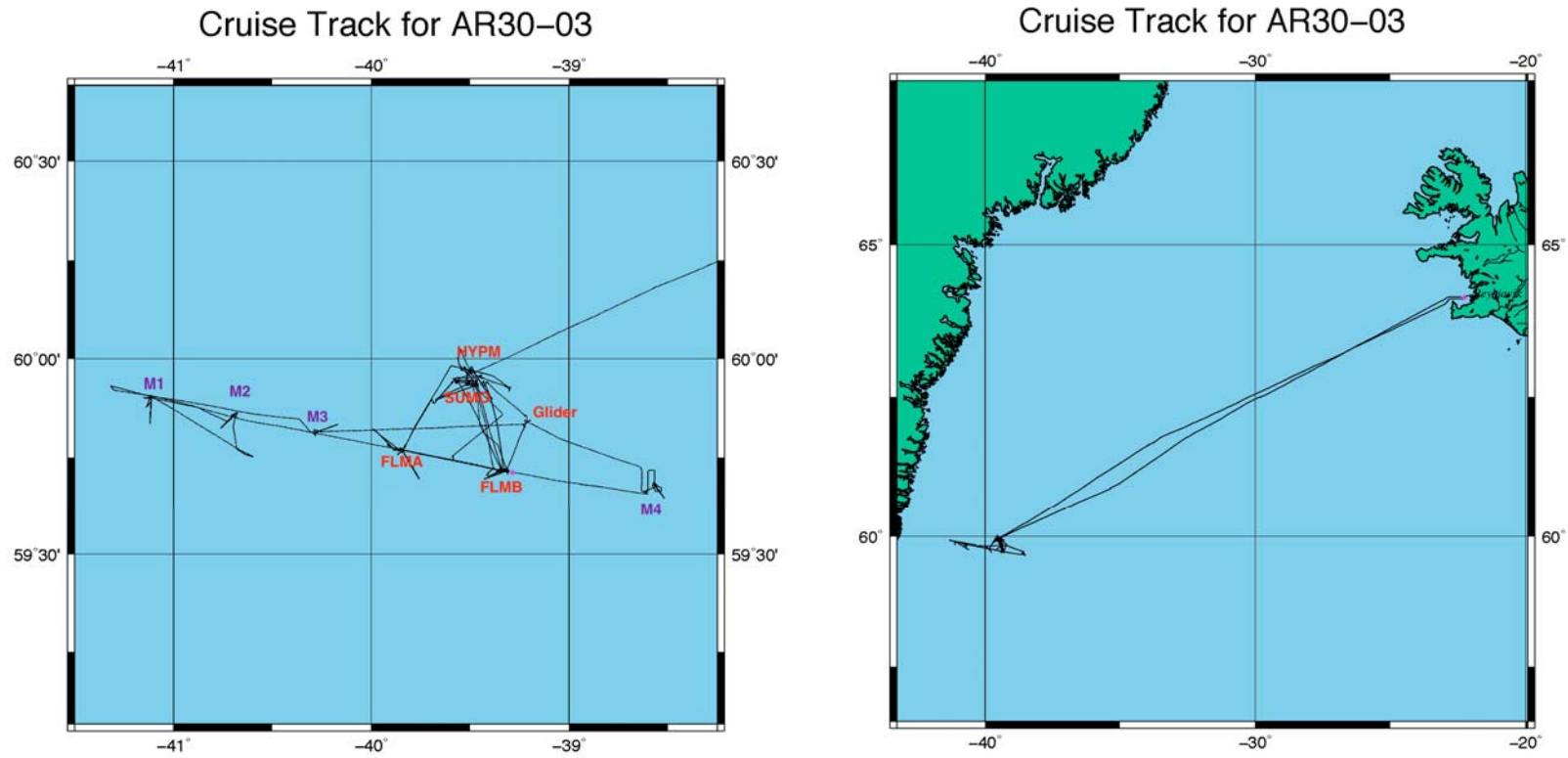


Figure 1 – Cruise track: Array detail (left), full track (right)

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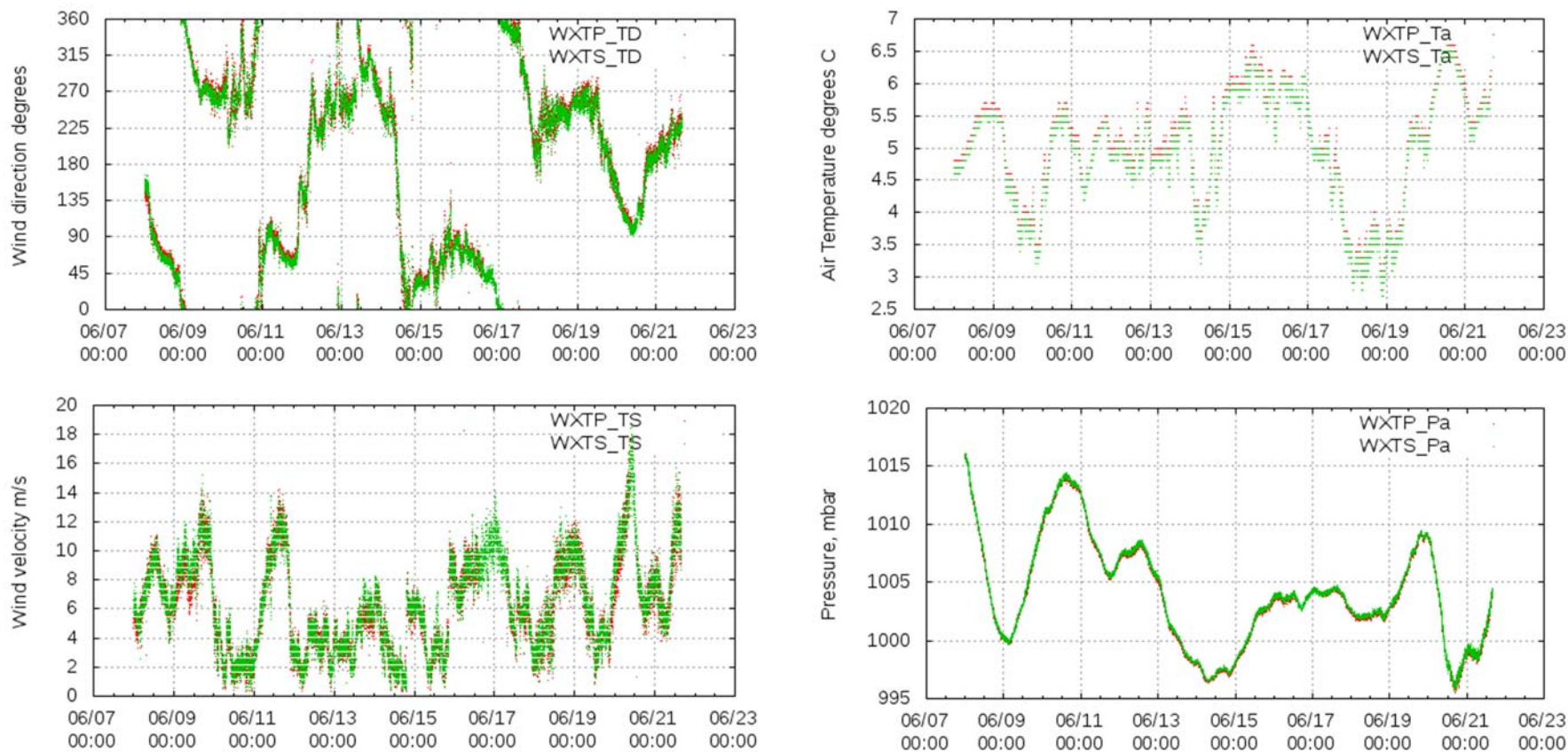


Figure 2 – Ship weather data from the time on station in the Irminger Array (June 8-21, 2018).