

Dagmar Hainbucher  
Institut für Meereskunde  
Universität Hamburg  
Bundesstr. 53  
20146 Hamburg

Tel.: +49 40 428385745  
Fax: +49 40 428387477  
email: dagmar.hainbucher@uni-hamburg.de

## Short Cruise Report R/V MARIA S. MERIAN cruise MSM72

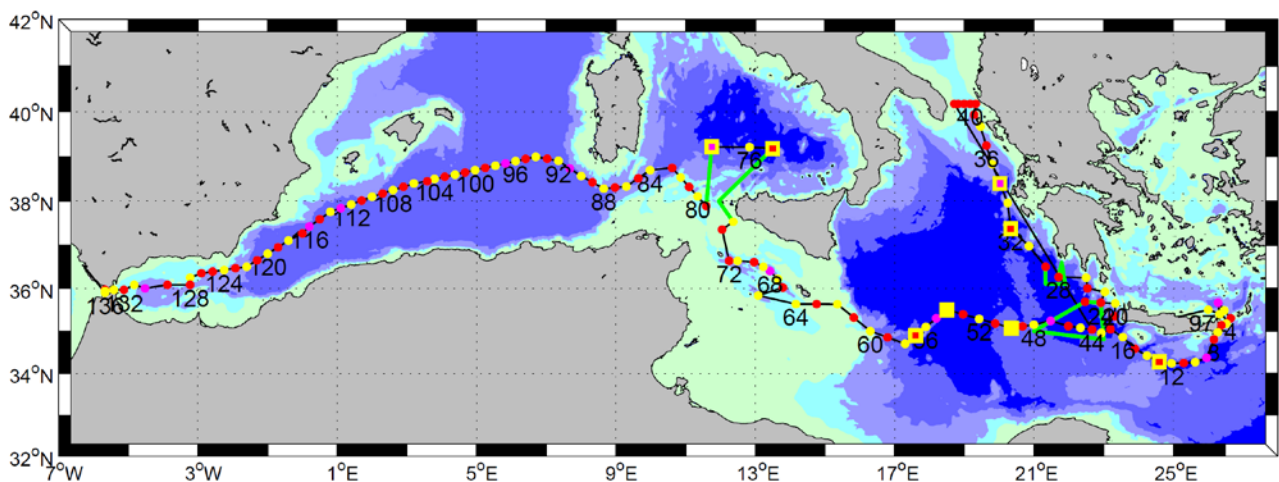
Iraklion, Greece – Cádiz, Spain

02.03.2018 – 03.04.2018

Chief Scientist: Dagmar Hainbucher

Captain: Björn Maaß

### MSM72 Track



*Yellow dots: CTD without any chemical sampling, red dots: CTD with chemical sampling, pink dots: CTD with chemical and additional sampling of isotopes, yellow squares: deployment of drifter and floats, green lines: fine resolved uCTD and ADCP tracks. Black lines: Track with uCTD casts between CTD stations.*

## Objectives

The last few decades have seen dramatic changes in the hydrography and biogeochemistry of the Mediterranean Sea. The complex bathymetry, the highly variable spatial and temporal scales of atmospheric forcing and internal processes contribute to generate complex and unsteady circulation patterns and significant variability in biogeochemical systems. Part of this variability can be influenced by anthropogenic contributions. Consequently, there is a need to document its details as well as to understand ongoing trends in order to better relate the observed processes and to possibly predict the consequences of these changes. The main goal of the cruise was to contribute to the understanding of long-term changes and trends in physical and biogeochemical parameters, such as the anthropogenic carbon uptake and to still evaluate the hydrographical situation after the major climatological shifts in the eastern and western part of the basin, known as the Eastern and Western Mediterranean Transients.

The following science questions were addressed:

1. What are the long-term changes and/or trends in physics and biogeochemistry in the Mediterranean Sea, including all the sub-basins?
2. How is the hydrographic situation in the Mediterranean developing further on after the EMT and WMT? Is there still a trend of the system to return to the pre-EMT situation and is there a similar trend in the WMed?
3. How are eddies distributed in the EMed and WMed during the cruise? Do they differ in the sub basins? To what extend is heat and salt transferred into the vertical by eddies in the WMed and EMed during the cruise?
4. What is the rate of uptake of the anthropogenic carbon in the Mediterranean and is this changing over time?
5. What is the magnitude of variability and trends in the inventory of biogeochemical variables (including oxygen and nutrients)?
6. What is the base-line values of rarely measured Essential Ocean Variables (EOVs) such as DOC and  $N_2O$

## Narrative

The scientific crew embarked at around 9:00 am on March 1<sup>st</sup>. The ship then left the port of Heraklion at 9:30 in the evening to bunker fuel in Kali Limenes the next morning. In the early afternoon of March 2<sup>nd</sup> we finally started our transfer to our first CTD station in the coastal area northeast of Crete. Unfortunately, this was not the first station we planned for the cruise. In view of the territorial ambiguities in parts of the work area, which only became clear shortly before the start of the cruise, the station plan was modified and adapted and we cancelled all stations east of our new first station.

During transfer and during bunkering we already unpacked our equipment and started to install the instruments. However, some of us had to stay in bed because of a cold with a feverish course. We received our mandatory safety briefing shortly after embarking and a safety exercise on the next day in which we also had to board the lifeboat. Everything went well and the scientific crew started to feel comfortable on board. On March 2<sup>nd</sup> at 10:30 pm we began with the station work. We started with CTD stations north-east of Crete in the Aegean Sea, carried out CTD stations in the Strait of Kasos, and then moved south of Crete to the west into the Ionian Basin. Along the Strait of Antikythera we steamed northwards in the height of the Peloponnese. Our main program was taking CTD casts. The biogeochemists took water samples from several depths to determine different parameters (nutrients, oxygen, inorganic carbon, etc.). We took biogeochemical samples in about every second station, because the laboratory analysis is sometimes very time-

consuming. At a few stations, the CTD was run twice in order to cover the demand for water for the additional isotope measurements. The deepest CTD station was station 23 with 4528 m water depth which we reached on the 8<sup>th</sup> of March. From station 15 (05.03.2018 early morning) onwards, we additionally took underway CTD measurements between the CTD stations. During these measurements we reduced the ship's speed to about 3 knots, so that we could reach depths between 600 - 800 m with the uCTD. On station 13 on 4<sup>th</sup> of March at around 20:30 UTC we deployed the first ARVOR float and a surface drifter. After station 21 on the 7<sup>th</sup> of March early morning, we interrupted our CTD work in order to investigate eddies for the first time on our cruise with fine resolved measurements. For this purpose, the uCTD was run about every hour, the ship speed between the stations was about 8 nm, while during uCTD measurements it was reduced to 3 nm. The route was determined using maps of dynamic topographies. Another "eddy track" followed after station 28 on the 10<sup>th</sup> of March. On these sections we were especially interested in the continuous ship's ADCP measurements, which we hope will help us to recognize eddies also in their vertical extension. Our northernmost stations were in the Strait of Otranto which we reached on the 12<sup>th</sup> of March in the afternoon. The section through the Strait of Otranto is repeatedly taken on cruises by us, as the Adriatic Sea is the most important producer of deep water in the Ionian Basin and we are interested in the changes in the outflow of deep water over long time scales. After this northernmost section a long transit route followed back to our section across the Mediterranean Sea, which we resumed with station 44 on the 14<sup>th</sup> of March west of Crete. On the transit, we continued to continuously collect data with the ADCP and ran an uCTD approximately every two hours. Additionally, we had some time to visit the ship's engine. On stations 50 (15.03.2018 23:30 UTC), 54 (16.03.2018, 20:00 UTC) and 56 (17.03.2018 07:30 UTC) surface drifters and additionally an ARVOR float (station 56) were deployed. At station 34 (11.03.2018 23:00 UTC) we dropped the only PROVOR BIO float.

Unfortunately, we had to contend with considerable technical problems with the CTD. On Monday, March 6 at 22:00, station 18, the rosette returned on deck with 2 missing and 3 broken Niskin bottles. First of all, we suspected an operating error when clamping one or more bottles. But then the release unit also stopped working. From now on, none of the bottles could be closed electronically in the water. So we swapped plugs, cables and devices. We first drove our own CTD and rosette and finally the CTD and rosette of the ship. But nothing helped. We also exchanged the winches. It turned out that the errors were caused by the defective releaser unit of our rosette and by the termination of the winches. Communication with the release unit was interrupted during tension and movement. On the next station everything worked fine, but on station 24 (09.03.2018 09:30 UTC) some of the bottles did not close again, and this time there were also faulty data transfers. We replaced the ship's CTD to its backup CTD. CTD operation ran then smoothly for some stations with the ship's own rosette and CTD. But on the evening of March 14, both oxygen sensors showed only noisy profiles from approx. 1000 m on, combined with a sudden offset. Now everything started again from the beginning, we exchanged cables, sensors and even the winches again. But all this did not help here either. Finally we decided to connect our CTD including sensors with the ship's own rosette. But for this we had to build an adapter cable, because the rosette of the ship uses different plugs (Subconn) than for our CTD (Seacon).

On the 15<sup>th</sup> of March 06:00 UTC station 47, we placed our CTD in a deep sea brine pool on a depth of 3528 m. These brines contain hydrogen sulphide and the water samples brought along smell accordingly when they arrived on deck. The laboratories were ventilated long after the event. Probably we came across the "l'Atalante Basin".

The weather has blown up since 17<sup>th</sup> of March. Again and again smaller strong wind events with up to 9Bft took place during which we had to suspend the uCTD work. However, the CTD stations could be carried out as planned. On Monday, 19.03.2018, we

had a seminar in which we discussed the state of work and presented first results of the cruise. The next day we started a fine resolving ADCP track on the Sicily shelf. The area was too flat and the swell too high to take uCTD profiles additionally. Now that more than half of our cruise was over, we celebrated this in the evening of the same day.

We entered the western basin of the Mediterranean Sea during the night to the 21<sup>st</sup> of March and had stations in the Tyrrhenian Sea. Again, on station 75 and 76, we were facing technical problems with the rosette but the problem was quickly solved. We deployed another float on Wednesday, 21.03.2018, after station 75 and continued also with uCTD measurements. On Thursday, 22.03.2018, we dropped the last ARVOR float on this cruise on CTD station 77 and changed again the CTD due to technical problems. At 8:00 in the morning on the same day we started another fine resolving uCTD/ADCP section to track eddies. The weather was mixed and we had to stop the uCTD measurements every now and then. The weather at the beginning of the last week of our cruise was windy with an average of 5 Bft, but allowed all work. We progressed quickly and according to plan.

On Wednesday, 28.03, we held a seminar to discuss our results and to agree on publications. We also took a group picture. On Thursday, 29.03., around 14:30 the sailing yacht Malizia II crossed our course with Boris Hermann, one of Germany's most famous extreme sailors, on board.

On Friday, 26.03., we had sunshine but again winds up to 9 Bft, so the uCTD casts had to be discontinued. On Saturday the weather calmed down, the uCTD work was resumed and on Easter Sunday, April 1st, we could carry out our last CTD station, No. 136, in the Strait of Gibraltar, in the afternoon. We celebrated this with a little drink. After the station we set course to the port of Cádiz, where we arrived on Monday morning. After the last CTD, the continuous data acquisition of the ADCPs and the thermosalinograph were also completed on the transit. We started to dismantle our equipment, to load the container and to clean the laboratories. Due to the cancelled stations at the beginning of this cruise, we entered the port of Cádiz one day earlier than expected.

## **Acknowledgements**

We would like to thank Captain Björn Maaß, his officers and the crew of R/V MARIA S. MERIAN for the support of our scientific programme. Besides this always professional support, the welcome on board was warm and the helpfulness from the bridge, over the deck to the engine was great. We have always felt comfortable on board.

The financial support for the cruise was provided by the project of the "Deutsche Forschungsgemeinschaft" U4600DFG040204. We gratefully acknowledge their support.

## Teilnehmerliste

|    |                              |                                      |        |
|----|------------------------------|--------------------------------------|--------|
| 01 | Dagmar Hainbucher            | Fahrtleiter / <i>Chief Scientist</i> | IfMHH  |
| 02 | Vanessa Cardin               | CTD/IADCP/uCTD/ADCP/Thermosal        | OGS    |
| 03 | Maria del Mar Chavez Montero | CTD/IADCP/uCTD/ADCP/Thermosal        | OGS    |
| 04 | Dimitrios Velaoras           | CTD/IADCP/uCTD/ADCP/Thermosal        | HCMR   |
| 05 | Paolo Celentano              | CTD/IADCP/uCTD/ADCP/Thermosal        | ISMAR  |
| 06 | Birte Gülk                   | CTD/IADCP/uCTD/ADCP/Thermosal        | IfMHH  |
| 07 | Andrea Rochner               | CTD/IADCP/uCTD/ADCP/Thermosal        | IfMHH  |
| 08 | Andreas Welsch               | Salinometer / technical support      | IfMHH  |
| 09 | Toste Tanhua                 | Transient tracers                    | GEOMAR |
| 10 | Fabian Wolf                  | Transient tracers                    | GEOMAR |
| 11 | Nico Lange                   | Transient tracers                    | GEOMAR |
| 12 | Lennart Gerke                | Transient tracers                    | GEOMAR |
| 13 | Giuseppe Civitarese          | Nutrients, TN, TP, Oxygen            | OGS    |
| 14 | Lidia Urbini                 | Nutrients, TN, TP, Oxygen            | OGS    |
| 15 | Spyros Chaikakis             | LISST, POC, PON                      | HCMR   |
| 16 | Noelia M. Fajar Gonzalez     | Carbonate System                     | IEO    |
| 17 | Elisa Fernández Guallart     | Carbonate System                     | IEO    |
| 18 | Blanca Astray Uceda          | Carbonate System                     | IEO    |
| 19 | Abed El Rahaman Hassoun      | Carbonate System                     | CNRS-L |
| 20 | Giancarlo Bachi              | DOC, CDOM                            | CNR-P  |

IfMHH: Institut für Meereskunde, Universität Hamburg, Bundesstr. 53, 250146 Hamburg,  
<http://www.ifm.uni-hamburg.de>

GEOMAR: Helmholtz-Zentrum für Ozeanforschung Kiel, Düsternbrooker Weg 20, 24105  
 Kiel, <http://www.geomar.de>

OGS: Istituto Nazionale di Oceanografia e di Geofisica Sperimentale Trieste, Borgo Grotta  
 Gigante 42/C, 34010 Sgonico (TS), Italy, <http://www.ogs.trieste.it>

IEO: Instituto Español de Oceanografía (IEO), centro de A Coruña, Spain,  
<http://www.co.ieo.es>

CNRS-L: National Council for Scientific Research in Lebanon. National Center for Marine  
 Sciences, P.O. Box 534, San Stephano Street, Batroun, Lebanon, [http://](http://https://www.cnrs.edu.lb)  
<https://www.cnrs.edu.lb>

ISMAR: Istituto di Scienze Marine, Arsenale – Tesa 104, Castello 2737/F, 30122 Venezia,  
 Italy, <http://www.ismar.cnr.it>

HCMR: Hellenic Centre for Marine Research, 46.7 km Athens – Sounio ave., P.O. Box  
 712, P.C.19013, Anavyssos Greece, <https://www.hcmr.gr/en/>

CNR-P: CNR Istituto di Biofisica Unità Operativa di Pisa, Ruolo Ricercatore, Via G.  
 Moruzzi N° 1 Pisa, Italy, <http://www.pi.ibf.cnr.it/?q=Facilities%20>

| XPO-COD | Stat. No. | Cast. No. | Typ             | Date     | Time  | Code     | POSITION      |               | Bottom depth | Max. press. | Bottom dist. | Biogeochem. Samples | Remarks                            |
|---------|-----------|-----------|-----------------|----------|-------|----------|---------------|---------------|--------------|-------------|--------------|---------------------|------------------------------------|
|         |           |           |                 |          | UTC   |          | Latitude      | Longitude     |              |             |              |                     |                                    |
| MSM72   | 001       | 1         | CTD/IADCP       | 02.03.18 | 20:21 | BE       | 35° 24,016'N  | 026° 20,016'E | 287          |             |              | CHE1                |                                    |
| MSM72   | 001       | 1         | CTD/IADCP       | 02.03.18 | 20:31 | BO       | 35° 24,008'N  | 026° 20,029'E | 289          | 281         | 10           |                     |                                    |
| MSM72   | 001       | 1         | CTD/IADCP       | 02.03.18 | 20:59 | EN       | 35° 24,008'N  | 026° 20,029'E | 288          |             |              |                     |                                    |
| MSM72   | 002       | 1         | CTD/IADCP       | 02.03.18 | 22:42 | BE       | 35° 40,040'N  | 026° 17,005'E | 2288         |             |              | CHE2                |                                    |
| MSM72   | 002       | 1         | CTD/IADCP       | 02.03.18 | 23:26 | BO       | 35° 40,019'N  | 026° 17,033'E | 2282         | 2315        | 12           |                     |                                    |
| MSM72   | 002       | 1         | CTD/IADCP       | 03.03.18 | 0:26  | EN       | 35° 40,018'N  | 026° 17,034'E | 2290         |             |              |                     |                                    |
| MSM72   | 002       | 2         | CTD             | 03.03.18 | 2:01  | BE       | 35° 40,018'N  | 026° 17,034'E | 2280         |             |              |                     |                                    |
| MSM72   | 002       | 2         | CTD             | 03.03.18 | 2:12  | BO       | 35° 40,019'N  | 026° 17,033'E | 2284         | 256         |              |                     |                                    |
| MSM72   | 002       | 2         | CTD             | 03.03.18 | 2:27  | EN       | 35° 40,019'N  | 026° 17,035'E | 2284         |             |              |                     |                                    |
| MSM72   | 002       | 3         | CTD/LISST       | 03.03.18 | 3:38  | BE       | 35° 40,020'N  | 026° 17,036'E | 2288         |             |              |                     |                                    |
| MSM72   | 002       | 3         | CTD/LISST       | 03.03.18 | 4:00  | BO       | 35° 40,018'N  | 026° 17,036'E | 2288         | 1010        |              |                     |                                    |
| MSM72   | 002       | 3         | CTD/LISST       | 03.03.18 | 4:24  | EN       | 35° 40,016'N  | 026° 17,037'E | 0            |             |              |                     |                                    |
| MSM72   | 003       | 1         | CTD/IADCP       | 03.03.18 | 5:43  | BE       | 35° 29,016'N  | 026° 28,039'E | 1027         |             |              | PHY                 |                                    |
| MSM72   | 003       | 1         | CTD/IADCP       | 03.03.18 | 6:07  | BO       | 35° 29,016'N  | 026° 28,041'E | 1034         | 809         | 10           |                     |                                    |
| MSM72   | 003       | 1         | CTD/IADCP       | 03.03.18 | 6:35  | EN       | 35° 29,015'N  | 026° 28,040'E | 1026         |             |              |                     |                                    |
| MSM72   | 004       | 1         | CTD/IADCP       | 03.03.18 | 8:00  | BE       | 35° 18,014'N  | 026° 39,042'E | 1099         |             |              | CHE1                |                                    |
| MSM72   | 004       | 1         | CTD/IADCP       | 03.03.18 | 8:25  | BO       | 35° 18,013'N  | 026° 39,042'E | 1095         | 1102        | 10           |                     |                                    |
| MSM72   | 004       | 1         | CTD/IADCP       | 03.03.18 | 9:05  | EN       | 35° 18,014'N  | 026° 39,042'E | 1101         |             |              |                     |                                    |
| MSM72   | 005       | 1         | CTD/IADCP       | 03.03.18 | 10:12 | BE       | 35° 10,503'N  | 026° 31,042'E | 612          |             |              | PHY                 |                                    |
| MSM72   | 005       | 1         | CTD/IADCP       | 03.03.18 | 10:29 | BO       | 35° 10,504'N  | 026° 31,044'E | 686          | 666         | 31           |                     |                                    |
| MSM72   | 005       | 1         | CTD/IADCP       | 03.03.18 | 10:53 | EN       | 35° 10,509'N  | 026° 31,045'E | 685          |             |              |                     |                                    |
| MSM72   | 006       | 1         | CTD/IADCP       | 03.03.18 | 12:06 | BE       | 35° 06,458'N  | 026° 21,975'E | 269          |             |              | CHE1                |                                    |
| MSM72   | 006       | 1         | CTD/IADCP       | 03.03.18 | 12:16 | BO       | 35° 06,458'N  | 026° 21,975'E | 269          | 266         | 10           |                     |                                    |
| MSM72   | 006       | 1         | CTD/IADCP       | 03.03.18 | 12:38 | EN       | 35° 06,458'N  | 026° 21,976'E | 269          |             |              |                     |                                    |
| MSM72   | 007       | 1         | CTD/IADCP/LISST | 03.03.18 | 13:37 | BE       | 34° 58,087'N  | 026° 16,437'E | 1593         |             |              | PHY                 |                                    |
| MSM72   | 007       | 1         | CTD/IADCP/LISST | 03.03.18 | 14:08 | BO       | 34° 58,103'N  | 026° 16,521'E | 1592         | 1593        | 20           |                     |                                    |
| MSM72   | 007       | 1         | CTD/IADCP/LISST | 03.03.18 | 14:41 | EN       | 34° 58,103'N  | 026° 16,521'E | 1595         |             |              |                     |                                    |
| MSM72   | 008       | 1         | CTD/IADCP/LISST | 03.03.18 | 15:46 | BE       | 34° 48,189'N  | 026° 10,033'E | 1246         |             |              | CHE1                |                                    |
| MSM72   | 008       | 1         | CTD/IADCP/LISST | 03.03.18 | 16:13 | BO       | 34° 48,043'N  | 026° 09,842'E | 1318         | 1315        | 14           |                     |                                    |
| MSM72   | 008       | 1         | CTD/IADCP/LISST | 03.03.18 | 16:51 | EN       | 34° 47,850'N  | 026° 09,610'E | 1289         |             |              |                     |                                    |
| MSM72   | 009       | 1         | CTD/IADCP       | 03.03.18 | 19:25 | BE       | 34° 22,002'N  | 025° 57,540'E | 4000         |             |              | CHE2                |                                    |
| MSM72   | 009       | 1         | CTD/IADCP       | 03.03.18 | 20:38 | BO       | 34° 22,001'N  | 025° 57,541'E | 3997         | 4054        | 14           |                     |                                    |
| MSM72   | 009       | 1         | CTD/IADCP       | 03.03.18 | 22:07 | EN       | 34° 22,001'N  | 025° 57,540'E | 4222         |             |              |                     |                                    |
| MSM72   | 009       | 2         | CTD             | 03.03.18 | 23:19 | BE       | 34° 22,002'N  | 025° 57,541'E | 3999         |             |              |                     |                                    |
| MSM72   | 009       | 2         | CTD             | 03.03.18 | 23:41 | BO       | 34° 21,965'N  | 025° 57,556'E | 3996         | 1000        |              |                     |                                    |
| MSM72   | 009       | 2         | CTD             | 04.03.18 | 0:19  | EN       | 34° 21,860'N  | 025° 57,591'E | 4055         |             |              |                     |                                    |
| MSM72   | 010       | 1         | CTD/IADCP       | 04.03.18 | 2:03  | BE       | 34° 15,988'N  | 025° 37,520'E | 2587         |             |              | PHY                 |                                    |
| MSM72   | 010       | 1         | CTD/IADCP       | 04.03.18 | 2:53  | BO       | 34° 15,988'N  | 025° 37,519'E | 2584         | 2604        | 16           |                     |                                    |
| MSM72   | 010       | 1         | CTD/IADCP       | 04.03.18 | 3:44  | EN       | 34° 15,988'N  | 025° 37,520'E | 2587         |             |              |                     |                                    |
| MSM72   | 011       | 1         | CTD/IADCP       | 04.03.18 | 5:17  | BE       | 34° 14,506'N  | 025° 18,044'E | 3806         |             |              | CHE1                |                                    |
| MSM72   | 011       | 1         | CTD/IADCP       | 04.03.18 | 6:35  | BO       | 34° 14,394'N  | 025° 18,023'E | 3825         | 3870        | 16           |                     |                                    |
| MSM72   | 011       | 1         | CTD/IADCP       | 04.03.18 | 7:48  | EN       | 34° 14,379'N  | 025° 18,054'E | 3827         |             |              |                     |                                    |
| MSM72   | 011       | 2         | CTD             | 04.03.18 | 8:15  | BE       | 34° 14,378'N  | 025° 18,053'E | 3829         |             |              |                     |                                    |
| MSM72   | 011       | 2         | CTD             | 04.03.18 | 9:23  | BO       | 34° 14,321'N  | 025° 18,166'E | 3835         | 3896        | 13           |                     |                                    |
| MSM72   | 011       | 2         | CTD             | 04.03.18 | 11:01 | EN       | 34° 14,262'N  | 025° 18,284'E | 3843         |             |              |                     |                                    |
| MSM72   | 012       | 1         | CTD/IADCP       | 04.03.18 | 13:17 | BE       | 34° 14,012'N  | 024° 56,975'E | 3494         |             |              | PHY                 |                                    |
| MSM72   | 012       | 1         | CTD/IADCP       | 04.03.18 | 14:23 | BO       | 34° 14,120'N  | 024° 56,916'E | 3470         | 3523        | 19           |                     |                                    |
| MSM72   | 012       | 1         | CTD/IADCP       | 04.03.18 | 15:39 | EN       | 34° 14,263'N  | 024° 56,820'E | 3464         |             |              |                     |                                    |
| MSM72   | 013       | 1         | CTD/IADCP       | 04.03.18 | 18:12 | BE       | 34° 16,024'N  | 024° 36,032'E | 3213         |             |              | CHE1                |                                    |
| MSM72   | 013       | 1         | CTD/IADCP       | 04.03.18 | 19:09 | BO       | 34° 16,135'N  | 024° 36,142'E | 3297         | 3275        | 13           |                     |                                    |
| MSM72   | 013       | 1         | CTD/IADCP       | 04.03.18 | 20:33 | EN       | 34° 16,230'N  | 024° 36,236'E | 3238         |             |              |                     |                                    |
| MSM72   | 013       | 1         | Float ARVOR I   | 04.03.18 | 20:39 | Deployed | 34° 16,199'N  | 024° 36,203'E | 3224         |             |              |                     |                                    |
| MSM72   | 013       | 2         | Driftr DWS      | 04.03.18 | 20:57 | Deployed | 34° 15,469'N  | 024° 35,288'E | 2908         |             |              |                     |                                    |
| MSM72   | 014       | 1         | CTD/IADCP/LISST | 04.03.18 | 23:11 | BE       | 34° 25,009'N  | 024° 14,996'E | 2334         |             |              | PHY                 |                                    |
| MSM72   | 014       | 1         | CTD/IADCP/LISST | 04.03.18 | 23:53 | BO       | 34° 25,016'N  | 024° 15,010'E | 2325         | 2348        | 10           |                     |                                    |
| MSM72   | 014       | 1         | CTD/IADCP/LISST | 05.03.18 | 0:40  | EN       | 34° 25,015'N  | 024° 15,010'E | 2342         |             |              |                     |                                    |
| MSM72   | 015       | 1         | CTD/IADCP       | 05.03.18 | 2:59  | BE       | 34° 34,814'N  | 023° 54,011'E | 2776         |             |              | CHE1                |                                    |
| MSM72   | 015       | 1         | CTD/IADCP       | 05.03.18 | 3:55  | BO       | 34° 34,815'N  | 023° 54,012'E | 2781         | 2797        | 12           |                     |                                    |
| MSM72   | 015       | 1         | CTD/IADCP       | 05.03.18 | 5:03  | EN       | 34° 34,816'N  | 023° 54,013'E | 2783         |             |              |                     |                                    |
| MSM72   | 015       | 1         | uCTD            | 05.03.18 | 6:25  | BE       | 34° 43,126'N  | 023° 43,597'E |              | 617         |              |                     |                                    |
| MSM72   | 016       | 1         | CTD/IADCP       | 05.03.18 | 8:09  | BE       | 34° 51,511'N  | 023° 32,997'E | 3011         |             |              | PHY                 |                                    |
| MSM72   | 016       | 1         | CTD/IADCP       | 05.03.18 | 9:11  | BO       | 34° 51,514'N  | 023° 33,010'E | 3011         | 352         | 15           |                     |                                    |
| MSM72   | 016       | 1         | CTD/IADCP       | 05.03.18 | 10:14 | EN       | 34° 51,514'N  | 023° 33,009'E | 3010         |             |              |                     |                                    |
| MSM72   | 016       | 2         | uCTD            | 05.03.18 | 11:34 | BE       | 34° 57,262'N  | 023° 22,038'E | 2958         | 608         |              |                     |                                    |
| MSM72   | 017       | 1         | CTD/IADCP       | 05.03.18 | 13:09 | BE       | 023° 11,950'N | 023° 11,950'E | 3221         |             |              | CHE1                |                                    |
| MSM72   | 017       | 1         | CTD/IADCP       | 05.03.18 | 14:10 | BO       | 023° 12,017'N | 023° 12,017'E | 3201         | 3237        | 16           |                     |                                    |
| MSM72   | 017       | 1         | CTD/IADCP       | 05.03.18 | 15:27 | EN       | 023° 12,017'N | 023° 12,017'E | 3202         |             |              |                     |                                    |
| MSM72   | 017       | 3         | uCTD            | 05.03.18 | 16:16 | BE       | 35° 00,128'N  | 023° 04,798'E |              | 640         |              |                     |                                    |
| MSM72   | 018       | 1         | CTD/IADCP       | 05.03.18 | 17:33 | BE       | 34° 57,306'N  | 022° 56,027'E | 3219         |             |              | PHY                 |                                    |
| MSM72   | 018       | 1         | CTD/IADCP       | 05.03.18 | 18:35 | BO       | 34° 57,308'N  | 022° 56,028'E | 3241         | 3261        | 14           |                     |                                    |
| MSM72   | 018       | 1         | CTD/IADCP       | 05.03.18 | 19:45 | EN       | 34° 57,306'N  | 022° 56,028'E | 3226         |             |              |                     |                                    |
| MSM72   | 018       | 4         | uCTD            | 05.03.18 | 21:38 | BE       | 35° 08,864'N  | 023° 07,394'E | 3753         | 579         |              |                     |                                    |
| MSM72   | 019       | 1         | CTD/IADCP       | 06.03.18 | 0:00  | BE       | 35° 21,000'N  | 023° 19,024'E | 3181         |             |              | CHE1                |                                    |
| MSM72   | 019       | 1         | CTD/IADCP       | 06.03.18 | 0:58  | BO       | 35° 21,000'N  | 023° 19,023'E | 3184         | 3217        | 14           |                     | no bottle closing                  |
| MSM72   | 019       | 1         | CTD/IADCP       | 06.03.18 | 2:14  | EN       | 35° 21,001'N  | 023° 19,023'E | 3185         |             |              |                     |                                    |
| MSM72   | 019       | 2         | CTD             | 06.03.18 | 11:06 | BE       | 35° 21,001'N  | 023° 19,023'E | 3185         |             |              |                     |                                    |
| MSM72   | 019       | 2         | CTD             | 06.03.18 | 12:12 | BO       | 35° 21,003'N  | 023° 19,025'E | 3176         | 3213        | 15           |                     | no bottle closing                  |
| MSM72   | 019       | 2         | CTD             | 06.03.18 | 13:46 | EN       | 35° 21,003'N  | 023° 19,025'E | 3184         |             |              |                     |                                    |
| MSM72   | 019       | 3         | CTD             | 06.03.18 | 14:51 | BE       | 35° 21,003'N  | 023° 19,011'E | 3184         |             |              |                     |                                    |
| MSM72   | 019       | 3         | CTD             | 06.03.18 | 15:49 | BO       | 35° 21,003'N  | 023° 19,012'E | 3429         | 3208        | 14           |                     | Canceling because of defective CTD |
| MSM72   | 019       | 3         | CTD             | 06.03.18 | 18:28 | EN       | 35° 21,003'N  | 023° 19,011'E | 3181         |             |              |                     |                                    |

|       |     |    |           |          |       |    |               |                |      |      |    |      |                               |
|-------|-----|----|-----------|----------|-------|----|---------------|----------------|------|------|----|------|-------------------------------|
| MSM72 | 019 | 5  | uCTD      | 06.03.18 | 19:58 | BE | 35° 29,229' N | 023° 19,303' E | 2178 | 626  |    |      |                               |
| MSM72 | 020 | 1  | CTD/IADCP | 06.03.18 | 22:00 | BE | 35° 39,015' N | 023° 20,024' E | 0    |      |    | PHY  |                               |
| MSM72 | 020 | 1  | CTD/IADCP | 06.03.18 | 22:13 | BO | 35° 39,015' N | 023° 20,024' E | 419  | 419  | 9  |      |                               |
| MSM72 | 020 | 1  | CTD/IADCP | 06.03.18 | 22:38 | EN | 35° 39,014' N | 023° 20,024' E | 419  |      |    |      |                               |
| MSM72 | 020 | 6  | uCTD      | 07.03.18 | 0:28  | BE | 35° 38,973' N | 023° 04,407' E | 1892 | 660  |    |      |                               |
| MSM72 | 021 | 1  | CTD/IADCP | 07.03.18 | 2:17  | BE | 35° 40,023' N | 022° 55,011' E | 2965 |      |    | CHE1 |                               |
| MSM72 | 021 | 1  | CTD/IADCP | 07.03.18 | 3:07  | BO | 35° 40,023' N | 022° 55,011' E | 2965 | 2994 | 16 |      |                               |
| MSM72 | 021 | 1  | CTD/IADCP | 07.03.18 | 4:07  | EN | 35° 40,023' N | 022° 55,011' E | 2962 |      |    |      |                               |
| MSM72 | 022 | 7  | uCTD      | 07.03.18 | 4:37  | BE | 35° 39,870' N | 022° 55,036' E | 2964 | 593  |    |      |                               |
| MSM72 | 022 | 8  | uCTD      | 07.03.18 | 5:46  | BE | 35° 32,374' N | 022° 55,776' E | 2066 | 568  |    |      |                               |
| MSM72 | 022 | 9  | uCTD      | 07.03.18 | 6:46  | BE | 35° 25,958' N | 022° 56,399' E | 3470 | 627  |    |      |                               |
| MSM72 | 022 | 10 | uCTD      | 07.03.18 | 7:46  | BE | 35° 19,812' N | 022° 56,949' E | 3626 | 657  |    |      |                               |
| MSM72 | 022 | 11 | uCTD      | 07.03.18 | 8:48  | BE | 35° 13,127' N | 022° 57,609' E | 3537 | 662  |    |      |                               |
| MSM72 | 022 | 12 | uCTD      | 07.03.18 | 9:48  | BE | 35° 06,923' N | 022° 58,278' E | 3058 | 647  |    |      |                               |
| MSM72 | 022 | 13 | uCTD      | 07.03.18 | 10:53 | BE | 35° 00,204' N | 022° 59,309' E | 3488 | 0    |    |      | no data recorded              |
| MSM72 | 022 | 14 | uCTD      | 07.03.18 | 11:50 | BE | 34° 54,122' N | 022° 59,371' E | 3185 | 594  |    |      |                               |
| MSM72 | 022 | 15 | uCTD      | 07.03.18 | 12:53 | BE | 34° 48,189' N | 022° 57,892' E | 2964 | 638  |    |      |                               |
| MSM72 | 022 | 16 | uCTD      | 07.03.18 | 13:44 | BE | 34° 48,698' N | 022° 53,095' E | 2947 | 680  |    |      |                               |
| MSM72 | 022 | 1  | CTD/IADCP | 07.03.18 | 14:32 | BE | 34° 48,843' N | 022° 51,444' E | 2944 |      |    | CHE1 |                               |
| MSM72 | 022 | 1  | CTD/IADCP | 07.03.18 | 15:27 | BO | 34° 48,843' N | 022° 51,444' E | 2944 | 2970 | 14 |      | Test of new CTD configuration |
| MSM72 | 022 | 1  | CTD/IADCP | 07.03.18 | 16:41 | EN | 34° 48,843' N | 022° 51,444' E | 2945 |      |    |      |                               |
| MSM72 | 022 | 17 | uCTD      | 07.03.18 | 17:31 | BE | 34° 49,481' N | 022° 44,416' E | 2913 | 663  |    |      |                               |
| MSM72 | 022 | 18 | uCTD      | 07.03.18 | 18:30 | BE | 34° 50,032' N | 022° 38,098' E | 2906 | 707  |    |      |                               |
| MSM72 | 022 | 19 | uCTD      | 07.03.18 | 19:30 | BE | 34° 50,685' N | 022° 32,570' E | 2938 | 703  |    |      |                               |
| MSM72 | 022 | 20 | uCTD      | 07.03.18 | 20:30 | BE | 34° 51,348' N | 022° 26,895' E | 2992 | 721  |    |      |                               |
| MSM72 | 022 | 21 | uCTD      | 07.03.18 | 21:30 | BE | 34° 51,743' N | 022° 20,618' E | 3047 | 723  |    |      |                               |
| MSM72 | 022 | 22 | uCTD      | 07.03.18 | 22:30 | BE | 34° 52,403' N | 022° 14,853' E | 3098 | 662  |    |      |                               |
| MSM72 | 022 | 23 | uCTD      | 07.03.18 | 23:30 | BE | 34° 52,809' N | 022° 08,485' E | 3132 | 661  |    |      |                               |
| MSM72 | 022 | 24 | uCTD      | 08.03.18 | 0:31  | BE | 34° 53,704' N | 022° 02,174' E | 3298 | 674  |    |      |                               |
| MSM72 | 022 | 25 | uCTD      | 08.03.18 | 1:31  | BE | 34° 54,344' N | 021° 55,913' E | 3145 | 687  |    |      |                               |
| MSM72 | 022 | 26 | uCTD      | 08.03.18 | 2:28  | BE | 34° 55,030' N | 021° 50,167' E | 3157 | 669  |    |      |                               |
| MSM72 | 022 | 27 | uCTD      | 08.03.18 | 3:32  | BE | 34° 55,714' N | 021° 43,348' E | 3133 | 696  |    |      |                               |
| MSM72 | 022 | 28 | uCTD      | 08.03.18 | 4:29  | BE | 34° 56,354' N | 021° 37,547' E | 3257 | 692  |    |      |                               |
| MSM72 | 022 | 29 | uCTD      | 08.03.18 | 5:27  | BE | 34° 57,015' N | 021° 31,588' E | 3267 | 710  |    |      |                               |
| MSM72 | 022 | 30 | uCTD      | 08.03.18 | 6:30  | BE | 34° 57,754' N | 021° 24,631' E | 2899 | 785  |    |      |                               |
| MSM72 | 022 | 31 | uCTD      | 08.03.18 | 7:30  | BE | 34° 57,845' N | 021° 19,067' E | 2633 | 787  |    |      |                               |
| MSM72 | 022 | 32 | uCTD      | 08.03.18 | 8:30  | BE | 34° 58,487' N | 021° 14,311' E | 2733 | 773  |    |      |                               |
| MSM72 | 022 | 33 | uCTD      | 08.03.18 | 9:28  | BE | 35° 01,889' N | 021° 04,678' E | 2738 | 772  |    |      |                               |
| MSM72 | 022 | 34 | uCTD      | 08.03.18 | 11:00 | BE | 35° 01,889' N | 021° 04,678' E | 2738 | 672  |    |      |                               |
| MSM72 | 022 | 35 | uCTD      | 08.03.18 | 12:01 | BE | 35° 04,387' N | 021° 09,788' E | 2860 | 667  |    |      |                               |
| MSM72 | 022 | 36 | uCTD      | 08.03.18 | 12:59 | BE | 35° 06,651' N | 021° 14,287' E | 2816 | 638  |    |      |                               |
| MSM72 | 022 | 37 | uCTD      | 08.03.18 | 14:05 | BE | 35° 08,837' N | 021° 19,654' E | 3107 | 649  |    |      |                               |
| MSM72 | 023 | 1  | CTD/IADCP | 08.03.18 | 21:26 | BE | 35° 40,991' N | 022° 28,017' E | 4525 |      |    | CHE1 |                               |
| MSM72 | 023 | 1  | CTD/IADCP | 08.03.18 | 22:45 | BO | 35° 40,992' N | 022° 28,015' E | 4524 | 4528 | 11 |      |                               |
| MSM72 | 023 | 1  | CTD/IADCP | 09.03.18 | 0:35  | EN | 35° 40,991' N | 022° 28,014' E | 4525 |      |    |      |                               |
| MSM72 | 023 | 38 | uCTD      | 09.03.18 | 2:07  | BE | 35° 40,466' N | 022° 42,414' E | 0    | 651  |    |      |                               |
| MSM72 | 024 | 1  | CTD/IADCP | 09.03.18 | 3:39  | BE | 35° 39,990' N | 022° 55,027' E | 2965 |      |    | CHE1 |                               |
| MSM72 | 024 | 1  | CTD/IADCP | 09.03.18 | 4:32  | BO | 35° 39,989' N | 022° 55,027' E | 2969 | 2987 | 15 |      |                               |
| MSM72 | 024 | 1  | CTD/IADCP | 09.03.18 | 5:40  | EN | 35° 39,989' N | 022° 55,028' E | 2969 |      |    |      |                               |
| MSM72 | 024 | 39 | uCTD      | 09.03.18 | 6:38  | BE | 35° 47,000' N | 022° 58,292' E | 1842 | 802  |    |      |                               |
| MSM72 | 025 | 1  | CTD/IADCP | 09.03.18 | 8:09  | BE | 35° 54,986' N | 023° 02,031' E | 1051 |      |    | PHY  |                               |
| MSM72 | 025 | 1  | CTD/IADCP | 09.03.18 | 8:36  | BO | 35° 54,990' N | 023° 02,028' E | 1049 | 1053 | 10 |      |                               |
| MSM72 | 025 | 1  | CTD/IADCP | 09.03.18 | 9:02  | EN | 35° 54,990' N | 023° 02,029' E | 1049 |      |    |      |                               |
| MSM72 | 025 | 40 | uCTD      | 09.03.18 | 10:39 | BE | 35° 57,879' N | 022° 45,088' E | 1163 | 695  |    |      |                               |
| MSM72 | 026 | 1  | CTD/IADCP | 09.03.18 | 12:15 | BE | 35° 59,990' N | 022° 32,028' E | 3164 |      |    | CHE1 |                               |
| MSM72 | 026 | 1  | CTD/IADCP | 09.03.18 | 13:13 | BO | 35° 59,993' N | 022° 32,024' E | 3167 | 3200 | 9  |      |                               |
| MSM72 | 026 | 1  | CTD/IADCP | 09.03.18 | 14:31 | EN | 35° 59,994' N | 022° 32,024' E | 3169 |      |    |      |                               |
| MSM72 | 026 | 41 | uCTD      | 09.03.18 | 15:27 | BE | 36° 07,090' N | 022° 31,180' E | 2792 | 706  |    |      |                               |
| MSM72 | 027 | 1  | CTD/IADCP | 09.03.18 | 16:51 | BE | 36° 14,987' N | 022° 30,031' E | 2164 |      |    | PHY  |                               |
| MSM72 | 027 | 1  | CTD/IADCP | 09.03.18 | 17:31 | BO | 36° 14,986' N | 022° 30,029' E | 2166 | 2190 | 14 |      |                               |
| MSM72 | 027 | 1  | CTD/IADCP | 09.03.18 | 18:16 | EN | 36° 14,986' N | 022° 30,029' E | 2163 |      |    |      |                               |
| MSM72 | 027 | 42 | uCTD      | 09.03.18 | 20:17 | BE | 36° 15,492' N | 022° 06,983' E | 2713 | 749  |    |      |                               |
| MSM72 | 028 | 1  | CTD/IADCP | 09.03.18 | 22:58 | BE | 36° 15,843' N | 021° 42,536' E | 3571 |      |    | CHE1 |                               |
| MSM72 | 028 | 1  | CTD/IADCP | 10.03.18 | 0:02  | BO | 36° 15,809' N | 021° 42,499' E | 3571 | 3605 | 8  |      |                               |
| MSM72 | 028 | 1  | CTD/IADCP | 10.03.18 | 1:33  | EN | 36° 15,809' N | 021° 42,499' E | 3576 |      |    |      |                               |
| MSM72 | 029 | 43 | uCTD      | 10.03.18 | 1:45  | BE | 36° 16,011' N | 021° 42,555' E | 3539 | 650  |    |      |                               |
| MSM72 | 029 | 44 | uCTD      | 10.03.18 | 2:45  | BE | 36° 22,209' N | 021° 44,487' E | 3551 | 672  |    |      |                               |
| MSM72 | 029 | 45 | uCTD      | 10.03.18 | 3:44  | BE | 36° 27,591' N | 021° 45,995' E | 3093 | 667  |    |      |                               |
| MSM72 | 029 | 46 | uCTD      | 10.03.18 | 4:43  | BE | 36° 33,464' N | 021° 47,564' E | 2427 | 694  |    |      |                               |
| MSM72 | 029 | 47 | uCTD      | 10.03.18 | 5:43  | BE | 36° 32,959' N | 021° 48,632' E | 2280 | 783  |    |      |                               |
| MSM72 | 029 | 48 | uCTD      | 10.03.18 | 6:45  | BE | 36° 26,914' N | 021° 49,855' E | 2488 | 785  |    |      |                               |
| MSM72 | 029 | 49 | uCTD      | 10.03.18 | 7:47  | BE | 36° 20,742' N | 021° 51,043' E | 3744 | 778  |    |      |                               |
| MSM72 | 029 | 50 | uCTD      | 10.03.18 | 9:17  | BE | 36° 13,660' N | 021° 52,271' E | 3545 | 765  |    |      |                               |
| MSM72 | 029 | 51 | uCTD      | 10.03.18 | 10:14 | BE | 36° 08,564' N | 021° 53,432' E | 3160 | 765  |    |      |                               |
| MSM72 | 029 | 52 | uCTD      | 10.03.18 | 11:15 | BE | 36° 05,966' N | 021° 48,443' E | 3886 | 757  |    |      |                               |
| MSM72 | 029 | 53 | uCTD      | 10.03.18 | 12:14 | BE | 36° 06,015' N | 021° 41,212' E | 3567 | 787  |    |      |                               |
| MSM72 | 029 | 54 | uCTD      | 10.03.18 | 13:15 | BE | 36° 06,027' N | 021° 33,438' E | 3607 | 783  |    |      |                               |
| MSM72 | 029 | 55 | uCTD      | 10.03.18 | 14:14 | BE | 36° 06,004' N | 021° 25,814' E | 3693 | 773  |    |      |                               |
| MSM72 | 029 | 56 | uCTD      | 10.03.18 | 15:14 | BE | 36° 08,009' N | 021° 19,984' E | 3972 | 816  |    |      |                               |
| MSM72 | 029 | 57 | uCTD      | 10.03.18 | 16:13 | BE | 36° 13,914' N | 021° 19,993' E | 4352 | 818  |    |      |                               |
| MSM72 | 029 | 58 | uCTD      | 10.03.18 | 17:14 | BE | 36° 20,172' N | 021° 20,053' E | 4312 | 814  |    |      |                               |
| MSM72 | 029 | 59 | uCTD      | 10.03.18 | 18:12 | BE | 36° 25,947' N | 021° 19,997' E | 4213 | 789  |    |      |                               |
| MSM72 | 30  | 1  | CTD/IADCP | 10.03.18 | 19:08 | BE | 36° 30,008' N | 021° 20,027' E | 4225 |      |    | CHE1 |                               |

|       |    |    |                 |          |       |          |               |                |        |      |       |      |  |
|-------|----|----|-----------------|----------|-------|----------|---------------|----------------|--------|------|-------|------|--|
| MSM72 | 30 | 1  | CTD/IADCP       | 10.03.18 | 20:25 | BO       | 36° 30,042' N | 021° 20,025' E | 4233   | 4290 | 11    |      |  |
| MSM72 | 30 | 1  | CTD/IADCP       | 10.03.18 | 22:02 | EN       | 36° 30,042' N | 021° 20,025' E | 4235   |      |       |      |  |
| MSM72 | 30 | 60 | uCTD            | 11.03.18 | 0:04  | BE       | 36° 44,697' N | 021° 05,365' E | 3919   | 722  |       |      |  |
| MSM72 | 31 | 1  | CTD/IADCP       | 11.03.18 | 2:23  | BE       | 36° 58,485' N | 020° 51,618' E | 2574   |      |       | PHY  |  |
| MSM72 | 31 | 1  | CTD/IADCP       | 11.03.18 | 3:15  | BO       | 36° 58,486' N | 020° 51,618' E | 2578   | 2554 | 3     |      |  |
| MSM72 | 31 | 1  | CTD/IADCP       | 11.03.18 | 3:56  | EN       | 36° 58,485' N | 020° 51,618' E | 2575   |      |       |      |  |
| MSM72 | 31 | 61 | uCTD            | 11.03.18 | 5:43  | BE       | 37° 09,676' N | 020° 36,886' E | 2595   | 730  |       |      |  |
| MSM72 | 32 | 1  | CTD/IADCP       | 11.03.18 | 8:04  | BE       | 37° 22,514' N | 020° 20,035' E | 4250   |      |       | CHE1 |  |
| MSM72 | 32 | 1  | CTD/IADCP       | 11.03.18 | 9:18  | BO       | 37° 22,511' N | 020° 20,030' E | 4250   | 4322 | 10    |      |  |
| MSM72 | 32 | 1  | CTD/IADCP       | 11.03.18 | 11:01 | EN       | 37° 22,511' N | 020° 20,030' E | 4496   |      |       |      |  |
| MSM72 | 32 | 3  | Float AVOR I    | 11.03.18 | 11:04 | deployed | 37° 22,506' N | 020° 20,031' E | 4240   |      |       |      |  |
| MSM72 | 32 | 62 | uCTD            | 11.03.18 | 13:08 | BE       | 37° 40,883' N | 020° 17,378' E | 2714   | 728  |       |      |  |
| MSM72 | 33 | 1  | CTD/IADCP/LISST | 11.03.18 | 15:17 | BE       | 37° 57,621' N | 020° 15,026' E | 813    |      |       | PHY  |  |
| MSM72 | 33 | 1  | CTD/IADCP/LISST | 11.03.18 | 15:34 | BO       | 37° 57,621' N | 020° 15,026' E | 811    | 807  | 15    |      |  |
| MSM72 | 33 | 1  | CTD/IADCP/LISST | 11.03.18 | 0:00  | EN       | 37° 57,622' N | 020° 15,025' E | 811    |      |       |      |  |
| MSM72 | 33 | 63 | uCTD            | 11.03.18 | 17:29 | BE       | 38° 11,122' N | 020° 08,073' E | 3400   | 747  |       |      |  |
| MSM72 | 34 | 1  | CTD/IADCP       | 11.03.18 | 19:24 | BE       | 38° 23,926' N | 020° 01,525' E | 2602   |      |       | CHE2 |  |
| MSM72 | 34 | 1  | CTD/IADCP       | 11.03.18 | 20:12 | BO       | 38° 23,918' N | 020° 01,535' E | 2603   | 2624 | 10    |      |  |
| MSM72 | 34 | 1  | CTD/IADCP       | 11.03.18 | 21:14 | EN       | 38° 23,918' N | 020° 01,536' E | 2599   |      |       |      |  |
| MSM72 | 34 | 2  | CTD             | 11.03.18 | 22:27 | BE       | 38° 23,920' N | 020° 01,534' E | 2605   |      |       |      |  |
| MSM72 | 34 | 2  | CTD             | 11.03.18 | 22:35 | BO       | 38° 23,920' N | 020° 01,534' E | 2604   | 203  |       |      |  |
| MSM72 | 34 | 2  | CTD             | 11.03.18 | 22:49 | EN       | 38° 23,920' N | 020° 01,534' E | 2602   |      |       |      |  |
| MSM72 | 34 | 4  | Float PROV-BIO  | 11.03.18 | 22:51 | deployed | 38° 23,918' N | 020° 01,538' E | 2600   |      |       |      |  |
| MSM72 | 34 | 64 | uCTD            | 12.03.18 | 0:38  | BE       | 38° 38,072' N | 019° 54,189' E | 1922   | 695  |       |      |  |
| MSM72 | 35 | 1  | CTD/IADCP       | 12.03.18 | 2:25  | BE       | 38° 50,114' N | 019° 47,991' E | 1455   |      |       | PHY  |  |
| MSM72 | 35 | 1  | CTD/IADCP       | 12.03.18 | 2:55  | BO       | 38° 50,111' N | 019° 47,990' E | 1448   | 1458 | 14    |      |  |
| MSM72 | 35 | 1  | CTD/IADCP       | 12.03.18 | 3:25  | EN       | 38° 50,112' N | 019° 47,991' E | 1463   |      |       |      |  |
| MSM72 | 35 | 65 | uCTD            | 12.03.18 | 4:50  | BE       | 39° 02,029' N | 019° 43,222' E | 1444   | 765  |       |      |  |
| MSM72 | 36 | 1  | CTD/IADCP       | 12.03.18 | 6:44  | BE       | 39° 15,031' N | 019° 37,997' E | 1406   |      |       | CHE1 |  |
| MSM72 | 36 | 1  | CTD/IADCP       | 12.03.18 | 7:11  | BO       | 39° 15,043' N | 019° 38,021' E | 1404   | 1412 | 10    |      |  |
| MSM72 | 36 | 1  | CTD/IADCP       | 12.03.18 | 7:56  | EN       | 39° 15,042' N | 019° 38,020' E | 1406   |      |       |      |  |
| MSM72 | 36 | 66 | uCTD            | 12.03.18 | 9:22  | BE       | 39° 27,162' N | 019° 33,112' E | 1253   | 747  |       |      |  |
| MSM72 | 37 | 1  | CTD/IADCP       | 12.03.18 | 11:14 | BE       | 39° 40,221' N | 019° 27,885' E | 345    |      |       | PHY  |  |
| MSM72 | 37 | 1  | CTD/IADCP       | 12.03.18 | 11:26 | BO       | 39° 40,222' N | 019° 27,885' E | 346    | 339  | 11    |      |  |
| MSM72 | 37 | 1  | CTD/IADCP       | 12.03.18 | 11:38 | EN       | 39° 40,222' N | 019° 27,886' E | 347    |      |       |      |  |
| MSM72 | 37 | 67 | uCTD            | 12.03.18 | 12:54 | BE       | 39° 49,228' N | 019° 19,903' E | 823    | 646  |       |      |  |
| MSM72 | 38 | 1  | CTD/IADCP       | 12.03.18 | 14:04 | BE       | 39° 56,025' N | 019° 16,994' E | 986    |      |       | CHE1 |  |
| MSM72 | 38 | 1  | CTD/IADCP       | 12.03.18 | 14:25 | BO       | 39° 56,025' N | 019° 16,994' E | 987    | 982  | 15    |      |  |
| MSM72 | 38 | 1  | CTD/IADCP       | 12.03.18 | 14:55 | EN       | 39° 56,025' N | 019° 16,994' E | 985    |      |       |      |  |
| MSM72 | 38 | 68 | uCTD            | 12.03.18 | 15:44 | BE       | 40° 02,085' N | 019° 18,202' E | 996    | 695  |       |      |  |
| MSM72 | 39 | 1  | CTD/IADCP/LISST | 12.03.18 | 17:04 | BE       | 40° 10,237' N | 019° 19,830' E | 937    |      |       | PHY  |  |
| MSM72 | 39 | 1  | CTD/IADCP/LISST | 12.03.18 | 17:24 | BO       | 40° 10,237' N | 019° 19,831' E | 935    | 925  | 15    |      |  |
| MSM72 | 39 | 1  | CTD/IADCP/LISST | 12.03.18 | 17:54 | EN       | 40° 10,237' N | 019° 19,830' E | 937    |      |       |      |  |
| MSM72 | 40 | 1  | CTD/IADCP/LISST | 12.03.18 | 19:05 | BE       | 40° 10,231' N | 019° 10,218' E | 970    |      |       | CHE1 |  |
| MSM72 | 40 | 1  | CTD/IADCP/LISST | 12.03.18 | 19:27 | BO       | 40° 10,232' N | 019° 10,217' E | 969    | 967  | 10    |      |  |
| MSM72 | 40 | 1  | CTD/IADCP/LISST | 12.03.18 | 20:06 | EN       | 40° 10,231' N | 019° 10,217' E | 973    |      |       |      |  |
| MSM72 | 41 | 1  | CTD/IADCP/LISST | 12.03.18 | 21:17 | BE       | 40° 10,220' N | 019° 00,043' E | 919    |      |       | PHY  |  |
| MSM72 | 41 | 1  | CTD/IADCP/LISST | 12.03.18 | 21:36 | BO       | 40° 10,222' N | 019° 00,045' E | 926    | 915  | 10    |      |  |
| MSM72 | 41 | 1  | CTD/IADCP/LISST | 12.03.18 | 22:13 | EN       | 40° 10,222' N | 019° 00,045' E | 921    |      |       |      |  |
| MSM72 | 42 | 1  | CTD/IADCP/LISST | 12.03.18 | 23:15 | BE       | 40° 10,223' N | 018° 49,789' E | 777    |      |       | CHE1 |  |
| MSM72 | 42 | 1  | CTD/IADCP/LISST | 12.03.18 | 23:34 | BO       | 40° 10,223' N | 018° 49,788' E | 777    | 774  | 10    |      |  |
| MSM72 | 42 | 1  | CTD/IADCP/LISST | 13.03.18 | 0:06  | EN       | 40° 10,222' N | 018° 49,789' E | 774    |      |       |      |  |
| MSM72 | 43 | 1  | CTD/IADCP/LISST | 13.03.18 | 1:07  | BE       | 40° 10,230' N | 018° 43,015' E | 597    |      |       | PHY  |  |
| MSM72 | 43 | 1  | CTD/IADCP/LISST | 13.03.18 | 1:22  | BO       | 40° 10,229' N | 018° 43,016' E | 598    | 589  | 9     |      |  |
| MSM72 | 43 | 1  | CTD/IADCP/LISST | 13.03.18 | 1:49  | EN       | 40° 10,229' N | 018° 43,016' E | 598    |      |       |      |  |
| MSM72 | 43 | 69 | uCTD            | 13.03.18 | 4:18  | BE       | 39° 49,705' N | 018° 58,653' E | 904    | 718  |       |      |  |
| MSM72 | 43 | 70 | uCTD            | 13.03.18 | 6:18  | BE       | 39° 36,106' N | 019° 08,904' E | 1082,1 | 754  |       |      |  |
| MSM72 | 43 | 71 | uCTD            | 13.03.18 | 8:13  | BE       | 39° 22,396' N | 019° 19,285' E | 1167,6 | 727  |       |      |  |
| MSM72 | 43 | 72 | uCTD            | 13.03.18 | 10:16 | BE       | 39° 07,414' N | 019° 30,607' E | 1102,3 | 797  |       |      |  |
| MSM72 | 43 | 73 | uCTD            | 13.03.18 | 12:15 | BE       | 38° 52,918' N | 019° 41,961' E | 1340,5 | 729  |       |      |  |
| MSM72 | 43 | 74 | uCTD            | 13.03.18 | 14:14 | BE       | 38° 38,660' N | 019° 52,648' E | 1761,7 | 731  |       |      |  |
| MSM72 | 43 | 75 | uCTD            | 13.03.18 | 16:13 | BE       | 38° 24,230' N | 020° 03,409' E | 2684,6 | 712  |       |      |  |
| MSM72 | 43 | 76 | uCTD            | 13.03.18 | 18:12 | BE       | 38° 09,169' N | 020° 11,644' E | 2505,2 | 746  |       |      |  |
| MSM72 | 43 | 77 | uCTD            | 13.03.18 | 20:14 | BE       | 37° 54,040' N | 020° 23,862' E | 1599,2 | 739  |       |      |  |
| MSM72 | 43 | 78 | uCTD            | 13.03.18 | 22:15 | BE       | 37° 39,699' N | 020° 35,585' E | 1129,2 | 697  |       |      |  |
| MSM72 | 43 | 79 | uCTD            | 14.03.18 | 0:14  | BE       | 37° 25,669' N | 020° 45,781' E | 3361,7 | 701  |       |      |  |
| MSM72 | 43 | 80 | uCTD            | 14.03.18 | 4:13  | BE       | 36° 53,692' N | 021° 09,335' E | 2015,9 | 771  |       |      |  |
| MSM72 | 43 | 81 | uCTD            | 14.03.18 | 6:16  | BE       | 36° 39,668' N | 021° 22,171' E | 4108   | 745  |       |      |  |
| MSM72 | 43 | 82 | uCTD            | 14.03.18 | 8:13  | BE       | 36° 26,328' N | 021° 33,766' E | 3898,2 | 847  |       |      |  |
| MSM72 | 44 | 1  | CTD/IADCP       | 14.03.18 | 16:18 | BE       | 35° 01,984' N | 022° 40,044' E | 3154   |      |       | CHE1 |  |
| MSM72 | 44 | 1  | CTD/IADCP       | 14.03.18 | 17:18 | BO       | 35° 02,016' N | 022° 40,019' E | 3154   | 3186 | 15.16 |      |  |
| MSM72 | 44 | 1  | CTD/IADCP       | 14.03.18 | 18:36 | EN       | 35° 02,016' N | 022° 40,019' E | 3155   |      |       |      |  |
| MSM72 | 44 | 83 | uCTD            | 14.03.18 | 19:32 | BE       | 35° 03,141' N | 022° 31,015' E | 3346,7 | 731  |       |      |  |
| MSM72 | 45 | 1  | CTD/IADCP       | 14.03.18 | 20:50 | BE       | 35° 04,590' N | 022° 20,042' E | 3314   |      |       | PHY  |  |
| MSM72 | 45 | 1  | CTD/IADCP       | 14.03.18 | 21:53 | BO       | 35° 04,628' N | 022° 20,009' E | 3321   | 3372 | 11.2  |      |  |
| MSM72 | 45 | 1  | CTD/IADCP       | 14.03.18 | 22:55 | EN       | 35° 04,629' N | 022° 20,007' E | 3309   |      |       |      |  |
| MSM72 | 45 | 84 | uCTD            | 14.03.18 | 23:45 | BE       | 35° 05,824' N | 022° 10,493' E | 3185,9 | 705  |       |      |  |
| MSM72 | 46 | 1  | CTD/IADCP       | 15.03.18 | 0:59  | BE       | 35° 07,209' N | 021° 59,405' E | 3252   |      |       | CHE1 |  |
| MSM72 | 46 | 1  | CTD/IADCP       | 15.03.18 | 1:59  | BO       | 35° 07,230' N | 021° 59,410' E | 3247   | 3275 | 10    |      |  |
| MSM72 | 46 | 1  | CTD/IADCP       | 15.03.18 | 3:15  | EN       | 35° 07,239' N | 021° 59,411' E | 3244   |      |       |      |  |
| MSM72 | 46 | 85 | uCTD            | 15.03.18 | 4:25  | BE       | 35° 10,719' N | 021° 44,345' E | 3304,1 | 672  |       |      |  |
| MSM72 | 47 | 1  | CTD/IADCP       | 15.03.18 | 5:56  | BE       | 35° 14,319' N | 021° 28,850' E | 3527   |      |       | CHE2 |  |
| MSM72 | 47 | 1  | CTD/IADCP       | 15.03.18 | 6:23  | BO       | 35° 14,319' N | 021° 28,850' E | 3514   | 1262 |       |      |  |

|       |    |    |                 |          |       |          |               |                |        |        |      |      |  |
|-------|----|----|-----------------|----------|-------|----------|---------------|----------------|--------|--------|------|------|--|
| MSM72 | 47 | 1  | CTD/IADCP       | 15.03.18 | 7:12  | EN       | 35° 14,319' N | 021° 28,850' E |        |        |      |      |  |
| MSM72 | 47 | 2  | CTD/IADCP       | 15.03.18 | 8:40  | BE       | 35° 14,394' N | 021° 28,850' E | 3522   |        |      | CHE2 |  |
| MSM72 | 47 | 2  | CTD/IADCP       | 15.03.18 | 9:46  | BO       | 35° 14,394' N | 021° 28,850' E | 3528   |        | 10.1 |      |  |
| MSM72 | 47 | 2  | CTD/IADCP       | 15.03.18 | 10:56 | EN       | 35° 14,393' N | 021° 28,848' E | 3536   |        |      |      |  |
| MSM72 | 47 | 86 | uCTD            | 15.03.18 | 12:04 | BE       | 35° 11,648' N | 021° 14,156' E | 3095,9 | 730    |      |      |  |
| MSM72 | 48 | 1  | CTD/IADCP       | 15.03.18 | 13:32 | BE       | 35° 08,979' N | 021° 00,065' E | 3076   |        |      | PHY  |  |
| MSM72 | 48 | 1  | CTD/IADCP       | 15.03.18 | 14:27 | BO       | 35° 08,992' N | 021° 00,050' E | 3078   | 3118   | 14.8 |      |  |
| MSM72 | 48 | 1  | CTD/IADCP       | 15.03.18 | 15:25 | EN       | 35° 08,992' N | 021° 00,051' E | 3076   |        |      |      |  |
| MSM72 | 48 | 87 | uCTD            | 15.03.18 | 16:10 | BE       | 35° 07,853' N | 020° 50,846' E | 2805,9 | 761    |      |      |  |
| MSM72 | 49 | 1  | CTD/IADCP/LISST | 15.03.18 | 17:20 | BE       | 35° 06,588' N | 020° 14,523' E | 2844   |        |      | CHE1 |  |
| MSM72 | 49 | 1  | CTD/IADCP/LISST | 15.03.18 | 18:13 | BO       | 35° 06,588' N | 020° 14,523' E | 2851   | 2877   | 9.3  |      |  |
| MSM72 | 49 | 1  | CTD/IADCP/LISST | 15.03.18 | 19:28 | EN       | 35° 06,588' N | 020° 14,523' E | 2848   |        |      |      |  |
| MSM72 | 49 | 88 | uCTD            | 15.03.18 | 20:12 | BE       | 35° 05,528' N | 020° 31,758' E | 2957,9 | 757    |      |      |  |
| MSM72 | 50 | 1  | CTD/IADCP/LISST | 15.03.18 | 21:27 | BE       | 35° 04,218' N | 020° 21,053' E | 2984   |        |      | PHY  |  |
| MSM72 | 50 | 1  | CTD/IADCP/LISST | 15.03.18 | 22:22 | BO       | 35° 04,234' N | 020° 21,014' E | 2996   | 3014   | 9.9  |      |  |
| MSM72 | 50 | 1  | CTD/IADCP/LISST | 15.03.18 | 23:16 | EN       | 35° 04,234' N | 020° 21,013' E | 2956   |        |      |      |  |
| MSM72 | 50 | 5  | Drifter         | 15.03.18 | 23:24 | deployed | 35° 04,189' N | 020° 20,990' E | 3237   |        |      |      |  |
| MSM72 | 50 | 89 | uCTD            | 16.03.18 | 0:31  | BE       | 35° 07,565' N | 020° 06,521' E | 2957,9 | 685    |      |      |  |
| MSM72 | 51 | 1  | CTD/IADCP       | 16.03.18 | 1:58  | BE       | 35° 10,760' N | 019° 53,220' E | 2976   |        |      | CHE1 |  |
| MSM72 | 51 | 1  | CTD/IADCP       | 16.03.18 | 2:55  | BO       | 35° 10,760' N | 019° 53,219' E | 2975   | 2982   | 15.1 |      |  |
| MSM72 | 51 | 1  | CTD/IADCP       | 16.03.18 | 4:05  | EN       | 35° 10,760' N | 019° 53,219' E | 2975   |        |      |      |  |
| MSM72 | 51 | 90 | uCTD            | 16.03.18 | 4:57  | BE       | 35° 13,510' N | 019° 41,652' E | 3176,1 | 731    |      |      |  |
| MSM72 | 52 | 1  | CTD/IADCP       | 16.03.18 | 6:36  | BE       | 35° 17,144' N | 019° 25,472' E | 3366,1 |        |      | CHE1 |  |
| MSM72 | 52 | 1  | CTD/IADCP       | 16.03.18 | 7:38  | BO       | 35° 17,143' N | 019° 25,474' E | 3368,7 | 3402,4 | 10.8 |      |  |
| MSM72 | 52 | 1  | CTD/IADCP       | 16.03.18 | 8:54  | EN       | 35° 17,143' N | 019° 25,474' E | 3368,3 |        |      |      |  |
| MSM72 | 52 | 91 | uCTD            | 16.03.18 | 6:37  | BE       | 35° 17,145' N | 019° 25,473' E | 3369   | 733    |      |      |  |
| MSM72 | 53 | 1  | CTD/IADCP       | 16.03.18 | 11:50 | BE       | 35° 23,621' N | 018° 57,817' E | 3771   |        |      | CHE1 |  |
| MSM72 | 53 | 1  | CTD/IADCP       | 16.03.18 | 12:55 | BO       | 35° 23,621' N | 018° 57,818' E | 3771   | 3825   | 9.2  |      |  |
| MSM72 | 53 | 1  | CTD/IADCP       | 16.03.18 | 14:23 | EN       | 35° 23,621' N | 018° 57,816' E | 3772   |        |      |      |  |
| MSM72 | 53 | 92 | uCTD            | 16.03.18 | 15:32 | BE       | 35° 27,785' N | 018° 44,951' E | 3917,7 | 724    |      |      |  |
| MSM72 | 54 | 1  | CTD/IADCP       | 16.03.18 | 17:09 | BE       | 35° 30,019' N | 018° 29,977' E | 4029   |        |      | PHY  |  |
| MSM72 | 54 | 1  | CTD/IADCP       | 16.03.18 | 18:32 | BO       | 35° 29,658' N | 018° 29,959' E | 4018   | 4029   | 10.3 |      |  |
| MSM72 | 54 | 1  | CTD/IADCP       | 16.03.18 | 19:49 | EN       | 35° 29,379' N | 018° 29,956' E |        |        |      |      |  |
| MSM72 | 54 | 6  | Float           | 16.03.18 | 19:59 | deployed | 35° 29,341' N | 018° 29,951' E | 4016   |        |      |      |  |
| MSM72 | 54 | 7  | Drifter         | 16.03.18 | 20:09 | deployed | 35° 28,541' N | 018° 30,037' E | 4283,8 |        |      |      |  |
| MSM72 | 54 | 93 | uCTD            | 16.03.18 | 20:49 | BE       | 35° 24,683' N | 018° 23,038' E | 3908,4 | 816    |      |      |  |
| MSM72 | 55 | 1  | CTD/IADCP       | 16.03.18 | 22:22 | BE       | 35° 18,001' N | 018° 11,991' E | 3866   |        |      | CHE2 |  |
| MSM72 | 55 | 1  | CTD/IADCP       | 16.03.18 | 23:32 | BO       | 35° 18,002' N | 018° 11,991' E | 3862   | 3924   | 9.9  |      |  |
| MSM72 | 55 | 1  | CTD/IADCP       | 17.03.18 | 0:55  | EN       | 35° 18,000' N | 018° 11,993' E | 3868   |        |      |      |  |
| MSM72 | 55 | 2  | CTD/IADCP       | 17.03.18 | 2:08  | BE       | 35° 18,000' N | 018° 11,994' E | 3865,7 |        |      | CHE2 |  |
| MSM72 | 55 | 2  | CTD/IADCP       | 17.03.18 | 2:30  | BO       | 35° 17,996' N | 018° 11,995' E | 3865,7 | 1009   |      |      |  |
| MSM72 | 55 | 2  | CTD/IADCP       | 17.03.18 | 3:02  | EN       | 35° 17,996' N | 018° 11,993' E | 3865,7 |        |      |      |  |
| MSM72 | 56 | 1  | CTD/IADCP       | 17.03.18 | 5:05  | BE       | 35° 06,023' N | 017° 53,992' E | 3579   |        |      | PHY  |  |
| MSM72 | 56 | 1  | CTD/IADCP       | 17.03.18 | 6:10  | BO       | 35° 06,020' N | 017° 53,992' E | 3576   | 3615   | 14.6 |      |  |
| MSM72 | 56 | 1  | CTD/IADCP       | 17.03.18 | 7:21  | EN       | 35° 06,022' N | 017° 53,992' E | 3591   |        |      |      |  |
| MSM72 | 57 | 1  | CTD/IADCP       | 17.03.18 | 9:51  | BE       | 34° 54,048' N | 017° 35,983' E | 2965   |        |      | CHE1 |  |
| MSM72 | 57 | 1  | CTD/IADCP       | 17.03.18 | 10:45 | BO       | 34° 54,048' N | 017° 35,988' E | 2950   | 2994   | 12   |      |  |
| MSM72 | 57 | 1  | CTD/IADCP       | 17.03.18 | 12:02 | EN       | 34° 54,047' N | 017° 35,987' E | 2962   |        |      |      |  |
| MSM72 | 58 | 1  | CTD/IADCP       | 17.03.18 | 14:21 | BE       | 34° 42,007' N | 017° 18,012' E | 2830   |        |      | PHY  |  |
| MSM72 | 58 | 1  | CTD/IADCP       | 17.03.18 | 15:15 | BO       | 34° 42,006' N | 017° 18,011' E | 2831   | 2856   | 14   |      |  |
| MSM72 | 58 | 1  | CTD/IADCP       | 17.03.18 | 16:10 | EN       | 34° 42,008' N | 017° 18,012' E | 2832   |        |      |      |  |
| MSM72 | 59 | 1  | CTD/IADCP/LISST | 17.03.18 | 18:47 | BE       | 34° 50,995' N | 016° 48,006' E | 2292   |        |      | CHE1 |  |
| MSM72 | 59 | 1  | CTD/IADCP/LISST | 17.03.18 | 19:32 | BO       | 34° 50,995' N | 016° 48,006' E | 2292   | 2310   | 9.8  |      |  |
| MSM72 | 59 | 1  | CTD/IADCP/LISST | 17.03.18 | 20:32 | EN       | 34° 50,995' N | 016° 48,006' E | 2290   |        |      |      |  |
| MSM72 | 59 | 94 | uCTD            | 17.03.18 | 21:53 | BE       | 34° 55,376' N | 016° 33,362' E | 2085,9 | 758    |      |      |  |
| MSM72 | 60 | 1  | CTD/IADCP       | 17.03.18 | 23:45 | BE       | 35° 00,007' N | 016° 17,985' E | 1504   |        |      | PHY  |  |
| MSM72 | 60 | 1  | CTD/IADCP       | 18.03.18 | 0:16  | BO       | 35° 00,009' N | 016° 17,985' E | 1497   | 1487   | 11.5 |      |  |
| MSM72 | 60 | 1  | CTD/IADCP       | 18.03.18 | 0:47  | EN       | 35° 00,009' N | 016° 17,986' E | 1495   |        |      |      |  |
| MSM72 | 61 | 1  | CTD/IADCP       | 18.03.18 | 4:05  | BE       | 35° 18,894' N | 015° 49,817' E | 413    |        |      | CHE1 |  |
| MSM72 | 61 | 1  | CTD/IADCP       | 18.03.18 | 4:18  | BO       | 35° 18,864' N | 015° 49,829' E | 413    | 406    | 10.2 |      |  |
| MSM72 | 61 | 1  | CTD/IADCP       | 18.03.18 | 4:37  | EN       | 35° 18,808' N | 015° 49,858' E | 415    |        |      |      |  |
| MSM72 | 62 | 1  | CTD/IADCP/LISST | 18.03.18 | 7:41  | BE       | 35° 37,783' N | 015° 21,642' E | 284    |        |      | PHY  |  |
| MSM72 | 62 | 1  | CTD/IADCP/LISST | 18.03.18 | 7:53  | BO       | 35° 37,786' N | 015° 21,641' E | 284    | 279    | 10.5 |      |  |
| MSM72 | 62 | 1  | CTD/IADCP/LISST | 18.03.18 | 8:04  | EN       | 35° 37,786' N | 015° 21,640' E | 286    |        |      |      |  |
| MSM72 | 63 | 1  | CTD/IADCP       | 18.03.18 | 11:41 | BE       | 35° 37,920' N | 014° 45,780' E | 134    |        |      | CHE1 |  |
| MSM72 | 63 | 1  | CTD/IADCP       | 18.03.18 | 11:48 | BO       | 35° 37,920' N | 014° 45,780' E | 134    | 125    | 9.2  |      |  |
| MSM72 | 63 | 1  | CTD/IADCP       | 18.03.18 | 11:59 | EN       | 35° 37,920' N | 014° 45,781' E | 135    |        |      |      |  |
| MSM72 | 64 | 1  | CTD/IADCP       | 18.03.18 | 15:06 | BE       | 35° 38,029' N | 014° 10,026' E | 560    |        |      | PHY  |  |
| MSM72 | 64 | 1  | CTD/IADCP       | 18.03.18 | 15:26 | BO       | 35° 38,028' N | 014° 10,025' E | 556    | 546    | 14   |      |  |
| MSM72 | 64 | 1  | CTD/IADCP       | 18.03.18 | 15:41 | EN       | 35° 38,028' N | 014° 10,025' E | 551    |        |      |      |  |
| MSM72 | 64 | 95 | uCTD            | 18.03.18 | 17:38 | BE       | 35° 43,562' N | 013° 45,671' E | 601,8  | 547    |      |      |  |
| MSM72 | 64 | 96 | uCTD            | 18.03.18 | 20:02 | BE       | 35° 48,069' N | 013° 18,644' E | 1446,4 | 667    |      |      |  |
| MSM72 | 65 | 1  | CTD/IADCP       | 18.03.18 | 22:19 | BE       | 35° 49,994' N | 013° 05,030' E | 1527   |        |      | PHY  |  |
| MSM72 | 65 | 1  | CTD/IADCP       | 18.03.18 | 22:52 | BO       | 35° 49,965' N | 013° 05,074' E | 1530   | 1536,3 | 11.6 |      |  |
| MSM72 | 65 | 1  | CTD/IADCP       | 18.03.18 | 23:22 | EN       | 35° 49,944' N | 013° 05,105' E | 1526   |        |      |      |  |
| MSM72 | 65 | 97 | uCTD            | 18.03.18 | 23:36 | BE       | 35° 50,143' N | 013° 05,354' E | 1532,9 | 665    |      |      |  |
| MSM72 | 66 | 1  | CTD/IADCP       | 19.03.18 | 3:05  | BE       | 36° 00,995' N | 013° 47,503' E | 1109   |        |      | CHE1 |  |
| MSM72 | 66 | 1  | CTD/IADCP       | 19.03.18 | 3:30  | BO       | 36° 00,995' N | 013° 47,503' E | 1111   | 1111   | 13.2 |      |  |
| MSM72 | 66 | 1  | CTD/IADCP       | 19.03.18 | 4:03  | EN       | 36° 00,994' N | 013° 47,502' E | 1108   |        |      |      |  |
| MSM72 | 66 | 98 | uCTD            | 19.03.18 | 4:45  | BE       | 36° 06,896' N | 013° 44,004' E | 1036,3 | 647    |      |      |  |
| MSM72 | 67 | 1  | CTD/IADCP       | 19.03.18 | 5:52  | BE       | 36° 12,990' N | 013° 38,977' E | 1309   |        |      | PHY  |  |
| MSM72 | 67 | 1  | CTD/IADCP       | 19.03.18 | 6:23  | BO       | 36° 12,990' N | 013° 38,976' E | 1308   | 1315   | 9.9  |      |  |
| MSM72 | 67 | 1  | CTD/IADCP       | 19.03.18 | 6:53  | EN       | 36° 12,984' N | 013° 38,971' E | 1306   |        |      |      |  |

|       |    |     |                 |          |       |          |               |                |        |        |       |      |                                          |
|-------|----|-----|-----------------|----------|-------|----------|---------------|----------------|--------|--------|-------|------|------------------------------------------|
| MSM72 | 67 | 99  | uCTD            | 19.03.18 | 7:44  | BE       | 36° 18,722' N | 013° 31,740' E | 1265,4 | 729    |       |      |                                          |
| MSM72 | 68 | 1   | CTD/IADCP/LISST | 19.03.18 | 8:53  | BE       | 36° 23,980' N | 013° 25,031' E | 1714   |        |       | CHE2 |                                          |
| MSM72 | 68 | 1   | CTD/IADCP/LISST | 19.03.18 | 9:35  | BO       | 36° 23,981' N | 013° 25,032' E | 1710   | 1722   | 10.7  |      |                                          |
| MSM72 | 68 | 1   | CTD/IADCP/LISST | 19.03.18 | 10:24 | EN       | 36° 23,980' N | 013° 25,032' E | 1712   |        |       |      |                                          |
| MSM72 | 68 | 100 | uCTD            | 19.03.18 | 11:03 | BE       | 36° 26,885' N | 013° 19,663' E | 1722   | 722    |       |      |                                          |
| MSM72 | 69 | 1   | CTD/IADCP/LISST | 19.03.18 | 12:01 | BE       | 36° 30,016' N | 013° 13,982' E | 1715   |        |       | PHY  |                                          |
| MSM72 | 69 | 1   | CTD/IADCP/LISST | 19.03.18 | 12:36 | BO       | 36° 30,018' N | 013° 13,981' E | 1713   | 1705   | 10.3  |      |                                          |
| MSM72 | 69 | 1   | CTD/IADCP/LISST | 19.03.18 | 13:10 | EN       | 36° 30,018' N | 013° 13,982' E | 1714   |        |       |      |                                          |
| MSM72 | 69 | 101 | uCTD            | 19.03.18 | 14:05 | BE       | 36° 33,803' N | 013° 04,473' E | 1213,9 | 799    |       |      |                                          |
| MSM72 | 70 | 1   | CTD/IADCP/LISST | 19.03.18 | 15:12 | BE       | 36° 36,493' N | 012° 57,799' E | 1008   |        |       | CHE1 |                                          |
| MSM72 | 70 | 1   | CTD/IADCP/LISST | 19.03.18 | 15:35 | BO       | 36° 36,494' N | 012° 57,798' E | 1013   | 1013.5 | 13.45 |      |                                          |
| MSM72 | 70 | 1   | CTD/IADCP/LISST | 19.03.18 | 16:07 | EN       | 36° 36,494' N | 012° 57,798' E | 1026   |        |       |      |                                          |
| MSM72 | 70 | 102 | uCTD            | 19.03.18 | 16:48 | BE       | 36° 36,860' N | 012° 50,504' E | 785,5  | 559    |       |      |                                          |
| MSM72 | 70 | 103 | uCTD            | 19.03.18 | 18:00 | BE       | 36° 37,485' N | 012° 38,783' E | 1193   | 699    |       |      |                                          |
| MSM72 | 71 | 1   | CTD/IADCP/LISST | 19.03.18 | 19:24 | BE       | 36° 37,985' N | 012° 29,522' E | 1327   |        |       | PHY  |                                          |
| MSM72 | 71 | 1   | CTD/IADCP/LISST | 19.03.18 | 19:55 | BO       | 36° 37,985' N | 012° 29,520' E | 1311   | 1313   | 9.5   |      |                                          |
| MSM72 | 71 | 1   | CTD/IADCP/LISST | 19.03.18 | 20:23 | EN       | 36° 37,985' N | 012° 29,520' E | 1308   |        |       |      |                                          |
| MSM72 | 71 | 104 | uCTD            | 19.03.18 | 21:13 | BE       | 36° 39,242' N | 012° 23,235' E | 1315,7 | 777    |       |      |                                          |
| MSM72 | 72 | 1   | CTD/IADCP       | 19.03.18 | 22:47 | BE       | 36° 38,022' N | 012° 15,028' E | 1302   |        |       | CHE1 |                                          |
| MSM72 | 72 | 1   | CTD/IADCP       | 19.03.18 | 23:16 | BO       | 36° 38,022' N | 012° 15,030' E | 1302   | 1308   | 10.7  |      |                                          |
| MSM72 | 72 | 1   | CTD/IADCP       | 19.03.18 | 23:53 | EN       | 36° 38,022' N | 012° 15,030' E | ?      |        |       |      |                                          |
| MSM72 | 72 | 105 | uCTD            | 20.03.18 | 0:17  | BE       | 36° 38,387' N | 012° 14,986' E | 1304,4 | 705    |       |      |                                          |
| MSM72 | 72 | 106 | uCTD            | 20.03.18 | 2:03  | BE       | 36° 48,949' N | 012° 12,009' E | 1163   | 683    |       |      |                                          |
| MSM72 | 73 | 1   | CTD/IADCP/LISST | 20.03.18 | 7:05  | BE       | 37° 21,324' N | 012° 03,008' E | 78     |        |       | CHE1 |                                          |
| MSM72 | 73 | 1   | CTD/IADCP/LISST | 20.03.18 | 7:09  | BO       | 37° 21,324' N | 012° 03,011' E | 77     | 72.2   | 8,7   |      |                                          |
| MSM72 | 73 | 1   | CTD/IADCP/LISST | 20.03.18 | 7:17  | EN       | 37° 21,324' N | 012° 03,010' E | 79     |        |       |      |                                          |
| MSM72 | 74 | 1   | CTD/IADCP/LISST | 20.03.18 | 10:10 | BE       | 37° 32,035' N | 012° 22,046' E | 80     |        |       | PHY  |                                          |
| MSM72 | 74 | 1   | CTD/IADCP/LISST | 20.03.18 | 10:20 | BO       | 37° 32,017' N | 012° 22,087' E | 80     | 67.8   | 9,5   |      |                                          |
| MSM72 | 74 | 1   | CTD/IADCP/LISST | 20.03.18 | 10:25 | EN       | 37° 32,003' N | 012° 22,129' E | 80     |        |       |      |                                          |
| MSM72 | 75 | 1   | CTD/IADCP       | 21.03.18 | 6:37  | BE       | 39° 10,979' N | 013° 30,062' E | 3076   |        |       | CHE1 | Bottles did not close, ctd probe changed |
| MSM72 | 75 | 1   | CTD/IADCP       | 21.03.18 | 7:38  | BO       | 39° 10,948' N | 013° 30,066' E | 3096   | 3122   | 11.6  |      |                                          |
| MSM72 | 75 | 1   | CTD/IADCP       | 21.03.18 | 8:50  | EN       | 39° 10,948' N | 013° 30,066' E |        |        |       |      |                                          |
| MSM72 | 75 | 2   | CTD/IADCP       | 21.03.18 | 11:14 | BE       | 39° 10,946' N | 013° 30,067' E | 3095   |        |       | CHE1 |                                          |
| MSM72 | 75 | 2   | CTD/IADCP       | 21.03.18 | 12:14 | BO       | 39° 10,948' N | 013° 30,066' E | 3100   | 3127   | 6.5   |      |                                          |
| MSM72 | 75 | 2   | CTD/IADCP       | 21.03.18 | 13:28 | EN       | 39° 10,948' N | 013° 30,067' E | 3100   |        |       |      |                                          |
| MSM72 | 75 | 7   | Float           | 21.03.18 | 14:42 | deployed | 39° 10,948' N | 013° 30,06' E  | 3083   |        |       |      |                                          |
| MSM72 | 75 | 107 | uCTD            | 21.03.18 | 15:56 | BE       | 39° 11,983' N | 013° 10,128' E | 3151,5 | 760    |       |      |                                          |
| MSM72 | 76 | 1   | CTD/IADCP       | 21.03.18 | 17:37 | BE       | 39° 12,988' N | 012° 50,028' E | 3414   |        |       | PHY  |                                          |
| MSM72 | 76 | 1   | CTD/IADCP       | 21.03.18 | 18:44 | BO       | 39° 13,000' N | 012° 50,029' E | 3418   | 3465.9 | 8.8   |      |                                          |
| MSM72 | 76 | 1   | CTD/IADCP       | 21.03.18 | 19:50 | EN       | 39° 13,000' N | 012° 50,027' E | 3417   |        |       |      |                                          |
| MSM72 | 76 | 108 | uCTD            | 21.03.18 | 22:04 | BE       | 39° 13,036' N | 012° 29,529' E | 3170,3 |        |       |      |                                          |
| MSM72 | 76 | 109 | uCTD            | 22.03.18 | 22:04 | BE       | 39° 13,110' N | 012° 05,920' E | 3100   |        |       |      |                                          |
| MSM72 | 77 | 1   | CTD/IADCP       | 22.03.18 | 1:59  | BE       | 39° 13,198' N | 011° 45,041' E | 3216   |        |       | CHE2 |                                          |
| MSM72 | 77 | 1   | CTD/IADCP       | 22.03.18 | 2:17  | BO       | 39° 13,198' N | 011° 45,042' E | 3218   | 758    |       |      |                                          |
| MSM72 | 77 | 1   | CTD/IADCP       | 22.03.18 | 2:44  | EN       | 39° 13,198' N | 011° 45,041' E | 3217   |        |       |      |                                          |
| MSM72 | 77 | 2   | CTD/IADCP       | 22.03.18 | 3:49  | BE       | 39° 13,197' N | 011° 45,039' E | 3218   |        |       | CHE2 |                                          |
| MSM72 | 77 | 2   | CTD/IADCP       | 22.03.18 | 4:49  | BO       | 39° 13,010' N | 011° 44,992' E | 3155   | 3219   | 14.1  |      |                                          |
| MSM72 | 77 | 2   | CTD/IADCP       | 22.03.18 | 5:54  | EN       | 39° 12,920' N | 011° 44,956' E | 3107   |        |       |      |                                          |
| MSM72 | 77 | 8   | Float           | 22.03.18 | 6:08  | BE       | 39° 12,950' N | 011° 44,96' E  | 3200   |        |       |      |                                          |
| MSM72 | 78 | 110 | uCTD            | 22.03.18 | 6:21  | BE       | 39° 12,704' N | 011° 44,929' E | 3055,5 | 686    |       |      |                                          |
| MSM72 | 78 | 111 | uCTD            | 22.03.18 | 7:27  | BE       | 39° 05,312' N | 011° 44,070' E | 2551,8 | 721    |       |      |                                          |
| MSM72 | 78 | 112 | uCTD            | 22.03.18 | 8:33  | BE       | 38° 58,086' N | 011° 43,278' E | 2284   | 706    |       |      |                                          |
| MSM72 | 78 | 113 | uCTD            | 22.03.18 | 9:40  | BE       | 38° 50,784' N | 011° 42,289' E | 1859,2 | 392    |       |      |                                          |
| MSM72 | 78 | 114 | uCTD            | 22.03.18 | 10:57 | BE       | 38° 42,283' N | 011° 41,445' E | 1933,2 | 718    |       |      |                                          |
| MSM72 | 78 | 115 | uCTD            | 22.03.18 | 12:25 | BE       | 38° 31,965' N | 011° 41,040' E | 2512,4 | 716    |       |      |                                          |
| MSM72 | 78 | 116 | uCTD            | 22.03.18 | 13:59 | BE       | 38° 21,813' N | 011° 38,655' E | 1071,2 | 634    |       |      |                                          |
| MSM72 | 78 | 117 | uCTD            | 22.03.18 | 15:19 | BE       | 38° 12,334' N | 011° 37,984' E | 713,1  | 466    |       |      |                                          |
| MSM72 | 78 | 118 | uCTD            | 22.03.18 | 16:32 | BE       | 38° 02,816' N | 011° 36,797' E | 708,9  | 445    |       |      |                                          |
| MSM72 | 79 | 1   | CTD/IADCP/LISST | 22.03.18 | 17:57 | BE       | 37° 53,489' N | 011° 35,581' E | 473    |        |       | CHE1 |                                          |
| MSM72 | 79 | 1   | CTD/IADCP/LISST | 22.03.18 | 18:11 | BO       | 37° 53,539' N | 011° 35,558' E | 474    | 470    | 9.7   |      |                                          |
| MSM72 | 79 | 1   | CTD/IADCP/LISST | 22.03.18 | 18:34 | EN       | 37° 53,646' N | 011° 35,508' E | 476    |        |       |      |                                          |
| MSM72 | 80 | 1   | CTD/IADCP       | 22.03.18 | 21:07 | BE       | 38° 06,340' N | 011° 20,776' E | 493    |        |       | PHY  |                                          |
| MSM72 | 80 | 1   | CTD/IADCP       | 22.03.18 | 21:21 | BO       | 38° 06,366' N | 011° 20,776' E | 500    | 484    | 9.8   |      |                                          |
| MSM72 | 80 | 1   | CTD/IADCP       | 22.03.18 | 21:34 | EN       | 38° 06,380' N | 011° 20,755' E | 500    |        |       |      |                                          |
| MSM72 | 81 | 1   | CTD/IADCP       | 22.03.18 | 22:53 | BE       | 38° 19,333' N | 011° 6,107' E  | 716    |        |       | CHE1 |                                          |
| MSM72 | 81 | 1   | CTD/IADCP       | 23.03.18 | 0:10  | BO       | 38° 19,334' N | 011° 6,106' E  | 712    | 706    | 14.7  |      |                                          |
| MSM72 | 81 | 1   | CTD/IADCP       | 23.03.18 | 0:35  | EN       | 38° 19,332' N | 011° 6,103' E  | 716    |        |       |      |                                          |
| MSM72 | 82 | 1   | CTD/IADCP       | 23.03.18 | 2:51  | BE       | 38° 32,213' N | 010° 51,523' E | 725    |        |       | PHY  |                                          |
| MSM72 | 82 | 1   | CTD/IADCP       | 23.03.18 | 3:08  | BO       | 38° 32,213' N | 010° 51,523' E | 717    | 706    | 13.6  |      |                                          |
| MSM72 | 82 | 1   | CTD/IADCP       | 23.03.18 | 3:27  | EN       | 38° 32,210' N | 010° 51,534' E | 722    |        |       |      |                                          |
| MSM72 | 83 | 1   | CTD/IADCP       | 23.03.18 | 5:35  | BE       | 38° 44,976' N | 010° 36,631' E | 2468   |        |       | CHE1 |                                          |
| MSM72 | 83 | 1   | CTD/IADCP/LISST | 23.03.18 | 6:23  | BO       | 38° 44,977' N | 010° 36,634' E | 2469   | 2492   | 10.3  |      |                                          |
| MSM72 | 83 | 1   | CTD/IADCP/LISST | 23.03.18 | 7:30  | EN       | 38° 44,978' N | 010° 36,634' E | 2466   |        |       |      |                                          |
| MSM72 | 83 | 2   | CTD/IADCP/LISST | 23.03.18 | 7:57  | BE       | 38° 44,978' N | 010° 36,634' E | 2477   |        |       | CHE1 |                                          |
| MSM72 | 83 | 2   | CTD/IADCP/LISST | 23.03.18 | 8:44  | BO       | 38° 44,976' N | 010° 36,631' E | 2598   | 2492   | 10.9  |      |                                          |
| MSM72 | 83 | 2   | CTD/IADCP/LISST | 23.03.18 | 9:47  | EN       | 38° 44,977' N | 010° 36,631' E | 2475   |        |       |      |                                          |
| MSM72 | 83 | 119 | uCTD            | 23.03.18 | 11:12 | BE       | 38° 43,878' N | 010° 22,921' E | 2689,6 | 655    |       |      |                                          |
| MSM72 | 83 | 120 | uCTD            | 23.03.18 | 12:41 | BE       | 38° 42,870' N | 010° 09,675' E | 2110,3 | 707    |       |      |                                          |
| MSM72 | 84 | 1   | CTD/IADCP/LISST | 23.03.18 | 14:02 | BE       | 38° 42,006' N | 009° 59,028' E | 2277   |        |       | PHY  |                                          |
| MSM72 | 84 | 1   | CTD/IADCP/LISST | 23.03.18 | 14:48 | BO       | 38° 42,007' N | 009° 59,026' E | 2270   | 2297   | 13.6  |      |                                          |
| MSM72 | 84 | 1   | CTD/IADCP/LISST | 23.03.18 | 15:42 | EN       | 38° 42,007' N | 009° 59,029' E | 2272   |        |       |      |                                          |
| MSM72 | 84 | 121 | uCTD            | 23.03.18 | 16:49 | BE       | 38° 36,329' N | 009° 48,143' E | 2060,7 | 766    |       |      |                                          |

|       |     |     |                 |          |       |    |               |                |        |        |      |      |  |
|-------|-----|-----|-----------------|----------|-------|----|---------------|----------------|--------|--------|------|------|--|
| MSM72 | 85  | 1   | CTD/IADCP/LISST | 23.03.18 | 18:09 | BE | 38° 30,998' N | 009° 38,540' E | 1868   |        |      | CHE1 |  |
| MSM72 | 85  | 1   | CTD/IADCP/LISST | 23.03.18 | 18:49 | BO | 38° 30,997' N | 009° 38,543' E | 1866   | 1884   | 8    |      |  |
| MSM72 | 85  | 1   | CTD/IADCP/LISST | 23.03.18 | 19:40 | EN | 38° 30,997' N | 009° 38,544' E | 1867   |        |      |      |  |
| MSM72 | 85  | 122 | uCTD            | 23.03.18 | 19:53 | BE | 38° 30,919' N | 009° 38,023' E | 1869,2 | 715    |      |      |  |
| MSM72 | 85  | 123 | uCTD            | 23.03.18 | 21:25 | BE | 38° 24,087' N | 009° 26,078' E | 1629,6 | 775    |      |      |  |
| MSM72 | 86  | 1   | CTD/IADCP       | 23.03.18 | 22:45 | BE | 38° 19,982' N | 009° 18,024' E | 1934   |        |      | PHY  |  |
| MSM72 | 86  | 1   | CTD/IADCP       | 23.03.18 | 23:22 | BO | 38° 19,982' N | 009° 18,023' E | 1927   | 1942   | 14.3 |      |  |
| MSM72 | 86  | 1   | CTD/IADCP       | 23.03.18 | 0:00  | EN | 38° 19,983' N | 009° 18,018' E | 1930   |        |      |      |  |
| MSM72 | 86  | 124 | uCTD            | 24.03.18 | 1:05  | BE | 38° 19,242' N | 009° 07,590' E | 1991,3 | 705    |      |      |  |
| MSM72 | 87  | 1   | CTD/IADCP       | 24.03.18 | 2:15  | BE | 38° 18,476' N | 008° 58,528' E | 2093   |        |      | CHE1 |  |
| MSM72 | 87  | 1   | CTD/IADCP       | 24.03.18 | 2:58  | BO | 38° 18,476' N | 008° 58,525' E | 2107   |        |      |      |  |
| MSM72 | 87  | 1   | CTD/IADCP       | 24.03.18 | 3:53  | EN | 38° 18,476' N | 008° 58,525' E | 2107   | 2115   | 13,9 |      |  |
| MSM72 | 87  | 125 | uCTD            | 24.03.18 | 4:43  | BE | 38° 17,771' N | 008° 48,827' E | 2177,6 | 781    |      |      |  |
| MSM72 | 88  | 1   | CTD/IADCP       | 24.03.18 | 5:55  | BE | 38° 17,004' N | 008° 39,029' E | 2135   |        |      | PHY  |  |
| MSM72 | 88  | 1   | CTD/IADCP       | 24.03.18 | 6:41  | BO | 38° 17,005' N | 008° 39,030' E | 2124   | 2144   | 10   |      |  |
| MSM72 | 88  | 1   | CTD/IADCP       | 24.03.18 | 7:25  | EN | 38° 17,004' N | 008° 39,030' E | 2120   |        |      |      |  |
| MSM72 | 88  | 126 | uCTD            | 24.03.18 | 7:35  | BE | 38° 17,143' N | 008° 38,765' E | 2119,6 | 654    |      |      |  |
| MSM72 | 88  | 127 | uCTD            | 24.03.18 | 9:03  | BE | 38° 22,224' N | 008° 27,131' E | 816,5  | 638    |      |      |  |
| MSM72 | 89  | 1   | CTD/IADCP/LISST | 24.03.18 | 10:12 | BE | 38° 25,511' N | 008° 19,522' E | 2097   |        |      | CHE1 |  |
| MSM72 | 89  | 1   | CTD/IADCP/LISST | 24.03.18 | 10:54 | BO | 38° 25,526' N | 008° 19,529' E | 2112   | 2108.1 | 9    |      |  |
| MSM72 | 89  | 1   | CTD/IADCP/LISST | 24.03.18 | 11:47 | EN | 38° 25,525' N | 008° 19,531' E | 2057   |        |      |      |  |
| MSM72 | 89  | 128 | uCTD            | 24.03.18 | 12:55 | BE | 38° 29,908' N | 008° 09,380' E | 2241,8 | 646    |      |      |  |
| MSM72 | 90  | 1   | CTD/IADCP/LISST | 24.03.18 | 14:12 | BE | 38° 34,031' N | 007° 50,987' E | 2211   |        |      | PHY  |  |
| MSM72 | 90  | 1   | CTD/IADCP/LISST | 24.03.18 | 14:56 | BO | 38° 34,080' N | 008° 00,128' E | 2214   | 2220   | 16   |      |  |
| MSM72 | 90  | 1   | CTD/IADCP/LISST | 24.03.18 | 15:40 | EN | 38° 34,106' N | 008° 00,208' E | 2204   |        |      |      |  |
| MSM72 | 90  | 129 | uCTD            | 24.03.18 | 16:48 | BE | 38° 39,141' N | 007° 50,009' E | 2381   | 772    |      |      |  |
| MSM72 | 91  | 1   | CTD/IADCP/LISST | 24.03.18 | 18:07 | BE | 38° 44,313' N | 007° 40,482' E | 2843   |        |      | CHE2 |  |
| MSM72 | 91  | 1   | CTD/IADCP/LISST | 24.03.18 | 18:24 | BO | 38° 44,312' N | 007° 40,483' E | 2829   | 505    |      |      |  |
| MSM72 | 91  | 1   | CTD/IADCP/LISST | 24.03.18 | 18:48 | EN | 38° 44,311' N | 007° 40,482' E | 2946   |        |      |      |  |
| MSM72 | 91  | 2   | CTD/IADCP/LISST | 24.03.18 | 20:08 | BE | 38° 44,309' N | 007° 40,482' E | 2827   |        |      | CHE2 |  |
| MSM72 | 91  | 2   | CTD/IADCP/LISST | 24.03.18 | 21:04 | BO | 38° 44,302' N | 007° 40,453' E | 2836   | 2864   | 9    |      |  |
| MSM72 | 91  | 2   | CTD/IADCP/LISST | 24.03.18 | 22:14 | EN | 38° 44,302' N | 007° 40,463' E | 2826   |        |      |      |  |
| MSM72 | 91  | 130 | uCTD            | 24.03.18 | 22:28 | BE | 38° 44,480' N | 007° 40,145' E | 2835,2 | 762    |      |      |  |
| MSM72 | 91  | 131 | uCTD            | 25.03.18 | 0:00  | BE | 38° 50,270' N | 007° 28,640' E | 2840,6 | 752    |      |      |  |
| MSM72 | 92  | 1   | CTD/IADCP       | 25.03.18 | 1:16  | BE | 38° 54,492' N | 007° 21,043' E | 2842   |        |      | PHY  |  |
| MSM72 | 92  | 1   | CTD/IADCP       | 25.03.18 | 2:11  | BO | 38° 54,515' N | 007° 21,012' E | 2843   | 2868   | 14.6 |      |  |
| MSM72 | 92  | 1   | CTD/IADCP       | 25.03.18 | 3:04  | EN | 38° 54,506' N | 007° 20,984' E | 2842   |        |      |      |  |
| MSM72 | 92  | 132 | uCTD            | 25.03.18 | 3:57  | BE | 38° 56,455' N | 007° 11,260' E | 2850,2 | 773    |      |      |  |
| MSM72 | 93  | 1   | CTD/IADCP       | 25.03.18 | 5:12  | BE | 38° 57,324' N | 007° 01,518' E | 2857   |        |      | CHE1 |  |
| MSM72 | 93  | 1   | CTD/IADCP       | 25.03.18 | 6:06  | BO | 38° 57,348' N | 007° 01,506' E | 2849   | 2857   | 14   |      |  |
| MSM72 | 93  | 1   | CTD/IADCP       | 25.03.18 | 7:19  | EN | 38° 57,867' N | 007° 01,496' E | 2851   |        |      |      |  |
| MSM72 | 93  | 133 | uCTD            | 25.03.18 | 8:20  | BE | 38° 58,863' N | 006° 51,977' E | 2848,9 | 683    |      |      |  |
| MSM72 | 94  | 1   | CTD/IADCP/LISST | 25.03.18 | 9:34  | BE | 39°00,049' N  | 006° 41,962' E | 2848   |        |      | PHY  |  |
| MSM72 | 94  | 1   | CTD/IADCP/LISST | 25.03.18 | 10:31 | BO | 39°00,090' N  | 006° 41,934' E | 2852   | 2884   | 9.5  |      |  |
| MSM72 | 94  | 1   | CTD/IADCP/LISST | 25.03.18 | 11:26 | EN | 39°00,090' N  | 006° 41,935' E | 2851   |        |      |      |  |
| MSM72 | 94  | 134 | uCTD            | 25.03.18 | 11:39 | BE | 38° 59,932' N | 006° 41,403' E | 2853   | 675    |      |      |  |
| MSM72 | 94  | 135 | uCTD            | 25.03.18 | 12:54 | BE | 38° 58,058' N | 006° 31,076' E | 2856,5 | 674    |      |      |  |
| MSM72 | 95  | 1   | CTD/IADCP/LISST | 25.03.18 | 13:56 | BE | 39°56,966' N  | 006° 24,575' E | 2867   |        |      | CHE1 |  |
| MSM72 | 95  | 1   | CTD/IADCP/LISST | 25.03.18 | 14:49 | BO | 39°56,808' N  | 006° 24,612' E | 2865   | 2882   | 13.7 |      |  |
| MSM72 | 95  | 1   | CTD/IADCP/LISST | 25.03.18 | 15:57 | EN | 39°56,586' N  | 006° 24,665' E | 2858   |        |      |      |  |
| MSM72 | 95  | 136 | uCTD            | 25.03.18 | 16:39 | BE | 38° 55,832' N | 006° 17,188' E | 2862,9 | 738    |      |      |  |
| MSM72 | 96  | 1   | CTD/IADCP/LISST | 25.03.18 | 17:58 | BE | 38°53,975' N  | 006° 07,218' E | 2854   |        |      | PHY  |  |
| MSM72 | 96  | 1   | CTD/IADCP/LISST | 25.03.18 | 18:52 | BO | 38°53,934' N  | 006° 07,194' E | 2857   | 2884   | 10.4 |      |  |
| MSM72 | 96  | 1   | CTD/IADCP/LISST | 25.03.18 | 19:48 | EN | 38°53,921' N  | 006° 07,184' E | 2850,5 |        |      |      |  |
| MSM72 | 96  | 137 | uCTD            | 25.03.18 | 20:38 | BE | 38° 52,754' N | 005° 58,727' E | 2856,6 | 729    |      |      |  |
| MSM72 | 97  | 1   | CTD/IADCP/LISST | 25.03.18 | 21:53 | BE | 38°50,974' N  | 005° 49,813' E | 2850   |        |      | CHE2 |  |
| MSM72 | 97  | 1   | CTD/IADCP/LISST | 25.03.18 | 22:08 | BO | 38°50,974' N  | 005° 49,816' E | 2851   | 504    | ---  |      |  |
| MSM72 | 97  | 1   | CTD/IADCP/LISST | 25.03.18 | 22:29 | EN | 38°50,972' N  | 005° 49,814' E | 2851   |        |      |      |  |
| MSM72 | 97  | 2   | CTD/IADCP/LISST | 25.03.18 | 23:46 | BE | 38°50,972' N  | 005° 49,818' E | 2850   |        |      | CHE2 |  |
| MSM72 | 97  | 2   | CTD/IADCP/LISST | 26.03.18 | 0:38  | BO | 38°50,971' N  | 005° 49,814' E | 2850   | 2880   | 10.1 |      |  |
| MSM72 | 97  | 2   | CTD/IADCP/LISST | 26.03.18 | 1:40  | EN | 38°50,972' N  | 005° 49,817' E | 2851   |        |      |      |  |
| MSM72 | 97  | 138 | uCTD            | 26.03.18 | 1:55  | BE | 38° 50,973' N | 005° 49,419' E | 2842,6 | 654    |      |      |  |
| MSM72 | 97  | 139 | uCTD            | 26.03.18 | 2:58  | BE | 38° 50,009' N | 005° 40,419' E | 2851   | 703    |      |      |  |
| MSM72 | 98  | 1   | CTD/IADCP       | 26.03.18 | 4:03  | BE | 38°47,981' N  | 005° 32,396' E | 2853   |        |      | PHY  |  |
| MSM72 | 98  | 1   | CTD/IADCP       | 26.03.18 | 4:58  | BO | 38°47,982' N  | 005° 32,395' E | 2846   | 2835   | 13.5 |      |  |
| MSM72 | 98  | 1   | CTD/IADCP       | 26.03.18 | 5:53  | EN | 38°47,981' N  | 005° 32,395' E | 2851   |        |      |      |  |
| MSM72 | 98  | 140 | uCTD            | 26.03.18 | 6:44  | BE | 38° 47,163' N | 005° 23,256' E | 2836   | 762    |      |      |  |
| MSM72 | 99  | 1   | CTD/IADCP       | 26.03.18 | 8:02  | BE | 38°44,976' N  | 005° 14,998' E | 2812   |        |      | CHE1 |  |
| MSM72 | 99  | 1   | CTD/IADCP       | 26.03.18 | 8:57  | BO | 38°44,976' N  | 005° 15,020' E | 2803   | 2802   | 10   |      |  |
| MSM72 | 99  | 1   | CTD/IADCP       | 26.03.18 | 10:11 | EN | 38°44,976' N  | 005° 15,020' E | 2807   |        |      |      |  |
| MSM72 | 99  | 141 | uCTD            | 26.03.18 | 11:08 | BE | 38° 43,448' N | 005° 05,206' E | 2800,7 | 709    |      |      |  |
| MSM72 | 100 | 1   | CTD/IADCP/LISST | 26.03.18 | 12:17 | BE | 38°42,007' N  | 004° 57,637' E | 2746   |        |      | PHY  |  |
| MSM72 | 100 | 1   | CTD/IADCP/LISST | 26.03.18 | 13:09 | BO | 38°42,008' N  | 004° 57,640' E | 2742   | 2765   | 9.1  |      |  |
| MSM72 | 100 | 1   | CTD/IADCP/LISST | 26.03.18 | 14:02 | EN | 38°42,008' N  | 004° 57,641' E | 2741   |        |      |      |  |
| MSM72 | 100 | 142 | uCTD            | 26.03.18 | 14:09 | BE | 38° 41,981' N | 004° 57,476' E | 2733,2 | 682    |      |      |  |
| MSM72 | 100 | 143 | uCTD            | 26.03.18 | 15:23 | BE | 38° 40,230' N | 004° 47,042' E | 2698,7 | 747    |      |      |  |
| MSM72 | 101 | 1   | CTD/IADCP/LISST | 26.03.18 | 16:23 | BE | 38°39,009' N  | 004° 40,254' E | 2650   |        |      | CHE1 |  |
| MSM72 | 101 | 1   | CTD/IADCP/LISST | 26.03.18 | 17:13 | BO | 38°39,008' N  | 004° 40,254' E | 2652   | 2675   | 12.7 |      |  |
| MSM72 | 101 | 1   | CTD/IADCP/LISST | 26.03.18 | 18:22 | EN | 38°39,010' N  | 004° 40,254' E | 2648   |        |      |      |  |
| MSM72 | 101 | 144 | uCTD            | 26.03.18 | 19:11 | BE | 38° 37,331' N | 004° 31,998' E | 2421,3 | 747    |      |      |  |
| MSM72 | 102 | 1   | CTD/IADCP/LISST | 26.03.18 | 20:23 | BE | 38°35,966' N  | 004° 22,823' E | 2477   |        |      | PHY  |  |
| MSM72 | 102 | 1   | CTD/IADCP/LISST | 26.03.18 | 21:15 | BO | 38°35,969' N  | 004° 22,820' E | 2476   | 2500   |      |      |  |
| MSM72 | 102 | 1   | CTD/IADCP/LISST | 26.03.18 | 22:06 | EN | 38°35,969' N  | 004° 22,818' E | 2476   |        |      |      |  |

|       |     |     |                 |          |       |    |               |                |        |      |      |                   |  |
|-------|-----|-----|-----------------|----------|-------|----|---------------|----------------|--------|------|------|-------------------|--|
| MSM72 | 102 | 145 | uCTD            | 26.03.18 | 23:29 | BE | 38° 34,615' N | 004° 10,855' E | 2624,7 | 699  |      |                   |  |
| MSM72 | 103 | 1   | CTD/IADCP       | 27.03.18 | 0:08  | BE | 38° 33,000' N | 004° 05,088' E | 2534   |      |      | CHE1              |  |
| MSM72 | 103 | 1   | CTD/IADCP       | 27.03.18 | 0:56  | BO | 38° 33,000' N | 004° 05,090' E | 2541   |      |      |                   |  |
| MSM72 | 103 | 1   | CTD/IADCP       | 27.03.18 | 1:59  | EN | 38° 33,000' N | 004° 05,092' E | 2530   | 2560 | 9.2  |                   |  |
| MSM72 | 103 | 146 | uCTD            | 27.03.18 | 2:05  | BE | 38° 33,002' N | 004° 04,953' E | 2535   | 779  |      |                   |  |
| MSM72 | 103 | 147 | uCTD            | 27.03.18 | 3:13  | BE | 38° 31,163' N | 003° 54,949' E | 2532,5 | 476  |      |                   |  |
| MSM72 | 104 | 1   | CTD/IADCP       | 27.03.18 | 4:12  | BE | 38° 29,977' N | 003° 47,370' E | 2580   |      |      | PHY               |  |
| MSM72 | 104 | 1   | CTD/IADCP       | 27.03.18 | 5:03  | BO | 38° 29,659' N | 003° 46,944' E | 2588   | 2584 | 13   |                   |  |
| MSM72 | 104 | 1   | CTD/IADCP       | 27.03.18 | 5:53  | EN | 38° 29,332' N | 003° 46,530' E | 2590   |      |      |                   |  |
| MSM72 | 104 | 148 | uCTD            | 27.03.18 | 6:26  | BE | 38° 28,245' N | 003° 40,742' E | 2616,5 | 406  |      |                   |  |
| MSM72 | 105 | 1   | CTD/IADCP/LISST | 27.03.18 | 7:20  | BE | 38° 26,971' N | 003° 35,209' E | 2614   |      |      | CHE1              |  |
| MSM72 | 105 | 1   | CTD/IADCP/LISST | 27.03.18 | 8:14  | BO | 38° 26,970' N | 003° 35,207' E | 2615   | 2644 | 10.4 |                   |  |
| MSM72 | 105 | 1   | CTD/IADCP/LISST | 27.03.18 | 9:28  | EN | 38° 26,971' N | 003° 35,208' E | 2615   |      |      |                   |  |
| MSM72 | 105 | 149 | uCTD            | 27.03.18 | 10:39 | BE | 38° 25,440' N | 003° 22,058' E | 2691,5 | 729  |      |                   |  |
| MSM72 | 106 | 1   | CTD/IADCP       | 27.03.18 | 11:55 | BE | 38° 23,996' N | 003° 12,046' E | 2704   |      |      | PHY               |  |
| MSM72 | 106 | 1   | CTD/IADCP       | 27.03.18 | 12:48 | BO | 38° 23,996' N | 003° 12,047' E | 2704   | 2737 | 9.5  |                   |  |
| MSM72 | 106 | 1   | CTD/IADCP       | 27.03.18 | 13:47 | EN | 38° 23,996' N | 003° 12,048' E | 2704   |      |      |                   |  |
| MSM72 | 106 | 150 | uCTD            | 27.03.18 | 13:57 | BE | 38° 24,015' N | 003° 11,749' E | 2713,3 | 747  |      |                   |  |
| MSM72 | 106 | 151 | uCTD            | 27.03.18 | 15:08 | BE | 38° 21,232' N | 003° 02,185' E | 2722,9 | 697  |      |                   |  |
| MSM72 | 107 | 1   | CTD/IADCP/LISST | 27.03.18 | 16:12 | BE | 38° 19,495' N | 002° 54,034' E | 2743   |      |      | CHE1              |  |
| MSM72 | 107 | 1   | CTD/IADCP/LISST | 27.03.18 | 17:06 | BO | 38° 19,494' N | 002° 54,032' E | 2741   | 2770 | 13.1 |                   |  |
| MSM72 | 107 | 1   | CTD/IADCP/LISST | 27.03.18 | 18:18 | EN | 38° 19,494' N | 002° 54,032' E | 2740,8 |      |      |                   |  |
| MSM72 | 107 | 152 | uCTD            | 27.03.18 | 19:14 | BE | 38° 17,220' N | 002° 44,885' E | 2725,3 | 756  |      |                   |  |
| MSM72 | 108 | 1   | CTD/IADCP/LISST | 27.03.18 | 21:23 | BE | 38° 15,014' N | 002° 36,035' E | 2734   |      |      | PHY               |  |
| MSM72 | 108 | 1   | CTD/IADCP/LISST | 27.03.18 | 21:23 | BO | 38° 15,013' N | 002° 36,034' E | 2732   | 2763 | 9.7  |                   |  |
| MSM72 | 108 | 1   | CTD/IADCP/LISST | 27.03.18 | 22:17 | EN | 38° 15,013' N | 002° 36,034' E | 2732   |      |      |                   |  |
| MSM72 | 108 | 153 | uCTD            | 27.03.18 | 23:13 | BE | 38° 12,472' N | 002° 26,131' E | 2733,3 | 584  |      |                   |  |
| MSM72 | 109 | 1   | CTD/IADCP       | 28.03.18 | 0:20  | BE | 38° 10,488' N | 002° 18,047' E | 2731   |      |      | CHE1              |  |
| MSM72 | 109 | 1   | CTD/IADCP       | 28.03.18 | 1:14  | BO | 38° 10,402' N | 002° 18,012' E | 2743   | 2768 | 10.1 |                   |  |
| MSM72 | 109 | 1   | CTD/IADCP       | 28.03.18 | 2:19  | EN | 38° 10,398' N | 002° 18,014' E | 2734   |      |      |                   |  |
| MSM72 | 109 | 154 | uCTD            | 28.03.18 | 2:25  | BE | 38° 10,314' N | 002° 17,896' E | 2741,6 | 654  |      |                   |  |
| MSM72 | 109 | 155 | uCTD            | 28.03.18 | 3:37  | BE | 38° 08,051' N | 002° 08,035' E | 2190,3 | 761  |      |                   |  |
| MSM72 | 110 | 1   | CTD/IADCP       | 28.03.18 | 4:47  | BE | 38° 06,008' N | 002° 00,040' E | 1884   |      |      | PHY               |  |
| MSM72 | 110 | 1   | CTD/IADCP       | 28.03.18 | 5:26  | BO | 38° 06,010' N | 002° 00,040' E | 1883   | 1877 | 12.1 |                   |  |
| MSM72 | 110 | 1   | CTD/IADCP       | 28.03.18 | 6:01  | EN | 38° 06,010' N | 002° 00,040' E | 1883   |      |      |                   |  |
| MSM72 | 110 | 156 | uCTD            | 28.03.18 | 7:02  | BE | 38° 03,423' N | 001° 50,740' E | 1790,9 | 699  |      |                   |  |
| MSM72 | 111 | 1   | CTD/IADCP/LISST | 28.03.18 | 8:17  | BE | 38° 01,025' N | 001° 42,028' E | 1624   |      |      | CHE1              |  |
| MSM72 | 111 | 1   | CTD/IADCP/LISST | 28.03.18 | 8:53  | BO | 38° 01,026' N | 001° 42,026' E | 1624   | 1644 | 10.3 |                   |  |
| MSM72 | 111 | 1   | CTD/IADCP/LISST | 28.03.18 | 9:43  | EN | 38° 01,026' N | 001° 42,026' E | 1625   |      |      |                   |  |
| MSM72 | 111 | 157 | uCTD            | 28.03.18 | 10:38 | BE | 37° 57,931' N | 001° 32,008' E | 2356,6 | 703  |      |                   |  |
| MSM72 | 112 | 1   | CTD/IADCP/LISST | 28.03.18 | 11:45 | BE | 37° 55,510' N | 001° 24,051' E | 2496   |      |      | PHY               |  |
| MSM72 | 112 | 1   | CTD/IADCP/LISST | 28.03.18 | 12:32 | BO | 37° 55,511' N | 001° 24,091' E | 2495   | 2523 | 9.4  |                   |  |
| MSM72 | 112 | 1   | CTD/IADCP/LISST | 28.03.18 | 13:22 | EN | 37° 55,511' N | 001° 24,091' E | 2497   |      |      |                   |  |
| MSM72 | 112 | 158 | uCTD            | 28.03.18 | 13:37 | BE | 37° 55,435' N | 001° 23,924' E | 2500,4 | 728  |      |                   |  |
| MSM72 | 112 | 159 | uCTD            | 28.03.18 | 14:50 | BE | 37° 52,776' N | 001° 13,194' E | 2588,1 | 755  |      |                   |  |
| MSM72 | 113 | 1   | CTD/IADCP/LISST | 28.03.18 | 15:54 | BE | 37° 50,514' N | 001° 06,054' E | 2643   |      |      | CHE2              |  |
| MSM72 | 113 | 1   | CTD/IADCP/LISST | 28.03.18 | 16:08 | BO | 37° 50,490' N | 001° 06,073' E | 2637   | 506  |      |                   |  |
| MSM72 | 113 | 1   | CTD/IADCP/LISST | 28.03.18 | 16:30 | EN | 37° 50,438' N | 001° 06,115' E | 2639   |      |      |                   |  |
| MSM72 | 113 | 2   | CTD/IADCP/LISST | 28.03.18 | 17:31 | BE | 37° 50,441' N | 001° 06,115' E | 2637   |      |      | CHE2              |  |
| MSM72 | 113 | 2   | CTD/IADCP/LISST | 28.03.18 | 18:24 | BO | 37° 50,377' N | 001° 06,184' E | 2638   | 2638 | 9.8  |                   |  |
| MSM72 | 113 | 2   | CTD/IADCP/LISST | 28.03.18 | 19:30 | EN | 37° 50,377' N | 001° 06,184' E | 2637   |      |      |                   |  |
| MSM72 | 113 | 160 | uCTD            | 28.03.18 | 20:25 | BE | 37° 48,046' N | 000° 56,770' E | 2750,6 | 691  |      |                   |  |
| MSM72 | 114 | 1   | CTD/IADCP       | 28.03.18 | 21:36 | BE | 37° 45,498' N | 000° 48,014' E | 2716   |      |      | PHY               |  |
| MSM72 | 114 | 1   | CTD/IADCP       | 28.03.18 | 22:29 | BO | 37° 45,498' N | 000° 48,014' E | 2764   | 2740 | 9    |                   |  |
| MSM72 | 114 | 1   | CTD/IADCP       | 28.03.18 | 23:21 | EN | 37° 45,498' N | 000° 48,016' E | 2720   |      |      |                   |  |
| MSM72 | 114 | 161 | uCTD            | 29.03.18 | 0:28  | BE | 37° 39,955' N | 000° 38,039' E | 2654,4 | 720  |      |                   |  |
| MSM72 | 115 | 1   | CTD/IADCP       | 29.03.18 | 1:45  | BE | 37° 35,514' N | 000° 30,011' E | 2675   |      |      | CHE1              |  |
| MSM72 | 115 | 1   | CTD/IADCP       | 29.03.18 | 2:36  | BO | 37° 35,514' N | 000° 30,010' E | 2676   | 2703 | 12.5 |                   |  |
| MSM72 | 115 | 1   | CTD/IADCP       | 29.03.18 | 3:41  | EN | 37° 35,514' N | 000° 30,008' E | 2676   |      |      |                   |  |
| MSM72 | 115 | 162 | uCTD            | 29.03.18 | 3:47  | BE | 37° 35,451' N | 000° 29,941' E | 2683,2 | 730  |      |                   |  |
| MSM72 | 115 | 163 | uCTD            | 29.03.18 | 5:19  | BE | 37° 28,541' N | 000° 17,370' E | 2731   | 777  |      |                   |  |
| MSM72 | 116 | 1   | CTD/IADCP/LISST | 29.03.18 | 6:07  | BE | 37° 25,512' N | 000° 12,026' E | 2731   |      |      | PHY               |  |
| MSM72 | 116 | 1   | CTD/IADCP/LISST | 29.03.18 | 7:01  | BO | 37° 25,511' N | 000° 12,025' E | 2731   | 2772 | 9.5  |                   |  |
| MSM72 | 116 | 1   | CTD/IADCP/LISST | 29.03.18 | 7:55  | EN | 37° 25,511' N | 000° 12,026' E | 2729   |      |      |                   |  |
| MSM72 | 116 | 164 | uCTD            | 29.03.18 | 8:44  | BE | 37° 20,839' N | 000° 06,125' E | 2725   | 731  |      |                   |  |
| MSM72 | 117 | 1   | CTD/IADCP/LISST | 29.03.18 | 9:48  | BE | 37° 15,989' N | 000° 00,035' E | 2713   |      |      | CHE1              |  |
| MSM72 | 117 | 1   | CTD/IADCP/LISST | 29.03.18 | 10:44 | BO | 37° 15,980' N | 000° 00,042' E | 2713   | 2747 | 9.3  |                   |  |
| MSM72 | 117 | 1   | CTD/IADCP/LISST | 29.03.18 | 11:50 | EN | 37° 15,980' N | 000° 00,042' E | 2710   |      |      |                   |  |
| MSM72 | 117 | 165 | uCTD            | 29.03.18 | 12:46 | BE | 37° 12,429' N | 000° 08,498' W | 2699,6 | 706  |      |                   |  |
| MSM72 | 117 | 166 | uCTD            | 29.03.18 | 13:54 | BE | 37° 09,149' N | 000° 16,457' W | 2687,1 | 692  |      |                   |  |
| MSM72 | 118 | 1   | CTD/IADCP/LISST | 29.03.18 | 15:03 | BE | 37° 06,029' N | 000° 23,957' W | 2667   |      |      | PHY               |  |
| MSM72 | 118 | 1   | CTD/IADCP/LISST | 29.03.18 | 15:55 | BO | 37° 06,090' N | 000° 23,838' W | 2670   | 2655 | 13.2 |                   |  |
| MSM72 | 118 | 1   | CTD/IADCP/LISST | 29.03.18 | 16:46 | EN | 37° 06,196' N | 000° 23,672' W | 2679   |      |      |                   |  |
| MSM72 | 118 | 167 | uCTD            | 29.03.18 | 17:25 | BE | 37° 06,095' N | 000° 23,878' W | 2668   |      |      | No data recorded! |  |
| MSM72 | 118 | 167 | uCTD            | 29.03.18 | 18:50 | BE | 37° 00,148' N | 000° 35,730' W | 2665,5 | 737  |      |                   |  |
| MSM72 | 119 | 1   | CTD/IADCP/LISST | 29.03.18 | 19:32 | BE | 37° 57,017' N | 000° 41,970' W | 2665   |      |      | CHE1              |  |
| MSM72 | 119 | 1   | CTD/IADCP/LISST | 29.03.18 | 20:24 | BO | 37° 57,012' N | 000° 41,965' W | 2669   | 2698 | 9.5  |                   |  |
| MSM72 | 119 | 1   | CTD/IADCP/LISST | 29.03.18 | 1:43  | EN | 37° 57,012' N | 000° 41,966' W | 2670   |      |      |                   |  |
| MSM72 | 119 | 168 | uCTD            | 29.03.18 | 22:48 | BE | 36° 52,195' N | 000° 51,568' W | 2653,1 | 735  |      |                   |  |
| MSM72 | 120 | 1   | CTD/IADCP       | 30.03.18 | 0:11  | BE | 36° 47,976' N | 000° 59,948' W | 2627   |      |      | PHY               |  |
| MSM72 | 120 | 1   | CTD/IADCP       | 30.03.18 | 1:00  | BO | 36° 47,996' N | 000° 59,962' W | 2627   | 2648 | 9.6  |                   |  |
| MSM72 | 120 | 1   | CTD/IADCP       | 30.03.18 | 1:51  | EN | 36° 47,995' N | 000° 59,963' W | 2620   |      |      |                   |  |
| MSM72 | 120 | 169 | uCTD            | 30.03.18 | 3:13  | BE | 36° 42,241' N | 001° 11,423' W | 2611,6 | 785  |      |                   |  |

|                                                                                                                                                                                                           |     |     |                 |          |          |    |               |                |        |      |      |  |                                  |  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----|-----------------|----------|----------|----|---------------|----------------|--------|------|------|--|----------------------------------|--|
| MSM72                                                                                                                                                                                                     | 121 | 1   | CTD/IADCP       | 30.03.18 | 04:29:00 | BE | 36° 39,020' N | 001° 17,973' W | 2427   |      |      |  | CHE1                             |  |
| MSM72                                                                                                                                                                                                     | 121 | 1   | CTD/IADCP       | 30.03.18 | 05:16:00 | BO | 36° 39,019' N | 001° 17,976' W | 2431   | 2454 | 13,6 |  |                                  |  |
| MSM72                                                                                                                                                                                                     | 121 | 1   | CTD/IADCP       | 30.03.18 | 06:23    | EN | 36° 39,020' N | 001° 17,975' W | 2431   |      |      |  |                                  |  |
| MSM72                                                                                                                                                                                                     | 121 | 170 | uCTD            | 30.03.18 | 6:30     | BE | 36° 38,924' N | 001° 18,169' W | 2437,2 | 787  |      |  |                                  |  |
| MSM72                                                                                                                                                                                                     | 122 | 1   | CTD/IADCP/LISST | 30.03.18 | 9:04     | BE | 36° 30,002' N | 001° 35,969' W | 1450   |      |      |  | PHY                              |  |
| MSM72                                                                                                                                                                                                     | 122 | 1   | CTD/IADCP/LISST | 30.03.18 | 9:40     | BO | 36° 30,004' N | 001° 35,964' W | 1452   | 1486 | 9.6  |  |                                  |  |
| MSM72                                                                                                                                                                                                     | 122 | 1   | CTD/IADCP/LISST | 30.03.18 | 10:12    | EN | 36° 30,002' N | 001° 35,969' W | 1456   |      |      |  |                                  |  |
| MSM72                                                                                                                                                                                                     | 123 | 1   | CTD/IADCP/LISST | 30.03.18 | 12:30    | BE | 36° 27,992' N | 001° 55,451' W | 1391   |      |      |  | CHE1                             |  |
| MSM72                                                                                                                                                                                                     | 123 | 1   | CTD/IADCP/LISST | 30.03.18 | 12:59    | BO | 36° 27,990' N | 001° 55,448' W | 1390   | 1398 | 10.5 |  |                                  |  |
| MSM72                                                                                                                                                                                                     | 123 | 1   | CTD/IADCP/LISST | 30.03.18 | 13:47    | EN | 36° 27,985' N | 001° 55,445' W | 1392   |      |      |  |                                  |  |
| MSM72                                                                                                                                                                                                     | 124 | 1   | CTD/IADCP/LISST | 30.03.18 | 15:53    | BE | 36° 27,024' N | 002° 14,388' W | 1031   |      |      |  | PHY                              |  |
| MSM72                                                                                                                                                                                                     | 124 | 1   | CTD/IADCP/LISST | 30.03.18 | 16:17    | BO | 36° 27,020' N | 002° 14,378' W | 1021   | 1031 | 13.9 |  |                                  |  |
| MSM72                                                                                                                                                                                                     | 124 | 1   | CTD/IADCP/LISST | 30.03.18 | 16:43    | EN | 36° 27,011' N | 002° 14,357' W | 1034   |      |      |  |                                  |  |
| MSM72                                                                                                                                                                                                     | 125 | 1   | CTD/IADCP/LISST | 30.03.18 | 18:25    | BE | 36° 23,316' N | 002° 34,471' W | 1382   |      |      |  | CHE1                             |  |
| MSM72                                                                                                                                                                                                     | 125 | 1   | CTD/IADCP/LISST | 30.03.18 | 19:51    | BO | 36° 23,315' N | 002° 34,472' W | 1382   | 1380 | 10   |  |                                  |  |
| MSM72                                                                                                                                                                                                     | 125 | 1   | CTD/IADCP/LISST | 30.03.18 | 20:43    | EN | 36° 23,317' N | 002° 34,464' W | 1383   |      |      |  |                                  |  |
| MSM72                                                                                                                                                                                                     | 126 | 1   | CTD/IADCP       | 31.03.18 | 0:09     | BE | 36° 20,983' N | 002° 53,971' W | 1063   |      |      |  | PHY                              |  |
| MSM72                                                                                                                                                                                                     | 126 | 1   | CTD/IADCP       | 31.03.18 | 0:33     | BO | 36° 20,957' N | 002° 53,969' W | 1072   | 1073 | 8.9  |  |                                  |  |
| MSM72                                                                                                                                                                                                     | 126 | 1   | CTD/IADCP       | 31.03.18 | 0:59     | EN | 36° 20,918' N | 002° 53,969' W | 1072   |      |      |  |                                  |  |
| MSM72                                                                                                                                                                                                     | 127 | 1   | CTD/IADCP       | 31.03.18 | 3:49     | BE | 36° 14,992' N | 003° 13,444' W | 856    |      |      |  | PHY                              |  |
| MSM72                                                                                                                                                                                                     | 127 | 1   | CTD/IADCP       | 31.03.18 | 4:00     | BO | 36° 14,990' N | 003° 13,440' W | 845    | 853  | 12.3 |  |                                  |  |
| MSM72                                                                                                                                                                                                     | 127 | 1   | CTD/IADCP       | 31.03.18 | 4:32     | EN | 36° 14,992' N | 003° 13,438' W | 852    |      |      |  |                                  |  |
| MSM72                                                                                                                                                                                                     | 128 | 1   | CTD/IADCP       | 31.03.18 | 5:53     | BE | 36° 05,015' N | 003° 13,471' W | 1172   |      |      |  | CHE1                             |  |
| MSM72                                                                                                                                                                                                     | 128 | 1   | CTD/IADCP       | 31.03.18 | 6:20     | BO | 36° 05,015' N | 003° 13,494' W | 1162   | 1186 | 10.1 |  |                                  |  |
| MSM72                                                                                                                                                                                                     | 128 | 1   | CTD/IADCP       | 31.03.18 | 7:01     | EN | 36° 05,014' N | 003° 13,474' W | 1167   |      |      |  |                                  |  |
| MSM72                                                                                                                                                                                                     | 128 | 171 | uCTD            | 31.03.18 | 8:12     | BE | 36° 05,209' N | 003° 25,167' W | 729,1  | 708  |      |  |                                  |  |
| MSM72                                                                                                                                                                                                     | 128 | 172 | uCTD            | 31.03.18 | 9:40     | BE | 36° 04,382' N | 003° 38,523' W | 784,6  | 684  |      |  |                                  |  |
| MSM72                                                                                                                                                                                                     | 129 | 1   | CTD/IADCP/LISST | 31.03.18 | 11:42    | BE | 36° 04,952' N | 003° 52,402' W | 1176   |      |      |  | CHE1                             |  |
| MSM72                                                                                                                                                                                                     | 129 | 1   | CTD/IADCP/LISST | 31.03.18 | 12:09    | BO | 36° 04,982' N | 003° 52,427' W | 1177   | 1182 | 9.8  |  |                                  |  |
| MSM72                                                                                                                                                                                                     | 129 | 1   | CTD/IADCP/LISST | 31.03.18 | 12:46    | EN | 36° 04,501' N | 003° 52,440' W | 1188   |      |      |  |                                  |  |
| MSM72                                                                                                                                                                                                     | 129 | 173 | uCTD            | 31.03.18 | 12:55    | BE | 36° 04,547' N | 003° 52,690' W | 1190,2 | 557  |      |  |                                  |  |
| MSM72                                                                                                                                                                                                     | 129 | 174 | uCTD            | 31.03.18 | 14:33    | BE | 36° 03,175' N | 004° 05,996' W | 1315,6 | 546  |      |  |                                  |  |
| MSM72                                                                                                                                                                                                     | 129 | 175 | uCTD            | 31.03.18 | 16:23    | BE | 36° 01,349' N | 004° 20,382' W | 1305,8 | 599  |      |  |                                  |  |
| MSM72                                                                                                                                                                                                     | 130 | 1   | CTD/IADCP/LISST | 31.03.18 | 17:54    | BE | 36° 00,000' N | 004° 30,949' W | 1236   |      |      |  | CHE2                             |  |
| MSM72                                                                                                                                                                                                     | 130 | 1   | CTD/IADCP/LISST | 31.03.18 | 18:14    | BO | 36° 00,020' N | 004° 30,743' W | 1240   |      |      |  |                                  |  |
| MSM72                                                                                                                                                                                                     | 130 | 1   | CTD/IADCP/LISST | 31.03.18 | 18:32    | EN | 36° 00,034' N | 004° 30,572' W | 1240   |      |      |  | for calibrating UCTD 289 and 183 |  |
| MSM72                                                                                                                                                                                                     | 130 | 176 | uCTD            | 31.03.18 | 17:54    | BE | 36° 00,035' N | 004° 30,556' W | 1243,9 | 900  |      |  |                                  |  |
| MSM72                                                                                                                                                                                                     | 130 | 2   | CTD/IADCP/LISST | 31.03.18 | 18:44    | BE | 36° 00,035' N | 004° 30,556' W | 1244   |      |      |  | CHE2                             |  |
| MSM72                                                                                                                                                                                                     | 130 | 2   | CTD/IADCP/LISST | 31.03.18 | 19:13    | BO | 36° 00,062' N | 004° 30,208' W | 1244   | 1237 | 9.6  |  |                                  |  |
| MSM72                                                                                                                                                                                                     | 130 | 2   | CTD/IADCP/LISST | 31.03.18 | 19:53    | EN | 36° 00,088' N | 004° 29,882' W | 1245   |      |      |  |                                  |  |
| MSM72                                                                                                                                                                                                     | 131 | 1   | CTD/IADCP       | 31.03.18 | 22:45:40 | BE | 36° 05,063' N | 004° 49,927' W | 926    |      |      |  | PHY                              |  |
| MSM72                                                                                                                                                                                                     | 131 | 1   | CTD/IADCP       | 31.03.18 | 23:12    | BO | 36° 05,358' N | 004° 49,661' W | 928    | 923  | 18   |  |                                  |  |
| MSM72                                                                                                                                                                                                     | 131 | 1   | CTD/IADCP       | 31.03.18 | 23:31    | EN | 36° 05,550' N | 004° 49,490' W | 929    |      |      |  |                                  |  |
| MSM72                                                                                                                                                                                                     | 132 | 1   | CTD/IADCP       | 01.04.18 | 2:01     | BE | 35° 58,028' N | 005° 07,440' W | 517    |      |      |  | CHE1                             |  |
| MSM72                                                                                                                                                                                                     | 132 | 1   | CTD/IADCP       | 01.04.18 | 2:18     | BO | 35° 58,132' N | 005° 07,181' W | 516    | 507  | 12.3 |  |                                  |  |
| MSM72                                                                                                                                                                                                     | 132 | 1   | CTD/IADCP       | 01.04.18 | 2:39     | EN | 35° 58,273' N | 005° 06,828' W | 518    |      |      |  |                                  |  |
| MSM72                                                                                                                                                                                                     | 133 | 1   | CTD/IADCP/LISST | 01.04.18 | 5:35     | BE | 35° 59,104' N | 005° 25,478' W | 921    |      |      |  | PHY                              |  |
| MSM72                                                                                                                                                                                                     | 133 | 1   | CTD/IADCP/LISST | 01.04.18 | 5:58     | BO | 35° 59,274' N | 005° 24,865' W | 933    |      | 14.9 |  |                                  |  |
| MSM72                                                                                                                                                                                                     | 133 | 1   | CTD/IADCP/LISST | 01.04.18 | 6:18     | EN | 35° 59,388' N | 005° 24,398' W | 942    |      |      |  |                                  |  |
| MSM72                                                                                                                                                                                                     | 134 | 1   | CTD/IADCP/LISST | 01.04.18 | 11:12    | BE | 35° 58,608' N | 005° 40,033' W | 356    |      |      |  | CHE1                             |  |
| MSM72                                                                                                                                                                                                     | 134 | 1   | CTD/IADCP/LISST | 01.04.18 | 11:24    | BO | 35° 58,656' N | 005° 40,134' W | 347    | 348  | 10   |  |                                  |  |
| MSM72                                                                                                                                                                                                     | 134 | 1   | CTD/IADCP/LISST | 01.04.18 | 11:40    | EN | 35° 58,842' N | 005° 40,400' W | 316    |      |      |  |                                  |  |
| MSM72                                                                                                                                                                                                     | 135 | 1   | CTD/IADCP/LISST | 01.04.18 | 12:23    | BE | 35° 56,017' N | 005° 40,026' W | 588    |      |      |  | CHE1                             |  |
| MSM72                                                                                                                                                                                                     | 135 | 1   | CTD/IADCP/LISST | 01.04.18 | 12:39    | BO | 35° 56,046' N | 005° 40,270' W | 562    | 564  | 7.9  |  |                                  |  |
| MSM72                                                                                                                                                                                                     | 135 | 1   | CTD/IADCP/LISST | 01.04.18 | 13:01    | EN | 35° 56,052' N | 005° 40,999' W | 536    |      |      |  |                                  |  |
| MSM72                                                                                                                                                                                                     | 136 | 1   | CTD/IADCP/LISST | 01.04.18 | 13:48    | BE | 35° 53,222' N | 005° 39,690' W | 330    |      |      |  | CHE1                             |  |
| MSM72                                                                                                                                                                                                     | 136 | 1   | CTD/IADCP/LISST | 01.04.18 | 14:00    | BO | 35° 53,233' N | 005° 39,755' W | 336    | 376  | 10.5 |  |                                  |  |
| MSM72                                                                                                                                                                                                     | 136 | 1   | CTD/IADCP/LISST | 01.04.18 | 14:16    | EN | 35° 53,233' N | 005° 39,754' W | 335    |      |      |  |                                  |  |
| BE=Begin, BO=Bottom, EN=End                                                                                                                                                                               |     |     |                 |          |          |    |               |                |        |      |      |  |                                  |  |
| PHY=no chemical sampling (only salinity samples)                                                                                                                                                          |     |     |                 |          |          |    |               |                |        |      |      |  |                                  |  |
| CHE1=chemical sampling (Oxygen,Phosphate, Total-P, Nitrate, Nitrite, Total-N,Silicate, Alkalinity, PH, CFC12, SF6, CDOM, DOC, dissolved sulphur hexafluoride, Freon-12, total dissolved inorganic carbon) |     |     |                 |          |          |    |               |                |        |      |      |  |                                  |  |
| CHE2=CHE1 plus Isotopes, POC, PON                                                                                                                                                                         |     |     |                 |          |          |    |               |                |        |      |      |  |                                  |  |