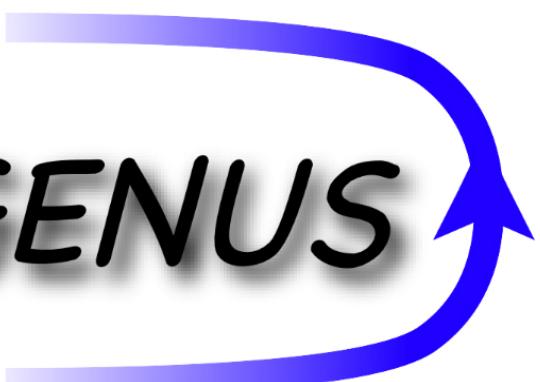


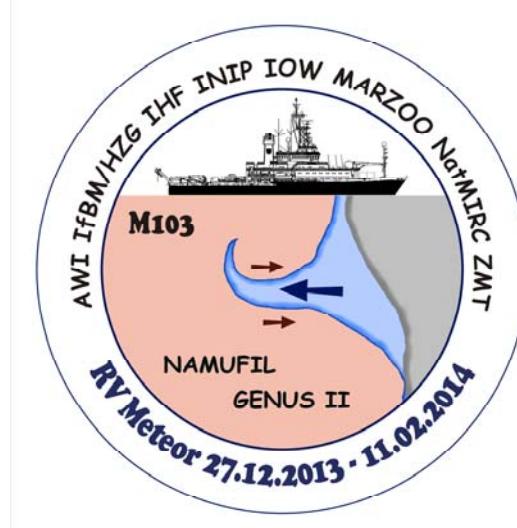
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Germany

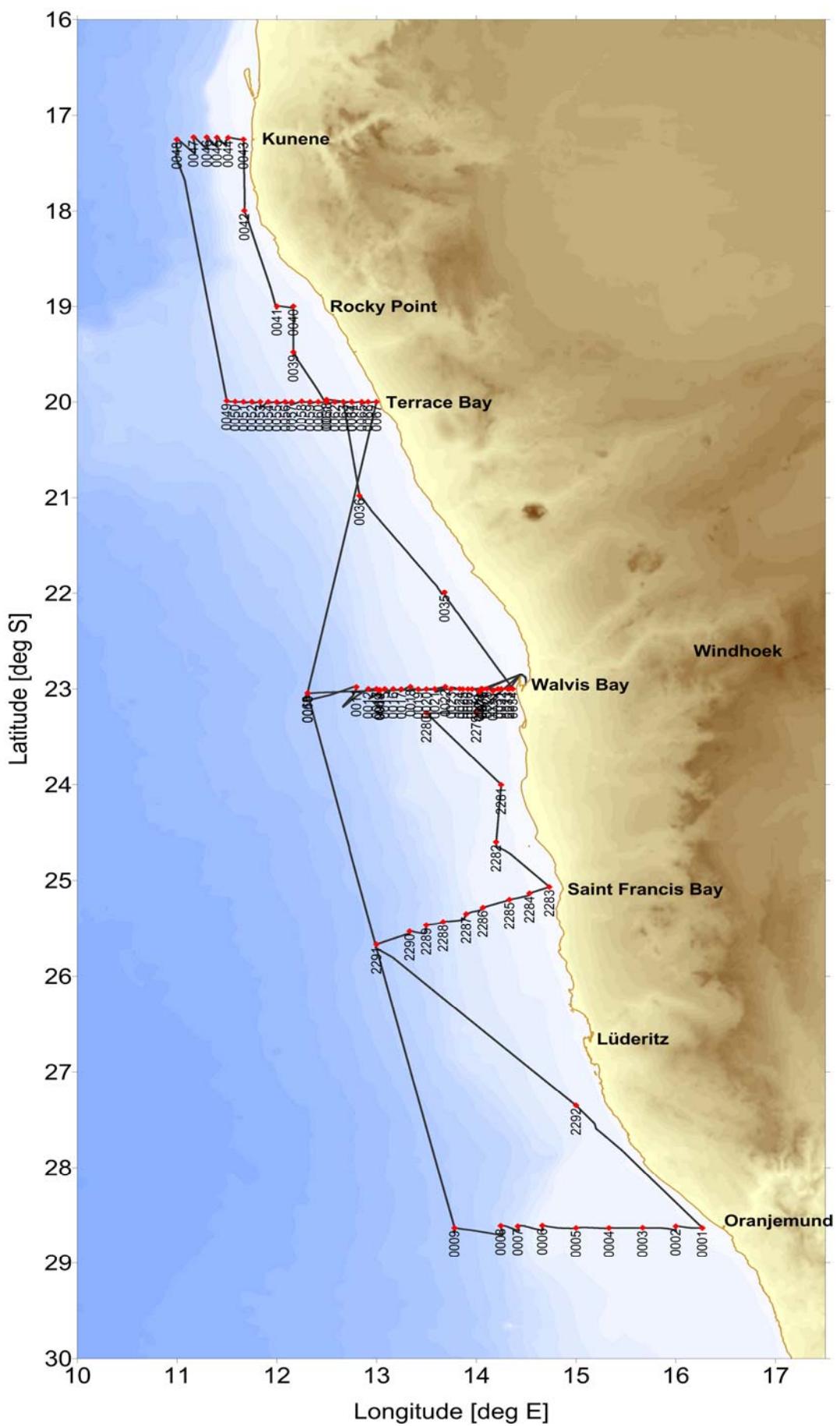
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**Short Cruise Report  
RV METEOR M-103/1  
Project: GENUS II  
Walvis Bay - Walvis Bay  
27.12.2013 - 18.01.2014**

**Chief Scientist: Niko Lahajnar  
Captain: Michael Schneider**

**GENUS** 





## Objectives

Coastal upwelling systems react directly to changes in external (climatic) forcing, and observed changes at lower trophic levels of upwelling ecosystems primarily reflect changes in this external physical forcing. In the Benguela Current coastal upwelling system off Namibia, the supply of oxygen to the shelf environment is directly coupled to hydrodynamic conditions, and fluctuating oxygen levels over the shelf have significant consequences for nutrient levels and nutrient ratios, for rates of exchange at the sediment-water interface, for gas exchange between the ocean and the atmosphere, and for biological production and therefore for the entire ecosystem. Work of expedition METEOR 103/1 in the coastal upwelling area off Namibia, funded by the BMBF and carried out within the project GENUS (**G**eochemistry and **E**cology of the **N**amibian **U**pwelling **S**ystem), phase II, was dedicated to upwelling areas in the eastern boundary currents respond sensitively to global, regional, and local changes in atmospheric circulation patterns. In the past several coastal upwelling systems have experienced dramatic changes (regime shifts) in ecosystem structure and fish catches, which are not fully understood yet. Using dedicated process studies and long term observations, the GENUS project aims to clarify the interactions between the particular trophic levels of the ecosystem in order to improve the knowledge about the system and to enhance the predictive capabilities of ecosystem models.

The cruises M-103/1+2 "NAMUFIL" forms the main field experiment of the GENUS II project; cruise M-103/1 was the synoptic part, the following M-103/2 aims to study the succession of a filament. During the seasonal upwelling minimum the status and development of the northern Benguela ecosystem was investigated by an interdisciplinary working group in close cooperation with African partner institutions. The targeted working area included the weak upwelling cell offshore Walvis Bay, the Terrace Bay (20°S) and Kunene cell (17°15' S) in the north and the very stable upwelling cell close to Lüderitz (25-27°S) as well as oxygenated water areas at the Namibian - South African border (28°38' S) in the south. We performed a combined oceanographic, remote sensing, biogeochemical, biological, and sediment sampling programme on a total of 5 transects perpendicular to the coast, which were connected with several stations between each transect. In addition, during transit time, we employed a lowered ADCP for measurements of currents and several ferrybox-systems for en-route determinations of temperature and salinity as well as nutrient concentrations plus pCO<sub>2</sub>, methane and online cavity ring down spectrometers in order to determine the isotopic composition of carbon bearing compounds (DIC, DOC, CH<sub>4</sub>). In sum, station work comprised sampling in water depths between 30 and 2200 m at 86 stations.

## Cruise Narrative

On December 26 2013, 29 scientists from Germany, Czech Republic, Greece and Namibia boarded RV METEOR for cruise M103/1. For this cruise two 20' containers with scientific equipment and one lab container owned by ZMT had been sent from Germany to the harbour of embarkation in Walvis Bay, Namibia. In addition, three containers which had been sent in Aug 2013 for M-100/1 were already on board. All containers were emptied on Dec. 23 so that the full equipment load could have been provided to the arriving scientists in time.

With this successfully planned and performed cruise organisation RV METEOR casted off from the port of Walvis Bay on Dec 27 at 09:00 local time. The first destination was a long-

term mooring station on the so-called Walvis Bay transect at 23°S in approx. 130 m water depth. The ship reached this first station in the early afternoon on the same day where the mooring with oceanographic sensors were deployed. All sensors had been working according to their schedules. After their successful deployment a station nearby was sampled using a variety of different gears such as CTD, multicorer and several types of nets (e.g., plankton net, MOCNESS, Multi-net, and Tucker Trawl). Sampling with all these gears and nets subsequently became the standard programme for the entire cruise. After this successful start RV METEOR headed south. Several stations were sampled on the short transit to a transect line (25-26°S) north of Lüderitz, which was reached in the evening of Dec 28. The Lüderitz cell is a very stable upwelling region and represents the boundary between the southern and northern Benguela system. The Lüderitz transect was sampled to a depth of 2100 m, intending to catch the coastal mud belt as well as a secondary depot center offshore. Then the ship headed southward to the Namibian border at the Orange River and performed another transect perpendicular to the coastline. The outermost station (2000 m water depth) was completed in the evening of Jan 03 2014.

We then returned back to the 23°S line and started with the outermost station at 2150 m water depth on Jan. 05. There we intended to retrieve the first of three sediment trap moorings that had been deployed in January 2013 with the Namibian vessel FRS MIRABILIS. However, it proved that the mooring replied to the acoustic signals but failed to release. Several attempts with different deck units were unsuccessful. Either the release got stuck with the anchor rope or the flotation modules were broken or lost due to bottom water trawling in that area. After several hours the mooring operation was abandoned in order not to jeopardize the overall mission of this cruise. We continued with our station work on the 23°S-line. On Jan 06 the second sediment trap mooring equipped with various oceanographic sensors provided by the IOW were due for retrieval. Again, we received some signals; however, these signals came most likely from the near-by fish trawlers. There was no connection possible between deck unit (both IfBM and IOW) and release. In addition, the whole mooring operation was interfered by strong fishing operations very close to the ship. If this fishing prevailed over the complete deployment period then without much doubt the system fell victim to the fishing activities in this area although a daily safety warning has been sent out by NAMPORT throughout the year. Without any substantial success regarding our sediment trap moorings we continued our station work and headed towards the inner shelf. On Jan 08 at least the shallow sediment trap mooring was retrieved and provided a valuable insight into the vertical flux in that area.

After having finished the 23°S line, METEOR headed towards the northern Namibian border for the Kunene transect at 17°15' S. In between the ichthyoplanktologists were able to catch different target species for their experiments between 21 and 17° S. The ship arrived at the innermost transect station on Jan 11 in the afternoon hours. This transect was sampled down to 2100 m water depth until Jan 13 in the evening. Afterwards the vessel moved on to the 20°S transect mainly for microstructure probe sampling in combination with monitoring support for the Namibian partner institutions. Station work at 20°S ceased on Jan 16 early in the morning.

METEOR then headed to the two abandoned mooring stations in order to check for a solid triangulation. The deep mooring at 2150 m was still at its initial position and was marked for a

dredging attempt during M-103/2 whereas the central mooring at 440 m did not reply for a single time so that the latter was declared as irrecoverably lost. During the day of Jan 17, the last day at sea, we retrieved one short-term and one long-term oceanographic mooring close to Walvis Bay and re-deployed the sediment trap mooring for the forth time at this position. Mooring operations and thus station work of M-103/1 ceased in the late afternoon and Meteor prepared for entering port on Jan 18. Initially docking was scheduled for 10:00 local time; however, due to harbour reorganisation docking was completed not until 20:00.

**Total Number of Stations:** 86 (#2279 - #2292 and #001-#072)

**Total Number of Gears deployed/used:** 500

**Total Net Station Work [days:hrs:min]:** 8:23:17

| <b>Instrument*</b> | <b>Numbers used</b> | <b>Total Station Time [hours]</b> |
|--------------------|---------------------|-----------------------------------|
| BWS                | 38                  | 19.67                             |
| CTD                | 93                  | 38.42                             |
| HN                 | 55                  | 2.80                              |
| SD                 | 29                  | 1.10                              |
| MOR                | 7                   | 8.18                              |
| MSS                | 40                  | 30.95                             |
| uCTD               | 0                   | 0.00                              |
| MUC                | 59                  | 23.95                             |
| TRIOS              | 20                  | 6.88                              |
| RTR                | 30                  | 9.70                              |
| SLS                | 24                  | 4.48                              |
| T-TRAW             | 3                   | 1.25                              |
| MOC                | 15                  | 19.33                             |
| MOC-D              | 8                   | 12.23                             |
| VGRAB              | 1                   | 0.35                              |
| TRBM               | 3                   | 1.90                              |
| MSN                | 69                  | 34.25                             |
| <b>Total</b>       | <b>500</b>          | <b>215:45</b>                     |

\*Abbreviations see station list below

| Name                  | Working Group                   | Affiliation   |
|-----------------------|---------------------------------|---------------|
| Lahajnar, Niko        | Chief Scientist                 | IfBM          |
| Ankele, Markus        | Ferry Box                       | HZG           |
| Annighöfer, Meike     | Biogeochemistry / Sedimentology | IfBM          |
| Beier, Sebastian      | CTD / Oceanography              | IOW           |
| Birkicht, Matthias    | Carbon Biogeochemistry          | ZMT           |
| Bohata, Karolina      | Zoo-Planktology                 | IHF           |
| Dähnke, Kirstin       | Nitrogen Biogeochemistry        | HZG           |
| Flohr, Anita          | Carbon Biogeochemistry          | ZMT           |
| Geist, Simon          | Ichthyoplanktology              | ZMT           |
| Gerth, Monika         | Remote Sensing                  | IOW           |
| Hansen, Anja          | Phyto-Planktology               | IOW           |
| Heene, Toralf         | CTD / Oceanography              | IOW           |
| Janssen, Silke        | Zoo-Planktology                 | IHF           |
| Kunzmann, Andreas     | Ichthyoplanktology              | ZMT           |
| Kretzschmann, Lisett  | Biogeochemistry                 | IfBM          |
| Martin, Bettina       | Zoo-Planktology                 | IHF           |
| Mlambo, Lindan        | Krill                           | AWI / NatMIRC |
| Möbius, Jürgen        | Biogeochemistry / Sedimentology | IfBM          |
| Ngutjinazo, Thusnelda | Phyto-Planktology               | NatMIRC       |
| Ohde, Thomas          | Remote Sensing                  | IOW           |
| Pavloudi, Christina   | Microbial Physiology            | HCMR / DMB    |
| Paul, Nina            | Ichthyoplanktology              | ZMT           |
| Rixen, Tim            | Carbon Biogeochemistry          | ZMT           |
| Schmidt, Martin       | CTD / Oceanography              | IOW           |
| Simon, Stephanie      | Ichthyoplanktology              | ZMT           |
| Stöber, Anette        | Multimedia                      | MMKH          |
| Teichert, Lea         | Biogeochemistry                 | IfBM          |
| Vorrath, Maria-Elena  | Biogeochemistry                 | IfBM          |
| Werner, Thorsten      | Krill                           | AWI           |

**Institutions:**

|                      |   |
|----------------------|---|
| <b>AWI</b>           | Alfred-Wegener-Institut für Polar- und Meeresforschung,<br>Am Handelshafen 12, D-27570 Bremerhaven, Germany   |
| <b>HCMR/<br/>DME</b> | Helenic Centre for Marine Research, Institute of Marine Biology, Biotechnology<br>and Aquaculture Institute of Marine Biology, Thalassocosmos, 71003 Heraklion,<br>Crete, Greece;<br>Department of Microbial Ecophysiology, Faculty of Biology, University of<br>Bremen, Leobener Straße, 28359 Bremen, Germany |
| <b>HZG</b>           | Helmholtz Zentrum Geesthacht, Institut für Material und Küstenforschung,<br>Max-Planck-Straße 1, D-21502 Geesthacht, Germany  |
| <b>IfBM</b>          | Institut für Biogeochemie und Meereschemie, Universität Hamburg,<br>Bundesstraße 55, D-20146 Hamburg, Germany   |
| <b>IHF</b>           | Institut für Hydrobiologie und Fischereiwissenschaft, Universität Hamburg,<br>Große Elbstraße 133, D-22767 Hamburg, Germany   |
| <b>IOW</b>           | Leibniz-Institut für Ostseeforschung Warnemünde,<br>Seestraße 15, D-18199 Rostock-Warnemünde, Germany   |
| <b>MMKH</b>          | Multimedia Kontor Hamburg,<br>Saarlandstraße 30, D-22303 Hamburg, Germany   |
| <b>NatMIRC</b>       | National Marine Information and Research Centre<br>Strand Street, Swakopmund, Namibia   |
| <b>ZMT</b>           | Leibniz-Zentrum für Marine Tropenökologie GmbH, Bremen<br>Fahrenheitstraße 6, D-28359 Bremen, Germany   |

**Acknowledgement**

We would like to thank Captain Michael Schneider, his officers and the crew of R/V METEOR for their outstanding support, the provision of a highly professional working environment and their significant contribution to the success of this cruise. All of us enjoyed the friendly, flexible and family-like atmosphere aboard during all stages of the cruise. We are indebted to the Namibian Ministry of Foreign Affairs and Ministry of Mines and Energy for their support and we would like to acknowledge the contribution of the German Ministry of Foreign Affairs (Wolfgang Mahrle and Elke Eggers) as well. We would also like to express our gratitude to the Leitstelle METEOR/MERIAN for its valuable support. The ship time of R/V METEOR was provided by the Deutsche Forschungsgemeinschaft and was supported by the GENUS II programme of the Federal Ministry of Education and Research.

**Abbreviations:**

|         |                                |
|---------|--------------------------------|
| CTD/RO: | CTD/Rosette                    |
| SD:     | Secchi-Disk                    |
| MOR:    | Mooring (long-term)            |
| MOC-1:  | MOCNESS                        |
| MOC-D:  | Double MOCNESS                 |
| MOR:    | Mooring                        |
| TD:     | Drifter                        |
| TT:     | Tucker Trawl                   |
| MN:     | Multinet                       |
| MUC:    | Multicorer                     |
| MOCN:   | Single MOCNESS                 |
| MSS:    | Microstructure Probe           |
| RT:     | Ring-Trawl                     |
| BWS :   | Bottom Water Sampler           |
| SLS :   | Satlantics                     |
| Trios:  | Trios                          |
| TRBM:   | Trawl Resistant Bottom Mooring |

| Station        | Date       | Time  | PositionLat  | PositionLon  | Depth [m]    | Wind [m/s] | Course [°] | Speed [kn] | Gear   | Action         |
|----------------|------------|-------|--------------|--------------|--------------|------------|------------|------------|--------|----------------|
| ME1031/2277-1  | 27.12.2013 | 09:26 | 22° 59,98' S | 14° 20,02' E | 60.9 SW 4    |            | 164        | 0          | CTD/RO | surface        |
| ME1031/2277-2  | 27.12.2013 | 09:48 | 22° 59,98' S | 14° 20,02' E | 59.8 WSW 4   |            | 143.8      | 0          | SD     | surface        |
| ME1031/2278-1  | 27.12.2013 | 11:40 | 23° 0,01' S  | 14° 3,60' E  | 132.8 SW 8   |            | 194.8      | -0.4       | MOR    | information    |
| ME1031/2278-1  | 27.12.2013 | 12:20 | 23° 0,02' S  | 14° 3,66' E  | 129.4 SSW 8  |            | 340.3      | 0          | MOR    | slipped        |
| ME1031/2279-1  | 27.12.2013 | 18:55 | 23° 14,98' S | 14° 0,01' E  | 145.3 S 14   |            | 261.7      | 0.1        | CTD/RO | surface        |
| ME1031/2279-2  | 27.12.2013 | 19:00 | 23° 14,98' S | 14° 0,01' E  | 145.5 S 13   |            | 186.7      | 0          | HN     | surface        |
| ME1031/2279-3  | 27.12.2013 | 20:13 | 23° 14,98' S | 14° 0,01' E  | 145.8 SSE 14 |            | 322.5      | 0          | MUC    | surface        |
| ME1031/2280-1  | 27.12.2013 | 23:24 | 23° 14,96' S | 13° 30,00' E | 228.6 SSE 10 |            | 291.6      | 0.1        | CTD/RO | surface        |
| ME1031/2280-2  | 27.12.2013 | 23:24 | 23° 14,96' S | 13° 30,00' E | 228.6 SSE 10 |            | 291.6      | 0.1        | HN     | surface        |
| ME1031/2280-3  | 27.12.2013 | 23:50 | 23° 14,96' S | 13° 30,00' E | 228.1 SSE 8  |            | 133.8      | 0          | BWS    | surface        |
| ME1031/2280-4  | 28.12.2013 | 00:30 | 23° 15,00' S | 13° 30,00' E | 227.1 SSE 12 |            | 273.6      | -0.1       | MUC    | surface        |
| ME1031/2281-1  | 28.12.2013 | 07:28 | 24° 0,01' S  | 14° 14,97' E | 120.4 SSE 4  |            | 285.2      | -0.1       | CTD/RO | surface        |
| ME1031/2281-2  | 28.12.2013 | 07:29 | 24° 0,01' S  | 14° 14,97' E | 118.9 SSE 4  |            | 271.4      | -0.1       | HN     | surface        |
| ME1031/2281-3  | 28.12.2013 | 07:34 | 24° 0,01' S  | 14° 14,97' E | 116.8 SSE 4  |            | 91.2       | -0.1       | SD     | surface        |
| ME1031/2281-4  | 28.12.2013 | 07:48 | 24° 0,01' S  | 14° 14,97' E | 118.8 SSE 4  |            | 83.3       | 0          | SLS    | into water     |
| ME1031/2281-5  | 28.12.2013 | 08:19 | 24° 0,02' S  | 14° 14,86' E | 121.2 SSE 4  |            | 107.5      | -0.1       | TRIOS  | surface        |
| ME1031/2281-6  | 28.12.2013 | 09:03 | 24° 0,02' S  | 14° 14,90' E | 57.9 S 6     |            | 99         | 0          | MUC    | surface        |
| ME1031/2281-7  | 28.12.2013 | 09:40 | 24° 0,26' S  | 14° 14,87' E | 119.6 S 7    |            | 177.5      | 2.9        | RTR    | start trawling |
| ME1031/2281-7  | 28.12.2013 | 09:56 | 24° 0,96' S  | 14° 14,84' E | 118.9 S 7    |            | 187.1      | 2.5        | RTR    | end trawling   |
| ME1031/2282-1  | 28.12.2013 | 13:40 | 24° 36,03' S | 14° 11,94' E | 145.3 S 10   |            | 114.9      | 0.3        | CTD/RO | surface        |
| ME1031/2282-2  | 28.12.2013 | 13:42 | 24° 36,02' S | 14° 11,94' E | 144.6 S 10   |            | 298        | -0.5       | HN     | on deck        |
| ME1031/2282-3  | 28.12.2013 | 13:43 | 24° 36,01' S | 14° 11,94' E | 145.2 S 10   |            | 114.2      | -0.1       | SD     | surface        |
| ME1031/2282-4  | 28.12.2013 | 14:05 | 24° 36,02' S | 14° 11,98' E | 146.0 S 11   |            | 289.5      | 0          | SLS    | into water     |
| ME1031/2282-5  | 28.12.2013 | 14:39 | 24° 36,02' S | 14° 11,98' E | 144.2 S 12   |            | 231.2      | 0          | TRIOS  | max. depth     |
| ME1031/2282-6  | 28.12.2013 | 14:54 | 24° 36,02' S | 14° 11,98' E | 144.9 S 12   |            | 115.2      | 0.1        | CTD/RO | at depth       |
| ME1031/2282-7  | 28.12.2013 | 15:28 | 24° 36,02' S | 14° 11,98' E | 144.6 S 12   |            | 146.3      | 0.1        | MUC    | at sea bottom  |
| ME1031/2282-8  | 28.12.2013 | 15:49 | 24° 36,36' S | 14° 11,94' E | 147.1 S 13   |            | 174.2      | 1.8        | T-TRAW |                |
| ME1031/2283-1  | 28.12.2013 | 21:08 | 25° 3,97' S  | 14° 43,99' E | 253.8 S 15   |            | 213.6      | 0.1        | CTD/RO | surface        |
| ME1031/2283-2  | 28.12.2013 | 21:10 | 25° 3,97' S  | 14° 43,99' E | 0.0 S 15     |            | 0          | 0          | HN     | surface        |
| ME1031/2283-3  | 28.12.2013 | 21:37 | 25° 3,97' S  | 14° 43,99' E | 52.2 S 14    |            | 110.2      | 0          | BWS    | surface        |
| ME1031/2283-4  | 28.12.2013 | 22:09 | 25° 3,99' S  | 14° 43,99' E | 51.2 S 14    |            | 246.6      | 0.1        | MUC    | at sea bottom  |
| ME1031/2284-2  | 28.12.2013 | 23:48 | 25° 7,98' S  | 14° 32,05' E | 91.5 S 13    |            | 81.7       | 0.1        | HN     | surface        |
| ME1031/2284-3  | 29.12.2013 | 00:14 | 25° 7,99' S  | 14° 32,00' E | 92.3 S 12    |            | 316.4      | 0.1        | MSN    | on deck        |
| ME1031/2284-4  | 29.12.2013 | 00:22 | 25° 7,99' S  | 14° 32,00' E | 92.0 S 13    |            | 196.8      | 0.2        | CTD/RO | surface        |
| ME1031/2284-4  | 29.12.2013 | 00:34 | 25° 7,99' S  | 14° 32,00' E | 91.1 S 13    |            | 260.1      | 0          | CTD/RO | on deck        |
| ME1031/2284-5  | 29.12.2013 | 00:54 | 25° 7,99' S  | 14° 32,00' E | 91.8 S 13    |            | 100.4      | 0          | BWS    | surface        |
| ME1031/2284-6  | 29.12.2013 | 01:14 | 25° 7,99' S  | 14° 32,00' E | 91.0 S 13    |            | 117.4      | 0.1        | BWS    | surface        |
| ME1031/2284-7  | 29.12.2013 | 01:50 | 25° 7,99' S  | 14° 32,00' E | 92.1 S 13    |            | 0          | 0.1        | BWS    | on deck        |
| ME1031/2284-8  | 29.12.2013 | 01:56 | 25° 7,99' S  | 14° 32,00' E | 94.3 S 13    |            | 145.8      | 0.1        | MUC    | surface        |
| ME1031/2284-9  | 29.12.2013 | 02:16 | 25° 7,96' S  | 14° 32,01' E | 91.1 S 13    |            | 0          | -0.2       | MUC    | surface        |
| ME1031/2284-9  | 29.12.2013 | 02:27 | 25° 7,97' S  | 14° 32,00' E | 90.9 S 12    |            | 319.7      | 0.2        | MUC    | on deck        |
| ME1031/2284-10 | 29.12.2013 | 02:31 | 25° 7,97' S  | 14° 32,01' E | 90.8 S 12    |            | 151        | 0          | MUC    | surface        |

| Station        | Date       | Time  | PositionLat  | PositionLon  | Depth [m] | Wind [m/s] | Course [°] | Speed [kn] | Gear   | Action         |
|----------------|------------|-------|--------------|--------------|-----------|------------|------------|------------|--------|----------------|
| ME1031/2284-10 | 29.12.2013 | 02:34 | 25° 7,97' S  | 14° 32,01' E | 90.9      | S 12       | 181.7      | 0          | MUC    | at sea bottom  |
| ME1031/2284-11 | 29.12.2013 | 02:49 | 25° 8,06' S  | 14° 32,00' E | 93.1      | S 11       | 175.9      | 2.3        | MSN    | surface        |
| ME1031/2284-11 | 29.12.2013 | 03:10 | 25° 8,85' S  | 14° 31,93' E | 96.2      | S 11       | 168.8      | 2.4        | MSN    | on deck        |
| ME1031/2285-1  | 29.12.2013 | 04:34 | 25° 11,96' S | 14° 19,99' E | 152.6     | SSE 13     | 200.1      | 1.7        | CTD/RO | surface        |
| ME1031/2285-2  | 29.12.2013 | 04:41 | 25° 11,96' S | 14° 19,99' E | 153.1     | SSE 14     | 75.4       | 0.6        | HN     | surface        |
| ME1031/2285-3  | 29.12.2013 | 05:02 | 25° 11,96' S | 14° 19,99' E | 153.1     | SSE 12     | 63.8       | 0.2        | BWS    | surface        |
| ME1031/2285-4  | 29.12.2013 | 05:25 | 25° 11,96' S | 14° 19,99' E | 153.1     | SSE 11     | 92.5       | 1.9        | CTD/RO | surface        |
| ME1031/2285-5  | 29.12.2013 | 06:01 | 25° 11,95' S | 14° 19,94' E | 153.1     | S 10       | 236.3      | 0.7        | MUC    | at sea bottom  |
| ME1031/2286-1  | 29.12.2013 | 08:10 | 25° 16,96' S | 14° 3,99' E  | 191.1     | S 13       | 57         | 0.8        | CTD/RO | surface        |
| ME1031/2286-2  | 29.12.2013 | 08:17 | 25° 16,96' S | 14° 3,98' E  | 190.6     | S 13       | 238.2      | 0.4        | SD     | surface        |
| ME1031/2286-3  | 29.12.2013 | 08:55 | 25° 16,97' S | 14° 3,99' E  | 190.3     | S 14       | 123.2      | 1.1        | MSN    | surface        |
| ME1031/2286-3  | 29.12.2013 | 09:08 | 25° 16,97' S | 14° 3,99' E  | 191.8     | S 13       | 83.4       | 2          | MSN    | on deck        |
| ME1031/2286-4  | 29.12.2013 | 09:26 | 25° 16,97' S | 14° 3,98' E  | 191.8     | S 13       | 312.5      | 0.4        | CTD/RO | surface        |
| ME1031/2286-5  | 29.12.2013 | 09:57 | 25° 16,96' S | 14° 3,99' E  | 190.2     | S 12       | 259.2      | 1.2        | HN     | on deck        |
| ME1031/2286-6  | 29.12.2013 | 10:06 | 25° 16,96' S | 14° 3,98' E  | 190.8     | S 12       | 65.9       | 0.4        | SLS    | into water     |
| ME1031/2286-7  | 29.12.2013 | 10:28 | 25° 16,97' S | 14° 3,94' E  | 190.9     | S 12       | 351.8      | 0.9        | TRIOS  | surface        |
| ME1031/2286-8  | 29.12.2013 | 10:59 | 25° 16,97' S | 14° 3,95' E  | 190.8     | S 12       | 239.6      | 0.6        | MSN    | at depth       |
| ME1031/2286-8  | 29.12.2013 | 11:08 | 25° 16,97' S | 14° 3,95' E  | 191.2     | S 12       | 264.7      | 0.5        | MSN    | on deck        |
| ME1031/2286-9  | 29.12.2013 | 11:42 | 25° 16,97' S | 14° 3,95' E  | 190.5     | S 13       | 273.7      | 1.5        | MUC    | on deck        |
| ME1031/2286-10 | 29.12.2013 | 11:44 | 25° 16,97' S | 14° 3,96' E  | 191.0     | S 13       | 96.4       | 1          | MUC    | surface        |
| ME1031/2286-11 | 29.12.2013 | 12:23 | 25° 17,28' S | 14° 3,95' E  | 190.6     | S 13       | 179.2      | 1.8        | MSN    | at depth       |
| ME1031/2287-1  | 29.12.2013 | 14:00 | 25° 20,93' S | 13° 53,97' E | 248.8     | S 12       | 325.6      | 1.2        | CTD/RO | surface        |
| ME1031/2287-2  | 29.12.2013 | 14:13 | 25° 20,99' S | 13° 54,00' E | 249.4     | S 12       | 232.7      | 1.6        | HN     | surface        |
| ME1031/2287-3  | 29.12.2013 | 14:18 | 25° 20,99' S | 13° 54,00' E | 248.8     | S 11       | 157.8      | 0.2        | SD     | on deck        |
| ME1031/2287-4  | 29.12.2013 | 14:41 | 25° 20,99' S | 13° 54,00' E | 250.4     | S 12       | 104.5      | 1.2        | MSN    | at depth       |
| ME1031/2287-5  | 29.12.2013 | 15:11 | 25° 20,99' S | 13° 54,00' E | 249.4     | S 12       | 161.4      | 0.3        | CTD/RO | at depth       |
| ME1031/2287-5  | 29.12.2013 | 15:21 | 25° 20,99' S | 13° 54,00' E | 248.5     | S 12       | 356.9      | 0.8        | CTD/RO | on deck        |
| ME1031/2287-6  | 29.12.2013 | 15:26 | 25° 20,99' S | 13° 53,99' E | 248.9     | S 12       | 348.1      | 0.5        | SLS    | into water     |
| ME1031/2287-7  | 29.12.2013 | 15:56 | 25° 21,01' S | 13° 53,83' E | 249.8     | S 12       | 262.7      | 1.2        | TRIOS  | max. depth     |
| ME1031/2287-8  | 29.12.2013 | 16:10 | 25° 21,01' S | 13° 53,83' E | 249.9     | S 11       | 47.1       | 0.8        | MSN    | at depth       |
| ME1031/2287-9  | 29.12.2013 | 16:36 | 25° 21,01' S | 13° 53,83' E | 250.2     | S 12       | 77.3       | 0.8        | BWS    | at sea bottom  |
| ME1031/2287-10 | 29.12.2013 | 17:06 | 25° 21,03' S | 13° 53,79' E | 250.1     | S 13       | 109.4      | 0.3        | MUC    | at sea bottom  |
| ME1031/2287-11 | 29.12.2013 | 17:40 | 25° 21,01' S | 13° 53,64' E | 251.3     | S 12       | 356.3      | 0.6        | MUC    | at sea bottom  |
| ME1031/2287-12 | 29.12.2013 | 18:24 | 25° 21,07' S | 13° 53,61' E | 250.8     | S 13       | 195.2      | 2.5        | MSN    | surface        |
| ME1031/2287-12 | 29.12.2013 | 19:02 | 25° 22,37' S | 13° 53,54' E | 254.1     | S 13       | 178        | 2          | MSN    | on deck        |
| ME1031/2287-13 | 29.12.2013 | 19:40 | 25° 20,96' S | 13° 53,92' E | 250.0     | S 13       | 139.5      | 2.8        | MOC    | Into water     |
| ME1031/2287-13 | 29.12.2013 | 20:04 | 25° 21,80' S | 13° 53,67' E | 1799.1    | S 13       | 206.2      | 2.7        | MOC    | max ropelength |
| ME1031/2287-13 | 29.12.2013 | 20:04 | 25° 21,80' S | 13° 53,67' E | 1799.1    | S 13       | 206.2      | 2.7        | MOC    | begin heave    |
| ME1031/2287-13 | 29.12.2013 | 20:30 | 25° 22,68' S | 13° 53,28' E | 1272.2    | S 14       | 191.2      | 3          | MOC    | on deck        |
| ME1031/2288-1  | 29.12.2013 | 22:33 | 25° 25,97' S | 13° 40,04' E | 411.5     | S 15       | 75.6       | 1.2        | CTD/RO | at depth       |
| ME1031/2288-2  | 29.12.2013 | 22:58 | 25° 25,99' S | 13° 40,01' E | 411.9     | SSE 15     | 154.4      | 0.6        | MSN    | at depth       |
| ME1031/2288-2  | 29.12.2013 | 23:04 | 25° 25,99' S | 13° 40,01' E | 412.4     | SSE 14     | 273.8      | 3.3        | MSN    | on deck        |
| ME1031/2288-3  | 29.12.2013 | 23:16 | 25° 25,99' S | 13° 40,00' E | 412.2     | SSE 13     | 58         | 1.2        | CTD/RO | at depth       |
| ME1031/2288-4  | 29.12.2013 | 23:26 | 25° 25,99' S | 13° 40,00' E | 412.9     | SSE 14     | 75.1       | 1.3        | HN     | on deck        |
| ME1031/2288-5  | 29.12.2013 | 23:48 | 25° 25,99' S | 13° 40,00' E | 415.0     | SSE 15     | 126        | 1.5        | BWS    | at sea bottom  |
| ME1031/2288-6  | 30.12.2013 | 00:27 | 25° 26,00' S | 13° 40,00' E | 411.4     | SSE 16     | 60.3       | 1.1        | MUC    | at sea bottom  |
| ME1031/2289-1  | 30.12.2013 | 02:14 | 25° 28,41' S | 13° 29,98' E | 1694.2    | SSE 14     | 203.4      | 2.9        | MSN    | at depth       |
| ME1031/2289-2  | 30.12.2013 | 03:03 | 25° 29,34' S | 13° 30,05' E | 712.7     | SSE 14     | 61.9       | 2          | CTD/RO | at depth       |
| ME1031/2289-3  | 30.12.2013 | 03:28 | 25° 29,33' S | 13° 30,04' E | 700.0     | SSE 13     | 85.7       | 2.5        | MSN    | at depth       |
| ME1031/2289-4  | 30.12.2013 | 04:01 | 25° 29,34' S | 13° 30,04' E | 696.7     | SSE 13     | 119.6      | 1.5        | CTD/RO | at depth       |
| ME1031/2289-5  | 30.12.2013 | 04:46 | 25° 29,34' S | 13° 30,05' E | 697.0     | SSE 14     | 166.8      | 0.7        | BWS    | at sea bottom  |
| ME1031/2289-6  | 30.12.2013 | 05:39 | 25° 29,32' S | 13° 30,01' E | 700.2     | SSE 14     | 279.2      | 2          | MUC    | at sea bottom  |
| ME1031/2289-7  | 30.12.2013 | 06:17 | 25° 29,27' S | 13° 29,85' E | 703.2     | SSE 13     | 112        | 1.9        | SD     | on deck        |
| ME1031/2289-8  | 30.12.2013 | 06:19 | 25° 29,27' S | 13° 29,85' E | 716.5     | SSE 12     | 335.7      | 1.5        | SLS    | into water     |
| ME1031/2289-9  | 30.12.2013 | 07:18 | 25° 29,76' S | 13° 29,73' E | 1729.8    | SSE 12     | 169.5      | 2.2        | MOC    | Into water     |
| ME1031/2289-9  | 30.12.2013 | 07:49 | 25° 30,77' S | 13° 29,57' E | 2026.4    | S 13       | 199.2      | 3.5        | MOC    | max ropelength |
| ME1031/2289-9  | 30.12.2013 | 07:49 | 25° 30,77' S | 13° 29,57' E | 2026.4    | S 13       | 199.2      | 3.5        | MOC    | begin heave    |
| ME1031/2289-9  | 30.12.2013 | 08:38 | 25° 32,11' S | 13° 29,23' E | 999.1     | SSE 12     | 118.1      | 1.6        | MOC    | on deck        |
| ME1031/2290-1  | 30.12.2013 | 10:14 | 25° 31,73' S | 13° 19,94' E | 883.7     | SSE 10     | 219.7      | 1.9        | MSN    | surface        |
| ME1031/2290-2  | 30.12.2013 | 11:05 | 25° 32,98' S | 13° 20,00' E | 1002.2    | SSE 10     | 152.3      | 1.4        | SD     | on deck        |
| ME1031/2290-3  | 30.12.2013 | 11:12 | 25° 32,99' S | 13° 20,00' E | 858.5     | SSE 11     | 245.2      | 1.9        | CTD/RO | surface        |

| Station        | Date       | Time  | PositionLat  | PositionLon  | Depth [m]  | Wind [m/s] | Course [°] | Speed [kn]  | Gear | Action         |
|----------------|------------|-------|--------------|--------------|------------|------------|------------|-------------|------|----------------|
| ME1031/2290-4  | 30.12.2013 | 11:12 | 25° 32,99' S | 13° 20,00' E | 858.5 SSE  | 11         | 245.2      | 1.9 HN      |      | surface        |
| ME1031/2290-5  | 30.12.2013 | 12:16 | 25° 32,99' S | 13° 19,91' E | 1121.8 SSE | 12         | 287        | 2.3 SLS     |      | on deck        |
| ME1031/2290-6  | 30.12.2013 | 12:32 | 25° 32,99' S | 13° 19,95' E | 1131.5 SSE | 11         | 98.5       | 0.3 CTD/RO  |      | surface        |
| ME1031/2290-7  | 30.12.2013 | 13:05 | 25° 32,99' S | 13° 19,99' E | 1125.9 SSE | 11         | 137.1      | 2.6 TRIOS   |      | max. depth     |
| ME1031/2290-8  | 30.12.2013 | 13:53 | 25° 32,99' S | 13° 19,99' E | 1129.3 SSE | 11         | 63.4       | 1.3 BWS     |      | at sea bottom  |
| ME1031/2290-9  | 30.12.2013 | 14:52 | 25° 33,00' S | 13° 19,99' E | 1124.4 SSE | 12         | 75.3       | 0.5 MSN     |      | at depth       |
| ME1031/2290-10 | 30.12.2013 | 15:20 | 25° 32,99' S | 13° 19,99' E | 1119.9 S   | 12         | 286.6      | 3.5 MUC     |      | surface        |
| ME1031/2290-11 | 30.12.2013 | 16:45 | 25° 32,99' S | 13° 19,93' E | 1128.0 S   | 12         | 155.2      | 0.3 MSN     |      | at depth       |
| ME1031/2290-12 | 30.12.2013 | 17:35 | 25° 32,99' S | 13° 19,93' E | 1129.6 S   | 13         | 311.5      | 1.7 MSN     |      | at depth       |
| ME1031/2291-1  | 30.12.2013 | 20:51 | 25° 39,97' S | 12° 59,94' E | 2560.2 SSE | 13         | 107.6      | 2.1 CTD/RO  |      | at depth       |
| ME1031/2291-2  | 30.12.2013 | 22:23 | 25° 39,97' S | 12° 59,94' E | 2223.3 SSE | 13         | 48.6       | 0.7 CTD/RO  |      | at depth       |
| ME1031/2291-3  | 30.12.2013 | 23:10 | 25° 39,97' S | 12° 59,94' E | 2236.9 SSE | 12         | 352.1      | 1.4 CTD/RO  |      | at depth       |
| ME1031/2291-4  | 30.12.2013 | 23:46 | 25° 39,97' S | 12° 59,94' E | 2232.4 SSE | 16         | 125.7      | 0.7 CTD/RO  |      | at depth       |
| ME1031/2291-5  | 31.12.2013 | 00:02 | 25° 39,97' S | 12° 59,94' E | 2234.7 SSE | 14         | 339.5      | 0.8 BWS     |      | surface        |
| ME1031/2291-6  | 31.12.2013 | 00:10 | 25° 39,98' S | 12° 59,96' E | 2231.1 SSE | 15         | 248.7      | 1.5 HN      |      | on deck        |
| ME1031/2291-5  | 31.12.2013 | 00:47 | 25° 40,00' S | 13° 0,00' E  | 2306.5 SSE | 14         | 268.5      | 0.4 BWS     |      | at sea bottom  |
| ME1031/2291-7  | 31.12.2013 | 02:28 | 25° 39,99' S | 13° 0,00' E  | 2225.9 SSE | 14         | 20.3       | 1.4 MUC     |      | at sea bottom  |
| ME1031/2291-7  | 31.12.2013 | 02:29 | 25° 39,99' S | 13° 0,00' E  | 2229.4 SSE | 14         | 306.3      | 0.6 MUC     |      | hiev           |
| ME1031/2291-8  | 31.12.2013 | 04:20 | 25° 39,98' S | 12° 59,96' E | 2232.5 SSE | 13         | 224.9      | 1.9 MUC     |      | at sea bottom  |
| ME1031/2291-9  | 31.12.2013 | 05:34 | 25° 40,14' S | 12° 59,92' E | 2422.3 SSE | 12         | 203.1      | 1.6 MOC     |      | Into water     |
| ME1031/2291-9  | 31.12.2013 | 06:04 | 25° 40,75' S | 12° 59,83' E | 2454.7 SSE | 13         | 144.4      | 1.4 MOC     |      | max ropelength |
| ME1031/2291-9  | 31.12.2013 | 06:04 | 25° 40,75' S | 12° 59,83' E | 2454.7 SSE | 13         | 144.4      | 1.4 MOC     |      | begin heave    |
| ME1031/2291-9  | 31.12.2013 | 06:53 | 25° 41,78' S | 12° 59,66' E | 2382.0 SSE | 11         | 42.8       | 0.4 MOC     |      | on deck        |
| ME1031/2292-1  | 31.12.2013 | 23:22 | 27° 20,97' S | 15° 0,00' E  | 191.4 SSE  | 10         | 92.9       | -0.1 CTD/RO |      | surface        |
| ME1031/2292-2  | 31.12.2013 | 23:27 | 27° 20,97' S | 15° 0,00' E  | 190.4 SSE  | 10         | 258.2      | 0.1 HN      |      | surface        |
| ME1031/2292-3  | 01.01.2014 | 00:05 | 27° 20,99' S | 15° 0,01' E  | 190.3 SSE  | 10         | 45.4       | 0 MUC       |      | at sea bottom  |
| ME1031/001-1   | 01.01.2014 | 10:22 | 28° 38,05' S | 16° 15,94' E | 40.7 S     | 5          | 63.9       | 0 CTD/RO    |      | surface        |
| ME1031/001-2   | 01.01.2014 | 10:25 | 28° 38,04' S | 16° 15,95' E | 39.8 S     | 5          | 0          | -0.1 HN     |      | surface        |
| ME1031/001-3   | 01.01.2014 | 10:26 | 28° 38,03' S | 16° 15,95' E | 40.6 S     | 5          | 62.4       | -0.2 SD     |      | surface        |
| ME1031/001-4   | 01.01.2014 | 10:46 | 28° 38,00' S | 16° 15,99' E | 40.1 S     | 6          | 0          | 0 SLS       |      | into water     |
| ME1031/001-5   | 01.01.2014 | 11:07 | 28° 38,00' S | 16° 16,02' E | 39.7 S     | 7          | 287.3      | 0.1 TRIOS   |      | max. depth     |
| ME1031/001-5   | 01.01.2014 | 11:16 | 28° 38,00' S | 16° 16,02' E | 39.1 S     | 7          | 267.9      | 0.1 TRIOS   |      | on deck        |
| ME1031/001-6   | 01.01.2014 | 11:40 | 28° 38,00' S | 16° 16,01' E | 40.2 S     | 8          | 173.1      | 0.1 BWS     |      | at sea bottom  |
| ME1031/001-7   | 01.01.2014 | 12:05 | 28° 38,00' S | 16° 16,01' E | 40.6 S     | 8          | 131.2      | 0 MUC       |      | at sea bottom  |
| ME1031/001-8   | 01.01.2014 | 12:23 | 28° 38,00' S | 16° 16,01' E | 39.9 S     | 9          | 0          | 0.2 MUC     |      | at sea bottom  |
| ME1031/002-1   | 01.01.2014 | 14:08 | 28° 37,28' S | 16° 0,00' E  | 114.1 S    | 8          | 203.4      | 2.3 MSN     |      | at depth       |
| ME1031/002-1   | 01.01.2014 | 14:08 | 28° 37,28' S | 16° 0,00' E  | 114.1 S    | 8          | 203.4      | 2.3 MSN     |      | Hoisting       |
| ME1031/002-2   | 01.01.2014 | 14:38 | 28° 38,17' S | 15° 59,97' E | 116.9 S    | 7          | 82.3       | 0.5 CTD/RO  |      | surface        |
| ME1031/002-3   | 01.01.2014 | 14:46 | 28° 38,17' S | 15° 59,98' E | 116.6 S    | 7          | 26.8       | 0.2 SD      |      | on deck        |
| ME1031/002-4   | 01.01.2014 | 15:00 | 28° 38,17' S | 15° 59,97' E | 116.6 S    | 7          | 102.2      | 0.5 MSN     |      | surface        |
| ME1031/002-5   | 01.01.2014 | 15:01 | 28° 38,17' S | 15° 59,97' E | 116.1 S    | 6          | 0          | 0.2 HN      |      | surface        |
| ME1031/002-6   | 01.01.2014 | 15:27 | 28° 38,17' S | 15° 59,98' E | 116.2 S    | 6          | 254.3      | 1.1 CTD/RO  |      | at depth       |
| ME1031/002-6   | 01.01.2014 | 15:33 | 28° 38,17' S | 15° 59,98' E | 116.6 S    | 6          | 301.1      | 0.3 CTD/RO  |      | on deck        |
| ME1031/002-7   | 01.01.2014 | 15:36 | 28° 38,17' S | 15° 59,97' E | 117.1 S    | 6          | 60.3       | 0.5 SLS     |      | into water     |
| ME1031/002-8   | 01.01.2014 | 16:09 | 28° 38,17' S | 15° 59,93' E | 115.0 S    | 6          | 107.4      | 1.6 TRIOS   |      | max. depth     |
| ME1031/002-9   | 01.01.2014 | 16:22 | 28° 38,17' S | 15° 59,93' E | 115.2 S    | 6          | 344        | 0.3 CTD/RO  |      | at depth       |
| ME1031/002-10  | 01.01.2014 | 17:11 | 28° 38,13' S | 15° 59,87' E | 114.5 S    | 7          | 221.5      | 0.7 BWS     |      | at sea bottom  |
| ME1031/002-11  | 01.01.2014 | 17:45 | 28° 38,15' S | 15° 59,76' E | 114.9 S    | 6          | 286.1      | 0.4 MSN     |      | at depth       |
| ME1031/002-12  | 01.01.2014 | 18:05 | 28° 38,15' S | 15° 59,75' E | 113.7 S    | 6          | 150.9      | 0.7 MUC     |      | at sea bottom  |
| ME1031/002-13  | 01.01.2014 | 18:22 | 28° 38,14' S | 15° 59,71' E | 114.3 S    | 6          | 80         | 2.6 MUC     |      | at sea bottom  |
| ME1031/002-14  | 01.01.2014 | 18:53 | 28° 38,70' S | 15° 59,83' E | 114.8 S    | 7          | 167.5      | 1.4 MSN     |      | on deck        |
| ME1031/002-15  | 01.01.2014 | 19:07 | 28° 39,03' S | 15° 59,95' E | 114.2 S    | 7          | 181.2      | 2.5 MSN     |      | surface        |
| ME1031/002-16  | 01.01.2014 | 19:45 | 28° 39,90' S | 16° 0,17' E  | 115.9 S    | 7          | 159.8      | 2.1 MSN     |      | at depth       |
| ME1031/002-16  | 01.01.2014 | 19:46 | 28° 39,93' S | 16° 0,18' E  | 117.4 S    | 7          | 160.6      | 1.8 MSN     |      | Hoisting       |
| ME1031/002-16  | 01.01.2014 | 19:53 | 28° 40,14' S | 16° 0,24' E  | 115.6 S    | 7          | 206.2      | 1.5 MSN     |      | on deck        |
| ME1031/003-1   | 01.01.2014 | 22:09 | 28° 37,98' S | 15° 40,02' E | 160.0 SSE  | 10         | 96.9       | 0 CTD/RO    |      | at depth       |
| ME1031/003-2   | 01.01.2014 | 22:12 | 28° 37,98' S | 15° 40,02' E | 160.9 SSE  | 11         | 100.9      | 0 HN        |      | surface        |
| ME1031/003-3   | 01.01.2014 | 22:20 | 28° 37,98' S | 15° 40,02' E | 160.2 SSE  | 11         | 288.4      | 0.2 BWS     |      | surface        |
| ME1031/003-4   | 01.01.2014 | 23:00 | 28° 38,00' S | 15° 40,02' E | 161.7 SE   | 10         | 111.7      | 0 MUC       |      | at sea bottom  |
| ME1031/004-1   | 02.01.2014 | 01:10 | 28° 37,98' S | 15° 19,92' E | 187.9 SE   | 9          | 222.9      | 0 CTD/RO    |      | at depth       |
| ME1031/004-2   | 02.01.2014 | 01:34 | 28° 37,97' S | 15° 19,99' E | 187.9 SE   | 10         | 99         | 0 BWS       |      | at sea bottom  |

| Station       | Date       | Time  | PositionLat  | PositionLon  | Depth [m] | Wind [m/s] | Course [°] | Speed [kn] | Gear   | Action         |
|---------------|------------|-------|--------------|--------------|-----------|------------|------------|------------|--------|----------------|
| ME1031/004-3  | 02.01.2014 | 01:59 | 28° 37,96' S | 15° 19,97' E | 187.4     | SE 9       | 138.2      | 0.1        | MUC    | at sea bottom  |
| ME1031/005-1  | 02.01.2014 | 04:08 | 28° 37,99' S | 14° 59,96' E | 171.4     | SSE 9      | 280.2      | 1.2        | CTD/RO | at depth       |
| ME1031/005-2  | 02.01.2014 | 04:29 | 28° 37,99' S | 14° 59,96' E | 171.5     | SE 11      | 283.9      | 0.9        | BWS    | at sea bottom  |
| ME1031/005-3  | 02.01.2014 | 04:59 | 28° 38,00' S | 14° 59,96' E | 171.2     | SE 10      | 79.9       | 0.3        | BWS    | off bottom     |
| ME1031/005-4  | 02.01.2014 | 05:01 | 28° 38,00' S | 14° 59,96' E | 171.8     | SE 10      | 247.8      | 2.6        | HN     | surface        |
| ME1031/005-5  | 02.01.2014 | 05:20 | 28° 38,00' S | 14° 59,95' E | 170.7     | SE 10      | 249.3      | 2.8        | MUC    | at sea bottom  |
| ME1031/006-1  | 02.01.2014 | 07:23 | 28° 36,79' S | 14° 39,81' E | 158.4     | SSE 11     | 211.3      | 1.9        | MSN    | at depth       |
| ME1031/006-2  | 02.01.2014 | 07:58 | 28° 37,97' S | 14° 39,99' E | 158.9     | SSE 10     | 106.3      | 0.1        | CTD/RO | surface        |
| ME1031/006-3  | 02.01.2014 | 08:06 | 28° 37,97' S | 14° 39,99' E | 158.6     | SE 11      | 259.5      | 0          | HN     | surface        |
| ME1031/006-4  | 02.01.2014 | 08:58 | 28° 38,00' S | 14° 39,68' E | 157.3     | SSE 10     | 322.2      | 1.8        | SLS    | on deck        |
| ME1031/006-5  | 02.01.2014 | 08:59 | 28° 38,00' S | 14° 39,66' E | 156.8     | SSE 11     | 232.7      | 1.6        | SD     | surface        |
| ME1031/006-6  | 02.01.2014 | 09:40 | 28° 38,01' S | 14° 39,62' E | 156.7     | SSE 12     | 251.5      | 0.6        | TRIOS  | max. depth     |
| ME1031/006-7  | 02.01.2014 | 09:58 | 28° 38,01' S | 14° 39,61' E | 157.3     | SSE 11     | 47.8       | 0.3        | MSN    | at depth       |
| ME1031/006-8  | 02.01.2014 | 10:19 | 28° 38,01' S | 14° 39,63' E | 157.7     | SSE 10     | 130        | 0.2        | BWS    | at sea bottom  |
| ME1031/006-9  | 02.01.2014 | 10:44 | 28° 38,01' S | 14° 39,62' E | 156.8     | SSE 9      | 259.1      | 2.7        | MSN    | at depth       |
| ME1031/006-10 | 02.01.2014 | 11:07 | 28° 38,03' S | 14° 39,63' E | 158.5     | SSE 9      | 107        | 0.4        | MUC    | at sea bottom  |
| ME1031/006-11 | 02.01.2014 | 11:29 | 28° 38,05' S | 14° 39,63' E | 158.6     | SSE 9      | 91.4       | 0.4        | MUC    | at sea bottom  |
| ME1031/006-13 | 02.01.2014 | 12:12 | 28° 38,47' S | 14° 39,69' E | 159.8     | SSE 9      | 119.6      | 1.8        | MSN    | on deck        |
| ME1031/007-1  | 02.01.2014 | 14:22 | 28° 37,29' S | 14° 25,01' E | 370.9     | S 10       | 168.1      | 2.4        | MSN    | at depth       |
| ME1031/007-2  | 02.01.2014 | 15:02 | 28° 38,36' S | 14° 24,99' E | 367.4     | S 11       | 250.1      | 1.5        | CTD/RO | surface        |
| ME1031/007-3  | 02.01.2014 | 15:07 | 28° 38,36' S | 14° 25,00' E | 368.4     | S 10       | 93.6       | 1.8        | SD     | on deck        |
| ME1031/007-4  | 02.01.2014 | 15:09 | 28° 38,36' S | 14° 25,00' E | 367.9     | S 11       | 269.4      | 0.3        | HN     | on deck        |
| ME1031/007-5  | 02.01.2014 | 15:47 | 28° 38,38' S | 14° 25,03' E | 366.2     | S 10       | 252.8      | 0.7        | SLS    | on deck        |
| ME1031/007-6  | 02.01.2014 | 16:06 | 28° 38,40' S | 14° 25,04' E | 367.9     | S 10       | 92.5       | 1.8        | TRIOS  | max. depth     |
| ME1031/007-7  | 02.01.2014 | 16:25 | 28° 38,40' S | 14° 25,04' E | 366.0     | S 11       | 283.8      | 2.3        | CTD/RO | at depth       |
| ME1031/007-8  | 02.01.2014 | 16:42 | 28° 38,40' S | 14° 25,06' E | 364.8     | S 11       | 110.9      | 0.5        | MSN    | at depth       |
| ME1031/007-9  | 02.01.2014 | 17:08 | 28° 38,40' S | 14° 25,15' E | 362.1     | S 10       | 271.6      | 1.6        | BWS    | at sea bottom  |
| ME1031/007-10 | 02.01.2014 | 17:42 | 28° 38,41' S | 14° 25,17' E | 360.5     | S 10       | 99.1       | 3.2        | MSN    | at depth       |
| ME1031/007-11 | 02.01.2014 | 18:17 | 28° 38,41' S | 14° 25,26' E | 358.2     | SSE 10     | 95.7       | 1.5        | MUC    | at sea bottom  |
| ME1031/007-12 | 02.01.2014 | 19:22 | 28° 39,49' S | 14° 25,51' E | 347.1     | SSE 10     | 130.2      | 1.9        | MSN    | Hoisting       |
| ME1031/007-13 | 02.01.2014 | 20:52 | 28° 38,50' S | 14° 25,08' E | 362.9     | SE 7       | 246.9      | 2          | MOC    | max ropelength |
| ME1031/008-1  | 02.01.2014 | 23:01 | 28° 36,80' S | 14° 14,74' E | 731.3     | SSE 7      | 192.8      | 0.3        | MSN    | at depth       |
| ME1031/008-2  | 03.01.2014 | 00:01 | 28° 37,99' S | 14° 15,00' E | 726.0     | SSE 9      | 263.2      | 1.3        | CTD/RO | at depth       |
| ME1031/008-3  | 03.01.2014 | 00:31 | 28° 37,99' S | 14° 15,00' E | 726.6     | SSE 9      | 338.7      | 0.6        | MSN    | at depth       |
| ME1031/008-4  | 03.01.2014 | 00:51 | 28° 37,99' S | 14° 15,00' E | 725.4     | SSE 8      | 70.9       | 0.6        | CTD/RO | at depth       |
| ME1031/008-5  | 03.01.2014 | 01:21 | 28° 37,99' S | 14° 15,00' E | 726.6     | SSE 10     | 126.4      | 0.9        | BWS    | at sea bottom  |
| ME1031/008-6  | 03.01.2014 | 02:12 | 28° 37,99' S | 14° 15,00' E | 726.4     | SSE 9      | 93         | 0.6        | MSN    | at depth       |
| ME1031/008-7  | 03.01.2014 | 02:53 | 28° 37,99' S | 14° 15,00' E | 725.6     | SSE 10     | 85.2       | 1.1        | MSN    | at depth       |
| ME1031/008-8  | 03.01.2014 | 03:29 | 28° 37,99' S | 14° 14,95' E | 728.0     | SSE 10     | 0          | 0.2        | MUC    | at sea bottom  |
| ME1031/008-9  | 03.01.2014 | 04:13 | 28° 38,02' S | 14° 14,87' E | 731.3     | SSE 10     | 242.9      | 1.4        | MUC    | at sea bottom  |
| ME1031/008-10 | 03.01.2014 | 05:22 | 28° 39,07' S | 14° 15,22' E | 3002.5    | SSE 9      | 106.4      | 2.7        | MSN    | at depth       |
| ME1031/008-10 | 03.01.2014 | 05:23 | 28° 39,09' S | 14° 15,23' E | 720.1     | SSE 9      | 157.6      | 1.5        | MSN    | Hoisting       |
| ME1031/008-11 | 03.01.2014 | 06:45 | 28° 40,89' S | 14° 15,88' E | 701.2     | SSE 9      | 161.1      | 1.3        | MOC    | max ropelength |
| ME1031/009-1  | 03.01.2014 | 10:10 | 28° 37,98' S | 13° 46,87' E | 2028.4    | SSE 7      | 325.4      | 0.2        | CTD/RO | surface        |
| ME1031/009-2  | 03.01.2014 | 10:17 | 28° 37,98' S | 13° 46,87' E | 2037.5    | SSE 8      | 15.8       | -0.1       | SD     | surface        |
| ME1031/009-3  | 03.01.2014 | 11:50 | 28° 38,01' S | 13° 46,99' E | 2033.7    | SSE 8      | 170.1      | 0.1        | SLS    | into water     |
| ME1031/009-4  | 03.01.2014 | 11:54 | 28° 38,01' S | 13° 46,99' E | 2033.7    | SSE 8      | 36.8       | 0          | HN     | surface        |
| ME1031/009-5  | 03.01.2014 | 12:20 | 28° 38,01' S | 13° 46,99' E | 2035.1    | SSE 7      | 162.2      | 0          | TRIOS  | max. depth     |
| ME1031/009-6  | 03.01.2014 | 13:14 | 28° 38,01' S | 13° 46,99' E | 2035.7    | S 8        | 329.6      | -0.1       | CTD/RO | at depth       |
| ME1031/009-7  | 03.01.2014 | 14:27 | 28° 38,01' S | 13° 46,99' E | 2033.7    | S 7        | 2.9        | 0.9        | CTD/RO | at depth       |
| ME1031/009-8  | 03.01.2014 | 15:21 | 28° 38,02' S | 13° 47,02' E | 2032.8    | S 7        | 182.1      | 0.7        | MUC    | at sea bottom  |
| ME1031/009-9  | 03.01.2014 | 16:20 | 28° 38,13' S | 13° 47,17' E | 2026.5    | SSE 6      | 325.6      | 0.6        | CTD/RO | at depth       |
| ME1031/009-10 | 03.01.2014 | 17:10 | 28° 38,13' S | 13° 47,18' E | 2026.5    | SSE 6      | 279.1      | 0.5        | BWS    | at sea bottom  |
| ME1031/009-11 | 03.01.2014 | 18:43 | 28° 39,24' S | 13° 47,10' E | 2038.9    | SSE 5      | 208.2      | 1.8        | MOC    | max ropelength |
| ME1031/010-1  | 05.01.2014 | 03:50 | 23° 2,38' S  | 12° 18,78' E | 0.0       | SW 4       | 18.9       | 0.1        | MOR    | released       |
| ME1031/010-1  | 05.01.2014 | 04:58 | 23° 2,31' S  | 12° 18,68' E | 0.0       | WNW 2      | 290.6      | 0.4        | MOR    | information    |
| ME1031/010-2  | 05.01.2014 | 06:04 | 23° 2,29' S  | 12° 18,61' E | 2098.8    | S 9        | 119.5      | 0          | CTD/RO | surface        |
| ME1031/010-3  | 05.01.2014 | 06:28 | 23° 2,29' S  | 12° 18,61' E | 2102.5    | SSE 10     | 168.9      | 0          | HN     | surface        |
| ME1031/010-4  | 05.01.2014 | 06:38 | 23° 2,29' S  | 12° 18,61' E | 2098.1    | S 9        | 264.7      | -0.1       | HN     | on deck        |
| ME1031/010-5  | 05.01.2014 | 07:06 | 23° 2,29' S  | 12° 18,61' E | 2099.7    | S 9        | 273.7      | 0          | SD     | on deck        |
| ME1031/010-6  | 05.01.2014 | 07:58 | 23° 2,29' S  | 12° 18,60' E | 2099.1    | S 9        | 121.5      | 0          | SLS    | on deck        |

| Station       | Date       | Time  | PositionLat  | PositionLon  | Depth [m]  | Wind [m/s] | Course [°] | Speed [kn] | Gear   | Action         |
|---------------|------------|-------|--------------|--------------|------------|------------|------------|------------|--------|----------------|
| ME1031/010-7  | 05.01.2014 | 08:17 | 23° 2,29' S  | 12° 18,59' E | 2100.8 SSE | 8          | 277.1      | 0          | TRIOS  | surface        |
| ME1031/010-8  | 05.01.2014 | 09:14 | 23° 2,29' S  | 12° 18,59' E | 2099.3 S   | 9          | 94.5       | 0          | CTD/RO | at depth       |
| ME1031/010-9  | 05.01.2014 | 10:09 | 23° 2,28' S  | 12° 18,59' E | 2099.0 S   | 8          | 105.6      | 0.1        | CTD/RO | at depth       |
| ME1031/010-10 | 05.01.2014 | 11:00 | 23° 2,28' S  | 12° 18,59' E | 2097.6 S   | 8          | 249.9      | 0          | BWS    | at sea bottom  |
| ME1031/010-11 | 05.01.2014 | 12:03 | 23° 2,28' S  | 12° 18,59' E | 2098.4 S   | 8          | 188.5      | 0.1        | CTD/RO | at depth       |
| ME1031/010-12 | 05.01.2014 | 13:06 | 23° 2,28' S  | 12° 18,59' E | 2099.4 S   | 10         | 92.5       | 0          | MUC    | at sea bottom  |
| ME1031/010-12 | 05.01.2014 | 13:46 | 23° 2,31' S  | 12° 18,63' E | 2097.1 S   | 11         | 126.4      | 0.3        | MUC    | on deck        |
| ME1031/010-13 | 05.01.2014 | 13:49 | 23° 2,32' S  | 12° 18,63' E | 2906.6 S   | 11         | 143.1      | 0.1        | HN     | surface        |
| ME1031/010-14 | 05.01.2014 | 14:48 | 23° 3,52' S  | 12° 18,43' E | 3769.2 S   | 11         | 179        | 2.1        | MOC    | max ropelength |
| ME1031/010-15 | 05.01.2014 | 17:59 | 23° 4,54' S  | 12° 17,51' E | 3748.7 S   | 10         | 144.1      | 2.8        | MOC-D  | max wire       |
| ME1031/011-1  | 05.01.2014 | 23:21 | 22° 58,96' S | 12° 47,89' E | 905.6 SSE  | 8          | 114.2      | 4.4        | MSN    | at depth       |
| ME1031/011-2  | 06.01.2014 | 00:20 | 22° 59,97' S | 12° 47,89' E | 1588.2 SSE | 7          | 306.4      | 2.6        | CTD/RO | at depth       |
| ME1031/011-3  | 06.01.2014 | 00:51 | 22° 59,99' S | 12° 47,96' E | 2111.5 SSE | 7          | 96.7       | 0.5        | MSN    | at depth       |
| ME1031/011-4  | 06.01.2014 | 01:14 | 23° 0,00' S  | 12° 47,97' E | 2909.8 SSE | 8          | 136.1      | 1          | CTD/RO | at depth       |
| ME1031/011-5  | 06.01.2014 | 01:40 | 23° 0,01' S  | 12° 47,98' E | 2307.3 S   | 8          | 256.5      | 0.9        | CTD/RO | at depth       |
| ME1031/011-6  | 06.01.2014 | 01:43 | 23° 0,01' S  | 12° 47,99' E | 2595.6 SSE | 8          | 101.7      | 0.4        | HN     | surface        |
| ME1031/011-7  | 06.01.2014 | 02:22 | 23° 0,01' S  | 12° 47,99' E | 906.6 SSE  | 7          | 149.3      | 1.4        | MSN    | at depth       |
| ME1031/011-8  | 06.01.2014 | 03:06 | 23° 0,01' S  | 12° 47,99' E | 896.6 SE   | 7          | 309.8      | 2.1        | MSN    | at depth       |
| ME1031/011-9  | 06.01.2014 | 04:43 | 23° 2,21' S  | 12° 46,76' E | 2800.7 SSE | 8          | 212        | 2.6        | MSN    | at depth       |
| ME1031/011-10 | 06.01.2014 | 06:39 | 23° 5,46' S  | 12° 44,57' E | 2907.9 SSE | 4          | 237.6      | 2.8        | MOC    | max ropelength |
| ME1031/011-11 | 06.01.2014 | 08:43 | 23° 7,58' S  | 12° 42,67' E | 1186.8 SSE | 2          | 145.4      | 1.4        | MSS    | on deck        |
| ME1031/011-12 | 06.01.2014 | 08:57 | 23° 7,81' S  | 12° 42,49' E | 1195.8 SSE | 2          | 211.8      | 3.2        | MOC-D  | to water       |
| ME1031/013-1  | 06.01.2014 | 14:30 | 22° 59,93' S | 12° 59,96' E | 502.2 SW   | 6          | 231.6      | 0.8        | MSS    | surface        |
| ME1031/013-1  | 06.01.2014 | 15:25 | 23° 0,19' S  | 12° 59,75' E | 512.4 SSW  | 6          | 211.3      | 0.5        | MSS    | on deck        |
| ME1031/014-1  | 06.01.2014 | 15:53 | 23° 0,63' S  | 13° 1,98' E  | 447.6 SSW  | 6          | 284.7      | 0.2        | MOR    | information    |
| ME1031/014-1  | 06.01.2014 | 17:30 | 23° 0,92' S  | 13° 1,92' E  | 0.0 SSW    | 5          | 135.7      | -0.5       | MOR    | Hydrophone on  |
| ME1031/014-2  | 06.01.2014 | 17:55 | 23° 0,98' S  | 13° 1,96' E  | 0.0 SSW    | 6          | 75.1       | -0.1       | CTD/RO | surface        |
| ME1031/014-3  | 06.01.2014 | 18:11 | 23° 0,98' S  | 13° 1,96' E  | 455.5 S    | 6          | 273.7      | 1.1        | HN     | on deck        |
| ME1031/014-4  | 06.01.2014 | 18:48 | 23° 0,98' S  | 13° 1,97' E  | 458.2 SSW  | 5          | 111.7      | 5.7        | MSN    | at depth       |
| ME1031/014-5  | 06.01.2014 | 19:13 | 23° 0,98' S  | 13° 1,96' E  | 454.7 S    | 5          | 201.3      | 0.6        | CTD/RO | at depth       |
| ME1031/014-6  | 06.01.2014 | 19:43 | 23° 0,98' S  | 13° 1,96' E  | 458.0 SSW  | 6          | 111.4      | 3.7        | BWS    | at sea bottom  |
| ME1031/014-7  | 06.01.2014 | 20:17 | 23° 0,98' S  | 13° 1,96' E  | 454.4 S    | 5          | 292.8      | 3.5        | BWS    | at sea bottom  |
| ME1031/014-8  | 06.01.2014 | 20:49 | 23° 0,98' S  | 13° 1,96' E  | 455.5 S    | 5          | 355.8      | 0.2        | CTD/RO | at depth       |
| ME1031/014-9  | 06.01.2014 | 21:39 | 23° 0,98' S  | 13° 1,96' E  | 454.6 SSW  | 3          | 295.1      | 4.7        | MUC    | at sea bottom  |
| ME1031/014-10 | 06.01.2014 | 22:19 | 23° 1,32' S  | 13° 1,87' E  | 462.6 SW   | 2          | 292.2      | 3.4        | MSN    | at depth       |
| ME1031/014-11 | 06.01.2014 | 23:34 | 23° 2,67' S  | 13° 0,67' E  | 517.4 WSW  | 1          | 282.2      | 3.2        | MOC    | max ropelength |
| ME1031/014-12 | 07.01.2014 | 01:35 | 23° 4,86' S  | 12° 57,35' E | 642.2 WSW  | 2          | 208.4      | 2.7        | MOC-D  | max wire       |
| ME1031/015-1  | 07.01.2014 | 04:22 | 23° 0,62' S  | 13° 4,63' E  | 373.1 NW   | 4          | 264.5      | 1          | MSS    | on deck        |
| ME1031/016-2  | 07.01.2014 | 05:28 | 22° 59,99' S | 13° 10,01' E | 322.7 NW   | 4          | 83.7       | 0.8        | HN     | surface        |
| ME1031/016-4  | 07.01.2014 | 06:30 | 23° 0,49' S  | 13° 9,81' E  | 325.8 NW   | 5          | 240.3      | 1          | MSS    | on deck        |
| ME1031/017-1  | 07.01.2014 | 08:09 | 23° 1,12' S  | 13° 14,40' E | 368.7 NNW  | 6          | 246        | 2.2        | MSS    | on deck        |
| ME1031/018-1  | 07.01.2014 | 09:05 | 22° 58,63' S | 13° 20,48' E | 347.1 NNW  | 8          | 198.4      | 3.4        | MSN    | surface        |
| ME1031/018-1  | 07.01.2014 | 09:18 | 22° 59,17' S | 13° 20,36' E | 349.1 NNW  | 7          | 183.3      | 2.7        | MSN    | at depth       |
| ME1031/018-2  | 07.01.2014 | 09:55 | 23° 0,39' S  | 13° 20,13' E | 352.8 NNW  | 8          | 322.7      | 0.6        | CTD/RO | surface        |
| ME1031/018-3  | 07.01.2014 | 10:00 | 23° 0,39' S  | 13° 20,13' E | 352.4 NNW  | 8          | 275.2      | 0.8        | SD     | surface        |
| ME1031/018-4  | 07.01.2014 | 10:11 | 23° 0,39' S  | 13° 20,13' E | 351.1 NNW  | 8          | 235        | 0.4        | HN     | on deck        |
| ME1031/018-5  | 07.01.2014 | 10:38 | 23° 0,69' S  | 13° 20,19' E | 351.6 NNW  | 9          | 186.4      | 1.4        | SLS    | on deck        |
| ME1031/018-6  | 07.01.2014 | 10:44 | 23° 0,73' S  | 13° 20,21' E | 351.1 NW   | 8          | 290.2      | 1.2        | TRIOS  | surface        |
| ME1031/018-7  | 07.01.2014 | 11:20 | 23° 0,73' S  | 13° 20,21' E | 350.2 NW   | 7          | 79.8       | 0.5        | CTD/RO | at depth       |
| ME1031/018-8  | 07.01.2014 | 11:59 | 23° 0,73' S  | 13° 20,21' E | 350.4 WNW  | 8          | 83.2       | 0.2        | BWS    | at sea bottom  |
| ME1031/018-9  | 07.01.2014 | 12:14 | 23° 0,73' S  | 13° 20,21' E | 350.8 WNW  | 8          | 284.1      | 0.3        | HN     | on deck        |
| ME1031/018-10 | 07.01.2014 | 12:18 | 23° 0,73' S  | 13° 20,21' E | 351.7 WNW  | 8          | 65.6       | 1.4        | CTD/RO | surface        |
| ME1031/018-11 | 07.01.2014 | 13:10 | 23° 0,74' S  | 13° 20,25' E | 352.4 W    | 8          | 10.2       | 0.8        | MUC    | on deck        |
| ME1031/018-12 | 07.01.2014 | 13:12 | 23° 0,74' S  | 13° 20,25' E | 351.6 W    | 8          | 162.4      | 0.6        | MSS    | surface        |
| ME1031/019-1  | 07.01.2014 | 15:39 | 23° 0,64' S  | 13° 25,06' E | 304.1 WNW  | 7          | 137.2      | 0.9        | MSS    | on deck        |
| ME1031/020-1  | 07.01.2014 | 16:18 | 23° 0,06' S  | 13° 30,05' E | 235.9 WNW  | 7          | 357.4      | 1          | SLS    | into water     |
| ME1031/020-2  | 07.01.2014 | 16:30 | 23° 0,22' S  | 13° 30,18' E | 232.6 NW   | 6          | 135.2      | 0.6        | TRIOS  | surface        |
| ME1031/020-3  | 07.01.2014 | 16:38 | 23° 0,20' S  | 13° 30,18' E | 233.7 NW   | 6          | 315.3      | 1.6        | HN     | surface        |
| ME1031/020-4  | 07.01.2014 | 16:53 | 23° 0,17' S  | 13° 30,15' E | 232.9 NW   | 6          | 73.5       | 0.3        | CTD/RO | surface        |
| ME1031/020-5  | 07.01.2014 | 16:55 | 23° 0,17' S  | 13° 30,15' E | 234.8 NW   | 6          | 86.4       | 1          | SD     | surface        |
| ME1031/020-6  | 07.01.2014 | 17:29 | 23° 0,18' S  | 13° 30,16' E | 234.0 NW   | 6          | 335        | 0.3        | BWS    | at sea bottom  |

| Station       | Date       | Time  | PositionLat  | PositionLon  | Depth [m]   | Wind [m/s] | Course [°] | Speed [kn] | Gear | Action         |
|---------------|------------|-------|--------------|--------------|-------------|------------|------------|------------|------|----------------|
| ME1031/020-7  | 07.01.2014 | 18:00 | 23° 0,18' S  | 13° 30,16' E | 232.7 WNW 5 |            | 133        | 2.3 CTD/RO |      | at depth       |
| ME1031/020-8  | 07.01.2014 | 18:17 | 23° 0,18' S  | 13° 30,16' E | 234.2 WNW 5 |            | 9          | 1.1 BWS    |      | at sea bottom  |
| ME1031/020-9  | 07.01.2014 | 18:47 | 23° 0,18' S  | 13° 30,16' E | 233.7 WNW 3 |            | 134        | 0.8 MUC    |      | at sea bottom  |
| ME1031/020-10 | 07.01.2014 | 19:51 | 23° 0,15' S  | 13° 30,23' E | 231.9 NW 3  |            | 0          | 0.2 MSS    |      | on deck        |
| ME1031/021-1  | 07.01.2014 | 20:33 | 22° 59,96' S | 13° 35,04' E | 146.7 NW 4  |            | 331.4      | 0.4 MSS    |      | surface        |
| ME1031/022-1  | 07.01.2014 | 22:09 | 22° 58,80' S | 13° 41,34' E | 147.0 WNW 4 |            | 201.3      | 1.2 MSN    |      | at depth       |
| ME1031/022-3  | 07.01.2014 | 22:58 | 22° 59,65' S | 13° 40,52' E | 149.7 N 2   |            | 302.4      | 0.8 HN     |      | on deck        |
| ME1031/022-2  | 07.01.2014 | 23:02 | 22° 59,66' S | 13° 40,50' E | 148.9 N 2   |            | 305.6      | 0.2 CTD/RO |      | at depth       |
| ME1031/022-4  | 07.01.2014 | 23:20 | 22° 59,69' S | 13° 40,44' E | 148.8 N 3   |            | 193.7      | 0.3 MSN    |      | at depth       |
| ME1031/022-5  | 07.01.2014 | 23:35 | 22° 59,74' S | 13° 40,37' E | 148.7 NNE 4 |            | 183.2      | 0.2 CTD/RO |      | at depth       |
| ME1031/022-6  | 07.01.2014 | 23:52 | 22° 59,81' S | 13° 40,28' E | 148.1 N 4   |            | 274.8      | 0.3 BWS    |      | at sea bottom  |
| ME1031/022-7  | 08.01.2014 | 00:17 | 22° 59,84' S | 13° 40,22' E | 149.5 NNE 4 |            | 22.6       | 0.4 BWS    |      | at sea bottom  |
| ME1031/022-8  | 08.01.2014 | 00:43 | 22° 59,83' S | 13° 40,23' E | 149.1 NNE 4 |            | 243        | 0.6 MSN    |      | at depth       |
| ME1031/022-9  | 08.01.2014 | 01:03 | 22° 59,83' S | 13° 40,24' E | 148.1 NNE 5 |            | 125.2      | 0.6 MUC    |      | at sea bottom  |
| ME1031/022-10 | 08.01.2014 | 02:10 | 23° 0,05' S  | 13° 39,30' E | 148.4 N 4   |            | 298        | 0.9 MSS    |      | on deck        |
| ME1031/022-11 | 08.01.2014 | 02:29 | 23° 0,35' S  | 13° 38,76' E | 147.7 N 4   |            | 240.4      | 1.9 MSN    |      | Hoisting       |
| ME1031/022-12 | 08.01.2014 | 03:20 | 23° 1,34' S  | 13° 37,26' E | 147.5 N 5   |            | 262.2      | 2.3 MOC    |      | max ropelength |
| ME1031/024-1  | 08.01.2014 | 06:33 | 22° 59,94' S | 13° 50,01' E | 150.2 N 6   |            | 351.8      | 0.9 MSS    |      | surface        |
| ME1031/025-2  | 08.01.2014 | 07:47 | 23° 0,03' S  | 13° 51,98' E | 142.7 N 8   |            | 155.3      | 0.3 SD     |      | surface        |
| ME1031/025-3  | 08.01.2014 | 07:53 | 23° 0,03' S  | 13° 51,98' E | 145.0 N 9   |            | 0          | 0.1 HN     |      | on deck        |
| ME1031/025-4  | 08.01.2014 | 07:56 | 23° 0,03' S  | 13° 51,98' E | 144.7 N 8   |            | 33.8       | 0.3 HN     |      | on deck        |
| ME1031/028-1  | 08.01.2014 | 10:52 | 23° 1,60' S  | 14° 1,72' E  | 135.1 WNW 6 |            | 333.6      | 0.2 SLS    |      | into water     |
| ME1031/028-2  | 08.01.2014 | 11:11 | 23° 1,60' S  | 14° 1,79' E  | 135.7 WNW 6 |            | 112.1      | 0.4 TRIOS  |      | max. depth     |
| ME1031/028-3  | 08.01.2014 | 11:31 | 23° 1,62' S  | 14° 1,84' E  | 0.0 WNW 5   |            | 89.3       | -0.1 MOR   |      | on the surface |
| ME1031/028-4  | 08.01.2014 | 12:29 | 23° 1,50' S  | 14° 1,60' E  | 131.9 WNW 5 |            | 187.2      | 0 CTD/RO   |      | at depth       |
| ME1031/028-5  | 08.01.2014 | 12:58 | 23° 1,50' S  | 14° 1,60' E  | 134.3 W 4   |            | 40.7       | 0 CTD/RO   |      | surface        |
| ME1031/028-6  | 08.01.2014 | 12:59 | 23° 1,50' S  | 14° 1,60' E  | 136.0 W 4   |            | 0          | 0 HN       |      | surface        |
| ME1031/028-7  | 08.01.2014 | 13:03 | 23° 1,50' S  | 14° 1,60' E  | 136.9 W 4   |            | 0          | 0.1 SD     |      | on deck        |
| ME1031/028-8  | 08.01.2014 | 13:05 | 23° 1,50' S  | 14° 1,60' E  | 134.5 W 4   |            | 308.4      | 0 HN       |      | surface        |
| ME1031/028-9  | 08.01.2014 | 13:25 | 23° 1,50' S  | 14° 1,60' E  | 132.2 W 5   |            | 268.6      | 0 BWS      |      | at sea bottom  |
| ME1031/028-10 | 08.01.2014 | 13:56 | 23° 1,50' S  | 14° 1,60' E  | 134.2 W 5   |            | 132        | 0 MUC      |      | at sea bottom  |
| ME1031/028-11 | 08.01.2014 | 14:19 | 23° 1,46' S  | 14° 1,64' E  | 135.3 W 4   |            | 50.3       | 0.3 MUC    |      | at sea bottom  |
| ME1031/028-12 | 08.01.2014 | 15:15 | 23° 0,91' S  | 14° 1,67' E  | 137.0 W 6   |            | 355.9      | 0.7 MSS    |      | on deck        |
| ME1031/029-1  | 08.01.2014 | 15:52 | 22° 59,90' S | 14° 6,53' E  | 125.0 WSW 6 |            | 19.5       | 1.4 MSS    |      | surface        |
| ME1031/030-1  | 08.01.2014 | 17:11 | 23° 0,89' S  | 14° 10,01' E | 118.1 WSW 5 |            | 1.8        | 2.7 MSN    |      | at depth       |
| ME1031/030-2  | 08.01.2014 | 18:00 | 22° 59,73' S | 14° 10,00' E | 127.8 SW 5  |            | 69.6       | 0.8 CTD/RO |      | at depth       |
| ME1031/030-3  | 08.01.2014 | 18:18 | 22° 59,72' S | 14° 10,04' E | 119.9 SSW 4 |            | 231.5      | 0.3 MSN    |      | at depth       |
| ME1031/030-4  | 08.01.2014 | 18:34 | 22° 59,73' S | 14° 10,04' E | 127.6 SSW 5 |            | 70.4       | 0.5 CTD/RO |      | surface        |
| ME1031/030-5  | 08.01.2014 | 18:35 | 22° 59,72' S | 14° 10,04' E | 127.0 SSW 5 |            | 0          | 0 HN       |      | surface        |
| ME1031/030-6  | 08.01.2014 | 19:16 | 22° 59,72' S | 14° 10,04' E | 127.4 SSW 4 |            | 0          | 0.2 RTR    |      | on deck        |
| ME1031/030-7  | 08.01.2014 | 19:23 | 22° 59,72' S | 14° 10,04' E | 120.1 SSW 4 |            | 312.4      | 0.5 BWS    |      | surface        |
| ME1031/030-8  | 08.01.2014 | 20:00 | 22° 59,73' S | 14° 10,05' E | 124.4 S 3   |            | 0          | 0 MUC      |      | at sea bottom  |
| ME1031/030-8  | 08.01.2014 | 20:00 | 22° 59,73' S | 14° 10,05' E | 124.4 S 3   |            | 0          | 0 MUC      |      | hiev           |
| ME1031/030-9  | 08.01.2014 | 20:31 | 22° 59,74' S | 14° 10,07' E | 126.3 S 3   |            | 155.9      | 1 MUC      |      | hiev           |
| ME1031/030-10 | 08.01.2014 | 20:56 | 23° 0,18' S  | 14° 10,09' E | 126.7 SSE 3 |            | 170.6      | 1.6 MSN    |      | at depth       |
| ME1031/030-11 | 08.01.2014 | 22:05 | 23° 1,34' S  | 14° 10,10' E | 126.4 SSE 3 |            | 178.1      | 0.8 MSS    |      | on deck        |
| ME1031/030-12 | 08.01.2014 | 22:29 | 23° 1,85' S  | 14° 9,93' E  | 118.2 SE 3  |            | 196.9      | 2.3 MOC-D  |      | start heaving  |
| ME1031/031-1  | 08.01.2014 | 23:30 | 22° 59,92' S | 14° 13,03' E | 106.6 SE 3  |            | 166.2      | 0.6 CTD/RO |      | at depth       |
| ME1031/031-2  | 09.01.2014 | 00:16 | 23° 0,12' S  | 14° 12,98' E | 108.1 SSE 2 |            | 163.7      | 0.3 MSS    |      | on deck        |
| ME1031/034-1  | 09.01.2014 | 02:38 | 23° 0,01' S  | 14° 21,98' E | 39.5 SW 3   |            | 52.4       | 0.3 CTD/RO |      | at depth       |
| ME1031/034-2  | 09.01.2014 | 02:49 | 23° 0,01' S  | 14° 21,98' E | 38.8 SSW 4  |            | 208.2      | 0.3 BWS    |      | surface        |
| ME1031/034-3  | 09.01.2014 | 03:13 | 23° 0,01' S  | 14° 21,98' E | 39.3 SSW 4  |            | 321.5      | 0.4 MUC    |      | at sea bottom  |
| ME1031/034-4  | 09.01.2014 | 03:15 | 23° 0,01' S  | 14° 21,98' E | 39.1 SSW 4  |            | 265        | 0.2 HN     |      | surface        |
| ME1031/034-5  | 09.01.2014 | 03:39 | 23° 0,20' S  | 14° 21,85' E | 39.7 SSW 4  |            | 217.9      | 0.5 MSS    |      | on deck        |
| ME1031/035-1  | 09.01.2014 | 10:20 | 21° 59,46' S | 13° 40,94' E | 117.0 S 4   |            | 233.7      | 1.9 MSN    |      | surface        |
| ME1031/035-2  | 09.01.2014 | 10:56 | 22° 0,12' S  | 13° 40,11' E | 117.8 S 5   |            | 272.7      | 0 CTD/RO   |      | surface        |
| ME1031/035-3  | 09.01.2014 | 11:03 | 22° 0,12' S  | 13° 40,11' E | 114.8 SSW 4 |            | 110.1      | 0 SD       |      | surface        |
| ME1031/035-4  | 09.01.2014 | 11:04 | 22° 0,12' S  | 13° 40,11' E | 114.8 SSW 4 |            | 0          | 0 HN       |      | surface        |
| ME1031/035-5  | 09.01.2014 | 11:16 | 22° 0,12' S  | 13° 40,11' E | 114.7 SSW 6 |            | 0          | 0 SLS      |      | into water     |
| ME1031/035-6  | 09.01.2014 | 11:50 | 22° 0,13' S  | 13° 39,96' E | 114.0 SSW 6 |            | 271.1      | 0 BWS      |      | at sea bottom  |
| ME1031/035-7  | 09.01.2014 | 12:36 | 22° 0,13' S  | 13° 39,96' E | 113.3 SSW 6 |            | 23.5       | 0 TRIOS    |      | max. depth     |

| Station      | Date       | Time  | PositionLat  | PositionLon  | Depth [m]    | Wind [m/s] | Course [°] | Speed [kn] | Gear   | Action         |
|--------------|------------|-------|--------------|--------------|--------------|------------|------------|------------|--------|----------------|
| ME1031/035-8 | 09.01.2014 | 12:48 | 22° 0,13' S  | 13° 39,95' E | 115.8 SSW 7  |            | 235.8      | 0.6        | T-TRAW |                |
| ME1031/036-1 | 09.01.2014 | 20:26 | 20° 59,06' S | 12° 49,79' E | 296.4 SSE 10 |            | 167.1      | 1.5        | MSN    | at depth       |
| ME1031/036-1 | 09.01.2014 | 20:26 | 20° 59,06' S | 12° 49,79' E | 296.4 SSE 10 |            | 167.1      | 1.5        | MSN    | Hoisting       |
| ME1031/036-2 | 09.01.2014 | 21:00 | 20° 59,74' S | 12° 49,86' E | 299.6 SSE 9  |            | 136.4      | 0          | CTD/RO | surface        |
| ME1031/036-3 | 09.01.2014 | 21:01 | 20° 59,74' S | 12° 49,87' E | 300.3 SSE 9  |            | 61.8       | 0          | HN     | surface        |
| ME1031/036-4 | 09.01.2014 | 21:28 | 20° 59,81' S | 12° 49,87' E | 298.7 SSE 8  |            | 155.3      | 1.2        | RTR    | start trawling |
| ME1031/036-5 | 09.01.2014 | 22:10 | 21° 0,65' S  | 12° 49,95' E | 301.2 SSE 9  |            | 175.9      | 1.2        | RTR    | end trawling   |
| ME1031/036-6 | 09.01.2014 | 22:38 | 21° 0,72' S  | 12° 49,96' E | 302.3 SSE 9  |            | 316.8      | 0          | MUC    | at sea bottom  |
| ME1031/037-1 | 10.01.2014 | 05:03 | 20° 0,05' S  | 12° 45,12' E | 116.6 SE 7   |            | 300.9      | 0          | TRBM   | on Ground      |
| ME1031/037-2 | 10.01.2014 | 05:32 | 20° 0,03' S  | 12° 45,19' E | 117.7 SE 7   |            | 89.1       | 0          | CTD/RO | at depth       |
| ME1031/037-3 | 10.01.2014 | 05:46 | 20° 0,04' S  | 12° 45,19' E | 117.7 SE 7   |            | 263.7      | -0.1       | MSN    | at depth       |
| ME1031/037-4 | 10.01.2014 | 05:58 | 20° 0,04' S  | 12° 45,19' E | 117.4 SE 6   |            | 98.9       | 0          | SD     | on deck        |
| ME1031/037-5 | 10.01.2014 | 05:59 | 20° 0,04' S  | 12° 45,19' E | 119.5 SE 6   |            | 286.8      | 0          | HN     | surface        |
| ME1031/038-1 | 10.01.2014 | 07:39 | 19° 58,95' S | 12° 30,02' E | 148.2 SSE 9  |            | 182.7      | 2.2        | MSN    | at depth       |
| ME1031/038-2 | 10.01.2014 | 08:16 | 19° 59,59' S | 12° 29,83' E | 150.2 SE 9   |            | 283        | -0.1       | SLS    | on deck        |
| ME1031/038-3 | 10.01.2014 | 08:24 | 19° 59,59' S | 12° 29,81' E | 149.8 SE 9   |            | 272        | 0          | TRIOS  | surface        |
| ME1031/038-4 | 10.01.2014 | 08:51 | 19° 59,63' S | 12° 29,80' E | 150.4 SSE 10 |            | 231.3      | 1.2        | RTR    | start trawling |
| ME1031/038-5 | 10.01.2014 | 09:16 | 20° 0,26' S  | 12° 29,75' E | 151.9 SE 9   |            | 167.6      | 1.6        | RTR    | start trawling |
| ME1031/038-6 | 10.01.2014 | 09:53 | 20° 0,64' S  | 12° 29,72' E | 152.3 SSE 10 |            | 260.3      | 0          | CTD/RO | at depth       |
| ME1031/038-7 | 10.01.2014 | 09:57 | 20° 0,64' S  | 12° 29,72' E | 153.0 SSE 9  |            | 280.4      | 0          | SD     | surface        |
| ME1031/039-1 | 10.01.2014 | 13:41 | 19° 29,05' S | 12° 9,98' E  | 231.2 S 9    |            | 132.5      | 1.4        | MSN    | at depth       |
| ME1031/039-2 | 10.01.2014 | 14:23 | 19° 29,63' S | 12° 9,99' E  | 233.2 S 10   |            | 0          | 0          | MUC    | at sea bottom  |
| ME1031/039-3 | 10.01.2014 | 14:54 | 19° 29,63' S | 12° 9,99' E  | 232.9 S 10   |            | 0          | 0          | RTR    | on deck        |
| ME1031/039-4 | 10.01.2014 | 15:02 | 19° 29,71' S | 12° 9,97' E  | 233.1 S 10   |            | 211.1      | 1.2        | RTR    | start trawling |
| ME1031/040-1 | 10.01.2014 | 18:36 | 19° 0,08' S  | 12° 9,94' E  | 123.0 SSE 10 |            | 141.2      | 1.5        | MSN    | Hoisting       |
| ME1031/040-1 | 10.01.2014 | 18:57 | 19° 0,54' S  | 12° 9,92' E  | 122.3 SE 9   |            | 238.4      | 0.4        | MSN    | on deck        |
| ME1031/040-2 | 10.01.2014 | 19:02 | 19° 0,54' S  | 12° 9,92' E  | 122.2 SE 9   |            | 103.4      | 0          | HN     | on deck        |
| ME1031/040-3 | 10.01.2014 | 19:11 | 19° 0,54' S  | 12° 9,92' E  | 122.0 SE 9   |            | 94.8       | 0          | CTD/RO | at depth       |
| ME1031/040-3 | 10.01.2014 | 19:17 | 19° 0,54' S  | 12° 9,92' E  | 121.6 SE 8   |            | 90.5       | 0          | CTD/RO | on deck        |
| ME1031/040-4 | 10.01.2014 | 19:34 | 19° 0,74' S  | 12° 9,92' E  | 124.3 SE 8   |            | 173.4      | 1.1        | RTR    | end trawling   |
| ME1031/040-4 | 10.01.2014 | 19:40 | 19° 0,85' S  | 12° 9,92' E  | 124.6 SE 8   |            | 165.3      | 1.2        | RTR    | on deck        |
| ME1031/040-5 | 10.01.2014 | 19:47 | 19° 0,99' S  | 12° 9,92' E  | 125.2 SE 8   |            | 109.3      | 0.8        | RTR    | end trawling   |
| ME1031/040-6 | 10.01.2014 | 19:54 | 19° 1,05' S  | 12° 9,92' E  | 126.1 SE 8   |            | 77.3       | 0          | RTR    | start trawling |
| ME1031/040-6 | 10.01.2014 | 19:59 | 19° 1,05' S  | 12° 9,92' E  | 125.2 SE 7   |            | 104.4      | 0          | RTR    | end trawling   |
| ME1031/040-7 | 10.01.2014 | 20:06 | 19° 1,05' S  | 12° 9,92' E  | 125.7 SE 7   |            | 77.1       | 0          | RTR    | start trawling |
| ME1031/040-7 | 10.01.2014 | 20:08 | 19° 1,05' S  | 12° 9,92' E  | 125.3 SE 7   |            | 314.9      | 0          | RTR    | end trawling   |
| ME1031/040-7 | 10.01.2014 | 20:10 | 19° 1,05' S  | 12° 9,92' E  | 126.2 SE 7   |            | 78         | 0          | RTR    | on deck        |
| ME1031/041-1 | 10.01.2014 | 21:34 | 19° 0,08' S  | 12° 0,07' E  | 205.3 SE 9   |            | 221.7      | 1.5        | MSN    | Hoisting       |
| ME1031/041-1 | 10.01.2014 | 22:00 | 19° 0,74' S  | 12° 0,06' E  | 209.8 SE 9   |            | 256.2      | 0.7        | MSN    | on deck        |
| ME1031/041-2 | 10.01.2014 | 22:16 | 19° 0,74' S  | 12° 0,06' E  | 209.0 SE 8   |            | 33.8       | -0.1       | MUC    | surface        |
| ME1031/041-3 | 10.01.2014 | 22:45 | 19° 0,78' S  | 12° 0,01' E  | 210.8 SE 10  |            | 212.6      | 1.2        | RTR    | start trawling |
| ME1031/041-3 | 10.01.2014 | 22:56 | 19° 0,97' S  | 12° 0,01' E  | 211.2 SE 9   |            | 149.7      | 1.3        | RTR    | end trawling   |
| ME1031/041-4 | 10.01.2014 | 23:17 | 19° 1,32' S  | 12° 0,01' E  | 212.6 SE 8   |            | 88.4       | -0.1       | RTR    | start trawling |
| ME1031/041-4 | 10.01.2014 | 23:21 | 19° 1,29' S  | 11° 59,96' E | 213.8 SE 8   |            | 346        | -0.5       | RTR    | end trawling   |
| ME1031/041-5 | 10.01.2014 | 23:29 | 19° 1,24' S  | 11° 59,88' E | 213.8 SE 8   |            | 272.2      | 0.2        | RTR    | start trawling |
| ME1031/042-1 | 11.01.2014 | 05:36 | 17° 59,72' S | 11° 40,51' E | 0.0 SSE 12   |            | 14.1       | -0.2       | TRBM   | Released       |
| ME1031/042-2 | 11.01.2014 | 06:55 | 17° 59,83' S | 11° 40,66' E | 0.0 SSE 9    |            | 262.8      | 0          | SLS    | on deck        |
| ME1031/042-3 | 11.01.2014 | 07:01 | 17° 59,83' S | 11° 40,65' E | 0.0 SSE 9    |            | 257.6      | 0.1        | TRIOS  | surface        |
| ME1031/042-4 | 11.01.2014 | 08:02 | 17° 59,84' S | 11° 40,77' E | 118.3 SSE 8  |            | 267.1      | -0.1       | CTD/RO | at depth       |
| ME1031/042-5 | 11.01.2014 | 08:33 | 17° 59,84' S | 11° 40,77' E | 117.5 SSE 8  |            | 278.3      | 0          | TRBM   | on Ground      |
| ME1031/043-2 | 11.01.2014 | 13:08 | 17° 14,98' S | 11° 39,90' E | 70.8 S 7     |            | 112.8      | 0.1        | HN     | on deck        |
| ME1031/043-1 | 11.01.2014 | 13:11 | 17° 14,99' S | 11° 39,91' E | 70.7 S 7     |            | 191.7      | 0          | CTD/RO | at depth       |
| ME1031/043-3 | 11.01.2014 | 13:12 | 17° 14,99' S | 11° 39,91' E | 72.5 S 7     |            | 62         | 0          | SD     | on deck        |
| ME1031/043-4 | 11.01.2014 | 13:35 | 17° 15,02' S | 11° 39,82' E | 71.1 SSW 8   |            | 296        | 0          | SLS    | on deck        |
| ME1031/043-5 | 11.01.2014 | 13:46 | 17° 15,04' S | 11° 39,84' E | 71.8 SSW 9   |            | 0          | 0          | TRIOS  | max. depth     |
| ME1031/043-6 | 11.01.2014 | 14:06 | 17° 15,04' S | 11° 39,85' E | 70.8 SSW 8   |            | 115.8      | 0          | BWS    | surface        |
| ME1031/043-7 | 11.01.2014 | 14:32 | 17° 15,04' S | 11° 39,84' E | 80.9 S 10    |            | 0          | -0.1       | MUC    | at sea bottom  |
| ME1031/044-1 | 11.01.2014 | 15:57 | 17° 14,09' S | 11° 30,60' E | 133.8 S 10   |            | 228.9      | 2          | MSN    | at depth       |
| ME1031/044-2 | 11.01.2014 | 16:29 | 17° 14,90' S | 11° 30,13' E | 141.5 S 10   |            | 283        | 0.8        | CTD/RO | surface        |
| ME1031/044-3 | 11.01.2014 | 16:33 | 17° 14,91' S | 11° 30,12' E | 141.7 S 10   |            | 278.6      | 0.5        | HN     | surface        |
| ME1031/044-4 | 11.01.2014 | 16:38 | 17° 14,93' S | 11° 30,09' E | 141.1 S 10   |            | 228.7      | 1          | SD     | on deck        |

| Station       | Date       | Time  | PositionLat  | PositionLon  | Depth [m] | Wind [m/s] | Course [°] | Speed [kn] | Gear   | Action         |
|---------------|------------|-------|--------------|--------------|-----------|------------|------------|------------|--------|----------------|
| ME1031/044-5  | 11.01.2014 | 16:53 | 17° 15,06' S | 11° 29,99' E | 143.9     | S 10       | 205.2      | 1.4        | RTR    | surface        |
| ME1031/044-6  | 11.01.2014 | 17:32 | 17° 16,26' S | 11° 29,32' E | 152.8     | S 9        | 234.9      | 0.2        | RTR    | start trawling |
| ME1031/044-7  | 11.01.2014 | 18:12 | 17° 16,26' S | 11° 29,32' E | 152.1     | S 10       | 102.1      | 0.3        | MSN    | at depth       |
| ME1031/044-8  | 11.01.2014 | 18:30 | 17° 16,26' S | 11° 29,32' E | 152.1     | S 10       | 81.3       | 0.4        | CTD/RO | at depth       |
| ME1031/044-9  | 11.01.2014 | 18:47 | 17° 16,26' S | 11° 29,32' E | 152.7     | S 11       | 299.4      | 0.2        | BWS    | at sea bottom  |
| ME1031/044-10 | 11.01.2014 | 19:15 | 17° 16,26' S | 11° 29,33' E | 151.5     | S 11       | 344.9      | 1.1        | MUC    | at sea bottom  |
| ME1031/044-11 | 11.01.2014 | 19:39 | 17° 16,26' S | 11° 29,33' E | 152.6     | S 11       | 289.6      | 0.3        | VGRAB  | at bottom      |
| ME1031/044-12 | 11.01.2014 | 20:09 | 17° 16,57' S | 11° 29,40' E | 151.5     | S 12       | 189.6      | 2.2        | MSN    | at depth       |
| ME1031/044-13 | 11.01.2014 | 21:05 | 17° 17,88' S | 11° 29,56' E | 151.2     | S 10       | 162.6      | 2.4        | MOC-D  | max wire       |
| ME1031/045-1  | 11.01.2014 | 22:40 | 17° 14,00' S | 11° 23,99' E | 223.1     | S 11       | 179.8      | 1.8        | MSN    | at depth       |
| ME1031/045-2  | 11.01.2014 | 23:23 | 17° 14,97' S | 11° 23,98' E | 240.5     | S 10       | 255.3      | 0.9        | CTD/RO | at depth       |
| ME1031/045-2  | 11.01.2014 | 23:28 | 17° 14,98' S | 11° 23,99' E | 239.8     | S 10       | 254.7      | 0.7        | CTD/RO | on deck        |
| ME1031/045-3  | 11.01.2014 | 23:44 | 17° 15,19' S | 11° 23,97' E | 242.5     | S 10       | 171        | 2          | RTR    | start trawling |
| ME1031/045-3  | 11.01.2014 | 23:54 | 17° 15,43' S | 11° 23,95' E | 243.7     | S 10       | 181.7      | 1.7        | RTR    | end trawling   |
| ME1031/045-4  | 12.01.2014 | 00:02 | 17° 15,47' S | 11° 23,94' E | 245.0     | S 10       | 122.7      | 0.3        | RTR    | start trawling |
| ME1031/045-4  | 12.01.2014 | 00:08 | 17° 15,47' S | 11° 23,94' E | 244.5     | S 10       | 82.8       | 0.8        | RTR    | end trawling   |
| ME1031/045-5  | 12.01.2014 | 00:14 | 17° 15,47' S | 11° 23,94' E | 244.9     | S 10       | 107.3      | 0.7        | RTR    | start trawling |
| ME1031/045-5  | 12.01.2014 | 00:18 | 17° 15,47' S | 11° 23,94' E | 245.0     | S 10       | 267.5      | 0.9        | RTR    | end trawling   |
| ME1031/045-6  | 12.01.2014 | 00:31 | 17° 15,47' S | 11° 23,94' E | 244.8     | S 10       | 320.5      | 0.8        | MSN    | at depth       |
| ME1031/045-7  | 12.01.2014 | 00:53 | 17° 15,47' S | 11° 23,94' E | 243.8     | S 10       | 80.4       | 0.8        | CTD/RO | at depth       |
| ME1031/045-8  | 12.01.2014 | 01:03 | 17° 15,47' S | 11° 23,94' E | 244.3     | S 11       | 300.5      | 0.6        | HN     | on deck        |
| ME1031/045-9  | 12.01.2014 | 01:13 | 17° 15,47' S | 11° 23,94' E | 244.8     | S 10       | 0          | 0.1        | BWS    | at sea bottom  |
| ME1031/045-10 | 12.01.2014 | 01:44 | 17° 15,47' S | 11° 23,94' E | 243.9     | SSE 10     | 218        | 0.2        | MUC    | at sea bottom  |
| ME1031/045-11 | 12.01.2014 | 02:33 | 17° 16,69' S | 11° 24,00' E | 244.9     | SSE 10     | 165.8      | 2.7        | MSN    | at depth       |
| ME1031/045-12 | 12.01.2014 | 03:13 | 17° 18,09' S | 11° 24,19' E | 244.9     | SSE 10     | 165.6      | 2.3        | MOC    | max ropelength |
| ME1031/046-1  | 12.01.2014 | 05:12 | 17° 13,95' S | 11° 17,93' E | 496.1     | SSE 10     | 133        | 2.2        | MSN    | at depth       |
| ME1031/046-2  | 12.01.2014 | 06:13 | 17° 15,03' S | 11° 18,04' E | 469.0     | SSE 9      | 239.1      | 0.8        | CTD/RO | at depth       |
| ME1031/046-3  | 12.01.2014 | 06:36 | 17° 15,16' S | 11° 18,05' E | 466.6     | SSE 11     | 183        | 1.4        | RTR    | start trawling |
| ME1031/046-3  | 12.01.2014 | 07:00 | 17° 15,77' S | 11° 18,12' E | 451.9     | SSE 11     | 219.7      | 1.3        | RTR    | end trawling   |
| ME1031/046-4  | 12.01.2014 | 07:16 | 17° 15,82' S | 11° 18,12' E | 450.2     | SSE 11     | 56.3       | 0.7        | RTR    | on deck        |
| ME1031/046-5  | 12.01.2014 | 07:31 | 17° 15,82' S | 11° 18,12' E | 450.2     | SSE 10     | 98.1       | 0.8        | MSN    | at depth       |
| ME1031/046-5  | 12.01.2014 | 07:31 | 17° 15,82' S | 11° 18,12' E | 450.2     | SSE 10     | 98.1       | 0.8        | MSN    | Hoisting       |
| ME1031/046-6  | 12.01.2014 | 07:48 | 17° 15,82' S | 11° 18,12' E | 451.3     | SSE 10     | 225        | 1.1        | CTD/RO | surface        |
| ME1031/046-7  | 12.01.2014 | 07:55 | 17° 15,82' S | 11° 18,12' E | 451.5     | SSE 10     | 307.1      | 0.6        | SD     | on deck        |
| ME1031/046-8  | 12.01.2014 | 08:31 | 17° 15,82' S | 11° 18,06' E | 452.4     | SSE 11     | 132.4      | 0.8        | SLS    | on deck        |
| ME1031/046-9  | 12.01.2014 | 08:39 | 17° 15,82' S | 11° 18,06' E | 455.9     | SSE 10     | 315.9      | 0.3        | TRIOS  | surface        |
| ME1031/046-10 | 12.01.2014 | 08:58 | 17° 15,82' S | 11° 18,06' E | 453.7     | SSE 11     | 109        | 0.6        | HN     | on deck        |
| ME1031/046-11 | 12.01.2014 | 09:06 | 17° 15,82' S | 11° 18,06' E | 453.3     | SSE 10     | 0          | 0.1        | CTD/RO | surface        |
| ME1031/046-12 | 12.01.2014 | 09:40 | 17° 15,82' S | 11° 18,06' E | 454.3     | SSE 10     | 126.3      | 0.6        | BWS    | at sea bottom  |
| ME1031/046-13 | 12.01.2014 | 10:16 | 17° 15,82' S | 11° 18,06' E | 453.5     | S 9        | 28.2       | 0.3        | MUC    | at sea bottom  |
| ME1031/046-14 | 12.01.2014 | 10:47 | 17° 15,82' S | 11° 18,06' E | 453.8     | S 9        | 243.6      | 0.3        | MUC    | at sea bottom  |
| ME1031/046-15 | 12.01.2014 | 11:46 | 17° 16,57' S | 11° 18,33' E | 432.6     | SSE 9      | 179.5      | 1.6        | MSN    | at depth       |
| ME1031/046-16 | 12.01.2014 | 12:46 | 17° 17,42' S | 11° 18,47' E | 418.1     | S 10       | 189.1      | 2          | MOC    | max ropelength |
| ME1031/046-17 | 12.01.2014 | 14:33 | 17° 19,72' S | 11° 18,12' E | 421.8     | S 10       | 160.2      | 2.5        | MOC-D  | max wire       |
| ME1031/047-1  | 12.01.2014 | 16:35 | 17° 14,02' S | 11° 9,94' E  | 1031.3    | S 11       | 162.9      | 2.2        | MSN    | at depth       |
| ME1031/047-2  | 12.01.2014 | 17:11 | 17° 15,04' S | 11° 10,01' E | 1015.4    | S 11       | 130.5      | 0.4        | CTD/RO | surface        |
| ME1031/047-3  | 12.01.2014 | 17:13 | 17° 15,03' S | 11° 10,01' E | 1017.2    | S 11       | 27         | 0.7        | HN     | surface        |
| ME1031/047-4  | 12.01.2014 | 18:09 | 17° 15,07' S | 11° 10,02' E | 1015.5    | S 11       | 188.7      | 1.4        | RTR    | start trawling |
| ME1031/047-5  | 12.01.2014 | 18:40 | 17° 15,49' S | 11° 10,05' E | 1013.5    | SSE 11     | 224.7      | 1          | RTR    | on deck        |
| ME1031/047-6  | 12.01.2014 | 18:41 | 17° 15,49' S | 11° 10,05' E | 1013.6    | S 12       | 123.9      | 0.8        | RTR    | surface        |
| ME1031/047-7  | 12.01.2014 | 19:01 | 17° 15,49' S | 11° 10,05' E | 1013.4    | SSE 12     | 233.8      | 0.8        | MSN    | at depth       |
| ME1031/047-8  | 12.01.2014 | 19:35 | 17° 15,49' S | 11° 10,05' E | 1014.3    | SSE 13     | 317.1      | 0.7        | CTD/RO | at depth       |
| ME1031/047-9  | 12.01.2014 | 20:16 | 17° 15,49' S | 11° 10,05' E | 1014.0    | S 13       | 281.5      | 0.7        | CTD/RO | at depth       |
| ME1031/047-10 | 12.01.2014 | 20:52 | 17° 15,49' S | 11° 10,05' E | 1013.3    | S 13       | 229        | 0.5        | BWS    | at sea bottom  |
| ME1031/047-11 | 12.01.2014 | 21:54 | 17° 15,49' S | 11° 10,04' E | 1015.4    | S 13       | 0          | 0.2        | MUC    | at sea bottom  |
| ME1031/047-12 | 12.01.2014 | 23:13 | 17° 16,63' S | 11° 10,28' E | 1005.0    | SSE 13     | 154.3      | 0.8        | MSN    | at depth       |
| ME1031/047-13 | 13.01.2014 | 00:44 | 17° 18,30' S | 11° 10,63' E | 934.1     | SSE 12     | 127.7      | 0.9        | MOC    | max ropelength |
| ME1031/047-14 | 13.01.2014 | 02:53 | 17° 21,21' S | 11° 10,70' E | 839.8     | SSE 13     | 176        | 1.2        | MOC-D  | max wire       |
| ME1031/048-1  | 13.01.2014 | 06:14 | 17° 15,00' S | 11° 0,00' E  | 2083.3    | SSE 13     | 57.9       | 0.2        | CTD/RO | at depth       |
| ME1031/048-2  | 13.01.2014 | 06:15 | 17° 15,00' S | 11° 0,00' E  | 2104.6    | SSE 12     | 0          | 0.1        | HN     | surface        |
| ME1031/048-3  | 13.01.2014 | 06:50 | 17° 15,00' S | 11° 0,00' E  | 2104.8    | SSE 11     | 55.6       | 1.1        | SD     | on deck        |

| Station       | Date       | Time  | PositionLat  | PositionLon  | Depth [m]  | Wind [m/s] | Course [°] | Speed [kn] | Gear   | Action         |
|---------------|------------|-------|--------------|--------------|------------|------------|------------|------------|--------|----------------|
| ME1031/048-4  | 13.01.2014 | 07:15 | 17° 15,00' S | 10° 59,97' E | 2110.3 SSE | 10         | 0          | 0.2        | SLS    | on deck        |
| ME1031/048-5  | 13.01.2014 | 07:25 | 17° 15,01' S | 10° 59,94' E | 2111.2 S   | 11         | 89.5       | 0.6        | CTD/RO | surface        |
| ME1031/048-6  | 13.01.2014 | 08:45 | 17° 15,01' S | 10° 59,94' E | 2114.0 SSE | 11         | 249.4      | 0.9        | TRIOS  | max. depth     |
| ME1031/048-7  | 13.01.2014 | 09:10 | 17° 15,01' S | 10° 59,94' E | 2117.2 S   | 10         | 294.6      | 0.7        | CTD/RO | at depth       |
| ME1031/048-8  | 13.01.2014 | 10:04 | 17° 15,01' S | 10° 59,94' E | 2116.2 S   | 10         | 130        | 1.1        | BWS    | at sea bottom  |
| ME1031/048-9  | 13.01.2014 | 11:17 | 17° 15,01' S | 10° 59,94' E | 2114.2 S   | 10         | 72.6       | 0.5        | CTD/RO | at depth       |
| ME1031/048-10 | 13.01.2014 | 12:14 | 17° 15,01' S | 10° 59,94' E | 2115.2 SSE | 10         | 30.6       | 1.3        | MUC    | at sea bottom  |
| ME1031/048-11 | 13.01.2014 | 13:51 | 17° 16,02' S | 10° 59,81' E | 2018.1 S   | 11         | 214.7      | 1.5        | MOC    | max ropelength |
| ME1031/048-12 | 13.01.2014 | 16:35 | 17° 21,60' S | 11° 0,01' E  | 1825.9 S   | 11         | 186.4      | 1.7        | MOC-D  | max wire       |
| ME1031/049-1  | 14.01.2014 | 12:22 | 19° 59,78' S | 11° 29,91' E | 775.7 SSW  | 3          | 139.5      | 0.4        | MSS    | on deck        |
| ME1031/049-2  | 14.01.2014 | 12:26 | 19° 59,80' S | 11° 29,92' E | 773.4 SSW  | 3          | 256.8      | 0.3        | SLS    | into water     |
| ME1031/049-3  | 14.01.2014 | 12:38 | 19° 59,85' S | 11° 29,97' E | 773.9 SW   | 3          | 223.7      | -0.1       | CTD/RO | surface        |
| ME1031/049-4  | 14.01.2014 | 12:39 | 19° 59,85' S | 11° 29,97' E | 778.2 SSW  | 3          | 243.1      | -0.1       | HN     | surface        |
| ME1031/049-5  | 14.01.2014 | 12:45 | 19° 59,85' S | 11° 29,97' E | 772.9 SW   | 3          | 85.7       | 0          | SD     | on deck        |
| ME1031/050-1  | 14.01.2014 | 14:28 | 19° 59,99' S | 11° 34,92' E | 680.1 WSW  | 2          | 172.6      | 0.4        | MSS    | on deck        |
| ME1031/051-1  | 14.01.2014 | 15:09 | 19° 59,93' S | 11° 39,99' E | 581.7 SW   | 2          | 106        | 0.7        | MSS    | surface        |
| ME1031/052-1  | 14.01.2014 | 17:36 | 20° 0,60' S  | 11° 44,92' E | 492.2 SE   | 2          | 118.1      | 1          | MSS    | on deck        |
| ME1031/053-1  | 14.01.2014 | 18:19 | 19° 59,97' S | 11° 49,96' E | 407.9 E    | 3          | 178        | 1.2        | CTD/RO | surface        |
| ME1031/053-2  | 14.01.2014 | 18:23 | 19° 59,97' S | 11° 49,95' E | 408.2 ESE  | 3          | 48.1       | 0.5        | HN     | surface        |
| ME1031/053-3  | 14.01.2014 | 18:53 | 19° 59,97' S | 11° 49,95' E | 407.8 ESE  | 2          | 75.1       | 0.4        | MSN    | at depth       |
| ME1031/053-4  | 14.01.2014 | 19:24 | 19° 59,97' S | 11° 49,92' E | 408.4 ESE  | 3          | 273.7      | 0.7        | MUC    | at sea bottom  |
| ME1031/053-5  | 14.01.2014 | 19:52 | 20° 0,17' S  | 11° 49,92' E | 410.5 ESE  | 3          | 184.4      | 1.1        | RTR    | start trawling |
| ME1031/053-6  | 14.01.2014 | 20:20 | 20° 1,01' S  | 11° 50,00' E | 412.6 E    | 3          | 0          | 0.2        | RTR    | start trawling |
| ME1031/053-7  | 14.01.2014 | 20:36 | 20° 1,26' S  | 11° 50,03' E | 415.3 SE   | 3          | 89         | 1.7        | RTR    | surface        |
| ME1031/053-8  | 14.01.2014 | 20:40 | 20° 1,26' S  | 11° 50,03' E | 414.9 SE   | 3          | 144.4      | 0.3        | HN     | surface        |
| ME1031/053-9  | 14.01.2014 | 21:28 | 20° 2,16' S  | 11° 50,17' E | 443.8 SE   | 5          | 160.7      | 2.3        | MOC    | max ropelength |
| ME1031/053-9  | 14.01.2014 | 21:28 | 20° 2,16' S  | 11° 50,17' E | 443.8 SE   | 5          | 160.7      | 2.3        | MOC    | begin heave    |
| ME1031/053-10 | 14.01.2014 | 22:56 | 20° 4,29' S  | 11° 49,78' E | 444.1 ESE  | 5          | 169.6      | 1.3        | MSS    | on deck        |
| ME1031/054-1  | 14.01.2014 | 23:48 | 19° 59,97' S | 11° 54,96' E | 369.8 E    | 4          | 159.8      | 0.4        | MSS    | surface        |
| ME1031/054-1  | 15.01.2014 | 00:38 | 20° 0,77' S  | 11° 54,66' E | 374.6 ENE  | 4          | 222.8      | 1.3        | MSS    | on deck        |
| ME1031/055-1  | 15.01.2014 | 01:24 | 20° 0,03' S  | 11° 59,93' E | 338.0 E    | 1          | 174.5      | 0.9        | MSS    | surface        |
| ME1031/055-1  | 15.01.2014 | 02:13 | 20° 0,86' S  | 11° 59,53' E | 341.0 SE   | 3          | 186.2      | 0.9        | MSS    | on deck        |
| ME1031/056-1  | 15.01.2014 | 03:00 | 19° 59,99' S | 12° 4,99' E  | 306.2 S    | 2          | 183.7      | 1.3        | MSS    | surface        |
| ME1031/056-1  | 15.01.2014 | 03:47 | 20° 0,73' S  | 12° 5,00' E  | 306.0 S    | 3          | 170.1      | 1.8        | MSS    | on deck        |
| ME1031/057-1  | 15.01.2014 | 04:27 | 20° 0,02' S  | 12° 8,94' E  | 929.7 S    | 3          | 187.8      | 0.8        | CTD/RO | surface        |
| ME1031/057-2  | 15.01.2014 | 04:56 | 20° 0,02' S  | 12° 8,94' E  | 281.4 SSE  | 4          | 279.7      | 1          | HN     | on deck        |
| ME1031/057-3  | 15.01.2014 | 04:58 | 20° 0,02' S  | 12° 8,94' E  | 281.9 SSE  | 4          | 260.3      | 1.2        | MSN    | surface        |
| ME1031/057-4  | 15.01.2014 | 05:22 | 20° 0,42' S  | 12° 8,89' E  | 282.7 S    | 4          | 185.9      | 3.2        | RTR    | start trawling |
| ME1031/057-4  | 15.01.2014 | 05:41 | 20° 0,93' S  | 12° 8,77' E  | 285.0 S    | 4          | 263.5      | 0.5        | RTR    | start trawling |
| ME1031/057-4  | 15.01.2014 | 05:47 | 20° 0,93' S  | 12° 8,76' E  | 283.3 S    | 4          | 343.6      | 0.6        | RTR    | on deck        |
| ME1031/057-4  | 15.01.2014 | 05:51 | 20° 0,93' S  | 12° 8,74' E  | 286.8 S    | 4          | 18         | 0.9        | RTR    | start trawling |
| ME1031/057-5  | 15.01.2014 | 06:01 | 20° 0,92' S  | 12° 8,70' E  | 284.9 SSE  | 6          | 99.8       | 1          | SD     | on deck        |
| ME1031/057-6  | 15.01.2014 | 06:02 | 20° 0,92' S  | 12° 8,69' E  | 286.6 SSE  | 5          | 221.3      | 0.3        | SLS    | into water     |
| ME1031/057-7  | 15.01.2014 | 07:15 | 20° 1,72' S  | 12° 8,37' E  | 288.0 SE   | 6          | 165.3      | 1.2        | MSS    | on deck        |
| ME1031/058-1  | 15.01.2014 | 08:12 | 19° 59,65' S | 12° 14,95' E | 244.8 ESE  | 6          | 220.7      | 0.6        | MSS    | surface        |
| ME1031/058-1  | 15.01.2014 | 09:04 | 20° 0,28' S  | 12° 14,96' E | 249.0 ESE  | 4          | 227.1      | 0.7        | MSS    | on deck        |
| ME1031/059-1  | 15.01.2014 | 09:49 | 19° 59,95' S | 12° 19,97' E | 212.5 SE   | 1          | 73.5       | 1.2        | CTD/RO | surface        |
| ME1031/059-2  | 15.01.2014 | 09:50 | 19° 59,95' S | 12° 19,97' E | 212.9 SE   | 1          | 271.8      | 1.6        | SD     | surface        |
| ME1031/059-3  | 15.01.2014 | 09:56 | 19° 59,95' S | 12° 19,97' E | 213.3 S    | 2          | 91.3       | 0.8        | HN     | on deck        |
| ME1031/059-4  | 15.01.2014 | 09:58 | 19° 59,95' S | 12° 19,97' E | 213.2 SSE  | 2          | 145.2      | 0.4        | HN     | surface        |
| ME1031/059-5  | 15.01.2014 | 10:24 | 19° 59,95' S | 12° 19,97' E | 212.5 SE   | 2          | 155        | 0.4        | MUC    | at sea bottom  |
| ME1031/059-6  | 15.01.2014 | 11:58 | 20° 1,10' S  | 12° 19,13' E | 225.5 SSW  | 4          | 233.9      | 1.5        | MSS    | on deck        |
| ME1031/060-1  | 15.01.2014 | 13:10 | 19° 59,96' S | 12° 24,98' E | 196.6 SSW  | 5          | 155.1      | 0.4        | MSS    | surface        |
| ME1031/060-1  | 15.01.2014 | 13:55 | 20° 0,24' S  | 12° 24,68' E | 196.7 SSW  | 5          | 260.6      | 1          | MSS    | on deck        |
| ME1031/061-1  | 15.01.2014 | 14:38 | 20° 0,00' S  | 12° 29,99' E | 149.5 S    | 5          | 165        | 0.5        | SLS    | into water     |
| ME1031/061-2  | 15.01.2014 | 14:53 | 19° 59,99' S | 12° 29,99' E | 149.7 SSE  | 5          | 230        | 0.5        | CTD/RO | surface        |
| ME1031/061-3  | 15.01.2014 | 14:55 | 19° 59,99' S | 12° 29,99' E | 150.4 SSE  | 5          | 271.7      | 1.7        | SD     | surface        |
| ME1031/061-4  | 15.01.2014 | 15:03 | 19° 59,99' S | 12° 29,99' E | 150.6 SSE  | 6          | 65.6       | 0.3        | HN     | on deck        |
| ME1031/061-5  | 15.01.2014 | 15:27 | 20° 0,32' S  | 12° 29,97' E | 151.4 SSE  | 6          | 179.3      | 1.8        | RTR    | start trawling |
| ME1031/061-5  | 15.01.2014 | 15:49 | 20° 0,90' S  | 12° 29,94' E | 151.8 SE   | 5          | 92.8       | 0.3        | RTR    | start trawling |
| ME1031/061-5  | 15.01.2014 | 15:58 | 20° 0,90' S  | 12° 29,94' E | 152.0 SE   | 5          | 86.2       | 1.7        | RTR    | on deck        |

| Station      | Date       | Time  | PositionLat  | PositionLon  | Depth [m]   | Wind [m/s] | Course [°] | Speed [kn] | Gear   | Action                    |
|--------------|------------|-------|--------------|--------------|-------------|------------|------------|------------|--------|---------------------------|
| ME1031/061-6 | 15.01.2014 | 16:04 | 20° 0,90' S  | 12° 29,94' E | 152.1 SE 6  |            | 243        | 1.3        | MSS    | surface                   |
| ME1031/062-1 | 15.01.2014 | 17:33 | 20° 0,01' S  | 12° 34,96' E | 134.2 SE 3  |            | 253.8      | 0.7        | MSS    | surface                   |
| ME1031/062-1 | 15.01.2014 | 18:14 | 20° 0,55' S  | 12° 34,84' E | 137.4 ESE 4 |            | 143.6      | 1.4        | MSS    | on deck                   |
| ME1031/063-1 | 15.01.2014 | 18:55 | 19° 59,97' S | 12° 39,96' E | 126.0 ESE 4 |            | 156.6      | 0.5        | MSS    | surface                   |
| ME1031/063-1 | 15.01.2014 | 19:34 | 20° 0,60' S  | 12° 39,97' E | 126.5 ESE 3 |            | 182.6      | 1.1        | MSS    | on deck                   |
| ME1031/064-1 | 15.01.2014 | 20:13 | 19° 59,94' S | 12° 44,98' E | 117.5 ESE 4 |            | 254.2      | 0.8        | MSS    | surface                   |
| ME1031/064-1 | 15.01.2014 | 20:48 | 20° 0,50' S  | 12° 44,98' E | 117.7 SE 4  |            | 175.1      | 1          | MSS    | on deck                   |
| ME1031/065-1 | 15.01.2014 | 21:36 | 19° 59,94' S | 12° 50,99' E | 97.1 SSE 3  |            | 337.1      | 0.3        | CTD/RO | surface                   |
| ME1031/065-2 | 15.01.2014 | 21:49 | 19° 59,94' S | 12° 50,99' E | 96.0 SE 4   |            | 208.1      | 0.3        | HN     | on deck                   |
| ME1031/065-3 | 15.01.2014 | 21:54 | 19° 59,94' S | 12° 50,98' E | 96.3 SE 4   |            | 153.8      | 0.6        | MUC    | surface                   |
| ME1031/065-3 | 15.01.2014 | 21:58 | 19° 59,94' S | 12° 50,98' E | 96.6 SE 3   |            | 293.6      | 0.4        | MUC    | at sea bottom             |
| ME1031/065-3 | 15.01.2014 | 21:59 | 19° 59,94' S | 12° 50,98' E | 93.4 SE 3   |            | 44         | 0.3        | MUC    | hiev                      |
| ME1031/065-4 | 15.01.2014 | 22:45 | 20° 0,60' S  | 12° 50,70' E | 95.9 SE 4   |            | 243.9      | 0.7        | MSS    | on deck                   |
| ME1031/065-5 | 15.01.2014 | 23:04 | 20° 0,71' S  | 12° 50,69' E | 102.1 SE 4  |            | 180.1      | 1.9        | MOC-D  | to water                  |
| ME1031/065-5 | 15.01.2014 | 23:20 | 20° 1,19' S  | 12° 50,57' E | 100.5 SE 4  |            | 181.5      | 2.6        | MOC-D  | on deck                   |
| ME1031/066-1 | 16.01.2014 | 00:02 | 19° 59,97' S | 12° 54,94' E | 161.5 SE 4  |            | 212.6      | 1.5        | MSS    | surface                   |
| ME1031/066-1 | 16.01.2014 | 00:32 | 20° 0,43' S  | 12° 54,50' E | 0.0 ESE 4   |            | 229.5      | 1.8        | MSS    | on deck                   |
| ME1031/067-1 | 16.01.2014 | 01:14 | 19° 59,99' S | 12° 59,94' E | 87.9 ESE 3  |            | 146.2      | 0.3        | CTD/RO | surface                   |
| ME1031/067-2 | 16.01.2014 | 01:18 | 20° 0,00' S  | 12° 59,94' E | 28.7 SE 2   |            | 108.3      | 0.6        | HN     | surface                   |
| ME1031/067-1 | 16.01.2014 | 01:24 | 20° 0,00' S  | 12° 59,94' E | 28.5 SSE 1  |            | 242.5      | 1.5        | CTD/RO | on deck                   |
| ME1031/067-3 | 16.01.2014 | 01:32 | 20° 0,00' S  | 12° 59,94' E | 28.3 SSW 3  |            | 232.8      | 0.9        | MUC    | surface                   |
| ME1031/067-4 | 16.01.2014 | 01:59 | 20° 0,22' S  | 13° 0,04' E  | 28.1 S 7    |            | 91.1       | 0.7        | MSS    | on deck                   |
| ME1031/068-1 | 16.01.2014 | 20:56 | 23° 2,54' S  | 12° 18,47' E | 0.0 SE 5    |            | 183.3      | 0.6        | MOR    | Hydrophone into the water |
| ME1031/068-1 | 16.01.2014 | 21:00 | 23° 2,55' S  | 12° 18,46' E | 0.0 SE 6    |            | 305.8      | 0          | MOR    | Hydrophone on Deck        |
| ME1031/068-1 | 16.01.2014 | 21:13 | 23° 2,90' S  | 12° 17,98' E | 0.0 SE 5    |            | 259.3      | 1          | MOR    | Hydrophone into the water |
| ME1031/068-1 | 16.01.2014 | 21:15 | 23° 2,90' S  | 12° 17,94' E | 0.0 SE 5    |            | 257.9      | 0.8        | MOR    | Hydrophone on Deck        |
| ME1031/068-1 | 16.01.2014 | 21:34 | 23° 1,92' S  | 12° 18,36' E | 0.0 SE 4    |            | 42.5       | 0.8        | MOR    | Hydrophone into the water |
| ME1031/068-1 | 16.01.2014 | 21:36 | 23° 1,89' S  | 12° 18,38' E | 0.0 SE 4    |            | 360        | 0.5        | MOR    | Hydrophone on Deck        |
| ME1031/068-1 | 16.01.2014 | 21:55 | 23° 2,69' S  | 12° 19,09' E | 0.0 ESE 4   |            | 220        | 1          | MOR    | Hydrophone into the water |
| ME1031/068-1 | 16.01.2014 | 22:00 | 23° 2,77' S  | 12° 19,09' E | 0.0 SE 3    |            | 84.2       | 2.2        | MOR    | Hydrophone on Deck        |
| ME1031/069-1 | 17.01.2014 | 02:05 | 23° 0,95' S  | 13° 1,78' E  | 0.0 SSW 1   |            | 352        | -0.1       | MOR    | Hydrophone into the water |
| ME1031/069-1 | 17.01.2014 | 02:11 | 23° 0,94' S  | 13° 1,80' E  | 0.0 SSW 1   |            | 124.4      | 0.8        | MOR    | Hydrophone on Deck        |
| ME1031/069-1 | 17.01.2014 | 02:18 | 23° 0,71' S  | 13° 1,78' E  | 0.0 SW 1    |            | 330.4      | 1          | MOR    | Hydrophone into the water |
| ME1031/069-1 | 17.01.2014 | 02:21 | 23° 0,70' S  | 13° 1,76' E  | 0.0 WSW 1   |            | 318.8      | 0.2        | MOR    | Hydrophone on Deck        |
| ME1031/069-1 | 17.01.2014 | 02:32 | 23° 1,04' S  | 13° 2,03' E  | 0.0 WNW 2   |            | 149        | 0.6        | MOR    | Hydrophone into the water |
| ME1031/069-1 | 17.01.2014 | 02:35 | 23° 1,06' S  | 13° 2,01' E  | 0.0 W 1     |            | 200        | 0.1        | MOR    | Hydrophone on Deck        |
| ME1031/069-1 | 17.01.2014 | 02:46 | 23° 1,08' S  | 13° 1,58' E  | 0.0 WSW 0   |            | 237.6      | 0.6        | MOR    | Hydrophone into the water |
| ME1031/069-1 | 17.01.2014 | 02:49 | 23° 1,09' S  | 13° 1,57' E  | 0.0 W 1     |            | 245.7      | 0.3        | MOR    | Hydrophone on Deck        |
| ME1031/070-1 | 17.01.2014 | 08:26 | 22° 59,75' S | 14° 3,04' E  | 0.0 NE 4    |            | 171.7      | 1.1        | MOR    | information               |
| ME1031/070-1 | 17.01.2014 | 08:26 | 22° 59,75' S | 14° 3,04' E  | 0.0 NE 4    |            | 171.7      | 1.1        | MOR    | Hydrophone into the water |
| ME1031/070-1 | 17.01.2014 | 08:29 | 22° 59,80' S | 14° 3,04' E  | 0.0 NE 4    |            | 172.8      | 1          | MOR    | released                  |
| ME1031/070-1 | 17.01.2014 | 08:43 | 22° 59,96' S | 14° 3,06' E  | 126.7 NE 4  |            | 331        | -0.3       | MOR    | on the surface            |
| ME1031/070-1 | 17.01.2014 | 09:24 | 23° 0,29' S  | 14° 3,17' E  | 125.5 NE 4  |            | 186.9      | 0.9        | MOR    | information               |
| ME1031/070-1 | 17.01.2014 | 09:25 | 23° 0,30' S  | 14° 3,18' E  | 124.7 NE 4  |            | 170.5      | 0.8        | MOR    | headbuoy on deck          |
| ME1031/070-1 | 17.01.2014 | 09:27 | 23° 0,33' S  | 14° 3,19' E  | 124.7 NE 4  |            | 182        | 0.8        | MOR    | mooring on deck           |
| ME1031/071-1 | 17.01.2014 | 09:50 | 23° 0,25' S  | 14° 3,51' E  | 124.7 NNE 3 |            | 134.2      | 0          | MOR    | information               |
| ME1031/071-1 | 17.01.2014 | 10:04 | 23° 0,21' S  | 14° 3,53' E  | 123.7 N 2   |            | 4.9        | 0.5        | MOR    | Hydrophone into the water |
| ME1031/071-1 | 17.01.2014 | 10:07 | 23° 0,21' S  | 14° 3,54' E  | 123.2 N 3   |            | 0          | 0          | MOR    | released                  |
| ME1031/071-1 | 17.01.2014 | 10:09 | 23° 0,21' S  | 14° 3,54' E  | 123.7 N 3   |            | 147.4      | 0          | MOR    | on the surface            |

| Station      | Date       | Time  | PositionLat | PositionLon | Depth [m] | Wind [m/s] | Course [°] | Speed [kn] | Gear | Action              |
|--------------|------------|-------|-------------|-------------|-----------|------------|------------|------------|------|---------------------|
| ME1031/071-1 | 17.01.2014 | 10:39 | 23° 0,32' S | 14° 3,93' E | 125.7 N   | 3          | 177.8      | 0          | MOR  | headbuoy on deck    |
| ME1031/071-1 | 17.01.2014 | 11:20 | 23° 0,30' S | 14° 3,91' E | 125.2 NW  | 2          | 132.1      | 0          | MOR  | mooring on deck     |
| ME1031/072-1 | 17.01.2014 | 11:50 | 23° 1,39' S | 14° 1,78' E | 128.5 WNW | 3          | 57.2       | 2.2        | MOR  | information         |
| ME1031/072-1 | 17.01.2014 | 12:36 | 23° 1,36' S | 14° 1,74' E | 128.7 W   | 5          | 28.9       | 0          | MOR  | surface             |
| ME1031/072-1 | 17.01.2014 | 12:50 | 23° 1,42' S | 14° 1,99' E | 129.2 W   | 6          | 228.4      | 0          | MOR  | Rubberboat in water |
| ME1031/072-1 | 17.01.2014 | 13:12 | 23° 1,50' S | 14° 2,27' E | 128.5 WSW | 5          | 119.9      | -0.1       | MOR  | on deck             |