

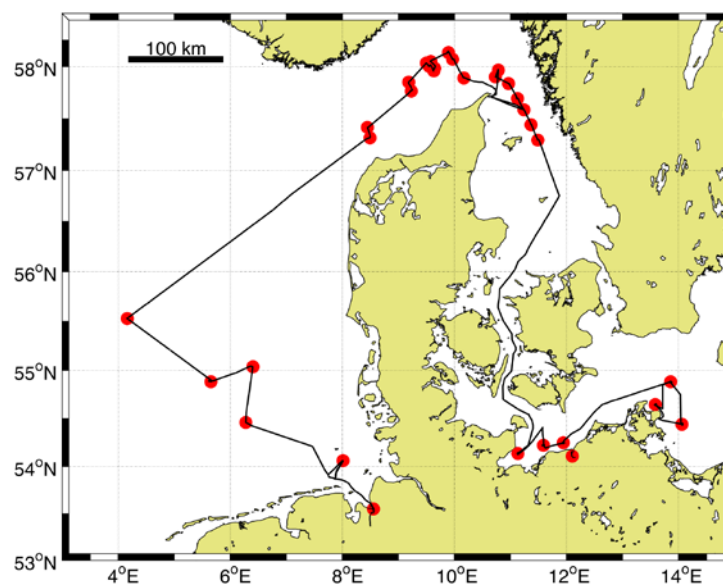
Prof. Dr. Ulrich Bathmann  
Leibniz-Institut für Ostseeforschung  
Seestraße 15  
18119 Rostock Warnemünde

Tel.: +49 381 5197 100  
Fax: +49 381 5197 105  
email: ulrich.bathmann@io-warnemuende.de

**Short Cruise Report**  
**MARIA S. MERIAN MSM 50**

**Bremerhaven - Rostock**  
**06.01.2016 – 29.01.2016**

**Chief Scientist: Ulrich Bathmann**  
**Captain: Ralf Schmidt**





## Objectives

The expedition MSM050 KÜNO INTERFACE (*Coastal benthic environments in North and Baltic Sea: Evaluation of processes and transports at the sediment-water interface*) was planned as a joint activity of the BMBF-funded projects NOAH and SECOS to increase the understanding of biogeochemical, biological and physical processes along the sediment-water interface in the North and Baltic Sea. This cruise aimed for the completion of seasonal data in these regions, with the main focus on the determination of biogeochemical functions, their control mechanism for the relevant benthic habitat types and turbulence measurements of near bottom water layers.

**Particle fluxes and gas exchanges** were investigated with Multicorer samples and *in situ* Benthic Chambers by means of the IOW Lander WaBOB. The release of nutrients, especially phosphorus, alkalinity (essentially dissolved carbon dioxide), and redox-sensitive elements (e.g. hydrogen sulfide and selected metals) was obtained from analyses of pore water gradients and whole core incubation experiments. To determine the **physical effects on resuspension and sediment** small-scale turbulent motions in the water column as crucial component of the sediment transport process were monitored with the help of vessel-mounted current profilers and a shear-microstructure profiler. These data yields nearly full-depth profiles of stratification, turbidity, oxygen, and micro-scale shear from which turbulent diffusivities can be inferred. Specialized bottom landers (composition of an ADV-Frame, an Aquadrop-Frame and a CTD-chain) were deployed for the analysis of near-bottom turbulence and SPM (suspended particulate matter) structure in the water column. The estimation of the **biological effects on particle exchange at the sediment-water interface** were investigated by determination on the intensity and depth of bioturbation in the sediment and the timing of the benthic resuspension cycle. The **determination of contaminants in the sediment in relation to biochemical processes** and its bio-availability were investigated on sediment samples by Multicorer.

## Narrative

On January 05<sup>th</sup> 2016, sixteen scientists and two guests embarked on board the R/V MARIA S. MERIAN in port Bremen, Germany. Three containers with equipment from the Leibniz-Institute for Baltic Sea Research Warnemünde (IOW), Rostock, and material from colleagues from the Helmholtz-Zentrum Geesthacht (HZG) were delivered to the ship in due time. On January 06<sup>th</sup> R/V MARIA S. MERIAN left Bremerhaven by 11 o'clock am (local time) in the direction of the first working area in the North Sea. Shortly after departure, the first CTD/rosette sampling was done at Station MSM\_001 at the 'Helgoländer Schlickloch' southeast of the island Helgoland, and sediment samples were collected by MUC and van Veen grab (16:24 – 21:00 UTC). After exchange of technical personnel offshore Bremerhaven, R/V MARIA S MERIAN headed further northwest towards four NOAH stations. On the next day, January 07<sup>th</sup> a storm with maximum wind speed about 9 Beaufort rised. After arrival at station MSM\_002 early morning, the NOAH investigations consisting of CTD/rosette measurements followed by sediment sampling by MUC and van Veen grab. Additionally, benthos macrofauna samples were taken by dredge by Mayya Gogina and Michael Zettler. These operations were finished at 09:00 local time and the ship continued to station MSM\_003. Here, the storm forced the ship team to cancel the work after the initial CTD/rosette measurements. Despite these harsh weather conditions most of the working program at the last two NOAH stations (stations no. 004 and 005) could be completed successfully on January 08<sup>th</sup> until January 09<sup>th</sup>. Here, the newly developed IOW lander WABOB was two times tested successfully. After the last

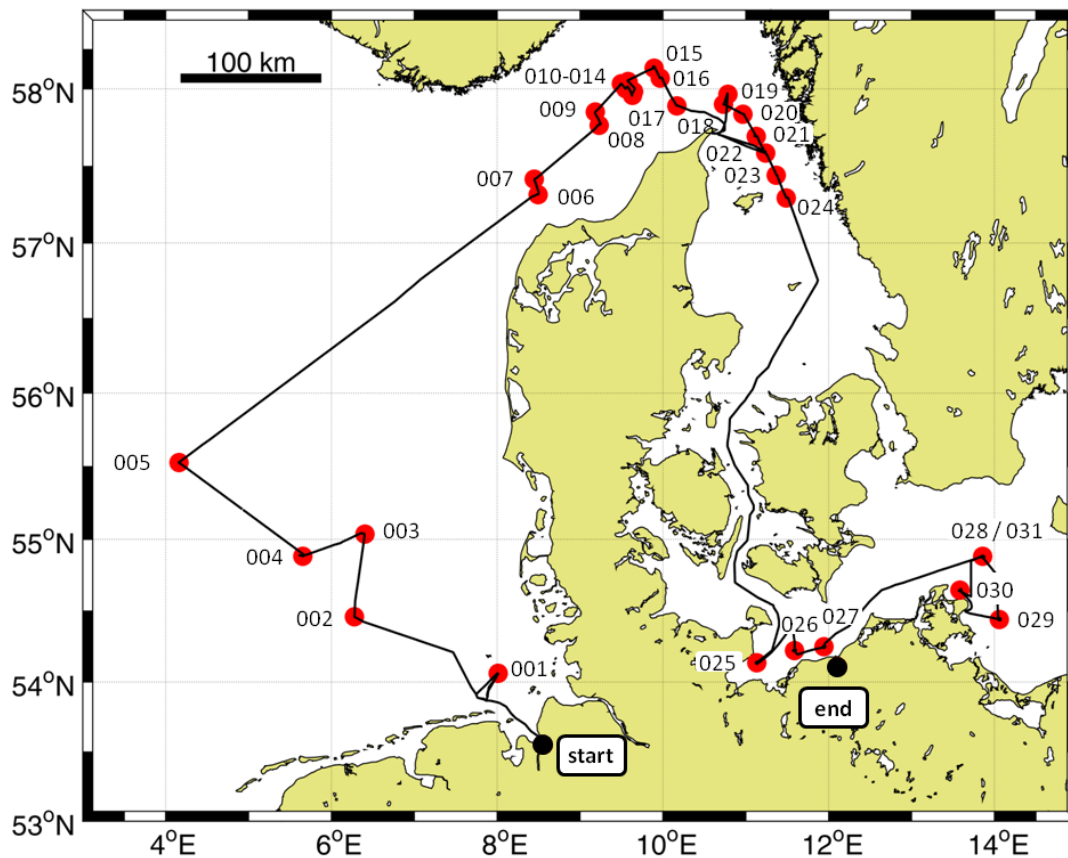
dredging was done the ship began the transit to the second working area in the Skagerrak and Kattegat for benthic macrofauna revisiting and the underway data acquisition (Ferry Box) was started.

On the Skagerrak/Kattegat stations (station MSM\_006 to 23) CTD/rosette sampling, sediment sampling by van Veen grab and dredging for macrofauna sampling were performed. At some Skagerrak stations sediment cores were taken by MUC for incubation experiments regarding oxygen consumption by the sediment and pore water analysis (stations MSM\_009, MSM\_010, MSM\_013 – 015, MSM\_018). Another storm with wind force 9 Beaufort did not interfere with our work. Depending on the wind regime the box core or the van Veen grab were used. In between stations, R/V MARIA S. MERIAN made a short stop in the harbour of Skagen, Denmark, between stations 17 and 18.

The subsequent transit from Kattegat across the Danish Belt Sea to the third working area in the Western Baltic Sea took a whole day and the R/V MARIA S. MERIAN arrived at the Lübeck Bight area in the morning of January 16<sup>th</sup>. In the Baltic Sea, six SECOS stations had been selected for investigation of biogeochemical parameters of sediment and pore water as well as benthic macrofauna. The studies performed during this cruise shall help to broaden the knowledge about the conditions in the winter season. Parallel to that a physical observation program with Microstructure measurements was performed. At the westernmost SECOS station, the Lübeck Bight station (MSM\_025) the new IOW chamber lander WABOB was set out for 48 hours in the morning of January 16<sup>th</sup> until January 18<sup>th</sup>. During the waiting time, sediment samples were taken by MUC and van Veen grab and dredging was done. By far the most time was used for MSS measurements.

This intensive 48 hours working program was repeated at the next stations, Mecklenburg Bight, Stolteraa and Arkona Basin. After arrival at station MSM\_028 in the morning of January 23<sup>rd</sup>, two shorter (2x tripods for ca. 2 hours and benthic chamber lander for 12 hours) lander deployments were carried out paralleled by CTD/rosette, MUC, van Veen grab, dredge and MSS profiling. This work was finished in the late evening of January 24<sup>th</sup>. From here, it was only a short distance to the easternmost station of the cruise, Oder Bank, which also represented the most eastern turning point of this last part of the MSM 50. Here, the program of the previous station was repeated in the time between morning of January 25<sup>th</sup> until afternoon of January 26<sup>th</sup>. Then the ship turned back north, exchanged technical personnel off Sasnitz harbor, and continued to the Tromper Wiek to absolve the same operations from evening of January 26<sup>th</sup> to afternoon of January 28<sup>th</sup>. After finishing the work at station no. 030, the ship turned back to the Arkona Basin as the final station of the cruise program. Here, the oceanographer's Tripod was deployed for long-term measurements. The recovery of this equipment was planned during a regular maintenance cruise in February 2016. Besides, a last sediment sampling by MUC was done and finished at 18:19 UTC.

The cruise finished on the morning of Friday January 29<sup>th</sup>, when R/V MARIA S. MERIAN entered port Rostock after direct transit back, having successfully completed cruise MSM 50.



Track chart and station overview of R/V MARIA S. MERIAN Cruise MSM50.

## Acknowledgements

We like to thank captain Ralf Schmidt, his officers and crew of R/V MARIA S. MERIAN for their hospitality and support in the achievement of the cruise objectives. We thank the DFG and BMBF as well as the members of the MARIA S. MERIAN advisory board for providing ship time funding and revising the application for the cruise on R/V MARIA S. MERIAN. The expedition is a contribution to the KÜNO projects NOAH and SECOS. Both projects are funded by the BMBF within the framework program “Research for Sustainable Development” (FONA) committed to the “Coastal Research Agenda for the North Sea and Baltic Sea” (reference no. NOAH: 03F0669, reference no. SECOS: 03F0666).

**Teilnehmerliste / list of scientists MSM 050**

<b>No.</b>	<b>Name</b>	<b>Discipline</b>	<b>Institution</b>
1	Bathmann, Ulrich, Prof. Dr.	Chief Scientist	IOW
2	Umlauf, Lars, PD Dr.	Moorings (L*)	IOW
3	Zettler, Michael, Dr.	Van Veen Grabs, Video, Dredge	IOW
4	Gogina, Mayya, Dr.	Van Veen Grabs, Video, Dredge	IOW
5	Sanders, Tina, Dr.	MUC, Incubation	HZG
6	Cordes, Florian	Nutrient Analysis	IOW
7	Dutschke, Florian	Nutrient Analysis	HZG
8	Glockzin, Michael	Lander	IOW
9	Heene, Toralf	Moorings, MSS, CTD	IOW
10	Lehnert, Gerhard	Lander	IOW
11	Lipka, Marko	MUC, Incubation	IOW
12	Naderipour, Céline	MUC, Incubation	HZG
13	Schulz, Kirstin	Moorings, MSS, CTD	IOW
14	Stephan, Anne	Lander; Help	IOW
15	von Neuhoff, Holger	PR	
16	von Neuhoff, Stephanie	PR	
17	Weinreben, Stefan	Elemental Analysis	IOW
18	Zimmermann, Tristan	Elemental / Trace Analysis	HZG

\*L indicates "lead" or "responsible" person

HZG – Helmholtz-Zentrum Geesthacht

IOW – Leibniz-Institut für Ostseeforschung, Warnemünde

## Stationsliste

Station No.	Date	Gear (Abbrevia- tion)	Time [UTC]	Position		Depth [m]	Remarks /Recovery
				Latitude	Longitude		
MSM50/001-1	06.01.2016	CTD/RO	16:34	54° 3,73' N	8° 0,84' E	22,1	SL max. 23m / EL2
MSM50/001-2	06.01.2016	MUC	20:24	54° 3,79' N	8° 0,87' E	23,4	SL max. 28m / FR1
MSM50/001-3	06.01.2016	VGRAB	20:44	54° 3,79' N	8° 0,87' E	23,1	SL max. 28m / ARW
MSM50/001-4	06.01.2016	VGRAB	20:56	54° 3,79' N	8° 0,87' E	23	SL max. 29m / ARW
MSM50/002-1	07.01.2016	CTD/RO	6:13	54° 27,73' N	6° 16,46' E	6,6	SL max. 40m / EL2
MSM50/002-2	07.01.2016	MUC	6:38	54° 27,72' N	6° 16,47' E	34,3	SL max. 39m / FR1
MSM50/002-3	07.01.2016	MUC	6:50	54° 27,72' N	6° 16,47' E	34,2	SL max. 43m / FR1
MSM50/002-4	07.01.2016	MUC	7:14	54° 27,73' N	6° 16,48' E	36	SL max. 43m / FR1
MSM50/002-5	07.01.2016	MUC	7:31	54° 27,73' N	6° 16,48' E	11,7	SL max. 43m / FR1
MSM50/002-6	07.01.2016	VGRAB	7:47	54° 27,73' N	6° 16,48' E	34,1	SL max. 42m / ARW
MSM50/002-7	07.01.2016	VGRAB	7:56	54° 27,73' N	6° 16,48' E	33,3	SL max. 42m / ARW
MSM50/002-8	07.01.2016	VGRAB	8:02	54° 27,73' N	6° 16,48' E	34	SL max. 42m / ARW
MSM50/002-9	07.01.2016	VGRAB	8:08	54° 27,72' N	6° 16,49' E	33,2	SL max. 42m / ARW
MSM50/002-10	07.01.2016	VGRAB	8:15	54° 27,72' N	6° 16,49' E	33,9	SL max. 42m / ARW
MSM50/002-11	07.01.2016	DRG	8:40	54° 27,72' N	6° 16,58' E	32,4	SL max. 95m / ARW
MSM50/003-1	07.01.2016	CTD/RO	13:22	55° 2,29' N	6° 23,66' E	8	SL max. 10m / FR1
MSM50/003-1	07.01.2016	CTD/RO	13:46	55° 2,58' N	6° 22,44' E	36,3	wetterbedingter Stationsabbruch
MSM50/004-1	07.01.2016	CTD/RO	17:34	54° 53,01' N	5° 39,04' E	35,2	SL max. 36m / EL2
MSM50/004-2	07.01.2016	LANDER	18:35	54° 52,99' N	5° 39,11' E	37,9	Kammerlander
MSM50/004-3	08.01.2016	MUC	5:07	54° 53,10' N	5° 38,65' E	37,3	SL max. 43m / FR1
MSM50/004-4	08.01.2016	MUC	5:27	54° 53,11' N	5° 38,64' E	35,6	SL max. 45m / FR1
MSM50/004-5	08.01.2016	MUC	5:51	54° 53,10' N	5° 38,64' E	34,7	SL max. 46m / FR1
MSM50/004-6	08.01.2016	VGRAB	6:05	54° 53,10' N	5° 38,64' E	36,7	SL max. 36m / ARW
MSM50/004-7	08.01.2016	VGRAB	6:14	54° 53,10' N	5° 38,64' E	37,1	SL max. 34m / ARW
MSM50/004-8	08.01.2016	VGRAB	6:21	54° 53,10' N	5° 38,65' E	37,1	SL max. 42m / ARW
MSM50/004-9	08.01.2016	VGRAB	6:27	54° 53,10' N	5° 38,64' E	36,2	SL max. 38m / ARW
MSM50/004-10	08.01.2016	VGRAB	6:32	54° 53,10' N	5° 38,62' E	38,5	SL max. 40m / ARW
MSM50/004-11	08.01.2016	VGRAB	6:38	54° 53,10' N	5° 38,62' E	36,2	SL max. 41m / ARW
MSM50/004-12	08.01.2016	VGRAB	6:42	54° 53,10' N	5° 38,62' E	34,5	SL max. 41m / ARW
MSM50/004-13	08.01.2016	DRG	6:58	54° 53,14' N	5° 38,69' E	35,7	SL max. 88m / ARW
MSM50/004-2	08.01.2016	LANDER	8:08	54° 53,00' N	5° 39,11' E	35	Kammerlander recovery
MSM50/005-1	08.01.2016	LANDER	16:03	55° 31,70' N	4° 9,68' E	32,7	Kammerlander
MSM50/005-2	08.01.2016	CTD/RO	16:31	55° 31,79' N	4° 9,21' E	32,8	SL max. 30m / EL1
MSM50/005-3	09.01.2016	MUC	5:06	55° 31,89' N	4° 9,92' E	32,9	SL max. 34m / FR1
MSM50/005-4	09.01.2016	MUC	5:25	55° 31,89' N	4° 9,92' E	32,8	SL max. 37m / FR1
MSM50/005-5	09.01.2016	VGRAB	5:42	55° 31,89' N	4° 9,93' E	32,7	SL max. 30m / ARW
MSM50/005-6	09.01.2016	VGRAB	5:50	55° 31,89' N	4° 9,92' E	33	SL max. 30m / ARW
MSM50/005-7	09.01.2016	VGRAB	5:56	55° 31,89' N	4° 9,92' E	32,9	SL max. 30m / ARW
MSM50/005-8	09.01.2016	VGRAB	6:00	55° 31,89' N	4° 9,92' E	32,8	SL max. 31m / ARW
MSM50/005-9	09.01.2016	VGRAB	6:05	55° 31,89' N	4° 9,92' E	33	SL max. 29m / ARW
MSM50/005-10	09.01.2016	VGRAB	6:10	55° 31,89' N	4° 9,93' E	32,7	SL max. 30m / ARW
MSM50/005-11	09.01.2016	MUC	6:22	55° 31,89' N	4° 9,92' E	32,9	SL max. 40m / FR1

Station No.	Date	Gear (Abbreviation)	Time [UTC]	Position		Depth [m]	Remarks /Recovery
				Latitude	Longitude		
MSM50/005-12	09.01.2016	MUC	6:37	55° 31,89' N	4° 9,92' E	32,7	SL max. 33m / FR1
MSM50/005-13	09.01.2016	DRG	6:56	55° 31,83' N	4° 10,01' E	32,7	SL max. 90m / ARW
MSM50/005-1	09.01.2016	LANDER	7:41	55° 31,70' N	4° 9,70' E	32,7	Kammerlander recovery
MSM50/006-1	10.01.2016	CTD/RO	2:07	57° 19,05' N	8° 29,51' E	31,2	SL max. 26m / EL2
MSM50/006-2	10.01.2016	VGRAB	2:16	57° 19,05' N	8° 29,53' E	31	SL max. 29m / ARW
MSM50/006-3	10.01.2016	VGRAB	2:23	57° 19,04' N	8° 29,53' E	31,1	SL max. 28m / ARW
MSM50/006-4	10.01.2016	VGRAB	2:27	57° 19,05' N	8° 29,53' E	31,1	SL max. 30m / ARW
MSM50/006-5	10.01.2016	VGRAB	2:31	57° 19,05' N	8° 29,54' E	30,9	SL max. 28m / ARW
MSM50/006-6	10.01.2016	VGRAB	2:36	57° 19,06' N	8° 29,57' E	31,2	SL max. 29m / ARW
MSM50/006-7	10.01.2016	DRG	3:24	57° 19,14' N	8° 29,71' E	31	SL max. 90m / ARW
MSM50/007-1	10.01.2016	CTD/RO	4:38	57° 25,02' N	8° 27,03' E	53,1	SL max. 50m / EL2
MSM50/007-2	10.01.2016	VGRAB	4:50	57° 25,05' N	8° 27,09' E	53,6	SL max. 50m / ARW
MSM50/007-3	10.01.2016	VGRAB	4:57	57° 25,05' N	8° 27,09' E	53,8	SL max. 52m / ARW
MSM50/007-4	10.01.2016	VGRAB	5:03	57° 25,05' N	8° 27,09' E	53,7	SL max. 52m / ARW
MSM50/007-5	10.01.2016	VGRAB	5:09	57° 25,05' N	8° 27,09' E	53,3	SL max. 52m / ARW
MSM50/007-6	10.01.2016	VGRAB	5:15	57° 25,05' N	8° 27,09' E	53,5	SL max. 52m / ARW
MSM50/007-7	10.01.2016	DRG	5:38	57° 25,12' N	8° 27,21' E	54,2	SL max. 150m / ARW
MSM50/008-1	10.01.2016	CTD/RO	9:47	57° 46,06' N	9° 14,06' E	93,8	SL max. 89m / EL2
MSM50/008-2	10.01.2016	VGRAB	10:06	57° 46,11' N	9° 14,10' E	94,2	SL max. 96m / ARW
MSM50/008-3	10.01.2016	VGRAB	10:23	57° 46,17' N	9° 14,17' E	94,3	SL max. 94m / ARW
MSM50/008-4	10.01.2016	VGRAB	10:35	57° 46,20' N	9° 14,22' E	94,3	SL max. 95m / ARW
MSM50/008-5	10.01.2016	VGRAB	10:49	57° 46,25' N	9° 14,28' E	94,4	SL max. 95m / ARW
MSM50/008-6	10.01.2016	VGRAB	11:03	57° 46,31' N	9° 14,37' E	94,7	SL max. 96m / ARW
MSM50/008-7	10.01.2016	DRG	11:28	57° 46,47' N	9° 14,67' E	94,9	SL max. 249m / ARW
MSM50/009-1	10.01.2016	CTD/RO	12:52	57° 51,01' N	9° 10,94' E	172,3	SL max. 168m / EL2
MSM50/009-2	10.01.2016	BC	13:26	57° 51,01' N	9° 10,94' E	171,5	SL max. 181m / FR1
MSM50/009-3	10.01.2016	BC	13:55	57° 51,01' N	9° 10,94' E	171,9	SL max. 172m / FR1
MSM50/009-4	10.01.2016	BC	14:21	57° 51,02' N	9° 10,96' E	171,8	SL max. 172m / FR1
MSM50/009-5	10.01.2016	BC	14:47	57° 51,03' N	9° 10,98' E	171,9	SL max. 172m / FR1
MSM50/009-6	10.01.2016	MUC	15:15	57° 51,02' N	9° 10,98' E	171,8	SL max. 172m / FR1
MSM50/009-7	10.01.2016	DRG	15:44	57° 51,24' N	9° 11,30' E	174,8	SL max. 300m / ARW
MSM50/010-1	10.01.2016	CTD/RO	18:22	58° 2,01' N	9° 30,00' E	427,3	SL max. 409m / EL2
MSM50/010-2	10.01.2016	MUC	18:49	58° 2,01' N	9° 30,00' E	426	SL max. 450m / FR1
MSM50/010-3	10.01.2016	BC	19:33	58° 2,01' N	9° 30,00' E	426,8	SL max. 418m / FR1
MSM50/010-4	10.01.2016	BC	20:08	58° 2,01' N	9° 30,00' E	425,9	SL max. 417m / FR1
MSM50/010-5	10.01.2016	BC	20:37	58° 2,01' N	9° 30,00' E	426,7	SL max. 418m / FR1
MSM50/010-6	10.01.2016	BC	21:10	58° 2,01' N	9° 29,99' E	425,5	SL max. 418m / FR1
MSM50/010-7	10.01.2016	DRG	21:55	58° 1,90' N	9° 30,16' E	425	SL max. 1000m / ARW
MSM50/011-1	11.01.2016	CTD/RO	5:24	58° 0,00' N	9° 33,00' E	276	SL max. 270m / EL2
MSM50/011-2	11.01.2016	BC	6:00	58° 0,00' N	9° 33,00' E	276,6	SL max. 288m / FR1
MSM50/011-3	11.01.2016	BC	6:31	58° 0,00' N	9° 33,00' E	274,4	SL max. 278m / FR1
MSM50/011-4	11.01.2016	BC	6:58	58° 0,00' N	9° 33,00' E	277	SL max. 275m / FR1
MSM50/011-5	11.01.2016	BC	7:27	58° 0,00' N	9° 32,99' E	276,2	SL max. 278m / FR1
MSM50/011-6	11.01.2016	DRG	8:11	58° 0,18' N	9° 33,31' E	291,1	SL max. 600m / ARW
MSM50/012-1	11.01.2016	CTD/RO	13:03	57° 57,49' N	9° 37,99' E	305,6	SL max. 149m / FR1
MSM50/012-2	11.01.2016	VGRAB	13:37	57° 57,49' N	9° 37,99' E	156,9	SL max. 150m / ARW



Station No.	Date	Gear (Abbreviation)	Time [UTC]	Position		Depth [m]	Remarks /Recovery
				Latitude	Longitude		
MSM50/012-3	11.01.2016	VGRAB	13:55	57° 57,50' N	9° 38,00' E	156	SL max. 152m / ARW
MSM50/012-4	11.01.2016	VGRAB	14:10	57° 57,50' N	9° 38,00' E	157,7	SL max. 152m / ARW
MSM50/012-5	11.01.2016	VGRAB	14:26	57° 57,49' N	9° 38,00' E	155,9	SL max. 152m / ARW
MSM50/012-6	11.01.2016	VGRAB	14:41	57° 57,49' N	9° 38,00' E	155,6	SL max. 152m / ARW
MSM50/012-7	11.01.2016	DRG	15:09	57° 57,56' N	9° 37,76' E	175,2	SL max. 200m / ARW
MSM50/013-1	11.01.2016	CTD/RO	18:44	57° 59,01' N	9° 38,76' E	182,2	SL max. 172m / EL2
MSM50/013-2	11.01.2016	VGRAB	19:07	57° 59,01' N	9° 38,76' E	182,1	SL max. 204m / ARW
MSM50/013-3	11.01.2016	VGRAB	19:26	57° 59,01' N	9° 38,76' E	182,8	SL max. 180m / ARW
MSM50/013-4	11.01.2016	VGRAB	19:43	57° 59,01' N	9° 38,77' E	182,4	SL max. 183m / ARW
MSM50/013-5	11.01.2016	VGRAB	20:00	57° 59,01' N	9° 38,77' E	182,3	SL max. 180m / ARW
MSM50/013-6	11.01.2016	MUC	20:27	57° 59,01' N	9° 38,76' E	183,2	SL max. 180m / FR1
MSM50/013-7	11.01.2016	DRG	20:53	57° 59,13' N	9° 38,85' E	182,5	SL max. 250m / ARW
MSM50/014-1	12.01.2016	CTD/RO	2:55	58° 2,87' N	9° 34,81' E	387,5	SL max. 378m / EL2
MSM50/014-2	12.01.2016	MUC	3:21	58° 2,88' N	9° 34,82' E	386,9	SL max. 383m / FR1
MSM50/014-3	12.01.2016	BC	4:05	58° 2,88' N	9° 34,83' E	387	SL max. 381m / FR1
MSM50/014-4	12.01.2016	BC	4:34	58° 2,87' N	9° 34,83' E	386,9	SL max. 380m / FR1
MSM50/014-5	12.01.2016	BC	5:04	58° 2,88' N	9° 34,82' E	386,8	SL max. 381m / FR1
MSM50/014-6	12.01.2016	BC	5:31	58° 2,87' N	9° 34,83' E	386,8	SL max. 381m / FR1
MSM50/014-7	12.01.2016	DRG	6:03	58° 2,94' N	9° 34,62' E	393	SL max. 450m / ARW
MSM50/015-1	12.01.2016	CTD/RO	13:24	58° 7,99' N	9° 53,49' E	336,4	SL max. 329m / EL2
MSM50/015-2	12.01.2016	BC	13:50	58° 8,00' N	9° 53,49' E	336,3	SL max. 332m / FR1
MSM50/015-3	12.01.2016	BC	14:17	58° 8,00' N	9° 53,50' E	336,5	SL max. 333m / FR1
MSM50/015-4	12.01.2016	BC	14:43	58° 8,01' N	9° 53,51' E	336,5	SL max. 333m / FR1
MSM50/015-5	12.01.2016	BC	15:10	58° 8,01' N	9° 53,51' E	336,6	SL max. 331m / FR1
MSM50/015-6	12.01.2016	MUC	15:41	58° 8,01' N	9° 53,51' E	336,6	SL max. 335m / FR1
MSM50/015-7	12.01.2016	DRG	16:11	58° 8,09' N	9° 53,17' E	342,3	SL max. 380m / ARW
MSM50/016-1	12.01.2016	CTD/RO	19:13	58° 3,99' N	9° 57,99' E	163,5	SL max. 156m / EL2
MSM50/016-2	12.01.2016	VGRAB	19:41	58° 3,99' N	9° 57,99' E	163,4	SL max. 164m / ARW
MSM50/016-3	12.01.2016	VGRAB	19:56	58° 3,99' N	9° 58,00' E	163,2	SL max. 163m / ARW
MSM50/016-4	12.01.2016	VGRAB	20:15	58° 3,99' N	9° 57,99' E	163	SL max. 163m / ARW
MSM50/016-5	12.01.2016	VGRAB	20:30	58° 3,99' N	9° 57,99' E	163,2	SL max. 163m / ARW
MSM50/016-6	12.01.2016	VGRAB	20:48	58° 3,99' N	9° 57,99' E	163,3	SL max. 163m / ARW
MSM50/016-7	12.01.2016	DRG	21:20	58° 4,06' N	9° 58,15' E	164,8	SL max. 220m / ARW
MSM50/017-1	13.01.2016	CTD/RO	3:04	57° 53,50' N	10° 9,97' E	79,4	SL max. 74m / EL2
MSM50/017-2	13.01.2016	VGRAB	3:19	57° 53,51' N	10° 9,97' E	79,4	SL max. 75m / ARW
MSM50/017-3	13.01.2016	VGRAB	3:32	57° 53,51' N	10° 9,97' E	79,4	SL max. 74m / ARW
MSM50/017-4	13.01.2016	VGRAB	3:50	57° 53,50' N	10° 9,97' E	79,4	SL max. 76m / ARW
MSM50/017-5	13.01.2016	VGRAB	4:06	57° 53,51' N	10° 9,97' E	79,4	SL max. 78m / ARW
MSM50/017-6	13.01.2016	DRG	4:32	57° 53,56' N	10° 9,93' E	79,3	SL max. 100m / ARW
MSM50/018-1	13.01.2016	CTD/RO	11:15	57° 58,01' N	10° 46,93' E	187	SL max. 180m / EL2
MSM50/018-2	13.01.2016	VGRAB	11:37	57° 58,01' N	10° 46,93' E	187	SL max. 188m / ARW
MSM50/018-3	13.01.2016	VGRAB	11:59	57° 58,01' N	10° 46,93' E	187,1	SL max. 188m / ARW
MSM50/018-4	13.01.2016	VGRAB	12:18	57° 58,01' N	10° 46,93' E	187,1	SL max. 185m / ARW
MSM50/018-5	13.01.2016	VGRAB	12:37	57° 58,01' N	10° 46,93' E	187,1	SL max. 185m / ARW
MSM50/018-6	13.01.2016	MUC	13:01	57° 58,01' N	10° 46,95' E	187,3	SL max. 185m / FR1
MSM50/018-7	13.01.2016	DRG	13:26	57° 58,19' N	10° 46,83' E	188,4	SL max. 246m / ARW

Station No.	Date	Gear (Abbrevia- tion)	Time [UTC]	Position		Depth [m]	Remarks /Recovery
				Latitude	Longitude		
MSM50/019-1	13.01.2016	CTD/RO	16:45	57° 53,99' N	10° 44,00' E	145,1	SL max. 140m / EL2
MSM50/019-2	13.01.2016	VGRAB	17:00	57° 53,99' N	10° 44,00' E	145,2	SL max. 142m / ARW
MSM50/019-3	13.01.2016	VGRAB	17:23	57° 53,99' N	10° 44,00' E	145,1	SL max. 155m / ARW
MSM50/019-4	13.01.2016	VGRAB	17:36	57° 53,99' N	10° 44,00' E	145,1	SL max. 150m / ARW
MSM50/019-5	13.01.2016	VGRAB	17:49	57° 53,99' N	10° 44,00' E	145,1	SL max. 149m / ARW
MSM50/019-6	13.01.2016	VGRAB	18:02	57° 53,99' N	10° 44,00' E	145,1	SL max. 150m / ARW
MSM50/019-7	13.01.2016	DRG	18:27	57° 54,02' N	10° 43,77' E	145,4	SL max. 165m / ARW
MSM50/020-1	14.01.2016	CTD/RO	4:03	57° 50,33' N	10° 57,91' E	120,7	SL max. 59m / EL2
MSM50/020-2	14.01.2016	VGRAB	4:24	57° 50,33' N	10° 57,91' E	63,6	SL max. 61m / ARW
MSM50/020-3	14.01.2016	VGRAB	4:36	57° 50,33' N	10° 57,91' E	63,6	SL max. 60m / ARW
MSM50/020-4	14.01.2016	VGRAB	4:44	57° 50,33' N	10° 57,91' E	63,6	SL max. 66m / ARW
MSM50/020-5	14.01.2016	VGRAB	4:55	57° 50,33' N	10° 57,91' E	63,6	SL max. 65m / ARW
MSM50/020-6	14.01.2016	VGRAB	5:01	57° 50,33' N	10° 57,91' E	63,6	SL max. 61m / ARW
MSM50/020-7	14.01.2016	DRG	5:53	57° 50,40' N	10° 58,05' E	63,7	SL max. 90m / ARW
MSM50/021-1	14.01.2016	CTD/RO	10:08	57° 41,67' N	11° 7,59' E	38,4	SL max. 34m / EL2
MSM50/021-2	14.01.2016	VGRAB	10:22	57° 41,67' N	11° 7,59' E	38,3	SL max. 39m / ARW
MSM50/021-3	14.01.2016	VGRAB	10:33	57° 41,67' N	11° 7,59' E	38,3	SL max. 39m / ARW
MSM50/021-4	14.01.2016	VGRAB	10:48	57° 41,67' N	11° 7,59' E	38,3	SL max. 38m / ARW
MSM50/021-5	14.01.2016	VGRAB	10:56	57° 41,67' N	11° 7,59' E	38,3	SL max. 38m / ARW
MSM50/021-6	14.01.2016	VGRAB	11:03	57° 41,67' N	11° 7,59' E	38,3	SL max. 38m / ARW
MSM50/021-7	14.01.2016	DRG	11:43	57° 41,72' N	11° 7,68' E	38,4	SL max. 60m / ARW
MSM50/022-1	14.01.2016	CTD/RO	16:09	57° 35,14' N	11° 14,38' E	50,8	SL max. 46m / EL2
MSM50/022-2	14.01.2016	VGRAB	16:34	57° 35,14' N	11° 14,38' E	50,9	SL max. 50m / ARW
MSM50/022-3	14.01.2016	VGRAB	16:43	57° 35,14' N	11° 14,38' E	50,9	SL max. 50m / ARW
MSM50/022-4	14.01.2016	VGRAB	16:51	57° 35,14' N	11° 14,38' E	50,8	SL max. 50m / ARW
MSM50/022-5	14.01.2016	VGRAB	16:57	57° 35,14' N	11° 14,38' E	50,9	SL max. 49m / ARW
MSM50/022-6	14.01.2016	DRG	17:35	57° 35,15' N	11° 14,43' E	50,9	SL max. 70m / ARW
MSM50/023-1	14.01.2016	CTD/RO	23:11	57° 26,66' N	11° 22,16' E	69,9	SL max. 65m / EL2
MSM50/023-2	14.01.2016	VGRAB	23:30	57° 26,66' N	11° 22,16' E	69,9	SL max. 65m / ARW
MSM50/023-3	14.01.2016	VGRAB	23:40	57° 26,66' N	11° 22,16' E	69,8	SL max. 66m / ARW
MSM50/023-4	14.01.2016	VGRAB	23:49	57° 26,66' N	11° 22,17' E	69,7	SL max. 67m / ARW
MSM50/023-5	14.01.2016	VGRAB	23:57	57° 26,65' N	11° 22,17' E	69,7	SL max. 65m / ARW
MSM50/023-6	15.01.2016	DRG	0:41	57° 26,72' N	11° 22,30' E	68,4	SL max. 100m / ARW
MSM50/024-1	15.01.2016	CTD/RO	5:07	57° 17,58' N	11° 29,44' E	77,8	SL max. 73m / EL2
MSM50/024-2	15.01.2016	VGRAB	5:26	57° 17,59' N	11° 29,44' E	77,9	SL max. 72m / ARW
MSM50/024-3	15.01.2016	VGRAB	5:38	57° 17,58' N	11° 29,44' E	77,8	SL max. 76m / ARW
MSM50/024-4	15.01.2016	VGRAB	5:47	57° 17,58' N	11° 29,44' E	77,8	SL max. 75m / ARW
MSM50/024-5	15.01.2016	VGRAB	5:55	57° 17,58' N	11° 29,44' E	77,8	SL max. 75m / ARW
MSM50/024-6	15.01.2016	DRG	6:10	57° 17,66' N	11° 29,53' E	77,8	SL max. 100m / ARW
MSM50/025-1	16.01.2016	LANDER	7:08	54° 7,82' N	11° 8,00' E	23,5	Kammerlander
MSM50/025-2	16.01.2016	LANDER	7:40	54° 8,21' N	11° 7,38' E	23,1	Tripod
MSM50/025-3	16.01.2016	MOR	7:57	54° 8,55' N	11° 7,99' E	22,8	Nr. 01
MSM50/025-3	16.01.2016	MOR	7:59	54° 8,55' N	11° 7,99' E	22,9	Messgerät
MSM50/025-3	16.01.2016	MOR	8:04	54° 8,57' N	11° 7,99' E	22,9	Grundgewicht
MSM50/025-4	16.01.2016	MOR	8:23	54° 8,20' N	11° 8,61' E	23,4	Nr. 02
MSM50/025-4	16.01.2016	MOR	8:24	54° 8,20' N	11° 8,61' E	23,4	Messgerät

Station No.	Date	Gear (Abbreviation)	Time [UTC]	Position		Depth [m]	Remarks /Recovery
				Latitude	Longitude		
MSM50/025-4	16.01.2016	MOR	8:30	54° 8,20' N	11° 8,65' E	23,3	Grundgewicht
MSM50/025-5	16.01.2016	CTD/RO	8:58	54° 7,66' N	11° 8,33' E	23,7	SL max. 20m / EL2
MSM50/025-6	16.01.2016	MUC	9:10	54° 7,66' N	11° 8,32' E	23,7	SL max. 26m / FR1
MSM50/025-7	16.01.2016	VGRAB	9:28	54° 7,66' N	11° 8,33' E	23,7	SL max. 23m / ARW
MSM50/025-8	16.01.2016	VGRAB	9:36	54° 7,66' N	11° 8,33' E	23,7	SL max. 22m / ARW
MSM50/025-9	16.01.2016	VGRAB	9:42	54° 7,66' N	11° 8,33' E	23,7	SL max. 22m / ARW
MSM50/025-10	16.01.2016	VGRAB	9:48	54° 7,66' N	11° 8,33' E	23,7	SL max. 22m / ARW
MSM50/025-11	16.01.2016	DRG	10:14	54° 7,67' N	11° 8,27' E	23,8	SL max. 40m / ARW
MSM50/025-12	16.01.2016	MSS	11:58	54° 8,78' N	11° 8,59' E	22,8	
MSM50/025-12	16.01.2016	MSS	14:25	54° 7,67' N	11° 7,49' E	23,6	
MSM50/025-13	16.01.2016	CTD/RO	14:51	54° 8,21' N	11° 8,01' E	23	SL max. 20m / EL 2
MSM50/025-14	16.01.2016	MSS	15:33	54° 8,81' N	11° 8,64' E	22,6	
MSM50/025-14	16.01.2016	MSS	18:13	54° 7,67' N	11° 7,45' E	23,6	
MSM50/025-15	16.01.2016	MUC	18:20	54° 7,65' N	11° 7,42' E	23,5	SL max. 23m / FR1
MSM50/025-16	16.01.2016	CTD/RO	18:48	54° 8,20' N	11° 8,01' E	23,2	SL max. 19m / EL2
MSM50/025-17	16.01.2016	MSS	19:12	54° 7,71' N	11° 8,98' E	23,6	
MSM50/025-17	16.01.2016	MSS	19:59	54° 7,96' N	11° 8,47' E	23,5	technischer Defekt
MSM50/025-18	16.01.2016	MSS	22:15	54° 7,79' N	11° 8,81' E	23,6	
MSM50/025-18	17.01.2016	MSS	0:46	54° 8,62' N	11° 7,19' E	22,5	
MSM50/025-19	17.01.2016	CTD/RO	1:12	54° 8,17' N	11° 8,01' E	23,2	SL max. 20m/ EL2
MSM50/025-20	17.01.2016	MSS	1:38	54° 7,57' N	11° 7,48' E	23,8	
MSM50/025-20	17.01.2016	MSS	2:17	54° 7,86' N	11° 7,71' E	23,6	Probleme am Gerät
MSM50/025-20	17.01.2016	MSS	2:32	54° 7,85' N	11° 7,71' E	23,6	
MSM50/025-20	17.01.2016	MSS	2:41	54° 7,91' N	11° 7,77' E	23,6	
MSM50/025-20	17.01.2016	MSS	3:00	54° 8,07' N	11° 7,89' E	23,4	
MSM50/025-20	17.01.2016	MSS	4:35	54° 8,74' N	11° 8,60' E	22,9	
MSM50/025-21	17.01.2016	CTD/RO	5:03	54° 8,19' N	11° 8,00' E	23,4	SL max. 18m / EL2
MSM50/025-22	17.01.2016	MSS	5:26	54° 7,56' N	11° 7,59' E	23,9	
MSM50/025-22	17.01.2016	MSS	8:12	54° 8,84' N	11° 8,41' E	22,9	
MSM50/025-23	17.01.2016	CTD/RO	8:41	54° 8,20' N	11° 8,00' E	23,5	SL max. 20m / EL2
MSM50/025-24	17.01.2016	MSS	9:12	54° 7,55' N	11° 7,61' E	24	
MSM50/025-24	17.01.2016	MSS	9:59	54° 7,92' N	11° 7,83' E	23,8	Technische Probleme - Gerät an Deck
MSM50/025-24	17.01.2016	MSS	10:30	54° 7,92' N	11° 7,83' E	23,8	Fortsetzung MSS - Profil
MSM50/025-24	17.01.2016	MSS	12:21	54° 8,78' N	11° 8,35' E	23	
MSM50/025-25	17.01.2016	CTD/RO	12:47	54° 8,18' N	11° 7,99' E	23,6	SL max. 20m / EL2
MSM50/025-26	17.01.2016	MSS	13:52	54° 7,73' N	11° 8,85' E	23,8	
MSM50/025-26	17.01.2016	MSS	14:02	54° 7,79' N	11° 8,75' E	23,9	Probleme am Gerät
MSM50/025-26	17.01.2016	MSS	14:20	54° 7,82' N	11° 8,70' E	23,7	
MSM50/025-26	17.01.2016	MSS	14:31	54° 7,88' N	11° 8,59' E	23,7	Probleme am Gerät
MSM50/025-26	17.01.2016	MSS	16:41	54° 8,66' N	11° 7,30' E	22,6	Profilende, MSS ging aufgrund von techn. Mängeln nicht mehr zu Wasser
MSM50/025-3	18.01.2016	MOR	4:01	54° 8,56' N	11° 8,02' E	22,6	Schwimmlleine angepickt
MSM50/025-3	18.01.2016	MOR	4:10	54° 8,55' N	11° 8,00' E	22,6	Grundgewicht an Deck
MSM50/025-4	18.01.2016	MOR	4:43	54° 8,20' N	11° 8,66' E	23,1	Schwimmlleine angepickt
MSM50/025-4	18.01.2016	MOR	4:50	54° 8,19' N	11° 8,64' E	23,1	Grundgewicht an Deck

Station No.	Date	Gear (Abbrevia- tion)	Time [UTC]	Position		Depth [m]	Remarks /Recovery
				Latitude	Longitude		
MSM50/025-2	18.01.2016	LANDER	5:22	54° 8,19' N	11° 7,42' E	22,7	Schwimmleine angepickt
MSM50/025-2	18.01.2016	LANDER	5:29	54° 8,19' N	11° 7,40' E	22,8	Tripod
MSM50/025-1	18.01.2016	LANDER	6:59	54° 7,83' N	11° 8,14' E	23,2	Wissenschaftliches Hydrophon
MSM50/025-1	18.01.2016	LANDER	7:10	54° 7,87' N	11° 8,07' E	23,2	Schwimmleine angepickt
MSM50/025-1	18.01.2016	LANDER	7:17	54° 7,84' N	11° 8,02' E	23,3	Schwimmleine ohne Gerät an Deck
MSM50/025-1	18.01.2016	LANDER	8:13	54° 7,83' N	11° 8,00' E	23,3	Videoausrüstung zu Wasser
MSM50/025-1	18.01.2016	LANDER	8:19	54° 7,84' N	11° 8,01' E	23,2	gesichtet
MSM50/025-1	18.01.2016	LANDER	8:33	54° 7,84' N	11° 8,01' E	23,3	Gerät am Haken
MSM50/025-1	18.01.2016	LANDER	8:36	54° 7,84' N	11° 8,01' E	23,3	Kammerlander
MSM50/026-1	18.01.2016	LANDER	15:09	54° 13,04' N	11° 35,16' E	27,4	Kammerlander
MSM50/026-2	18.01.2016	LANDER	15:38	54° 13,39' N	11° 34,57' E	26,4	Tripod
MSM50/026-3	18.01.2016	MOR	16:02	54° 13,74' N	11° 35,16' E	26,3	Nr. 02
MSM50/026-3	18.01.2016	MOR	16:04	54° 13,74' N	11° 35,16' E	26,4	Messgerät
MSM50/026-3	18.01.2016	MOR	16:12	54° 13,72' N	11° 35,17' E	26,3	Grundgewicht
MSM50/026-4	18.01.2016	MOR	16:36	54° 13,39' N	11° 35,75' E	27,1	Nr. 01
MSM50/026-4	18.01.2016	MOR	16:38	54° 13,39' N	11° 35,75' E	27	Messgerät
MSM50/026-4	18.01.2016	MOR	16:46	54° 13,37' N	11° 35,77' E	27,1	Grundgewicht
MSM50/026-5	18.01.2016	CTD/RO	17:13	54° 12,85' N	11° 35,51' E	28,3	SL max. 24m / EL2
MSM50/026-6	18.01.2016	MUC	17:26	54° 12,85' N	11° 35,51' E	28,2	SL max. 29m / FR1
MSM50/026-7	18.01.2016	VGRAB	17:41	54° 12,85' N	11° 35,51' E	28,3	SL max. 28m / ARW
MSM50/026-8	18.01.2016	VGRAB	17:48	54° 12,85' N	11° 35,51' E	28,3	SL max. 26m / ARW
MSM50/026-9	18.01.2016	VGRAB	17:53	54° 12,85' N	11° 35,51' E	28,3	SL max. 26m / ARW
MSM50/026-10	18.01.2016	VGRAB	17:58	54° 12,85' N	11° 35,51' E	28,3	SL max. 25m / ARW
MSM50/026-11	18.01.2016	DRG	18:24	54° 12,81' N	11° 35,50' E	28,5	SL max. 45m / ARW
MSM50/026-12	18.01.2016	MSS	19:28	54° 13,82' N	11° 36,05' E	26,5	
MSM50/026-12	18.01.2016	MSS	22:09	54° 12,99' N	11° 34,28' E	26,8	
MSM50/026-13	18.01.2016	CTD/RO	22:37	54° 13,40' N	11° 35,16' E	26,8	SL max. 22m / EL2
MSM50/026-14	18.01.2016	MSS	23:03	54° 13,70' N	11° 36,17' E	27	
MSM50/026-14	19.01.2016	MSS	1:15	54° 13,12' N	11° 34,16' E	26,5	
MSM50/026-15	19.01.2016	CTD/RO	1:41	54° 13,41' N	11° 35,19' E	26,9	SL max. 23m / EL2
MSM50/026-16	19.01.2016	MSS	2:03	54° 13,73' N	11° 36,15' E	26,9	
MSM50/026-16	19.01.2016	MSS	4:17	54° 13,11' N	11° 34,20' E	26,5	
MSM50/026-17	19.01.2016	CTD/RO	4:47	54° 13,40' N	11° 35,16' E	0	SL max. 22m / EL2
MSM50/026-18	19.01.2016	MSS	5:11	54° 13,84' N	11° 36,06' E	26,5	
MSM50/026-18	19.01.2016	MSS	6:18	54° 13,45' N	11° 35,26' E	26,7	Vereisung der Kabeltrommel
MSM50/026-19	19.01.2016	MUC	6:47	54° 12,88' N	11° 35,58' E	28,2	SL max. 27m / FR1
MSM50/026-20	19.01.2016	MSS	7:48	54° 13,84' N	11° 36,03' E	26,5	
MSM50/026-20	19.01.2016	MSS	10:07	54° 12,94' N	11° 34,26' E	26,6	
MSM50/026-21	19.01.2016	CTD/RO	10:35	54° 13,40' N	11° 35,16' E	26,5	SL max. 22m / EL2
MSM50/026-22	19.01.2016	MSS	11:05	54° 13,79' N	11° 35,92' E	26,4	
MSM50/026-22	19.01.2016	MSS	13:06	54° 12,99' N	11° 34,35' E	26,7	
MSM50/026-23	19.01.2016	CTD/RO	13:33	54° 13,40' N	11° 35,17' E	26,6	SL max. 22m / EL2
MSM50/026-24	19.01.2016	MSS	13:54	54° 13,87' N	11° 35,98' E	26,4	
MSM50/026-24	19.01.2016	MSS	16:03	54° 12,95' N	11° 34,41' E	26,6	
MSM50/026-25	19.01.2016	CTD/RO	16:27	54° 13,40' N	11° 35,17' E	26,6	SL max. 23m / EL2

Station No.	Date	Gear (Abbrevia- tion)	Time [UTC]	Position		Depth [m]	Remarks /Recovery
				Latitude	Longitude		
MSM50/026-26	19.01.2016	MSS	16:50	54° 13,72' N	11° 36,20' E	26,7	
MSM50/026-26	19.01.2016	MSS	19:05	54° 13,09' N	11° 34,17' E	26,4	
MSM50/026-27	19.01.2016	CTD/RO	19:31	54° 13,36' N	11° 35,22' E	26,8	SL max. 22m / EL2
MSM50/026-28	19.01.2016	MSS	19:57	54° 13,55' N	11° 36,27' E	27	
MSM50/026-28	19.01.2016	MSS	21:03	54° 13,40' N	11° 35,17' E	26,8	Kabelschaden
MSM50/026-29	19.01.2016	MSS	23:10	54° 13,56' N	11° 36,22' E	27,1	
MSM50/026-29	20.01.2016	MSS	1:18	54° 13,25' N	11° 34,12' E	26,6	
MSM50/026-30	20.01.2016	CTD/RO	1:42	54° 13,39' N	11° 35,18' E	27	SL max. 23m / EL2
MSM50/026-31	20.01.2016	MSS	2:04	54° 12,86' N	11° 35,85' E	28,9	
MSM50/026-31	20.01.2016	MSS	4:14	54° 13,88' N	11° 34,47' E	26,3	
MSM50/026-32	20.01.2016	CTD/RO	4:40	54° 13,40' N	11° 35,15' E	27,1	SL max. 23m / EL2
MSM50/026-33	20.01.2016	MSS	5:02	54° 12,92' N	11° 35,96' E	28,9	
MSM50/026-33	20.01.2016	MSS	7:19	54° 13,88' N	11° 34,33' E	26,2	
MSM50/026-34	20.01.2016	CTD/RO	7:43	54° 13,40' N	11° 35,14' E	27,1	SL max. 22m / EL2
MSM50/026-35	20.01.2016	MSS	8:06	54° 13,24' N	11° 36,29' E	28	
MSM50/026-35	20.01.2016	MSS	10:20	54° 13,55' N	11° 34,08' E	26,3	
MSM50/026-36	20.01.2016	CTD/RO	10:45	54° 13,40' N	11° 35,15' E	27,2	SL max. 22m / EL2
MSM50/026-37	20.01.2016	MSS	11:04	54° 13,17' N	11° 36,29' E	28,4	
MSM50/026-37	20.01.2016	MSS	12:45	54° 13,50' N	11° 34,66' E	26,9	
MSM50/026-2	20.01.2016	LANDER	13:03	54° 13,40' N	11° 34,60' E	26,9	Schwimmleine angepickt
MSM50/026-2	20.01.2016	LANDER	13:13	54° 13,39' N	11° 34,57' E	26,9	Tripod
MSM50/026-3	20.01.2016	MOR	13:33	54° 13,72' N	11° 35,19' E	26,9	Schwimmleine angepickt
MSM50/026-3	20.01.2016	MOR	13:38	54° 13,72' N	11° 35,17' E	26,9	Grundgewicht an Deck
MSM50/026-3	20.01.2016	MOR	13:47	54° 13,74' N	11° 35,15' E	26,9	Nr. 02
MSM50/026-4	20.01.2016	MOR	14:04	54° 13,37' N	11° 35,79' E	27,7	Schwimmleine angepickt
MSM50/026-4	20.01.2016	MOR	14:09	54° 13,38' N	11° 35,77' E	27,7	Grundgewicht an Deck
MSM50/026-4	20.01.2016	MOR	14:09	54° 13,38' N	11° 35,77' E	27,7	Nr. 01
MSM50/026-1	20.01.2016	LANDER	14:26	54° 13,03' N	11° 35,19' E	28	Schwimmleine angepickt
MSM50/026-1	20.01.2016	LANDER	14:35	54° 13,04' N	11° 35,16' E	27,9	Kammerlander recovery
MSM50/026-38	20.01.2016	MSS	16:00	54° 13,42' N	11° 35,15' E	27,2	
MSM50/026-38	20.01.2016	MSS	18:04	54° 11,72' N	11° 37,15' E	9,5	
MSM50/027-1	20.01.2016	LANDER	23:08	54° 14,65' N	11° 56,59' E	18,5	Kammerlander
MSM50/027-2	20.01.2016	MOR	23:28	54° 15,00' N	11° 56,02' E	19,6	Nr. 01
MSM50/027-2	20.01.2016	MOR	23:29	54° 15,00' N	11° 56,02' E	19,6	Messgerät
MSM50/027-2	20.01.2016	MOR	23:36	54° 15,03' N	11° 56,02' E	19,6	Grundgewicht
MSM50/027-3	20.01.2016	MOR	23:54	54° 15,35' N	11° 56,62' E	19	Nr. 02
MSM50/027-3	20.01.2016	MOR	23:56	54° 15,35' N	11° 56,62' E	19,1	Messgerät
MSM50/027-3	21.01.2016	MOR	0:01	54° 15,37' N	11° 56,62' E	19,1	Grundgewicht
MSM50/027-4	21.01.2016	LANDER	0:25	54° 15,01' N	11° 57,21' E	19,8	Tripod
MSM50/027-5	21.01.2016	CTD/RO	0:50	54° 14,50' N	11° 56,23' E	19,2	SL max. 16m / EL2
MSM50/027-6	21.01.2016	MUC	1:01	54° 14,50' N	11° 56,23' E	19,3	SL max. 16m / FR1
MSM50/027-7	21.01.2016	VGRAB	1:10	54° 14,50' N	11° 56,23' E	19,3	SL max. 16m / ARW
MSM50/027-8	21.01.2016	VGRAB	1:20	54° 14,50' N	11° 56,23' E	19,3	SL max. 16m / ARW
MSM50/027-9	21.01.2016	VGRAB	1:25	54° 14,50' N	11° 56,23' E	19,3	SL max. 17m / ARW
MSM50/027-10	21.01.2016	VGRAB	1:28	54° 14,50' N	11° 56,23' E	19,3	SL max. 18m / ARW
MSM50/027-11	21.01.2016	DRG	1:51	54° 14,44' N	11° 56,18' E	19,3	SL max. 60m / ARW

Station No.	Date	Gear (Abbreviation)	Time [UTC]	Position		Depth [m]	Remarks /Recovery
				Latitude	Longitude		
MSM50/027-12	21.01.2016	MSS	4:58	54° 14,52' N	11° 57,39' E	18,7	
MSM50/027-12	21.01.2016	MSS	7:25	54° 15,49' N	11° 55,80' E	19,4	
MSM50/027-13	21.01.2016	CTD/RO	7:54	54° 14,99' N	11° 56,61' E	18,6	SL max. 15m / EL2
MSM50/027-14	21.01.2016	MSS	8:23	54° 14,46' N	11° 57,16' E	18,1	
MSM50/027-14	21.01.2016	MSS	10:29	54° 15,52' N	11° 56,06' E	19	
MSM50/027-15	21.01.2016	CTD/RO	10:56	54° 14,99' N	11° 56,62' E	18,5	SL max. 16m / EL2
MSM50/027-16	21.01.2016	MSS	11:15	54° 14,62' N	11° 57,60' E	19	
MSM50/027-16	21.01.2016	MSS	13:31	54° 15,47' N	11° 55,90' E	19,4	
MSM50/027-17	21.01.2016	CTD/RO	13:55	54° 14,99' N	11° 56,64' E	18,6	SL max. 16m / EL2
MSM50/027-18	21.01.2016	MUC	14:14	54° 14,48' N	11° 56,32' E	19,1	SL max. 18m / FR1
MSM50/027-19	21.01.2016	MSS	14:41	54° 15,19' N	11° 57,67' E	19,7	
MSM50/027-19	21.01.2016	MSS	16:48	54° 14,81' N	11° 55,60' E	19,8	
MSM50/027-20	21.01.2016	CTD/RO	17:14	54° 15,00' N	11° 56,63' E	18,5	SL max. 12m / EL2
MSM50/027-21	21.01.2016	MSS	17:38	54° 15,35' N	11° 57,56' E	19,8	
MSM50/027-21	21.01.2016	MSS	19:45	54° 14,67' N	11° 55,71' E	19,6	
MSM50/027-22	21.01.2016	CTD/RO	20:12	54° 15,00' N	11° 56,60' E	18,5	SL max. 24m / EL2
MSM50/027-23	21.01.2016	MSS	20:33	54° 15,25' N	11° 57,67' E	19,5	
MSM50/027-23	21.01.2016	MSS	22:41	54° 14,77' N	11° 55,64' E	19,6	
MSM50/027-24	21.01.2016	CTD/RO	23:06	54° 14,99' N	11° 56,58' E	18,4	SL max. 15m / EL2
MSM50/027-24	21.01.2016	CTD/RO	23:09	54° 14,99' N	11° 56,59' E	18,4	
MSM50/027-25	21.01.2016	MSS	23:27	54° 15,32' N	11° 57,63' E	19,6	
MSM50/027-25	22.01.2016	MSS	0:33	54° 15,01' N	11° 56,63' E	18,5	
MSM50/027-26	22.01.2016	MSS	12:02	54° 14,64' N	11° 55,65' E	19,6	
MSM50/027-26	22.01.2016	MSS	14:09	54° 15,30' N	11° 57,53' E	19,7	
MSM50/027-27	22.01.2016	CTD/RO	14:36	54° 15,02' N	11° 56,60' E	18,5	SL max. 15m / EL2
MSM50/027-28	22.01.2016	MSS	14:58	54° 15,34' N	11° 57,60' E	19,7	
MSM50/027-28	22.01.2016	MSS	15:38	54° 15,13' N	11° 57,00' E	19,5	Unterbrechung wegen Abgabe Besatzungsmitglied
MSM50/027-28	22.01.2016	MSS	15:52	54° 15,11' N	11° 56,92' E	19,2	Fortsetzung
MSM50/027-28	22.01.2016	MSS	17:05	54° 14,67' N	11° 55,66' E	19,7	
MSM50/027-29	22.01.2016	CTD/RO	17:31	54° 15,01' N	11° 56,61' E	18,5	SL max. 15m / EL2
MSM50/027-30	22.01.2016	MSS	17:52	54° 15,58' N	11° 56,06' E	18,8	
MSM50/027-30	22.01.2016	MSS	20:06	54° 14,47' N	11° 57,09' E	17,8	
MSM50/027-2	22.01.2016	MOR	20:56	54° 15,03' N	11° 56,00' E	19,2	Schwimmleine angepickt
MSM50/027-2	22.01.2016	MOR	21:00	54° 15,02' N	11° 56,03' E	19,2	Grundgewicht an Deck
MSM50/027-2	22.01.2016	MOR	21:07	54° 15,00' N	11° 56,03' E	19,2	Nr. 01
MSM50/027-3	22.01.2016	MOR	21:27	54° 15,37' N	11° 56,60' E	18,6	Schwimmleine angepickt
MSM50/027-3	22.01.2016	MOR	21:31	54° 15,37' N	11° 56,62' E	18,6	Grundgewicht an Deck
MSM50/027-3	22.01.2016	MOR	21:35	54° 15,35' N	11° 56,63' E	18,6	Nr. 02
MSM50/027-4	22.01.2016	LANDER	21:50	54° 15,00' N	11° 57,20' E	19,2	Schwimmleine angepickt
MSM50/027-4	22.01.2016	LANDER	21:58	54° 15,00' N	11° 57,22' E	19,3	Tripod
MSM50/027-1	22.01.2016	LANDER	22:33	54° 14,65' N	11° 56,60' E	18	Schwimmleine angepickt
MSM50/027-1	22.01.2016	LANDER	22:40	54° 14,65' N	11° 56,61' E	18	Kammerlander recovery
MSM50/028-1	23.01.2016	LANDER	7:29	54° 52,97' N	13° 51,32' E	47,4	Kammerlander
MSM50/028-2	23.01.2016	LANDER	8:12	54° 53,10' N	13° 51,62' E	47,4	Tripod
MSM50/028-3	23.01.2016	CTD/RO	8:43	54° 53,11' N	13° 51,27' E	47,6	SL max. 43m / EL2

Station No.	Date	Gear (Abbrevia- tion)	Time [UTC]	Position		Depth [m]	Remarks /Recovery
				Latitude	Longitude		
MSM50/028-4	23.01.2016	MUC	8:55	54° 53,11' N	13° 51,27' E	47,6	SL max. 46m / FR1
MSM50/028-5	23.01.2016	VGRAB	9:11	54° 53,11' N	13° 51,27' E	47,5	SL max. 46m / ARW
MSM50/028-6	23.01.2016	VGRAB	9:21	54° 53,11' N	13° 51,27' E	47,5	SL max. 46m / ARW
MSM50/028-7	23.01.2016	VGRAB	9:27	54° 53,11' N	13° 51,27' E	47,4	SL max. 45m / ARW
MSM50/028-8	23.01.2016	VGRAB	9:34	54° 53,11' N	13° 51,27' E	47,4	SL max. 46m / ARW
MSM50/028-9	23.01.2016	DRG	9:48	54° 53,14' N	13° 51,32' E	47,5	SL max. 60m / ARW
MSM50/028-2	23.01.2016	LANDER	10:09	54° 53,21' N	13° 51,66' E	47,5	Tripod
MSM50/028-2	23.01.2016	LANDER	10:20	54° 53,10' N	13° 51,62' E	47,4	Schwimmleine angepickt
MSM50/028-2	23.01.2016	LANDER	10:24	54° 53,10' N	13° 51,62' E	47,4	Tripod
MSM50/028-10	23.01.2016	LANDER	11:11	54° 53,10' N	13° 51,62' E	47,6	Tripod
MSM50/028-10	23.01.2016	LANDER	11:19	54° 53,10' N	13° 51,62' E	47,4	via Releaser MSM
MSM50/028-11	23.01.2016	MSS	13:18	54° 52,51' N	13° 52,76' E	46,9	
MSM50/028-11	23.01.2016	MSS	15:30	54° 52,60' N	13° 50,48' E	47,2	
MSM50/028-12	23.01.2016	CTD/RO	15:58	54° 52,54' N	13° 51,48' E	47,1	SL max. 42m / EL2
MSM50/028-13	23.01.2016	MSS	16:21	54° 52,55' N	13° 52,70' E	46,8	
MSM50/028-13	23.01.2016	MSS	18:29	54° 52,55' N	13° 50,48' E	47,3	
MSM50/028-14	23.01.2016	MSS	18:53	54° 52,53' N	13° 52,65' E	47	
MSM50/028-14	23.01.2016	MSS	21:07	54° 52,54' N	13° 50,33' E	47,3	
MSM50/028-15	23.01.2016	CTD/RO	21:35	54° 52,49' N	13° 51,50' E	47	SL max. 41m / EL2
MSM50/028-16	23.01.2016	MSS	22:15	54° 52,55' N	13° 52,65' E	47	
MSM50/028-16	24.01.2016	MSS	0:24	54° 52,55' N	13° 50,41' E	47,3	
MSM50/028-17	24.01.2016	CTD/RO	0:50	54° 52,52' N	13° 51,66' E	47	SL max. 42m / EL2
MSM50/028-18	24.01.2016	MSS	1:11	54° 52,54' N	13° 52,73' E	46,9	
MSM50/028-18	24.01.2016	MSS	3:23	54° 52,55' N	13° 50,43' E	47,3	
MSM50/028-19	24.01.2016	CTD/RO	3:51	54° 52,55' N	13° 51,57' E	47,1	SL max. 42m / EL2
MSM50/028-20	24.01.2016	MSS	4:13	54° 52,55' N	13° 52,71' E	46,9	
MSM50/028-20	24.01.2016	MSS	6:24	54° 52,55' N	13° 50,46' E	47,2	
MSM50/028-21	24.01.2016	CTD/RO	6:53	54° 52,55' N	13° 51,56' E	47	SL max. 41m / EL2
MSM50/028-22	24.01.2016	MSS	7:15	54° 52,56' N	13° 52,75' E	46,8	
MSM50/028-22	24.01.2016	MSS	9:32	54° 52,55' N	13° 50,38' E	47,2	
MSM50/028-23	24.01.2016	CTD/RO	10:02	54° 52,54' N	13° 51,62' E	47	SL max. 42m / EL2
MSM50/028-24	24.01.2016	MSS	11:19	54° 52,51' N	13° 52,77' E	46,8	
MSM50/028-24	24.01.2016	MSS	12:32	54° 52,54' N	13° 51,50' E	47,1	
MSM50/028-25	24.01.2016	MUC	12:52	54° 53,11' N	13° 51,31' E	47,5	mobiler Spillkopf
MSM50/028-26	24.01.2016	MUC	13:07	54° 53,11' N	13° 51,31' E	47,5	mobiler Spillkopf
MSM50/028-10	24.01.2016	LANDER	13:43	54° 53,15' N	13° 51,77' E	47,4	Tripod
MSM50/028-10	24.01.2016	LANDER	14:08	54° 53,11' N	13° 51,65' E	47,4	Schwimmleine angepickt
MSM50/028-10	24.01.2016	LANDER	14:12	54° 53,11' N	13° 51,65' E	47,4	Tripod
MSM50/028-27	24.01.2016	MSS	14:29	54° 52,54' N	13° 52,72' E	46,8	
MSM50/028-27	24.01.2016	MSS	16:44	54° 52,55' N	13° 50,39' E	47,2	
MSM50/028-28	24.01.2016	CTD/RO	17:13	54° 52,57' N	13° 51,54' E	47,1	SL max. 42m / EL2
MSM50/028-1	24.01.2016	LANDER	18:36	54° 52,98' N	13° 51,36' E	47,3	Schwimmleine angepickt
MSM50/028-1	24.01.2016	LANDER	18:48	54° 52,98' N	13° 51,33' E	47,3	Kammerlander
MSM50/028-29	24.01.2016	MSS	19:25	54° 52,12' N	13° 51,98' E	46,7	
MSM50/028-29	24.01.2016	MSS	22:50	54° 46,53' N	13° 59,85' E	39,8	Wegen Unterwasserhindernis
MSM50/028-29	24.01.2016	MSS	22:55	54° 46,37' N	14° 0,09' E	39,7	

Station No.	Date	Gear (Abbrevia- tion)	Time [UTC]	Position		Depth [m]	Remarks /Recovery
				Latitude	Longitude		
MSM50/028-29	24.01.2016	MSS	23:44	54° 44,98' N	14° 2,07' E	29	
MSM50/029-1	25.01.2016	LANDER	2:15	54° 26,13' N	14° 3,34' E	15,5	Kammerlander
MSM50/029-2	25.01.2016	MOR	2:31	54° 26,48' N	14° 2,75' E	16,4	Nr. 01
MSM50/029-2	25.01.2016	MOR	2:32	54° 26,49' N	14° 2,75' E	16,4	Messgerät
MSM50/029-2	25.01.2016	MOR	2:37	54° 26,47' N	14° 2,72' E	16,3	Grundgewicht
MSM50/029-3	25.01.2016	MOR	3:02	54° 26,83' N	14° 3,35' E	16,3	Nr. 02
MSM50/029-3	25.01.2016	MOR	3:03	54° 26,83' N	14° 3,35' E	16,3	Messgerät
MSM50/029-3	25.01.2016	MOR	3:08	54° 26,82' N	14° 3,33' E	16,3	Grundgewicht
MSM50/029-4	25.01.2016	LANDER	3:35	54° 26,48' N	14° 3,95' E	15,8	Tripod
MSM50/029-5	25.01.2016	CTD/RO	3:59	54° 25,98' N	14° 3,80' E	15,8	SL max. 12m / EL2
MSM50/029-6	25.01.2016	MUC	4:08	54° 25,98' N	14° 3,80' E	15,8	mobiler Spillkopf
MSM50/029-7	25.01.2016	MUC	4:20	54° 25,98' N	14° 3,80' E	15,8	mobiler Spillkopf
MSM50/029-8	25.01.2016	MUC	4:34	54° 25,98' N	14° 3,80' E	15,8	mobiler Spillkopf
MSM50/029-9	25.01.2016	VGRAB	4:43	54° 25,98' N	14° 3,80' E	15,8	SL max. 12m / ARW
MSM50/029-10	25.01.2016	VGRAB	4:48	54° 25,98' N	14° 3,80' E	15,8	SL max. 12m / ARW
MSM50/029-11	25.01.2016	VGRAB	4:51	54° 25,98' N	14° 3,80' E	15,8	SL max. 13m / ARW
MSM50/029-12	25.01.2016	VGRAB	4:56	54° 25,98' N	14° 3,80' E	15,8	SL max. 12m / ARW
MSM50/029-13	25.01.2016	VGRAB	4:59	54° 25,98' N	14° 3,80' E	15,8	SL max. 12m / ARW
MSM50/029-14	25.01.2016	DRG	5:17	54° 25,90' N	14° 3,82' E	15,7	SL max. 45m / ARW
MSM50/029-15	25.01.2016	MSS	6:01	54° 26,71' N	14° 4,49' E	16	
MSM50/029-15	25.01.2016	MSS	6:31	54° 26,62' N	14° 4,00' E	16,2	
MSM50/029-16	25.01.2016	CTD/RO	6:44	54° 26,62' N	14° 3,99' E	16,2	SL max. 13m / EL2
MSM50/029-17	25.01.2016	MSS	9:00	54° 26,33' N	14° 4,50' E	16,4	
MSM50/029-17	25.01.2016	MSS	9:31	54° 26,41' N	14° 3,98' E	15,4	
MSM50/029-18	25.01.2016	CTD/RO	9:46	54° 26,41' N	14° 3,95' E	15,5	SL max 12m / EL2
MSM50/029-19	25.01.2016	MSS	12:02	54° 26,34' N	14° 4,45' E	16,4	
MSM50/029-19	25.01.2016	MSS	12:31	54° 26,41' N	14° 3,97' E	15,5	
MSM50/029-20	25.01.2016	CTD/RO	12:43	54° 26,41' N	14° 3,95' E	15,5	SL max. 12m / EL2
MSM50/029-21	25.01.2016	MUC	13:02	54° 25,95' N	14° 3,81' E	15,9	mobiler Spill
MSM50/029-22	25.01.2016	MUC	13:14	54° 25,95' N	14° 3,81' E	15,9	mobiler Spillkopf
MSM50/029-23	25.01.2016	MUC	13:24	54° 25,95' N	14° 3,80' E	15,8	mobiler Spillkopf
MSM50/029-24	25.01.2016	MSS	15:00	54° 26,34' N	14° 4,45' E	16,4	
MSM50/029-24	25.01.2016	MSS	15:32	54° 26,42' N	14° 3,94' E	15,5	
MSM50/029-25	25.01.2016	CTD/RO	15:45	54° 26,42' N	14° 3,92' E	15,5	SL max. 11m / EL2
MSM50/029-26	25.01.2016	MSS	18:02	54° 26,72' N	14° 4,42' E	16	
MSM50/029-26	25.01.2016	MSS	18:37	54° 26,60' N	14° 3,85' E	16,3	
MSM50/029-27	25.01.2016	CTD/RO	18:51	54° 26,60' N	14° 3,84' E	16,3	SL max. 12m / EL2
MSM50/029-28	25.01.2016	MSS	21:01	54° 26,72' N	14° 4,45' E	16	
MSM50/029-28	25.01.2016	MSS	21:37	54° 26,60' N	14° 3,86' E	16,2	
MSM50/029-29	25.01.2016	CTD/RO	21:49	54° 26,60' N	14° 3,85' E	16,3	SL max. 12m / EL2
MSM50/029-30	26.01.2016	MSS	0:00	54° 27,07' N	14° 3,99' E	16	
MSM50/029-30	26.01.2016	MSS	0:30	54° 26,81' N	14° 3,71' E	16,5	
MSM50/029-31	26.01.2016	CTD/RO	0:40	54° 26,81' N	14° 3,71' E	16,5	SL max. 13m / EL2
MSM50/029-32	26.01.2016	MSS	2:59	54° 27,07' N	14° 3,99' E	16	
MSM50/029-32	26.01.2016	MSS	3:31	54° 26,80' N	14° 3,70' E	16,4	
MSM50/029-33	26.01.2016	CTD/RO	3:41	54° 26,79' N	14° 3,69' E	16,4	SL max. 13m / EL2



Station No.	Date	Gear (Abbreviation)	Time [UTC]	Position		Depth [m]	Remarks /Recovery
				Latitude	Longitude		
MSM50/029-34	26.01.2016	MSS	6:00	54° 27,02' N	14° 4,11' E	16,3	
MSM50/029-34	26.01.2016	MSS	6:32	54° 26,77' N	14° 3,76' E	16,5	
MSM50/029-35	26.01.2016	MSS	9:02	54° 26,72' N	14° 4,44' E	15,8	
MSM50/029-35	26.01.2016	MSS	9:33	54° 26,62' N	14° 3,94' E	16	
MSM50/029-4	26.01.2016	LANDER	12:08	54° 26,50' N	14° 4,03' E	15,5	Schwimmleine angepickt
MSM50/029-4	26.01.2016	LANDER	12:12	54° 26,50' N	14° 4,04' E	15,6	Tripod
MSM50/029-3	26.01.2016	MOR	12:38	54° 26,81' N	14° 3,34' E	16,2	Schwimmleine angepickt
MSM50/029-3	26.01.2016	MOR	12:44	54° 26,82' N	14° 3,34' E	16,2	Grundgewicht an Deck
MSM50/029-3	26.01.2016	MOR	12:47	54° 26,83' N	14° 3,35' E	16,1	Nr. 02
MSM50/029-2	26.01.2016	MOR	13:05	54° 26,47' N	14° 2,74' E	16,2	Schwimmleine angepickt
MSM50/029-2	26.01.2016	MOR	13:09	54° 26,47' N	14° 2,73' E	16,1	Grundgewicht an Deck
MSM50/029-2	26.01.2016	MOR	13:14	54° 26,48' N	14° 2,74' E	16,2	Nr. 01
MSM50/029-1	26.01.2016	LANDER	14:01	54° 26,17' N	14° 3,43' E	15,2	Schwimmleine angepickt
MSM50/029-1	26.01.2016	LANDER	14:08	54° 26,16' N	14° 3,43' E	15,2	Kammerlander recovery
MSM50/030-1	26.01.2016	LANDER	20:31	54° 38,40' N	13° 35,06' E	22,9	Kammerlander
MSM50/030-2	26.01.2016	MOR	20:51	54° 38,79' N	13° 34,51' E	23,1	Nr. 02
MSM50/030-2	26.01.2016	MOR	20:53	54° 38,79' N	13° 34,51' E	23,1	Messgerät
MSM50/030-2	26.01.2016	MOR	20:56	54° 38,79' N	13° 34,54' E	23,1	Grundgewicht
MSM50/030-3	26.01.2016	MOR	21:13	54° 39,14' N	13° 35,11' E	23,5	Nr. 01
MSM50/030-3	26.01.2016	MOR	21:14	54° 39,14' N	13° 35,11' E	23,5	Messgerät
MSM50/030-3	26.01.2016	MOR	21:15	54° 39,14' N	13° 35,11' E	23,5	Grundgewicht
MSM50/030-4	26.01.2016	LANDER	21:36	54° 38,76' N	13° 35,68' E	23,5	Tripod
MSM50/030-5	26.01.2016	CTD/RO	22:01	54° 38,45' N	13° 35,60' E	23,2	SL max. 24m / EL2
MSM50/030-6	26.01.2016	MUC	22:13	54° 38,45' N	13° 35,60' E	23,3	mobiler Spillkopf
MSM50/030-7	26.01.2016	VGRAB	22:36	54° 38,46' N	13° 35,60' E	29,9	SL max. 27m / ARW
MSM50/030-8	26.01.2016	VGRAB	22:44	54° 38,45' N	13° 35,60' E	29,9	SL max. 28m / ARW
MSM50/030-9	26.01.2016	VGRAB	22:49	54° 38,45' N	13° 35,60' E	29,9	SL max. 27m / ARW
MSM50/030-10	26.01.2016	VGRAB	22:55	54° 38,45' N	13° 35,60' E	29,9	SL max. 27m / ARW
MSM50/030-11	26.01.2016	DRG	23:22	54° 38,41' N	13° 35,72' E	29,9	SL max. 60m / ARW
MSM50/030-12	27.01.2016	MSS	0:00	54° 39,33' N	13° 35,77' E	30,5	
MSM50/030-12	27.01.2016	MSS	2:09	54° 38,30' N	13° 34,43' E	29,2	
MSM50/030-13	27.01.2016	CTD/RO	2:33	54° 38,80' N	13° 35,22' E	30	SL max. 25m / EL2
MSM50/030-14	27.01.2016	MSS	2:56	54° 39,15' N	13° 36,00' E	30,5	
MSM50/030-14	27.01.2016	MSS	5:03	54° 38,44' N	13° 34,16' E	29	
MSM50/030-15	27.01.2016	CTD/RO	5:30	54° 38,79' N	13° 35,09' E	29,8	SL max. 25m / EL2
MSM50/030-16	27.01.2016	MSS	6:03	54° 39,24' N	13° 36,00' E	30,4	
MSM50/030-16	27.01.2016	MSS	8:54	54° 38,36' N	13° 34,19' E	28,9	
MSM50/030-17	27.01.2016	CTD/RO	9:19	54° 38,77' N	13° 35,08' E	29,6	SL max. 25m / EL2
MSM50/030-18	27.01.2016	MSS	9:43	54° 39,22' N	13° 35,94' E	30,2	
MSM50/030-18	27.01.2016	MSS	12:38	54° 38,37' N	13° 34,23' E	28,9	
MSM50/030-19	27.01.2016	CTD/RO	13:04	54° 38,81' N	13° 35,12' E	29,7	SL max. 25m / EL2
MSM50/030-20	27.01.2016	MSS	13:24	54° 39,35' N	13° 35,80' E	30,3	
MSM50/030-20	27.01.2016	MSS	16:25	54° 38,27' N	13° 34,41' E	29	
MSM50/030-21	27.01.2016	MSS	16:47	54° 39,30' N	13° 35,85' E	30,3	
MSM50/030-21	27.01.2016	MSS	19:42	54° 38,32' N	13° 34,36' E	29,1	
MSM50/030-22	27.01.2016	CTD/RO	20:07	54° 38,79' N	13° 35,12' E	29,8	SL max. 25m / ARW

Station No.	Date	Gear (Abbreviation)	Time [UTC]	Position		Depth [m]	Remarks /Recovery
				Latitude	Longitude		
MSM50/030-23	27.01.2016	MSS	20:30	54° 39,30' N	13° 35,88' E	30,4	
MSM50/030-23	27.01.2016	MSS	23:14	54° 38,32' N	13° 34,26' E	28,9	
MSM50/030-24	27.01.2016	CTD/RO	23:38	54° 38,79' N	13° 35,23' E	29,8	SL max. 26m / ARW
MSM50/030-25	27.01.2016	MSS	23:56	54° 39,33' N	13° 35,82' E	30,3	
MSM50/030-25	28.01.2016	MSS	2:38	54° 38,28' N	13° 34,39' E	28,9	
MSM50/030-26	28.01.2016	CTD/RO	3:01	54° 38,78' N	13° 35,11' E	29,7	SL max. 26m / ARW
MSM50/030-27	28.01.2016	MSS	3:25	54° 39,04' N	13° 36,18' E	30,2	
MSM50/030-27	28.01.2016	MSS	6:06	54° 38,55' N	13° 34,04' E	29	
MSM50/030-28	28.01.2016	CTD/RO	6:33	54° 38,78' N	13° 35,09' E	29,8	SL max. 25m / ARW
MSM50/030-4	28.01.2016	LANDER	7:04	54° 38,79' N	13° 35,75' E	30,1	Schwimmlleine angepickt
MSM50/030-4	28.01.2016	LANDER	7:11	54° 38,79' N	13° 35,72' E	30	Tripod
MSM50/030-3	28.01.2016	MOR	7:40	54° 39,14' N	13° 35,17' E	30	Schwimmlleine angepickt
MSM50/030-3	28.01.2016	MOR	7:45	54° 39,14' N	13° 35,14' E	30	Grundgewicht an Deck
MSM50/030-3	28.01.2016	MOR	7:48	54° 39,14' N	13° 35,11' E	30	Nr. 02
MSM50/030-2	28.01.2016	MOR	8:17	54° 38,79' N	13° 34,59' E	29,6	Schwimmlleine angepickt
MSM50/030-2	28.01.2016	MOR	8:22	54° 38,79' N	13° 34,53' E	29,5	Grundgewicht an Deck
MSM50/030-2	28.01.2016	MOR	8:25	54° 38,79' N	13° 34,51' E	29,5	Nr. 01
MSM50/030-1	28.01.2016	LANDER	8:48	54° 38,43' N	13° 35,14' E	29,5	Schwimmlleine angepickt
MSM50/030-1	28.01.2016	LANDER	8:52	54° 38,44' N	13° 35,11' E	29,5	Kammerlander recovery
MSM50/030-29	28.01.2016	MSS	9:44	54° 36,10' N	13° 43,02' E	26,7	
MSM50/030-29	28.01.2016	MSS	17:09	54° 50,87' N	13° 43,02' E	46,5	
MSM50/031-1	28.01.2016	LANDER	18:01	54° 53,06' N	13° 51,39' E	46,9	Tripod
MSM50/031-1	28.01.2016	LANDER	18:04	54° 53,06' N	13° 51,39' E	47,1	via Releaser MSM
MSM50/031-2	28.01.2016	MUC	18:16	54° 53,07' N	13° 51,24' E	47	mobiler Spillkopf