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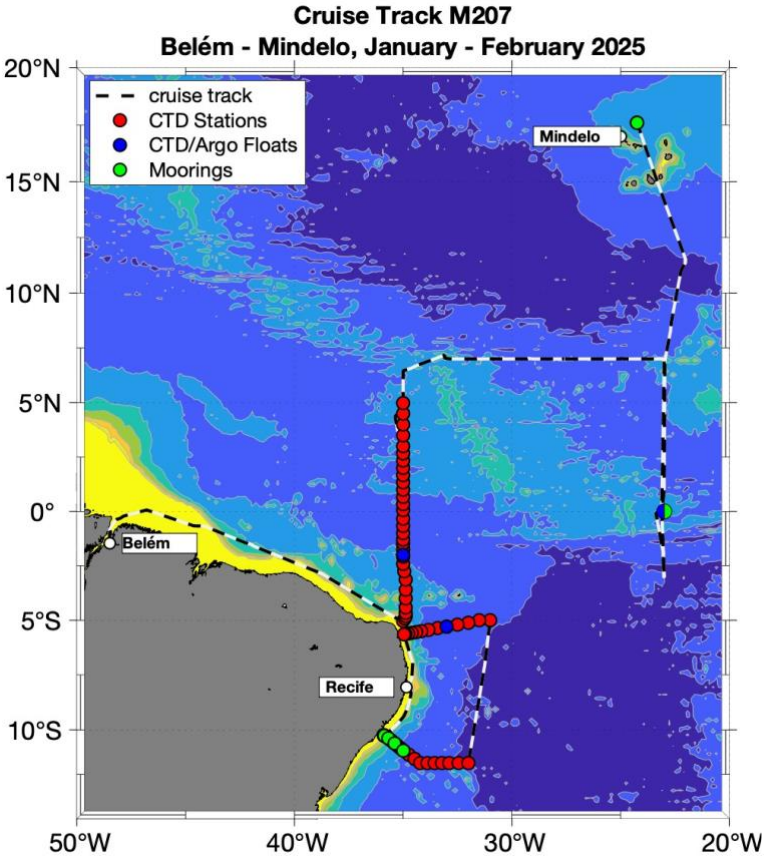
Short Cruise Report
RV METEOR M207

Belém, Brazil – Mindelo, Cape Verde
04.01.2025 – 11.02.2025
Chief Scientist: Rebecca Hummels
Captain: Detlef Korte



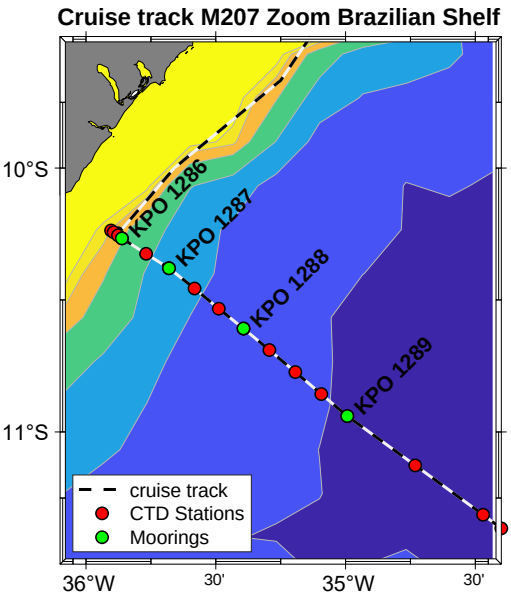


Fig. 1: a) Cruise track with stations of R/V METEOR cruise M207 from Belém to Mindelo; b) Zoom on cruise track along the shelf.

Objectives

The objectives of R/V METEOR cruise M207 were to investigate the variability of the western boundary current circulation off South America and to estimate the strength and variability of the Atlantic meridional overturning circulation (AMOC) at 11°S. A specific focus is on the transport variability of the North Brazil Undercurrent (NBUC) as part of the AMOC and the Subtropical Cells (STCs) and the Deep Western Boundary Current (DWBC) on intraseasonal to decadal time scales. The meridional section along 35°W as well as the mooring maintenance at 23°W at the equator provide additional information with respect to signal propagation along and across the equator. The meteorological program dealt with the dynamics of dust outbreaks (aerosols), the climate in the eastern tropical Atlantic and with the dynamics in the main precipitation region of the intertropical convergence zone (ITCZ). The latter investigations also contribute to the EU NextGEMS project as a seasonal addition to the BOWTIE research cruise, which took place in August 2024. The detection of aerosols and the meteorological conditions during dust outbreaks was the first experiment with the new portable meteorological observatory for desert-dust transport (EXPORT) with focus on the trans-Atlantic transport and the deposition of dust.

The main work during M207 with regard to these focal points was the recovery and deployment of deep-sea moorings and station work as well as underway measurements. The combination of CTD, lowered ADCP, UVP and OPUS was mainly used for the station work. In addition, currents were measured underway with the ship's own ADCPs and water mass properties with the thermosalinograph, as well as meteorological underway measurements including wind lidar, ceilometer, radiometer, disdrometer etc., which at some locations could be aligned with the overflight of the ESA EarthCare satellite for calibration purposes. In addition to the underway meteorological measurements, regular radiosonde ascents were done along the meridional sections at 35°W and 23°W.
The final objective of M207 was the recovery and deployment of the Cape Verde Ocean Observatory (CVOO) mooring. The establishment of the CVOO mooring is a central component of the monitoring in the region and the cooperation between GEOMAR and Cape Verde. The Ocean Science Centre Mindelo (OSCM) is a joint activity of GEOMAR and the Instituto do Mar (IMar) in Mindelo. A general goal of this observatory is to better understand the role of eddies in the ocean, especially with regard to the CO2 source/sink function and biological carbon pump in coastal upwelling regions. The main work on this cruise with regard to this topic was the recovery and deployment of the deep-sea mooring north of Cape Verde (CVOO).

Narrative

Most part of the science team of the cruise M207 arrived in Belém late at night on 2nd of January. After a very short night the scientific team went onboard of METEOR hoping to start with the setup of the scientific equipment. Unfortunately, delays in the harbor logistics of Belém almost prevented METEOR to set off in time. First, we still had to wait for the containers although they were promised to arrive already two days ago, and then there was no crane to load them when they finally arrived. However, thanks to the remarkable efforts of the crew and scientists, the containers were loaded using the ship's own cranes and the ship was able to set sail as planned.

Another obstacle was still between the set off and the arrival in the working area. Due to an oil leakage in the upright shaft that needed to be repaired we made a short stopover outside the port of Recife as the water off Belém is too turbid for a diver to do the repair. The requested diver came on board in the morning of January 9, 2025 and had the crew explain the necessary repair work to him. As the crew had already prepared this operation very well in advance, the work progressed very quickly, and we were able to continue our transit to the working area in the afternoon.

Consequently, we were able to start the work program of M207 shortly afterwards, as the first station is also only about 16 hours away from Recife. We immediately started recovering the first two moorings of the mooring array along 11°S. After becoming slightly impatient with one of the two moorings because it did not surface immediately, we were fortunately able to recover both moorings quickly. The data yield was very good, only one instrument had a water ingress, all the other instruments have been recording data for about 1.5 years. During the night we used our CTD/LADCP system, which was additionally equipped with oxygen sensors, an underwater vision profiler (UVP) to determine particle size and distribution and an OPUS sensor for nitrate to get measurements of the hydrography and ocean currents from the surface to the seafloor. In addition, we mounted the instruments of the recovered moorings to the CTD for calibration purposes. During the next day we redeployed the two shorter moorings again. We then spent the next two days in a similar way, having mooring operations during the day to recover and redeploy the two longer moorings and CTD stations during the night until we redeployed the last mooring in the afternoon of January 13, 2025. The data retrieval was in total very good and we could continue with the CTD stations along the 11°S section. Unfortunately, we had some issues with the LADCP while on station as the LADCP power supply system was disturbing the signal for the CTD. We tested various options and combinations and ended up using the old battery case for the LADCP as power supply. In total, we collected 22 full-depth CTD stations from the Brazilian shelf at 10°14.2’S,35°54.2’W until 11°30’S, 32°W.

The ship then headed northward during the night of the January 16, 2025 to the 5°S section. We began the 5°S section at 5°07.0’S and 32°00’W in the evening of January 17, 2025 and performed 14 full depth CTD stations along this section until 5°39’S, 34°57.6’W. The spacing in between stations varied from 10nm close to the Brazilian shelf to 30nm further offshore, similar to the 11°S section. At the beginning of the 5°S section, at the open ocean end, we deployed the first Argo float on this cruise at 5°17.7’S, 33°W.

In the night of January 20, 2025, we started the very short transit to the meridional section along 35°W crossing the equator. We began the station work very early on January 20, 2025 and continued the section until the night of January 27, 2025. Here, we started close to the Brazilian shelf break at 5°02'S and 35°01’W and performed 32 full depth CTD stations until the northernmost station at 6°N, 35°W in the open ocean. At 2°S we deployed the second Argo float. Between the equator and 4°N we also deployed 5 SVP surface drifters after the CTD casts at the stations of the full degrees. Over the entire 35°W section the regular 6 hourly radiosonde ascents were increased to 3 hourly ascents. Shortly before we were done with the whole section at around 4°N, we made a nightly detour of the track in order to catch

the overpassing EarthCare satellite on its orbit. The meteorological underway data collected with the Oceanet Atmosphere Container from the Tropos institute will be used for cal/val (calibration/validation) purposes with the data of this ESA satellite.
After finalizing the 35°W section at 6°N, 35°W in the night of January 27, 2025, METEOR headed northward to 7°N, where we turned to the east heading towards the 23°W section. As we realized that there was another EarthCare overpass on our way we did not quite go exactly to 7°N, 35°W and turned to the east a bit before to be able to make it in time for the overpass.
During the transit to the 23°W section we encountered a dust storm as we wished for to be sampled with all the meteorological underway devices. We continued the 3 hourly radiosonde ascents as along the 35°W section and collected a lot of data concerning the aerosols. When we arrived at 7°N, 23°W we headed south towards the equator still within a dusty atmosphere and towards another passage of the ITCZ. When arriving at the equator we successfully recovered the mooring there, made another CTD cast for calibration and then continued southward until 3°S to get another complete cross-section of the ITCZ. Then we turned around northward again, while deploying another 5 drifters between 2°S and 2°N at every full degree in latitude. Just before the equator we managed to catch another overflight of the EarthCare satellite and arrived at the equator again on the morning of February 3, 2025 to redeploy the mooring. The deployment went smoothly and after another drifter and the last Argo float deployment we continued the 23°W section towards the north heading to Cape Verde. At around 11°N we deviated slightly from the track again to catch the 4th and last overflight of the EarthCare satellite along our route and shortly afterwards arrived in Cape Verdean waters. At around mid-day of February 8, 2025 we arrived at the mooring position of the Cape Verde Ocean Observatory (CVOO) and recovered the mooring. It took a bit longer than expected because a lot of fishing lines were attached to the mooring wire. This probably explains why the telemetry buoy, which is a surface extension of the mooring was ripped off at some time in 2023. As the telemetry buoy was recovered during another cruise and we brought it with us on the ship, we were able to redeploy it on February 9, 2025 again with the rest of the equipment. After the last mooring deployment, we slowly made our way to Sao Vicente island still collecting at lot of underway meteorological data for comparison with the Cape Verde Atmosphere Observatory (CVAO). On Tuesday February 11, 2025 we arrived in the harbor of Mindelo on Sao Vicente, where M207 ended.

Acknowledgements

We thank Detlef Korte and the entire crew of RV METEOR for their excellent support during the whole cruise. The professional working environment and good atmosphere on the METEOR are greatly appreciated. The expedition took place as part of the research program of the EU Horizon2020 project NextGEMS under grant number 101003470 and GEOMAR's Program-Oriented Research (POF).

Cruise participants

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6.	Paula Damke	UVP, CTD	GEOMAR
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8.	Hannah-Theresa Gaenslen	Radiosondes	MPI-M
9.	Anna Christina Hans	CTD, Microcats, Argo	GEOMAR
10.	Lennéa Hayo	Radiosondes	MPI-M
11.	Philipp Henning	Technician	GEOMAR
12.	Thies Johnsen	S-ADCP	GEOMAR
13.	Franz Kanngießer	Meteorology	GEOMAR
14.	Matthias Klopfer	Technician	GEOMAR
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16.	Joke Lübbecke	Microcats, CTD	GEOMAR
17.	David Menzel	Oxygen, CTD	GEOMAR
18.	Christian Rohleder	Meteorology	DWD
19.	Daniel Rudloff	Oxygen, CTD	GEOMAR
20.	Marius Schulz	Radiosondes	MPI-M
21.	Annett Skupin	OCEANET Atmosphere Container	TROPOS
22.	Hugo Soares	Brazilian observer	Brazilian Navy
23.	Tarsila Sousa Lima	CTD, Moorings	UFPE
24.	Natalia Sudarchikova	Meteorology	GEOMAR
25.	Andebo Waza	Meteorology	GEOMAR
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Station List

Station No.		Date	Gear	Time	Latitude	Longitude	Water Depth	Remarks/ Recovery
METEOR	GEOMAR	2023		[UTC]	[°N]	[°W]	[m]	
M207_1-1		05.01.	BLN	22:47	0°40.313'S	44°17.135'W	46	—
M207_2-1		06.01.	BLN	10:45	1°21.793'S	42°26.879'W	2792	—
M207_3-1		07.01.	BLN	11:04	2°42.584'S	39°07.072'W	347	—
M207_4-1		08.01.	BLN	10:53	4°40.625'S	35°42.482'W	1423	—
M207_5-1	KPO_1260	10.01.	MOOR	11:09	10°16.503'S	35°51.927'W	900	dur. 1.2h; recovery
M207_6-1	KPO_1261	10.01.	MOOR	14:06	10°23.031'S	35°41.218'W	2310	dur. 3.7h; recovery
M207_7-1	1	10.01.	CTD	21:44	10°27.386'S	35°34.910'W	2863	dur. 2.5h
M207_8-1	2	11.01.	CTD	00:46	10°22.840'S	35°40.840'W	2309	dur. 2.1h
M207_9-1	3	11.01.	CTD	03:53	10°19.483'S	35°46.117'W	1715	dur. 1.2h
M207_10-1	4	11.01.	CTD	06:18	10°16.019'S	35°51.705'W	893	dur. 1.1h
M207_11-1	5	11.01.	CTD	07:39	10°15.300'S	35°52.601'W	519	dur. 0.5h
M207_12-1	6	11.01.	CTD	08:40	10°14.593'S	35°53.604'W	224	dur. 0.3h
M207_13-1	7	11.01.	CTD	09:20	10°14.195'S	35°54.207'W	80	dur. 0.2h
M207_14-1	KPO_1286	11.01.	MOOR	11:11	10°17.314'S	35°52.884'W	838	dur. 1.3h; deployment
M207_15-1	KPO_1287	11.01.	MOOR	14:27	10°24.945'S	35°43.456'W	2254	dur. 2.4h; deployment
M207_16-1	8	11.01.	CTD	19:39	10°31.997'S	35°29.300'W	3456	dur. 1.9h
M207_17-1	9	11.01.	CTD	23:30	10°41.410'S	35°17.667'W	3683	dur. 2.9h
M207_18-1	10	12.01.	CTD	03:31	10°46.388'S	35°11.626'W	3875	dur. 2.9h
M207_19-1	11	12.01.	CTD	07:29	10°51.394'S	35°05.626'W	3968	dur. 2.4h
M207_20-1	KPO_1263	12.01.	MOOR	10:18	10°57.034'S	35°00.182'W	4110	dur. 4.3h; recovery
M207_21-1	KPO_1262	12.01.	MOOR	17:54	10°36.877'S	35°23.892'W	3496	dur. 3.5h; recovery
M207_22-1	12	12.01.	CTD	23:48	10°36.539'S	35°23.591'W	3521	dur. 2.7h
M207_23-1	13	13.01.	CTD	06:02	10°56.392'S	34°59.579'W	4110	dur. 2.4h
M207_24-1	KPO_1289	13.01.	MOOR	10:21	10°59.858'S	35°02.241'W	4002	dur. 4.2h; deployment
M207_25-1	KPO_1288	13.01.	MOOR	18:11	10°39.997'S	35°26.170'W	3475	dur. 2.6h; deployment
M207_26-1		13.01.	BLN	22:53	10°47.380'S	35°09.511'W	3915	—
M207_27-1	14	14.01.	CTD	03:29	11°07.596'S	34°43.891'W	4252	dur. 2.5h
M207_28-1	15	14.01.	CTD	08:14	11°18.799'S	34°28.197'W	4640	dur. 2.7h
M207_29-1		14.01.	BLN	10:50	11°25.648'S	34°18.653'W	4634	—
M207_30-1	16	14.01.	CTD	13:03	11°29.984'S	34°12.995'W	4582	dur. 2.7h
M207_31-1	17	14.01.	CTD	18:06	11°29.977'S	33°53.016'W	4624	dur. 2.7h
M207_32-1	18	14.01.	CTD	23:12	11°30.002'S	33°33.003'W	4956	dur. 2.9h
M207_33-1	19	15.01.	CTD	04:18	11°30.013'S	33°12.999'W	4293	dur. 2.5h
M207_34-1	20	15.01.	CTD	08:50	11°29.996'S	32°53.005'W	3526	dur. 2.0h
M207_35-1		15.01.	BLN	10:51	11°30.016'S	32°43.833'W	4340	—
M207_36-1	21	15.01.	CTD	14:29	11°29.980'S	32°27.002'W	4786	dur. 2.7h
M207_37-1	22	15.01.	CTD	20:36	11°30.002'S	32°00.002'W	5048	dur. 3.3h
M207_38-1		16.01.	BLN	10:50	9°23.636'S	31°38.609'W	5089	—
M207_39-1		16.01.	BLN	16:50	8°23.685'S	31°28.510'W	5309	—
M207_40-1		17.01.	BLN	04:53	6°21.121'S	31°09.791'W	5076	—
M207_41-1		17.01.	BLN	10:50	5°20.224'S	31°02.438'W	4946	—
M207_42-1		17.01.	BLN	13:50	5°00.014'S	31°00.044'W	4854	—
M207_43-1	23	17.01.	CTD	16:01	5°00.021'S	31°00.021'W	4855	dur. 3.4h
M207_44-1		17.01.	BLN	16:50	5°00.021'S	31°00.022'W	4854	—
M207_45-1		17.01.	BLN	19:50	5°00.000'S	31°23.221'W	4765	—
M207_46-1	24	17.01.	CTD	22:50	4°59.999'S	31°30.033'W	4717	dur. 2.8h
M207_47-1		18.01.	BLN	01:52	5°03.577'S	31°44.034'W	4658	—
M207_48-1	25	18.01.	CTD	05:02	5°06.997'S	32°00.016'W	4852	dur. 2.7h
M207_49-1		18.01.	BLN	04:50	5°06.997'S	32°00.015'W	4858	—

M207_50-1		18.01.	BLN	07:49	5°10.787’S	32°11.682’W	4633	—
M207_51-1	26	18.01.	CTD	11:15	5°12.299’S	32°30.014’W	4605	dur. 2.8h
M207_52-1		18.01.	BLN	10:50	5°12.301’S	32°30.015’W	4605	—
M207_53-1		18.01.	BLN	13:50	5°13.862’S	32°38.551’W	4604	—
M207_54-1	27	18.01.	CTD	17:37	5°17.718’S	32°59.985’W	4563	dur. 2.7h
M207_55-1		18.01.	BLN	16:50	5°17.719’S	32°59.986’W	4563	—
M207_56-1	Argo 1	18.01.	FLOAT	19:20	5°17.827’S	33°00.178’W	4565	—
M207_57-1		18.01.	BLN	19:50	5°18.504’S	33°05.016’W	4555	—
M207_58-1	28	18.01.	CTD	23:22	5°21.729’S	33°25.051’W	4487	dur. 2.7h
M207_59-1		19.01.	BLN	01:51	5°23.886’S	33°33.388’W	4445	—
M207_60-1	29	19.01.	CTD	05:07	5°26.612’S	33°50.063’W	4325	dur. 2.6h
M207_61-1		19.01.	BLN	04:50	5°26.607’S	33°50.052’W	4326	—
M207_62-1		19.01.	BLN	07:49	5°27.730’S	34°02.716’W	4174	—
M207_63-1	30	19.01.	CTD	09:55	5°30.231’S	34°10.041’W	4118	dur. 2.6h
M207_64-1		19.01.	BLN	10:51	5°30.232’S	34°10.040’W	4118	—
M207_65-1	31	19.01.	CTD	14:18	5°32.709’S	34°24.040’W	3768	dur. 2.2h
M207_66-1		19.01.	BLN	13:50	5°32.709’S	34°24.040’W	3766	—
M207_67-1		19.01.	BLN	16:50	5°34.872’S	34°36.067’W	3373	—
M207_68-1	32	19.01.	CTD	18:11	5°34.630’S	34°36.140’W	3386	dur. 2.2h
M207_69-1		19.01.	BLN	19:49	5°35.489’S	34°41.067’W	3370	—
M207_70-1	33	19.01.	CTD	21:25	5°35.836’S	34°46.307’W	2834	dur. 1.8h
M207_71-1		19.01.	BLN	22:46	5°36.143’S	34°48.954’W	2602	—
M207_72-1	34	20.01.	CTD	00:02	5°37.375’S	34°54.002’W	1835	dur. 1.8h
M207_73-1		20.01.	BLN	01:50	5°38.407’S	34°55.983’W	778	—
M207_74-1	35	20.01.	CTD	02:23	5°38.218’S	34°56.076’W	681	dur. 0.5h
M207_75-1	36	20.01.	CTD	03:18	5°38.960’S	34°57.617’W	355	dur. 0.3h
M207_76-1	37	20.01.	CTD	08:08	5°01.855’S	35°01.040’W	942	dur. 0.5h
M207_77-1		20.01.	BLN	07:51	5°01.973’S	35°01.048’W	1004	—
M207_78-1	38	20.01.	CTD	09:44	4°54.918’S	34°55.038’W	830	dur. 0.6h
M207_79-1		20.01.	BLN	10:50	4°48.969’S	34°52.756’W	959	—
M207_80-1	39	20.01.	CTD	11:22	4°48.398’S	34°52.965’W	979	dur. 0.7h
M207_81-1	40	20.01.	CTD	13:34	4°39.774’S	34°52.980’W	2529	dur. 1.5h
M207_82-1		20.01.	BLN	13:51	4°39.773’S	34°52.980’W	2537	—
M207_83-1	41	20.01.	CTD	17:06	4°24.899’S	34°52.969’W	3359	dur. 2.0h
M207_84-1		20.01.	BLN	16:50	4°24.899’S	34°52.968’W	3358	—
M207_85-1		20.01.	BLN	19:51	4°08.125’S	34°52.800’W	3536	—
M207_86-1	42	20.01.	CTD	21:58	3°59.975’S	34°52.919’W	3563	dur. 2.2h
M207_87-1	43	21.01.	CTD	02:40	3°36.011’S	34°52.752’W	3099	dur. 1.9h
M207_88-1		21.01.	BLN	01:50	3°36.019’S	34°52.747’W	3352	—
M207_89-1	44	21.01.	CTD	07:47	3°07.923’S	34°52.806’W	3828	dur. 2.6h
M207_90-1		21.01.	BLN	07:48	3°07.923’S	34°52.806’W	3828	—
M207_91-1		21.01.	BLN	10:51	2°52.233’S	34°55.700’W	3845	—
M207_92-1	45	21.01.	CTD	12:54	2°45.121’S	34°57.027’W	3867	dur. 2.2h
M207_93-1		21.01.	BLN	13:50	2°45.122’S	34°57.027’W	4113	—
M207_94-1	46	21.01.	CTD	17:52	2°24.896’S	35°00.063’W	3919	dur. 2.3h
M207_95-1		21.01.	BLN	16:50	2°24.897’S	35°00.062’W	3919	—
M207_96-1		21.01.	BLN	19:50	2°17.690’S	35°00.002’W	3965	—
M207_97-1	47	21.01.	CTD	22:31	2°05.144’S	35°00.046’W	4051	dur. 2.4h
M207_98-1	Argo 2	21.01.	FLOAT	23:49	2°05.069’S	35°00.012’W	4060	—
M207_99-1		22.01.	BLN	01:52	1°45.272’S	35°00.180’W	4111	—
M207_100-1	48	22.01.	CTD	03:17	1°45.108’S	35°00.056’W	4111	dur. 2.4h
M207_101-1		22.01.	BLN	04:50	1°42.896’S	35°00.000’W	4102	—
M207_102-1	49	22.01.	CTD	07:46	1°28.000’S	35°00.020’W	4561	dur. 2.5h
M207_103-1		22.01.	BLN	07:52	1°28.000’S	35°00.020’W	4317	—

M207_104-1	50	22.01.	CTD	11:30	1°18.020’S	35°00.058’W	4362	dur. 2.5h
M207_105-1		22.01.	BLN	10:51	1°18.020’S	35°00.058’W	4362	—
M207_106-1		22.01.	BLN	13:50	1°08.662’S	35°00.001’W	4381	—
M207_107-1	51	22.01.	CTD	16:11	0°59.972’S	35°00.019’W	4360	dur. 3.2h
M207_108-1		22.01.	BLN	19:50	0°43.856’S	34°59.999’W	4454	—
M207_109-1	52	22.01.	CTD	21:43	0°39.975’S	34°59.972’W	4466	dur. 2.6h
M207_110-1	53	23.01.	CTD	02:40	0°19.984’S	35°00.052’W	4512	dur. 2.6h
M207_111-1		23.01.	BLN	01:50	0°19.986’S	35°00.051’W	4762	—
M207_112-1		23.01.	BLN	02:01	0°19.985’S	35°00.051’W	4512	—
M207_113-1	54	23.01.	CTD	08:03	0°03.590’N	35°00.018’W	4794	dur. 2.6h
M207_114-1		23.01.	BLN	07:50	0°03.589’N	35°00.019’W	4790	—
M207_115-1	Drifter 1	23.01.	DRIFT	09:23	0°03.623’N	35°00.017’W	4542	—
M207_116-1		23.01.	BLN	10:50	0°17.704’N	35°00.018’W	4797	—
M207_117-1	55	23.01.	CTD	12:37	0°19.916’N	35°00.031’W	4544	dur. 2.6h
M207_118-1		23.01.	BLN	13:50	0°19.916’N	35°00.029’W	4545	—
M207_119-1	56	23.01.	CTD	17:43	0°40.001’N	35°00.002’W	4554	dur. 2.7h
M207_120-1		23.01.	BLN	16:50	0°40.002’N	35°00.002’W	4550	—
M207_121-1		23.01.	BLN	19:50	0°46.588’N	34°59.999’W	4482	—
M207_122-1	57	23.01.	CTD	22:26	0°59.966’N	34°59.995’W	3596	dur. 2.1h
M207_123-1	Drifter 2	23.01.	DRIFT	23:38	1°00.052’N	34°59.926’W	3608	—
M207_124-1		24.01.	BLN	01:50	1°18.537’N	35°00.010’W	4059	—
M207_125-1	58	24.01.	CTD	03:29	1°20.295’N	35°00.040’W	4066	dur. 2.4h
M207_126-1		24.01.	BLN	04:56	1°21.990’N	35°00.001’W	4038	—
M207_127-1	59	24.01.	CTD	08:20	1°40.105’N	35°00.016’W	4042	dur. 2.3h
M207_128-1		24.01.	BLN	07:51	1°40.105’N	35°00.015’W	4290	—
M207_129-1		24.01.	BLN	10:50	1°52.133’N	34°59.999’W	4204	—
M207_130-1	60	24.01.	CTD	13:05	2°00.088’N	35°00.047’W	4181	dur. 2.4h
M207_131-1		24.01.	BLN	13:50	2°00.089’N	35°00.047’W	4168	—
M207_132-1	Drifter 3	24.01.	DRIFT	14:23	2°00.209’N	35°00.074’W	4162	—
M207_133-1	61	24.01.	CTD	18:05	2°20.291’N	35°00.176’W	4387	dur. 2.5h
M207_134-1		24.01.	BLN	16:50	2°20.207’N	35°00.067’W	4142	—
M207_135-1	62	24.01.	CTD	22:59	2°40.090’N	35°00.112’W	4024	dur. 2.4h
M207_136-1		25.01.	BLN	01:50	2°52.215’N	34°59.999’W	3925	—
M207_137-1	63	25.01.	CTD	04:02	3°00.189’N	35°00.084’W	4059	dur. 2.2h
M207_138-1		25.01.	BLN	04:54	3°00.189’N	35°00.084’W	3813	—
M207_139-1	Drifter 4	25.01.	DRIFT	05:13	3°00.402’N	35°00.233’W	3806	—
M207_140-1		25.01.	BLN	07:51	3°24.526’N	35°00.000’W	3936	—
M207_141-1	64	25.01.	CTD	09:44	3°29.921’N	35°00.017’W	3962	dur. 2.3h
M207_142-1		25.01.	BLN	10:50	3°29.922’N	35°00.017’W	4207	—
M207_143-1		25.01.	BLN	13:48	3°56.818’N	35°00.000’W	3940	—
M207_144-1	65	25.01.	CTD	15:20	3°59.898’N	35°00.139’W	3496	dur. 2.1h
M207_145-1	Drifter 5	25.01.	DRIFT	16:25	4°00.082’N	35°00.196’W	3494	—
M207_146-1		25.01.	BLN	16:50	4°03.350’N	35°00.002’W	3430	—
M207_147-1		25.01.	BLN	19:50	4°29.288’N	35°00.448’W	3823	—
M207_148-1		26.01.	BLN	01:50	3°46.482’N	35°13.354’W	4303	—
M207_149-1		26.01.	BLN	04:50	4°01.044’N	35°18.565’W	3779	—
M207_150-1		26.01.	BLN	07:52	4°25.174’N	35°19.388’W	3942	—
M207_151-1	66	26.01.	CTD	11:35	4°29.877’N	35°00.066’W	3879	dur. 2.3h
M207_152-1		26.01.	BLN	10:50	4°29.877’N	35°00.066’W	3879	—
M207_153-1		26.01.	BLN	13:50	4°38.781’N	35°00.001’W	4202	—
M207_154-1	67	26.01.	CTD	17:26	4°58.787’N	35°00.030’W	3770	dur. 2.2h
M207_155-1		26.01.	BLN	16:50	4°58.788’N	35°00.031’W	3781	—
M207_156-1		26.01.	BLN	19:50	5°09.387’N	35°00.001’W	3757	—
M207_157-1	68	26.01.	CTD	23:32	5°29.967’N	35°00.015’W	4382	dur. 2.3h

M207_158-1		26.01.	BLN	22:48	5°29.966'N	35°00.014'W	3865	—
M207_159-1		27.01.	BLN	01:51	5°39.133'N	34°59.986'W	3767	—
M207_160-1	69	27.01.	CTD	05:59	5°59.922'N	35°00.013'W	4225	dur. 2.4h
M207_161-1		27.01.	BLN	04:50	5°59.922'N	35°00.013'W	4226	—
M207_162-1		27.01.	BLN	07:52	6°04.646'N	34°59.999'W	4064	—
M207_163-1		27.01.	BLN	10:48	6°27.045'N	34°59.999'W	3975	—
M207_164-1		27.01.	BLN	13:52	6°34.755'N	34°37.047'W	3440	—
M207_165-1		27.01.	BLN	16:51	6°45.177'N	34°14.517'W	3866	—
M207_166-1		27.01.	BLN	19:50	6°53.608'N	33°51.387'W	3731	—
M207_167-1		27.01.	BLN	22:45	7°00.135'N	33°33.985'W	2596	—
M207_168-1		28.01.	BLN	01:51	7°07.067'N	33°15.074'W	3611	—
M207_169-1		28.01.	BLN	04:51	7°00.573'N	33°02.934'W	3788	—
M207_170-1		28.01.	BLN	10:50	7°00.216'N	32°05.689'W	3431	—
M207_171-1		28.01.	BLN	16:50	7°00.000'N	31°05.852'W	3931	—
M207_172-1		28.01.	BLN	22:44	7°00.060'N	30°06.342'W	4089	—
M207_173-1		29.01.	BLN	10:45	7°00.000'N	28°02.216'W	4425	—
M207_174-1		29.01.	BLN	16:50	7°00.002'N	26°59.382'W	4366	—
M207_175-1		29.01.	BLN	22:47	7°00.000'N	25°58.330'W	4444	—
M207_176-1		30.01.	BLN	10:48	6°59.938'N	23°55.361'W	4122	—
M207_177-1		30.01.	BLN	16:52	6°52.737'N	22°59.686'W	3383	—
M207_178-1		30.01.	BLN	19:50	6°21.709'N	23°00.543'W	2266	—
M207_179-1		30.01.	BLN	22:45	5°51.814'N	23°01.109'W	4177	—
M207_180-1		31.01.	BLN	01:50	5°19.394'N	23°01.633'W	4240	—
M207_181-1		31.01.	BLN	04:50	4°47.707'N	23°02.148'W	4019	—
M207_182-1		31.01.	BLN	07:50	4°16.321'N	23°02.656'W	4188	—
M207_183-1		31.01.	BLN	10:50	3°44.840'N	23°03.165'W	4113	—
M207_184-1		31.01.	BLN	13:51	3°13.266'N	23°03.676'W	4359	—
M207_185-1		31.01.	BLN	16:51	2°41.858'N	23°04.186'W	4590	—
M207_186-1		31.01.	BLN	19:50	2°10.593'N	23°04.690'W	4409	—
M207_187-1		31.01.	BLN	22:46	1°40.141'N	23°05.182'W	4066	—
M207_188-1		01.02.	BLN	01:49	1°08.196'N	23°05.699'W	4162	—
M207_189-1		01.02.	BLN	04:50	0°36.704'N	23°06.208'W	3552	—
M207_190-1		01.02.	BLN	07:51	0°05.963'N	23°07.019'W	3815	—
M207_191-1	KPO_1270	01.02.	MOOR	08:32	0°00.312'N	23°07.111'W	3800	dur. 3.2h; recovery
M207_192-1		01.02.	BLN	10:51	0°00.156'N	23°05.972'W	4212	—
M207_193-1		01.02.	BLN	13:49	0°00.222'S	22°59.934'W	3960	—
M207_194-1	70	01.02.	CTD	16:48	0°00.023'N	23°06.819'W	3932	dur. 3.4h
M207_195-1		01.02.	BLN	16:50	0°00.023'N	23°06.819'W	4175	—
M207_196-1		01.02.	BLN	19:50	0°09.364'S	23°06.445'W	4164	—
M207_197-1		01.02.	BLN	22:44	0°39.552'S	23°05.301'W	3678	—
M207_198-1		02.02.	BLN	01:52	1°11.844'S	23°04.080'W	3296	—
M207_199-1		02.02.	BLN	04:50	1°42.268'S	23°02.933'W	4909	—
M207_200-1		02.02.	BLN	07:50	2°12.971'S	23°01.773'W	5184	—
M207_201-1		02.02.	BLN	10:50	2°44.062'S	23°00.600'W	5498	—
M207_202-1		02.02.	BLN	13:51	2°47.257'S	23°01.877'W	5279	—
M207_203-1		02.02.	BLN	16:49	2°16.323'S	23°03.182'W	5049	—
M207_204-1	Drifter 6	02.02.	DRIFT	18:35	2°00.008'S	23°01.702'W	5184	—
M207_205-1		02.02.	BLN	19:50	1°47.749'S	23°03.988'W	4779	—
M207_206-1		02.02.	BLN	22:41	1°19.069'S	23°09.340'W	4791	—
M207_207-1	Drifter 7	03.02.	DRIFT	00:37	1°00.146'S	23°12.871'W	4418	—
M207_208-1		03.02.	BLN	01:50	0°48.104'S	23°15.113'W	3367	—
M207_209-1		03.02.	BLN	04:51	0°20.076'S	23°20.337'W	3642	—
M207_210-1		03.02.	BLN	07:50	0°04.054'S	23°11.397'W	3813	—
M207_211-1	KPO_1293	03.02.	MOOR	09:45	0°03.423'S	23°09.901'W	3798	dur. 4.0h; deployment

M207_212-1		03.02.	BLN	10:50	0°02.248’S	23°08.860’W	3865	—
M207_213-1	Argo 3	03.02.	FLOAT	13:49	0°00.496’S	23°07.038’W	3934	—
M207_214-1	Drifter 8	03.02.	DRIFT	13:50	0°00.423’S	23°07.008’W	3934	—
M207_215-1		03.02.	BLN	13:50	0°00.418’S	23°07.006’W	3932	—
M207_216-1		03.02.	BLN	16:51	0°14.178’N	23°05.191’W	3754	—
M207_217-1		03.02.	BLN	19:48	0°43.696’N	23°01.848’W	4131	—
M207_218-1	Drifter 9	03.02.	DRIFT	21:27	0°59.909’N	23°00.004’W	3178	—
M207_219-1		03.02.	BLN	22:48	1°13.127’N	22°59.995’W	4021	—
M207_220-1		04.02.	BLN	01:49	1°43.266’N	23°00.000’W	4080	—
M207_221-1	Drifter 10	04.02.	DRIFT	03:31	2°00.042’N	23°00.002’W	4335	—
M207_222-1		04.02.	BLN	04:50	2°13.427’N	23°00.002’W	4398	—
M207_223-1		04.02.	BLN	07:50	2°43.990’N	23°00.000’W	4646	—
M207_224-1		04.02.	BLN	10:50	3°14.012’N	23°00.016’W	4426	—
M207_225-1		04.02.	BLN	13:50	3°43.964’N	22°59.998’W	4124	—
M207_226-1		04.02.	BLN	16:49	4°03.442’N	22°59.088’W	4201	—
M207_227-1		04.02.	BLN	19:49	4°20.784’N	22°58.895’W	4221	—
M207_228-1		04.02.	BLN	22:47	4°49.224’N	22°58.908’W	4045	—
M207_229-1		05.02.	BLN	01:50	5°18.398’N	22°58.902’W	4228	—
M207_230-1		05.02.	BLN	04:51	5°46.902’N	22°58.898’W	4495	—
M207_231-1		05.02.	BLN	07:50	6°14.401’N	22°58.895’W	3856	—
M207_232-1		05.02.	BLN	10:51	6°40.286’N	22°58.899’W	3582	—
M207_233-1		05.02.	BLN	13:51	7°07.083’N	22°56.017’W	3124	—
M207_234-1		05.02.	BLN	16:50	7°33.215’N	22°51.093’W	4388	—
M207_235-1		05.02.	BLN	19:49	7°59.139’N	22°46.200’W	4434	—
M207_236-1		05.02.	BLN	22:43	8°24.706’N	22°41.423’W	4734	—
M207_237-1		06.02.	BLN	01:50	8°53.325’N	22°38.094’W	4826	—
M207_238-1		06.02.	BLN	04:50	9°20.968’N	22°32.850’W	4336	—
M207_239-1		06.02.	BLN	07:50	9°48.129’N	22°27.693’W	4810	—
M207_240-1		06.02.	BLN	10:50	10°14.938’N	22°22.590’W	5417	—
M207_241-1		06.02.	BLN	14:02	10°41.735’N	22°17.484’W	5083	—
M207_242-1		06.02.	BLN	16:50	10°56.643’N	22°14.639’W	5116	—
M207_243-1		06.02.	BLN	19:50	11°11.156’N	22°08.388’W	5339	—
M207_244-1		06.02.	BLN	22:42	11°24.956’N	21°59.976’W	5043	—
M207_245-1		07.02.	BLN	01:51	11°52.412’N	22°09.061’W	4973	—
M207_246-1		07.02.	BLN	04:48	12°19.503’N	22°19.132’W	5194	—
M207_247-1		07.02.	BLN	07:51	12°47.902’N	22°29.706’W	4803	—
M207_248-1		07.02.	BLN	10:59	13°17.590’N	22°40.779’W	4639	—
M207_249-1		07.02.	BLN	13:51	13°45.436’N	22°51.187’W	4422	—
M207_250-1		07.02.	BLN	16:51	14°14.966’N	23°02.251’W	4233	—
M207_251-1		07.02.	BLN	19:50	14°44.100’N	23°13.188’W	3723	—
M207_252-1		07.02.	BLN	22:46	15°12.753’N	23°23.866’W	1010	—
M207_253-1		08.02.	BLN	01:51	15°43.242’N	23°34.671’W	3494	—
M207_254-1		08.02.	BLN	04:50	16°12.822’N	23°45.176’W	3647	—
M207_255-1		08.02.	BLN	07:50	16°42.149’N	23°55.614’W	3079	—
M207_256-1		08.02.	BLN	10:49	17°11.175’N	24°05.975’W	3494	—
M207_257-1	KPO_1271	08.02.	MOOR	13:34	17°36.144’N	24°15.452’W	3600	dur. 4.4h; recovery
M207_258-1		08.02.	BLN	13:53	17°36.407’N	24°15.199’W	3600	—
M207_259-1		08.02.	BLN	16:50	17°37.612’N	24°16.038’W	3600	—
M207_260-1	71	08.02.	CTD	20:15	17°36.400’N	24°15.025’W	3597	dur. 2.5h
M207_261-1		08.02.	BLN	19:50	17°36.399’N	24°15.023’W	3599	—
M207_262-1		08.02.	BLN	22:40	17°36.402’N	24°15.022’W	3604	—
M207_263-1		09.02.	BLN	01:50	17°33.824’N	24°20.711’W	3851	—
M207_264-1		09.02.	BLN	04:50	17°33.819’N	24°20.717’W	3610	—
M207_265-1	72	09.02.	CTD	08:09	17°33.818’N	24°20.716’W	3610	dur. 2.8h

M207_266-1		09.02.	BLN	07:51	17°33.818’N	24°20.717’W	3854	—
M207_267-1		09.02.	BLN	10:50	17°33.554’N	24°20.523’W	3609	—
M207_268-1	KPO_1294	09.02.	MOOR	13:52	17°32.477’N	24°19.855’W	3605	dur. 4.8h; deployment
M207_269-1		09.02.	BLN	22:52	17°25.182’N	24°43.149’W	3373	—