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Short Cruise Report R/V METEOR Cruise M208

Mindelo (Cape Verde) – Mindelo (Cape Verde)
14th February – 17th March 2025

Chief Scientist: Prof. Dr. Peter Brandt
Co-Chief Scientist: Prof. Dr. Rainer Kiko
Captain: Detlef Korte

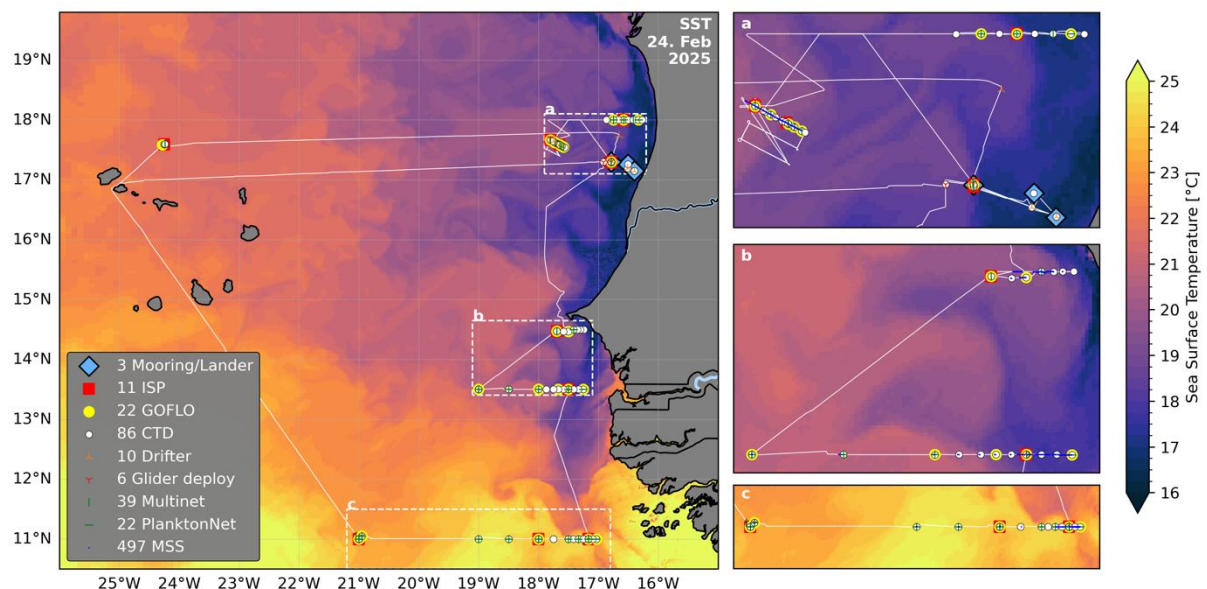


Fig. 1: Geographic map showing the cruise track of R/V METEOR cruise M208 (thin white solid line), including the locations of short-term mooring deployments and recoveries, in-situ pump (ISP) stations, Go-Flo stations for trace metals, CTD/UVP stations, drifter and glider deployments, Multinet and plankton-net stations, and microstructure profiler (MSS) stations. The right panels show close-ups of the areas indicated by white dashed boxes in the left panel. The background image displays sea surface temperature from the ODYSSEA Sea Surface Temperature Multi-sensor L3 Product (10.48670/moi-00310), for February 24, 2025, retrieved from the Copernicus Marine Service.

Objectives

The METEOR Cruise M208 was an interdisciplinary expedition focusing on upwelling in the tropical Northeast Atlantic. The main topics included the physical forcing of upwelling, its role in biological production and plankton communities, associated chemical cycles, and the resulting downward carbon export. Additionally, the cruise investigated atmospheric forcing, the input of Saharan dust, and its significance for nitrogen fixation and biological productivity. The research conducted during M208 contributed to the Heisenberg Project IOChange and the Program-Oriented Research (POF) of GEOMAR. Furthermore, the expedition served as a preparatory campaign for the FUTURO Project (The Future West African Upwelling System), referred to as FUTURO^{pre}.

The seasonal maximum of coastal upwelling occurs in March, when the intertropical convergence zone is at its southernmost position and the northeast trade winds are strongest in the eastern boundary upwelling system. This period is also characterized by increased nutrient inputs due to frequent Saharan dust storms. Investigations into ocean dynamics focused on upwelling and downwelling processes, mixing at the continental slope and shelf, as well as mesoscale and submesoscale processes and their interactions, utilizing shipboard measurements, short-term moorings, and gliders. Atmospheric measurements included observations of aerosols and dust. A key focus of the research cruise was the study of carbon fixation at the surface and carbon export to greater depths, including processes such as particle transport and diel vertical migrations of zooplankton. Additionally, potential nitrogen fixation due to selective nutrient uptake, resulting nutrient limitation, trace gas production and distribution of trace metals were also investigated.

The primary objective of the research cruise was to improve our understanding of physical, biogeochemical, and biological processes governing the Northwest African coastal upwelling system during its onset and peak phases. The specific aims include:

Physical Oceanography:

- Investigate the eastern boundary current system, its response to wind forcing, and the role of coastal-trapped waves.
- Study mixing processes at the continental slope and shelf, with a focus on internal waves and tides.
- Examine upwelling fronts, filaments, mesoscale eddies, and submesoscale variability to improve knowledge of vertical exchange processes and ocean-atmosphere interactions.
- Assess the utility of SWOT altimeter data for characterizing upwelling dynamics.

Marine Meteorology:

- Measure atmospheric variability over the upwelling region, focusing on low-level jets, front and wave dynamics.
- Investigate the co-evolution of atmospheric and oceanic processes.
- Sample specific dust outbreaks to analyse submesoscale patterns and their role in desert-dust transport and deposition.

Biogeochemistry and Biological Measurements:

- Examine the biological pump through three key subtasks:
 - Identify primary drivers of primary productivity, including nutrient supply, dust deposition, light availability, and community composition.
 - Characterize organic matter stocks and quantify export rates of dissolved and suspended particulate organic matter.
 - Study gravitational particle fluxes, zooplankton/nekton biomass distribution, diurnal vertical migration, and related effects on carbon sequestration.
- Investigate the relationship between primary productivity and particulate matter flux, as well as the connection between productivity and zooplankton/nekton biomass along the upwelling region's productivity gradient and in association with fronts.

Overall, the cruise aimed to integrate multidisciplinary observations to advance the understanding of ocean-atmosphere interactions, biogeochemical cycles, and biological variability in a highly productive and dynamic upwelling system.

Narrative

On February 15, 2025, R/V METEOR departed from the port of Mindelo, Cape Verde. The cruise began with a one-day delay as we awaited the arrival of two delayed supply containers. However, it soon became clear that the containers would be further delayed due to a mechanical failure of the container ship. In consultation with the agency and port authorities, we decided to commence scientific operations and return to Mindelo later to retrieve the supplies. This decision required a deviation from the original cruise plan.

Therefore, R/V METEOR proceeded directly to the designated mooring and glider deployment sites off Mauritania to maximize measurement time for the moored instruments and gliders. The vessel arrived on February 17 at 13:00 UTC off the coast of Mauritania, where the first CTD station was conducted, followed by the deployment of two gliders—one equipped with an Underwater Vision Profiler (UVP) and the other with a SUNA nitrate sensor. While the gliders were deployed in waters approximately 1000 m deep, R/V METEOR continued towards the coast to reach the mooring deployment sites. On the same day, a tripod was deployed at a depth of 53 m at 21:00 UTC, followed by a lander deployment at 102 m depth at 23:00 UTC. Both the tripod and the lander were equipped, among other instruments, with ADCPs to measure full-depth velocity profiles.

During the night, the first super-station was conducted, including a CTD/UVP cast, CTD sampling, a zooplankton Multinet station, Go-Flo bottle sampling for trace metals, and an in-situ pump station. These measurements were followed by the deployment of a subsurface mooring at the same location, anchored at a depth of 558 m. The mooring was equipped with three ADCPs, four UVPs, and additional instrumentation.

Later in the afternoon of February 18, the third glider—equipped with a microstructure probe—was deployed. However, after its initial dive, it resurfaced with a leak detection alarm and had to be recovered. As we needed to return to Mindelo to retrieve delayed supply containers, there was no opportunity for a timely inspection that might have enabled a redeployment.

On the way back to the port of Mindelo, we stopped near the Cape Verde Ocean Observatory to conduct another super-station. The station work took place during the day of February 20 and continued through the night. We arrived at the port of Mindelo on the morning of February 21. The delayed supply containers had arrived, and the supplies were loaded onto the ship. We were able to depart from Mindelo again in the afternoon. Due to the time lost from our scientific program, the speed restrictions for R/V METEOR were lifted, allowing us to proceed at a higher speed to reach our next working area.

In the meantime, we inspected the glider that had triggered the leak detection alarm but found no signs of water ingress or any other issues that could have caused the alarm. Therefore, we decided to test the glider again during our one-day study in the core of the deep oxygen minimum zone (OMZ) near 11°N, 21°W using a lowered sensitivity threshold for the leak alarm. Although the glider continued to show slightly reduced leak detection values, it no longer triggered the alarm. While the glider was in the water, we conducted station work in a triangular pattern, focusing particularly on day-night Multinet stations to observe the diel vertical migration of zooplankton.

On February 24, 2025, we began the 11°N section toward the coast of Guinea-Bissau, starting at 19°W. Station work was conducted using CTD/UVP probes, Multinet, plankton net, and a microstructure probe. Along this section, two super-stations were carried out at 18°W and 17°10'W. Meteorological measurements were intensified due to the clearly observable presence of Saharan dust. The 11°N section was completed in the afternoon of February 27, with the shallowest station located at 17°02'W in 60 m water depth.

Upon completing the 11°N section in the territorial waters of Guinea-Bissau, we still had not received permission to conduct measurements in the territorial waters of Senegal. Therefore, we decided to shift the planned measurements along 14°30'N, south of Dakar, to 13°30'N within the territorial waters of The Gambia. While transiting through the southern part of Senegal, all underway measurements were switched off as required. Measurements along 13°30'N in The Gambia began early in the morning on February 28. Similar station work to that conducted along 11°N was performed, with the shallowest station at 17°15'W in 55 m water depth and the farthest offshore station at 19°W. A super-station was carried out at 17°30'W.

While finishing the stations in The Gambia, we received diplomatic clearance to conduct measurements in Senegalese waters. Although much of the time allocated for this work had already passed, we decided to carry out a shortened section along 14°30'N, south of Dakar. This section is part of a repeat line frequently surveyed by our French colleagues in recent years. Station work

began on the morning of March 3 at the shallowest station, located at 17°18'W in 36 m water depth, and continued westward, ending around 17°42'W. An exceptionally strong surface temperature gradient was observed, with near-coastal upwelling waters approximately 4°C colder than offshore waters. In addition to standard station work, we aimed to capture the frontal dynamics in greater detail by continuously deploying the microstructure probe along the transect. However, measurements had to be paused overnight due to the high density of artisanal fishing boats, some without lights. Despite this interruption, we successfully completed the microstructure section during the following day and departed from the 14°30'N section in the afternoon of March 4.

After completing our work in Senegalese waters, we returned to the waters off Mauritania. At the start of the cruise, we had deployed a mooring, a lander, a tripod, and two gliders — all intended to collect data throughout the entire campaign and be recovered at the end. Two days before our return, one glider — ifm13 equipped with the SUNA nitrate sensor — began exhibiting poor diving behavior and was programmed to stay at the surface until our arrival. The second glider, ifm14, equipped with the UVP camera, was prone to biofouling, potentially degrading particle measurements. Our first task upon reaching the area was to recover both gliders. This was successfully completed without issues after lunch on March 5.

While we were still in Gambian waters, the lander watchdog systems transmitted a position message, indicating that the lander was no longer anchored to the seafloor. However, only two messages were received, about an hour apart. Upon arriving at the mooring area off Mauritania, we searched for the lander using acoustic communication and successfully located it approximately 4 nautical miles from its original deployment position. The recorded data confirmed that the lander had been caught by a fishing boat and, after spending several hours on board, was eventually dropped back into the sea. While in the area, we observed heavy fishing activity and decided to recover all remaining moored instrumentation. All instruments were successfully recovered, and nearly all had complete data records.

After completing the mooring recovery on the afternoon of March 6, we selected a suitable location for the filament study, identifying an optimal site to investigate upwelling filaments and their role in driving instabilities, mixing, and enhanced productivity. The chosen site was in deep ocean waters at the edge of a warm-core eddy, where cold upwelling water circulated around the eddy. At this location, we deployed two gliders: ifm14, equipped with an Underwater Vision Profiler (UVP) to measure sinking particles and zooplankton, and ifm16, equipped with a microstructure probe. During the filament study, both gliders were programmed to repeatedly transect across the cold filament into the warm anticyclone and back. Shipboard measurements included standard station work alongside enhanced microstructure profiling. Additionally, R/V METEOR conducted two raster patterns, continuously collecting data using the Moving Vessel Profiler (MVP). The filament study began on the afternoon of March 6 and concluded in the evening of March 10.

The final section of our research cruise, along 18°N, began on the morning of March 11 with a super-station at 16°35'W. The section extended from the shallowest station at 41 m water depth at 16°16'W to the farthest offshore station at 18°W, which we completed on the morning of March 14. In the afternoon of March 13, we recovered the two gliders that had continued their measurement program in the area of the filament study. A few additional CTD/UVP and Multinet stations within the anticyclonic eddy wrapped up our station work for cruise M208 in the evening of March 14.

After finishing measurements within the anticyclonic eddy, we headed eastward toward the final destination, the port of Mindelo, Cape Verde. On request of GEOMAR colleagues, we measured the topography of an uncharted seamount near 18°10'N, 22°23'W and finally arrived in the port of Mindelo on March 17 at 09:00 UTC.

Acknowledgements

We are grateful to Detlef Korte and his crew for the excellent collaboration and the pleasant working atmosphere during the cruise. The crew of R/V METEOR greatly contributed to the success of the cruise. The ship time of METEOR was provided by the German Science Foundation (DFG) within the core program METEOR/MERIAN. Financial support was provided by the Heisenberg Project IOChange and the Program-Oriented Research (POF) of GEOMAR.

List of Participants

No	Name	Discipline	Institution
1	Brandt, Peter, Prof.	PO, Chief scientist	GEOMAR
2	Kiko, Rainer, Prof.	BO, Co-Chief Scientist	GEOMAR
3	Dengler, Marcus, Dr.	PO, CTD, Microstructure, glider	GEOMAR
4	Schulz, Marco	PO, CTD, MVP, satellite data	GEOMAR
5	Huang, Hao	PO, CTD, MVP, mooring	GEOMAR
6	Andrae, Alexandra	PO, CTD, ADCP, Drifter, MicroCATs	GEOMAR
7	Kemper, Hannah	PO, CTD, UVP	GEOMAR
8	Malsang, Manon	PO, CTD, microstructure	LOCEAN
9	Franco Pire, Manuel	PO, CTD, salinometer	GEOMAR
10	Wilms, Alexander	PO, CTD, salinometer	GEOMAR
11	Begler, Christian	PO, mooring technique, glider, CTD	GEOMAR
12	Duerkop, Felix	PO, MVP, microstructure, technique	GEOMAR
13	Wahl, Sebastian, Dr.	ME, atmospheric remote sensing	GEOMAR
14	Speith, Simon	ME, aerosol measurements	GEOMAR
15	Faye, Saliou, Dr.	BO, Zooplankton, particles, UVP	CRODT
16	Navarro Engesser, Marina	BO, Zooplankton, Multinet	GEOMAR
17	Hintringer, Moritz	BO, Zooplankton, particles, UVP	GEOMAR
18	Mohr, Wiebke, Dr.	BO, C & N-fixation	MPI-MM
19	Schötz, Juliane	BO, C & N-fixation	MPI-MM
20	Koopmann, Rieke	BO, POM, DOM	MPI-MM
21	Zhang, Wan	CO, in-situ pumps	GEOMAR
22	Nicolas, Angèle	CO, Trace metals, nutrients	GEOMAR
23	Blanke, Jana	CO, in-situ pumps	GEOMAR
24	Luo, Yaohua	Underway DIC	GEOMAR
25	Otte, Frank	Meteorology	DWD
26	Tobana Nhanque, Filipe	Observer, BO, Zooplankton	INIPO

Abbreviations:

PO – Physical Oceanography, BO – Biological Oceanography, CO – Chemical Oceanography, ME – Meteorology, CTD – conductivity-temperature-depth measurements and water sampling, MVP – Moving Vessel Profiler, ADCP – acoustic Doppler current profiler, UVP – underwater vision profiler, DOM/POM – dissolved/particulate organic matter, DIC – dissolved inorganic carbon.

Institutions:

CRODT	Centre de Recherche Océanographique de Dakar Thiaroye, Senegal
DWD	Deutscher Wetterdienst, Germany
GEOMAR	GEOMAR Helmholtz-Zentrum für Ozeanforschung Kiel, Germany
INIPO	Instituto Nacional de Investigação das Pescas e Oceanografia, Bissau, Guiné-Bissau
LOCEAN	Laboratoire d'Océanographie et du Climat: Expérimentations et Approches Numériques, Paris, France
MPI-MM	Max-Planck-Institut für Marine Mikrobiologie, Bremen, Germany

Station List

Station No.		Date	Gear	Time	Latitude	Longitude	Water Depth	Remarks
METEOR (M208)	GEOMAR	2025		[UTC]	[°]	[°]	[m]	
M208_1	TFISH	15.02. 18.02.	TFISH	17:10 23:12	16°59.00'N 17°44.60'N	24°35.60'W 16°39.40'W		TowFish underway
M208_2	CTD 1	17.02.	CTD	13:03-14:10	17°18.00'N	16°55.00'W	1012	CTD station
M208_3	IFM13	17.02.	Glider	14:41-14:57	17°18.07'N	16°54.88'W	1010	Glider deployment
M208_4	IFM14	17.02.	Glider	15:05-15:26	17°18.06'N	16°54.88'W	1010	Glider deployment
M208_5	CTD 2	17.02.	CTD	18:00	17°09.00'N	16°24.00'W	53	CTD station
M208_6	KPO1304	17.02.	Lander	20:59-21:11	17°08.996'N	16°24.010'W	53	Tripod deployment
M208_7	DRIFT 1	17.02.	Surface drifter	21:19	17°09.02'N	16°24.02'W		SVP drifter deployment
M208_8	CTD 3	17.02.	CTD	22:22-22:38	17°11.60'N	16°30.90'W	102	CTD station
M208_9	KPO1303	17.02.	Lander	22:51-23:08	17°11.638'N	16°30.882'W	102	Lander deployment
M208_10	DRIFT 2	17.02.	Surface drifter	23:14	17°11.64'N	16°30.89'W		SVP drifter deployment
M208_11	CTD 4	18.02.	CTD	01:56-02:34	17°18.00'N	16°47.10'W	558	CTD station
M208_12	MSN 1	18.02.	MSN	02:56-03:40	17°18.00'N	16°47.10'W		Multinet station
M208_13	CTD 5	18.02.	CTD	03:58-04:27	17°18.00'N	16°47.10'W		CTD station
M208_14	GoFlo 1	18.02.	GoFlo	04:41-06:42	17°18.00'N	16°47.10'W		GoFlo station
M208_15	CTD 6 ISP 1	18.02.	CTD	06:54-10:07	17°18.00'N	16°47.10'W		CTD/in-situ pump station
M208_16	KPO1302	18.02.	Mooring	11:16-13:22	17°18.00'N	16°47.10'W	558	Mooring deployment
M208_17	CTD 7	18.02.	CTD	13:48-14:04	17°18.00'N	16°47.10'W		CTD station
M208_18	MSN 2	18.02.	MSN	14:15-14:50	17°18.00'N	16°47.10'W		Multinet station
M208_19	IFM16	18.02.	Glider	16:18-18:44	17°18.00'N	16°47.10'W		Glider deployment and recovery
M208_20	DRIFT 3	18.02.	Surface drifter	19:04	17°18.89'N	16°47.43'W		SVP drifter deployment
M208_21	MVP 1	18.02.	MVP	19:12-23:05	17°19.50'N, 17°44.00'N	16°47.20'W, 16°39.60'W		MVP section
M208_22	DRIFT 4	18.02.	Surface drifter	23:10	17°44.48'N	16°39.44'W	437	SVP drifter deployment
M208_23	CTD 8	20.02.	CTD	13:41-15:49	17°36.00'N	24°14.00'W	3595	CTD station
M208_24	MSN 3	20.02.	MSN	16:04-17:04	17°36.00'N	24°14.00'W		Multinet station
M208_25	CTD 9 ISP 2	20.02.	CTD ISP	16:24-20:40	17°35.00'N	24°15.00'W		CTD/in-situ pump station
M208_26	GoFlo 2	20.02.	GoFlo	20:50-22:21	17°35.00'N	24°17.00'W		GoFlo station
M208_27	MSS 1	20.02.	MSS	23:05-23:40	17°35.00'N	24°17.00'W		Microstructure
M208_28	CTD 10	21.02.	CTD	00:35-00:57	17°36.00'N	24°14.00'W		CTD station
M208_29	MSN 4	21.02.	MSN	01:10-02:13	17°36.00'N	24°14.00'W		Multinet station
M208_30	CTD 11	21.02.	CTD	02:25-03:12	17°36.00'N	24°14.00'W		CTD station
M208_31	CTD 12	23.02.	CTD	06:50-07:16	11°00.00'N	21°00.00'W		CTD station
M208_32	MSS 2	23.02.	MSS	08:06-08:59	11°00.00'N	21°00.00'W		Microstructure
M208_33	IFM16	23.02.	Glider	09:54-10:04	11°03.00'N	20°57.00'W		Glider deployment
M208_34	MSN 5	23.02.	MSN	10:38-11:32	11°03.00'N	20°57.00'W		Multinet station
M208_35	TFISH	23.02. 24.02.	TFISH	11:09 13:15	11°03.00'N 11°00.00'N	20°57.00'W 20°33.00'W		TowFish underway
M208_36	MSS 3	23.02.	MSS	11:46-12:12	11°03.00'N	20°57.00'W		Microstructure
M208_37	MSN 6	23.02.	MSN	13:05-14:00	11°03.00'N	21°03.00'W		Multinet station
M208_38	BLN 1	23.02.	BLN	14:47	11°00.00'N	21°00.00'W		Radiosonde
M208_39	MSN 7	23.02.	MSN	14:54-15:49	11°00.00'N	21°00.00'W		Multinet station
M208_40	WP2 1	23.02.	WP2	15:54-16:07	11°00.00'N	21°00.00'W		Plankton net
M208_41	CTD 13 ISP 3	23.02.	CTD ISP	16:14-20:08	11°00.00'N	21°00.00'W		CTD/in-situ pump station
M208_42	BLN 2	23.02.	BLN	16:56	11°00.00'N	21°00.00'W		Radiosonde
M208_43	BLN 3	23.02.	BLN	19:55	11°00.00'N	21°00.00'W		Radiosonde
M208_44	GoFlo 3	23.02.	GoFlo	20:54-21:50	11°00.00'N	21°00.00'W		GoFlo station
M208_45	CTD 14	23.02.	CTD	22:01-22:22	11°00.00'N	21°00.00'W		CTD station
M208_46	MSN 8	23.02.	MSN	22:30-23:30	11°00.00'N	21°00.00'W		Multinet station
M208_47	BLN 4	23.02.	BLN	22:33	11°00.00'N	21°00.00'W		Radiosonde
M208_48	CTD 15	23.02.	CTD	23:41-00:26	11°00.00'N	21°00.00'W		CTD station
M208_49	MSN 9	24.02.	MSN	01:30-02:26	11°03.00'N	21°03.00'W		Multinet station
M208_50	MSS 4	24.02.	MSS	02:39-03:35	11°03.00'N	21°03.00'W		Microstructure
M208_51	MSN 10	24.02.	MSN	04:33-05:30	11°03.00'N	20°57.00'W		Multinet station
M208_52	WP2 2	24.02.	WP2	05:34-05:44	11°03.00'N	20°57.00'W		Plankton net
M208_53	CTD 16	24.02.	CTD	05:59-06:38	11°03.00'N	20°57.00'W		CTD station
M208_54	GoFlo 4	24.02.	GoFlo	06:52-08:39	11°03.00'N	20°57.00'W		GoFlo station
M208_55	MSS 5	24.02.	MSS	08:53-09:45	11°03.00'N	20°57.00'W		Microstructure
M208_56	IFM16	24.02.	Glider	11:21-11:36	11°00.00'N	20°48.00'W		Glider recovery
M208_57	BLN 5	24.02.	BLN	13:41	11°00.00'N	20°30.00'W		Radiosonde
M208_58	BLN 6	24.02.	BLN	16:30	11°00.00'N	20°00.00'W		Radiosonde

M208_59	TFISH	24.02. 27.02	TFISH	22:17 14:32	11°00.00'N 11°00.00'N	19°00.00'W 17°10.00'W		TowFish underway
M208_60	CTD 17	24.02.	CTD	22:26-23:18	11°00.00'N	19°00.00'W		CTD station
M208_61	MSN 11	24.02.	MSN	23:26-00:26	11°00.00'N	19°00.00'W		Multinet station
M208_62	WP2 3	25.02.	WP2	00:34-00:44	11°00.00'N	19°00.00'W		Plankton net
M208_63	MSS 6	25.02.	MSS	00:50-01:44	11°00.00'N	19°00.00'W		Microstructure
M208_64	CTD 18	25.02.	CTD	04:52-05:43	11°00.00'N	18°30.00'W		CTD station
M208_65	MSN 12	25.02.	MSN	05:56-06:52	11°00.00'N	18°30.00'W		Multinet station
M208_66	WP2 4	25.02.	WP2	06:57-07:06	11°00.00'N	18°30.00'W		Plankton net
M208_67	MSS 7	25.02.	MSS	07:21-08:19	11°00.00'N	18°30.00'W		Microstructure
M208_68	CTD 19	25.02.	CTD	11:38-12:36	11°00.00'N	18°00.00'W		CTD station
M208_69	MSN 13	25.02.	MSN	12:45-13:42	11°00.00'N	18°00.00'W		Multinet station
M208_70	BLN 7	25.02.	BLN	13:37	11°00.00'N	18°00.00'W		Radiosonde
M208_71	CTD 20 ISP 4	25.02.	CTD ISP	13:52-17:15	11°00.00'N	18°00.00'W		CTD/in-situ pump station
M208_72	BLN 8	25.02.	BLN	16:46	11°00.00'N	18°00.00'W		Radiosonde
M208_73	GoFlo 5	25.02.	GoFlo	17:24-18:45	11°00.00'N	18°00.00'W		GoFlo station
M208_74	CTD 21	25.02.	CTD	18:53-19:34	11°00.00'N	18°00.00'W		CTD station
M208_75	BLN 9	25.02.	BLN	19:51	11°00.00'N	18°00.00'W		Radiosonde
M208_76	MSS 8	25.02.	MSS	19:56-20:46	11°00.00'N	18°00.00'W		Microstructure
M208_77	MSN 14	25.02.	MSN	21:26-22:29	11°00.00'N	18°00.00'W		Multinet station
M208_78	WP2 5	25.02.	WP2	22:34-22:48	11°00.00'N	18°00.00'W		Plankton net
M208_79	CTD 22	26.02.	CTD	00:33-01:25	11°00.00'N	17°45.00'W		CTD station
M208_80	MSS 9	26.02.	MSS	02:00-02:24	11°00.00'N	17°45.00'W		Microstructure
M208_81	CTD 23	26.02.	CTD	04:03-05:05	11°00.00'N	17°30.00'W	1536	CTD station
M208_82	MSN 15	26.02.	MSN	05:14-06:13	11°00.00'N	17°30.00'W		Multinet station
M208_83	WP2 6	26.02.	WP2	06:18-06:29	11°00.00'N	17°30.00'W		Plankton net
M208_84	CTD 24	26.02.	CTD	07:28-08:21	11°00.00'N	17°25.00'W	1569	CTD station
M208_85	MSN 16	26.02.	MSN	09:27-10:27	11°00.00'N	17°20.00'W		Multinet station
M208_86	WP2 7	26.02.	WP2	10:32-10:43	11°00.00'N	17°20.00'W		Plankton net
M208_87	CTD 25	26.02.	CTD	10:54-11:57	11°00.00'N	17°20.00'W	1090	CTD station
M208_88	MSS 10	26.02.	MSS	12:45-15:31	11°00.00'N	17°20.00'W		Microstructure
M208_89	BLN 10	26.02.	BLN	13:31	11°00.00'N	17°18.00'W		Radiosonde
M208_90	CTD 26	26.02.	CTD	15:44-16:15	11°00.00'N	17°15.00'W	562	CTD station
M208_91	MSS 11	26.02.	MSS	16:29-17:58	11°00.00'N	17°15.00'W		Microstructure
M208_92	BLN 11	26.02.	BLN	16:35	11°00.00'N	17°15.00'W		Radiosonde
M208_93	CTD 27	26.02.	CTD	18:23-19:03	11°00.00'N	17°10.00'W	475	CTD station
M208_94	GoFlo 6	26.02.	GoFlo	19:12-20:06	11°00.00'N	17°10.00'W		GoFlo station
M208_95	BLN 12	26.02.	BLN	19:42	11°00.00'N	17°10.00'W		Radiosonde
M208_96	MSN 17	26.02.	MSN	20:14-20:44	11°00.00'N	17°10.00'W		Multinet station
M208_97	WP2 8	26.02.	WP2	20:49-21:01	11°00.00'N	17°10.00'W		Plankton net
M208_98	CTD 28	26.02.	CTD	21:11-21:35	11°00.00'N	17°10.00'W	480	CTD station
M208_99	BLN 13	26.02.	BLN	22:56	11°00.00'N	17°02.00'W		Radiosonde
M208_100	CTD 29	26.02.	CTD	23:08-23:25	11°00.00'N	17°02.00'W	60	CTD station
M208_101	GoFlo 7	26.02.	GoFlo	23:32-23:55	11°00.00'N	17°02.00'W		GoFlo station
M208_102	WP2 9	27.02.	WP2	00:00-00:07	11°00.00'N	17°02.00'W		Plankton net
M208_103	WP2 10	27.02.	WP2	00:10-00:21	11°00.00'N	17°02.00'W		Plankton net
M208_104	MSS 12	27.02.	MSS	00:29-04:14	11°00.00'N	17°02.00'W		Microstructure
M208_105	CTD 30	27.02.	CTD	04:26-04:42	11°00.00'N	17°06.00'W	155	CTD station
M208_106	MSS 13	27.02.	MSS	05:14-08:43	11°00.00'N	17°06.00'W		Microstructure
M208_107	CTD 31	27.02.	CTD	08:57-09:33	11°00.00'N	17°10.00'W	480	CTD station
M208_108	MSN 18	27.02.	MSN	09:42-10:11	11°00.00'N	17°10.00'W		Multinet station
M208_109	WP2 11	27.02.	WP2	10:19-10:28	11°00.00'N	17°10.00'W		Plankton net
M208_110	CTD 32 ISP 5	27.02.	CTD ISP	10:44-13:49	11°00.00'N	17°10.00'W		CTD/in-situ pump station
M208_111	BLN 14	27.02.	BLN	13:46	11°00.00'N	17°10.00'W		Radiosonde
M208_112	MSS 14	27.02.	MSS	14:05-14:47	11°00.00'N	17°10.00'W		Microstructure
M208_113	DRIFT 5	27.02.	Surface drifter	14:54	11°02.00'N	17°10.00'W		SVP drifter deployment
M208_114	BLN 15	27.02.	BLN	16:36	11°20.00'N	17°16.00'W		Radiosonde
M208_115	BLN 16	27.02.	BLN	19:38	11°52.00'N	17°26.00'W		Radiosonde
M208_116	MSN 19	28.02.	MSN	04:51-05:57	13°30.00'N	17°30.00'W		Multinet station
M208_117	WP2 12	28.02.	WP2	06:02-06:12	13°30.00'N	17°30.00'W		Plankton net
M208_118	CTD 33	28.02.	CTD	06:19-06:55	13°30.00'N	17°30.00'W	505	CTD station
M208_119	GoFlo 8	28.02.	GoFlo	07:11-08:13	13°30.00'N	17°30.00'W		GoFlo station
M208_120	MSN 20	28.02.	MSN	08:23-08:54	13°30.00'N	17°30.00'W		Multinet station
M208_121	CTD 34	28.02.	CTD	10:44-10:54	13°30.00'N	17°15.00'W	55	CTD station
M208_122	GoFlo 9	28.02.	GoFlo	11:03-11:23	13°30.00'N	17°15.00'W		GoFlo station
M208_123	WP2 13	28.02.	WP2	11:30-11:34	13°30.00'N	17°15.00'W		Plankton net
M208_124	WP2 14	28.02.	WP2	11:37-11:41	13°30.00'N	17°15.00'W		Plankton net
M208_125	MSS 15	28.02.	MSS	12:03	13°30.00'N	17°15.00'W		Microstructure
M208_126	TFISH	28.02. 03.03.	TFISH	12:04 10:38	13°30.00'N 14°30.00'N	17°15.00'W 17°14.00'W		TowFish underway
M208_127	CTD 35	28.02.	CTD	15:50-16:00	13°30.00'N	17°20.00'W	71	CTD station

M208_128	MSS 16	28.02.	MSS	16:16-21:47	13°30.00'N	17°20.00'W		Microstructure
M208_129	CTD 36	28.02.	CTD	21:58-22:14	13°30.00'N	17°25.00'W	95	CTD station
M208_130	MSS 17	28.02.	MSS	22:40-02:11	13°30.00'N	17°25.00'W		Microstructure
M208_131	CTD 37 ISP 6	01.03.	CTD ISP	02:18-05:33	13°30.00'N	17°30.00'W	522	CTD/in-situ pump station
M208_132	CTD 38	01.03.	CTD	06:23-07:04	13°30.00'N	17°30.00'W		CTD station
M208_133	DRIFT 6	01.03.	Surface drifter	07:18	13°30.00'N	17°30.00'W		SVP drifter deployment
M208_134	MSS 18	01.03.	MSS	07:24-09:37	13°30.00'N	17°30.00'W		Microstructure
M208_135	CTD 39	01.03.	CTD	10:13-10:51	13°30.00'N	17°35.00'W	872	CTD station
M208_136	MSS 19	01.03.	MSS	11:01-11:42	13°30.00'N	17°35.00'W		Microstructure
M208_137	CTD 40	01.03.	CTD	12:38-13:33	13°30.00'N	17°40.00'W		CTD station
M208_138	GoFlo 10	01.03.	GoFlo	13:40-15:18	13°30.00'N	17°40.00'W		GoFlo station
M208_139	MSS 20	01.03.	MSS	15:34-16:20	13°30.00'N	17°40.00'W		Microstructure
M208_140	CTD 41	01.03.	CTD	17:06-18:17	13°30.00'N	17°45.00'W		CTD station
M208_141	MSS 21	01.03.	MSS	18:38	13°30.00'N	17°45.00'W		Microstructure
M208_142	CTD 42	01.03.	CTD	20:24-21:15	13°30.00'N	17°52.00'W		CTD station
M208_143	MSS 22	01.03.	MSS	21:37-22:20	13°30.00'N	17°52.00'W		Microstructure
M208_144	BLN 17	01.03.	BLN	23:08	13°30.00'N	17°59.00'W		Radiosonde
M208_145	CTD 43	01.03.	CTD	23:22-00:23	13°30.00'N	18°00.00'W		CTD station
M208_146	MSN 21	02.03.	MSN	00:34-01:35	13°30.00'N	18°00.00'W		Multinet station
M208_147	BLN 18	02.03.	BLN	01:33	13°30.00'N	18°00.00'W		Radiosonde
M208_148	WP2 15	02.03.	WP2	01:41-01:50	13°30.00'N	18°00.00'W		Plankton net
M208_149	GoFlo 11	02.03.	GoFlo	02:04-03:37	13°30.00'N	18°00.00'W		GoFlo station
M208_150	MSS 23	02.03.	MSS	03:53-04:35	13°30.00'N	18°00.00'W		Microstructure
M208_151	BLN 19	02.03.	BLN	04:31	13°30.00'N	18°00.00'W		Radiosonde
M208_152	CTD 44	02.03.	CTD	07:31-08:32	13°30.00'N	18°30.00'W		CTD station
M208_153	BLN 20	02.03.	BLN	07:38	13°30.00'N	18°00.00'W		Radiosonde
M208_154	MSN 22	02.03.	MSN	08:41-09:41	13°30.00'N	18°30.00'W		Multinet station
M208_155	WP2 16	02.03.	WP2	09:49-10:01	13°30.00'N	18°30.00'W		Plankton net
M208_156	MSS 24	02.03.	MSS	10:13-11:10	13°30.00'N	18°30.00'W		Microstructure
M208_157	BLN 21	02.03.	BLN	13:44	13°30.00'N	18°57.00'W		Radiosonde
M208_158	WP2 17	02.03.	WP2	14:10-14:17	13°30.00'N	19°00.00'W		Plankton net
M208_159	MSN 23	02.03.	MSN	14:24-15:33	13°30.00'N	19°00.00'W		Multinet station
M208_160	CTD 45	02.03.	CTD	15:33-16:29	13°30.00'N	19°00.00'W		CTD station
M208_161	GoFlo 12	02.03.	GoFlo	16:37-18:18	13°30.00'N	19°00.00'W		GoFlo station
M208_162	MSS 25	02.03.	MSS	18:32-19:17	13°30.00'N	19°00.00'W		Microstructure
M208_163	CTD 46	02.03.	CTD	19:47-20:20	13°30.00'N	19°00.00'W		CTD station
M208_164	MSN 24	02.03.	MSN	20:30-21:33	13°30.00'N	19°00.00'W		Multinet station
M208_165	CTD 47	02.03.	CTD	21:50-22:08	13°30.00'N	19°00.00'W		CTD station
M208_166	CTD 48	03.03.	CTD	10:24-10:33	14°30.00'N	17°14.50'W	36	CTD station
M208_167	CTD 49	03.03.	CTD	11:20-11:29	14°30.00'N	17°18.00'W	45	CTD station
M208_168	TFISH	03.03. 06.03.	TFISH	11:35 09:12	14°30.00'N 17°45.50'N	17°18.00'W 16°30.40'W		TowFish underway
M208_169	MSS 26	03.03.	MSS	11:37-11:49	14°30.00'N	17°18.00'W		Microstructure
M208_170	CTD 50	03.03.	CTD	12:26-12:34	14°30.00'N	17°21.00'W	60	CTD station
M208_171	MSS 27	03.03.	MSS	12:41-16:11	14°30.00'N	17°21.00'W		Microstructure
M208_172	CTD 51	03.03.	CTD	16:19-16:31	14°30.00'N	17°25.00'W	76	CTD station
M208_173	MSN 25	03.03.	MSN	16:38-16:47	14°30.00'N	17°25.00'W		Multinet station
M208_174	WP2 18	03.03.	WP2	16:51-17:01	14°30.00'N	17°25.00'W		Plankton net
M208_175	MSS 28	03.03.	MSS	17:36-21:27	14°30.00'N	17°25.00'W		Microstructure
M208_176	CTD 52	03.03.	CTD	21:54-22:07	14°28.10'N	17°30.00'W	100	CTD station
M208_177	GoFlo 13	03.03.	GoFlo	22:16-22:43	14°28.10'N	17°30.00'W		GoFlo station
M208_178	MSS 29	03.03.	MSS	22:50-01:33	14°28.10'N	17°30.00'W		Microstructure
M208_179	CTD 53	04.03.	CTD	02:20-02:44	14°27.80'N	17°34.80'W	300	CTD station
M208_180	MSS 30	04.03.	MSS	02:59-03:40	14°27.80'N	17°34.80'W		Microstructure
M208_181	MSN 26	04.03.	MSN	04:45-05:45	14°28.50'N	17°41.60'W		Multinet station
M208_182	CTD 54	04.03.	CTD	05:52-06:51	14°28.50'N	17°41.60'W	1060	CTD station
M208_183	GoFlo 14	04.03.	GoFlo	07:02-08:48	14°28.50'N	17°41.60'W		GoFlo station
M208_184	CTD 55 ISP 7	04.03.	CTD ISP	08:59-11:57	14°28.50'N	17°41.60'W		CTD/in-situ pump station
M208_185	MSN 27	04.03.	MSN	12:08-13:05	14°28.50'N	17°41.60'W		Multinet station
M208_186	MSS 31	04.03.	MSS	14:12-16:56	14°30.00'N	17°34.50'W		Microstructure
M208_187	IFM13	05.03.	Glider	12:58-13:18	17°06.90'N	17°01.50'W	1504	Glider recovery
M208_188	IFM14	05.03.	Glider	15:09-15:22	17°18.80'N	16°54.60'W	1010	Glider recovery
M208_189	CTD 56	05.03.	CTD	17:03-17:49	17°17.50'N	17°47.10'W	450	CTD station
M208_190	MSN 28	05.03.	MSN	17:57-18:28	17°17.50'N	17°47.10'W		Multinet station
M208_191	CTD 57 ISP 8	05.03.	CTD ISP	18:47-21:21	17°17.50'N	17°47.10'W		CTD/in-situ pump station
M208_192	MSN 29	05.03.	MSN	21:28-21:59	17°17.50'N	17°47.10'W		Multinet station
M208_193	MVP 2	06.03.	MVP	00:30-00:47	17°12.40'N	16°29.90'W		MVP section
M208_194	KPO1303	06.03.	Lander		17°15.618'N	16°30.259'W	100	Lander search after surfacing
M208_194	KPO1303	06.03.	Lander	09:27-09:43	17°15.618'N	16°30.259'W	100	Lander recovery

M208_195	CTD 58	06.03.	CTD	10:05-10:20	17°15.60'N	16°30.30'W		CTD station
M208_196	KPO1304	06.03.	Lander	11:29-12:01	17°08.996'N	16°24.010'W	50	Lander recovery
M208_197	CTD 59	06.03.	CTD	12:12-12:22	17°09.00'N	16°24.10'W		CTD station
M208_198	TFISH	06.03. 07.03.	TFISH	12:16 11:33	17°09.00'N 17°40.00'N	16°24.00'W 17°48.00'W		TowFish underway
M208_199	KPO1302	06.03.	Mooring	14:57-16:09	17°18.00'N	16°47.10'W	558	Mooring recovery
M208_200	CTD 60	06.03.	CTD	16:28-17:03	17°18.00'N	16°47.10'W		CTD station
M208_201	MVP 3	06.03.	MVP	17:36-09:28	17°18.20'N 18°00.00'N 18°00.00'N 17°44.40'N 17°39.70'N	16°47.20'W 17°18.00'W 17°50.50'W 17°28.70'W 17°49.50'W		MVP section
M208_202	CTD 61	07.03.	CTD	09:56-11:01	17°39.90'N	17°48.00'W		CTD station
M208_203	MSN 30	07.03.	MSN	11:13-12:08	17°39.90'N	17°48.00'W		Multinet station
M208_204	IFM14	07.03.	Glider	13:03	17°41.50'N	17°48.00'W		Glider deployment
M208_205	IFM16	07.03.	Glider	13:15	17°41.70'N	17°48.00'W		Glider deployment
M208_206	BLN 22	07.03.	BLN	13:33	17°41.00'N	17°49.00'W		Radiosonde
M208_207	TFISH	07.03.	TFISH	13:55	17°40.00'N	17°48.00'W		TowFish underway
M208_208	CTD 62 ISP 9	07.03.	CTD ISP	14:00-17:07	17°39.90'N	17°48.00'W		CTD/in-situ pump station
M208_209	BLN 23	07.03.	BLN	14:30	17°39.90'N	17°48.00'W		Radiosonde
M208_210	GoFlo 15	07.03.	GoFlo	17:17-18:25	17°39.90'N	17°48.00'W		GoFlo station
M208_211	MSS 32	07.03. 08.03.	MSS	18:52 02:14	17°39.90'N 17°35.00'N	17°47.90'W 17°38.80'W		Microstructure
M208_212	BLN 24	07.03.	BLN	19:52	17°39.00'N	17°47.00'W		Radiosonde
M208_213	DRIFT 7	07.03.	Surface drifter	20:41	17°38.60'N	17°45.60'W		SVP drifter deployment
M208_214	BLN 25	07.03.	BLN	23:10	17°37.00'N	17°43.00'W		Radiosonde
M208_215	DRIFT 8	07.03.	Surface drifter	23:24	17°35.80'N	17°40.30'W		SVP drifter deployment
M208_216	BLN 26	08.03.	BLN	01:39	17°35.00'N	17°39.00'W		Radiosonde
M208_217	CTD 63	08.03.	CTD	02:28-03:35	17°34.90'N	17°38.70'W		CTD station
M208_218	MSN 31	08.03.	MSN	03:45-04:44	17°34.90'N	17°38.70'W		Multinet station
M208_219	BLN 27	08.03.	BLN	04:36	17°34.90'N	17°38.70'W		Radiosonde
M208_220	GoFlo 16	08.03.	GoFlo	04:57-06:06	17°34.90'N	17°38.70'W		GoFlo station
M208_221	DRIFT 9	08.03.	Surface drifter	06:21	17°34.90'N	17°38.70'W		SVP drifter deployment
M208_222	MSS 33	08.03.	MSS	06:26-09:34	17°34.90'N 17°33.00'N	17°38.60'W 17°35.00'W		Microstructure
M208_223	BLN 28	08.03.	BLN	07:31	17°34.30'N	17°37.50'W		Radiosonde
M208_224	DRIFT 10	08.03.	Surface drifter	08:20	17°33.80'N	17°36.60'W		SVP drifter deployment
M208_225	CTD 64	08.03.	CTD	09:40-10:54	17°33.00'N	17°35.00'W		CTD station
M208_226	MSN 32	08.03.	MSN	11:01-12:01	17°33.00'N	17°35.00'W		Multinet station
M208_227	GoFlo 17	08.03.	GoFlo	12:07-13:35	17°33.00'N	17°35.00'W		GoFlo station
M208_228	BLN 29	08.03.	BLN	13:40	17°33.00'N	17°35.00'W		Radiosonde
M208_229	MVP 4	08.03.	MVP	14:00	17°32.500'N 17°28.097'N 17°35.107'N 17°30.704'N 17°23.694'N 17°39.900'N	17°34.000'W 17°36.327'W 17°49.589'W 17°51.916'W 17°38.654'W 17°48.000'W		MVP section
M208_230	BLN 30	08.03.	BLN	17:09	17°29.00'N	17°42.00'W		Radiosonde
M208_231	BLN 31	08.03.	BLN	19:31	17°31.00'N	17°52.00'W		Radiosonde
M208_232	CTD 65	08.03.	CTD	22:27-23:20	17°37.50'N	17°43.70'W		CTD station
M208_233	BLN 32	08.03.	BLN	22:51	17°37.50'N	17°43.70'W		Radiosonde
M208_234	MSN 33	09.03.	MSN	23:28-00:33	17°37.50'N	17°43.70'W		Multinet station
M208_235	GoFlo 18	09.03.	GoFlo	00:39-01:56	17°37.50'N	17°43.70'W		GoFlo station
M208_236	BLN 33	09.03.	BLN	00:31	17°37.50'N	17°43.70'W		Radiosonde
M208_237	MVP 5	09.03.	MVP	02:13-02:52	17°37.40'N 17°35.40'N	17°43.60'W 17°39.20'W		MVP section
M208_238	CTD 66 ISP 10	09.03.	CTD ISP	03:17-06:25	17°35.20'N	17°39.20'W		CTD/in-situ pump station
M208_239	MVP 6	09.03.	MVP	06:47-07:05	17°35.10'N 17°34.00'N	17°39.10'W 17°37.20'W		MVP section
M208_240	CTD 67	09.03.	CTD	07:20-08:21	17°34.10'N	17°37.10'W		CTD station
M208_241	BLN 34	09.03.	BLN	07:35	17°34.10'N	17°37.10'W		Radiosonde
M208_242	MSN 34	09.03.	MSN	08:30-09:26	17°34.10'N	17°37.10'W		Multinet station
M208_243	GoFlo 19	09.03.	GoFlo	09:34-10:48	17°34.10'N	17°37.10'W		GoFlo station
M208_244	MSS 34	09.03.	MSS	11:36-14:39	17°33.00'N 17°35.20'N	17°35.00'W 17°39.30'W		Microstructure
M208_245	BLN 35	09.03.	BLN	13:32	17°34.50'N	17°37.80'W		Radiosonde
M208_246	CTD 68	09.03.	CTD	14:44-15:11	17°35.20'N	17°39.30'W		CTD station
M208_247	MSS 35	09.03.	MSS	15:27-17:27	17°35.30'N 17°36.70'N	17°39.30'W 17°42.30'W		Microstructure

M208_248	BLN 36	09.03.	BLN	16:35	17°36.10'N	17°41.00'W		Radiosonde
M208_249	CTD 69	09.03.	CTD	17:40-18:09	17°36.70'N	17°42.30'W		CTD station
M208_250	MSS 36	09.03.	MSS	18:29-20:24	17°36.80'N 17°38.30'N	17°42.40'W 17°45.10'W		Microstructure
M208_251	BLN 37	09.03.	BLN	19:52	17°37.90'N	17°44.40'W		Radiosonde
M208_252	CTD 70	09.03.	CTD	20:36-21:07	17°38.30'N	17°45.10'W		CTD station
M208_253	MSS 37	09.03.	MSS	21:28-01:33	17°38.50'N 17°41.60'N	17°45.30'W 17°51.10'W		Microstructure
M208_254	BLN 38	09.03.	BLN	22:29	17°39.20'N	17°46.70'W		Radiosonde
M208_255	BLN 39	10.03.	BLN	01:24	17°41.50'N	17°50.90'W		Radiosonde
M208_256	MVP 7	10.03.	MVP	01:40-09:56	17°41.90'N 17°32.20'N	17°51.20'W 17°34.20'W		MVP section
M208_257	BLN 40	10.03.	BLN	07:32	17°35.10'N	17°49.60'W		Radiosonde
M208_258	CTD 71	10.03.	CTD	10:15-10:44	17°32.50'N	17°34.00'W		CTD station
M208_259	CTD 72	10.03.	CTD	11:51-12:20	17°34.20'N	17°37.50'W		CTD station
M208_260	MSS 38	10.03.	MSS	12:37-13:07	17°34.50'N	17°37.70'W		Microstructure
M208_261	BLN 41	10.03.	BLN	13:36	17°33.90'N	17°37.00'W		Radiosonde
M208_262	CTD 73	10.03.	CTD	13:46-14:14	17°34.00'N	17°37.00'W		CTD station
M208_263	MSS 39	10.03.	MSS	14:23-14:51	17°34.10'N	17°37.90'W		Microstructure
M208_264	BUCKET	10.03.	BUCKET	14:36	17°34.40'N	17°37.50'W		Bucket
M208_265	CTD 74	10.03.	CTD	15:39-16:33	17°35.80'N	17°40.50'W		CTD station
M208_266	BLN 42	10.03.	BLN	16:41	17°35.80'N	17°40.50'W		Radiosonde
M208_267	CTD 75	10.03.	CTD	17:17-18:01	17°35.40'N	17°39.60'W		CTD station
M208_268	MSS 40	10.03.	MSS	18:18-18:58	17°35.50'N	17°39.60'W		Microstructure
M208_269	BLN 43	10.03.	BLN	19:31	17°34.90'N	17°38.80'W		Radiosonde
M208_270	CTD 76	10.03.	CTD	19:40-20:41	17°35.00'N	17°38.80'W		CTD station
M208_271	MSN 35	10.03.	MSN	20:49-21:48	17°35.00'N	17°38.80'W		Multinet station
M208_272	MSS 41	10.03.	MSS	22:18-22:48	17°35.00'N	17°38.80'W		Microstructure
M208_273	BLN 44	10.03.	BLN	22:39	17°35.40'N	17°39.00'W		Radiosonde
M208_274	CTD 77	10.03.	CTD	23:54-00:23	17°38.70'N	17°45.70'W		CTD station
M208_275	BLN 45	11.03.	BLN	01:28	17°46.50'N	17°39.90'W		Radiosonde
M208_276	BLN 46	11.03.	BLN	04:30	18°00.00'N	17°14.40'W		Radiosonde
M208_277	BLN 47	11.03.	BLN	07:39	18°00.00'N	16°39.50'W		Radiosonde
M208_278	CTD 78	11.03.	CTD	08:17-08:48	18°00.00'N	16°35.00'W	427	CTD station
M208_279	GoFlo 20	11.03.	GoFlo	08:55-09:54	18°00.00'N	16°35.00'W		GoFlo station
M208_280	WP2 19	11.03.	WP2	10:02-10:10	18°00.00'N	16°35.00'W		Plankton net
M208_281	MSN 36	11.03.	MSN	10:25-10:51	18°00.00'N	16°35.00'W		Multinet station
M208_282	CTD 79 ISP 11	11.03.	CTD ISP	11:00-13:58	18°00.00'N	16°35.00'W		CTD/in-situ pump station
M208_283	MSS 42	11.03.	MSS	14:12-14:55	18°00.00'N	16°35.00'W		Microstructure
M208_284	CTD 80	11.03.	CTD	15:38-15:56	18°00.000'N	16°30.00'W	198	CTD station
M208_285	MSS 43	11.03.	MSS	16:11-16:49	18°00.00'N	16°30.00'W		Microstructure
M208_286	CTD 81	11.03.	CTD	17:35-17:53	18°00.00'N	16°25.00'W	109	CTD station
M208_287	MSN 37	11.03.	MSN	18:00-18:15	18°00.00'N	16°25.00'W		Multinet station
M208_288	MSS 44	11.03.	MSS	18:26-18:50	18°00.00'N	16°25.00'W		Microstructure
M208_289	CTD 82	11.03.	CTD	19:44-19:56	18°00.00'N	16°20.00'W	75	CTD station
M208_290	WP2 20	11.03.	WP2	20:02-20:11	18°00.00'N	16°20.00'W		Plankton net
M208_291	WP2 21	11.03.	WP2	20:14-20:23	18°00.00'N	16°20.00'W		Plankton net
M208_292	GoFlo 21	11.03.	GoFlo	20:37-21:02	18°00.00'N	16°20.00'W		GoFlo station
M208_293	CTD 83	11.03.	CTD	21:56-22:04	18°00.00'N	16°16.30'W	41	CTD station
M208_294	MSS 45	11.03.	MSS	22:29-04:01	18°00.00'N	16°16.30'W		Microstructure
M208_295	MSS 46	11.03.	MSS	06:10-12:15	18°00.00'N	16°24.20'W		Microstructure
M208_296	CTD 84	12.03.	CTD	13:21-14:26	18°00.00'N	16°40.00'W	715	CTD station, calibration cast for moored instruments
M208_297	MSS 47	12.03.	MSS	14:40-15:15	18°00.00'N	16°40.00'W		Microstructure
M208_298	CTD 85	12.03.	CTD	15:54-17:09	18°00.00'N	16°45.00'W	995	CTD station
M208_299	MSN 38	12.03.	MSN	17:17-18:16	18°00.00'N	16°45.00'W		Multinet station
M208_300	WP2 22	12.03.	WP2	18:20-18:32	18°00.00'N	16°45.00'W		Plankton net
M208_301	GoFlo 22	12.03.	GoFlo	18:41-20:12	18°00.00'N	16°45.00'W		GoFlo station
M208_302	MSN 39	12.03.	MSN	20:19-21:17	18°00.00'N	16°45.00'W		Multinet station
M208_303	MSS 48	12.03.	MSS	21:29-22:02	18°00.00'N	16°45.00'W		Microstructure
M208_304	CTD 86	12.03.	CTD	22:54-23:42	18°00.00'N	16°52.00'W	1382	CTD station
M208_305	MSS 49	12.03.	MSS	23:59-00:24	18°00.00'N	16°52.00'W		Microstructure
M208_306	CTD 87	13.03.	CTD	01:32-02:32	18°00.00'N	17°00.00'W		CTD station
M208_307	MSN 40	13.03.	MSN	02:44-03:43	18°00.00'N	17°00.00'W		Multinet station
M208_308	MSS 50	13.03.	MSS	03:55-04:35	18°00.00'N	17°00.00'W		Microstructure
M208_309	CTD 88	13.03.	CTD	07:25-08:16	18°00.00'N	17°30.00'W		CTD station
M208_310	BLN 48	13.03.	BLN	07:34	18°00.00'N	17°30.00'W		Radiosonde
M208_311	MSS 51	13.03.	MSS	08:39-09:15	18°00.00'N	17°30.00'W		Microstructure
M208_312	BLN 49	13.03.	BLN	13:39	18°00.00'N	17°31.00'W		Radiosonde
M208_313	IFM14	13.03.	Glider	14:49	17°39.00'N	17°43.70'W		Glider recovery
M208_314	IFM16	13.03.	Glider	16:21	17°36.40'N	17°40.40'W		Glider recovery
M208_315	BLN 50	13.03.	BLN	16:26	17°36.70'N	17°40.50'W		Radiosonde

M208_316	BLN 51	13.03.	BLN	18:09	17°48.40'N	17°49.50'W	Radiosonde
M208_317	CTD 89	13.03.	CTD	20:00-20:48	18°00.00'N	18°00.00'W	CTD station
M208_318	CTD 90	13.03.	CTD	21:30-21:48	18°00.00'N	18°00.00'W	CTD station
M208_319	CTD 91 ISP 12	13.03.	CTD ISP	22:24-01:47	18°00.00'N	18°00.00'W	CTD/in-situ pump station
M208_320	BLN 52	13.03.	BLN	22:37	18°00.00'N	18°00.00'W	Radiosonde
M208_321	BLN 53	14.03.	BLN	01:36	18°00.00'N	18°00.00'W	Radiosonde
M208_322	GoFlo 23	14.03.	GoFlo	02:01-03:33	18°00.00'N	18°00.00'W	GoFlo station
M208_323	CTD 92	14.03.	CTD	03:49-04:47	18°00.00'N	18°00.00'W	CTD station
M208_324	BLN 54	14.03.	BLN	04:35	18°00.00'N	18°00.00'W	Radiosonde
M208_325	MSN 41	14.03.	MSN	04:59-05:56	18°00.00'N	18°00.00'W	Multinet station
M208_326	WP2 23	14.03.	WP2	06:00-06:10	18°00.00'N	18°00.00'W	Plankton net
M208_327	MSS 52	14.03.	MSS	06:44-07:18	18°00.00'N	18°00.00'W	Microstructure
M208_328	BLN 55	14.03.	BLN	07:35	18°00.50'N	18°01.00'W	Radiosonde
M208_329	CTD 93	14.03.	CTD	09:35-10:52	17°49.00'N	18°12.00'W	CTD station
M208_330	MSN 42	14.03.	MSN	11:02-11:56	17°49.00'N	18°12.00'W	Multinet station
M208_331	MSS 53	14.03.	MSS	12:17-13:03	17°49.00'N	18°12.00'W	Microstructure
M208_332	BLN 56	14.03.	BLN	13:37	17°46.50'N	18°16.40'W	Radiosonde
M208_333	MSN 43	14.03.	MSN	15:01-15:54	17°37.50'N	18°25.00'W	Multinet station
M208_334	CTD 94	14.03.	CTD	16:01-16:57	17°37.50'N	18°25.00'W	CTD station
M208_335	BLN 57	14.03.	BLN	16:34	17°37.50'N	18°25.00'W	Radiosonde
M208_336	MSS 54	14.03.	MSS	17:12-19:33	17°37.50'N	18°25.20'W	Microstructure
M208_337	BLN 58	14.03.	BLN	19:33	17°27.40'N	18°36.40'W	Radiosonde
M208_338	CTD 95	14.03.	CTD	22:45-23:39	17°06.00'N	19°00.00'W	CTD station
M208_339	MSN 44	14.03.	MSN	23:47-00:51	17°06.00'N	19°00.00'W	Multinet station
M208_340	BLN 59	15.03.	BLN	00:13	17°06.00'N	19°00.00'W	Radiosonde
M208_341	MSS 55	15.03.	MSS	00:58-01:43	17°06.10'N	19°00.20'W	Microstructure
M208_342	BLN 60	15.03.	BLN	01:24	17°06.70'N	19°01.20'W	Radiosonde
M208_343	BLN 61	15.03.	BLN	04:29	17°15.40'N	19°29.50'W	Radiosonde
M208_344	BLN 62	15.03.	BLN	07:37	17°25.80'N	20°02.30'W	Radiosonde