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Short Cruise Report R/V METEOR M203

Mindelo (Cape Verde) – Bridgetown (Barbados)

10.08.2024 – 24.09.2024

Chief Scientist: Dr. Daniel Klocke

Captain: Detlef Korte

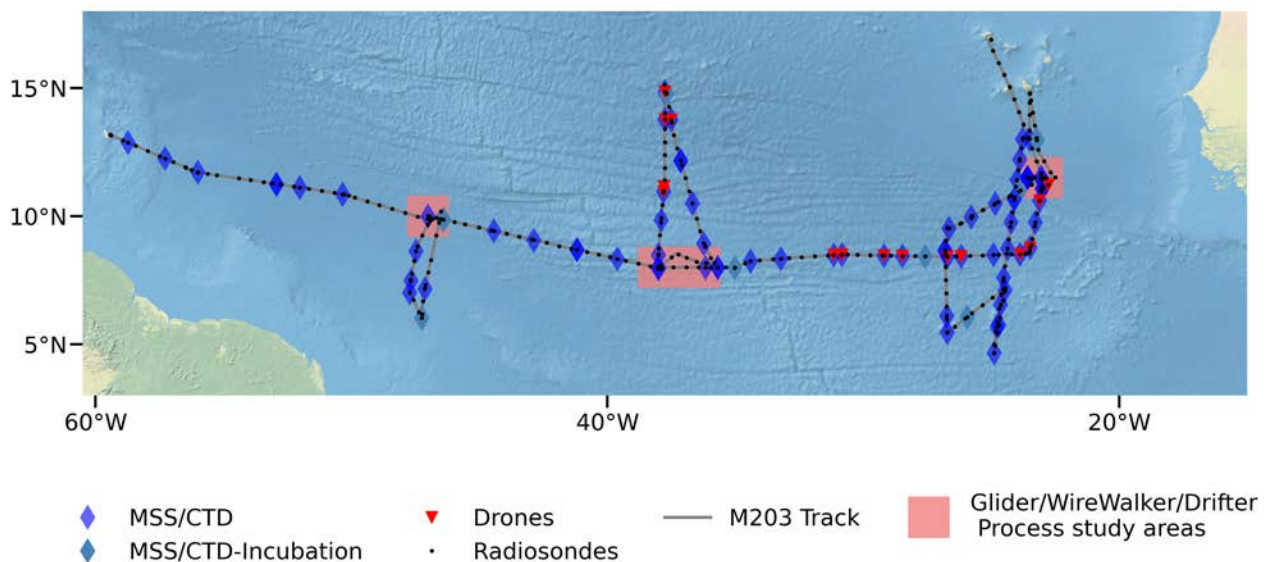


Figure 1: Bathymetric map and cruise track of R/V METEOR cruise M203 (grey line), including locations of radiosonde launches, CTD/MSS with incubation stations and drone flight positions. Red shaded areas indicate the oceanographic process study areas, where glider and drifters were deployed.

Objectives

The objective of the FS METEOR M203 BOWTIE expedition was to study how air- and water mass properties and small-scale weather systems in atmosphere and ocean impact the large-scale structure and dynamics of the inter-tropical convergence zone (ITCZ) with particular focus on the variability of the Atlantic ITCZ. BOWTIE will provide spatially resolved cross sections of the ITCZ from the upper ocean to the tropopause. Cross sections were made by transecting the ITCZ from north to south in the eastern, central and western Atlantic, while continuously sampling the atmospheric state with a large set of instruments profiling the atmosphere. The characteristics of the upper ocean were sampled continuously with shipboard instrumentation and during hydrographic stations (CTD/O₂ and microstructure measurements) about every degree travelled, complemented by autonomous profiling observatories and drifters that were deployed at each of the transects. Additionally, biogeochemical parameters in the ocean, aerosols in the atmosphere and the exchange of trace gases between the atmosphere and ocean were measured.

M203 BOWTIE is part of a large set of international campaigns, which were coordinated under the name ORCESTR - Organized Convection and EarthCare Studies over the Tropical Atlantic which all operated within the tropical Atlantic region in August and September 2024¹. Exactly 50 years after the Atmospheric Research Program's Atlantic Tropical Experiment (GATE) - the largest atmospheric field experiment to date - was conducted south of the Cape Verde Islands, the international science community was again visiting this region, this time with much more advanced measurement techniques. Besides FS METEOR, three airborne platforms (the German research aircraft HALO, a French research aircraft, and a Romanian research aircraft, operated by Norwegian researchers), two island-based measurement stations on either side of the Atlantic (in Mindelo in the Cape Verde Islands and on Barbados) and the recently launched EarthCare satellite contribute to this initiative. On FS METEOR two separately funded campaigns additionally contributed to M203 and strengthen BOWTIE. Through the US National Science Foundation (NSF)-funded project PICCOLO (Process Investigation of Clouds and Convective Organization over the Atlantic Ocean) the SEA-POL (Sea-Going Polarimetric) radar is installed on FS METEOR to observe precipitation and related variables in a radius of 200km around the ship. The project STRINQS (Soundings and Turbulent eddy measurements in the ITCZ with a Network of QuadcopterS) from the TU Delft in the Netherlands added a swarm of drones to the BOWTIE instrumentation to observe atmospheric conditions close the sea surface.

Narrative

With a delay of 6 days, R/V METEOR left the port of Mindelo on the Cape Verde islands in the morning of the 16th of August 2024. The delay was due to the late arrival of containers with research equipment and provisions for the ship in Mindelo. Even with this delay, the airfreight with the drones did not make it to the ship before departure. While in port, the remaining scientific instruments were setup and configured and with the permission of the aviation authorities we were already allowed to launch several radio sondes. Directly after leaving port, we activated all of our atmospheric measurement systems and underway

¹ <https://orcestra-campaign.org>

ocean sampling and started heading south towards the moist tropics and the ITCZ. Except for the weather balloons, which are launched every three hours to obtain information about the vertical structure of the atmosphere, all other atmospheric measurements will operate continuously until we reach Barbados. The biggest scientific loss of the delayed departure were two missed opportunities for coordinated measurements with research aircrafts stationed in Sal and the recently launched EarthCare satellite.

First, we headed towards the Pirata buoy at 11.5°N, 23.0°W, just outside the exclusive economic zone of the Cape Verde Islands. We reached the working area just south of the buoy late on Saturday evening on the 17th of August. Due to winds and waves, we waited to deploy a glider, a drift buoy and a WireWalker - a drifting instrument which profiles the upper 750m of the ocean - until the next morning. A second bio-glider was deployed several miles north of the other instruments. All instruments sampled the upper ocean state continuously for about two weeks, after which they were collected again to be taken to the central Atlantic.

Following the deployment of the oceanographic instruments, R/V METEOR travelled South across the ITCZ until we reached the Southern edge of the ITCZ. After reaching the dry tropics, we turned around to head back North. While steaming, we continuously profiled the atmosphere and stopped to profile the ocean about every degree travelled. During the transect, we performed coordinated measurements with the EarthCARE satellite (on the 20th and 22nd of August) and the German research aircraft HALO (21st and 22nd of August), which was operating from Sal, Cape Verde through our partner project Persistent EarthCARE Underflight Studies of the ITCZ and Organized convection (PERCUSION). On the 27th of August, coordinated measurements with the German research aircraft HALO, as well as a French and Norwegian research aircraft were performed. The transect of the ITCZ towards the Northern edge was extended to Praia to pick up drones, drone pilots and a replacement part for the Sea-Pol radar, which is needed for the dual-polarimetric information from the measurements to make M203 instrumentation complete. The exchange of equipment and personal was done outside the port of Praia on the 28th of August.

On the 30th of August the autonomous oceanographic instruments were recovered and following more coordinated measurements 31st of August, R/V METEOR headed towards the central tropical Atlantic along the precipitation maximum around 8°N. On the 6th of September R/V METEOR reached the oceanographic process study area around 8°N and 38°W, where glider, drift buoy and WireWalker were deployed again. After the deployment the ITCZ was transected in Northern direction, while stations for CTD, MSS and UAV measurements were continuously repeated about every travelled degree. R/V METEOR reached the Northern Edge of the ITCZ at 15°N on the 8th of September, where turned around to collect gliders and drifters. Due to the strong equatorial counter current, the instruments had drifted East by more than 2°.

After concluding the measurements in the central tropical Atlantic around 38°W, R/V METEOR moved its working area to the western tropical Atlantic around 47°W. Here, in the last working area before ending the M203 expedition in Barbados, we again deployed ocean gliders and drifters, at 10°N and 47°W, and again transect the ITCZ before recovering the instruments. This time, R/V METEOR headed for the Southern edge of the ITCZ for the transect. We reached the Southern edge of the moist tropics on the 17th of September around 6°N and turned around to collect the autonomous oceanographic instruments for the last time on the 18th of September. While continuing our under way measurement program, including regular station stops, R/V METEOR headed for Barbados.

In the afternoon of the 22nd of September, R/V METEOR reached Barbados. Before heading to the port of Bridgetown in Barbados, R/V METEOR spend a day stationed in front of the Barbados Cloud Observatory (BCO), which is operated by Max Planck Institute

for Meteorology in cooperation with Caribbean Institute for Meteorology and Hydrology (CIMH) since 2010. We performed coordinated atmospheric measurements with the observatory and the German research aircraft HALO on the 23rd of September, which was now stationed in Barbados as part of ORCESTRA. The measurement program concluded in the late afternoon of the 23rd of September and R/V METEOR moved to the port of Bridgetown early on the 24th. M203 was concluded with a reception and a tour of R/V METEOR for officials, scientists of Barbados (Figure 3).



Figure 2: Crew of M203 (not complete) on R/V METEOR with Barbados in the background.



Figure 3: Participants of reception and tour of R/V METEOR in the port of Bridgetown in Barbados.

Acknowledgements

The scientists of M203 are very grateful to Captain Detlef Korte and his crew. Without their professional support, this campaign would not have been possible, and they contributed enormously with their experience to making M203 a great success. We also like to thank the Leitstelle Deutsche Forschungsschiffe and Briesse Research for their support, as well the Gutachtenpael Forschungsschiffe (GPF) for their guidance and assistance. M203 received funding through the Deutsche Forschungsgemeinschaft (DFG) under the grant GPF20-1/072 and financial support by the Max Planck Society (MPG).

Teilnehmerliste

Abbreviations: PO - physical oceanography; ME - Meteorology; UAV - unmanned aerial vehicle; OBGC - ocean biogeochemistry; CTD - conductivity, temperature and depth measurements and water sampling; MSS - microstructure sonde

1. Daniel Klocke	<i>Chief Scientist</i>	MPI-Met
2. Marcus Dengler	Co-chief scientist, PO	GEOMAR
3. Allison Wing	ME, Sea-Pol radar	FSU
4. Celine Imker	PO, plankton, MSS, CTD	MPI-Met
5. Philip Hennig	PO, glider, drifter	GEOMAR
6. Dominik Austen	ME, raman lidar	MPI-Met
7. Michael Bell	ME, Sea-Pol radar	CSU
8. Geet Georges	ME, UAV lead	TUD
9. Hauke Schmidt	ME, radiosonde team	MPI-Met
10. Christian Begler	PO, glider, drifter	GEOMAR
11. Daniel Blandfort	PO, plankton Glider, WireWalker	HEREON
12. Delían Colon-Burgos	ME, Sea-Pol radar	CSU
13. Joelle Habib	PO, CTD, MSS plankton	LOV
14. Lennéa Mayo	ME, radiosonde team	MPI-Met
15. Francesc Junyent	ME, Sea-Pol radar	CSU
16. Abiel Kidane	OBGC, incubation	MPI-MM
17. Mateo Lovato	ME, Sea-Pol radar	CSU
18. Robert Mackenzie	ME, WindCube, UAV pilot	TUD
19. Charlotte Merz	PO, CTD, MSS	GEOMAR
20. Owen O'Discroll	ME, UAV pilot	TUD
21. Judith van der Giessen	OBGC, incubation	MPI-MM
22. Hans Segura	ME, Radiosonde team	MPI-Met
23. Karl-Hermann Wieners	ME, radiosonde team	MPI-Met
24. Peristera Paschou	ME, raman lidar	NOA
25. James Ruppert	ME, Sea-Pol radar	UOK
26. Anna Trosits	ME, Cloud radar, radiometer	LIM
27. Martin Stelzner	ME, Weather technician	DWD

MPI-Met	Max-Planck-Institut für Meteorologie, Hamburg, Germany
GEOMAR	GEOMAR Helmholtz Zentrum für Ozeanforschung Kiel, Germany
MPI-MM	Max-Planck-Institut für Marine Mikrobiologie, Bremen, Germany
CSU	Colorado State University - Department of Atmospheric science, Colorado, USA
LOV	Laboratoire d'Océanographie de Villefranche, France
TUD	Delft University of Technology - Civil Engineering and Geosciences, Netherlands
NOA	National Observatory of Athens, Greece
FSU	Florida State University, USA
LIM	Leipziger Institut für Meteorologie, Universität Leipzig, Germany
UOK	University of Oklahoma - School of Meteorology, USA
HEREON	Helmholtz-Zentrum (HEREON), Germany
DWD	Deutscher Wetterdienst, Germany

Stationslist

Station No.	Date	Gear	Time [UTC]	Latitude [°]	Longitude [°]	Water Depth [m]	Remarks
M203_1-1	16.08.24	BLN	16:50:41	15° 30,175' N	024° 29,135' W	3911	Radiosonde released
M203_2-1	16.08.24	BLN	19:51:51	15° 02,385' N	024° 16,305' W	1495	Radiosonde released
M203_3-1	16.08.24	BLN	22:51:18	14° 33,072' N	024° 05,489' W	3952	Radiosonde released
M203_4-1	17.08.24	BLN	01:50:39	14° 03,606' N	023° 54,800' W	4315	Radiosonde released
M203_5-1	17.08.24	BLN	04:51:17	13° 34,059' N	023° 44,111' W	4445	Radiosonde released
M203_6-1	17.08.24	BLN	08:06:39	13° 03,368' N	023° 33,032' W	4604	Radiosonde released
M203_7-1	17.08.24	BLN	13:50:24	12° 07,756' N	023° 13,013' W	5009	Radiosonde released
M203_8-1	17.08.24	BLN	16:50:46	11° 39,229' N	023° 02,771' W	5078	Radiosonde released
M203_9-1	17.08.24	BLN	19:51:05	11° 29,058' N	022° 58,697' W	5099	Radiosonde released
M203_10-1	18.08.24	CTD	01:14:00	11° 04,965' N	022° 59,925' W	5128	2000m CTD
M203_11-1	18.08.24	BLN	01:51:02	11° 04,976' N	022° 59,905' W	5128	Radiosonde released
M203_12-1	18.08.24	MSS	02:34:33	11° 04,957' N	023° 00,007' W	5128	2 profiles to 160m
M203_13-1	18.08.24	CTD	03:42:33	11° 04,137' N	023° 00,103' W	5130	2000m CTD
M203_14-1	18.08.24	BLN	04:52:42	11° 04,124' N	023° 00,052' W	5129	Radiosonde released
M203_15-1	18.08.24	MSS	06:27:57	11° 03,514' N	023° 00,997' W	5132	3 profiles to 150m
M203_16-1	18.08.24	BLN	07:51:56	11° 02,610' N	023° 03,248' W	5137	Radiosonde released
M203_17-1	18.08.24	GLIDER	08:55:24	11° 04,984' N	023° 00,037' W	5130	Deploy ifm50
M203_18-1	18.08.24	DRIFT	10:10:08	11° 05,378' N	022° 59,554' W	5129	Deploy drifter
M203_19-1	18.08.24	BLN	10:50:24	11° 05,354' N	022° 59,519' W	5128	Radiosonde released
M203_20-1	18.08.24	DRIFT	12:25:41	11° 05,366' N	022° 59,512' W	5126	Deploy WireWalker
M203_21-1	18.08.24	BLN	13:51:11	11° 09,756' N	022° 59,989' W	5119	Radiosonde released
M203_22-1	18.08.24	GLIDER	16:09:03	11° 26,561' N	023° 00,358' W	5105	Deploy ifm09
M203_23-1	18.08.24	BLN	16:51:27	11° 25,908' N	023° 01,105' W	5104	Radiosonde released
M203_24-1	18.08.24	CTD	17:42:52	11° 26,175' N	023° 00,942' W	5104	2000m CTD
M203_25-1	18.08.24	MSS	19:15:30	11° 26,265' N	023° 01,232' W	5106	2 profiles to 130m
M203_26-1	18.08.24	BLN	19:50:20	11° 25,818' N	023° 02,301' W	5110	Radiosonde released
M203_27-1	18.08.24	BLN	22:50:26	11° 13,270' N	023° 25,930' W	5158	Radiosonde released
M203_28-1	19.08.24	BLN	01:50:37	10° 58,931' N	023° 53,360' W	5220	Radiosonde released
M203_29-1	19.08.24	CTD	02:06:09	10° 58,412' N	023° 54,213' W	5225	2000m incubation CTD
M203_30-1	19.08.24	CTD	04:45:12	10° 58,441' N	023° 54,196' W	5226	200m incubation CTD
M203_31-1	19.08.24	BLN	04:50:24	10° 58,440' N	023° 54,195' W	5226	Radiosonde released
M203_32-1	19.08.24	BLN	07:50:03	10° 46,293' N	024° 17,517' W	5171	Radiosonde released
M203_33-1	19.08.24	CTD	11:34:32	10° 29,182' N	024° 50,259' W	5251	2000m CTD

Station No.	Date	Gear	Time [UTC]	Latitude [°]	Longitude [°]	Water Depth [m]	Remarks
M203_34-1	19.08.24	MSS	13:02:16	10° 29,111' N	024° 50,289' W	5245	2 profiles to 200m
M203_35-1	19.08.24	BLN	13:51:23	10° 27,611' N	024° 52,673' W	5135	Radiosonde released
M203_36-1	19.08.24	BLN	16:50:33	10° 13,817' N	025° 19,541' W	5517	Radiosonde released
M203_37-1	19.08.24	BLN	19:52:22	09° 59,899' N	025° 45,996' W	4734	Radiosonde released
M203_38-1	19.08.24	MSS	20:09:44	09° 59,322' N	025° 46,346' W	4945	2 profiles to 130m
M203_39-1	19.08.24	CTD	20:50:27	09° 58,266' N	025° 46,473' W	5061	2000m CTD
M203_40-1	19.08.24	BLN	22:51:07	09° 55,572' N	025° 46,108' W	5530	Radiosonde released
M203_41-1	20.08.24	BLN	01:50:00	09° 42,047' N	026° 12,497' W	5290	Radiosonde released
M203_42-1	20.08.24	MSS	04:37:58	09° 31,601' N	026° 38,466' W	5279	3 profiles to 150m
M203_43-1	20.08.24	BLN	04:50:06	09° 31,468' N	026° 38,700' W	5298	Radiosonde released
M203_44-1	20.08.24	CTD	05:19:57	09° 31,154' N	026° 39,185' W	5711	2000m CTD
M203_45-1	20.08.24	BLN	07:50:13	09° 31,570' N	026° 43,113' W	5290	Radiosonde released
M203_46-1	20.08.24	BLN	10:47:20	09° 01,799' N	026° 45,579' W	5357	Radiosonde released
M203_47-1	20.08.24	MSS	13:08:08	08° 39,887' N	026° 47,934' W	5123	3 profiles to 170m
M203_48-1	20.08.24	BLN	13:49:18	08° 39,534' N	026° 48,298' W	5135	Radiosonde released
M203_49-1	20.08.24	CTD	13:57:17	08° 39,480' N	026° 48,330' W	5132	600m plankton CTD
M203_50-1	20.08.24	BLN	15:19:35	08° 38,779' N	026° 47,968' W	5134	Radiosonde released
M203_51-1	20.08.24	BLN	16:50:38	08° 31,082' N	026° 47,636' W	5042	Radiosonde released
M203_52-1	20.08.24	BLN	19:50:50	08° 00,595' N	026° 46,784' W	4467	Radiosonde released
M203_53-1	20.08.24	BLN	22:49:40	07° 29,931' N	026° 45,929' W	4765	Radiosonde released
M203_54-1	21.08.24	BLN	01:50:35	06° 59,074' N	026° 45,071' W	4233	Radiosonde released
M203_55-1	21.08.24	BLN	04:51:49	06° 27,971' N	026° 44,209' W	4356	Radiosonde released
M203_56-1	21.08.24	MSS	07:08:13	06° 06,744' N	026° 43,792' W	4307	3 profiles to 170m
M203_57-1	21.08.24	BLN	07:50:36	06° 06,242' N	026° 44,086' W	4303	Radiosonde released
M203_58-1	21.08.24	CTD	07:54:43	06° 06,243' N	026° 44,086' W	4301	2000m CTD
M203_59-1	21.08.24	BLN	10:45:10	05° 58,123' N	026° 43,378' W	4164	Radiosonde released
M203_60-1	21.08.24	BLN	13:50:49	05° 27,580' N	026° 42,618' W	4357	Radiosonde released
M203_61-1	21.08.24	BLN	14:50:25	05° 27,897' N	026° 42,422' W	4358	Radiosonde released
M203_62-1	21.08.24	MSS	15:18:16	05° 27,731' N	026° 42,470' W	4368	3 profiles to 170m
M203_63-1	21.08.24	CTD	16:03:26	05° 27,345' N	026° 42,981' W	4284	2000m CTD
M203_64-1	21.08.24	BLN	16:50:00	05° 27,345' N	026° 42,981' W	4289	Radiosonde released
M203_65-1	21.08.24	BLN	19:50:11	05° 40,706' N	026° 24,726' W	4312	Radiosonde released
M203_66-1	21.08.24	BLN	22:51:13	06° 00,208' N	026° 00,670' W	3917	Radiosonde released
M203_67-1	21.08.24	MSS	23:34:59	06° 03,461' N	025° 56,314' W	3896	3 profiles to 170m

Station No.	Date	Gear	Time [UTC]	Latitude [°]	Longitude [°]	Water Depth [m]	Remarks
M203_68-1	22.08.24	CTD	00:23:40	06° 03,294' N	025° 56,482' W	3891	2000m incubation CTD
M203_69-1	22.08.24	BLN	01:50:29	06° 03,219' N	025° 56,388' W	3888	Radiosonde released
M203_70-1	22.08.24	CTD	02:49:22	06° 03,292' N	025° 56,382' W	3890	150m incubation CTD
M203_71-1	22.08.24	BLN	04:50:53	06° 12,823' N	025° 45,046' W	4017	Radiosonde released
M203_72-1	22.08.24	BLN	07:50:01	06° 31,135' N	025° 20,417' W	4268	Radiosonde released
M203_73-1	22.08.24	BLN	10:46:51	06° 48,835' N	024° 56,585' W	4408	Radiosonde released
M203_74-1	22.08.24	BLN	13:50:32	07° 07,554' N	024° 31,374' W	4458	Radiosonde released
M203_75-1	22.08.24	BLN	15:25:28	07° 11,258' N	024° 26,497' W	4530	Radiosonde released
M203_76-1	22.08.24	CTD	16:31:58	07° 05,854' N	024° 27,651' W	4444	full-depth CTD (4410m)
M203_77-1	22.08.24	BLN	16:50:31	07° 05,749' N	024° 27,565' W	4439	Radiosonde released
M203_78-1	22.08.24	BLN	19:50:00	07° 02,478' N	024° 27,825' W	4284	Radiosonde released
M203_79-1	22.08.24	BLN	21:50:44	06° 42,237' N	024° 31,662' W	4403	Radiosonde released
M203_80-1	23.08.24	BLN	01:50:05	06° 02,149' N	024° 38,672' W	4307	Radiosonde released
M203_81-1	23.08.24	MSS	03:32:45	05° 46,045' N	024° 41,551' W	4449	3 profiles to 150m
M203_82-1	23.08.24	CTD	04:24:26	05° 44,729' N	024° 41,968' W	4417	2000m CTD
M203_83-1	23.08.24	BLN	04:50:51	05° 44,719' N	024° 41,977' W	4422	Radiosonde released
M203_84-1	23.08.24	BLN	07:50:37	05° 25,550' N	024° 45,069' W	4393	Radiosonde released
M203_85-1	23.08.24	BLN	10:48:55	04° 56,267' N	024° 50,184' W	4321	Radiosonde released
M203_86-1	23.08.24	MSS	12:32:43	04° 40,216' N	024° 52,893' W	4297	3 profiles to 150m
M203_87-1	23.08.24	CTD	13:15:01	04° 39,050' N	024° 52,735' W	4314	2000m CTD
M203_88-1	23.08.24	BLN	13:52:46	04° 39,080' N	024° 52,741' W	4313	Radiosonde released
M203_89-1	23.08.24	BLN	16:50:08	04° 59,359' N	024° 52,452' W	4339	Radiosonde released
M203_90-1	23.08.24	BLN	19:50:37	05° 29,752' N	024° 48,333' W	4462	Radiosonde released
M203_91-1	23.08.24	MSS	21:19:27	05° 42,089' N	024° 46,281' W	4392	3 profiles to 150m
M203_92-1	23.08.24	CTD	21:56:54	05° 41,109' N	024° 46,029' W	4390	2000m CTD
M203_93-1	23.08.24	BLN	22:50:34	05° 40,817' N	024° 45,936' W	4388	Radiosonde released
M203_94-1	24.08.24	BLN	01:50:56	05° 52,847' N	024° 45,169' W	4392	Radiosonde released
M203_95-1	24.08.24	BLN	04:50:23	06° 23,146' N	024° 41,014' W	4220	Radiosonde released
M203_96-1	24.08.24	MSS	06:07:43	06° 33,345' N	024° 38,982' W	4207	3 profiles to 160m
M203_97-1	24.08.24	CTD	06:54:41	06° 32,640' N	024° 37,914' W	4227	2000m CTD
M203_98-1	24.08.24	BLN	07:51:06	06° 32,669' N	024° 37,593' W	4255	Radiosonde released
M203_99-1	24.08.24	BLN	10:46:44	06° 56,544' N	024° 36,430' W	4170	Radiosonde released
M203_100-1	24.08.24	BLN	13:50:50	07° 27,672' N	024° 32,153' W	4025	Radiosonde released
M203_101-1	24.08.24	MSS	14:33:21	07° 33,989' N	024° 31,339' W	4755	3 profiles to 170m

Station No.	Date	Gear	Time [UTC]	Latitude [°]	Longitude [°]	Water Depth [m]	Remarks
M203_102-1	24.08.24	CTD	15:24:43	07° 35,186' N	024° 30,989' W	4848	2000m CTD
M203_103-1	24.08.24	BLN	16:50:42	07° 35,274' N	024° 31,043' W	4846	Radiosonde released
M203_104-1	24.08.24	BLN	19:50:10	08° 02,100' N	024° 27,419' W	4954	Radiosonde released
M203_105-1	24.08.24	BLN	22:49:59	08° 32,161' N	024° 23,276' W	4686	Radiosonde released
M203_106-1	25.08.24	CTD	00:08:00	08° 43,502' N	024° 21,717' W	5080	2000m CTD
M203_107-1	25.08.24	MSS	01:36:22	08° 43,408' N	024° 21,757' W	5080	3 profiles to 160m
M203_108-1	25.08.24	BLN	01:50:27	08° 43,232' N	024° 21,858' W	5081	Radiosonde released
M203_109-1	25.08.24	BLN	04:50:46	09° 05,216' N	024° 18,716' W	5073	Radiosonde released
M203_110-1	25.08.24	BLN	07:50:43	09° 34,865' N	024° 14,619' W	5271	Radiosonde released
M203_111-1	25.08.24	MSS	09:01:03	09° 45,510' N	024° 13,316' W	5296	3 profiles to 200m
M203_112-1	25.08.24	CTD	09:43:04	09° 45,618' N	024° 13,639' W	5299	2000m CTD
M203_113-1	25.08.24	BLN	10:46:23	09° 45,613' N	024° 13,635' W	5297	Radiosonde released
M203_114-1	25.08.24	BLN	13:50:17	10° 08,330' N	024° 09,988' W	5256	Radiosonde released
M203_115-1	25.08.24	BLN	16:50:46	10° 39,089' N	024° 05,725' W	5092	Radiosonde released
M203_116-1	25.08.24	CTD	17:00:50	10° 39,490' N	024° 06,019' W	5035	600m plankton CTD
M203_117-1	25.08.24	BLN	19:51:20	10° 44,594' N	024° 06,014' W	5233	Radiosonde released
M203_118-1	25.08.24	BLN	22:50:31	11° 08,848' N	024° 01,796' W	5159	Radiosonde released
M203_119-1	26.08.24	BLN	01:50:39	11° 23,492' N	023° 59,762' W	5191	Radiosonde released
M203_120-1	26.08.24	CTD	02:16:47	11° 25,151' N	023° 59,411' W	5193	2000m CTD
M203_121-1	26.08.24	BLN	04:50:29	11° 24,291' N	024° 00,071' W	5194	Radiosonde released
M203_122-1	26.08.24	BLN	07:50:43	11° 47,353' N	023° 56,452' W	5107	Radiosonde released
M203_123-1	26.08.24	BLN	10:47:32	12° 10,081' N	023° 53,296' W	5010	Radiosonde released
M203_124-1	26.08.24	CTD	11:17:49	12° 12,736' N	023° 52,906' W	5021	2000m CTD
M203_125-1	26.08.24	BLN	13:50:09	12° 13,347' N	023° 52,825' W	5028	Radiosonde released
M203_126-1	26.08.24	BLN	16:50:10	12° 39,611' N	023° 49,185' W	4902	Radiosonde released
M203_127-1	26.08.24	CTD	19:14:12	12° 59,957' N	023° 46,271' W	4729	2000m CTD
M203_128-1	26.08.24	BLN	19:51:31	13° 00,011' N	023° 46,261' W	4731	Radiosonde released
M203_129-1	26.08.24	MSS	21:30:40	13° 01,353' N	023° 45,977' W	4730	6 profiles to 160m
M203_130-1	26.08.24	BLN	22:50:40	13° 01,250' N	023° 45,769' W	4732	Radiosonde released
M203_131-1	26.08.24	MSS	23:01:51	13° 01,173' N	023° 45,961' W	4730	6 profiles to 160m
M203_132-1	27.08.24	MSS	00:29:46	13° 01,300' N	023° 45,902' W	4730	6 profiles to 160m
M203_133-1	27.08.24	BLN	01:50:55	13° 03,221' N	023° 45,055' W	4700	Radiosonde released
M203_134-1	27.08.24	MSS	02:39:14	13° 01,139' N	023° 45,904' W	4730	6 profiles to 160m
M203_135-1	27.08.24	MSS	04:30:50	13° 01,108' N	023° 45,941' W	4729	6 profiles to 160m

Station No.	Date	Gear	Time [UTC]	Latitude [°]	Longitude [°]	Water Depth [m]	Remarks
M203_136-1	27.08.24	BLN	04:50:03	13° 01,626' N	023° 45,845' W	4731	Radiosonde released
M203_137-1	27.08.24	MSS	06:10:29	13° 01,048' N	023° 45,897' W	4730	6 profiles to 150m
M203_138-1	27.08.24	BLN	07:51:02	13° 01,933' N	023° 45,563' W	4731	Radiosonde released
M203_139-1	27.08.24	MSS	08:07:56	13° 01,047' N	023° 45,938' W	4729	6 profiles to 150m
M203_140-1	27.08.24	MSS	09:41:35	13° 01,167' N	023° 45,903' W	4729	6 profiles to 160m
M203_141-1	27.08.24	BLN	10:46:32	13° 02,380' N	023° 45,621' W	4729	Radiosonde released
M203_142-1	27.08.24	MSS	11:18:35	13° 01,099' N	023° 45,905' W	4730	6 profiles to 150m
M203_143-1	27.08.24	MSS	12:50:38	13° 01,213' N	023° 45,934' W	4731	6 profiles to 150m
M203_144-1	27.08.24	BLN	13:50:28	13° 02,607' N	023° 45,636' W	4725	Radiosonde released
M203_145-1	27.08.24	BLN	15:50:00	13° 00,559' N	023° 31,918' W	4685	Radiosonde released
M203_146-1	27.08.24	CTD	18:05:15	13° 00,000' N	023° 30,000' W	4675	2000m CTD
M203_147-1	27.08.24	BLN	19:50:15	13° 01,412' N	023° 30,023' W	4662	Radiosonde released
M203_148-1	27.08.24	BLN	21:51:58	13° 19,757' N	023° 30,357' W	4545	Radiosonde released
M203_149-1	28.08.24	BLN	01:50:00	13° 56,779' N	023° 30,036' W	4288	Radiosonde released
M203_150-1	28.08.24	BLN	04:50:21	14° 25,015' N	023° 30,050' W	4020	Radiosonde released
M203_151-1	28.08.24	BLN	07:50:01	14° 46,937' N	023° 30,060' W	2904	Radiosonde released
M203_152-1	28.08.24	BLN	12:08:02	14° 47,514' N	023° 28,879' W	3007	Radiosonde released
M203_153-1	28.08.24	BLN	13:50:25	14° 30,907' N	023° 26,406' W	3915	Radiosonde released
M203_154-1	28.08.24	BLN	16:50:04	14° 01,974' N	023° 22,103' W	4262	Radiosonde released
M203_155-1	28.08.24	BLN	19:50:20	13° 32,389' N	023° 17,718' W	4486	Radiosonde released
M203_156-1	28.08.24	BLN	22:49:29	13° 03,140' N	023° 13,387' W	4690	Radiosonde released
M203_157-1	28.08.24	MSS	23:24:54	12° 58,498' N	023° 12,982' W	4727	3 profiles to 200m
M203_158-1	29.08.24	CTD	00:02:19	12° 58,089' N	023° 12,972' W	4732	2000m incubation CTD
M203_159-1	29.08.24	BLN	01:50:04	12° 57,846' N	023° 12,864' W	4731	Radiosonde released
M203_160-1	29.08.24	CTD	02:10:07	12° 58,077' N	023° 12,966' W	4732	100m incubation CTD
M203_161-1	29.08.24	BLN	04:50:00	12° 35,609' N	023° 09,552' W	4872	Radiosonde released
M203_162-1	29.08.24	BLN	07:50:34	12° 08,247' N	022° 55,826' W	5008	Radiosonde released
M203_163-1	29.08.24	BLN	10:46:57	11° 42,752' N	022° 40,599' W	5030	Radiosonde released
M203_164-1	29.08.24	GLIDER	12:45:42	11° 30,970' N	022° 29,430' W	5058	Recover ifm09
M203_165-1	29.08.24	BLN	13:48:27	11° 30,734' N	022° 29,583' W	5059	Radiosonde released
M203_166-1	29.08.24	DRIFT	13:59:12	11° 30,910' N	022° 29,699' W	5059	Recover drifter
M203_167-1	29.08.24	BLN	16:50:28	11° 29,643' N	022° 51,960' W	5090	Radiosonde released
M203_168-1	29.08.24	GLIDER	18:02:02	11° 30,922' N	023° 02,428' W	5101	Recover ifm50
M203_169-1	29.08.24	MSS	18:53:23	11° 31,360' N	023° 02,065' W	5098	3 profiles to 200m

Station No.	Date	Gear	Time [UTC]	Latitude [°]	Longitude [°]	Water Depth [m]	Remarks
M203_170-1	29.08.24	CTD	19:43:30	11° 31,566' N	023° 02,649' W	5097	2000m CTD
M203_171-1	29.08.24	BLN	19:50:00	11° 31,567' N	023° 02,653' W	5097	Radiosonde released
M203_172-1	29.08.24	BLN	22:50:38	11° 30,704' N	023° 18,199' W	5133	Radiosonde released
M203_173-1	30.08.24	MSS	00:43:18	11° 30,207' N	023° 34,566' W	5142	3 profiles to 200m
M203_174-1	30.08.24	CTD	01:40:12	11° 30,038' N	023° 34,697' W	5142	600m plankton CTD
M203_175-1	30.08.24	BLN	01:50:16	11° 30,004' N	023° 34,698' W	5142	Radiosonde released
M203_176-1	30.08.24	CTD	02:36:45	11° 30,011' N	023° 34,699' W	5143	300m plankton CTD
M203_177-1	30.08.24	BLN	02:50:06	11° 30,011' N	023° 34,699' W	5143	Radiosonde released
M203_178-1	30.08.24	BLN	04:50:50	11° 26,761' N	023° 26,552' W	5139	Radiosonde released
M203_179-1	30.08.24	DRIFT	09:00:56	11° 13,481' N	022° 46,005' W	5086	Recover WireWalker
M203_180-1	30.08.24	UAV	10:35:27	11° 13,404' N	022° 45,663' W	5085	Drone BL profiles
M203_181-1	30.08.24	BLN	10:47:34	11° 13,404' N	022° 45,663' W	5086	Radiosonde released
M203_182-1	30.08.24	BLN	13:50:24	10° 57,303' N	023° 02,512' W	5144	Radiosonde released
M203_183-1	30.08.24	MSS	16:06:48	10° 36,770' N	023° 06,229' W	5167	3 profiles to 200m
M203_184-1	30.08.24	BLN	16:49:16	10° 36,039' N	023° 06,303' W	5166	Radiosonde released
M203_185-1	30.08.24	CTD	16:51:45	10° 36,019' N	023° 06,293' W	5569	2000m CTD
M203_186-1	30.08.24	UAV	17:40:20	10° 35,778' N	023° 06,149' W	5166	Drone BL profiles
M203_187-1	30.08.24	BLN	19:51:05	10° 35,660' N	023° 07,116' W	5167	Radiosonde released
M203_188-1	30.08.24	BLN	22:52:16	10° 05,434' N	023° 12,347' W	5078	Radiosonde released
M203_189-1	31.08.24	MSS	01:05:29	09° 45,349' N	023° 16,087' W	5220	3 profiles to 200m
M203_190-1	31.08.24	BLN	01:50:19	09° 44,945' N	023° 16,159' W	5214	Radiosonde released
M203_191-1	31.08.24	CTD	01:55:10	09° 44,935' N	023° 16,156' W	5220	2000m CTD
M203_192-1	31.08.24	BLN	04:50:43	09° 36,091' N	023° 17,903' W	4891	Radiosonde released
M203_193-1	31.08.24	BLN	07:50:05	09° 06,585' N	023° 23,476' W	4583	Radiosonde released
M203_194-1	31.08.24	BLN	09:15:00	08° 52,786' N	023° 26,084' W	4898	Radiosonde released
M203_195-1	31.08.24	CTD	10:32:24	08° 46,011' N	023° 28,509' W	4994	2000m CTD
M203_196-1	31.08.24	BLN	10:47:14	08° 46,011' N	023° 28,510' W	4994	Radiosonde released
M203_197-1	31.08.24	UAV	10:49:07	08° 46,010' N	023° 28,510' W	4994	Drone BL profiles
M203_198-1	31.08.24	BLN	13:25:30	08° 37,476' N	023° 30,186' W	4674	Radiosonde released
M203_199-1	31.08.24	BLN	14:50:32	08° 33,319' N	023° 30,973' W	4706	Radiosonde released
M203_200-1	31.08.24	BLN	16:50:45	08° 31,721' N	023° 39,822' W	4852	Radiosonde released
M203_201-1	31.08.24	MSS	18:15:53	08° 30,896' N	023° 51,637' W	4829	3 profiles to 160m
M203_202-1	31.08.24	CTD	18:57:10	08° 30,332' N	023° 52,095' W	4799	2000m CTD
M203_203-1	31.08.24	UAV	19:08:10	08° 30,331' N	023° 52,096' W	4805	Drone BL profiles

Station No.	Date	Gear	Time [UTC]	Latitude [°]	Longitude [°]	Water Depth [m]	Remarks
M203_204-1	31.08.24	BLN	19:50:01	08° 30,330' N	023° 52,096' W	4796	Radiosonde released
M203_205-1	31.08.24	BLN	22:49:23	08° 30,531' N	024° 12,142' W	4711	Radiosonde released
M203_206-1	01.09.24	BLN	01:50:08	08° 29,485' N	024° 42,434' W	4632	Radiosonde released
M203_207-1	01.09.24	MSS	03:00:39	08° 29,101' N	024° 53,481' W	4680	3 profiles to 160m
M203_208-1	01.09.24	CTD	03:44:56	08° 29,079' N	024° 54,344' W	4776	2000m CTD
M203_209-1	01.09.24	BLN	04:51:25	08° 29,078' N	024° 54,345' W	4782	Radiosonde released
M203_210-1	01.09.24	BLN	07:51:04	08° 27,610' N	025° 19,566' W	5000	Radiosonde released
M203_211-1	01.09.24	BLN	10:50:43	08° 26,838' N	025° 48,875' W	4986	Radiosonde released
M203_212-1	01.09.24	MSS	13:01:14	08° 26,159' N	026° 09,998' W	4799	3 profiles to 160m
M203_213-1	01.09.24	CTD	13:35:36	08° 25,807' N	026° 10,389' W	4772	2000m CTD
M203_214-1	01.09.24	UAV	14:30:47	08° 25,805' N	026° 10,392' W	4773	Drone BL profiles
M203_215-1	01.09.24	BLN	16:50:24	08° 25,751' N	026° 21,700' W	4759	Radiosonde released
M203_216-1	01.09.24	CTD	19:06:06	08° 24,829' N	026° 42,542' W	4922	2000m CTD
M203_218-1	01.09.24	BLN	19:50:35	08° 24,828' N	026° 42,542' W	4927	Radiosonde released
M203_217-1	01.09.24	UAV	19:52:22	08° 24,829' N	026° 42,543' W	4923	Drone BL profiles
M203_219-1	01.09.24	BLN	20:48:52	08° 24,706' N	026° 43,699' W	4991	Radiosonde released
M203_220-1	02.09.24	BLN	01:50:44	08° 25,659' N	027° 33,872' W	5044	Radiosonde released
M203_221-1	02.09.24	MSS	02:02:36	08° 25,196' N	027° 34,517' W	5001	3 profiles to 170m
M203_222-1	02.09.24	CTD	02:45:57	08° 25,120' N	027° 34,649' W	4970	2000m incubation CTD
M203_223-1	02.09.24	BLN	04:49:14	08° 25,536' N	027° 34,875' W	5020	Radiosonde released
M203_224-1	02.09.24	CTD	05:02:50	08° 25,214' N	027° 34,626' W	4987	140m incubation CTD
M203_225-1	02.09.24	BLN	07:50:28	08° 26,182' N	027° 57,597' W	5068	Radiosonde released
M203_226-1	02.09.24	BLN	10:50:04	08° 26,708' N	028° 27,777' W	4896	Radiosonde released
M203_227-1	02.09.24	MSS	10:59:34	08° 26,465' N	028° 28,016' W	4889	3 profiles to 200m
M203_228-1	02.09.24	CTD	11:38:43	08° 26,455' N	028° 28,021' W	4888	2000m CTD
M203_229-1	02.09.24	UAV	11:46:45	08° 26,455' N	028° 28,022' W	4888	Drone BL profiles
M203_230-1	02.09.24	BLN	13:57:50	08° 26,618' N	028° 28,194' W	4889	Radiosonde released
M203_231-1	02.09.24	BLN	16:50:37	08° 27,433' N	028° 54,388' W	4755	Radiosonde released
M203_232-1	02.09.24	CTD	18:48:50	08° 27,671' N	029° 11,314' W	4438	2000m CTD
M203_233-1	02.09.24	UAV	19:05:01	08° 27,670' N	029° 11,312' W	4449	Drone BL profiles
M203_234-1	02.09.24	BLN	19:52:04	08° 27,667' N	029° 11,313' W	4440	Radiosonde released
M203_235-1	02.09.24	MSS	20:52:09	08° 27,614' N	029° 11,335' W	4448	3 profiles to 200m
M203_236-1	02.09.24	BLN	22:49:43	08° 27,997' N	029° 14,552' W	4936	Radiosonde released
M203_237-1	03.09.24	BLN	01:51:46	08° 27,917' N	029° 43,331' W	4851	Radiosonde released

Station No.	Date	Gear	Time [UTC]	Latitude [°]	Longitude [°]	Water Depth [m]	Remarks
M203_238-1	03.09.24	BLN	01:51:54	08° 27,916' N	029° 43,351' W	4851	Radiosonde released
M203_239-1	03.09.24	BLN	04:50:53	08° 29,174' N	030° 13,221' W	5265	Radiosonde released
M203_240-1	03.09.24	BLN	07:50:12	08° 29,697' N	030° 36,962' W	5000	Radiosonde released
M203_241-1	03.09.24	MSS	09:49:17	08° 29,674' N	030° 49,868' W	4521	3 profiles to 200m
M203_242-1	03.09.24	CTD	10:33:37	08° 29,197' N	030° 49,792' W	4580	2000m CTD
M203_243-1	03.09.24	BLN	10:50:28	08° 29,197' N	030° 49,794' W	4567	Radiosonde released
M203_244-1	03.09.24	UAV	10:55:52	08° 29,199' N	030° 49,793' W	4561	Drone BL profiles
M203_245-1	03.09.24	BLN	12:20:07	08° 29,202' N	030° 49,793' W	4555	Radiosonde released
M203_246-1	03.09.24	UAV	13:40:04	08° 30,083' N	030° 50,506' W	4494	Drone BL profiles
M203_247-1	03.09.24	BLN	13:56:23	08° 30,086' N	030° 50,496' W	4494	Radiosonde released
M203_248-1	03.09.24	BLN	15:18:06	08° 30,298' N	030° 50,197' W	4529	Radiosonde released
M203_249-1	03.09.24	UAV	16:13:07	08° 30,091' N	030° 50,511' W	4493	Drone BL profiles
M203_250-1	03.09.24	BLN	16:56:16	08° 30,095' N	030° 50,511' W	4492	Radiosonde released
M203_251-1	03.09.24	CTD	19:03:53	08° 28,733' N	031° 08,836' W	4190	2000m CTD
M203_252-1	03.09.24	UAV	19:21:54	08° 28,735' N	031° 08,839' W	4190	Drone BL profiles and crash, drone lost
M203_253-1	03.09.24	BLN	19:48:54	08° 28,734' N	031° 08,839' W	4192	Radiosonde released
M203_254-1	03.09.24	MSS	20:39:30	08° 28,663' N	031° 08,920' W	4197	3 profiles to 160m
M203_255-1	03.09.24	BLN	22:46:37	08° 27,860' N	031° 22,300' W	4355	Radiosonde released
M203_256-1	04.09.24	BLN	01:49:52	08° 25,715' N	031° 52,951' W	4903	Radiosonde released
M203_257-1	04.09.24	BLN	04:55:31	08° 23,517' N	032° 24,212' W	4676	Radiosonde released
M203_258-1	04.09.24	BLN	07:50:31	08° 21,487' N	032° 53,328' W	4540	Radiosonde released
M203_259-1	04.09.24	MSS	09:57:36	08° 19,896' N	033° 12,735' W	4620	3 profiles to 150m
M203_260-1	04.09.24	CTD	10:30:17	08° 19,883' N	033° 12,743' W	4617	2000m CTD
M203_261-1	04.09.24	BLN	10:50:41	08° 19,880' N	033° 12,744' W	4617	Radiosonde released
M203_262-1	04.09.24	BLN	13:50:05	08° 18,835' N	033° 31,158' W	4595	Radiosonde released
M203_263-1	04.09.24	BLN	16:50:08	08° 16,620' N	034° 02,798' W	4302	Radiosonde released
M203_264-1	04.09.24	CTD	19:03:10	08° 14,927' N	034° 24,141' W	4418	2000m CTD
M203_265-1	04.09.24	BLN	19:50:13	08° 14,923' N	034° 24,135' W	4422	Radiosonde released
M203_266-1	04.09.24	MSS	20:29:36	08° 14,877' N	034° 24,170' W	4422	3 profiles to 150m
M203_267-1	04.09.24	BLN	22:47:44	08° 09,461' N	034° 36,820' W	4792	Radiosonde released
M203_268-1	05.09.24	MSS	01:36:58	07° 59,560' N	035° 00,863' W	3972	3 profiles to 190m
M203_269-1	05.09.24	BLN	01:50:53	07° 59,332' N	035° 00,932' W	3961	Radiosonde released
M203_270-1	05.09.24	CTD	02:13:19	07° 59,059' N	035° 00,961' W	3879	2000m incubation CTD

Station No.	Date	Gear	Time [UTC]	Latitude [°]	Longitude [°]	Water Depth [m]	Remarks
M203_271-1	05.09.24	CTD	04:31:09	07° 58,832' N	035° 00,718' W	3898	130m incubation CTD
M203_272-1	05.09.24	BLN	04:51:01	07° 58,819' N	035° 00,700' W	3899	Radiosonde released
M203_273-1	05.09.24	BLN	07:50:02	08° 00,001' N	035° 21,701' W	3990	Radiosonde released
M203_274-1	05.09.24	MSS	09:53:31	07° 59,934' N	035° 40,630' W	3892	3 profiles to 160m
M203_275-1	05.09.24	CTD	10:41:31	07° 59,594' N	035° 40,700' W	3895	600m plankton CTD
M203_276-1	05.09.24	BLN	10:50:12	07° 59,590' N	035° 40,699' W	3887	Radiosonde released
M203_277-1	05.09.24	BLN	13:50:27	07° 59,277' N	035° 57,311' W	3494	Radiosonde released
M203_278-1	05.09.24	MSS	15:15:25	07° 59,904' N	036° 09,961' W	3395	3 profiles to 170m
M203_279-1	05.09.24	CTD	15:58:03	07° 59,547' N	036° 09,676' W	3353	2000m CTD
M203_280-1	05.09.24	BLN	16:50:15	07° 59,236' N	036° 09,407' W	3448	Radiosonde released
M203_281-1	05.09.24	BLN	19:50:18	08° 00,000' N	036° 25,450' W	3438	Radiosonde released
M203_282-1	05.09.24	BLN	22:49:03	08° 00,001' N	036° 54,199' W	3739	Radiosonde released
M203_283-1	06.09.24	BLN	01:50:04	08° 00,003' N	037° 24,715' W	3125	Radiosonde released
M203_284-1	06.09.24	BLN	04:50:31	08° 00,190' N	037° 53,953' W	3242	Radiosonde released
M203_285-1	06.09.24	MSS	05:53:20	08° 01,507' N	037° 59,212' W	3872	3 profiles to 180m
M203_286-1	06.09.24	CTD	07:30:24	07° 56,445' N	037° 59,990' W	3893	2000m CTD
M203_287-1	06.09.24	BLN	07:50:39	07° 56,424' N	038° 00,024' W	3923	Radiosonde released
M203_288-1	06.09.24	BLN	10:50:38	07° 56,387' N	038° 00,616' W	4214	Radiosonde released
M203_289-1	06.09.24	GLIDER	11:03:31	07° 56,388' N	038° 00,615' W	4215	Deploy ifm50
M203_290-1	06.09.24	GLIDER	11:33:47	07° 56,390' N	038° 00,609' W	4215	Deploy ifm14
M203_291-1	06.09.24	DRIFT	12:17:27	07° 56,624' N	038° 00,384' W	4233	Deploy drifter
M203_292-1	06.09.24	BLN	12:40:17	07° 56,424' N	038° 00,313' W	4142	Radiosonde released
M203_293-1	06.09.24	BLN	13:50:12	08° 00,557' N	037° 59,728' W	4064	Radiosonde released
M203_295-1	06.09.24	BLN	16:50:14	08° 29,997' N	038° 00,028' W	3675	Radiosonde released
M203_294-1	06.09.24	GLIDER	17:12:08	08° 29,983' N	038° 00,016' W	3650	Deploy ifm09
M203_296-1	06.09.24	DRIFT	17:50:59	08° 29,896' N	038° 00,016' W	3642	Deploy WireWalker
M203_297-1	06.09.24	MSS	18:46:42	08° 29,647' N	037° 59,919' W	3715	3 profiles to 170m
M203_298-1	06.09.24	CTD	19:34:04	08° 28,933' N	038° 00,251' W	3610	2000m CTD
M203_299-1	06.09.24	BLN	19:50:02	08° 28,926' N	038° 00,250' W	3607	Radiosonde released
M203_300-1	06.09.24	BLN	22:46:29	08° 44,025' N	037° 58,970' W	4151	Radiosonde released
M203_301-1	07.09.24	BLN	01:50:47	09° 14,981' N	037° 56,373' W	4310	Radiosonde released
M203_302-1	07.09.24	BLN	04:50:29	09° 45,232' N	037° 53,833' W	4131	Radiosonde released
M203_303-1	07.09.24	MSS	05:32:34	09° 50,537' N	037° 53,541' W	4041	3 profiles to 1800m
M203_304-1	07.09.24	CTD	06:19:37	09° 50,645' N	037° 53,776' W	4065	2000m CTD

Station No.	Date	Gear	Time [UTC]	Latitude [°]	Longitude [°]	Water Depth [m]	Remarks
M203_305-1	07.09.24	BLN	07:50:57	09° 55,100' N	037° 53,045' W	4442	Radiosonde released
M203_306-1	07.09.24	BLN	10:50:51	10° 25,370' N	037° 50,454' W	4650	Radiosonde released
M203_307-1	07.09.24	BLN	13:50:31	10° 55,320' N	037° 47,928' W	4924	Radiosonde released
M203_308-1	07.09.24	MSS	14:01:57	10° 56,314' N	037° 47,958' W	4938	3 profiles to 150m
M203_309-1	07.09.24	CTD	14:48:00	10° 57,311' N	037° 47,885' W	4948	2000m CTD
M203_310-1	07.09.24	UAV	14:53:57	10° 57,322' N	037° 47,882' W	4951	Drone BL profiles
M203_311-1	07.09.24	BLN	15:20:21	10° 57,302' N	037° 47,884' W	4949	Radiosonde released
M203_312-1	07.09.24	BLN	16:50:22	10° 59,276' N	037° 47,971' W	4922	Radiosonde released
M203_313-1	07.09.24	UAV	18:12:33	11° 09,469' N	037° 46,807' W	4967	Drone BL profiles
M203_314-1	07.09.24	BLN	19:54:31	11° 24,041' N	037° 45,502' W	4698	Radiosonde released
M203_315-1	07.09.24	BLN	22:47:22	11° 52,349' N	037° 45,004' W	4698	Radiosonde released
M203_316-1	08.09.24	BLN	01:50:49	12° 23,014' N	037° 45,001' W	4698	Radiosonde released
M203_317-1	08.09.24	BLN	04:50:55	12° 52,953' N	037° 45,002' W	4698	Radiosonde released
M203_318-1	08.09.24	BLN	07:50:19	13° 24,135' N	037° 45,005' W	4698	Radiosonde released
M203_319-1	08.09.24	MSS	10:07:39	13° 46,321' N	037° 45,085' W	5486	3 profiles to 120m
M203_320-1	08.09.24	CTD	10:38:01	13° 46,381' N	037° 44,620' W	5493	2000m CTD
M203_322-1	08.09.24	UAV	10:45:50	13° 46,379' N	037° 44,618' W	5488	Drone BL profiles
M203_321-1	08.09.24	BLN	10:50:23	13° 46,381' N	037° 44,619' W	5473	Radiosonde released
M203_323-1	08.09.24	BLN	13:50:00	13° 59,929' N	037° 45,006' W	5147	Radiosonde released
M203_324-1	08.09.24	BLN	13:50:08	13° 59,949' N	037° 45,013' W	5147	Radiosonde released
M203_325-1	08.09.24	CTD	18:58:17	14° 50,847' N	037° 44,938' W	5515	2000m CTD
M203_326-1	08.09.24	UAV	19:06:16	14° 50,843' N	037° 44,942' W	5528	Drone BL profiles
M203_327-1	08.09.24	BLN	19:50:21	14° 50,850' N	037° 44,944' W	5498	Radiosonde released
M203_328-1	08.09.24	BLN	22:50:12	15° 08,244' N	037° 45,087' W	5751	Radiosonde released
M203_329-1	09.09.24	MSS	01:34:27	14° 47,264' N	037° 41,014' W	5590	3 profiles to 200m
M203_330-1	09.09.24	BLN	01:50:09	14° 47,262' N	037° 40,813' W	5613	Radiosonde released
M203_331-1	09.09.24	CTD	02:09:49	14° 47,265' N	037° 40,689' W	5614	2000m incubation CTD
M203_332-1	09.09.24	CTD	04:18:17	14° 47,257' N	037° 40,684' W	5615	160m incubation CTD
M203_333-1	09.09.24	BLN	04:50:56	14° 46,472' N	037° 40,626' W	5630	Radiosonde released
M203_334-1	09.09.24	BLN	07:51:07	14° 15,955' N	037° 35,348' W	5115	Radiosonde released
M203_335-1	09.09.24	BLN	10:53:13	13° 46,368' N	037° 30,256' W	5402	Radiosonde released
M203_336-1	09.09.24	MSS	10:57:51	13° 46,246' N	037° 30,223' W	5390	3 profiles to 150m
M203_337-1	09.09.24	CTD	11:30:34	13° 45,744' N	037° 30,014' W	5517	2000m CTD

Station No.	Date	Gear	Time [UTC]	Latitude [°]	Longitude [°]	Water Depth [m]	Remarks
M203_338-1	09.09.24	UAV	11:31:12	13° 45,746' N	037° 30,014' W	5518	Drone crash and recovered
M203_339-1	09.09.24	BLN	13:50:47	13° 39,317' N	037° 28,781' W	5814	Radiosonde released
M203_340-1	09.09.24	BLN	16:50:47	13° 09,662' N	037° 23,560' W	5561	Radiosonde released
M203_341-1	09.09.24	BLN	19:58:25	12° 38,346' N	037° 15,771' W	5450	Radiosonde released
M203_342-1	09.09.24	BLN	22:48:04	12° 10,802' N	037° 08,086' W	5548	Radiosonde released
M203_343-1	09.09.24	MSS	22:58:16	12° 10,128' N	037° 07,921' W	5529	3 profiles to 160m
M203_344-1	09.09.24	CTD	23:33:57	12° 09,640' N	037° 07,955' W	5499	600m plankton CTD
M203_345-1	10.09.24	BLN	01:50:40	11° 58,786' N	037° 04,734' W	5617	Radiosonde released
M203_346-1	10.09.24	BLN	04:50:51	11° 28,885' N	036° 56,407' W	4560	Radiosonde released
M203_347-1	10.09.24	BLN	07:55:29	10° 58,016' N	036° 47,831' W	4727	Radiosonde released
M203_348-1	10.09.24	BLN	10:50:09	10° 29,693' N	036° 39,971' W	4949	Radiosonde released
M203_349-1	10.09.24	MSS	10:57:06	10° 29,316' N	036° 40,060' W	4999	3 profiles to 220m
M203_350-1	10.09.24	CTD	11:37:11	10° 29,539' N	036° 40,029' W	4970	2000m CTD
M203_351-1	10.09.24	BLN	16:50:05	09° 53,936' N	036° 30,062' W	4390	Radiosonde released
M203_352-1	10.09.24	BLN	19:51:19	09° 24,465' N	036° 22,087' W	4364	Radiosonde released
M203_353-1	10.09.24	BLN	22:47:06	08° 55,691' N	036° 13,721' W	4450	Radiosonde released
M203_354-1	10.09.24	MSS	22:57:43	08° 55,305' N	036° 13,658' W	4483	3 profiles to 190m
M203_355-1	10.09.24	CTD	23:40:33	08° 55,370' N	036° 14,011' W	4431	2000m CTD
M203_356-1	11.09.24	BLN	01:51:19	08° 48,556' N	036° 10,099' W	4642	Radiosonde released
M203_357-1	11.09.24	BLN	04:50:02	08° 21,697' N	035° 57,069' W	4239	Radiosonde released
M203_358-1	11.09.24	BLN	07:48:46	08° 10,685' N	035° 48,381' W	4879	Radiosonde released
M203_359-1	11.09.24	DRIFT	08:13:05	08° 10,990' N	035° 48,051' W	4881	Recover drifter
M203_360-1	11.09.24	BLN	10:55:27	08° 09,971' N	036° 07,828' W	4525	Radiosonde released
M203_361-1	11.09.24	GLIDER	13:55:55	08° 12,855' N	036° 29,772' W	4861	Recover ifm14
M203_362-1	11.09.24	BLN	13:50:30	08° 12,753' N	036° 29,983' W	4845	Radiosonde released
M203_363-1	11.09.24	BLN	16:50:33	08° 22,144' N	036° 53,921' W	3712	Radiosonde released
M203_364-1	11.09.24	GLIDER	19:24:03	08° 30,419' N	037° 10,922' W	3500	Recover ifm09
M203_365-1	11.09.24	BLN	19:50:15	08° 30,771' N	037° 13,155' W	3948	Radiosonde released
M203_366-1	11.09.24	DRIFT	20:18:48	08° 31,274' N	037° 17,384' W	4110	Recover WireWalker
M203_367-1	11.09.24	BLN	22:46:35	08° 23,229' N	037° 29,116' W	4108	Radiosonde released
M203_368-1	12.09.24	BLN	01:51:21	08° 04,512' N	037° 54,006' W	3067	Radiosonde released
M203_369-1	12.09.24	MSS	03:00:46	08° 00,032' N	037° 59,851' W	3989	3 profiles to 160m
M203_370-1	12.09.24	CTD	03:56:06	07° 59,882' N	038° 00,076' W	4255	2000m CTD

Station No.	Date	Gear	Time [UTC]	Latitude [°]	Longitude [°]	Water Depth [m]	Remarks
M203_371-1	12.09.24	BLN	04:50:09	07° 59,879' N	038° 00,076' W	4249	Radiosonde released
M203_372-1	12.09.24	BLN	07:50:33	07° 56,471' N	038° 00,486' W	4205	Radiosonde released
M203_373-1	12.09.24	GLIDER	10:55:40	07° 57,021' N	037° 52,234' W	2939	Recover ifm50
M203_374-1	12.09.24	BLN	10:51:50	07° 56,968' N	037° 52,305' W	2910	Radiosonde released
M203_375-1	12.09.24	BLN	13:50:33	08° 02,432' N	038° 18,764' W	3234	Radiosonde released
M203_376-1	12.09.24	BLN	16:50:55	08° 08,845' N	038° 47,120' W	4658	Radiosonde released
M203_377-1	12.09.24	BLN	19:50:01	08° 15,506' N	039° 16,571' W	4073	Radiosonde released
M203_378-1	12.09.24	MSS	22:01:31	08° 19,919' N	039° 36,410' W	4227	3 profiles to 170m
M203_379-1	12.09.24	CTD	22:38:24	08° 19,931' N	039° 36,394' W	4209	2000m CTD
M203_380-1	12.09.24	BLN	22:48:13	08° 19,928' N	039° 36,385' W	4210	Radiosonde released
M203_381-1	13.09.24	BLN	01:54:37	08° 23,792' N	039° 53,239' W	3663	Radiosonde released
M203_382-1	13.09.24	BLN	04:50:35	08° 29,760' N	040° 19,663' W	3557	Radiosonde released
M203_383-1	13.09.24	BLN	07:50:04	08° 36,047' N	040° 47,504' W	3510	Radiosonde released
M203_384-1	13.09.24	MSS	10:30:17	08° 41,271' N	041° 11,018' W	4039	3 profiles to 180m
M203_385-1	13.09.24	BLN	10:51:33	08° 41,303' N	041° 10,909' W	3849	Radiosonde released
M203_386-1	13.09.24	CTD	11:08:42	08° 41,310' N	041° 10,886' W	3850	600m plankton CTD
M203_387-1	13.09.24	BLN	13:50:08	08° 44,256' N	041° 23,872' W	3899	Radiosonde released
M203_388-1	13.09.24	BLN	16:50:28	08° 49,094' N	041° 52,392' W	4150	Radiosonde released
M203_389-1	13.09.24	BLN	19:50:52	08° 57,328' N	042° 21,919' W	4690	Radiosonde released
M203_390-1	13.09.24	BLN	22:53:22	09° 04,065' N	042° 51,888' W	4849	Radiosonde released
M203_391-1	13.09.24	MSS	23:00:21	09° 04,017' N	042° 52,011' W	4849	3 profiles to 170m
M203_392-1	13.09.24	CTD	23:37:30	09° 03,568' N	042° 52,295' W	4854	2000m CTD
M203_393-1	14.09.24	BLN	01:50:00	09° 05,266' N	042° 57,067' W	4765	Radiosonde released
M203_394-1	14.09.24	BLN	04:50:49	09° 11,905' N	043° 26,357' W	4842	Radiosonde released
M203_395-1	14.09.24	BLN	07:50:36	09° 18,457' N	043° 55,746' W	4999	Radiosonde released
M203_396-1	14.09.24	BLN	10:50:28	09° 25,241' N	044° 24,966' W	4743	Radiosonde released
M203_397-1	14.09.24	MSS	10:58:11	09° 25,194' N	044° 25,331' W	4844	3 profiles to 170m
M203_398-1	14.09.24	CTD	11:34:06	09° 24,947' N	044° 25,538' W	4844	2000m CTD
M203_399-1	14.09.24	BLN	13:51:24	09° 26,570' N	044° 31,717' W	4846	Radiosonde released
M203_400-1	14.09.24	BLN	16:50:50	09° 33,106' N	045° 00,290' W	4839	Radiosonde released
M203_401-1	14.09.24	BLN	20:13:19	09° 40,516' N	045° 33,268' W	4848	Radiosonde released
M203_402-1	14.09.24	BLN	22:46:53	09° 46,063' N	045° 58,106' W	4855	Radiosonde released
M203_403-1	15.09.24	CTD	01:30:32	09° 51,659' N	046° 23,620' W	4843	2000m CTD
M203_404-1	15.09.24	BLN	01:56:13	09° 51,665' N	046° 23,612' W	4842	Radiosonde released

Station No.	Date	Gear	Time [UTC]	Latitude [°]	Longitude [°]	Water Depth [m]	Remarks
M203_405-1	15.09.24	MSS	03:07:29	09° 51,662' N	046° 23,613' W	4843	3 profiles to 160m
M203_406-1	15.09.24	CTD	04:02:34	09° 50,934' N	046° 23,819' W	4841	30m incubation CTD
M203_407-1	15.09.24	BLN	04:50:43	09° 52,444' N	046° 27,860' W	4838	Radiosonde released
M203_408-1	15.09.24	BLN	05:05:46	09° 53,248' N	046° 30,182' W	4836	Radiosonde released
M203_409-1	15.09.24	BLN	06:04:34	09° 55,439' N	046° 39,830' W	4830	Radiosonde released
M203_410-1	15.09.24	BLN	07:51:00	09° 59,582' N	046° 57,113' W	4827	Radiosonde released
M203_411-1	15.09.24	MSS	09:02:01	10° 00,006' N	046° 59,978' W	4829	2 profiles to 200m
M203_412-1	15.09.24	CTD	09:37:07	09° 59,794' N	047° 00,173' W	4828	2000m CTD
M203_413-1	15.09.24	BLN	10:50:00	09° 59,793' N	047° 00,172' W	4827	Radiosonde released
M203_414-1	15.09.24	DRIFT	11:35:23	09° 59,972' N	046° 59,918' W	4827	Deploy drifter
M203_415-1	15.09.24	GLIDER	12:16:55	09° 59,964' N	046° 59,741' W	4827	Deploy ifm50
M203_416-1	15.09.24	BLN	13:51:58	09° 53,259' N	046° 59,995' W	4822	Radiosonde released
M203_417-1	15.09.24	GLIDER	15:01:27	09° 45,137' N	047° 00,054' W	4811	Deploy ifm14
M203_418-1	15.09.24	DRIFT	15:48:38	09° 44,860' N	046° 59,936' W	4809	Deploy Wirewalker
M203_419-1	15.09.24	BLN	16:50:49	09° 40,631' N	047° 00,450' W	4799	Radiosonde released
M203_420-1	15.09.24	BLN	19:49:53	09° 14,520' N	047° 13,371' W	4710	Radiosonde released
M203_421-1	15.09.24	BLN	22:47:26	08° 48,458' N	047° 24,793' W	4608	Radiosonde released
M203_422-1	16.09.24	MSS	00:00:36	08° 37,920' N	047° 28,535' W	4566	3 profiles to 160m
M203_423-1	16.09.24	CTD	00:39:10	08° 37,786' N	047° 28,580' W	4564	2000m CTD
M203_424-1	16.09.24	BLN	01:50:32	08° 37,787' N	047° 28,579' W	4564	Radiosonde released
M203_425-1	16.09.24	BLN	04:50:34	08° 15,035' N	047° 32,398' W	4463	Radiosonde released
M203_426-1	16.09.24	BLN	07:48:52	07° 44,818' N	047° 37,748' W	4351	Radiosonde released
M203_427-1	16.09.24	MSS	10:16:51	07° 29,836' N	047° 40,286' W	4283	3 profiles to 160m
M203_428-1	16.09.24	BLN	10:50:08	07° 29,177' N	047° 39,910' W	4278	Radiosonde released
M203_429-1	16.09.24	CTD	10:59:14	07° 29,167' N	047° 39,904' W	4281	2000m CTD
M203_430-1	16.09.24	BLN	13:50:28	07° 30,928' N	047° 41,043' W	4289	Radiosonde released
M203_431-1	16.09.24	MSS	18:32:05	07° 01,490' N	047° 42,878' W	4145	3 profiles to 160m
M203_432-1	16.09.24	CTD	19:09:32	07° 00,685' N	047° 42,725' W	4139	2000m CTD
M203_433-1	16.09.24	BLN	19:50:01	07° 00,665' N	047° 42,705' W	4138	Radiosonde released
M203_434-1	16.09.24	BLN	22:46:04	06° 43,409' N	047° 34,437' W	4072	Radiosonde released
M203_435-1	17.09.24	BLN	01:54:51	06° 15,052' N	047° 21,124' W	3925	Radiosonde released
M203_436-1	17.09.24	CTD	03:38:42	06° 01,168' N	047° 14,757' W	3882	2000m incubation CTD
M203_437-1	17.09.24	BLN	04:50:31	06° 01,244' N	047° 14,607' W	3878	Radiosonde released
M203_438-1	17.09.24	MSS	05:41:36	06° 01,546' N	047° 14,061' W	3885	3 profiles to 150m

Station No.	Date	Gear	Time [UTC]	Latitude [°]	Longitude [°]	Water Depth [m]	Remarks
M203_439-1	17.09.24	CTD	06:35:47	06° 01,375' N	047° 14,241' W	3881	120m incubation CTD
M203_440-1	17.09.24	BLN	07:50:38	06° 10,213' N	047° 13,873' W	3914	Radiosonde released
M203_441-1	17.09.24	BLN	10:50:03	06° 40,343' N	047° 12,062' W	4077	Radiosonde released
M203_442-1	17.09.24	BLN	13:50:30	07° 09,985' N	047° 07,559' W	4218	Radiosonde released
M203_443-1	17.09.24	MSS	13:56:05	07° 10,028' N	047° 07,494' W	4217	3 profiles to 150m
M203_444-1	17.09.24	CTD	14:29:15	07° 09,771' N	047° 07,193' W	4214	2000m CTD
M203_445-1	17.09.24	BLN	16:50:10	07° 18,143' N	047° 05,730' W	4257	Radiosonde released
M203_446-1	17.09.24	BLN	19:50:01	07° 48,507' N	046° 59,289' W	4390	Radiosonde released
M203_447-1	17.09.24	BLN	22:45:42	08° 16,757' N	046° 53,233' W	4517	Radiosonde released
M203_448-1	18.09.24	BLN	04:50:03	09° 14,832' N	046° 40,761' W	4728	Radiosonde released
M203_449-1	18.09.24	BLN	07:50:15	09° 44,783' N	046° 34,315' W	4818	Radiosonde released
M203_450-1	18.09.24	DRIFT	10:48:30	10° 10,980' N	046° 29,637' W	4829	Recover drifter
M203_451-1	18.09.24	BLN	10:49:12	10° 10,987' N	046° 29,634' W	4832	Radiosonde released
M203_452-1	18.09.24	GLIDER	11:37:51	10° 09,590' N	046° 30,255' W	4838	Recover ifm50
M203_453-1	18.09.24	BLN	14:17:27	09° 53,287' N	046° 49,210' W	4821	Radiosonde released
M203_454-1	18.09.24	GLIDER	15:18:24	09° 50,920' N	046° 52,951' W	4820	Recover ifm14
M203_455-1	18.09.24	DRIFT	16:04:24	09° 49,068' N	046° 53,380' W	4819	Recover Wirewalker
M203_456-1	18.09.24	BLN	16:50:03	09° 49,454' N	046° 54,462' W	4819	Radiosonde released
M203_457-1	18.09.24	BLN	19:50:00	09° 58,610' N	047° 24,354' W	4827	Radiosonde released
M203_458-1	18.09.24	BLN	22:46:39	10° 07,627' N	047° 53,748' W	4843	Radiosonde released
M203_459-1	19.09.24	BLN	01:50:22	10° 16,907' N	048° 24,349' W	4866	Radiosonde released
M203_460-1	19.09.24	BLN	04:50:42	10° 25,779' N	048° 53,798' W	4886	Radiosonde released
M203_461-1	19.09.24	BLN	07:50:15	10° 34,411' N	049° 22,281' W	4906	Radiosonde released
M203_462-1	19.09.24	BLN	10:49:35	10° 43,106' N	049° 51,313' W	4927	Radiosonde released
M203_463-1	19.09.24	BLN	12:19:53	10° 48,049' N	050° 05,439' W	4933	Radiosonde released
M203_464-1	19.09.24	BLN	13:49:41	10° 50,793' N	050° 17,092' W	4937	Radiosonde released
M203_465-1	19.09.24	MSS	15:17:00	10° 51,412' N	050° 20,228' W	4939	3 profiles to 160m
M203_466-1	19.09.24	CTD	15:59:20	10° 50,652' N	050° 20,251' W	4939	2000m CTD
M203_467-1	19.09.24	BLN	16:59:46	10° 50,647' N	050° 20,257' W	4938	Radiosonde released
M203_468-1	19.09.24	BLN	19:50:06	10° 54,458' N	050° 39,008' W	4947	Radiosonde released
M203_469-1	19.09.24	BLN	22:46:49	10° 59,185' N	051° 08,961' W	4947	Radiosonde released
M203_470-1	20.09.24	BLN	01:50:24	11° 03,876' N	051° 39,467' W	4951	Radiosonde released
M203_471-1	20.09.24	MSS	04:03:54	11° 06,925' N	052° 00,545' W	4953	3 profiles to 200m
M203_472-1	20.09.24	BLN	04:50:44	11° 06,500' N	052° 00,989' W	4949	Radiosonde released

Station No.	Date	Gear	Time [UTC]	Latitude [°]	Longitude [°]	Water Depth [m]	Remarks
M203_473-1	20.09.24	CTD	05:07:37	11° 06,487' N	052° 00,981' W	4949	2000m CTD
M203_474-1	20.09.24	BLN	07:52:27	11° 09,188' N	052° 14,476' W	4954	Radiosonde released
M203_475-1	20.09.24	BLN	10:50:23	11° 13,850' N	052° 45,187' W	4928	Radiosonde released
M203_476-1	20.09.24	MSS	12:00:15	11° 15,212' N	052° 55,933' W	4918	3 profiles to 160m
M203_477-1	20.09.24	CTD	12:35:59	11° 14,597' N	052° 55,395' W	4915	600m plankton CTD
M203_478-1	20.09.24	BLN	14:50:21	11° 16,875' N	053° 05,468' W	4907	Radiosonde released
M203_479-1	20.09.24	BLN	16:50:12	11° 19,870' N	053° 25,418' W	4880	Radiosonde released
M203_480-1	20.09.24	BLN	19:51:57	11° 24,409' N	053° 55,737' W	4830	Radiosonde released
M203_481-1	20.09.24	BLN	22:46:25	11° 28,323' N	054° 23,656' W	4770	Radiosonde released
M203_482-1	21.09.24	BLN	04:50:07	11° 35,708' N	055° 15,045' W	4645	Radiosonde released
M203_483-1	21.09.24	BLN	07:50:24	11° 38,793' N	055° 36,741' W	4636	Radiosonde released
M203_484-1	21.09.24	BLN	10:50:53	11° 42,000' N	056° 00,003' W	4543	Radiosonde released
M203_485-1	21.09.24	BLN	11:50:13	11° 42,246' N	055° 59,808' W	4548	Radiosonde released
M203_486-1	21.09.24	MSS	13:07:19	11° 42,024' N	055° 59,985' W	4543	3 profiles to 160m
M203_487-1	21.09.24	CTD	13:44:46	11° 42,681' N	055° 59,596' W	4547	2000m CTD
M203_488-1	21.09.24	BLN	13:51:46	11° 42,673' N	055° 59,589' W	4548	Radiosonde released
M203_489-1	21.09.24	BLN	16:50:54	11° 47,747' N	056° 14,275' W	4499	Radiosonde released
M203_490-1	21.09.24	BLN	18:15:30	11° 53,006' N	056° 27,394' W	4456	Radiosonde released
M203_491-1	21.09.24	BLN	19:50:00	11° 54,879' N	056° 28,843' W	4435	Radiosonde released
M203_492-1	21.09.24	BLN	22:49:32	12° 06,574' N	056° 57,483' W	4429	Radiosonde released
M203_493-1	22.09.24	MSS	01:04:13	12° 15,119' N	057° 16,512' W	4455	3 profiles to 180m
M203_494-1	22.09.24	CTD	01:39:25	12° 14,601' N	057° 16,290' W	4457	2000m CTD
M203_495-1	22.09.24	BLN	01:50:42	12° 14,586' N	057° 16,283' W	4455	Radiosonde released
M203_496-1	22.09.24	BLN	04:50:30	12° 20,378' N	057° 29,168' W	4158	Radiosonde released
M203_497-1	22.09.24	BLN	07:50:35	12° 32,500' N	057° 57,160' W	2826	Radiosonde released
M203_498-1	22.09.24	BLN	10:50:01	12° 44,511' N	058° 25,052' W	4419	Radiosonde released
M203_499-1	22.09.24	MSS	13:03:03	12° 52,828' N	058° 44,092' W	1898	3 profiles to 170m
M203_500-1	22.09.24	CTD	13:46:52	12° 52,403' N	058° 43,183' W	1846	full-depth CTD (1800m)
M203_501-1	22.09.24	BLN	13:51:25	12° 52,404' N	058° 43,183' W	1847	Radiosonde released
M203_502-1	22.09.24	BLN	16:50:22	12° 57,344' N	058° 54,942' W	1823	Radiosonde released
M203_503-1	22.09.24	BLN	19:50:40	13° 09,251' N	059° 23,084' W	334	Radiosonde released
M203_504-1	22.09.24	BLN	22:49:36	13° 10,037' N	059° 24,975' W	98	Radiosonde released
M203_505-1	23.09.24	BLN	01:51:12	13° 10,087' N	059° 25,018' W	96	Radiosonde released
M203_506-1	23.09.24	BLN	04:50:04	13° 10,060' N	059° 24,943' W	136	Radiosonde released

Station No.	Date	Gear	Time [UTC]	Latitude [°]	Longitude [°]	Water Depth [m]	Remarks
M203_507-1	23.09.24	BLN	07:50:10	13° 10,095' N	059° 24,973' W	121	Radiosonde released
M203_508-1	23.09.24	BLN	09:50:13	13° 10,064' N	059° 24,966' W	123	Radiosonde released
M203_509-1	23.09.24	BLN	10:50:25	13° 09,746' N	059° 24,798' W	130	Radiosonde released
M203_510-1	23.09.24	BLN	11:40:13	13° 09,744' N	059° 24,869' W	106	Radiosonde released
M203_511-1	23.09.24	BLN	13:49:32	13° 09,743' N	059° 24,768' W	132	Radiosonde released
M203_512-1	23.09.24	BLN	16:50:18	13° 09,739' N	059° 24,759' W	131	Radiosonde released
M203_513-1	23.09.24	BLN	19:30:40	13° 09,693' N	059° 24,676' W	108	Radiosonde released
M203_514-1	23.09.24	BLN	22:49:35	13° 09,699' N	059° 24,507' W	154	Radiosonde released
M203_515-1	24.09.24	BLN	01:50:58	13° 09,707' N	059° 24,427' W	171	Radiosonde released