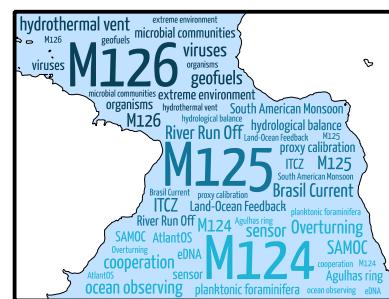


Johannes Karstensen
 Helmholtz Centre for Ocean Research Kiel
 GEOMAR
 Düsternbrooker Weg 20
 D-24105 Kiel
 Tel.: +49 431 600 4156
 Fax.: +49 431 600 4102
 email: jkarstensen@geomar.de



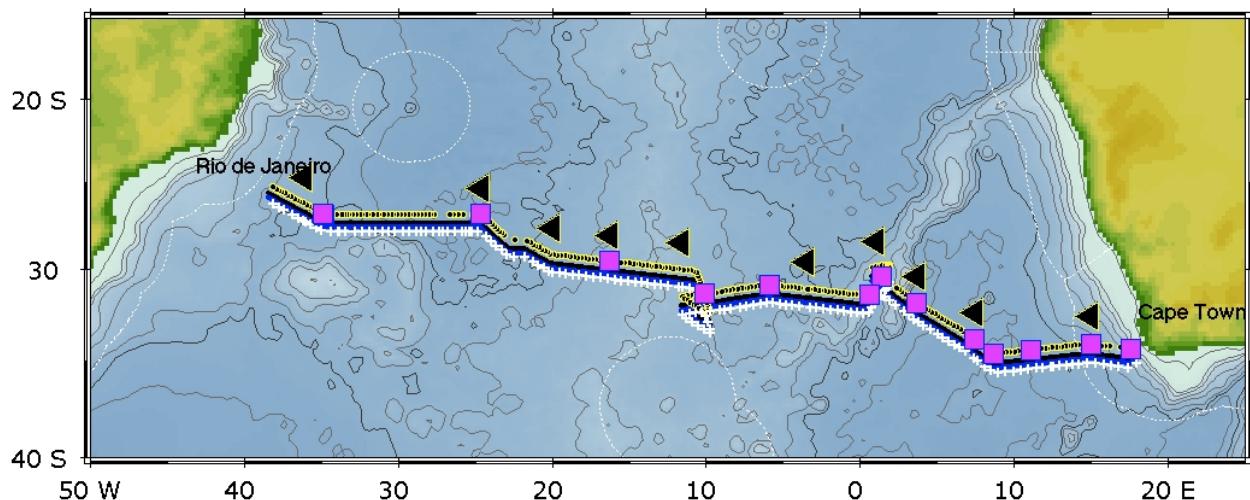
Short Cruise Report RV Meteor Cruise M124

Cape Town, Republic South Africa – Rio de Janeiro, Brazil

29. February – 18. March 2016

Chief scientist: Johannes Karstensen

Captain: Michael Schneider



RV Meteor M124 cruise track and sampling – yellow dots: uCTD Station (0-450m)n, magenta square CTD-rosette (0-2000m), black triangle: Multinet/CTD (0-700m), black line: ADCP recordings, white crosses: XBT launches (0-700m). Symbols for the instrument groups are shifted by 1° in latitude for clearness

Objective

The focus of M124 was to perform a cross-basin lower atmosphere/upper ocean physical and biogeochemical survey along approximately 30°S in the sparsely sampled South Atlantic Ocean.

The survey during M124 aimed to: (i) estimate the upper ocean meridional heat and freshwater transport along approximately 30°S; (ii) investigate the physical/biogeochemical characteristics of Agulhas Rings, transporting Indian Ocean Water far into the South Atlantic; (iii) measuring turbulent heat fluxes and estimating the surface radiation balance, also considering the aerosol load of the atmosphere; (iv) measure the surface water carbonate system parameters (pCO_2) using newly developed sensors; (v) estimate the nitrogen fixation rates from incubation experiments. (vi) A full depth CTD cast at the northern exist of the Vema channel contributed to the long term temperature time series that represents the changes in properties of the Antarctic Bottom Water. The temperature and salinity observations have been uploaded into international data bases during the cruise for rapid distribution via GTS.

Most observations have been acquired from underway systems operated during transit of the vessel. On average every 4° (about 400km) a mulitnet/CTD rosette station provide vertical profiles in the upper layer down to 700 or 2000m depth. The multinet catches were analyzed under the microscope for planktonic foraminifera abundances and characteristics. Underway sampling was targeted to estimate the hydrographic (temperature, salinity) structure of the upper layer using an underway CTD system as well as Expandable Bathythermographs (XBTs). Two ADCPs (75kHz, 38kHz) were used to survey the surface layer current down to about 1500 m. The thermosalinograph was used for continuous T/S recording close to the surface. A towed pump system provided water that was sampled for carbon system parameters and is in parallel surveyed with a new pCO_2 optode sensor. Samples for analysis of organic pollutants (pesticides and other chemicals) mostly originating from atmospheric long-range transport were collected in the surface waters and in air. The atmospheric program measured mean aerosols load and clouds using sun photometers. With disdrometers the precipitation was quantified and a turbulence measurement system was used to derive momentum and heat fluxes.

The expedition was used for training purposes as a “MyScience cruise”. In total nine students from South Atlantic bordering countries South Africa, Brazil, Uruguay, Argentina, as well as a person from Togo, and two students from Germany participated in the cruise and add their own science projects to it by making use of the sampling proposed for the cruise.

Narrative

With the end of the M123 expedition Meteor arrived in Cape Town on the 27.02.2016 and moored about 10' walking distance from the famous "Water front". Shortly after arrival M124 groups from Marum, GEOMAR, MPI-M, MPI-C entered the ship and started to unload and install equipment. In parallel students from the "MyScience cruise" project arrived in Cape Town. All science crew embarked the ship on the 28.02. One student (Stefano Crivellari) was not allowed to arrive in RZA because of special rule applying to him regarding yellow fever vaccination. A first meeting of the science team took place in the late afternoon. Setting up the equipment for the cruise continued. After a dog squad examined the ship (starting at about 06:00LT) for blind passengers Meteor left Cape Town at about 10:00 on the 29.02. A swell from the south slowly move the ship up and down and, accompanied by many sea-life – dolphins, humpback-whales and seals, the first hours reserved for an engine test, passed away quickly. A safety information and "familiarization with the ship" was done during that period.

After returning back close to port, to disembark a technician for the engine test, we finally headed for the first XBT – launched at 18:10, at about 200 m water depths. During M124 we do an XBT program in collaboration with NOAA who maintain a high-resolution XBT line at around 30°S (AX18) since about 2002 with 4 crossing a year using container ships. During M124 we will do a standard crossing, launching an XBT every 2 hours measuring temperature to 700 m depth – however, we will stop the program at the 200nm zone of Brazil. One aim of the program is to compare the XBT recording with measurements achieved with an underway CTD system (uCTD). The uCTD is operated more frequent (every hour) but covering only the upper 450 m. Other underway systems (ADCP, echosounding) have been started after passing the 12 nm zone. A first CTD/rosette sampling was done at the SAMOC CPIES station. Full sampling of biogeochemical variables and dO¹⁸ (Zabel, University Bremen, and Martinez, GEOMAR, Kiel) was done. The group from Eric Achterberg (GEOMAR) Tim de Groot, Eva Louropoulou, did a first test with the towed fish that supplies water via a trace metal clean pump for underway sampling. The underway biogeochemistry measurements were started, including sensors for phosphate analysis and pCO2 that are under development. Meteorological observations of turbulent fluxes in the marine boundary layer were started (Karl Bumke, GEOMAR) as well as the air sampling for pollutants observations (Gerhard Lammel/Aanne Scherhag, Uni Mainz). A first multinet/CTD cast was performed by the team of Rapahel Morard (Marum, University Bremen). The foraminifers' abundance was analysed under the microscope. After the picking, two students used the remnant of the catches to analyse it for the occurrence of microplastic (Veronica van de Schyff) and zooplankton (Lais Fernanda de Palma). Kevin Schmidt (student from Cape Town University) did the first presentation in the daily science meeting. The watch system was set up: each of the three watch teams had an experienced watch leader and 3 students. The routine daily work was CTD, uCTD, and XBT profiling as well as watching ADCP, and topography logging. The first night passed by with regular XBT, uCTD work. Some irregularities occurred with the uCTD as one probe did not record on some casts and also did record corrupt data – the probe was replaced.

The daily "Kapitänsbesprechung" at 08:30 started on the 01. March. A safety drill was set at 10:20. We analysed, with support from the home-bases in Kiel and Brest, the recent sea-level anomaly and absolute dynamic topography maps in order to locate mesoscale eddies along the proposed track. A first uCTD/XBT section through one cyclonic eddy was done. The ADCPs (75kHz, 38kHz) worked very well. In the science meeting Sabrina Speich presented an introduction to the South Atlantic.

During the night, some problems with knots and turns in the uCTD rope appeared and the robe

was exchanged by a new one, as it was suspected that salt crystals lead to sticking the robe and hamper the free spooling. The new robe worked well during the following operations. The satellite data based eddy tracking revealed us some change in the position of a cyclone and we delayed the CTD and the CTD/MSN on the 02.03. to 23:00, in order to measure close to the centre of the eddy. Along the cruise we always tried to align the CTDs with the best estimated location of the centre of eddies. The students science themes were further discussed and a presentation on optical instruments were given (Lais Fernanda de Palma Lopez).

A routine work was developing and typically we did a Multinet/CTD (700m) at 08:30 in the morning at the current position. The rest of the day was then used to count the foraminifers under the microscope. Candidate eddies were identified along the track and centre's determined were a deep (2000m) CTD cast was done and sometimes another Multinet/CTD. We also tried to align the weather observations with the eddy sampling. Student presentations of instrumentation (Christina Schmidt 03.03., Livia Sancho 04.03.) where given during the seminars and two presentations on physical oceanography fundamentals and ocean eddies were given (J. Karstensen).

On the 4th March we did a first lab test with the RapidCast system, provided for field testing by Teledyne Oceanscience. The company was interested in conducting a test of the recently developed system during M124 regarding general performance but also in comparison with uCTD and XBT systems. The RapidCast is a winch system like the uCTD but with a lot more control on motor heating and robe tension. On the 7th March the system was tested with a probe and in water with the ship moving with 10kn. Due to a wrong setting in the interface a too long rope was spooled out and the system was overloaded when attempting to rewind the robe. The wire had to be rewinded by hand. After communication with Teledyne Oceansciences it was decided that the RapidCast could not be used further during M124.

A very intense (in absolute dynamic topography) anticyclone was approached and a CTD was done it is centre on the 06. March, followed by an X-shaped track to survey the "3-d" velocity structure and hydrography (uCTD, XBT). The ship speed was lowered to 6kn to reach greater depth with the uCTD but also to exchange ballast water for the ship. At the seminars of the following days, four presentations were given by students (Kodjo Mamouena, Mareike Körner, Anahi Brun, Veronica van der Schyff). A science theme review was done and plans were made for the poster presentations planned for the reception in Rio de Janeiro on the 19. March 2016. The watch groups were getting more and more adapted to the shift work and handling the instrumentation. On the 12th March at around 07:00 LT the dGPS signal was stopped because of some contractual issues and the signal appeared again on the 13th March 15:00.

One of the uCTD winches failed and a replacement system (University Hamburg) was used instead. However, some care was taken to repair the winch, but not will full success because the specialized bearings were not available. Two Agulhas Rings (Anticyclones) were sampled, one again with an X-shaped survey pattern. We approached the Vema Channel Extension region and on the 15th March we did two full depth CTDs, primarily to survey the Antarctic Bottom Water properties and which showed the increase in temperature observed now since more than a decade.

Brazilian authorities complicated the ships logistical preparations for the arrival in Rio. In particular relevant for the scientific crew was an information from the federal police that three students from USA, Togo, and China were not allowed enter Brazil with the Meteor. All three had visas for Brazil and issued by the individual countries embassies, but local authorities in Rio refused to accept the visas and requested work visas instead. The issue was resolved on the 19th March early morning.

The scientific program was ended at 00:00 on the 17th March 2016, shortly before entering the EEZ

of Brazil and all measurements were stopped. The posters for the reception were finalized. The Meteor moored in Rio at 09:00. Unfortunately the container we ordered for shipping back our equipment was not delivered to the ship. We move the equipment to the lower deck of Meteor to organize shipping from the next port (Fortaleza). The reception on the 19th, invited by the German Ambassador Mr. Brengelmann, the Consul Mr. Klein, and the Captain of RV Meteor Michael Schneider, took place in the early afternoon.

Acknowledgement

We like to thank captain Michael Schneider, his officers and crew of RV METEOR for their support of our measurement program and for creating a very friendly and professional work atmosphere on board. The ship time of METEOR was provided by the German Science Foundation (DFG) within the core program METEOR/MERIAN. Financial support for the different projects carried out during the cruise was provided though the H2020 project AtlantOS, the Excellence-cluster “Future Ocean” Kiel as part of the Semestertopic 2016 “Ocean Observations: from Sensor to Knowledge”.

Cruise participants science:

	Name	Surname	Institution
1	Karstensen	Johannes	GEOMAR
2	Baumeister	Adrian Soeren	Uni Bremen/Marum
3	Brun	Anahí Amaru	Exzellenzcluster
4	Bumke	Karl Wilhelm	GEOMAR
5	Clarke	Jennifer	GEOMAR
6	de Palma Lopes	Lais Fernanda	Exzellenzcluster
7	de Groot	Tim	GEOMAR
8	Fu	Yao	GEOMAR
9	Geissler	Felix	Uni Bremen/Marum
10	Giorgetta	Marco Andrea	MPI-M
11	Kodjo Mawouéna	Aziayibor	Exzellenzcluster
12	Koehn	Eike Eduard	GEOMAR
13	Koerner	Mareike	Exzellenzcluster
14	Louropoulou	Evangelia	GEOMAR
15	Luebben	Birgit	Uni Bremen/Marum
16	Manzini	Elisa	MPI-M
17	Morard	Raphael Jean-Louis Pierre	Uni Bremen/Marum
18	Pinck	Andreas	GEOMAR
19	Rabellino	Javier	Exzellenzcluster
20	Reuter	Runa Turid	Uni Bremen/Marum
21	Barbosa Sancho Alvares Mendonca Cabral	Livia Maria	Exzellenzcluster
22	Scherhag	Anne Katharina	MPI-C/MU
23	Schmidt	Christina	Exzellenzcluster
24	Schmidt	Kevin Mikus	Exzellenzcluster
25	Speich	Sabrina	ENS
26	van der Schyff	Veronica	Exzellenzcluster
27	Raeke	Andreas	DWD

GEOMAR: Helmholtz-Zentrum für Ozeanforschung Kiel, Düsternbrooker Weg 20, 24105 Kiel / Germany

ENS: École normale supérieure; 45, rue d'Ulm, Paris /France

Marum: MARUM/Universität Bremen, Leobener Str., 28359 Bremen / Germany

MPI-M: Max Planck Institute for Meteorology,Bundesstraße 53, 20146 Hamburg / Germany

MPI-C: Max Planck Institute for Chemistry, Hahn-Meitner-Weg 1, 55128 Mainz / Germany

Exzellenzcluster: Exzellenzcluster "Ozean der Zukunft", Christian-Albrechts-Platz 4, 24118 Kiel / Germany

MU: Masaryk University, RC Toxic Compounds in the Environment, Kamenice 3, 62500 Brno / Czech Rep.



Science crew M124

Station list

Gear coding

CTD/RO: Conductivity/Temperature/Pressure sonde with rosette sampler

uCTD: Underway CTD

MSN: Multinet

XBT: Expandable Bathythermograph

FISH: in-situ pump

Station	Date	Time UTC	Position Latitude	Position Longitude	Depth [m]	Gear	Gear station #
ME124/189-1	29/02/16	16:50	34° 08.26' S	017° 58.32' E	234,4	XBT	XBT #1
ME124/190-1	29/02/16	17:08	34° 09.67' S	017° 54.83' E	261,4	XBT	XBT #2
ME124/191-1	29/02/16	17:29	34° 12.30' S	017° 51.47' E	290,7	uCTD	uCTD #1
ME124/191-1	29/02/16	17:44	34° 14.01' S	017° 48.85' E	325,3	uCTD	uCTD #2
ME124/192-1	29/02/16	19:25	34° 23.30' S	017° 33.27' E	1220,7	MSN	MSN #192
ME124/192-2	29/02/16	20:30	34° 23.30' S	017° 32.99' E	1235,8	CTD/RO	CTD #1
ME124/193-1	29/02/16	21:10	34° 23.26' S	017° 32.62' E	1248,9	FISCH	FISCH
ME124/194-1	29/02/16	22:10	34° 22.39' S	017° 24.01' E	2036,6	XBT	XBT #3
ME124/195-1	29/02/16	22:59	34° 21.20' S	017° 11.93' E	2851,7	uCTD	uCTD #3
ME124/195-1	01/03/16	00:13	34° 19.46' S	016° 54.14' E	2838,6	uCTD	uCTD #4
ME124/196-1	01/03/16	00:49	34° 18.62' S	016° 45.63' E	0	XBT	XBT #4
ME124/195-1	01/03/16	01:16	34° 18.00' S	016° 39.25' E	0	uCTD	uCTD #5
ME124/195-1	01/03/16	01:51	34° 17.19' S	016° 31.04' E	0	uCTD	uCTD #6
ME124/197-1	01/03/16	02:42	34° 16.02' S	016° 19.16' E	3756	XBT	XBT #5
ME124/198-1	01/03/16	03:12	34° 15.35' S	016° 12.31' E	3886	uCTD	uCTD #7
ME124/198-1	01/03/16	04:22	34° 13.79' S	015° 56.46' E	4035,6	uCTD	uCTD #8
ME124/199-1	01/03/16	04:45	34° 13.29' S	015° 51.40' E	4071,4	XBT	XBT #6
ME124/200-1	01/03/16	05:23	34° 12.49' S	015° 43.23' E	4115,6	uCTD	uCTD #9
ME124/200-1	01/03/16	06:32	34° 11.04' S	015° 28.41' E	4217,9	uCTD	uCTD #10
ME124/201-1	01/03/16	07:07	34° 10.33' S	015° 21.27' E	4264,4	XBT	XBT #7
ME124/200-1	01/03/16	07:37	34° 09.72' S	015° 15.04' E	4289,1	uCTD	uCTD #11
ME124/200-1	01/03/16	08:46	34° 08.28' S	015° 00.38' E	4333,9	uCTD	uCTD #12
ME124/193-1	01/03/16	09:10	34° 07.95' S	014° 57.04' E	4340,7	FISCH	FISCH
ME124/202-1	01/03/16	09:52	34° 07.94' S	014° 56.47' E	4343,2	MSN	MSN #202
ME124/202-2	01/03/16	10:21	34° 08.00' S	014° 56.50' E	4342,4	MSN	MSN #202
ME124/202-3	01/03/16	10:38	34° 08.10' S	014° 56.54' E	4342,4	MSN	MSN #202
ME124/202-4	01/03/16	11:41	34° 08.28' S	014° 56.64' E	4344,2	CTD/RO	CTD #2
ME124/193-1	01/03/16	12:26	34° 08.32' S	014° 56.65' E	4345,4	FISCH	FISCH
ME124/203-1	01/03/16	13:26	34° 08.21' S	014° 45.41' E	4387	XBT	XBT #8
ME124/204-1	01/03/16	14:07	34° 08.84' S	014° 37.07' E	4423,6	uCTD	uCTD #13
ME124/204-1	01/03/16	15:11	34° 09.95' S	014° 24.24' E	4476,6	uCTD	uCTD #14
ME124/205-1	01/03/16	16:07	34° 10.92' S	014° 13.08' E	4484,1	XBT	XBT #9
ME124/206-1	01/03/16	16:22	34° 11.18' S	014° 10.10' E	4485,5	uCTD	uCTD #15
ME124/206-1	01/03/16	17:10	34° 12.02' S	014° 00.53' E	4483,6	uCTD	uCTD #16
ME124/207-1	01/03/16	18:12	34° 13.10' S	013° 48.11' E	4483,6	XBT	XBT #10
ME124/206-1	01/03/16	18:35	34° 13.51' S	013° 43.37' E	4497,5	uCTD	uCTD #17
ME124/206-1	01/03/16	19:35	34° 14.60' S	013° 30.86' E	4529,8	uCTD	uCTD #18
ME124/208-1	01/03/16	20:24	34° 15.21' S	013° 23.91' E	4539,4	XBT	XBT #11
ME124/206-1	01/03/16	20:46	34° 15.61' S	013° 19.34' E	4561,4	uCTD	uCTD #19

Station	Date	Time UTC	Position Latitude	Position Longitude	Depth [m]	Gear	Gear station #
ME124/206-1	01/03/16	21:42	34° 16.63' S	013° 07.53' E	4621	uCTD	uCTD #20
ME124/209-1	01/03/16	22:27	34° 17.45' S	012° 58.15' E	4646,6	XBT	XBT #12
ME124/206-1	01/03/16	22:48	34° 17.83' S	012° 53.84' E	4665,8	uCTD	uCTD #21
ME124/206-1	01/03/16	23:45	34° 18.86' S	012° 41.98' E	4702,8	uCTD	uCTD #22
ME124/210-1	02/03/16	00:23	34° 19.54' S	012° 34.22' E	4717,7	XBT	XBT #13
ME124/206-1	02/03/16	00:55	34° 20.12' S	012° 27.56' E	4743,1	uCTD	uCTD #23
ME124/211-1	02/03/16	01:21	34° 20.58' S	012° 22.18' E	4760,2	XBT	XBT #14
ME124/206-1	02/03/16	02:07	34° 21.42' S	012° 12.54' E	4784,6	uCTD	uCTD #24
ME124/206-1	02/03/16	03:14	34° 22.65' S	011° 58.43' E	4819,1	uCTD	uCTD #25
ME124/212-1	02/03/16	03:42	34° 23.17' S	011° 52.40' E	4846,8	XBT	XBT #15
ME124/206-1	02/03/16	04:19	34° 23.87' S	011° 44.38' E	4863,2	uCTD	uCTD #26
ME124/206-1	02/03/16	05:10	34° 24.83' S	011° 33.33' E	4900,4	uCTD	uCTD #27
ME124/213-1	02/03/16	05:37	34° 25.33' S	011° 27.60' E	4933,7	XBT	XBT #16
ME124/206-1	02/03/16	06:20	34° 26.12' S	011° 18.49' E	4948,5	uCTD	uCTD #28
ME124/214-1	02/03/16	08:16	34° 27.24' S	011° 05.18' E	4962,7	MSN	MSN #214
ME124/214-2	02/03/16	08:53	34° 27.24' S	011° 05.18' E	4964,4	MSN	MSN #214
ME124/214-3	02/03/16	09:09	34° 27.24' S	011° 05.18' E	4964,4	MSN	MSN #214
ME124/193-1	02/03/16	09:28	34° 27.24' S	011° 05.18' E	4954,1	FISCH	FISCH
ME124/214-4	02/03/16	10:17	34° 27.24' S	011° 05.18' E	4964,9	CTD/RO	CTD #3
ME124/193-1	02/03/16	11:05	34° 27.24' S	011° 05.15' E	4949,1	FISCH	FISCH
ME124/215-1	02/03/16	11:50	34° 28.05' S	010° 56.38' E	4963,5	XBT	XBT #17
ME124/216-1	02/03/16	12:01	34° 28.26' S	010° 53.88' E	5008,1	XBT	XBT #18
ME124/217-1	02/03/16	12:27	34° 28.78' S	010° 47.89' E	4990,1	uCTD	uCTD #29
ME124/217-1	02/03/16	12:43	34° 29.10' S	010° 44.20' E	5012	uCTD	uCTD #30
ME124/217-1	02/03/16	13:45	34° 30.33' S	010° 30.09' E	5010,9	uCTD	uCTD #31
ME124/218-1	02/03/16	14:06	34° 30.74' S	010° 25.41' E	5019	XBT	XBT #19
ME124/217-1	02/03/16	15:51	34° 32.76' S	010° 02.19' E	5017,1	uCTD	uCTD #32
ME124/219-1	02/03/16	16:14	34° 33.19' S	009° 57.13' E	5027,1	XBT	XBT #20
ME124/217-1	02/03/16	17:00	34° 34.08' S	009° 46.97' E	5066,6	uCTD	uCTD #33
ME124/217-1	02/03/16	18:08	34° 35.35' S	009° 32.24' E	5076,5	uCTD	uCTD #34
ME124/220-1	02/03/16	18:28	34° 35.72' S	009° 28.00' E	5069,4	XBT	XBT #21
ME124/217-1	02/03/16	19:11	34° 36.53' S	009° 18.73' E	5037	uCTD	uCTD #35
ME124/217-1	02/03/16	20:26	34° 37.25' S	009° 02.53' E	5025,2	uCTD	uCTD #36
ME124/221-1	02/03/16	20:58	34° 37.01' S	008° 55.48' E	5046,5	XBT	XBT #22
ME124/217-1	02/03/16	21:38	34° 36.80' S	008° 46.70' E	5037,3	uCTD	uCTD #37
ME124/222-1	02/03/16	23:18	34° 37.50' S	008° 37.51' E	5062	CTD/RO	CTD #4
ME124/223-1	03/03/16	00:51	34° 32.73' S	008° 29.52' E	5095,2	XBT	XBT #23
ME124/224-1	03/03/16	01:32	34° 28.14' S	008° 21.85' E	5132,8	uCTD	uCTD #38
ME124/224-1	03/03/16	02:39	34° 20.69' S	008° 09.41' E	5137	uCTD	uCTD #39
ME124/225-1	03/03/16	03:02	34° 18.19' S	008° 05.24' E	4746,2	XBT	XBT #24
ME124/224-1	03/03/16	04:03	34° 11.67' S	007° 54.36' E	5211,6	uCTD	uCTD #40
ME124/224-1	03/03/16	05:03	34° 05.26' S	007° 43.70' E	5198,6	uCTD	uCTD #41
ME124/226-1	03/03/16	05:41	34° 01.19' S	007° 36.93' E	4199,7	XBT	XBT #25
ME124/224-1	03/03/16	06:10	33° 58.08' S	007° 31.77' E	5227	uCTD	uCTD #42
ME124/227-1	03/03/16	08:01	33° 52.84' S	007° 22.76' E	5198	CTD/RO	CTD #5
ME124/227-2	03/03/16	09:29	33° 53.34' S	007° 23.20' E	5190,7	MSN	MSN #227

Station	Date	Time UTC	Position Latitude	Position Longitude	Depth [m]	Gear	Gear station #
ME124/227-3	03/03/16	10:07	33° 53.25' S	007° 23.17' E	5188,5	MSN	MSN #227
ME124/227-4	03/03/16	10:24	33° 53.32' S	007° 23.19' E	5192	MSN	MSN #227
ME124/228-1	03/03/16	10:45	33° 52.59' S	007° 22.48' E	5205,3	XBT	XBT #26
ME124/229-1	03/03/16	11:30	33° 47.20' S	007° 15.68' E	5175,1	uCTD	uCTD #43
ME124/229-1	03/03/16	12:31	33° 40.02' S	007° 06.44' E	5235,7	uCTD	uCTD #44
ME124/229-1	03/03/16	13:35	33° 33.00' S	006° 56.02' E	5084,6	uCTD	uCTD #45
ME124/230-1	03/03/16	13:59	33° 30.85' S	006° 51.72' E	5170,5	XBT	XBT #27
ME124/229-1	03/03/16	14:40	33° 27.13' S	006° 44.32' E	5225,2	uCTD	uCTD #46
ME124/229-1	03/03/16	15:46	33° 21.03' S	006° 32.16' E	5173,6	uCTD	uCTD #47
ME124/193-1	03/03/16	16:00	33° 19.73' S	006° 29.57' E	5140,5	FISCH	FISCH
ME124/231-1	03/03/16	16:10	33° 18.80' S	006° 27.73' E	5161	XBT	XBT #28
ME124/229-1	03/03/16	17:00	33° 14.09' S	006° 18.37' E	5068	uCTD	uCTD #48
ME124/193-1	03/03/16	17:03	33° 13.80' S	006° 17.80' E	5084,1	FISCH	FISCH
ME124/232-1	03/03/16	17:55	33° 08.80' S	006° 07.86' E	5215,7	XBT	XBT #29
ME124/229-1	03/03/16	18:07	33° 07.64' S	006° 05.56' E	5104,1	uCTD	uCTD #49
ME124/229-1	03/03/16	19:14	33° 01.09' S	005° 52.58' E	5083,7	uCTD	uCTD #50
ME124/233-1	03/03/16	19:45	32° 58.07' S	005° 46.58' E	5185,7	XBT	XBT #30
ME124/229-1	03/03/16	20:17	32° 54.89' S	005° 40.29' E	5234	uCTD	uCTD #51
ME124/229-1	03/03/16	21:10	32° 49.52' S	005° 29.67' E	5192,6	uCTD	uCTD #52
ME124/234-1	03/03/16	21:40	32° 46.50' S	005° 23.68' E	5056,3	XBT	XBT #31
ME124/229-1	03/03/16	22:18	32° 42.94' S	005° 16.66' E	5017,9	uCTD	uCTD #53
ME124/229-1	03/03/16	23:18	32° 36.83' S	005° 04.60' E	5140,3	uCTD	uCTD #54
ME124/235-1	03/03/16	23:49	32° 33.68' S	004° 58.39' E	5021	XBT	XBT #32
ME124/229-1	04/03/16	00:23	32° 30.27' S	004° 51.66' E	4918,5	uCTD	uCTD #55
ME124/229-1	04/03/16	01:23	32° 24.30' S	004° 39.90' E	4957,3	uCTD	uCTD #56
ME124/236-1	04/03/16	01:52	32° 21.44' S	004° 34.27' E	5124,7	XBT	XBT #33
ME124/229-1	04/03/16	02:26	32° 18.09' S	004° 27.69' E	4787	uCTD	uCTD #57
ME124/229-1	04/03/16	03:23	32° 12.41' S	004° 16.52' E	4918,5	uCTD	uCTD #58
ME124/237-1	04/03/16	04:02	32° 08.48' S	004° 08.82' E	4787,1	XBT	XBT #34
ME124/229-1	04/03/16	04:22	32° 06.48' S	004° 04.89' E	4777,4	uCTD	uCTD #59
ME124/229-1	04/03/16	05:18	32° 00.91' S	003° 53.96' E	4690,1	uCTD	uCTD #60
ME124/238-1	04/03/16	05:56	31° 57.17' S	003° 46.64' E	4707,6	XBT	XBT #35
ME124/229-1	04/03/16	06:09	31° 55.90' S	003° 44.16' E	4714,3	uCTD	uCTD #61
ME124/239-1	04/03/16	07:15	31° 52.50' S	003° 37.54' E	4679,9	MSN	MSN #239
ME124/239-2	04/03/16	07:52	31° 52.50' S	003° 37.54' E	4679,3	MSN	MSN #239
ME124/239-3	04/03/16	08:08	31° 52.50' S	003° 37.54' E	4681,2	MSN	MSN #239
ME124/239-4	04/03/16	09:10	31° 52.51' S	003° 37.54' E	4681,1	CTD/RO	CTD #6
ME124/240-1	04/03/16	10:43	31° 48.09' S	003° 30.84' E	4799,6	XBT	XBT #36
ME124/241-1	04/03/16	11:37	31° 41.85' S	003° 21.41' E	4979,9	uCTD	uCTD #62
ME124/242-1	04/03/16	11:55	31° 39.78' S	003° 18.29' E	4975,7	CTD-RCST	CTD-RCST
ME124/242-1	04/03/16	12:48	31° 33.59' S	003° 08.95' E	4992,4	CTD-RCST	CTD-RCST
ME124/243-1	04/03/16	12:50	31° 33.35' S	003° 08.59' E	4992,7	XBT	XBT #37
ME124/242-1	04/03/16	12:56	31° 32.64' S	003° 07.51' E	4996,5	CTD-RCST	CTD-RCST
ME124/242-1	04/03/16	13:11	31° 30.86' S	003° 04.84' E	4926,4	CTD-RCST	CTD-RCST
ME124/241-1	04/03/16	13:11	31° 30.86' S	003° 04.84' E	4926,4	uCTD	uCTD #63
ME124/242-1	04/03/16	13:30	31° 28.61' S	003° 01.46' E	4269,1	CTD-RCST	CTD-RCST

Station	Date	Time UTC	Position Latitude	Position Longitude	Depth [m]	Gear	Gear station #
ME124/242-1	04/03/16	14:15	31° 25.09' S	002° 56.18' E	2530	CTD-RCST	CTD-RCST
ME124/242-1	04/03/16	15:35	31° 25.62' S	002° 55.51' E	2561,4	CTD-RCST	CTD-RCST
ME124/241-1	04/03/16	15:43	31° 25.41' S	002° 55.02' E	2730	uCTD	uCTD #64
ME124/244-1	04/03/16	16:05	31° 22.20' S	002° 51.76' E	2764,7	XBT	XBT #38
ME124/241-1	04/03/16	16:48	31° 17.12' S	002° 44.17' E	1480,9	uCTD	uCTD #65
ME124/241-1	04/03/16	17:53	31° 09.52' S	002° 32.76' E	2268,2	uCTD	uCTD #66
ME124/241-1	04/03/16	18:42	31° 03.87' S	002° 24.28' E	3999,4	uCTD	uCTD #67
ME124/245-1	04/03/16	19:09	31° 00.72' S	002° 19.57' E	3898,9	XBT	XBT #39
ME124/241-1	04/03/16	19:56	30° 55.24' S	002° 11.36' E	3815,1	uCTD	uCTD #68
ME124/241-1	04/03/16	20:58	30° 48.00' S	002° 00.53' E	4280,5	uCTD	uCTD #69
ME124/246-1	04/03/16	21:21	30° 45.36' S	001° 56.59' E	4312,6	XBT	XBT #40
ME124/241-1	04/03/16	21:59	30° 41.06' S	001° 50.17' E	4296,7	uCTD	uCTD #70
ME124/241-1	04/03/16	22:55	30° 34.75' S	001° 40.75' E	4201,4	uCTD	uCTD #71
ME124/247-1	04/03/16	23:26	30° 31.25' S	001° 35.53' E	4188,7	XBT	XBT #41
ME124/241-1	05/03/16	00:10	30° 26.26' S	001° 28.10' E	3883	uCTD	uCTD #72
ME124/248-1	05/03/16	01:36	30° 22.51' S	001° 22.55' E	3163,7	CTD/RO	CTD #7
ME124/193-1	05/03/16	02:31	30° 22.51' S	001° 22.55' E	3162,9	FISCH	FISCH
ME124/249-1	05/03/16	03:21	30° 16.93' S	001° 15.33' E	1986,8	uCTD	uCTD #73
ME124/250-1	05/03/16	03:54	30° 12.65' S	001° 09.83' E	2888,4	XBT	XBT #42
ME124/250-1	05/03/16	03:56	30° 12.39' S	001° 09.50' E	2896,4	XBT	XBT #43
ME124/249-1	05/03/16	04:20	30° 09.28' S	001° 05.50' E	2990,2	uCTD	uCTD #74
ME124/249-1	05/03/16	05:34	29° 59.62' S	000° 53.11' E	2614,7	uCTD	uCTD #75
ME124/251-1	05/03/16	06:08	29° 55.24' S	000° 47.53' E	2946	XBT	XBT #44
ME124/249-1	05/03/16	06:21	29° 54.76' S	000° 48.71' E	2924	uCTD	uCTD #76
ME124/252-1	05/03/16	08:08	29° 54.98' S	001° 00.78' E	3154,4	MSN	MSN #252
ME124/252-2	05/03/16	08:46	29° 54.97' S	001° 00.78' E	3153,2	MSN	MSN #252
ME124/252-3	05/03/16	09:03	29° 54.94' S	001° 00.75' E	3153,5	MSN	MSN #252
ME124/253-1	05/03/16	09:27	29° 54.13' S	001° 02.98' E	3385,1	uCTD	uCTD #77
ME124/254-1	05/03/16	09:56	29° 52.34' S	001° 08.90' E	3598,8	XBT	XBT #45
ME124/253-1	05/03/16	10:28	29° 50.88' S	001° 15.57' E	3645,4	uCTD	uCTD #78
ME124/253-1	05/03/16	11:28	29° 49.28' S	001° 27.99' E	3685,8	uCTD	uCTD #79
ME124/255-1	05/03/16	11:54	29° 48.56' S	001° 33.41' E	3685,7	XBT	XBT #46
ME124/253-1	05/03/16	12:22	29° 47.78' S	001° 39.22' E	3686	uCTD	uCTD #80
ME124/253-1	05/03/16	13:24	29° 46.03' S	001° 52.30' E	3630,1	uCTD	uCTD #81
ME124/256-1	05/03/16	13:47	29° 45.36' S	001° 57.27' E	3578,1	XBT	XBT #47
ME124/253-1	05/03/16	14:35	29° 49.90' S	001° 55.83' E	3619,4	uCTD	uCTD #82
ME124/193-1	05/03/16	14:55	29° 50.97' S	001° 54.90' E	3609	FISCH	FISCH
ME124/253-1	05/03/16	15:34	29° 53.45' S	001° 52.81' E	3621,8	uCTD	uCTD #83
ME124/257-1	05/03/16	16:14	29° 56.02' S	001° 50.63' E	3654,7	XBT	XBT #48
ME124/253-1	05/03/16	16:27	29° 56.67' S	001° 50.07' E	3654,6	uCTD	uCTD #84
ME124/253-1	05/03/16	17:28	29° 59.89' S	001° 47.33' E	3567	uCTD	uCTD #85
ME124/258-1	05/03/16	18:12	30° 02.59' S	001° 45.04' E	3555,2	XBT	XBT #49
ME124/253-1	05/03/16	18:27	30° 03.54' S	001° 44.22' E	3550,9	uCTD	uCTD #86
ME124/253-1	05/03/16	19:28	30° 06.86' S	001° 41.40' E	3477	uCTD	uCTD #87
ME124/259-1	05/03/16	20:07	30° 08.31' S	001° 40.17' E	3014,6	XBT	XBT #50
ME124/253-1	05/03/16	20:38	30° 10.00' S	001° 38.72' E	2732,2	uCTD	uCTD #88

Station	Date	Time UTC	Position Latitude	Position Longitude	Depth [m]	Gear	Gear station #
ME124/253-1	05/03/16	21:47	30° 13.43' S	001° 35.78' E	2736,9	uCTD	uCTD #89
ME124/260-1	05/03/16	22:06	30° 14.39' S	001° 34.97' E	2716,9	XBT	XBT #51
ME124/253-1	05/03/16	22:50	30° 16.61' S	001° 33.08' E	2801,9	uCTD	uCTD #90
ME124/253-1	05/03/16	23:50	30° 24.13' S	001° 26.65' E	3616,3	uCTD	uCTD #91
ME124/261-1	06/03/16	00:17	30° 27.52' S	001° 23.76' E	3578,9	XBT	XBT #52
ME124/253-1	06/03/16	00:55	30° 32.14' S	001° 19.96' E	3023,2	uCTD	uCTD #92
ME124/253-1	06/03/16	01:57	30° 39.60' S	001° 13.41' E	3448,4	uCTD	uCTD #93
ME124/262-1	06/03/16	02:12	30° 41.37' S	001° 11.89' E	3530,6	XBT	XBT #53
ME124/253-1	06/03/16	03:14	30° 48.70' S	001° 05.60' E	4419,6	uCTD	uCTD #94
ME124/253-1	06/03/16	04:07	30° 55.11' S	001° 00.09' E	4411,3	uCTD	uCTD #95
ME124/263-1	06/03/16	04:24	30° 57.19' S	000° 58.30' E	4414,5	XBT	XBT #54
ME124/263-1	06/03/16	04:27	30° 57.57' S	000° 57.97' E	4418,4	XBT	XBT #55
ME124/253-1	06/03/16	05:04	31° 01.89' S	000° 54.26' E	4413,6	uCTD	uCTD #96
ME124/253-1	06/03/16	06:03	31° 08.43' S	000° 48.62' E	4401,3	uCTD	uCTD #97
ME124/264-1	06/03/16	06:21	31° 10.54' S	000° 46.80' E	4433,2	XBT	XBT #56
ME124/253-1	06/03/16	07:06	31° 15.78' S	000° 42.29' E	4428,6	uCTD	uCTD #98
ME124/265-1	06/03/16	09:01	31° 24.53' S	000° 34.86' E	4491,9	MSN	MSN #265
ME124/265-2	06/03/16	09:43	31° 24.22' S	000° 35.08' E	4493,2	MSN	MSN #265
ME124/265-3	06/03/16	10:13	31° 23.94' S	000° 35.28' E	4490,2	MSN	MSN #265
ME124/266-1	06/03/16	11:25	31° 23.33' S	000° 35.60' E	4492,2	CTD/RO	CTD #8
ME124/267-1	06/03/16	12:44	31° 25.24' S	000° 34.11' E	4492,5	XBT	XBT #57
ME124/268-1	06/03/16	12:53	31° 26.31' S	000° 33.19' E	4494,9	uCTD	uCTD #99
ME124/268-1	06/03/16	13:56	31° 29.33' S	000° 23.13' E	4485,4	uCTD	uCTD #100
ME124/269-1	06/03/16	14:42	31° 28.37' S	000° 13.30' E	4364,1	XBT	XBT #58
ME124/268-1	06/03/16	15:00	31° 27.99' S	000° 09.41' E	4415,4	uCTD	uCTD #101
ME124/268-1	06/03/16	16:00	31° 26.75' S	000° 03.30' W	4439,5	uCTD	uCTD #102
ME124/270-1	06/03/16	16:42	31° 25.90' S	000° 11.99' W	4362,3	XBT	XBT #59
ME124/268-1	06/03/16	17:07	31° 25.39' S	000° 17.14' W	3802,1	uCTD	uCTD #103
ME124/268-1	06/03/16	18:08	31° 24.18' S	000° 29.56' W	3257	uCTD	uCTD #104
ME124/271-1	06/03/16	18:38	31° 23.58' S	000° 35.70' W	2877,4	XBT	XBT #60
ME124/268-1	06/03/16	19:07	31° 23.00' S	000° 41.64' W	2800	uCTD	uCTD #105
ME124/268-1	06/03/16	20:17	31° 21.59' S	000° 55.97' W	3446,4	uCTD	uCTD #106
ME124/272-1	06/03/16	20:50	31° 20.93' S	001° 02.73' W	4041	XBT	XBT #61
ME124/268-1	06/03/16	21:22	31° 20.28' S	001° 09.37' W	3406,7	uCTD	uCTD #107
ME124/268-1	06/03/16	22:28	31° 18.93' S	001° 23.18' W	4701,6	uCTD	uCTD #108
ME124/273-1	06/03/16	22:47	31° 18.53' S	001° 27.25' W	4746,8	XBT	XBT #62
ME124/268-1	06/03/16	23:24	31° 17.75' S	001° 35.25' W	4750	uCTD	uCTD #109
ME124/268-1	07/03/16	00:27	31° 16.41' S	001° 48.90' W	4620,2	uCTD	uCTD #110
ME124/274-1	07/03/16	00:49	31° 15.92' S	001° 53.66' W	4595	XBT	XBT #63
ME124/268-1	07/03/16	01:32	31° 15.03' S	002° 03.00' W	4313,2	uCTD	uCTD #111
ME124/268-1	07/03/16	02:33	31° 13.72' S	002° 16.34' W	4428,1	uCTD	uCTD #112
ME124/275-1	07/03/16	02:58	31° 13.18' S	002° 21.88' W	3297,8	XBT	XBT #64
ME124/268-1	07/03/16	03:33	31° 12.42' S	002° 29.62' W	2899,3	uCTD	uCTD #113
ME124/268-1	07/03/16	04:36	31° 11.06' S	002° 43.52' W	4306	uCTD	uCTD #114
ME124/276-1	07/03/16	05:10	31° 10.31' S	002° 51.15' W	4165,3	XBT	XBT #65
ME124/268-1	07/03/16	05:35	31° 09.76' S	002° 56.76' W	4617,5	uCTD	uCTD #115

Station	Date	Time UTC	Position Latitude	Position Longitude	Depth [m]	Gear	Gear station #
ME124/268-1	07/03/16	06:42	31° 08.26' S	003° 12.03' W	4169,2	uCTD	uCTD #116
ME124/277-1	07/03/16	07:00	31° 07.86' S	003° 16.16' W	4130,1	XBT	XBT #66
ME124/268-1	07/03/16	07:29	31° 07.21' S	003° 22.80' W	4191,8	uCTD	uCTD #117
ME124/278-1	07/03/16	08:54	31° 06.28' S	003° 34.30' W	4145	MSN	MSN #278
ME124/278-2	07/03/16	09:30	31° 06.28' S	003° 34.31' W	4141,5	MSN	MSN #278
ME124/278-3	07/03/16	09:45	31° 06.28' S	003° 34.31' W	4142,1	MSN	MSN #278
ME124/279-1	07/03/16	11:08	31° 04.62' S	003° 49.15' W	4244,9	uCTD	uCTD #118
ME124/280-1	07/03/16	11:33	31° 04.08' S	003° 54.62' W	4540,7	XBT	XBT #67
ME124/279-1	07/03/16	12:05	31° 03.39' S	004° 01.68' W	4351,7	uCTD	uCTD #119
ME124/279-1	07/03/16	13:14	31° 01.88' S	004° 17.05' W	4316,2	uCTD	uCTD #120
ME124/281-1	07/03/16	13:41	31° 01.23' S	004° 22.93' W	4228,9	XBT	XBT #68
ME124/279-1	07/03/16	14:11	31° 00.66' S	004° 29.52' W	4188,2	uCTD	uCTD #121
ME124/279-1	07/03/16	15:12	30° 59.32' S	004° 43.09' W	4312,9	uCTD	uCTD #122
ME124/282-1	07/03/16	15:37	30° 58.78' S	004° 48.66' W	4282	XBT	XBT #69
ME124/279-1	07/03/16	16:10	30° 58.83' S	004° 55.97' W	4459,1	uCTD	uCTD #123
ME124/279-1	07/03/16	16:55	30° 57.07' S	005° 06.03' W	4471,8	uCTD	uCTD #124
ME124/283-1	07/03/16	17:15	30° 56.64' S	005° 10.45' W	4450,1	XBT	XBT #70
ME124/279-1	07/03/16	18:07	30° 55.51' S	005° 21.87' W	4231,5	uCTD	uCTD #125
ME124/279-1	07/03/16	19:05	30° 54.27' S	005° 34.55' W	4436,3	uCTD	uCTD #126
ME124/284-1	07/03/16	19:25	30° 53.83' S	005° 38.93' W	4265,2	XBT	XBT #71
ME124/285-1	07/03/16	21:15	30° 52.50' S	005° 52.50' W	4160,7	CTD/RO	CTD #9
ME124/286-1	07/03/16	22:48	30° 53.55' S	006° 00.91' W	4052,9	XBT	XBT #72
ME124/287-1	07/03/16	23:02	30° 53.96' S	006° 04.12' W	4385,4	uCTD	uCTD #127
ME124/287-1	08/03/16	00:05	30° 55.79' S	006° 18.77' W	4139,5	uCTD	uCTD #128
ME124/288-1	08/03/16	00:32	30° 56.61' S	006° 25.11' W	4064,6	XBT	XBT #73
ME124/287-1	08/03/16	01:11	30° 57.74' S	006° 34.33' W	4090,7	uCTD	uCTD #129
ME124/287-1	08/03/16	02:17	30° 59.66' S	006° 49.63' W	4188,3	uCTD	uCTD #130
ME124/289-1	08/03/16	02:42	31° 00.39' S	006° 55.49' W	4473,8	XBT	XBT #74
ME124/287-1	08/03/16	03:18	31° 01.43' S	007° 03.81' W	4383,5	uCTD	uCTD #131
ME124/287-1	08/03/16	04:17	31° 03.15' S	007° 17.52' W	4435,6	uCTD	uCTD #132
ME124/290-1	08/03/16	04:37	31° 03.72' S	007° 22.11' W	4366,3	XBT	XBT #75
ME124/287-1	08/03/16	05:13	31° 04.76' S	007° 30.41' W	4413,1	uCTD	uCTD #133
ME124/287-1	08/03/16	06:09	31° 06.38' S	007° 43.35' W	4399,3	uCTD	uCTD #134
ME124/291-1	08/03/16	06:28	31° 06.93' S	007° 47.75' W	4413,8	XBT	XBT #76
ME124/287-1	08/03/16	07:07	31° 08.05' S	007° 56.72' W	4417,6	uCTD	uCTD #135
ME124/292-1	08/03/16	08:55	31° 10.33' S	008° 13.30' W	4422,2	MSN	MSN #193
ME124/292-2	08/03/16	09:32	31° 10.33' S	008° 13.29' W	4422,2	MSN	MSN #193
ME124/292-3	08/03/16	09:48	31° 10.33' S	008° 13.29' W	4422,5	MSN	MSN #193
ME124/293-1	08/03/16	10:36	31° 11.05' S	008° 20.75' W	4342,4	XBT	XBT #77
ME124/294-1	08/03/16	11:11	31° 12.08' S	008° 28.49' W	4335,3	uCTD	uCTD #136
ME124/294-1	08/03/16	12:16	31° 14.76' S	008° 42.68' W	4367,3	uCTD	uCTD #137
ME124/295-1	08/03/16	12:40	31° 15.52' S	008° 48.01' W	4353,3	XBT	XBT #78
ME124/294-1	08/03/16	13:22	31° 17.16' S	008° 57.32' W	4327,5	uCTD	uCTD #138
ME124/296-1	08/03/16	14:43	31° 18.32' S	009° 06.86' W	4239,3	XBT	XBT #79
ME124/294-1	08/03/16	15:13	31° 19.32' S	009° 13.62' W	4088,7	uCTD	uCTD #139
ME124/294-1	08/03/16	15:42	31° 20.20' S	009° 20.18' W	3805,6	uCTD	uCTD #140

Station	Date	Time UTC	Position Latitude	Position Longitude	Depth [m]	Gear	Gear station #
ME124/294-1	08/03/16	16:53	31° 22.09' S	009° 36.06' W	3697,9	uCTD	uCTD #141
ME124/297-1	08/03/16	17:41	31° 22.20' S	009° 44.69' W	3521,6	XBT	XBT #80
ME124/294-1	08/03/16	18:17	31° 22.30' S	009° 52.92' W	3650,6	uCTD	uCTD #142
ME124/298-1	08/03/16	20:09	31° 22.49' S	010° 07.50' W	3555,3	CTD/RO	CTD #10
ME124/299-1	08/03/16	21:25	31° 23.54' S	010° 13.82' W	3642,6	XBT	XBT #81
ME124/300-1	08/03/16	21:40	31° 24.09' S	010° 17.10' W	3478,8	uCTD	uCTD #143
ME124/300-1	08/03/16	22:40	31° 25.37' S	010° 30.42' W	3676,9	uCTD	uCTD #144
ME124/301-1	08/03/16	23:17	31° 25.92' S	010° 38.80' W	3376,4	XBT	XBT #82
ME124/300-1	08/03/16	23:31	31° 26.17' S	010° 41.99' W	3335,1	uCTD	uCTD #145
ME124/300-1	09/03/16	00:40	31° 27.83' S	010° 57.72' W	3505,4	uCTD	uCTD #146
ME124/302-1	09/03/16	01:11	31° 28.59' S	011° 04.87' W	3449,4	XBT	XBT #83
ME124/300-1	09/03/16	01:44	31° 29.40' S	011° 12.45' W	3276,3	uCTD	uCTD #147
ME124/300-1	09/03/16	02:45	31° 30.86' S	011° 26.27' W	3235,1	uCTD	uCTD #148
ME124/303-1	09/03/16	03:06	31° 31.38' S	011° 31.10' W	3186,1	XBT	XBT #84
ME124/300-1	09/03/16	03:45	31° 33.79' S	011° 33.68' W	3206,8	uCTD	uCTD #149
ME124/300-1	09/03/16	04:55	31° 41.04' S	011° 20.26' W	3570,9	uCTD	uCTD #150
ME124/304-1	09/03/16	05:15	31° 43.10' S	011° 16.47' W	3657,2	XBT	XBT #85
ME124/300-1	09/03/16	05:50	31° 46.73' S	011° 09.73' W	3724,9	uCTD	uCTD #151
ME124/300-1	09/03/16	06:54	31° 53.43' S	010° 57.30' W	3613,7	uCTD	uCTD #152
ME124/305-1	09/03/16	07:13	31° 55.43' S	010° 53.59' W	3527,3	XBT	XBT #86
ME124/300-1	09/03/16	07:50	31° 59.35' S	010° 46.33' W	3658,5	uCTD	uCTD #153
ME124/306-1	09/03/16	08:57	32° 02.87' S	010° 40.05' W	3675,7	MSN	MSN #306
ME124/306-2	09/03/16	09:32	32° 02.91' S	010° 39.73' W	3694,8	MSN	MSN #306
ME124/306-3	09/03/16	09:47	32° 02.93' S	010° 39.64' W	3704,2	MSN	MSN #306
ME124/307-1	09/03/16	10:18	32° 04.72' S	010° 36.33' W	3699	uCTD	uCTD #154
ME124/308-1	09/03/16	10:36	32° 06.69' S	010° 32.68' W	3733,9	XBT	XBT #87
ME124/307-1	09/03/16	11:19	32° 11.40' S	010° 23.92' W	3873,5	uCTD	uCTD #155
ME124/307-1	09/03/16	12:26	32° 19.01' S	010° 09.71' W	4119,5	uCTD	uCTD #156
ME124/309-1	09/03/16	12:49	32° 21.36' S	010° 05.34' W	3882,1	XBT	XBT #88
ME124/307-1	09/03/16	13:30	32° 25.66' S	009° 57.32' W	2966,5	uCTD	uCTD #157
ME124/310-1	09/03/16	14:42	32° 33.38' S	009° 42.90' W	3945,4	XBT	XBT #89
ME124/307-1	09/03/16	15:18	32° 32.85' S	009° 39.27' W	3935,3	uCTD	uCTD #158
ME124/307-1	09/03/16	16:04	32° 25.28' S	009° 42.33' W	3672	uCTD	uCTD #159
ME124/311-1	09/03/16	16:37	32° 19.20' S	009° 44.78' W	3971	XBT	XBT #90
ME124/307-1	09/03/16	17:05	32° 13.75' S	009° 46.97' W	4058	uCTD	uCTD #160
ME124/307-1	09/03/16	18:10	32° 01.75' S	009° 51.79' W	3771	uCTD	uCTD #161
ME124/312-1	09/03/16	18:39	31° 56.72' S	009° 53.81' W	3859,8	XBT	XBT #91
ME124/307-1	09/03/16	19:07	31° 51.28' S	009° 55.99' W	3821,3	uCTD	uCTD #162
ME124/307-1	09/03/16	20:15	31° 38.45' S	010° 01.13' W	3973,1	uCTD	uCTD #163
ME124/313-1	09/03/16	20:37	31° 34.88' S	010° 02.55' W	4012,3	XBT	XBT #92
ME124/307-1	09/03/16	21:13	31° 27.82' S	010° 05.38' W	3579,7	uCTD	uCTD #164
ME124/307-1	09/03/16	22:12	31° 17.29' S	010° 09.57' W	3607	uCTD	uCTD #165
ME124/314-1	09/03/16	22:34	31° 13.93' S	010° 10.91' W	3008,1	XBT	XBT #93
ME124/307-1	09/03/16	23:08	31° 07.24' S	010° 13.58' W	3817,8	uCTD	uCTD #166
ME124/307-1	10/03/16	00:04	30° 57.01' S	010° 17.64' W	3693,2	uCTD	uCTD #167
ME124/315-1	10/03/16	00:30	30° 52.63' S	010° 19.38' W	3581,3	XBT	XBT #94

Station	Date	Time UTC	Position Latitude	Position Longitude	Depth [m]	Gear	Gear station #
ME124/307-1	10/03/16	01:13	30° 44.12' S	010° 22.74' W	3533,8	uCTD	uCTD #168
ME124/307-1	10/03/16	02:09	30° 33.68' S	010° 26.88' W	3733,5	uCTD	uCTD #169
ME124/316-1	10/03/16	02:47	30° 28.86' S	010° 28.78' W	3659,9	XBT	XBT #95
ME124/307-1	10/03/16	03:12	30° 23.96' S	010° 30.71' W	3576,6	uCTD	uCTD #170
ME124/307-1	10/03/16	04:15	30° 12.29' S	010° 35.31' W	3623,7	uCTD	uCTD #171
ME124/317-1	10/03/16	04:51	30° 07.75' S	010° 39.53' W	3768,9	XBT	XBT #96
ME124/307-1	10/03/16	05:22	30° 07.00' S	010° 47.01' W	3708,3	uCTD	uCTD #172
ME124/307-1	10/03/16	06:18	30° 05.75' S	010° 59.46' W	3704,5	uCTD	uCTD #173
ME124/318-1	10/03/16	06:35	30° 05.41' S	011° 02.82' W	3556,5	XBT	XBT #97
ME124/307-1	10/03/16	07:05	30° 04.69' S	011° 10.00' W	3533,5	uCTD	uCTD #174
ME124/307-1	10/03/16	08:21	30° 03.03' S	011° 26.54' W	3427,1	uCTD	uCTD #175
ME124/319-1	10/03/16	08:39	30° 02.68' S	011° 30.02' W	3485,4	XBT	XBT #98
ME124/320-1	10/03/16	09:54	30° 01.61' S	011° 39.52' W	3489,8	MSN	MSN #320
ME124/320-2	10/03/16	10:30	30° 01.61' S	011° 39.52' W	3489,4	MSN	MSN #320
ME124/320-3	10/03/16	11:07	30° 01.61' S	011° 39.52' W	3489,6	MSN	MSN #320
ME124/320-4	10/03/16	11:46	30° 01.61' S	011° 39.52' W	3489,6	MSN	MSN #320
ME124/321-1	10/03/16	12:22	30° 01.29' S	011° 43.92' W	3522,5	uCTD	uCTD #176
ME124/322-1	10/03/16	12:42	30° 00.92' S	011° 47.61' W	3514,7	XBT	XBT #99
ME124/321-1	10/03/16	13:28	29° 59.84' S	011° 58.36' W	3618,8	uCTD	uCTD #177
ME124/321-1	10/03/16	14:26	29° 58.59' S	012° 10.81' W	3473,4	uCTD	uCTD #178
ME124/321-1	10/03/16	15:23	29° 57.41' S	012° 22.57' W	3252,4	uCTD	uCTD #179
ME124/323-1	10/03/16	15:42	29° 57.06' S	012° 25.98' W	3274,1	XBT	XBT #100
ME124/321-1	10/03/16	16:30	29° 55.98' S	012° 36.78' W	3285,7	uCTD	uCTD #180
ME124/321-1	10/03/16	17:30	29° 54.66' S	012° 49.98' W	3096,8	uCTD	uCTD #181
ME124/324-1	10/03/16	17:50	29° 54.28' S	012° 53.70' W	3433,6	XBT	XBT #101
ME124/324-1	10/03/16	17:53	29° 54.23' S	012° 54.25' W	3437,4	XBT	XBT #102
ME124/321-1	10/03/16	18:29	29° 53.45' S	013° 02.00' W	2944,2	uCTD	uCTD #182
ME124/321-1	10/03/16	19:31	29° 52.08' S	013° 15.61' W	3052	uCTD	uCTD #183
ME124/325-1	10/03/16	19:49	29° 51.73' S	013° 19.07' W	2693,2	XBT	XBT #103
ME124/321-1	10/03/16	20:40	29° 50.55' S	013° 30.86' W	2651,7	uCTD	uCTD #184
ME124/321-1	10/03/16	21:37	29° 49.35' S	013° 42.76' W	2195,3	uCTD	uCTD #185
ME124/326-1	10/03/16	21:56	29° 49.00' S	013° 46.21' W	3168,2	XBT	XBT #104
ME124/321-1	10/03/16	22:31	29° 48.22' S	013° 54.00' W	3551,5	uCTD	uCTD #186
ME124/321-1	10/03/16	23:28	29° 47.01' S	014° 06.03' W	2945,1	uCTD	uCTD #187
ME124/327-1	10/03/16	23:46	29° 46.67' S	014° 09.41' W	3001,6	XBT	XBT #105
ME124/321-1	11/03/16	00:22	29° 45.80' S	014° 18.08' W	3015,2	uCTD	uCTD #188
ME124/321-1	11/03/16	01:27	29° 44.36' S	014° 32.40' W	2949,9	uCTD	uCTD #189
ME124/328-1	11/03/16	01:51	29° 43.93' S	014° 36.68' W	2888,7	XBT	XBT #106
ME124/321-1	11/03/16	02:25	29° 43.16' S	014° 44.24' W	2814,3	uCTD	uCTD #190
ME124/321-1	11/03/16	03:25	29° 41.84' S	014° 57.42' W	3230,7	uCTD	uCTD #191
ME124/329-1	11/03/16	03:46	29° 41.43' S	015° 01.43' W	3011,1	XBT	XBT #107
ME124/321-1	11/03/16	04:42	29° 40.14' S	015° 14.29' W	3106,5	uCTD	uCTD #192
ME124/321-1	11/03/16	04:50	29° 39.98' S	015° 15.83' W	3303,4	uCTD	uCTD #193
ME124/330-1	11/03/16	05:50	29° 38.62' S	015° 29.37' W	3795,5	XBT	XBT #108
ME124/321-1	11/03/16	06:04	29° 38.30' S	015° 32.52' W	3479	uCTD	uCTD #194
ME124/321-1	11/03/16	06:49	29° 37.29' S	015° 42.57' W	4057,7	uCTD	uCTD #195

Station	Date	Time UTC	Position Latitude	Position Longitude	Depth [m]	Gear	Gear station #
ME124/321-1	11/03/16	07:17	29° 36.72' S	015° 48.29' W	3823	uCTD	uCTD #196
ME124/331-1	11/03/16	07:49	29° 36.01' S	015° 55.29' W	3585,6	XBT	XBT #109
ME124/321-1	11/03/16	08:09	29° 35.53' S	016° 00.04' W	3863,4	uCTD	uCTD #197
ME124/332-1	11/03/16	09:56	29° 33.89' S	016° 16.76' W	3806,2	MSN	MSN #332
ME124/332-2	11/03/16	10:30	29° 33.74' S	016° 16.86' W	3821,3	MSN	MSN #332
ME124/332-3	11/03/16	11:07	29° 33.53' S	016° 16.99' W	3867,1	MSN	MSN #332
ME124/332-4	11/03/16	11:42	29° 33.32' S	016° 17.14' W	3929,9	MSN	MSN #332
ME124/332-5	11/03/16	12:54	29° 32.98' S	016° 17.36' W	4046,5	CTD/RO	CTD #11
ME124/333-1	11/03/16	14:19	29° 32.91' S	016° 24.43' W	4170,6	XBT	XBT #110
ME124/334-1	11/03/16	14:39	29° 32.76' S	016° 29.14' W	4142,2	uCTD	uCTD #198
ME124/334-1	11/03/16	15:42	29° 31.14' S	016° 43.53' W	4104,5	uCTD	uCTD #199
ME124/335-1	11/03/16	16:11	29° 30.50' S	016° 49.89' W	3862,4	XBT	XBT #111
ME124/334-1	11/03/16	16:37	29° 29.89' S	016° 56.02' W	3943,2	uCTD	uCTD #200
ME124/334-1	11/03/16	17:43	29° 28.41' S	017° 10.67' W	3473,9	uCTD	uCTD #201
ME124/336-1	11/03/16	18:22	29° 27.54' S	017° 19.23' W	3527,8	XBT	XBT #112
ME124/334-1	11/03/16	18:41	29° 27.10' S	017° 23.62' W	3615,6	uCTD	uCTD #202
ME124/334-1	11/03/16	19:44	29° 25.73' S	017° 37.51' W	3853,9	uCTD	uCTD #203
ME124/337-1	11/03/16	20:22	29° 24.92' S	017° 45.71' W	4034,2	XBT	XBT #113
ME124/334-1	11/03/16	20:45	29° 24.34' S	017° 50.97' W	4064,9	uCTD	uCTD #204
ME124/334-1	11/03/16	21:43	29° 23.05' S	018° 03.77' W	4075,4	uCTD	uCTD #205
ME124/338-1	11/03/16	22:44	29° 21.72' S	018° 16.87' W	4067,1	XBT	XBT #114
ME124/334-1	11/03/16	22:50	29° 21.59' S	018° 18.18' W	3999,7	uCTD	uCTD #206
ME124/334-1	12/03/16	00:02	29° 20.02' S	018° 33.75' W	4106,6	uCTD	uCTD #207
ME124/339-1	12/03/16	00:21	29° 19.69' S	018° 36.98' W	4182,1	XBT	XBT #115
ME124/334-1	12/03/16	01:02	29° 18.75' S	018° 46.31' W	4379,4	uCTD	uCTD #208
ME124/334-1	12/03/16	02:12	29° 17.25' S	019° 01.08' W	4392,9	uCTD	uCTD #209
ME124/340-1	12/03/16	02:30	29° 16.93' S	019° 04.27' W	4287,6	XBT	XBT #116
ME124/334-1	12/03/16	03:03	29° 16.18' S	019° 11.73' W	4430,2	uCTD	uCTD #210
ME124/334-1	12/03/16	04:09	29° 14.71' S	019° 26.24' W	4671,7	uCTD	uCTD #211
ME124/341-1	12/03/16	04:30	29° 14.32' S	019° 30.09' W	4626,8	XBT	XBT #117
ME124/334-1	12/03/16	05:11	29° 13.36' S	019° 39.63' W	4213,3	uCTD	uCTD #212
ME124/334-1	12/03/16	06:09	29° 12.03' S	019° 52.71' W	4263,5	uCTD	uCTD #213
ME124/342-1	12/03/16	06:33	29° 11.53' S	019° 57.72' W	4311,2	XBT	XBT #118
ME124/343-1	12/03/16	07:26	29° 10.80' S	020° 03.18' W	4151,7	MSN	MSN #NA
ME124/343-2	12/03/16	07:59	29° 10.80' S	020° 03.18' W	4149,5	MSN	MSN #NA
ME124/343-3	12/03/16	08:32	29° 10.79' S	020° 03.18' W	4151,7	MSN	MSN #NA
ME124/343-4	12/03/16	09:06	29° 10.80' S	020° 03.18' W	4149,3	MSN	MSN #NA
ME124/344-1	12/03/16	09:32	29° 10.36' S	020° 05.47' W	3950,9	uCTD	uCTD #214
ME124/345-1	12/03/16	09:58	29° 08.20' S	020° 09.95' W	4382,1	XBT	XBT #119
ME124/345-1	12/03/16	10:02	29° 07.71' S	020° 10.71' W	4435,4	XBT	XBT #120
ME124/344-1	12/03/16	10:36	29° 03.63' S	020° 17.02' W	4485,5	uCTD	uCTD #215
ME124/344-1	12/03/16	11:30	28° 58.86' S	020° 27.33' W	4720,2	uCTD	uCTD #216
ME124/346-1	12/03/16	11:47	28° 57.62' S	020° 30.07' W	4531,1	XBT	XBT #121
ME124/344-1	12/03/16	12:23	28° 54.43' S	020° 37.67' W	4538,8	uCTD	uCTD #217
ME124/344-1	12/03/16	13:36	28° 47.91' S	020° 51.26' W	4458,3	uCTD	uCTD #218
ME124/347-1	12/03/16	13:58	28° 46.08' S	020° 54.88' W	4483,9	XBT	XBT #122

Station	Date	Time UTC	Position Latitude	Position Longitude	Depth [m]	Gear	Gear station #
ME124/344-1	12/03/16	14:30	28° 42.85' S	021° 01.26' W	4304,8	uCTD	uCTD #219
ME124/344-1	12/03/16	15:30	28° 37.41' S	021° 12.02' W	4474,9	uCTD	uCTD #220
ME124/348-1	12/03/16	15:52	28° 35.66' S	021° 15.47' W	4464,1	XBT	XBT #123
ME124/344-1	12/03/16	16:33	28° 31.63' S	021° 23.43' W	4556,7	uCTD	uCTD #221
ME124/349-1	12/03/16	17:51	28° 25.64' S	021° 35.24' W	4479,4	XBT	XBT #124
ME124/344-1	12/03/16	18:02	28° 24.62' S	021° 37.25' W	4581,9	uCTD	uCTD #222
ME124/344-1	12/03/16	21:39	28° 21.21' S	022° 24.05' W	4629,1	uCTD	uCTD #223
ME124/350-1	12/03/16	22:04	28° 21.25' S	022° 28.40' W	4760,3	XBT	XBT #125
ME124/344-1	12/03/16	22:47	28° 20.47' S	022° 37.78' W	4602,3	uCTD	uCTD #224
ME124/344-1	12/03/16	23:57	28° 15.74' S	022° 51.06' W	5116,8	uCTD	uCTD #225
ME124/351-1	13/03/16	00:23	28° 12.86' S	022° 54.85' W	4772,6	XBT	XBT #126
ME124/344-1	13/03/16	01:18	28° 05.80' S	023° 04.48' W	4792,1	uCTD	uCTD #226
ME124/344-1	13/03/16	02:18	27° 58.65' S	023° 14.22' W	5029,7	uCTD	uCTD #227
ME124/352-1	13/03/16	02:38	27° 56.54' S	023° 17.07' W	5289,1	XBT	XBT #127
ME124/344-1	13/03/16	03:18	27° 51.16' S	023° 24.13' W	4809,1	uCTD	uCTD #228
ME124/344-1	13/03/16	04:23	27° 43.18' S	023° 34.50' W	4658,9	uCTD	uCTD #229
ME124/353-1	13/03/16	04:47	27° 40.49' S	023° 37.91' W	4523,2	XBT	XBT #128
ME124/344-1	13/03/16	05:21	27° 35.91' S	023° 43.67' W	4701	uCTD	uCTD #230
ME124/344-1	13/03/16	06:26	27° 27.74' S	023° 54.01' W	4986,3	uCTD	uCTD #231
ME124/354-1	13/03/16	06:44	27° 25.71' S	023° 56.57' W	5155,2	XBT	XBT #129
ME124/344-1	13/03/16	07:14	27° 21.70' S	024° 01.60' W	5100	uCTD	uCTD #232
ME124/344-1	13/03/16	08:19	27° 13.32' S	024° 12.15' W	4757,1	uCTD	uCTD #233
ME124/355-1	13/03/16	08:39	27° 11.05' S	024° 15.05' W	4541	XBT	XBT #130
ME124/344-1	13/03/16	09:19	27° 05.63' S	024° 21.79' W	4765,1	uCTD	uCTD #234
ME124/356-1	13/03/16	11:30	26° 52.45' S	024° 37.64' W	5577,4	MSN	MSN #356
ME124/356-2	13/03/16	12:02	26° 52.45' S	024° 37.64' W	5577,5	MSN	MSN #356
ME124/356-3	13/03/16	12:36	26° 52.45' S	024° 37.64' W	5571	MSN	MSN #356
ME124/356-4	13/03/16	13:09	26° 52.45' S	024° 37.64' W	5575,1	MSN	MSN #356
ME124/356-5	13/03/16	14:26	26° 52.45' S	024° 37.64' W	5570,5	CTD/RO	CTD #12
ME124/357-1	13/03/16	16:17	26° 52.51' S	024° 47.22' W	5541,1	XBT	XBT #131
ME124/358-1	13/03/16	16:36	26° 52.52' S	024° 51.56' W	5584,2	uCTD	uCTD #235
ME124/358-1	13/03/16	17:46	26° 52.54' S	025° 06.77' W	5591,7	uCTD	uCTD #236
ME124/359-1	13/03/16	18:15	26° 52.54' S	025° 12.79' W	5519,8	XBT	XBT #132
ME124/360-1	13/03/16	18:57	26° 52.55' S	025° 22.32' W	5364,8	XBT	XBT #133
ME124/361-1	13/03/16	20:00	26° 52.56' S	025° 36.50' W	5581,6	XBT	XBT #134
ME124/358-1	13/03/16	20:23	26° 52.58' S	025° 41.64' W	5631,4	uCTD	uCTD #237
ME124/358-1	13/03/16	20:45	26° 52.58' S	025° 45.98' W	5536,8	uCTD	uCTD #238
ME124/362-1	13/03/16	21:08	26° 52.58' S	025° 50.80' W	5566	XBT	XBT #135
ME124/358-1	13/03/16	22:00	26° 52.60' S	026° 02.65' W	5562,9	uCTD	uCTD #239
ME124/363-1	13/03/16	23:14	26° 52.62' S	026° 18.74' W	5523,1	XBT	XBT #136
ME124/363-1	13/03/16	23:19	26° 52.62' S	026° 19.88' W	5384,7	XBT	XBT #137
ME124/358-1	13/03/16	23:25	26° 52.62' S	026° 21.05' W	5474,2	uCTD	uCTD #240
ME124/358-1	14/03/16	00:41	26° 52.64' S	026° 37.64' W	5661,4	uCTD	uCTD #241
ME124/364-1	14/03/16	01:14	26° 52.65' S	026° 44.25' W	5702,4	XBT	XBT #138
ME124/365-1	14/03/16	02:36	26° 52.67' S	027° 03.01' W	5713,5	XBT	XBT #139
ME124/366-1	14/03/16	03:37	26° 52.68' S	027° 16.53' W	5343,3	XBT	XBT #140

Station	Date	Time UTC	Position Latitude	Position Longitude	Depth [m]	Gear	Gear station #
ME124/358-1	14/03/16	05:00	26° 52.70' S	027° 35.23' W	5657,6	uCTD	uCTD #242
ME124/367-1	14/03/16	05:43	26° 52.71' S	027° 44.22' W	5694,4	XBT	XBT #141
ME124/358-1	14/03/16	06:11	26° 52.72' S	027° 50.26' W	5400,9	uCTD	uCTD #243
ME124/358-1	14/03/16	07:10	26° 52.74' S	028° 03.00' W	5458	uCTD	uCTD #244
ME124/368-1	14/03/16	07:46	26° 52.74' S	028° 10.54' W	5123,4	XBT	XBT #142
ME124/358-1	14/03/16	08:14	26° 52.75' S	028° 16.71' W	5313,7	uCTD	uCTD #245
ME124/358-1	14/03/16	09:21	26° 52.77' S	028° 28.74' W	5272,3	uCTD	uCTD #246
ME124/369-1	14/03/16	09:34	26° 52.77' S	028° 31.07' W	5351,1	XBT	XBT #143
ME124/370-1	14/03/16	10:56	26° 52.57' S	028° 41.42' W	4676,1	MSN	MSN #370
ME124/370-2	14/03/16	11:32	26° 52.57' S	028° 41.42' W	4678,7	MSN	MSN #370
ME124/370-3	14/03/16	11:45	26° 52.57' S	028° 41.42' W	4676,2	MSN	MSN #370
ME124/371-1	14/03/16	12:15	26° 52.67' S	028° 44.60' W	5157,6	uCTD	uCTD #247
ME124/372-1	14/03/16	12:35	26° 52.79' S	028° 48.24' W	5352,1	XBT	XBT #144
ME124/371-1	14/03/16	13:08	26° 52.79' S	028° 55.79' W	5345,2	uCTD	uCTD #248
ME124/371-1	14/03/16	14:14	26° 52.81' S	029° 09.64' W	5338,8	uCTD	uCTD #249
ME124/373-1	14/03/16	14:37	26° 52.82' S	029° 13.98' W	5331,2	XBT	XBT #145
ME124/371-1	14/03/16	15:14	26° 52.83' S	029° 22.54' W	5289,4	uCTD	uCTD #250
ME124/371-1	14/03/16	16:18	26° 52.84' S	029° 34.66' W	5292	uCTD	uCTD #251
ME124/374-1	14/03/16	16:51	26° 52.85' S	029° 41.54' W	5289	XBT	XBT #146
ME124/371-1	14/03/16	17:22	26° 52.86' S	029° 48.81' W	5278,5	uCTD	uCTD #252
ME124/371-1	14/03/16	18:31	26° 52.88' S	030° 03.78' W	5271,3	uCTD	uCTD #253
ME124/375-1	14/03/16	19:06	26° 52.88' S	030° 11.11' W	5240,4	XBT	XBT #147
ME124/371-1	14/03/16	19:34	26° 52.89' S	030° 17.49' W	4943,1	uCTD	uCTD #254
ME124/371-1	14/03/16	20:43	26° 53.06' S	030° 28.63' W	4954,3	uCTD	uCTD #255
ME124/376-1	14/03/16	21:17	26° 52.91' S	030° 35.65' W	5090,2	XBT	XBT #148
ME124/371-1	14/03/16	21:45	26° 52.92' S	030° 42.00' W	4921,3	uCTD	uCTD #256
ME124/371-1	14/03/16	22:43	26° 52.93' S	030° 54.45' W	4859	uCTD	uCTD #257
ME124/377-1	14/03/16	23:10	26° 52.94' S	030° 59.28' W	4900,1	XBT	XBT #149
ME124/371-1	15/03/16	00:02	26° 52.95' S	031° 11.07' W	4925,2	uCTD	uCTD #258
ME124/371-1	15/03/16	01:06	26° 52.97' S	031° 24.67' W	4817,1	uCTD	uCTD #259
ME124/378-1	15/03/16	01:24	26° 52.97' S	031° 27.76' W	4802,2	XBT	XBT #150
ME124/371-1	15/03/16	02:12	26° 52.98' S	031° 38.29' W	4672,1	uCTD	uCTD #260
ME124/379-1	15/03/16	03:22	26° 53.00' S	031° 52.80' W	4769,6	XBT	XBT #151
ME124/371-1	15/03/16	03:40	26° 53.01' S	031° 56.62' W	4714,5	uCTD	uCTD #261
ME124/371-1	15/03/16	04:30	26° 53.02' S	032° 06.35' W	4701	uCTD	uCTD #262
ME124/371-1	15/03/16	05:27	26° 53.03' S	032° 17.55' W	4717,9	uCTD	uCTD #263
ME124/380-1	15/03/16	05:45	26° 53.03' S	032° 20.52' W	4733,1	XBT	XBT #152
ME124/371-1	15/03/16	06:29	26° 53.04' S	032° 29.86' W	4680,4	uCTD	uCTD #264
ME124/371-1	15/03/16	07:26	26° 53.05' S	032° 41.22' W	4601,5	uCTD	uCTD #265
ME124/381-1	15/03/16	07:48	26° 53.06' S	032° 45.28' W	4586,5	XBT	XBT #153
ME124/371-1	15/03/16	08:31	26° 53.07' S	032° 54.68' W	4524,8	uCTD	uCTD #266
ME124/371-1	15/03/16	09:40	26° 53.09' S	033° 08.97' W	4403,2	uCTD	uCTD #267
ME124/382-1	15/03/16	10:56	26° 53.20' S	033° 17.12' W	4117,2	MSN	MSN #382
ME124/382-2	15/03/16	11:31	26° 53.20' S	033° 17.11' W	4117,1	MSN	MSN #382
ME124/382-3	15/03/16	11:47	26° 53.21' S	033° 17.10' W	4117,7	MSN	MSN #382
ME124/383-1	15/03/16	12:11	26° 53.06' S	033° 18.87' W	4092,3	uCTD	uCTD #268

Station	Date	Time UTC	Position Latitude	Position Longitude	Depth [m]	Gear	Gear station #
ME124/384-1	15/03/16	13:00	26° 53.11' S	033° 25.40' W	4041,9	XBT	XBT #154
ME124/383-1	15/03/16	13:12	26° 53.11' S	033° 28.10' W	4016,8	uCTD	uCTD #269
ME124/383-1	15/03/16	14:11	26° 53.12' S	033° 40.58' W	3991,9	uCTD	uCTD #270
ME124/385-1	15/03/16	14:52	26° 53.13' S	033° 49.37' W	3889,6	XBT	XBT #155
ME124/385-1	15/03/16	14:57	26° 53.14' S	033° 50.58' W	3852,1	XBT	XBT #156
ME124/385-1	15/03/16	15:10	26° 53.14' S	033° 53.71' W	3811,2	XBT	XBT #157
ME124/383-1	15/03/16	15:35	26° 53.15' S	033° 59.23' W	3761,2	uCTD	uCTD #271
ME124/383-1	15/03/16	17:00	26° 53.17' S	034° 18.20' W	4104,9	uCTD	uCTD #272
ME124/386-1	15/03/16	17:20	26° 53.17' S	034° 22.20' W	4290,9	XBT	XBT #158
ME124/383-1	15/03/16	17:57	26° 53.18' S	034° 31.07' W	4490,2	uCTD	uCTD #273
ME124/387-1	15/03/16	20:45	26° 53.19' S	034° 47.56' W	4781,6	CTD/RO	CTD #13
ME124/388-1	16/03/16	00:51	26° 50.08' S	034° 53.98' W	4682,7	CTD/RO	CTD #14
ME124/389-1	16/03/16	03:05	26° 48.23' S	034° 57.93' W	4685	XBT	XBT #159
ME124/390-1	16/03/16	03:22	26° 46.69' S	035° 01.15' W	4615,1	uCTD	uCTD #274
ME124/391-1	16/03/16	05:11	26° 39.69' S	035° 15.77' W	4527,4	XBT	XBT #160
ME124/390-1	16/03/16	05:35	26° 37.41' S	035° 20.51' W	4503,6	uCTD	uCTD #275
ME124/390-1	16/03/16	06:41	26° 31.53' S	035° 32.78' W	4432,4	uCTD	uCTD #276
ME124/392-1	16/03/16	07:22	26° 28.08' S	035° 39.97' W	4413,4	XBT	XBT #161
ME124/390-1	16/03/16	07:44	26° 26.02' S	035° 44.28' W	4414	uCTD	uCTD #277
ME124/390-1	16/03/16	08:45	26° 20.71' S	035° 55.33' W	4352,7	uCTD	uCTD #278
ME124/393-1	16/03/16	09:32	26° 19.72' S	035° 57.39' W	4329,6	XBT	XBT #162
ME124/394-1	16/03/16	10:54	26° 15.32' S	036° 07.01' W	4304,2	MSN	MSN #394
ME124/394-2	16/03/16	11:29	26° 15.32' S	036° 07.01' W	4304,6	MSN	MSN #394
ME124/394-3	16/03/16	12:04	26° 15.32' S	036° 07.01' W	4315,2	MSN	MSN #394
ME124/394-4	16/03/16	12:36	26° 15.32' S	036° 07.01' W	4316	MSN	MSN #394
ME124/395-1	16/03/16	12:57	26° 15.07' S	036° 07.68' W	4305,4	XBT	XBT #163
ME124/396-1	16/03/16	13:02	26° 14.69' S	036° 08.43' W	4311,6	uCTD	uCTD #279
ME124/396-1	16/03/16	14:16	26° 07.87' S	036° 22.02' W	4251,2	uCTD	uCTD #280
ME124/397-1	16/03/16	14:59	26° 04.09' S	036° 29.88' W	4273,7	XBT	XBT #164
ME124/396-1	16/03/16	15:00	26° 03.99' S	036° 30.08' W	4265,4	uCTD	uCTD #281
ME124/396-1	16/03/16	16:07	25° 58.02' S	036° 42.48' W	4239,3	uCTD	uCTD #282
ME124/398-1	16/03/16	16:49	25° 54.41' S	036° 49.96' W	4207,6	XBT	XBT #165
ME124/396-1	16/03/16	17:24	25° 51.21' S	036° 56.60' W	4250,2	uCTD	uCTD #283
ME124/396-1	16/03/16	18:28	25° 45.67' S	037° 08.08' W	4250,5	uCTD	uCTD #284
ME124/396-1	16/03/16	19:28	25° 40.14' S	037° 19.54' W	4256,1	uCTD	uCTD #285
ME124/399-1	16/03/16	19:52	25° 38.26' S	037° 23.42' W	4225,6	XBT	XBT #166
ME124/396-1	16/03/16	20:33	25° 34.42' S	037° 31.37' W	4217,2	uCTD	uCTD #286
ME124/396-1	16/03/16	21:28	25° 29.77' S	037° 40.97' W	4155,4	uCTD	uCTD #287
ME124/400-1	16/03/16	21:46	25° 28.40' S	037° 43.82' W	4136,6	XBT	XBT #167
ME124/396-1	16/03/16	22:28	25° 24.63' S	037° 51.60' W	4062,5	uCTD	uCTD #288
ME124/396-1	16/03/16	23:39	25° 18.51' S	038° 04.24' W	3974,1	uCTD	uCTD #289
ME124/401-1	17/03/16	00:13	25° 16.63' S	038° 08.11' W	3965,1	XBT	XBT #168
ME124/402-1	17/03/16	00:52	25° 13.40' S	038° 14.76' W	3946	uCTD	uCTD #290
ME124/193-1	17/03/16	01:41	25° 09.79' S	038° 22.20' W	3951,4	FISCH	FISCH
ME124/402-2	17/03/16	01:51	25° 08.88' S	038° 24.08' W	3943,1	uCTD	uCTD #291