

Dr. Gabriele Uenzelmann-Neben  
Alfred-Wegener-Institut Helmholtz-Zentrum für Polar- und Meeresforschung  
Am Alten Hafen 26  
27568 Bremerhaven

Tel.: +49 471 48311208  
Fax: +49 471 48311271  
email: gabriele.uenzelmann-neben@awi.de

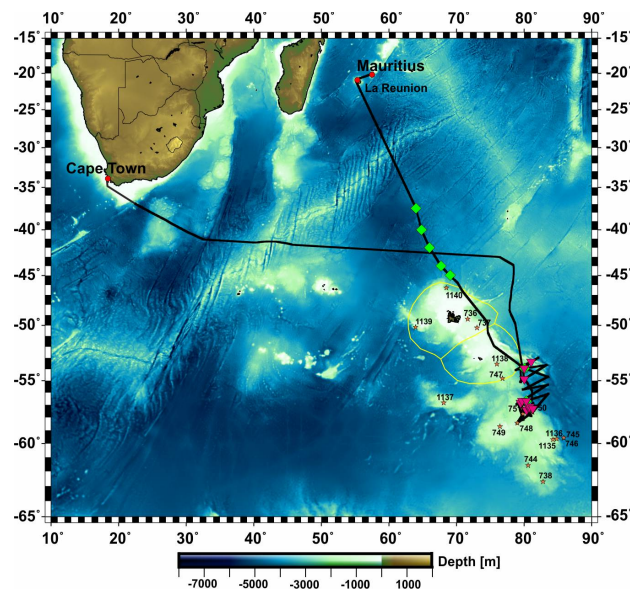
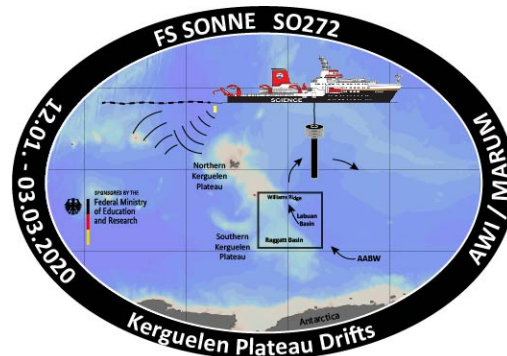
## Short Cruise Report R/V Sonne cruise SO 272

Port Louis, Mauritius – Cape Town, South Africa

13.01.2020 – 03.03.2020

Chief Scientist: Dr. Gabriele Uenzelmann-Neben

Captain: Oliver Meyer



## Objectives

The overarching objectives of the cruise to the Kerguelen Plateau were twofold: 1) to study variations in flow paths and intensities of deep and bottom water masses in response to tectonic movements and climate variability; this is the major focus of the cruise, and 2) to collect critical pre-site survey data for the preparation of an IODP drilling proposal.

### Objective 1: Variations in pathways and intensities of deep and bottom water masses

The tectonic development of the KP during the late Cretaceous and Cenozoic has led to significant modifications in the flow paths of deep and bottom water masses that can be reconstructed studying sediment drifts in great detail. Opening, widening and deepening of the Tasman gateway and the Drake Passage have had a significant effect on flow paths of AABW and the ACC in particular. Development and modifications in the ACC itself primarily influenced the location of the oceanographic frontal system around Antarctica relocating sedimentary depocentres. The seismic data collected allow the identification and mapping of these depocentres, and to reconstruct changes in water mass pathways and intensities through time. Major focus in the analysis of the data will be on the climate dynamics and tectonic development in the Eocene to Oligocene. Seismic mapping of the above mentioned depocentres will provide unique insight into effects of tectonic movements and modifications in climate during that time. Our detailed study will focus on the Eocene opening of the Tasman Gateway, the Oligocene opening of the Drake Passage, the late Eocene ephemeral glaciations, and the Eocene-Oligocene Transition. As a second focus, the seismic survey in the Labuan Basin (LB) provides unprecedented information on variations in water mass flows and movements in the Antarctic frontal system from the Mid-Miocene Climatic Optimum, the late Miocene cooling, and Pliocene warming. Especially this latter interval is of high significance because it might provide new views on the dynamics of both the East and West Antarctic Ice Sheets on ocean circulation when atmospheric  $p\text{CO}_2$  was as high as today (~ 400 ppm). The following hypotheses are to be tested:

*Hypothesis 1: Tectonic movements were the major factors controlling the pathway of AABW/DWBC during the Cenozoic, while the intensity of the ACC was mainly influenced by modifications in climate.*

*Hypothesis 2: While colder bottom water activity can be observed east of the Tasman gateway already in the early Paleogene, warm water masses, and hence no bottom water, prevailed west of the gateway in the southern Indian Ocean prior to the Eocene-Oligocene boundary.*

### Objective 2: Pre-site survey for an IODP proposal

Supported by the proposed seismic survey and geological sampling of the surface deposits we plan to write an IODP drilling proposal to recover the drift deposits in the Ragatt Basin on the northern SKP and in the Labuan Basin. Carbonate rich sediments from the SKP are ideal to monitor changes in geochemical properties driven by climate throughout the Cenozoic at high resolution. Previous drill cores provided low resolution and spotty windows into Cenozoic climate history of the region. Based on the information to be collected in the proposed survey a much more focused expedition could be planned to retrieve stratigraphic complete successions. The planned IODP drilling proposal for the SKP will focus on climate change, biotic shifts, and deep-sea chemistry during the Paleogene in important southern Indian Ocean sectors, testing the following hypotheses:

*Hypothesis 1: the magnitude of temperature change across transient warming events in the Paleogene is driving the response of high-latitude plankton groups.*

*Hypothesis 2: southern high latitude cooling causing changes in deep and bottom water circulation preceded the major onset of Antarctic Peninsula glaciation at the Eocene-Oligocene Transition.*

*Hypothesis 3: opening of the Drake Passage and Tasman Gateway paced the development of the Antarctic Circumpolar Current (ACC), AABW and DWBC.*

*Hypothesis 4: changes in high-latitude and global climate during the Cenozoic are coupled to variations in the ACC circulation.*

## **Narrative**

The final preparations for cruise So272 were carried out on board RV *SONNE*. 21 scientists embarked in Port Louis on January 11. Unfortunately, the unloading of the containers could only commence for the Geology containers. One of the seismic containers was delayed. This contained the working clothes, thus the set-up of the seismic equipment had to wait. RV *SONNE* left port on January 14 at appr. 18:00 LT to head to La Reunion, where the delayed container was supposed to be landed. We arrived in La Reunion on January 15 and carried out a safety manoeuvre. The freight vessel with our container arrived on January 16 but the port of La Reunion was on strike for the period January 16 to 17. We could load the container on January 17 but only leave port on January 18 00:30 LT already being six days behind schedule. Set-up of the seismic equipment thus began on January 18 and continued during transit to the working area.

On January 18 at 18:35 UTC the recording of EM 122 and Parasound commenced. During our transit we deployed six ARGO floats for Dr. C. Hanstein from CSIRO, Australia. The first was deployed on January 22 at 1:48 UTC. We arrived in the working area, the Labuan Basin on January 26 at ~12:00 UCT. The first geostation GeoB24001 was carried out with a gravity core and a multi-corer as well as a Sound Velocity Profiler (SVP). A second geostation followed. Seismic profiling commenced on January 27 at 4:45 UTC. We continued seismic profiling across the Labuan Basin and the central Kerguelen Plateau until February 13, 22:22 UTC, when the seismic equipment was retrieved. A set of eight geological sampling stations across the central Kerguelen Plateau followed. Seismic profiling recommenced on February 15, 20:12, and two additional profiles were collected. The seismic work ended on February 16, 23:40 followed by another geological station. The scientific programme came to an end on February 17, 5:51, when we set course for Cape Town.

The transit to Cape Town took 15 days, which was mainly due to the fact that we had to sail against the prevailing west winds and the east-setting current system within the ACC. Due to the bad weather we could not collect a bathymetric profile, which had kindly been requested by T. Thovhogi from the Petroleum Agency South Africa.

On March 3<sup>rd</sup>, 9:00 we came into the port of Cape Town.

## **Acknowledgements**

We like to thank Captain Oliver Meyer, his officers and crew of RV *SONNE* for their professional and enthusiastic engagement and service to the scientific programme of this leg. This cruise Leg So 272 and the project Kerguelen Plateau Drifts are primarily funded by the German Federal Ministry of Education and Research (BMBF) under Project Number 03G0272A/B. Additional funding has been provided by the Alfred-Wegener-Institut and MARUM as well as Macquarie University and the University of South Carolina. We gratefully acknowledge all this support.

## Teilnehmerliste

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Uenzelmann-Neben, Gabriele, Dr	Seismics / Chief Scientist	AWI
Eggers, Thorsten	Seismics	AWI
Pfeiffer, Adalbert	Seismics	AWI
Daub, Pascal	Seismics	AWI
Eisermann, Hannes	Seismics	AWI
Geils, Jonah	Seismics	AWI
Najjarifarizhendi, Banafsheh	Seismics	AWI
Nielsen, Ricarda, Dr.	Seismics	AWI
Schneider, Matthias	Seismics	AWI
Westerhold, Thomas, Dr.	Geology	MARUM
Krauss, Florian	Geology	MARUM
Petersen, Ann-Katrin	Geology	MARUM
Abbott, April	Geology	MACQUARIE
Duggan, Brian	Geology	USC
Dreutter, Simon	Bathymetry	AWI
Hehemann, Laura	Bathymetry	AWI
Werner, Ellen	Bathymetry	AWI
Repenning, Katharina	Parasound	AWI
Andreas, Pascal	Parasound	AWI
Warnke, Fynn	Parasound	AWI
Peters, Ingrid	MMO	OSC
Lazar, Laura	MMO	OSC
Sievers, Oliver	Weather	DWD

AWI	Alfred-Wegener-Institut, Helmholtz-Zentrum für Polar- und Meeresforschung
DWD	Deutscher Wetterdienst
MACQUARIE	Macquarie University, Sydney
MARUM	Universität Bremen
OSC	Ocean Science Consulting Ltd

## Stationsliste

### Seismic profile list

PROFILE # AWI-...	Start / End	DATE	TIME (UTC)	LATITUDE	LONGITUDE
20200001	start end	27.01.20 28.01.20	08:00:55 08:46:27	-53.08591 -54.06653	81.834983 78.819852
20200002	start end	28.01.20 29.01.20	10:12:30 18:51:00	-54.070017 -53.639154	78.791250 83.326615
20200003	start end	29.01.20 31.01.20	19:48:00 03:33:00	-53.624952 -55.046632	83.3172396 79.5131076
20200004	start end	31.01.20 31.01.20	06:43:00 21:39:59	-55.048507 -53.818698	79.5381510 79.4517708
20200005	start end	31.01.20 01.02.20	20:14:15 05:21:00	-53.831007 -54.669023	79.4219792 83.5317448
20200006	start end	02.02.20 03.02.20	06:31:00 10:29:57	-54.655517 -55.741454	83.526337 79.934609
20200007	start end	03.02.20 04.02.20	12:11:00 13:55:00	-55.750903 -55.353872	79.79920134 83.5081944
20200008	start end	04.02.20 06.02.20	14:57:00 03:02:00	-55.326901 - 56.941393	83.493151 78.9690797
20200009	start end	06.02.20 07.02.20	06:11:02 13:37:00	-56.9185856 -56.1066623	79.0683507 83.5609375
20200010	start end	07.02.20 09.02.20	14:41:00 08:19:10	-56.082773 -58.451853	83.5627517 78.9738108
20200011	start end	09.02.20 10.02.20	09:37:00 10:24:27	-58.471615 -56.859336	78.9627604 81.3146788
20200012	start end	10.02.20 10.02.20	11:34:52 20:56:41	-56.851849 -57.630004	81.29191840 81.2755642
20200013	start end	10.02.20 11.02.20	22:01:00 14:12:00	-57.633602 -56.648199	81.31247396 79.63247396

PROFILE # AWI-...	Start / End	DATE	TIME (UTC)	LATITUDE	LONGITUDE
20200014	start end	11.02.20 12.02.20	15:36:00 09:54:57	-56.659849 -58.175898	79.6544097 79.8808420
20200015	start end	12.02.20 13.03.19	11:11:58 04:14:00	-58.173034 -56.828308	79.8921094 79.0601129
20200016	start end	13.02.20 13.02.20	05:55:00 22:22:40	-56.824010 -57.842274	79.0300260 80.8296875
20200017	start end	15.02.20 16.02.20	20:12:41 00:05:57	-56.679748 -56.647235	80.56819444 81.1529514
20200018	start end	16.02.20 16.02.20	00:12:30 23:40:26	-56.6424609 -54.8498481	81.1663281 79.9969444

Gravity corer sampling during R/V SONNE expedition SO-272

GeoB#	Gear	Latitude (S)	Longitude (E)	Water Depth (m)	Recovery (cm)
24001-1	12m	53°55.546'	80°00.957'	3132	979
24002-1	6m	53°20.991'	81°02.127'	1143	0
24003-1	12m	57°25.348'	80°20.568'	1924	322
24004-1	6m	57°14.333'	80°39.604'	2033	60
24005-1	6m	57°11.870'	80°43.847'	2153	108
24006-1	6m	57°08.640'	80°49.417'	2369	176
24007-1	6m	57°18.240'	81°17.009'	2444	165
24008-1	6m	56°50.661'	79°28.979'	1854	170
24009-1	6m	56°41.151'	79°41.872'	1939	275
24010-1	6m	56°41.564'	80°19.603'	2699	112
24011-1	12m	54°51.826'	80°00.822'	3625	748

Multi-corer sampling during R/V SONNE expedition SO-272

GeoB#	Latitude (S)	Longitude (E)	Water Depth (m)	Max. Recovery (cm)
24001-2	53°55.544'	80°00.954'	3124	29
24002-2	53°20.992'	81°02.126'	1142	0
24003-2	57°25.354'	80°20.580'	1905	15
24004-2	57°14.329'	80°39.606'	2035	10
24008-2	56°50.660'	79°28.986'	1859	15
24009-2	56°41.153'	79°41.869'	1943	5

Details on deployed ARGO floats

Hull #	Latitude	Longitude	Date & Time	Waterdepth
1061	37°29.947'S	063°59.983'E	22-01-2020; 01:48 UTC	4658 m
1079	39°59.770'S	064°48.444'E	22-01-2020; 17:48 UTC	4691 m
1054	41°59.783'S	066°00.374'E	23-01-2020; 06:18 UTC	5344 m
1080	43°59.635'S	067°42.888'E	23-01-2020; 18:46 UTC	4288 m
8847	45°00.016'S	069°00.085'E	24-01-2020; 01:40 UTC	3755 m
8830	53°55.641'S	080°01.197'E	26-01-2020; 17:57 UTC	3128 m
8846	56°41.560'S	080°19.429'E	15-02-2020; 18:15 UTC	2692 m

SO272 station list

Station	Date / Time UTC	Device	Action	Comment (Action)	Depth (m)	Latitude	Longitude
SO272_1-1	2020/01/22 01:41:39	Float	station start	ARGO Float 1061	4657.8300	37° 30.000' S	064° 00.028' E
SO272_1-1	22/01/2020 01:46:39	Float	in the water		4670.7700	37° 29.995' S	064° 00.032' E
SO272_1-1	22/01/2020 01:50:14	Float	station end		4660.6400	37° 29.924' S	063° 59.957' E
SO272_2-1	22/01/2020 17:44:57	Float	station start	ARGO Float 1079	4690.7400	39° 59.770' S	064° 48.444' E
SO272_2-1	22/01/2020 17:45:52	Float	in the water		4694.7300	39° 59.759' S	064° 48.413' E
SO272_2-1	22/01/2020 17:50:50	Float	station end		4727.4800	39° 59.714' S	064° 48.078' E
SO272_3-1	23/01/2020 06:18:14	Float	station start	ARGO Float 1054	5343.7900	41° 59.782' S	066° 00.379' E
SO272_3-1	23/01/2020 06:19:41	Float	in the water		5657.7700	41° 59.802' S	066° 00.317' E
SO272_3-1	23/01/2020 06:22:06	Float	station end		4466.5200	41° 59.864' S	066° 00.170' E
SO272_4-1	23/01/2020 18:46:09	Float	station start	ARGO Float 1080	4287.8900	43° 59.634' S	067° 42.893' E
SO272_4-1	23/01/2020 18:47:35	Float	in the water		4293.0100	43° 59.648' S	067° 42.817' E
SO272_4-1	23/01/2020 18:49:48	Float	station end		4291.3700	43° 59.662' S	067° 42.687' E
SO272_5-1	24/01/2020 01:37:53	Float	station start	ARGO Float 8847	3778.6400	44° 59.898' S	068° 59.892' E
SO272_5-1	24/01/2020 01:41:27	Float	in the water		3754.4500	45° 00.056' S	069° 00.151' E

Station	Date / Time UTC	Device	Action	Comment (Action)	Depth (m)	Latitude	Longitude
SO272_5-1	24/01/2020 01:43:52	Float	station end		3731.1100	45° 00.158' S	069° 00.285' E
SO272_6-1	26/01/2020 12:20:33	Gravity Corer	station start	GeoB 24001	3133.2300	53° 55.554' S	080° 00.988' E
SO272_6-1	26/01/2020 12:28:11	Gravity Corer	in the water	GC 12m	3135.3300	53° 55.547' S	080° 00.953' E
SO272_6-1	26/01/2020 13:27:31	Gravity Corer	max depth/on ground	Boko, maxSL: 3158m	3131.7000	53° 55.546' S	080° 00.957' E
SO272_6-1	26/01/2020 13:28:42	Gravity Corer	hoisting	maxSZ: 71,1kN	3126.7700	53° 55.546' S	080° 00.957' E
SO272_6-1	26/01/2020 14:33:29	Gravity Corer	on deck		3121.9900	53° 55.540' S	080° 00.957' E
SO272_6-1	26/01/2020 14:37:23	Gravity Corer	station end		3128.5300	53° 55.543' S	080° 00.957' E
SO272_6-2	26/01/2020 14:38:26	Multi Corer	station start	GeoB 24001	3134.1700	53° 55.541' S	080° 00.956' E
SO272_6-2	26/01/2020 14:44:59	Multi Corer	in the water	MUC + SVP	3130.8400	53° 55.551' S	080° 00.953' E
SO272_6-2	26/01/2020 16:04:30	Multi Corer	max depth/on ground	BOKO, SLmax: 3150m	3123.6100	53° 55.544' S	080° 00.954' E
SO272_6-2	26/01/2020 16:06:45	Multi Corer	hoisting	SZmax: 39,1kN	3131.4400	53° 55.541' S	080° 00.953' E
SO272_6-2	26/01/2020 17:47:16	Multi Corer	on deck		3128.2900	53° 55.555' S	080° 00.947' E
SO272_6-2	26/01/2020 17:49:20	Multi Corer	station end		3122.9800	53° 55.553' S	080° 00.950' E
SO272_7-1	26/01/2020 17:56:46	Float	station start	ARGO Float 8830	3123.9800	53° 55.627' S	080° 01.158' E
SO272_7-1	26/01/2020 17:57:47	Float	in the water		3116.1100	53° 55.649' S	080° 01.220' E
SO272_7-1	26/01/2020 18:00:32	Float	station end		3207.8500	53° 55.771' S	080° 01.494' E
SO272_8-1	26/01/2020 22:36:28	Gravity Corer	station start	GeoB 24002	1144.2400	53° 21.003' S	081° 02.078' E
SO272_8-1	26/01/2020 22:41:22	Gravity Corer	in the water	GC 6m	1147.6800	53° 20.996' S	081° 02.101' E
SO272_8-1	26/01/2020 23:05:36	Gravity Corer	max depth/on ground	SLmax: 1175m	1142.0700	53° 20.991' S	081° 02.127' E
SO272_8-1	26/01/2020 23:06:26	Gravity Corer	hoisting	SZmax: 29,2kN	1143.3600	53° 20.990' S	081° 02.123' E
SO272_8-1	26/01/2020 23:35:32	Gravity Corer	on deck		1141.7700	53° 20.988' S	081° 02.136' E



Station	Date / Time UTC	Device	Action	Comment (Action)	Depth (m)	Latitude	Longitude
SO272_8-2	26/01/2020 23:38:12	Multi Corer	station start	GeoB 24002	1140.9700	53° 20.991' S	081° 02.132' E
SO272_8-2	26/01/2020 23:47:35	Multi Corer	in the water	MUC + SVP ohne Probennahme	1142.2000	53° 20.992' S	081° 02.132' E
SO272_8-2	27/01/2020 00:13:05	Multi Corer	max depth/on ground	auf Tiefe, maxSL: 1100m	1142.7000	53° 20.992' S	081° 02.126' E
SO272_8-2	27/01/2020 00:38:37	Multi Corer	on deck		1142.9600	53° 20.990' S	081° 02.122' E
SO272_8-2	27/01/2020 00:40:44	Multi Corer	station end		1143.0400	53° 20.989' S	081° 02.120' E
SO272_9-1	27/01/2020 04:42:25	Seismic Towed Receiver	station start		4548.1900	52° 59.270' S	082° 06.356' E
SO272_9-1	27/01/2020 04:45:03	Seismic Towed Receiver	information	Kopfboje zu Wasser	4545.8800	52° 59.307' S	082° 06.214' E
SO272_9-1	27/01/2020 04:53:26	Seismic Towed Receiver	information	1. Bird zu Wasser	4546.1700	52° 59.506' S	082° 05.706' E
SO272_9-1	27/01/2020 05:01:16	Seismic Towed Receiver	information	2. Bird zu Wasser	4560.7500	52° 59.681' S	082° 05.121' E
SO272_9-1	27/01/2020 05:09:24	Seismic Towed Receiver	information	3. Bird zu Wasser	4566.3700	52° 59.916' S	082° 04.528' E
SO272_9-1	27/01/2020 05:18:31	Seismic Towed Receiver	information	4. Bird zu Wasser	4559.9600	53° 00.200' S	082° 03.899' E
SO272_9-1	27/01/2020 05:27:46	Seismic Towed Receiver	information	5. Bird zu Wasser	4555.8800	53° 00.481' S	082° 03.271' E
SO272_9-1	27/01/2020 05:37:07	Seismic Towed Receiver	information	6. Bird zu Wasser	4553.8500	53° 00.755' S	082° 02.619' E
SO272_9-1	27/01/2020 05:46:38	Seismic Towed Receiver	information	7. Bird zu Wasser	4552.9800	53° 01.075' S	082° 01.928' E
SO272_9-1	27/01/2020 05:56:51	Seismic Towed Receiver	information	8. Bird zu Wasser	4318.6300	53° 01.407' S	082° 01.215' E
SO272_9-1	27/01/2020 06:07:22	Seismic Towed Receiver	information	9. Bird zu Wasser	3952.2500	53° 01.779' S	082° 00.396' E
SO272_9-1	27/01/2020 06:18:41	Seismic Towed Receiver	information	10. Bird zu Wasser	3775.5900	53° 02.099' S	081° 59.428' E

Station	Date / Time UTC	Device	Action	Comment (Action)	Depth (m)	Latitude	Longitude
SO272_9-1	27/01/2020 06:29:29	Seismic Towed Receiver	information	Beginn Einbau von Modulen und einem Segment	3874.7200	53° 02.391' S	081° 58.524' E
SO272_9-1	27/01/2020 06:36:47	Seismic Towed Receiver	information	11. Bird zu Wasser	3829.6200	53° 02.634' S	081° 57.828' E
SO272_9-1	27/01/2020 06:49:26	Seismic Towed Receiver	information	12. Bird zu Wasser	3446.5600	53° 02.977' S	081° 56.770' E
SO272_9-1	27/01/2020 07:08:58	Seismic Towed Receiver	information	13. (letzter) Bird zu Wasser	3194.5000	53° 03.597' S	081° 54.942' E
SO272_9-1	27/01/2020 07:20:08	Seismic Towed Receiver	information	Streamer voll ausgesteckt	3110.9000	53° 03.923' S	081° 53.934' E
SO272_9-1	27/01/2020 07:28:13	Seismic Towed Receiver	information	Beginn Aussetzen Stb.Airgun- Array	2903.5800	53° 04.139' S	081° 53.289' E
SO272_9-1	27/01/2020 07:46:57	Seismic Towed Receiver	information	Stb.Airgun- Array ausgesteckt	2893.3600	53° 04.671' S	081° 51.683' E
SO272_9-1	27/01/2020 08:04:14	Seismic Towed Receiver	information	Airgun schießt	3360.6500	53° 05.320' S	081° 49.687' E
SO272_9-1	27/01/2020 08:31:43	Seismic Towed Receiver	profile start	AWI- 20200001, rwK: 241°, FüG: 5kn, d: 121sm	3957.8200	53° 06.332' S	081° 46.617' E
SO272_9-1	28/01/2020 08:33:40	Seismic Towed Receiver	profile end		2362.6900	54° 03.504' S	078° 50.725' E
SO272_9-1	28/01/2020 08:46:49	Seismic Towed Receiver	information	Beginn Drehung	2225.1400	54° 04.046' S	078° 49.105' E
SO272_9-1	28/01/2020 09:25:16	Seismic Towed Receiver	information	Airguns full power	2113.8500	54° 06.225' S	078° 45.535' E
SO272_9-1	28/01/2020 10:21:27	Seismic Towed Receiver	profile start	AWI- 20200002, rwK: 081°, FüG: 5kn, d: 161sm	2217.8000	54° 04.127' S	078° 48.788' E
SO272_9-1	29/01/2020 18:38:42	Seismic Towed Receiver	profile end	1nm weiter fahren, dann Beginn Drehung	4656.1400	53° 38.480' S	083° 17.935' E
SO272_9-1	29/01/2020 18:49:05	Seismic Towed Receiver	information	Beginn Drehung	4666.1500	53° 38.343' S	083° 19.371' E

Station	Date / Time UTC	Device	Action	Comment (Action)	Depth (m)	Latitude	Longitude
SO272_9-1	29/01/2020 19:22:44	Seismic Towed Receiver	information	mini start up um 30 Min. verschoben, da Wal gehört wurde	4699.4600	53° 37.024' S	083° 21.899' E
SO272_9-1	29/01/2020 19:49:01	Seismic Towed Receiver	information	full ramp up gestartet	4673.9800	53° 37.578' S	083° 18.938' E
SO272_9-1	29/01/2020 19:51:16	Seismic Towed Receiver	profile start	AWI-20200003, rwK: 213°, d: 1nm, FüG 5kn	4907.5900	53° 37.729' S	083° 18.782' E
SO272_9-1	29/01/2020 20:02:52	Seismic Towed Receiver	alter course	rwK: 238°, d: 156sm, FüG: 5kn	4551.5600	53° 38.503' S	083° 17.866' E
SO272_9-1	29/01/2020 20:20:09	Seismic Towed Receiver	information	Airguns full power	4631.3900	53° 39.270' S	083° 15.859' E
SO272_9-1	31/01/2020 03:32:56	Seismic Towed Receiver	profile end		2371.0300	55° 02.818' S	079° 30.753' E
SO272_9-1	31/01/2020 03:44:58	Seismic Towed Receiver	on deck	Airguns an Deck	2347.1800	55° 03.232' S	079° 29.656' E
SO272_9-1	31/01/2020 04:25:33	Seismic Towed Receiver	information	Beginn Drehung	2329.4200	55° 04.994' S	079° 24.783' E
SO272_9-1	31/01/2020 06:19:19	Seismic Towed Receiver	information	Beginn Aussetzen der Airgun-Array	2363.8600	55° 04.647' S	079° 32.352' E
SO272_9-1	31/01/2020 06:25:04	Seismic Towed Receiver	information	Airgun-Array zu Wasser	2355.6800	55° 04.370' S	079° 32.325' E
SO272_9-1	31/01/2020 06:37:52	Seismic Towed Receiver	profile start	AWI-20200004	2371.2800	55° 03.329' S	079° 32.290' E
SO272_9-1	31/01/2020 06:43:36	Seismic Towed Receiver	information	Beginn Softstart	2383.1300	55° 02.860' S	079° 32.267' E
SO272_9-1	31/01/2020 07:14:39	Seismic Towed Receiver	information	Airguns full power	2481.0800	55° 00.386' S	079° 32.084' E
SO272_9-1	31/01/2020 12:33:09	Seismic Towed Receiver	information	Airguns auf Low Power	3739.7200	54° 35.098' S	079° 30.282' E
SO272_9-1	31/01/2020 13:07:17	Seismic Towed Receiver	information	Airguns auf Full Power	3843.8900	54° 32.262' S	079° 30.084' E
SO272_9-1	31/01/2020 21:26:57	Seismic Towed Receiver	profile end		3821.5600	53° 50.166' S	079° 27.158' E

Station	Date / Time UTC	Device	Action	Comment (Action)	Depth (m)	Latitude	Longitude
SO272_9-1	31/01/2020 21:39:05	Seismic Towed Receiver	information	Beginn Drehung, Airguns auf low power	3833.2900	53° 49.144' S	079° 27.084' E
SO272_9-1	31/01/2020 22:20:11	Seismic Towed Receiver	information	Airguns auf full power	3880.1500	53° 48.758' S	079° 23.592' E
SO272_9-1	31/01/2020 22:40:01	Seismic Towed Receiver	profile start	AWI-20200005, rwK: 105°, FüG: 5kn	3829.9200	53° 49.841' S	079° 25.337' E
SO272_9-1	01/02/2020 03:04:04	Seismic Towed Receiver	alter course	rwk: 110°, d: 130sm	3133.9200	53° 55.557' S	080° 01.040' E
SO272_9-1	01/02/2020 07:04:28	Seismic Towed Receiver	information	Airguns auf Low Power	3769.9500	54° 02.345' S	080° 32.908' E
SO272_9-1	01/02/2020 08:04:24	Seismic Towed Receiver	information	Airguns auf Full Power	3745.6100	54° 04.039' S	080° 40.867' E
SO272_9-1	02/02/2020 05:08:25	Seismic Towed Receiver	profile end	AWI-20200005 Ende	4729.2900	54° 39.764' S	083° 30.279' E
SO272_9-1	02/02/2020 05:17:36	Seismic Towed Receiver	information	Beginn Drehung	4735.9800	54° 40.029' S	083° 31.527' E
SO272_9-1	02/02/2020 05:22:20	Seismic Towed Receiver	information	Airguns schießen nur noch mit einer Kanone	4738.3900	54° 40.219' S	083° 32.123' E
SO272_9-1	02/02/2020 05:50:42	Seismic Towed Receiver	information	Beginn Soft-Start	4740.4200	54° 40.127' S	083° 35.293' E
SO272_9-1	02/02/2020 06:00:29	Seismic Towed Receiver	information	Airguns Full Power	4738.0300	54° 39.391' S	083° 35.376' E
SO272_9-1	02/02/2020 06:29:29	Seismic Towed Receiver	profile start	AWI-20200006 Start, rwK: 242°, d: 139nm, FüG 5kn	4733.3200	54° 39.271' S	083° 31.769' E
SO272_9-1	03/02/2020 10:16:40	Seismic Towed Receiver	profile end		3180.2000	55° 43.995' S	079° 57.664' E
SO272_9-1	03/02/2020 10:29:09	Seismic Towed Receiver	information	Beginn Drehung	3215.7500	55° 44.489' S	079° 56.084' E
SO272_9-1	03/02/2020 10:31:41	Seismic Towed Receiver	information	Airguns aus	3236.0000	55° 44.612' S	079° 55.790' E

Station	Date / Time UTC	Device	Action	Comment (Action)	Depth (m)	Latitude	Longitude
SO272_9-1	03/02/2020 10:40:10	Seismic Towed Receiver	information	Beginn Bergung Airguns	3213.4000	55° 44.875' S	079° 54.659' E
SO272_9-1	03/02/2020 10:49:57	Seismic Towed Receiver	on deck	Airguns zur Wartung an Deck	3200.7700	55° 44.731' S	079° 53.668' E
SO272_9-1	03/02/2020 12:03:53	Seismic Towed Receiver	information	Airguns zu Wasser	3042.2000	55° 44.845' S	079° 47.155' E
SO272_9-1	03/02/2020 12:13:55	Seismic Towed Receiver	information	Beg. Soft-Start	3030.1800	55° 45.072' S	079° 48.374' E
SO272_9-1	03/02/2020 12:46:00	Seismic Towed Receiver	information	Airguns auf Full Power	3182.0300	55° 44.523' S	079° 52.939' E
SO272_9-1	03/02/2020 12:46:18	Seismic Towed Receiver	profile start	AWI-202000007, rwk: 078°, d: 125sm	3187.3300	55° 44.518' S	079° 52.983' E
SO272_9-1	04/02/2020 04:14:06	Seismic Towed Receiver	information	Beginn Soft-Start	4660.3800	55° 30.180' S	082° 07.002' E
SO272_9-1	04/02/2020 04:20:25	Seismic Towed Receiver	information	Airguns wieder off, wegen Walsichtung	4662.9200	55° 30.078' S	082° 07.913' E
SO272_9-1	04/02/2020 05:58:27	Seismic Towed Receiver	information	Beginn Soft-Start	4959.8400	55° 28.572' S	082° 22.012' E
SO272_9-1	04/02/2020 06:26:59	Seismic Towed Receiver	information	Airguns auf Full-Power	4747.4800	55° 28.135' S	082° 26.097' E
SO272_9-1	04/02/2020 13:54:32	Seismic Towed Receiver	profile end		4771.2200	55° 21.220' S	083° 30.416' E
SO272_9-1	04/02/2020 14:05:06	Seismic Towed Receiver	information	Beg. Drehung, Airguns auf Low Power	4753.7000	55° 21.045' S	083° 31.924' E
SO272_9-1	04/02/2020 14:38:25	Seismic Towed Receiver	information	Airguns auf Full Power	4744.8400	55° 19.067' S	083° 32.020' E
SO272_9-1	04/02/2020 14:47:22	Seismic Towed Receiver	profile start	AWI-202000008, rwk: 237°, d: 180sm	4740.3400	55° 19.165' S	083° 30.763' E
SO272_9-1	05/02/2020 00:51:09	Seismic Towed Receiver	information	Airguns aus, Walsichtung	4923.1200	55° 46.261' S	082° 16.264' E
SO272_9-1	05/02/2020 01:13:22	Seismic Towed Receiver	information	Beg. soft start	4676.7800	55° 47.249' S	082° 13.501' E

Station	Date / Time UTC	Device	Action	Comment (Action)	Depth (m)	Latitude	Longitude
SO272_9-1	05/02/2020 01:34:10	Seismic Towed Receiver	information	Airguns auf Full Power	4673.2400	55° 48.176' S	082° 10.931' E
SO272_9-1	06/02/2020 03:02:53	Seismic Towed Receiver	profile end		1754.5200	56° 56.546' S	078° 58.088' E
SO272_9-1	06/02/2020 03:15:42	Seismic Towed Receiver	information	Airguns an Deck	1755.4300	56° 57.172' S	078° 57.312' E
SO272_9-1	06/02/2020 05:19:00	Seismic Towed Receiver	profile start	rwK: 072°, d: 160nm, FüG: 5,0kn, Airguns noch an Deck wegen Reparatur	1754.7500	56° 56.200' S	078° 57.901' E
SO272_9-1	06/02/2020 05:53:49	Seismic Towed Receiver	information	Beginn aussetzen Airgun-Array	1775.9000	56° 55.509' S	079° 01.955' E
SO272_9-1	06/02/2020 06:00:33	Seismic Towed Receiver	information	Airgun-Array zu Wasser uns ausgesteckt	1773.7700	56° 55.375' S	079° 02.736' E
SO272_9-1	06/02/2020 06:12:22	Seismic Towed Receiver	information	Beginn Soft-Start	1769.4600	56° 55.070' S	079° 04.326' E
SO272_9-1	06/02/2020 06:41:06	Seismic Towed Receiver	information	Airguns auf Full-Power	1765.8600	56° 54.331' S	079° 08.486' E
SO272_9-1	07/02/2020 13:36:40	Seismic Towed Receiver	profile end		4610.5400	56° 06.390' S	083° 33.681' E
SO272_9-1	07/02/2020 13:48:42	Seismic Towed Receiver	alter course	Beg. Drehung über Bb, Airguns auf Low Power	4356.3800	56° 06.375' S	083° 35.443' E
SO272_9-1	07/02/2020 14:15:30	Seismic Towed Receiver	information	Airguns auf Full Power	4261.7400	56° 04.792' S	083° 36.900' E
SO272_9-1	07/02/2020 14:53:22	Seismic Towed Receiver	profile start	Beg. Profil AWI-202000010, rwk: 220°, d: 118sm	4371.9000	56° 05.899' S	083° 32.980' E
SO272_9-1	08/02/2020 14:27:52	Seismic Towed Receiver	alter course	rwk: 234°, d: 88sm	2024.0600	57° 35.509' S	081° 14.398' E
SO272_9-1	09/02/2020 00:00:08	Seismic Towed Receiver	information	Airguns aus, Walsichtung	1667.0300	58° 03.100' S	080° 01.953' E

Station	Date / Time UTC	Device	Action	Comment (Action)	Depth (m)	Latitude	Longitude
SO272_9-1	09/02/2020 01:11:16	Seismic Towed Receiver	information	Airguns auf Full Power	1669.0800	58° 06.527' S	079° 52.883' E
SO272_9-1	09/02/2020 08:06:31	Seismic Towed Receiver	profile end		1294.9600	58° 26.469' S	078° 59.873' E
SO272_9-1	09/02/2020 08:18:41	Seismic Towed Receiver	information	Beginn Drehung	1275.7500	58° 27.122' S	078° 58.413' E
SO272_9-1	09/02/2020 08:22:21	Seismic Towed Receiver	information	Airgun auf low power	1269.3400	58° 27.206' S	078° 57.859' E
SO272_9-1	09/02/2020 08:49:25	Seismic Towed Receiver	information	Airguns soft start	1253.8300	58° 27.809' S	078° 53.779' E
SO272_9-1	09/02/2020 08:59:13	Seismic Towed Receiver	information	Airguns auf full power	1251.4200	58° 28.586' S	078° 53.401' E
SO272_9-1	09/02/2020 09:51:08	Seismic Towed Receiver	profile start	Profil AWI-202000011, rwk: 031°, d: 51sm	1273.3600	58° 27.335' S	078° 58.879' E
SO272_9-1	09/02/2020 13:53:44	Seismic Towed Receiver	information	Walsichtung, Airguns auf Low Power	1576.9200	58° 10.108' S	079° 18.674' E
SO272_9-1	09/02/2020 14:20:41	Seismic Towed Receiver	information	Airguns auf Full Power	1621.7600	58° 08.195' S	079° 20.878' E
SO272_9-1	09/02/2020 20:06:25	Seismic Towed Receiver	alter course	rwK: 043°, d: 72sm	1631.7800	57° 43.590' S	079° 48.859' E
SO272_9-1	09/02/2020 23:35:36	Seismic Towed Receiver	information	Walsichtung, Airguns auf Low Power	1753.1300	57° 30.895' S	080° 10.962' E
SO272_9-1	10/02/2020 00:17:12	Seismic Towed Receiver	information	Airguns auf Full Power	1826.6100	57° 28.366' S	080° 15.346' E
SO272_9-1	10/02/2020 10:12:02	Seismic Towed Receiver	profile end		4342.1100	56° 52.209' S	081° 17.568' E
SO272_9-1	10/02/2020 10:23:14	Seismic Towed Receiver	information	Beginn Drehung	4372.5500	56° 51.568' S	081° 18.800' E
SO272_9-1	10/02/2020 10:25:56	Seismic Towed Receiver	information	Airguns auf low power	4377.5000	56° 51.491' S	081° 19.187' E
SO272_9-1	10/02/2020 11:01:43	Seismic Towed Receiver	information	Airguns auf full power	4404.7300	56° 49.559' S	081° 20.211' E

Station	Date / Time UTC	Device	Action	Comment (Action)	Depth (m)	Latitude	Longitude
SO272_9-1	10/02/2020 11:36:06	Seismic Towed Receiver	profile start	Profil AWI-202000012, rwk: 181°, d: 46sm	4345.5100	56° 51.253' S	081° 17.532' E
SO272_9-1	10/02/2020 20:43:57	Seismic Towed Receiver	profile end		2029.6600	57° 36.798' S	081° 16.643' E
SO272_9-1	10/02/2020 20:56:32	Seismic Towed Receiver	information	Beginn Drehung	2007.4100	57° 37.842' S	081° 16.522' E
SO272_9-1	10/02/2020 20:56:53	Seismic Towed Receiver	information	Airguns auf low power	2009.6300	57° 37.869' S	081° 16.503' E
SO272_9-1	10/02/2020 21:37:46	Seismic Towed Receiver	information	Airguns auf full power	1986.1200	57° 39.649' S	081° 18.685' E
SO272_9-1	10/02/2020 22:08:48	Seismic Towed Receiver	profile start	Profil AWI-202000013, rwk: 317°, d: 3sm	2028.2700	57° 37.545' S	081° 17.938' E
SO272_9-1	10/02/2020 22:42:27	Seismic Towed Receiver	alter course	rwK: 317°, d: 75sm	2022.6800	57° 35.518' S	081° 14.391' E
SO272_9-1	11/02/2020 14:11:28	Seismic Towed Receiver	profile end		1978.1600	56° 38.911' S	079° 37.933' E
SO272_9-1	11/02/2020 14:12:56	Seismic Towed Receiver	alter course	Beg. Drehung, Airguns auf Low Power	1976.1800	56° 38.859' S	079° 37.745' E
SO272_9-1	11/02/2020 15:32:03	Seismic Towed Receiver	profile start	AWI-202000014, rwk: 175°, d: 65sm	1969.1200	56° 39.277' S	079° 39.269' E
SO272_9-1	11/02/2020 15:53:31	Seismic Towed Receiver	information	Airguns auf Full-Power	1945.0800	56° 41.085' S	079° 39.482' E
SO272_9-1	12/02/2020 09:42:19	Seismic Towed Receiver	profile end		1678.4000	58° 09.572' S	079° 52.776' E
SO272_9-1	12/02/2020 09:54:17	Seismic Towed Receiver	information	Beginn Drehung	1683.7800	58° 10.556' S	079° 52.860' E
SO272_9-1	12/02/2020 09:55:07	Seismic Towed Receiver	information	Airguns auf low power	1700.3900	58° 10.623' S	079° 52.832' E
SO272_9-1	12/02/2020 10:34:31	Seismic Towed Receiver	information	Airguns auf full power	1681.7800	58° 12.526' S	079° 54.875' E
SO272_9-1	12/02/2020 11:14:21	Seismic Towed Receiver	profile start	AWI-202000015, rwk: 342°, d: 86sm	1681.7500	58° 10.185' S	079° 53.246' E



Station	Date / Time UTC	Device	Action	Comment (Action)	Depth (m)	Latitude	Longitude
SO272_9-1	12/02/2020 13:41:25	Seismic Towed Receiver	information	wal gesichtet; airguns shut off	1647.0600	57° 58.618' S	079° 45.914' E
SO272_9-1	12/02/2020 14:30:46	Seismic Towed Receiver	information	Beg. Soft Start	1635.8800	57° 54.742' S	079° 43.478' E
SO272_9-1	12/02/2020 15:01:00	Seismic Towed Receiver	information	Airguns auf Full Power	1639.4100	57° 52.341' S	079° 41.982' E
SO272_9-1	13/02/2020 04:02:20	Seismic Towed Receiver	profile end		1767.2100	56° 50.618' S	079° 03.985' E
SO272_9-1	13/02/2020 04:09:32	Seismic Towed Receiver	alter course	Airguns auf Low Power	1769.9100	56° 50.053' S	079° 03.666' E
SO272_9-1	13/02/2020 04:43:54	Seismic Towed Receiver	information	Beginn Soft-Start	1781.6900	56° 47.510' S	079° 03.615' E
SO272_9-1	13/02/2020 04:54:10	Seismic Towed Receiver	information	Airguns auf Full-Power	1779.1100	56° 47.375' S	079° 02.136' E
SO272_9-1	13/02/2020 05:33:23	Seismic Towed Receiver	profile start	rwK: 136°, d: 83nm, FüG: 5,0kn	1770.8600	56° 49.886' S	079° 02.710' E
SO272_9-1	13/02/2020 22:09:23	Seismic Towed Receiver	profile end		1746.9000	57° 49.781' S	080° 48.407' E
SO272_9-1	13/02/2020 22:28:01	Seismic Towed Receiver	information	Beginn Bergung Airguns	1743.9100	57° 50.839' S	080° 50.353' E
SO272_9-1	13/02/2020 22:36:55	Seismic Towed Receiver	on deck	Airguns	1752.0600	57° 51.291' S	080° 51.160' E
SO272_9-1	13/02/2020 22:38:55	Seismic Towed Receiver	information	Beginn Bergung Streamer	1747.1400	57° 51.393' S	080° 51.345' E
SO272_9-1	13/02/2020 22:45:08	Seismic Towed Receiver	on deck	1. Bird an Deck	1747.5600	57° 51.622' S	080° 51.897' E
SO272_9-1	13/02/2020 22:50:44	Seismic Towed Receiver	on deck	2. Bird an Deck	1746.4800	57° 51.782' S	080° 52.430' E
SO272_9-1	13/02/2020 22:54:50	Seismic Towed Receiver	on deck	3. Bird an Deck	1756.0600	57° 51.941' S	080° 52.768' E
SO272_9-1	13/02/2020 23:00:21	Seismic Towed Receiver	on deck	4. Bird an Deck	1750.0400	57° 52.163' S	080° 53.294' E
SO272_9-1	13/02/2020 23:09:10	Seismic Towed Receiver	on deck	5. Bird an Deck	1754.7800	57° 52.455' S	080° 54.203' E

Station	Date / Time UTC	Device	Action	Comment (Action)	Depth (m)	Latitude	Longitude
SO272_9-1	13/02/2020 23:18:18	Seismic Towed Receiver	on deck	6. Bird an Deck	1751.7100	57° 52.700' S	080° 55.139' E
SO272_9-1	13/02/2020 23:27:51	Seismic Towed Receiver	on deck	7. Bird an Deck	1755.8400	57° 52.959' S	080° 56.164' E
SO272_9-1	13/02/2020 23:38:50	Seismic Towed Receiver	on deck	8. Bird an Deck	1758.9900	57° 53.233' S	080° 57.347' E
SO272_9-1	13/02/2020 23:49:02	Seismic Towed Receiver	on deck	9. Bird an Deck	1761.4800	57° 53.478' S	080° 58.444' E
SO272_9-1	14/02/2020 00:00:12	Seismic Towed Receiver	on deck	10. Bird an Deck	1771.3000	57° 53.727' S	080° 59.646' E
SO272_9-1	14/02/2020 00:09:30	Seismic Towed Receiver	on deck	11. Bird an Deck	1768.2300	57° 53.932' S	081° 00.645' E
SO272_9-1	14/02/2020 00:19:34	Seismic Towed Receiver	on deck	12. Bird an Deck	1770.6700	57° 54.141' S	081° 01.740' E
SO272_9-1	14/02/2020 00:32:23	Seismic Towed Receiver	on deck	14. Bird an Deck	1774.1500	57° 54.366' S	081° 03.137' E
SO272_9-1	14/02/2020 00:40:23	Seismic Towed Receiver	on deck	Endboye an Deck	1771.3300	57° 54.478' S	081° 04.046' E
SO272_9-1	14/02/2020 00:43:55	Seismic Towed Receiver	station end		1776.8600	57° 54.508' S	081° 04.536' E
SO272_10-1	14/02/2020 04:14:52	Gravity Corer	station start	GeoB24003, GC-12m	1902.9300	57° 25.347' S	080° 20.584' E
SO272_10-1	14/02/2020 04:21:37	Gravity Corer	in the water	FW2/SPW2	1907.0900	57° 25.353' S	080° 20.574' E
SO272_10-1	14/02/2020 04:58:54	Gravity Corer	max depth/on ground	Boko, SLmax: 1924m	1946.1100	57° 25.348' S	080° 20.568' E
SO272_10-1	14/02/2020 04:59:38	Gravity Corer	hoisting	Beginn hieven, SZmax: 45,4kN	1945.5000	57° 25.349' S	080° 20.571' E
SO272_10-1	14/02/2020 05:43:06	Gravity Corer	on deck		1946.4700	57° 25.352' S	080° 20.574' E
SO272_10-1	14/02/2020 05:44:47	Gravity Corer	station end		1945.9500	57° 25.352' S	080° 20.569' E
SO272_10-2	14/02/2020 05:49:09	Multi Corer	station start	MUC + SVP	1945.5400	57° 25.345' S	080° 20.571' E
SO272_10-2	14/02/2020 05:50:46	Multi Corer	in the water	FW2/SPW2	1903.9600	57° 25.343' S	080° 20.572' E

Station	Date / Time UTC	Device	Action	Comment (Action)	Depth (m)	Latitude	Longitude
SO272_10-2	14/02/2020 06:36:53	Multi Corer	max depth/on ground	BOKO, SLmax: 1920m	1904.5300	57° 25.354' S	080° 20.580' E
SO272_10-2	14/02/2020 06:39:05	Multi Corer	hoisting	Beginn hieven, SZmax: 26,7kN	1903.6500	57° 25.353' S	080° 20.582' E
SO272_10-2	14/02/2020 07:44:04	Multi Corer	on deck		1902.9400	57° 25.355' S	080° 20.573' E
SO272_10-2	14/02/2020 07:45:28	Multi Corer	station end		1903.7100	57° 25.356' S	080° 20.576' E
SO272_11-1	14/02/2020 09:15:27	Gravity Corer	station start	GeoB24004, GC-6m	2037.0900	57° 14.274' S	080° 39.669' E
SO272_11-1	14/02/2020 09:22:52	Gravity Corer	in the water		2034.2300	57° 14.303' S	080° 39.642' E
SO272_11-1	14/02/2020 09:59:41	Gravity Corer	max depth/on ground	SLmax: 2080m	2032.8100	57° 14.333' S	080° 39.604' E
SO272_11-1	14/02/2020 10:01:50	Gravity Corer	hoisting	SZmax: 44,3kN	2035.0400	57° 14.331' S	080° 39.605' E
SO272_11-1	14/02/2020 10:46:10	Gravity Corer	on deck		2079.4700	57° 14.318' S	080° 39.604' E
SO272_11-1	14/02/2020 10:46:41	Gravity Corer	station end		2079.4000	57° 14.318' S	080° 39.602' E
SO272_11-2	14/02/2020 10:48:31	Multi Corer	station start	GeoB24004, MUC+SVP	2078.8600	57° 14.320' S	080° 39.599' E
SO272_11-2	14/02/2020 10:52:36	Multi Corer	in the water		2078.4000	57° 14.319' S	080° 39.607' E
SO272_11-2	14/02/2020 11:41:10	Multi Corer	max depth/on ground	SLmax: 2056m	2034.7800	57° 14.329' S	080° 39.606' E
SO272_11-2	14/02/2020 11:42:52	Multi Corer	hoisting	SZmax: 35,3kN	2032.5200	57° 14.328' S	080° 39.599' E
SO272_11-2	14/02/2020 12:48:34	Multi Corer	on deck		2031.8500	57° 14.321' S	080° 39.608' E
SO272_11-2	14/02/2020 12:50:20	Multi Corer	station end		2032.3600	57° 14.322' S	080° 39.606' E
SO272_12-1	14/02/2020 13:22:46	Gravity Corer	station start	GeoB24005	2155.9700	57° 11.895' S	080° 43.864' E
SO272_12-1	14/02/2020 13:26:25	Gravity Corer	in the water	GC 6m	2152.5900	57° 11.889' S	080° 43.861' E
SO272_12-1	14/02/2020 14:06:44	Gravity Corer	max depth/on ground	Boko, maxSL: 2188m	2152.9000	57° 11.870' S	080° 43.847' E
SO272_12-1	14/02/2020 14:07:39	Gravity Corer	hoisting	Beg. hieven, maxSZ: 50,9kN	2153.1200	57° 11.869' S	080° 43.852' E
SO272_12-1	14/02/2020 14:54:46	Gravity Corer	on deck		2153.4200	57° 11.874' S	080° 43.846' E

Station	Date / Time UTC	Device	Action	Comment (Action)	Depth (m)	Latitude	Longitude
SO272_12-1	14/02/2020 14:57:47	Gravity Corer	station end		2153.7100	57° 11.875' S	080° 43.861' E
SO272_13-1	14/02/2020 15:35:10	Gravity Corer	station start	GeoB24006	2394.6300	57° 08.678' S	080° 49.444' E
SO272_13-1	14/02/2020 15:41:20	Gravity Corer	in the water	GC 6m	2397.7500	57° 08.659' S	080° 49.438' E
SO272_13-1	14/02/2020 16:25:45	Gravity Corer	max depth/on ground	BOKO, SLmax: 2428m	2396.0600	57° 08.640' S	080° 49.417' E
SO272_13-1	14/02/2020 16:26:16	Gravity Corer	hoisting	SZmax: 56,3kN	2394.2900	57° 08.640' S	080° 49.414' E
SO272_13-1	14/02/2020 17:21:55	Gravity Corer	on deck		2395.1000	57° 08.634' S	080° 49.419' E
SO272_13-1	14/02/2020 17:23:22	Gravity Corer	station end		2396.8600	57° 08.636' S	080° 49.421' E
SO272_14-1	14/02/2020 19:34:35	Gravity Corer	station start	GeoB24007, GC-6m	2444.1900	57° 18.243' S	081° 17.006' E
SO272_14-1	14/02/2020 19:41:12	Gravity Corer	in the water	FW2/SPW2	2441.9700	57° 18.244' S	081° 17.013' E
SO272_14-1	14/02/2020 20:23:29	Gravity Corer	max depth/on ground	SLmax: 2478m	2444.2500	57° 18.240' S	081° 17.009' E
SO272_14-1	14/02/2020 20:23:50	Gravity Corer	hoisting	SZmax: 52,3kN	2439.6300	57° 18.240' S	081° 17.011' E
SO272_14-1	14/02/2020 21:19:18	Gravity Corer	on deck		2440.1200	57° 18.245' S	081° 17.002' E
SO272_14-1	14/02/2020 21:46:51	Gravity Corer	station end		2442.3600	57° 18.239' S	081° 17.004' E
SO272_15-1	15/02/2020 05:27:55	Gravity Corer	station start	GeoB24008, GC-6m	1858.0600	56° 50.657' S	079° 28.989' E
SO272_15-1	15/02/2020 05:30:37	Gravity Corer	in the water	FW2/SPW2	1856.5300	56° 50.657' S	079° 28.988' E
SO272_15-1	15/02/2020 06:07:04	Gravity Corer	max depth/on ground	BOKO, SLmax: 1882m	1854.1900	56° 50.661' S	079° 28.979' E
SO272_15-1	15/02/2020 06:08:03	Gravity Corer	hoisting	SZmax: 45,3kN	1857.9100	56° 50.662' S	079° 28.980' E
SO272_15-1	15/02/2020 06:49:26	Gravity Corer	on deck		1857.4900	56° 50.663' S	079° 28.979' E
SO272_15-1	15/02/2020 06:51:35	Gravity Corer	station end		1857.5400	56° 50.659' S	079° 28.980' E
SO272_15-2	15/02/2020 07:16:11	Multi Corer	station start	GeoB24008, MUC + SVP	1872.5900	56° 50.652' S	079° 28.991' E
SO272_15-2	15/02/2020 07:17:49	Multi Corer	in the water	FW2/SPW2	1900.9600	56° 50.653' S	079° 28.992' E
SO272_15-2	15/02/2020 07:59:55	Multi Corer	max depth/on ground	BOKO, SLmax: 1878m	1858.5900	56° 50.660' S	079° 28.986' E

Station	Date / Time UTC	Device	Action	Comment (Action)	Depth (m)	Latitude	Longitude
SO272_15-2	15/02/2020 08:04:35	Multi Corer	hoisting	SZmax: 34,6kN	1854.8600	56° 50.658' S	079° 28.985' E
SO272_15-2	15/02/2020 09:09:20	Multi Corer	on deck		1857.9700	56° 50.665' S	079° 28.985' E
SO272_15-2	15/02/2020 09:11:06	Multi Corer	station end		1858.1700	56° 50.662' S	079° 28.983' E
SO272_16-1	15/02/2020 10:41:42	Gravity Corer	station start	GeoB24009, GC-6m	1939.5700	56° 41.189' S	079° 41.820' E
SO272_16-1	15/02/2020 10:46:22	Gravity Corer	in the water		1940.2800	56° 41.174' S	079° 41.839' E
SO272_16-1	15/02/2020 11:21:31	Gravity Corer	max depth/on ground	SLmax: 1971m	1938.7300	56° 41.151' S	079° 41.872' E
SO272_16-1	15/02/2020 11:22:39	Gravity Corer	hoisting	SZmax: 63,8kN	1940.9300	56° 41.154' S	079° 41.868' E
SO272_16-1	15/02/2020 12:06:32	Gravity Corer	on deck		1942.4500	56° 41.148' S	079° 41.869' E
SO272_16-1	15/02/2020 12:08:31	Gravity Corer	station end		1939.5800	56° 41.148' S	079° 41.871' E
SO272_16-2	15/02/2020 12:09:56	Multi Corer	station start	GeoB24009, MUC + SVP	1942.2000	56° 41.148' S	079° 41.873' E
SO272_16-2	15/02/2020 12:11:32	Multi Corer	in the water		1941.7600	56° 41.149' S	079° 41.872' E
SO272_16-2	15/02/2020 12:55:52	Multi Corer	max depth/on ground	Boko, maxSL: 1966m	1942.5500	56° 41.153' S	079° 41.869' E
SO272_16-2	15/02/2020 12:57:07	Multi Corer	hoisting	Beg. hieven, maxSZ: 26,0kN	1943.1600	56° 41.155' S	079° 41.872' E
SO272_16-2	15/02/2020 14:02:28	Multi Corer	on deck		1945.1000	56° 41.147' S	079° 41.869' E
SO272_16-2	15/02/2020 14:03:53	Multi Corer	station end		1942.9800	56° 41.146' S	079° 41.868' E
SO272_17-1	15/02/2020 16:11:51	Gravity Corer	station start	GeoB24010, GC- 6m	2702.0000	56° 41.570' S	080° 19.609' E
SO272_17-1	15/02/2020 16:19:18	Gravity Corer	in the water	FW2/SPW2	2700.3900	56° 41.560' S	080° 19.604' E
SO272_17-1	15/02/2020 17:08:08	Gravity Corer	max depth/on ground	BOKO, SLmax: 2733m	2698.8900	56° 41.564' S	080° 19.603' E
SO272_17-1	15/02/2020 17:09:15	Gravity Corer	hoisting	Beginn hieven, SZmax: 56,4kN	2698.2300	56° 41.565' S	080° 19.602' E
SO272_17-1	15/02/2020 18:05:59	Gravity Corer	on deck		2698.7800	56° 41.563' S	080° 19.603' E
SO272_17-1	15/02/2020 18:07:18	Gravity Corer	station end		2701.1100	56° 41.564' S	080° 19.600' E

Station	Date / Time UTC	Device	Action	Comment (Action)	Depth (m)	Latitude	Longitude
SO272_17-2	15/02/2020 18:09:34	Float	station start	ARGO-Float # 8846	2698.8300	56° 41.566' S	080° 19.595' E
SO272_17-2	15/02/2020 18:13:40	Float	in the water		2696.3800	56° 41.572' S	080° 19.508' E
SO272_17-2	15/02/2020 18:13:40	Float	station end		2696.3800	56° 41.572' S	080° 19.508' E
SO272_18-1	15/02/2020 18:20:41	Seismic Towed Receiver	station start		2716.7100	56° 41.392' S	080° 19.823' E
SO272_18-1	15/02/2020 18:22:26	Seismic Towed Receiver	information	Endboje zu Wasser	2726.3400	56° 41.377' S	080° 20.028' E
SO272_18-1	15/02/2020 18:29:56	Seismic Towed Receiver	information	Bird # 01 zu Wasser	2766.9400	56° 41.337' S	080° 20.835' E
SO272_18-1	15/02/2020 18:36:37	Seismic Towed Receiver	information	Bird # 02 zu Wasser	2830.2300	56° 41.308' S	080° 21.645' E
SO272_18-1	15/02/2020 18:43:30	Seismic Towed Receiver	information	Bird # 03 zu Wasser	2875.0800	56° 41.277' S	080° 22.399' E
SO272_18-1	15/02/2020 18:50:26	Seismic Towed Receiver	information	Bird # 04 zu Wasser	2924.6100	56° 41.252' S	080° 23.291' E
SO272_18-1	15/02/2020 18:57:16	Seismic Towed Receiver	information	Bird # 05 zu Wasser	2997.8100	56° 41.255' S	080° 24.332' E
SO272_18-1	15/02/2020 19:04:28	Seismic Towed Receiver	information	Bird # 06 zu Wasser	3070.5900	56° 41.231' S	080° 25.262' E
SO272_18-1	15/02/2020 19:11:53	Seismic Towed Receiver	information	Bird # 07 zu Wasser	3099.4200	56° 41.186' S	080° 26.209' E
SO272_18-1	15/02/2020 19:19:48	Seismic Towed Receiver	information	Bird # 08 zu Wasser	3106.1700	56° 41.131' S	080° 27.301' E
SO272_18-1	15/02/2020 19:27:51	Seismic Towed Receiver	information	Bird # 09 zu Wasser	3145.3200	56° 41.077' S	080° 28.355' E
SO272_18-1	15/02/2020 19:36:30	Seismic Towed Receiver	information	Bird # 10 zu Wasser	3185.1000	56° 41.018' S	080° 29.457' E
SO272_18-1	15/02/2020 19:45:43	Seismic Towed Receiver	information	Bird # 11 zu Wasser	3138.3500	56° 40.952' S	080° 30.631' E
SO272_18-1	15/02/2020 19:50:22	Seismic Towed Receiver	information	Bird # 12 zu Wasser	3200.4500	56° 40.922' S	080° 31.218' E
SO272_18-1	15/02/2020 19:54:35	Seismic Towed Receiver	information	Bird # 13 zu Wasser	3259.4500	56° 40.890' S	080° 31.741' E

Station	Date / Time UTC	Device	Action	Comment (Action)	Depth (m)	Latitude	Longitude
SO272_18-1	15/02/2020 20:02:06	Seismic Towed Receiver	information	Streamer komplett zu Wasser	3253.9100	56° 40.841' S	080° 32.699' E
SO272_18-1	15/02/2020 20:06:51	Seismic Towed Receiver	information	Airguns zu Wasser	3256.8300	56° 40.805' S	080° 33.302' E
SO272_18-1	15/02/2020 20:12:54	Seismic Towed Receiver	information	Airguns soft start	3303.2500	56° 40.763' S	080° 34.189' E
SO272_18-1	15/02/2020 20:43:48	Seismic Towed Receiver	information	Airguns auf full power	3427.6800	56° 40.502' S	080° 38.828' E
SO272_18-1	15/02/2020 20:45:00	Seismic Towed Receiver	profile start	AWI-20200017, rwK: 084°, d: 17sm	3431.8100	56° 40.492' S	080° 39.008' E
SO272_18-1	16/02/2020 00:04:40	Seismic Towed Receiver	profile end		4411.0700	56° 38.829' S	081° 09.079' E
SO272_18-1	16/02/2020 00:05:40	Seismic Towed Receiver	alter course	Beg. drehen über Bb	4405.0700	56° 38.809' S	081° 09.222' E
SO272_18-1	16/02/2020 00:19:07	Seismic Towed Receiver	profile start	AWI-20200018, rwk: 000°d: 47sm	4384.9300	56° 37.975' S	081° 10.334' E
SO272_18-1	16/02/2020 09:40:01	Seismic Towed Receiver	alter course	rwK: 329°, d: 48sm	4629.8300	55° 51.441' S	081° 09.890' E
SO272_18-1	16/02/2020 18:58:05	Seismic Towed Receiver	alter course	auf rwK: 321°, d: 23nm	3763.9100	55° 09.891' S	080° 26.466' E
SO272_18-1	16/02/2020 23:26:53	Seismic Towed Receiver	profile end		3622.7600	54° 51.912' S	080° 00.951' E
SO272_18-1	16/02/2020 23:42:02	Seismic Towed Receiver	information	Airguns aus	3628.6200	54° 50.854' S	079° 59.606' E
SO272_18-1	16/02/2020 23:46:21	Seismic Towed Receiver	information	Beginn Bergung Airguns	3613.4000	54° 50.628' S	079° 59.253' E
SO272_18-1	16/02/2020 23:56:15	Seismic Towed Receiver	on deck	Airguns an Deck	3617.0000	54° 50.304' S	079° 58.294' E
SO272_18-1	17/02/2020 00:04:03	Seismic Towed Receiver	information	Beg. hieven Streamer	3605.7500	54° 50.063' S	079° 57.509' E
SO272_18-1	17/02/2020 00:09:25	Seismic Towed Receiver	information	1. Bird an Deck	3600.1000	54° 49.911' S	079° 57.021' E

Station	Date / Time UTC	Device	Action	Comment (Action)	Depth (m)	Latitude	Longitude
SO272_18-1	17/02/2020 00:15:57	Seismic Towed Receiver	information	2. Bird an Deck	3603.7100	54° 49.732' S	079° 56.400' E
SO272_18-1	17/02/2020 00:22:28	Seismic Towed Receiver	information	3. Bird an Deck	3609.1200	54° 49.548' S	079° 55.800' E
SO272_18-1	17/02/2020 00:35:15	Seismic Towed Receiver	information	4. Bird an Deck	3624.5600	54° 49.162' S	079° 54.595' E
SO272_18-1	17/02/2020 00:48:25	Seismic Towed Receiver	information	5. Bird an Deck	3638.2400	54° 48.766' S	079° 53.269' E
SO272_18-1	17/02/2020 01:00:47	Seismic Towed Receiver	information	6. Bird an Deck	3650.9600	54° 48.416' S	079° 52.116' E
SO272_18-1	17/02/2020 01:11:31	Seismic Towed Receiver	information	7. Bird an Deck	3657.7300	54° 48.150' S	079° 51.124' E
SO272_18-1	17/02/2020 01:22:32	Seismic Towed Receiver	information	8. Bird an Deck	3655.6800	54° 47.851' S	079° 50.022' E
SO272_18-1	17/02/2020 01:33:00	Seismic Towed Receiver	information	9. Bird an Deck	3661.2900	54° 47.573' S	079° 48.983' E
SO272_18-1	17/02/2020 01:42:07	Seismic Towed Receiver	information	10. Bird an Deck	3683.3800	54° 47.358' S	079° 48.070' E
SO272_18-1	17/02/2020 01:50:56	Seismic Towed Receiver	information	11. Bird an Deck	3755.8200	54° 47.155' S	079° 47.190' E
SO272_18-1	17/02/2020 01:59:44	Seismic Towed Receiver	information	12. Bird an Deck	3807.9400	54° 46.934' S	079° 46.320' E
SO272_18-1	17/02/2020 02:03:06	Seismic Towed Receiver	information	13. Bird an Deck	3830.5800	54° 46.873' S	079° 45.993' E
SO272_18-1	17/02/2020 02:10:21	Seismic Towed Receiver	information	Endboje an Deck	3853.4500	54° 46.705' S	079° 45.280' E
SO272_18-1	17/02/2020 02:17:20	Seismic Towed Receiver	station end		3821.2700	54° 46.489' S	079° 44.615' E
SO272_19-1	17/02/2020 03:28:30	Gravity Corer	station start	GeoB24011	3626.3000	54° 51.850' S	080° 00.796' E
SO272_19-1	17/02/2020 03:33:24	Gravity Corer	in the water	GC 12m	3619.8300	54° 51.847' S	080° 00.822' E
SO272_19-1	17/02/2020 04:38:44	Gravity Corer	max depth/on ground	BOKO, SLmax: 3657m	3623.9600	54° 51.826' S	080° 00.822' E



Station	Date / Time UTC	Device	Action	Comment (Action)	Depth (m)	Latitude	Longitude
SO272_19-1	17/02/2020 04:39:06	Gravity Corer	hoisting	Beginn hieven, SZmax: 91,9kN	3624.7300	54° 51.825' S	080° 00.819' E
SO272_19-1	17/02/2020 05:51:13	Gravity Corer	on deck		3614.1200	54° 51.822' S	080° 00.829' E
SO272_19-1	17/02/2020 05:53:18	Gravity Corer	station end		3623.8900	54° 51.825' S	080° 00.833' E