

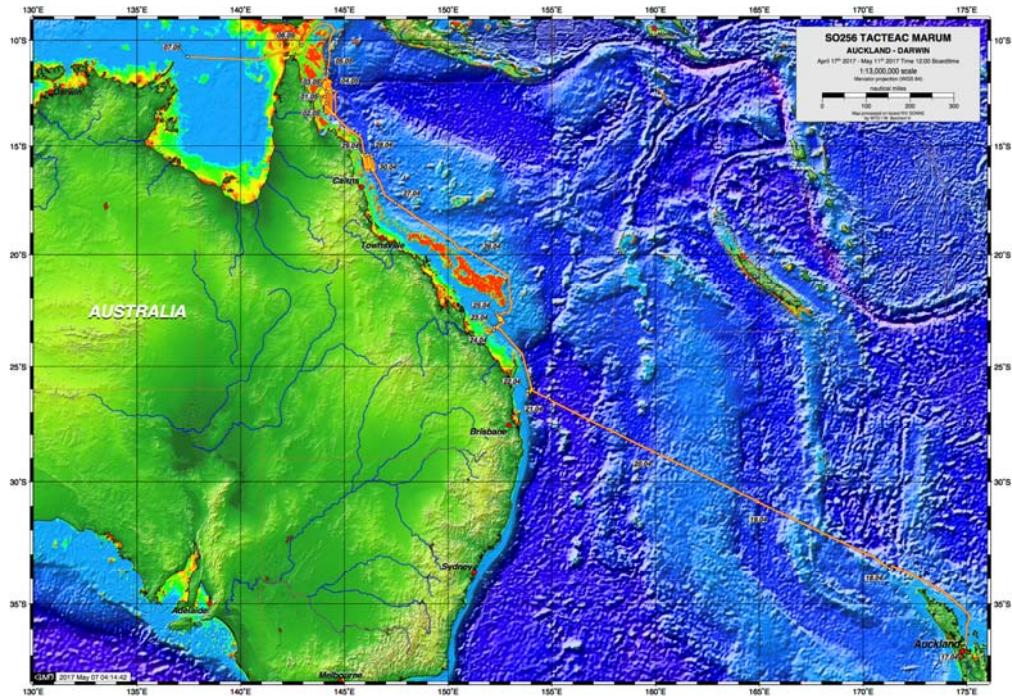
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Short Cruise Report RV SONNE SO256

Auckland (New Zealand) – Darwin (Australia)
17.04.2017 – 09.05.2017

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Captain: Oliver Meyer



Objectives

The East Australian Current (EAC) is one of the two main western boundary currents of the Pacific that transports large amount of heat out of the Western Pacific Warm Pool into the subtropics and subpolar regions, thereby regulating the global climate. The few existing reconstructions of past changes in transport and temperature of the EAC are contradictory resulting in a knowledge gap in long-term variability of the southwest Pacific currents, which in turn hampers a reliable projection of future tropical and subtropical climate development. Since sea surface temperature (SST) changes in this area also influence the climate of the eastern and northeastern Australia it is planned to investigate proxies for rainfall and dust in the collected sample material in order to reconstruct the continental climate and its relation to regional SST changes. In this expedition, we aimed to collect sediments and fossil corals at several sites along the EAC between 12° and 26°S in order to assess seasonal to multi-millennial changes in sea surface temperature and circulation of the Coral Sea and their effect on regional and global climate.

Narrative

The expedition started on April 17 at 10 AM. During the transit from Auckland to the southern Queensland margin the EM122 multibeam and Parasound sub-bottom profiler were started on April 18 once inside Australian waters. After more than 4 days of transit, we finally reached the designated working area 1 off Fraser Island in the afternoon of Friday, April 21, and immediately started the sampling campaign with a CTD-rosette cast. We sampled 2500 m of water column for oxygen, nitrogen and carbon isotopes, nutrients, uranium and radiocarbon at 23 different depths. Upslope at 1700 m, sediments were successfully sampled using a Multiple Corer (MUC) and a Gravity Corer (GC). The overnight swath bathymetry and sub-bottom profiling of the shelf edge were followed by dredging on the paleo-shorelines features between ~110 and 80 m on April 22. Dredging operations were successful breaking of fist-sized limestones from ~ 92 m water depth. The next Giant Box Corer (GBC) deployment recovered surface sediments rich in benthic biota, mainly coralline algae and benthic foraminifera. We returned to site GeoB22201 and sampled the sediment with a GC before leaving for the second working area, where we started with the site survey on Sunday, April 23. In accordance with the permit conditions for the Great Barrier Reef Marine Park, we deployed a video telemetry system attached to the Multiple Corer in order to survey the designated dredging areas in advance. The system provided images of extraordinary high quality and enabled us to survey two transects at 120 and 90 m water depths, which revealed an intact live coral reef community growing on top of fossil reef structures. While bathymetric lows are covered by unlithified carbonate sediments, the surface of the “pinnacles” are characterized by a highly complex, honeycomb style outcrop with large cavities with abundant attached biota and fish life. These are the first moving pictures of such coral communities in the Great Barrier Reef (GBR) at these depths and of great importance for further mapping, managing, and protecting such structures in the GBR.

The systematic EM710 multibeam and Parasound survey over the One Tree shelf lying to the east of the Capricorn-Bunker Group of islands in the southern GBR covered ~109 km² with depths ranging from 50 to 200 m revealing the shelf break together with multiple terraces and numerous low pinnacles. We continued with the video telemetry in the southern part of the third working area (GeoB22209, 152° 11' E, 23° 25' S). We traversed southeast for about 300 m over the top of a ridge (paleo-reef) structure at 90 m water depth. The substrate was mainly covered by soft sediments with isolate patches of

limestone outcrop covered by attached biota (e.g. sponges, red coralline algae). More complex pinnacle structures occurred towards the end of the traverse with their sides and tops characterized by rough substrates and abundant attached biota.

We sampled the northern part of the study area with a GBC at 90 m water depth and recovered rather homogenous medium to coarse carbonate sand with few pebbles on top and abundant benthic foraminifera. Sediments were recovered with a GC deployed at 120 m water depth followed by two GC deployments at 200 and 240 m water depth (recovery between 5 and 6 m) on the way to the Capricorn Channel further east. The overnight survey along a scarp rimming the channel in ~200 m revealed drift deposit-like sediments on the downslope side and low pinnacles on the upslope platform. We sampled the southern part of the channel at 340 m water depth with a GC recovering more than 5 m of sandy to clayey mud, and the northern part of the channel with a GBC and two GC at 120 m water depth and recovered clayey sand with patches of ooids.

On Tuesday 25 April, we transited around the eastern side of the Swain Reefs over the South Marion Plateau, stopping briefly for a camera survey over a previously mapped patch of low pinnacles lying in 100 m. We rounded Elusive Reef at the northeast tip of the Swain Reefs on Wednesday 26 April and crossed onto the North Marion Plateau in about 350 m. There, we recovered the top ~9 m of sediment at the ODP site 194 (GeoB22218-1, 152°48' E, 20°54' S). We crossed the tail of a large submarine landslide, sourced from the GBR shelf, to the west of Elusive Reef. We continued along the plateau for Hydrographers Passage and the Southern Queensland Trough and deployed one GC in each area before arriving at the Gloria Knolls, which are the remains of large submarine landslide from the GBR margin. We deployed a CTD-rosette water sampler followed by a MUC with the video-telemetry for surveying and recording this sampling technique. With a GC, we recovered the top 6 m of sediments before heading to the Ribbon Reefs. Underway in the Central Queensland Trough, we deployed two GCs in order to collect mass wasting deposits and hemipelagic sediments in close vicinity.

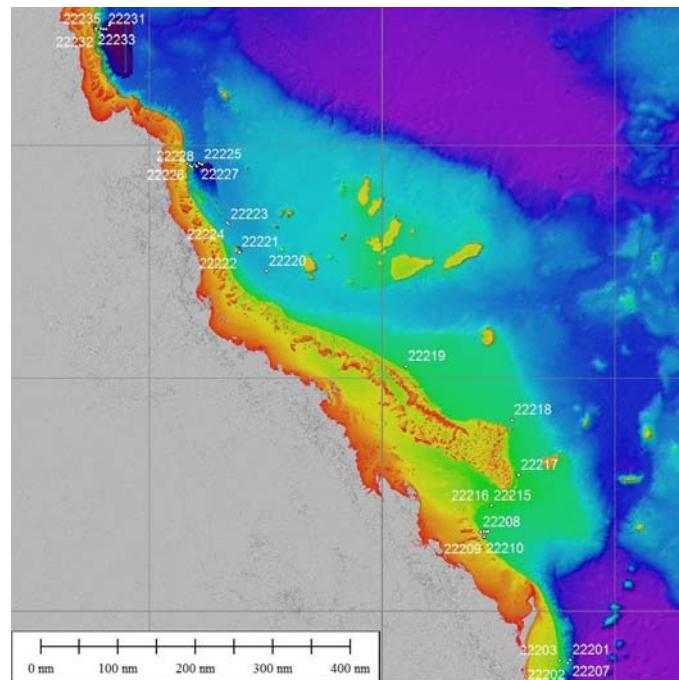
From Friday 28 to Sunday 30 April, we conducted extensive swath mapping near the Ribbon Reefs on the northern GBR margin. Depths ranged from 400 m on the upper slope to depths over 2000 m, heavily incised with a submarine canyon system, and draining into the relatively flat Queensland Trough. We sampled the Ribbon Reef working area with CTD-rosette, several MUCs and GCs in a depth transect from 800 m to 2200 m. After a long transit to our final working area in the northern GBR off Cape York, we started an extensive swath mapping that revealed large deep-cutting canyons between 600 and 2200 m water depth in this area, which have not been mapped before. The flanks and tops of the canyons were barren of sediments and thus, we deployed the water and sediment sampling campaign at deeper depths between 2200 and 3000 m. In the morning of May 5, we left the final study area towards the Torres Strait for a 4-day transit to Darwin.



Deployment of the multiple corer with the video telemetry system (left) and a snapshot of the sampling technique on Gloria Knolls (GeoB22222-2).

Acknowledgements

We thank the captain and the crew of SO256 for their kind assistance throughout the cruise. This project is funded by the German Ministry for Education and Research (BMBF) project 03G0256A.



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Abkürzungen / Abbreviation

z.W.	zu Wasser / into water
a.D.	an Deck / on deck
SLmax	(maximale) Seillänge / max. rope-length
LT	Lottiefe nach EM 122 / Depth of EM 122
W ...	eingesetzte Winde / Winch used
nm	Seemeilen / nautical miles
EM/PS	SIMRAD Multibeam / Parasound
rwk / COG:	Rechtweisender Kurs / true course
d:	Distanz / distance
v:	Geschwindigkeit in Knoten / SOG in knots
SL:	Seillänge / rope-length
SZ:	Seilzug / rope tension

Eingesetzte Geräte / Equipment used

CTD	4
MUC	14
Gravity Corer GC	23
Dredge	5
Kastengreifer	3

Einsätze / tasks

Σ 49

Geräteverluste / lost Equipment: keine

Station	Date / Time UTC	Device	Device Abbreviation	Action	Comment (Station)	Comment (Device Op)	Comment (Action)	Expedition Fixed	Latitude	Longitude	Depth (m)	Speed (kn)	Wind Dir	Wind speed (m/s)	Course
Station - Device	date time	Device	Device Code	Action	Comment (Station)	Comment (Device Opera)	Comment (Action)	Expedition Fixed	Latitude	Longitude	Depth (m)	Speed (kn)	Vind Dir	Wind Speed (m/s)	Course
SO256_1-1	21.04.2017 03:56:00	CTD	CTD	station start			GeoB22201	f	26° 3,039' S	154° 2,980' E	2495	0,3	134,9	11,4	159,3
SO256_1-1	21.04.2017 04:02:20	CTD	CTD	in the water			EL2	f	26° 3,042' S	154° 2,977' E	2507,7	0,5	124,1	12,1	61,6
SO256_1-1	21.04.2017 05:08:20	CTD	CTD	max depth/on ground			SLmax: 2450m	f	26° 3,030' S	154° 2,980' E	2504,9	0,9	133,1	9,4	41,8
SO256_1-1	21.04.2017 05:09:00	CTD	CTD	hoisting			SZmax: 17,0kN	f	26° 3,030' S	154° 2,981' E	2511,3	0,2	136	9,1	342,6
SO256_1-1	21.04.2017 06:24:15	CTD	CTD	on deck				f	26° 3,037' S	154° 2,977' E	2508,6	0,9	125,3	8,4	228,3
SO256_1-1	21.04.2017 06:26:12	CTD	CTD	station end				f	26° 3,037' S	154° 2,980' E	2519,4	0,3	131,6	8,8	71,4
SO256_2-1	21.04.2017 08:22:03	Multi Corer	MUC	station start			GeoB22202-1	f	26° 7,810' S	153° 59,365' E	975,1	0,7	135,2	9,5	258,4
SO256_2-1	21.04.2017 08:23:29	Multi Corer	MUC	in the water				f	26° 7,806' S	153° 59,360' E	963,3	0,4	141,2	9,2	22,2
SO256_2-1	21.04.2017 08:27:09	Multi Corer	MUC	information			Posidonia bei SL: 50m	f	26° 7,812' S	153° 59,365' E	976,5	0,4	139,6	9,3	135,4
SO256_2-1	21.04.2017 09:13:43	Multi Corer	MUC	max depth/on ground			Boko, maxSL: 973m	f	26° 7,818' S	153° 59,366' E	964,8	0,2	120,1	9,1	83,3
SO256_2-1	21.04.2017 09:36:31	Multi Corer	MUC	on deck				f	26° 7,807' S	153° 59,366' E	972,6	0,1	148,6	11,1	254,9
SO256_2-1	21.04.2017 10:27:48	Multi Corer	MUC	station end				f	26° 7,818' S	153° 59,366' E	976,6	0,1	119,6	8,4	21,4
SO256_2-2	21.04.2017 10:28:51	Gravity Corer	GC	station start			GeoB22202-2	f	26° 7,818' S	153° 59,366' E	974,8	0,7	127,9	8,1	12,6
SO256_2-2	21.04.2017 10:30:23	Gravity Corer	GC	in the water				f	26° 7,818' S	153° 59,366' E	974,8	0,1	142,4	8,9	114,9
SO256_2-2	21.04.2017 10:50:30	Gravity Corer	GC	max depth/on ground			SLmax: 980m	f	26° 7,806' S	153° 59,365' E	978,7	0,5	123,2	12,5	346,8
SO256_2-2	21.04.2017 10:50:52	Gravity Corer	GC	hoisting			SZmax: 35,2 KN	f	26° 7,806' S	153° 59,365' E	974,3	0	123	12	160,6
SO256_2-2	21.04.2017 11:15:58	Gravity Corer	GC	on deck				f	26° 7,812' S	153° 59,364' E	974,7	0,9	117,1	12,7	285,2
SO256_2-2	21.04.2017 11:17:33	Gravity Corer	GC	station end				f	26° 7,811' S	153° 59,360' E	973,1	0,1	122,8	12	206
SO256_3-1	21.04.2017 22:08:57	Dredge	DRG	station start			GeoB22203-1	f	26° 4,464' S	153° 49,281' E	104,1	1,8	121	12,3	326,2
SO256_3-1	21.04.2017 22:09:39	Dredge	DRG	in the water				f	26° 4,461' S	153° 49,280' E	101,7	0,5	116	15,3	113,4
SO256_3-1	21.04.2017 22:26:10	Dredge	DRG	information			Geraet an Deck wegen techn. Probleme	f	26° 4,451' S	153° 49,289' E	104,2	1	110,4	13,2	318,1
SO256_3-1	21.04.2017 22:37:23	Dredge	DRG	in the water				f	26° 4,454' S	153° 49,291' E	103,8	0,4	114,4	13,3	343,8
SO256_3-1	21.04.2017 22:41:27	Dredge	DRG	max depth/on ground			BoKo, SL:115m	f	26° 4,449' S	153° 49,295' E	103,3	0,3	128,8	14,1	356,5
SO256_3-1	21.04.2017 22:42:55	Dredge	DRG	profile start			rwK: 266°, d: 50m, FüG: 0,6kn	f	26° 4,447' S	153° 49,293' E	103,4	0,5	124,9	14,6	300,5
SO256_3-1	21.04.2017 22:47:39	Dredge	DRG	hoisting			SLmax: 170m	f	26° 4,448' S	153° 49,260' E	98,9	0,2	116,5	13,2	357,3
SO256_3-1	21.04.2017 22:53:31	Dredge	DRG	information			Dredge frei vom Grund, SL: 98m, SZmax: 170m	f	26° 4,442' S	153° 49,263' E	99,9	1,1	119,7	13,4	197,4
SO256_3-1	21.04.2017 22:58:06	Dredge	DRG	on deck				f	26° 4,451' S	153° 49,266' E	102,1	1,4	129,6	11,6	164,8
SO256_3-2	21.04.2017 23:29:18	Dredge	DRG	station start			GeoB22203-2	f	26° 4,453' S	153° 49,288' E	103	0,6	123,3	12,4	177,7
SO256_3-2	21.04.2017 23:29:25	Dredge	DRG	in the water				f	26° 4,453' S	153° 49,288' E	102,7	0,3	119,2	13,2	157,5
SO256_3-2	21.04.2017 23:33:48	Dredge	DRG	max depth/on ground			BoKo, SL: 114m	f	26° 4,451' S	153° 49,289' E	103,2	0,1	126,2	13,2	64,9
SO256_3-2	21.04.2017 23:35:20	Dredge	DRG	profile start			rwK: 266°, d: 80m, FüG: 0,6kn	f	26° 4,452' S	153° 49,283' E	101,5	0,6	123,8	12,4	240,6
SO256_3-2	21.04.2017 23:40:27	Dredge	DRG	profile end			SLmax: 180m	f	26° 4,454' S	153° 49,240' E	91,1	1	126,2	11,2	124,6
SO256_3-2	21.04.2017 23:40:56	Dredge	DRG	hoisting				f	26° 4,453' S	153° 49,244' E	91,1	0,8	120,2	12,1	159,8
SO256_3-2	21.04.2017 23:48:35	Dredge	DRG	information			Dredge frei vom Grund, SL: 93m, SZmax: 170m	f	26° 4,454' S	153° 49,240' E	91,1	0,2	112,2	12,9	236
SO256_3-2	21.04.2017 23:55:00	Dredge	DRG	on deck				f	26° 4,453' S	153° 49,241' E	92,2	0,8	124,1	12,8	341,6
SO256_3-2	21.04.2017 23:57:01	Dredge	DRG	station end				f	26° 4,453' S	153° 49,239' E	92,8	0,6	128,7	12,6	317,8
SO256_4-1	22.04.2017 00:14:54														

Station	Date / Time UTC	Device	Device Abbreviation	Action	Comment (Station)	Comment (Device Op)	Comment (Action)	Expedition Fixed	Latitude	Longitude	Depth (m)	Speed (kn)	Wind Dir	Wind speed (m/s)	Course
SO256_4-1	22.04.2017 00:39:24	Giant Box Corer	GKG	on deck				f	26° 4,271' S	153° 49,201' E	100,1	0,9	133	14	40,1
SO256_4-1	22.04.2017 01:00:18	Giant Box Corer	GKG	station end				f	26° 4,274' S	153° 49,204' E	99,7	0,8	122,1	11	28,4
SO256_5-1	22.04.2017 01:04:16	Dredge	DRG	profile start			rwK: 286°, d: 80m, FüG: 0,6kN	f	26° 4,276' S	153° 49,149' E	95,7	0,7	122,4	13,9	279,4
SO256_5-1	22.04.2017 01:07:26	Dredge	DRG	station start			GeoB22205-1	f	26° 4,278' S	153° 49,107' E	93,5	0,5	125,9	10,7	318,9
SO256_5-1	22.04.2017 01:10:27	Dredge	DRG	in the water				f	26° 4,276' S	153° 49,107' E	95	1,1	129	11,2	353,1
SO256_5-1	22.04.2017 01:13:26	Dredge	DRG	max depth/on ground			BoKo: SL: 100m	f	26° 4,270' S	153° 49,101' E	93,1	0,6	128,4	11,8	37,3
SO256_5-1	22.04.2017 01:19:20	Dredge	DRG	profile end				f	26° 4,260' S	153° 49,064' E	82,8	1,1	138,3	12,6	188,8
SO256_5-1	22.04.2017 01:19:29	Dredge	DRG	hoisting			SLmax: 175m	f	26° 4,260' S	153° 49,063' E	84,1	1,2	131,2	9,8	236,6
SO256_5-1	22.04.2017 01:24:34	Dredge	DRG	information			Dredge hakt bei SL: 126m, SZ: 92,	f	26° 4,262' S	153° 49,060' E	83,5	0,1	123	11,5	242,3
SO256_5-1	22.04.2017 01:33:34	Dredge	DRG	information			Verholen 40m voraus	f	26° 4,262' S	153° 49,062' E	89,2	0,7	131,8	10,2	346,7
SO256_5-1	22.04.2017 01:51:05	Dredge	DRG	information			Dredge von Grund SZmax: 92,5	f	26° 4,267' S	153° 49,086' E	91	0,3	128,8	11	157,2
SO256_5-1	22.04.2017 01:55:41	Dredge	DRG	on deck				f	26° 4,268' S	153° 49,085' E	89,4	0,4	140,6	12,4	332,4
SO256_5-1	22.04.2017 02:00:25	Dredge	DRG	station end				f	26° 4,266' S	153° 49,085' E	89,4	0,9	124,7	14,1	151,5
SO256_6-1	22.04.2017 02:22:30	Dredge	DRG	station start			GeoB22206-1	f	26° 4,562' S	153° 49,002' E	79,8	1,7	127,1	11,9	170,7
SO256_6-1	22.04.2017 02:24:07	Dredge	DRG	in the water			FW2 / SPW2	f	26° 4,565' S	153° 48,998' E	80,8	0,5	134,1	11,5	57,5
SO256_6-1	22.04.2017 02:36:26	Dredge	DRG	max depth/on ground			Boko, SL: 89m	f	26° 4,583' S	153° 48,971' E	79,9	0,3	135,4	10,6	65,8
SO256_6-1	22.04.2017 02:37:56	Dredge	DRG	profile start			rwK: 050°, d: 65m	f	26° 4,582' S	153° 48,971' E	81,2	0,3	138,7	9,8	298,5
SO256_6-1	22.04.2017 02:42:48	Dredge	DRG	hoisting			SLmax: 155m	f	26° 4,564' S	153° 49,004' E	80,5	0,1	113,5	12,7	271
SO256_6-1	22.04.2017 02:49:47	Dredge	DRG	information			frei vom Grund, SZmax: 2,0kN + ~	f	26° 4,565' S	153° 49,005' E	80,6	0,4	129,2	12,6	191
SO256_6-1	22.04.2017 02:56:36	Dredge	DRG	on deck				f	26° 4,565' S	153° 49,002' E	80,5	1,2	125,2	10,8	28,3
SO256_6-1	22.04.2017 02:58:17	Dredge	DRG	station end				f	26° 4,563' S	153° 49,005' E	80,9	1,2	128,5	11	31,9
SO256_6-2	22.04.2017 03:03:32	Dredge	DRG	station start			GeoB22206-1	f	26° 4,586' S	153° 48,966' E	80,8	1,1	146,1	11,2	175,9
SO256_6-2	22.04.2017 03:05:14	Dredge	DRG	in the water			FW2/SPW2	f	26° 4,585' S	153° 48,967' E	80,9	1,3	138,5	11,2	19,7
SO256_6-2	22.04.2017 03:09:12	Dredge	DRG	max depth/on ground			Boko, SL 92m	f	26° 4,585' S	153° 48,970' E	85,1	0,8	134,6	14,1	120
SO256_6-2	22.04.2017 03:09:55	Dredge	DRG	profile start			rwK: 056°, d: 75m	f	26° 4,586' S	153° 48,971' E	81,1	0,4	139	11	295,1
SO256_6-2	22.04.2017 03:15:17	Dredge	DRG	hoisting			SLmax: 183m	f	26° 4,563' S	153° 49,005' E	80,2	0,3	139,4	12,9	147,6
SO256_6-2	22.04.2017 03:26:31	Dredge	DRG	information			frei vom Grund, SZmax: 1,6kN + ~	f	26° 4,564' S	153° 49,007' E	80,1	0,1	131,7	12	251,8
SO256_6-2	22.04.2017 03:32:58	Dredge	DRG	on deck			leere Dredge	f	26° 4,565' S	153° 49,010' E	81,2	0,4	138	11,6	140,1
SO256_6-2	22.04.2017 03:35:17	Dredge	DRG	station end				f	26° 4,565' S	153° 49,016' E	80,4	1,2	138,1	12,1	127,1
SO256_7-1	22.04.2017 04:55:24	Gravity Corer	GC	station start			GeoB22207-1 GC-6m	f	26° 2,995' S	154° 3,004' E	2541,2	0,6	140,3	13,1	15,2
SO256_7-1	22.04.2017 04:57:55	Gravity Corer	GC	in the water			FW2/ SPW2	f	26° 2,999' S	154° 2,999' E	2544,7	0,9	142,3	13,9	351,1
SO256_7-1	22.04.2017 05:43:50	Gravity Corer	GC	max depth/on ground			SLmax: 2544m	f	26° 2,997' S	154° 3,000' E	2527,8	1	152,8	12,4	344,9
SO256_7-1	22.04.2017 05:44:03	Gravity Corer	GC	hoisting			SZmax: 42,9kN	f	26° 2,997' S	154° 3,000' E	2542,7	0,5	151	12,3	33,7
SO256_7-1	22.04.2017 06:35:40	Gravity Corer	GC	on deck				f	26° 3,003' S	154° 3,002' E	2535,8	0,3	136,8	9,5	182,9
SO256_7-1	22.04.2017 06:40:38	Gravity Corer	GC	station end				f	26° 2,946' S	154° 3,051' E	2525,4	4,4	132,9	11,5	36
SO256_8-1	23.04.2017 06:49:49	Multi Corer	MUC	station start			GeoB22208-1	f	23° 18,734' S	152° 7,578' E	89,5	0	66,8	5,8	56,2
SO256_8-1	23.04.2017 06:51:13	Multi Corer	MUC	in the water				f	23° 18,733' S	152° 7,578' E	89,5	0,2	60,3	7,6	216,4
SO256_8-1	23.04.2017 06:53:50	Multi Corer	MUC	information			Posidonia bei SL: 30m	f	23° 18,734' S	152° 7,588' E	92,4	0,6	62,5	6,5	42,3
SO256_8-1	23.04.2017 06:58:16	Multi Corer	MUC	information			Bosi, SL: 77m	f	23° 18,736' S	152° 7,613' E	94,4	0,6	73,6	7	17,8
SO256_8-1	23.04.2017 07:09:17	Multi Corer	MUC	information			Bildausfall; SL: 107 m; Hieven bis SL	f	23° 18,742' S	152° 7,671' E	106	0,2	91,8	5,9	95,7
SO256_8-1	23.04.2017 07:26:17	Multi Corer	MUC	information			Fortsetzung	f	23° 18,741' S	152° 7,704' E	110	0,5	101,4	5,2	353,8
SO256_8-1	23.04.2017 07:50:07	Multi Corer	MUC	hoisting			SLmax: 120 m; Ohne Boko	f	23° 18,707' S	152° 7,814' E	128,5	0,5	112	8,1	121,2
SO256_8-1	23.04.2017 08:00:17	Multi Corer	MUC	on deck				f	23° 18,700' S	152° 7,824' E	124,9	0,2	115,1	8,8	270,3
SO256_8-1	23.04.2017 08:00:52	Multi Corer	MUC	station end				f</							

Station	Date / Time UTC	Device	Device Abbreviation	Action	Comment (Station)	Comment (Device Op)	Comment (Action)	Expedition Fixed	Latitude	Longitude	Depth (m)	Speed (kn)	Wind Dir	Wind speed (m/s)	Course
SO256_9-1	24.04.2017 00:15:22	Multi Corer	MUC	on deck				f	23° 25,646' S	152° 11,965' E	104,8	0,2	120,6	6,7	114,7
SO256_9-1	24.04.2017 00:20:43	Multi Corer	MUC	station end				f	23° 25,647' S	152° 11,966' E	104	0,4	149,1	7,6	222,6
SO256_10-1	24.04.2017 00:50:03	Giant Box Corer	GKG	station start			GeoB22210-1	f	23° 25,134' S	152° 11,272' E	86	0,4	128,8	7,1	195,4
SO256_10-1	24.04.2017 00:56:05	Giant Box Corer	GKG	in the water				f	23° 25,134' S	152° 11,271' E	85,2	0,2	125,2	6,5	349,7
SO256_10-1	24.04.2017 00:58:37	Giant Box Corer	GKG	max depth/on ground			BoKo, SLmax: 89m	f	23° 25,135' S	152° 11,273' E	85,3	0,6	118,7	6,3	48,1
SO256_10-1	24.04.2017 00:59:18	Giant Box Corer	GKG	hoisting			SZmax: 11,7kN	f	23° 25,134' S	152° 11,271' E	85,6	0,5	126,1	6,4	299
SO256_10-1	24.04.2017 01:08:39	Giant Box Corer	GKG	on deck				f	23° 25,134' S	152° 11,272' E	85,7	0,3	136,8	6,8	337,2
SO256_10-1	24.04.2017 01:10:54	Giant Box Corer	GKG	station end				f	23° 25,134' S	152° 11,271' E	85,9	0,3	144,6	6,9	236,6
SO256_11-1	24.04.2017 02:03:54	Gravity Corer	GC	station start			GeoB 22211-1 , GC 6m	f	23° 17,830' S	152° 11,545' E	222	0,6	120,1	6,8	214
SO256_11-1	24.04.2017 02:06:15	Gravity Corer	GC	in the water			FW2/SPW2	f	23° 17,843' S	152° 11,546' E	220,8	0,3	106,6	7,1	223,2
SO256_11-1	24.04.2017 02:11:49	Gravity Corer	GC	max depth/on ground			Boko, SLmax: 236m	f	23° 17,846' S	152° 11,550' E	222,1	0,4	111,5	7,6	249,9
SO256_11-1	24.04.2017 02:11:57	Gravity Corer	GC	hoisting			SZmax: 26,1 kN	f	23° 17,846' S	152° 11,550' E	221,9	0,3	109,2	7,6	234,2
SO256_11-1	24.04.2017 02:24:06	Gravity Corer	GC	on deck				f	23° 17,846' S	152° 11,549' E	221,3	0,1	118,8	8,3	24,4
SO256_11-1	24.04.2017 02:26:58	Gravity Corer	GC	station end				f	23° 17,865' S	152° 11,550' E	221,5	1,1	114,3	7,8	179,1
SO256_11-2	24.04.2017 02:32:41	Gravity Corer	GC	station start			GeoB 22211-2 , GC 6m	f	23° 17,847' S	152° 11,548' E	221,4	0,2	116,6	7,5	227,6
SO256_11-2	24.04.2017 02:37:43	Gravity Corer	GC	in the water			FW2/SPW2	f	23° 17,846' S	152° 11,550' E	221,8	0,2	126,7	7,8	110,6
SO256_11-2	24.04.2017 02:44:39	Gravity Corer	GC	max depth/on ground			Boko, SLmax: 233m	f	23° 17,847' S	152° 11,550' E	221,2	0,3	120,7	7,2	60,3
SO256_11-2	24.04.2017 02:44:42	Gravity Corer	GC	hoisting			SZmax: 27,3kN	f	23° 17,847' S	152° 11,550' E	221,7	0,5	123,2	7,8	260,3
SO256_11-2	24.04.2017 02:55:24	Gravity Corer	GC	on deck				f	23° 17,847' S	152° 11,550' E	221,4	0,1	127,4	7,9	302,9
SO256_11-2	24.04.2017 02:56:27	Gravity Corer	GC	station end				f	23° 17,847' S	152° 11,550' E	222,1	0,3	127,8	7,9	241
SO256_12-1	24.04.2017 03:28:36	Gravity Corer	GC	station start			GeoB 22212-1 , GC 6m	f	23° 17,846' S	152° 14,291' E	260,7	0,1	117,5	6,3	211,9
SO256_12-1	24.04.2017 03:31:00	Gravity Corer	GC	in the water			FW2/SPW2	f	23° 17,848' S	152° 14,290' E	247,4	0,1	110,2	5,6	338,4
SO256_12-1	24.04.2017 03:38:12	Gravity Corer	GC	max depth/on ground			Boko, SLmax: 262m	f	23° 17,848' S	152° 14,292' E	247,5	0,2	122,6	7,4	220
SO256_12-1	24.04.2017 03:38:31	Gravity Corer	GC	hoisting			SZmax: 25,5kN	f	23° 17,848' S	152° 14,290' E	247,9	0,3	132,1	7,4	269,3
SO256_12-1	24.04.2017 03:50:49	Gravity Corer	GC	on deck				f	23° 17,847' S	152° 14,291' E	247,8	0,1	121,1	7,2	54,5
SO256_12-1	24.04.2017 03:51:52	Gravity Corer	GC	station end				f	23° 17,848' S	152° 14,291' E	247,6	0,1	116,6	7,5	248,1
SO256_13-1	24.04.2017 04:23:30	Gravity Corer	GC	station start			BeoB 22213-1 , GC 6m	f	23° 17,853' S	152° 16,460' E	268	0,2	130,9	5,9	134,8
SO256_13-1	24.04.2017 04:25:46	Gravity Corer	GC	in the water			FW2/SPW2	f	23° 17,854' S	152° 16,464' E	267,3	0,2	128,3	6,6	129,6
SO256_13-1	24.04.2017 04:33:55	Gravity Corer	GC	max depth/on ground			Boko, SLmax: 285m	f	23° 17,854' S	152° 16,463' E	267,6	0,2	135,4	7,5	39,3
SO256_13-1	24.04.2017 04:34:05	Gravity Corer	GC	hoisting			SZmax: 27,3kN	f	23° 17,854' S	152° 16,463' E	267,6	0,3	134,6	7,1	33,8
SO256_13-1	24.04.2017 04:47:45	Gravity Corer	GC	on deck				f	23° 17,854' S	152° 16,464' E	267,8	0,2	162,3	9,6	137,7
SO256_13-1	24.04.2017 04:47:59	Gravity Corer	GC	station end				f	23° 17,854' S	152° 16,464' E	268,2	0,2	161,1	9,3	222,4
SO256_14-1	24.04.2017 07:22:24	Gravity Corer	GC	station start			GeoB 22214-1 , GC 6m	f	23° 6,707' S	152° 42,444' E	339,9	0,3	139,9	9,5	174
SO256_14-1	24.04.2017 07:26:19	Gravity Corer	GC	in the water				f	23° 6,709' S	152° 42,430' E	338,3	0,6	137,3	9,5	272
SO256_14-1	24.04.2017 07:36:31	Gravity Corer	GC	max depth/on ground			maxSL: 350m, maxSZ: 26,2kN	f	23° 6,709' S	152° 42,433' E	338,6	0,3	147,1	9	18,9
SO256_14-1	24.04.2017 07:50:14	Gravity Corer	GC	on deck				f	23° 6,712' S	152° 42,425' E	338,9	0,1	134,5	8,7	162,5
SO256_14-1	24.04.2017 07:50:28	Gravity Corer	GC	station end				f	23° 6,712' S	152° 42,425' E	339	0,3	137,6	8,5	32,5
SO256_15-1	24.04.2017 10:34:19	Giant Box Corer	GKG	station start			GeoB22216	f	22° 44,727' S	152° 21,055' E	120,3	0,2	135,7	8,3	200,8
SO256_15-1	24.04.2017 10:34:50	Giant Box Corer	GKG	in the water				f	22° 44,726' S	152° 21,055' E	121	0,3	140,9	8,2	272,1
SO256_15-1	24.04.2017 10:39:28	Giant Box Corer	GKG	max depth/on ground			BoKo SLmax: 129m	f	22° 44,725' S	152° 21,052' E	120,8	0,1	124,4	7,3	157,3
SO256_15-1	24.04.2017 10:39:57	Giant Box Corer	GKG	hoisting			SZmax: 43,5kN	f	22° 44,726' S	152° 21,052' E	120,4	0,1	122,1	8,4	199,9
SO256_15-1	24.04.2017 10:50:50	Giant Box Corer	GKG	on deck				f	22° 44,730' S	152° 21,051' E	120,8	0,4	116,6	9,4	258,4
SO256_15-1	24.04.2017 11:13:29	Giant Box Corer	GKG	station end				f	22° 44,731' S	152° 21,052' E	120,4	0,1	127,2	7,8	291,9
SO256															

Station	Date / Time UTC	Device	Device Abbreviation	Action	Comment (Station)	Comment (Device Op)	Comment (Action)	Expedition Fixed	Latitude	Longitude	Depth (m)	Speed (kn)	Wind Dir	Wind speed (m/s)	Course
SO256_17-1	25.04.2017 06:26:42	Multi Corer	MUC	in the water				f	22° 4,777' S	152° 56,714' E	97,5	0,3	117,7	4,1	179,9
SO256_17-1	25.04.2017 06:34:18	Multi Corer	MUC	information			Posidonia bei SL: 30m	f	22° 4,793' S	152° 56,710' E	94,1	0,2	112,3	3,4	72,8
SO256_17-1	25.04.2017 06:40:42	Multi Corer	MUC	information			Bosi, SL: 95m	f	22° 4,795' S	152° 56,711' E	94	0,3	118,5	3,3	48,9
SO256_17-1	25.04.2017 07:44:53	Multi Corer	MUC	hoisting			Beg. Hieven, maxSL: 116m	f	22° 4,821' S	152° 57,244' E	115,7	0,5	117,5	4,3	36,2
SO256_17-1	25.04.2017 07:56:03	Multi Corer	MUC	on deck				f	22° 4,821' S	152° 57,245' E	116,2	0,4	116,3	3,2	226,2
SO256_17-1	25.04.2017 08:06:05	Multi Corer	MUC	station end				f	22° 4,817' S	152° 57,247' E	114,9	0,4	123	3,5	196,1
SO256_18-1	25.04.2017 15:00:46	Gravity Corer	GC	station start			GeoB 22218-1 , GC 12m	f	20° 54,480' S	152° 47,898' E	356,3	0,8	14,3	2	321,3
SO256_18-1	25.04.2017 15:08:50	Gravity Corer	GC	in the water			FW2/SPW2	f	20° 54,479' S	152° 47,897' E	355,5	0,1	34,4	2	216,1
SO256_18-1	25.04.2017 15:17:25	Gravity Corer	GC	max depth/on ground			Boko, SLmax: 373m	f	20° 54,479' S	152° 47,896' E	356	0,7	33	2,3	275,4
SO256_18-1	25.04.2017 15:17:34	Gravity Corer	GC	hoisting			SZmax: 25,3kN	f	20° 54,479' S	152° 47,896' E	355,4	0,2	39	2,5	12,3
SO256_18-1	25.04.2017 15:37:52	Gravity Corer	GC	on deck				f	20° 54,475' S	152° 47,896' E	351,1	0,2	33,4	3,1	25
SO256_18-1	25.04.2017 15:38:51	Gravity Corer	GC	station end				f	20° 54,475' S	152° 47,896' E	365,4	0,1	36	2,8	348,3
SO256_19-1	26.04.2017 03:47:46	Gravity Corer	GC	station start			GeoB 22219-1 , GC 6m	f	19° 44,913' S	150° 30,906' E	235,8	0,4	213,9	2	272,4
SO256_19-1	26.04.2017 03:51:38	Gravity Corer	GC	in the water			FW2/SPW2	f	19° 44,917' S	150° 30,884' E	235,7	0,4	223,7	2,4	94,4
SO256_19-1	26.04.2017 04:00:04	Gravity Corer	GC	max depth/on ground			Boko, SLmax: 249m	f	19° 44,916' S	150° 30,880' E	235,5	0,1	215,7	1,2	77,6
SO256_19-1	26.04.2017 04:00:19	Gravity Corer	GC	hoisting			SZmax: 21,1kN	f	19° 44,916' S	150° 30,881' E	235,8	0,1	229,9	0,9	258,4
SO256_19-1	26.04.2017 04:16:31	Gravity Corer	GC	on deck				f	19° 44,917' S	150° 30,881' E	235,6	0,2	224,4	1,5	58,9
SO256_19-1	26.04.2017 04:17:09	Gravity Corer	GC	station end				f	19° 44,917' S	150° 30,881' E	235,4	0,2	205,4	2,3	347,7
SO256_20-1	26.04.2017 21:55:38	Gravity Corer	GC	station start			GeoB 22220-1, GC 9m	f	17° 41,867' S	147° 31,291' E	1294,8	0,5	160,3	1,2	272,5
SO256_20-1	26.04.2017 21:57:28	Gravity Corer	GC	in the water				f	17° 41,866' S	147° 31,291' E	1293,1	0,2	220	2	347,2
SO256_20-1	26.04.2017 22:26:15	Gravity Corer	GC	max depth/on ground			SLmax: 1313m	f	17° 41,869' S	147° 31,287' E	1292,4	0,1	219,5	1,1	273,6
SO256_20-1	26.04.2017 22:26:40	Gravity Corer	GC	hoisting			SZmax: 39,9KN	f	17° 41,869' S	147° 31,287' E	1292,2	0,1	220,7	1	300,1
SO256_20-1	26.04.2017 23:04:20	Gravity Corer	GC	on deck				f	17° 41,867' S	147° 31,289' E	1294,7	0,4	207,4	0,9	100,4
SO256_20-1	26.04.2017 23:08:46	Gravity Corer	GC	station end				f	17° 41,866' S	147° 31,288' E	1294,9	0,5	177,8	1,6	2,3
SO256_21-1	27.04.2017 02:20:33	CTD	CTD	station start			GeoB 22221-1 CTD	f	17° 17,913' S	146° 56,256' E	1166,4	0,8	160,6	2,9	325,1
SO256_21-1	27.04.2017 02:23:02	CTD	CTD	in the water			EL 2	f	17° 17,901' S	146° 56,245' E	1167,9	0,8	152,1	1,7	288,3
SO256_21-1	27.04.2017 02:58:58	CTD	CTD	max depth/on ground			SLmax: 1150m	f	17° 17,880' S	146° 56,219' E	1185,4	0,2	189,1	2,4	10,1
SO256_21-1	27.04.2017 03:00:00	CTD	CTD	hoisting			SZmax: 9,3kN	f	17° 17,879' S	146° 56,219' E	1185,4	0,1	171,9	2,5	146,8
SO256_21-1	27.04.2017 04:04:54	CTD	CTD	on deck				f	17° 17,876' S	146° 56,220' E	1183,4	0	172,1	3,2	105,6
SO256_21-1	27.04.2017 04:07:13	CTD	CTD	station end				f	17° 17,877' S	146° 56,220' E	1183,7	0,1	191,8	4,6	210
SO256_21-2	27.04.2017 04:08:55	Multi Corer	MUC	station start			GeoB 22221-2 ,MUC	f	17° 17,876' S	146° 56,220' E	1178,5	0,1	189,5	4,2	148,5
SO256_21-2	27.04.2017 04:46:26	Multi Corer	MUC	in the water			FW2/SPW2	f	17° 17,877' S	146° 56,222' E	1184,4	0	183,3	4	259,4
SO256_21-2	27.04.2017 05:17:13	Multi Corer	MUC	hoisting			SL1066m, hieven auf SL 200m da Probleme	f	17° 17,876' S	146° 56,219' E	1181,8	0	188,1	5,5	283,9
SO256_21-2	27.04.2017 05:34:31	Multi Corer	MUC	station end			Gerät ist noch im Wasser bei SL 2	f	17° 17,880' S	146° 56,220' E	1183,4	0,3	175,7	3,1	112,7
SO256_22-1	27.04.2017 05:52:56	Multi Corer	MUC	station start			GeoB 22222-1 , MUC, Gerät ist im Wasser	f	17° 17,695' S	146° 56,356' E	1168,9	0,8	175,9	3,3	191,6
SO256_22-1	27.04.2017 05:53:06	Multi Corer	MUC	lowering				f	17° 17,697' S	146° 56,355' E	1167,5	1	179,1	3,2	225,2
SO256_22-1	27.04.2017 06:16:52	Multi Corer	MUC	max depth/on ground			Boko, maxSL: 1182m	f	17° 17,698' S	146° 56,354' E	1168,4	0,2	172,8	2,1	138,1
SO256_22-1	27.04.2017 06:17:30	Multi Corer	MUC	hoisting			maxSZ: 23,1kN	f	17° 17,699' S	146° 56,354' E	1168,9	0,1	166	1,7	295,4
SO256_22-1	27.04.2017 06:42:34	Multi Corer	MUC	on deck				f	17° 17,699' S	146° 56,349' E	1167,7	0,2	NaN	NaN	99,7
SO256_22-1	27.04.2017 06:48:01	Multi Corer	MUC	station end				f	17° 17,701' S	146° 56,353' E	1171,2	0,1	174,1	3,8	154,9
SO256_22-2	27.04.2017 06:57:11	Multi Corer	MUC	station start			GeoB 22222-2	f	17° 17,702' S	146° 56,352' E	1169	0,2	157	3,5	120,2
SO256_22-2	27.04.2017 07:03:28	Multi Corer	MUC	in the water				f	17° 17,702' S	146° 56,348' E	1167,2	0,1	157,1	3,1	90,3
SO256_22-2	27.04.2017 07:31:51	Multi Corer	MUC	information			Bosi, SL: 1176m	f	17° 17,701' S	146° 56,349' E	1167,9	0,4	170,1	4,4	79,9

Station	Date / Time UTC	Device	Device Abbreviation	Action	Comment (Station)	Comment (Device Op)	Comment (Action)	Expedition Fixed	Latitude	Longitude	Depth (m)	Speed (kn)	Wind Dir	Wind speed (m/s)	Course
SO256_23-1	27.04.2017 14:17:25	Gravity Corer	GC	on deck				f	16° 41,743' S	146° 42,176' E	1565,5	0,1	105,2	1,8	325
SO256_23-1	27.04.2017 14:18:04	Gravity Corer	GC	station end				f	16° 41,743' S	146° 42,176' E	1565,7	0	98,3	2,1	46,6
SO256_24-1	27.04.2017 14:55:52	Gravity Corer	GC	station start			GeoB 22224-1 , GC-6m	f	16° 39,786' S	146° 40,464' E	1564,7	0,6	125,4	2,4	68,9
SO256_24-1	27.04.2017 15:01:58	Gravity Corer	GC	in the water			FW2/ SPW2	f	16° 39,777' S	146° 40,505' E	1566,5	0,3	131,2	3,3	148,8
SO256_24-1	27.04.2017 15:31:27	Gravity Corer	GC	max depth/on ground			Boko, SLmax: 1586m	f	16° 39,774' S	146° 40,507' E	1564,4	0,1	148,7	2,1	141,5
SO256_24-1	27.04.2017 15:32:06	Gravity Corer	GC	hoisting			SZmax: 39,6kN	f	16° 39,774' S	146° 40,507' E	1564,7	0,1	140,7	2,2	196,1
SO256_24-1	27.04.2017 16:09:30	Gravity Corer	GC	on deck				f	16° 39,780' S	146° 40,509' E	1567,7	0,1	161,9	4,3	255,7
SO256_24-1	27.04.2017 16:09:45	Gravity Corer	GC	station end				f	16° 39,780' S	146° 40,509' E	1567,6	0,1	163,9	4,2	350,5
SO256_25-1	27.04.2017 22:18:46	CTD	CTD	station start			GeoB22225	f	15° 24,116' S	146° 7,912' E	2227,9	0,2	163,2	7,8	115,4
SO256_25-1	27.04.2017 22:19:58	CTD	CTD	in the water				f	15° 24,113' S	146° 7,912' E	2224,3	0,3	163,6	7,6	353,4
SO256_25-1	27.04.2017 23:15:10	CTD	CTD	max depth/on ground			SLmax: 2150m	f	15° 24,119' S	146° 7,909' E	2229,3	0	156,4	11	84,5
SO256_25-1	28.04.2017 00:23:59	CTD	CTD	on deck				f	15° 24,114' S	146° 7,917' E	2226,3	0,1	151,3	11,8	60,1
SO256_25-1	28.04.2017 00:25:39	CTD	CTD	station end				f	15° 24,116' S	146° 7,918' E	2223,4	0,2	164,2	12,9	64,9
SO256_26-1	28.04.2017 04:52:07	Multi Corer	MUC	station start			GeoB 22226-1 , MUC	f	15° 23,387' S	145° 48,789' E	731,2	0,8	140,2	11,7	144,7
SO256_26-1	28.04.2017 04:53:36	Multi Corer	MUC	in the water			FW2/SPW2	f	15° 23,390' S	145° 48,790' E	736,5	0,2	143,4	11,5	317
SO256_26-1	28.04.2017 04:57:05	Multi Corer	MUC	information			bei SL 30m Transponder am Dra	f	15° 23,395' S	145° 48,792' E	739,7	0,1	153,4	11,3	239,7
SO256_26-1	28.04.2017 05:12:59	Multi Corer	MUC	information			Bodensicht, SL: 700m	f	15° 23,391' S	145° 48,795' E	739	0,1	148,6	9,8	194,2
SO256_26-1	28.04.2017 05:17:03	Multi Corer	MUC	profile start			rwK: 157°, d: 350m	f	15° 23,392' S	145° 48,797' E	740,9	0,1	162,8	10,4	272,5
SO256_26-1	28.04.2017 05:31:19	Multi Corer	MUC	information			Stop Profil, da kein Bild mehr, hieven 30m,	f	15° 23,453' S	145° 48,821' E	793,7	0,2	154,7	11,1	223,9
SO256_26-1	28.04.2017 05:35:00	Multi Corer	MUC	information			Bild wieder da bei SL 720m, wird wiede	f	15° 23,456' S	145° 48,820' E	797,2	0,2	157,4	10,8	239,9
SO256_26-1	28.04.2017 05:37:02	Multi Corer	MUC	information			Bodensicht bei SL 760m, Profil wird fo	f	15° 23,452' S	145° 48,816' E	790,9	0,1	149,5	11,3	285,4
SO256_26-1	28.04.2017 05:59:15	Multi Corer	MUC	hoisting			SLmax: 840m	f	15° 23,551' S	145° 48,860' E	887,9	0,3	152,9	10,1	162,4
SO256_26-1	28.04.2017 06:21:03	Multi Corer	MUC	on deck				f	15° 23,555' S	145° 48,862' E	892,8	0,2	146,5	11,1	290,6
SO256_26-1	28.04.2017 06:23:31	Multi Corer	MUC	station end				f	15° 23,550' S	145° 48,874' E	910,1	1,9	153,2	12,4	63,1
SO256_27-1	28.04.2017 08:04:52	Multi Corer	MUC	station start			GeoB22227-1	f	15° 22,880' S	146° 4,514' E	2237,6	0,1	140,5	11,8	190,2
SO256_27-1	28.04.2017 08:06:41	Multi Corer	MUC	in the water				f	15° 22,889' S	146° 4,511' E	2236,1	0,6	143,9	12,1	230,4
SO256_27-1	28.04.2017 08:57:42	Multi Corer	MUC	max depth/on ground			Boko, maxSL: 2251m	f	15° 22,932' S	146° 4,499' E	2236,3	0,3	140,9	11,2	314,1
SO256_27-1	28.04.2017 08:58:07	Multi Corer	MUC	hoisting			maxSZ: 36,5kN	f	15° 22,932' S	146° 4,498' E	2237,3	0,1	142,3	10,6	230,8
SO256_27-1	28.04.2017 09:39:56	Multi Corer	MUC	on deck				f	15° 22,926' S	146° 4,503' E	2239,8	0,1	133,1	11,2	275,3
SO256_27-1	28.04.2017 09:40:41	Multi Corer	MUC	station end				f	15° 22,925' S	146° 4,503' E	2234,8	0,3	131	10,4	324,3
SO256_27-2	28.04.2017 09:48:30	Gravity Corer	GC	station start			GeoB22227-2, GC 12m	f	15° 22,926' S	146° 4,503' E	2241,7	0,1	136,4	9,5	315,8
SO256_27-2	28.04.2017 09:53:37	Gravity Corer	GC	in the water				f	15° 22,925' S	146° 4,500' E	2237,7	0,3	131,3	10,8	127
SO256_27-2	28.04.2017 10:36:31	Gravity Corer	GC	max depth/on ground			SLmax: 2258m	f	15° 22,927' S	146° 4,502' E	2396,5	0,1	129,6	10,6	81,3
SO256_27-2	28.04.2017 10:36:52	Gravity Corer	GC	hoisting			SZmax: 44,4KN	f	15° 22,927' S	146° 4,502' E	2241,1	0,3	131,3	11	1,4
SO256_27-2	28.04.2017 11:27:59	Gravity Corer	GC	on deck				f	15° 22,926' S	146° 4,503' E	2240,6	0,3	124,2	10,3	184,2
SO256_27-2	28.04.2017 11:29:57	Gravity Corer	GC	station end				f	15° 22,926' S	146° 4,502' E	2237,9	0,3	123,5	10,6	169,4
SO256_28-1	28.04.2017 23:06:52	Gravity Corer	GC	station start			GeoB 22228-1 GC12m	f	15° 26,974' S	146° 1,310' E	2121,8	0,5	153,6	8,8	41,8
SO256_28-1	28.04.2017 23:17:15	Gravity Corer	GC	in the water				f	15° 26,978' S	146° 1,306' E	2121,8	0,2	NaN	NaN	290,5
SO256_28-1	28.04.2017 23:59:04	Gravity Corer	GC	max depth/on ground			SLmax: 2144m	f	15° 26,980' S	146° 1,305' E	2124,1	0,1	140,3	10,3	117,9
SO256_28-1	29.04.2017 00:00:27	Gravity Corer	GC	hoisting			SZmax: 45,5KN	f	15° 26,978' S	146° 1,304' E	2124,3	0,1	137,8	10,5	250,6
SO256_28-1	29.04.2017 00:50:39	Gravity Corer	GC	on deck				f	15° 26,979' S	146° 1,305' E	2122	0,2	125,8	11,9	126
SO256_28-1	29.04.2017 00:52:12	Gravity Corer	GC	station end				f	15° 26,979' S	146° 1,303' E	2125,6	0,1	137,7	8,7	251,5
SO256_28-2	29.04.2017 00:56:44	Multi Corer	MUC	station start			GeoB 22228-2	f	15° 26,980' S	146° 1,307' E	2121,5	0,2			

Station	Date / Time UTC	Device	Device Abbreviation	Action	Comment (Station)	Comment (Device Op)	Comment (Action)	Expedition Fixed	Latitude	Longitude	Depth (m)	Speed (kn)	Wind Dir	Wind speed (m/s)	Course
SO256_30-1	30.04.2017 02:41:43	Gravity Corer	GC	station start			GeoB 22230-1 , GC-12m	f	15° 26,454' S	145° 52,195' E	969,6	0,6	184,9	10,1	194,1
SO256_30-1	30.04.2017 02:47:52	Gravity Corer	GC	in the water			FW2/SPW2	f	15° 26,470' S	145° 52,196' E	969,7	0,2	184,2	8	267,6
SO256_30-1	30.04.2017 03:07:08	Gravity Corer	GC	max depth/on ground			Boko, SLmax: 986m	f	15° 26,471' S	145° 52,199' E	967,5	0,1	168,6	9,4	308,6
SO256_30-1	30.04.2017 03:07:30	Gravity Corer	GC	hoisting			SZmax: 36,7kN	f	15° 26,471' S	145° 52,199' E	964,8	0,1	168,7	9,4	305,7
SO256_30-1	30.04.2017 03:36:31	Gravity Corer	GC	on deck				f	15° 26,472' S	145° 52,192' E	966,8	0	152,3	10,9	261,6
SO256_30-1	30.04.2017 03:37:03	Gravity Corer	GC	station end				f	15° 26,472' S	145° 52,192' E	965,2	0,2	146,9	11,4	260,1
SO256_30-2	30.04.2017 03:41:20	Multi Corer	MUC	station start			GeoB 22230-2 , MUC	f	15° 26,472' S	145° 52,196' E	967,3	0,1	150,5	9,7	351,4
SO256_30-2	30.04.2017 03:42:49	Multi Corer	MUC	in the water			FW2/SPW2	f	15° 26,471' S	145° 52,197' E	968,4	0,2	159,1	10,7	55,8
SO256_30-2	30.04.2017 04:08:12	Multi Corer	MUC	max depth/on ground			Boko, SLmax: 999m	f	15° 26,473' S	145° 52,198' E	967,6	0,1	165,4	10	79,8
SO256_30-2	30.04.2017 04:08:26	Multi Corer	MUC	hoisting			SZmax: 21,9kN	f	15° 26,473' S	145° 52,198' E	967,4	0	171,6	10,8	53,9
SO256_30-2	30.04.2017 04:30:34	Multi Corer	MUC	on deck				f	15° 26,471' S	145° 52,193' E	969	0,1	179,5	11,2	39,1
SO256_30-2	30.04.2017 04:31:12	Multi Corer	MUC	station end				f	15° 26,470' S	145° 52,193' E	966,5	0,1	171,8	11,1	44,1
SO256_31-1	01.05.2017 00:24:15	CTD	CTD	station start			GeoB 22231	f	12° 30,109' S	144° 4,080' E	2822,1	0,2	111,1	3,8	343,1
SO256_31-1	01.05.2017 00:24:54	CTD	CTD	in the water				f	12° 30,109' S	144° 4,080' E	2819,2	0,3	122,4	4,4	301,8
SO256_31-1	01.05.2017 01:36:27	CTD	CTD	max depth/on ground			SLmax: 2750m	f	12° 30,110' S	144° 4,076' E	2818,7	0,1	129,3	4,8	272,7
SO256_31-1	01.05.2017 03:12:00	CTD	CTD	on deck				f	12° 30,110' S	144° 4,076' E	2817,8	0,1	122	6,7	244,7
SO256_31-1	01.05.2017 03:16:45	CTD	CTD	station end				f	12° 30,110' S	144° 4,075' E	2821,7	0,1	134,2	7,5	72,1
SO256_32-1	02.05.2017 04:08:31	Multi Corer	MUC	station start			GeoB 22232-1 , MUC	f	12° 31,994' S	143° 51,107' E	627,4	0,7	118,4	8,9	147,6
SO256_32-1	02.05.2017 04:20:06	Multi Corer	MUC	in the water			FW2/SPW2	f	12° 31,999' S	143° 51,108' E	632	0,3	109,6	7,5	239,9
SO256_32-1	02.05.2017 04:23:13	Multi Corer	MUC	information			bei SL 30m Transponder am Dra	f	12° 32,000' S	143° 51,109' E	629,7	0	122,2	7,6	101,5
SO256_32-1	02.05.2017 04:39:20	Multi Corer	MUC	information			Bodensicht, SL: 624m	f	12° 32,000' S	143° 51,110' E	632,5	0,1	125,1	8,4	75,2
SO256_32-1	02.05.2017 05:14:18	Multi Corer	MUC	hoisting			SLmax: 739m	f	12° 32,105' S	143° 51,216' E	802,7	0,3	117,7	9	104,2
SO256_32-1	02.05.2017 05:31:12	Multi Corer	MUC	information			Transponder an Deck	f	12° 32,107' S	143° 51,222' E	809,3	0,2	113,7	8,4	320,4
SO256_32-1	02.05.2017 05:35:13	Multi Corer	MUC	on deck				f	12° 32,106' S	143° 51,220' E	809	0,1	113,5	9,1	250,8
SO256_32-1	02.05.2017 05:36:02	Multi Corer	MUC	station end				f	12° 32,107' S	143° 51,220' E	818,7	0,1	115	9,1	109,5
SO256_33-1	02.05.2017 06:11:11	Multi Corer	MUC	station start			GeoB 22233-1 , MUC	f	12° 29,284' S	143° 51,566' E	618,2	0,6	134,7	8,5	45,1
SO256_33-1	02.05.2017 06:12:48	Multi Corer	MUC	in the water				f	12° 29,278' S	143° 51,571' E	619,6	0,2	137	8,9	152,9
SO256_33-1	02.05.2017 06:27:58	Multi Corer	MUC	max depth/on ground			Boko, maxSL: 620m, maxSZ: 17,	f	12° 29,280' S	143° 51,571' E	612,5	0,1	120,6	8,6	343,7
SO256_33-1	02.05.2017 06:43:19	Multi Corer	MUC	on deck				f	12° 29,279' S	143° 51,576' E	612,7	0,2	119,3	7,9	175,5
SO256_33-1	02.05.2017 06:44:12	Multi Corer	MUC	station end				f	12° 29,280' S	143° 51,575' E	613,5	0,1	123,7	8,2	179,4
SO256_33-2	02.05.2017 06:48:54	Gravity Corer	GC	station start			GeoB22233-2, GC 12m	f	12° 29,278' S	143° 51,572' E	615,7	0,1	128	6,7	48,1
SO256_33-2	02.05.2017 06:51:54	Gravity Corer	GC	in the water				f	12° 29,273' S	143° 51,577' E	611,8	0,1	139,6	7,1	124,2
SO256_33-2	02.05.2017 07:05:17	Gravity Corer	GC	max depth/on ground			Boko, maxSL: 620m	f	12° 29,271' S	143° 51,574' E	611,5	0,2	126,4	6,4	241,3
SO256_33-2	02.05.2017 07:05:51	Gravity Corer	GC	hoisting			maxSZ: 28,4kN	f	12° 29,272' S	143° 51,574' E	611,9	0,1	129,4	7,9	201,7
SO256_33-2	02.05.2017 07:24:56	Gravity Corer	GC	on deck				f	12° 29,271' S	143° 51,579' E	614,5	0,1	125,9	5,7	166,4
SO256_33-2	02.05.2017 07:26:06	Gravity Corer	GC	station end				f	12° 29,272' S	143° 51,580' E	614,8	0,2	130,4	6,9	277,8
SO256_34-1	02.05.2017 21:55:27	Multi Corer	MUC	station start			GeoB22234, MUC	f	12° 24,574' S	144° 9,065' E	2867,2	1	126,8	9,9	23
SO256_34-1	02.05.2017 21:56:59	Multi Corer	MUC	in the water				f	12° 24,563' S	144° 9,065' E	2866,2	0,7	125,2	11,3	347,9
SO256_34-1	02.05.2017 23:04:21	Multi Corer	MUC	max depth/on ground			SLmax: 2884	f	12° 24,589' S	144° 9,069' E	2863,6	0,2	117,4	12,5	114,6
SO256_34-1	02.05.2017 23:04:40	Multi Corer	MUC	hoisting			SZmax>: 37,4Kn	f	12° 24,589' S	144° 9,069' E	2865,9	0,2	117,8	12,9	205,9
SO256_34-1	03.05.2017 00:00:41	Multi Corer	MUC	on deck				f	12° 24,590' S	144° 9,073' E	2870,2	0,2	107,9	10,9	248
SO256_34-1	03.05.2017 00:00:57	Multi Corer	MUC	station end				f	12° 24,591' S	144° 9,072' E	2861,1	0,3	110,3	10,7	259,7
SO256_34-2	03.05.2017 00:05:37	Gravity Corer	GC	station start			GeoB 22234-2, GC 9m	f	12° 24,586' S	144° 9,071' E	2864,1	0,2	115,9	12,3	308,3

Station	Date / Time UTC	Device	Device Abbreviation	Action	Comment (Station)	Comment (Device Op)	Comment (Action)	Expedition Fixed	Latitude	Longitude	Depth (m)	Speed (kn)	Wind Dir	Wind speed (m/s)	Course
SO256_36-1	04.05.2017 05:12:40	Gravity Corer	GC	max depth/on ground			Boko, SLmax: 2414m	f	12° 29,272' S	143° 57,591' E	2413,9	0,2	122,6	9,1	132,2
SO256_36-1	04.05.2017 05:12:44	Gravity Corer	GC	hoisting			SZmax: 40,0kN	f	12° 29,272' S	143° 57,591' E	2413,9	0,1	121,1	9,3	70
SO256_36-1	04.05.2017 06:03:42	Gravity Corer	GC	on deck				f	12° 29,273' S	143° 57,596' E	2412	0,1	127,6	9,4	272,1
SO256_36-1	04.05.2017 06:05:16	Gravity Corer	GC	station end				f	12° 29,273' S	143° 57,597' E	2413,5	0,1	119,6	9,2	20,9