

Cruise Report: 11.05. – 24.05.2013

R.V. Alkor

Cruise No.:AL 415

General subject of research: Physical, chemical, biological and fishery oceanography

Port calls: Visby, Sweden 18.05.2013 – 19.05.2012

Helmholtz Centre for Ocean Research Kiel GEOMAR: Marine Ecology, Evolutionary Ecology of Marine Fishes (FB3)

Chief Scientist: Dr. Holger Haslob

Number of Scientists: 11

Projects: CAVIAR, BIOACID II, DFG-Mnemiopsis, POPDYN, BONUS, others

Research programme

This multidisciplinary cruise was conducted within the framework of several on-going research projects and to maintain a monitoring time series which is conducted in the Bornholm Basin and adjacent areas since 1986 by the Helmholtz Centre for Ocean Research Kiel GEOMAR (former IFM-GEOMAR Kiel, former IfM Kiel). Research activities were conducted in the Kiel Bight, Arkona Basin, Gdansk Deep and Southern Gotland Basin (Fig. 1). Investigations considered hydrographic measurements, ichthyo- and zooplankton distributions, and the distribution and abundance of pelagic clupeid and gadoid fish species. The physical measurements conducted in the Bornholm Basin were designed to investigate the quasi-synoptic three-dimensional distribution of temperature, salinity and oxygen (CAVIAR). Further, a pH-sensor was attached to the CTD to address acidification of the water column (BIOACID II). An 8 x 10 nm station grid (45 stations) was covered with CTD casts in the Bornholm Basin. On the same stations Bongo-casts were conducted in order to assess the abundance, biomass, production and nutritional condition of zoo- and ichthyoplankton. In the Southern Gotland Basin and the Gdansk Deep IKS-80 and CTD casts were performed. Further, emphasis was given on the meso- to small-scale horizontal distribution of their main vertebrate and invertebrate predators (DFG-Mnemiopsis/DTU-AQUA). Pelagic fishery hauls were conducted to collect clupeid stomachs and cod single fish data (DTU-AQUA). Stock structure, gonadal maturation and egg production of sprat and cod was investigated (POPDYN).

Gears used

Hydrography: ADM-CTD with pH and O₂ sensor, Hydrobios Water Sampler with CTD

Zooplankton: Baby Bongo-Net (150 µm), Bongo-Net (335µm), Bongo Net (500µm), WP2 (150µm), Apstein net (50µm).

Ichthyoplankton: Bongo-Net (335µm and 500 µm), Hydrobios MAXI Multinet (335µm horizontal tows), Hydrobios MIDI Multinet (50µm), IKS80 (500µm)

Fish: Jungfisch Trawl (pelagic trawl)

Hydroacoustic: 38, 70, 120 and 200 kHz-echosounder EK60

Scientific crew:

- Holger Haslob	(Chief Scientist)	Thünen Institute SF	whole cruise
- Svend Mees		GEOMAR, Kiel	whole cruise
- Andrea Franke		GEOMAR, Kiel	Visby - Kiel
- Burkhard von Dewitz		GEOMAR, Kiel	whole cruise
- Malte Heuer		HYDROBIOS, Kiel	Kiel - Visby
- Martin Grimm		CAU, Kiel (student)	whole cruise
- Lili Beckmann		CAU Kiel, (student)	whole cruise
- Clarissa Mohm		CAU Kiel, (student)	whole cruise
- Svantje Gottschlich		CAU Kiel, (student)	whole cruise
- Jonas Drescher		CAU Kiel, (student)	whole cruise
- Jörg Dutz		DTU-AQUA, Copenhagen	whole cruise

Summary of cruise

The cruise started as scheduled, RV Alkor left Kiel 11th May 09:00 heading to the research area of the Bornholm Basin. The station work started 12th May 01:00 UTC. The next two days the Bornholm Basin station grid was covered with Bongo and CTD casts. On one station in the central basin additional hauls with WP2, Apstein net, and water sampler was performed. After the completion of the standard station grid several multicasts were performed in the central basin. Due to technical problems with the on-board internet connection the research program was interrupted after the multinet station for approximately 4 h, and a technician was picked up at Nexø roads (14th May 20:00). The research program was then continued with hydro acoustic/towed CTD transects during the night and fishery hauls on the same transects during the day. When the first fisheries transect was completed on the 15th May, Alkor sailed back to Nexø roads to debark the technician. The research program was continued on 15th May 19:05. On the 17th May three fishery hauls were performed, before the fishery winch broke down during the fourth haul. Unfortunately, it was not possible to fix the winch and all planned fishery operations had to be cancelled for the rest of the cruise. The hydro acoustic transect was finished without further fishery hauls and at 18:05 RV Alkor sailed with direction to Visby. Visby port was reached 18th May 08:00. The next day one person was debarked and one embarked, before Alkor left Visby at 18:00. On 20th May 06:00 the first station in the Gotland Basin was reached and the station work was continued. For the next two days different plankton gears (IKS-80, WP-2, Bongo) and the CTD was deployed on stations in the Gotland Basin, Gdansk Deep, and Slupsk Farrow. During the 22th May the night and day distribution of ichthyoplankton, zooplankton, and pelagic fish was investigated in the central Bornholm Basin. For this purpose the multinet MAXI and multinet MIDI were deployed on the same station during complete darkness and during the daytime. Fish distribution during darkness and daylight in relation to hydrographic parameters was investigated by means of a hydro acoustic / towed CTD transect. After the operations in the Bornholm Basin were finished with additional WP2 and Apstein net casts in the central basin, it was again necessary to pick up a technician at Nexø roads to fix the board internet, which was not operating stable yet. The research program was continued on 23th May in the Arkona Basin with Bongo and CTD casts. In the early morning hours of the same day the station work was interrupted because of bad weather condition for 3.5h. The last station was performed 24th May at 00:36 after which Alkor sailed back to Kiel. Kiel port (Seefischmarkt) was reached 24th May 12:00. The ship was unloaded and shifted to the west shore pier where the cruise ended, two days before the planned end of the cruise.

Due to the failure of the fishery winch, the cruise was only in parts successful. Five days (60%) of fishery operations had to be cancelled. Until then, all the planned work was accomplished without problems. During the second cruise leg planned and additional casts with several plankton nets and an additional hydro acoustic transect were performed. Another problem during this cruise was the instable internet connection which could not be solved totally till the end of the cruise.

A cruise track (Fig. 1), an overview of gear deployments (Tab. 1) and a detailed station list (Tab. 3) is given below. Thanks to Captain Lass and his crew of RV Alkor for an outstanding support during the whole cruise!

Tab. 1: Overview of gear deployment. Mesh size is given in brackets.

Gear	Number of deployments
ADM-CTD	106
Towed CTD with hydro acoustic	4
Watersampler	11
Bongo- Babybongo (150 μ , 335 μ , 500 μ)	69
WP2 (200 μ)	12
Maxi Multinet horizontal (335 μ)	10
Midi Multinet (50 μ)	10
IKS80 (500 μ)	25
pelagic trawl (Jungfischtrawl)	14

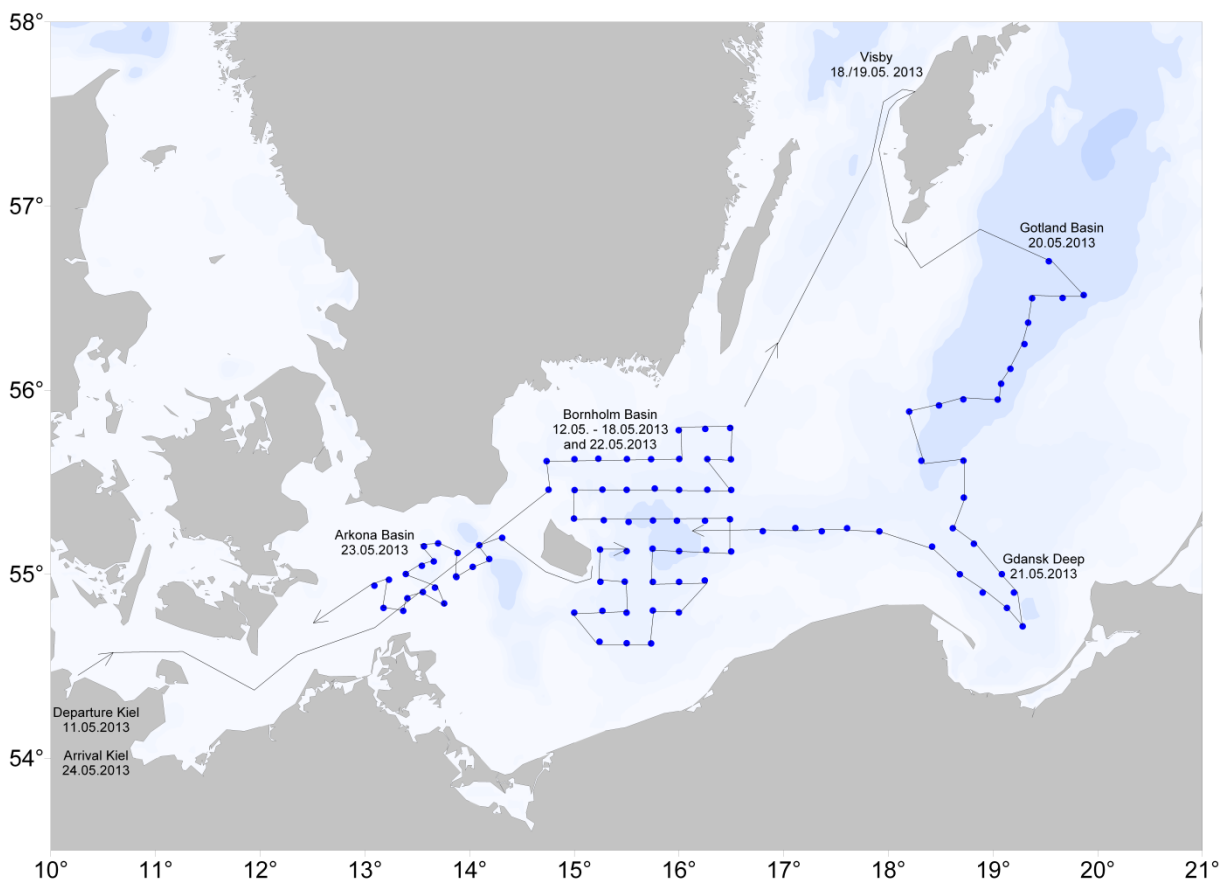


Fig. 1: Cruise track AL415. Red circles denote CTD casts.

Ichthyo- and zooplankton sampling

Bongo- and Babybongo casts were performed in the Bornholm Basin (45 hauls), Slupsk Farrow (4 hauls), and Arkona Basin (19 hauls) (Fig. 2). All Bongo samples were immediately checked for the presence of *Mnemiopsis leidyi*. No specimens of this invasive ctenophore were found in the investigation areas. Larvae of cod (*Gadus morhua*), sprat (*Sprattus sprattus*), and flounder (*Plathichthys flesus*) were picked from the 500 μ bongo-samples for subsequent RNA/DNA analysis. The 335 μ bongo samples will be used for abundance determination of ichthyoplankton. Preliminary results indicate that flounder eggs and larvae

were most abundant, followed by sprat. Cod larvae were only sporadically present in the samples. Stations in the Gdansk Deep and the Southern Gotland Basin were covered with IKS-80 casts (Fig. 2). IKS-80 samples were taken in cooperation with Latvian Fish Resources Agency (LATFRA; Andrei Makarcuks). On one central station in the Bornholm Basin MAXI (335 μ , towed) and MIDI (50 μ , vertical) type multinet (HYDROBIOS, Kiel) casts were performed to reveal the vertical distribution of ichthyoplankton and zooplankton. These hauls were performed by total darkness as well as during daylight to reveal vertical migration patterns. WP-2 (150 μ) and Apstein (50 μ) nets were deployed on a central, deep station in the Bornholm Basin at the beginning and towards the end of the cruise to get additional information on the seasonal dynamics of zooplankton (Fig. 2). Several WP2 nets were deployed to sample live material for copepod broodstocks which will be established at DTU-AQUA within the BONUS project (Dr. Jörg Dutz).

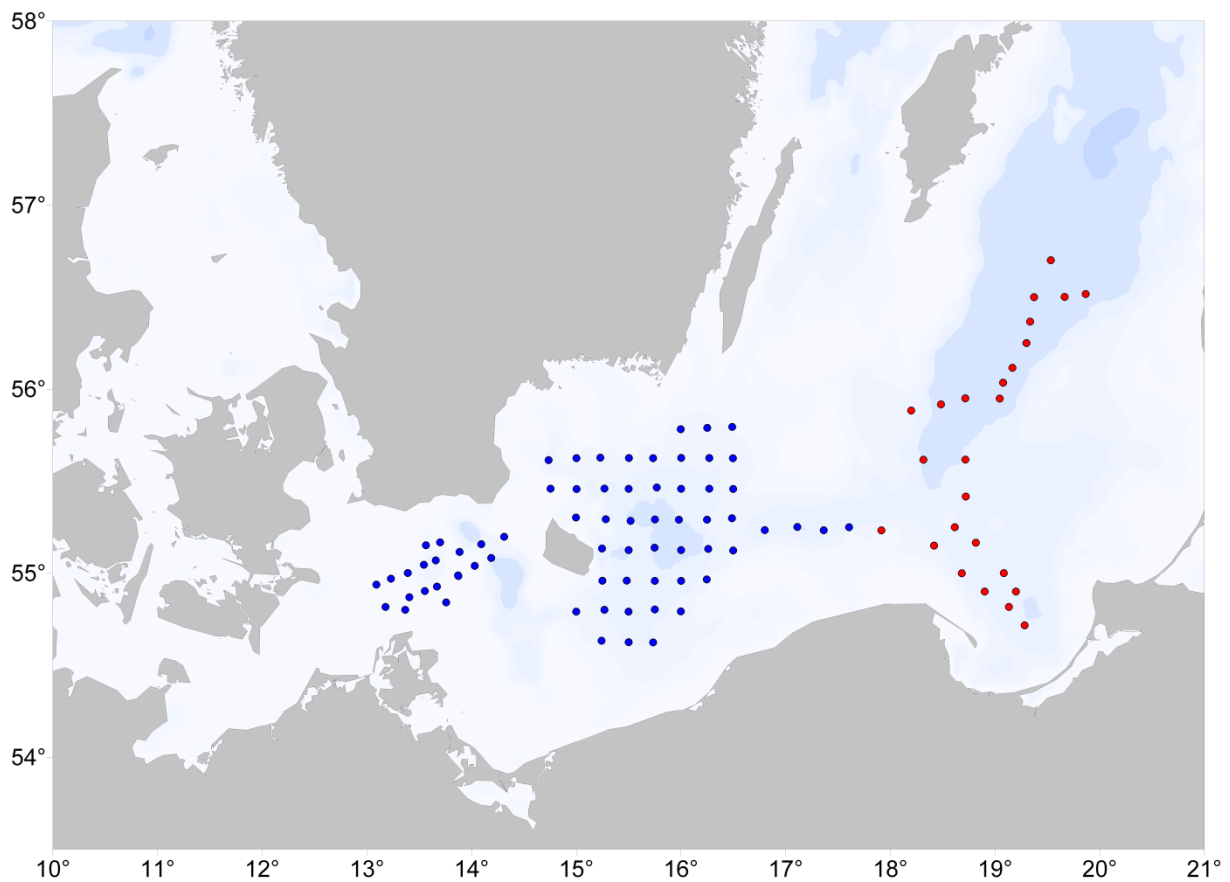


Fig. 2: Bongo, IKS-80, CTD casts during AL415. Blue circles = bongo and CTD, red circles = IKS-80 and CTD.

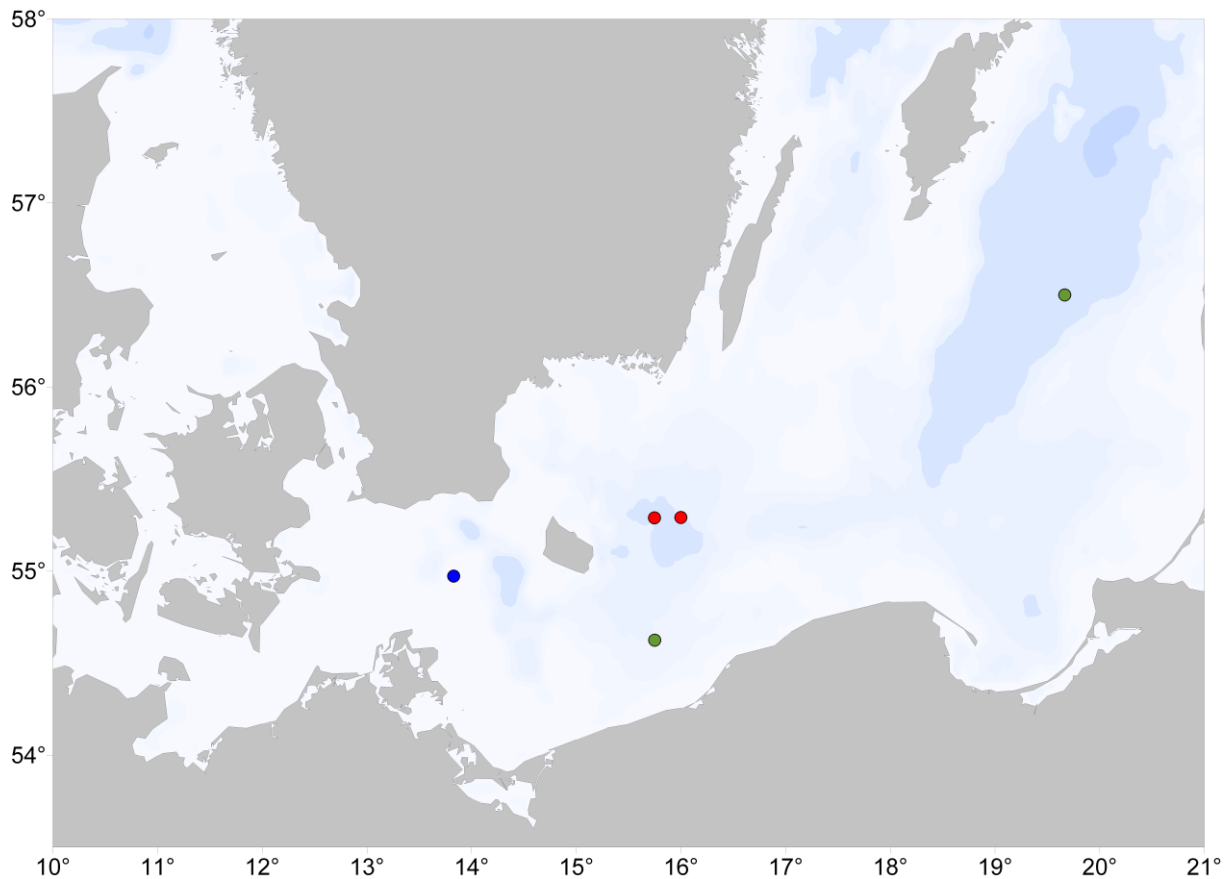


Fig. 3: Multinet, WP-2, and Apstein net casts during AL415. Blue circle = Multinet MAXI; green circles = WP-2; red circles = Multinet MAXI and Midi, WP-2, Apstein.

Fishery

During the cruise pelagic fishery was conducted in the Bornholm Basin only (14 hauls; Fig. 4). Planned fishery hauls in all other areas (Arkona Basin, Gdansk Deep, and Southern Gotland Basin) had to be cancelled because of the fishery winch failure. In parallel to the fishery hauls fish distribution patterns were detected by means of hydro acoustic measurements. Catches in the Bornholm Basin were dominated by sprat, followed by herring and cod. Very few whittings (*Merlangius merlangus*) and flounders occurred in the catches also. Compared to previous years the cod catches were extremely low.

From all hauls species composition, catch weight and length frequencies of all species were taken (Fig. 5). Stomach samples were taken from sprat (min 10 per 1cm length class) and herring (min 10 per 2 cm length class). For cod single fish data, otoliths, and fin clips for genetic analysis were sampled from each individual.

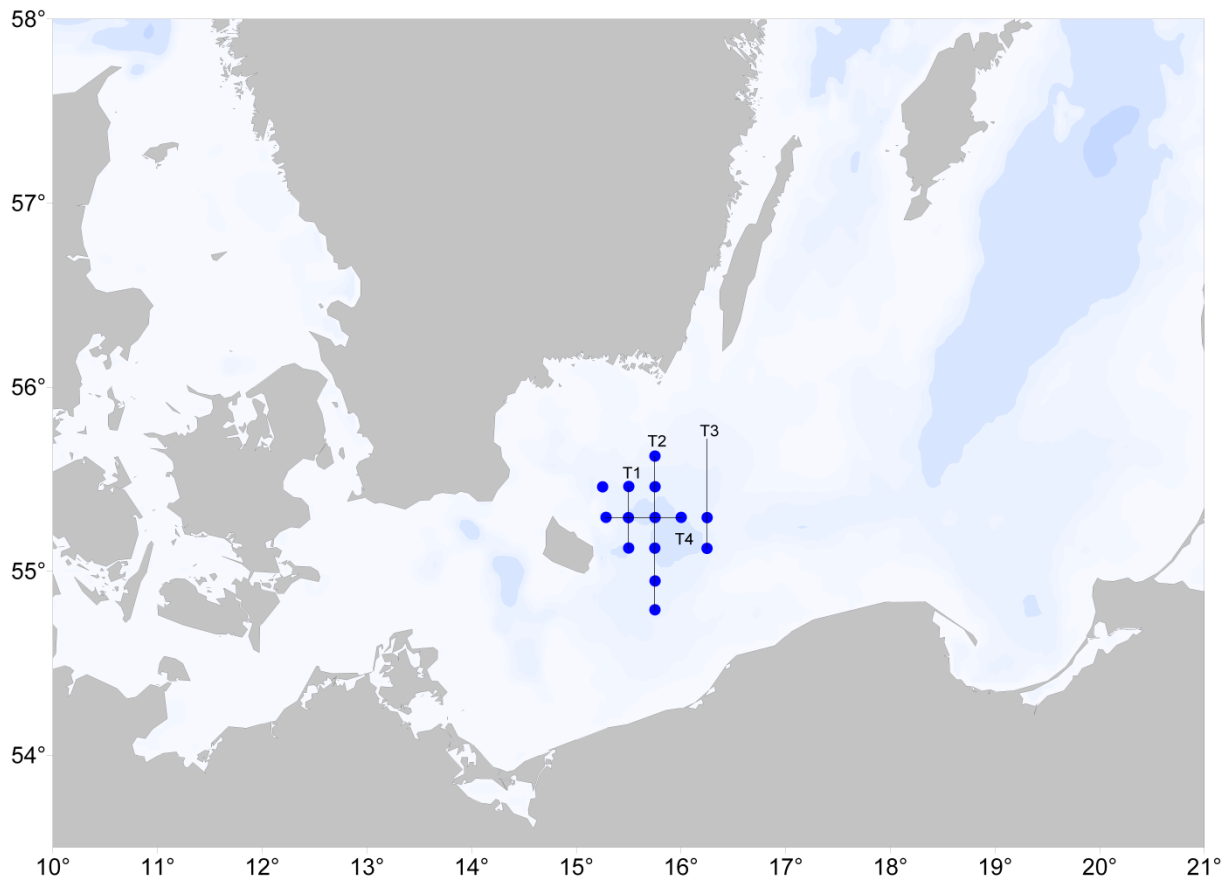


Fig. 4: Fishery stations covered during AL415 with the Jungfisch-Trawl. Lines denote hydro acoustic transects covered with a towed CTD system (T1, T2, T3, T4).

Tab. 2: Catch in numbers and weight (kg) of the target species cod, sprat, and herring for each haul.

Species		1	2	3	4	5	6	7	8	9	10	11	12	13	14	sum
Cod (<i>Gadus morhua</i>)	n	3	0	3	1	2	2	2	2	2	42	20	35	6	1	121
	kg	0.7	0	0.9	0.3	0.3	1.2	0.5	0.9	1.4	14.0	4.4	13.6	3.3	0.2	41.6
Sprat (<i>Sprattus sprattus</i>)	n	4755	13757	4679	14543	7413	5772	3352	2546	6541	6266	5020	245	31174	2173	108236
	kg	55.8	167.3	49.6	174.5	97.2	81.5	40.7	31.5	76.7	80.6	62.8	3.0	393.4	23.5	1338.1
Herring (<i>Clupea harengus</i>)	n	20	2	168	18	70	282	168	36	85	20	232	173	169	184	1627
	kg	0.9	0.1	10.9	0.9	2.1	13.8	10.3	2.1	5.4	1.1	12.3	10.9	9.6	5.4	85.8

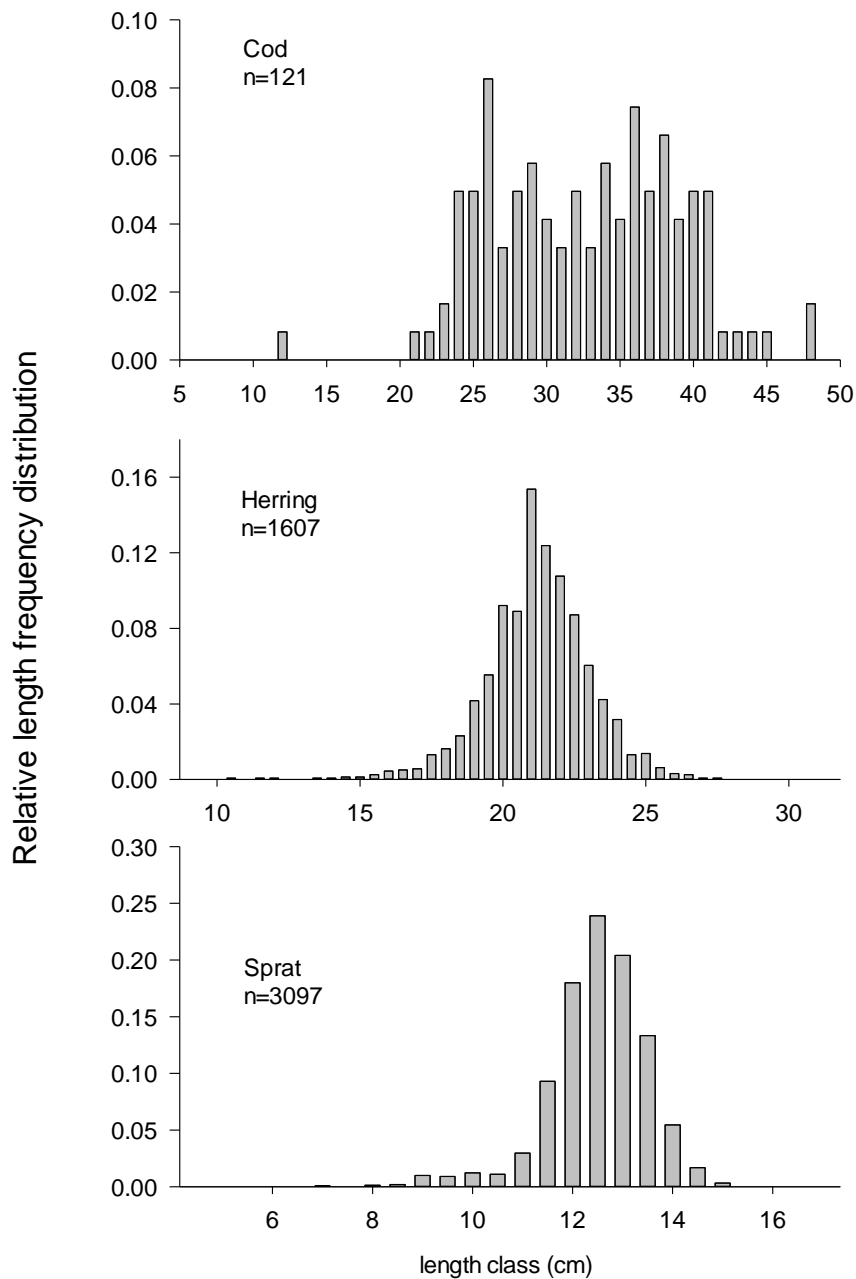


Fig. 5: Relative length frequency distribution of cod, herring, and sprat in the Bornholm Basin.

Hydrography

117 CTD casts (ADM-CTD and HYDROBIOS water sampler) were performed. Temperature profiles revealed 6.7 °C from the surface down to 14 m water depth (Fig. 6). Below this mixed surface layer temperatures declined below 2.0 °C. Below the halocline temperatures reached up to 5.7 °C in the central Bornholm Basin. The permanent halocline was located in ca. 60 m depth. Maximum salinity values near the bottom reached 16.7 in the Bornholm Basin. Oxygen decreased from surface to bottom depth. However, oxygen was detected at the bottom of the Bornholm Basin with values up to 3.7 ml/l. These results indicate an inflow event of oxygenated North Sea water into the Bornholm Basin in winter 2012/2013.

Additionally, a towed CTD system was deployed to obtain a high resolution of the hydrographic situation on selected transects (Fig. 4).

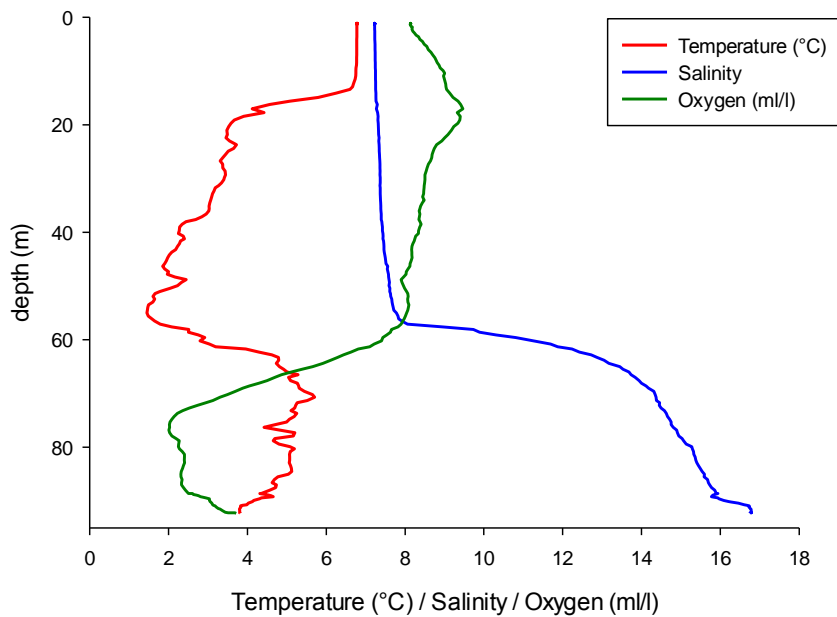


Fig. 6: Hydrography on a central station in the in the Bornholm Basin (St. 301 55°17.5'N 015° 45.0'E, bottom depth 93m).

Report of cruise AL415 with technical details (board time)

Saturday	11/05/2013	0900	leaving IfM-pier, heading with direction Bornholm Basin.
Sunday	12/05/2013	0300	beginning plankton station work in the Bornholm Basin. CTD, Bongo, WP2, Apstein, MIDI and MAXI multinet.
Tuesday	14/05/2013	1813	End of plankton station Bornholm Basin. Sailing to Nexø roads to pick up technician.
		2203	Start of hydro acoustic transect T1.
Wednesday	15/05/2013	0410	End of hydro acoustic transect T1.
		0601	Start of pelagic fishery, 5 hauls on transect T1.
		1445	End of pelagic fishery. Sailing to Nexø roads to debark technician.
		1904	CTD and water sampler station.
		2025	Start of hydro acoustic transect T2.
Thursday	16/05/2013	0428	End of hydro acoustic transect T2.
		0600	Start pelagic fishery on transect T2, 6 hauls.
		1702	End of pelagic fishery on T2.
		1904	Start of hydro acoustic transect T3.
Friday	17/05/2013	0441	End of hydro acoustic transect T3.
		0603	Start of pelagic fishery on transect T3. Only 3 successful hauls due to technical problems with the fishery winch.

		1607	Fishery aborted definitely. The rest of T3 is covered with hydro acoustic.
		1805	End of T3. Leaving investigation area with direction to Visby.
Saturday	18/05/2013	0800	Arrival at Visby port.
Sunday	19/05/2013		Exchange of staff.
		1800	Leaving Visby port, heading with direction Southern Gotland Basin.
Monday	20/05/2013	0600	Beginning plankton station work in the Southern Gotland basin. CTD, IKS-80, WP2.
Tuesday	21/05/2013	0411	First plankton station Gdansk Deep.
		1537	First plankton station Slupsk Farrow.
		2356	multinet station in the central Bornholm Basin, night casts.
Wednesday	22/05/2013	0252	Start of hydro acoustic transect T4.
		1233	End of hydro acoustic transect T4.
		1243	Multinet station in central Bornholm Basin, day casts. Additional WP2, Apstein net casts.
		1839	End of station work in the Bornholm Basin. Sailing to Nexø roads to embark technician staff.
		2130	Leaving Nexø roads, heading with direction Arkona Basin.
Thursday	23/05/2013	0202	Beginning with plankton station work in the Arkona Basin. CTD, Bongo, multinet MAXI.
		0500	Interruption of station work due to bad weather conditions.
		0826	Continuing of station work.
Friday	24/05/2013	0049	last station completed, leaving research area with direction Kiel.
		1148	arrival Kiel port, Seefischmarkt. Ship is unloaded.
		1230	arrival west shore berth, end of cruise.

Table 3: Detailed station list of AL415 11.05. – 24.05.2012. Date and time in UTC.

Station	Date	Time [UTC]	Latitude (N)	Longitude (E)	Bottom depth (m)	Wind (m/s)	Course (°)	Speed (kn)	Gear	Action
279	12.05.2013	01:00	55° 27.47'	14° 45.19'	70	S 4	4	0.3	CTD	surface
	12.05.2013	01:05	55° 27.47'	14° 45.19'	70	S 4	4	0.2	CTD	on deck
	12.05.2013	01:14	55° 27.47'	14° 45.19'	70	S 4	5	0.4	Calibration pressure sensor	surface
	12.05.2013	01:21	55° 27.50'	14° 45.21'	70	SSW 4	97	0.2	Calibration pressure sensor	on deck
	12.05.2013	01:25	55° 27.51'	14° 45.27'	70	SSW 3	13	1.5	Bongo net	surface
	12.05.2013	01:37	55° 28.05'	14° 45.58'	70	SSW 5	34	2.4	Bongo net	on deck
280	12.05.2013	02:30	55° 36.85'	14° 44.12'	74	SSW 5	20	3.5	Bongo net	surface
	12.05.2013	02:42	55° 37.39'	14° 44.65'	69	SSW 6	37	3.2	Bongo net	on deck
	12.05.2013	02:48	55° 37.52'	14° 45.02'	68	SW 5	148	0.7	CTD	surface
	12.05.2013	02:56	55° 37.46'	14° 45.06'	69	SW 6	63	0.1	CTD	on deck
281	12.05.2013	03:51	55° 37.51'	15° 0.02'	81	WSW 6	250	1.2	CTD	surface
	12.05.2013	03:58	55° 37.50'	14° 59.99'	81	WSW 6	69	0.3	CTD	on deck
	12.05.2013	04:01	55° 37.48'	15° 0.07'	81	WSW 6	105	2.7	Bongo net	surface
	12.05.2013	04:15	55° 37.26'	15° 1.38'	81	WSW 6	101	3.5	Bongo net	on deck
282	12.05.2013	04:55	55° 37.65'	15° 13.79'	76	W 7	93	3.5	Bongo net	surface
	12.05.2013	05:07	55° 37.57'	15° 14.88'	76	WSW 6	105	3	Bongo net	on deck
	12.05.2013	05:12	55° 37.50'	15° 15.04'	73	WSW 6	190	0.4	CTD	surface
	12.05.2013	05:17	55° 37.49'	15° 15.03'	73	WSW 6	65	0.1	CTD	on deck
283	12.05.2013	06:08	55° 37.51'	15° 30.02'	68	W 5	22	1.5	CTD	surface
	12.05.2013	06:14	55° 37.51'	15° 30.04'	68	WSW 5	134	0.5	CTD	on deck
	12.05.2013	06:17	55° 37.50'	15° 30.14'	68	WSW 4	85	2.5	Bongo net	surface
	12.05.2013	06:27	55° 37.49'	15° 31.00'	68	WSW 4	92	3.3	Bongo net	on deck
284	12.05.2013	07:14	55° 37.46'	15° 44.07'	69	W 5	44	3.5	Bongo net	surface
	12.05.2013	07:24	55° 37.50'	15° 44.87'	69	WSW 5	100	2.5	Bongo net	on deck
	12.05.2013	07:28	55° 37.50'	15° 44.98'	69	W 5	110	0.2	CTD	surface
	12.05.2013	07:33	55° 37.50'	15° 45.02'	71	W 4	106	0.3	CTD	on deck
285	12.05.2013	08:28	55° 37.51'	16° 0.02'	75	WNW 6	24	1.8	CTD	surface
	12.05.2013	08:34	55° 37.56'	16° 0.10'	80	W 5	56	0.7	CTD	on deck
	12.05.2013	08:37	55° 37.57'	16° 0.12'	80	W 5	259	1.3	Bongo net	surface
	12.05.2013	08:48	55° 37.95'	15° 59.65'	74	W 5	3	3.9	Bongo net	on deck
286	12.05.2013	09:40	55° 46.92'	15° 59.88'	65	WSW 3	262	1.6	Bongo net	surface
	12.05.2013	09:48	55° 47.17'	15° 59.61'	62	WSW 3	25	3.3	Bongo net	on deck
	12.05.2013	09:54	55° 47.43'	15° 59.95'	62	WSW 3	157	0.9	CTD	surface
	12.05.2013	09:58	55° 47.40'	15° 59.97'	62	WSW 3	160	0.3	CTD	on deck
287	12.05.2013	10:49	55° 47.42'	16° 14.98'	62	WSW 4	167	0.9	CTD	surface
	12.05.2013	10:53	55° 47.38'	16° 15.01'	61	W 4	153	0.5	CTD	on deck
	12.05.2013	10:56	55° 47.34'	16° 15.04'	61	W 4	108	1.1	Bongo net	surface
	12.05.2013	11:08	55° 47.24'	16° 16.02'	61	WSW 3	98	3.1	Bongo net	on deck
288	12.05.2013	11:53	55° 47.68'	16° 29.39'	57	WSW 3	109	2.8	Bongo net	surface
	12.05.2013	12:02	55° 47.48'	16° 30.07'	57	WSW 3	134	2.6	Bongo net	on deck
	12.05.2013	12:06	55° 47.41'	16° 30.11'	57	WSW 3	186	0.6	CTD	surface
	12.05.2013	12:10	55° 47.38'	16° 30.10'	57	WSW 3	193	0.3	CTD	on deck
289	12.05.2013	13:08	55° 37.53'	16° 29.99'	63	SW 1	197	1.7	CTD	surface
	12.05.2013	13:13	55° 37.47'	16° 29.91'	63	SSW 2	233	0.5	CTD	on deck
	12.05.2013	13:16	55° 37.45'	16° 29.81'	63	SSW 2	263	1.8	Bongo net	surface
	12.05.2013	13:27	55° 37.52'	16° 28.92'	63	SW 2	286	2.3	Bongo net	on deck
290	12.05.2013	14:12	55° 37.53'	16° 16.25'	75	S 3	270	3.2	Bongo net	surface
	12.05.2013	14:23	55° 37.52'	16° 15.28'	75	S 3	270	3.5	Bongo net	on deck
	12.05.2013	14:26	55° 37.51'	16° 14.99'	75	SSW 2	226	1.7	CTD	surface
	12.05.2013	14:32	55° 37.48'	16° 14.97'	75	SSW 2	110	0.2	CTD	on deck
291	12.05.2013	15:51	55° 27.51'	16° 29.97'	59	SSW 3	204	0.6	CTD	surface
	12.05.2013	15:56	55° 27.49'	16° 29.96'	59	SSW 3	203	0.1	CTD	on deck
	12.05.2013	15:59	55° 27.45'	16° 29.89'	59	SSW 3	245	2.8	Bongo net	surface
	12.05.2013	16:08	55° 27.36'	16° 29.13'	59	S 3	270	2.8	Bongo net	on deck
292	12.05.2013	16:51	55° 27.52'	16° 16.27'	74	S 4	270	3.5	Bongo net	surface
	12.05.2013	17:01	55° 27.62'	16° 15.36'	75	S 4	292	3.1	Bongo net	on deck
	12.05.2013	17:07	55° 27.50'	16° 15.03'	75	S 4	250	0.5	CTD	surface
	12.05.2013	17:11	55° 27.50'	16° 14.99'	75	S 3	316	0.4	CTD	on deck
293	12.05.2013	18:01	55° 27.52'	16° 0.10'	84	S 4	240	1.5	CTD	surface
	12.05.2013	18:07	55° 27.52'	16° 0.08'	84	S 4	96	0.3	CTD	on deck
	12.05.2013	18:09	55° 27.49'	16° 0.08'	84	S 4	206	2.4	Bongo net	surface
	12.05.2013	18:20	55° 27.38'	15° 59.17'	84	S 4	282	3.7	Bongo net	on deck

Tab. 2 continued

294	12.05.2013	19:02	55° 27.92'	15° 46.11'	86	SSW 5	196	4.1	Bongo net	surface
	12.05.2013	19:13	55° 27.62'	15° 45.38'	86	S 5	243	3.8	Bongo net	on deck
	12.05.2013	19:16	55° 27.50'	15° 45.03'	86	S 4	256	2.7	CTD	surface
	12.05.2013	19:22	55° 27.49'	15° 45.02'	86	S 4	215	0.6	CTD	on deck
295	12.05.2013	20:11	55° 27.51'	15° 30.00'	86	SW 5	232	0.7	CTD	surface
	12.05.2013	20:16	55° 27.51'	15° 30.04'	86	SSW 5	131	0.7	CTD	on deck
	12.05.2013	20:18	55° 27.48'	15° 30.05'	92	SSW 5	192	1.2	Bongo net	surface
	12.05.2013	20:29	55° 27.28'	15° 29.25'	86	SSW 5	276	2.9	Bongo net	on deck
296	12.05.2013	21:11	55° 27.55'	15° 16.16'	89	WSW 5	207	3.3	Bongo net	surface
	12.05.2013	21:21	55° 27.43'	15° 15.41'	93	SW 6	283	3.3	Bongo net	on deck
	12.05.2013	21:24	55° 27.48'	15° 15.07'	94	WSW 4	267	2.9	CTD	surface
	12.05.2013	21:30	55° 27.44'	15° 15.05'	94	WSW 5	177	0.5	CTD	on deck
297	12.05.2013	22:21	55° 27.49'	15° 0.14'	79	WSW 8	283	0.7	CTD	surface
	12.05.2013	22:27	55° 27.46'	15° 0.17'	79	WSW 8	136	0.5	CTD	on deck
	12.05.2013	22:30	55° 27.42'	15° 0.18'	78	WSW 9	190	1.7	Bongo net	surface
	12.05.2013	22:43	55° 26.88'	14° 59.71'	74	WSW 8	231	2.7	Bongo net	on deck
298	12.05.2013	23:35	55° 18.13'	14° 59.82'	76	WNW 8	189	2.2	Bongo net	surface
	12.05.2013	23:47	55° 17.58'	14° 59.74'	73	W 8	206	1.7	Bongo net	on deck
	12.05.2013	23:49	55° 17.55'	14° 59.71'	73	WNW 8	207	0.7	CTD	surface
	12.05.2013	23:54	55° 17.51'	14° 59.69'	72	WNW 8	236	0.3	CTD	on deck
299	13.05.2013	00:52	55° 17.53'	15° 17.02'	90	NW 6	22	0.9	CTD	surface
	13.05.2013	00:59	55° 17.54'	15° 16.95'	89	WNW 6	276	0.4	CTD	on deck
	13.05.2013	01:02	55° 17.57'	15° 16.92'	90	WNW 6	355	1.5	Bongo net	surface
	13.05.2013	01:17	55° 17.91'	15° 17.84'	92	NW 6	102	2.7	Bongo net	on deck
300	13.05.2013	02:06	55° 17.04'	15° 31.13'	94	NW 5	310	2.8	Bongo net	surface
	13.05.2013	02:21	55° 17.38'	15° 29.97'	93	WNW 4	315	2.7	Bongo net	on deck
	13.05.2013	02:25	55° 17.49'	15° 30.03'	94	NW 4	349	1.2	CTD	surface
	13.05.2013	02:32	55° 17.53'	15° 29.99'	94	NW 4	269	0.3	CTD	on deck
301	13.05.2013	03:30	55° 17.51'	15° 45.02'	100	WNW 5	310	0.3	CTD	surface
	13.05.2013	03:37	55° 17.49'	15° 45.01'	100	W 5	135	0.3	CTD	on deck
	13.05.2013	03:43	55° 17.49'	15° 45.01'	102	WSW 5	316	0.3	CTD/rosette water sampler	surface
	13.05.2013	03:59	55° 17.52'	15° 44.94'	99	WSW 5	182	0.2	CTD/rosette water sampler	on deck
	13.05.2013	04:26	55° 17.49'	15° 44.98'	99	W 5	181	0.1	CTD/rosette water sampler	surface
	13.05.2013	04:33	55° 17.48'	15° 44.99'	96	W 5	111	0.1	CTD/rosette water sampler	on deck
	13.05.2013	04:38	55° 17.52'	15° 45.00'	102	W 5	23	0.6	Apstein net	surface
	13.05.2013	05:00	55° 17.41'	15° 44.89'	99	W 6	194	0.4	Apstein net	on deck
	13.05.2013	05:05	55° 17.51'	15° 44.94'	96	WSW 6	234	0.3	Apstein net	surface
	13.05.2013	05:23	55° 17.51'	15° 44.92'	96	WSW 5	333	0.2	Apstein net	on deck
	13.05.2013	05:24	55° 17.51'	15° 44.92'	97	WSW 5	357	0.2	Apstein net	surface
	13.05.2013	05:44	55° 17.50'	15° 44.94'	100	W 5	52	0.2	Apstein net	on deck
	13.05.2013	05:48	55° 17.52'	15° 44.99'	101	W 5	342	0.5	Apstein net	surface
	13.05.2013	06:07	55° 17.47'	15° 45.01'	102	W 5	188	0.4	Apstein net	on deck
	13.05.2013	06:09	55° 17.47'	15° 45.01'	101	W 6	216	0.5	WP 2	surface
	13.05.2013	06:22	55° 17.43'	15° 44.99'	99	W 6	73	0	WP 2	on deck
	13.05.2013	06:24	55° 17.43'	15° 45.00'	97	W 5	2	0.1	WP 2	surface
	13.05.2013	06:37	55° 17.44'	15° 44.99'	97	W 6	215	0.2	WP 2	on deck
	13.05.2013	06:41	55° 17.44'	15° 44.99'	102	W 6	101	0.1	WP 2	surface
	13.05.2013	06:53	55° 17.46'	15° 45.00'	101	W 5	343	0.2	WP 2	on deck
	13.05.2013	06:56	55° 17.46'	15° 45.01'	99	W 5	338	0.2	WP 2	surface
	13.05.2013	07:08	55° 17.48'	15° 45.01'	100	W 5	335	0.2	WP 2	on deck
	13.05.2013	07:11	55° 17.49'	15° 45.01'	100	WSW 5	304	0.1	WP 2	surface
	13.05.2013	07:24	55° 17.51'	15° 45.03'	102	W 5	77	0.2	WP 2	on deck
	13.05.2013	07:27	55° 17.50'	15° 45.05'	96	W 5	73	1.5	Bongo net	surface
	13.05.2013	07:41	55° 17.60'	15° 46.27'	99	W 5	89	3.2	Bongo net	on deck
302	13.05.2013	08:21	55° 17.41'	15° 58.80'	91	WSW 4	113	6	Bongo net	surface
	13.05.2013	08:36	55° 17.50'	15° 59.98'	90	WSW 4	88	1.4	Bongo net	on deck
	13.05.2013	08:39	55° 17.49'	16° 0.05'	89	WSW 3	82	0.4	CTD	surface
	13.05.2013	08:45	55° 17.47'	16° 0.01'	91	WSW 4	237	0.3	CTD	on deck

Tab. 2 continued

303	13.05.2013	09:36	55° 17.50'	16° 14.93'	75	SW 5	164	1.1	CTD	surface
	13.05.2013	09:41	55° 17.45'	16° 14.93'	75	SW 5	195	0.5	CTD	on deck
	13.05.2013	09:43	55° 17.42'	16° 14.92'	75	WSW 5	148	1.1	Bongo net	surface
	13.05.2013	09:56	55° 17.05'	16° 15.69'	73	SW 5	128	2.5	Bongo net	on deck
304	13.05.2013	10:41	55° 17.90'	16° 29.25'	60	SW 6	116	3.2	Bongo net	surface
	13.05.2013	10:53	55° 17.50'	16° 29.98'	62	SW 6	168	1.4	Bongo net	on deck
	13.05.2013	10:55	55° 17.47'	16° 29.97'	62	SW 6	205	0.4	CTD	surface
	13.05.2013	11:00	55° 17.45'	16° 29.93'	63	SW 5	233	0.4	CTD	on deck
305	13.05.2013	11:57	55° 7.54'	16° 30.02'	51	SW 5	185	2	CTD	surface
	13.05.2013	12:01	55° 7.48'	16° 29.98'	51	SW 6	206	1	CTD	on deck
	13.05.2013	12:05	55° 7.40'	16° 29.90'	51	SW 5	215	1.9	Bongo net	surface
	13.05.2013	12:13	55° 7.15'	16° 29.42'	51	SSW 6	263	3.1	Bongo net	on deck
306	13.05.2013	12:59	55° 7.89'	16° 15.62'	81	SSW 5	247	2.7	Bongo net	surface
	13.05.2013	13:13	55° 7.44'	16° 14.83'	82	SSW 4	224	1.6	Bongo net	on deck
	13.05.2013	13:15	55° 7.42'	16° 14.80'	82	SSW 4	205	0.3	CTD	surface
	13.05.2013	13:21	55° 7.38'	16° 14.82'	82	SSW 4	155	0.3	CTD	on deck
307	13.05.2013	14:14	55° 7.51'	15° 59.99'	90	S 5	185	0.7	CTD	surface
	13.05.2013	14:21	55° 7.51'	16° 0.02'	90	SSE 5	96	0.2	CTD	on deck
	13.05.2013	14:23	55° 7.50'	16° 0.05'	90	SSE 5	147	1.9	Bongo net	surface
	13.05.2013	14:38	55° 6.84'	16° 0.56'	87	SSE 6	164	2.6	Bongo net	on deck
308	13.05.2013	15:35	55° 8.29'	15° 44.84'	90	SSE 6	206	2	Bongo net	surface
	13.05.2013	15:51	55° 7.56'	15° 45.12'	91	S 7	228	3.2	Bongo net	on deck
	13.05.2013	15:54	55° 7.51'	15° 45.00'	91	SSE 6	192	0.7	CTD	surface
	13.05.2013	16:00	55° 7.51'	15° 44.94'	91	SSE 6	324	0.4	CTD	on deck
309	13.05.2013	16:55	55° 7.51'	15° 29.97'	68	SSE 7	186	0.4	CTD	surface
	13.05.2013	17:00	55° 7.50'	15° 29.98'	68	SSE 7	61	0.2	CTD	on deck
	13.05.2013	17:02	55° 7.50'	15° 30.00'	68	SSE 7	138	2.7	Bongo net	surface
	13.05.2013	17:14	55° 7.00'	15° 30.59'	67	SSE 7	144	3	Bongo net	on deck
310	13.05.2013	18:08	55° 8.00'	15° 14.73'	63	S 8	201	2.1	Bongo net	surface
	13.05.2013	18:16	55° 7.63'	15° 14.97'	62	SSE 8	169	3.2	Bongo net	on deck
	13.05.2013	18:19	55° 7.52'	15° 15.02'	62	SSE 8	159	0.3	CTD	surface
	13.05.2013	18:24	55° 7.50'	15° 15.04'	62	SSE 8	171	0.9	CTD	on deck
311	13.05.2013	19:22	54° 57.52'	15° 14.93'	44	SSE 7	229	2.4	CTD	surface
	13.05.2013	19:26	54° 57.51'	15° 14.95'	44	SSE 8	47	0.5	CTD	on deck
	13.05.2013	19:28	54° 57.52'	15° 14.98'	44	S 7	121	1.4	Bongo net	surface
	13.05.2013	19:35	54° 57.47'	15° 15.58'	45	S 7	88	3.8	Bongo net	on deck
312	13.05.2013	20:16	54° 57.57'	15° 28.90'	80	SSW 6	101	5.9	Bongo net	surface
	13.05.2013	20:27	54° 57.49'	15° 29.87'	79	SSW 6	99	2.5	Bongo net	on deck
	13.05.2013	20:29	54° 57.48'	15° 29.98'	80	SSW 6	114	2.2	CTD	surface
	13.05.2013	20:34	54° 57.46'	15° 30.05'	77	SW 6	137	0.4	CTD	on deck
313	13.05.2013	21:28	54° 57.53'	15° 44.96'	84	SSW 5	146	2.8	CTD	surface
	13.05.2013	21:34	54° 57.49'	15° 45.00'	81	SSW 5	149	0.2	CTD	on deck
	13.05.2013	21:37	54° 57.46'	15° 45.01'	83	SSW 5	175	2.8	Bongo net	surface
	13.05.2013	21:49	54° 56.86'	15° 45.04'	84	SW 5	178	2.6	Bongo net	on deck
314	13.05.2013	22:41	54° 48.14'	15° 45.04'	76	SSW 6	183	3.2	Bongo net	surface
	13.05.2013	22:52	54° 47.60'	15° 45.01'	75	SSW 6	188	2.3	Bongo net	on deck
	13.05.2013	22:55	54° 47.54'	15° 45.00'	72	SSW 7	194	0.7	CTD	surface
	13.05.2013	23:01	54° 47.51'	15° 44.99'	74	SSW 7	168	0.4	CTD	on deck
315	13.05.2013	23:53	54° 47.49'	15° 30.04'	78	SSW 6	237	0.7	CTD	surface
	13.05.2013	23:59	54° 47.45'	15° 29.97'	78	S 6	269	0.5	CTD	on deck
	14.05.2013	00:01	54° 47.44'	15° 29.92'	78	S 6	235	1.6	Bongo net	surface
	14.05.2013	00:13	54° 47.29'	15° 29.00'	77	SW 5	280	3.1	Bongo net	on deck
316	14.05.2013	00:58	54° 48.02'	15° 16.11'	68	WNW 5	241	2.6	Bongo net	surface
	14.05.2013	01:09	54° 47.67'	15° 15.33'	68	NW 4	233	3.1	Bongo net	on deck
	14.05.2013	01:13	54° 47.62'	15° 15.16'	68	NW 5	311	0.3	CTD	surface
	14.05.2013	01:17	54° 47.64'	15° 15.16'	68	NW 4	35	0.4	CTD	on deck
317	14.05.2013	02:11	54° 47.50'	15° 0.04'	61	SW 0	304	0.5	CTD	surface
	14.05.2013	02:16	54° 47.50'	14° 59.97'	61	SSW 1	224	0.5	CTD	on deck
	14.05.2013	02:19	54° 47.45'	14° 59.99'	60	SSW 1	141	2.8	Bongo net	surface
	14.05.2013	02:30	54° 47.02'	15° 0.65'	61	SSW 2	136	2.8	Bongo net	on deck
318	14.05.2013	03:41	54° 37.96'	15° 14.46'	60	S 4	147	3.4	Bongo net	surface
	14.05.2013	03:53	54° 37.50'	15° 15.02'	59	S 3	186	1.1	Bongo net	on deck
	14.05.2013	03:55	54° 37.50'	15° 15.03'	59	S 3	50	0.1	CTD	surface
	14.05.2013	04:00	54° 37.50'	15° 15.00'	59	S 3	298	0.2	CTD	on deck

Tab. 2 continued

319	14.05.2013	05:00	54° 37.51'	15° 30.00'	63	S 4	210	0.4	CTD	surface	
	14.05.2013	05:04	54° 37.51'	15° 29.98'	63	S 4	331	0.4	CTD	on deck	
	14.05.2013	05:07	54° 37.48'	15° 30.03'	63	S 4	95	2.8	Bongo net	surface	
	14.05.2013	05:19	54° 37.49'	15° 31.07'	64	S 4	89	2.9	Bongo net	on deck	
320	14.05.2013	06:03	54° 37.40'	15° 44.04'	60	SSW 5	107	5.7	Bongo net	surface	
	14.05.2013	06:13	54° 37.43'	15° 44.88'	60	S 5	85	2.6	Bongo net	on deck	
	14.05.2013	06:16	54° 37.48'	15° 44.97'	60	SSE 5	107	1.4	WP 2	surface	
	14.05.2013	06:23	54° 37.45'	15° 45.01'	60	S 6	292	0.1	WP 2	on deck	
	14.05.2013	06:28	54° 37.45'	15° 45.01'	60	SSW 6	248	0.3	CTD	surface	
321	14.05.2013	06:32	54° 37.45'	15° 45.00'	60	SSW 6	208	0.1	CTD	on deck	
	14.05.2013	07:51	54° 47.48'	16° 0.00'	52	SW 7	314	1.6	CTD	surface	
	14.05.2013	07:55	54° 47.49'	15° 59.94'	52	S 7	348	0.2	CTD	on deck	
	14.05.2013	07:58	54° 47.51'	15° 59.91'	52	SSW 7	328	2.6	Bongo net	surface	
322	14.05.2013	08:06	54° 47.84'	16° 0.18'	53	SSW 7	37	2.9	Bongo net	on deck	
	14.05.2013	09:22	54° 57.93'	16° 14.79'	52	S 8	59	3.5	Bongo net	surface	
	14.05.2013	09:28	54° 57.72'	16° 15.03'	51	SSW 8	187	2.7	Bongo net	on deck	
	14.05.2013	09:31	54° 57.62'	16° 15.01'	50	SW 8	147	0.7	CTD	surface	
323	14.05.2013	09:35	54° 57.59'	16° 15.07'	50	SW 8	127	0.6	CTD	on deck	
	14.05.2013	10:28	54° 57.49'	16° 0.17'	74	WSW 9	260	2.1	CTD	surface	
	14.05.2013	10:34	54° 57.47'	16° 0.12'	74	WSW 9	98	0.1	CTD	on deck	
	14.05.2013	10:36	54° 57.46'	16° 0.10'	76	WSW 9	239	1.4	Bongo net	surface	
324	14.05.2013	10:49	54° 57.81'	15° 59.49'	75	WSW 9	11	3.1	Bongo net	on deck	
	14.05.2013	12:49	55° 17.47'	15° 45.00'	99	WSW 5	297	1.7	CTD	surface	
	14.05.2013	12:56	55° 17.45'	15° 44.91'	100	WSW 4	212	0.4	CTD	on deck	
	14.05.2013	13:03	55° 17.37'	15° 44.77'	101	WSW 5	227	1.4	towed multinet maxi	surface	
	14.05.2013	13:37	55° 16.34'	15° 42.69'	96	WSW 6	221	1	towed multinet maxi	on deck	
	14.05.2013	13:50	55° 16.27'	15° 42.66'	99	WSW 5	58	1.2	towed multinet maxi	surface	
	14.05.2013	14:30	55° 17.62'	15° 45.15'	103	SW 4	43	2.6	towed multinet maxi	on deck	
	14.05.2013	14:42	55° 17.58'	15° 45.15'	103	WSW 4	197	1	towed multinet maxi	surface	
	14.05.2013	15:18	55° 16.40'	15° 42.96'	96	SW 3	228	2.8	towed multinet maxi	on deck	
325	14.05.2013	15:30	55° 16.31'	15° 42.64'	101	SSE 3	359	2.4	towed multinet maxi	surface	
	14.05.2013	16:13	55° 17.70'	15° 45.37'	97	SW 3	47	2.7	towed multinet maxi	on deck	
	14.05.2013	20:03	55° 7.41'	15° 29.93'	67	SSE 5	2	4.8	towed CTD / EK60 transect	surface	
	15.05.2013	02:10	55° 38.00'	15° 30.04'	67	SE 9	4	4.8	towed CTD / EK60 transect	on deck	
	326	15.05.2013	03:55	55° 27.55'	15° 30.00'	86	ESE 12	93	0.8	CTD	surface
		15.05.2013	04:00	55° 27.55'	15° 30.01'	85	N 0	0	0.2	CTD	on deck
		15.05.2013	04:01	55° 27.61'	15° 30.09'	91	ESE 12	54	0.8	pelagic trawl	surface
		15.05.2013	04:18	55° 27.48'	15° 31.34'	85	ESE 12	107	2.9	pelagic trawl	start fishing
		15.05.2013	04:48	55° 27.04'	15° 33.71'	86	ESE 11	109	2.9	pelagic trawl	end fishing
327	15.05.2013	04:59	55° 26.96'	15° 34.33'	88	ESE 11	93	2	pelagic trawl	on deck	
	15.05.2013	06:05	55° 27.50'	15° 14.97'	93	ESE 12	207	1.4	CTD	surface	
	15.05.2013	06:11	55° 27.51'	15° 15.04'	95	ESE 11	86	0.7	CTD	on deck	
	15.05.2013	06:13	55° 27.49'	15° 15.09'	94	ESE 11	114	2.1	pelagic trawl	surface	
	15.05.2013	06:24	55° 27.27'	15° 16.07'	93	ESE 13	113	2.7	pelagic trawl	start fishing	
	15.05.2013	06:54	55° 26.67'	15° 18.47'	92	ESE 9	119	2.9	pelagic trawl	end fishing	
328	15.05.2013	07:05	55° 26.51'	15° 19.05'	89	ESE 9	103	2	pelagic trawl	on deck	
	15.05.2013	08:09	55° 17.56'	15° 16.94'	89	SE 10	152	1.7	CTD	surface	
	15.05.2013	08:15	55° 17.55'	15° 17.01'	90	ESE 9	104	0.4	CTD	on deck	
	15.05.2013	08:17	55° 17.53'	15° 17.06'	90	ESE 10	119	2.5	pelagic trawl	surface	
	15.05.2013	08:27	55° 17.41'	15° 18.02'	92	ESE 9	101	3.1	pelagic trawl	start fishing	
	15.05.2013	08:57	55° 17.02'	15° 20.52'	91	ESE 9	123	2.9	pelagic trawl	end fishing	
329	15.05.2013	09:07	55° 16.83'	15° 20.98'	91	ESE 9	122	2.1	pelagic trawl	on deck	
	15.05.2013	09:55	55° 17.46'	15° 29.83'	93	ESE 10	67	0.3	CTD	surface	
	15.05.2013	10:02	55° 17.48'	15° 29.82'	93	ESE 10	273	0.1	CTD	on deck	
	15.05.2013	10:05	55° 17.47'	15° 29.87'	94	ESE 10	105	1.6	pelagic trawl	surface	
	15.05.2013	10:16	55° 17.35'	15° 30.77'	94	ESE 10	103	2.9	pelagic trawl	start fishing	
	15.05.2013	10:45	55° 16.95'	15° 33.05'	95	ESE 9	109	2.8	pelagic trawl	end fishing	
	15.05.2013	10:56	55° 16.87'	15° 33.56'	95	ESE 10	73	1.4	pelagic trawl	on deck	

Tab. 2 continued

330	15.05.2013	11:55	55° 7.55'	15° 30.01'	68	ESE 11	161	1.2	CTD	surface
	15.05.2013	12:00	55° 7.54'	15° 30.00'	68	E 11	222	0.2	CTD	on deck
	15.05.2013	12:02	55° 7.54'	15° 30.02'	68	E 11	97	1.2	pelagic trawl	surface
	15.05.2013	12:15	55° 7.48'	15° 31.03'	70	E 10	96	2.8	pelagic trawl	start fishing
	15.05.2013	12:45	55° 7.34'	15° 33.35'	73	E 9	94	2.7	pelagic trawl	end fishing
	15.05.2013	12:56	55° 7.36'	15° 34.02'	74	E 9	61	2.4	pelagic trawl	on deck
331	15.05.2013	17:04	55° 21.63'	15° 35.79'	95	E 11	68	0.6	CTD	surface
	15.05.2013	17:10	55° 21.64'	15° 35.82'	101	E 11	17	0.2	CTD	on deck
	15.05.2013	17:15	55° 21.65'	15° 35.82'	98	E 12	68	0.4	CTD/rosette water sampler	surface
	15.05.2013	17:30	55° 21.67'	15° 35.97'	99	ESE 11	81	0.5	CTD/rosette water sampler	on deck
332	15.05.2013	18:25	55° 27.47'	15° 44.25'	86	ESE 12	97	2.6	towed CTD / EK60 transect	surface
	16.05.2013	02:28	54° 47.07'	15° 45.00'	71	E 11	177	3.8	towed CTD / EK60 transect	on deck
333	16.05.2013	03:55	54° 47.48'	15° 44.99'	72	ESE 10	139	1	CTD	surface
	16.05.2013	04:00	54° 47.44'	15° 45.03'	73	ESE 10	147	0.5	CTD	on deck
	16.05.2013	04:02	54° 47.42'	15° 45.06'	75	ESE 10	125	1.1	pelagic trawl	surface
	16.05.2013	04:14	54° 47.24'	15° 46.13'	71	ESE 10	108	3	pelagic trawl	start fishing
	16.05.2013	04:44	54° 46.76'	15° 48.70'	67	ESE 11	107	3.1	pelagic trawl	end fishing
	16.05.2013	04:54	54° 46.65'	15° 49.26'	66	ESE 9	106	2.1	pelagic trawl	on deck
334	16.05.2013	06:00	54° 56.80'	15° 45.03'	85	ESE 9	54	1.5	CTD	surface
	16.05.2013	06:06	54° 56.80'	15° 45.13'	84	ESE 9	124	0.4	CTD	on deck
	16.05.2013	06:08	54° 56.79'	15° 45.16'	83	ESE 9	104	1.7	pelagic trawl	surface
	16.05.2013	06:17	54° 56.83'	15° 46.06'	80	ESE 9	98	2.8	pelagic trawl	start fishing
	16.05.2013	06:46	54° 56.51'	15° 48.49'	59	ESE 9	100	3.4	pelagic trawl	end fishing
	16.05.2013	06:56	54° 56.50'	15° 49.15'	78	ESE 9	63	2.7	pelagic trawl	on deck
335	16.05.2013	08:07	55° 7.51'	15° 44.96'	89	E 9	347	1.5	CTD	surface
	16.05.2013	08:14	55° 7.50'	15° 44.98'	89	E 9	165	0.2	CTD	on deck
	16.05.2013	08:16	55° 7.50'	15° 45.03'	91	E 9	99	1.9	pelagic trawl	surface
	16.05.2013	08:25	55° 7.56'	15° 45.82'	91	ESE 9	85	2.9	pelagic trawl	start fishing
	16.05.2013	08:55	55° 7.51'	15° 48.36'	93	ESE 10	93	3	pelagic trawl	end fishing
	16.05.2013	09:05	55° 7.50'	15° 49.02'	93	ESE 10	80	1.5	pelagic trawl	on deck
336	16.05.2013	10:10	55° 17.48'	15° 45.08'	96	E 10	353	1.1	CTD	surface
	16.05.2013	10:16	55° 17.51'	15° 45.09'	102	E 9	102	0.4	CTD	on deck
	16.05.2013	10:19	55° 17.50'	15° 45.14'	100	E 10	93	1.6	pelagic trawl	surface
	16.05.2013	10:29	55° 17.50'	15° 45.97'	96	E 9	92	2.6	pelagic trawl	start fishing
	16.05.2013	10:58	55° 17.46'	15° 48.33'	98	E 11	91	3	pelagic trawl	end fishing
	16.05.2013	11:08	55° 17.45'	15° 48.90'	95	E 11	85	1.9	pelagic trawl	on deck
337	16.05.2013	12:10	55° 27.51'	15° 45.12'	86	E 10	35	1.3	CTD	surface
	16.05.2013	12:16	55° 27.54'	15° 45.13'	86	E 10	65	0.5	CTD	on deck
	16.05.2013	12:17	55° 27.54'	15° 45.14'	86	E 10	56	0.7	pelagic trawl	surface
	16.05.2013	12:30	55° 27.65'	15° 46.18'	86	E 10	81	2.8	pelagic trawl	start fishing
	16.05.2013	13:00	55° 27.83'	15° 48.63'	88	E 11	87	2.9	pelagic trawl	end fishing
	16.05.2013	13:11	55° 27.90'	15° 49.24'	87	E 10	36	1.8	pelagic trawl	on deck
338	16.05.2013	14:13	55° 37.52'	15° 45.00'	69	ENE 10	98	1.3	CTD	surface
	16.05.2013	14:19	55° 37.52'	15° 45.02'	70	E 10	314	0.4	CTD	on deck
	16.05.2013	14:21	55° 37.53'	15° 45.05'	70	E 11	78	2.2	pelagic trawl	surface
	16.05.2013	14:32	55° 37.75'	15° 46.12'	70	E 10	55	3.1	pelagic trawl	start fishing
	16.05.2013	15:02	55° 38.55'	15° 48.24'	71	E 11	65	2.9	pelagic trawl	end fishing
	16.05.2013	15:12	55° 38.70'	15° 48.84'	72	E 11	50	1.9	pelagic trawl	on deck
339	16.05.2013	17:01	55° 47.65'	16° 14.76'	62	ENE 11	122	2	towed CTD / EK60 transect	surface
	16.05.2013	20:20	55° 31.14'	16° 15.00'	74	E 12	180	4.8	towed CTD / EK60 transect	on deck
	16.05.2013	20:53	55° 31.15'	16° 15.27'	74	E 12	123	0.6	towed CTD / EK60 transect	surface
	17.05.2013	02:41	55° 1.44'	16° 15.03'	68	E 10	178	4.4	towed CTD / EK60 transect	on deck
340	17.05.2013	03:56	55° 7.47'	16° 15.02'	80	E 9	212	0.4	CTD	surface
	17.05.2013	04:02	55° 7.42'	16° 14.96'	80	E 9	255	0.8	CTD	on deck
	17.05.2013	04:03	55° 7.42'	16° 14.94'	81	E 9	318	0.4	pelagic trawl	surface
	17.05.2013	04:15	55° 7.35'	16° 15.96'	80	ESE 9	98	3.1	pelagic trawl	start fishing
	17.05.2013	04:45	55° 7.12'	16° 18.58'	72	E 9	100	3	pelagic trawl	end fishing
	17.05.2013	04:55	55° 7.04'	16° 19.16'	70	E 9	94	2.4	pelagic trawl	on deck

Tab. 2 continued

341	17.05.2013	06:00	55° 17.50'	16° 14.95'	75	E 10	64	1.1	CTD	surface
	17.05.2013	06:05	55° 17.47'	16° 14.99'	75	ESE 10	158	0.3	CTD	on deck
	17.05.2013	06:06	55° 17.47'	16° 15.01'	74	ESE 10	102	1.9	pelagic trawl	surface
	17.05.2013	06:13	55° 17.44'	16° 15.70'	73	ESE 9	94	2.9	pelagic trawl	start fishing
	17.05.2013	06:43	55° 17.28'	16° 18.10'	68	ESE 9	101	2.8	pelagic trawl	end fishing
	17.05.2013	06:54	55° 17.25'	16° 18.84'	67	E 9	65	2.3	pelagic trawl	on deck
342	17.05.2013	08:00	55° 17.51'	15° 59.94'	90	E 10	333	0.9	CTD	surface
	17.05.2013	08:06	55° 17.52'	15° 59.98'	90	E 10	195	0.2	CTD	on deck
	17.05.2013	08:10	55° 17.50'	15° 59.96'	91	E 10	98	0.4	multinet midi	surface
	17.05.2013	08:22	55° 17.51'	15° 59.98'	89	E 10	60	0.4	multinet midi	on deck
	17.05.2013	08:32	55° 17.53'	16° 0.00'	91	E 10	45	0	multinet midi	surface
	17.05.2013	08:41	55° 17.53'	16° 0.06'	91	E 9	73	0.4	multinet midi	on deck
	17.05.2013	08:45	55° 17.54'	16° 0.14'	91	E 9	79	1.5	pelagic trawl	surface
	17.05.2013	08:53	55° 17.60'	16° 0.88'	89	E 10	83	3.2	pelagic trawl	start fishing
	17.05.2013	09:23	55° 17.71'	16° 3.39'	87	E 9	87	2.8	pelagic trawl	end fishing
	17.05.2013	09:32	55° 17.74'	16° 3.90'	87	E 9	61	2	pelagic trawl	on deck
343	17.05.2013	11:00	55° 27.47'	16° 14.95'	75	E 11	324	0.2	CTD	surface
	17.05.2013	11:06	55° 27.51'	16° 14.99'	75	E 11	46	0.4	CTD	on deck
	17.05.2013	11:07	55° 27.51'	16° 15.00'	75	E 11	24	0.3	pelagic trawl	surface
	17.05.2013	12:23	55° 27.69'	16° 20.29'	70	E 11	85	1.9	pelagic trawl	on deck
344	17.05.2013	14:07	55° 27.50'	16° 14.98'	75	ENE 11	331	9.2	EK60 transect	start transect
	17.05.2013	16:05	55° 47.51'	16° 14.98'	60	ENE 10	0	10.2	EK60 transect	end transect
345	20.05.2013	04:00	56° 42.00'	19° 31.97'	132	E 8	261	0.2	CTD	surface
	20.05.2013	04:09	56° 42.00'	19° 31.97'	133	E 8	179	0.2	CTD	on deck
	20.05.2013	04:16	56° 42.01'	19° 31.98'	132	E 8	99	0.2	IKS 80	surface
	20.05.2013	04:27	56° 42.02'	19° 31.98'	132	E 8	216	0.1	IKS 80	on deck
346	20.05.2013	06:00	56° 30.98'	19° 51.95'	119	E 7	109	0.9	IKS 80	surface
	20.05.2013	06:10	56° 30.99'	19° 51.93'	119	ENE 8	272	0.4	IKS 80	on deck
	20.05.2013	06:13	56° 30.99'	19° 51.89'	119	ENE 8	290	0.5	CTD/rosette water sampler	surface
	20.05.2013	06:22	56° 30.98'	19° 51.87'	119	ENE 7	219	0.4	CTD/rosette water sampler	on deck
347	20.05.2013	07:02	56° 30.00'	19° 39.95'	142	E 8	204	1	CTD/rosette water sampler	surface
	20.05.2013	07:20	56° 30.02'	19° 39.88'	142	ENE 7	36	0.5	CTD/rosette water sampler	on deck
	20.05.2013	07:23	56° 30.03'	19° 39.89'	142	ENE 7	334	0.2	CTD	surface
	20.05.2013	07:33	56° 30.04'	19° 39.90'	142	ENE 7	3	0.1	CTD	on deck
	20.05.2013	07:35	56° 30.05'	19° 39.90'	142	ENE 6	349	0.1	IKS 80	surface
	20.05.2013	07:47	56° 30.09'	19° 39.89'	142	ENE 7	92	0.8	IKS 80	on deck
	20.05.2013	07:49	56° 30.05'	19° 39.96'	142	ENE 6	126	1.2	WP 2	surface
	20.05.2013	07:57	56° 30.04'	19° 39.92'	142	ENE 6	264	0.5	WP 2	on deck
348	20.05.2013	08:55	56° 29.97'	19° 22.42'	133	NE 6	338	1.8	IKS 80	surface
	20.05.2013	09:06	56° 30.01'	19° 22.38'	133	ENE 6	76	0.2	IKS 80	on deck
	20.05.2013	09:09	56° 30.02'	19° 22.38'	133	ENE 6	26	0.2	CTD/rosette water sampler	surface
	20.05.2013	09:18	56° 30.02'	19° 22.39'	133	ENE 6	256	0.3	CTD/rosette water sampler	on deck
349	20.05.2013	10:08	56° 22.02'	19° 20.01'	133	ENE 6	100	1.3	CTD/rosette water sampler	surface
	20.05.2013	10:17	56° 22.00'	19° 20.11'	132	NE 6	150	0.3	CTD/rosette water sampler	on deck
	20.05.2013	10:19	56° 22.00'	19° 20.14'	132	NE 6	71	0.7	IKS 80	surface
	20.05.2013	10:32	56° 22.04'	19° 20.19'	132	ENE 6	4	0.2	IKS 80	on deck
350	20.05.2013	11:18	56° 14.98'	19° 18.04'	130	ENE 7	106	0.8	IKS 80	surface
	20.05.2013	11:28	56° 15.01'	19° 18.05'	130	ENE 7	6	0.6	IKS 80	on deck
	20.05.2013	11:31	56° 15.04'	19° 18.06'	130	ENE 7	359	0.3	CTD/rosette water sampler	surface
	20.05.2013	11:41	56° 15.07'	19° 18.04'	130	ENE 7	302	0.2	CTD/rosette water sampler	on deck
351	20.05.2013	12:37	56° 6.97'	19° 9.95'	122	ENE 7	142	0.8	CTD/rosette water sampler	surface
	20.05.2013	12:46	56° 6.94'	19° 9.98'	127	ENE 7	250	0.3	CTD/rosette water sampler	on deck
	20.05.2013	12:49	56° 6.95'	19° 9.97'	122	ENE 7	310	0.3	IKS 80	surface
	20.05.2013	12:59	56° 6.99'	19° 9.94'	130	NE 7	111	0.1	IKS 80	on deck
352	20.05.2013	13:36	56° 2.09'	19° 4.66'	117	ENE 7	128	0.4	IKS 80	surface
	20.05.2013	13:46	56° 2.10'	19° 4.64'	117	NE 7	304	0.2	IKS 80	on deck
	20.05.2013	13:49	56° 2.12'	19° 4.64'	117	NE 7	31	0.4	CTD/rosette water sampler	surface
	20.05.2013	13:57	56° 2.12'	19° 4.67'	117	NE 7	191	0.2	CTD/rosette water sampler	on deck
353	20.05.2013	14:35	55° 56.88'	19° 2.70'	112	NE 7	115	1	CTD	surface
	20.05.2013	14:44	55° 56.88'	19° 2.72'	111	NE 7	346	0.1	CTD	on deck
	20.05.2013	14:46	55° 56.89'	19° 2.72'	112	NE 7	359	0.2	IKS 80	surface
	20.05.2013	14:55	55° 56.89'	19° 2.72'	112	NE 7	195	0.3	IKS 80	on deck

Tab. 2 continued

354	20.05.2013	16:03	55° 57.00'	18° 42.99'	116	ENE 7	120	0.9	IKS 80	surface
	20.05.2013	16:13	55° 57.02'	18° 42.98'	116	NE 6	355	0.1	IKS 80	on deck
	20.05.2013	16:17	55° 57.01'	18° 42.98'	116	NE 6	148	0.2	CTD	surface
	20.05.2013	16:25	55° 57.01'	18° 42.97'	116	NE 6	327	0.2	CTD	on deck
355	20.05.2013	17:18	55° 55.00'	18° 28.98'	106	NW 2	121	1.5	CTD	surface
	20.05.2013	17:26	55° 55.01'	18° 29.02'	106	NE 4	296	0.3	CTD	on deck
	20.05.2013	17:28	55° 55.01'	18° 29.00'	106	NE 5	312	0.6	IKS 80	surface
	20.05.2013	17:37	55° 55.04'	18° 28.94'	106	NNW 2	19	0.2	IKS 80	on deck
356	20.05.2013	18:38	55° 53.01'	18° 11.98'	66	NNE 2	175	0.8	IKS 80	surface
	20.05.2013	18:44	55° 52.97'	18° 12.03'	67	N 3	168	0.3	IKS 80	on deck
	20.05.2013	18:47	55° 52.97'	18° 12.08'	67	NNE 4	55	0.3	CTD	surface
	20.05.2013	18:52	55° 52.96'	18° 12.09'	67	NNW 3	117	0.2	CTD	on deck
357	20.05.2013	20:23	55° 36.96'	18° 19.01'	93	NNW 6	221	1	CTD	surface
	20.05.2013	20:29	55° 36.94'	18° 18.94'	93	NNW 6	292	0.4	CTD	on deck
	20.05.2013	20:31	55° 36.95'	18° 18.93'	93	NNW 6	278	0.2	IKS 80	surface
	20.05.2013	20:39	55° 36.94'	18° 18.88'	93	NNW 6	310	0.4	IKS 80	on deck
358	20.05.2013	22:00	55° 37.00'	18° 43.01'	85	N 6	332	0.2	IKS 80	surface
	20.05.2013	22:07	55° 37.00'	18° 42.91'	84	N 7	265	0.5	IKS 80	on deck
	20.05.2013	22:10	55° 37.00'	18° 42.86'	84	N 7	273	0.5	CTD	surface
	20.05.2013	22:16	55° 37.00'	18° 42.86'	84	N 6	131	0.3	CTD	on deck
359	20.05.2013	23:26	55° 25.03'	18° 43.14'	85	SW 8	148	1.2	CTD	surface
	20.05.2013	23:32	55° 24.97'	18° 43.23'	85	SW 8	174	0.6	CTD	on deck
	20.05.2013	23:37	55° 24.94'	18° 43.22'	85	SW 7	166	0.3	IKS 80	surface
	20.05.2013	23:41	55° 24.91'	18° 43.25'	85	SW 8	190	1	IKS 80	on deck
360	21.05.2013	00:54	55° 14.98'	18° 36.95'	77	NW 9	221	0.7	IKS 80	surface
	21.05.2013	01:00	55° 14.98'	18° 36.98'	77	NW 9	340	0.4	IKS 80	on deck
	21.05.2013	01:03	55° 15.00'	18° 36.95'	77	NW 9	310	0.1	CTD	surface
	21.05.2013	01:08	55° 14.99'	18° 36.96'	77	NW 8	146	0.2	CTD	on deck
361	21.05.2013	02:01	55° 9.98'	18° 49.04'	92	WSW 9	234	1.7	CTD	surface
	21.05.2013	02:08	55° 9.94'	18° 48.99'	92	W 9	194	0.8	CTD	on deck
	21.05.2013	02:11	55° 9.91'	18° 48.98'	92	W 8	194	0.4	IKS 80	surface
	21.05.2013	02:19	55° 9.89'	18° 48.93'	92	W 8	190	0.2	IKS 80	on deck
362	21.05.2013	03:39	54° 59.99'	19° 5.03'	101	W 9	190	0.5	IKS 80	surface
	21.05.2013	03:47	54° 59.96'	19° 5.03'	101	W 9	117	0.2	IKS 80	on deck
	21.05.2013	03:50	54° 59.95'	19° 5.00'	104	W 9	236	0.5	CTD	surface
	21.05.2013	03:57	54° 59.94'	19° 4.98'	101	W 10	245	0.5	CTD	on deck
363	21.05.2013	04:42	54° 54.00'	19° 12.03'	118	W 7	252	0.9	CTD	surface
	21.05.2013	04:49	54° 53.98'	19° 11.99'	107	W 7	216	0.2	CTD	on deck
	21.05.2013	04:52	54° 53.98'	19° 11.99'	107	W 7	106	0.2	IKS 80	surface
	21.05.2013	05:00	54° 53.98'	19° 11.94'	107	W 7	289	0.2	IKS 80	on deck
364	21.05.2013	06:06	54° 42.98'	19° 16.97'	98	W 5	281	0.3	IKS 80	surface
	21.05.2013	06:14	54° 42.98'	19° 17.00'	99	W 5	185	0.4	IKS 80	on deck
	21.05.2013	06:18	54° 42.96'	19° 16.97'	98	W 5	228	0.4	CTD	surface
	21.05.2013	06:25	54° 42.92'	19° 16.92'	98	W 6	175	0.4	CTD	on deck
365	21.05.2013	07:17	54° 48.99'	19° 8.00'	104	W 10	313	1.1	CTD	surface
	21.05.2013	07:24	54° 48.98'	19° 7.95'	104	W 9	284	0.5	CTD	on deck
	21.05.2013	07:26	54° 48.98'	19° 7.95'	103	W 9	92	0.1	IKS 80	surface
	21.05.2013	07:35	54° 48.94'	19° 7.95'	104	W 9	261	0.8	IKS 80	on deck
366	21.05.2013	08:35	54° 53.98'	18° 54.05'	99	W 9	303	2.2	IKS 80	surface
	21.05.2013	08:44	54° 53.94'	18° 54.05'	100	W 9	141	0.3	IKS 80	on deck
	21.05.2013	08:47	54° 53.93'	18° 54.04'	99	W 9	239	0.3	CTD	surface
	21.05.2013	08:54	54° 53.95'	18° 54.10'	99	W 9	48	0.7	CTD	on deck
367	21.05.2013	09:58	55° 0.01'	18° 41.03'	93	W 6	288	0.7	CTD	surface
	21.05.2013	10:04	54° 59.98'	18° 41.00'	93	W 6	232	0.4	CTD	on deck
	21.05.2013	10:07	54° 59.97'	18° 40.95'	93	W 6	226	0.4	IKS 80	surface
	21.05.2013	10:15	54° 59.94'	18° 40.90'	93	W 5	255	0.2	IKS 80	on deck
368	21.05.2013	11:32	55° 8.98'	18° 25.06'	80	WSW 6	289	1.3	IKS 80	surface
	21.05.2013	11:39	55° 8.94'	18° 25.05'	80	WSW 6	184	0.3	IKS 80	on deck
	21.05.2013	11:42	55° 8.92'	18° 25.03'	80	WSW 5	232	0.5	CTD	surface
	21.05.2013	11:47	55° 8.92'	18° 25.00'	80	WSW 6	254	0.5	CTD	on deck

Tab. 2 continued

369	21.05.2013	13:32	55° 14.00'	17° 55.07'	62	WSW 4	268	0.9	CTD	surface
	21.05.2013	13:37	55° 13.97'	17° 55.05'	61	WSW 4	191	0.4	CTD	on deck
	21.05.2013	13:50	55° 13.94'	17° 54.87'	61	WSW 4	277	0.5	IKS 80	surface
	21.05.2013	13:56	55° 13.94'	17° 54.82'	61	WSW 4	207	0.2	IKS 80	on deck
370	21.05.2013	14:59	55° 14.95'	17° 36.37'	80	SW 4	285	3	Bongo net	surface
	21.05.2013	15:12	55° 15.07'	17° 35.24'	83	SW 5	278	2.9	Bongo net	on deck
	21.05.2013	15:15	55° 15.03'	17° 35.03'	83	SW 4	231	1.1	CTD	surface
	21.05.2013	15:21	55° 15.00'	17° 34.93'	83	SW 4	255	0.5	CTD	on deck
371	21.05.2013	16:07	55° 14.01'	17° 21.99'	89	S 3	258	1.7	CTD	surface
	21.05.2013	16:14	55° 14.00'	17° 21.94'	90	SSW 3	78	0.1	CTD	on deck
	21.05.2013	16:17	55° 13.98'	17° 21.86'	89	SSW 4	267	3	Bongo net	surface
	21.05.2013	16:31	55° 13.99'	17° 20.67'	90	SSW 4	272	2.6	Bongo net	on deck
372	21.05.2013	17:19	55° 15.04'	17° 6.68'	84	SSW 5	266	3.7	Bongo net	surface
	21.05.2013	17:35	55° 15.03'	17° 5.20'	84	SSW 6	271	3.1	Bongo net	on deck
	21.05.2013	17:38	55° 15.01'	17° 5.01'	84	SSW 5	267	0.5	CTD	surface
	21.05.2013	17:44	55° 15.00'	17° 4.95'	84	SW 5	85	0.1	CTD	on deck
373	21.05.2013	18:48	55° 14.02'	16° 48.00'	80	SSW 5	339	0.6	CTD	surface
	21.05.2013	18:55	55° 14.02'	16° 48.02'	80	SSW 6	68	0.4	CTD	on deck
	21.05.2013	18:56	55° 14.02'	16° 48.03'	80	SSW 6	152	0.9	Bongo net	surface
	21.05.2013	19:09	55° 13.72'	16° 47.20'	81	SSW 7	274	2.9	Bongo net	on deck
374	21.05.2013	21:56	55° 17.50'	16° 0.01'	89	SSW 8	261	0.1	CTD	surface
	21.05.2013	22:02	55° 17.49'	16° 0.04'	91	SSW 8	247	0.1	CTD	on deck
	21.05.2013	22:08	55° 17.47'	16° 0.04'	89	SSW 8	179	0.3	multinet midi	surface
	21.05.2013	22:21	55° 17.48'	16° 0.04'	91	SSW 7	182	0.6	multinet midi	on deck
	21.05.2013	22:26	55° 17.46'	16° 0.01'	91	SSW 9	311	0.3	multinet midi	surface
	21.05.2013	22:38	55° 17.49'	15° 59.97'	91	SSW 8	224	0.1	multinet midi	on deck
	21.05.2013	22:42	55° 17.50'	15° 59.96'	89	SSW 8	341	0.2	multinet midi	surface
	21.05.2013	22:50	55° 17.49'	16° 0.00'	91	SSW 8	79	0.3	multinet midi	on deck
	21.05.2013	22:54	55° 17.50'	16° 0.01'	89	SSW 8	234	0.1	multinet midi	surface
	21.05.2013	23:02	55° 17.48'	16° 0.01'	91	SSW 8	11	0.1	multinet midi	on deck
	21.05.2013	23:10	55° 17.45'	15° 59.98'	89	SSW 8	199	1.5	towed multinet maxi	surface
	21.05.2013	23:43	55° 16.02'	15° 59.07'	92	SSW 8	193	0.9	towed multinet maxi	on deck
	22.05.2013	00:02	55° 17.48'	15° 59.95'	91	SSW 7	202	1.5	towed multinet maxi	surface
	22.05.2013	00:37	55° 15.97'	15° 58.79'	90	SSW 7	204	1.4	towed multinet maxi	on deck
375	22.05.2013	00:53	55° 16.54'	15° 58.83'	91	SSW 8	287	3.3	towed CTD / EK60 transect	surface
	22.05.2013	00:54	55° 16.56'	15° 58.73'	90	SSW 9	289	3.4	towed CTD / EK60 transect	start transect
	22.05.2013	10:29	55° 17.50'	15° 59.45'	90	S 8	90	5.2	towed CTD / EK60 transect	end transect
	22.05.2013	10:35	55° 17.50'	16° 0.16'	89	S 7	89	2.4	towed CTD / EK60 transect	on deck

Tab. 2 continued

376	22.05.2013	10:44	55° 17.49'	16° 0.03'	91	SSE 7	244	0.5	CTD	surface
	22.05.2013	10:50	55° 17.48'	16° 0.01'	89	SSE 7	15	0.2	CTD	on deck
	22.05.2013	10:54	55° 17.49'	16° 0.00'	89	SSE 6	293	0.1	multinet midi	surface
	22.05.2013	11:07	55° 17.48'	15° 59.99'	91	SE 5	222	0.2	multinet midi	on deck
	22.05.2013	11:13	55° 17.48'	15° 59.94'	91	SE 6	305	0.5	multinet midi	surface
	22.05.2013	11:25	55° 17.49'	15° 59.97'	91	SE 7	129	0.2	multinet midi	on deck
	22.05.2013	11:29	55° 17.48'	15° 59.98'	89	SE 7	5	0.2	multinet midi	surface
	22.05.2013	11:38	55° 17.49'	16° 0.00'	91	SE 8	223	0.3	multinet midi	on deck
	22.05.2013	11:43	55° 17.49'	15° 59.97'	89	SE 8	317	0.3	multinet midi	surface
	22.05.2013	11:49	55° 17.49'	15° 59.98'	89	SE 7	115	0.4	multinet midi	on deck
	22.05.2013	12:04	55° 17.41'	16° 0.13'	89	SE 6	142	1.5	towed multinet maxi	surface
	22.05.2013	12:39	55° 16.10'	16° 1.86'	90	SE 6	157	1.1	towed multinet maxi	on deck
	22.05.2013	12:56	55° 16.08'	16° 1.87'	88	ESE 6	326	2	towed multinet maxi	surface
	22.05.2013	13:30	55° 17.41'	16° 0.13'	89	ESE 7	325	2.3	towed multinet maxi	on deck
	22.05.2013	13:35	55° 17.51'	15° 59.96'	89	SE 8	248	0.5	CTD/rosette water sampler	surface
	22.05.2013	13:42	55° 17.50'	15° 59.96'	91	ESE 7	58	0.5	CTD/rosette water sampler	on deck
	22.05.2013	13:46	55° 17.52'	16° 0.00'	91	ESE 7	40	0.3	Apstein net	surface
	22.05.2013	14:07	55° 17.53'	16° 0.00'	91	SE 8	234	0.2	Apstein net	on deck
	22.05.2013	14:10	55° 17.52'	15° 59.99'	89	SE 8	203	0.1	Apstein net	surface
	22.05.2013	14:32	55° 17.50'	16° 0.05'	91	SE 6	113	0.2	Apstein net	on deck
	22.05.2013	14:34	55° 17.50'	16° 0.06'	89	SE 6	137	0.1	Apstein net	surface
	22.05.2013	14:56	55° 17.47'	16° 0.13'	89	SSE 6	272	0.2	Apstein net	on deck
	22.05.2013	14:58	55° 17.48'	16° 0.12'	91	SSE 6	316	0.3	Apstein net	surface
	22.05.2013	15:21	55° 17.49'	16° 0.08'	89	S 7	320	0.1	Apstein net	on deck
	22.05.2013	15:26	55° 17.51'	16° 0.07'	91	S 7	24	0.3	WP 2	surface
	22.05.2013	15:39	55° 17.48'	16° 0.10'	89	S 6	159	0	WP 2	on deck
	22.05.2013	15:43	55° 17.48'	16° 0.09'	89	S 5	317	0.2	WP 2	surface
	22.05.2013	15:57	55° 17.50'	16° 0.07'	89	S 6	194	0.1	WP 2	on deck
	22.05.2013	15:59	55° 17.49'	16° 0.07'	91	S 6	208	0.2	WP 2	surface
	22.05.2013	16:12	55° 17.46'	16° 0.03'	89	S 5	275	0.1	WP 2	on deck
	22.05.2013	16:14	55° 17.47'	16° 0.02'	91	S 6	307	0.1	WP 2	surface
	22.05.2013	16:26	55° 17.49'	15° 59.99'	89	S 5	217	0.1	WP 2	on deck
22.05.2013	16:28	55° 17.49'	15° 59.99'	91	S 4	181	0.2	WP 2	surface	
22.05.2013	16:40	55° 17.46'	16° 0.00'	89	S 5	62	0.1	WP 2	on deck	
377	23.05.2013	00:03	55° 4.95'	14° 11.27'	49	WNW 14	263	2	Bongo net	surface
	23.05.2013	00:09	55° 4.91'	14° 10.88'	48	W 14	254	1.7	Bongo net	on deck
	23.05.2013	00:12	55° 4.90'	14° 10.89'	48	W 14	173	0.4	CTD	surface
	23.05.2013	00:16	55° 4.87'	14° 10.89'	48	W 14	119	0.4	CTD	on deck
378	23.05.2013	01:14	55° 11.87'	14° 18.70'	46	W 14	51	0.5	CTD	surface
	23.05.2013	01:18	55° 11.86'	14° 18.69'	45	W 13	212	0.3	CTD	on deck
	23.05.2013	01:20	55° 11.84'	14° 18.65'	46	W 14	244	2	Bongo net	surface
	23.05.2013	01:26	55° 11.78'	14° 18.24'	47	W 13	269	2.1	Bongo net	on deck
379	23.05.2013	02:38	55° 9.43'	14° 5.58'	45	W 14	246	2.9	Bongo net	surface
	23.05.2013	02:45	55° 9.32'	14° 5.02'	45	W 11	250	2	Bongo net	on deck
	23.05.2013	02:49	55° 9.33'	14° 4.93'	44	W 12	219	0.2	CTD	surface
	23.05.2013	02:52	55° 9.32'	14° 4.91'	45	WNW 10	249	0.7	CTD	on deck
380	23.05.2013	06:26	55° 2.38'	14° 1.85'	49	W 9	227	1.6	CTD	surface
	23.05.2013	06:30	55° 2.36'	14° 1.83'	50	W 8	330	0.2	CTD	on deck
	23.05.2013	06:32	55° 2.37'	14° 1.81'	47	W 8	271	1.2	Bongo net	surface
	23.05.2013	06:40	55° 2.26'	14° 1.22'	47	W 8	267	2.2	Bongo net	on deck
381	23.05.2013	07:26	55° 6.91'	13° 53.11'	45	W 6	307	3	Bongo net	surface
	23.05.2013	07:33	55° 6.86'	13° 52.65'	45	WSW 7	284	3.2	Bongo net	on deck
	23.05.2013	07:36	55° 6.89'	13° 52.50'	45	W 6	290	0.5	CTD	surface
	23.05.2013	07:39	55° 6.88'	13° 52.51'	45	W 6	175	0.3	CTD	on deck
382	23.05.2013	08:24	55° 10.02'	13° 41.98'	44	WSW 8	320	0.7	CTD	surface
	23.05.2013	08:30	55° 10.03'	13° 41.97'	44	WSW 8	293	0.5	CTD	on deck
	23.05.2013	08:32	55° 10.04'	13° 41.95'	46	WSW 8	278	0.6	Bongo net	surface
	23.05.2013	08:38	55° 9.91'	13° 41.56'	44	WSW 8	241	2.4	Bongo net	on deck

Tab. 2 continued

382	23.05.2013	09:09	55° 9.10'	13° 33.82'	44	WSW 7	250	3	Bongo net	surface
	23.05.2013	09:16	55° 8.98'	13° 33.30'	54	WSW 7	275	3.2	Bongo net	on deck
	23.05.2013	09:19	55° 8.99'	13° 33.02'	44	WSW 7	253	1.6	CTD	surface
	23.05.2013	09:22	55° 8.96'	13° 32.99'	44	WSW 7	210	0.4	CTD	on deck
384	23.05.2013	10:05	55° 4.20'	13° 39.48'	45	WSW 9	164	0.4	CTD	surface
	23.05.2013	10:08	55° 4.19'	13° 39.51'	45	WSW 9	117	0.4	CTD	on deck
	23.05.2013	10:11	55° 4.16'	13° 39.46'	46	WSW 8	227	2.1	Bongo net	surface
	23.05.2013	10:18	55° 3.92'	13° 39.10'	47	SW 8	220	2.5	Bongo net	on deck
385	23.05.2013	10:46	55° 2.71'	13° 32.65'	45	SW 8	252	2.7	Bongo net	surface
	23.05.2013	10:53	55° 2.53'	13° 32.19'	45	WSW 8	241	2.9	Bongo net	on deck
	23.05.2013	10:57	55° 2.38'	13° 31.80'	45	WSW 7	232	1.7	CTD	surface
	23.05.2013	11:01	55° 2.34'	13° 31.73'	45	WSW 8	221	0.8	CTD	on deck
386	23.05.2013	12:15	54° 59.28'	13° 52.20'	51	WSW 6	148	0.5	CTD	surface
	23.05.2013	12:18	54° 59.26'	13° 52.20'	47	WSW 6	230	0.5	CTD	on deck
	23.05.2013	12:21	54° 59.25'	13° 52.19'	50	WSW 6	221	1.2	Bongo net	surface
	23.05.2013	12:29	54° 59.04'	13° 51.64'	47	W 5	236	2.9	Bongo net	on deck
	23.05.2013	12:39	54° 59.27'	13° 52.16'	49	WSW 5	226	1	towed multinet maxi	surface
	23.05.2013	13:14	54° 58.40'	13° 49.69'	47	W 4	237	1.8	towed multinet maxi	on deck
	23.05.2013	13:30	54° 58.38'	13° 49.73'	48	W 3	60	2	towed multinet maxi	surface
	23.05.2013	14:10	54° 59.52'	13° 52.66'	49	WNW 3	54	2.8	towed multinet maxi	on deck
	23.05.2013	14:35	54° 59.05'	13° 52.41'	47	NW 3	225	2.6	Bongo net	surface
	23.05.2013	14:46	54° 58.59'	13° 51.86'	51	NW 3	211	2.5	Bongo net	on deck
387	23.05.2013	15:37	54° 50.46'	13° 45.42'	50	E 2	207	3.4	Bongo net	surface
	23.05.2013	15:44	54° 50.14'	13° 45.08'	45	ESE 2	212	3.6	Bongo net	on deck
	23.05.2013	15:47	54° 50.02'	13° 44.99'	45	E 2	168	1.1	CTD	surface
	23.05.2013	15:51	54° 49.99'	13° 45.01'	44	E 2	150	0.4	CTD	on deck
388	23.05.2013	16:33	54° 55.59'	13° 40.20'	52	E 2	353	0.4	CTD	surface
	23.05.2013	16:36	54° 55.61'	13° 40.20'	47	E 2	20	0.4	CTD	on deck
	23.05.2013	16:39	54° 55.61'	13° 40.15'	52	SE 2	248	2.6	Bongo net	surface
	23.05.2013	16:47	54° 55.48'	13° 39.48'	50	ESE 2	250	3.1	Bongo net	on deck
389	23.05.2013	17:12	54° 54.17'	13° 33.20'	47	ESE 2	244	2.8	Bongo net	surface
	23.05.2013	17:21	54° 54.01'	13° 32.49'	47	ESE 3	265	2	Bongo net	on deck
	23.05.2013	17:24	54° 54.00'	13° 32.39'	47	SE 2	207	0.2	CTD	surface
	23.05.2013	17:28	54° 53.99'	13° 32.39'	47	SE 2	154	0.1	CTD	on deck
390	23.05.2013	18:25	54° 48.03'	13° 21.91'	44	ESE 3	121	0.4	CTD	surface
	23.05.2013	18:29	54° 48.03'	13° 21.94'	44	ESE 4	126	0.3	CTD	on deck
	23.05.2013	18:32	54° 48.05'	13° 21.96'	44	ESE 4	1	2.2	Bongo net	surface
	23.05.2013	18:40	54° 48.42'	13° 22.09'	44	ESE 4	16	3.6	Bongo net	on deck
391	23.05.2013	19:03	54° 52.14'	13° 24.31'	46	SSE 3	30	2.5	Bongo net	surface
	23.05.2013	19:12	54° 52.48'	13° 24.32'	46	SE 3	58	1.4	Bongo net	on deck
	23.05.2013	19:15	54° 52.49'	13° 24.38'	46	SE 3	70	0.2	CTD	surface
	23.05.2013	19:19	54° 52.50'	13° 24.40'	46	SE 3	69	0.1	CTD	on deck
392	23.05.2013	20:05	55° 0.07'	13° 23.41'	45	SE 4	42	1.9	CTD	surface
	23.05.2013	20:08	55° 0.08'	13° 23.42'	45	SE 3	120	0.3	CTD	on deck
	23.05.2013	20:11	55° 0.04'	13° 23.42'	45	ESE 4	189	2.6	Bongo net	surface
	23.05.2013	20:17	54° 59.83'	13° 23.05'	45	ESE 4	242	3.4	Bongo net	on deck
393	23.05.2013	20:50	54° 58.20'	13° 13.78'	47	SE 3	127	1.5	Bongo net	surface
	23.05.2013	20:57	54° 58.17'	13° 14.34'	47	SE 3	86	2.4	Bongo net	on deck
	23.05.2013	21:00	54° 58.18'	13° 14.41'	47	SE 3	53	0.7	CTD	surface
	23.05.2013	21:03	54° 58.19'	13° 14.43'	47	SE 3	64	0.3	CTD	on deck
394	23.05.2013	21:39	54° 56.28'	13° 5.44'	43	ESE 3	154	0.4	CTD	surface
	23.05.2013	21:41	54° 56.27'	13° 5.43'	43	ESE 3	276	0.4	CTD	on deck
	23.05.2013	21:44	54° 56.26'	13° 5.46'	43	ESE 3	128	1.5	Bongo net	surface
	23.05.2013	21:50	54° 56.03'	13° 5.76'	43	ESE 4	150	2.8	Bongo net	on deck
395	23.05.2013	22:36	54° 48.97'	13° 10.63'	43	E 4	149	2.9	Bongo net	surface
	23.05.2013	22:43	54° 48.66'	13° 10.86'	43	E 4	175	2.2	Bongo net	on deck
	23.05.2013	22:46	54° 48.60'	13° 10.89'	43	E 3	147	0.5	CTD	surface
	23.05.2013	22:49	54° 48.58'	13° 10.93'	43	ESE 4	132	0.4	CTD	on deck