

- CRUISE REPORT -

NAME OF RESEARCH SHIP	RV HEINCKE
CRUISE NO	HE 379
DATES OF CRUISE	08.05.2012 21.05.2012
OPERATING AUTHORITY	Alfred-Wegener-Institute for Polar and Marine Research P.O.-Box 12 01 61 D-27515 Bremerhaven Phone +49 471 4831 0 Telefax +49 471 4831 1149 TELEX 238 695 polar d
OWNER	German Government

PARTICULARS OF SHIP

Name	HEINCKE
Nationality	German
Registration port	Helgoland
IMO	8806113
Call sign	DBCK

CREW

Name of master	Robert Voss
Number of crew	12

SCIENTIFIC PERSONNEL

Scientist in charge	Dr. Rainer Knust Alfred Wegener Institute for Polar an Marine Research Am Alten Hafen D-27570 Bremerhaven, Germany Phone +49 471 4831 1709 Telefax +49 471 4831 1918
No. of scientists	12 + 12

Heincke Cruise Leg 1: 08.-14.05.2012					
Number	Surname	First name	Study programme	Nationality	Sex
1	Knust	Rainer	Supervisor AWI	Germany	m
2	Auel	Holger	Supervisor BreMarE - Uni HB	Germany	m
3	Wetjen	Maj	Supervisor AWI	Germany	f
4	Meyer	Steffi	Supervisor AWI	Germany	f
5	Teuber	Lena	Supervisor BreMarE - Uni HB	Germany	f
6	Albrecht	Cora Rabea	Marine Biology	Germany	f
7	Kellerer	Fiona Magdalena	Marine Biology	Germany	f
8	Mevenkamp	Lisa	EMBC	Germany	f
9	Andreu	Miguel Angel	EMBC	Spain	m
10	Christiansen	Henrik	Marine Biology	Germany	m
11	Jungblut	Simon	EMBC	Germany	m
12	Navazas Alvarez	Alejandro	ERASMUS	Spain (Oviedo)	m
Heincke Cruise Leg 2: 14.-21.05.2012					
Number	Surname	First name	Study programme	Nationality	Sex
1	Knust	Rainer	Supervisor AWI	Germany	m
2	Hagen	Wilhelm	Supervisor BreMarE - Uni HB	Germany	m
3	Wetjen	Maj	Supervisor AWI	Germany	f
4	Meyer	Steffi	Supervisor AWI	Germany	f
5	Bode	Maya	Supervisor BreMarE - Uni HB	Germany	f
6	Maier	Sandra	Marine Biology	Germany	f
7	Kupprat	Franziska	Marine Biology	Germany	f
8	Ruano	Cristina	EMBC	Spain	f
9	Straub	Sandra	EMBC	Germany	f
10	Wolf	Tosia Rebecca	Marine Biology	Germany	f
11	Islam	Md. Ashraf	EMBC	Bangladesh	m
12	Siegenthaler	Andjin	EMBC	Netherlands	m

BRIEF DESCRIPTION AND SCHEDULE OF THE CRUISE

The main objective of this cruise was scientific education. Additionally a small sampling work for basic research (Zooplankton and fish sampling for further bio-chemical analysis in the home labs) and testing of a new scientific gear (mooring) was planned, but could not be realized due to logistic reasons and due to bad weather conditions.

The education is part of the student master program of the University of Bremen (Biology and Chemistry). The University of Bremen offers an international M.Sc. study program in Marine Biology. During the cruise, students experienced different marine habitats off the North Sea area and studied marine biodiversity from zooplankton species composition via fish communities to seabirds and marine mammals. A major focus was given to the changes occurring across an transect from the southern German Bight to the deeper part of the Norwegian Channel and to ecological differences between shelf seas and deeper basins. Besides the scientific background, students learned state-of-the-art methods in oceanographic and marine biological research and they gained personal experience with regard to working at sea, which is also a formal requirement of our curriculum. Because this cruise was concentrated on scientific education, no valid biological data were produced, which could be stored in a databases or which will be published. The data on water temperature and salinity measured by a CTD system are stored in the database PANGAEA and is open for scientific use:

Knust, Rainer; Rohardt, Gerd (2013): Physical oceanography during HEINCKE cruise HE379. *Alfred Wegener Institute, Helmholtz Center for Polar and Marine Research, Bremerhaven*, doi:10.1594/PANGAEA.808443

Link to the CTD data : <http://doi.pangaea.de/10.1594/PANGAEA.808443>

HEINCKE left Bremerhaven port in the morning time of 08.05.2012. First sampling work take place in the German Bight. Water temperature and salinity was measured with a CTD - rosette system, Plankton was caught with a bongo net (60cm) and with a multi net. Samples for epibenthic organisms and fish were taken with a 3m beam trawl und a bottom trawl. Due to bad weather condition not at all planned station all equipment could be used. All details are listed in the station list and map attached to this document. 14.05 - 15.05.2012 the student crew were changed in the port of Hirtshals (see list of participants above). HEINCKE left Hirtshals at the 15.05.2012 and sailed back to Bremerhaven. On the way nearly the same sampling program like in leg 1 was carried out. The cruise ended in Bremerhaven at the 21.05.2012.



(Principal Scientist)

Dated 27.05.2013

STATION LIST

Date	Time	Station	Gear	Action	PositionLat	PositionLon	Depth [m]
08.05.2012	13:11:00	HE379/0001-1	CTD/rosette water sampler	in the water	53°58,15'N	07°56,88'E	29,0
08.05.2012	13:18:00	HE379/0001-1	CTD/rosette water sampler	on ground/max depth	53°58,24'N	07°57,00'E	28,9
08.05.2012	13:23:59	HE379/0001-1	CTD/rosette water sampler	on deck	53°58,28'N	07°57,13'E	29,4
08.05.2012	13:34:00	HE379/0001-2	Bongo net	in the water	53°58,42'N	07°57,27'E	29,5
08.05.2012	13:36:00	HE379/0001-2	Bongo net	on ground/max depth	53°58,44'N	07°57,30'E	29,5
08.05.2012	13:38:59	HE379/0001-2	Bongo net	on deck	53°58,46'N	07°57,33'E	29,6
08.05.2012	13:46:00	HE379/0001-3	Bottom trawl	in the water	53°58,58'N	07°57,42'E	29,7
08.05.2012	13:56:00	HE379/0001-3	Bottom trawl	profile start	53°58,76'N	07°56,35'E	30,4
08.05.2012	14:16:00	HE379/0001-3	Bottom trawl	profile end	53°59,11'N	07°54,44'E	31,1
08.05.2012	14:31:59	HE379/0001-3	Bottom trawl	on deck	53°59,24'N	07°53,11'E	31,3
09.05.2012	06:01:00	HE379/0002-1	CTD/rosette water sampler	in the water	54°50,21'N	06°39,51'E	38,9
09.05.2012	06:10:00	HE379/0002-1	CTD/rosette water sampler	on ground/max depth	54°50,24'N	06°39,53'E	39,0
09.05.2012	06:13:59	HE379/0002-1	CTD/rosette water sampler	on deck	54°50,25'N	06°39,54'E	39,0
09.05.2012	06:24:00	HE379/0002-2	Bongo net	in the water	54°50,26'N	06°39,56'E	38,8
09.05.2012	06:26:00	HE379/0002-2	Bongo net	on ground/max depth	54°50,27'N	06°39,55'E	38,9
09.05.2012	06:29:59	HE379/0002-2	Bongo net	on deck	54°50,26'N	06°39,56'E	39,0
09.05.2012	06:35:00	HE379/0002-3	Bottom trawl	in the water	54°50,28'N	06°39,38'E	39,0
09.05.2012	06:42:00	HE379/0002-3	Bottom trawl	profile start	54°50,48'N	06°38,51'E	38,8
09.05.2012	07:02:00	HE379/0002-3	Bottom trawl	profile end	54°51,06'N	06°36,75'E	39,0
09.05.2012	07:16:59	HE379/0002-3	Bottom trawl	on deck	54°51,44'N	06°35,75'E	39,2
09.05.2012	08:16:00	HE379/0002-4	Beam trawl	in the water	54°52,04'N	06°35,97'E	39,6
09.05.2012	08:19:00	HE379/0002-4	Beam trawl	profile start	54°52,08'N	06°35,68'E	39,5
09.05.2012	08:34:00	HE379/0002-4	Beam trawl	profile end	54°52,27'N	06°34,58'E	39,5
09.05.2012	08:37:59	HE379/0002-4	Beam trawl	on deck	54°52,30'N	06°34,40'E	39,6
09.05.2012	11:58:00	HE379/0003-1	CTD/rosette water sampler	in the water	55°14,96'N	06°20,01'E	47,1
09.05.2012	12:06:00	HE379/0003-1	CTD/rosette water sampler	on ground/max depth	55°14,88'N	06°20,05'E	0,0
09.05.2012	12:10:59	HE379/0003-1	CTD/rosette water sampler	on deck	55°14,85'N	06°20,07'E	47,0
09.05.2012	12:13:00	HE379/0003-2	Bongo net	in the water	55°14,83'N	06°20,09'E	47,2
09.05.2012	12:15:00	HE379/0003-2	Bongo net	on ground/max depth	55°14,82'N	06°20,10'E	47,0
09.05.2012	12:18:59	HE379/0003-2	Bongo net	on deck	55°14,80'N	06°20,11'E	46,9
09.05.2012	12:21:00	HE379/0003-3	Beam trawl	in the water	55°14,77'N	06°20,14'E	47,0

09.05.2012	12:24:00	HE379/0003-3	Beam trawl	profile start	55°14,64'N	06°20,28'E	47,1
09.05.2012	12:39:00	HE379/0003-3	Beam trawl	profile end	55°14,02'N	06°20,87'E	46,9
09.05.2012	12:42:59	HE379/0003-3	Beam trawl	on deck	55°13,91'N	06°20,97'E	46,9
09.05.2012	13:57:00	HE379/0003-4	Bottom trawl	in the water	55°12,76'N	06°22,98'E	47,4
09.05.2012	14:06:00	HE379/0003-4	Bottom trawl	profile start	55°13,20'N	06°22,06'E	47,1
09.05.2012	14:28:00	HE379/0003-4	Bottom trawl	profile end	55°14,31'N	06°20,91'E	47,2
09.05.2012	14:36:59	HE379/0003-4	Bottom trawl	on deck	55°14,64'N	06°20,61'E	47,3
10.05.2012	06:00:00	HE379/0004-1	CTD/rosette water sampler	in the water	57°02,61'N	06°53,87'E	50,7
10.05.2012	06:09:00	HE379/0004-1	CTD/rosette water sampler	on ground/max depth	57°02,67'N	06°53,90'E	51,0
10.05.2012	06:12:59	HE379/0004-1	CTD/rosette water sampler	on deck	57°02,68'N	06°53,93'E	51,0
10.05.2012	06:14:00	HE379/0004-2	Bongo net	in the water	57°02,68'N	06°53,94'E	51,1
10.05.2012	06:17:00	HE379/0004-2	Bongo net	on ground/max depth	57°02,71'N	06°53,93'E	51,0
10.05.2012	06:20:59	HE379/0004-2	Bongo net	on deck	57°02,73'N	06°53,94'E	51,1
10.05.2012	06:32:00	HE379/0004-3	Bottom trawl	in the water	57°02,88'N	06°54,31'E	51,5
10.05.2012	06:39:00	HE379/0004-3	Bottom trawl	profile start	57°03,10'N	06°55,09'E	53,0
10.05.2012	07:00:00	HE379/0004-3	Bottom trawl	profile end	57°03,56'N	06°57,19'E	52,2
10.05.2012	07:12:59	HE379/0004-3	Bottom trawl	on deck	57°03,89'N	06°57,85'E	53,5
10.05.2012	08:01:00	HE379/0004-4	Beam trawl	in the water	57°02,47'N	06°57,16'E	45,5
10.05.2012	08:02:00	HE379/0004-4	Beam trawl	profile start	57°02,46'N	06°57,25'E	44,9
10.05.2012	08:17:00	HE379/0004-4	Beam trawl	profile end	57°02,59'N	06°58,58'E	43,8
10.05.2012	08:22:59	HE379/0004-4	Beam trawl	on deck	57°02,64'N	06°58,94'E	41,3
10.05.2012	08:23:00	HE379/0004-5	Beam trawl	in the water	57°02,65'N	06°59,00'E	41,2
10.05.2012	08:26:00	HE379/0004-5	Beam trawl	profile start	57°02,69'N	06°59,28'E	40,5
10.05.2012	08:41:00	HE379/0004-5	Beam trawl	profile end	57°02,87'N	07°00,57'E	37,9
10.05.2012	08:43:59	HE379/0004-5	Beam trawl	on deck	57°02,89'N	07°00,73'E	37,7
10.05.2012	10:58:00	HE379/0005-1	CTD/rosette water sampler	in the water	57°06,38'N	07°20,27'E	26,6
10.05.2012	11:05:00	HE379/0005-1	CTD/rosette water sampler	on ground/max depth	57°06,36'N	07°20,40'E	26,1
10.05.2012	11:08:59	HE379/0005-1	CTD/rosette water sampler	on deck	57°06,34'N	07°20,43'E	26,0
10.05.2012	11:15:00	HE379/0005-2	Bongo net	in the water	57°06,34'N	07°20,56'E	25,7
10.05.2012	11:18:00	HE379/0005-2	Bongo net	on ground/max depth	57°06,33'N	07°20,58'E	25,3
10.05.2012	11:19:59	HE379/0005-2	Bongo net	on deck	57°06,33'N	07°20,60'E	25,5
10.05.2012	11:24:00	HE379/0005-3	Beam trawl	in the water	57°06,33'N	07°20,82'E	25,2
10.05.2012	11:26:00	HE379/0005-3	Beam trawl	profile start	57°06,32'N	07°21,02'E	25,2
10.05.2012	11:41:00	HE379/0005-3	Beam trawl	profile end	57°06,32'N	07°22,44'E	24,1
10.05.2012	11:43:59	HE379/0005-3	Beam trawl	on deck	57°06,33'N	07°22,62'E	23,8

10.05.2012	11:52:00	HE379/0005-4	Bottom trawl	in the water	57°06,26'N	07°23,06'E	23,4
10.05.2012	11:59:00	HE379/0005-4	Bottom trawl	profile start	57°06,17'N	07°23,95'E	23,5
10.05.2012	12:19:00	HE379/0005-4	Bottom trawl	profile end	57°06,08'N	07°26,18'E	33,9
10.05.2012	12:30:59	HE379/0005-4	Bottom trawl	on deck	57°06,28'N	07°27,11'E	36,5
10.05.2012	12:33:00	HE379/0005-5	Multi-Schließnetz	in the water	57°06,24'N	07°27,29'E	36,1
10.05.2012	12:36:00	HE379/0005-5	Multi-Schließnetz	on ground/max depth	57°06,23'N	07°27,31'E	36,5
10.05.2012	12:36:59	HE379/0005-5	Multi-Schließnetz	on deck	57°06,23'N	07°27,31'E	36,5
11.05.2012	06:04:00	HE379/0006-1	CTD/rosette water sampler	in the water	57°45,50'N	09°48,12'E	35,8
11.05.2012	06:08:00	HE379/0006-1	CTD/rosette water sampler	on ground/max depth	57°45,48'N	09°48,20'E	36,3
11.05.2012	06:10:59	HE379/0006-1	CTD/rosette water sampler	on deck	57°45,47'N	09°48,25'E	36,4
11.05.2012	06:12:00	HE379/0006-2	Multi-Schließnetz	in the water	57°45,46'N	09°48,31'E	36,2
11.05.2012	06:14:00	HE379/0006-2	Multi-Schließnetz	on ground/max depth	57°45,45'N	09°48,36'E	36,1
11.05.2012	06:17:59	HE379/0006-2	Multi-Schließnetz	on deck	57°45,45'N	09°48,42'E	36,3
11.05.2012	06:24:00	HE379/0006-3	Bottom trawl	in the water	57°45,13'N	09°47,68'E	35,9
11.05.2012	06:30:00	HE379/0006-3	Bottom trawl	profile start	57°44,94'N	09°47,13'E	36,2
11.05.2012	06:51:00	HE379/0006-3	Bottom trawl	profile end	57°44,05'N	09°45,67'E	36,0
11.05.2012	07:03:59	HE379/0006-3	Bottom trawl	on deck	57°43,78'N	09°45,40'E	37,1
11.05.2012	07:06:00	HE379/0006-4	Multi-Schließnetz	in the water	57°43,76'N	09°45,42'E	36,7
11.05.2012	07:08:00	HE379/0006-4	Multi-Schließnetz	on ground/max depth	57°43,74'N	09°45,46'E	37,0
11.05.2012	07:12:59	HE379/0006-4	Multi-Schließnetz	on deck	57°43,71'N	09°45,53'E	37,2
11.05.2012	07:16:00	HE379/0006-5	Bongo net	in the water	57°43,69'N	09°45,64'E	37,7
11.05.2012	07:18:00	HE379/0006-5	Bongo net	on ground/max depth	57°43,67'N	09°45,69'E	37,5
11.05.2012	07:21:59	HE379/0006-5	Bongo net	on deck	57°43,66'N	09°45,76'E	38,0
11.05.2012	08:32:00	HE379/0006-6	Beam trawl	in the water	57°45,25'N	09°47,17'E	35,9
11.05.2012	08:35:00	HE379/0006-6	Beam trawl	profile start	57°45,17'N	09°46,97'E	35,4
11.05.2012	08:50:00	HE379/0006-6	Beam trawl	profile end	57°44,84'N	09°45,81'E	35,4
11.05.2012	08:58:59	HE379/0006-6	Beam trawl	on deck	57°44,77'N	09°45,52'E	35,1
11.05.2012	10:56:00	HE379/0007-1	CTD/rosette water sampler	in the water	57°45,04'N	10°09,95'E	83,1
11.05.2012	11:03:00	HE379/0007-1	CTD/rosette water sampler	on ground/max depth	57°44,95'N	10°10,04'E	81,1
11.05.2012	11:08:59	HE379/0007-1	CTD/rosette water sampler	on deck	57°44,91'N	10°10,11'E	81,1
11.05.2012	11:11:00	HE379/0007-2	Bottom trawl	in the water	57°44,87'N	10°10,14'E	80,0
11.05.2012	11:20:00	HE379/0007-2	Bottom trawl	profile start	57°44,74'N	10°09,17'E	80,9
11.05.2012	11:40:00	HE379/0007-2	Bottom trawl	profile end	57°44,35'N	10°07,23'E	80,6
11.05.2012	11:54:59	HE379/0007-2	Bottom trawl	on deck	57°43,96'N	10°06,98'E	70,8

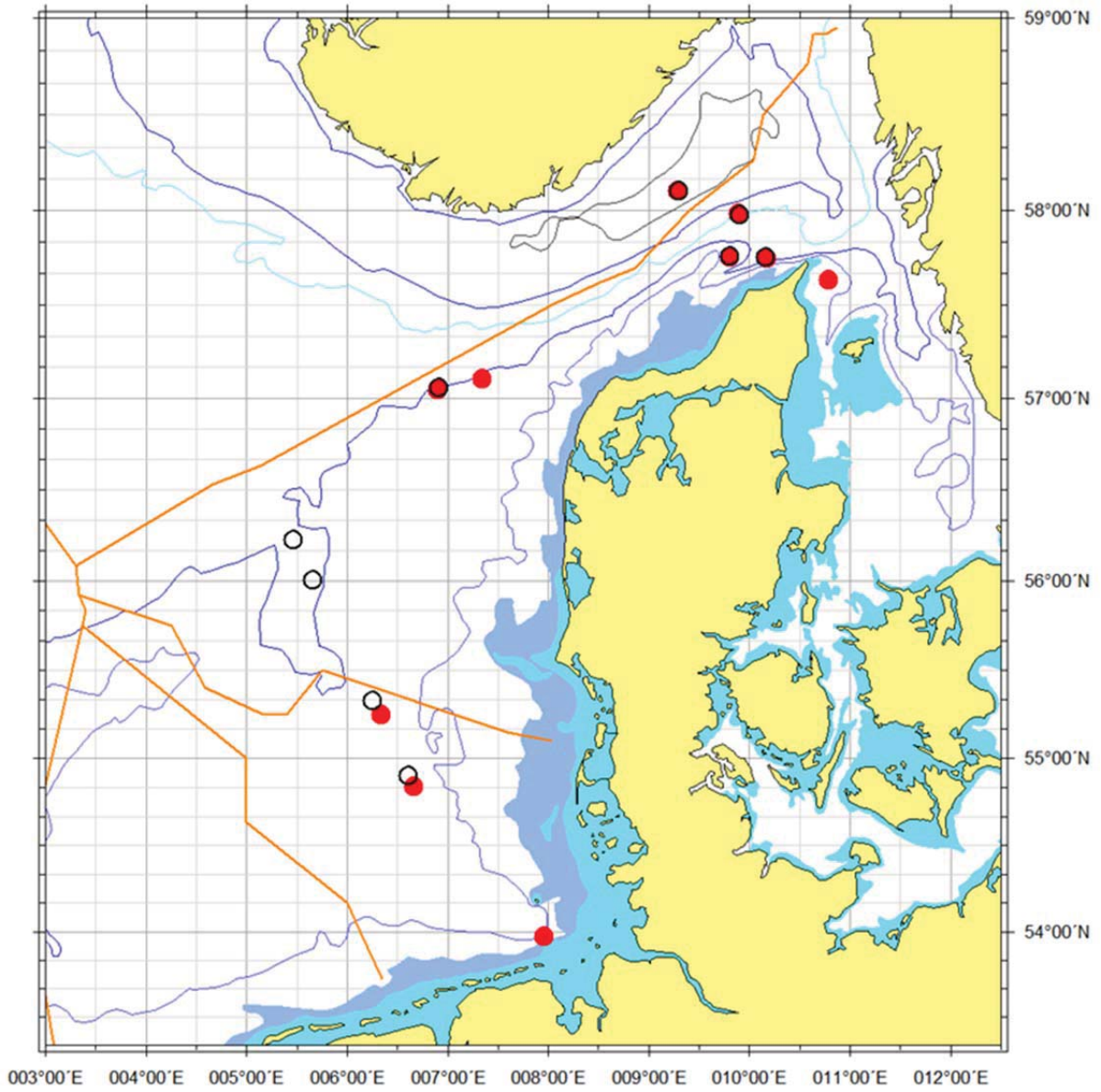
11.05.2012	12:02:00	HE379/0007-3	Bongo net	in the water	57°43,98'N	10°06,84'E	71,8
11.05.2012	12:06:00	HE379/0007-3	Bongo net	on ground/max depth	57°43,92'N	10°06,95'E	70,3
11.05.2012	12:10:59	HE379/0007-3	Bongo net	on deck	57°43,88'N	10°07,01'E	68,1
11.05.2012	12:16:00	HE379/0007-4	Multi-Schließnetz	in the water	57°43,78'N	10°07,10'E	62,0
11.05.2012	12:20:00	HE379/0007-4	Multi-Schließnetz	on ground/max depth	57°43,72'N	10°07,16'E	60,0
11.05.2012	12:24:59	HE379/0007-4	Multi-Schließnetz	on deck	57°43,67'N	10°07,23'E	57,0
12.05.2012	06:59:00	HE379/0008-1	CTD/rosette water sampler	in the water	57°38,15'N	10°47,43'E	22,6
12.05.2012	07:04:00	HE379/0008-1	CTD/rosette water sampler	on ground/max depth	57°38,13'N	10°47,30'E	22,3
12.05.2012	07:06:59	HE379/0008-1	CTD/rosette water sampler	on deck	57°38,14'N	10°47,27'E	22,5
12.05.2012	07:11:00	HE379/0008-2	Bongo net	in the water	57°38,16'N	10°47,16'E	22,2
12.05.2012	07:12:00	HE379/0008-2	Bongo net	on ground/max depth	57°38,16'N	10°47,14'E	22,4
12.05.2012	07:14:59	HE379/0008-2	Bongo net	on deck	57°38,16'N	10°47,09'E	22,2
13.05.2012	06:00:00	HE379/0009-1	CTD/rosette water sampler	in the water	58°06,49'N	09°17,44'E	623,9
13.05.2012	06:31:00	HE379/0009-1	CTD/rosette water sampler	on ground/max depth	58°06,45'N	09°16,93'E	625,1
13.05.2012	06:53:59	HE379/0009-1	CTD/rosette water sampler	on deck	58°06,40'N	09°16,68'E	626,9
13.05.2012	06:57:00	HE379/0009-2	Bongo net	in the water	58°06,40'N	09°16,66'E	626,8
13.05.2012	07:00:00	HE379/0009-2	Bongo net	on ground/max depth	58°06,42'N	09°16,62'E	627,4
13.05.2012	07:02:59	HE379/0009-2	Bongo net	on deck	58°06,41'N	09°16,60'E	627,3
13.05.2012	07:07:00	HE379/0009-3	Multi-Schließnetz	in the water	58°06,41'N	09°16,50'E	627,5
13.05.2012	07:48:00	HE379/0009-3	Multi-Schließnetz	on ground/max depth	58°06,36'N	09°16,25'E	629,0
13.05.2012	08:19:59	HE379/0009-3	Multi-Schließnetz	on deck	58°06,30'N	09°16,59'E	624,8
13.05.2012	10:58:00	HE379/0010-1	CTD/rosette water sampler	in the water	57°59,04'N	09°53,41'E	102,8
13.05.2012	11:05:00	HE379/0010-1	CTD/rosette water sampler	on ground/max depth	57°58,97'N	09°53,39'E	101,8
13.05.2012	11:10:59	HE379/0010-1	CTD/rosette water sampler	on deck	57°58,96'N	09°53,47'E	100,9
13.05.2012	11:17:00	HE379/0010-2	Bottom trawl	in the water	57°58,84'N	09°53,02'E	101,6
13.05.2012	11:26:00	HE379/0010-2	Bottom trawl	profile start	57°58,68'N	09°51,87'E	103,9
13.05.2012	11:46:00	HE379/0010-2	Bottom trawl	profile end	57°58,12'N	09°49,75'E	103,9
13.05.2012	12:01:59	HE379/0010-2	Bottom trawl	on deck	57°57,94'N	09°49,07'E	102,8
15.05.2012	07:03:00	HE379/0011-1	CTD/rosette water sampler	in the water	57°58,84'N	09°53,71'E	98,8
15.05.2012	07:16:00	HE379/0011-1	CTD/rosette water sampler	on ground/max depth	57°58,84'N	09°53,84'E	98,6
15.05.2012	07:23:59	HE379/0011-1	CTD/rosette water	on deck	57°58,83'N	09°53,94'E	98,3

			sampler				
15.05.2012	07:51:00	HE379/0011-2	Bongo net	in the water	57°59,06'N	09°53,60'E	101,9
15.05.2012	07:55:00	HE379/0011-2	Bongo net	on ground/max depth	57°59,07'N	09°53,65'E	102,3
15.05.2012	08:00:59	HE379/0011-2	Bongo net	on deck	57°59,13'N	09°53,76'E	103,0
15.05.2012	08:08:00	HE379/0011-3	Bottom trawl	in the water	57°59,08'N	09°53,43'E	102,2
15.05.2012	08:17:00	HE379/0011-3	Bottom trawl	profile start	57°58,85'N	09°52,33'E	106,4
15.05.2012	08:37:00	HE379/0011-3	Bottom trawl	profile end	57°58,27'N	09°50,36'E	103,9
15.05.2012	08:47:59	HE379/0011-3	Bottom trawl	on deck	57°58,12'N	09°49,90'E	102,7
15.05.2012	12:00:00	HE379/0012-1	CTD/rosette water sampler	in the water	58°06,36'N	09°17,42'E	621,1
15.05.2012	12:29:00	HE379/0012-1	CTD/rosette water sampler	on ground/max depth	58°06,36'N	09°17,67'E	621,0
15.05.2012	13:02:59	HE379/0012-1	CTD/rosette water sampler	on deck	58°06,53'N	09°18,03'E	620,9
15.05.2012	13:07:00	HE379/0012-2	Multi-Schließnetz	in the water	58°06,57'N	09°18,07'E	621,0
15.05.2012	13:38:00	HE379/0012-2	Multi-Schließnetz	on ground/max depth	58°06,82'N	09°18,35'E	625,1
15.05.2012	14:13:59	HE379/0012-2	Multi-Schließnetz	on deck	58°07,06'N	09°18,67'E	627,7
16.05.2012	05:57:00	HE379/0013-1	CTD/rosette water sampler	in the water	57°45,79'N	09°48,26'E	35,9
16.05.2012	06:04:00	HE379/0013-1	CTD/rosette water sampler	on ground/max depth	57°45,82'N	09°48,38'E	36,0
16.05.2012	06:08:59	HE379/0013-1	CTD/rosette water sampler	on deck	57°45,85'N	09°48,43'E	36,0
16.05.2012	06:12:00	HE379/0013-2	Bongo net	in the water	57°45,88'N	09°48,48'E	36,0
16.05.2012	06:14:00	HE379/0013-2	Bongo net	on ground/max depth	57°45,89'N	09°48,50'E	35,9
16.05.2012	06:16:59	HE379/0013-2	Bongo net	on deck	57°45,90'N	09°48,51'E	35,9
16.05.2012	06:27:00	HE379/0013-3	Bottom trawl	in the water	57°45,53'N	09°47,56'E	35,4
16.05.2012	06:29:00	HE379/0013-3	Bottom trawl	profile start	57°45,47'N	09°47,38'E	35,2
16.05.2012	06:49:00	HE379/0013-3	Bottom trawl	profile end	57°44,84'N	09°45,51'E	34,8
16.05.2012	06:56:59	HE379/0013-3	Bottom trawl	on deck	57°44,72'N	09°45,12'E	34,5
16.05.2012	08:48:00	HE379/0013-4	Beam trawl	in the water	57°45,15'N	09°46,33'E	35,1
16.05.2012	08:50:00	HE379/0013-4	Beam trawl	profile start	57°45,17'N	09°46,55'E	35,2
16.05.2012	09:05:00	HE379/0013-4	Beam trawl	profile end	57°45,35'N	09°47,97'E	36,2
16.05.2012	09:07:59	HE379/0013-4	Beam trawl	on deck	57°45,37'N	09°48,13'E	36,7
16.05.2012	12:01:00	HE379/0014-1	CTD/rosette water sampler	in the water	57°45,26'N	10°09,14'E	86,9
16.05.2012	12:09:00	HE379/0014-1	CTD/rosette water sampler	on ground/max depth	57°45,29'N	10°09,35'E	86,7
16.05.2012	12:15:00	HE379/0014-2	Bongo net	in the water	57°45,32'N	10°09,50'E	86,6
16.05.2012	12:15:59	HE379/0014-1	CTD/rosette water sampler	on deck	57°45,32'N	10°09,50'E	86,6
16.05.2012	12:21:00	HE379/0014-2	Bongo net	on ground/max depth	57°45,36'N	10°09,64'E	86,5

16.05.2012	12:23:59	HE379/0014-2	Bongo net	on deck	57°45,37'N	10°09,66'E	86,4
16.05.2012	12:32:00	HE379/0014-3	Multi-Schließnetz	in the water	57°45,36'N	10°09,82'E	86,2
16.05.2012	12:36:00	HE379/0014-3	Multi-Schließnetz	on ground/max depth	57°45,37'N	10°09,92'E	86,4
16.05.2012	12:44:59	HE379/0014-3	Multi-Schließnetz	on deck	57°45,37'N	10°10,05'E	86,2
16.05.2012	12:49:00	HE379/0014-4	Beam trawl	in the water	57°45,06'N	10°10,14'E	83,3
16.05.2012	12:53:00	HE379/0014-4	Beam trawl	profile start	57°44,95'N	10°09,76'E	82,2
16.05.2012	13:09:00	HE379/0014-4	Beam trawl	profile end	57°44,64'N	10°08,51'E	81,1
16.05.2012	13:18:59	HE379/0014-4	Beam trawl	on deck	57°44,51'N	10°07,93'E	80,9
16.05.2012	15:30:00	HE379/0014-5	Bottom trawl	in the water	57°44,77'N	10°09,37'E	80,7
16.05.2012	15:39:00	HE379/0014-5	Bottom trawl	profile start	57°44,49'N	10°08,27'E	79,8
16.05.2012	16:00:00	HE379/0014-5	Bottom trawl	profile end	57°44,16'N	10°06,36'E	78,7
16.05.2012	16:12:59	HE379/0014-5	Bottom trawl	on deck	57°43,96'N	10°05,49'E	77,3
17.05.2012	14:00:00	HE379/0015-1	Bottom trawl	in the water	57°03,02'N	06°58,53'E	45,4
17.05.2012	14:09:00	HE379/0015-1	Bottom trawl	profile start	57°03,19'N	06°57,67'E	49,6
17.05.2012	14:30:00	HE379/0015-1	Bottom trawl	profile end	57°03,24'N	06°55,44'E	52,9
17.05.2012	14:38:59	HE379/0015-1	Bottom trawl	on deck	57°03,35'N	06°54,97'E	54,3
17.05.2012	14:46:00	HE379/0015-2	CTD/rosette water sampler	in the water	57°03,39'N	06°54,76'E	56,6
17.05.2012	14:50:00	HE379/0015-2	CTD/rosette water sampler	on ground/max depth	57°03,38'N	06°54,70'E	56,9
17.05.2012	14:53:59	HE379/0015-2	CTD/rosette water sampler	on deck	57°03,38'N	06°54,71'E	56,0
17.05.2012	14:57:00	HE379/0015-3	Bongo net	in the water	57°03,36'N	06°54,65'E	56,4
17.05.2012	14:59:00	HE379/0015-3	Bongo net	on ground/max depth	57°03,36'N	06°54,63'E	55,8
17.05.2012	15:03:59	HE379/0015-3	Bongo net	on deck	57°03,36'N	06°54,64'E	55,8
18.05.2012	06:01:00	HE379/0016-1	CTD/rosette water sampler	in the water	56°13,52'N	05°27,50'E	53,4
18.05.2012	06:07:00	HE379/0016-1	CTD/rosette water sampler	on ground/max depth	56°13,52'N	05°27,43'E	54,4
18.05.2012	06:11:59	HE379/0016-1	CTD/rosette water sampler	on deck	56°13,52'N	05°27,39'E	53,0
18.05.2012	06:13:00	HE379/0016-2	Bongo net	in the water	56°13,51'N	05°27,37'E	52,9
18.05.2012	06:16:00	HE379/0016-2	Bongo net	on ground/max depth	56°13,51'N	05°27,34'E	52,9
18.05.2012	06:22:59	HE379/0016-2	Bongo net	on deck	56°13,52'N	05°27,28'E	53,3
18.05.2012	06:32:00	HE379/0016-3	Bottom trawl	in the water	56°13,74'N	05°26,24'E	53,0
18.05.2012	06:34:00	HE379/0016-3	Bottom trawl	profile start	56°13,77'N	05°26,06'E	52,3
18.05.2012	06:55:00	HE379/0016-3	Bottom trawl	profile end	56°14,28'N	05°24,08'E	51,8
18.05.2012	07:07:59	HE379/0016-3	Bottom trawl	on deck	56°14,49'N	05°23,18'E	53,5
18.05.2012	11:56:00	HE379/0017-1	CTD/rosette water sampler	in the water	56°00,05'N	05°39,07'E	49,9
18.05.2012	12:02:00	HE379/0017-1	CTD/rosette water sampler	on ground/max depth	56°00,09'N	05°39,08'E	49,8

18.05.2012	12:05:59	HE379/0017-1	CTD/rosette water sampler	on deck	56°00,11'N	05°39,12'E	49,8
18.05.2012	12:09:00	HE379/0017-2	Bongo net	in the water	56°00,14'N	05°39,17'E	50,4
18.05.2012	12:11:00	HE379/0017-2	Bongo net	on ground/max depth	56°00,16'N	05°39,19'E	0,0
18.05.2012	12:14:59	HE379/0017-2	Bongo net	on deck	56°00,18'N	05°39,21'E	50,3
18.05.2012	12:17:00	HE379/0017-3	Bottom trawl	in the water	56°00,27'N	05°39,31'E	49,8
18.05.2012	12:24:00	HE379/0017-3	Bottom trawl	profile start	56°00,68'N	05°39,93'E	49,9
18.05.2012	12:47:00	HE379/0017-3	Bottom trawl	profile end	56°00,89'N	05°42,10'E	49,4
18.05.2012	12:54:59	HE379/0017-3	Bottom trawl	on deck	56°00,90'N	05°42,48'E	49,4
19.05.2012	06:00:00	HE379/0018-1	CTD/rosette water sampler	in the water	55°19,76'N	06°15,29'E	46,9
19.05.2012	06:06:00	HE379/0018-1	CTD/rosette water sampler	on ground/max depth	55°19,75'N	06°15,28'E	46,2
19.05.2012	06:11:59	HE379/0018-1	CTD/rosette water sampler	on deck	55°19,74'N	06°15,28'E	47,0
19.05.2012	06:13:00	HE379/0018-2	Bongo net	in the water	55°19,73'N	06°15,28'E	46,6
19.05.2012	06:15:00	HE379/0018-2	Bongo net	on ground/max depth	55°19,72'N	06°15,28'E	46,4
19.05.2012	06:18:59	HE379/0018-2	Bongo net	on deck	55°19,72'N	06°15,28'E	47,0
19.05.2012	06:23:00	HE379/0018-3	Bottom trawl	in the water	55°19,63'N	06°15,50'E	46,8
19.05.2012	06:30:00	HE379/0018-3	Bottom trawl	profile start	55°19,18'N	06°15,99'E	46,6
19.05.2012	06:50:00	HE379/0018-3	Bottom trawl	profile end	55°18,25'N	06°17,25'E	46,2
19.05.2012	06:58:59	HE379/0018-3	Bottom trawl	on deck	55°17,94'N	06°17,69'E	46,9
19.05.2012	08:28:00	HE379/0018-4	Beam trawl	in the water	55°16,50'N	06°18,32'E	46,1
19.05.2012	08:31:00	HE379/0018-4	Beam trawl	profile start	55°16,34'N	06°18,44'E	46,5
19.05.2012	08:46:00	HE379/0018-4	Beam trawl	profile end	55°15,58'N	06°19,00'E	46,5
19.05.2012	08:48:59	HE379/0018-4	Beam trawl	on deck	55°15,49'N	06°19,07'E	46,3
19.05.2012	12:05:00	HE379/0019-1	CTD/rosette water sampler	in the water	54°54,08'N	06°36,56'E	40,5
19.05.2012	12:07:00	HE379/0019-1	CTD/rosette water sampler	on ground/max depth	54°54,07'N	06°36,55'E	40,9
19.05.2012	12:09:59	HE379/0019-1	CTD/rosette water sampler	on deck	54°54,06'N	06°36,55'E	40,4
19.05.2012	12:11:00	HE379/0019-2	Bongo net	in the water	54°54,04'N	06°36,55'E	40,6
19.05.2012	12:14:00	HE379/0019-2	Bongo net	on ground/max depth	54°54,03'N	06°36,54'E	40,5
19.05.2012	12:15:59	HE379/0019-2	Bongo net	on deck	54°54,03'N	06°36,54'E	40,3
19.05.2012	12:31:00	HE379/0019-3	Bottom trawl	in the water	54° 52,55' N	06° 35,11' E	39,6

STATION MAP



red circles = leg 1 / black circles = leg 2