

HEINCKE-Bericht

*Fjord Export - Pelagic Imaging Consortium Cruise 2021*

Cruise No. HE570

01.03.2021 – 18.03.2021

Bremerhaven (Germany) – Bremerhaven (Germany)

Fjord Export



**Hauss, H., Möller, K.O., Blandfort, D., Drago, L., Iversen, M., Kim, D., Konrad, C.,  
Neumann, A., Rühl, S., Stenvers, V.I., Taucher, J.**

**Contributing scientists: Flöser, G., Niehoff, B.**

Chief Scientists: Dr Klas Ove Möller & Dr Helena Hauss

(Hereon & GEOMAR)

2021

## **1 Cruise Summary**

### **1.1 Summary in English**

On the 1<sup>st</sup> of March 2021, HE570 commenced on board FS Heincke, sailing from Bremerhaven towards Masfjorden and Lurefjorden on the Norwegian west coast. Following the two-day transit to Masfjorden, scientific work started on the 3<sup>rd</sup> of March, continuing until the 9<sup>th</sup> of March 2021. After a further transit to Lurefjorden, the work commenced there between the 11<sup>th</sup> and the 16<sup>th</sup> of March. The campaign was concluded successfully upon return to Bremerhaven on the 17<sup>th</sup> of March 2021.

The work during HE570 included the deployment of a diverse range of imaging instruments, plankton nets, sediment traps, a sediment corer and a CTD rosette, as well as a range of hydrographic and oceanographic sensors. Instruments and sensors were deployed separately and in combination with one another, mounted on dipped platforms, an anchored buoy, and a mooring. Additionally, auxiliary data were recorded continuously using a FerryBox. The ship's echosounder (EK80) was used continuously. In each fjord, twelve stations were visited as planned.

This campaign's scientific aim was to compare two fjord ecosystems in regards to the effects of different top predators, following the introduction of a deep-sea jellyfish (*Periphylla periphylla*) and subsequent replacement of the hitherto dominant fish species in Lurefjorden in the 1970s. A particular focus lay on the interactions of plankton and particles in the water column of each of the fjords, and the resulting potential variability in carbon export.

The deployment of a broad range of imaging instruments allowed a direct comparison and pooling of observations covering different size spectra, thereby facilitating an impression of the entire size spectrum of plankton and particles in the water.

### **1.2 Zusammenfassung auf Deutsch**

Am 01.03.2021 lief die FS Heincke wie geplant zur Kampagne HE570 in Bremerhaven aus, mit dem Ziel zwei Fjorde an der norwegischen Westküste (Masfjorden und Lurefjorden) an zu steuern. Nach knapp zwei Tagen Transit begann am 03.03.2021 die wissenschaftliche Arbeit im Masfjorden. Diese wurden bis zum 09.03.2021 fortgesetzt, worauf der Transit zum Lurefjorden folgte. Hier wurde das Arbeitsprogramm vom 11.03.2021 bis zum 16.03.2021 fortgesetzt. Die Kampagne wurde nach dem Rücktransit von Lurefjorden nach Bremerhaven am 17.03.2021 erfolgreich abgeschlossen.

Das Arbeitsprogramm beinhaltete den Einsatz von diversen bildgebenden Instrumenten, sowie Panktonnetzen, Sedimentfallen, einem Sedimentkern Probennehmer, der CTD-Rosette, sowie diverser hydrographischer und ozeanographischer Sensoren. Instrumente und Sensoren wurden, einzeln und in Kombination, im Rahmen getauchter Plattformen, sowie einer verankerten Boje und eines Moorings

eingesetzt. Zudem wurden kontinuierliche Ferrybox-Messungen angestellt und Echolot-Daten während der Transitfahrten zwischen Stationen aufgenommen. In beiden Fjorden wurden jeweils 12 Stationen beprobt, wie geplant.

Das wissenschaftliche Ziel der Kampagne war der Vergleich der zwei Fjord Ökosysteme hinsichtlich der Auswirkungen unterschiedlicher Spitzenprädatoren, nach der Einschleppung einer Tiefseequalle Art (*Periphylla periphylla*) und darauf folgenden Verdrängung der zuvor dominanten Fischarten im Lurefjorden in den 70er Jahren. Ein besonderer Schwerpunkt lag hierbei auf den Interaktionen von Plankton und Partikeln in der Wassersäule, und den daraus resultierenden jeweiligen Kohlenstoff Exportraten in den beiden Fjorden.

Der Einsatz eines weiten Spektrums bildgebender Instrumente diente dem direkten Vergleich dessen was diese jeweils aufzeichnen, um im Idealfall das Gesamtspektrum der vorhandenen Größenordnungen an Plankton und Partikeln im Wasser zu erfassen.

## 2 Participants

### 2.1 Principal Investigators

Name	Institution
Hauss, Helena, Dr	GEOMAR
Möller, Klas O., Dr	Hereon

### 2.2 Scientific Party

Name	Discipline	Institution
Hauss, Helena, Dr	Marine Ecology / Chief Scientist	GEOMAR
Möller, Klas O., Dr	Marine Biology / Chief Scientist	Hereon
Blandfort, Daniel	Marine Science / Engineer	Hereon

Drago, Laetitia	Biological Oceanography / Doctoral Researcher	LOV
Iversen, Morten, Prof.	Marine Environmental Sciences / Scientist	MARUM
Kim, Dong-gyun	Marine Ecology / Doctoral Researcher	AWI
Konrad, Christian	Marine Science / Engineer	MARUM
Neumann, Andreas, Dr	Marine Biogeochemistry / Scientist	Hereon
Stenvers, Vanessa I.	Marine Evolutionary Ecology / Scientist	GEOMAR
Rühl, Saskia, Dr	Marine Ecology / Scientist	Hereon
Taucher, Jan, Dr	Biological Oceanography / Scientist	GEOMAR

### 2.3 Participating Institutions

GEOMAR	Helmholtz-Zentrum für Ozeanforschung Kiel
Hereon	Helmholtz Zentrum Hereon
LOV	Laboratoire d'Océanographie de Villefranche
MARUM	Universität Bremen
AWI	Alfred Wegener Institut

### 3 Research Program

#### 3.1 Description of the Work Area

Masfjorden and Lurefjorden are located on the west coast of Norway approximately 50 km north of Bergen (Figure 1). They are fewer than 20 km apart from each other and connected *via* surface open waters through a common coastal entrance. Masfjorden is an arm of the larger Fensfjord, from which it is separated by a 75 m deep sill. It is approximately 20 km long with an average width of 1 km and a maximum depth of 494 m. Lurefjorden has a direct, but very shallow (20 m sill depth) and narrow connection to the coastal waters. It extends 16 km from northwest to southeast and ends in the Seimsfjorden, which extends another 5 km further south to Seim.

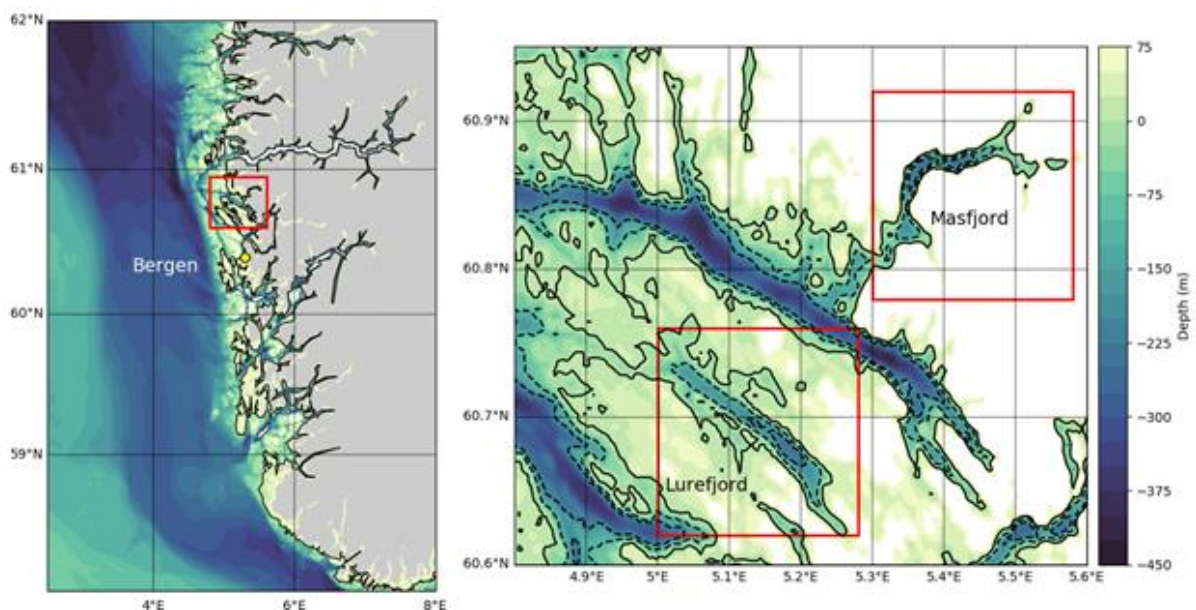


Figure 1: Map of southwestern Norway (left) with red rectangle indicating study area (right).

Both fjords have a similar maximum depth; however, due to the shallower sill depth in Lurefjorden, the ecosystem structure varies substantially between the two fjords. Since the 1970s, Lurefjorden is dominated by the pelagic predatory medusa *Periphylla periphylla* (Sørnes *et al.*, 2007), while Masfjorden sustains populations of the mesopelagic fishes *Maurolicus muelleri* and *Benthosema glaciale*, while containing only negligible populations of jellyfish, although more recently *Periphylla* has also been reported.

The difference in ecosystem structure is most likely a result of the different light regimes in the two fjords (Aksnes *et al.*, 2009). Lurefjorden has a strong light attenuation due to the influence of fresh coastal surface water combined with a lower turnover rate, which is caused by the shallow sill. According to Aksnes *et al.* (2009), Lurefjorden is subject to coastal water darkening which may have been the cause for the regime shift towards a *Periphylla*-dominated ecosystem. Masfjorden's source water on the other hand is more marine and light attenuation is lower, although annual variations can occur in relation to water renewal in the deep basin (Sørnes & Aksnes 2006). Limited exchange with coastal water leads to reduced oxygen

concentrations in deep fjord basins. Basin water oxygen concentrations in Masfjorden have declined from about 5 ml L<sup>-1</sup> to < 2.5 ml L<sup>-1</sup> over the last four decades due to increased stratification driven by warming (Aksnes *et al.*, 2019). Further deoxygenation may lead to a reduction in zooplankton-mediated export flux (Kiko & Hauss 2019).

In Masfjorden, juvenile and adult *Maurolicus muelleri* form distinct acoustic scattering layers over the winter. The juveniles have an active diel vertical migration (DVM) pattern with daytime depths around 150 m, short feeding periods at the surface around dusk and dawn and midnight sinking in-between. The adults stay in a deeper layer at around 200 m depth and only partly migrate. Around the end of March, the two layers merge, facilitating synchronised twilight migrations (Staby *et al.*, 2011, Prihartato *et al.*, 2015). *Benthosema glaciale* occur below the *Maurolicus* layers at daytime, but migrate to the surface at night (Giske *et al.* 1990). Northern krill (*Meganyctiphanes norvegica*) have a regular DVM pattern, generally descending to daytime depths in Masfjorden shortly before *M. muelleri* and ascending slightly later in the evening. In Lurefjorden, in addition to *Periphylla*, which has diverse migration patterns, including asynchronous migration (Kaartvedt *et al.*, 2007, Kaartvedt *et al.*, 2011), krill form the major scattering layer and perform DVM. Larger fish (*e.g.* Whiting, *Merlangius merlangus*) are present, seemingly in connection with the distribution of krill (Kaartvedt *et al.*, 2011). Both mesopelagic fish species in Masfjorden are diel vertical migrators (Staby *et al.*, 2011, Prihartato *et al.*, 2015), as is *Periphylla* in Lurefjorden (Kaartvedt *et al.*, 2007, Sørnes *et al.*, 2007). However, while the generally synchronised twilight migration of *M. muelleri* in Masfjorden likely results in pulsed fluxes of faecal matter (Prihartato *et al.*, 2015), *Periphylla* migrates asynchronously (Kaartvedt *et al.*, 2007), which hypothetically leads to a more constant flux.

### 3.2 Aims of the Cruise

The aim was to produce a process study of the Biological Carbon Pump in two Norwegian Fjords that are close to each other and feature similar dimensions and little advection, but a fundamentally differing structure of the pelagic ecosystem and are thus ideal environments as Natural Mesocosms. While Masfjorden sustains populations of mesopelagic fishes and has negligible populations of jellyfish, Lurefjorden is characterised by year-round mass abundance of the deep sea jellyfish *Periphylla periphylla*, which may be a dead end to the food web and an important contributor to carbon export by deposition of moribund/dead individuals. We aimed to quantify the respective contribution to export flux by different zooplankton (in particular *Periphylla* and copepods of the genus *Calanus*) by respiration, faecal pellet production and subsiding of individuals as well as characterising particle-zooplankton interactions. The spatial and temporal variability of these processes has thus far only been partially captured and understood, nor is it well quantified. To change this, we deployed a suite of different state-of-the-art *in-situ* imaging systems to cross-calibrate and harmonise output data, to resolve a broad size spectrum, and to ensure intercomparability between instruments. We combined this high-resolution *in-situ* imaging approach with

complementary traditional methods, such as vertical net hauls, sediment traps, and shipboard experiments using material collected with a marine snow catcher.

In short, the aims were to i) investigate and quantify the underlying mechanisms of the Biological Carbon Pump in two contrasting Fjord ecosystems on unprecedented temporal and spatial scales and ii) conduct crucial harmonisation approaches between different underwater imaging systems to allow an intercomparison of the datasets obtained. This was the first concerted action of the newly formed Pelagic Imaging Consortium, a collaborative effort of Hereon, AWI and GEOMAR within HGFs Earth and Environment.

### 3.3 Agenda of the Cruise

Following the two day transit from Bremerhaven to Norway, sampling commenced in Masfjorden, starting at the central and deepest station (M7, see Figure 2).

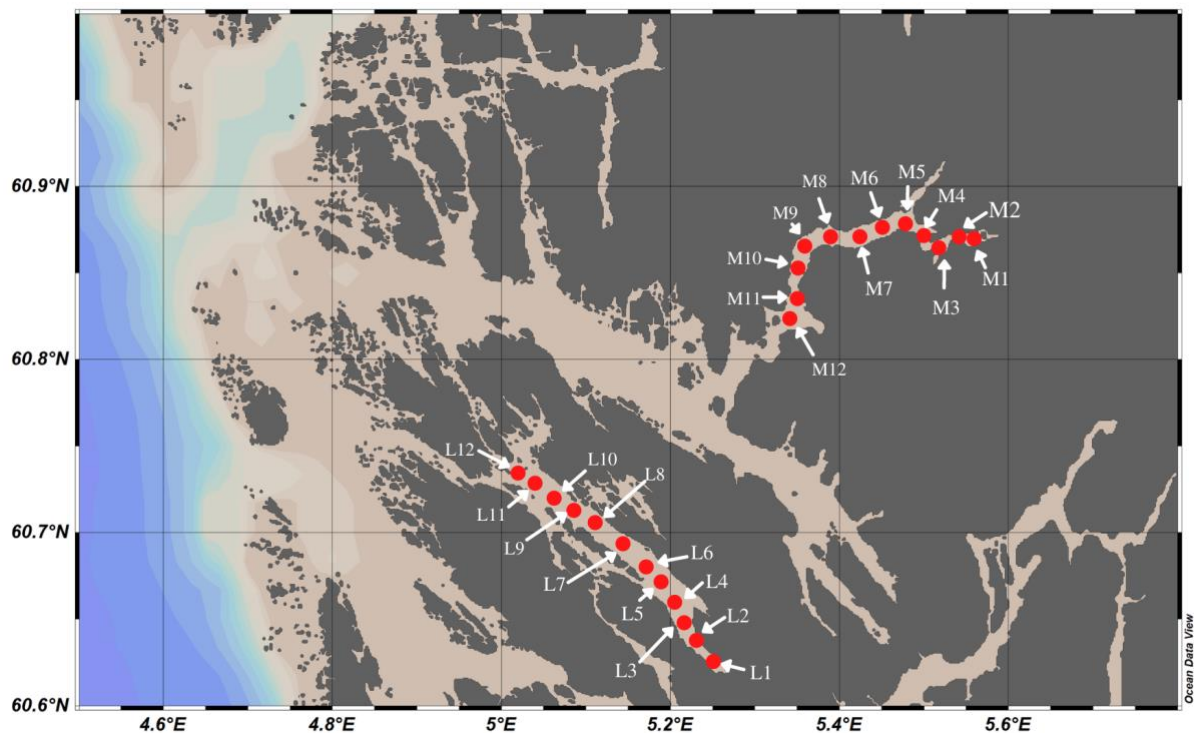


Figure 2: Station positions within Masfjorden and Lurefjorden.

After some instrument testing, and initial measurements *via* vertical and towed hauls (see Section 7.1), the sediment trap and associated instruments were deployed at M7. Next a complete transect of Masfjorden was undertaken, covering all stations from M1 to M12 between the 4<sup>th</sup> and the 6<sup>th</sup> of March. While CTD, BOP and ROSINA were used at each of the stations, LOKI and MUC were only deployed at stations M1, M7 and M12 (see Section 7.1), and the two towed instruments (Multinet Maxi and PELAGIOS) in the deep basin around the central stations. The Multinet Medi was deployed at stations M7 and M10. The sediment trap was recovered during the re-visitation of M7 in the middle of the transect. After completion of the

transect at M12, the Heincke returned to M7, where additional sampling was carried out, including CTD, BOP, ROSINA, Multinets, sediment trap mooring. The WireWalker instrument platform was deployed near M10 on the 8th of March, and retrieved on the 9th. After retrieval M10 was sampled again using the CTD, LOKI, marine snow catcher, ROSINA and multinets. Following one final visit to station M7 that included CTD, BOP and LOKI, an acoustic transect from M5 to M12 was collected, before the transit between fjords.

Upon arrival at Lurefjorden on the 11th of March, its stations were visited in sequence from L1 to L12, establishing a complete transect along the fjord using CTD, BOP and ROSINA at each one. At L1 and L12, MUC and LOKI were deployed in addition to the regular transect programme, and the central station, L7, was sampled in more detail, including the deployment of the sediment trap and WireWalker moorings, and sampling with WP2, multinets, LOKI, PELAGIOS and MUC. The WP2 was also used again at L12.

After completion of the transect, between the 13th and the 16th, L7 was revisited for further sampling. CTD, BOP, ROSINA, LOKI, multinets, WP2, MUC, and the marine snow catcher were used to probe this central station further. The WireWalker and sediment trap moorings deployed during the transect were recovered on the 15th and 13th respectively, and the latter was deployed a second time from the 14th to the 15th of March.

Once the scientific work had been finished successfully, HE570 was concluded on arrival back in Bremerhaven on the 17th of March 2021.

## **4 Narrative of the Cruise**

The scientific and methodological questions the Pelagic Imaging Consortium is aiming to answer using the data collected during HE570 will further our understanding of fjord ecosystems as well as pelagic imaging instrumentation. Subsequent publication of these data will therefore provide an impactful and valuable addition to both fields of research.

## **5 Preliminary Results**

### **5.1 CTD measurements**

The CTD (SBE 49, Sea-Bird Scientific) was operated on board by K. Möller and H. Hauss. Data (see *e.g.* Figure 3) were processed *via* Fielax.



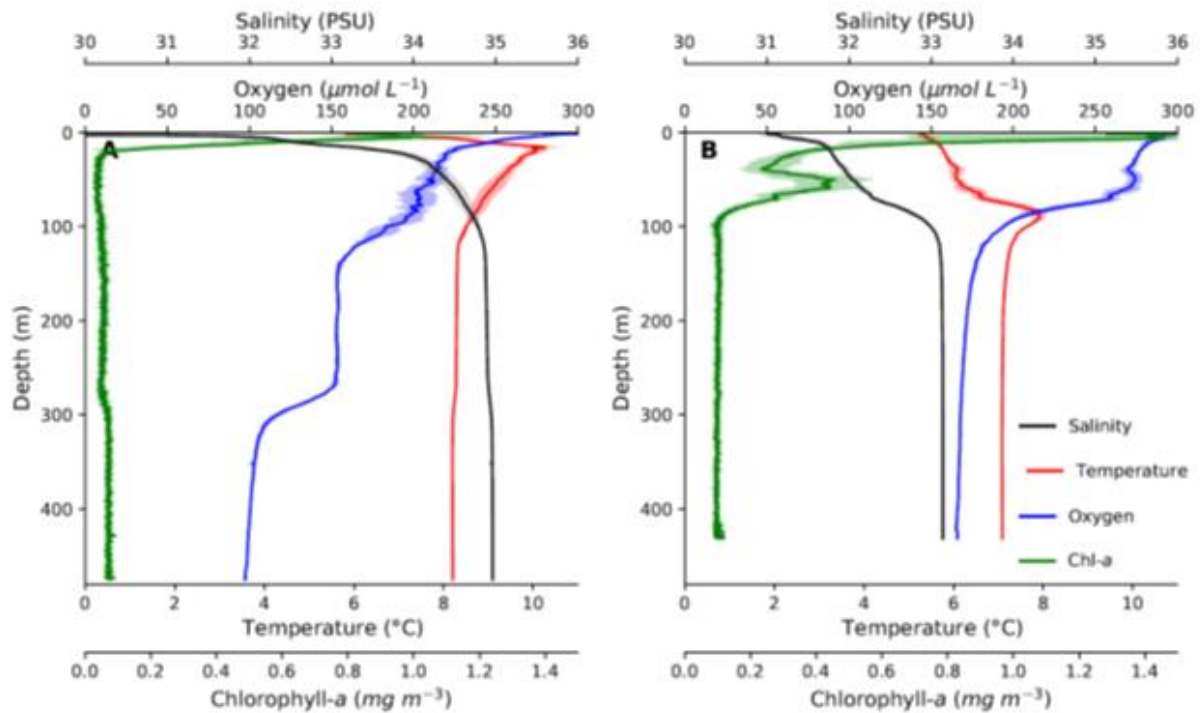


Figure 3: Vertical mean ( $\pm$ SD) profiles of temperature, salinity, oxygen and chlorophyll-a fluorescence at the respective central stations in Masfjorden (left) and Lurefjorden (right).

## 5.2 Rosette water sampling

### 5.2.1 Suspended Particulate Matter (SPM) Filtration

(Saskia Rühl<sup>1</sup>)

<sup>1</sup>Hereon

Water sample profiles were taken at stations M1, M3, M5, M7, M9 and M11 in Masfjorden, and L1, L3, L5, L7, L9, and L11 in Lurefjorden, using a Rosette sampler. Stations M7, L1 and L7 were sampled multiple times, the others once each. Roughly 1 - 3 litres were collected at depth intervals of 10 to 20 m respectively, at all stations (see Table 1).

Table 1: Rosette sampling depths and filtration volumes for suspended particulate matter sampling at each of the stations, including dates and times at which the stations were visited

Station	Date	Time (UTC)	Depth (m)	Volume filtered (ml)
M1	04.03.2021	15:30	5	2156
M1	04.03.2021	15:30	10	2132

M1	04.03.2021	15:30	20	1117
M1	04.03.2021	15:30	30	1140
M1	04.03.2021	15:30	40	2270
M1	04.03.2021	15:30	60	3000
M1	04.03.2021	15:30	80	2067
M1	04.03.2021	15:30	80	2388
M1	04.03.2021	15:30	100	2370
M1	04.03.2021	15:30	125	3132
M1	04.03.2021	15:30	150	1555
M1	04.03.2021	15:30	170	1500
M3	04.03.2021	19:30	164	1625
M3	04.03.2021	19:30	160	1660
M3	04.03.2021	19:30	150	1635
M3	04.03.2021	19:30	125	2105
M3	04.03.2021	19:30	100	1132
M3	04.03.2021	19:30	80	1142
M3	04.03.2021	19:30	80	1805
M3	04.03.2021	19:30	60	1956
M3	04.03.2021	19:30	40	2085
M3	04.03.2021	19:30	30	2738

M3	04.03.2021	19:30	20	2825
M3	04.03.2021	19:30	10	2890
M5	05.03.2021	10:30	250	1617
M5	05.03.2021	10:30	200	1656
M5	05.03.2021	10:30	150	1638
M5	05.03.2021	10:30	125	1160
M5	05.03.2021	10:30	100	1055
M5	05.03.2021	10:30	80	2095
M5	05.03.2021	10:30	60	2066
M5	05.03.2021	10:30	40	2283
M5	05.03.2021	10:30	20	2070
M5	05.03.2021	10:30	10	3120
M5	05.03.2021	10:30	5	3030
M5	05.03.2021	10:30	5	3100
M7	05.03.2021	15:00	470	1616
M7	05.03.2021	15:00	400	1660
M7	05.03.2021	15:00	300	1634
M7	05.03.2021	15:00	250	1120
M7	05.03.2021	15:00	200	1100
M7	05.03.2021	15:00	150	2100

M7	05.03.2021	15:00	100	2106
M7	05.03.2021	15:00	80	2110
M7	05.03.2021	15:00	60	2136
M7	05.03.2021	15:00	40	3120
M7	05.03.2021	15:00	20	3085
M7	05.03.2021	15:00	10	3110
M9	05.03.2021	22:00	460	1620
M9	05.03.2021	22:00	400	1654
M9	05.03.2021	22:00	300	1640
M9	05.03.2021	22:00	250	1165
M9	05.03.2021	22:00	200	1175
M9	05.03.2021	22:00	150	2120
M9	05.03.2021	22:00	100	2348
M9	05.03.2021	22:00	80	2144
M9	05.03.2021	22:00	60	2146
M9	05.03.2021	22:00	40	2840
M9	05.03.2021	22:00	20	2815
M9	05.03.2021	22:00	10	3075
M11	06.03.2021	10:45	208	1622
M11	06.03.2021	10:45	200	1656

M11	06.03.2021	10:45	175	1638
M11	06.03.2021	10:45	150	1113
M11	06.03.2021	10:45	125	1145
M11	06.03.2021	10:45	100	2030
M11	06.03.2021	10:45	80	2174
M11	06.03.2021	10:45	60	2187
M11	06.03.2021	10:45	40	2344
M11	06.03.2021	10:45	20	3100
M11	06.03.2021	10:45	10	3048
M11	06.03.2021	10:45	5	3052
M7	06.03.2021	19:00	462	1616
M7	06.03.2021	19:00	400	1657
M7	06.03.2021	19:00	300	1646
M7	06.03.2021	19:00	250	1130
M7	06.03.2021	19:00	200	1155
M7	06.03.2021	19:00	150	2075
M7	06.03.2021	19:00	100	2232
M7	06.03.2021	19:00	80	2232
M7	06.03.2021	19:00	60	2286
M7	06.03.2021	19:00	40	3100

M7	06.03.2021	19:00	20	3052
M7	06.03.2021	19:00	10	3032
M1	07.03.2021	18:00	182	1616
M1	07.03.2021	18:00	150	1660
M1	07.03.2021	18:00	125	1635
M1	07.03.2021	18:00	100	1085
M1	07.03.2021	18:00	80	1090
M1	07.03.2021	18:00	60	2054
M1	07.03.2021	18:00	40	2275
M1	07.03.2021	18:00	30	2275
M1	07.03.2021	18:00	20	2190
M1	07.03.2021	18:00	10	2835
M1	07.03.2021	18:00	5	3040
M1	07.03.2021	18:00	5	3075
L1	11.03.2021	09:00	187	1372
L1	11.03.2021	09:00	150	1414
L1	11.03.2021	09:00	150	1388
L1	11.03.2021	09:00	125	1145
L1	11.03.2021	09:00	100	1140
L1	11.03.2021	09:00	80	2080

L1	11.03.2021	09:00	60	2284
L1	11.03.2021	09:00	40	2238
L1	11.03.2021	09:00	30	2366
L1	11.03.2021	09:00	20	3100
L1	11.03.2021	09:00	10	3050
L1	11.03.2021	09:00	5	1960
L3	11.03.2021	12:40	197	1620
L3	11.03.2021	12:40	170	1663
L3	11.03.2021	12:40	150	1645
L3	11.03.2021	12:40	125	1130
L3	11.03.2021	12:40	100	1115
L3	11.03.2021	12:40	80	2080
L3	11.03.2021	12:40	60	2270
L3	11.03.2021	12:40	40	2195
L3	11.03.2021	12:40	30	2288
L3	11.03.2021	12:40	20	3100
L3	11.03.2021	12:40	10	3055
L3	11.03.2021	12:40	5	3085
L5	11.03.2021	15:45	280	1658
L5	11.03.2021	15:45	250	1640

L5	11.03.2021	15:45	200	1638
L5	11.03.2021	15:45	150	1138
L5	11.03.2021	15:45	125	1130
L5	11.03.2021	15:45	100	2085
L5	11.03.2021	15:45	80	2216
L5	11.03.2021	15:45	60	2190
L5	11.03.2021	15:45	40	2230
L5	11.03.2021	15:45	20	3090
L5	11.03.2021	15:45	10	3065
L5	11.03.2021	15:45	5	3075
L7	11.03.2021	21:00	413	1618
L7	11.03.2021	21:00	400	1658
L7	11.03.2021	21:00	300	1640
L7	11.03.2021	21:00	250	1125
L7	11.03.2021	21:00	200	1140
L7	11.03.2021	21:00	150	2075
L7	11.03.2021	21:00	100	2226
L7	11.03.2021	21:00	80	2236
L7	11.03.2021	21:00	60	2265
L7	11.03.2021	21:00	40	3090



L7	11.03.2021	21:00	20	3040
L7	11.03.2021	21:00	10	3070
L9	12.03.2021	16:40	272	1623
L9	12.03.2021	16:40	270	1658
L9	12.03.2021	16:40	250	1640
L9	12.03.2021	16:40	200	1105
L9	12.03.2021	16:40	150	1125
L9	12.03.2021	16:40	100	2085
L9	12.03.2021	16:40	80	2170
L9	12.03.2021	16:40	60	2154
L9	12.03.2021	16:40	40	2185
L9	12.03.2021	16:40	20	3095
L9	12.03.2021	16:40	10	3050
L9	12.03.2021	16:40	5	3077
L11	12.03.2021	22:15	160	1618
L11	12.03.2021	22:15	160	1656
L11	12.03.2021	22:15	150	1640
L11	12.03.2021	22:15	125	1165
L11	12.03.2021	22:15	100	1150
L11	12.03.2021	22:15	80	2080

L11	12.03.2021	22:15	60	2240
L11	12.03.2021	22:15	40	2214
L11	12.03.2021	22:15	30	2303
L11	12.03.2021	22:15	20	3135
L11	12.03.2021	22:15	10	3050
L11	12.03.2021	22:15	5	3075
L7	14.03.2021	08:00	427	1616
L7	14.03.2021	08:00	400	1658
L7	14.03.2021	08:00	300	1644
L7	14.03.2021	08:00	200	1140
L7	14.03.2021	08:00	150	1150
L7	14.03.2021	08:00	100	2075
L7	14.03.2021	08:00	80	2180
L7	14.03.2021	08:00	60	2163
L7	14.03.2021	08:00	40	2148
L7	14.03.2021	08:00	20	3085
L7	14.03.2021	08:00	10	3055
L7	14.03.2021	08:00	5	3075
L7	15.03.2021	15:30	408	1614
L7	15.03.2021	15:30	350	1654

L7	15.03.2021	15:30	300	1632
L7	15.03.2021	15:30	200	1160
L7	15.03.2021	15:30	150	1155
L7	15.03.2021	15:30	100	2065
L7	15.03.2021	15:30	80	2134
L7	15.03.2021	15:30	60	2200
L7	15.03.2021	15:30	40	2230
L7	15.03.2021	15:30	20	3075
L7	15.03.2021	15:30	10	3050
L7	15.03.2021	15:30	5	3068

After retrieving the water from the rosette, samples were homogenised and divided into subsamples to facilitate easier filtration. The water was then filtered through a 6-stem filtration rack, using pre-ashed GFFs (one hour at 450°C) that had also been pre-weighed after ashing. Filtration volumes were noted for each filter to facilitate the calculation of concentrations from the sample weights. To avoid alterations in the weight of the collected SPM through potential salt content variability in the water, filters were flushed with 100 ml deionized water before being frozen at -20 °C, for storage and transport. Each filter was subsequently dried for at least three hours at 55 °C, weighed, ashed and weighed again to determine the overall dry weight of the SPM and the amount of organic matter within it lost through ignition in the ashing process.

Thus determined suspended particulate matter concentrations are displayed in Figure 4, with corresponding concentrations of organic matter lost on ignition in Figure 5.

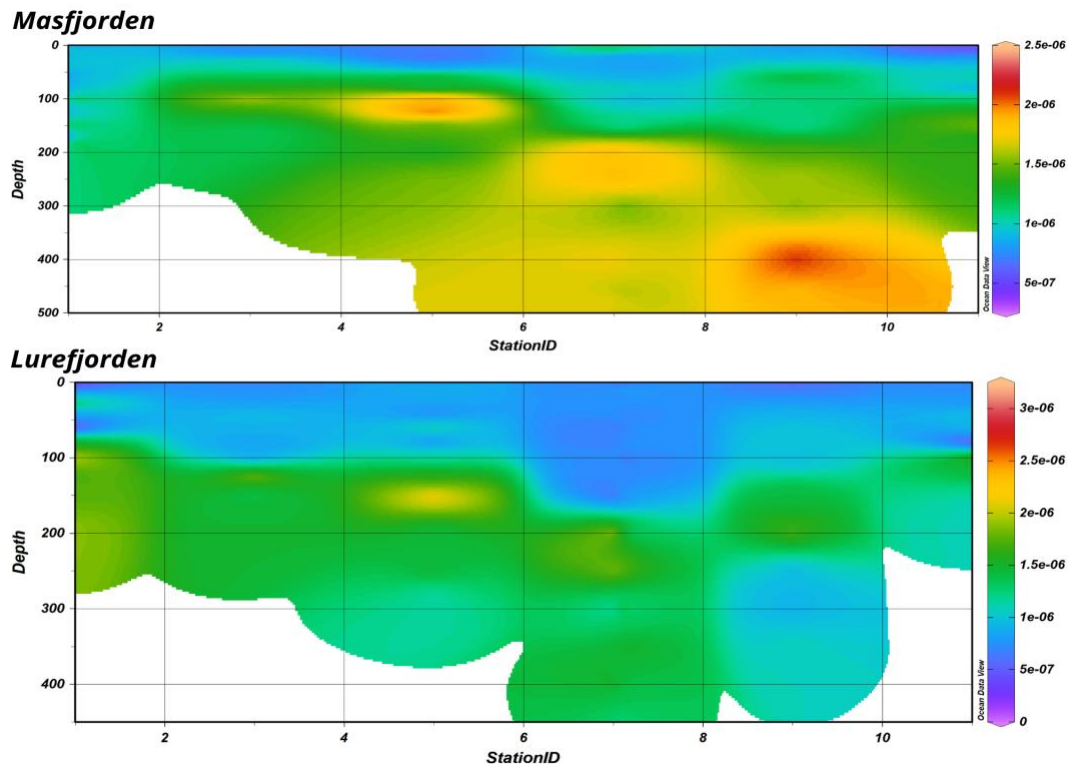


Figure 4: Suspended particulate matter concentration (g/l) in Masfjorden (top) and Lurefjorden (bottom).

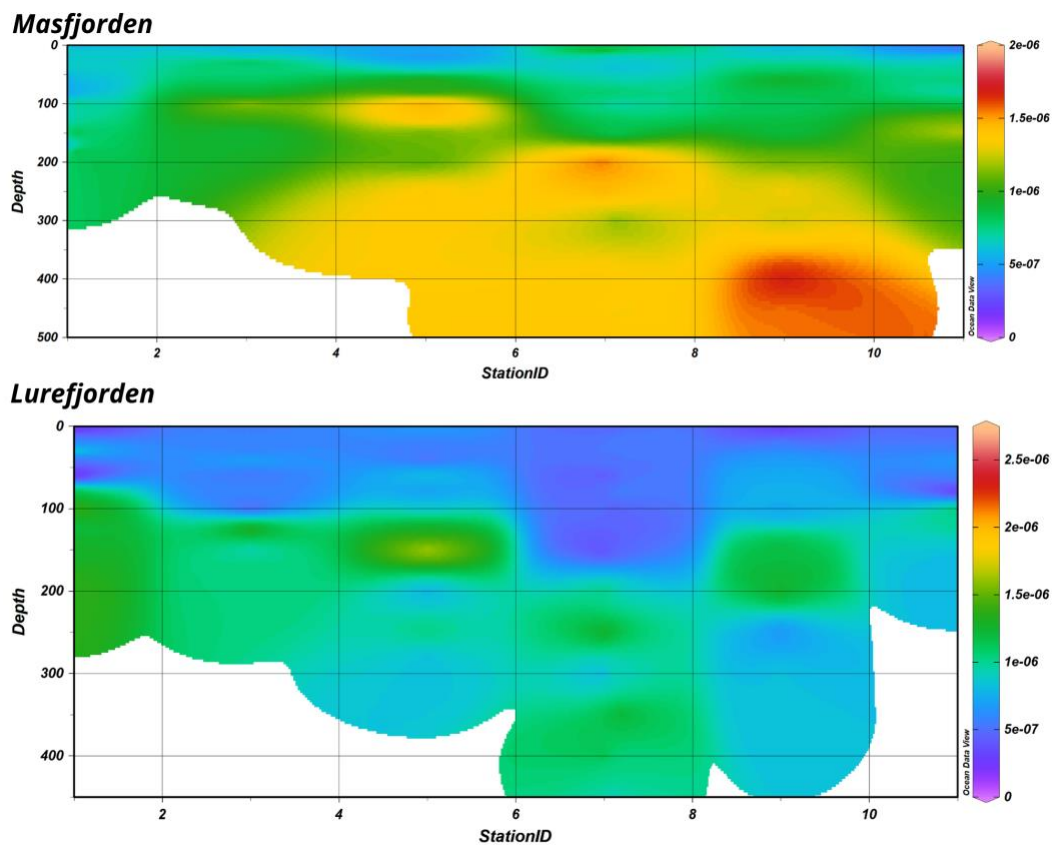


Figure 5: Concentration (g/l) of organic material lost on ignition from the suspended matter in Masfjorden (top) and Lurefjorden (bottom).

### 5.2.2 Water column nutrient measurements

(Klas Ove Möller<sup>1</sup>, Andreas Neumann<sup>1</sup>)

<sup>1</sup>Hereon

Nutrient samples were taken at the same stations and from the same depths as the suspended particulate matter samples described in section 5.2.1 (see Table 1), with the exception of an omission of the final visit to station L7 on the 15th of March 2021. At each station, one 50 ml falcon tube per depth was rinsed twice with sample water before filling, and immediately transferred to the -20 °C freezer for storage and transport.

## 5.3 Multicorer (MUC) sediment sampling

We employed an 8-core Multicorer from Oktopus Kiel (Germany), equipped with PMMA core liners (60 cm length, 10 cm inner diameter). The retrieved sediment cores measured typically 40 - 50 cm in length.

### 5.3.1 Bioturbation incubations

(Saskia Rühl<sup>1</sup>)

<sup>1</sup>Hereon

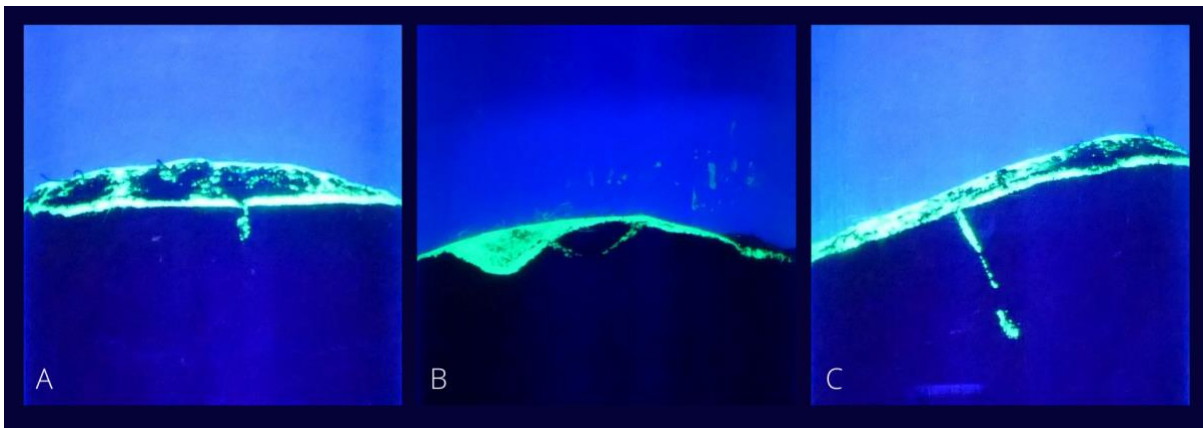
Sediment samples for bioturbation incubation experiments were taken at the most seaward, the central, and the most landward stations in each fjord (M1, M7, M12 and L1, L7, L12 respectively). Six replicate sediment cores (hereafter referred to simply as cores) were collected at each station, using the MUC. They were transported and stored vertically at all times, with minimal physical disturbance to the sediment matrix. Upon transferral of the cores to the controlled-temperature laboratory (CT lab), the overlying water in each of them was aerated gently using diffusing airstones, without disturbing the sediment surface. Cores were then left to settle in a darkened space for 5-10 hours before further processing in order to facilitate the re-establishment of biogenic sediment matrix structures and to avoid recording altered behaviours due to stress. The CT lab was kept at ambient seawater temperatures (roughly 6 °C), or as cold as possible when ambient temperatures could not be reached due to technical issues (max. of 10.3 °C at times).

After the settling period, each core was photographed from all sides and from above under normal lighting conditions, for reference. Then, a pre-weighed amount of luminophores were added to each core at a rate of 0.1 g / cm<sup>2</sup> sediment surface, following recommendations in Queirós *et al.* (2015; see also Gilbert *et al.*, 2003). Luminophores were uniformly sized at 0.2 mm diameter, as sediment *in-situ* grain size distribution was unknown. In the distribution of the luminophores, particular attention was paid to even coverage across the whole sediment surface.

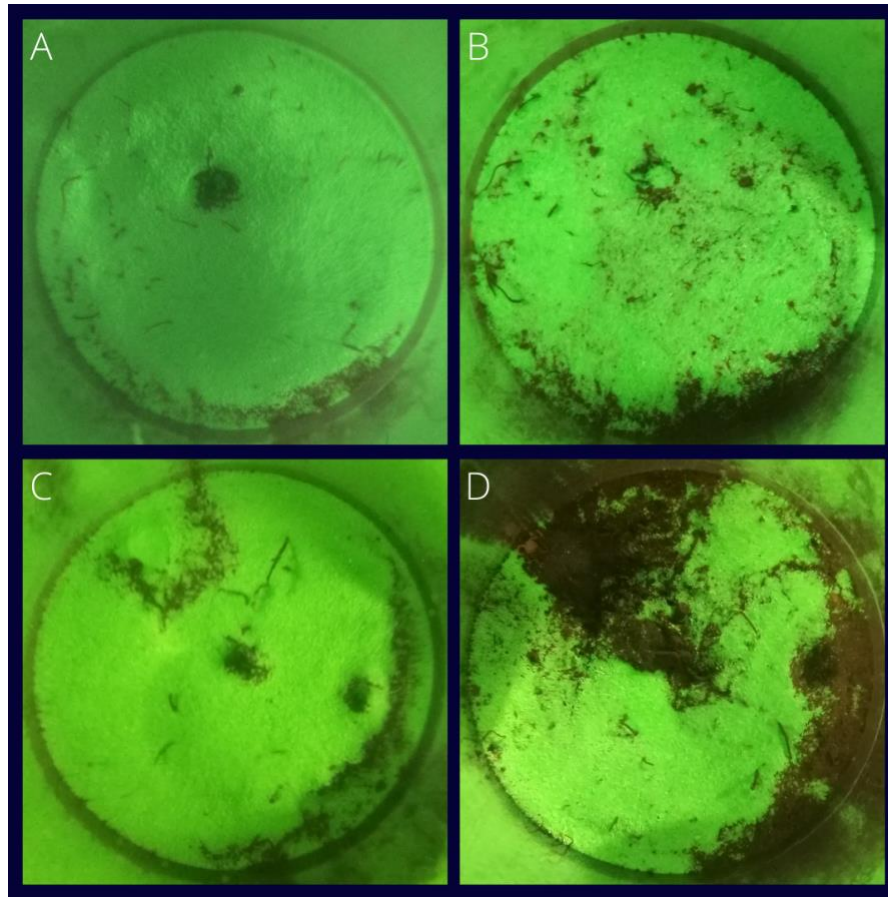
Following a brief period to allow the luminophores to settle, cores were placed inside an enclosed darkened space, illuminated only by a UV light used to excite the luminophores, and photographed from all sides. To ensure complete imaging of all sides of the cores during the photographing, cores were rotated in

increments of 1/16th of the cores diameter at a time after each photo. Both sets of cores (from stations M7 and L7 respectively) were imaged in this way at intervals of 24 hours for seven consecutive days. Storage during the incubation of the cores between imaging continued as in the initial settling period, in a darkened space within the CT lab, standing upright and being aerated gently.

Examples of the bioturbation activity captured through this method can be found in Figures 6 and 7, although only the lateral images (Figure 6) will be used to quantify bioturbation activity and depth. Top-down images (Figure 7) were taken for personal reference and to record the presence of bioturbation activity at the centre of the cores, that could not be captured otherwise.

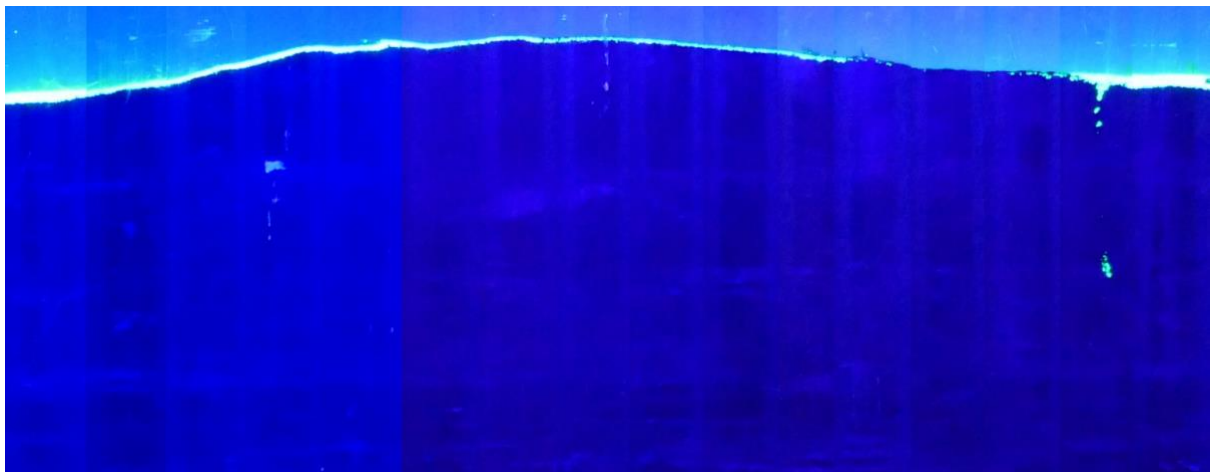


*Figure 6: Three examples of vertical particle transport through downward conveying bioturbation (A-C), visualised through the biogenic burial of luminophore tracer that had been placed only at the sediment-water interface at the beginning of the incubation period.*



*Figure 7: Examples of vertical particle transport through upward conveying bioturbation activity, visualised through the deposition of sediment on top of the luminophore tracer particles; Images A and C were taken immediately after tracer deposition on the sediment surface, while images B and D depict the respective states of the same cores at the end of the incubation period.*

Upon completion, images of each of the 1 cm sections of the cores were combined into single frames, each containing a complete circumference of one core at one time point (see *e.g.* Figure 8).



*Figure 8: Combined image of core's outside, from a single core at a single time point*

Bioturbation activity and depth will be determined by fitting a random-walk bioturbation model (Schiffers *et al.*, 2011) to the manually cropped automatically processed imaging time-series using scripts and techniques described in Queirós *et al.* (2015).

At the end of both incubation periods the cores were sieved (mesh size 0.5-1mm) and the retained macrofauna was preserved in 10% formalin for subsequent identification and biomass determination.

### **5.3.2 Nutrient and oxygen fluxes across the sediment-water boundary**

(Andreas Neumann<sup>1</sup>)

<sup>1</sup>Hereon

From the retrieved sediment cores from stations M1, M7, M12, L1, L7, and L12, four cores were immediately incubated in the ship's temperature-controlled lab at *in-situ* temperature to measure benthic fluxes of oxygen and nutrients by means of whole-core incubations. The oxygen concentration was continuously measured with fibre-optodes (Presens, Germany) over the course of 20 - 30 h due to low overall activity. A Bromide tracer was injected into the supernatant to measure irrigation rates. Throughout the incubation, water samples were drawn from the supernatant, filtered (0.45 µm), and stored frozen (-20° C) for later measurements of nutrients and Bromide at hereon. The incubation method is described in detail in Neumann *et al.* (2021). Additionally, water samples of 20 ml each were taken out of each of the sediment cores used in the bioturbation incubations (collected at stations M1, M7, M12, L1, L7, and L12; see Section 5.3.1) on each incubation day (1-7). Each water sample was filtered through Sartorius 0.45 µm membrane filters before being frozen at -20 °C for storage and transport purposes prior to analysis.

The measured oxygen fluxes are summarised in Figure 9. The oxygen fluxes were generally very low (2 - 5 mmol O<sub>2</sub> m<sup>-2</sup> d<sup>-1</sup>), which can be attributed to the low bottom water temperature and the high degree of degradation of the organic matter. In combination with results from similar, muddy sediment from the shallow 'Helgoland Mud Area', a clear inverse correlation of oxygen flux and bottom depth becomes apparent. The nutrient and bromide analyses are not complete yet, and the results will be provided later.



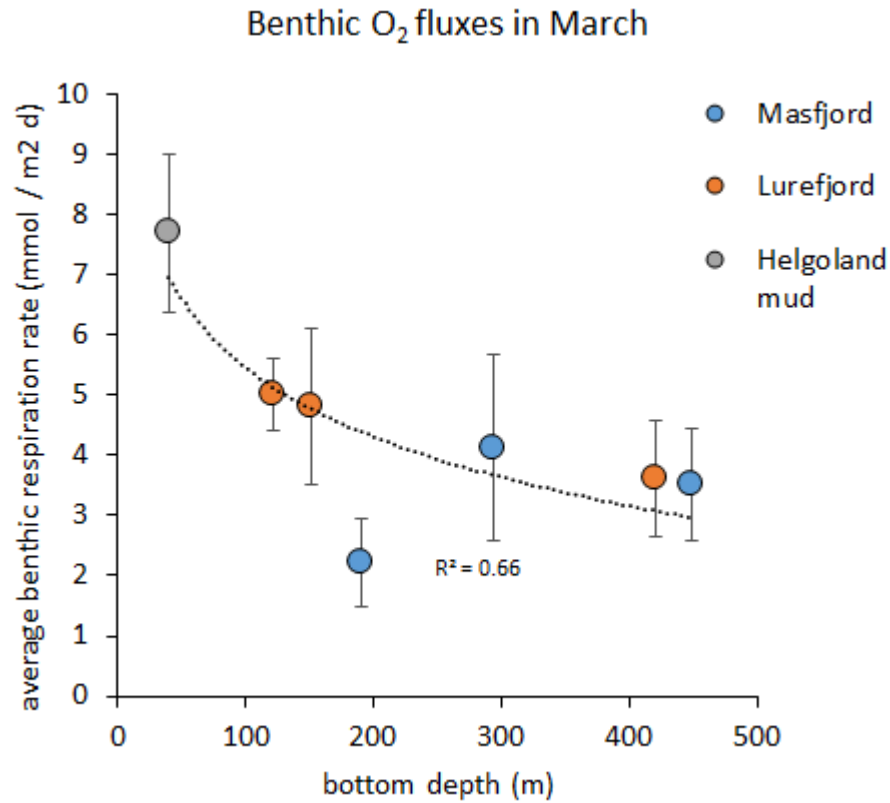


Figure 9: Average oxygen fluxes ( $N=4$ ) in late winter (March) as measured during Heincke cruise 570. Error bars indicate 1 standard deviation.

## 5.4 Pelagic plankton and particle sampling and imaging

### 5.4.1 Remotely ObServing *IN-situ* camera for Aggregates (ROSINA) with Particle Camera

(Morten Iversen<sup>1,2</sup>, Christian Konrad<sup>1,2</sup>)

<sup>1</sup>MARUM

<sup>2</sup>AWI

The Particle-Camera Package consisted of two different camera systems to measure vertical profiles of particle size and abundance distributions in the water column. On the frame (Figure 10) the *In-Situ* Camera (ISC), the ROSINA (Remotely ObServing *IN-situ* camera for Aggregates) system and a CTD (OceanSeven 310, Idronaut S.r.l) were mounted together. Via a telemetry unit data and settings of some instruments (ROSINA, CTD) could be observed and controlled online during the deployment.

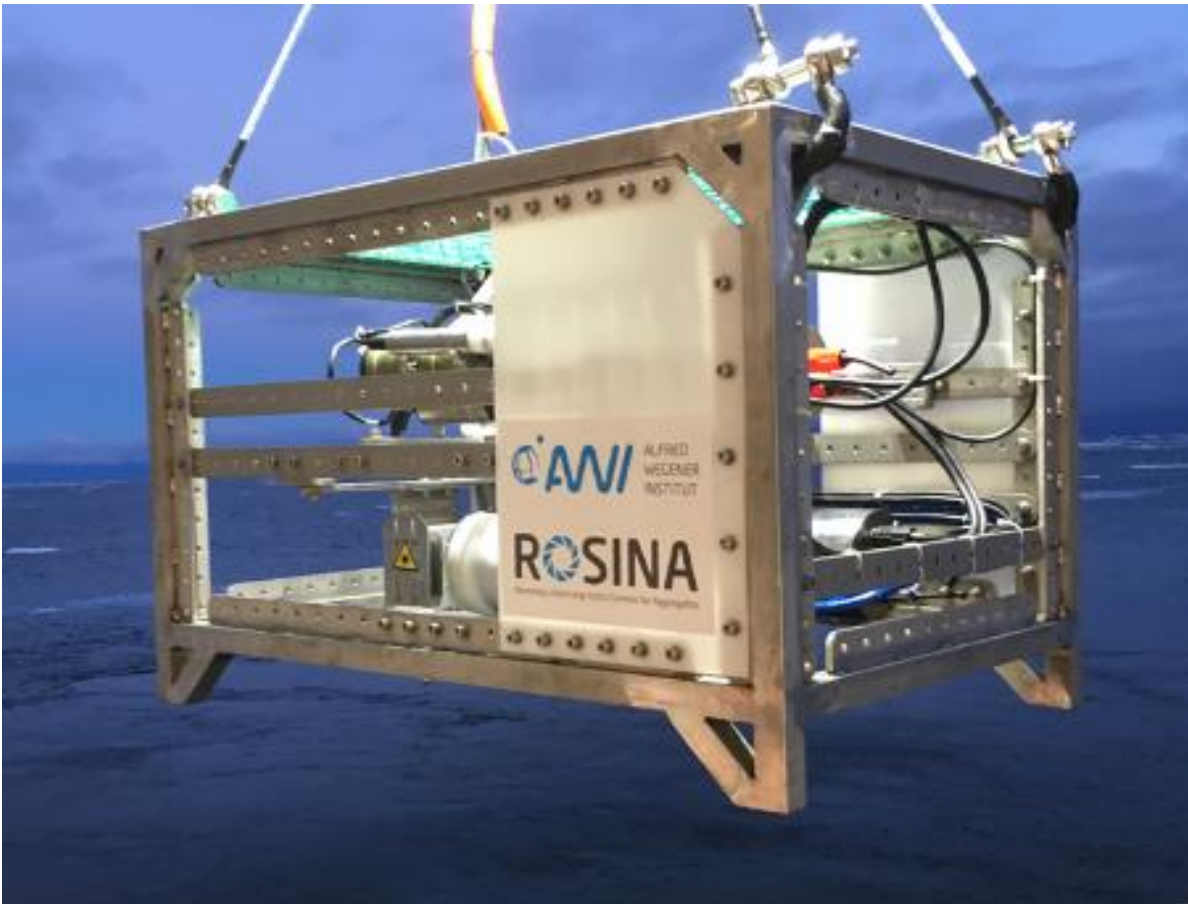


Figure 10: ROSINA frame with ROSINA camera system, In-Situ camera and the CTD mounted inside (photo: Christian Konrad)

### ***In-situ* Camera**

The ISC consisted of an industrial camera with backend electronics for timing, image acquisition and storage of data and a fixed focal length lens. Furthermore, a DSPL battery (24V, 38Ah) was used to power the system. A single board computer was used as the operating system for the infrared camera, to acquire the images from the camera and send them to an SSD hard drive where they were stored. The illumination was provided by a custom-made light source that consisted of infrared LEDs which were placed in an array in front of the camera. With this geometrical arrangement of the camera and the light source we obtained shadow images of particles through the water column.

### **ROSINA (Remotely ObServing *IN-situ* camera for Aggregates)**

The profiling particle camera ROSINA is a highly flexible and modular system and, thus, able to address a range of different research questions related to the biological carbon pump and organic matter transport and transformation. The system consists of a measurement unit and a control unit. The measurement unit (Figure 10) is a stainless-steel frame with all components for the *in-situ* measurement. It consists of the optical system (camera, lenses and light sources), computing unit, standalone CTD, battery and telemetry. Since the system is equipped with telemetry, the operator is able to observe the measurement and make changes

via the control unit during deployment. The control unit consists of the telemetry, which provides the communication interface and power for the measurement unit, and an operator workstation.

The system is equipped with two independent light sources which allows the user to choose remotely between the two light source options during the deployment. One backlight source to obtain shadow images for precise size determination and a reflective light source to be able to get colour information of particles and aggregates.

### **OceanSeven 310 CTD (Idronaut S.r.l.)**

During this cruise the CTD was equipped with a sensor for pressure, temperature, conductivity, oxygen, turbidity and chlorophyll *a* (Chla). The system was partly used in unattended mode and partly in attended mode via the ROSINA telemetry to get online profiles of the above-mentioned parameters. A sampling rate of 2Hz was chosen for the vertical profiles.

### **Work at Sea**

We made 34 vertical profiles with the Particle-Camera system to water depth between 105 and 490 m. The 34 stations included two transects and two time resolving stations (M7 and L7). Furthermore, the drifting trap stations were covered with profiles before deployment and after recovery of the drifting trap. Lowering speed of the Particle-Camera system was 0.2 m/s and 0.3 m/s respectively. Both camera systems worked properly during all casts. CTD data could be obtained during all stations except at station HE570-M7-4 and HE570-L8-136. ROSINA was operated in the backlight mode during the downcasts. At the stations HE570-L7-213 and HE570-L7-222 the reflective light source was used during the upcasts.

### **Preliminary results**

An example of online retrieved results of the Particle-Camera system (ROSINA and CTD) is given in Figure 11. Furthermore in Figure 12 a contour plot shows the particle concentration retrieved with ROSINA during the transects in Masfjorden and Lurefjord. Finally Figure 13. shows the time variation of particle abundance at station M7 (Masfjorden) and L7 (Lurefjorden).

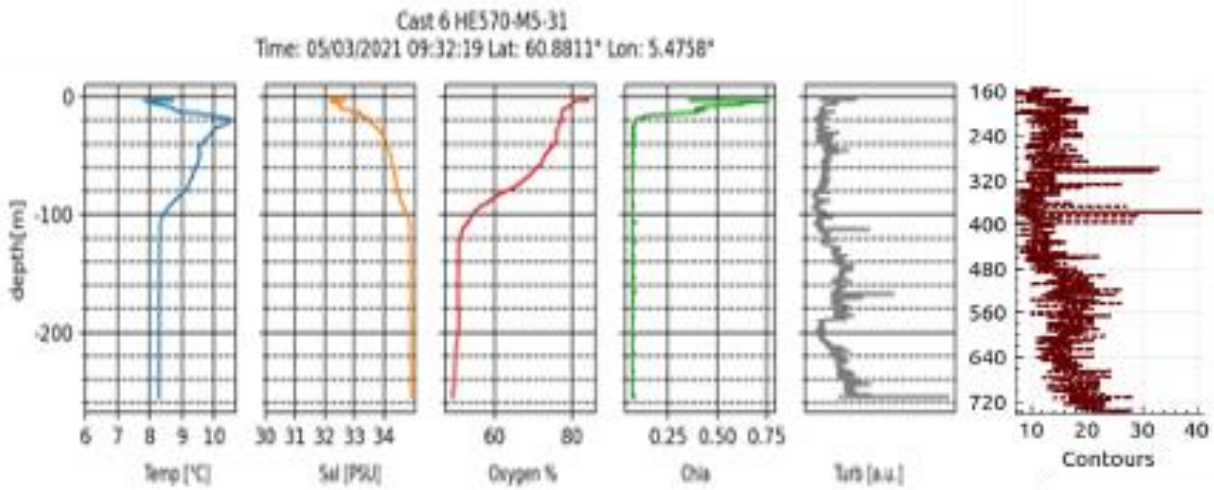


Figure 11: CTD profile and online contour measurement of ROSINA during profile at station HE570-M5-31.

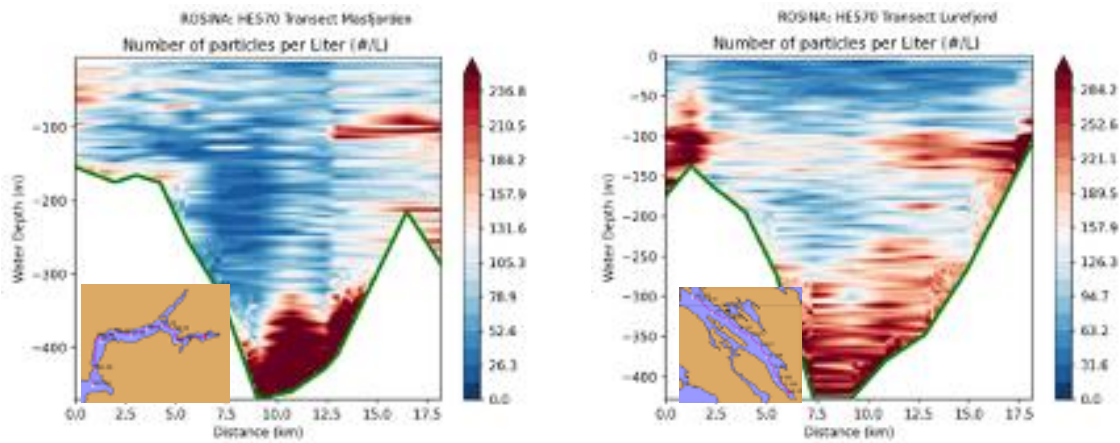


Figure 12: Graphs of particle abundance measured with ROSINA for the transect in Masfjorden (left) and Lurefjord (right). The green line in the contour plot marks the profile depth at the station.

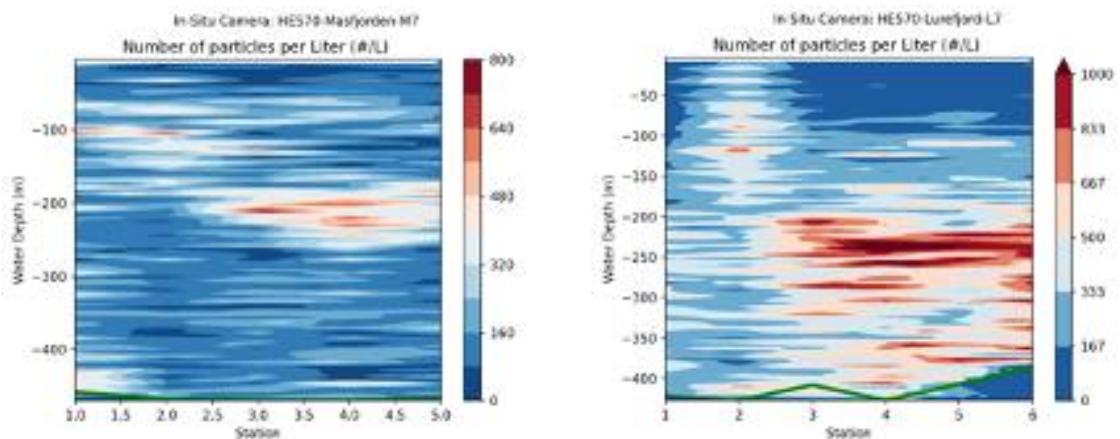


Figure 13: Graphs of particle abundance measured with ISC for the station M7 (Masfjorden) consisting of 5 casts and for the station L7 (Lurefjord) consisting of 6 casts.

During postprocessing of the profile images of the ROSINA particle camera system crops of aggregates are generated. A selection of aggregate crops can be seen in Figure 14 for backlight operation mode and in Figure 15 for reflective light operation mode.

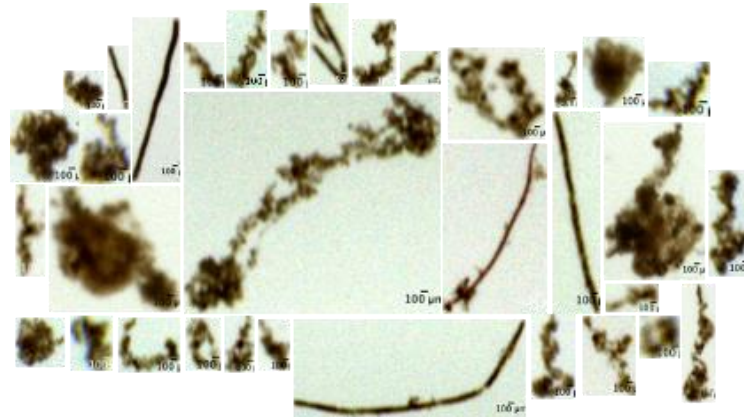


Figure 14: A selection of aggregate crops obtained with ROSINA in backlight operation mode.

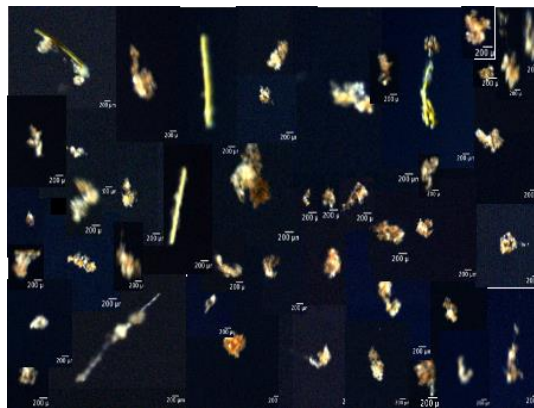


Figure 15: A selection of aggregate crops obtained with ROSINA in reflective light operation mode.

#### 5.4.2 Lightframe On-sight Key species Investigation (LOKI)

(Barbara Niehoff)

<sup>1</sup>AWI

In Masforden, LOKI was deployed across the fjord (M1, M7, M10, and M12) while taking multiple tows on the centre of the fjord (M7). In Laurefjorden, LOKI was deployed across the fjord (L1, L7, and L12) with detail sampling on the centre of the fjord (L7). LOKI acquired data without the problem except for the flowmeter malfunction at station 38. The acquired images (see Figure 16 for the example) will be processed with Zoomie and the plankton taxa will be verified on EcoTaxa.

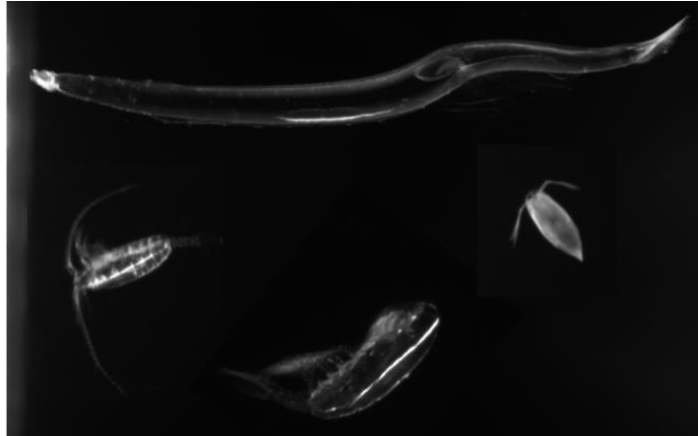


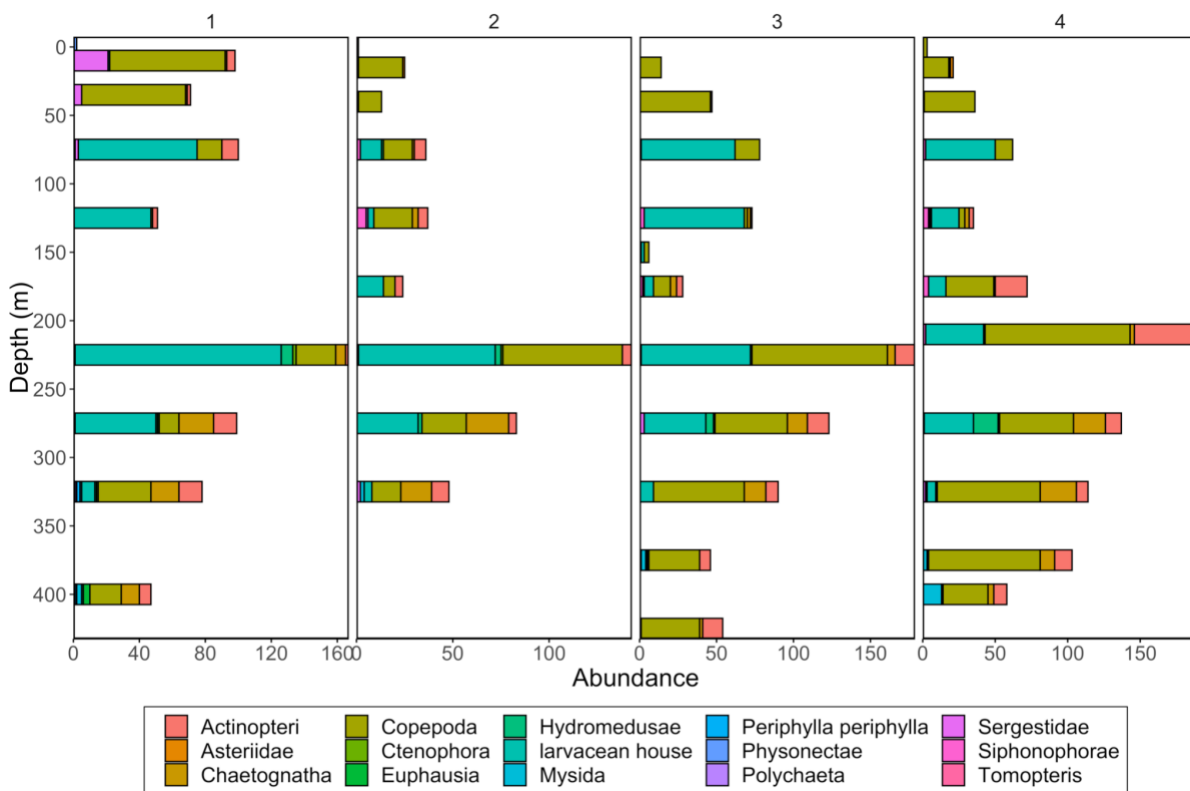
Figure 16: Example of plankton images acquired from LOKI.

### 5.4.3 The Pelagic *In-situ* Observation System (PELAGIOS)

(Helena Hauss<sup>1</sup>, Vanessa Stenvers<sup>1</sup>)

<sup>1</sup>GEOMAR

In Masfjorden, PELAGIOS (Hoving *et al.*, 2019) was deployed four times (2x with WBAT mounted) and worked flawlessly. In Lurefjorden, water entered into the battery pressure case during the first deployment, causing a short circuit at 420m. Video data was manually annotated in VARS (Figure 17; Schlining & Stout, 2006). An example frame grab of *Periphylla* is given in Figure 18.



*Figure 17: Abundance macrozooplankton per depth bin observed with PELAGIOS in Masfjorden at station M7 (NB not yet corrected for water volume filmed). Numbers indicate different hauls (1= night time, 2 and 4=during dusk, 3= daytime).*



*Figure 18: Example frame grab of PELAGIOS in-situ video with Periphylla periphylla.*

#### **5.4.4 Bio Optical Platform (BOP)**

A large rosette frame was used as an instrument carrier for vertical profiles, and termed the Bio Optical Platform, carrying the Continuous Particle Imaging Classification Platform (CPICS), Underwater Vision Profiler 6 High Frequency (UVP-6HF), Underwater Vision Profiler 5 (UVP-5) and Plankton Imager with Scanning Optics (PIScO). It is shown from various angles in Figure 19.



*Figure 19: Three different views of the BOP, carrying CPICS, UVP5, UVP6-HF and PIScO throughout HE570.*

The BOP was deployed at every station, in both fjords (see station plan in Section 7.1).

#### **5.4.4.1 Continuous Particle Imaging Classification System (CPICS) with CTD**

(Klas O. Möller<sup>1</sup>, Daniel Blandfort<sup>1</sup>, Saskia Rühl<sup>1</sup>)

<sup>1</sup>Hereon

The CPICS (CoastalOceanVision, 2021) and RBR Concerto CTD were not included in every BOP deployment, as they were occupied through WireWalker deployments during some of them (see Section 5.2.2). During the vertical hauls with the BOP, both instruments recorded continuously during both downward and upward transport through the water column. Imaging data collected with the CPICS have been manually sorted, but not yet processed further (see example images Figure 20).



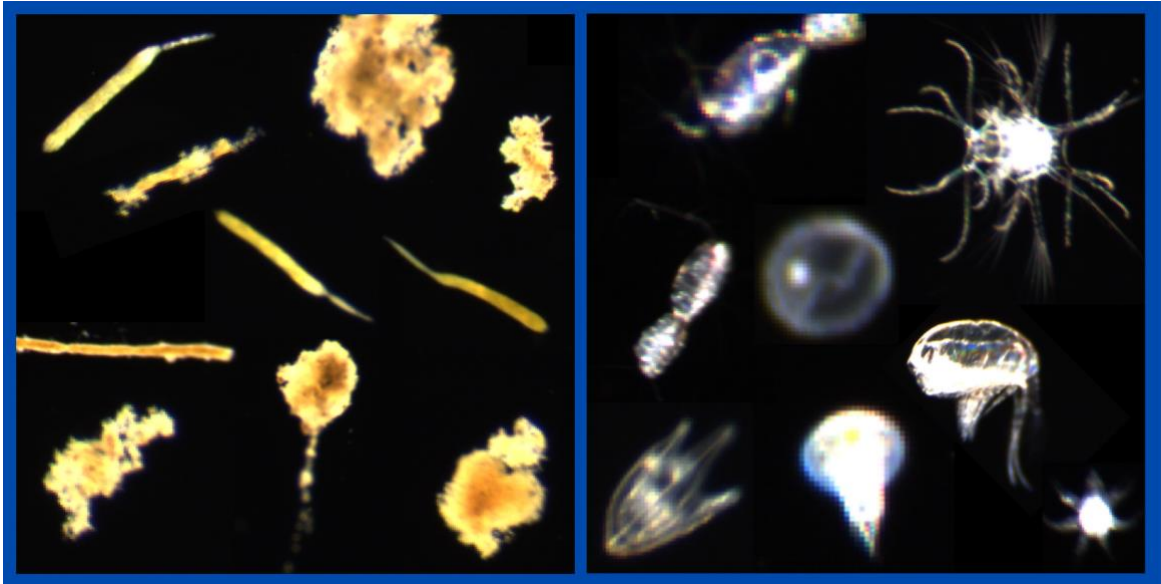


Figure 20: CPICS image examples collected during HE570, including particles (left) and plankton (right).

#### 5.4.4.2 Plankton Imager with Scanning Optics (PIScO)

(Jan Taucher<sup>1</sup>)

<sup>1</sup>GEOMAR

The PIScO is the sea-going prototype of a new zooplankton imaging system developed at GEOMAR. It features a special optical setup with a ultra-high-speed varifocal lens, allowing to combine high optical resolution with a large image volume (patent pending). This enables us to examine organisms over a wide body size range with high image detail. The HE570 cruise was its first field application and was a full success, collecting high-resolution images of zooplankton organisms over the full depth of the water column on all BOP profiles (see Figure 21 for sample images).

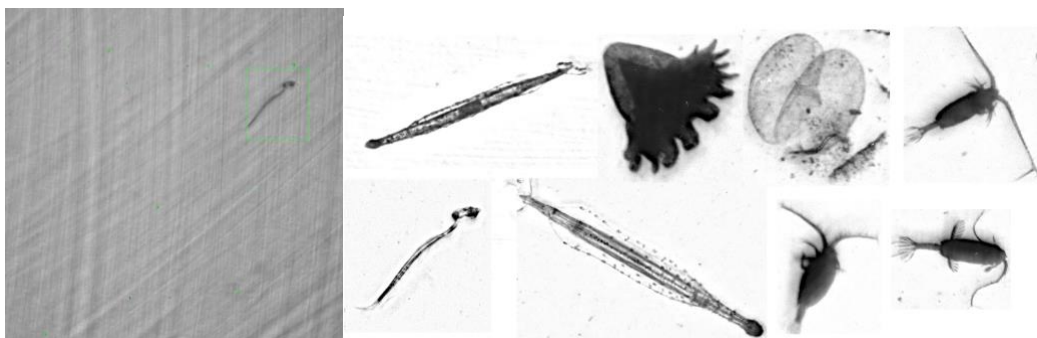


Figure 21: PIScO sample images. Left: raw image and detection by machine learning. Right: Extracted zooplankton taxa.

Currently, we are working on the optimization of our data processing pipeline (noise reduction, object detection and segmentation, taxonomic classification) for the collected image data (approx. 15 TB). The goal is to achieve a similar output format as from the UVP5 (see section 5.4.4.3) for harmonisation and comparability of data, and the use of the Ecotaxa platform.

#### 5.4.4.3 Underwater Vision Profiler 5 (UVP5)

(Helena Hauss)

<sup>1</sup>GEOMAR

The UVP5 (serial number 204, Picheral *et al.*, 2010) was running without errors on all BOP profiles. The resulting particle and image data were processed and imported to Ecopart (<https://ecotaxa.obs-vlfr.fr/part/>) and Ecotaxa (<https://ecotaxa.obs-vlfr.fr/prj/4105>), respectively. Images were predicted into taxonomic categories and are currently validated (approximately 75% validated). First results are shown in Figure 22 and 23. Note increase of small particles in the bottom water of Masfjorden (where oxygen is decreasing, compare to Figure 3). Also, not high abundance of appendicularians in Masfjorden and absence in Lurefjorden, as well as very low copepod abundance in Masfjorden compared to Lurefjorden. However, it has to be noted that only large copepods (such as *Calanus glacialis*) are visible in the UVP5.

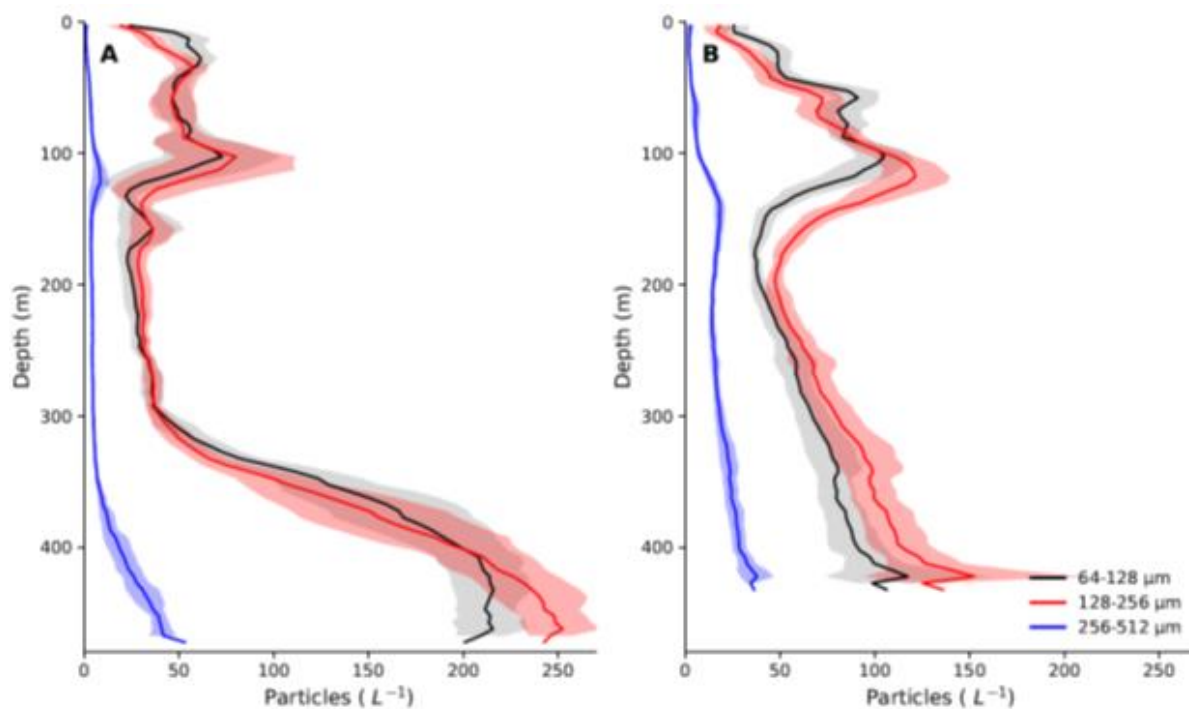


Figure 22: Vertical mean ( $\pm$ SD) profiles of particles in three different size classes as determined by the UVP5 at the respective central station in Masfjorden (A) and Lurefjorden (B).

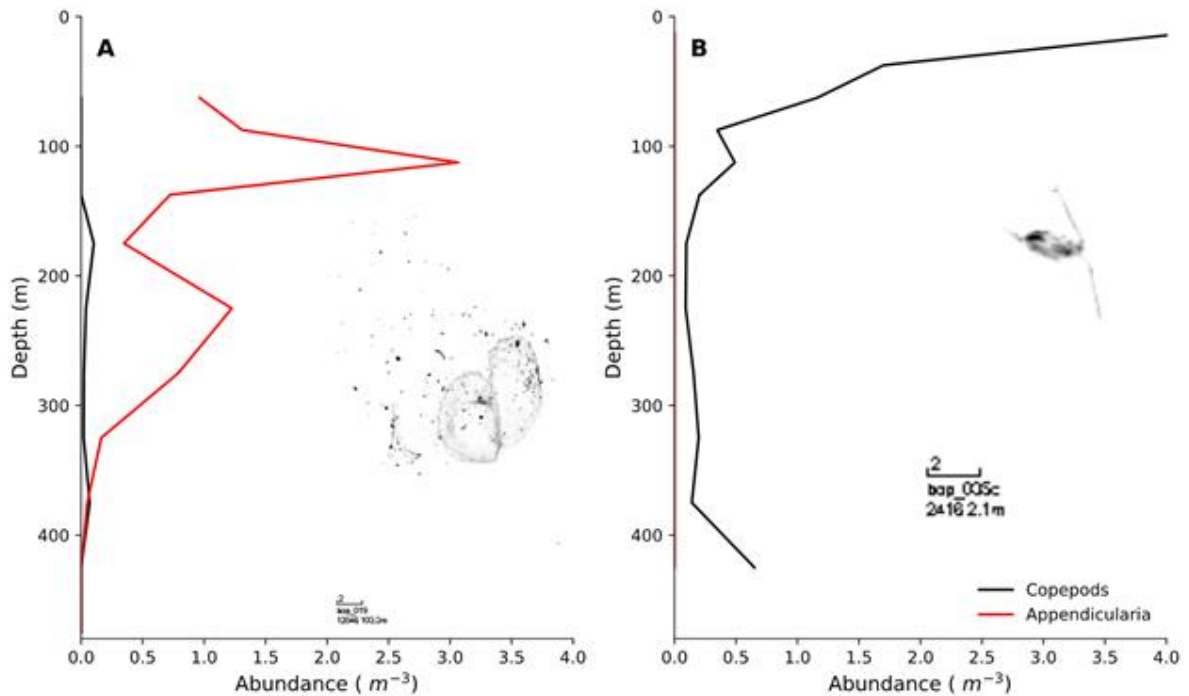


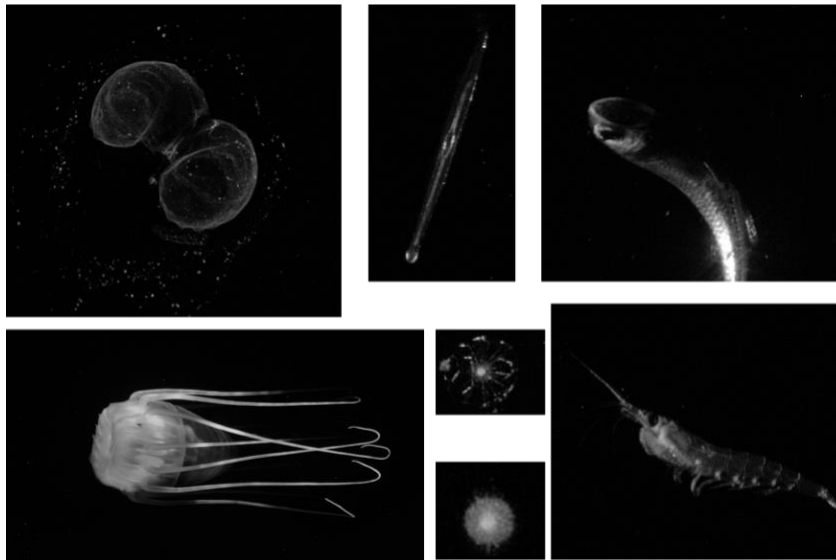
Figure 23: Vertical mean abundance profiles of appendicularians and large copepods as determined by the UVP5 at the respective central station in Masfjorden (A) and Lurefjorden (B). Example images of appendicularians and copepods are included in the graphs. Values are still low estimates because the project is currently 75% validated and only validated images are included.

#### 5.4.4.4 Underwater Vision Profiler 6 High Frequency (UVP6-HF)

(Laetitia Drago)

<sup>1</sup>LOV

The Underwater Profiler 6 High Frequency (UVP6-HF, ref : sn000125, Picheral *et al.*, 2021) was deployed with the BOP on all of the profiles. The resulting information on particles and images were uploaded to Ecopart (<https://ecopart.obs-vlfr.fr/>) and Ecotaxa (<https://ecotaxa.obs-vlfr.fr/prj/4515>; Picheral *et al.* 2017) under the project name “uvp6\_sn000125hf\_2021\_fjord\_experiment\_he570”. The Ecotaxa project contains 67 680 images among which 45 947 (67.9%) have already been validated (see examples in Figure 24).



*Figure 24: Example of raw vignettes imaged by the UVP6-HF*

#### **5.4.5 WireWalker wave powered vertically profiling mooring**

(Daniel Blandfort<sup>1</sup>, Klas O. Möller<sup>1</sup>, Saskia Rühl<sup>1</sup>)

<sup>1</sup>Hereon

The WireWalker (Del Mar Oceanographic, 2021), a wave powered vertically profiling instrument platform (see Figure 25), was deployed in both fjords in moored format to avoid drifting towards the shorelines on either side.

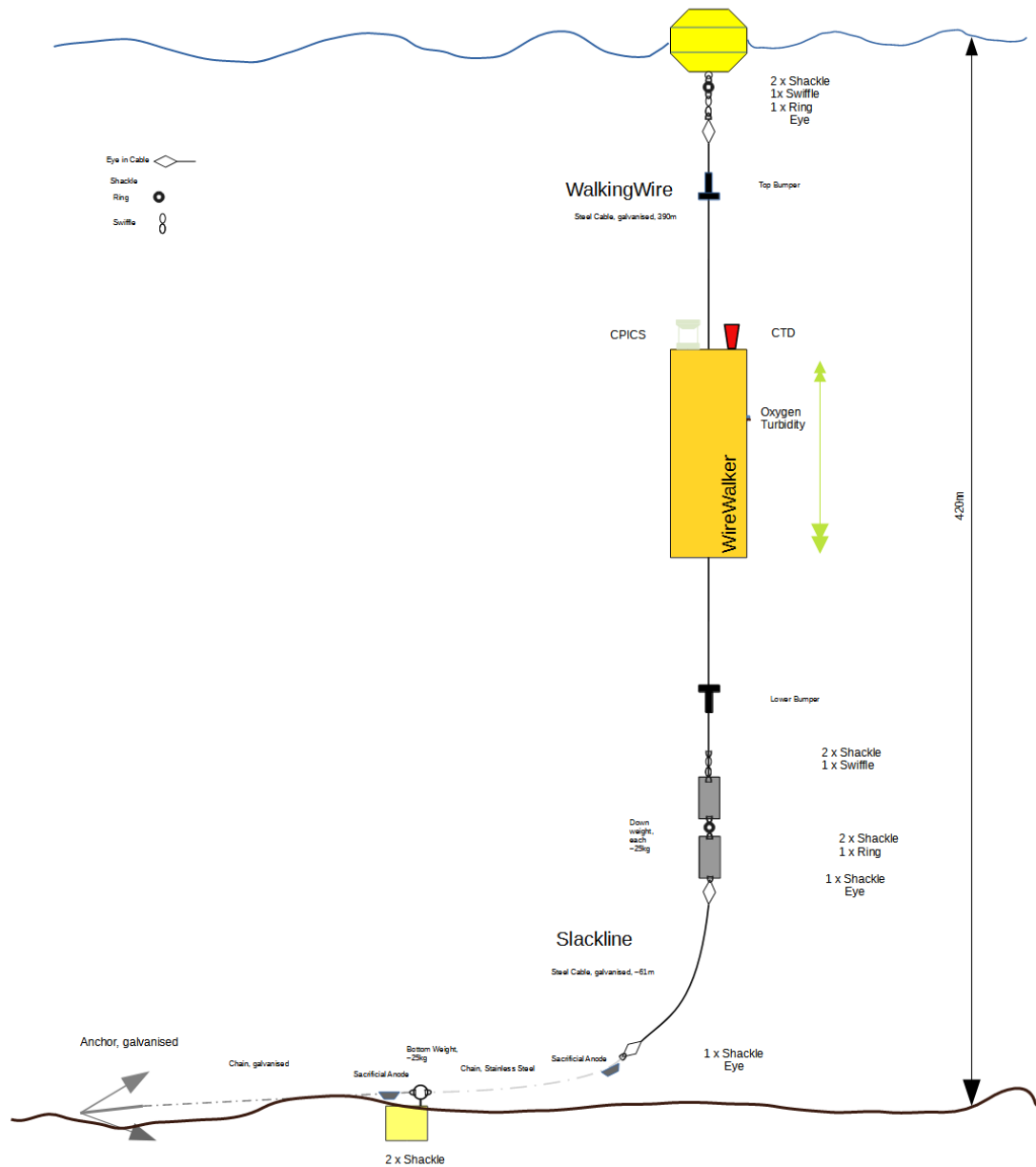


Figure 25: Schematic of WireWalker set-up used during HE570

It was anchored at points of roughly 400 m depth, at locations near M10 in Masfjorden (mean surface buoy position  $60^{\circ}50.9238' \text{ N}$ ,  $05^{\circ}22.8870' \text{ E}$ ) and near L7 in Lurefjorden (mean surface buoy position  $60^{\circ}41.5080' \text{ N}$ ,  $05^{\circ}09.3542' \text{ E}$ ). While the WireWalker is capable of carrying a broad range of instruments, it was equipped with a CTD and data logger (RBR Concerto), dissolved oxygen sensor (RBRcoda), Chlorophyll *a* sensor (Turner Cyclops), the Continuous Particle Imaging Classification System underwater imager (CPICS, CoastalOceanVision, 2021) and Fermata Battery packs as a power source during both deployments on this campaign.

Deployments lasted from the 8th until the 9th of March in Masfjorden, and from the 12th to the 15th in Lurefjorden (see Section 7.1). Because of the low wave heights, the WireWalker did not profile

continuously during deployments, resulting in the majority of the data having been collected at its deepest depth. CPICS image data have been partially sorted manually, but not yet processed further.

#### 5.4.6 Sediment Trap mooring

We deployed the drifting trap mooring four times during this cruise (see Table 2).

*Table 2: Deployments of the free-drifting sediment trap with information about station name, date of deployment, time for deployment and recovery, as well as latitude and longitude for deployment and recovery (see comments).*

Station No	Profile No.	Date	Time	Trap gear station depths
a.u.	a.u.	DD/MM/YY	HH:MM	m
HE570-M7-12	KDF1 Depl.	04/03/21	09:06:00	Traps: 100m, 200m, 400m; UVP6: 30m, 80m, 180m, 350m; LisstHolo/200: 82m
HE570-M7-35	KDF1 Rec.	05/03/21	12:50:00	
HE570-M7-70	KDF2 Depl.	07/03/21	06:48:00	Traps: 100m, 200m, 400m; UVP6: 30m, 80m, 180m, 350m; LisstHolo/200: 82m; WBAT: 180m
HE570-M7-79	KDF2-Rec.	08/03/21	06:56:00	
HE570-L7-132	KDF3 Depl.	12/03/21	10:52:00	Traps: 100m, 200m, 370m; UVP6: 30m, 80m, 180m, 350m; LisstHolo/200: 82m; WBAT: 180m
HE570-L7-162	KDF3 Rec.	13/03/21	12:09:00	

HE570-L7-189	KDF4 Depl.	14/03/21	08:27:00	Traps: 100m, 200m, 370m; UVP6: 30m, 80m, 180m, 350m; LisstHolo/200: 82m; WBAT: 180m
HE570-L7-209	KDF4 Rec.	15/03/21	09:05:00	

The drifting array (Figure 26) was topped with a surface buoy equipped with an Iridium satellite unit that provided trap positions every 10 minutes with a resolution of two minutes. Since the drifting trap was further used to deploy various other instruments (UVP6, Lisst-Holo, LISST-200X, WBAT, see setup in Figure 26), we used nine benthos floats for buoyancy and 14 small buoyancy balls were placed between the surface buoy and the nine benthos floats to act as wave breakers and thereby reducing the hydrodynamic effects on the sediments traps.

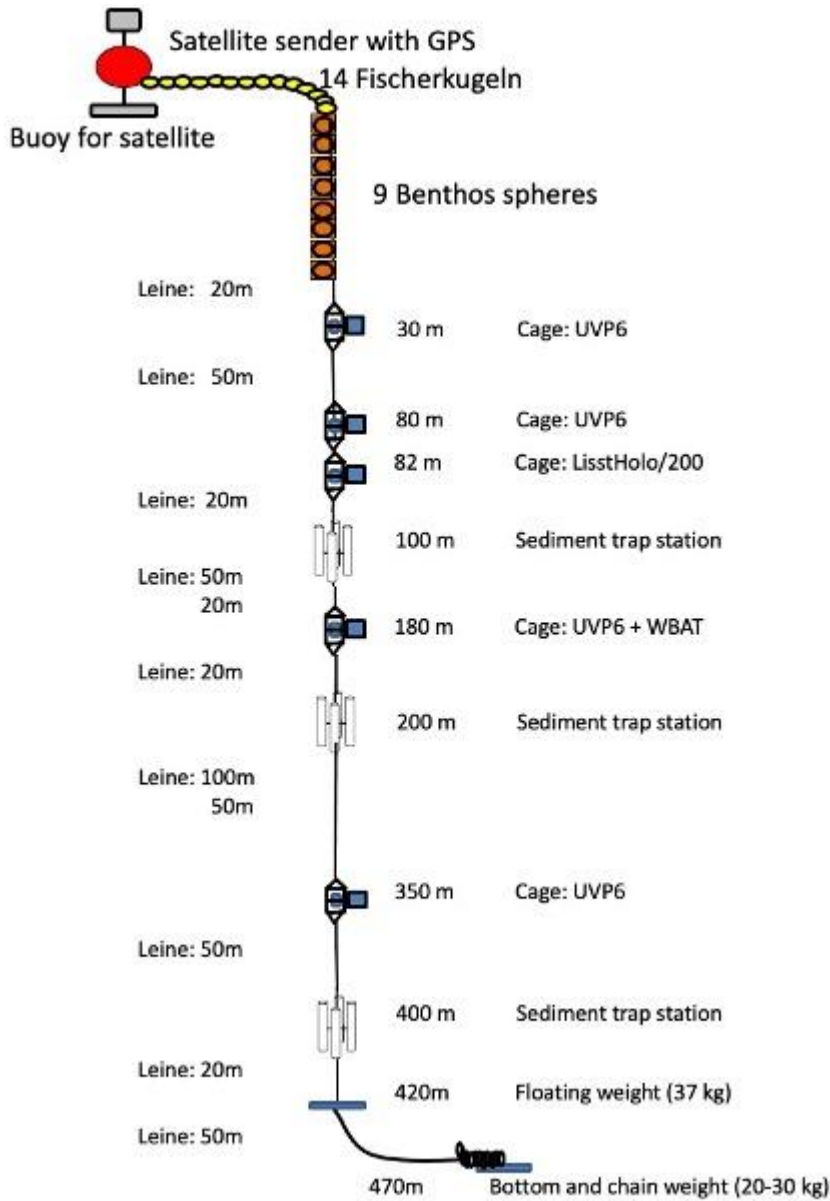


Figure 26: Sediment trap mooring set-up during HE570.

#### 5.4.6.1 Wideband Autonomous Transceiver (WBAT)

(Helena Hauss<sup>1</sup>)

<sup>1</sup>GEOMAR

A Simrad WBAT (S/N 265303) with two transducers at 200 (ES200-7CDK, S/N 134) and 333 kHz (ES333-7CDK, S/N 102) was used both on the sediment trap (see Figure 26) at 180 m depth in upward-looking mode and in forward looking mode on PELAGIOS. On the mooring, ping interval on both transducers (CW mode) was set to 0.4 s and pulse duration to 128  $\mu$ s, with a maximum range of 50 m. The



WBAT were set to collect data in continuous 30-min intervals at each frequency during the entire mooring deployment. For the towed PELAGIOS deployment, the two frequencies were alternating.

#### 5.4.6.2 Submersible Particle Size Analyzer (LISST-200X) and Submersible Digital Holographic Camera (LISST-Holo)

(Daniel Blandfort<sup>1</sup>, Götz Flöser<sup>1</sup>)

<sup>1</sup>Hereon

The two laser diffraction particle analysers deployed together, mostly in context of the sediment trap mooring, but also twice on their own, on the 6th and 9th of March. While the LISST-Holo was used to collect holographic silhouette images of individual particles, the LISST-200X recorded bulk particle concentrations in 36 different size classes (see *e.g.* particle size spectrum recorded during one of the deployments pictured in Figure 27).

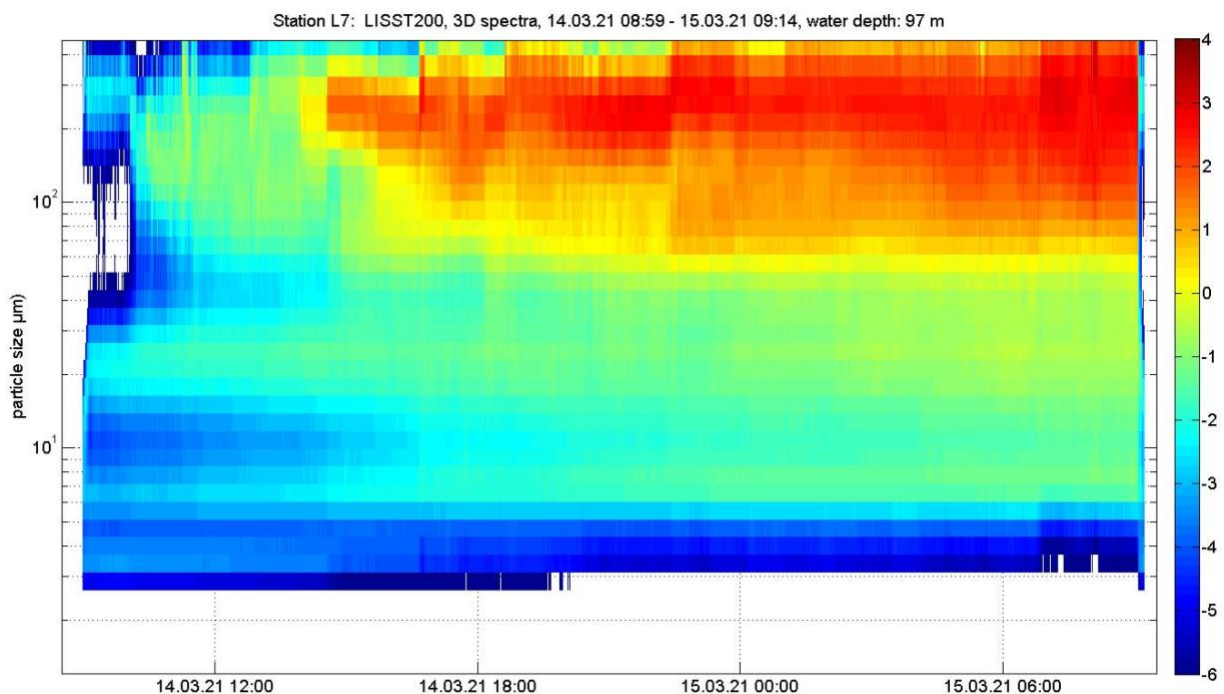


Figure 27: LISST-200X particle size spectrum recorded over a near-24 hour period between the 14th and the 15th of March 2021 at station L7 in Lurefjorden, moored at a depth of 97m within the sediment trap mooring.

#### 5.4.6.3 Underwater Vision Profiler 6 Low Power (UVP6 -LP)

(Laetitia Drago<sup>1</sup>)

## <sup>1</sup>LOV

Four Underwater Vision Profiler 6 Low Power (UVP6-LP, ref : sn000109LP, sn000111LP, sn000112LP, sn000123LP, Picheral *et al.*, 2021) were deployed twice during this cruise on the sediment trap mooring at 4 different depths (30, 80, 180, 350m). Each instrument was mounted on a metal cage with a plastic fin used to limit the rotational movement of the instrument in the water column (see Figures 28 and 29).



Figure 28: The four UVP6-LP mounted on their cage on the deck of FS Heincke. Two deployments were done in each of the two fjords.



Figure 29: Deployment of a UVP6-LP in Masfjorden.

Each of the 4 instruments has a dedicated project in Ecpart and Ecotaxa (Picheral *et al.*, 2017):

- uvp6\_sn000109lp\_202103\_fjord\_experiment\_he570: 6046 vignettes

- uvp6\_sn000111lp\_202103\_fjord\_experiment\_he570: 35924 vignettes
- uvp6\_sn000112lp\_202103\_fjord\_experiment\_he570: 18677 vignettes
- uvp6\_sn000123lp\_202103\_fjord\_experiment\_he570: 93862 vignettes

The images obtained with these instruments have been uploaded to Ecotaxa and will be classified with automated classification tools, followed by manual validation.

#### 5.4.6.4 Sediment trap

(Morten Iversen<sup>1,2</sup>, Christian Konrad<sup>1,2</sup>)

<sup>1</sup>MARUM

<sup>2</sup>AWI

We used an array of free-drifting sediment traps to measure the export fluxes at 100 m, 200 m, and 400 (370) m depth (see Table 2, Figure 26 in Section 5.4.6). Each collection depth had a trap station that consisted of four cylindrical collection tubes with a gyroscopical attachment (Figure 30). The trap cylinders were mounted to a sediment station with gimbal mounts ensuring that they were maintaining a vertical position in the water column. Each cylinder was 1 m tall and had a diameter 10.4 cm, which resulted in a collection area of 84.95 cm<sup>2</sup>.



*Figure 30: Images of the drifting sediment trap close to the ice edge at East-Greenland (left). One of the trap stations with the four sediment trap cylinders (right). (photos: Tim Kalvelage)*

Three of the four collection cylinders at each depth were used to collect samples for biogeochemical measurements of total dry weight, particulate organic carbon, particulate organic nitrogen, particulate inorganic carbon, and silica. The fourth trap cylinder at each depth was equipped with a viscous gel that preserved the structure, shape and size of the fragile settling particles (Figure 31). After recovery of the drifting trap, the samples for bulk fluxes were frozen for later analysis in the home laboratory. The particles collected in the gel traps were photographed with a digital camera on board and frozen for further detailed

investigations in the home laboratory. The image analyses of the gel traps will be used to determine the composition, abundance and size distribution of the sinking particles.

### Preliminary results

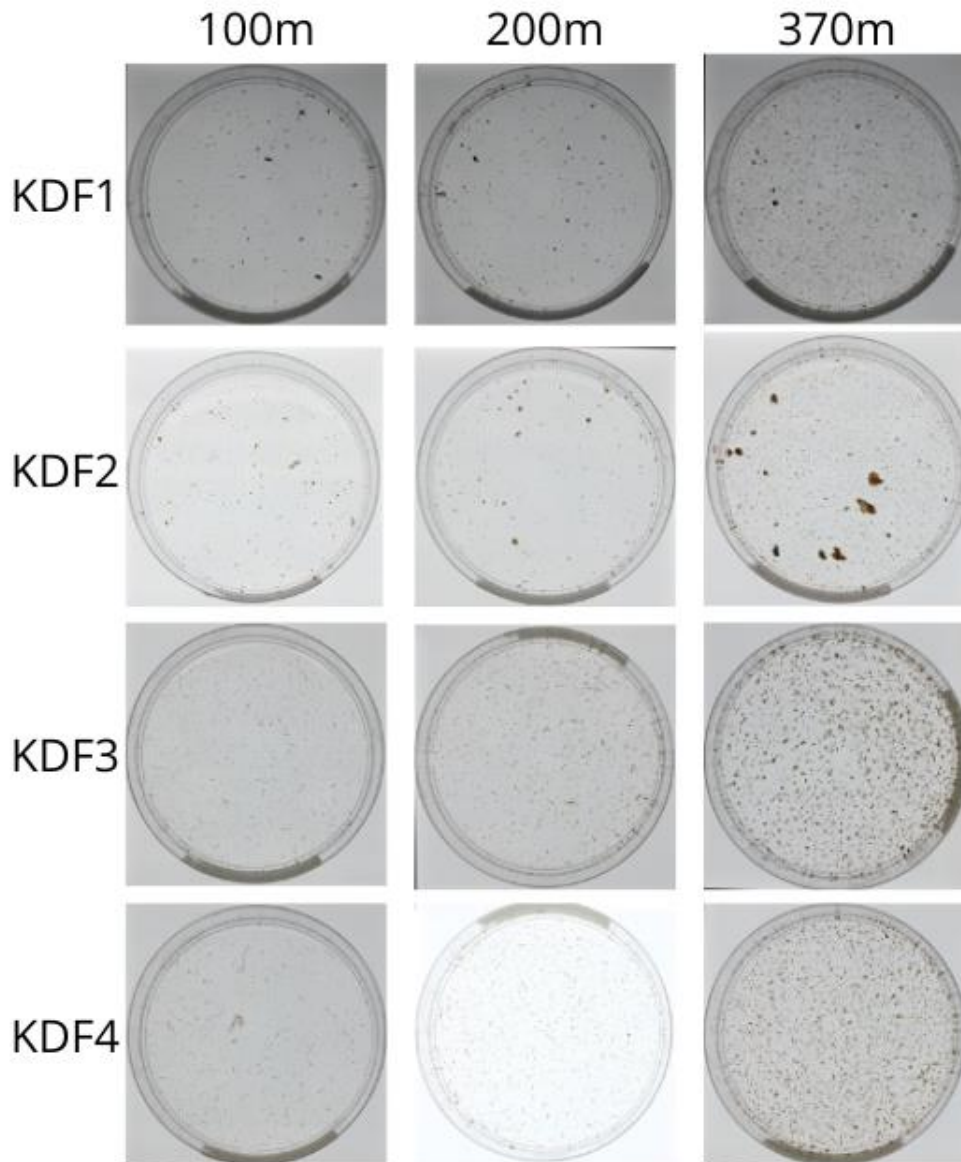


Figure 31: Particles captured in the gel trap deployments at 100, 200 and 370 m (columns 1, 2 and 3 respectively) during the four deployments (KDF1-4, see rows respectively).

## 5.4.7 Net sampling

### 5.4.7.1 WP2 net sampling and experiments

(Helena Hauss<sup>1</sup>, Vanessa Stenvers<sup>1</sup>)

<sup>1</sup>GEOMAR

The WP2 net was used to collect live *Periphylla periphylla* for experiments and was therefore only deployed in Lurefjorden. Through a series of *ex-situ* experiments in bottles (different temperatures) and kreisel tanks (five different concentrations of abyssal sediment collected by RV Sonne near Madeira), we measured the metabolic response (ammonium excretion and respiration, measured on board), electron transport system activity (measured in the lab) and expression of stress related RNA transcripts (ongoing). Three temperatures (*in-situ*, +2°C, +4°C for 7–9 hours) and five abyssal sediment concentrations (0, 16.7, 33.3, 166.7, 333.3 mg·L<sup>-1</sup> for 24 hours; Figure 32) were tested. Our first results show that a four degree increase in temperature doubled respiration rates and that ammonium excretion increased over five-fold. Suspended particle load showed a visible negative effect on *P. periphylla* at concentrations >16.7mg·L<sup>-1</sup>.

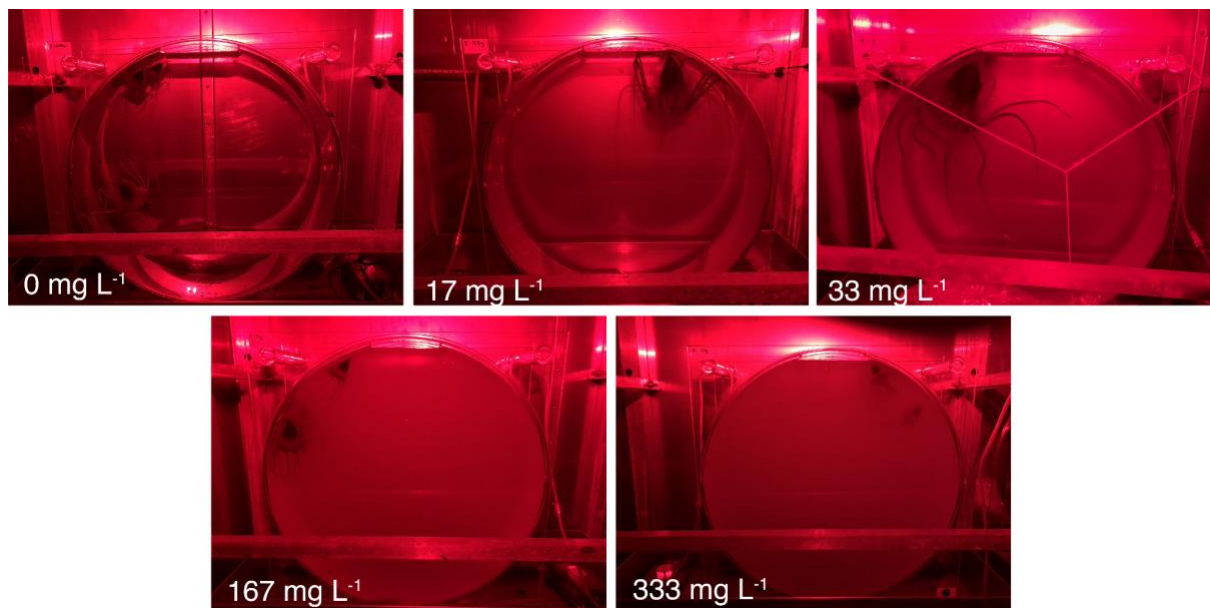


Figure 32: Experimental set-up for sediment plume experiments with *Periphylla periphylla*, showing different concentrations of abyssal plain sediment tested.

#### 5.4.7.2 Multinet (MSN) Midi

(Barbara Niehoff<sup>1</sup>)

<sup>1</sup>AWI

The multinet midi was deployed around the centre of each fjord (M7, M10, and L7). The samples were taken during the day and night time in both M7 and L7, but only during the day time at M10. The samples were stored in 4% formaldehyde with filtered seawater for further analysis at the home laboratory, and will be scanned with ZooScan (Figure 33) and uploaded to EcoTaxa.



Figure 33: Example of the zooplankton images scanned through ZooScan

#### 5.4.7.3 Multinet (MSN) Maxi

(Helena Hauss<sup>1</sup>)

<sup>1</sup>GEOMAR

The multinet maxi was towed at 2kn in the deep central basin of each fjord, with two day and night deployments in each. In Lurefjorden, *Periphylla* were taken out of the samples, photographed for size and frozen. All other organisms were fixed in 4% formaldehyde in seawater solution, transported to the home laboratory, scanned on a flatbed scanner in a modification of the ZooScan method (Gorsky *et al.* 2010) and imported to Ecotaxa.

#### 5.5 Marine Snow Catcher (MSC)

(Morten Iversen<sup>1,2</sup>)

<sup>1</sup>MARUM

<sup>2</sup>AWI

The Marine Snow Catcher was used to sample the water column on four occasions during HE570: on the 7<sup>th</sup> at station M7, the 9<sup>th</sup> at M10 in Masfjorden, and on the 14<sup>th</sup> and 15<sup>th</sup> of March at L7 in Lurefjorden. MSC samples are still in the process of being processed.

## 5.6 FerryBox

(Daniel Blandfort<sup>1</sup>, Götz Flöser<sup>1</sup>)

<sup>1</sup>Hereon

A FerryBox (pocketbox model) was installed on board the FS Heincke prior to departure in Bremerhaven and used to collect data at ten second intervals between the 3rd of March and the 16th of March 2021. Parameters measured through the FerryBox included CO<sub>2</sub>, O<sub>2</sub>, turbidity, pH, fluorescence, conductivity, temperature and salinity. Some of the data recorded along the cruise track are displayed in Figure 34.

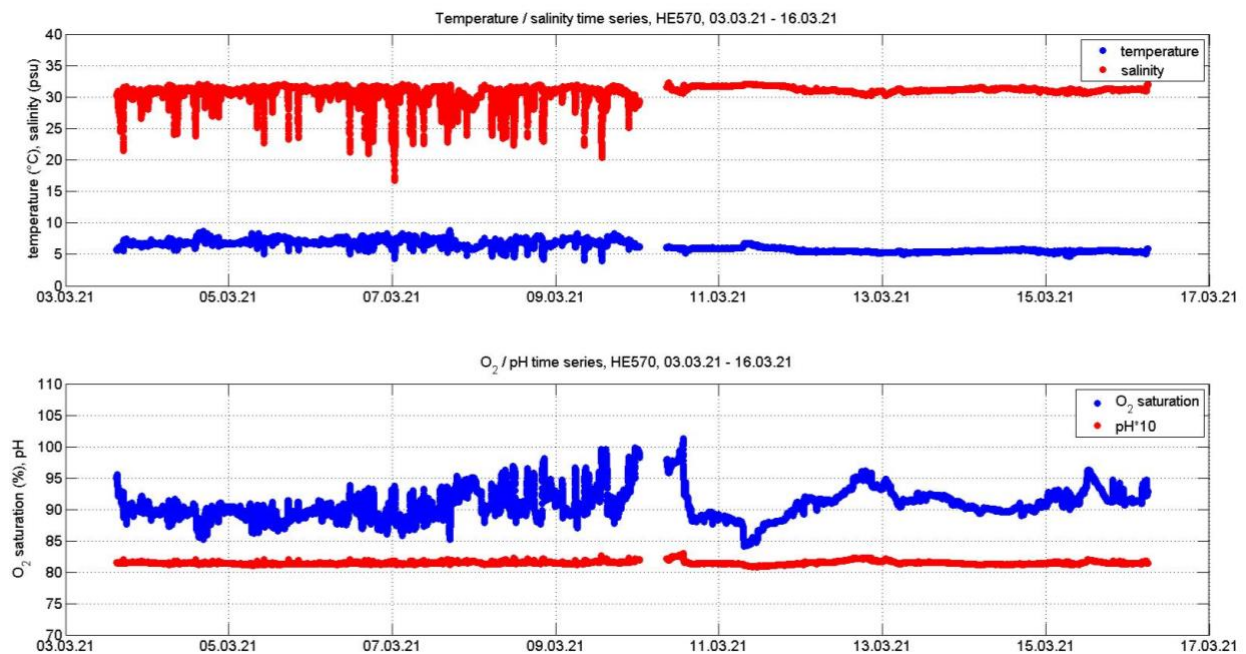


Figure 34: Environmental data collected through the FerryBox over the course of the entire HE570 campaign, including temperature and salinity (top) as well as oxygen saturation and pH (bottom) data.

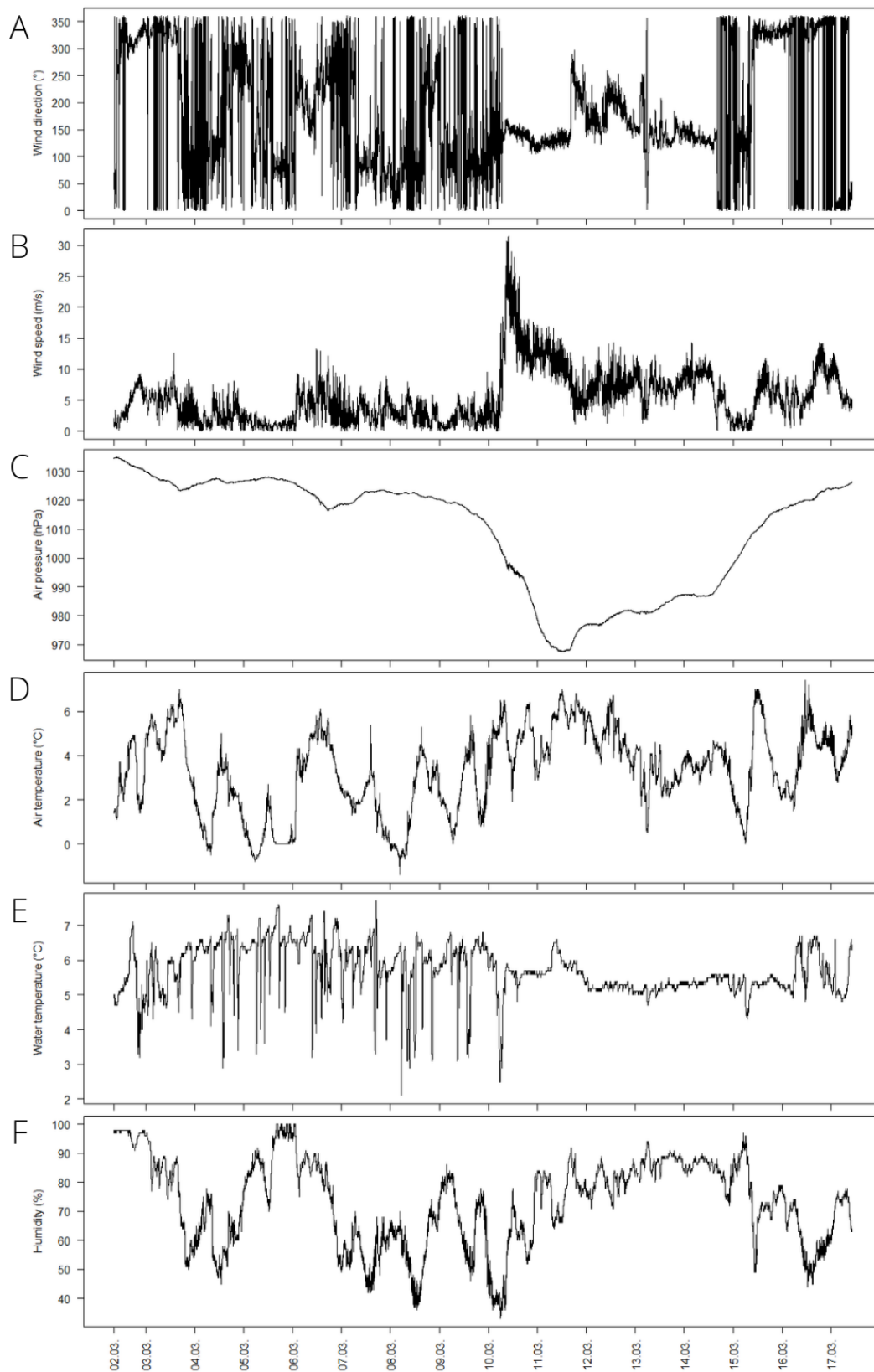
The FerryBox data are available online through the European FerryBox Database (see Section 8).

## 5.7 Echosounder

The Echosounder (EK80 V2, Kongsberg Maritime AS) was calibrated upon arrival at Masfjorden and used to collect data between the 8th and the 16th of March 2021 in both fjords. Echosounder profiles were collected using pulse durations between 0.064 and 8.192 ms, at a sampling interval of 0.002 ms and frequencies of 38, 70, 120 and 200 kHz.

## 6 Ship's Meteorological Station

The ship's meteorological station was operational throughout the entire duration of the HE570 campaign, recording wind direction (°), wind speed (m/s), air pressure (hPa), air and water temperature (°C) and humidity (%), as displayed in Figure 35.





*Figure 35: Measurements made by the ship's meteorological station between the 2nd and the 17th of March 2021; A) Absolute wind direction; B) Absolute wind speed; C) Air pressure; D) Air temperature; E) Water temperature; F) Humidity.*

## 7. Station List HE570

Table 3: Overall Station List

Station No.		Device Operation ID	Date	Device	Time	Latitude	Longitude	Depth	Speed	Course	Action
HE570	Activity Number		2021		[UTC]	[°N]	[°W]	[m]	[kn]	[°]	
M7	2	HE570_2-2	03.03.	CTD	17:00	60° 52,314' N	005° 25,074' E	490.30	1.60	273.30	station start
M7	2	HE570_2-2	03.03.	CTD	17:15	60° 52,321' N	005° 25,003' E	488.60	0.10	341.30	in the water
M7	2	HE570_2-2	03.03.	CTD	17:20	60° 52,321' N	005° 25,019' E	483.80	0.10	116.90	on deck
M7	2	HE570_2-2	03.03.	CTD	17:30	60° 52,318' N	005° 25,034' E	489.90	0.00	259.50	station end
M7	3	HE570_3-1	03.03.	BOP	18:00	60° 52,318' N	005° 24,984' E	483.30	0.10	277.80	station start
M7	3	HE570_3-1	03.03.	BOP	18:32	60° 52,296' N	005° 24,935' E	483.80	0.30	24.60	in the water
M7	3	HE570_3-1	03.03.	BOP	19:16	60° 52,302' N	005° 24,959' E	483.40	0.10	89.80	max depth/on ground
M7	3	HE570_3-1	03.03.	BOP	19:25	60° 52,280' N	005° 24,949' E	485.50	0.30	180.40	station end

M7	3	HE570_3-1	03.03.	BOP	19:25	60° 52,279' N	005° 24,949' E	484.20	0.20	166.30	on deck
M7	4	HE570_4-1	03.03.	ROSINA	19:30	60° 52,295' N	005° 24,937' E	483.40	0.20	333.50	station start
M7	4	HE570_4-1	03.03.	ROSINA	19:30	60° 52,297' N	005° 24,941' E	486.30	0.40	61.40	in the water
M7	4	HE570_4-1	03.03.	ROSINA	20:10	60° 52,305' N	005° 24,952' E	493.80	0.20	96.80	max depth/on ground
M7	4	HE570_4-1	03.03.	ROSINA	20:27	60° 52,306' N	005° 24,956' E	26.40	0.20	139.90	on deck
M7	4	HE570_4-1	03.03.	ROSINA	20:30	60° 52,299' N	005° 24,970' E	483.60	0.10	26.90	station end
M7	5	HE570_5-1	03.03.	LOKI	20:35	60° 52,294' N	005° 24,963' E	489.50	0.10	132.20	station start
M7	5	HE570_5-1	03.03.	LOKI	20:36	60° 52,297' N	005° 24,972' E	483.60	0.20	30.50	in the water
M7	5	HE570_5-1	03.03.	LOKI	20:49	60° 52,297' N	005° 24,978' E	482.30	0.10	107.70	max depth/on ground
M7	5	HE570_5-1	03.03.	LOKI	21:04	60° 52,311' N	005° 24,950' E	17.80	0.20	166.30	on deck
M7	5	HE570_5-1	03.03.	LOKI	21:05	60° 52,307' N	005° 24,953' E	489.00	0.20	105.00	station end
M7	6	HE570_6-1	03.03.	MSN Medi	21:10	60° 52,309' N	005° 24,979' E	499.10	0.40	141.70	station start

M7	6	HE570_6-1	03.03.	MSN Medi	21:18	60° 52,306' N	005° 24,998' E	487.90	0.20	194.40	in the water
M7	6	HE570_6-1	03.03.	MSN Medi	21:32	60° 52,294' N	005° 25,025' E	79.10	0.10	309.80	max depth/on ground
M7	6	HE570_6-1	03.03.	MSN Medi	21:53	60° 52,299' N	005° 24,956' E	74.90	0.20	119.70	on deck
M7	6	HE570_6-1	03.03.	MSN Medi	21:55	60° 52,300' N	005° 24,966' E	22.60	0.20	74.20	station end
M7	7	HE570_7-1	03.03.	MSN Maxi	22:00	60° 52,309' N	005° 24,989' E	54.60	0.30	344.40	station start
M7	7	HE570_7-1	03.03.	MSN Maxi	22:12	60° 52,389' N	005° 25,275' E	476.70	1.20	72.40	in the water
M7	7	HE570_7-1	03.03.	MSN Maxi	22:27	60° 52,575' N	005° 26,255' E	426.60	2.10	71.70	max depth/on ground
M7	7	HE570_7-1	03.03.	MSN Maxi	22:40	60° 52,740' N	005° 27,233' E	372.50	2.50	70.40	on deck
M7	7	HE570_7-1	03.03.	MSN Maxi	22:45	60° 52,792' N	005° 27,552' E	354.90	1.80	84.90	station end
M7	8	HE570_8-1	03.03.	Pelagios	22:57	60° 52,694' N	005° 27,296' E	364.80	1.00	249.50	station start
M7	8	HE570_8-1	03.03.	Pelagios	22:59	60° 52,686' N	005° 27,247' E	365.60	1.00	252.00	in the water
M7	8	HE570_8-1	03.03.	Pelagios	23:09	60° 52,641' N	005° 26,884' E	344.80	1.00	255.40	profile start

M7	8	HE570_8-1	04.03.	Pelagios	00:11	60° 52,292' N	005° 24,840' E	493.00	1.10	266.80	profile end
M7	8	HE570_8-1	04.03.	Pelagios	00:18	60° 52,299' N	005° 24,769' E	485.80	1.10	127.70	station end
M7	9	HE570_9-1	04.03.	MUC	00:23	60° 52,288' N	005° 24,918' E	485.50	0.30	92.00	station start
M7	9	HE570_9-1	04.03.	MUC	00:53	60° 52,304' N	005° 25,077' E	488.40	0.80	267.60	in the water
M7	9	HE570_9-1	04.03.	MUC	01:05	60° 52,289' N	005° 24,856' E	486.30	0.60	260.50	max depth/on ground
M7	9	HE570_9-1	04.03.	MUC	01:20	60° 52,283' N	005° 24,545' E	493.20	0.60	261.00	on deck
M7	9	HE570_9-1	04.03.	MUC	01:23	60° 52,279' N	005° 24,470' E	448.70	0.40	261.00	station end
M7	10	HE570_10-1	04.03.	MSN Medi	07:00	60° 52,292' N	005° 25,021' E	491.60	0.10	121.90	station start
M7	10	HE570_10-1	04.03.	MSN Medi	07:12	60° 52,299' N	005° 25,033' E	482.30	0.10	276.40	in the water
M7	10	HE570_10-1	04.03.	MSN Medi	07:12	60° 52,299' N	005° 25,033' E	489.80	0.10	271.30	max depth/on ground
M7	10	HE570_10-1	04.03.	MSN Medi	07:29	60° 52,306' N	005° 25,016' E	486.30	0.10	126.80	max depth/on ground
M7	10	HE570_10-1	04.03.	MSN Medi	07:49	60° 52,272' N	005° 25,019' E	483.90	0.60	183.90	on deck

M7	10	HE570_10-1	04.03.	MSN Medi	07:50	60° 52,270' N	005° 25,019' E	480.50	0.60	188.60	station end
M7	11	HE570_11-1	04.03.	MSN Maxi	08:00	60° 52,302' N	005° 23,667' E	475.90	2.80	305.10	station start
M7	11	HE570_11-1	04.03.	MSN Maxi	08:06	60° 52,367' N	005° 23,823' E	485.20	2.00	90.60	in the water
M7	11	HE570_11-1	04.03.	MSN Maxi	08:31	60° 52,472' N	005° 25,561' E	454.10	1.80	74.40	max depth/on ground
M7	11	HE570_11-1	04.03.	MSN Maxi	08:44	60° 52,553' N	005° 26,388' E	424.00	1.50	159.10	on deck
M7	11	HE570_11-1	04.03.	MSN Maxi	08:45	60° 52,531' N	005° 26,375' E	424.00	0.90	243.40	station end
M7	12	HE570_12-1	04.03.	Sediment trap mooring deployment	09:05	60° 52,305' N	005° 24,980' E	490.80	0.30	198.70	station start
M7	12	HE570_12-1	04.03.	Sediment trap mooring deployment	09:06	60° 52,298' N	005° 24,977' E	484.40	0.30	162.00	information
M7	12	HE570_12-1	04.03.	Sediment trap mooring deployment	10:16	60° 52,309' N	005° 25,129' E	481.20	0.50	98.20	in the water
M7	12	HE570_12-1	04.03.	Sediment trap mooring deployment	10:20	60° 52,308' N	005° 25,159' E	479.10	0.30	88.90	station end
	13	HE570_13-1	04.03.	EK80 calibration	11:39	60° 52,443' N	005° 25,692' E	453.00	0.20	149.50	station start

	13	HE570_13-1	04.03.	EK80 calibration	13:18	60° 52,486' N	005° 25,150' E	399.40	0.40	86.90	station end
M1	14	HE570_14-1	04.03.	CTD	14:25	60° 52,227' N	005° 33,514' E	175.40	0.50	91.90	station start
M1	14	HE570_14-1	04.03.	CTD	14:28	60° 52,230' N	005° 33,521' E	175.10	0.10	80.90	in the water
M1	14	HE570_14-1	04.03.	CTD	14:36	60° 52,231' N	005° 33,538' E	174.30	0.10	93.50	max depth/on ground
M1	14	HE570_14-1	04.03.	CTD	14:43	60° 52,224' N	005° 33,549' E	173.80	0.10	173.60	on deck
M1	14	HE570_14-1	04.03.	CTD	14:45	60° 52,223' N	005° 33,549' E	173.60	0.20	136.30	station end
M1	15	HE570_15-1	04.03.	BOP	14:50	60° 52,217' N	005° 33,563' E	172.90	0.10	92.80	station start
M1	15	HE570_15-1	04.03.	BOP	14:51	60° 52,217' N	005° 33,567' E	173.10	0.20	346.10	in the water
M1	15	HE570_15-1	04.03.	BOP	15:08	60° 52,233' N	005° 33,579' E	173.60	0.10	173.90	max depth/on ground
M1	15	HE570_15-1	04.03.	BOP	15:13	60° 52,234' N	005° 33,580' E	173.60	0.00	120.90	on deck
M1	15	HE570_15-1	04.03.	BOP	15:15	60° 52,233' N	005° 33,581' E	173.50	0.10	161.80	station end
M1	16	HE570_16-1	04.03.	LOKI	15:20	60° 52,232' N	005° 33,584' E	173.40	0.10	144.90	station start

M1	16	HE570_16-1	04.03.	LOKI	15:21	60° 52,231' N	005° 33,585' E	173.40	0.10	175.60	in the water
M1	16	HE570_16-1	04.03.	LOKI	15:26	60° 52,231' N	005° 33,588' E	173.40	0.00	40.80	max depth/on ground
M1	16	HE570_16-1	04.03.	LOKI	15:33	60° 52,232' N	005° 33,588' E	173.30	0.00	298.60	on deck
M1	16	HE570_16-1	04.03.	LOKI	15:35	60° 52,232' N	005° 33,589' E	173.30	0.00	359.20	station end
M1	17	HE570_17-1	04.03.	ROSINA	15:40	60° 52,234' N	005° 33,590' E	173.40	0.00	345.30	station start
M1	17	HE570_17-1	04.03.	ROSINA	15:41	60° 52,235' N	005° 33,590' E	173.50	0.10	327.30	in the water
M1	17	HE570_17-1	04.03.	ROSINA	16:05	60° 52,195' N	005° 33,572' E	156.90	0.40	130.40	max depth/on ground
M1	17	HE570_17-1	04.03.	ROSINA	16:14	60° 52,233' N	005° 33,634' E	171.50	0.30	332.10	on deck
M1	17	HE570_17-1	04.03.	ROSINA	16:15	60° 52,236' N	005° 33,631' E	171.80	0.40	337.30	station end
M1	18	HE570_18-1	04.03.	Van Veen grab	16:17	60° 52,243' N	005° 33,637' E	171.60	0.20	49.80	station start
M1	18	HE570_18-1	04.03.	Van Veen grab	16:18	60° 52,245' N	005° 33,647' E	171.00	0.30	70.40	in the water
M1	18	HE570_18-1	04.03.	Van Veen grab	16:21	60° 52,249' N	005° 33,665' E	170.10	0.20	58.00	max depth/on ground



M1	18	HE570_18-1	04.03.	Van Veen grab	16:30	60° 52,251' N	005° 33,667' E	170.30	0.30	195.60	station end
M1	19	HE570_19-1	04.03.	MUC	16:35	60° 52,241' N	005° 33,663' E	170.50	0.00	271.10	station start
M1	19	HE570_19-1	04.03.	MUC	16:38	60° 52,243' N	005° 33,658' E	170.50	0.20	241.90	in the water
M1	19	HE570_19-1	04.03.	MUC	16:45	60° 52,251' N	005° 33,630' E	172.20	0.10	324.30	max depth/on ground
M1	19	HE570_19-1	04.03.	MUC	16:52	60° 52,259' N	005° 33,631' E	172.30	0.10	15.30	on deck
M1	19	HE570_19-1	04.03.	MUC	16:55	60° 52,256' N	005° 33,642' E	171.30	0.60	150.80	station end
M2	20	HE570_20-1	04.03.	CTD	17:30	60° 52,054' N	005° 31,488' E	185.60	0.10	342.90	station start
M2	20	HE570_20-1	04.03.	CTD	17:35	60° 52,061' N	005° 31,479' E	186.20	0.10	103.80	in the water
M2	20	HE570_20-1	04.03.	CTD	17:43	60° 52,064' N	005° 31,480' E	186.20	0.10	228.80	max depth/on ground
M2	20	HE570_20-1	04.03.	CTD	17:50	60° 52,064' N	005° 31,465' E	186.20	0.10	315.40	on deck
M2	20	HE570_20-1	04.03.	CTD	17:50	60° 52,064' N	005° 31,464' E	186.20	0.10	355.20	station end
M2	21	HE570_21-1	04.03.	BOP	17:55	60° 52,066' N	005° 31,456' E	186.60	0.10	239.90	station start

M2	21	HE570_21-1	04.03.	BOP	17:58	60° 52,065' N	005° 31,454' E	186.40	0.10	264.30	in the water
M2	21	HE570_21-1	04.03.	BOP	18:16	60° 52,065' N	005° 31,444' E	186.40	0.10	89.00	max depth/on ground
M2	21	HE570_21-1	04.03.	BOP	18:21	60° 52,064' N	005° 31,453' E	186.00	0.10	141.70	on deck
M2	21	HE570_21-1	04.03.	BOP	18:24	60° 52,061' N	005° 31,461' E	185.50	0.10	149.60	station end
M2	22	HE570_22-1	04.03.	ROSINA	18:25	60° 52,061' N	005° 31,462' E	185.40	0.10	184.20	station start
M2	22	HE570_22-1	04.03.	ROSINA	18:25	60° 52,061' N	005° 31,462' E	185.40	0.10	138.40	in the water
M2	22	HE570_22-1	04.03.	ROSINA	18:46	60° 52,061' N	005° 31,480' E	185.90	0.10	105.40	max depth/on ground
M2	22	HE570_22-1	04.03.	ROSINA	18:52	60° 52,047' N	005° 31,483' E	183.90	0.40	257.40	on deck
M2	22	HE570_22-1	04.03.	ROSINA	18:55	60° 52,047' N	005° 31,462' E	184.00	0.10	206.90	station end
M3	23	HE570_23-1	04.03.	CTD	19:15	60° 51,937' N	005° 30,308' E	173.30	0.70	259.60	station start
M3	23	HE570_23-1	04.03.	CTD	19:22	60° 51,936' N	005° 30,229' E	168.90	0.10	264.90	in the water
M3	23	HE570_23-1	04.03.	CTD	19:30	60° 51,932' N	005° 30,214' E	167.30	0.10	157.70	max depth/on ground

M3	23	HE570_23-1	04.03.	CTD	19:39	60° 51,931' N	005° 30,223' E	168.40	0.10	316.20	on deck
M3	23	HE570_23-1	04.03.	CTD	19:40	60° 51,931' N	005° 30,223' E	168.60	0.00	328.30	station end
M3	24	HE570_24-1	04.03.	BOP	19:45	60° 51,936' N	005° 30,232' E	170.00	0.10	72.40	station start
M3	24	HE570_24-1	04.03.	BOP	19:45	60° 51,937' N	005° 30,233' E	170.10	0.20	64.10	in the water
M3	24	HE570_24-1	04.03.	BOP	20:04	60° 51,955' N	005° 30,283' E	173.90	0.30	229.50	max depth/on ground
M3	24	HE570_24-1	04.03.	BOP	20:07	60° 51,941' N	005° 30,283' E	173.70	0.40	188.80	on deck
M3	24	HE570_24-1	04.03.	BOP	20:10	60° 51,932' N	005° 30,276' E	171.90	0.20	241.30	station end
M3	25	HE570_25-1	04.03.	ROSINA	20:20	60° 51,931' N	005° 30,257' E	170.20	0.20	293.80	station start
M3	25	HE570_25-1	04.03.	ROSINA	20:20	60° 51,931' N	005° 30,257' E	170.30	0.20	302.20	in the water
M3	25	HE570_25-1	04.03.	ROSINA	20:44	60° 51,924' N	005° 30,230' E	166.70	0.10	29.00	max depth/on ground
M3	25	HE570_25-1	04.03.	ROSINA	20:51	60° 51,931' N	005° 30,238' E	168.60	0.10	279.60	on deck
M3	25	HE570_25-1	04.03.	ROSINA	20:55	60° 51,939' N	005° 30,173' E	167.00	1.70	309.70	station end

M4	26	HE570_26-1	05.03.	CTD	06:50	60° 52,580' N	005° 30,009' E	179.10	0.10	70.70	station start
M4	26	HE570_26-1	05.03.	CTD	06:54	60° 52,580' N	005° 30,013' E	179.20	0.10	148.40	in the water
M4	26	HE570_26-1	05.03.	CTD	07:02	60° 52,575' N	005° 30,017' E	179.40	0.10	227.80	max depth/on ground
M4	26	HE570_26-1	05.03.	CTD	07:07	60° 52,572' N	005° 30,011' E	179.50	0.00	246.40	on deck
M4	26	HE570_26-1	05.03.	CTD	07:10	60° 52,569' N	005° 30,002' E	179.50	0.10	280.50	station end
M4	27	HE570_27-1	05.03.	BOP	07:10	60° 52,569' N	005° 30,002' E	179.50	0.10	332.20	station start
M4	27	HE570_27-1	05.03.	BOP	07:12	60° 52,570' N	005° 29,993' E	179.50	0.10	280.30	in the water
M4	27	HE570_27-1	05.03.	BOP	07:29	60° 52,569' N	005° 29,917' E	180.10	0.10	256.60	max depth/on ground
M4	27	HE570_27-1	05.03.	BOP	07:33	60° 52,567' N	005° 29,897' E	180.40	0.30	223.40	on deck
M4	27	HE570_27-1	05.03.	BOP	07:35	60° 52,555' N	005° 29,895' E	180.40	0.40	147.10	station end
M4	28	HE570_28-1	05.03.	ROSINA	07:35	60° 52,552' N	005° 29,901' E	180.40	0.70	121.10	station start
M4	28	HE570_28-1	05.03.	ROSINA	07:38	60° 52,560' N	005° 29,930' E	180.00	0.40	357.70	in the water

M4	28	HE570_28-1	05.03.	ROSINA	07:55	60° 52,585' N	005° 29,846' E	172.70	0.20	265.90	max depth/on ground
M4	28	HE570_28-1	05.03.	ROSINA	08:03	60° 52,585' N	005° 29,803' E	149.00	0.20	289.20	on deck
M4	28	HE570_28-1	05.03.	ROSINA	08:05	60° 52,587' N	005° 29,785' E	145.30	0.30	351.90	station end
M5	29	HE570_29-1	05.03.	CTD	08:25	60° 52,868' N	005° 28,507' E	257.40	0.30	77.20	station start
M5	29	HE570_29-1	05.03.	CTD	08:27	60° 52,870' N	005° 28,521' E	257.00	0.20	74.70	in the water
M5	29	HE570_29-1	05.03.	CTD	08:37	60° 52,866' N	005° 28,551' E	256.10	0.10	159.50	max depth/on ground
M5	29	HE570_29-1	05.03.	CTD	08:46	60° 52,865' N	005° 28,545' E	256.40	0.10	210.10	on deck
M5	29	HE570_29-1	05.03.	CTD	08:50	60° 52,863' N	005° 28,540' E	256.30	0.10	263.30	station end
M5	30	HE570_30-1	05.03.	BOP	08:50	60° 52,863' N	005° 28,540' E	256.30	0.10	250.30	station start
M5	30	HE570_30-1	05.03.	BOP	08:50	60° 52,863' N	005° 28,539' E	256.00	0.10	236.80	in the water
M5	30	HE570_30-1	05.03.	BOP	09:12	60° 52,869' N	005° 28,512' E	257.40	0.00	351.20	max depth/on ground
M5	30	HE570_30-1	05.03.	BOP	09:17	60° 52,872' N	005° 28,510' E	257.80	0.00	347.60	on deck

M5	30	HE570_30-1	05.03.	BOP	09:20	60° 52,876' N	005° 28,507' E	257.90	0.00	167.60	station end
M5	31	HE570_31-1	05.03.	ROSINA	09:20	60° 52,876' N	005° 28,506' E	257.90	0.10	217.70	station start
M5	31	HE570_31-1	05.03.	ROSINA	09:21	60° 52,876' N	005° 28,506' E	257.90	0.00	249.10	in the water
M5	31	HE570_31-1	05.03.	ROSINA	09:52	60° 52,856' N	005° 28,530' E	256.60	0.30	38.30	max depth/on ground
M5	31	HE570_31-1	05.03.	ROSINA	10:01	60° 52,869' N	005° 28,523' E	257.70	0.20	303.80	on deck
M5	31	HE570_31-1	05.03.	ROSINA	10:05	60° 52,872' N	005° 28,372' E	262.20	3.80	254.80	station end
M6	32	HE570_32-1	05.03.	CTD	10:20	60° 52,638' N	005° 26,852' E	353.60	0.10	330.60	station start
M6	32	HE570_32-1	05.03.	CTD	10:22	60° 52,642' N	005° 26,842' E	354.50	0.20	299.90	in the water
M6	32	HE570_32-1	05.03.	CTD	10:41	60° 52,644' N	005° 26,804' E	354.70	0.30	131.60	max depth/on ground
M6	32	HE570_32-1	05.03.	CTD	10:45	60° 52,638' N	005° 26,841' E	353.70	0.20	103.80	on deck
M6	32	HE570_32-1	05.03.	CTD	10:45	60° 52,638' N	005° 26,844' E	352.20	0.20	117.70	station end
M6	33	HE570_33-1	05.03.	BOP	10:48	60° 52,634' N	005° 26,856' E	352.40	0.10	131.60	station start

M6	33	HE570_33-1	05.03.	BOP	10:49	60° 52,634' N	005° 26,856' E	352.20	0.20	164.60	in the water
M6	33	HE570_33-1	05.03.	BOP	11:17	60° 52,665' N	005° 26,921' E	365.40	0.30	310.60	max depth/on ground
M6	33	HE570_33-1	05.03.	BOP	11:24	60° 52,663' N	005° 26,879' E	368.40	0.70	154.90	on deck
M6	33	HE570_33-1	05.03.	BOP	11:26	60° 52,644' N	005° 26,896' E	363.10	0.60	160.90	station end
M6	34	HE570_34-1	05.03.	ROSINA	11:28	60° 52,628' N	005° 26,902' E	334.70	0.50	173.40	station start
M6	34	HE570_34-1	05.03.	ROSINA	11:28	60° 52,626' N	005° 26,903' E	334.50	0.40	168.60	in the water
M6	34	HE570_34-1	05.03.	ROSINA	12:09	60° 52,632' N	005° 26,916' E	335.60	0.20	124.00	max depth/on ground
M6	34	HE570_34-1	05.03.	ROSINA	12:21	60° 52,638' N	005° 26,815' E	352.60	0.30	276.90	on deck
M6	34	HE570_34-1	05.03.	ROSINA	12:22	60° 52,638' N	005° 26,810' E	352.80	0.20	281.50	station end
M7	35	HE570_35-1	05.03.	Sediment trap mooring recovery	12:55	60° 52,327' N	005° 24,991' E	476.70	0.10	335.30	station start
M7	35	HE570_35-1	05.03.	Sediment trap mooring recovery	13:42	60° 52,320' N	005° 25,420' E	411.30	0.50	113.80	station end
M7	36	HE570_36-1	05.03.	CTD	13:55	60° 52,302' N	005° 25,117' E	475.20	0.60	272.00	station start

M7	36	HE570_36-1	05.03.	CTD	13:55	60° 52,302' N	005° 25,103' E	475.90	0.50	260.30	in the water
M7	36	HE570_36-1	05.03.	CTD	14:12	60° 52,288' N	005° 25,034' E	476.90	0.10	128.80	max depth/on ground
M7	36	HE570_36-1	05.03.	CTD	14:20	60° 52,286' N	005° 25,031' E	477.00	0.30	286.70	on deck
M7	36	HE570_36-1	05.03.	CTD	14:21	60° 52,286' N	005° 25,027' E	477.00	0.30	296.40	station end
M7	37	HE570_37-1	05.03.	BOP	14:25	60° 52,288' N	005° 25,004' E	477.00	0.10	226.90	station start
M7	37	HE570_37-1	05.03.	BOP	14:26	60° 52,288' N	005° 25,003' E	477.00	0.20	289.50	in the water
M7	37	HE570_37-1	05.03.	BOP	15:06	60° 52,302' N	005° 24,919' E	477.20	0.10	35.50	max depth/on ground
M7	37	HE570_37-1	05.03.	BOP	15:14	60° 52,302' N	005° 24,923' E	477.10	0.10	174.70	on deck
M7	37	HE570_37-1	05.03.	BOP	15:15	60° 52,302' N	005° 24,923' E	477.10	0.00	228.50	station end
M7	38	HE570_38-1	05.03.	LOKI	15:20	60° 52,304' N	005° 24,929' E	477.00	0.00	92.10	station start
M7	38	HE570_38-1	05.03.	LOKI	15:20	60° 52,304' N	005° 24,930' E	477.10	0.00	64.60	in the water
M7	38	HE570_38-1	05.03.	LOKI	15:35	60° 52,299' N	005° 24,933' E	477.00	0.00	182.50	max depth/on ground



M7	38	HE570_38-1	05.03.	LOKI	15:49	60° 52,301' N	005° 24,939' E	476.80	0.10	146.80	on deck
M7	38	HE570_38-1	05.03.	LOKI	15:50	60° 52,301' N	005° 24,939' E	476.80	0.00	228.40	station end
M7	39	HE570_39-1	05.03.	ROSINA	15:55	60° 52,302' N	005° 24,944' E	476.80	0.00	83.40	station start
M7	39	HE570_39-1	05.03.	ROSINA	15:56	60° 52,302' N	005° 24,945' E	476.80	0.10	358.10	in the water
M7	39	HE570_39-1	05.03.	ROSINA	16:47	60° 52,310' N	005° 24,983' E	476.30	0.10	281.10	max depth/on ground
M7	39	HE570_39-1	05.03.	ROSINA	17:12	60° 52,304' N	005° 24,974' E	476.30	0.10	88.40	on deck
M7	39	HE570_39-1	05.03.	ROSINA	17:15	60° 52,314' N	005° 24,991' E	476.10	0.60	349.00	station end
M8	40	HE570_40-1	05.03.	CTD	17:35	60° 52,428' N	005° 23,029' E	460.20	0.00	300.10	station start
M8	40	HE570_40-1	05.03.	CTD	17:35	60° 52,428' N	005° 23,028' E	460.20	0.10	237.40	in the water
M8	40	HE570_40-1	05.03.	CTD	17:52	60° 52,430' N	005° 23,051' E	459.80	0.00	187.00	max depth/on ground
M8	40	HE570_40-1	05.03.	CTD	18:07	60° 52,425' N	005° 23,069' E	459.70	0.10	2.50	on deck
M8	40	HE570_40-1	05.03.	CTD	18:10	60° 52,427' N	005° 23,070' E	459.70	0.00	273.80	station end

M8	41	HE570_41-1	05.03.	BOP	18:11	60° 52,427' N	005° 23,070' E	459.70	0.10	339.10	station start
M8	41	HE570_41-1	05.03.	BOP	18:12	60° 52,428' N	005° 23,070' E	459.60	0.10	97.20	in the water
M8	41	HE570_41-1	05.03.	BOP	18:46	60° 52,423' N	005° 23,106' E	459.80	0.00	56.50	max depth/on ground
M8	41	HE570_41-1	05.03.	BOP	18:57	60° 52,419' N	005° 23,125' E	459.80	0.00	152.90	on deck
M8	41	HE570_41-1	05.03.	BOP	19:00	60° 52,418' N	005° 23,125' E	459.90	0.10	261.90	station end
M8	42	HE570_42-1	05.03.	ROSINA	19:00	60° 52,417' N	005° 23,124' E	459.90	0.10	257.10	station start
M8	42	HE570_42-1	05.03.	ROSINA	19:04	60° 52,416' N	005° 23,106' E	459.90	0.10	256.50	in the water
M8	42	HE570_42-1	05.03.	ROSINA	19:51	60° 52,408' N	005° 23,148' E	459.80	0.10	211.00	max depth/on ground
M8	42	HE570_42-1	05.03.	ROSINA	20:06	60° 52,404' N	005° 23,136' E	459.80	0.10	85.10	on deck
M8	42	HE570_42-1	05.03.	ROSINA	20:10	60° 52,441' N	005° 23,165' E	454.60	2.00	285.50	station end
M9	43	HE570_43-1	05.03.	CTD	20:30	60° 51,956' N	005° 21,436' E	437.80	0.20	169.60	station start
M9	43	HE570_43-1	05.03.	CTD	20:30	60° 51,953' N	005° 21,437' E	437.90	0.20	179.90	in the water

M9	43	HE570_43-1	05.03.	CTD	20:52	60° 51,957' N	005° 21,499' E	457.50	0.20	320.70	on deck
M9	43	HE570_43-1	05.03.	CTD	20:55	60° 51,964' N	005° 21,488' E	457.70	0.20	6.20	station end
M9	44	HE570_44-1	05.03.	BOP	20:55	60° 51,968' N	005° 21,490' E	460.70	0.30	10.10	station start
M9	44	HE570_44-1	05.03.	BOP	20:56	60° 51,969' N	005° 21,491' E	463.40	0.30	19.50	in the water
M9	44	HE570_44-1	05.03.	BOP	21:31	60° 51,972' N	005° 21,409' E	440.00	0.10	338.60	max depth/on ground
M9	44	HE570_44-1	05.03.	BOP	21:39	60° 51,978' N	005° 21,401' E	441.10	0.10	284.30	on deck
M9	44	HE570_44-1	05.03.	BOP	21:40	60° 51,978' N	005° 21,398' E	447.40	0.10	270.50	station end
M9	45	HE570_45-1	05.03.	ROSINA	21:40	60° 51,978' N	005° 21,396' E	445.80	0.10	270.10	station start
M9	45	HE570_45-1	05.03.	ROSINA	21:42	60° 51,978' N	005° 21,391' E	445.00	0.10	259.70	in the water
M9	45	HE570_45-1	05.03.	ROSINA	22:18	60° 51,961' N	005° 21,374' E	439.30	0.10	12.70	max depth/on ground
M9	45	HE570_45-1	05.03.	ROSINA	22:35	60° 51,964' N	005° 21,372' E	439.40	0.10	234.80	on deck
M9	45	HE570_45-1	05.03.	ROSINA	22:35	60° 51,963' N	005° 21,372' E	439.40	0.10	222.60	station end

M10	46	HE570_46-1	06.03.	CTD	07:00	60° 51,218' N	005° 20,962' E	422.50	0.00	359.90	station start
M10	46	HE570_46-1	06.03.	CTD	07:04	60° 51,222' N	005° 20,961' E	422.50	0.20	342.30	in the water
M10	46	HE570_46-1	06.03.	CTD	07:18	60° 51,215' N	005° 20,974' E	422.50	0.10	325.80	max depth/on ground
M10	46	HE570_46-1	06.03.	CTD	07:33	60° 51,224' N	005° 20,964' E	422.40	0.00	11.80	on deck
M10	46	HE570_46-1	06.03.	CTD	07:35	60° 51,224' N	005° 20,964' E	422.40	0.10	61.90	station end
M10	47	HE570_47-1	06.03.	BOP	07:35	60° 51,224' N	005° 20,964' E	422.40	0.10	131.40	station start
M10	47	HE570_47-1	06.03.	BOP	07:37	60° 51,224' N	005° 20,965' E	422.40	0.10	148.90	in the water
M10	47	HE570_47-1	06.03.	BOP	08:11	60° 51,222' N	005° 20,972' E	422.40	0.40	131.30	max depth/on ground
M10	47	HE570_47-1	06.03.	BOP	08:21	60° 51,219' N	005° 20,995' E	422.20	0.10	35.80	on deck
M10	47	HE570_47-1	06.03.	BOP	08:25	60° 51,221' N	005° 21,000' E	422.30	0.10	43.50	station end
M10	48	HE570_48-1	06.03.	ROSINA	08:30	60° 51,220' N	005° 20,997' E	422.30	0.20	168.70	station start
M10	48	HE570_48-1	06.03.	ROSINA	08:33	60° 51,221' N	005° 20,995' E	422.30	0.20	336.50	in the water

M10	48	HE570_48-1	06.03.	ROSINA	09:11	60° 51,223' N	005° 20,994' E	422.40	0.10	82.80	max depth/on ground
M10	48	HE570_48-1	06.03.	ROSINA	09:25	60° 51,224' N	005° 20,957' E	422.40	0.30	293.20	on deck
M10	48	HE570_48-1	06.03.	ROSINA	09:25	60° 51,225' N	005° 20,954' E	422.40	0.40	309.30	station end
M11	49	HE570_49-1	06.03.	CTD	09:45	60° 50,376' N	005° 20,750' E	210.90	0.30	203.60	station start
M11	49	HE570_49-1	06.03.	CTD	09:45	60° 50,375' N	005° 20,749' E	214.60	0.30	211.80	in the water
M11	49	HE570_49-1	06.03.	CTD	09:54	60° 50,364' N	005° 20,736' E	208.40	0.10	264.00	max depth/on ground
M11	49	HE570_49-1	06.03.	CTD	09:59	60° 50,363' N	005° 20,734' E	208.60	0.20	100.00	on deck
M11	49	HE570_49-1	06.03.	CTD	10:00	60° 50,362' N	005° 20,740' E	208.80	0.30	119.50	station end
M11	50	HE570_50-1	06.03.	BOP	10:00	60° 50,358' N	005° 20,748' E	211.50	0.60	149.20	station start
M11	50	HE570_50-1	06.03.	BOP	10:01	60° 50,348' N	005° 20,755' E	233.40	0.20	172.10	in the water
M11	50	HE570_50-1	06.03.	BOP	10:24	60° 50,345' N	005° 20,761' E	235.60	0.10	164.50	max depth/on ground
M11	50	HE570_50-1	06.03.	BOP	10:28	60° 50,345' N	005° 20,762' E	235.30	0.10	241.50	on deck

M11	50	HE570_50-1	06.03.	BOP	10:30	60° 50,345' N	005° 20,760' E	231.50	0.10	228.10	station end
M11	51	HE570_51-1	06.03.	ROSINA	10:30	60° 50,345' N	005° 20,757' E	231.30	0.10	162.50	station start
M11	51	HE570_51-1	06.03.	ROSINA	10:33	60° 50,341' N	005° 20,756' E	234.60	0.20	171.00	in the water
M11	51	HE570_51-1	06.03.	ROSINA	11:03	60° 50,345' N	005° 20,747' E	233.40	0.00	359.60	max depth/on ground
M11	51	HE570_51-1	06.03.	ROSINA	11:12	60° 50,342' N	005° 20,741' E	232.80	0.40	159.10	on deck
M11	51	HE570_51-1	06.03.	ROSINA	11:13	60° 50,335' N	005° 20,746' E	224.10	0.40	156.10	station end
M12	52	HE570_52-1	06.03.	CTD	11:40	60° 49,506' N	005° 20,608' E	928.90	0.20	5.70	station start
M12	52	HE570_52-1	06.03.	CTD	11:41	60° 49,501' N	005° 20,621' E	979.90	0.40	153.70	in the water
M12	52	HE570_52-1	06.03.	CTD	11:53	60° 49,494' N	005° 20,600' E	293.50	0.40	173.60	max depth/on ground
M12	52	HE570_52-1	06.03.	CTD	12:02	60° 49,438' N	005° 20,571' E	293.70	0.20	174.10	on deck
M12	52	HE570_52-1	06.03.	CTD	12:03	60° 49,437' N	005° 20,571' E	293.70	0.20	178.50	station end
M12	53	HE570_53-1	06.03.	BOP	12:06	60° 49,441' N	005° 20,545' E	293.60	0.40	330.30	station start

M12	53	HE570_53-1	06.03.	BOP	12:07	60° 49,444' N	005° 20,542' E	293.60	0.40	339.10	in the water
M12	53	HE570_53-1	06.03.	BOP	12:34	60° 49,537' N	005° 20,514' E	291.50	0.30	143.60	max depth/on ground
M12	53	HE570_53-1	06.03.	BOP	12:41	60° 49,518' N	005° 20,552' E	292.70	0.10	95.20	on deck
M12	53	HE570_53-1	06.03.	BOP	12:42	60° 49,518' N	005° 20,556' E	292.70	0.10	131.00	station end
M12	54	HE570_54-1	06.03.	ROSINA	12:45	60° 49,498' N	005° 20,574' E	293.40	0.50	129.10	station start
M12	54	HE570_54-1	06.03.	ROSINA	12:46	60° 49,491' N	005° 20,592' E	293.60	0.40	140.80	in the water
M12	54	HE570_54-1	06.03.	ROSINA	13:25	60° 49,519' N	005° 20,611' E	292.90	0.30	76.30	max depth/on ground
M12	54	HE570_54-1	06.03.	ROSINA	13:34	60° 49,526' N	005° 20,632' E	292.70	0.50	354.20	on deck
M12	54	HE570_54-1	06.03.	ROSINA	13:35	60° 49,530' N	005° 20,630' E	292.50	0.40	333.20	station end
M12	55	HE570_55-1	06.03.	LOKI	13:40	60° 49,496' N	005° 20,632' E	293.80	0.20	131.10	station start
M12	55	HE570_55-1	06.03.	LOKI	13:40	60° 49,495' N	005° 20,635' E	293.80	0.30	134.10	in the water
M12	55	HE570_55-1	06.03.	LOKI	13:50	60° 49,484' N	005° 20,587' E	293.90	0.20	196.10	max depth/on ground

M12	55	HE570_55-1	06.03.	LOKI	14:00	60° 49,467' N	005° 20,465' E	293.80	0.10	342.30	on deck
M12	55	HE570_55-1	06.03.	LOKI	14:01	60° 49,471' N	005° 20,461' E	293.70	0.70	320.50	station end
M7	56	HE570_56-1	06.03.	MSN Medi	14:50	60° 52,311' N	005° 25,034' E	476.60	0.30	157.80	station start
M7	56	HE570_56-1	06.03.	MSN Medi	14:59	60° 52,294' N	005° 25,044' E	476.90	0.10	197.70	in the water
M7	56	HE570_56-1	06.03.	MSN Medi	15:19	60° 52,306' N	005° 25,041' E	476.60	0.10	329.70	max depth/on ground
M7	56	HE570_56-1	06.03.	MSN Medi	15:39	60° 52,339' N	005° 25,024' E	476.50	0.10	3.70	on deck
M7	56	HE570_56-1	06.03.	MSN Medi	15:40	60° 52,341' N	005° 25,023' E	476.50	0.10	258.90	station end
M7	57	HE570_57-1	06.03.	MSN Maxi	15:55	60° 52,362' N	005° 23,197' E	460.30	2.00	92.00	station start
M7	57	HE570_57-1	06.03.	MSN Maxi	15:59	60° 52,345' N	005° 23,482' E	463.20	1.80	96.60	in the water
M7	57	HE570_57-1	06.03.	MSN Maxi	16:40	60° 52,519' N	005° 26,193' E	420.60	2.10	69.40	max depth/on ground
M7	57	HE570_57-1	06.03.	MSN Maxi	16:50	60° 52,619' N	005° 26,793' E	343.90	1.90	80.90	on deck
M7	57	HE570_57-1	06.03.	MSN Maxi	16:50	60° 52,620' N	005° 26,810' E	344.90	1.90	84.60	station end



M7	58	HE570_58-1	06.03.	PELAGIOS	17:05	60° 52,749' N	005° 27,936' E	331.30	1.30	221.20	station start
M7	58	HE570_58-1	06.03.	PELAGIOS	17:10	60° 52,723' N	005° 27,880' E	329.70	0.70	261.80	in the water
M7	58	HE570_58-1	06.03.	PELAGIOS	17:23	60° 52,692' N	005° 27,660' E	347.30	0.60	249.30	max depth/on ground
M7	58	HE570_58-1	06.03.	PELAGIOS	18:22	60° 52,532' N	005° 26,655' E	402.50	0.50	248.20	on deck
M7	58	HE570_58-1	06.03.	PELAGIOS	18:25	60° 52,511' N	005° 26,544' E	410.50	3.20	248.00	station end
M7	59	HE570_59-1	06.03.	CTD	18:35	60° 52,329' N	005° 25,089' E	474.90	2.40	239.00	station start
M7	59	HE570_59-1	06.03.	CTD	18:37	60° 52,293' N	005° 25,040' E	476.50	0.60	169.00	in the water
M7	59	HE570_59-1	06.03.	CTD	18:54	60° 52,256' N	005° 25,046' E	475.50	0.20	287.20	max depth/on ground
M7	59	HE570_59-1	06.03.	CTD	19:09	60° 52,270' N	005° 24,961' E	477.30	0.20	283.80	on deck
M7	59	HE570_59-1	06.03.	CTD	19:10	60° 52,271' N	005° 24,956' E	477.30	0.20	289.70	station end
M7	60	HE570_60-1	06.03.	BOP	19:10	60° 52,271' N	005° 24,954' E	477.30	0.10	292.10	station start
M7	60	HE570_60-1	06.03.	BOP	19:14	60° 52,274' N	005° 24,978' E	476.90	0.20	47.60	in the water

M7	60	HE570_60-1	06.03.	BOP	19:52	60° 52,281' N	005° 24,990' E	476.40	0.30	34.70	max depth/on ground
M7	60	HE570_60-1	06.03.	BOP	20:03	60° 52,288' N	005° 25,045' E	476.20	0.30	70.30	on deck
M7	60	HE570_60-1	06.03.	BOP	20:05	60° 52,291' N	005° 25,039' E	476.30	0.20	265.90	station end
M7	61	HE570_61-1	06.03.	ROSINA	20:05	60° 52,291' N	005° 25,036' E	476.20	0.10	238.70	station start
M7	61	HE570_61-1	06.03.	ROSINA	20:06	60° 52,290' N	005° 25,035' E	476.20	0.10	221.20	in the water
M7	61	HE570_61-1	06.03.	ROSINA	20:58	60° 52,277' N	005° 24,980' E	476.60	0.10	180.50	max depth/on ground
M7	61	HE570_61-1	06.03.	ROSINA	21:14	60° 52,273' N	005° 24,936' E	476.50	0.20	196.40	on deck
M7	61	HE570_61-1	06.03.	ROSINA	21:15	60° 52,273' N	005° 24,935' E	476.50	0.20	202.20	station end
M7	62	HE570_62-1	06.03.	LOKI	21:15	60° 52,273' N	005° 24,934' E	476.60	0.20	218.10	station start
M7	62	HE570_62-1	06.03.	LOKI	21:20	60° 52,259' N	005° 24,939' E	476.60	0.10	321.50	in the water
M7	62	HE570_62-1	06.03.	LOKI	21:36	60° 52,273' N	005° 24,860' E	477.10	0.30	305.00	max depth/on ground
M7	62	HE570_62-1	06.03.	LOKI	21:50	60° 52,276' N	005° 24,846' E	477.20	0.10	49.70	on deck

M7	62	HE570_62-1	06.03.	LOKI	21:50	60° 52,277' N	005° 24,846' E	477.20	0.20	18.90	station end
M7	63	HE570_63-1	06.03.	LISST (200x & Holo)	21:55	60° 52,287' N	005° 24,818' E	477.40	0.20	298.60	station start
M7	63	HE570_63-1	06.03.	LISST (200x & Holo)	21:55	60° 52,287' N	005° 24,816' E	477.40	0.20	294.10	in the water
M7	63	HE570_63-1	06.03.	LISST (200x & Holo)	22:11	60° 52,319' N	005° 24,855' E	476.50	0.20	62.30	on deck
M7	63	HE570_63-1	06.03.	LISST (200x & Holo)	22:15	60° 52,309' N	005° 24,879' E	476.50	0.40	272.00	station end
M7	64	HE570_64-1	06.03.	MUC	22:15	60° 52,308' N	005° 24,867' E	476.50	0.60	244.70	station start
M7	64	HE570_64-1	06.03.	MUC	22:17	60° 52,306' N	005° 24,851' E	476.80	0.20	252.30	in the water
M7	64	HE570_64-1	06.03.	MUC	22:27	60° 52,305' N	005° 24,837' E	477.10	0.20	252.40	max depth/on ground
M7	64	HE570_64-1	06.03.	MUC	22:41	60° 52,242' N	005° 24,864' E	445.40	0.70	82.50	on deck
M7	64	HE570_64-1	06.03.	MUC	22:43	60° 52,247' N	005° 24,885' E	448.70	0.70	53.70	station end
M7	65	HE570_65-1	06.03.	MSN Medi	23:00	60° 52,329' N	005° 25,126' E	473.70	0.70	107.00	station start
M7	65	HE570_65-1	06.03.	MSN Medi	23:02	60° 52,318' N	005° 25,167' E	471.50	0.70	139.10	in the water

M7	65	HE570_65-1	06.03.	MSN Medi	23:19	60° 52,301' N	005° 24,923' E	476.40	0.60	283.50	max depth/on ground
M7	65	HE570_65-1	06.03.	MSN Medi	23:37	60° 52,350' N	005° 24,550' E	480.20	0.70	280.60	on deck
M7	65	HE570_65-1	06.03.	MSN Medi	23:37	60° 52,351' N	005° 24,538' E	480.40	0.70	277.50	station end
M7	66	HE570_66-1	06.03.	MSN Maxi	23:47	60° 52,325' N	005° 24,396' E	480.80	1.20	64.70	station start
M7	66	HE570_66-1	06.03.	MSN Maxi	23:48	60° 52,341' N	005° 24,467' E	480.90	1.70	66.30	in the water
M7	66	HE570_66-1	07.03.	MSN Maxi	00:23	60° 52,606' N	005° 26,695' E	350.40	2.00	65.20	max depth/on ground
M7	66	HE570_66-1	07.03.	MSN Maxi	00:32	60° 52,667' N	005° 27,231' E	345.40	2.60	111.60	on deck
M7	66	HE570_66-1	07.03.	MSN Maxi	00:34	60° 52,638' N	005° 27,353' E	360.90	2.90	123.00	station end
M7	67	HE570_67-1	07.03.	LOKI	00:55	60° 52,316' N	005° 25,029' E	476.20	0.70	242.50	station start
M7	67	HE570_67-1	07.03.	LOKI	00:55	60° 52,313' N	005° 25,020' E	476.30	0.60	236.80	in the water
M7	67	HE570_67-1	07.03.	LOKI	01:11	60° 52,308' N	005° 24,665' E	479.80	0.70	276.80	max depth/on ground
M7	67	HE570_67-1	07.03.	LOKI	01:25	60° 52,315' N	005° 24,375' E	480.80	0.50	286.90	on deck

M7	67	HE570_67-1	07.03.	LOKI	01:26	60° 52,315' N	005° 24,361' E	480.70	0.50	251.50	station end
M7	68	HE570_68-1	07.03.	CTD	01:31	60° 52,281' N	005° 24,395' E	480.40	0.50	72.60	station start
M7	68	HE570_68-1	07.03.	CTD	01:32	60° 52,285' N	005° 24,410' E	480.90	0.50	60.30	in the water
M7	68	HE570_68-1	07.03.	CTD	01:51	60° 52,289' N	005° 24,705' E	479.50	0.40	74.40	max depth/on ground
M7	68	HE570_68-1	07.03.	CTD	02:05	60° 52,298' N	005° 24,919' E	476.70	0.40	88.20	on deck
M7	68	HE570_68-1	07.03.	CTD	02:06	60° 52,299' N	005° 24,924' E	476.80	0.40	79.30	station end
M7	69	HE570_69-1	07.03.	BOP	02:10	60° 52,275' N	005° 24,901' E	477.30	0.40	282.70	station start
M7	69	HE570_69-1	07.03.	BOP	02:10	60° 52,277' N	005° 24,892' E	477.50	0.50	300.60	in the water
M7	69	HE570_69-1	07.03.	BOP	02:47	60° 52,298' N	005° 24,553' E	481.20	0.20	60.40	max depth/on ground
M7	69	HE570_69-1	07.03.	BOP	04:51	60° 52,312' N	005° 24,830' E	477.40	0.10	70.10	on deck
M7	69	HE570_69-1	07.03.	BOP	04:55	60° 52,315' N	005° 24,843' E	477.20	0.10	58.80	station end
M7	70	HE570_70-1	07.03.	Sediment trap mooring deployment	06:40	60° 52,315' N	005° 24,985' E	476.00	0.10	53.60	station start

M7	70	HE570_70-1	07.03.	Sediment trap mooring deployment	06:48	60° 52,326' N	005° 24,995' E	476.30	0.10	14.10	information
M7	70	HE570_70-1	07.03.	Sediment trap mooring deployment	07:37	60° 52,329' N	005° 24,963' E	476.00	0.40	332.90	information
M7	70	HE570_70-1	07.03.	Sediment trap mooring deployment	07:40	60° 52,361' N	005° 24,937' E	476.30	0.50	336.40	station end
M7	71	HE570_71-1	07.03.	MSC	08:00	60° 52,372' N	005° 24,875' E	477.20	0.10	275.70	station start
M7	71	HE570_71-1	07.03.	MSC	08:06	60° 52,362' N	005° 24,860' E	477.40	0.20	207.30	in the water
M7	71	HE570_71-1	07.03.	MSC	08:08	60° 52,358' N	005° 24,858' E	477.40	0.00	179.10	max depth/on ground
M7	71	HE570_71-1	07.03.	MSC	08:10	60° 52,359' N	005° 24,859' E	477.40	0.10	92.50	on deck
M7	71	HE570_71-1	07.03.	MSC	08:10	60° 52,359' N	005° 24,860' E	0.00	0.10	36.60	station end
M7	72	HE570_72-1	07.03.	Sea Core Sampler	08:15	60° 52,364' N	005° 24,861' E	477.40	0.10	323.70	station start
M7	72	HE570_72-1	07.03.	Sea Core Sampler	08:35	60° 52,355' N	005° 24,787' E	478.00	0.20	274.60	in the water
M7	72	HE570_72-1	07.03.	Sea Core Sampler	08:37	60° 52,356' N	005° 24,780' E	478.00	0.20	287.30	max depth/on ground

M7	72	HE570_72-1	07.03.	Sea Core Sampler	08:39	60° 52,359' N	005° 24,766' E	478.00	0.20	304.20	on deck
M7	72	HE570_72-1	07.03.	Sea Core Sampler	08:57	60° 52,388' N	005° 24,618' E	478.40	0.30	311.50	in the water
M7	72	HE570_72-1	07.03.	Sea Core Sampler	08:59	60° 52,395' N	005° 24,603' E	478.40	0.30	321.40	max depth/on ground
M7	72	HE570_72-1	07.03.	Sea Core Sampler	08:59	60° 52,397' N	005° 24,599' E	478.40	0.30	313.40	on deck
M7	72	HE570_72-1	07.03.	Sea Core Sampler	09:09	60° 52,390' N	005° 24,676' E	478.10	0.30	288.20	in the water
M7	72	HE570_72-1	07.03.	Sea Core Sampler	09:11	60° 52,396' N	005° 24,668' E	478.00	0.10	315.60	max depth/on ground
M7	72	HE570_72-1	07.03.	Sea Core Sampler	09:13	60° 52,399' N	005° 24,659' E	477.90	0.20	346.80	on deck
M7	72	HE570_72-1	07.03.	Sea Core Sampler	09:15	60° 52,384' N	005° 24,732' E	478.10	2.80	124.40	station end
M7	73	HE570_73-1	07.03.	WP2	09:20	60° 52,350' N	005° 24,891' E	477.00	0.30	6.60	station start
M7	73	HE570_73-1	07.03.	WP2	09:21	60° 52,351' N	005° 24,890' E	477.00	0.30	352.30	in the water
M7	73	HE570_73-1	07.03.	WP2	09:25	60° 52,371' N	005° 24,876' E	477.00	0.20	24.80	max depth/on ground

M7	73	HE570_73-1	07.03.	WP2	09:29	60° 52,372' N	005° 24,879' E	476.90	0.10	279.80	on deck
M7	73	HE570_73-1	07.03.	WP2	09:30	60° 52,373' N	005° 24,875' E	477.00	0.20	278.30	station end
M7	74	HE570_74-1	07.03.	WP2	09:30	60° 52,373' N	005° 24,869' E	477.00	0.20	273.50	station start
M7	74	HE570_74-1	07.03.	WP2	09:30	60° 52,373' N	005° 24,868' E	476.90	0.20	276.00	in the water
M7	74	HE570_74-1	07.03.	WP2	09:34	60° 52,380' N	005° 24,859' E	476.10	0.20	4.40	max depth/on ground
M7	74	HE570_74-1	07.03.	WP2	09:38	60° 52,388' N	005° 24,852' E	472.00	0.20	292.30	on deck
M7	74	HE570_74-1	07.03.	WP2	09:40	60° 52,391' N	005° 24,839' E	469.50	0.20	311.30	station end
M7	75	HE570_75-1	07.03.	CTD	09:45	60° 52,390' N	005° 24,835' E	473.10	0.30	208.00	station start
M7	75	HE570_75-1	07.03.	CTD	09:49	60° 52,385' N	005° 24,834' E	470.70	0.20	212.40	in the water
M7	75	HE570_75-1	07.03.	CTD	10:10	60° 52,378' N	005° 24,831' E	475.90	0.10	126.70	max depth/on ground
M7	75	HE570_75-1	07.03.	CTD	10:24	60° 52,369' N	005° 24,823' E	477.30	0.10	220.10	on deck
M7	75	HE570_75-1	07.03.	CTD	10:25	60° 52,369' N	005° 24,821' E	477.50	0.10	207.20	station end



M7	76	HE570_76-1	07.03.	BOP	10:57	60° 52,334' N	005° 24,666' E	478.40	0.20	75.90	station start
M7	76	HE570_76-1	07.03.	BOP	11:01	60° 52,337' N	005° 24,696' E	478.20	0.20	90.50	in the water
M7	76	HE570_76-1	07.03.	BOP	11:40	60° 52,359' N	005° 24,816' E	477.90	0.10	35.70	max depth/on ground
M7	76	HE570_76-1	07.03.	BOP	12:28	60° 52,388' N	005° 25,058' E	474.10	0.10	93.20	max depth/on ground
M7	76	HE570_76-1	07.03.	BOP	13:03	60° 52,370' N	005° 25,157' E	471.90	0.20	80.70	max depth/on ground
M7	76	HE570_76-1	07.03.	BOP	13:20	60° 52,376' N	005° 25,226' E	471.70	0.10	295.00	max depth/on ground
M7	76	HE570_76-1	07.03.	BOP	13:42	60° 52,380' N	005° 25,305' E	466.40	0.30	93.90	max depth/on ground
M7	76	HE570_76-1	07.03.	BOP	13:58	60° 52,378' N	005° 25,440' E	443.30	0.30	161.80	on deck
M7	76	HE570_76-1	07.03.	BOP	14:00	60° 52,364' N	005° 25,432' E	441.40	0.90	223.60	station end
M7	77	HE570_77-1	07.03.	PELAGIOS	14:25	60° 52,345' N	005° 24,622' E	479.50	0.30	321.40	station start

M7	77	HE570_77-1	07.03.	PELAGIOS	14:30	60° 52,388' N	005° 24,721' E	478.70	0.50	81.10	in the water
M7	77	HE570_77-1	07.03.	PELAGIOS	14:44	60° 52,395' N	005° 24,988' E	472.60	0.50	80.70	max depth/on ground
M7	77	HE570_77-1	07.03.	PELAGIOS	15:57	60° 52,537' N	005° 26,246' E	420.40	0.50	70.50	on deck
M7	77	HE570_77-1	07.03.	PELAGIOS	16:00	60° 52,556' N	005° 26,364' E	417.50	3.50	71.80	station end
M7	78	HE570_78-1	07.03.	CTD	16:40	60° 52,315' N	005° 32,901' E	185.60	2.90	84.60	station start
M7	78	HE570_78-1	07.03.	CTD	16:45	60° 52,321' N	005° 32,994' E	185.00	0.10	80.90	in the water
M7	78	HE570_78-1	07.03.	CTD	16:54	60° 52,326' N	005° 32,996' E	185.00	0.00	0.20	max depth/on ground
M7	78	HE570_78-1	07.03.	CTD	17:01	60° 52,329' N	005° 32,994' E	185.00	0.00	244.70	on deck
M7	78	HE570_78-1	07.03.	CTD	17:05	60° 52,317' N	005° 33,002' E	185.10	0.80	186.50	station end
M7	79	HE570_79-1	08.03.	Sediment trap mooring recovery	06:50	60° 52,297' N	005° 24,886' E	477.00	0.40	74.40	station start
M7	79	HE570_79-1	08.03.	Sediment trap mooring recovery	07:39	60° 52,405' N	005° 24,994' E	464.90	0.20	38.10	on deck

M7	79	HE570_79-1	08.03.	Sediment trap mooring recovery	07:40	60° 52,408' N	005° 24,997' E	459.60	0.30	24.70	station end
M12	80	HE570_80-1	08.03.	MUC	08:30	60° 49,473' N	005° 20,574' E	293.60	0.50	321.30	station start
M12	80	HE570_80-1	08.03.	MUC	08:34	60° 49,490' N	005° 20,551' E	293.30	0.20	324.20	in the water
M12	80	HE570_80-1	08.03.	MUC	08:43	60° 49,501' N	005° 20,541' E	293.00	0.10	20.50	max depth/on ground
M12	80	HE570_80-1	08.03.	MUC	08:52	60° 49,509' N	005° 20,531' E	292.80	0.10	193.90	on deck
M12	80	HE570_80-1	08.03.	MUC	08:55	60° 49,505' N	005° 20,519' E	292.90	0.30	237.80	station end
M7	81	HE570_81-1	08.03.	WireWalker deployment	10:49	60° 51,029' N	005° 20,957' E	421.60	0.20	11.30	station start
M7	81	HE570_81-1	08.03.	WireWalker deployment	10:53	60° 51,041' N	005° 20,958' E	421.80	0.20	0.30	in the water
M7	81	HE570_81-1	08.03.	WireWalker deployment	11:09	60° 51,055' N	005° 20,953' E	421.90	0.20	7.60	information
M7	81	HE570_81-1	08.03.	WireWalker deployment	11:21	60° 51,097' N	005° 20,961' E	0.00	0.50	353.40	station end
M7	82	HE570_82-1	08.03.	CTD	12:17	60° 52,298' N	005° 24,920' E	476.30	0.70	90.50	station start
M7	82	HE570_82-1	08.03.	CTD	12:19	60° 52,295' N	005° 24,924' E	476.20	0.20	194.70	in the water

M7	82	HE570_82-1	08.03.	CTD	12:38	60° 52,278' N	005° 24,933' E	476.30	0.30	35.40	max depth/on ground
M7	82	HE570_82-1	08.03.	CTD	12:47	60° 52,296' N	005° 24,997' E	476.20	0.30	120.50	on deck
M7	82	HE570_82-1	08.03.	CTD	12:47	60° 52,294' N	005° 25,001' E	476.20	0.30	127.50	station end
M7	83	HE570_83-1	08.03.	LOKI	12:51	60° 52,278' N	005° 25,032' E	476.20	0.30	152.80	station start
M7	83	HE570_83-1	08.03.	LOKI	12:52	60° 52,277' N	005° 25,035' E	476.20	0.40	156.10	in the water
M7	83	HE570_83-1	08.03.	LOKI	13:08	60° 52,260' N	005° 25,001' E	476.40	0.40	286.10	max depth/on ground
M7	83	HE570_83-1	08.03.	LOKI	13:23	60° 52,293' N	005° 25,001' E	476.20	0.20	160.50	on deck
M7	83	HE570_83-1	08.03.	LOKI	13:24	60° 52,290' N	005° 25,003' E	476.20	0.30	167.40	station end
M7	84	HE570_84-1	08.03.	ROSINA	13:30	60° 52,275' N	005° 25,018' E	476.30	0.10	170.80	station start
M7	84	HE570_84-1	08.03.	ROSINA	13:31	60° 52,274' N	005° 25,018' E	476.30	0.00	247.20	in the water
M7	84	HE570_84-1	08.03.	ROSINA	14:13	60° 52,295' N	005° 25,052' E	475.90	0.10	267.60	max depth/on ground
M7	84	HE570_84-1	08.03.	ROSINA	14:30	60° 52,292' N	005° 25,034' E	0.00	0.20	163.20	on deck

M7	84	HE570_84-1	08.03.	ROSINA	14:30	60° 52,290' N	005° 25,033' E	0.00	0.10	160.50	station end
M7	85	HE570_85-1	08.03.	BOP	14:35	60° 52,285' N	005° 25,037' E	0.00	0.10	68.00	station start
M7	85	HE570_85-1	08.03.	BOP	14:37	60° 52,285' N	005° 25,044' E	0.00	0.10	97.50	in the water
M7	85	HE570_85-1	08.03.	BOP	15:16	60° 52,294' N	005° 25,044' E	0.00	0.10	177.50	max depth/on ground
M7	85	HE570_85-1	08.03.	BOP	15:30	60° 52,296' N	005° 25,058' E	0.00	0.10	207.50	on deck
M7	85	HE570_85-1	08.03.	BOP	15:30	60° 52,296' N	005° 25,057' E	0.00	0.00	346.50	station end
M7	86	HE570_86-1	08.03.	PELAGIOS with WBAT	15:50	60° 52,737' N	005° 26,743' E	0.00	0.90	276.30	station start
M7	86	HE570_86-1	08.03.	PELAGIOS with WBAT	15:56	60° 52,706' N	005° 26,626' E	0.00	0.60	238.50	in the water
M7	86	HE570_86-1	08.03.	PELAGIOS with WBAT	16:13	60° 52,652' N	005° 26,357' E	411.80	0.50	251.60	max depth/on ground
M7	86	HE570_86-1	08.03.	PELAGIOS with WBAT	17:32	60° 52,403' N	005° 25,009' E	461.40	0.60	251.60	on deck
M7	86	HE570_86-1	08.03.	PELAGIOS with WBAT	17:35	60° 52,390' N	005° 24,965' E	473.10	0.70	183.20	station end
M7	87	HE570_87-1	08.03.	LOKI	17:40	60° 52,321' N	005° 25,015' E	476.50	0.10	150.70	station start

M7	87	HE570_87-1	08.03.	LOKI	17:42	60° 52,319' N	005° 25,020' E	476.60	0.10	154.40	in the water
M7	87	HE570_87-1	08.03.	LOKI	17:55	60° 52,305' N	005° 25,021' E	476.80	0.10	287.60	max depth/on ground
M7	87	HE570_87-1	08.03.	LOKI	18:10	60° 52,298' N	005° 25,026' E	476.80	0.00	258.30	on deck
M7	87	HE570_87-1	08.03.	LOKI	18:10	60° 52,298' N	005° 25,026' E	476.80	0.10	336.40	station end
M7	88	HE570_88-1	08.03.	ROSINA	18:15	60° 52,299' N	005° 25,025' E	476.80	0.00	319.10	station start
M7	88	HE570_88-1	08.03.	ROSINA	18:15	60° 52,299' N	005° 25,025' E	476.80	0.00	358.70	in the water
M7	88	HE570_88-1	08.03.	ROSINA	19:03	60° 52,307' N	005° 24,969' E	476.70	0.10	4.60	max depth/on ground
M7	88	HE570_88-1	08.03.	ROSINA	19:20	60° 52,311' N	005° 24,972' E	476.50	0.10	56.90	on deck
M7	88	HE570_88-1	08.03.	ROSINA	19:20	60° 52,311' N	005° 24,972' E	476.50	0.00	130.00	station end
M7	89	HE570_89-1	08.03.	BOP	19:25	60° 52,313' N	005° 24,988' E	476.40	0.00	122.40	station start
M7	89	HE570_89-1	08.03.	BOP	19:27	60° 52,313' N	005° 24,987' E	476.50	0.20	274.40	in the water
M7	89	HE570_89-1	08.03.	BOP	19:46	60° 52,327' N	005° 24,910' E	476.70	0.00	198.10	max depth/on ground

M7	89	HE570_89-1	08.03.	BOP	19:55	60° 52,325' N	005° 24,915' E	476.60	0.10	60.80	on deck
M7	89	HE570_89-1	08.03.	BOP	19:55	60° 52,325' N	005° 24,916' E	476.60	0.10	118.20	station end
M7	90	HE570_90-1	09.03.	LISST (200x & Holo)	07:00	60° 52,309' N	005° 25,061' E	475.30	0.10	30.50	station start
M7	90	HE570_90-1	09.03.	LISST (200x & Holo)	07:00	60° 52,309' N	005° 25,061' E	475.30	0.00	64.90	in the water
M7	90	HE570_90-1	09.03.	LISST (200x & Holo)	08:26	60° 52,309' N	005° 24,971' E	476.30	0.10	56.30	on deck
M7	90	HE570_90-1	09.03.	LISST (200x & Holo)	08:30	60° 52,279' N	005° 24,977' E	477.00	2.40	236.60	station end
M10	91	HE570_91-1	09.03.	WireWalker recovery	09:00	60° 51,002' N	005° 20,947' E	422.10	0.30	306.50	station start
M10	91	HE570_91-1	09.03.	WireWalker recovery	09:05	60° 51,030' N	005° 20,957' E	422.30	0.20	178.60	information
M10	91	HE570_91-1	09.03.	WireWalker recovery	09:29	60° 51,045' N	005° 20,868' E	420.60	0.10	27.10	information
M10	91	HE570_91-1	09.03.	WireWalker recovery	09:30	60° 51,046' N	005° 20,868' E	420.30	0.10	60.70	on deck
M10	91	HE570_91-1	09.03.	WireWalker recovery	09:30	60° 51,046' N	005° 20,869' E	420.50	0.00	85.40	station end
M10	92	HE570_92-1	09.03.	CTD	09:45	60° 51,227' N	005° 20,999' E	422.70	0.10	181.60	station start
M10	92	HE570_92-1	09.03.	CTD	09:46	60° 51,224' N	005° 21,000' E	422.70	0.20	144.80	in the water

M10	92	HE570_92-1	09.03.	CTD	10:04	60° 51,222' N	005° 20,997' E	422.70	0.20	235.90	max depth/on ground
M10	92	HE570_92-1	09.03.	CTD	10:12	60° 51,215' N	005° 21,003' E	422.60	0.20	152.70	on deck
M10	92	HE570_92-1	09.03.	CTD	10:15	60° 51,211' N	005° 21,012' E	422.70	0.10	174.80	station end
M10	93	HE570_93-1	09.03.	MSC	10:59	60° 51,191' N	005° 21,020' E	421.80	0.10	323.20	station start
M10	93	HE570_93-1	09.03.	MSC	11:00	60° 51,194' N	005° 21,015' E	421.40	0.20	330.00	in the water
M10	93	HE570_93-1	09.03.	MSC	11:02	60° 51,196' N	005° 21,007' E	422.40	0.20	241.50	max depth/on ground
M10	93	HE570_93-1	09.03.	MSC	11:04	60° 51,197' N	005° 20,999' E	422.40	0.20	341.20	on deck
M10	93	HE570_93-1	09.03.	MSC	11:05	60° 51,199' N	005° 20,998' E	422.40	0.20	355.40	station end
M10	94	HE570_94-1	09.03.	LOKI	11:11	60° 51,221' N	005° 21,004' E	422.50	0.20	358.50	station start
M10	94	HE570_94-1	09.03.	LOKI	11:11	60° 51,223' N	005° 21,004' E	422.50	0.20	2.10	in the water
M10	94	HE570_94-1	09.03.	LOKI	11:11	60° 51,224' N	005° 21,003' E	422.50	0.10	18.20	max depth/on ground
M10	94	HE570_94-1	09.03.	LOKI	11:40	60° 51,185' N	005° 20,993' E	422.20	0.30	180.10	on deck



M10	94	HE570_94-1	09.03.	LOKI	11:40	60° 51,184' N	005° 20,993' E	422.20	0.30	178.90	station end
M10	95	HE570_95-1	09.03.	MSN Medi	11:48	60° 51,167' N	005° 20,954' E	421.90	0.10	329.90	station start
M10	95	HE570_95-1	09.03.	MSN Medi	11:50	60° 51,169' N	005° 20,954' E	422.00	0.10	42.30	in the water
M10	95	HE570_95-1	09.03.	MSN Medi	12:04	60° 51,194' N	005° 21,000' E	422.30	0.10	115.90	max depth/on ground
M10	95	HE570_95-1	09.03.	MSN Medi	12:21	60° 51,209' N	005° 21,029' E	422.30	0.20	341.50	on deck
M10	95	HE570_95-1	09.03.	MSN Medi	12:22	60° 51,216' N	005° 21,025' E	422.30	0.20	350.80	station end
M10	96	HE570_96-1	09.03.	ROSINA	12:28	60° 51,224' N	005° 21,023' E	422.30	0.10	250.00	station start
M10	96	HE570_96-1	09.03.	ROSINA	12:28	60° 51,224' N	005° 21,022' E	422.30	0.10	197.80	in the water
M10	96	HE570_96-1	09.03.	ROSINA	13:07	60° 51,168' N	005° 20,990' E	422.00	0.10	336.40	max depth/on ground
M10	96	HE570_96-1	09.03.	ROSINA	13:19	60° 51,188' N	005° 20,992' E	421.50	0.10	5.60	on deck
M10	96	HE570_96-1	09.03.	ROSINA	13:20	60° 51,189' N	005° 20,992' E	422.20	0.10	24.10	station end
M7	97	HE570_97-1	09.03.	MSN Maxi	13:49	60° 52,387' N	005° 23,731' E	464.20	1.50	86.60	station start

M7	97	HE570_97-1	09.03.	MSN Maxi	13:49	60° 52,388' N	005° 23,746' E	464.10	1.50	85.50	in the water
M7	97	HE570_97-1	09.03.	MSN Maxi	14:12	60° 52,326' N	005° 25,142' E	473.40	1.80	78.80	max depth/on ground
M7	97	HE570_97-1	09.03.	MSN Maxi	14:52	60° 52,741' N	005° 27,631' E	354.60	1.00	86.90	on deck
M7	97	HE570_97-1	09.03.	MSN Maxi	14:55	60° 52,755' N	005° 27,679' E	353.20	0.60	286.90	station end
M7	98	HE570_98-1	09.03.	CTD	15:20	60° 52,307' N	005° 24,902' E	476.70	0.20	60.90	station start
M7	98	HE570_98-1	09.03.	CTD	15:20	60° 52,308' N	005° 24,905' E	476.60	0.20	79.60	in the water
M7	98	HE570_98-1	09.03.	CTD	15:37	60° 52,308' N	005° 24,943' E	476.40	0.10	219.00	max depth/on ground
M7	98	HE570_98-1	09.03.	CTD	15:52	60° 52,300' N	005° 24,957' E	476.30	0.00	350.50	on deck
M7	98	HE570_98-1	09.03.	CTD	15:55	60° 52,300' N	005° 24,955' E	476.40	0.00	27.50	station end
M7	99	HE570_99-1	09.03.	LOKI	15:55	60° 52,300' N	005° 24,955' E	476.40	0.00	355.10	station start
M7	99	HE570_99-1	09.03.	LOKI	15:57	60° 52,300' N	005° 24,955' E	476.40	0.10	167.00	in the water
M7	99	HE570_99-1	09.03.	LOKI	16:13	60° 52,291' N	005° 24,950' E	476.60	0.10	252.00	max depth/on ground

M7	99	HE570_99-1	09.03.	LOKI	16:27	60° 52,295' N	005° 24,932' E	476.60	0.10	347.30	on deck
M7	99	HE570_99-1	09.03.	LOKI	16:30	60° 52,299' N	005° 24,931' E	476.70	0.10	50.80	station end
M7	100	HE570_100-1	09.03.	BOP	16:40	60° 52,293' N	005° 24,935' E	476.60	0.10	15.70	station start
M7	100	HE570_100-1	09.03.	BOP	16:42	60° 52,296' N	005° 24,939' E	476.70	0.00	329.90	in the water
M7	100	HE570_100-1	09.03.	BOP	18:39	60° 52,298' N	005° 24,974' E	476.80	0.10	137.00	max depth/on ground
M7	100	HE570_100-1	09.03.	BOP	19:02	60° 52,288' N	005° 24,954' E	477.10	0.10	3.10	on deck
M7	100	HE570_100-1	09.03.	BOP	19:03	60° 52,289' N	005° 24,956' E	477.10	0.10	54.70	station end
M7	100	HE570_100-1	09.03.	BOP	22:45	60° 52,355' N	005° 24,205' E	475.00	0.20	261.10	station end
L1	101	HE570_101-1	11.03.	CTD	07:30	60° 37,574' N	005° 15,090' E	190.40	0.70	91.50	station start
L1	101	HE570_101-1	11.03.	CTD	07:35	60° 37,571' N	005° 15,072' E	187.30	0.30	255.70	in the water
L1	101	HE570_101-1	11.03.	CTD	07:43	60° 37,574' N	005° 15,078' E	189.90	0.40	113.60	max depth/on ground
L1	101	HE570_101-1	11.03.	CTD	07:48	60° 37,571' N	005° 15,093' E	189.70	0.40	80.80	on deck

L1	101	HE570_101-1	11.03.	CTD	07:50	60° 37,573' N	005° 15,102' E	187.90	0.20	46.40	station end
L1	102	HE570_102-1	11.03.	ROSINA	07:50	60° 37,574' N	005° 15,104' E	188.10	0.20	39.10	station start
L1	102	HE570_102-1	11.03.	ROSINA	07:54	60° 37,571' N	005° 15,029' E	180.80	0.30	247.10	in the water
L1	102	HE570_102-1	11.03.	ROSINA	08:21	60° 37,566' N	005° 15,122' E	184.30	0.50	91.20	max depth/on ground
L1	102	HE570_102-1	11.03.	ROSINA	08:28	60° 37,551' N	005° 15,151' E	178.80	0.70	108.30	on deck
L1	102	HE570_102-1	11.03.	ROSINA	08:30	60° 37,545' N	005° 15,184' E	171.70	0.10	193.80	station end
L1	103	HE570_103-1	11.03.	BOP	08:30	60° 37,545' N	005° 15,183' E	171.70	0.20	258.80	station start
L1	103	HE570_103-1	11.03.	BOP	08:33	60° 37,547' N	005° 15,167' E	174.80	0.40	52.80	in the water
L1	103	HE570_103-1	11.03.	BOP	08:49	60° 37,513' N	005° 15,219' E	160.00	0.40	226.80	max depth/on ground
L1	103	HE570_103-1	11.03.	BOP	08:54	60° 37,512' N	005° 15,154' E	162.50	0.00	42.90	on deck
L1	103	HE570_103-1	11.03.	BOP	08:55	60° 37,512' N	005° 15,154' E	163.70	0.10	64.90	station end
L1	104	HE570_104-1	11.03.	LOKI	08:55	60° 37,512' N	005° 15,160' E	161.40	0.40	104.60	station start

L1	104	HE570_104-1	11.03.	LOKI	08:59	60° 37,497' N	005° 15,159' E	150.50	0.30	228.90	in the water
L1	104	HE570_104-1	11.03.	LOKI	09:05	60° 37,511' N	005° 15,199' E	157.80	0.20	118.70	max depth/on ground
L1	104	HE570_104-1	11.03.	LOKI	09:10	60° 37,494' N	005° 15,218' E	136.10	0.30	272.40	on deck
L1	104	HE570_104-1	11.03.	LOKI	09:10	60° 37,494' N	005° 15,217' E	135.90	0.30	266.30	station end
L1	105	HE570_105-1	11.03.	Van Veen grab	09:13	60° 37,503' N	005° 15,194' E	150.50	0.50	353.30	station start
L1	105	HE570_105-1	11.03.	Van Veen grab	09:16	60° 37,545' N	005° 15,215' E	164.80	0.40	42.20	max depth/on ground
L1	105	HE570_105-1	11.03.	Van Veen grab	09:23	60° 37,550' N	005° 15,226' E	161.90	0.40	67.60	on deck
L1	105	HE570_105-1	11.03.	Van Veen grab	09:23	60° 37,550' N	005° 15,227' E	161.50	0.30	80.90	station end
L1	106	HE570_106-1	11.03.	MUC	09:25	60° 37,539' N	005° 15,223' E	163.50	1.00	227.40	station start
L1	106	HE570_106-1	11.03.	MUC	09:27	60° 37,525' N	005° 15,186' E	168.30	0.40	191.10	in the water
L1	106	HE570_106-1	11.03.	MUC	09:32	60° 37,503' N	005° 15,196' E	150.90	0.20	188.20	max depth/on ground
L1	106	HE570_106-1	11.03.	MUC	09:38	60° 37,502' N	005° 15,212' E	151.60	0.10	19.30	on deck

L1	106	HE570_106-1	11.03.	MUC	09:40	60° 37,506' N	005° 15,193' E	153.50	1.20	254.00	station end
L2	107	HE570_107-1	11.03.	CTD	09:55	60° 38,074' N	005° 14,122' E	180.10	0.40	137.90	station start
L2	107	HE570_107-1	11.03.	CTD	09:56	60° 38,071' N	005° 14,121' E	179.80	0.40	235.00	in the water
L2	107	HE570_107-1	11.03.	CTD	10:10	60° 38,035' N	005° 14,134' E	174.80	0.50	256.70	on deck
L2	107	HE570_107-1	11.03.	CTD	10:10	60° 38,033' N	005° 14,121' E	173.30	0.80	267.30	station end
L2	108	HE570_108-1	11.03.	BOP	10:10	60° 38,033' N	005° 14,117' E	165.40	0.90	272.40	station start
L2	108	HE570_108-1	11.03.	BOP	10:15	60° 38,015' N	005° 14,046' E	140.20	0.30	104.70	in the water
L2	108	HE570_108-1	11.03.	BOP	10:32	60° 38,037' N	005° 14,113' E	172.80	0.40	236.80	max depth/on ground
L2	108	HE570_108-1	11.03.	BOP	10:34	60° 38,022' N	005° 14,100' E	150.60	0.30	201.00	on deck
L2	108	HE570_108-1	11.03.	BOP	10:34	60° 38,020' N	005° 14,099' E	150.50	0.30	196.40	station end
L2	109	HE570_109-1	11.03.	ROSINA	10:38	60° 38,003' N	005° 14,091' E	144.40	0.20	143.60	station start
L2	109	HE570_109-1	11.03.	ROSINA	10:39	60° 38,003' N	005° 14,091' E	144.10	0.20	183.90	in the water

L2	109	HE570_109-1	11.03.	ROSINA	11:10	60° 38,021' N	005° 13,998' E	130.20	0.80	265.20	max depth/on ground
L2	109	HE570_109-1	11.03.	ROSINA	11:14	60° 38,006' N	005° 14,016' E	124.90	1.00	107.20	on deck
L2	109	HE570_109-1	11.03.	ROSINA	11:15	60° 38,003' N	005° 14,047' E	134.60	0.60	97.60	station end
L3	110	HE570_110-1	11.03.	CTD	11:36	60° 38,599' N	005° 13,241' E	206.10	1.10	120.90	station start
L3	110	HE570_110-1	11.03.	CTD	11:36	60° 38,596' N	005° 13,249' E	207.90	1.10	134.20	in the water
L3	110	HE570_110-1	11.03.	CTD	11:44	60° 38,546' N	005° 13,325' E	193.60	0.50	211.00	max depth/on ground
L3	110	HE570_110-1	11.03.	CTD	11:45	60° 38,542' N	005° 13,316' E	187.80	0.30	216.90	on deck
L3	110	HE570_110-1	11.03.	CTD	11:48	60° 38,555' N	005° 13,313' E	193.70	0.50	28.50	station end
L3	111	HE570_111-1	11.03.	BOP	11:48	60° 38,557' N	005° 13,318' E	197.30	0.60	65.00	station start
L3	111	HE570_111-1	11.03.	BOP	11:54	60° 38,523' N	005° 13,344' E	188.90	0.20	305.50	in the water
L3	111	HE570_111-1	11.03.	BOP	12:15	60° 38,454' N	005° 13,381' E	166.00	1.00	359.20	max depth/on ground
L3	111	HE570_111-1	11.03.	BOP	12:16	60° 38,469' N	005° 13,377' E	170.60	1.20	349.10	on deck

L3	111	HE570_111-1	11.03.	BOP	12:16	60° 38,478' N	005° 13,373' E	169.90	1.10	352.80	station end
L3	111	HE570_111-1	11.03.	BOP	12:17	60° 38,483' N	005° 13,373' E	170.00	0.90	354.00	station end
L3	112	HE570_112-1	11.03.	ROSINA	12:19	60° 38,527' N	005° 13,366' E	196.10	1.00	345.80	station start
L3	112	HE570_112-1	11.03.	ROSINA	12:20	60° 38,531' N	005° 13,363' E	198.30	1.10	344.50	in the water
L3	112	HE570_112-1	11.03.	ROSINA	12:41	60° 38,550' N	005° 13,384' E	207.10	0.60	141.30	max depth/on ground
L3	112	HE570_112-1	11.03.	ROSINA	12:45	60° 38,501' N	005° 13,348' E	169.30	1.00	165.70	on deck
L3	112	HE570_112-1	11.03.	ROSINA	12:46	60° 38,482' N	005° 13,361' E	168.30	1.20	150.60	station end
L4	113	HE570_113-1	11.03.	CTD	13:09	60° 39,228' N	005° 12,715' E	208.30	0.10	250.80	station start
L4	113	HE570_113-1	11.03.	CTD	13:09	60° 39,228' N	005° 12,714' E	208.30	0.00	243.10	in the water
L4	113	HE570_113-1	11.03.	CTD	13:20	60° 39,206' N	005° 12,774' E	207.60	0.40	173.80	max depth/on ground
L4	113	HE570_113-1	11.03.	CTD	13:23	60° 39,199' N	005° 12,805' E	201.90	0.50	71.40	on deck
L4	113	HE570_113-1	11.03.	CTD	13:24	60° 39,200' N	005° 12,812' E	201.40	0.60	64.00	station end



L4	114	HE570_114-1	11.03.	BOP	13:26	60° 39,211' N	005° 12,845' E	192.10	0.50	9.70	station start
L4	114	HE570_114-1	11.03.	BOP	13:28	60° 39,224' N	005° 12,831' E	192.10	0.90	335.80	in the water
L4	114	HE570_114-1	11.03.	BOP	13:47	60° 39,195' N	005° 12,706' E	205.30	0.50	173.70	max depth/on ground
L4	114	HE570_114-1	11.03.	BOP	13:53	60° 39,201' N	005° 12,782' E	205.30	0.30	83.00	on deck
L4	114	HE570_114-1	11.03.	BOP	13:54	60° 39,202' N	005° 12,788' E	204.40	0.20	77.00	station end
L4	115	HE570_115-1	11.03.	ROSINA	13:56	60° 39,209' N	005° 12,794' E	204.30	0.50	3.60	station start
L4	115	HE570_115-1	11.03.	ROSINA	13:58	60° 39,224' N	005° 12,800' E	199.00	0.30	72.30	in the water
L4	115	HE570_115-1	11.03.	ROSINA	14:16	60° 39,212' N	005° 12,783' E	206.50	0.60	29.70	max depth/on ground
L4	115	HE570_115-1	11.03.	ROSINA	14:23	60° 39,209' N	005° 12,840' E	192.70	0.40	158.60	on deck
L4	115	HE570_115-1	11.03.	ROSINA	14:24	60° 39,204' N	005° 12,848' E	192.50	0.40	129.60	station start
L4	115	HE570_115-1	11.03.	ROSINA	14:24	60° 39,203' N	005° 12,852' E	192.30	0.40	101.70	station end
L5	116	HE570_116-1	11.03.	CTD	14:45	60° 40,063' N	005° 11,827' E	281.30	0.30	147.10	station start

L5	116	HE570_116-1	11.03.	CTD	14:48	60° 40,058' N	005° 11,854' E	283.10	0.20	95.50	in the water
L5	116	HE570_116-1	11.03.	CTD	14:58	60° 40,058' N	005° 11,889' E	285.50	0.30	48.90	max depth/on ground
L5	116	HE570_116-1	11.03.	CTD	15:03	60° 40,053' N	005° 11,887' E	286.00	0.10	100.70	on deck
L5	116	HE570_116-1	11.03.	CTD	15:05	60° 40,054' N	005° 11,891' E	285.90	0.20	52.40	station end
L5	117	HE570_117-1	11.03.	BOP	15:05	60° 40,055' N	005° 11,893' E	286.00	0.20	45.70	station start
L5	117	HE570_117-1	11.03.	BOP	15:06	60° 40,055' N	005° 11,900' E	286.30	0.10	107.20	in the water
L5	117	HE570_117-1	11.03.	BOP	15:33	60° 40,039' N	005° 11,923' E	288.40	0.10	19.30	max depth/on ground
L5	117	HE570_117-1	11.03.	BOP	15:39	60° 40,049' N	005° 11,923' E	287.70	0.20	48.20	on deck
L5	117	HE570_117-1	11.03.	BOP	15:40	60° 40,050' N	005° 11,927' E	287.90	0.30	70.50	station end
L6	118	HE570_118-1	11.03.	CTD	15:40	60° 40,050' N	005° 11,929' E	287.90	0.40	75.20	station start
L6	118	HE570_118-1	11.03.	CTD	15:42	60° 40,052' N	005° 11,953' E	291.20	0.30	83.70	in the water
L6	118	HE570_118-1	11.03.	CTD	15:42	60° 40,052' N	005° 11,956' E	291.80	0.30	81.80	max depth/on ground

L6	118	HE570_118-1	11.03.	CTD	15:43	60° 40,053' N	005° 11,961' E	292.40	0.20	63.70	on deck
L6	118	HE570_118-1	11.03.	CTD	15:45	60° 40,058' N	005° 11,965' E	292.70	0.10	286.90	station end
L6	119	HE570_119-1	11.03.	ROSINA	15:45	60° 40,058' N	005° 11,964' E	293.30	0.20	274.30	station start
L6	119	HE570_119-1	11.03.	ROSINA	15:49	60° 40,057' N	005° 11,921' E	287.10	0.20	269.30	in the water
L6	119	HE570_119-1	11.03.	ROSINA	16:16	60° 40,053' N	005° 11,891' E	285.90	0.40	153.70	max depth/on ground
L6	119	HE570_119-1	11.03.	ROSINA	16:26	60° 40,060' N	005° 11,994' E	299.30	0.10	160.90	on deck
L6	119	HE570_119-1	11.03.	ROSINA	16:30	60° 40,061' N	005° 11,977' E	297.60	2.10	297.30	station end
L7	120	HE570_120-1	11.03.	CTD	16:45	60° 40,826' N	005° 10,703' E	427.90	0.00	87.30	station start
L7	120	HE570_120-1	11.03.	CTD	16:47	60° 40,822' N	005° 10,707' E	427.20	0.50	158.90	in the water
L7	120	HE570_120-1	11.03.	CTD	17:03	60° 40,802' N	005° 10,692' E	413.40	0.50	16.70	max depth/on ground
L7	120	HE570_120-1	11.03.	CTD	17:14	60° 40,823' N	005° 10,683' E	426.90	0.00	323.70	on deck
L7	120	HE570_120-1	11.03.	CTD	17:15	60° 40,823' N	005° 10,683' E	426.90	0.00	178.70	station end

L7	121	HE570_121-1	11.03.	BOP	17:19	60° 40,825' N	005° 10,687' E	427.50	0.10	331.20	station start
L7	121	HE570_121-1	11.03.	BOP	17:20	60° 40,826' N	005° 10,687' E	427.50	0.10	335.70	in the water
L7	121	HE570_121-1	11.03.	BOP	17:56	60° 40,832' N	005° 10,703' E	429.20	0.20	76.10	max depth/on ground
L7	121	HE570_121-1	11.03.	BOP	18:09	60° 40,801' N	005° 10,720' E	425.60	0.30	324.60	on deck
L7	121	HE570_121-1	11.03.	BOP	18:10	60° 40,806' N	005° 10,711' E	425.80	0.40	313.50	station end
L7	122	HE570_122-1	11.03.	ROSINA	18:10	60° 40,807' N	005° 10,709' E	425.70	0.40	311.90	station start
L7	122	HE570_122-1	11.03.	ROSINA	18:14	60° 40,811' N	005° 10,693' E	415.10	0.30	224.50	in the water
L7	122	HE570_122-1	11.03.	ROSINA	18:50	60° 40,835' N	005° 10,672' E	428.80	0.40	173.40	max depth/on ground
L7	122	HE570_122-1	11.03.	ROSINA	19:05	60° 40,807' N	005° 10,672' E	413.50	0.20	217.00	on deck
L7	122	HE570_122-1	11.03.	ROSINA	19:05	60° 40,804' N	005° 10,667' E	413.40	0.20	207.10	station end
L7	123	HE570_123-1	11.03.	CTD	19:20	60° 41,557' N	005° 09,434' E	425.30	1.80	277.90	station start
L7	123	HE570_123-1	11.03.	CTD	19:23	60° 41,543' N	005° 09,345' E	434.90	0.50	163.60	in the water

L7	123	HE570_123-1	11.03.	CTD	19:38	60° 41,496' N	005° 09,324' E	402.30	0.30	284.40	max depth/on ground
L7	123	HE570_123-1	11.03.	CTD	19:45	60° 41,514' N	005° 09,283' E	412.50	0.20	338.20	on deck
L7	123	HE570_123-1	11.03.	CTD	19:45	60° 41,515' N	005° 09,282' E	413.80	0.20	332.30	station end
L7	124	HE570_124-1	11.03.	BOP	19:45	60° 41,516' N	005° 09,282' E	411.20	0.20	320.90	station start
L7	124	HE570_124-1	11.03.	BOP	19:49	60° 41,517' N	005° 09,271' E	411.90	0.10	112.20	on deck
L7	124	HE570_124-1	11.03.	BOP	20:21	60° 41,578' N	005° 09,241' E	432.80	0.20	222.10	max depth/on ground
L7	124	HE570_124-1	11.03.	BOP	20:28	60° 41,570' N	005° 09,257' E	433.60	0.20	40.10	on deck
L7	124	HE570_124-1	11.03.	BOP	20:30	60° 41,577' N	005° 09,232' E	432.20	0.60	299.30	station end
L7	125	HE570_125-1	11.03.	ROSINA	20:35	60° 41,604' N	005° 09,180' E	428.60	0.50	325.70	station start
L7	125	HE570_125-1	11.03.	ROSINA	20:38	60° 41,612' N	005° 09,155' E	429.20	0.10	337.70	in the water
L7	125	HE570_125-1	11.03.	ROSINA	21:15	60° 41,605' N	005° 09,073' E	430.50	0.40	237.60	max depth/on ground
L7	125	HE570_125-1	11.03.	ROSINA	21:29	60° 41,598' N	005° 09,097' E	431.00	0.10	88.40	on deck

L7	125	HE570_125-1	11.03.	ROSINA	21:30	60° 41,599' N	005° 09,100' E	431.10	0.20	62.90	station end
L7	126	HE570_126-1	11.03.	WP2	21:30	60° 41,600' N	005° 09,103' E	431.30	0.20	47.50	station start
L7	126	HE570_126-1	11.03.	WP2	21:33	60° 41,599' N	005° 09,101' E	431.10	0.40	207.80	in the water
L7	126	HE570_126-1	11.03.	WP2	21:35	60° 41,591' N	005° 09,095' E	430.60	0.20	168.30	max depth/on ground
L7	126	HE570_126-1	11.03.	WP2	21:37	60° 41,584' N	005° 09,105' E	430.70	0.20	132.00	on deck
L7	126	HE570_126-1	11.03.	WP2	21:38	60° 41,582' N	005° 09,113' E	430.90	0.30	122.10	in the water
L7	126	HE570_126-1	11.03.	WP2	21:42	60° 41,577' N	005° 09,149' E	431.90	0.40	94.70	max depth/on ground
L7	126	HE570_126-1	11.03.	WP2	21:45	60° 41,572' N	005° 09,187' E	432.90	0.40	137.00	on deck
L7	126	HE570_126-1	11.03.	WP2	21:45	60° 41,569' N	005° 09,192' E	432.80	0.40	156.30	station end
L7	126	HE570_126-1	11.03.	WP2	21:47	60° 41,561' N	005° 09,187' E	432.30	0.30	270.20	in the water
L7	126	HE570_126-1	11.03.	WP2	21:51	60° 41,573' N	005° 09,178' E	432.50	0.30	359.80	max depth/on ground
L7	126	HE570_126-1	11.03.	WP2	21:53	60° 41,597' N	005° 09,165' E	429.60	1.00	314.70	on deck

L7	126	HE570_126-1	11.03.	WP2	21:55	60° 41,600' N	005° 09,144' E	431.40	0.10	337.90	station end
L7	127	HE570_127-1	11.03.	LOKI	21:55	60° 41,604' N	005° 09,143' E	430.40	0.30	8.90	station start
L7	127	HE570_127-1	11.03.	LOKI	21:56	60° 41,609' N	005° 09,146' E	429.90	0.40	18.60	in the water
L7	127	HE570_127-1	11.03.	LOKI	22:09	60° 41,653' N	005° 09,092' E	430.80	0.10	286.10	max depth/on ground
L7	127	HE570_127-1	11.03.	LOKI	22:24	60° 41,589' N	005° 09,231' E	430.80	0.80	186.20	on deck
L7	127	HE570_127-1	11.03.	LOKI	22:25	60° 41,573' N	005° 09,228' E	433.40	0.80	176.80	station end
L7	128	HE570_128-1	11.03.	MSN Medi	22:31	60° 41,545' N	005° 09,301' E	434.80	0.80	63.50	station start
L7	128	HE570_128-1	11.03.	MSN Medi	22:31	60° 41,547' N	005° 09,310' E	434.80	0.80	60.10	in the water
L7	128	HE570_128-1	11.03.	MSN Medi	22:45	60° 41,575' N	005° 09,279' E	433.40	0.50	246.80	max depth/on ground
L7	128	HE570_128-1	11.03.	MSN Medi	23:02	60° 41,554' N	005° 09,194' E	431.90	0.40	228.80	on deck
L7	128	HE570_128-1	11.03.	MSN Medi	23:03	60° 41,550' N	005° 09,183' E	431.10	0.40	236.50	station end
L7	129	HE570_129-1	11.03.	PELAGIOS	23:11	60° 41,534' N	005° 09,393' E	435.30	1.30	94.00	station start

L7	129	HE570_129-1	11.03.	PELAGIOS	23:15	60° 41,501' N	005° 09,554' E	436.80	1.30	136.80	in the water
L7	129	HE570_129-1	11.03.	PELAGIOS	23:29	60° 41,296' N	005° 09,830' E	436.60	1.10	152.90	max depth/on ground
L7	129	HE570_129-1	12.03.	PELAGIOS	00:46	60° 40,354' N	005° 11,479' E	327.60	1.40	116.90	on deck
L7	129	HE570_129-1	12.03.	PELAGIOS	00:47	60° 40,344' N	005° 11,526' E	322.00	1.60	110.10	station end
L7	130	HE570_130-1	12.03.	MSN Maxi	01:10	60° 41,651' N	005° 09,059' E	429.90	1.80	108.60	station start
L7	130	HE570_130-1	12.03.	MSN Maxi	01:11	60° 41,637' N	005° 09,130' E	429.00	2.10	114.10	in the water
L7	130	HE570_130-1	12.03.	MSN Maxi	01:28	60° 41,280' N	005° 10,013' E	434.40	2.00	134.10	max depth/on ground
L7	130	HE570_130-1	12.03.	MSN Maxi	01:43	60° 40,903' N	005° 10,655' E	434.70	1.70	143.50	on deck
L7	130	HE570_130-1	12.03.	MSN Maxi	01:46	60° 40,860' N	005° 10,774' E	430.60	1.10	119.50	station end
L7	131	HE570_131-1	12.03.	MUC	02:06	60° 41,607' N	005° 09,083' E	431.00	0.80	91.40	station start
L7	131	HE570_131-1	12.03.	MUC	02:07	60° 41,606' N	005° 09,097' E	430.90	0.90	97.70	in the water
L7	131	HE570_131-1	12.03.	MUC	02:18	60° 41,571' N	005° 09,273' E	432.80	0.30	256.90	max depth/on ground



L7	131	HE570_131-1	12.03.	MUC	02:32	60° 41,539' N	005° 09,172' E	415.40	0.40	213.20	on deck
L7	131	HE570_131-1	12.03.	MUC	02:35	60° 41,528' N	005° 09,152' E	409.90	0.40	267.10	station end
L7	132	HE570_132-1	12.03.	Sediment trap mooring deployment	10:52	60° 41,705' N	005° 08,757' E	398.10	0.10	275.70	station start
L7	132	HE570_132-1	12.03.	Sediment trap mooring deployment	10:52	60° 41,705' N	005° 08,756' E	401.30	0.20	266.80	in the water
L7	132	HE570_132-1	12.03.	Sediment trap mooring deployment	11:54	60° 41,596' N	005° 08,920' E	410.00	0.80	352.10	max depth/on ground
L7	132	HE570_132-1	12.03.	Sediment trap mooring deployment	11:54	60° 41,603' N	005° 08,918' E	0.00	0.90	352.20	station end
L7	133	HE570_133-1	12.03.	WireWalker deployment	12:10	60° 41,342' N	005° 09,839' E	436.50	0.40	187.30	station start
L7	133	HE570_133-1	12.03.	WireWalker deployment	12:11	60° 41,340' N	005° 09,839' E	436.70	0.50	181.40	in the water
L7	133	HE570_133-1	12.03.	WireWalker deployment	12:25	60° 41,333' N	005° 09,868' E	436.40	0.70	289.90	max depth/on ground
L7	133	HE570_133-1	12.03.	WireWalker deployment	12:37	60° 41,429' N	005° 09,665' E	438.20	1.20	305.40	station end
L8	134	HE570_134-1	12.03.	CTD	13:02	60° 42,067' N	005° 07,614' E	377.00	0.30	185.40	station start

L8	134	HE570_134-1	12.03.	CTD	13:06	60° 42,052' N	005° 07,589' E	393.70	0.40	271.90	in the water
L8	134	HE570_134-1	12.03.	CTD	13:17	60° 41,998' N	005° 07,555' E	397.10	0.90	123.90	max depth/on ground
L8	134	HE570_134-1	12.03.	CTD	13:29	60° 41,988' N	005° 07,507' E	396.90	0.30	301.90	on deck
L8	134	HE570_134-1	12.03.	CTD	13:30	60° 41,988' N	005° 07,505' E	396.90	0.30	303.10	station end
L8	135	HE570_135-1	12.03.	BOP	13:32	60° 41,995' N	005° 07,483' E	396.70	0.30	301.60	station start
L8	135	HE570_135-1	12.03.	BOP	13:32	60° 41,996' N	005° 07,481' E	396.80	0.30	308.10	in the water
L8	135	HE570_135-1	12.03.	BOP	14:07	60° 41,978' N	005° 07,495' E	396.50	0.40	31.50	max depth/on ground
L8	135	HE570_135-1	12.03.	BOP	14:19	60° 42,075' N	005° 07,655' E	340.30	0.90	89.40	on deck
L8	135	HE570_135-1	12.03.	BOP	14:20	60° 42,075' N	005° 07,686' E	335.50	0.90	102.80	station end
L8	136	HE570_136-1	12.03.	ROSINA	14:23	60° 42,070' N	005° 07,714' E	312.10	0.40	329.30	station start
L8	136	HE570_136-1	12.03.	ROSINA	14:24	60° 42,072' N	005° 07,708' E	311.80	0.40	280.60	in the water
L8	136	HE570_136-1	12.03.	ROSINA	14:58	60° 42,017' N	005° 07,557' E	396.60	0.10	322.50	max depth/on ground

L8	136	HE570_136-1	12.03.	ROSINA	15:13	60° 42,029' N	005° 07,577' E	395.80	0.20	195.70	on deck
L8	136	HE570_136-1	12.03.	ROSINA	15:15	60° 42,032' N	005° 07,565' E	396.10	0.80	308.10	station end
L9	137	HE570_137-1	12.03.	CTD	15:35	60° 42,640' N	005° 05,994' E	370.30	0.20	177.30	station start
L9	137	HE570_137-1	12.03.	CTD	15:35	60° 42,640' N	005° 05,993' E	370.90	0.40	170.80	in the water
L9	137	HE570_137-1	12.03.	CTD	15:48	60° 42,629' N	005° 06,033' E	366.30	0.30	232.80	max depth/on ground
L9	137	HE570_137-1	12.03.	CTD	15:59	60° 42,656' N	005° 05,999' E	0.00	0.50	328.80	on deck
L9	137	HE570_137-1	12.03.	CTD	16:00	60° 42,659' N	005° 05,997' E	361.10	0.40	337.10	station end
L9	138	HE570_138-1	12.03.	BOP	16:03	60° 42,661' N	005° 05,997' E	361.40	0.20	121.50	station start
L9	138	HE570_138-1	12.03.	BOP	16:04	60° 42,658' N	005° 06,004' E	357.70	0.30	134.20	in the water
L9	138	HE570_138-1	12.03.	BOP	16:36	60° 42,667' N	005° 05,930' E	0.00	0.20	227.60	max depth/on ground
L9	138	HE570_138-1	12.03.	BOP	16:43	60° 42,668' N	005° 05,923' E	365.60	0.10	236.00	on deck
L9	138	HE570_138-1	12.03.	BOP	16:45	60° 42,669' N	005° 05,933' E	364.60	0.30	89.80	station end

L9	139	HE570_139-1	12.03.	ROSINA	16:49	60° 42,671' N	005° 05,954' E	362.90	0.50	149.70	station start
L9	139	HE570_139-1	12.03.	ROSINA	16:50	60° 42,669' N	005° 05,956' E	362.90	0.50	135.40	in the water
L9	139	HE570_139-1	12.03.	ROSINA	17:22	60° 42,634' N	005° 06,005' E	371.20	0.30	86.00	max depth/on ground
L9	139	HE570_139-1	12.03.	ROSINA	17:34	60° 42,626' N	005° 06,004' E	374.30	0.30	299.70	on deck
L9	139	HE570_139-1	12.03.	ROSINA	17:35	60° 42,627' N	005° 06,002' E	374.30	0.30	305.20	station end
L10	140	HE570_140-1	12.03.	WP2	17:55	60° 43,166' N	005° 04,030' E	0.00	0.30	251.00	station start
L10	140	HE570_140-1	12.03.	WP2	18:00	60° 43,163' N	005° 03,975' E	274.80	0.10	241.70	in the water
L10	140	HE570_140-1	12.03.	WP2	18:06	60° 43,152' N	005° 03,999' E	0.00	0.10	149.40	max depth/on ground
L10	140	HE570_140-1	12.03.	WP2	18:10	60° 43,137' N	005° 04,053' E	274.30	0.20	190.70	on deck
L10	140	HE570_140-1	12.03.	WP2	18:11	60° 43,134' N	005° 04,052' E	274.30	0.40	192.20	station end
L10	141	HE570_141-1	12.03.	WP2	18:12	60° 43,131' N	005° 04,049' E	274.20	0.20	204.90	station start
L10	141	HE570_141-1	12.03.	WP2	18:12	60° 43,130' N	005° 04,048' E	274.10	0.40	186.80	in the water

L10	141	HE570_141-1	12.03.	WP2	18:18	60° 43,146' N	005° 04,133' E	273.40	0.80	76.50	max depth/on ground
L10	141	HE570_141-1	12.03.	WP2	18:25	60° 43,153' N	005° 04,281' E	285.70	0.60	104.30	on deck
L10	141	HE570_141-1	12.03.	WP2	18:25	60° 43,152' N	005° 04,291' E	285.90	0.40	95.90	station end
L10	142	HE570_142-1	12.03.	CTD	18:30	60° 43,142' N	005° 04,255' E	281.70	0.50	290.40	station start
L10	142	HE570_142-1	12.03.	CTD	18:36	60° 43,130' N	005° 04,180' E	276.90	0.30	170.40	in the water
L10	142	HE570_142-1	12.03.	CTD	18:48	60° 43,081' N	005° 04,376' E	276.50	0.60	102.90	on deck
L10	142	HE570_142-1	12.03.	CTD	18:50	60° 43,075' N	005° 04,393' E	277.40	0.50	311.50	station end
L10	143	HE570_143-1	12.03.	BOP	19:00	60° 43,187' N	005° 04,017' E	276.50	0.90	316.20	station start
L10	143	HE570_143-1	12.03.	BOP	19:05	60° 43,148' N	005° 03,977' E	274.40	0.30	129.10	in the water
L10	143	HE570_143-1	12.03.	BOP	19:31	60° 43,167' N	005° 03,915' E	274.60	0.30	145.20	max depth/on ground
L10	143	HE570_143-1	12.03.	BOP	19:37	60° 43,168' N	005° 03,909' E	274.50	0.10	249.50	on deck
L10	143	HE570_143-1	12.03.	BOP	19:40	60° 43,163' N	005° 03,901' E	273.80	0.30	186.70	station end

L10	144	HE570_144-1	12.03.	ROSINA	19:40	60° 43,160' N	005° 03,900' E	273.00	0.10	192.00	station start
L10	144	HE570_144-1	12.03.	ROSINA	19:41	60° 43,158' N	005° 03,900' E	0.00	0.10	190.30	in the water
L10	144	HE570_144-1	12.03.	ROSINA	20:24	60° 43,155' N	005° 03,901' E	0.00	0.40	156.50	max depth/on ground
L10	144	HE570_144-1	12.03.	ROSINA	20:35	60° 43,166' N	005° 03,986' E	275.70	0.80	273.30	station end
L11	145	HE570_145-1	12.03.	WP2	20:50	60° 43,930' N	005° 01,983' E	160.10	0.60	46.10	station start
L11	145	HE570_145-1	12.03.	WP2	20:53	60° 43,947' N	005° 02,025' E	162.20	0.30	100.00	in the water
L11	145	HE570_145-1	12.03.	WP2	20:57	60° 43,943' N	005° 02,053' E	161.80	0.20	42.40	max depth/on ground
L11	145	HE570_145-1	12.03.	WP2	20:59	60° 43,945' N	005° 02,062' E	161.40	0.30	182.80	on deck
L11	145	HE570_145-1	12.03.	WP2	21:00	60° 43,940' N	005° 02,059' E	162.40	0.30	216.00	in the water
L11	145	HE570_145-1	12.03.	WP2	21:03	60° 43,936' N	005° 02,046' E	163.00	0.00	196.80	max depth/on ground
L11	145	HE570_145-1	12.03.	WP2	21:05	60° 43,933' N	005° 02,045' E	163.00	0.20	126.10	on deck
L11	145	HE570_145-1	12.03.	WP2	21:05	60° 43,932' N	005° 02,048' E	163.10	0.20	139.30	station end

L11	146	HE570_146-1	12.03.	CTD	21:10	60° 43,935' N	005° 02,076' E	0.00	0.60	72.70	station start
L11	146	HE570_146-1	12.03.	CTD	21:10	60° 43,936' N	005° 02,080' E	161.10	0.60	65.00	in the water
L11	146	HE570_146-1	12.03.	CTD	21:17	60° 43,944' N	005° 02,096' E	159.90	0.40	249.10	max depth/on ground
L11	146	HE570_146-1	12.03.	CTD	21:23	60° 43,941' N	005° 02,075' E	161.00	0.20	33.00	on deck
L11	146	HE570_146-1	12.03.	CTD	21:25	60° 43,938' N	005° 02,076' E	161.50	0.20	236.80	station end
L11	147	HE570_147-1	12.03.	BOP	21:25	60° 43,938' N	005° 02,066' E	162.40	0.60	288.30	station start
L11	147	HE570_147-1	12.03.	BOP	21:29	60° 43,928' N	005° 02,007' E	160.80	0.50	266.10	in the water
L11	147	HE570_147-1	12.03.	BOP	21:43	60° 43,930' N	005° 02,005' E	160.60	0.20	314.50	max depth/on ground
L11	147	HE570_147-1	12.03.	BOP	21:45	60° 43,941' N	005° 02,005' E	161.70	0.40	29.00	on deck
L11	147	HE570_147-1	12.03.	BOP	21:45	60° 43,942' N	005° 02,008' E	162.50	0.30	50.70	station end
L11	148	HE570_148-1	12.03.	ROSINA	21:50	60° 43,941' N	005° 01,997' E	161.30	0.20	257.80	station start
L11	148	HE570_148-1	12.03.	ROSINA	21:50	60° 43,941' N	005° 01,996' E	161.30	0.20	283.70	in the water

L11	148	HE570_148-1	12.03.	ROSINA	22:12	60° 43,939' N	005° 02,015' E	162.10	0.30	298.80	max depth/on ground
L11	148	HE570_148-1	12.03.	ROSINA	22:19	60° 43,926' N	005° 02,025' E	161.90	0.20	187.90	on deck
L11	148	HE570_148-1	12.03.	ROSINA	22:20	60° 43,926' N	005° 02,025' E	161.90	0.40	217.60	station end
L12	149	HE570_149-1	12.03.	WP2	22:29	60° 44,190' N	005° 01,035' E	115.80	0.60	13.70	station start
L12	149	HE570_149-1	12.03.	WP2	22:30	60° 44,202' N	005° 01,043' E	114.30	0.50	42.50	in the water
L12	149	HE570_149-1	12.03.	WP2	22:34	60° 44,212' N	005° 01,062' E	116.10	0.10	24.00	max depth/on ground
L12	149	HE570_149-1	12.03.	WP2	22:37	60° 44,211' N	005° 01,074' E	117.30	0.20	119.90	on deck
L12	149	HE570_149-1	12.03.	WP2	22:37	60° 44,210' N	005° 01,079' E	117.30	0.20	96.30	station end
L12	150	HE570_150-1	12.03.	CTD	22:39	60° 44,212' N	005° 01,088' E	119.50	0.30	41.10	station start
L12	150	HE570_150-1	12.03.	CTD	22:39	60° 44,213' N	005° 01,090' E	120.10	0.30	38.10	in the water
L12	150	HE570_150-1	12.03.	CTD	22:46	60° 44,202' N	005° 01,112' E	116.60	0.00	289.20	max depth/on ground
L12	150	HE570_150-1	12.03.	CTD	22:51	60° 44,201' N	005° 01,115' E	116.30	0.20	204.60	on deck



L12	150	HE570_150-1	12.03.	CTD	22:51	60° 44,200' N	005° 01,114' E	116.20	0.40	180.00	station end
L12	151	HE570_151-1	12.03.	BOP	22:54	60° 44,194' N	005° 01,135' E	120.50	0.50	100.10	station start
L12	151	HE570_151-1	12.03.	BOP	22:55	60° 44,193' N	005° 01,144' E	0.00	0.60	122.90	in the water
L12	151	HE570_151-1	12.03.	BOP	23:09	60° 44,177' N	005° 01,113' E	118.30	0.30	113.90	max depth/on ground
L12	151	HE570_151-1	12.03.	BOP	23:12	60° 44,183' N	005° 01,130' E	118.40	0.30	358.40	on deck
L12	151	HE570_151-1	12.03.	BOP	23:12	60° 44,187' N	005° 01,127' E	117.30	0.30	323.20	station end
L12	152	HE570_152-1	12.03.	ROSINA	23:13	60° 44,189' N	005° 01,121' E	116.60	0.20	281.70	station start
L12	152	HE570_152-1	12.03.	ROSINA	23:17	60° 44,190' N	005° 01,100' E	116.60	0.20	181.20	in the water
L12	152	HE570_152-1	12.03.	ROSINA	23:30	60° 44,196' N	005° 01,045' E	114.70	0.30	43.90	max depth/on ground
L12	152	HE570_152-1	12.03.	ROSINA	23:35	60° 44,184' N	005° 01,038' E	123.30	0.00	207.80	on deck
L12	152	HE570_152-1	12.03.	ROSINA	23:36	60° 44,186' N	005° 01,038' E	122.80	0.20	2.50	station end
L12	153	HE570_153-1	12.03.	LOKI	23:39	60° 44,201' N	005° 01,081' E	115.10	0.20	103.90	station start

L12	153	HE570_153-1	12.03.	LOKI	23:44	60° 44,206' N	005° 01,073' E	115.70	0.10	81.70	in the water
L12	153	HE570_153-1	12.03.	LOKI	23:45	60° 44,206' N	005° 01,077' E	115.80	0.30	90.40	max depth/on ground
L12	153	HE570_153-1	12.03.	LOKI	23:48	60° 44,208' N	005° 01,124' E	0.00	0.40	95.90	on deck
L12	153	HE570_153-1	12.03.	LOKI	23:49	60° 44,208' N	005° 01,131' E	0.00	0.10	98.20	station end
L12	154	HE570_154-1	12.03.	MUC	23:57	60° 44,198' N	005° 01,166' E	125.00	0.20	283.40	station start
L12	154	HE570_154-1	12.03.	MUC	23:58	60° 44,198' N	005° 01,162' E	121.60	0.30	270.90	in the water
L12	154	HE570_154-1	13.03.	MUC	00:02	60° 44,198' N	005° 01,153' E	0.00	0.30	104.40	max depth/on ground
L12	154	HE570_154-1	13.03.	MUC	00:08	60° 44,184' N	005° 01,114' E	116.50	0.70	149.80	on deck
L12	154	HE570_154-1	13.03.	MUC	00:08	60° 44,179' N	005° 01,128' E	0.00	0.80	118.00	station end
L7	155	HE570_155-1	13.03.	CTD	07:00	60° 41,551' N	005° 09,383' E	433.40	0.20	131.50	station start
L7	155	HE570_155-1	13.03.	CTD	07:05	60° 41,538' N	005° 09,388' E	434.40	0.20	178.60	in the water
L7	155	HE570_155-1	13.03.	CTD	07:21	60° 41,536' N	005° 09,494' E	432.50	0.20	69.90	max depth/on ground

L7	155	HE570_155-1	13.03.	CTD	07:28	60° 41,531' N	005° 09,460' E	434.60	0.10	229.90	on deck
L7	155	HE570_155-1	13.03.	CTD	07:30	60° 41,529' N	005° 09,460' E	434.50	0.50	124.90	station end
L7	156	HE570_156-1	13.03.	BOP	07:30	60° 41,526' N	005° 09,469' E	434.90	0.10	133.00	station start
L7	156	HE570_156-1	13.03.	BOP	07:31	60° 41,525' N	005° 09,468' E	435.00	0.10	132.30	in the water
L7	156	HE570_156-1	13.03.	BOP	07:50	60° 41,536' N	005° 09,412' E	434.40	0.20	46.50	max depth/on ground
L7	156	HE570_156-1	13.03.	BOP	07:58	60° 41,540' N	005° 09,398' E	434.50	0.30	250.40	on deck
L7	156	HE570_156-1	13.03.	BOP	08:00	60° 41,542' N	005° 09,386' E	434.20	0.30	19.60	station end
L7	157	HE570_157-1	13.03.	ROSINA	08:00	60° 41,545' N	005° 09,393' E	434.00	0.40	87.30	station start
L7	157	HE570_157-1	13.03.	ROSINA	08:01	60° 41,544' N	005° 09,408' E	433.90	0.30	77.80	in the water
L7	157	HE570_157-1	13.03.	ROSINA	08:36	60° 41,518' N	005° 09,336' E	436.20	0.30	303.10	max depth/on ground
L7	157	HE570_157-1	13.03.	ROSINA	08:50	60° 41,523' N	005° 09,345' E	436.20	0.20	175.80	on deck
L7	157	HE570_157-1	13.03.	ROSINA	08:50	60° 41,523' N	005° 09,345' E	436.30	0.20	175.00	station end

L7	158	HE570_158-1	13.03.	LOKI	08:55	60° 41,528' N	005° 09,378' E	435.90	0.10	59.80	station start
L7	158	HE570_158-1	13.03.	LOKI	08:57	60° 41,525' N	005° 09,379' E	436.10	0.60	150.70	in the water
L7	158	HE570_158-1	13.03.	LOKI	09:11	60° 41,492' N	005° 09,424' E	438.00	0.20	114.30	max depth/on ground
L7	158	HE570_158-1	13.03.	LOKI	09:25	60° 41,516' N	005° 09,480' E	436.20	0.20	89.80	on deck
L7	158	HE570_158-1	13.03.	LOKI	09:25	60° 41,517' N	005° 09,482' E	436.20	0.10	348.00	station end
L7	159	HE570_159-1	13.03.	MSN Medi	09:30	60° 41,524' N	005° 09,453' E	435.50	0.10	85.60	station start
L7	159	HE570_159-1	13.03.	MSN Medi	09:33	60° 41,527' N	005° 09,465' E	435.10	0.10	84.30	in the water
L7	159	HE570_159-1	13.03.	MSN Medi	09:46	60° 41,541' N	005° 09,563' E	404.00	0.50	246.60	max depth/on ground
L7	159	HE570_159-1	13.03.	MSN Medi	10:00	60° 41,582' N	005° 09,486' E	362.50	0.70	116.40	on deck
L7	159	HE570_159-1	13.03.	MSN Medi	10:00	60° 41,577' N	005° 09,499' E	363.70	0.90	137.20	station end
L7	160	HE570_160-1	13.03.	MSN Maxi	10:20	60° 42,045' N	005° 07,334' E	396.90	1.10	55.00	station start
L7	160	HE570_160-1	13.03.	MSN Maxi	10:24	60° 42,047' N	005° 07,491' E	397.50	1.20	95.00	in the water

L7	160	HE570_160-1	13.03.	MSN Maxi	10:38	60° 41,829' N	005° 08,229' E	369.60	2.20	121.00	max depth/on ground
L7	160	HE570_160-1	13.03.	MSN Maxi	11:18	60° 41,088' N	005° 10,165' E	429.00	2.20	203.90	on deck
L7	160	HE570_160-1	13.03.	MSN Maxi	11:19	60° 41,079' N	005° 10,155' E	426.00	2.10	210.80	station end
L7	161	HE570_161-1	13.03.	WP2	11:37	60° 41,518' N	005° 09,218' E	391.40	0.50	145.60	station start
L7	161	HE570_161-1	13.03.	WP2	11:37	60° 41,516' N	005° 09,222' E	392.00	0.40	134.80	in the water
L7	161	HE570_161-1	13.03.	WP2	11:47	60° 41,498' N	005° 09,312' E	408.90	0.40	97.00	max depth/on ground
L7	161	HE570_161-1	13.03.	WP2	11:52	60° 41,494' N	005° 09,353' E	425.30	0.10	209.20	on deck
L7	161	HE570_161-1	13.03.	WP2	11:53	60° 41,493' N	005° 09,352' E	419.30	0.30	223.70	station end
L7	162	HE570_162-1	13.03.	Sediment trap mooring recovery	11:56	60° 41,472' N	005° 09,271' E	281.20	2.60	260.90	station start
L7	162	HE570_162-1	13.03.	Sediment trap mooring recovery	12:52	60° 41,444' N	005° 09,668' E	436.50	0.90	150.00	station end
L7	163	HE570_163-1	13.03.	CTD	13:05	60° 41,731' N	005° 08,919' E	394.90	0.40	270.60	station start
L7	163	HE570_163-1	13.03.	CTD	13:10	60° 41,727' N	005° 08,897' E	397.50	0.20	157.70	in the water

L7	163	HE570_163-1	13.03.	CTD	13:28	60° 41,679' N	005° 08,928' E	414.00	0.10	131.70	max depth/on ground
L7	163	HE570_163-1	13.03.	CTD	13:39	60° 41,671' N	005° 08,894' E	413.60	0.40	206.30	on deck
L7	163	HE570_163-1	13.03.	CTD	13:40	60° 41,669' N	005° 08,892' E	414.10	0.50	214.50	station end
L7	164	HE570_164-1	13.03.	BOP	13:42	60° 41,657' N	005° 08,860' E	415.80	0.60	248.10	station start
L7	164	HE570_164-1	13.03.	BOP	13:43	60° 41,655' N	005° 08,850' E	415.10	0.70	251.70	in the water
L7	164	HE570_164-1	13.03.	BOP	14:01	60° 41,639' N	005° 08,928' E	414.90	0.40	121.90	max depth/on ground
L7	164	HE570_164-1	13.03.	BOP	14:11	60° 41,631' N	005° 08,997' E	421.50	0.20	78.80	on deck
L7	164	HE570_164-1	13.03.	BOP	14:13	60° 41,629' N	005° 09,003' E	421.20	0.10	158.90	station end
L7	165	HE570_165-1	13.03.	ROSINA	14:14	60° 41,625' N	005° 09,002' E	420.00	0.30	216.70	station start
L7	165	HE570_165-1	13.03.	ROSINA	14:15	60° 41,624' N	005° 09,001' E	420.80	0.20	225.30	in the water
L7	165	HE570_165-1	13.03.	ROSINA	14:54	60° 41,626' N	005° 08,965' E	415.00	0.10	192.60	max depth/on ground
L7	165	HE570_165-1	13.03.	ROSINA	15:09	60° 41,614' N	005° 08,900' E	409.80	0.10	76.40	on deck

L7	165	HE570_165-1	13.03.	ROSINA	15:10	60° 41,614' N	005° 08,904' E	410.30	0.20	96.70	station end
L7	166	HE570_166-1	13.03.	LOKI	15:10	60° 41,614' N	005° 08,909' E	410.70	0.20	76.80	station start
L7	166	HE570_166-1	13.03.	LOKI	15:11	60° 41,616' N	005° 08,917' E	411.40	0.30	52.50	in the water
L7	166	HE570_166-1	13.03.	LOKI	15:25	60° 41,630' N	005° 08,946' E	416.00	0.00	300.70	max depth/on ground
L7	166	HE570_166-1	13.03.	LOKI	15:40	60° 41,628' N	005° 08,928' E	412.10	0.10	206.00	on deck
L7	166	HE570_166-1	13.03.	LOKI	15:40	60° 41,628' N	005° 08,928' E	414.50	0.10	219.30	station end
L7	167	HE570_167-1	13.03.	WP2	15:41	60° 41,628' N	005° 08,927' E	411.90	0.10	338.40	station start
L7	167	HE570_167-1	13.03.	WP2	15:43	60° 41,628' N	005° 08,927' E	414.90	0.10	133.70	in the water
L7	167	HE570_167-1	13.03.	WP2	15:49	60° 41,636' N	005° 08,957' E	416.60	0.20	56.20	max depth/on ground
L7	167	HE570_167-1	13.03.	WP2	16:04	60° 41,654' N	005° 09,005' E	423.60	0.20	260.90	on deck
L7	167	HE570_167-1	13.03.	WP2	16:05	60° 41,650' N	005° 08,999' E	423.30	0.30	129.00	in the water
L7	167	HE570_167-1	13.03.	WP2	16:12	60° 41,673' N	005° 09,034' E	421.50	0.10	143.90	max depth/on ground

L7	167	HE570_167-1	13.03.	WP2	16:30	60° 41,672' N	005° 09,057' E	418.70	0.10	156.00	on deck
L7	167	HE570_167-1	13.03.	WP2	16:30	60° 41,671' N	005° 09,058' E	422.20	0.20	182.80	station end
L7	168	HE570_168-1	13.03.	CTD	16:35	60° 41,662' N	005° 09,064' E	427.20	0.20	164.00	station start
L7	168	HE570_168-1	13.03.	CTD	16:36	60° 41,657' N	005° 09,059' E	428.80	0.20	240.80	in the water
L7	168	HE570_168-1	13.03.	CTD	16:52	60° 41,646' N	005° 09,081' E	430.00	0.10	138.20	max depth/on ground
L7	168	HE570_168-1	13.03.	CTD	17:05	60° 41,641' N	005° 09,059' E	429.50	0.00	308.90	on deck
L7	168	HE570_168-1	13.03.	CTD	17:05	60° 41,641' N	005° 09,059' E	429.50	0.10	246.30	station end
L7	169	HE570_169-1	13.03.	BOP	17:06	60° 41,641' N	005° 09,058' E	429.20	0.10	157.30	station start
L7	169	HE570_169-1	13.03.	BOP	17:08	60° 41,639' N	005° 09,060' E	429.50	0.10	10.40	in the water
L7	169	HE570_169-1	13.03.	BOP	17:27	60° 41,643' N	005° 09,040' E	427.20	0.20	201.10	max depth/on ground
L7	169	HE570_169-1	13.03.	BOP	17:34	60° 41,636' N	005° 09,046' E	428.30	0.20	102.40	on deck
L7	169	HE570_169-1	13.03.	BOP	17:35	60° 41,636' N	005° 09,047' E	428.60	0.20	84.70	station end



L7	170	HE570_170-1	13.03.	ROSINA	17:35	60° 41,636' N	005° 09,049' E	429.20	0.10	48.90	station start
L7	170	HE570_170-1	13.03.	ROSINA	17:37	60° 41,638' N	005° 09,049' E	428.40	0.10	284.20	in the water
L7	170	HE570_170-1	13.03.	ROSINA	18:15	60° 41,629' N	005° 09,056' E	430.20	0.00	327.80	max depth/on ground
L7	170	HE570_170-1	13.03.	ROSINA	18:29	60° 41,625' N	005° 09,059' E	430.30	0.10	228.30	on deck
L7	170	HE570_170-1	13.03.	ROSINA	18:30	60° 41,625' N	005° 09,058' E	430.10	0.10	151.20	station end
L7	171	HE570_171-1	13.03.	LOKI	18:30	60° 41,622' N	005° 09,059' E	430.30	0.20	106.70	station start
L7	171	HE570_171-1	13.03.	LOKI	18:33	60° 41,621' N	005° 09,076' E	431.00	0.30	95.40	in the water
L7	171	HE570_171-1	13.03.	LOKI	18:46	60° 41,628' N	005° 09,092' E	430.90	0.20	110.00	max depth/on ground
L7	171	HE570_171-1	13.03.	LOKI	18:59	60° 41,623' N	005° 09,113' E	430.30	0.00	305.70	on deck
L7	171	HE570_171-1	13.03.	LOKI	19:00	60° 41,621' N	005° 09,107' E	430.50	0.60	198.80	station end
L7	172	HE570_172-1	13.03.	MSN Maxi	19:10	60° 41,941' N	005° 07,435' E	394.50	5.10	297.90	station start
L7	172	HE570_172-1	13.03.	MSN Maxi	19:15	60° 42,049' N	005° 07,452' E	396.90	0.80	75.90	in the water

L7	172	HE570_172-1	13.03.	MSN Maxi	19:37	60° 41,734' N	005° 08,654' E	400.20	2.10	117.50	max depth/on ground
L7	172	HE570_172-1	13.03.	MSN Maxi	20:05	60° 41,178' N	005° 09,690' E	375.80	1.90	298.70	on deck
L7	172	HE570_172-1	13.03.	MSN Maxi	20:05	60° 41,200' N	005° 09,634' E	367.50	4.00	313.70	station end
L7	173	HE570_173-1	13.03.	MSN Medi	20:15	60° 41,645' N	005° 09,011' E	425.00	0.60	88.80	station start
L7	173	HE570_173-1	13.03.	MSN Medi	20:17	60° 41,647' N	005° 09,034' E	427.20	0.30	81.60	in the water
L7	173	HE570_173-1	13.03.	MSN Medi	20:23	60° 41,645' N	005° 09,079' E	430.80	0.40	12.10	max depth/on ground
L7	173	HE570_173-1	13.03.	MSN Medi	20:29	60° 41,660' N	005° 09,127' E	428.00	0.40	202.80	on deck
L7	173	HE570_173-1	13.03.	MSN Medi	20:30	60° 41,658' N	005° 09,126' E	428.70	0.80	204.80	station end
L7	174	HE570_174-1	13.03.	MSN Medi	20:35	60° 41,625' N	005° 09,039' E	428.50	0.40	154.40	station start
L7	174	HE570_174-1	13.03.	MSN Medi	20:37	60° 41,615' N	005° 09,064' E	431.20	0.70	111.30	in the water
L7	174	HE570_174-1	13.03.	MSN Medi	20:43	60° 41,630' N	005° 09,109' E	430.80	0.40	319.70	max depth/on ground
L7	174	HE570_174-1	13.03.	MSN Medi	20:49	60° 41,624' N	005° 09,110' E	430.60	0.10	14.90	on deck

L7	174	HE570_174-1	13.03.	MSN Medi	20:50	60° 41,627' N	005° 09,111' E	430.70	0.40	2.70	station end
L7	175	HE570_175-1	13.03.	MSN Medi	20:55	60° 41,637' N	005° 09,109' E	430.80	0.30	186.60	station start
L7	175	HE570_175-1	13.03.	MSN Medi	20:57	60° 41,635' N	005° 09,109' E	430.80	0.10	322.30	in the water
L7	175	HE570_175-1	13.03.	MSN Medi	21:02	60° 41,643' N	005° 09,081' E	431.10	0.10	213.60	max depth/on ground
L7	175	HE570_175-1	13.03.	MSN Medi	21:09	60° 41,638' N	005° 09,095' E	431.20	0.40	168.90	on deck
L7	175	HE570_175-1	13.03.	MSN Medi	21:10	60° 41,634' N	005° 09,093' E	431.30	0.30	197.60	station end
L7	176	HE570_176-1	13.03.	MSN Medi	21:15	60° 41,632' N	005° 09,115' E	430.40	0.70	29.40	station start
L7	176	HE570_176-1	13.03.	MSN Medi	21:15	60° 41,634' N	005° 09,118' E	430.20	0.70	27.00	in the water
L7	176	HE570_176-1	13.03.	MSN Medi	21:22	60° 41,645' N	005° 09,102' E	431.00	0.40	245.60	max depth/on ground
L7	176	HE570_176-1	13.03.	MSN Medi	21:29	60° 41,630' N	005° 09,100' E	431.60	0.30	312.40	on deck
L7	176	HE570_176-1	13.03.	MSN Medi	21:30	60° 41,632' N	005° 09,094' E	431.50	0.40	305.10	station end
L7	177	HE570_177-1	13.03.	MSN Medi	21:30	60° 41,635' N	005° 09,082' E	431.50	0.30	274.00	station start

L7	177	HE570_177-1	13.03.	MSN Medi	21:34	60° 41,630' N	005° 09,071' E	431.90	0.10	215.00	in the water
L7	177	HE570_177-1	13.03.	MSN Medi	21:40	60° 41,627' N	005° 09,055' E	430.80	0.30	123.40	max depth/on ground
L7	177	HE570_177-1	13.03.	MSN Medi	21:47	60° 41,650' N	005° 09,149' E	428.10	0.40	84.90	on deck
L7	177	HE570_177-1	13.03.	MSN Medi	21:50	60° 41,637' N	005° 09,168' E	428.30	0.70	212.80	station end
L7	178	HE570_178-1	13.03.	MSN Medi	21:50	60° 41,632' N	005° 09,161' E	428.40	0.70	206.20	station start
L7	178	HE570_178-1	13.03.	MSN Medi	21:52	60° 41,617' N	005° 09,155' E	428.50	0.10	107.90	in the water
L7	178	HE570_178-1	13.03.	MSN Medi	22:01	60° 41,619' N	005° 09,143' E	429.00	0.30	231.30	max depth/on ground
L7	178	HE570_178-1	13.03.	MSN Medi	22:09	60° 41,607' N	005° 09,140' E	429.80	0.20	261.20	on deck
L7	178	HE570_178-1	13.03.	MSN Medi	22:10	60° 41,607' N	005° 09,137' E	431.50	0.20	275.80	station end
L7	179	HE570_179-1	13.03.	MSN Medi	22:15	60° 41,629' N	005° 09,134' E	429.30	0.20	41.40	station start
L7	179	HE570_179-1	13.03.	MSN Medi	22:15	60° 41,629' N	005° 09,135' E	429.30	0.10	46.70	in the water
L7	179	HE570_179-1	13.03.	MSN Medi	22:23	60° 41,611' N	005° 09,090' E	431.70	0.20	169.60	max depth/on ground

L7	179	HE570_179-1	13.03.	MSN Medi	22:32	60° 41,618' N	005° 09,070' E	431.90	0.40	289.70	on deck
L7	179	HE570_179-1	13.03.	MSN Medi	22:32	60° 41,618' N	005° 09,068' E	431.90	0.30	310.00	station end
L7	180	HE570_180-1	13.03.	MSN Medi	22:41	60° 41,687' N	005° 09,094' E	408.10	0.30	150.10	station start
L7	180	HE570_180-1	13.03.	MSN Medi	22:41	60° 41,685' N	005° 09,095' E	410.40	0.40	168.40	in the water
L7	180	HE570_180-1	13.03.	MSN Medi	22:50	60° 41,619' N	005° 09,120' E	430.50	0.20	133.20	max depth/on ground
L7	180	HE570_180-1	13.03.	MSN Medi	22:56	60° 41,618' N	005° 09,122' E	431.10	0.10	165.20	on deck
L7	180	HE570_180-1	13.03.	MSN Medi	22:56	60° 41,618' N	005° 09,122' E	430.70	0.00	129.80	station end
L7	181	HE570_181-1	13.03.	MSN Medi	23:01	60° 41,606' N	005° 09,106' E	431.70	0.10	135.80	station start
L7	181	HE570_181-1	13.03.	MSN Medi	23:01	60° 41,605' N	005° 09,107' E	431.70	0.10	137.90	in the water
L7	181	HE570_181-1	13.03.	MSN Medi	23:09	60° 41,656' N	005° 09,134' E	428.50	0.80	21.50	max depth/on ground
L7	181	HE570_181-1	13.03.	MSN Medi	23:15	60° 41,630' N	005° 09,193' E	428.60	0.50	143.40	on deck
L7	181	HE570_181-1	13.03.	MSN Medi	23:15	60° 41,629' N	005° 09,195' E	428.60	0.40	139.90	station end

L7	182	HE570_182-1	13.03.	MSN Medi	23:19	60° 41,615' N	005° 09,209' E	428.80	0.50	246.40	station start
L7	182	HE570_182-1	13.03.	MSN Medi	23:19	60° 41,615' N	005° 09,206' E	428.50	0.40	244.60	in the water
L7	182	HE570_182-1	13.03.	MSN Medi	23:28	60° 41,599' N	005° 09,171' E	429.50	0.60	241.30	max depth/on ground
L7	182	HE570_182-1	13.03.	MSN Medi	23:33	60° 41,583' N	005° 09,145' E	431.90	0.30	95.00	on deck
L7	182	HE570_182-1	13.03.	MSN Medi	23:34	60° 41,582' N	005° 09,154' E	432.00	0.20	132.10	station end
L7	183	HE570_183-1	13.03.	MSN Medi	23:37	60° 41,572' N	005° 09,144' E	431.50	0.20	198.00	station start
L7	183	HE570_183-1	13.03.	MSN Medi	23:38	60° 41,571' N	005° 09,143' E	431.40	0.20	168.90	in the water
L7	183	HE570_183-1	13.03.	MSN Medi	23:45	60° 41,554' N	005° 09,181' E	431.70	0.40	199.10	max depth/on ground
L7	183	HE570_183-1	13.03.	MSN Medi	23:51	60° 41,549' N	005° 09,182' E	431.20	0.20	91.60	on deck
L7	183	HE570_183-1	13.03.	MSN Medi	23:56	60° 41,539' N	005° 09,187' E	426.50	0.10	144.60	station end
L7	184	HE570_184-1	13.03.	MSN Medi	23:56	60° 41,538' N	005° 09,187' E	426.30	0.10	92.10	station start
L7	184	HE570_184-1	13.03.	MSN Medi	23:57	60° 41,538' N	005° 09,190' E	427.60	0.30	67.40	in the water

L7	184	HE570_184-1	14.03.	MSN Medi	00:04	60° 41,536' N	005° 09,222' E	426.30	0.20	71.90	max depth/on ground
L7	184	HE570_184-1	14.03.	MSN Medi	00:10	60° 41,544' N	005° 09,212' E	429.40	0.50	287.10	on deck
L7	184	HE570_184-1	14.03.	MSN Medi	00:11	60° 41,545' N	005° 09,208' E	429.50	0.40	290.00	station end
L7	185	HE570_185-1	14.03.	MSN Medi	00:16	60° 41,573' N	005° 09,125' E	431.00	0.50	346.60	station start
L7	185	HE570_185-1	14.03.	MSN Medi	00:18	60° 41,585' N	005° 09,120' E	431.20	0.60	356.90	in the water
L7	185	HE570_185-1	14.03.	MSN Medi	00:26	60° 41,575' N	005° 09,150' E	431.80	0.20	143.70	max depth/on ground
L7	185	HE570_185-1	14.03.	MSN Medi	00:32	60° 41,543' N	005° 09,156' E	418.40	0.30	161.60	on deck
L7	185	HE570_185-1	14.03.	MSN Medi	00:33	60° 41,540' N	005° 09,158' E	417.10	0.30	145.30	station end
L7	186	HE570_186-1	14.03.	MSN Medi	00:37	60° 41,531' N	005° 09,185' E	415.90	0.30	176.30	station start
L7	186	HE570_186-1	14.03.	MSN Medi	00:38	60° 41,522' N	005° 09,185' E	410.60	0.30	179.00	in the water
L7	186	HE570_186-1	14.03.	MSN Medi	00:46	60° 41,506' N	005° 09,265' E	392.60	0.50	117.00	max depth/on ground
L7	186	HE570_186-1	14.03.	MSN Medi	00:53	60° 41,497' N	005° 09,359' E	426.90	0.50	77.90	on deck

L7	186	HE570_186-1	14.03.	MSN Medi	00:55	60° 41,496' N	005° 09,398' E	432.10	0.70	103.00	station end
L7	187	HE570_187-1	14.03.	CTD	06:55	60° 41,624' N	005° 09,078' E	431.10	0.30	352.80	station start
L7	187	HE570_187-1	14.03.	CTD	06:58	60° 41,621' N	005° 09,077' E	431.10	0.20	244.40	in the water
L7	187	HE570_187-1	14.03.	CTD	07:27	60° 41,625' N	005° 09,096' E	431.10	0.30	167.80	on deck
L7	187	HE570_187-1	14.03.	CTD	07:30	60° 41,616' N	005° 09,061' E	430.80	0.50	259.00	station end
L7	188	HE570_188-1	14.03.	LOKI	07:30	60° 41,615' N	005° 09,058' E	430.40	0.40	228.40	station start
L7	188	HE570_188-1	14.03.	LOKI	07:30	60° 41,613' N	005° 09,055' E	430.30	0.30	200.10	in the water
L7	188	HE570_188-1	14.03.	LOKI	07:42	60° 41,604' N	005° 09,067' E	430.50	0.40	113.60	max depth/on ground
L7	188	HE570_188-1	14.03.	LOKI	07:58	60° 41,592' N	005° 09,019' E	422.90	0.90	291.40	on deck
L7	188	HE570_188-1	14.03.	LOKI	08:00	60° 41,602' N	005° 08,938' E	412.90	1.30	264.60	station end
L7	189	HE570_189-1	14.03.	Sediment trap mooring deployment	08:25	60° 41,585' N	005° 09,143' E	431.50	0.50	134.70	station start
L7	189	HE570_189-1	14.03.	Sediment trap mooring deployment	09:10	60° 41,508' N	005° 09,460' E	437.20	0.40	156.50	in the water



L7	189	HE570_189-1	14.03.	Sediment trap mooring deployment	09:10	60° 41,507' N	005° 09,461' E	437.30	0.60	152.00	station end
L7	190	HE570_190-1	14.03.	MSC	09:30	60° 41,632' N	005° 09,042' E	429.00	0.40	95.70	station start
L7	190	HE570_190-1	14.03.	MSC	09:33	60° 41,629' N	005° 09,045' E	429.60	0.20	276.90	in the water
L7	190	HE570_190-1	14.03.	MSC	09:35	60° 41,628' N	005° 09,054' E	430.60	0.40	63.60	max depth/on ground
L7	190	HE570_190-1	14.03.	MSC	09:39	60° 41,633' N	005° 09,097' E	431.50	0.20	95.30	on deck
L7	190	HE570_190-1	14.03.	MSC	09:40	60° 41,628' N	005° 09,102' E	431.50	0.20	234.50	station end
L7	191	HE570_191-1	14.03.	BOP	10:58	60° 41,704' N	005° 08,606' E	403.70	0.30	103.30	station start
L7	191	HE570_191-1	14.03.	BOP	11:03	60° 41,693' N	005° 08,636' E	405.40	0.10	111.80	in the water
L7	191	HE570_191-1	14.03.	BOP	11:38	60° 41,641' N	005° 08,761' E	400.90	0.10	80.30	max depth/on ground
L7	191	HE570_191-1	14.03.	BOP	11:45	60° 41,625' N	005° 08,786' E	398.50	0.30	180.40	on deck
L7	191	HE570_191-1	14.03.	BOP	12:05	60° 41,575' N	005° 08,909' E	409.50	0.40	106.00	max depth/on ground

L7	191	HE570_191-1	14.03.	BOP	12:12	60° 41,556' N	005° 08,946' E	411.90	0.30	150.80	on deck
L7	191	HE570_191-1	14.03.	BOP	12:32	60° 41,612' N	005° 08,907' E	411.60	0.10	277.00	max depth/on ground
L7	191	HE570_191-1	14.03.	BOP	12:33	60° 41,612' N	005° 08,906' E	410.30	0.10	266.10	on deck
L7	191	HE570_191-1	14.03.	BOP	12:57	60° 41,613' N	005° 08,742' E	392.60	0.10	324.00	max depth/on ground
L7	191	HE570_191-1	14.03.	BOP	12:58	60° 41,616' N	005° 08,741' E	394.40	0.20	348.30	on deck
L7	191	HE570_191-1	14.03.	BOP	12:59	60° 41,617' N	005° 08,741' E	393.00	0.10	359.90	station end
L7	192	HE570_192-1	14.03.	CTD	13:05	60° 41,614' N	005° 08,744' E	393.50	0.20	159.30	station start
L7	192	HE570_192-1	14.03.	CTD	13:05	60° 41,614' N	005° 08,745' E	392.00	0.20	170.50	in the water
L7	192	HE570_192-1	14.03.	CTD	13:20	60° 41,619' N	005° 08,710' E	396.10	0.10	40.90	max depth/on ground
L7	192	HE570_192-1	14.03.	CTD	13:33	60° 41,620' N	005° 08,761' E	395.00	0.30	43.80	on deck
L7	192	HE570_192-1	14.03.	CTD	13:33	60° 41,622' N	005° 08,764' E	395.20	0.20	40.00	station end
L7	193	HE570_193-1	14.03.	ROSINA	13:36	60° 41,625' N	005° 08,776' E	396.10	0.10	71.20	station start

L7	193	HE570_193-1	14.03.	ROSINA	13:38	60° 41,628' N	005° 08,789' E	397.50	0.20	70.30	in the water
L7	193	HE570_193-1	14.03.	ROSINA	14:15	60° 41,597' N	005° 08,966' E	415.90	0.20	306.00	max depth/on ground
L7	193	HE570_193-1	14.03.	ROSINA	15:23	60° 41,583' N	005° 08,931' E	411.40	0.00	154.10	on deck
L7	193	HE570_193-1	14.03.	ROSINA	15:25	60° 41,582' N	005° 08,932' E	411.90	0.00	230.10	station end
L7	194	HE570_194-1	14.03.	MUC	15:30	60° 41,582' N	005° 08,933' E	412.90	0.00	247.20	station start
L7	194	HE570_194-1	14.03.	MUC	15:30	60° 41,582' N	005° 08,933' E	413.00	0.00	222.60	in the water
L7	194	HE570_194-1	14.03.	MUC	15:39	60° 41,579' N	005° 08,935' E	411.90	0.10	345.00	max depth/on ground
L7	194	HE570_194-1	14.03.	MUC	15:53	60° 41,575' N	005° 08,931' E	411.20	0.10	304.50	on deck
L7	194	HE570_194-1	14.03.	MUC	15:55	60° 41,575' N	005° 08,931' E	411.20	0.30	162.00	station end
L7	195	HE570_195-1	14.03.	MSN Maxi	17:15	60° 39,958' N	005° 12,285' E	315.50	0.60	278.50	station start
L7	195	HE570_195-1	14.03.	MSN Maxi	17:19	60° 40,041' N	005° 12,138' E	311.40	2.10	322.60	in the water
L7	195	HE570_195-1	14.03.	MSN Maxi	17:37	60° 40,502' N	005° 11,313' E	327.30	2.00	320.40	max depth/on ground

L7	195	HE570_195-1	14.03.	MSN Maxi	18:06	60° 41,162' N	005° 09,899' E	427.40	2.00	304.50	on deck
L7	195	HE570_195-1	14.03.	MSN Maxi	18:10	60° 41,250' N	005° 09,669' E	391.20	3.70	310.90	station end
L7	196	HE570_196-1	14.03.	MSN Medi	18:20	60° 41,572' N	005° 08,971' E	414.40	0.20	294.00	station start
L7	196	HE570_196-1	14.03.	MSN Medi	18:21	60° 41,573' N	005° 08,966' E	413.70	0.20	293.80	in the water
L7	196	HE570_196-1	14.03.	MSN Medi	18:28	60° 41,582' N	005° 08,939' E	411.80	0.20	339.60	max depth/on ground
L7	196	HE570_196-1	14.03.	MSN Medi	18:34	60° 41,580' N	005° 08,941' E	412.80	0.20	135.20	on deck
L7	196	HE570_196-1	14.03.	MSN Medi	18:35	60° 41,579' N	005° 08,942' E	412.20	0.10	71.80	station end
L7	197	HE570_197-1	14.03.	MSN Medi	18:40	60° 41,608' N	005° 08,921' E	410.90	0.50	301.20	station start
L7	197	HE570_197-1	14.03.	MSN Medi	18:40	60° 41,609' N	005° 08,917' E	410.50	0.50	298.50	in the water
L7	197	HE570_197-1	14.03.	MSN Medi	18:49	60° 41,634' N	005° 08,815' E	400.60	0.30	338.00	max depth/on ground
L7	197	HE570_197-1	14.03.	MSN Medi	18:58	60° 41,641' N	005° 08,839' E	407.20	0.20	61.30	on deck
L7	197	HE570_197-1	14.03.	MSN Medi	19:00	60° 41,646' N	005° 08,846' E	410.10	0.10	67.50	station end

L7	198	HE570_198-1	14.03.	MSN Medi	19:00	60° 41,646' N	005° 08,847' E	413.20	0.10	109.00	station start
L7	198	HE570_198-1	14.03.	MSN Medi	19:02	60° 41,643' N	005° 08,850' E	409.30	0.20	165.60	in the water
L7	198	HE570_198-1	14.03.	MSN Medi	19:12	60° 41,617' N	005° 08,880' E	406.20	0.10	67.20	max depth/on ground
L7	198	HE570_198-1	14.03.	MSN Medi	19:19	60° 41,620' N	005° 08,846' E	400.90	0.20	268.90	on deck
L7	198	HE570_198-1	14.03.	MSN Medi	19:20	60° 41,619' N	005° 08,843' E	404.20	0.10	250.20	station end
L7	199	HE570_199-1	14.03.	MSN Medi	19:25	60° 41,618' N	005° 08,844' E	400.90	0.50	358.70	station start
L7	199	HE570_199-1	14.03.	MSN Medi	19:26	60° 41,628' N	005° 08,844' E	404.70	0.20	339.70	in the water
L7	199	HE570_199-1	14.03.	MSN Medi	19:34	60° 41,628' N	005° 08,733' E	399.10	0.60	310.20	max depth/on ground
L7	199	HE570_199-1	14.03.	MSN Medi	19:40	60° 41,640' N	005° 08,696' E	404.70	0.40	329.20	on deck
L7	199	HE570_199-1	14.03.	MSN Medi	19:40	60° 41,641' N	005° 08,695' E	405.60	0.50	332.70	station end
L7	200	HE570_200-1	14.03.	MSN Medi	19:45	60° 41,686' N	005° 08,687' E	411.00	0.30	348.40	station start
L7	200	HE570_200-1	14.03.	MSN Medi	19:46	60° 41,688' N	005° 08,686' E	411.00	0.20	348.70	in the water

L7	200	HE570_200-1	14.03.	MSN Medi	19:53	60° 41,681' N	005° 08,594' E	400.20	0.50	245.90	max depth/on ground
L7	200	HE570_200-1	14.03.	MSN Medi	20:00	60° 41,683' N	005° 08,485' E	398.90	0.50	313.50	on deck
L7	200	HE570_200-1	14.03.	MSN Medi	20:00	60° 41,684' N	005° 08,483' E	399.00	0.40	314.40	station end
L7	201	HE570_201-1	14.03.	MSN Medi	20:05	60° 41,704' N	005° 08,465' E	398.70	0.30	352.30	station start
L7	201	HE570_201-1	14.03.	MSN Medi	20:05	60° 41,707' N	005° 08,461' E	398.40	0.20	296.40	in the water
L7	201	HE570_201-1	14.03.	MSN Medi	20:12	60° 41,713' N	005° 08,393' E	396.70	0.40	300.40	max depth/on ground
L7	201	HE570_201-1	14.03.	MSN Medi	20:18	60° 41,730' N	005° 08,328' E	396.40	0.20	293.50	on deck
L7	201	HE570_201-1	14.03.	MSN Medi	20:20	60° 41,731' N	005° 08,320' E	396.40	0.20	279.50	station end
L7	202	HE570_202-1	14.03.	MSN Medi	20:25	60° 41,753' N	005° 08,283' E	395.90	0.40	325.80	station start
L7	202	HE570_202-1	14.03.	MSN Medi	20:26	60° 41,759' N	005° 08,274' E	395.70	0.40	319.30	in the water
L7	202	HE570_202-1	14.03.	MSN Medi	20:31	60° 41,774' N	005° 08,223' E	395.70	0.30	280.00	max depth/on ground
L7	202	HE570_202-1	14.03.	MSN Medi	20:38	60° 41,803' N	005° 08,146' E	392.00	0.40	316.50	on deck

L7	202	HE570_202-1	14.03.	MSN Medi	20:40	60° 41,809' N	005° 08,134' E	389.30	0.30	315.00	station end
L7	203	HE570_203-1	14.03.	WP2	20:45	60° 41,822' N	005° 08,107' E	385.80	0.30	327.50	station start
L7	203	HE570_203-1	14.03.	WP2	20:46	60° 41,837' N	005° 08,086' E	378.20	0.30	318.20	in the water
L7	203	HE570_203-1	14.03.	WP2	20:52	60° 41,846' N	005° 08,031' E	389.00	0.30	263.20	max depth/on ground
L7	203	HE570_203-1	14.03.	WP2	20:57	60° 41,844' N	005° 07,976' E	394.00	0.30	276.00	on deck
L7	203	HE570_203-1	14.03.	WP2	20:59	60° 41,846' N	005° 07,958' E	394.20	0.40	285.80	station end
L7	204	HE570_204-1	14.03.	WP2	20:59	60° 41,847' N	005° 07,951' E	394.00	0.40	296.10	station start
L7	204	HE570_204-1	14.03.	WP2	20:59	60° 41,848' N	005° 07,948' E	393.90	0.40	300.50	in the water
L7	204	HE570_204-1	14.03.	WP2	21:03	60° 41,864' N	005° 07,908' E	393.20	0.40	309.20	max depth/on ground
L7	204	HE570_204-1	14.03.	WP2	21:08	60° 41,880' N	005° 07,849' E	395.70	0.30	285.40	on deck
L7	204	HE570_204-1	14.03.	WP2	21:10	60° 41,882' N	005° 07,837' E	395.90	0.30	285.50	station end
L7	205	HE570_205-1	14.03.	WP2	21:10	60° 41,882' N	005° 07,835' E	396.00	0.30	273.70	station start

L7	205	HE570_205-1	14.03.	WP2	21:11	60° 41,883' N	005° 07,827' E	396.10	0.30	280.40	in the water
L7	205	HE570_205-1	14.03.	WP2	21:16	60° 41,881' N	005° 07,784' E	396.90	0.30	241.50	max depth/on ground
L7	205	HE570_205-1	14.03.	WP2	21:20	60° 41,876' N	005° 07,740' E	397.10	0.30	257.90	on deck
L7	205	HE570_205-1	14.03.	WP2	21:20	60° 41,876' N	005° 07,738' E	397.00	0.30	258.20	station end
L7	206	HE570_206-1	14.03.	WP2	21:20	60° 41,876' N	005° 07,737' E	397.10	0.30	255.30	station start
L7	206	HE570_206-1	14.03.	WP2	21:23	60° 41,873' N	005° 07,722' E	397.10	0.20	268.70	in the water
L7	206	HE570_206-1	14.03.	WP2	21:29	60° 41,876' N	005° 07,687' E	397.00	0.10	278.30	max depth/on ground
L7	206	HE570_206-1	14.03.	WP2	21:33	60° 41,875' N	005° 07,670' E	396.80	0.20	227.40	on deck
L7	206	HE570_206-1	14.03.	WP2	21:35	60° 41,869' N	005° 07,654' E	396.70	0.10	213.70	station end
L7	207	HE570_207-1	15.03.	WireWalker recovery	06:50	60° 41,249' N	005° 09,725' E	412.70	2.90	43.60	station start
L7	207	HE570_207-1	15.03.	WireWalker recovery	07:10	60° 41,377' N	005° 09,745' E	436.40	0.50	326.40	station end
L7	208	HE570_208-1	15.03.	BOP	07:45	60° 41,618' N	005° 09,240' E	428.30	0.10	331.30	station start



L7	208	HE570_208-1	15.03.	BOP	07:50	60° 41,618' N	005° 09,248' E	428.30	0.10	122.60	in the water
L7	208	HE570_208-1	15.03.	BOP	08:25	60° 41,660' N	005° 09,080' E	429.30	0.30	211.00	max depth/on ground
L7	208	HE570_208-1	15.03.	BOP	08:44	60° 41,586' N	005° 09,089' E	429.10	0.20	183.80	max depth/on ground
L7	208	HE570_208-1	15.03.	BOP	08:51	60° 41,574' N	005° 09,066' E	425.60	0.10	198.20	on deck
L7	208	HE570_208-1	15.03.	BOP	08:55	60° 41,429' N	005° 09,231' E	185.50	4.40	150.60	station end
L7	209	HE570_209-1	15.03.	Sediment trap mooring recovery	09:00	60° 41,457' N	005° 09,426' E	415.90	1.30	6.00	station start
L7	209	HE570_209-1	15.03.	Sediment trap mooring recovery	09:45	60° 41,613' N	005° 09,135' E	429.80	2.00	226.60	station end
L7	210	HE570_210-1	15.03.	CTD	09:50	60° 41,584' N	005° 09,086' E	429.60	0.30	112.60	station start
L7	210	HE570_210-1	15.03.	CTD	09:52	60° 41,581' N	005° 09,100' E	430.00	0.30	105.00	in the water
L7	210	HE570_210-1	15.03.	CTD	10:07	60° 41,606' N	005° 09,210' E	428.20	0.30	87.60	max depth/on ground
L7	210	HE570_210-1	15.03.	CTD	10:19	60° 41,583' N	005° 09,208' E	430.50	0.30	135.40	on deck

L7	210	HE570_210-1	15.03.	CTD	10:20	60° 41,582' N	005° 09,209' E	430.60	0.30	140.50	station end
L7	211	HE570_211-1	15.03.	BOP	11:06	60° 41,431' N	005° 09,339' E	280.20	0.90	121.20	station start
L7	211	HE570_211-1	15.03.	BOP	11:06	60° 41,428' N	005° 09,352' E	300.60	0.90	120.70	in the water
L7	211	HE570_211-1	15.03.	BOP	11:43	60° 41,428' N	005° 09,439' E	398.70	0.20	295.90	max depth/on ground
L7	211	HE570_211-1	15.03.	BOP	11:53	60° 41,433' N	005° 09,581' E	438.40	0.80	100.80	at surface
L7	211	HE570_211-1	15.03.	BOP	12:27	60° 41,489' N	005° 09,303' E	398.30	0.40	98.80	max depth/on ground
L7	211	HE570_211-1	15.03.	BOP	12:36	60° 41,524' N	005° 09,283' E	426.70	0.60	322.90	at surface
L7	211	HE570_211-1	15.03.	BOP	13:11	60° 41,666' N	005° 08,958' E	416.60	0.30	24.70	max depth/on ground
L7	211	HE570_211-1	15.03.	BOP	13:24	60° 41,696' N	005° 08,873' E	404.60	0.60	278.70	at surface
L7	211	HE570_211-1	15.03.	BOP	13:24	60° 41,696' N	005° 08,865' E	405.70	0.60	276.60	at surface
L7	211	HE570_211-1	15.03.	BOP	13:59	60° 41,737' N	005° 08,513' E	398.10	0.20	233.40	max depth/on ground

L7	211	HE570_211-1	15.03.	BOP	14:12	60° 41,770' N	005° 08,385' E	393.90	0.50	302.10	on deck
L7	211	HE570_211-1	15.03.	BOP	14:12	60° 41,771' N	005° 08,382' E	393.70	0.50	303.00	station end
L7	212	HE570_212-1	15.03.	CTD	14:24	60° 41,570' N	005° 09,133' E	430.30	0.50	68.30	station start
L7	212	HE570_212-1	15.03.	CTD	14:27	60° 41,573' N	005° 09,163' E	431.30	0.20	41.70	in the water
L7	212	HE570_212-1	15.03.	CTD	14:42	60° 41,570' N	005° 09,160' E	431.00	0.20	31.80	max depth/on ground
L7	212	HE570_212-1	15.03.	CTD	14:50	60° 41,587' N	005° 09,198' E	429.00	0.20	30.00	on deck
L7	212	HE570_212-1	15.03.	CTD	14:50	60° 41,587' N	005° 09,198' E	428.90	0.20	25.80	station end
L7	213	HE570_213-1	15.03.	MSC	14:59	60° 41,580' N	005° 09,187' E	430.50	0.20	255.00	station start
L7	213	HE570_213-1	15.03.	MSC	15:00	60° 41,580' N	005° 09,182' E	430.70	0.20	283.50	in the water
L7	213	HE570_213-1	15.03.	MSC	15:01	60° 41,581' N	005° 09,176' E	430.30	0.00	105.60	max depth/on ground
L7	213	HE570_213-1	15.03.	MSC	15:04	60° 41,579' N	005° 09,170' E	431.20	0.10	217.50	on deck
L7	213	HE570_213-1	15.03.	MSC	15:05	60° 41,579' N	005° 09,170' E	431.00	0.10	311.50	station end

L7	214	HE570_214-1	15.03.	CTD	15:20	60° 41,583' N	005° 09,167' E	430.70	0.10	230.00	station start
L7	214	HE570_214-1	15.03.	CTD	15:21	60° 41,583' N	005° 09,166' E	430.70	0.10	298.60	in the water
L7	214	HE570_214-1	15.03.	CTD	15:33	60° 41,601' N	005° 09,206' E	427.60	0.30	93.60	max depth/on ground
L7	214	HE570_214-1	15.03.	CTD	15:39	60° 41,598' N	005° 09,251' E	428.50	0.40	146.20	on deck
L7	214	HE570_214-1	15.03.	CTD	15:40	60° 41,598' N	005° 09,250' E	428.50	0.20	271.60	station end
L7	215	HE570_215-1	15.03.	BOP	15:50	60° 41,586' N	005° 09,209' E	428.80	0.10	168.20	station start
L7	215	HE570_215-1	15.03.	BOP	15:54	60° 41,576' N	005° 09,191' E	430.70	0.10	208.40	in the water
L7	215	HE570_215-1	15.03.	BOP	16:30	60° 41,588' N	005° 09,147' E	430.10	0.10	347.20	max depth/on ground
L7	215	HE570_215-1	15.03.	BOP	18:23	60° 41,624' N	005° 09,147' E	427.90	0.10	242.90	on deck
L7	215	HE570_215-1	15.03.	BOP	18:25	60° 41,624' N	005° 09,146' E	427.90	0.10	357.40	station end
L7	216	HE570_216-1	15.03.	CTD	18:28	60° 41,626' N	005° 09,149' E	427.60	0.10	188.40	station start
L7	216	HE570_216-1	15.03.	CTD	18:29	60° 41,626' N	005° 09,149' E	427.70	0.10	248.90	in the water

L7	216	HE570_216-1	15.03.	CTD	18:44	60° 41,636' N	005° 09,111' E	430.00	0.20	174.50	max depth/on ground
L7	216	HE570_216-1	15.03.	CTD	18:52	60° 41,623' N	005° 09,119' E	429.60	0.30	31.50	on deck
L7	216	HE570_216-1	15.03.	CTD	18:54	60° 41,634' N	005° 09,112' E	430.00	0.40	301.20	station end
L7	217	HE570_217-1	15.03.	WP2	18:55	60° 41,635' N	005° 09,106' E	430.00	0.30	283.70	station start
L7	217	HE570_217-1	15.03.	WP2	18:56	60° 41,633' N	005° 09,097' E	430.30	0.30	225.80	in the water
L7	217	HE570_217-1	15.03.	WP2	19:00	60° 41,623' N	005° 09,056' E	428.30	0.20	288.70	max depth/on ground
L7	217	HE570_217-1	15.03.	WP2	19:05	60° 41,608' N	005° 09,076' E	430.00	0.50	185.40	on deck
L7	217	HE570_217-1	15.03.	WP2	19:05	60° 41,606' N	005° 09,075' E	429.80	0.60	185.80	station end
L7	218	HE570_218-1	15.03.	WP2	19:07	60° 41,590' N	005° 09,073' E	427.60	0.70	193.70	station start
L7	218	HE570_218-1	15.03.	WP2	19:07	60° 41,587' N	005° 09,072' E	427.30	0.70	196.30	in the water
L7	218	HE570_218-1	15.03.	WP2	19:17	60° 41,555' N	005° 08,937' E	414.50	0.20	314.90	on deck
L7	218	HE570_218-1	15.03.	WP2	19:17	60° 41,555' N	005° 08,936' E	409.40	0.10	339.90	station end

L7	219	HE570_219-1	15.03.	WP2	19:19	60° 41,557' N	005° 08,939' E	408.70	0.20	100.20	station start
L7	219	HE570_219-1	15.03.	WP2	19:23	60° 41,551' N	005° 08,934' E	407.30	0.40	292.30	max depth/on ground
L7	219	HE570_219-1	15.03.	WP2	19:28	60° 41,534' N	005° 08,886' E	370.60	0.60	267.50	on deck
L7	219	HE570_219-1	15.03.	WP2	19:29	60° 41,544' N	005° 08,867' E	382.80	0.50	335.80	station end
L7	220	HE570_220-1	15.03.	WP2	19:30	60° 41,548' N	005° 08,867' E	389.30	0.40	26.30	station start
L7	220	HE570_220-1	15.03.	WP2	19:32	60° 41,557' N	005° 08,862' E	397.70	0.40	219.70	in the water
L7	220	HE570_220-1	15.03.	WP2	19:37	60° 41,539' N	005° 08,801' E	369.30	0.40	195.90	max depth/on ground
L7	220	HE570_220-1	15.03.	WP2	19:54	60° 41,569' N	005° 08,604' E	361.50	0.70	298.80	max depth/on ground
L7	220	HE570_220-1	15.03.	WP2	20:00	60° 41,593' N	005° 08,513' E	360.60	0.60	310.20	max depth/on ground
L7	220	HE570_220-1	15.03.	WP2	20:03	60° 41,602' N	005° 08,488' E	354.60	0.40	306.30	max depth/on ground

L7	220	HE570_220-1	15.03.	WP2	20:13	60° 41,633' N	005° 08,375' E	359.70	0.50	320.40	max depth/on ground
L7	220	HE570_220-1	15.03.	WP2	20:28	60° 41,663' N	005° 08,220' E	368.30	0.30	280.50	max depth/on ground
L7	220	HE570_220-1	15.03.	WP2	20:44	60° 41,736' N	005° 08,068' E	395.40	0.10	261.60	max depth/on ground
L7	220	HE570_220-1	15.03.	WP2	20:59	60° 41,775' N	005° 07,923' E	384.70	0.50	299.60	max depth/on ground
L7	220	HE570_220-1	15.03.	WP2	21:14	60° 41,762' N	005° 07,765' E	381.70	0.40	299.50	max depth/on ground
L7	220	HE570_220-1	15.03.	WP2	21:29	60° 41,771' N	005° 07,755' E	381.30	0.40	200.50	max depth/on ground
L7	220	HE570_220-1	15.03.	WP2	21:52	60° 41,848' N	005° 08,230' E	363.70	0.30	255.30	max depth/on ground
L7	220	HE570_220-1	15.03.	WP2	22:21	60° 41,881' N	005° 07,875' E	394.40	0.60	300.00	max depth/on ground

L7	220	HE570_220-1	15.03.	WP2	22:36	60° 41,949' N	005° 07,547' E	396.50	0.70	281.40	max depth/on ground
L7	220	HE570_220-1	15.03.	WP2	22:43	60° 41,966' N	005° 07,387' E	394.30	0.60	275.70	max depth/on ground
L7	220	HE570_220-1	15.03.	WP2	22:44	60° 41,966' N	005° 07,380' E	394.00	0.60	271.10	on deck
L7	220	HE570_220-1	15.03.	WP2	22:44	60° 41,966' N	005° 07,374' E	394.20	0.60	276.80	station end
L7	221	HE570_221-1	15.03.	BOP	23:03	60° 41,548' N	005° 09,196' E	431.50	0.40	11.80	station start
L7	221	HE570_221-1	15.03.	BOP	23:03	60° 41,550' N	005° 09,197' E	431.50	0.40	7.90	in the water
L7	221	HE570_221-1	15.03.	BOP	23:36	60° 41,709' N	005° 08,708' E	401.20	0.60	293.40	max depth/on ground
L7	221	HE570_221-1	15.03.	BOP	23:50	60° 41,771' N	005° 08,480' E	390.30	0.60	293.30	at surface
L7	221	HE570_221-1	16.03.	BOP	00:07	60° 41,854' N	005° 08,122' E	369.00	0.60	295.50	max depth/on ground
L7	221	HE570_221-1	16.03.	BOP	00:19	60° 41,887' N	005° 07,963' E	383.30	0.40	299.10	at surface



L7	221	HE570_221-1	16.03.	BOP	00:55	60° 42,039' N	005° 07,561' E	395.90	0.50	304.20	max depth/on ground
L7	221	HE570_221-1	16.03.	BOP	01:07	60° 42,100' N	005° 07,382' E	397.40	0.60	313.60	on deck
L7	221	HE570_221-1	16.03.	BOP	01:07	60° 42,102' N	005° 07,378' E	397.30	0.60	312.30	station end
L7	222	HE570_222-1	16.03.	ROSINA	01:08	60° 41,581' N	005° 09,198' E	430.70	0.40	359.30	station start
L7	222	HE570_222-1	16.03.	ROSINA	01:23	60° 41,583' N	005° 09,198' E	430.50	0.30	352.50	in the water
L7	222	HE570_222-1	16.03.	ROSINA	01:59	60° 41,631' N	005° 08,713' E	401.50	0.70	314.70	max depth/on ground
L7	222	HE570_222-1	16.03.	ROSINA	03:38	60° 41,661' N	005° 08,548' E	393.70	0.10	173.80	on deck
L7	222	HE570_222-1	16.03.	ROSINA	03:40	60° 41,660' N	005° 08,549' E	391.30	0.20	165.00	station end

## 8 Data and Sample Storage and Availability

Table 4: Overview of data availability

Type	Database	Available	Free Access	Contact	DOI
Master track (1-sec resolution)	PANGAEA	April 2021	April 2021	klas.moeller@hereon.de	<a href="https://doi.org/10.1594/PANGAEA.933064">https://doi.org/10.1594/PANGAEA.933064</a>
Master track (varying resolution)	PANGAEA	April 2021	April 2021	klas.moeller@hereon.de	<a href="https://doi.org/10.1594/PANGAEA.933065">https://doi.org/10.1594/PANGAEA.933065</a>
Physical Oceanography	PANGAEA	April 2021	April 2021	klas.moeller@hereon.de	<a href="https://doi.org/10.1594/PANGAEA.931411">https://doi.org/10.1594/PANGAEA.931411</a>
UVP5 particle data	Ecopart	2021	31/12/2023	hhauss@geomar.de	N/A
UVP5 image data	Ecotaxa	2021	31/12/2023	hhauss@geomar.de	<a href="https://ecotaxa.obs-vlfr.fr/prj/4105">https://ecotaxa.obs-vlfr.fr/prj/4105</a>
PELAGIOS annotations	PANGAEA	31/12/2022	31/12/2023	hhauss@geomar.de	Not yet available
MSN Maxi	Ecotaxa	01/06/2022	31/12/2023	hhauss@geomar.de	<a href="https://ecotaxa.obs-vlfr.fr/prj/5765">https://ecotaxa.obs-vlfr.fr/prj/5765</a>

Periphylla metabolic rate data	PANGAEA	31/12/2022	31/12/2023	hhauss@geomar.de	Not yet available
FerryBox data	European FerryBox Database	2021	2021	klas.moeller@hereon.de	N/A
CPICS image data	N/A	2023	31/12/2023	klas.moeller@hereon.de	N/A
RBR Concerto CTD	PANGAEA	2023	31/12/2023	klas.moeller@hereon.de	N/A
LISST-200X data	PANGAEA	2023	31/12/2023	klas.moeller@hereon.de	N/A
LISST-Holo data	PANGAEA	2023	31/12/2023	klas.moeller@hereon.de	N/A
Echosounder data	PANGAEA	2023	31/12/2023	klas.moeller@hereon.de	N/A
SPM & LoI data	PANGAEA	2023	31/12/2023	saskia.ruehl@hereon.de	N/A
UVP6 HF	Ecotaxa	June 2021	Expected March 2023	laetitia.drago@imev-mer.fr	<a href="https://ecotaxa.obs-vlfr.fr/prj/4515">https://ecotaxa.obs-vlfr.fr/prj/4515</a>
UVP6 LP (sediment trap mooring deployments)	Ecotaxa	June 2021	Expected March 2023	laetitia.drago@imev-mer.fr	<a href="https://ecotaxa.obs-vlfr.fr/prj/4205">https://ecotaxa.obs-vlfr.fr/prj/4205</a> <a href="https://ecotaxa.obs-vlfr.fr/prj/4206">https://ecotaxa.obs-vlfr.fr/prj/4206</a> <a href="https://ecotaxa.obs-vlfr.fr/prj/4207">https://ecotaxa.obs-vlfr.fr/prj/4207</a> <a href="https://ecotaxa.obs-vlfr.fr/prj/4208">https://ecotaxa.obs-vlfr.fr/prj/4208</a>

PIScO	PANGAEA	2023	31/12/2023	jtaucher@geomar.de	N/A
Benthic/pelagic fluxes	PANGAEA	2023	31/12/2023	andreas.neumann@hereon.de	N/A
Bioirrigation	PANGAEA	2023	31/12/2023	andreas.neumann@hereon.de	N/A
Bioturbation	PANGAEA	2023	31/12/2023	saskia.ruehl@hereon.de	N/A
Water column nutrients	PANGAEA	2023	31/12/2023	tbc	N/A
LOKI	Ecotaxa	2023	31/12/2023	barbara.niehoff@awi.de	N/A
ROSINA	PANGAEA	2023	31/12/2023	morten.iversen@awi.de	N/A
ISC	PANGAEA	2023	31/12/2023	morten.iversen@awi.de	N/A
WBAT	PANGAEA	2023	31/12/2023	tbc	N/A
MSC & Sediment traps	PANGAEA	2023	31/12/2023	morten.iversen@awi.de	N/A
WP2	PANGAEA	2023	31/12/2023	tbc	N/A
MSN Medi	PANGAEA	2023	31/12/2023	tbc	N/A

## 9 Acknowledgements

We thank the ever-reliable crew of the FS Heincke, who have supported our work during HE570 throughout all weathers and odd hours. We'd also like to thank everyone who made the campaign possible despite the restrictions laid on us by the on-going pandemic, both logistically and in terms of health and safety of everyone involved.

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## 11 Abbreviations

Table 4: Abbreviations used throughout this document

Abbreviation	Explanation
AWI	Alfred Wegener Institute
BOP	Bio Optical Platform
Chla	Chlorophyll a
CO <sub>2</sub>	Carbon Dioxide
CPICS	Continuous Particle Imaging Classification System
CT lab	Controlled-temperature laboratory
CTD	Conductivity, Temperature & Density sensor
DSPL	Deep Sea Power and Light

DVM	Diel Vertical Migration
GEOMAR	Helmholtz Centre for Ocean Research Kiel
GFF	Glass Fibre Filters
Hereon	Helmholtz Centre Hereon
ISC	<i>In-situ</i> camera
LISST-200X	Submersible Particle Size Analyser
LISST-Holo	Submersible Digital Holographic Camera
LOKI	Lightframe On-sight Key species Investigation
LOV	Laboratoire d'Océanographie de Villefranche
MARUM	University Bremen
MSN Maxi	Large Multinet (Multi-Schließ-Netz)
MSN Medi	Medium Multinet (Multi-Schließ-Netz)
MUC	Multicorer
N/A	Not Available (yet)
O <sub>2</sub>	Oxygen
PELAGIOS	Pelagic <i>In-situ</i> Observation System
PIC	Pelagic Imaging Consortium
PIScO	Plankton Imager with Scanning Optics
PMMA	Polymethylmethacrylate
RNA	Ribonucleic acid
ROSINA	Remotely ObServing <i>IN-situ</i> camera for Aggregates
SSD	Solid State Drive
tbc	To be confirmed
UV	Ultraviolet
UVP5	Underwater Vision Profiler, version 5
UVP6 HF	Underwater Vision Profiler, version 6, High Frequency
UVP6 LP	Underwater Vision Profiler, version 6, Low Power
VARs	Video Annotation and Reference System
WBAT	Wideband Autonomous Transceiver
WP2	WP2 plankton net

## 12 Appendices

### 12.1 Selected Pictures of Shipboard Operations



*Figure 36: HE570 Science team left to right: Vanessa Stenvers, Laetitia Drago, Saskia Rühl, Jan Taucher, Morten Iversen, Christian Konrad, Kim Dong-Gyun, Andreas Neumann, Helena Hauss, Klas Möller, and Daniel Blandfort.*