Suomen ympäristökeskus
Finlands miljöcentral
Finnish Environment Institute

ILMATIETEEN LAITOS

CRUISE REPORT

R/V Aranda

Cruise 05/2026

COMBINE 2
26.5.2026 – 7.6.2026

This report is based on preliminary data and is subject to changes.

Objectives of the cruise

The COMBINE 2 2026 cruise contributed to the HELCOM Baltic Sea integrated physical, chemical and biological monitoring programme and the Finnish marine management plan. The specific objectives of the cruise were:

1) Long-term monitoring of hydrography, nutrient concentrations, macrozoobenthos and zooplankton
2) Monitoring of microlitter in water and sediment
3) Monitoring of radioactive substances in water and sediment
4) Deployments of wave buoys in the Bothnian Bay and exchange of an ADCP in the Gulf of Finland
5) Retrieval of lost gear (wave buoy anchor and an ADCP) close to Utö
6) Retrieval of ice radars in the Bothnian Bay
7) Retrieval of hydrophones in Gulf of Finland, Northern Baltic Proper, Bothnian Sea and Bothnian Bay and deployment of a hydrophone at Tahkoluoto
8) Sediment sampling using vibrohammer corer
9) Retrieval of a benthic lander outside Pori
10) Research on nanoplastics in sea water and air in the Gulf of Finland

Table 1 The scientific crew on COMBINE 2 2026

Name	On board	Organization
Henrik Nygård	26.5.-8.6.2026	Syke
Tanja Kinnunen	26.5.-8.6.2026	Syke
Pia Varmanen	26.5.-8.6.2026	Syke
Riikka Mattsson	26.5.-8.6.2026	Syke
Mira Granlund	26.5.-8.6.2026	Syke
Anne-Mari Lehto	26.5.-8.6.2026	Syke
Tarja Katajisto	26.5.-8.6.2026	Syke
Okko Outinen	26.5.-8.6.2026	Syke
Lauri Kähkönen	26.5.-8.6.2026	Syke
Sanna Suikkanen	29.5.-8.6.2026	Syke
Sami Rantapusa	26.5.-8.6.2026	IL
Heini Jalli	26.5.-8.6.2026	IL
Andrew Twelves	26-29.5.2026	IL
Mariah Josten	26.5.-8.6.2026	UTU
Arto Hiltunen	26-29.5.2026	UTU
Joonas Virtasalo	29.5.-8.6.2026	GTK
Jyrki Hämäläinen	29.5.-6.6.2026	GTK
Mikko Kinnunen	29.5.-6.6.2026	GTK
Marko Saramo	6-8.2026	MeriNorpat

Kari Saramo	6-8.2026	MeriNorpat
Eelis Lähteenaro	26-29.5.2026	
Ewa Gorzna	29.5.-8.6.2026	
Katarzyna Miron	29.5.-8.6.2026	

Cruise Route

The cruise started in Helsinki on the 26th of May 2026. Due to changes in personnel onboard (only one field technician available) the original cruise plan had to be changed. This meant prioritation of the work and consequently some of the planned work and sampling stations had to be cut out of the plan. As a result of this the ice radar retrievals and a total of 14 monitoring stations were not done during the cruise. Following the new plan, the cruise first headed towards the central parts of Gulf of Finland, before heading to the easternmost station. From there the cruise continued to the western parts of Gulf of Finland and a short stop was made in Hanko to exchange some personnel. From Hanko the cruise continued towards the Northern Baltic Proper and through the Åland Sea to the Bothnian Sea. In Bothnian Sea only two stations were sampled on the way northward before entering the Quark and the Bothnian Bay. After sampling in the Bothnian Bay the cruise headed southward back to the Bothnian Sea and through the Archipelago Sea to Utö. From Utö the last stretch towards Helsinki started in the evening the 7th June and arrival in Helsinki was in the morning of the 8th of June. The cruise route is shown in Figure 1.

Sampling

A list of sampled stations and samples collected during the cruise is found in Annex 1. At each station a CTD profile was taken and when water samples were collected, the nutrient concentrations (NO_2, NO_X, NH_3, PO_4, SiO_4, Total N, Total P), chlorophyll-*a*, O_2 and pH were measured at standard depths. Alkalinity was measured at selected stations. If anoxic conditions were observed, also H_2S was measured at the standard depth where no oxygen was found. The standard sampling depths were 1, 5, 10, 15, 20, 30, 40, 50, 60, 70, 80, 90, 100, 125, 150, 175, 200, 225 and 250 m, depending on the sampling station's depth. A water sample 1 m above the sea bottom was also taken. Chlorophyll-*a* samples were taken at 1, 5, 10, 15 and 20 m depth. Zooplankton samples were collected using a 100 µm WP-2 net and macrozoobenthos were collected with a van Veen grab. Sediment samples were collected using a Gemax-corer. Microlitter sampling in surface water was carried out towing a Manta-net for a distance of 1500 m at 2 knots speed. Secchi depth was recorded when station visits occurred during daytime.

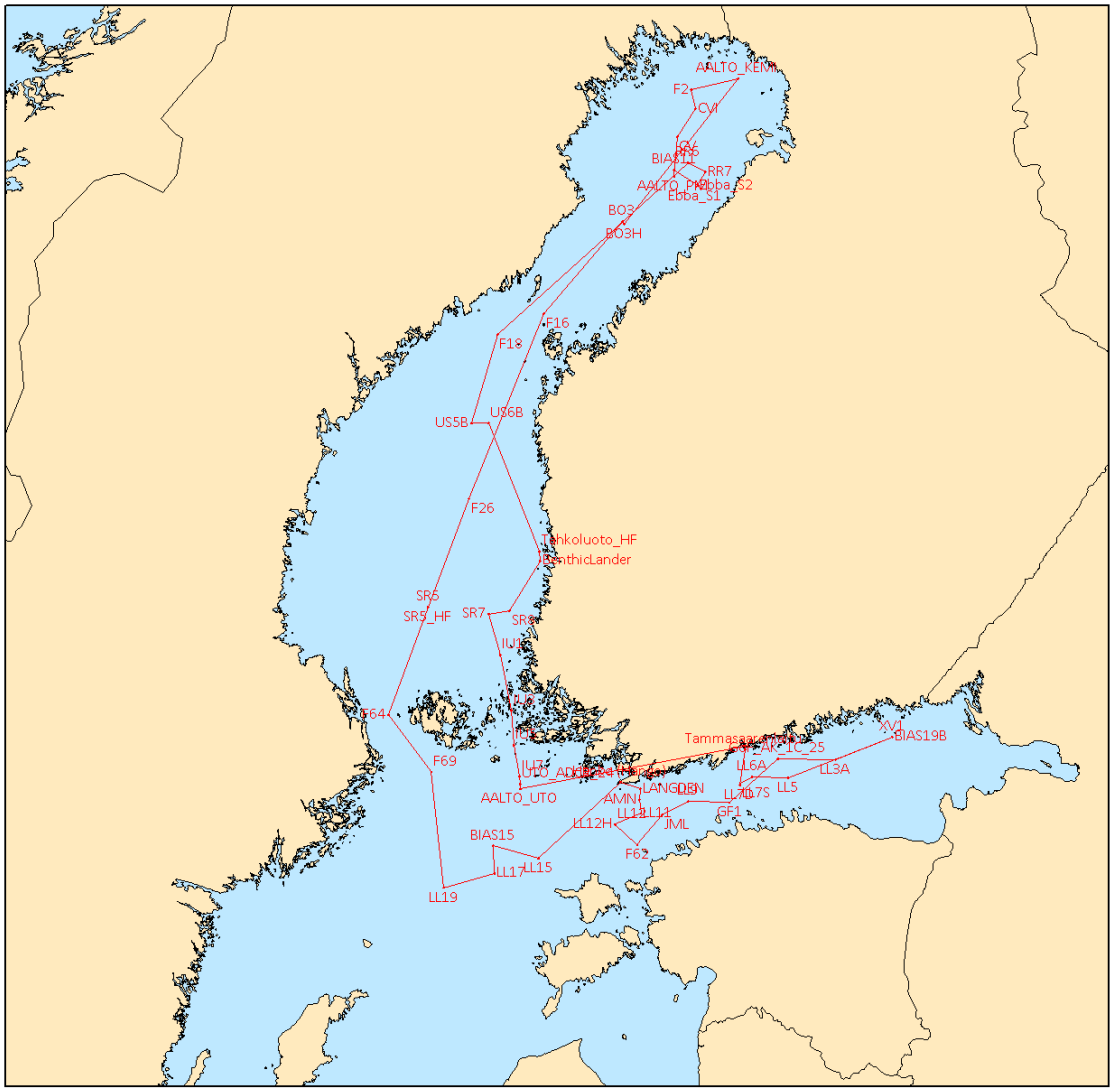


Figure 1. COMBINE 2 2026 cruise route.

Observations

CTD profiles from selected stations can be found in Annex 2. Results for temperature, salinity, oxygen, hydrogen sulphide, pH, alkalinity and nutrient parameters from the standard sampling depths at selected stations can be found in Annex 3, with a comparison to average values measured in the same season since 2000 at the respective station. When referring to average values in the following section, the reference period is 2000-2025, using station specific measurements done in May and June.

Hydrography and nutrient concentrations

Gulf of Finland

The temperature at the sampling stations was generally around the average conditions, but a warmer surface water layer (8-9°C) down to 10-15 m, depending on station, was generally observed. Salinity in the surface water (down to ~20m) was generally below the average, but below 20 m generally above the average salinties observed at this time of the year. The oxygen conditions were poor. Oxygen concentrations dropped close to 0 ml/l at 60 m depth and anoxic conditions

generally occurred from 70 m and deeper. Hydrogen sulphide was generally observed at these depths.
Phophate levels in the surface water was close to the average values for this time of the year. Closer to the bottom, the phosphate concentration was well above the average values. Dissolved nitrogen parameters were depleted in the surface waters. Silicate concentrations were lower than the average values at this time of the year in the surface waters, but below 20 m the silicate concentrations were generally above the average.

Northern Baltic Proper

Temperature was close to the average observed at this time of the year. However elevated temperatures were observed at depths greater than 70 m at LL15 and LL17. Salinity showed different patterns at the sampling stations. At LL15, the halocline was situated shallower than on average, between 50-70 m, whereas on LL19 the halocline was located deeper than on avergage, between 70-90 m. At LL17, the salinity was very close to the average values recorded at this time of the year. Anoxic conditions were observed from 70 m and deeper at LL15 and LL17, and from 90 m and deeper at LL19. At these depths, the hydrogen sulphide concentrations were generally well above the average concentrations.
Elevated phosphate levels were observed throughout the water column. In surface waters concentrations were between 0.2 and 0.3 µmol/l. Dissolved nitrogen parameters were depleted in the surface waters but elevated ammonium concentrations were observed below the halocline. Silicate concetrations were well above the average values at this time of the year.

Åland Sea

Temperature was generally slightly above the average observed at this time of the year throughout the water column. Salinities higher than on average were observed throughout the water column at F69 and from 40 m and deeper at F64. Oxygen conditions were well below the average concentrations observed at this time of the year, reaching down to 2 ml/l in the bottom water at F69. Elevated phosphate levels were observed throughout the water column. At F64, surface water concentrations were above 0.3 µmol/l. Dissolved nitrogen parameters were depleted in the surface waters. Silicate concetrations were well above the average values at this time of the year.

Bothnian Sea

The temperature was generally above the average observed at this time of the year throughout the water column. Salinity was generally above the average throughout the water column and this was more pronounced at greater depths. Oxygen concentrations were lower than on average. At US5b, oxygen concentrations were below 5 ml/l at depths greater than 90 m.
Dissolved nitrogen was depleted in surface waters. Phosphate concentrations were close to detection limit in the surface water, but slightly elevated compared to average concentrations at greater depths. Silicate concentrations were above the average throughout the water column.

The Quark

Temperature was around the average observed at this time of the year, reaching 8°C in the surface. Elevated salinities were observed at depths over 10 m. Oxygen concentrations were lower than the average concentrations observed at this time of the year, but still around 8 ml/l throughout the water column.
Dissolved nitrogen was not depleted in surface waters, but close to the average concentrations observed at this time of the year. Phosphate concentrations in the surface water were below the detection limit. Silicate concentrations were above the average throughout the water column.

Bothnian Bay

The sea water was warmer than on average at this time of the year. Especially in the northern parts of Bothnian Bay at stations F2, CVI and CV the temperature at depths greater than 50 m was clearly above the average. The surface water was generally fresher than on average at this time of the year, but elevated salinities were observed at depths greater than 40-50 m. Oxygen concentrations

were lower than the average concentrations, but still generally above 7 ml/l throughout the water column.
Dissolved nitrogen parameters were generally below the average concentrations in the surface waters, but close to or above the average at depths greater than 20 m. Phosphate concentrations in the surface water were below the detection limit. Silicate concentrations were generally above the average throughout the water column.

Archipelago Sea

Temperature was above the average observed at this time of the year, reaching 12°C in the surface and 5-6° close to the bottom (80 m) at IU5 and IU7. Fresher water than on average was observed throughout the water column in the middle and northern parts of the Archipelago Sea. At IU7, elevated salinity compared to the average was observed in deeper waters (>40 m), reaching 8.5 in the bottom water. Oxygen concentrations well below the average were observed throughout the water column at every sampling station in the Archipelago Sea. At IU7, only 1.8 ml/l was measured at 80 m depth, which is the lowest oxygen concentration observed at this station during this time of the year.
Dissolved nitrogen was depleted in surface waters. Phosphate concentrations were generally close to the average values, but at IU7 clearly higher concentrations than on averge were observed at depths more than 40 m, reaching 2.5 µmol/l in the bottom water. Silicate concentrations were above the average throughout the water column in the northern parts of the Archipelago Sea. At IU7, elevated silicate concentrations were observed at depths greater than 30 m.

Other work

Zoobenthos and zooplankton samples were preserved on the cruise and the analyses of these will be carried out in the laboratory after the cruise. A total of eight zoobenthos sampling stations were cut out of the plan. All zooplankton stations were visited, but at US5b no samples were taken due to strong winds and difficulties to keep the ship at the sampling point without propeller propulsion. All microplastics sampling stations were sampled, but no Manta-net samples were collected during the first leg of the cruise (i.e. in the Gulf of Finland). Microlitter samples were frozen and transported back to the laboratory for further analyses. The water and sediment samples for analyses of radioactive substances were successfully taken and will be analysed at a later stage by the Radiation and Nuclear Safety Authority (STUK). The nanoplastics samples were successfully sampled and samples will be analysed by Turku University at a later stage. All but one (BO3H, to which no contact with the acoustic release could be formed) hydrophones were retrieved and the hydrophone deployment close to Tahkoluoto was successfully done. The benthic lander was retrieved and a preliminary check confirmed that all sensors worked and had collected data. Only one sediment sample from the vibrohammer coring was retrieved, as the corer was lost on the second coring station. After loosing the vibrohammer corer, five planned coring stations had to be canceled. The lost ADCP close to Utö was found and retrieved, whereas the wave buouy anchor could not be found.

Conclusions

As a result of having only one field technician onboard during the cruise, which restricted sampling, the monitoring plan could not be carried out in full. In total 14 monitoring stations had to be cut out of the cruise plan and in addition three installations and one coring site (4 coring stations) had to be cut from the original plan. Nevertheless, the work went smoothly on the stations that were visited. Near-bottom conditions in the Gulf of Finland and the Northern Baltic Proper showed no improvement, with anoxic bottoms and only sporadic presence of benthic macrofauna occurring at depths greater than 60 m. Oxygen concentrations had also decreased in the southern parts of the Åland (F69) and Archipelago Seas, deep areas in the Bothnian Sea (US5b) and throughout the Bothnian Bay, although conditions were still oxic. Based on preliminary observations of benthic macrofauna, the benthic community at F69 and US5b were degraded compared to what has earlier

been observed at these locations. Elevated salinity, especially in deeper waters, in the Gulf of Bothnia may indicate an increased inflow of water from the Baltic Proper. Combined with the freshening of surface water in the Bothnian Bay, this can lead to a stronger vertical stratification of the water column. Worth noting is also the warming of the water column in the Gulf of Bothnia and especially in the deeper waters of the Bothnian Bay.

Finnish Environment Institute
Agnes Sjöbergin katu 2
FI-00790 Helsinki
Finland
http://www.syke.fi/en

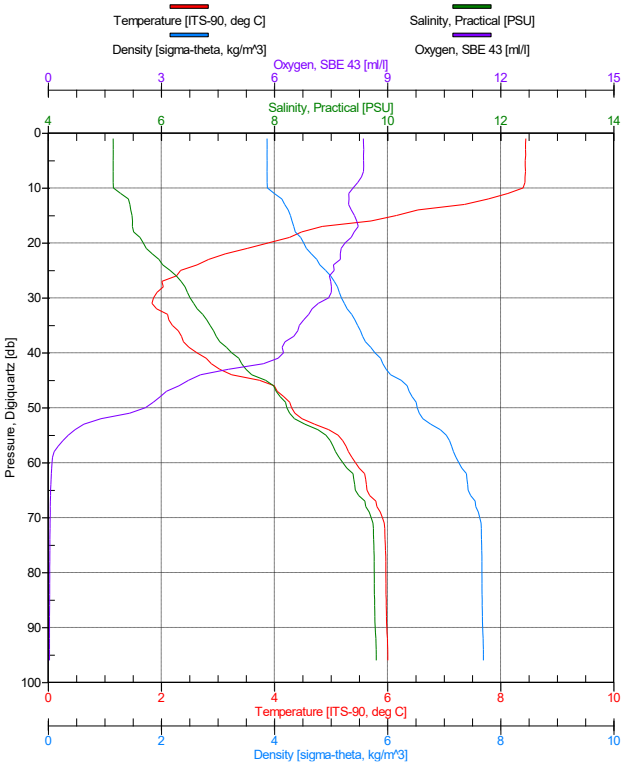
Finnish Meteorological Institute
Erik Palménin aukio 1
P.O. Box 503
FI-00101 Helsinki
Finland
http://en.ilmatieteenlaitos.fi/

Annex 1. List of sampled stations of the cruise.

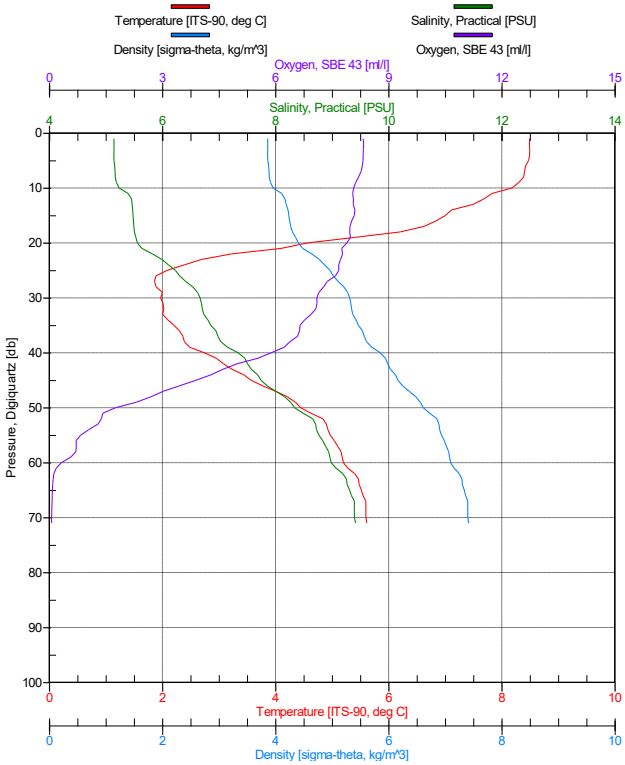
INDEX	STATION	latitude	longitude	depth	DATE	time	ctd	pH	ox	nu	zo	be	chl	secchi
Tammasaarenlaituri	Tammasaarenlaitu	60.13242	24.90448		2026-05-26	07.13								
2026010155	LL7D	59.84648	24.83787	101	2026-05-26	09.24	x	x	x	x	x		x	x
2026010156	LL7S	59.85852	24.83845	77	2026-05-26	11.22	x	x	x	x		x		
2026010157	LL6A	59.91682	25.03015	72	2026-05-26	13.48	x	x	x	x		x	x	x
2026010158	LL5	59.91685	25.59702	69	2026-05-26	16.47	x	x	x	x		x	x	x
2026010159	XV1	60.24997	27.24693	65	2026-05-27	05.25	x	x	x	x	x	x	x	x
2026010160	BIAS19B	60.24862	27.24723	63	2026-05-27	07.32								
2026010161	LL3A	60.06715	26.34668	69	2026-05-27	11.17	x	x	x	x	x	x	x	x
2026010162	GoF_AK_1C_25	60.06628	25.42905	51	2026-05-27	16.18								
2026010163	GF1	59.70498	24.68220	84	2026-05-28	05.36	x	x	x	x	x	x	x	x
2026010164	LL9	59.70018	24.03003	65	2026-05-28	09.11	x	x	x	x	x	x	x	x
2026010165	JML	59.58183	23.62678	80	2026-05-28	12.15	x	x	x	x		x	x	x
2026010166	F62	59.33348	23.26348	96	2026-05-28	15.36	x	x	x	x			x	x
2026010167	LL12	59.48350	22.89687	82	2026-05-29	05.22	x	x	x	x	x	x	x	x
2026010168	LL12H	59.48555	22.89633	81	2026-05-29	06.56								
2026010169	LL11	59.58352	23.29682	67	2026-05-29	09.00	x	x	x	x		x	x	x
2026010170	AMN	59.69050	23.25712	55	2026-05-29	10.51	x	x	x	x		x	x	x
2026010171	LANGDEN	59.77683	23.26283	57	2026-05-29	12.35	x	x	x	x	x	x	x	x
Hanko (Hango)	Hanko (Hango)	59.82193	22.94720		2026-05-29	15.23								
2026010172	LL15	59.18332	21.74682	132	2026-05-30	05.19	x	x	x	x		x	x	x
2026010173	BIAS15	59.24963	21.01618	93	2026-05-30	08.47								
2026010174	LL17	59.03335	21.07957	173	2026-05-30	11.13	x	x	x	x	x	x	x	x
2026010175	LL19	58.88068	20.31083	167	2026-05-30	15.52	x	x	x	x		x	x	x
2026010176	F69	59.78307	19.93003	191	2026-05-31	05.23	x	x	x	x		x	x	x
2026010177	F64	60.18898	19.14245	287	2026-05-31	10.53	x	x	x	x	x	x	x	x
2026010178	SR5	61.08333	19.57963	125	2026-06-01	05.21	x	x	x	x	x	x	x	
2026010179	SR5_HF	61.08205	19.57928	124	2026-06-01	07.44								
2026010180	F26	61.98352	20.06302	138	2026-06-01	14.11	x	x	x	x		x	x	x
2026010181	F16	63.51687	21.06283	47	2026-06-02	05.16	x	x	x	x	x	x	x	x
2026010182	BO3	64.30203	22.34315	110	2026-06-02	12.27	x	x	x	x	x	x	x	x
2026010183	BO3H	64.28080	22.37645	108	2026-06-02	15.26								
2026010184	AALTO_KEMI	65.48882	24.34715	29	2026-06-03	05.01								
2026010185	F2	65.38367	23.46273	87	2026-06-03	08.56	x	x	x	x	x		x	x
2026010186	CVI	65.23367	23.56282	69	2026-06-03	11.16	x	x	x	x		x	x	x
2026010187	CV	65.00038	23.24642	86	2026-06-03	15.21	x	x	x	x		x	x	x
2026010188	AALTO_PM	64.68385	23.23912	82	2026-06-04	05.00								
2026010189	BIAS11	64.73408	23.23093	65	2026-06-04	05.57								
2026010190	Ebba_S2	64.62007	23.68733	48	2026-06-04	07.44								
2026010191	Ebba_S1	64.61208	23.65623	43	2026-06-04	10.19								
2026010192	RR7	64.73365	23.81288	39	2026-06-04	13.58	x	x	x	x			x	x
2026010193	RR6	64.80030	23.47945	86	2026-06-04	15.46	x	x	x	x		x	x	x
2026010194	F18	63.31435	20.27265	101	2026-06-05	05.20	x	x	x	x		x	x	x
2026010195	US5B	62.58613	19.96890	222	2026-06-05	11.56	x	x	x	x		x	x	x
2026010196	US6B	62.60023	20.26317	81	2026-06-05	15.12	x	x	x	x		x	x	x
2026010197	Tahkoluoto_HF	61.62407	21.34123	21	2026-06-06	05.01								
2026010198	BenthicLander	61.54895	21.36742	20	2026-06-06	06.12								
2026010199	SR8	61.12647	20.92993	47	2026-06-06	10.03	x	x	x	x			x	x
2026010200	SR7	61.08348	20.59650	78	2026-06-06	11.49	x	x	x	x		x	x	x
2026010201	IU1	60.76685	20.84670	33	2026-06-06	15.26	x	x	x	x			x	x
2026010202	IU3	60.33335	21.11333	51	2026-06-07	03.09	x	x	x	x		x	x	x
2026010203	IU5	60.05817	21.19830	89	2026-06-07	06.39	x	x	x	x		x	x	x
2026010204	IU7	59.81520	21.33667	92	2026-06-07	09.46	x	x	x	x	x		x	x
2026010205	UTO_ADCP_24	59.75492	21.35537	74	2026-06-07	11.42								
2026010206	AALTO_UTO	59.71617	21.36992	76	2026-06-07	15.23								
Tammasaarenlaituri	Tammasaarenlaitu	60.13242	24.90448		2026-06-08	05.30								
Parameters: ox = oxygen, nu = nutrients, zo = zooplankton, be = benthos, chl = chlorophyll a. Time is in UTC.														

Annex 2. CTD profiles, including oxygen profiles, from selected stations

LL7D 26.05.2026 09.10, a260155.cnv



LL7S 26.05.2026 11.15, a260156.cnv



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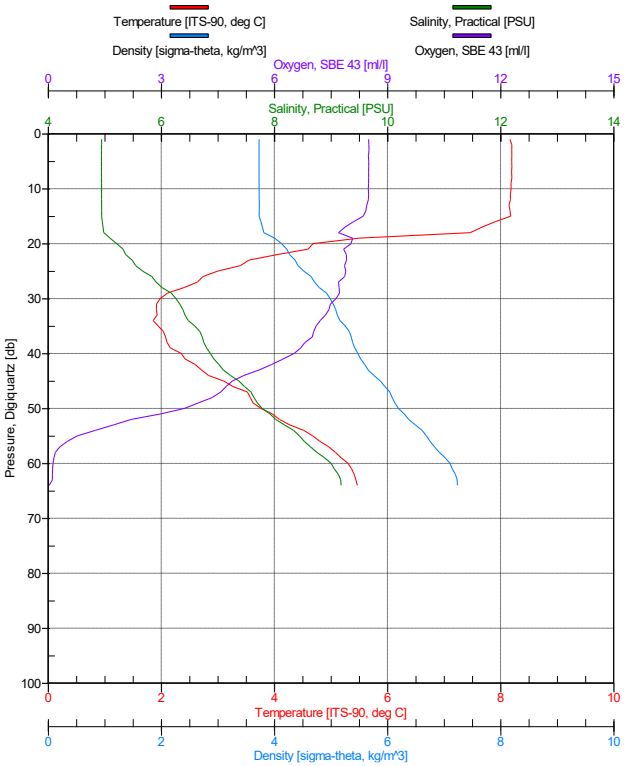
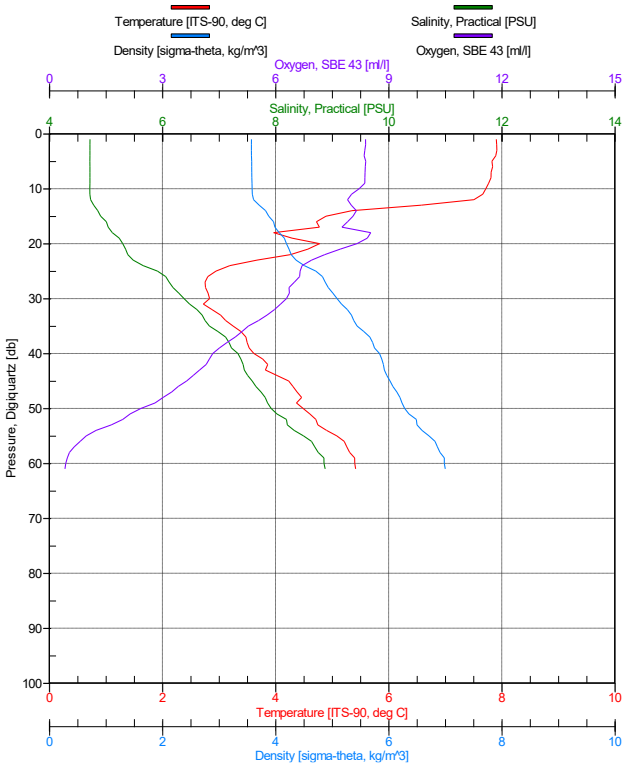
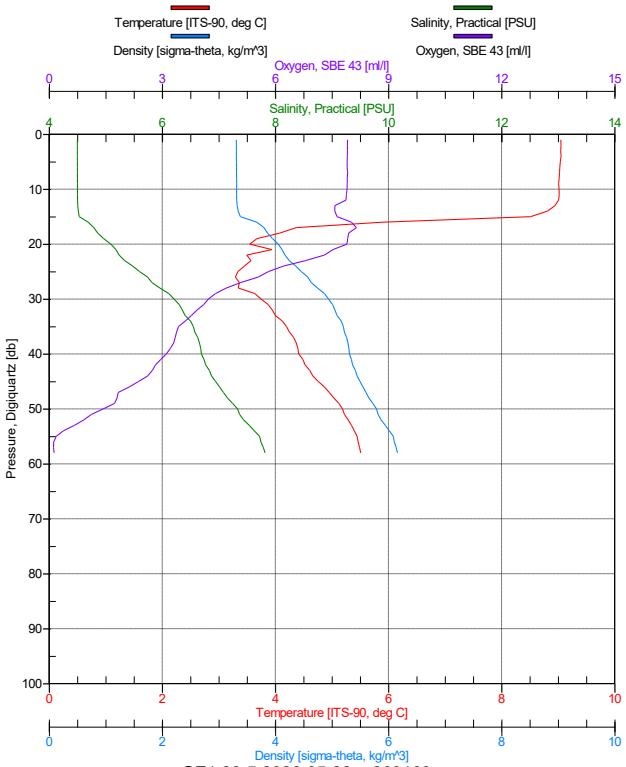


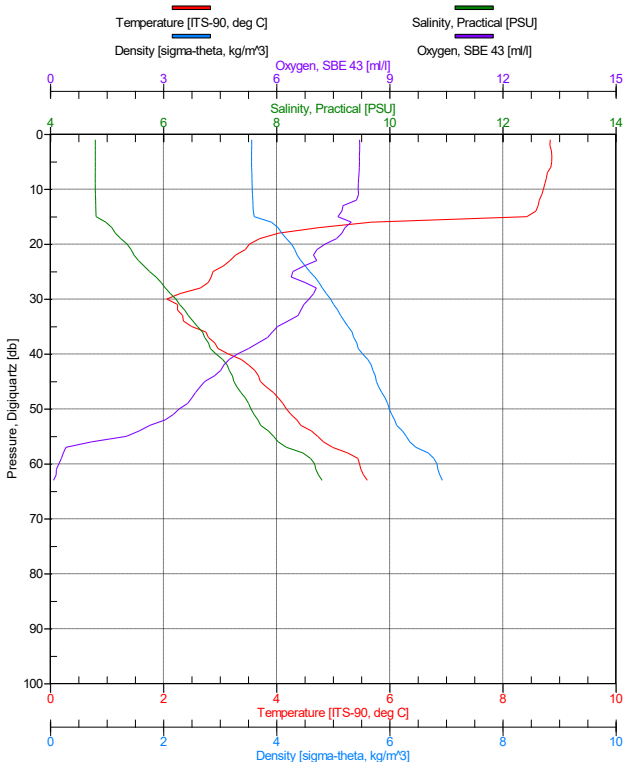
LL5 26.05.2026 16.37, a260158.cnv



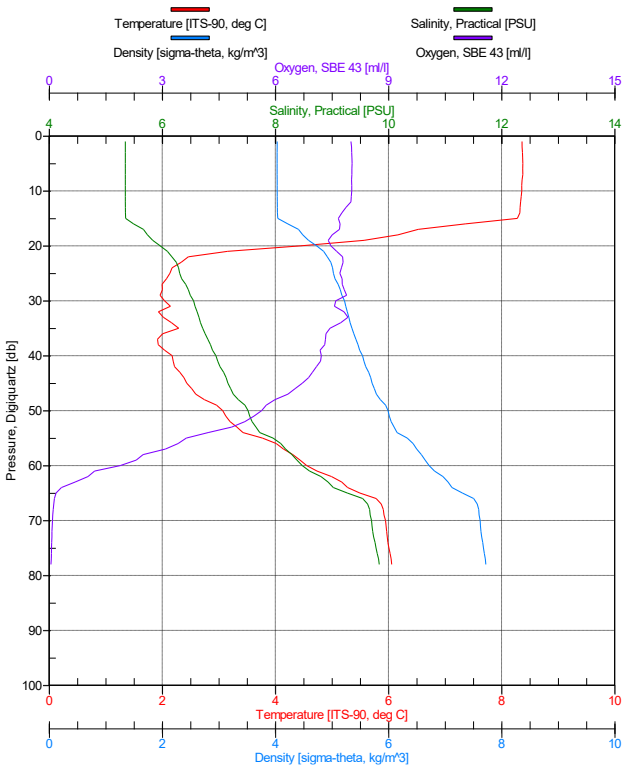
XV1 27.05.2026 05.06, a260159.cnv



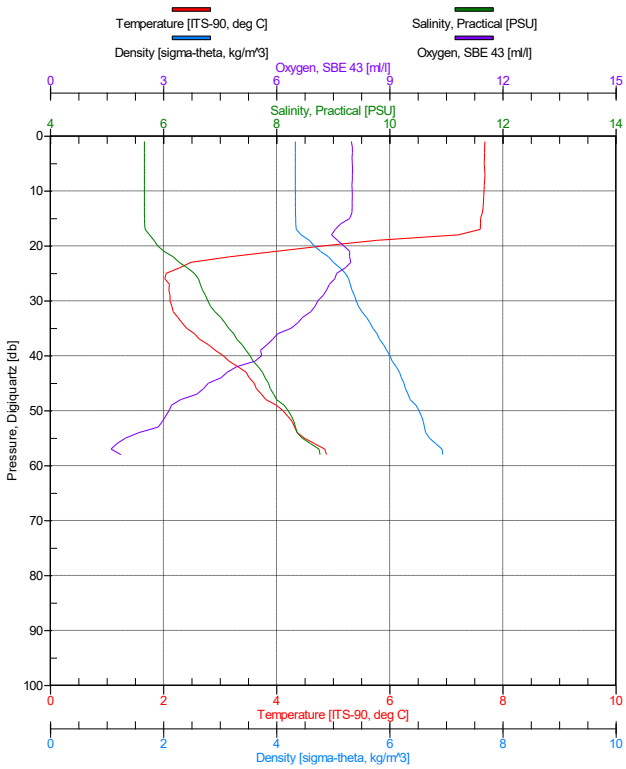
LL3A 27.5.2026 11:08, a260161.cnv

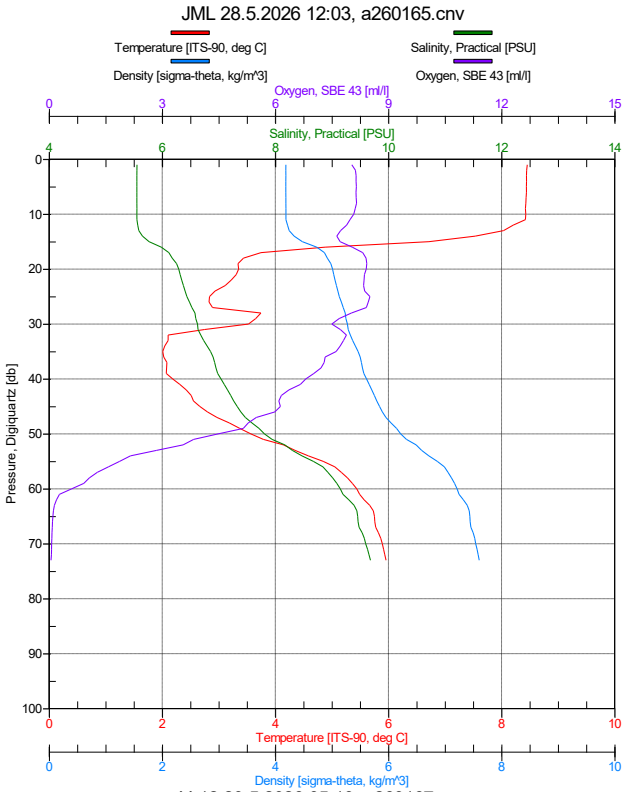


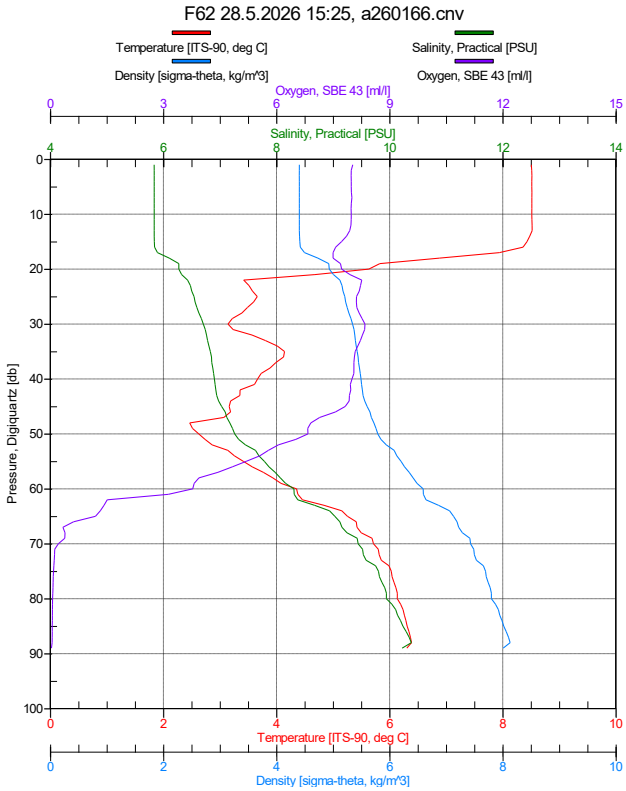
GF1 28.5.2026 05:22, a260163.cnv



LL9 28.5.2026 08:55, a260164.cnv




JML 28.5.2026 12:03, a260165.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Oxygen, SBE 43 [ml/l]
Pressure, Digiquartz [db]
Temperature [ITS-90, deg C]
Density [sigma-theta, kg/m^3]


F62 28.5.2026 15:25, a260166.cnv
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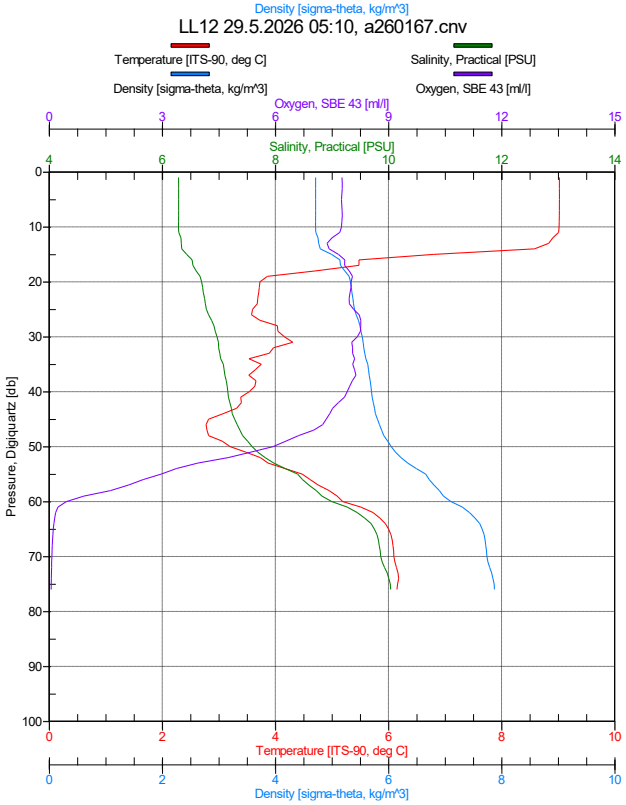
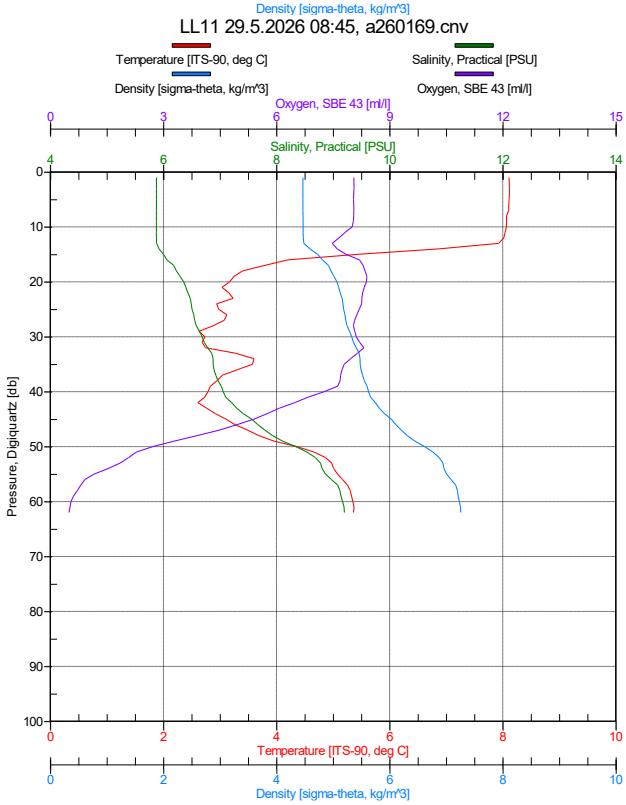
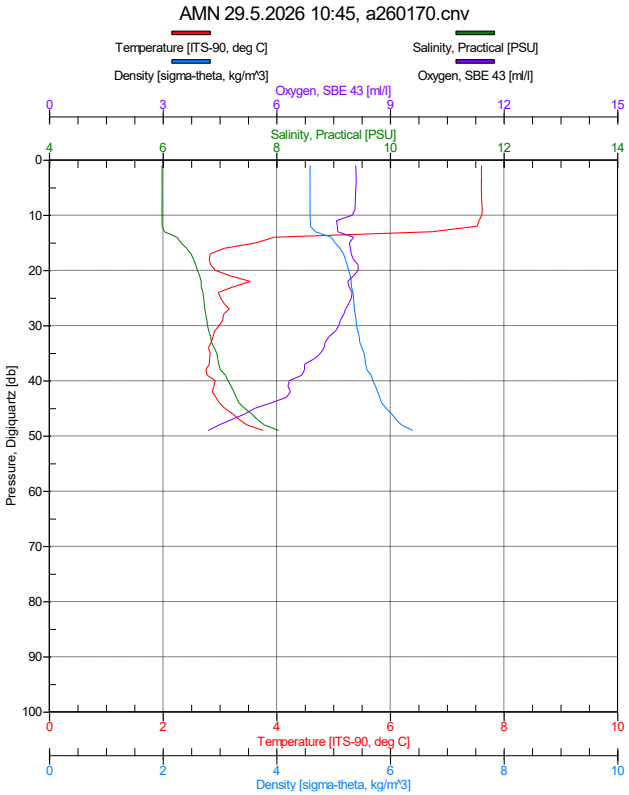
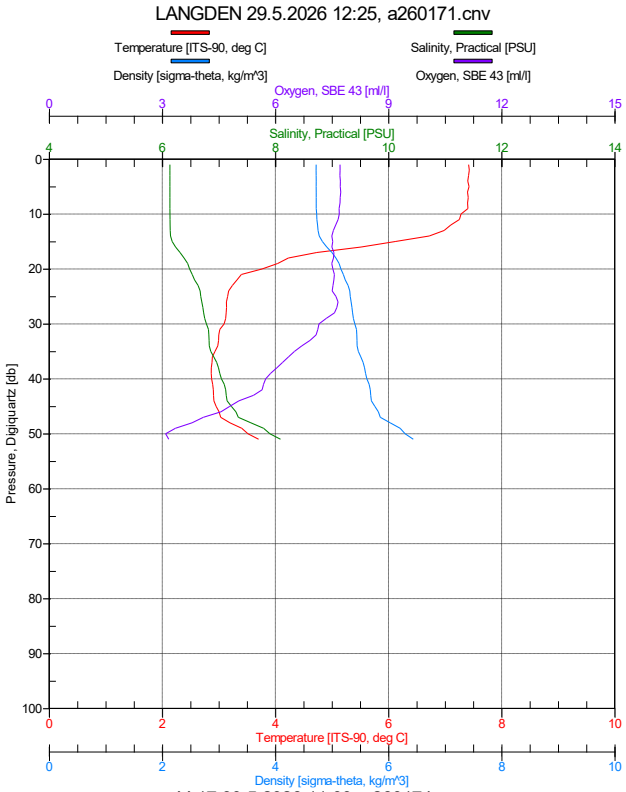
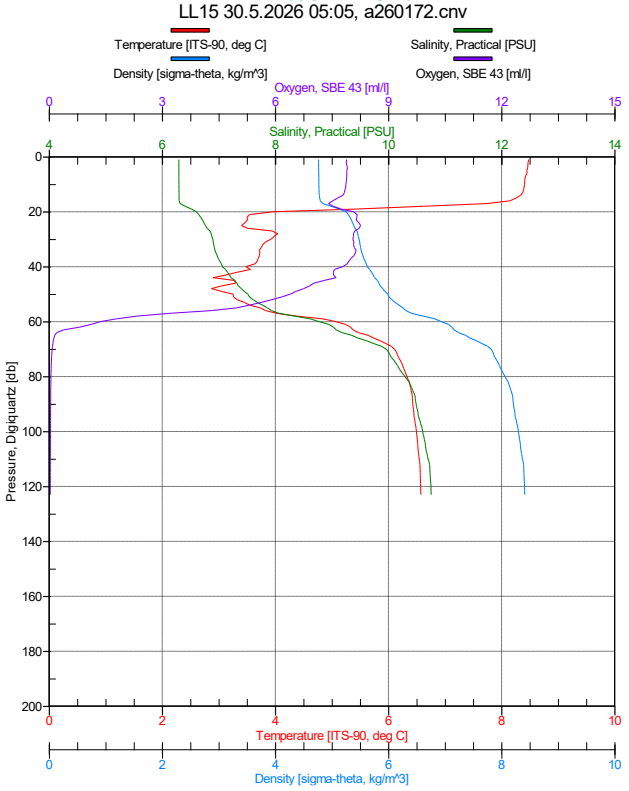
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Oxygen, SBE 43 [ml/l]
Pressure, Digiquartz [db]
Temperature [ITS-90, deg C]
Density [sigma-theta, kg/m^3]

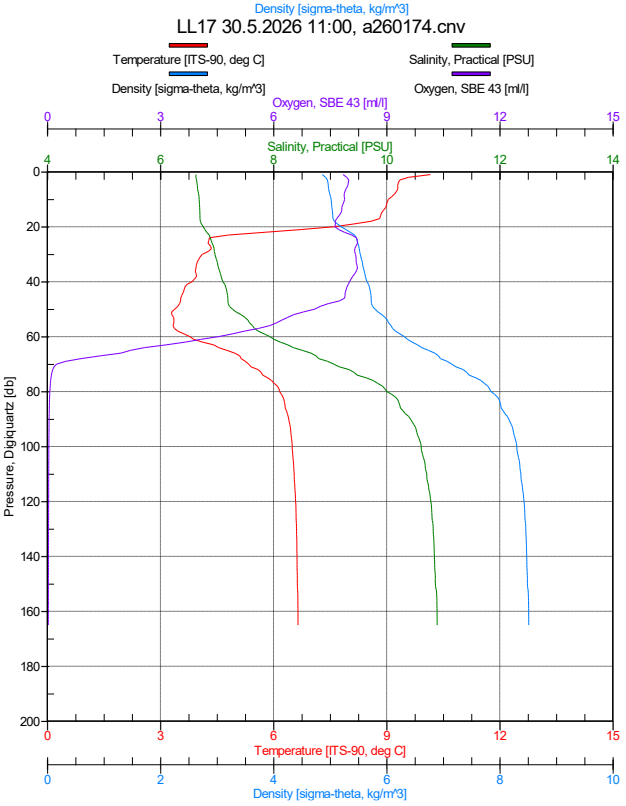

LL12 29.5.2026 05:10, a260167.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Oxygen, SBE 43 [ml/l]
Pressure, Digiquartz [db]
Temperature [ITS-90, deg C]
Density [sigma-theta, kg/m^3]

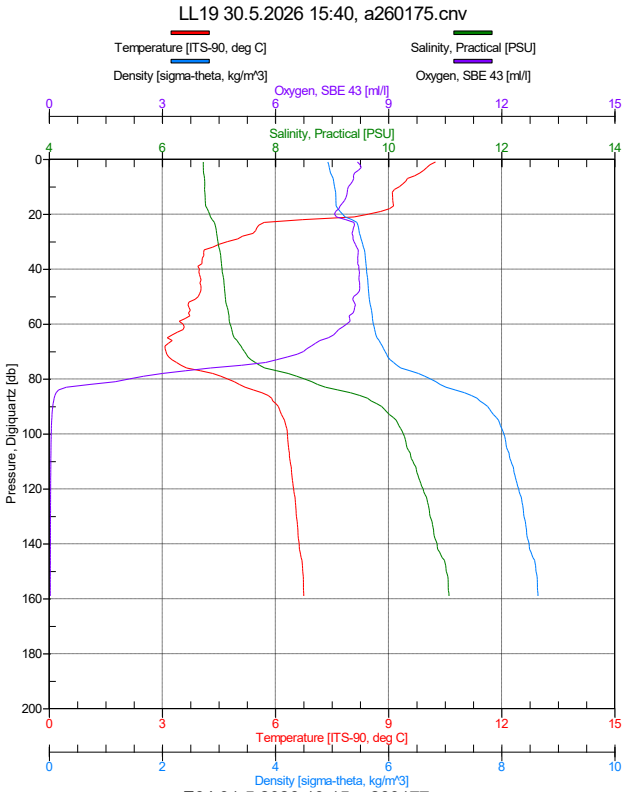

LL11 29.5.2026 08:45, a260169.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Oxygen, SBE 43 [ml/l]
Pressure, Digiquartz [db]
Temperature [ITS-90, deg C]
Density [sigma-theta, kg/m^3]

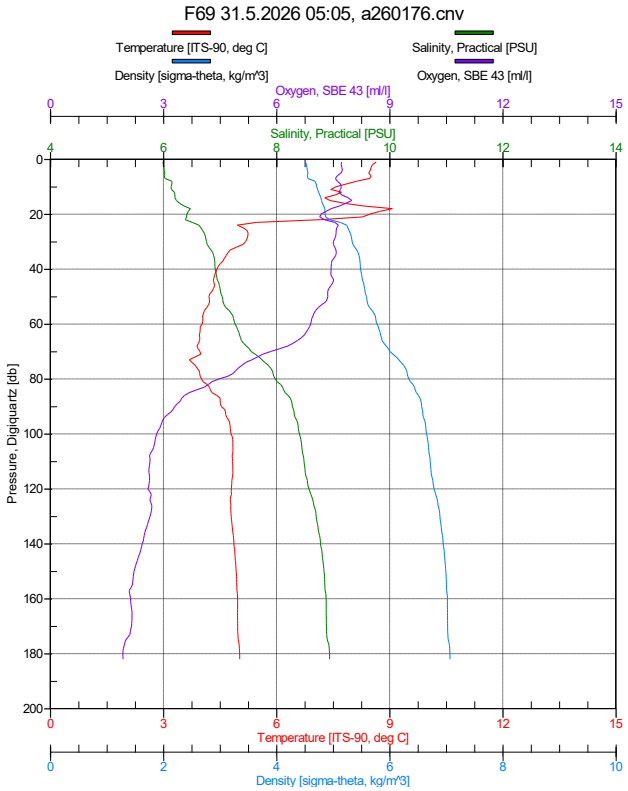

AMN 29.5.2026 10:45, a260170.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Oxygen, SBE 43 [ml/l]
Pressure, Digiquartz [db]
Temperature [ITS-90, deg C]
Density [sigma-theta, kg/m^3]

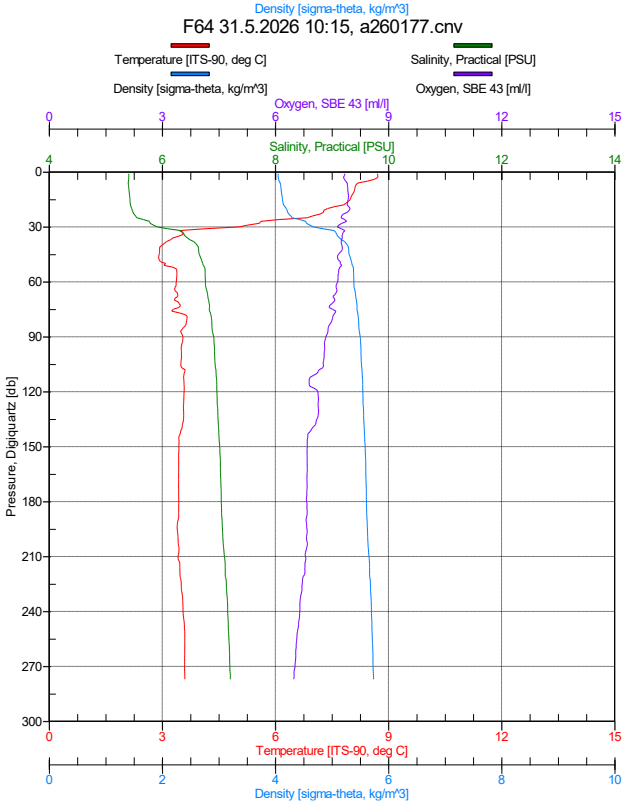

LANGDEN 29.5.2026 12:25, a260171.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Oxygen, SBE 43 [ml/l]
Pressure, Digiquartz [db]
Temperature [ITS-90, deg C]
Density [sigma-theta, kg/m^3]

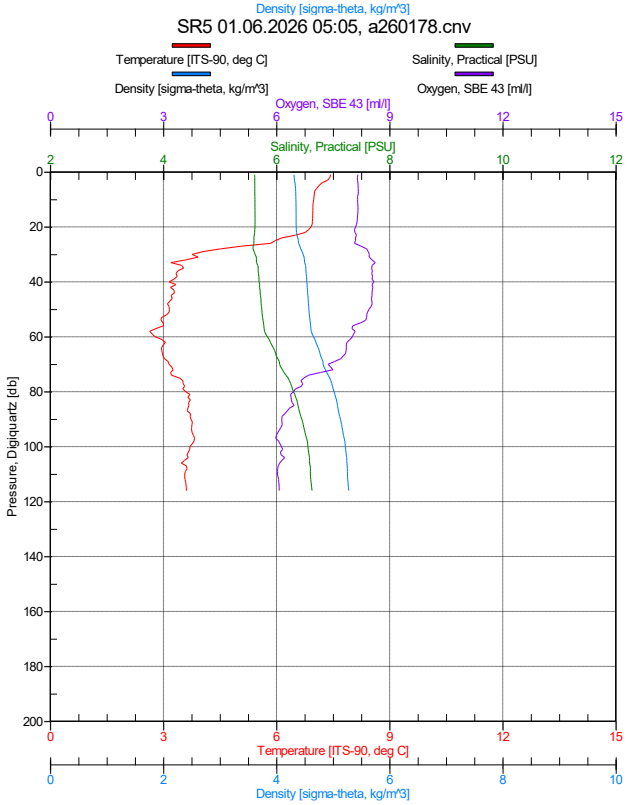

LL15 30.5.2026 05:05, a260172.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Oxygen, SBE 43 [ml/l]
Pressure, Digiquartz [db]
Temperature [ITS-90, deg C]
Density [sigma-theta, kg/m^3]


LL17 30.5.2026 11:00, a260174.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Oxygen, SBE 43 [ml/l]
Pressure, Digiquartz [db]
Temperature [ITS-90, deg C]
Density [sigma-theta, kg/m^3]

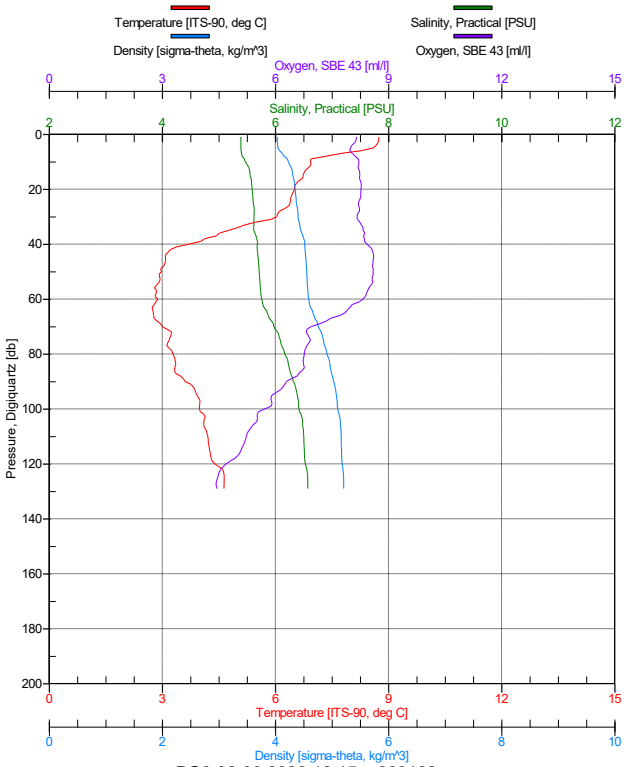

LL19 30.5.2026 15:40, a260175.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Oxygen, SBE 43 [ml/l]
Pressure, Digiquartz [db]


F69 31.5.2026 05:05, a260176.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Oxygen, SBE 43 [ml/l]
Pressure, Digiquartz [db]

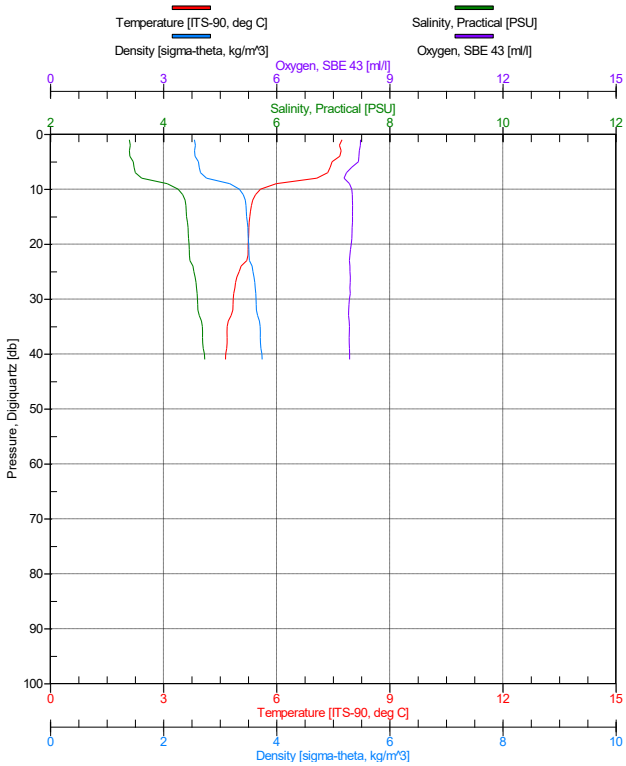

F64 31.5.2026 10:15, a260177.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Oxygen, SBE 43 [ml/l]
Pressure, Digiquartz [db]


SR5 01.06.2026 05:05, a260178.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Oxygen, SBE 43 [ml/l]
Pressure, Digiquartz [db]

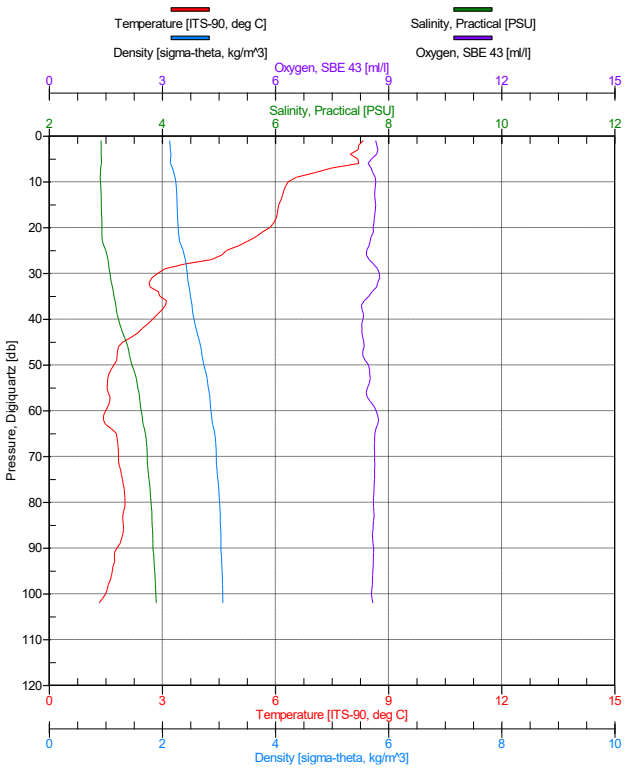
F26 01.06.2026 14:00, a260180.cnv



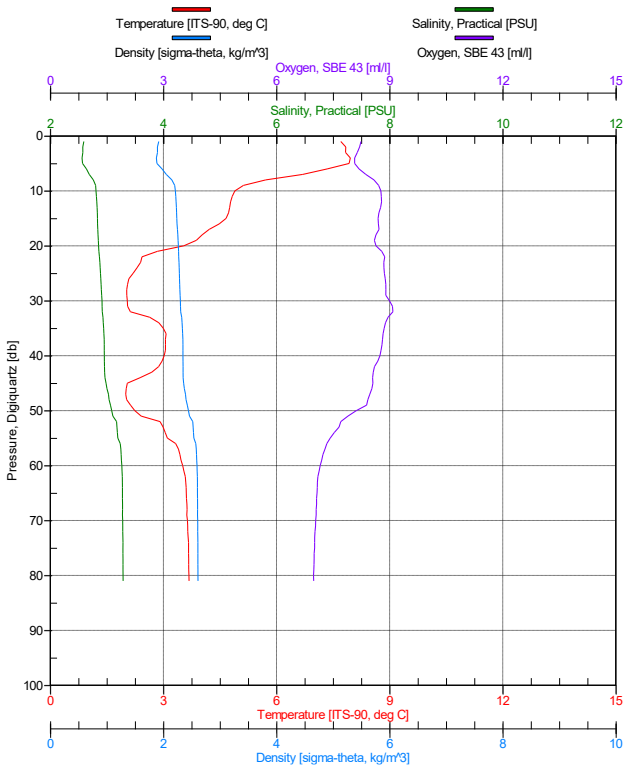
F16 02.06.2026 05:05, a260181.cnv

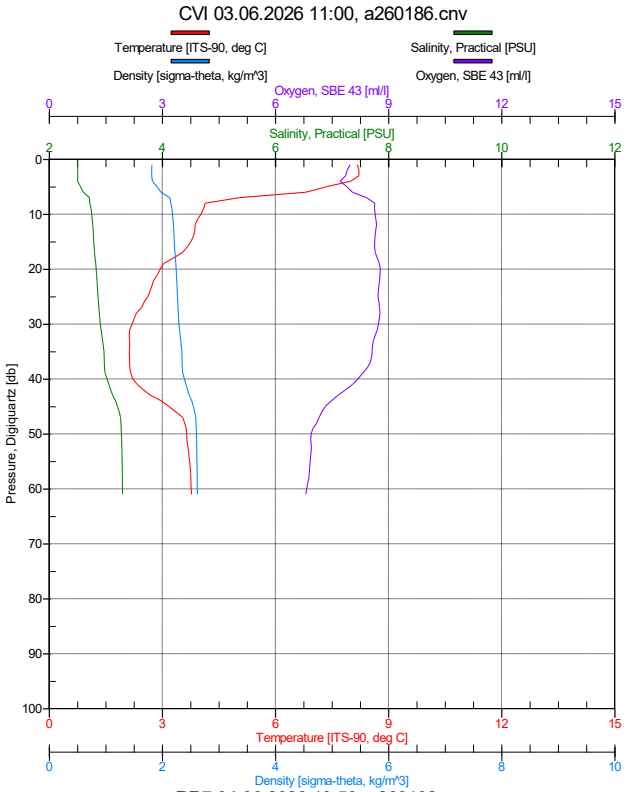


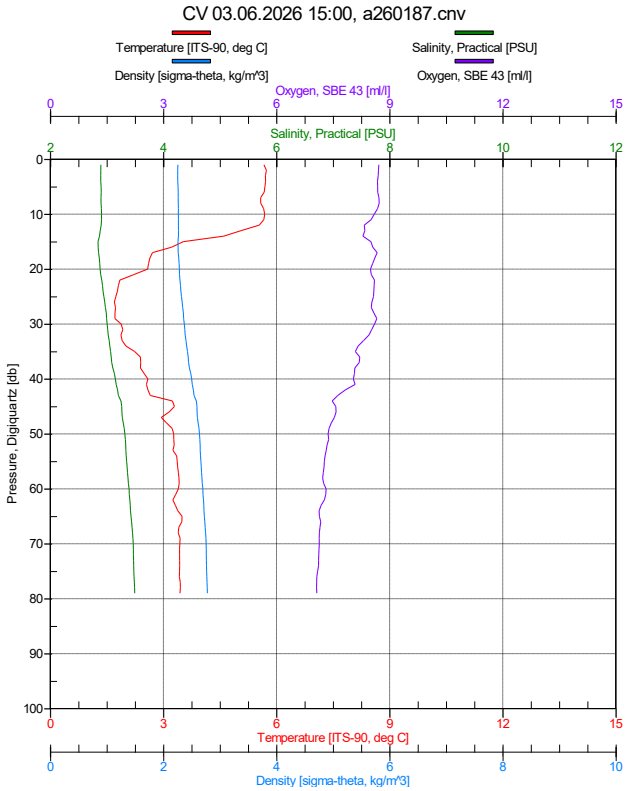
BO3 02.06.2026 12:15, a260182.cnv

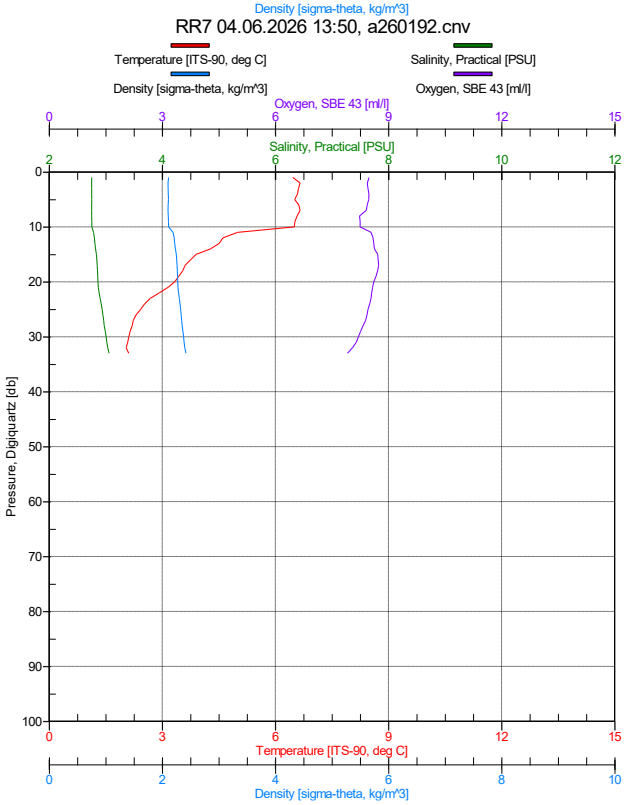


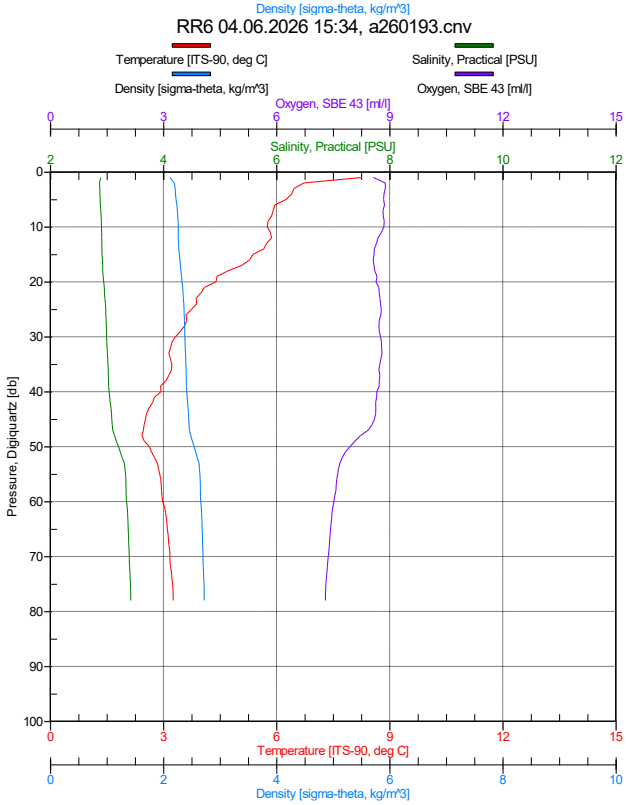
F2 03.06.2026 08:45, a260185.cnv



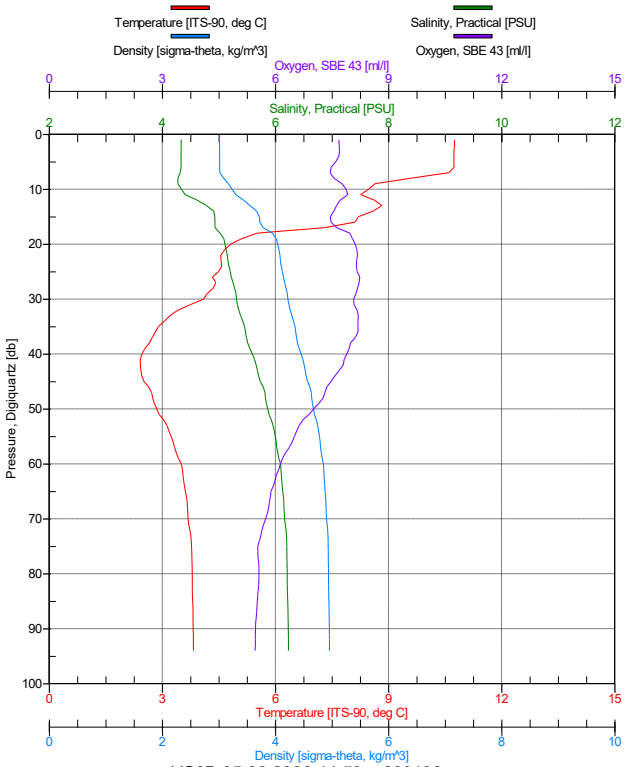

CVI 03.06.2026 11:00, a260186.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Oxygen, SBE 43 [ml/l]
Pressure, Digiquartz [db]
Temperature [ITS-90, deg C]
Density [sigma-theta, kg/m^3]


CV 03.06.2026 15:00, a260187.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Oxygen, SBE 43 [ml/l]
Pressure, Digiquartz [db]
Temperature [ITS-90, deg C]
Density [sigma-theta, kg/m^3]

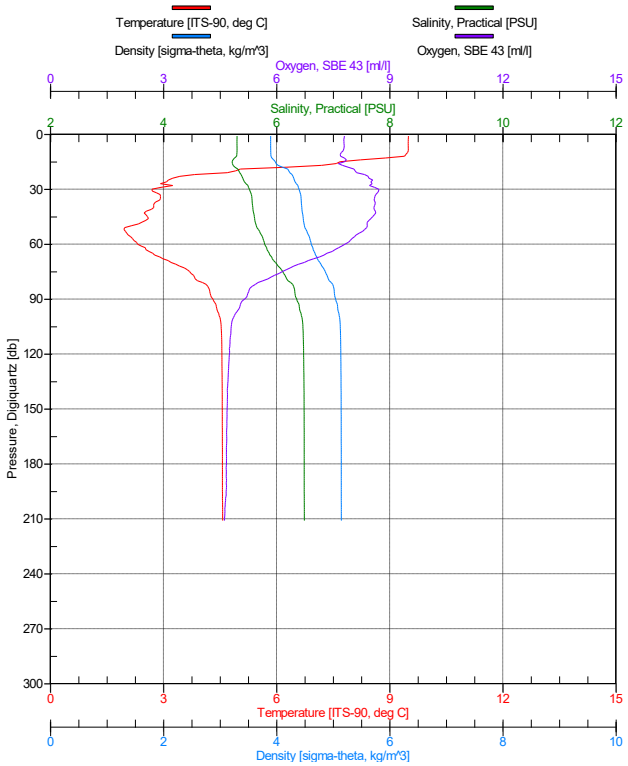

RR7 04.06.2026 13:50, a260192.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Oxygen, SBE 43 [ml/l]
Pressure, Digiquartz [db]
Temperature [ITS-90, deg C]
Density [sigma-theta, kg/m^3]


RR6 04.06.2026 15:34, a260193.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Oxygen, SBE 43 [ml/l]
Pressure, Digiquartz [db]
Temperature [ITS-90, deg C]
Density [sigma-theta, kg/m^3]

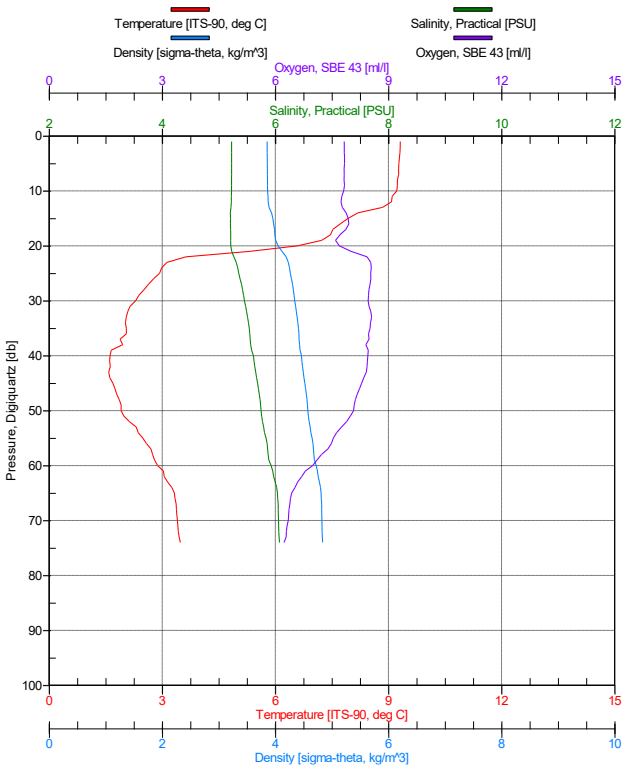
F18 05.06.2026 05:00, a260194.cnv



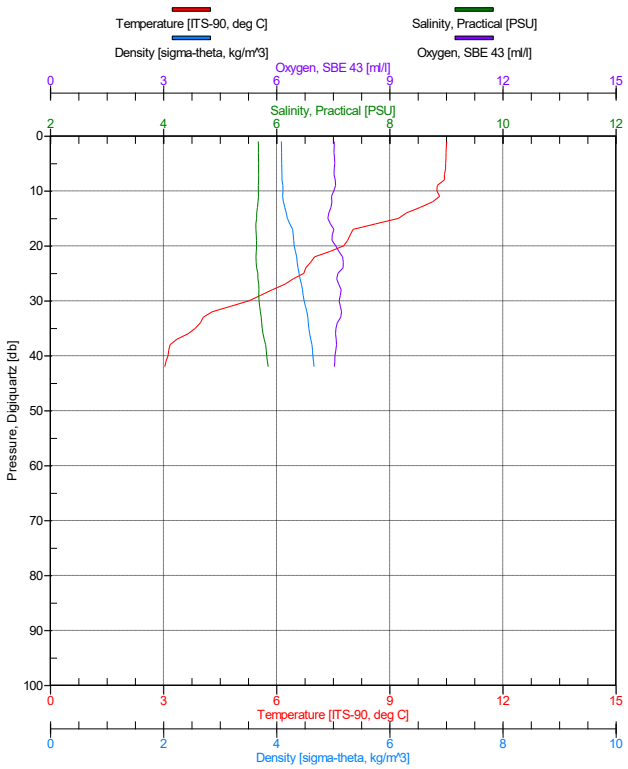
US5B 05.06.2026 11:36, a260195.cnv



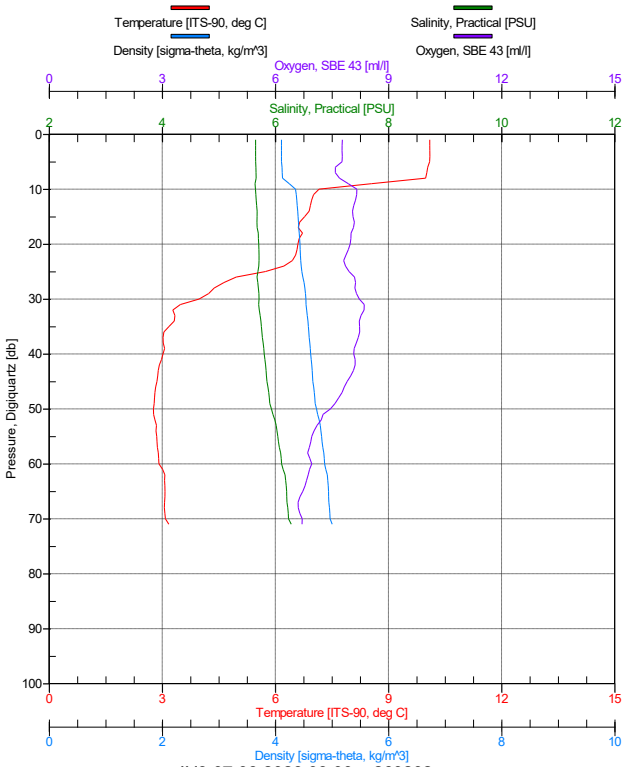
US6B 05.06.2026 14:50, a260196.cnv



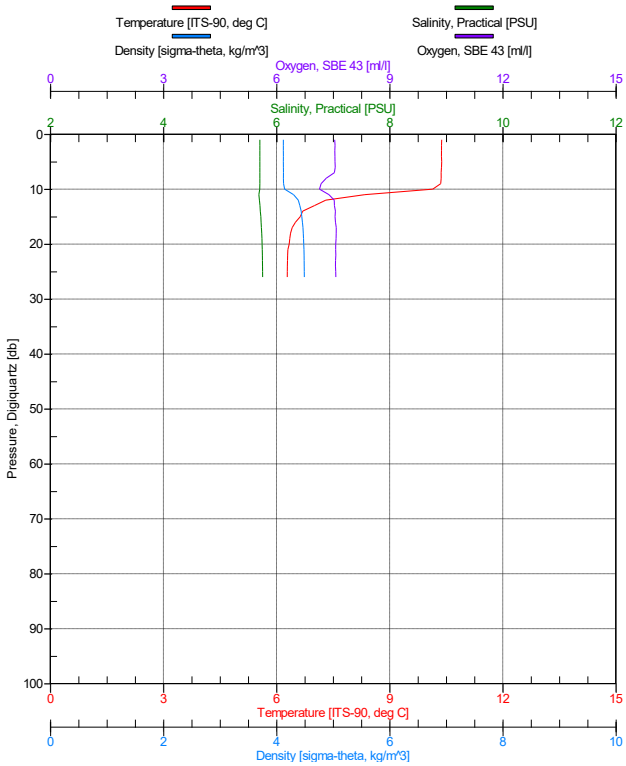
SR8 06.06.2026 09:50, a260199.cnv



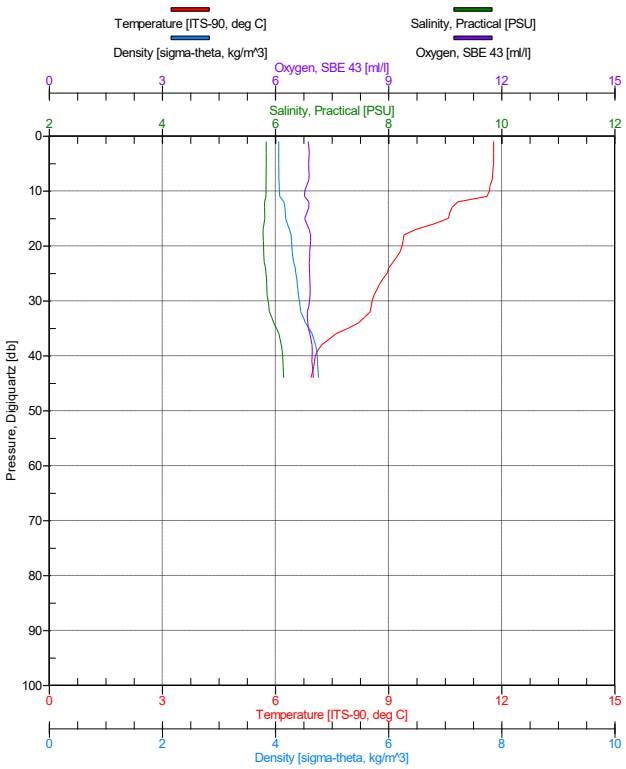
SR7 06.06.2026 11:40, a260200.cnv



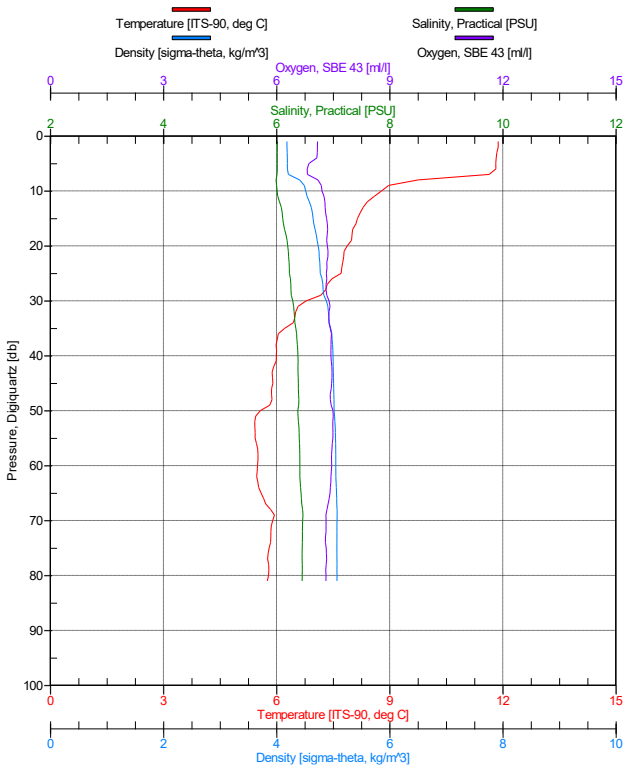
IU1 06.06.2026 15:20, a260201.cnv

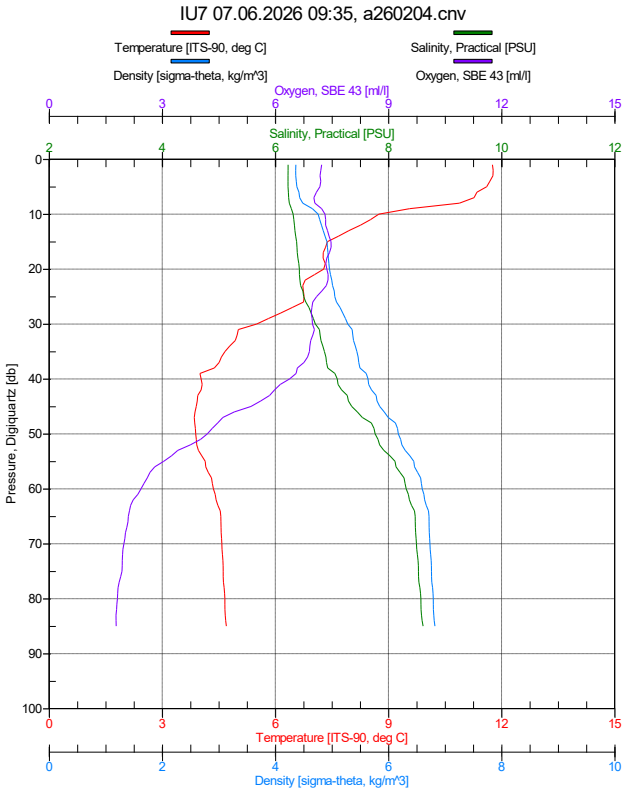


IU3 07.06.2026 03:00, a260202.cnv

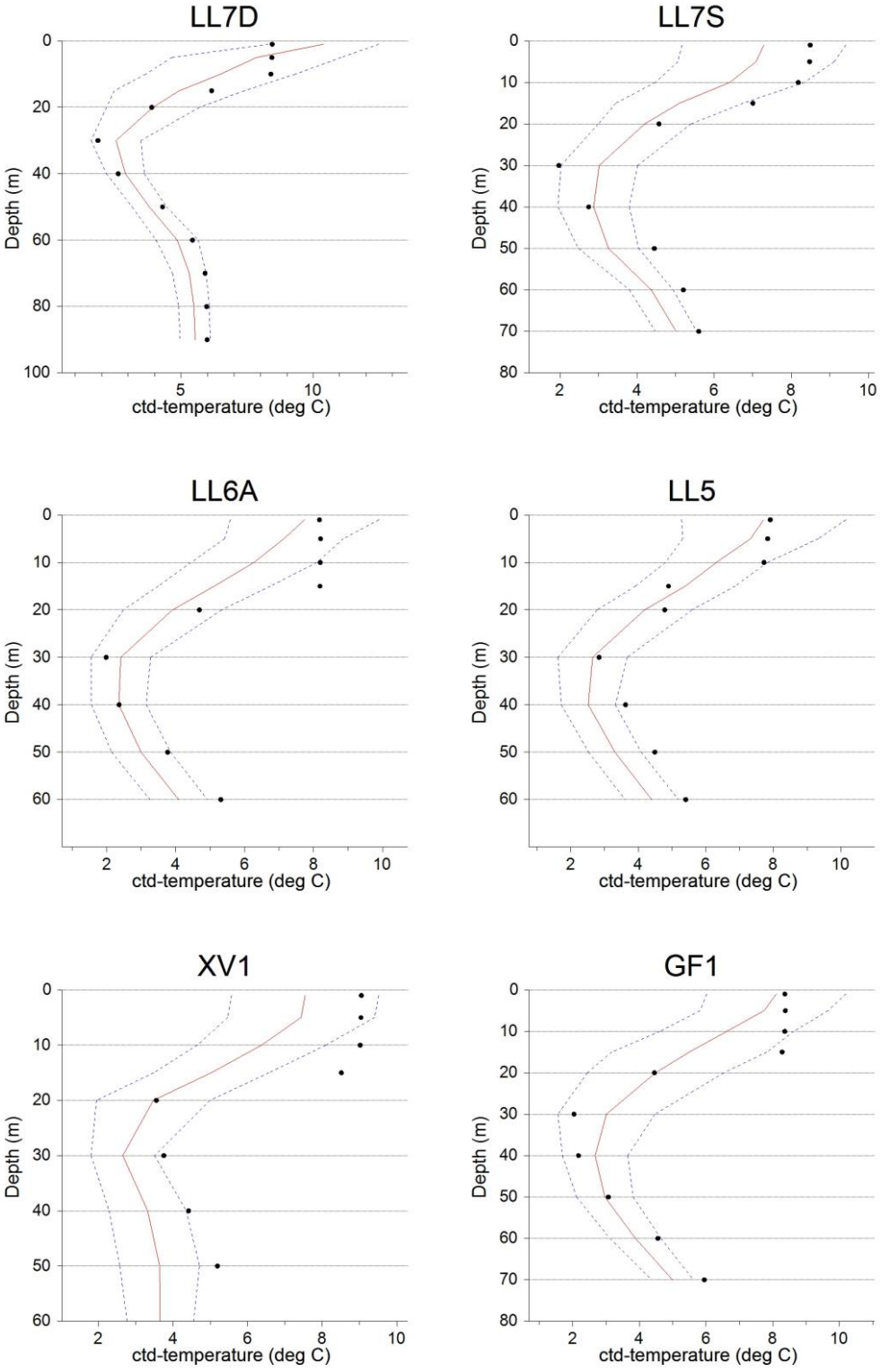


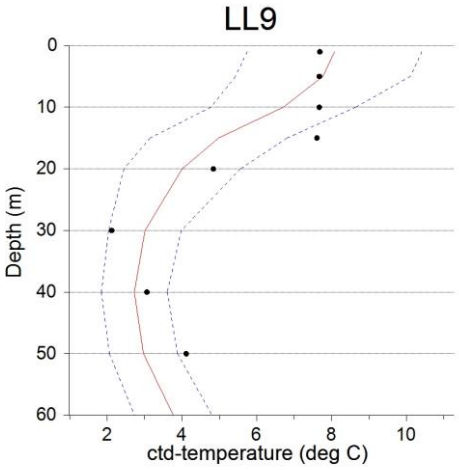
IU5 07.06.2026 06:25, a260203.cnv

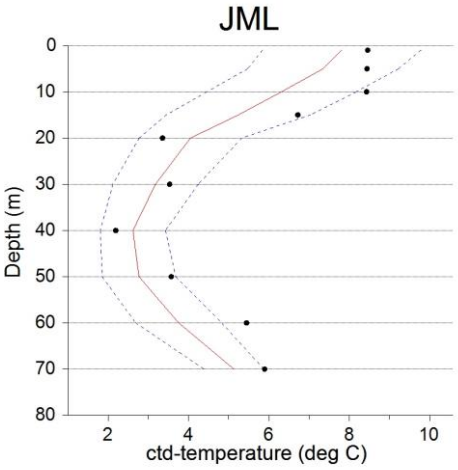


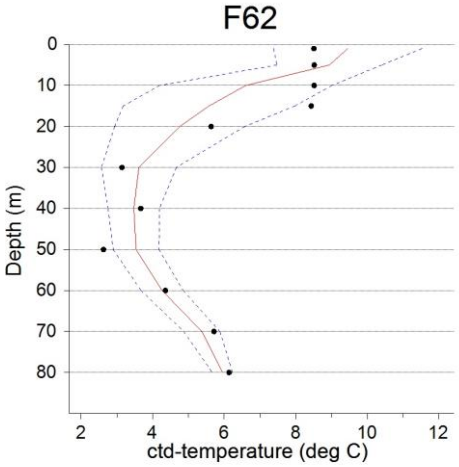

IU7 07.06.2026 09:35, a260204.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Oxygen, SBE 43 [ml/l]
Oxygen, SBE 43 [ml/l]
Salinity, Practical [PSU]
Pressure, Digiquartz [db]
Temperature [ITS-90, deg C]
Density [sigma-theta, kg/m^3]

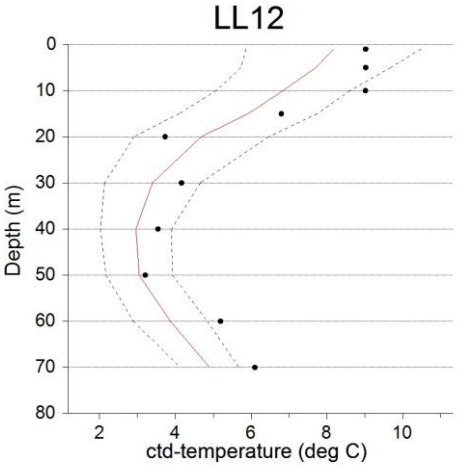
Annex 3. Selected variables at the stations LL7D, LL7S, LL6A, LL5, XV1, GF1, LL9, JML, F62, LL12, LL11, AMN, LANGDEN, LL15, LL17, LL19, F69, F64, SR5, F26, F16, BO3, F2, CVI, CV, RR7, RR6, F18, US5B, US6B, SR8, SR7, IU1, IU3, IU5 and IU7. Mean (red solid line) and standard deviation (blue dotted lines) represent the data collected at the same time of season since the year 2000.

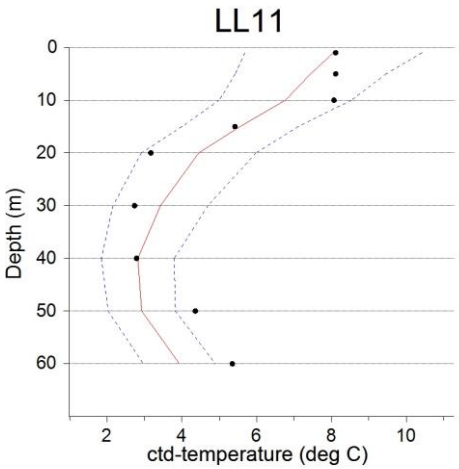


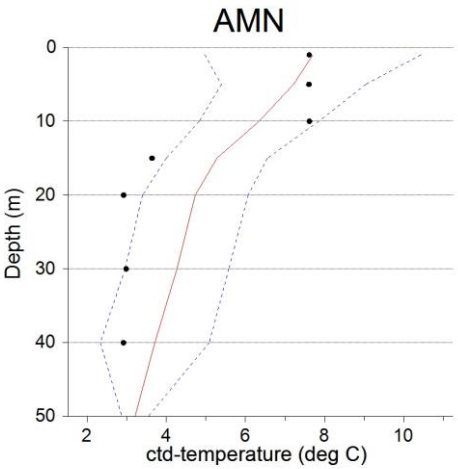

LL9
Depth (m)
ctd-temperature (deg C)

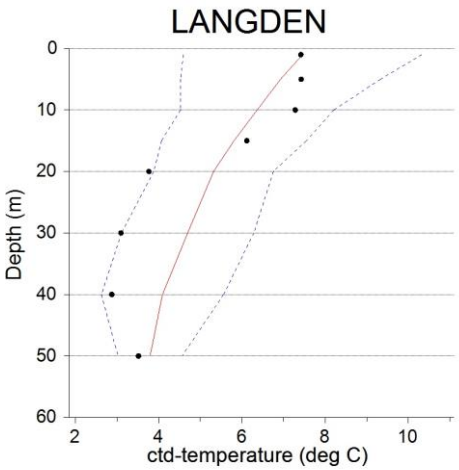

JML
Depth (m)
ctd-temperature (deg C)

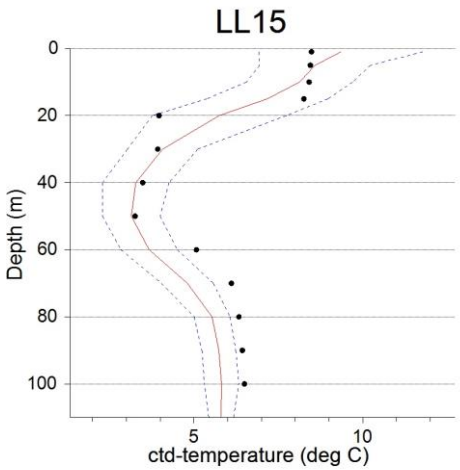

F62
Depth (m)
ctd-temperature (deg C)

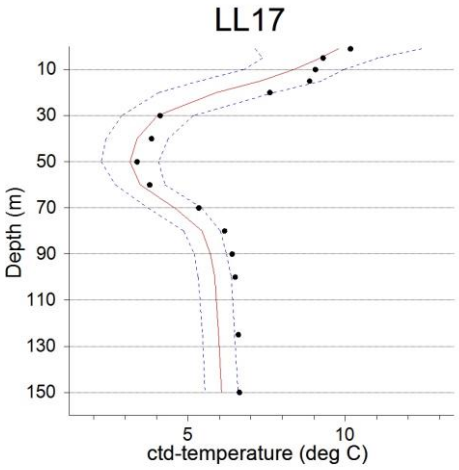

LL12
Depth (m)
ctd-temperature (deg C)

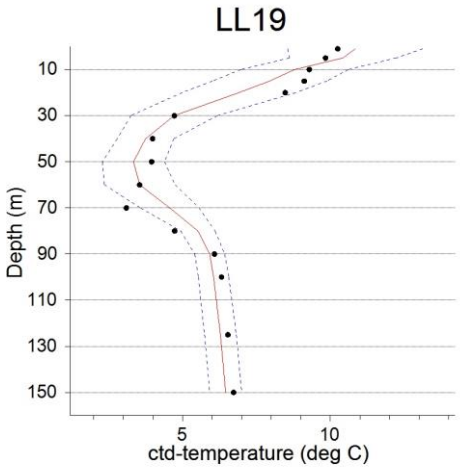

LL11
Depth (m)
ctd-temperature (deg C)

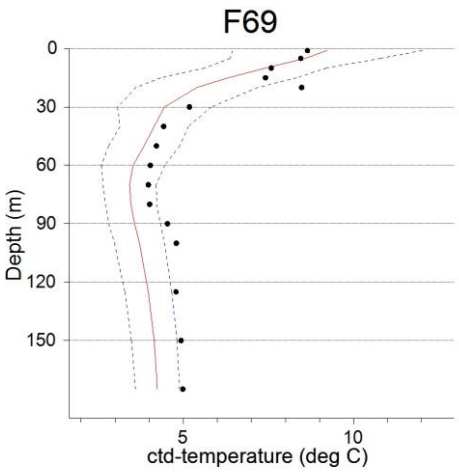

AMN
Depth (m)
ctd-temperature (deg C)

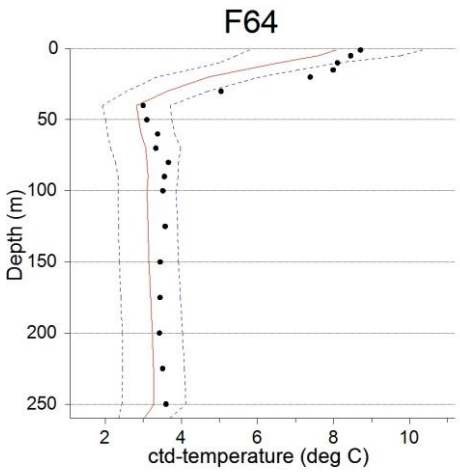

LANGDEN
Depth (m)
0
10
20
30
40
50
60
2
4
6
8
10
ctd-temperature (deg C)

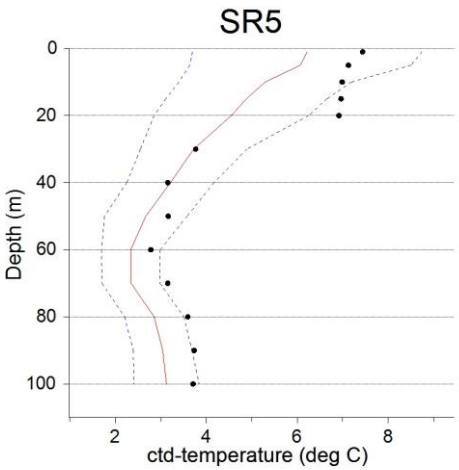

LL15
Depth (m)
0
20
40
60
80
100
5
10
ctd-temperature (deg C)

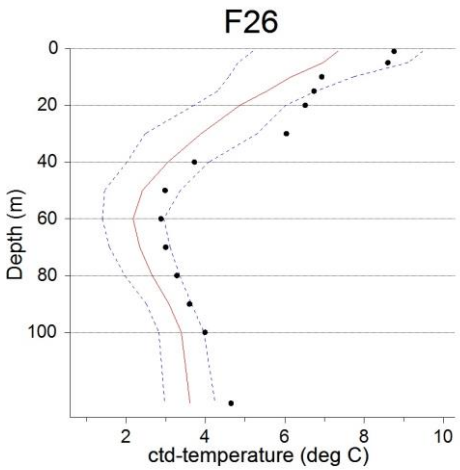

LL17
Depth (m)
10
30
50
70
90
110
130
150
5
10
ctd-temperature (deg C)

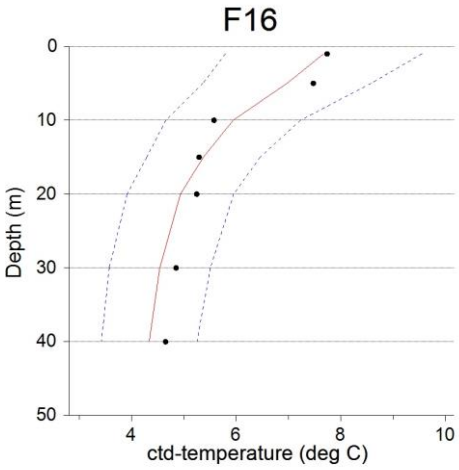

LL19
Depth (m)
10
30
50
70
90
110
130
150
5
10
ctd-temperature (deg C)

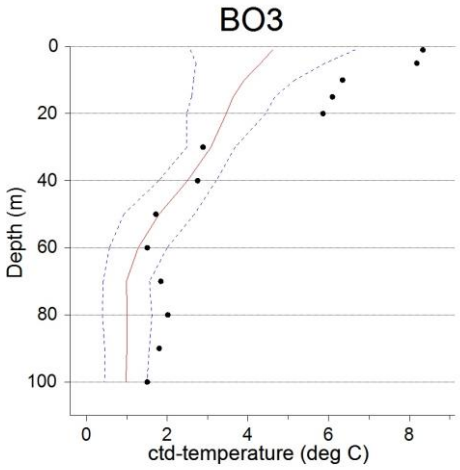

F69
Depth (m)
0
30
60
90
120
150
5
10
ctd-temperature (deg C)

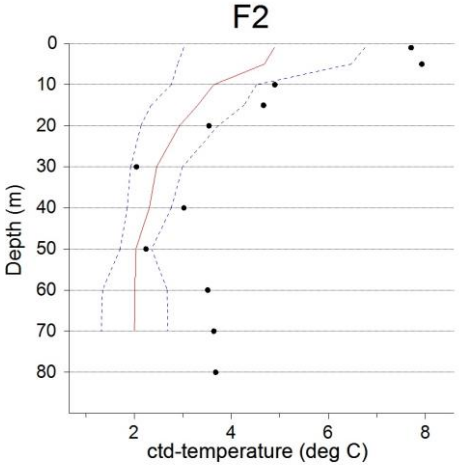

F64
Depth (m)
0
50
100
150
200
250
2
4
6
8
10
ctd-temperature (deg C)

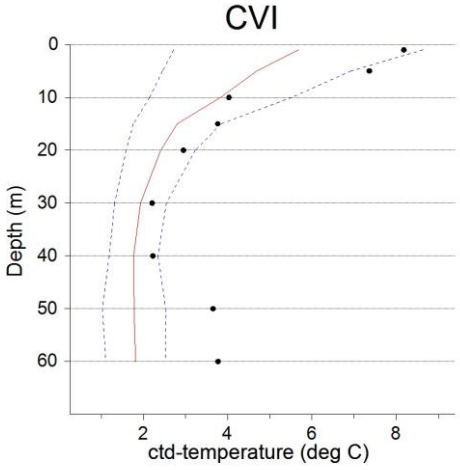

SR5
Depth (m)
ctd-temperature (deg C)

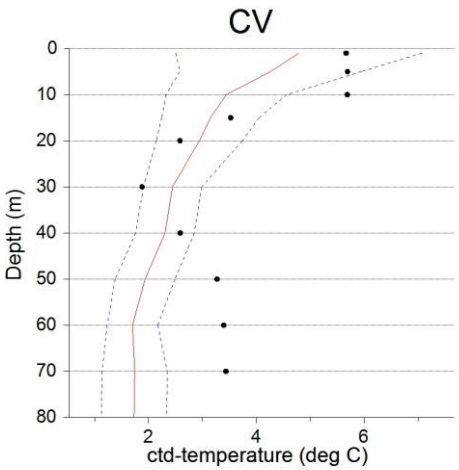

F26
Depth (m)
ctd-temperature (deg C)

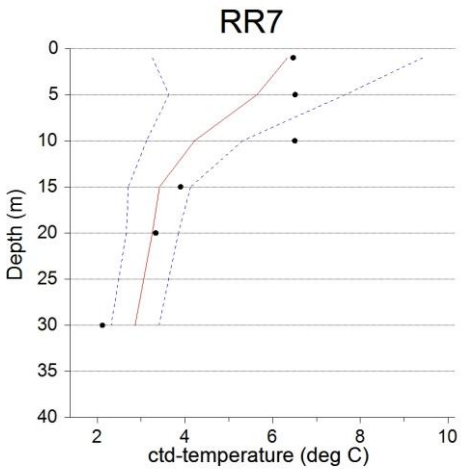

F16
Depth (m)
ctd-temperature (deg C)

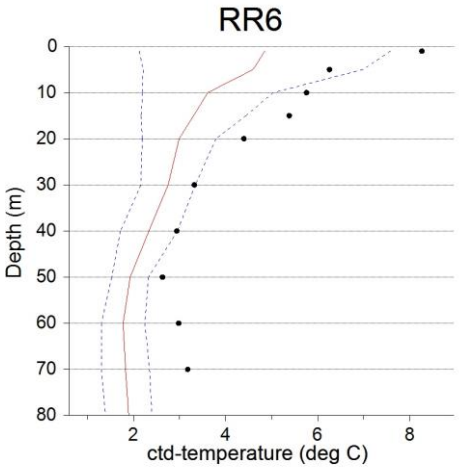

BO3
Depth (m)
ctd-temperature (deg C)

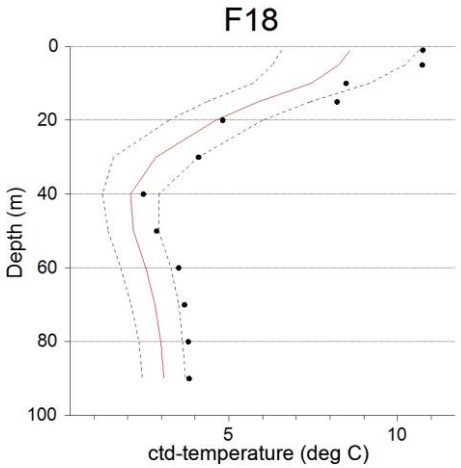

F2
Depth (m)
ctd-temperature (deg C)

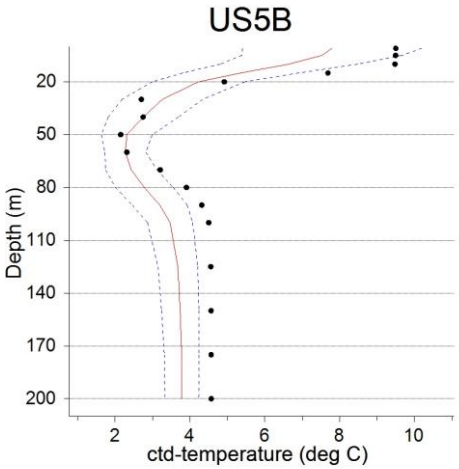

CVI
Depth (m)
ctd-temperature (deg C)

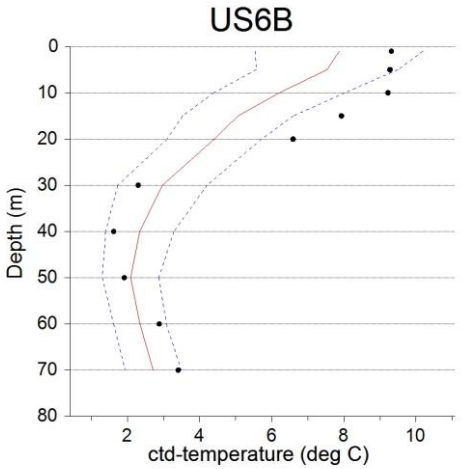

CV
Depth (m)
0
10
20
30
40
50
60
70
80
2
4
6
ctd-temperature (deg C)

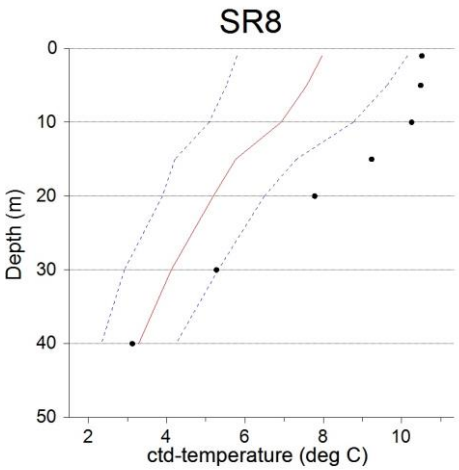

RR7
Depth (m)
0
5
10
15
20
25
30
35
40
2
4
6
8
10
ctd-temperature (deg C)

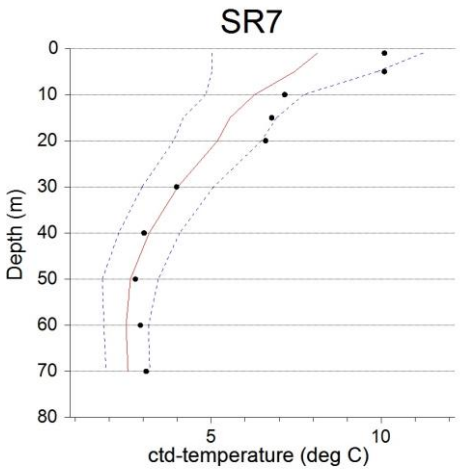

RR6
Depth (m)
0
10
20
30
40
50
60
70
80
2
4
6
8
ctd-temperature (deg C)

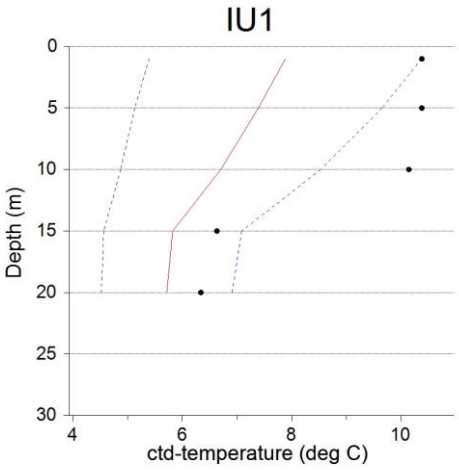

F18
Depth (m)
0
20
40
60
80
100
5
10
ctd-temperature (deg C)

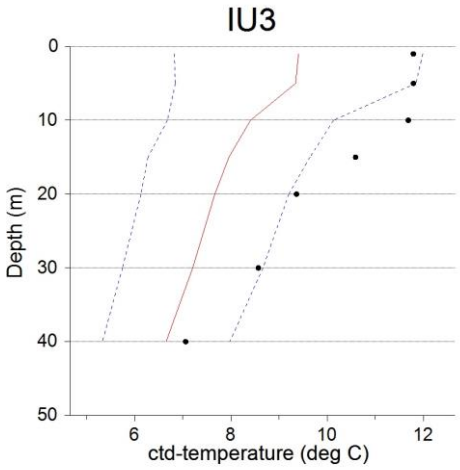

US5B
Depth (m)
20
50
80
110
140
170
200
2
4
6
8
10
ctd-temperature (deg C)

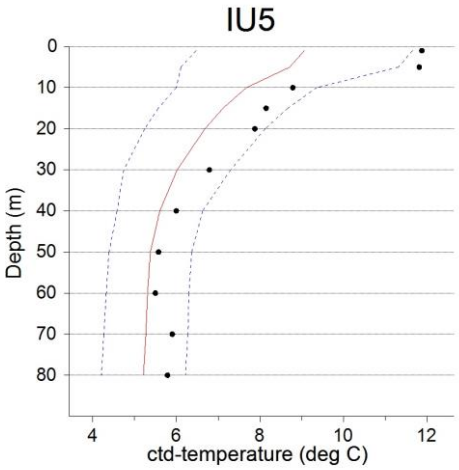

US6B
Depth (m)
0
10
20
30
40
50
60
70
80
2
4
6
8
10
ctd-temperature (deg C)

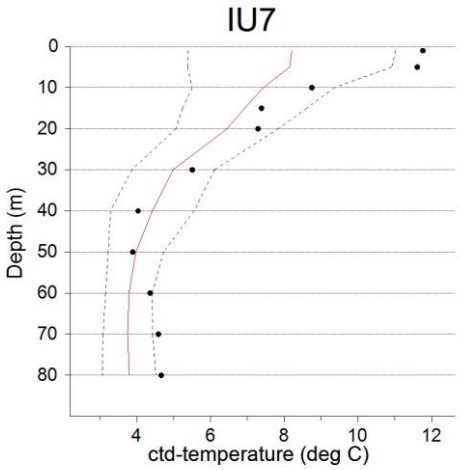

SR8
Depth (m)
ctd-temperature (deg C)

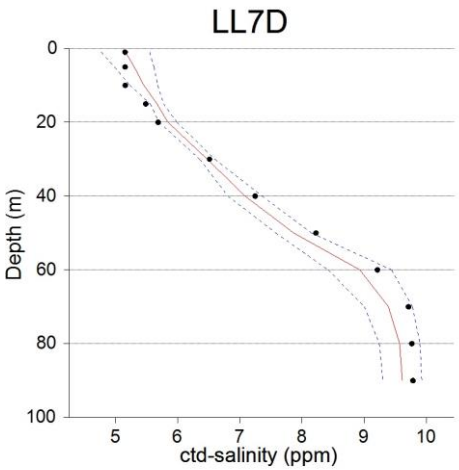

SR7
Depth (m)
ctd-temperature (deg C)

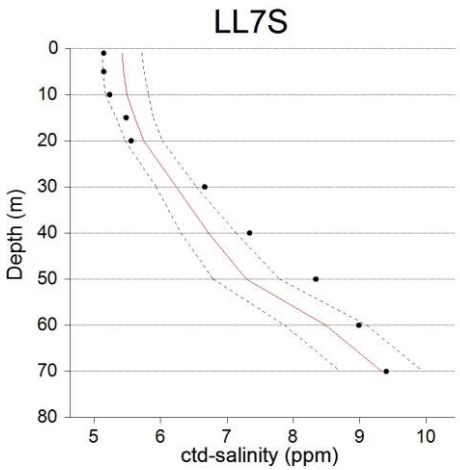

IU1
Depth (m)
ctd-temperature (deg C)

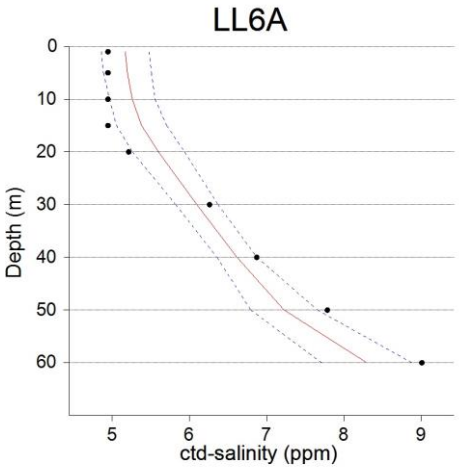

IU3
Depth (m)
ctd-temperature (deg C)

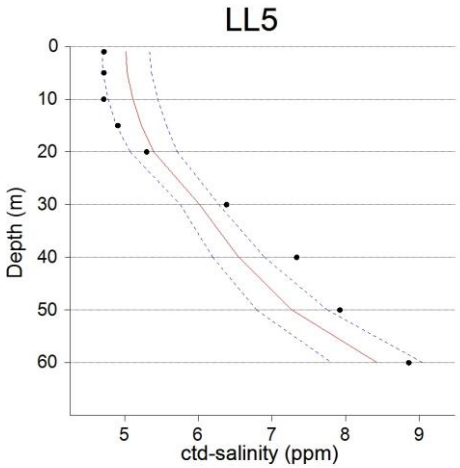

IU5
Depth (m)
ctd-temperature (deg C)

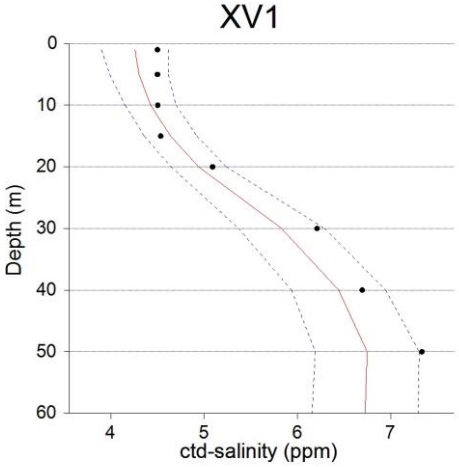

IU7
Depth (m)
ctd-temperature (deg C)

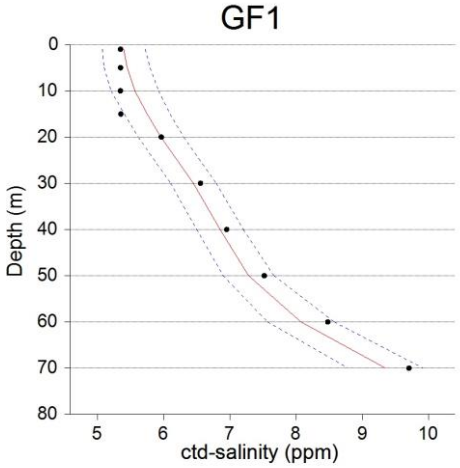

LL7D
Depth (m)
0
20
40
60
80
100
5
6
7
8
9
10
ctd-salinity (ppm)

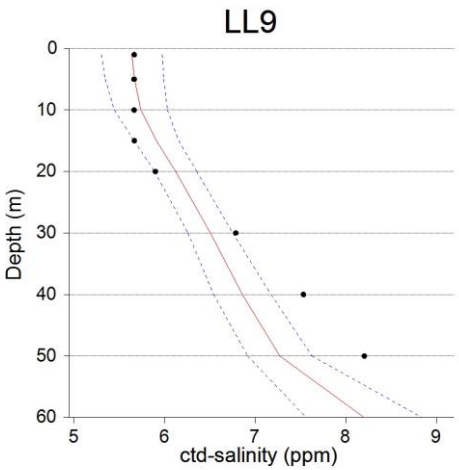

LL7S
Depth (m)
0
10
20
30
40
50
60
70
80
5
6
7
8
9
10
ctd-salinity (ppm)

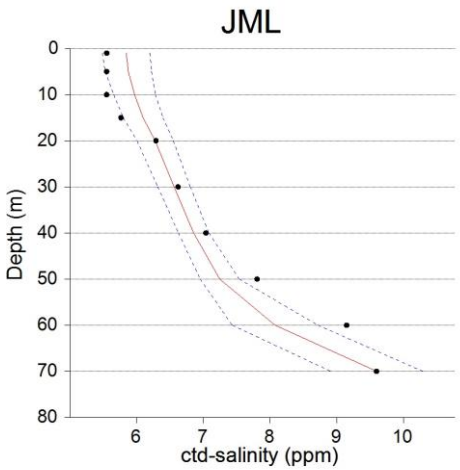

LL6A
Depth (m)
0
10
20
30
40
50
60
5
6
7
8
9
ctd-salinity (ppm)

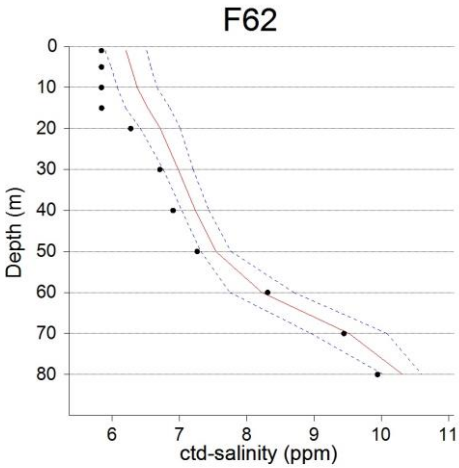

LL5
Depth (m)
0
10
20
30
40
50
60
5
6
7
8
9
ctd-salinity (ppm)

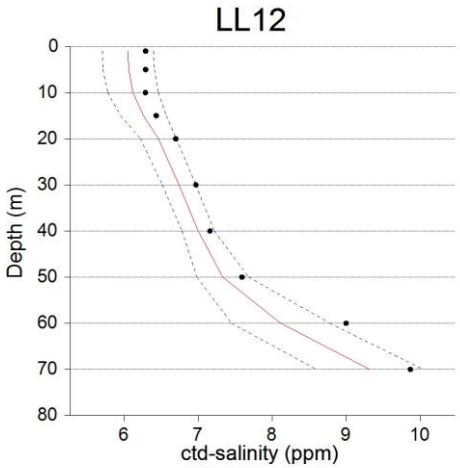

XV1
Depth (m)
0
10
20
30
40
50
60
4
5
6
7
ctd-salinity (ppm)

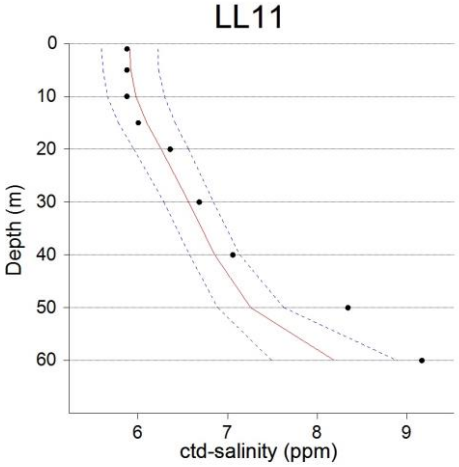

GF1
Depth (m)
0
10
20
30
40
50
60
70
80
5
6
7
8
9
10
ctd-salinity (ppm)

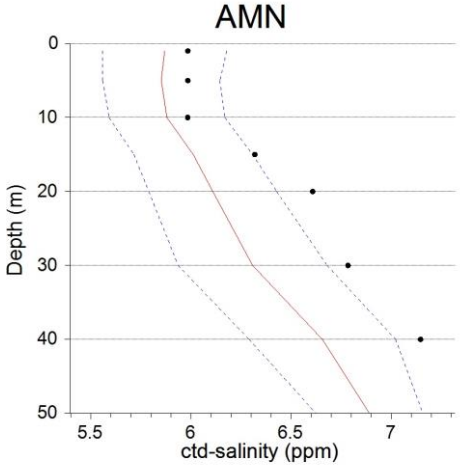

LL9
Depth (m)
0
10
20
30
40
50
60
5
6
7
8
9
ctd-salinity (ppm)

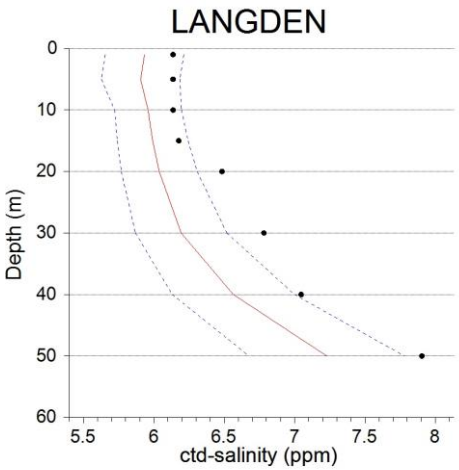

JML
Depth (m)
0
10
20
30
40
50
60
70
80
6
7
8
9
10
ctd-salinity (ppm)

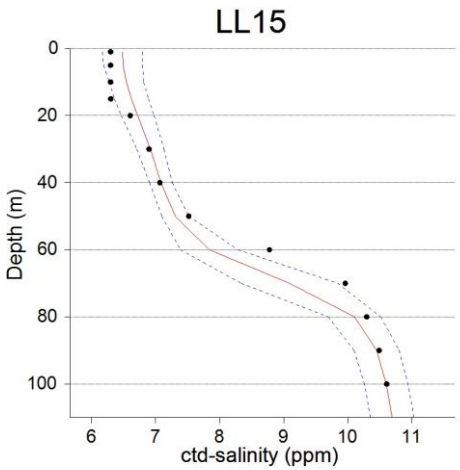

F62
Depth (m)
0
10
20
30
40
50
60
70
80
6
7
8
9
10
11
ctd-salinity (ppm)

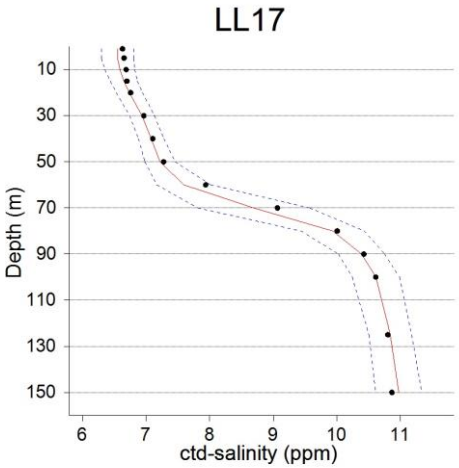

LL12
Depth (m)
0
10
20
30
40
50
60
70
80
6
7
8
9
10
ctd-salinity (ppm)

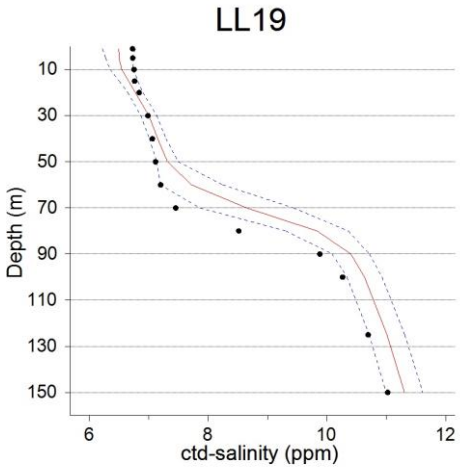

LL11
Depth (m)
0
10
20
30
40
50
60
6
7
8
9
ctd-salinity (ppm)

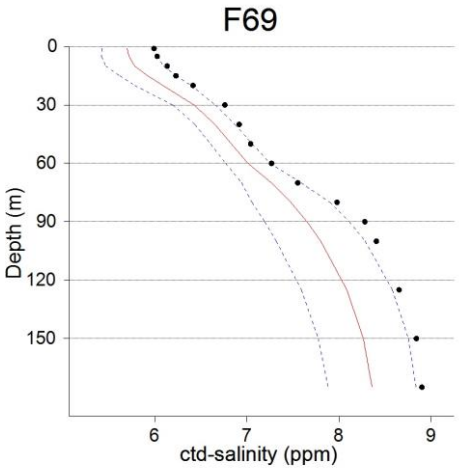

AMN
Depth (m)
0
10
20
30
40
50
5.5
6
6.5
7
ctd-salinity (ppm)

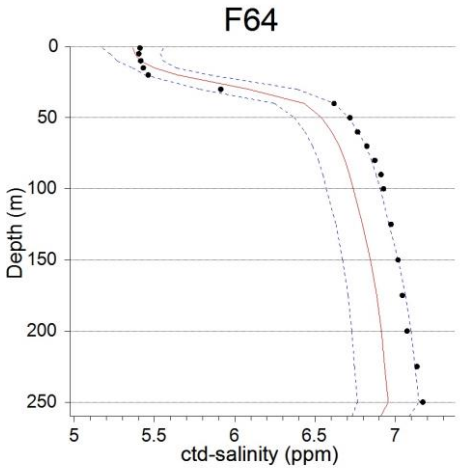

LANGDEN
Depth (m)
0
10
20
30
40
50
60
5.5
6
6.5
7
7.5
8
ctd-salinity (ppm)

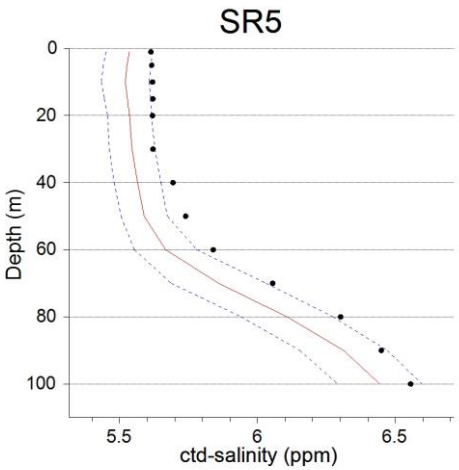

LL15
Depth (m)
0
20
40
60
80
100
6
7
8
9
10
11
ctd-salinity (ppm)

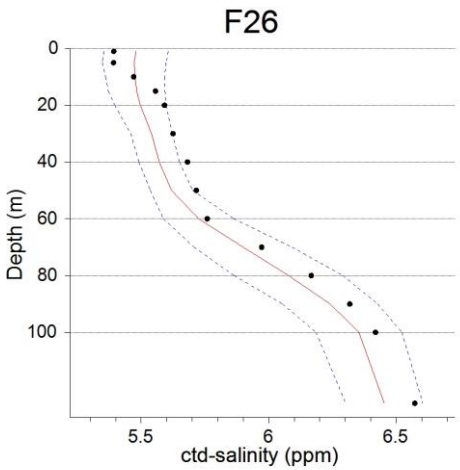

LL17
Depth (m)
10
30
50
70
90
110
130
150
6
7
8
9
10
11
ctd-salinity (ppm)

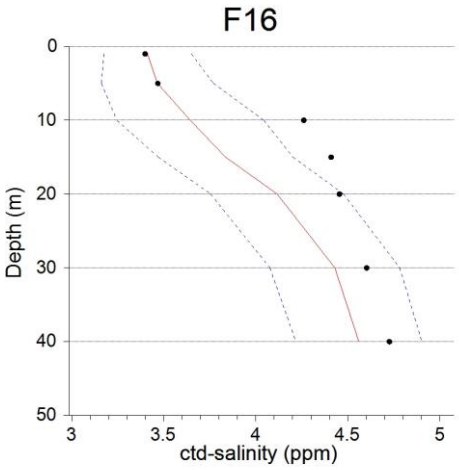

LL19
Depth (m)
10
30
50
70
90
110
130
150
6
8
10
12
ctd-salinity (ppm)

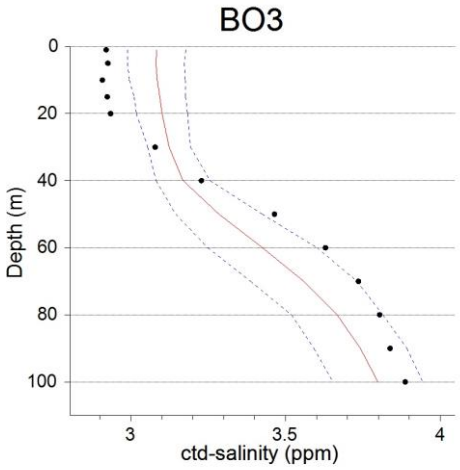

F69
Depth (m)
0
30
60
90
120
150
6
7
8
9
ctd-salinity (ppm)

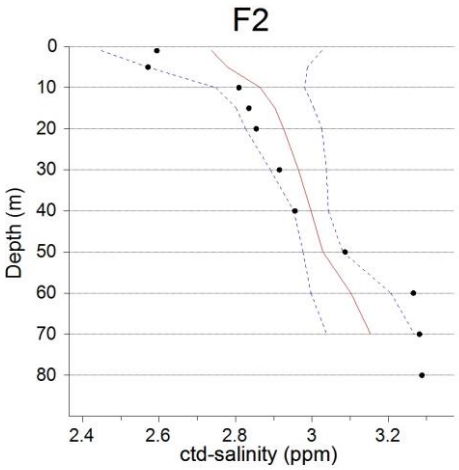

F64
Depth (m)
0
50
100
150
200
250
5
5.5
6
6.5
7
ctd-salinity (ppm)

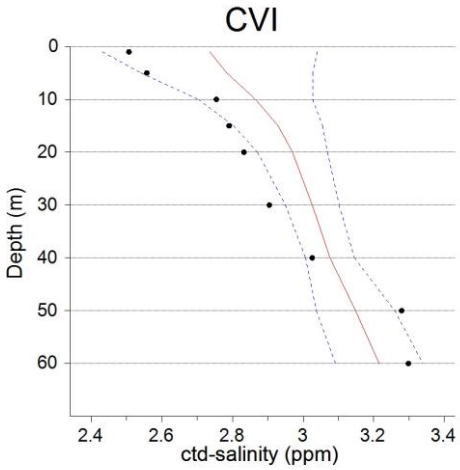

SR5
Depth (m)
0
20
40
60
80
100
5.5
6
6.5
ctd-salinity (ppm)

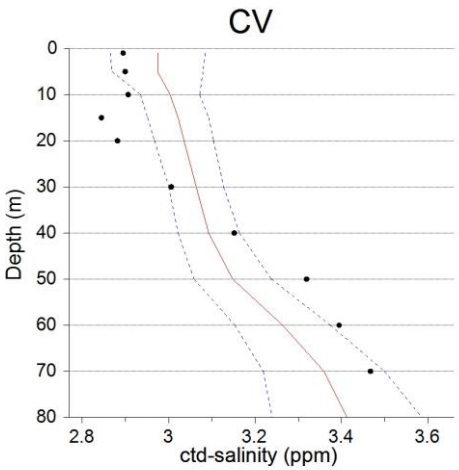

F26
Depth (m)
0
20
40
60
80
100
5.5
6
6.5
ctd-salinity (ppm)

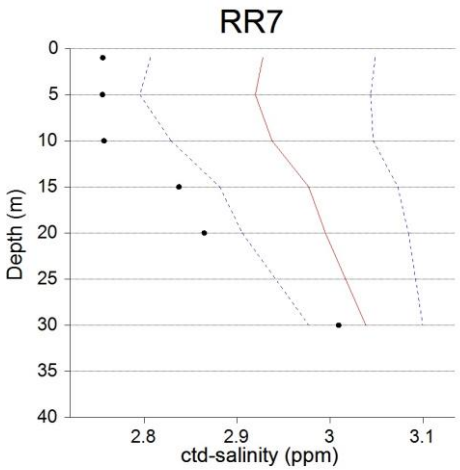

F16
Depth (m)
0
10
20
30
40
50
3
3.5
4
4.5
5
ctd-salinity (ppm)

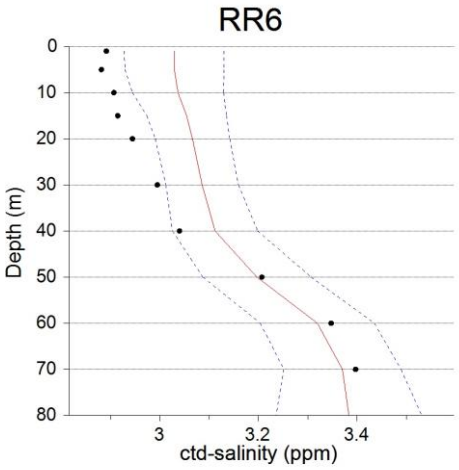

BO3
Depth (m)
0
20
40
60
80
100
3
3.5
4
ctd-salinity (ppm)

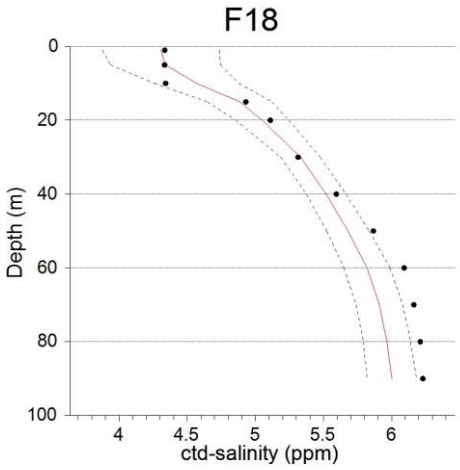

F2
Depth (m)
0
10
20
30
40
50
60
70
80
2.4
2.6
2.8
3
3.2
ctd-salinity (ppm)

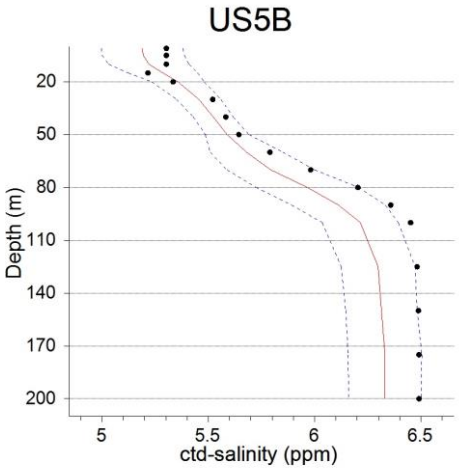

CVI
Depth (m)
0
10
20
30
40
50
60
2.4
2.6
2.8
3
3.2
3.4
ctd-salinity (ppm)

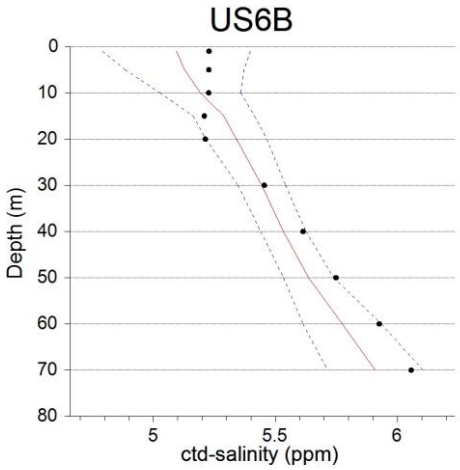

CV
Depth (m)
0
10
20
30
40
50
60
70
80
2.8
3
3.2
3.4
3.6
ctd-salinity (ppm)

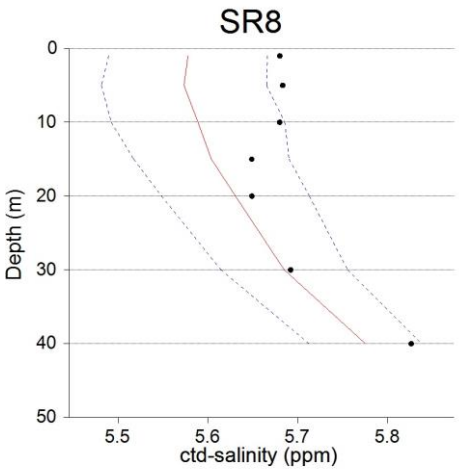

RR7
Depth (m)
0
5
10
15
20
25
30
35
40
2.8
2.9
3
3.1
ctd-salinity (ppm)

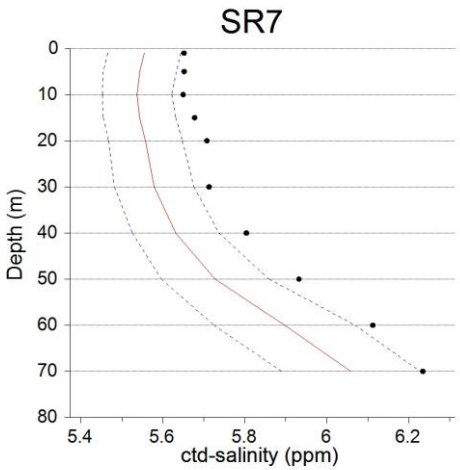

RR6
Depth (m)
0
10
20
30
40
50
60
70
80
3
3.2
3.4
ctd-salinity (ppm)

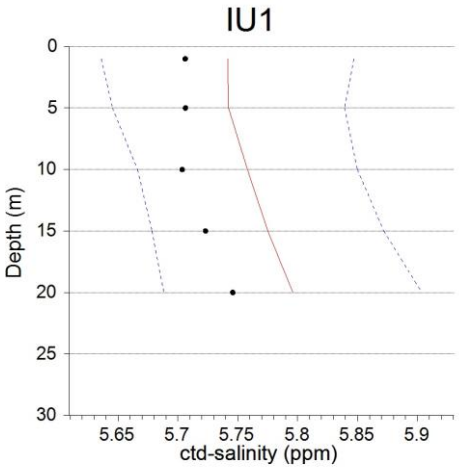

F18
Depth (m)
0
20
40
60
80
100
4
4.5
5
5.5
6
ctd-salinity (ppm)

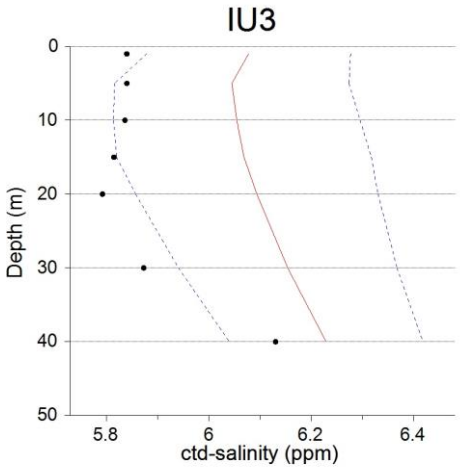

US5B
Depth (m)
20
50
80
110
140
170
200
5
5.5
6
6.5
ctd-salinity (ppm)

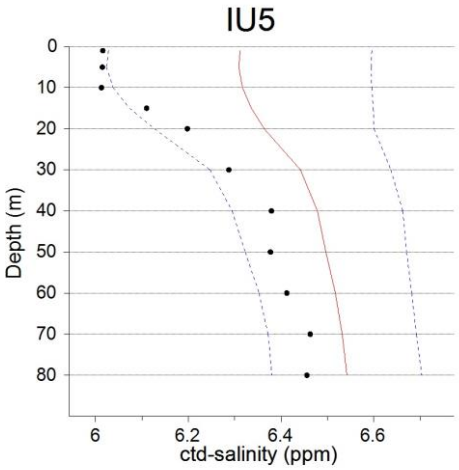

US6B
Depth (m)
0
10
20
30
40
50
60
70
80
5
5.5
6
ctd-salinity (ppm)

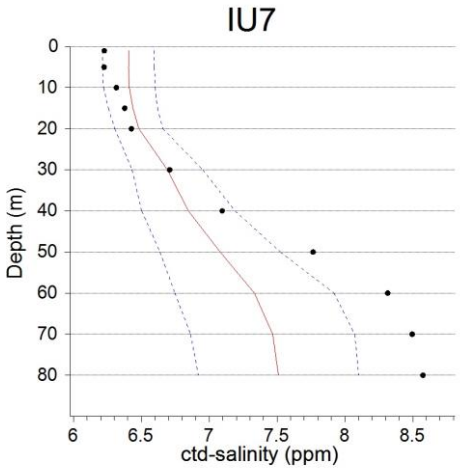

SR8
Depth (m)
0
10
20
30
40
50
5.5
5.6
5.7
5.8
ctd-salinity (ppm)

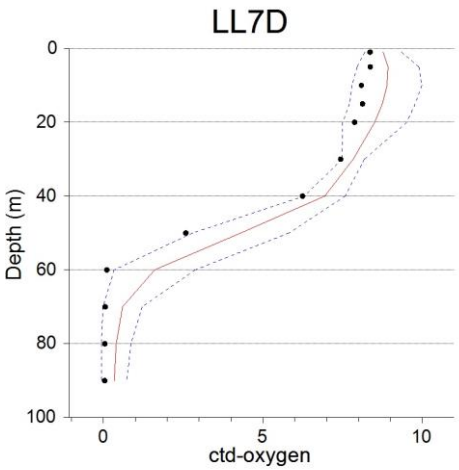

SR7
Depth (m)
0
10
20
30
40
50
60
70
80
5.4
5.6
5.8
6
6.2
ctd-salinity (ppm)

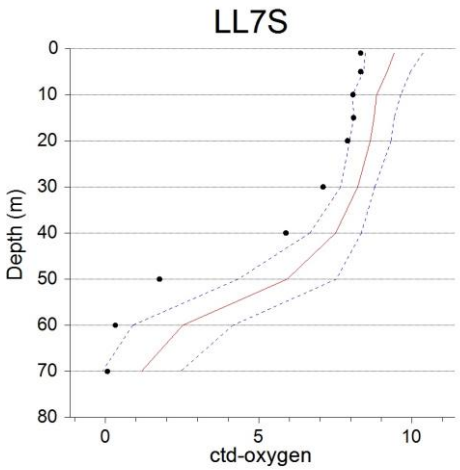

IU1
Depth (m)
0
5
10
15
20
25
30
5.65
5.7
5.75
5.8
5.85
5.9
ctd-salinity (ppm)

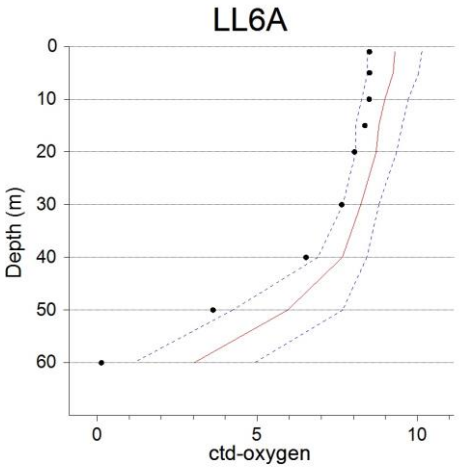

IU3
Depth (m)
0
10
20
30
40
50
5.8
6
6.2
6.4
ctd-salinity (ppm)

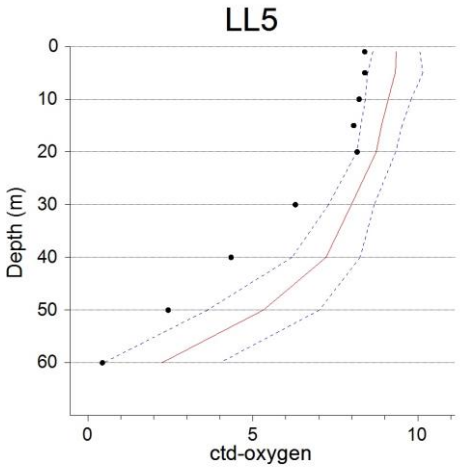

IU5
Depth (m)
0
10
20
30
40
50
60
70
80
6
6.2
6.4
6.6
ctd-salinity (ppm)

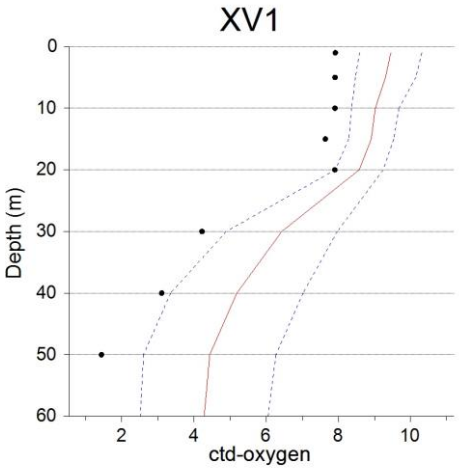

IU7
Depth (m)
0
10
20
30
40
50
60
70
80
6
6.5
7
7.5
8
8.5
ctd-salinity (ppm)

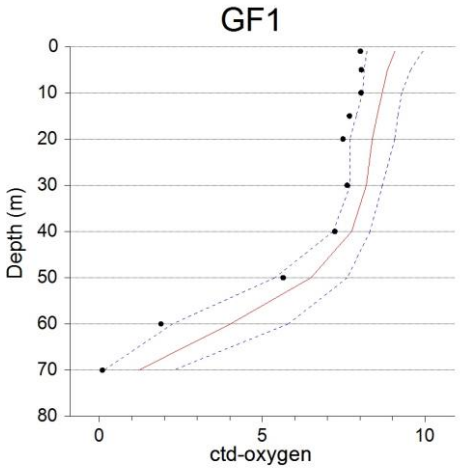

LL7D
Depth (m)
0
20
40
60
80
100
0
5
10
ctd-oxygen

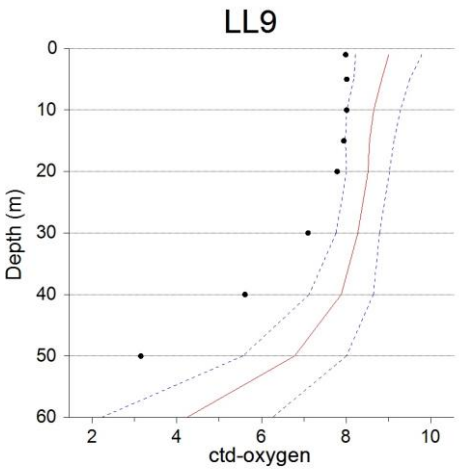

LL7S
Depth (m)
0
10
20
30
40
50
60
70
80
0
5
10
ctd-oxygen

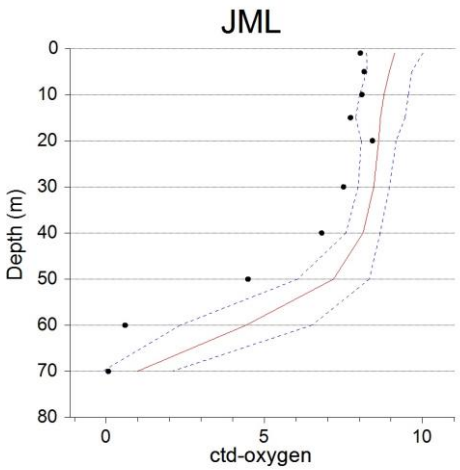

LL6A
Depth (m)
0
10
20
30
40
50
60
0
5
10
ctd-oxygen

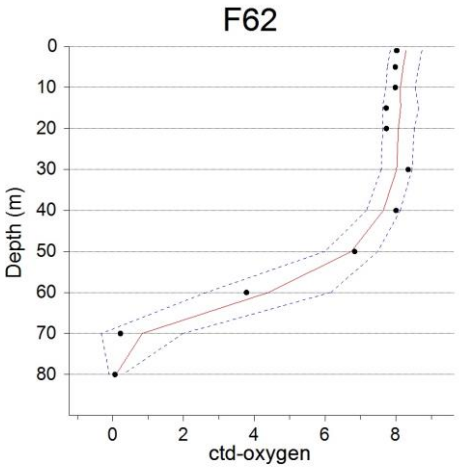

LL5
Depth (m)
0
10
20
30
40
50
60
0
5
10
ctd-oxygen

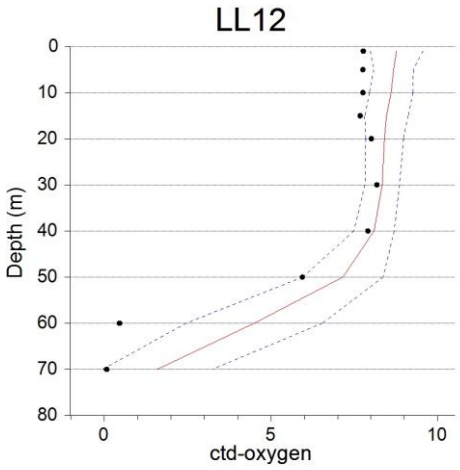

XV1
Depth (m)
0
10
20
30
40
50
60
2
4
6
8
10
ctd-oxygen

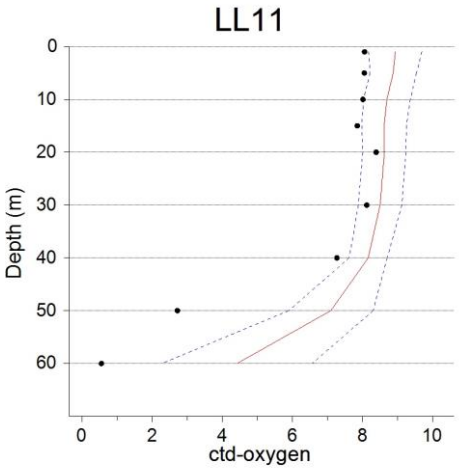

GF1
Depth (m)
0
10
20
30
40
50
60
70
80
0
5
10
ctd-oxygen

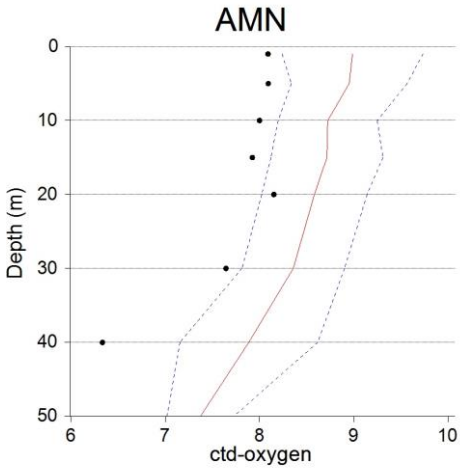

LL9
Depth (m)
ctd-oxygen

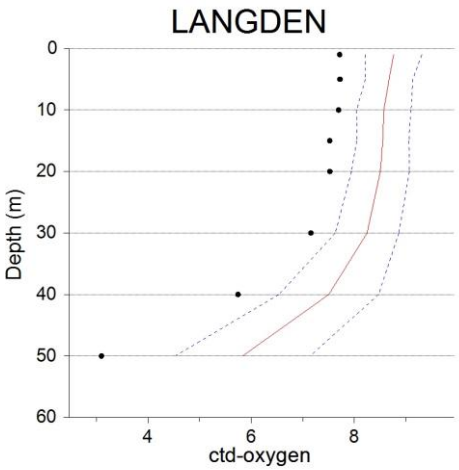

JML
Depth (m)
ctd-oxygen

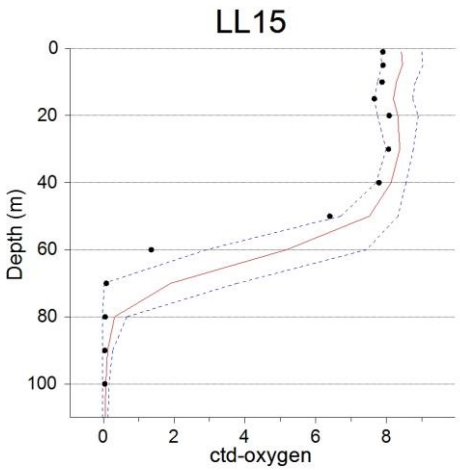

F62
Depth (m)
ctd-oxygen

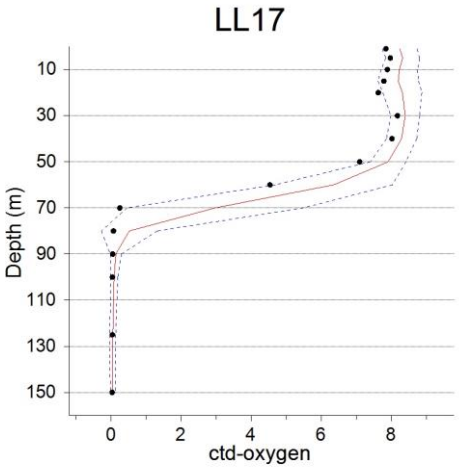

LL12
Depth (m)
ctd-oxygen

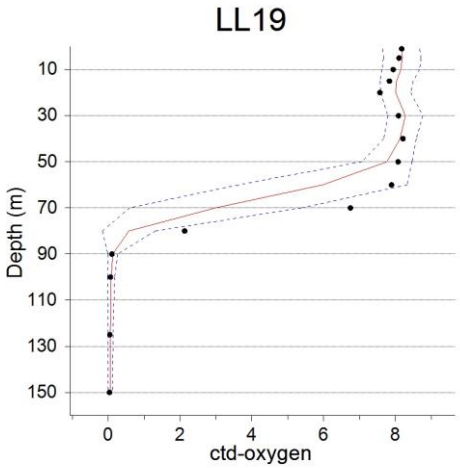

LL11
Depth (m)
ctd-oxygen

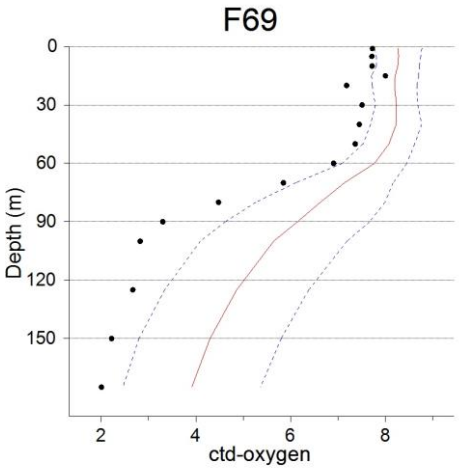

AMN
Depth (m)
ctd-oxygen

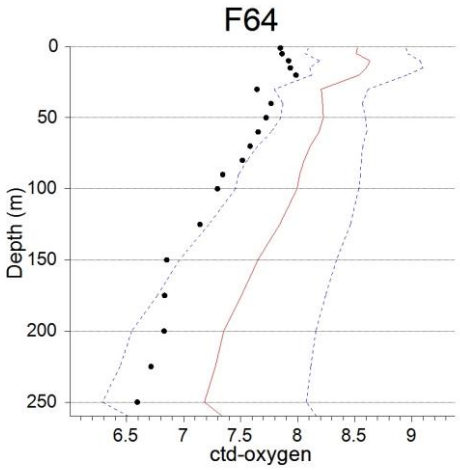

LANGDEN
Depth (m)
0
10
20
30
40
50
60
4
6
8
ctd-oxygen

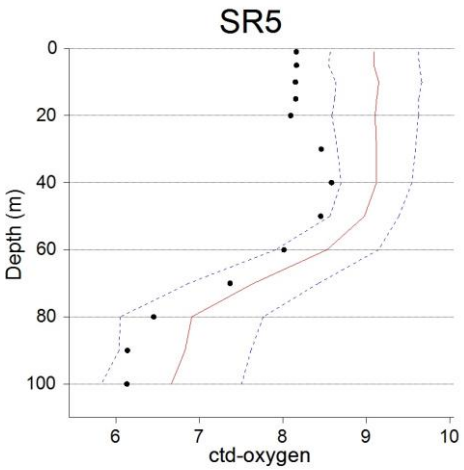

LL15
Depth (m)
0
20
40
60
80
100
0
2
4
6
8
ctd-oxygen

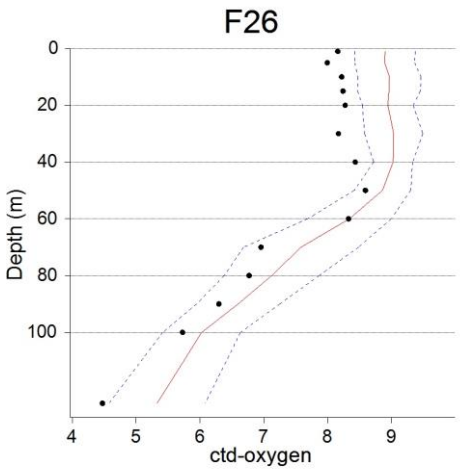

LL17
Depth (m)
10
30
50
70
90
110
130
150
0
2
4
6
8
ctd-oxygen

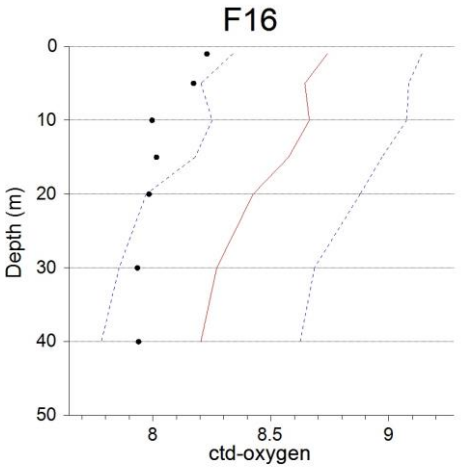

LL19
Depth (m)
10
30
50
70
90
110
130
150
0
2
4
6
8
ctd-oxygen

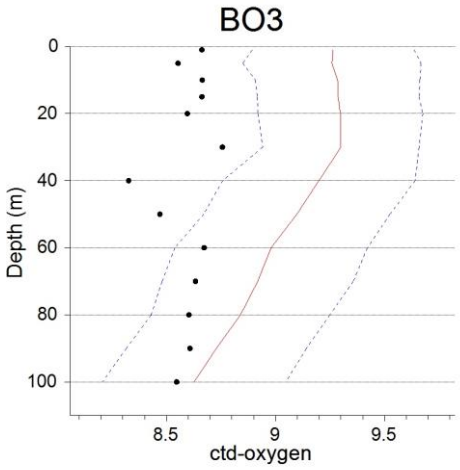

F69
Depth (m)
0
30
60
90
120
150
2
4
6
8
ctd-oxygen

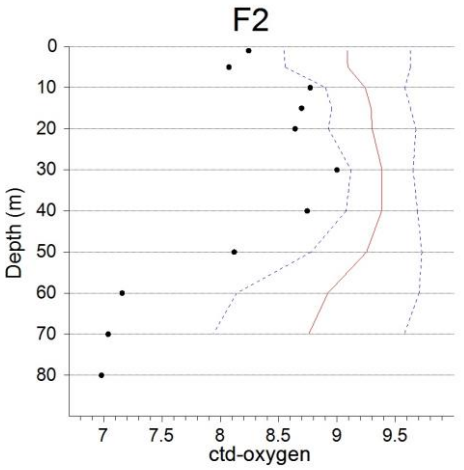

F64
Depth (m)
0
50
100
150
200
250
6.5
7
7.5
8
8.5
9
ctd-oxygen

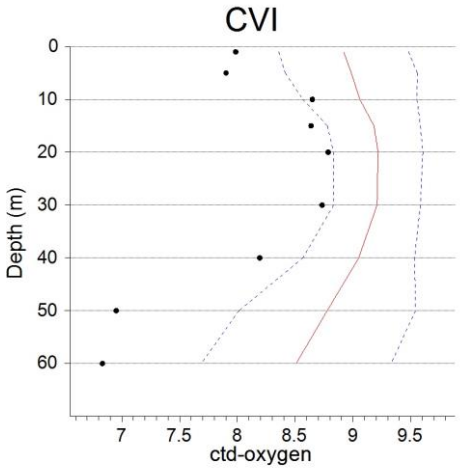

SR5
Depth (m)
0
20
40
60
80
100
6
7
8
9
10
ctd-oxygen

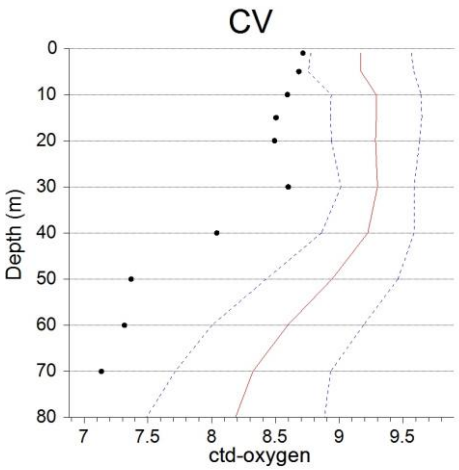

F26
Depth (m)
0
20
40
60
80
100
4
5
6
7
8
9
ctd-oxygen

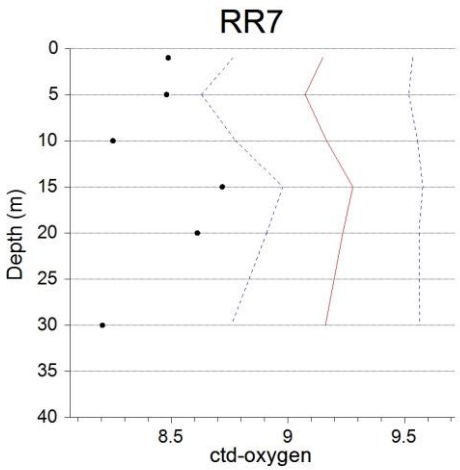

F16
Depth (m)
0
10
20
30
40
50
8
8.5
9
ctd-oxygen

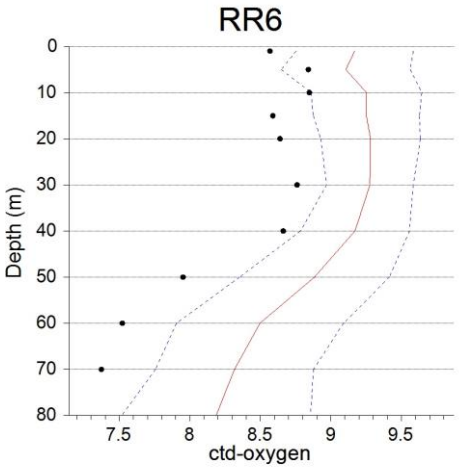

BO3
Depth (m)
0
20
40
60
80
100
8.5
9
9.5
ctd-oxygen

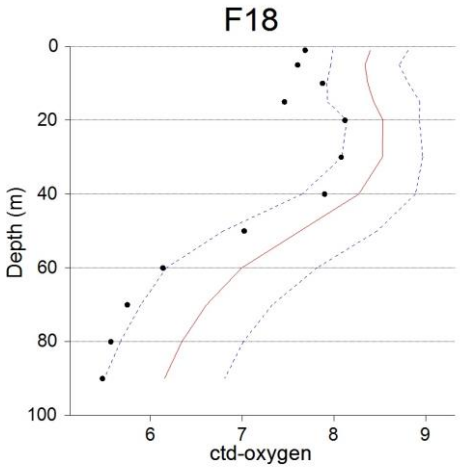

F2
Depth (m)
0
10
20
30
40
50
60
70
80
7
7.5
8
8.5
9
9.5
ctd-oxygen

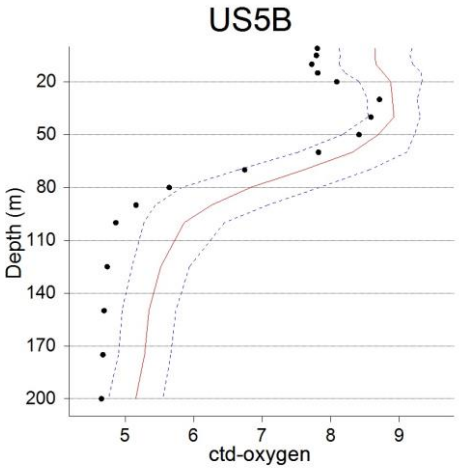

CVI
Depth (m)
0
10
20
30
40
50
60
7
7.5
8
8.5
9
9.5
ctd-oxygen

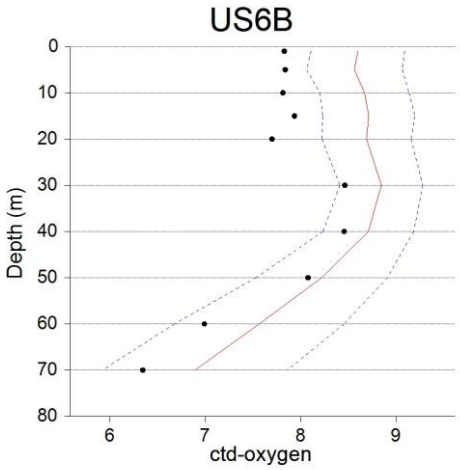

CV
Depth (m)
0
10
20
30
40
50
60
70
80
7
7.5
8
8.5
9
9.5
ctd-oxygen

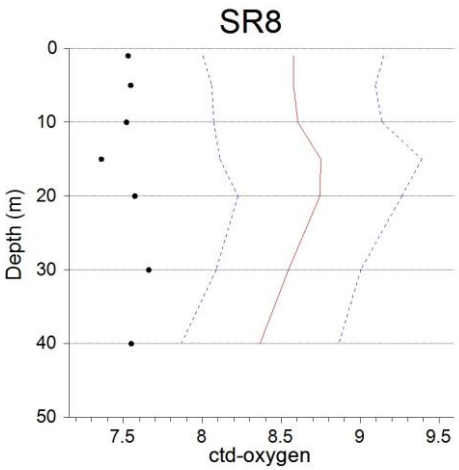

RR7
Depth (m)
0
5
10
15
20
25
30
35
40
8.5
9
9.5
ctd-oxygen

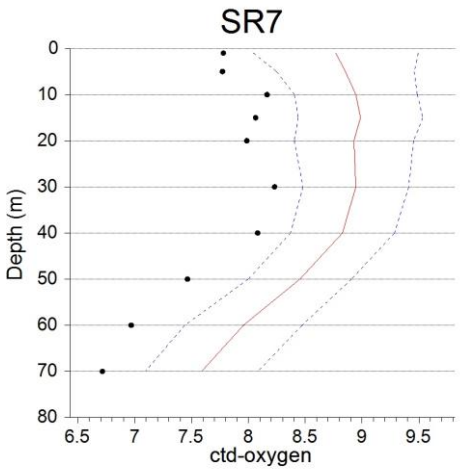

RR6
Depth (m)
0
10
20
30
40
50
60
70
80
7.5
8
8.5
9
9.5
ctd-oxygen

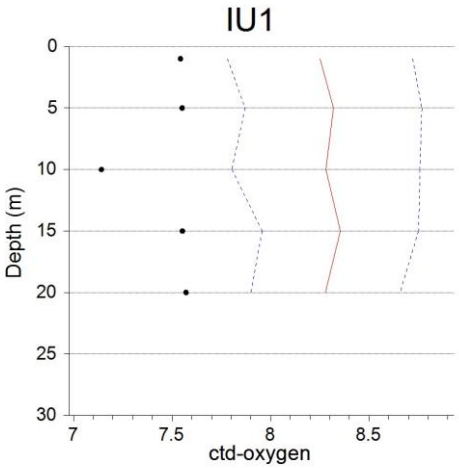

F18
Depth (m)
0
20
40
60
80
100
6
7
8
9
ctd-oxygen

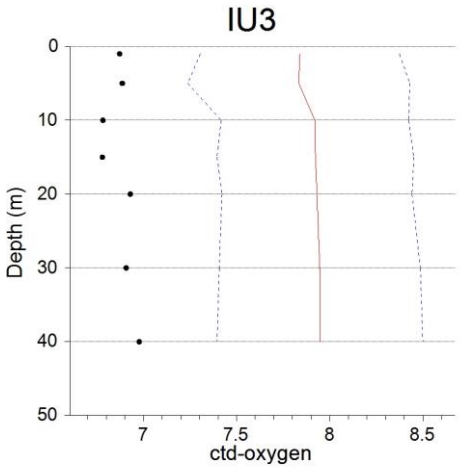

US5B
Depth (m)
20
50
80
110
140
170
200
5
6
7
8
9
ctd-oxygen

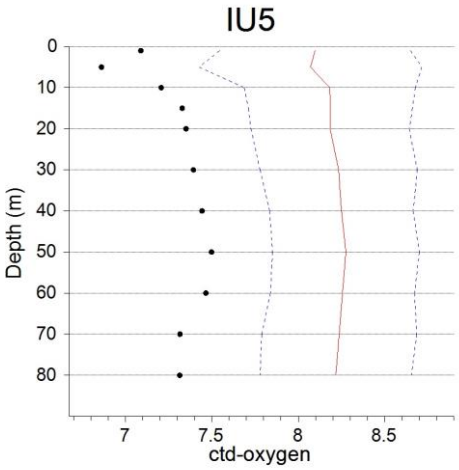

US6B
Depth (m)
0
10
20
30
40
50
60
70
80
6
7
8
9
ctd-oxygen

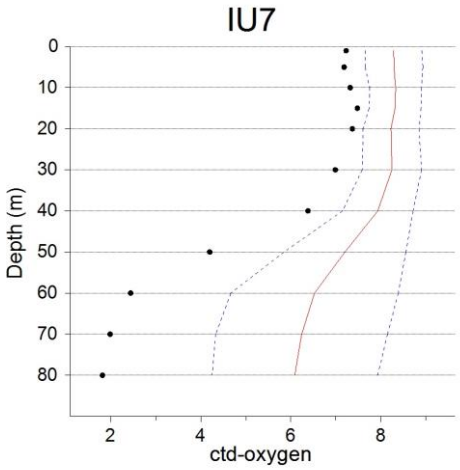

SR8
Depth (m)
0
10
20
30
40
50
7.5
8
8.5
9
9.5
ctd-oxygen

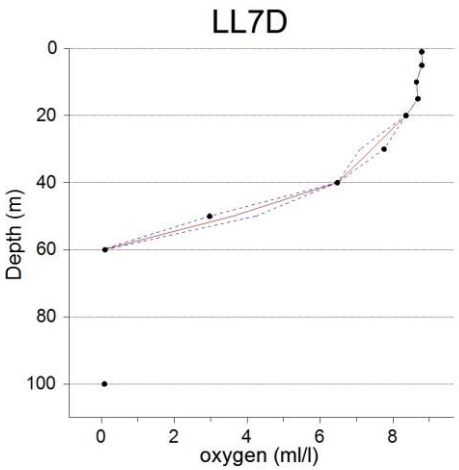

SR7
Depth (m)
0
10
20
30
40
50
60
70
80
6.5
7
7.5
8
8.5
9
9.5
ctd-oxygen

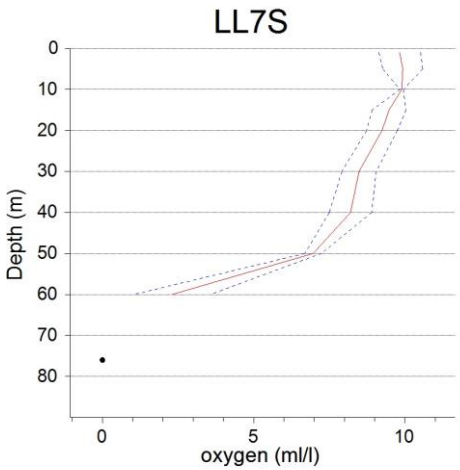

IU1
Depth (m)
0
5
10
15
20
25
30
7
7.5
8
8.5
ctd-oxygen

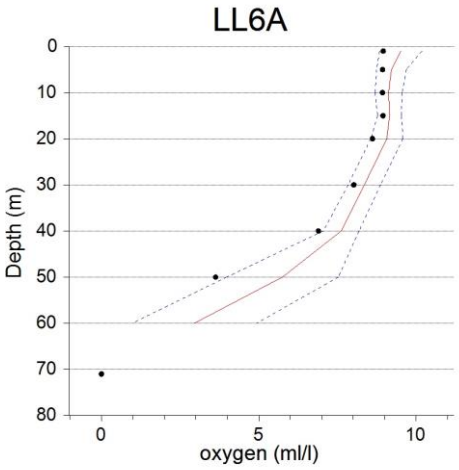

IU3
Depth (m)
0
10
20
30
40
50
7
7.5
8
8.5
ctd-oxygen

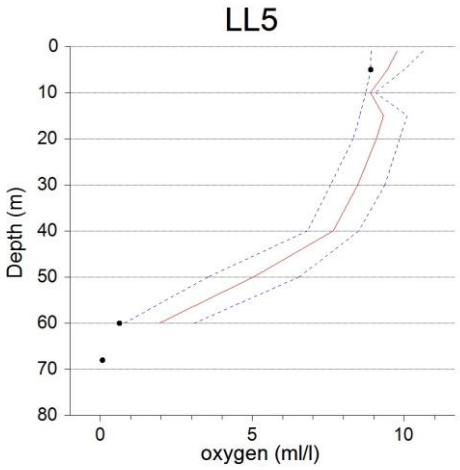

IU5
Depth (m)
0
10
20
30
40
50
60
70
80
7
7.5
8
8.5
ctd-oxygen

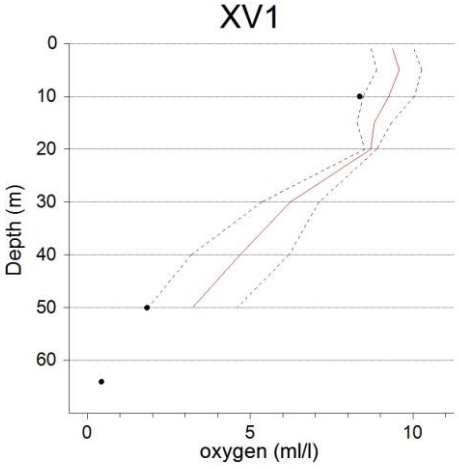

IU7
Depth (m)
0
10
20
30
40
50
60
70
80
2
4
6
8
ctd-oxygen

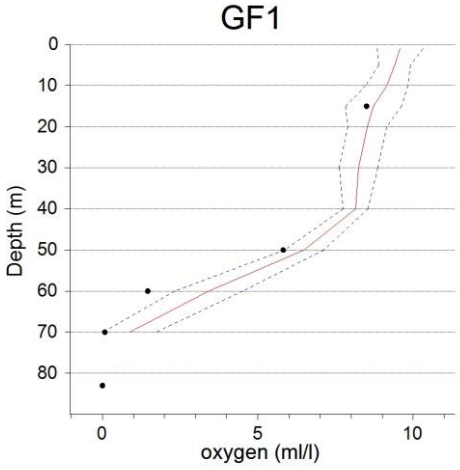

LL7D
Depth (m)
0
20
40
60
80
100
0
2
4
6
8
oxygen (ml/l)

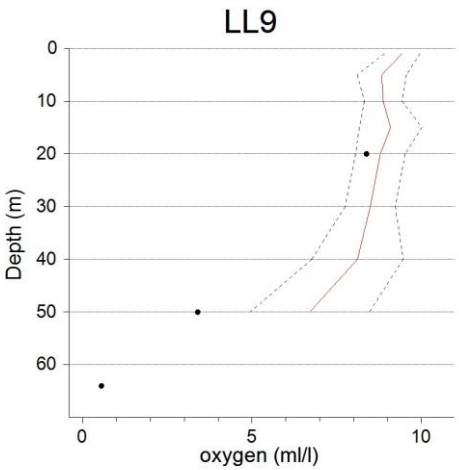

LL7S
Depth (m)
0
10
20
30
40
50
60
70
80
0
5
10
oxygen (ml/l)

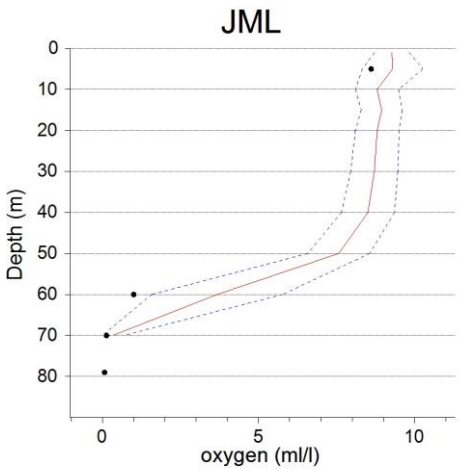

LL6A
Depth (m)
0
10
20
30
40
50
60
70
80
0
5
10
oxygen (ml/l)

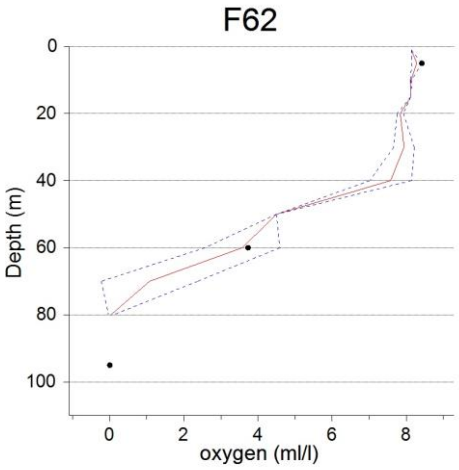

LL5
Depth (m)
0
10
20
30
40
50
60
70
80
0
5
10
oxygen (ml/l)

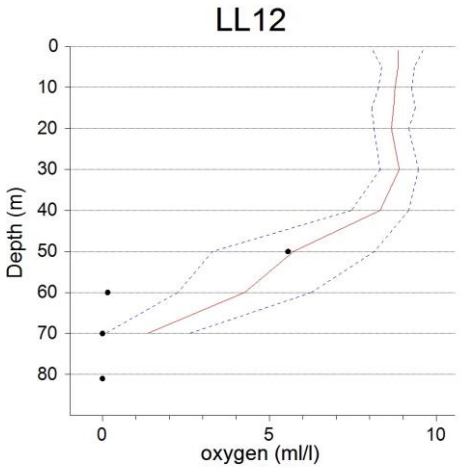

XV1
Depth (m)
0
10
20
30
40
50
60
0
5
10
oxygen (ml/l)

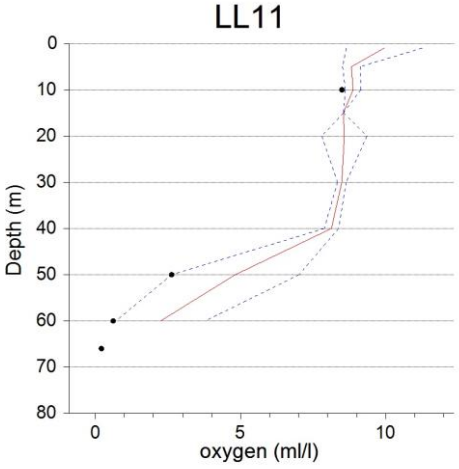

GF1
Depth (m)
0
10
20
30
40
50
60
70
80
0
5
10
oxygen (ml/l)

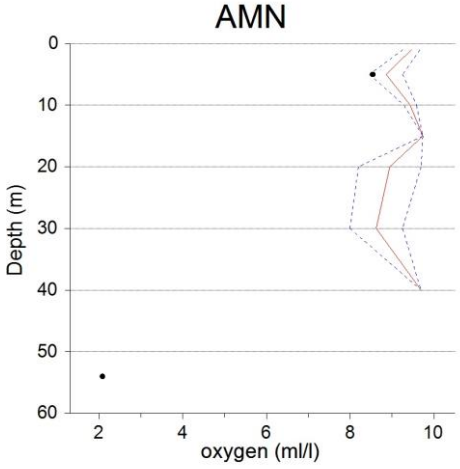

LL9
Depth (m)
0
10
20
30
40
50
60
0
5
10
oxygen (ml/l)

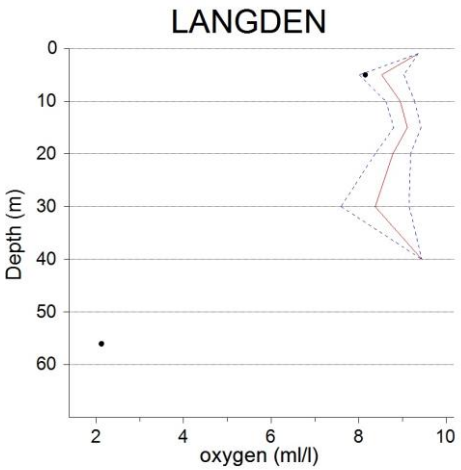

JML
Depth (m)
0
10
20
30
40
50
60
70
80
0
5
10
oxygen (ml/l)

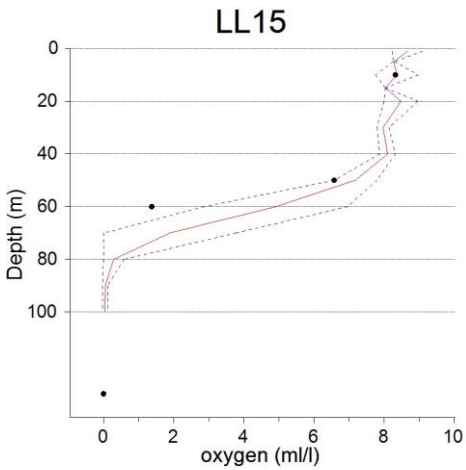

F62
Depth (m)
0
20
40
60
80
100
0
2
4
6
8
oxygen (ml/l)

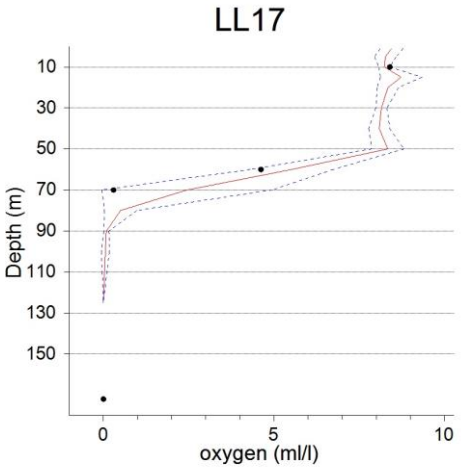

LL12
Depth (m)
0
10
20
30
40
50
60
70
80
0
5
10
oxygen (ml/l)

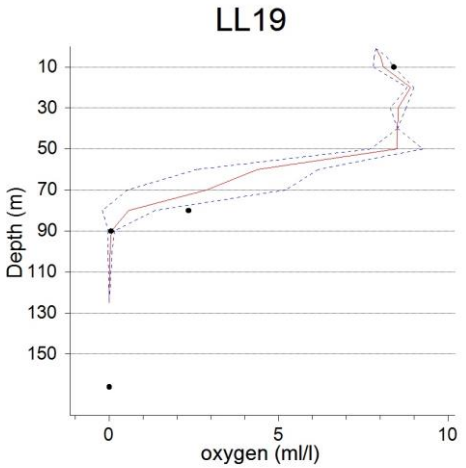

LL11
Depth (m)
0
10
20
30
40
50
60
70
80
0
5
10
oxygen (ml/l)

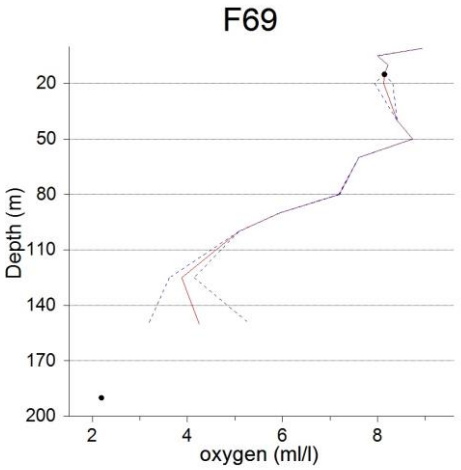

AMN
Depth (m)
0
10
20
30
40
50
60
2
4
6
8
10
oxygen (ml/l)

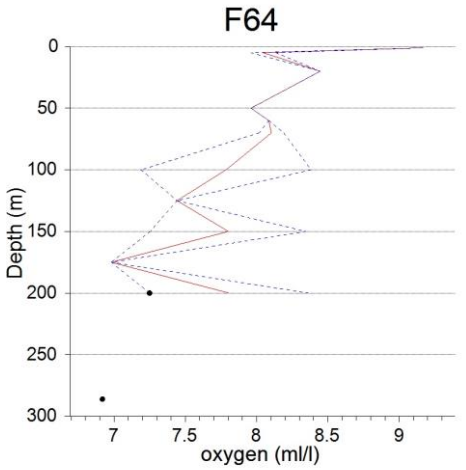

LANGDEN
Depth (m)
0
10
20
30
40
50
60
2
4
6
8
10
oxygen (ml/l)

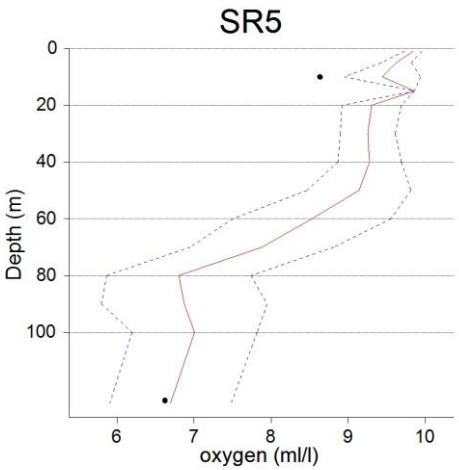

LL15
Depth (m)
0
20
40
60
80
100
0
2
4
6
8
10
oxygen (ml/l)

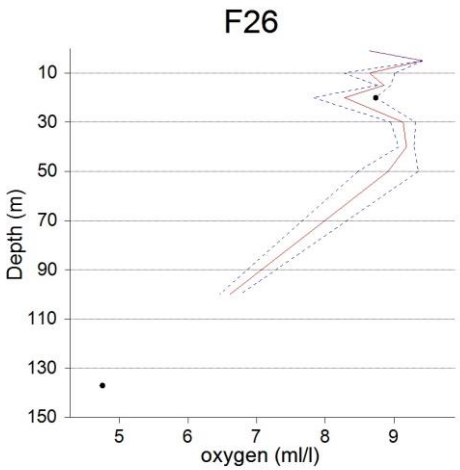

LL17
Depth (m)
10
30
50
70
90
110
130
150
0
5
10
oxygen (ml/l)

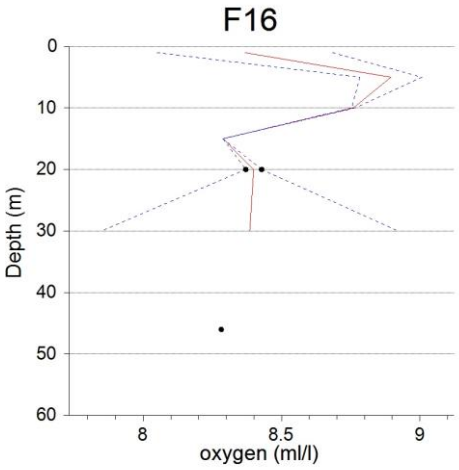

LL19
Depth (m)
10
30
50
70
90
110
130
150
0
5
10
oxygen (ml/l)

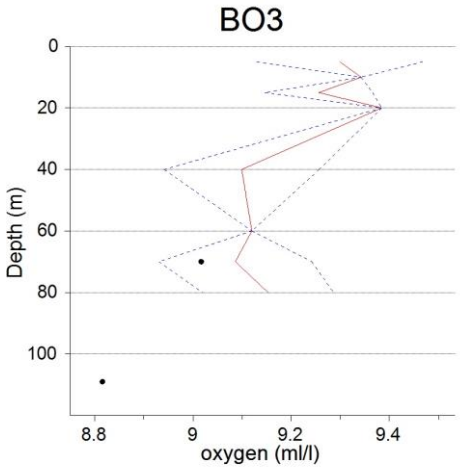

F69
Depth (m)
20
50
80
110
140
170
200
2
4
6
8
oxygen (ml/l)

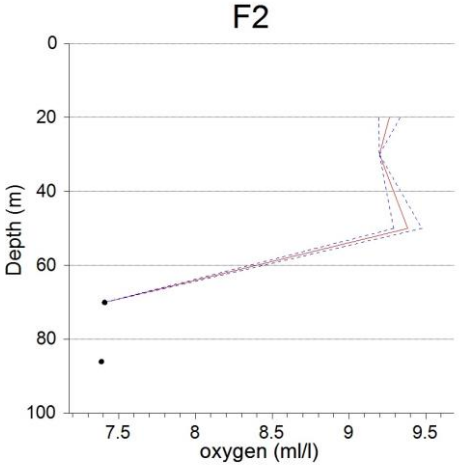

F64
Depth (m)
0
50
100
150
200
250
300
7
7.5
8
8.5
9
oxygen (ml/l)

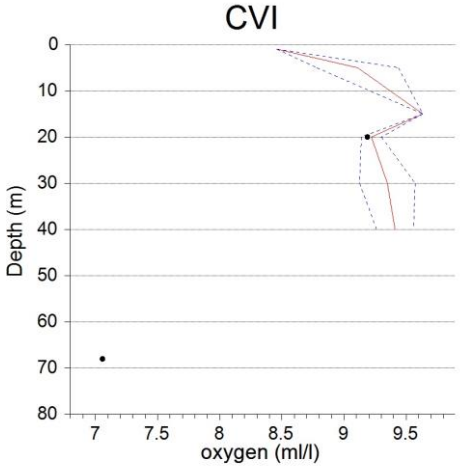

SR5
Depth (m)
0
20
40
60
80
100
6
7
8
9
10
oxygen (ml/l)

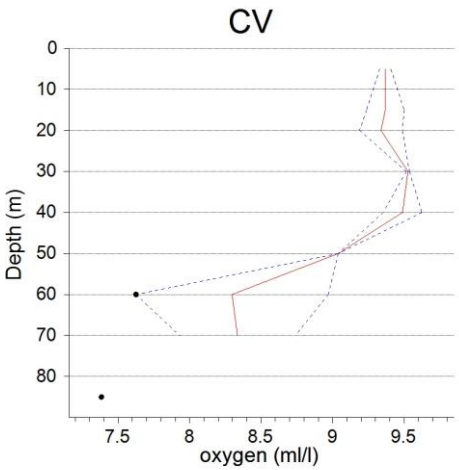

F26
Depth (m)
10
30
50
70
90
110
130
150
5
6
7
8
9
oxygen (ml/l)

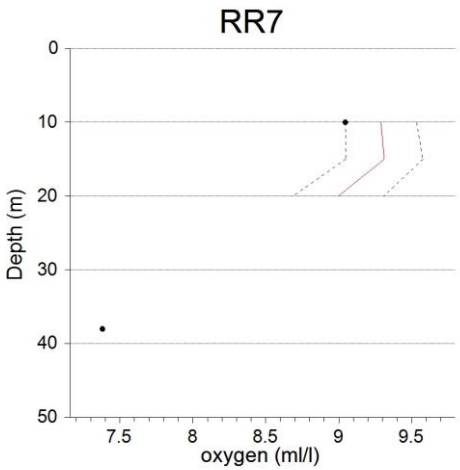

F16
Depth (m)
0
10
20
30
40
50
60
8
8.5
9
oxygen (ml/l)

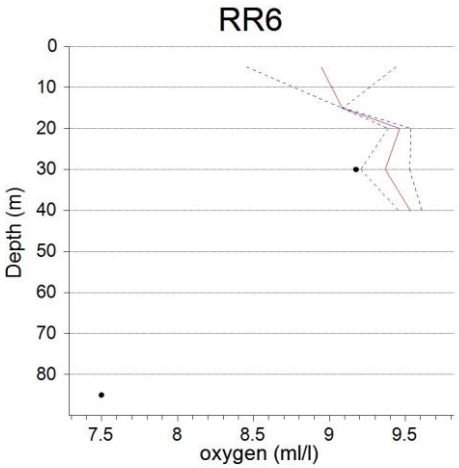

BO3
Depth (m)
0
20
40
60
80
100
8.8
9
9.2
9.4
oxygen (ml/l)

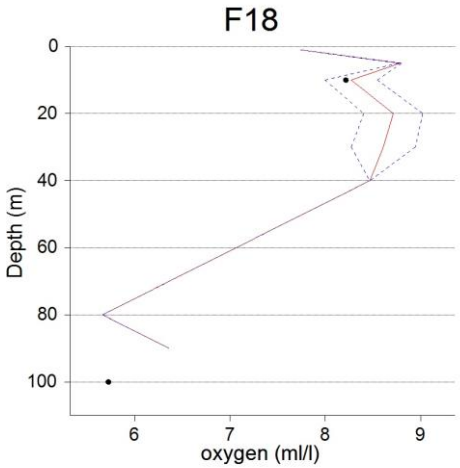

F2
Depth (m)
0
20
40
60
80
100
7.5
8
8.5
9
9.5
oxygen (ml/l)

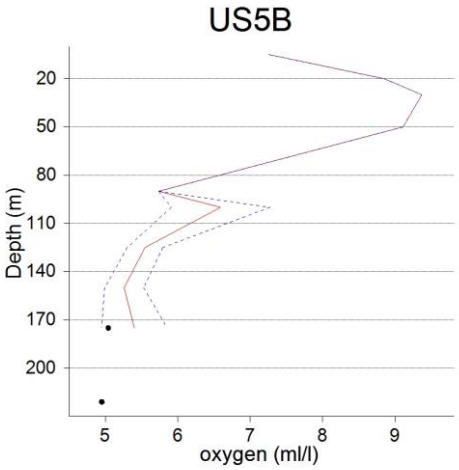

CVI
Depth (m)
0
10
20
30
40
50
60
70
80
7
7.5
8
8.5
9
9.5
oxygen (ml/l)

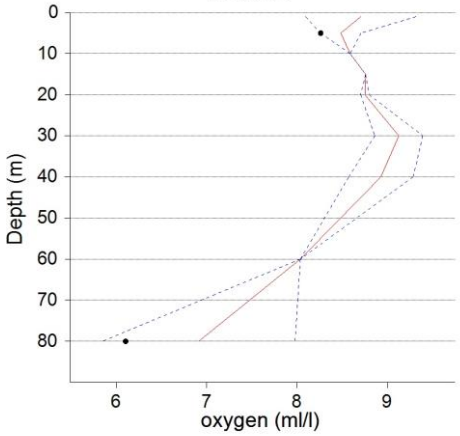

CV
Depth (m)
0
10
20
30
40
50
60
70
80
7.5
8
8.5
9
9.5
oxygen (ml/l)

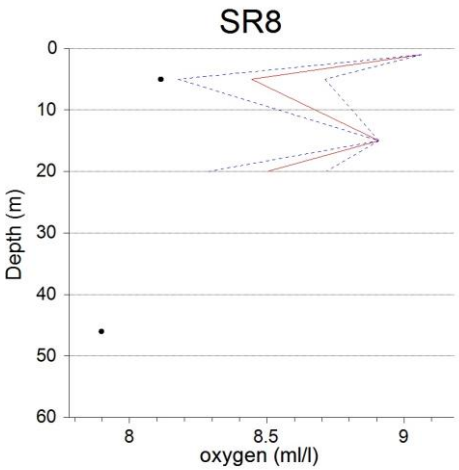

RR7
Depth (m)
0
10
20
30
40
50
7.5
8
8.5
9
9.5
oxygen (ml/l)

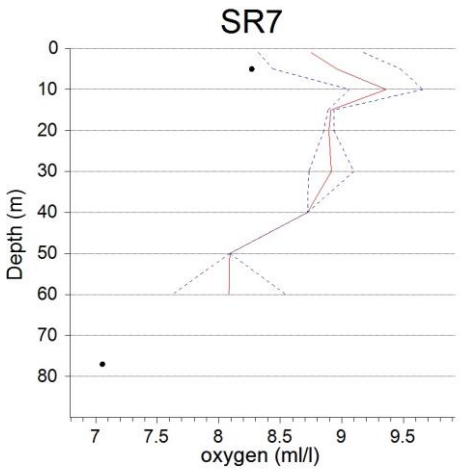

RR6
Depth (m)
0
10
20
30
40
50
60
70
80
7.5
8
8.5
9
9.5
oxygen (ml/l)

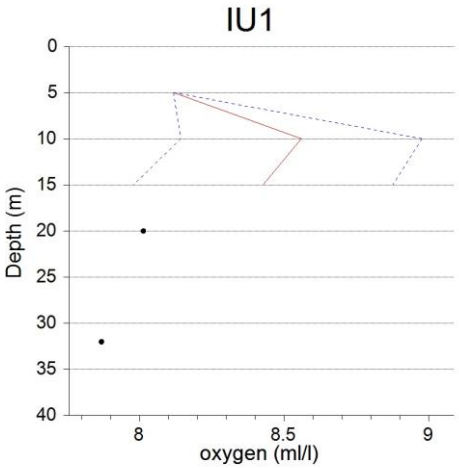

F18
Depth (m)
0
20
40
60
80
100
6
7
8
9
oxygen (ml/l)

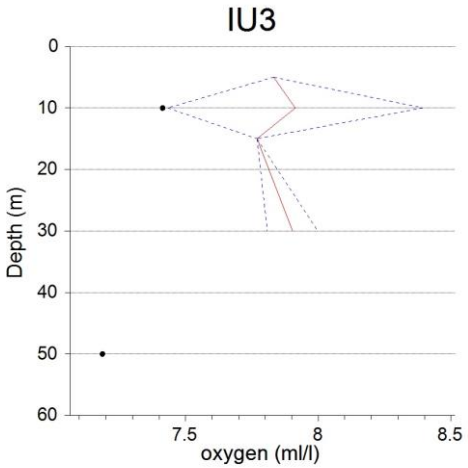

US5B
Depth (m)
20
50
80
110
140
170
200
5
6
7
8
9
oxygen (ml/l)

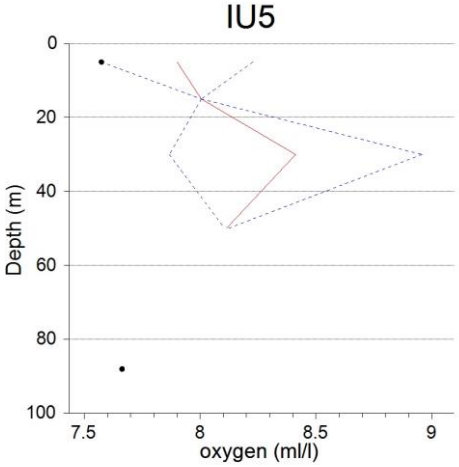

US6B
Depth (m)
0
10
20
30
40
50
60
70
80
6
7
8
9
oxygen (ml/l)

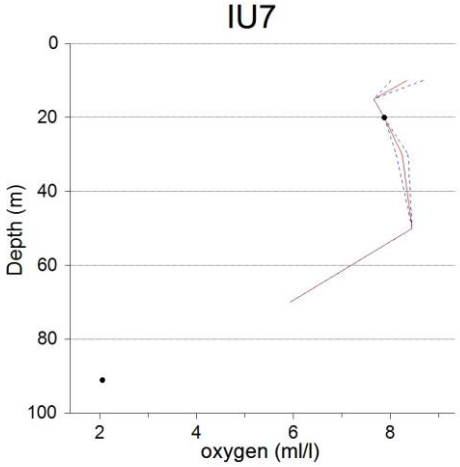

SR8
Depth (m)
0
10
20
30
40
50
60
8
8.5
9
oxygen (ml/l)

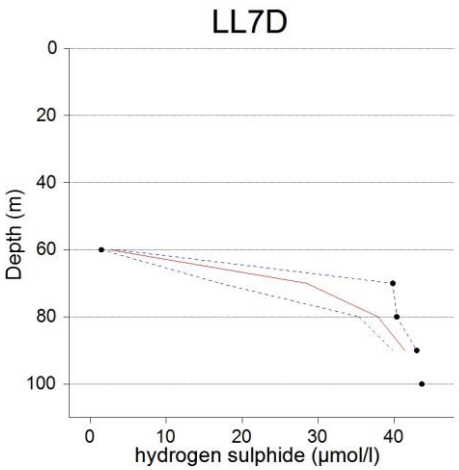

SR7
Depth (m)
0
10
20
30
40
50
60
70
80
7
7.5
8
8.5
9
9.5
oxygen (ml/l)

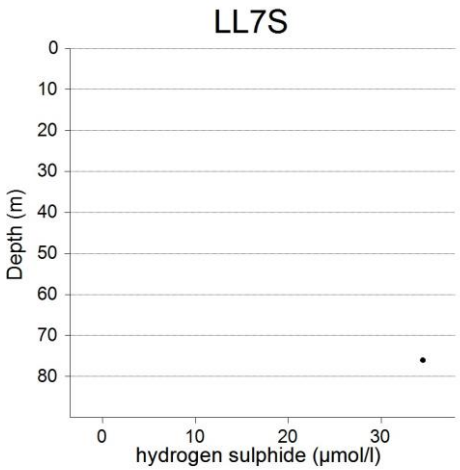

IU1
Depth (m)
0
5
10
15
20
25
30
35
40
8
8.5
9
oxygen (ml/l)

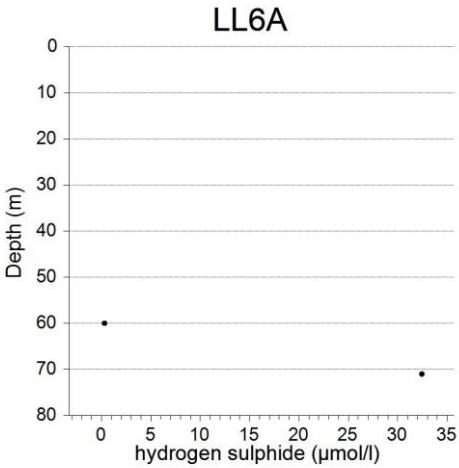

IU3
Depth (m)
0
10
20
30
40
50
60
7.5
8
8.5
oxygen (ml/l)

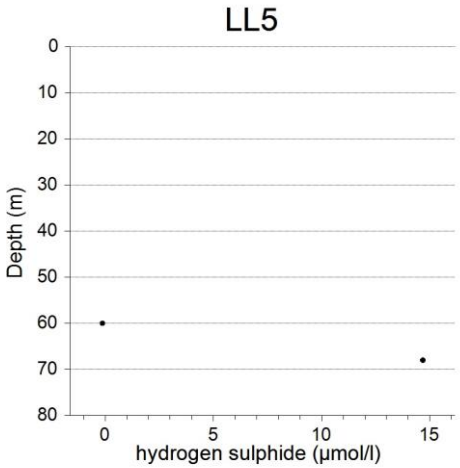

IU5
Depth (m)
0
20
40
60
80
100
7.5
8
8.5
9
oxygen (ml/l)

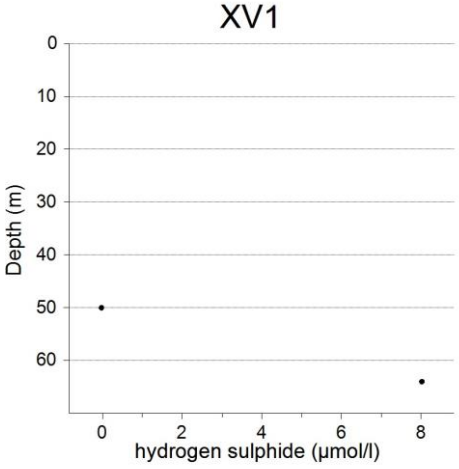

IU7
Depth (m)
0
20
40
60
80
100
2
4
6
8
oxygen (ml/l)

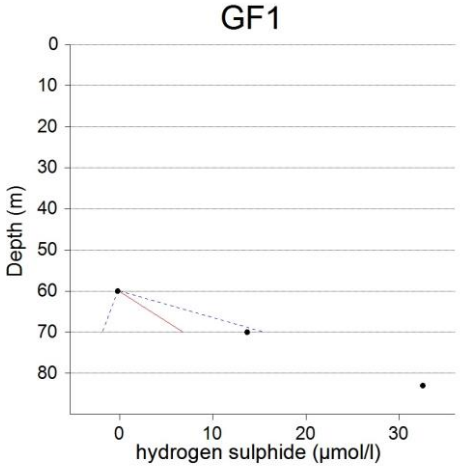

LL7D
Depth (m)
0
20
40
60
80
100
0
10
20
30
40
hydrogen sulphide (µmol/l)

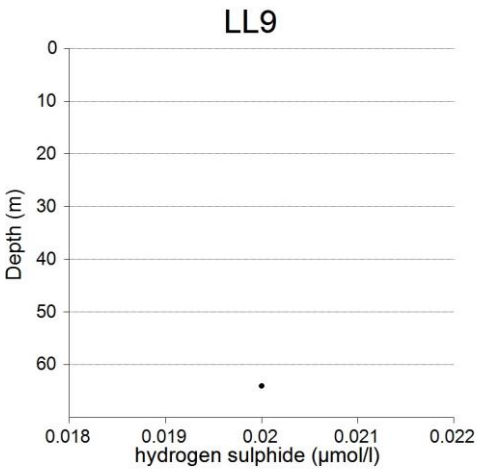

LL7S
Depth (m)
0
10
20
30
40
50
60
70
80
0
10
20
30
hydrogen sulphide (µmol/l)

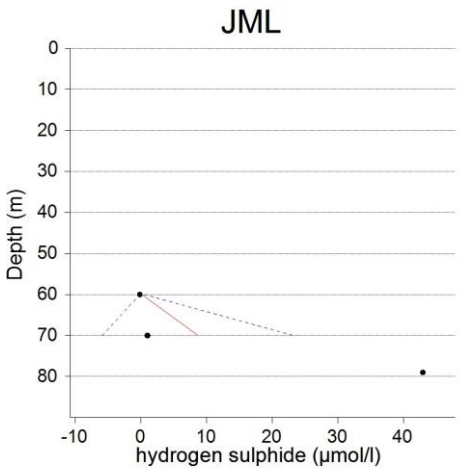

LL6A
Depth (m)
0
10
20
30
40
50
60
70
80
0
5
10
15
20
25
30
35
hydrogen sulphide (µmol/l)

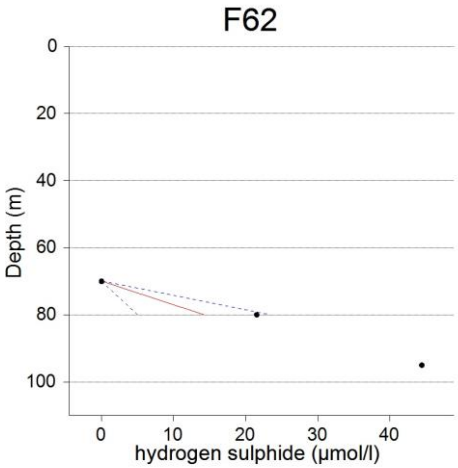

LL5
Depth (m)
0
10
20
30
40
50
60
70
80
0
5
10
15
hydrogen sulphide (µmol/l)

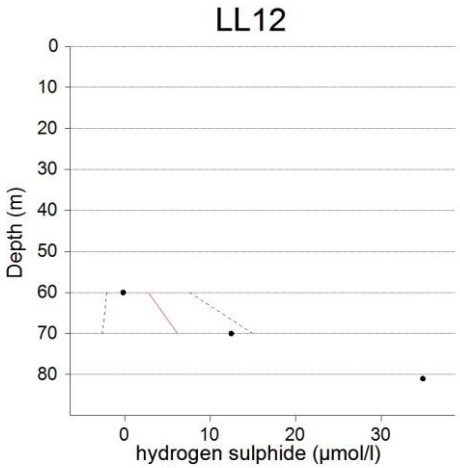

XV1
Depth (m)
0
10
20
30
40
50
60
0
2
4
6
8
hydrogen sulphide (µmol/l)

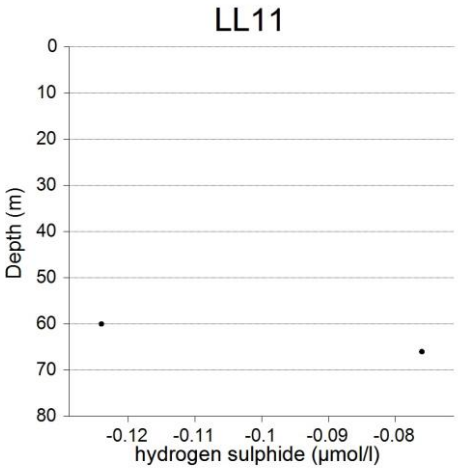

GF1
Depth (m)
0
10
20
30
40
50
60
70
80
0
10
20
30
hydrogen sulphide (µmol/l)

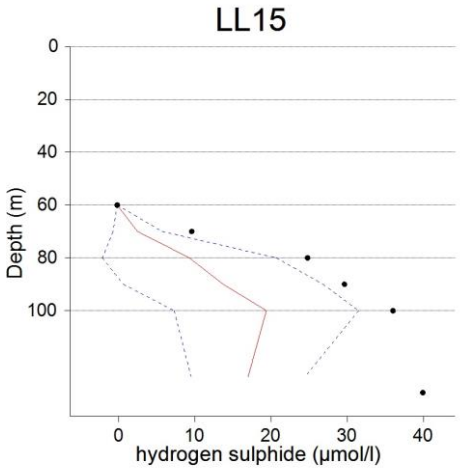

LL9
Depth (m)
0
10
20
30
40
50
60
0.018
0.019
0.02
0.021
0.022
hydrogen sulphide (µmol/l)

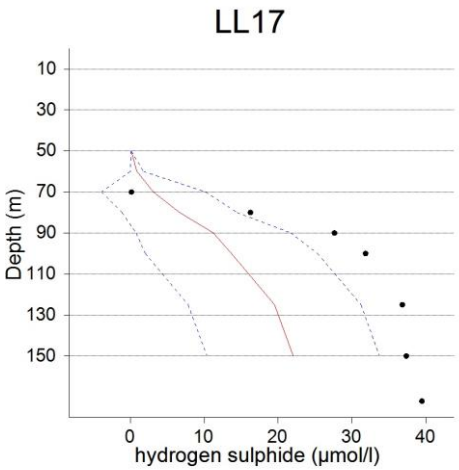

JML
Depth (m)
0
10
20
30
40
50
60
70
80
-10
0
10
20
30
40
hydrogen sulphide (µmol/l)

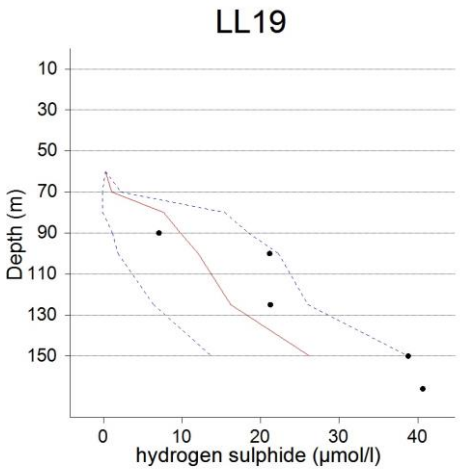

F62
Depth (m)
0
20
40
60
80
100
0
10
20
30
40
hydrogen sulphide (µmol/l)

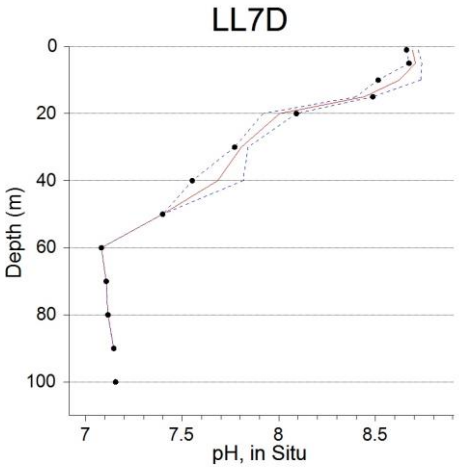

LL12
Depth (m)
0
10
20
30
40
50
60
70
80
0
10
20
30
hydrogen sulphide (µmol/l)

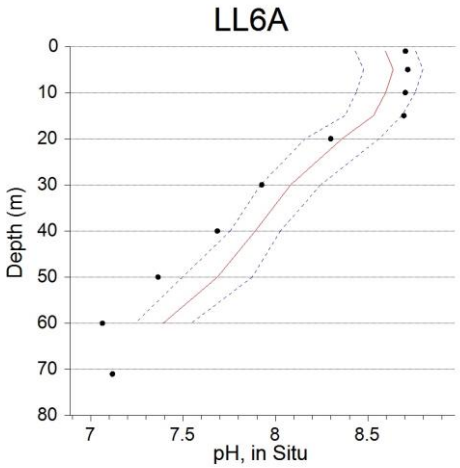

LL11
Depth (m)
0
10
20
30
40
50
60
70
80
-0.12
-0.11
-0.1
-0.09
-0.08
hydrogen sulphide (µmol/l)

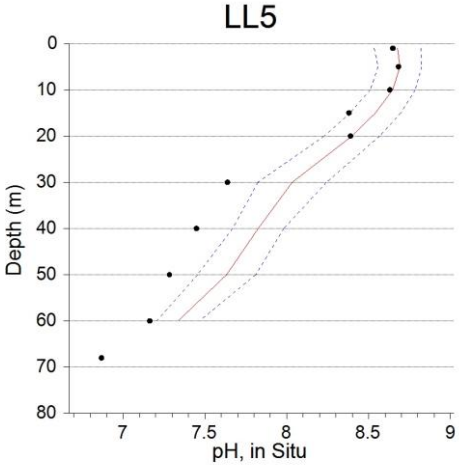

LL15
Depth (m)
0
20
40
60
80
100
0
10
20
30
40
hydrogen sulphide (µmol/l)

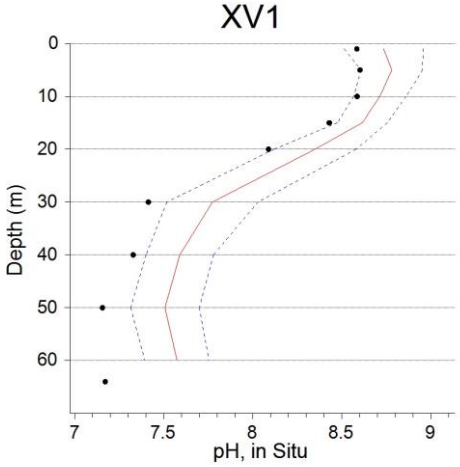

LL17
Depth (m)
10
30
50
70
90
110
130
150
0
10
20
30
40
hydrogen sulphide (µmol/l)

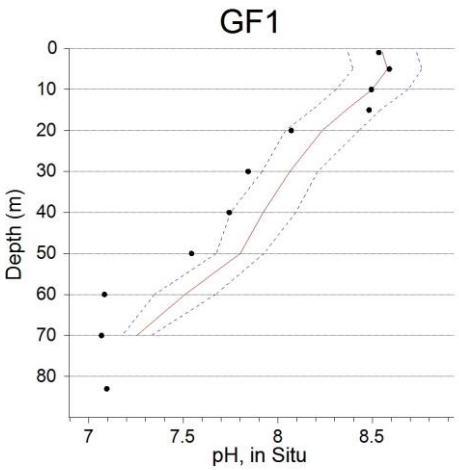

LL19
Depth (m)
10
30
50
70
90
110
130
150
0
10
20
30
40
hydrogen sulphide (µmol/l)

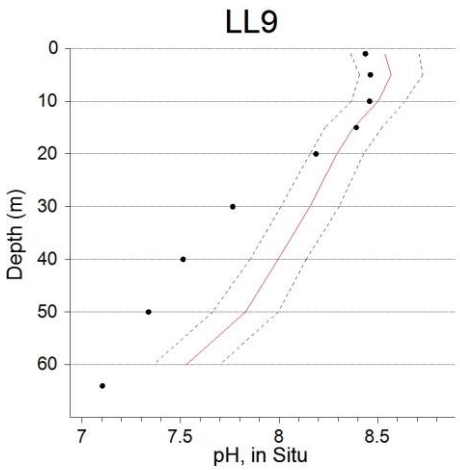

LL7D
Depth (m)
0
20
40
60
80
100
7
7.5
8
8.5
pH, in Situ

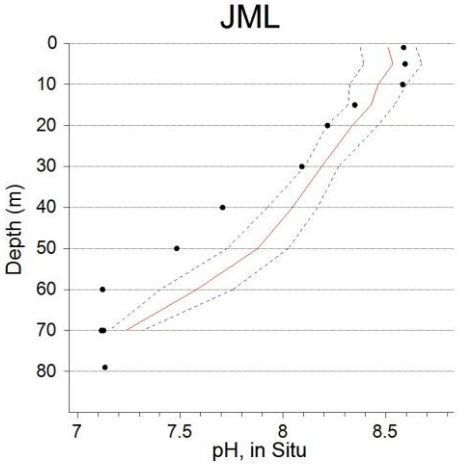

LL6A
Depth (m)
0
10
20
30
40
50
60
70
80
7
7.5
8
8.5
pH, in Situ

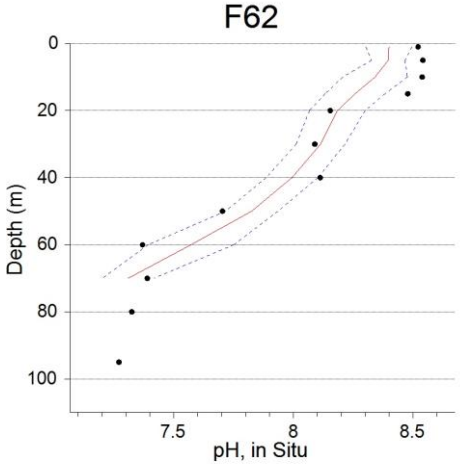

LL5
Depth (m)
0
10
20
30
40
50
60
70
80
7
7.5
8
8.5
9
pH, in Situ

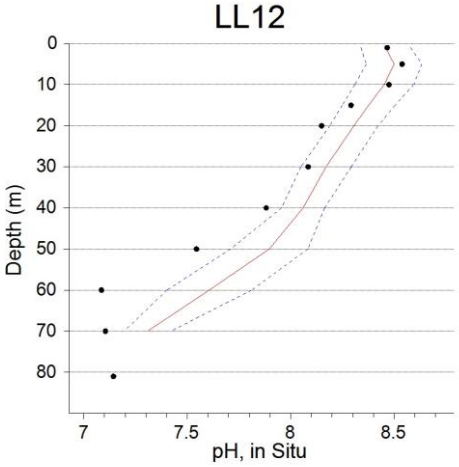

XV1
Depth (m)
0
10
20
30
40
50
60
7
7.5
8
8.5
9
pH, in Situ

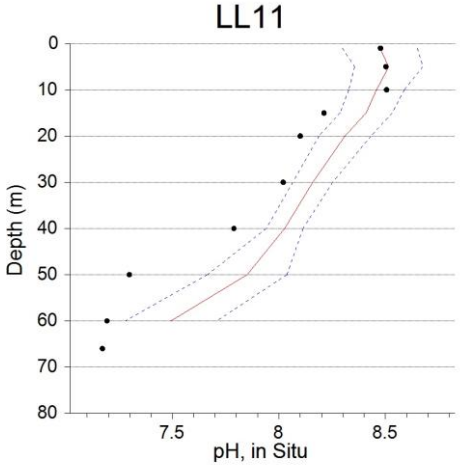

GF1
Depth (m)
0
10
20
30
40
50
60
70
80
7
7.5
8
8.5
pH, in Situ

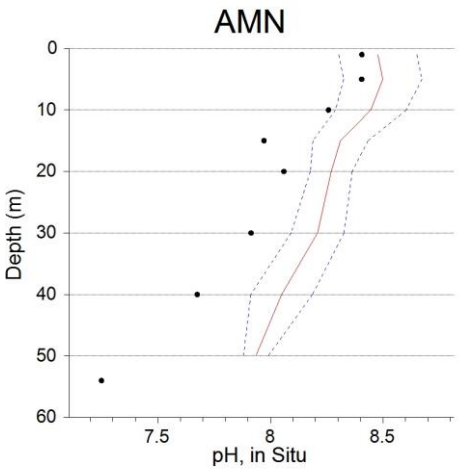

LL9
Depth (m)
0
10
20
30
40
50
60
7
7.5
8
8.5
pH, in Situ

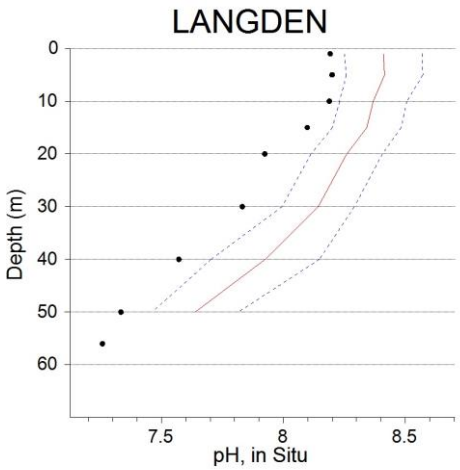

JML
Depth (m)
0
10
20
30
40
50
60
70
80
7
7.5
8
8.5
pH, in Situ

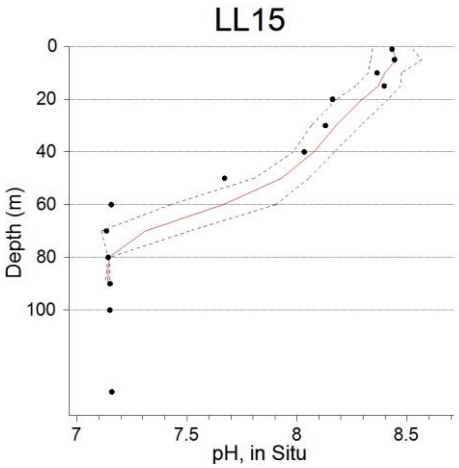

F62
Depth (m)
0
20
40
60
80
100
7.5
8
8.5
pH, in Situ

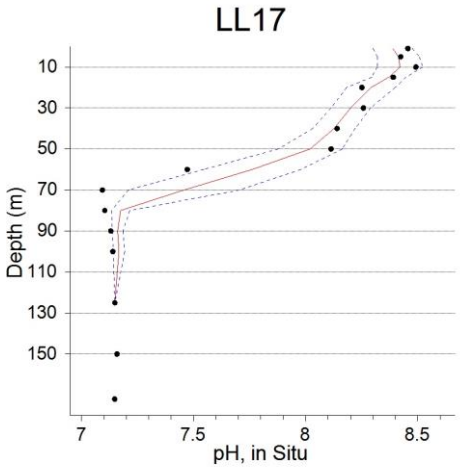

LL12
Depth (m)
0
10
20
30
40
50
60
70
80
7
7.5
8
8.5
pH, in Situ

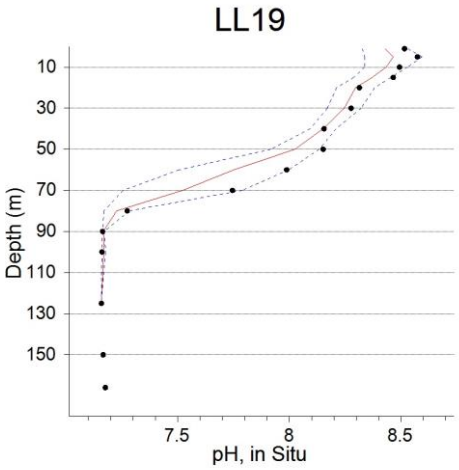

LL11
Depth (m)
0
10
20
30
40
50
60
70
80
7.5
8
8.5
pH, in Situ

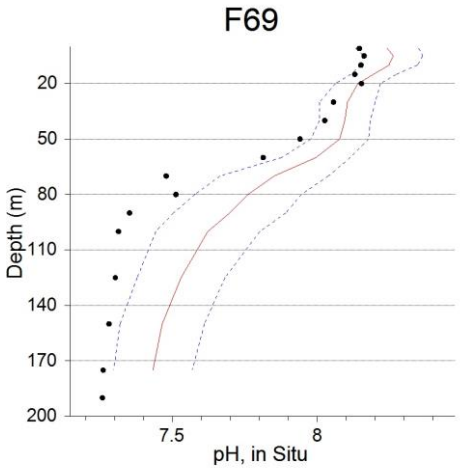

AMN
Depth (m)
0
10
20
30
40
50
60
7.5
8
8.5
pH, in Situ

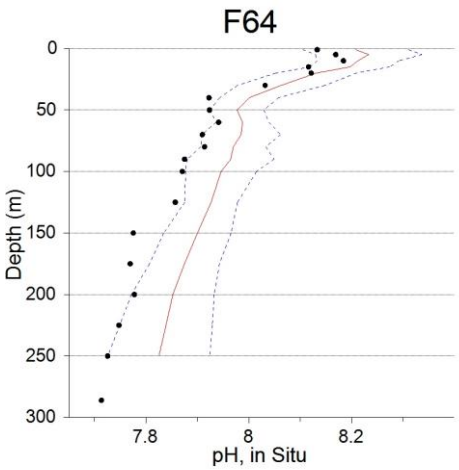

LANGDEN
Depth (m)
0
10
20
30
40
50
60
7.5
8
8.5
pH, in Situ

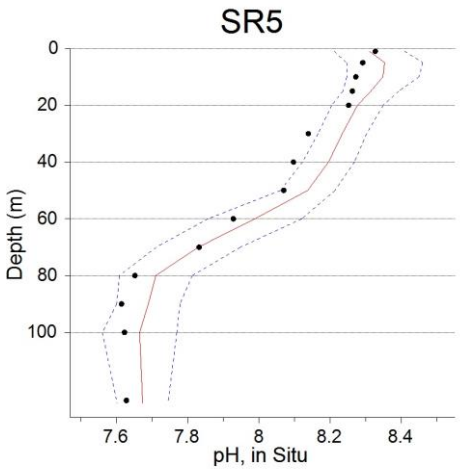

LL15
Depth (m)
0
20
40
60
80
100
7
7.5
8
8.5
pH, in Situ

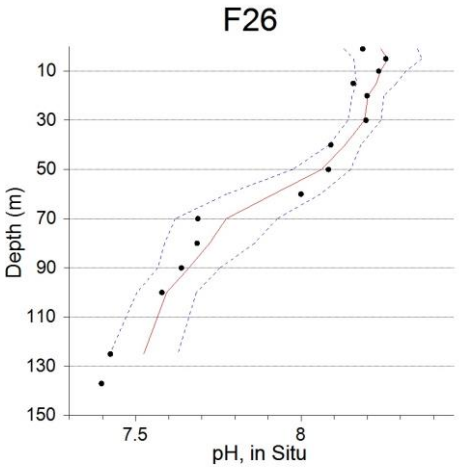

LL17
Depth (m)
10
30
50
70
90
110
130
150
7
7.5
8
8.5
pH, in Situ

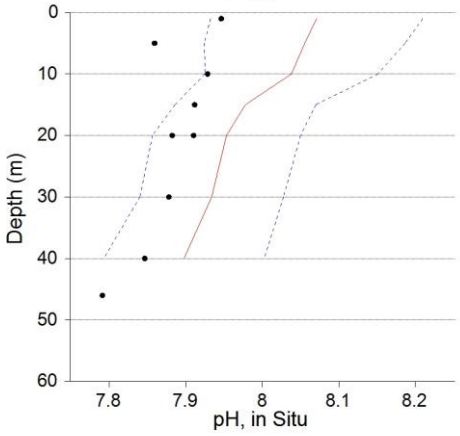

LL19
Depth (m)
10
30
50
70
90
110
130
150
7.5
8
8.5
pH, in Situ

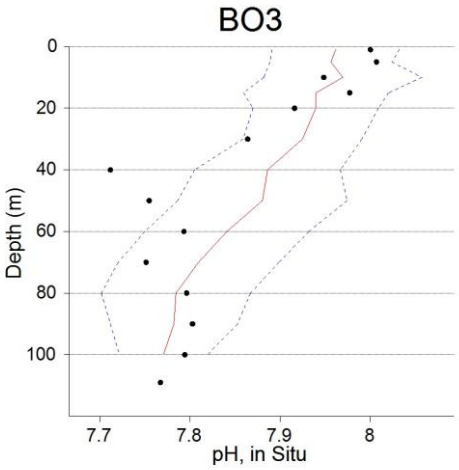

F69
Depth (m)
20
50
80
110
140
170
200
7.5
8
pH, in Situ

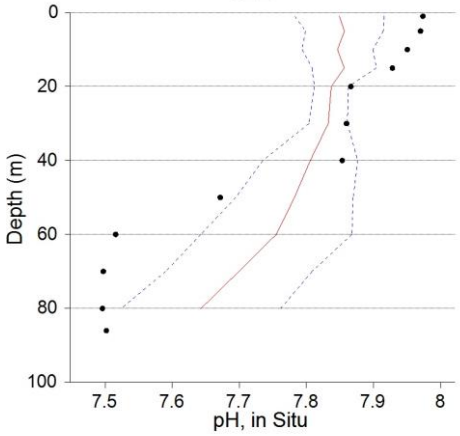

F64
Depth (m)
0
50
100
150
200
250
300
7.8
8
8.2
pH, in Situ

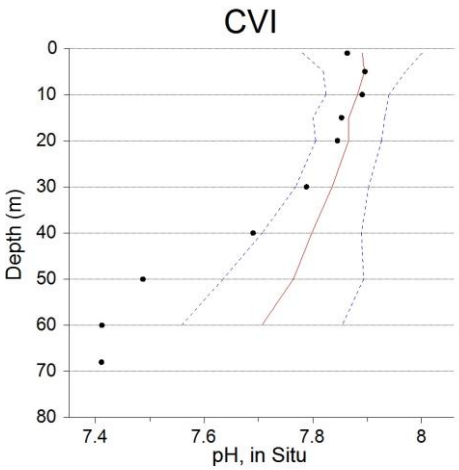

SR5
Depth (m)
0
20
40
60
80
100
7.6
7.8
8
8.2
8.4
pH, in Situ

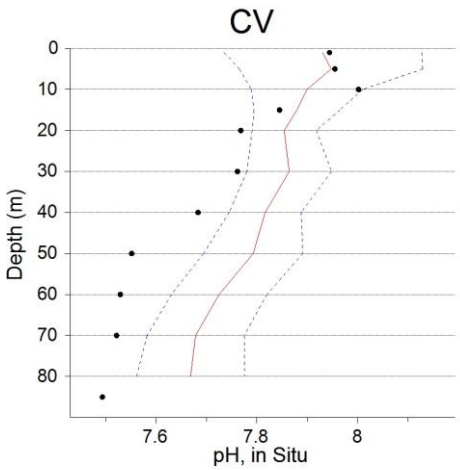

F26
Depth (m)
10
30
50
70
90
110
130
150
7.5
8
pH, in Situ

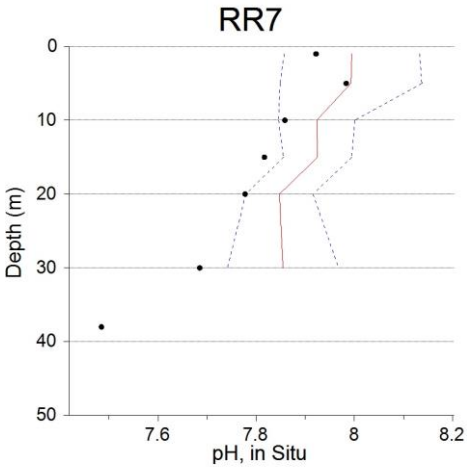

F16
Depth (m)
0
10
20
30
40
50
60
7.8
7.9
8
8.1
8.2
pH, in Situ

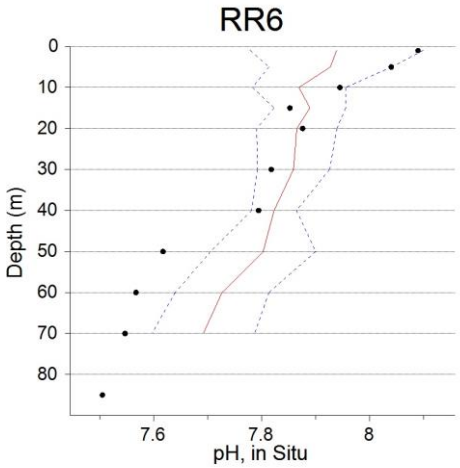

BO3
Depth (m)
0
20
40
60
80
100
7.7
7.8
7.9
8
pH, in Situ

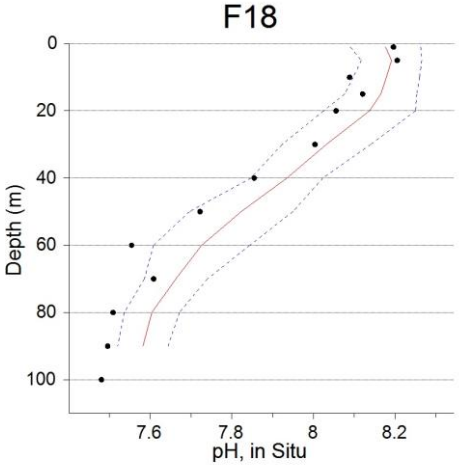

F2
Depth (m)
0
20
40
60
80
100
7.5
7.6
7.7
7.8
7.9
8
pH, in Situ

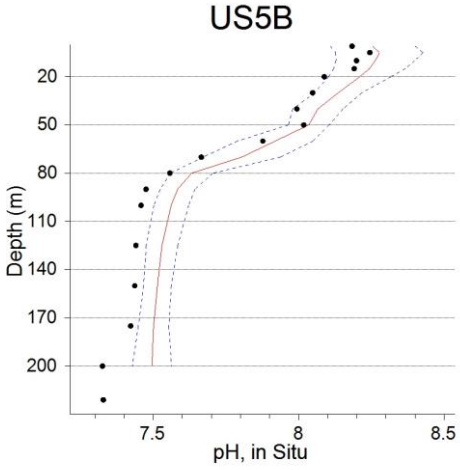

CVI
Depth (m)
0
10
20
30
40
50
60
70
80
7.4
7.6
7.8
8
pH, in Situ

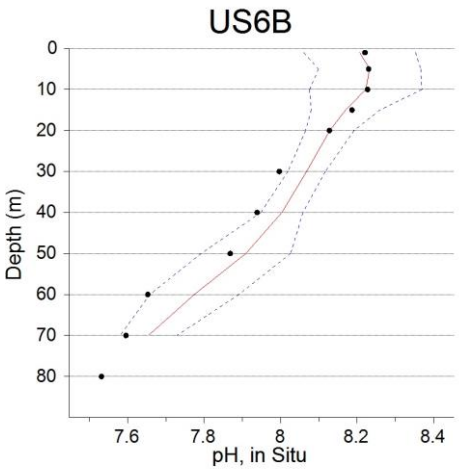

CV
Depth (m)
0
10
20
30
40
50
60
70
80
7.6
7.8
8
pH, in Situ

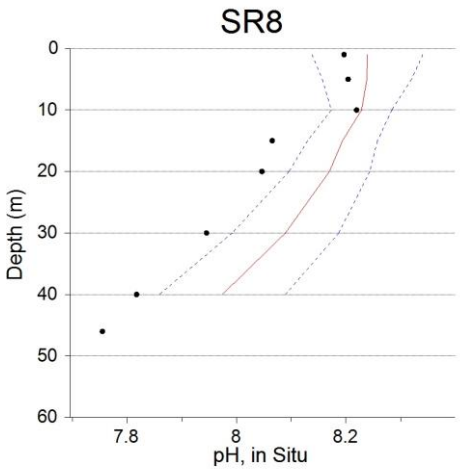

RR7
Depth (m)
0
10
20
30
40
50
7.6
7.8
8
8.2
pH, in Situ

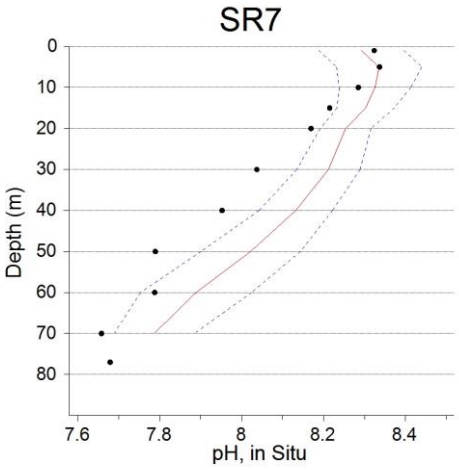

RR6
Depth (m)
0
10
20
30
40
50
60
70
80
7.6
7.8
8
pH, in Situ

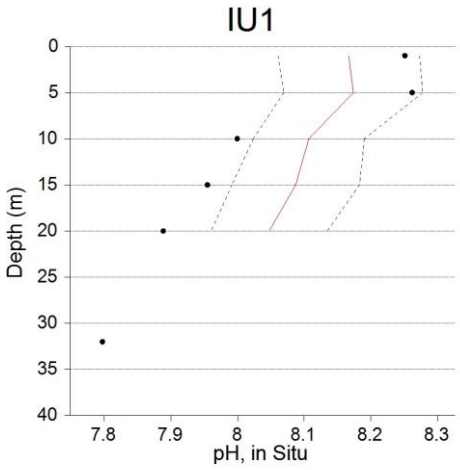

F18
Depth (m)
0
20
40
60
80
100
7.6
7.8
8
8.2
pH, in Situ

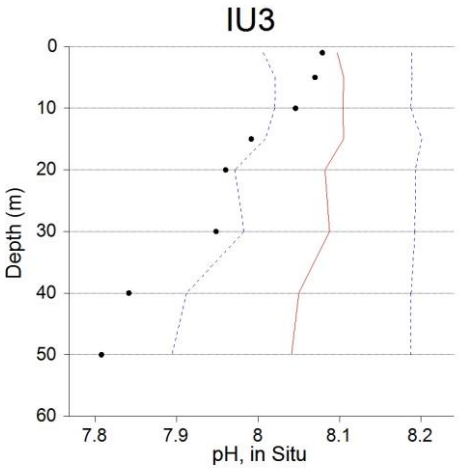

US5B
Depth (m)
20
50
80
110
140
170
200
7.5
8
8.5
pH, in Situ

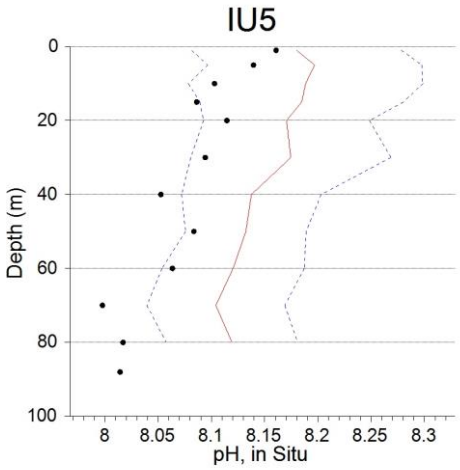

US6B
Depth (m)
0
10
20
30
40
50
60
70
80
7.6
7.8
8
8.2
8.4
pH, in Situ

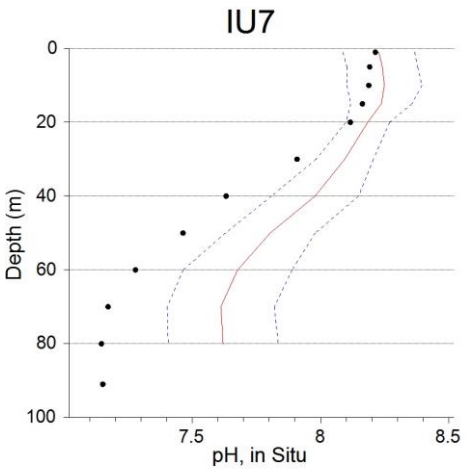

SR8
Depth (m)
0
10
20
30
40
50
60
7.8
8
8.2
pH, in Situ

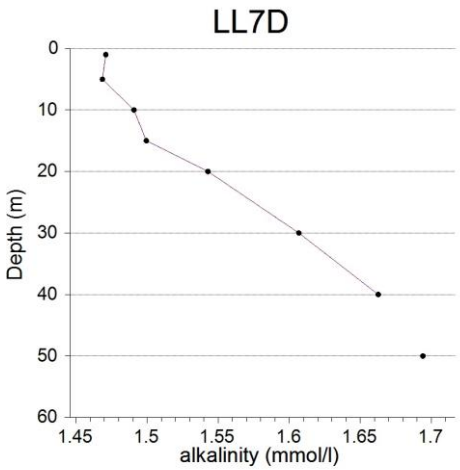

SR7
Depth (m)
0
10
20
30
40
50
60
70
80
7.6
7.8
8
8.2
8.4
pH, in Situ

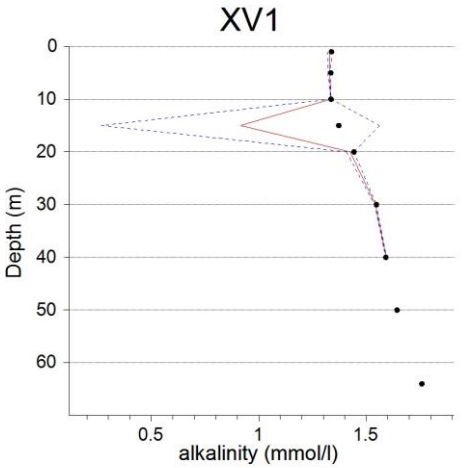

IU1
Depth (m)
0
5
10
15
20
25
30
35
40
7.8
7.9
8
8.1
8.2
8.3
pH, in Situ

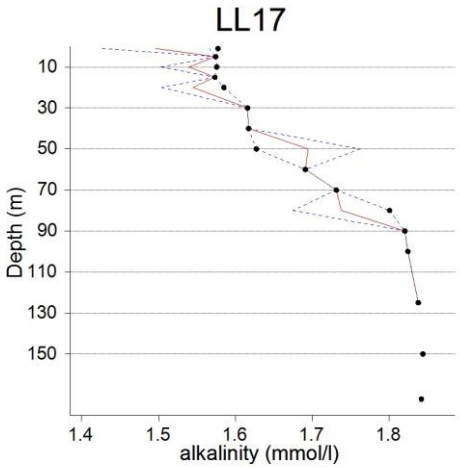

IU3
Depth (m)
0
10
20
30
40
50
60
7.8
7.9
8
8.1
8.2
pH, in Situ

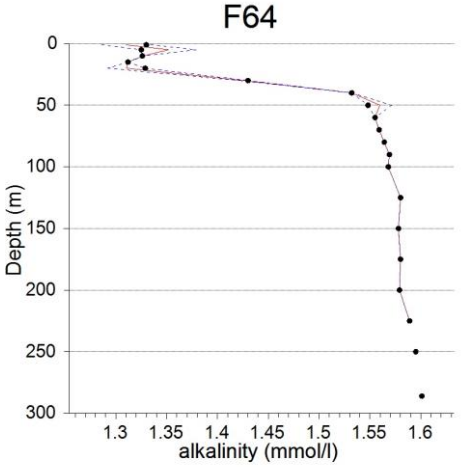

IU5
Depth (m)
0
20
40
60
80
100
8
8.05
8.1
8.15
8.2
8.25
8.3
pH, in Situ

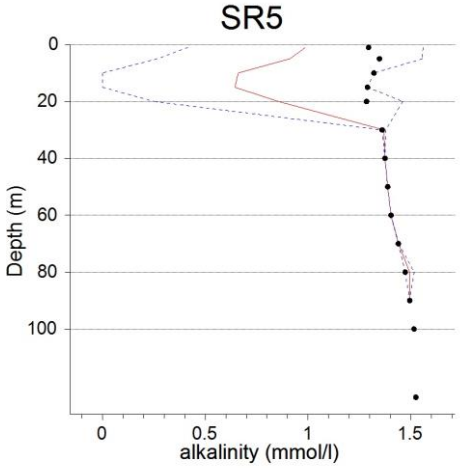

IU7
Depth (m)
0
20
40
60
80
100
7.5
8
8.5
pH, in Situ

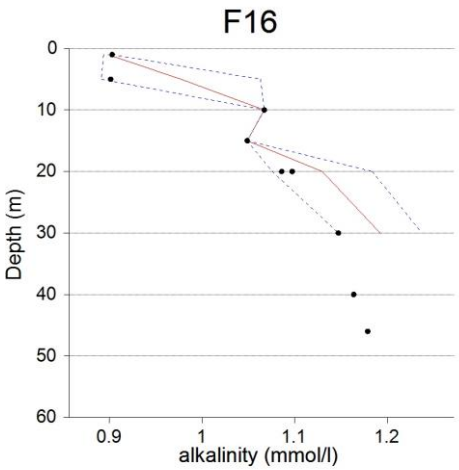

LL7D
Depth (m)
0
10
20
30
40
50
60
1.45
1.5
1.55
1.6
1.65
1.7
alkalinity (mmol/l)

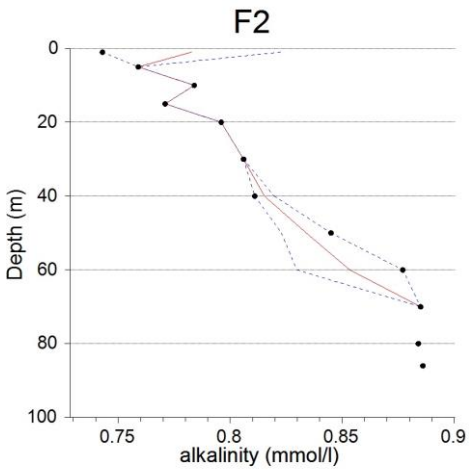

XV1
Depth (m)
0
10
20
30
40
50
60
0.5
1
1.5
alkalinity (mmol/l)

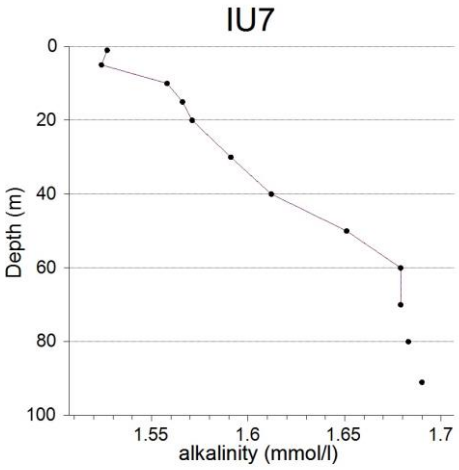

LL17
Depth (m)
10
30
50
70
90
110
130
150
1.4
1.5
1.6
1.7
1.8
alkalinity (mmol/l)

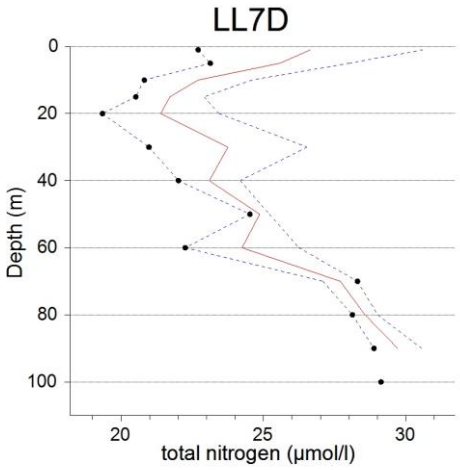

F64
Depth (m)
0
50
100
150
200
250
300
1.3
1.35
1.4
1.45
1.5
1.55
1.6
alkalinity (mmol/l)

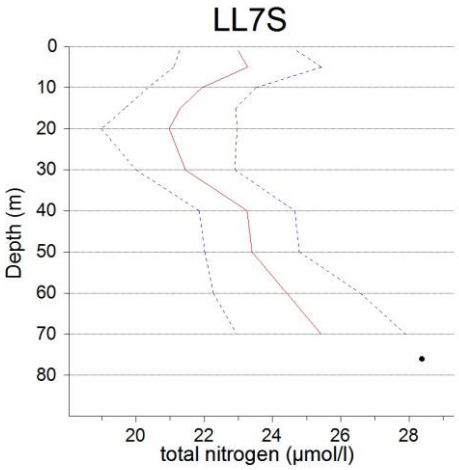

SR5
Depth (m)
0
20
40
60
80
100
0
0.5
1
1.5
alkalinity (mmol/l)

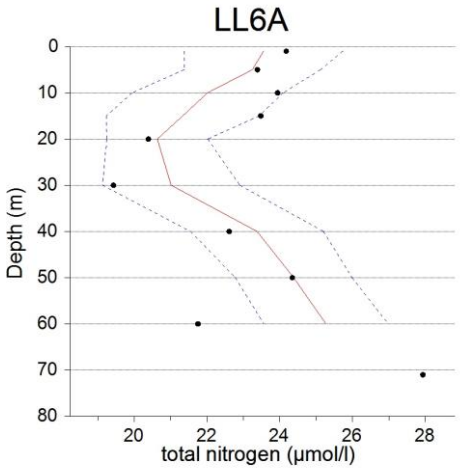

F16
Depth (m)
0
10
20
30
40
50
60
0.9
1
1.1
1.2
alkalinity (mmol/l)

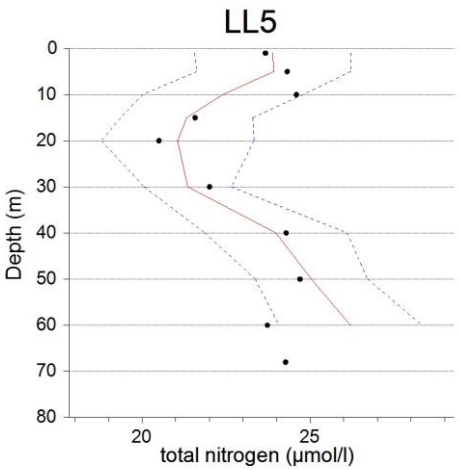

F2
Depth (m)
0
20
40
60
80
100
0.75
0.8
0.85
0.9
alkalinity (mmol/l)

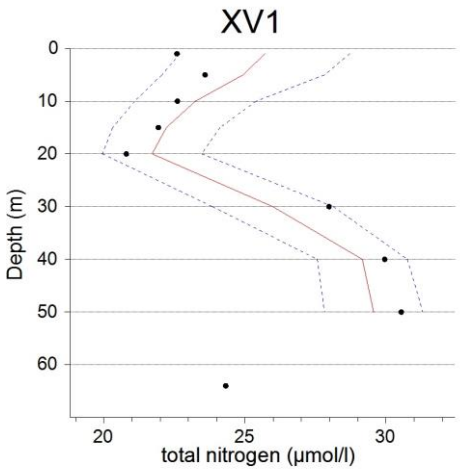

IU7
Depth (m)
0
20
40
60
80
100
1.55
1.6
1.65
1.7
alkalinity (mmol/l)

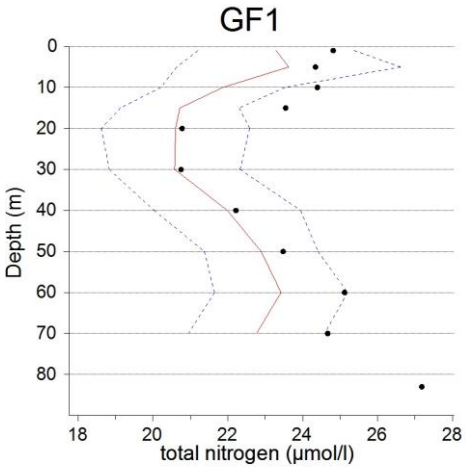

LL7D
Depth (m)
0
20
40
60
80
100
20
25
30
total nitrogen (µmol/l)

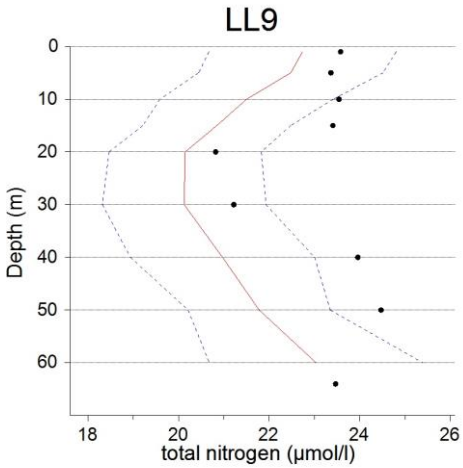

LL7S
Depth (m)
0
10
20
30
40
50
60
70
80
20
22
24
26
28
total nitrogen (µmol/l)

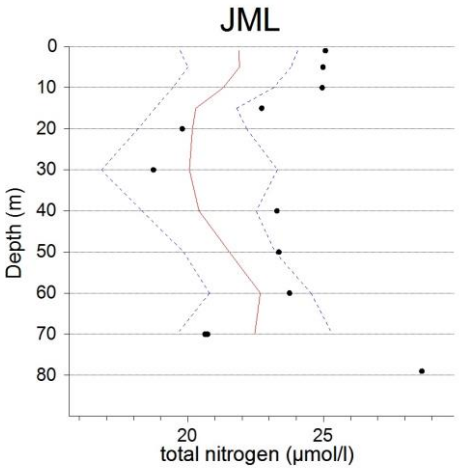

LL6A
Depth (m)
0
10
20
30
40
50
60
70
80
20
22
24
26
28
total nitrogen (µmol/l)

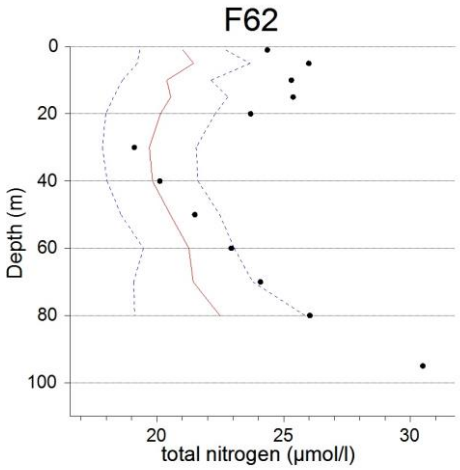

LL5
Depth (m)
0
10
20
30
40
50
60
70
80
20
25
total nitrogen (µmol/l)

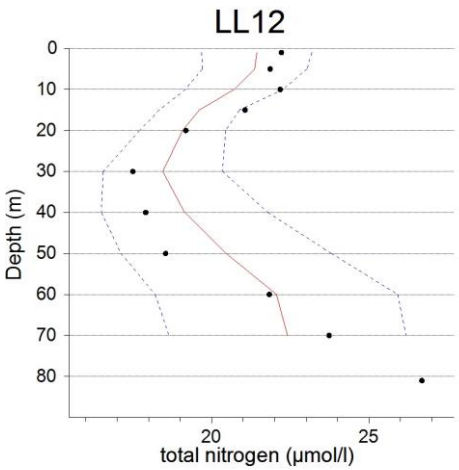

XV1
Depth (m)
0
10
20
30
40
50
60
20
25
30
total nitrogen (µmol/l)

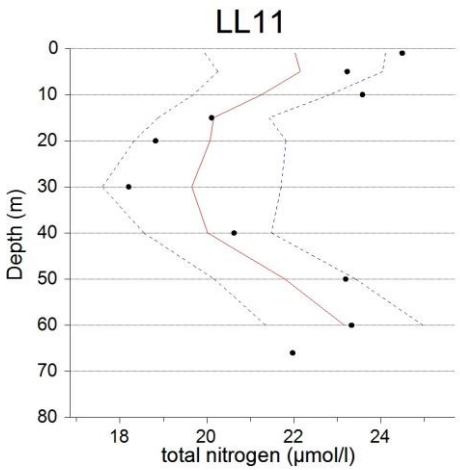

GF1
Depth (m)
0
10
20
30
40
50
60
70
80
18
20
22
24
26
28
total nitrogen (µmol/l)

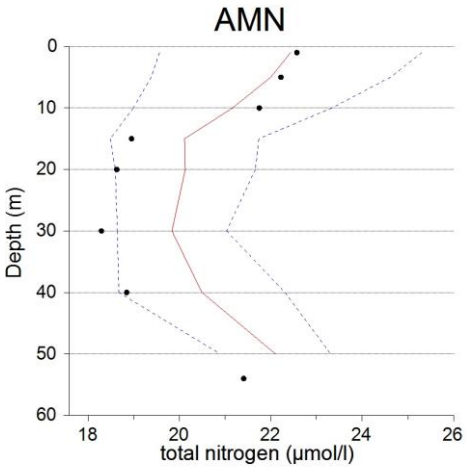

LL9
Depth (m)
0
10
20
30
40
50
60
18
20
22
24
26
total nitrogen (µmol/l)

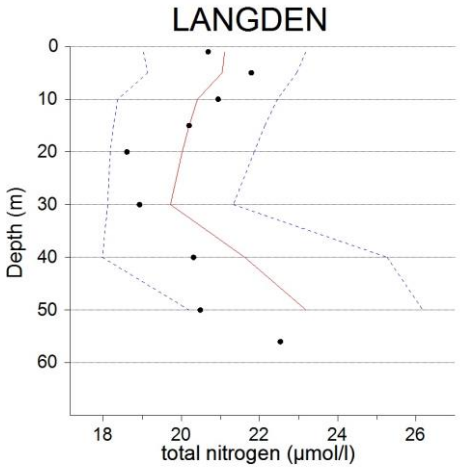

JML
Depth (m)
0
10
20
30
40
50
60
70
80
20
25
total nitrogen (µmol/l)

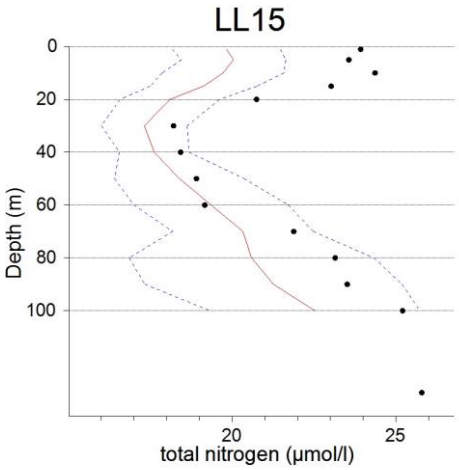

F62
Depth (m)
0
20
40
60
80
100
20
25
30
total nitrogen (µmol/l)

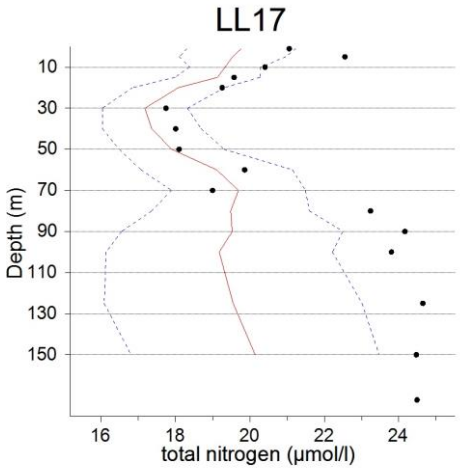

LL12
Depth (m)
0
10
20
30
40
50
60
70
80
20
25
total nitrogen (µmol/l)

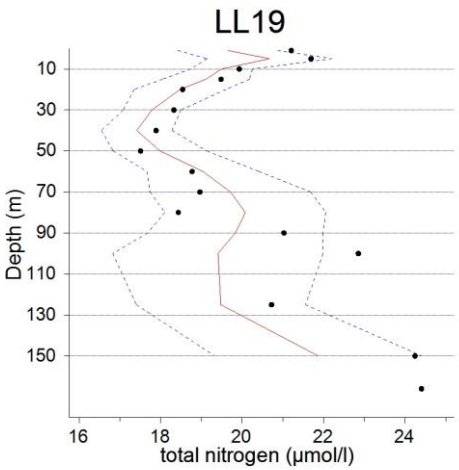

LL11
Depth (m)
0
10
20
30
40
50
60
70
80
18
20
22
24
total nitrogen (µmol/l)

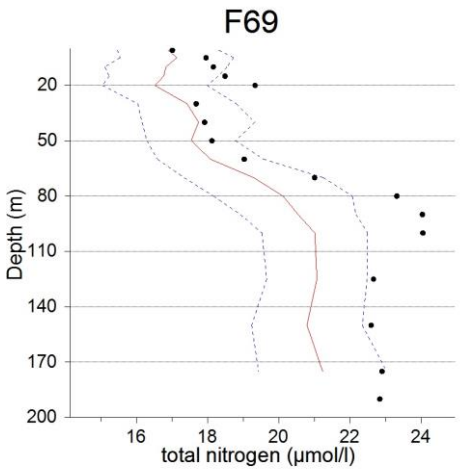

AMN
Depth (m)
0
10
20
30
40
50
60
18
20
22
24
26
total nitrogen (µmol/l)

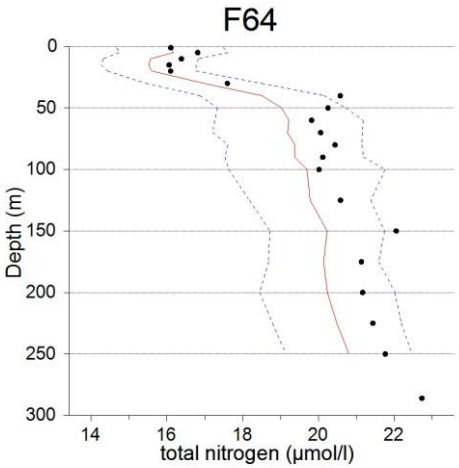

LANGDEN
Depth (m)
0
10
20
30
40
50
60
18
20
22
24
26
total nitrogen (µmol/l)

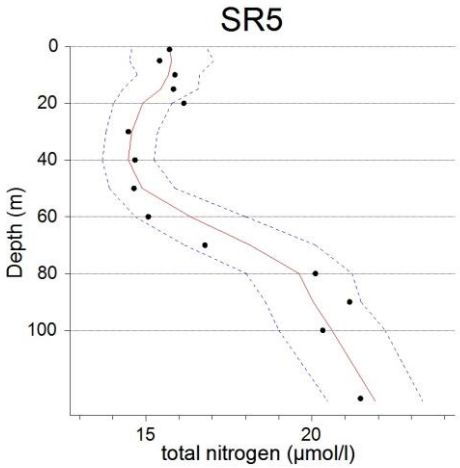

LL15
Depth (m)
0
20
40
60
80
100
20
25
total nitrogen (µmol/l)

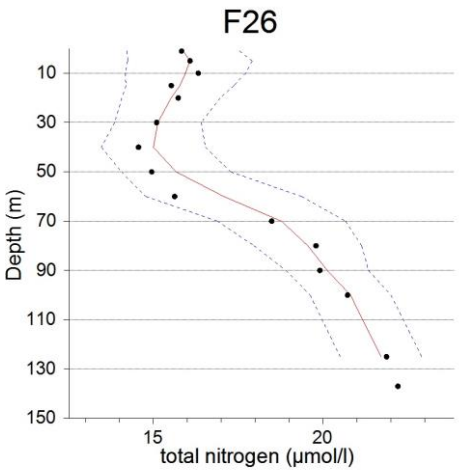

LL17
Depth (m)
10
30
50
70
90
110
130
150
16
18
20
22
24
total nitrogen (µmol/l)

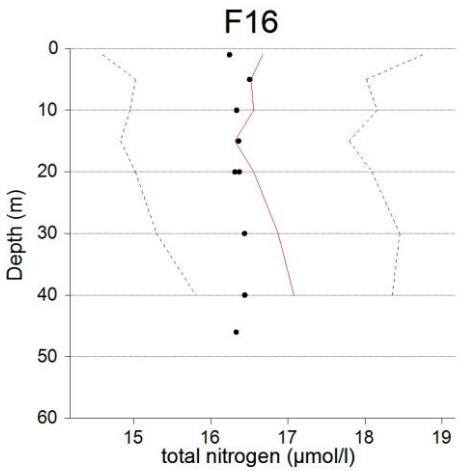

LL19
Depth (m)
10
30
50
70
90
110
130
150
16
18
20
22
24
total nitrogen (µmol/l)

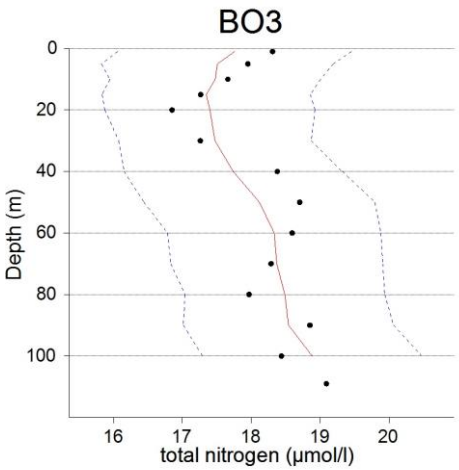

F69
Depth (m)
20
50
80
110
140
170
200
16
18
20
22
24
total nitrogen (µmol/l)

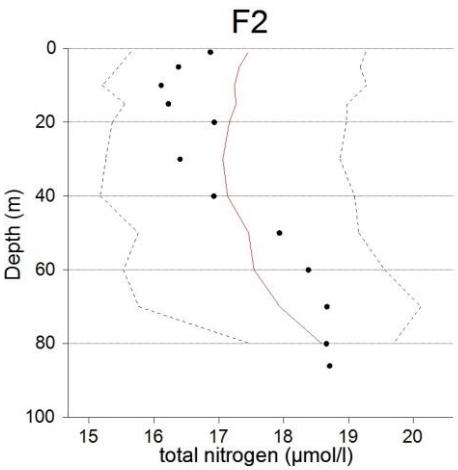

F64
Depth (m)
0
50
100
150
200
250
300
14
16
18
20
22
total nitrogen (µmol/l)

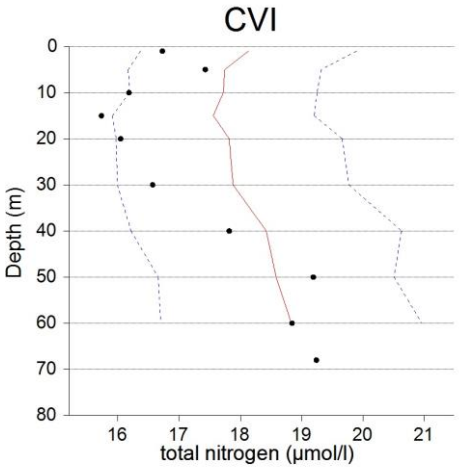

SR5
Depth (m)
0
20
40
60
80
100
15
20
total nitrogen (µmol/l)

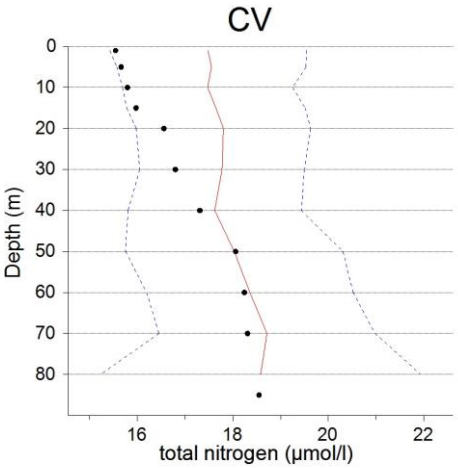

F26
Depth (m)
10
30
50
70
90
110
130
150
15
20
total nitrogen (µmol/l)

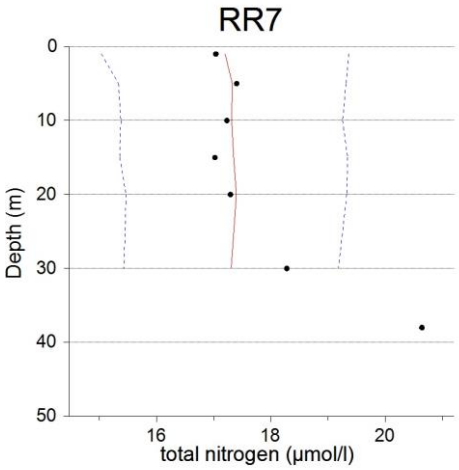

F16
Depth (m)
0
10
20
30
40
50
60
15
16
17
18
19
total nitrogen (µmol/l)

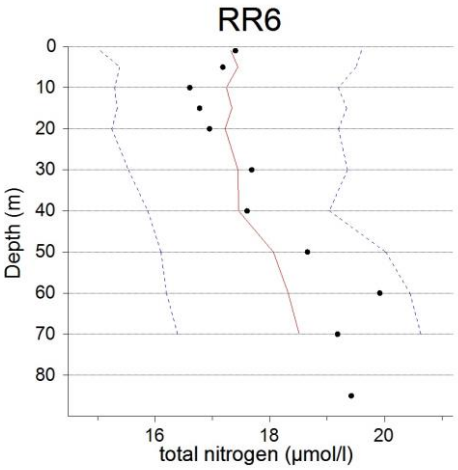

BO3
Depth (m)
0
20
40
60
80
100
16
17
18
19
20
total nitrogen (µmol/l)

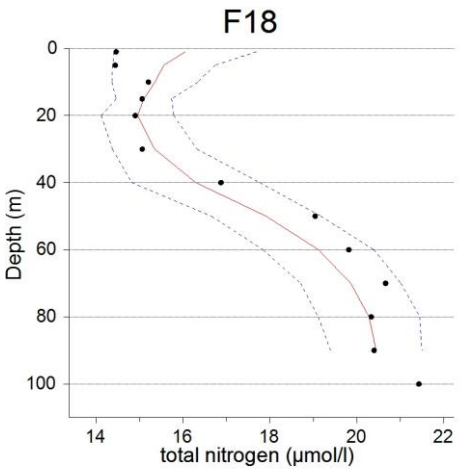

F2
Depth (m)
0
20
40
60
80
100
15
16
17
18
19
20
total nitrogen (µmol/l)

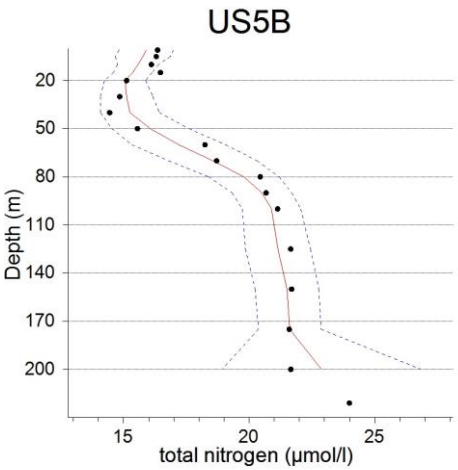

CVI
Depth (m)
0
10
20
30
40
50
60
70
80
16
17
18
19
20
21
total nitrogen (µmol/l)

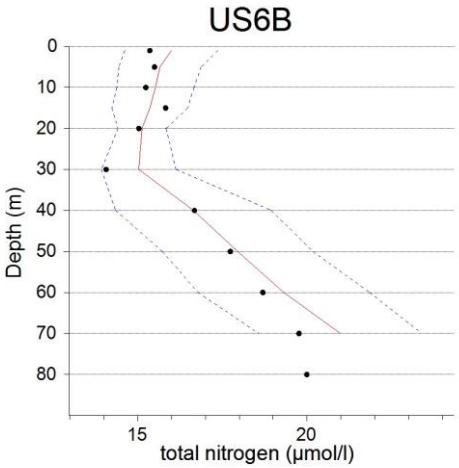

CV
Depth (m)
0
10
20
30
40
50
60
70
80
16
18
20
22
total nitrogen (µmol/l)

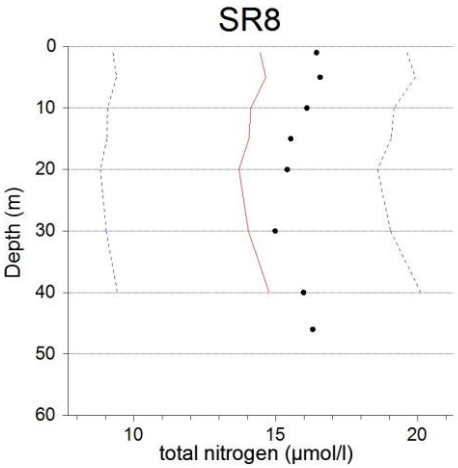

RR7
Depth (m)
0
10
20
30
40
50
16
18
20
total nitrogen (µmol/l)

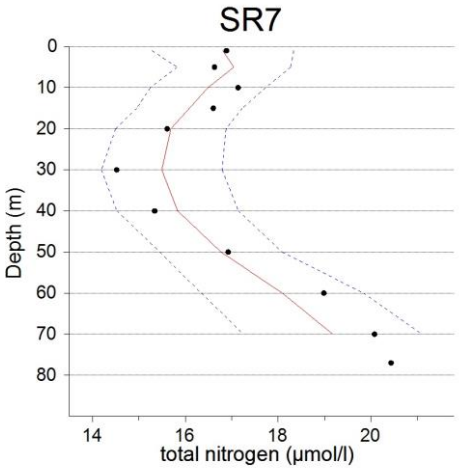

RR6
Depth (m)
0
10
20
30
40
50
60
70
80
16
18
20
total nitrogen (µmol/l)

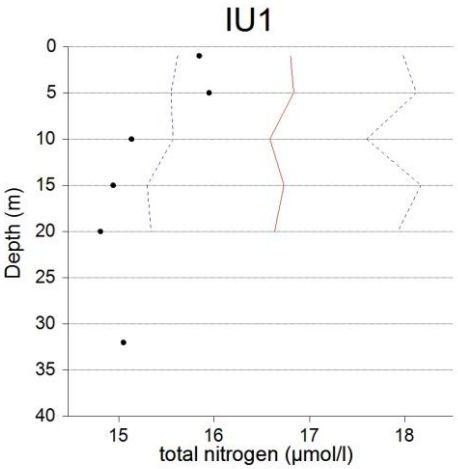

F18
Depth (m)
0
20
40
60
80
100
14
16
18
20
22
total nitrogen (µmol/l)

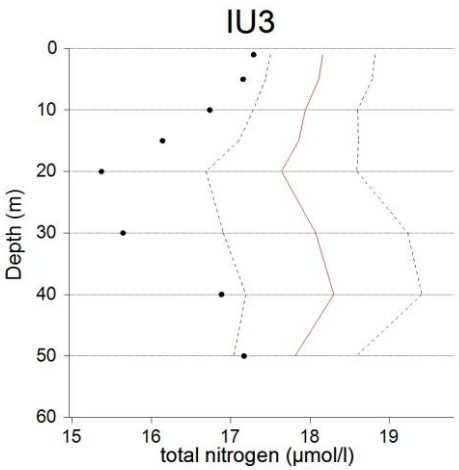

US5B
Depth (m)
20
50
80
110
140
170
200
15
20
25
total nitrogen (µmol/l)

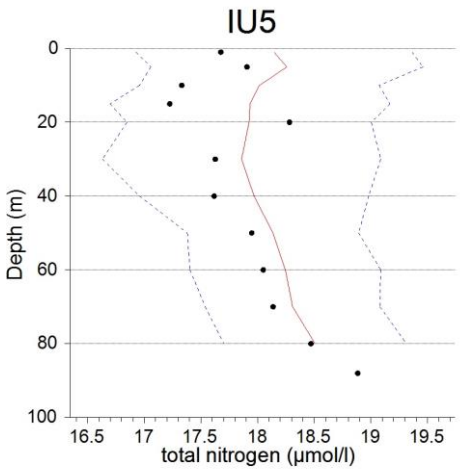

US6B
Depth (m)
0
10
20
30
40
50
60
70
80
15
20
total nitrogen (µmol/l)

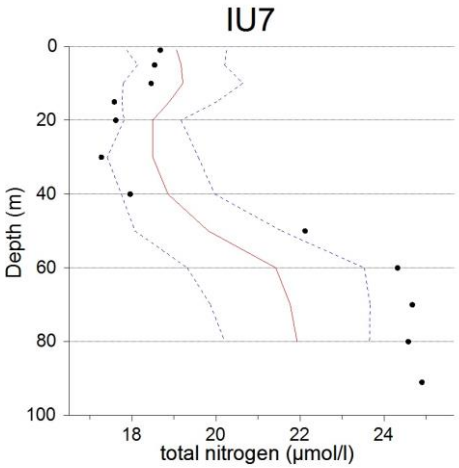

SR8
Depth (m)
0
10
20
30
40
50
60
10
15
20
total nitrogen (µmol/l)

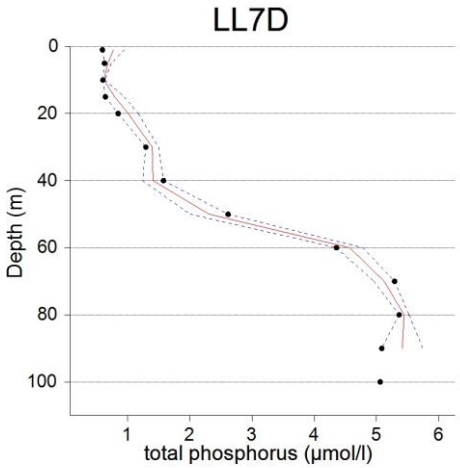

SR7
Depth (m)
0
10
20
30
40
50
60
70
80
14
16
18
20
total nitrogen (µmol/l)

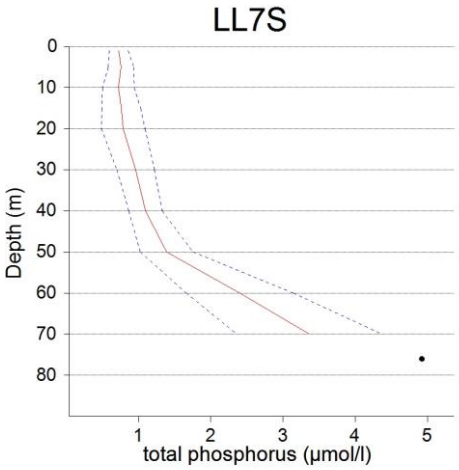

IU1
Depth (m)
0
5
10
15
20
25
30
35
40
15
16
17
18
total nitrogen (µmol/l)

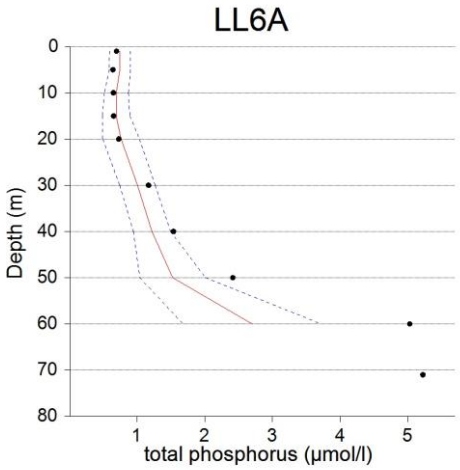

IU3
Depth (m)
0
10
20
30
40
50
60
15
16
17
18
19
total nitrogen (µmol/l)

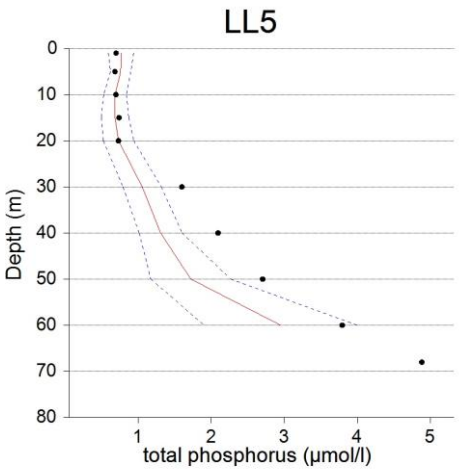

IU5
Depth (m)
0
20
40
60
80
100
16.5
17
17.5
18
18.5
19
19.5
total nitrogen (µmol/l)

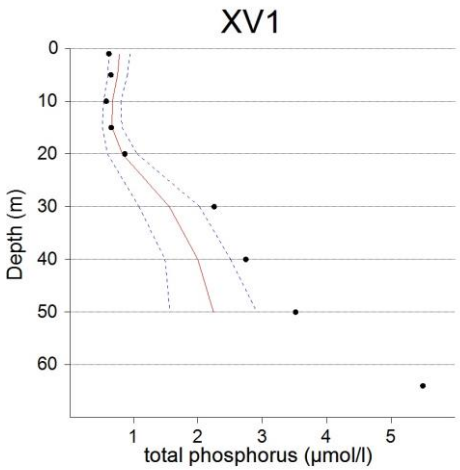

IU7
Depth (m)
0
20
40
60
80
100
18
20
22
24
total nitrogen (µmol/l)

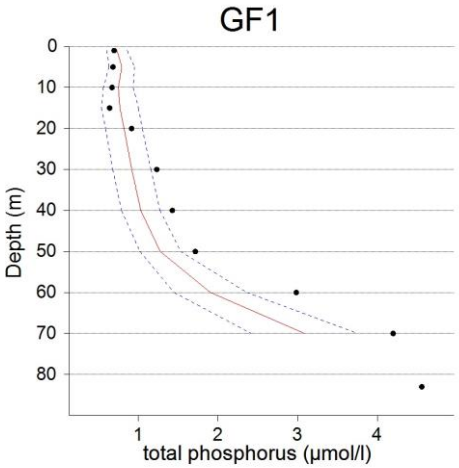

LL7D
Depth (m)
0
20
40
60
80
100
1
2
3
4
5
6
total phosphorus (µmol/l)

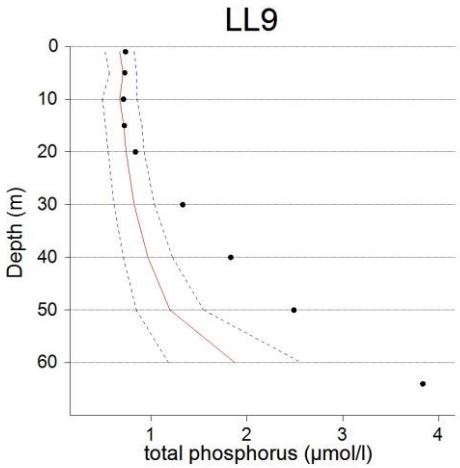

LL7S
Depth (m)
0
10
20
30
40
50
60
70
80
1
2
3
4
5
total phosphorus (µmol/l)

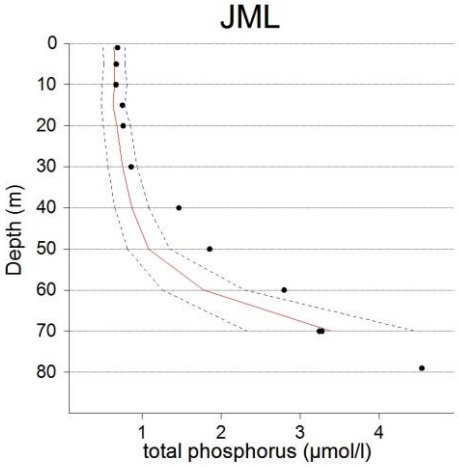

LL6A
Depth (m)
0
10
20
30
40
50
60
70
80
1
2
3
4
5
total phosphorus (µmol/l)

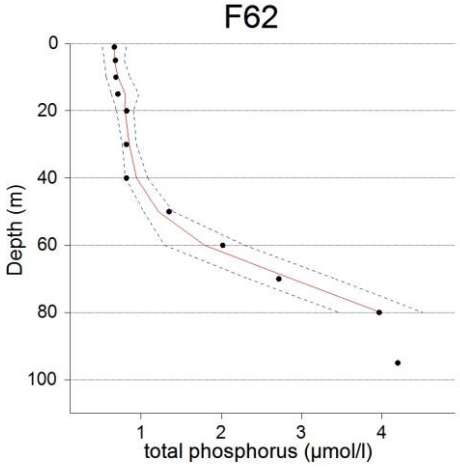

LL5
Depth (m)
0
10
20
30
40
50
60
70
80
1
2
3
4
5
total phosphorus (µmol/l)

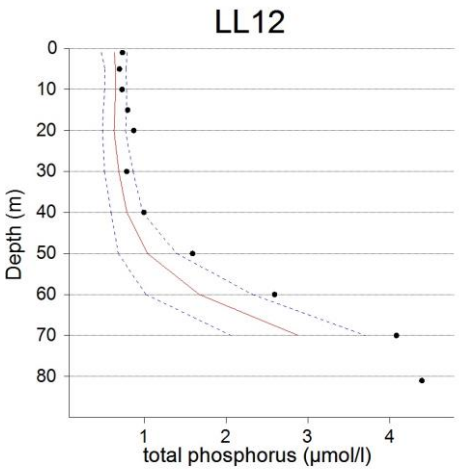

XV1
Depth (m)
0
10
20
30
40
50
60
1
2
3
4
5
total phosphorus (µmol/l)

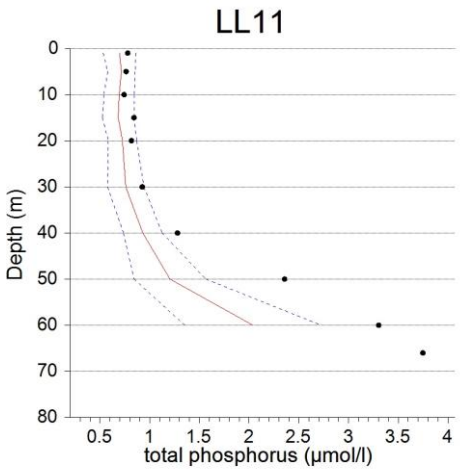

GF1
Depth (m)
0
10
20
30
40
50
60
70
80
1
2
3
4
total phosphorus (µmol/l)

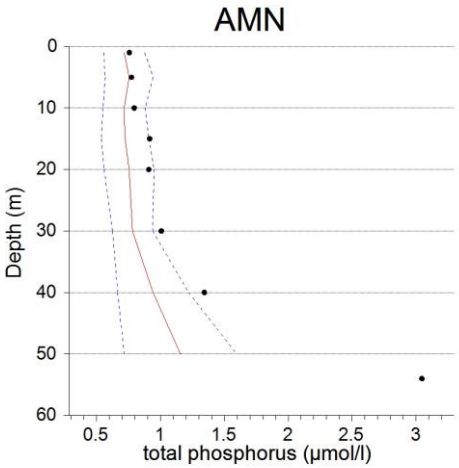

LL9
Depth (m)
0
10
20
30
40
50
60
1
2
3
4
total phosphorus (µmol/l)

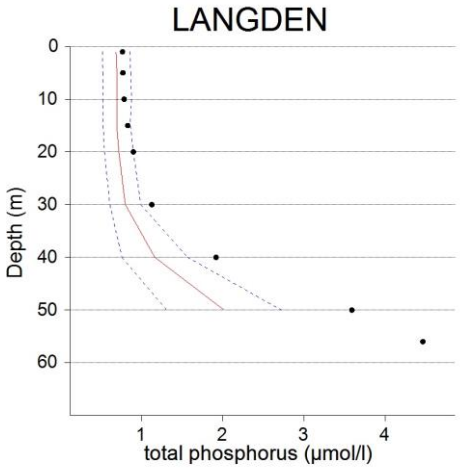

JML
Depth (m)
0
10
20
30
40
50
60
70
80
1
2
3
4
total phosphorus (µmol/l)

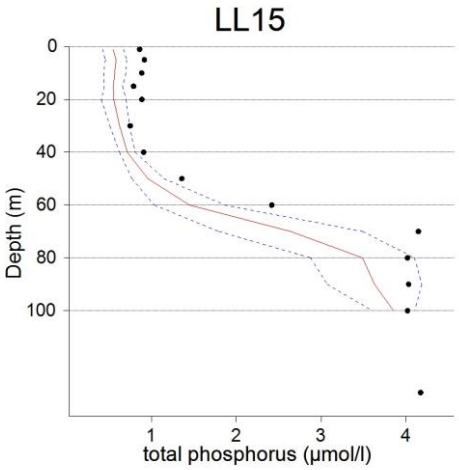

F62
Depth (m)
0
20
40
60
80
100
1
2
3
4
total phosphorus (µmol/l)

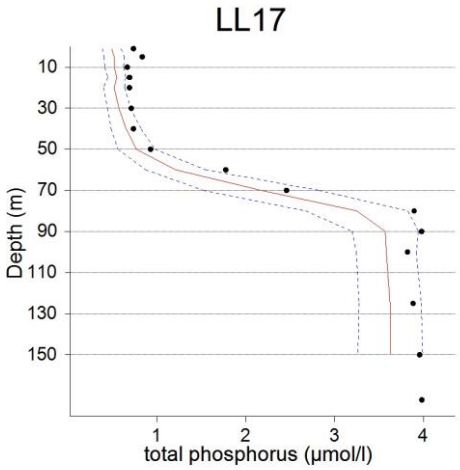

LL12
Depth (m)
0
10
20
30
40
50
60
70
80
1
2
3
4
total phosphorus (µmol/l)

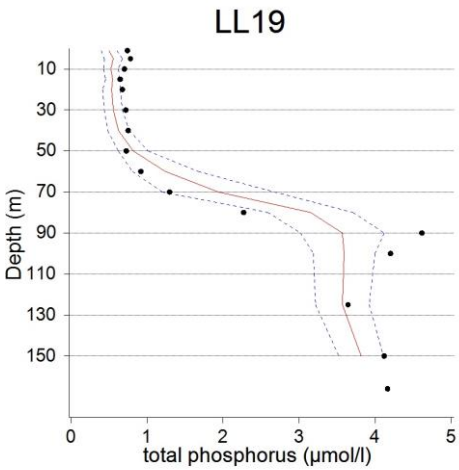

LL11
Depth (m)
0
10
20
30
40
50
60
70
80
0.5
1
1.5
2
2.5
3
3.5
4
total phosphorus (µmol/l)

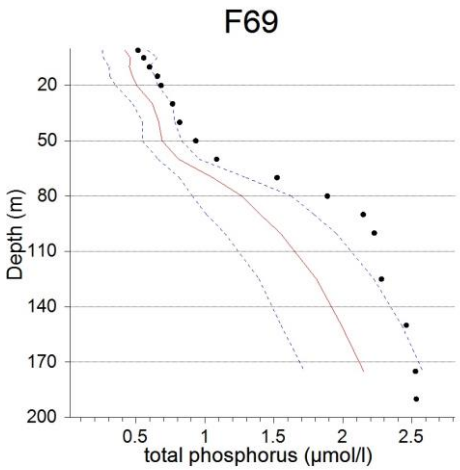

AMN
Depth (m)
0
10
20
30
40
50
60
0.5
1
1.5
2
2.5
3
total phosphorus (µmol/l)

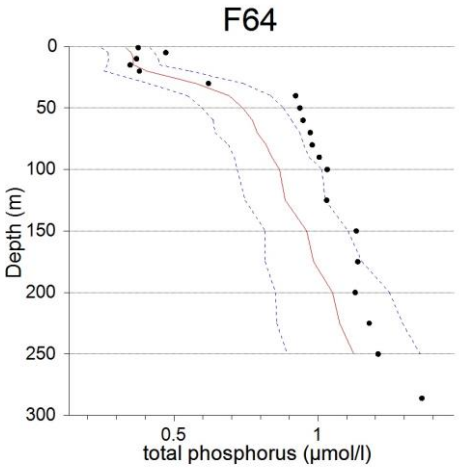

LANGDEN
Depth (m)
0
10
20
30
40
50
60
1
2
3
4
total phosphorus (µmol/l)

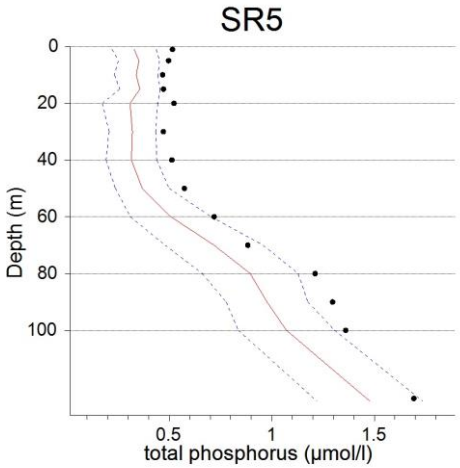

LL15
Depth (m)
0
20
40
60
80
100
1
2
3
4
total phosphorus (µmol/l)

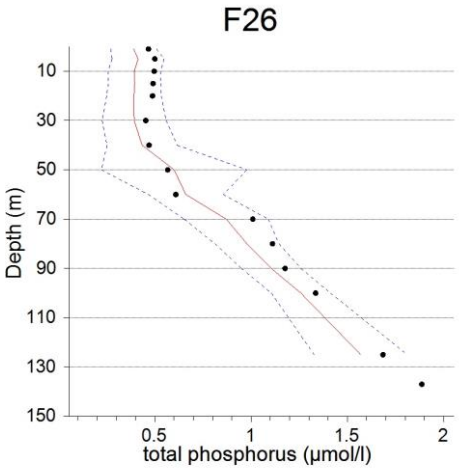

LL17
Depth (m)
10
30
50
70
90
110
130
150
1
2
3
4
total phosphorus (µmol/l)

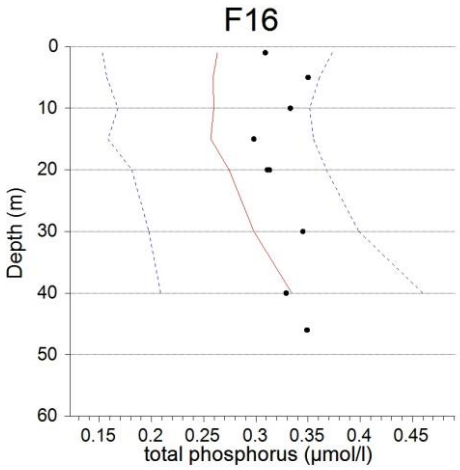

LL19
Depth (m)
10
30
50
70
90
110
130
150
0
1
2
3
4
5
total phosphorus (µmol/l)

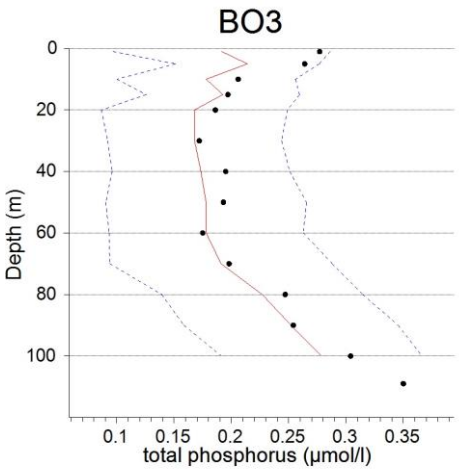

F69
Depth (m)
20
50
80
110
140
170
200
0.5
1
1.5
2
2.5
total phosphorus (µmol/l)

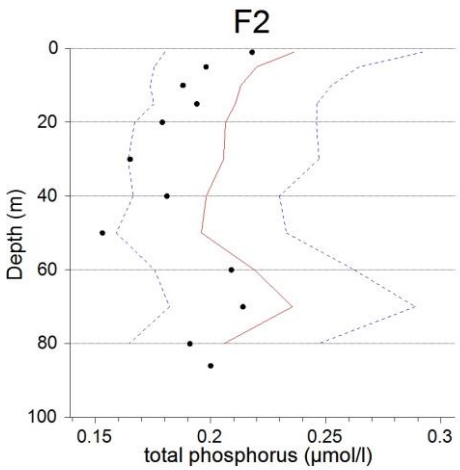

F64
Depth (m)
0
50
100
150
200
250
300
0.5
1
total phosphorus (µmol/l)

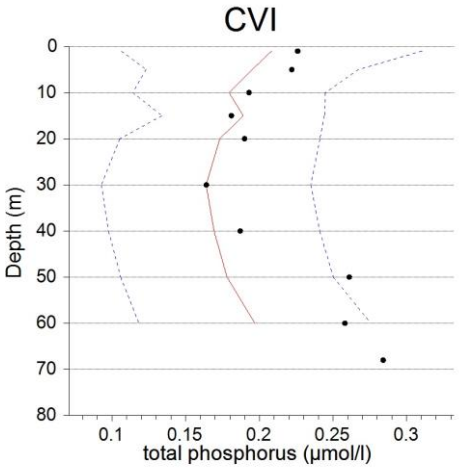

SR5
Depth (m)
0
20
40
60
80
100
0.5
1
1.5
total phosphorus (µmol/l)

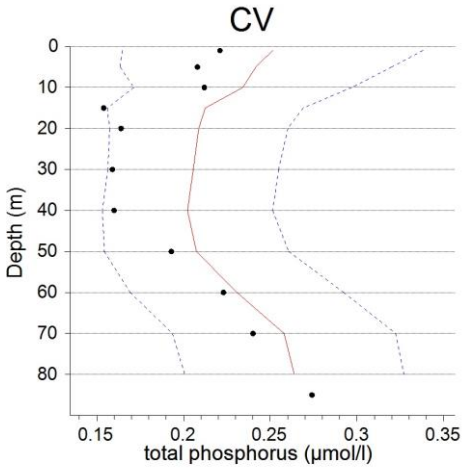

F26
Depth (m)
10
30
50
70
90
110
130
150
0.5
1
1.5
2
total phosphorus (µmol/l)

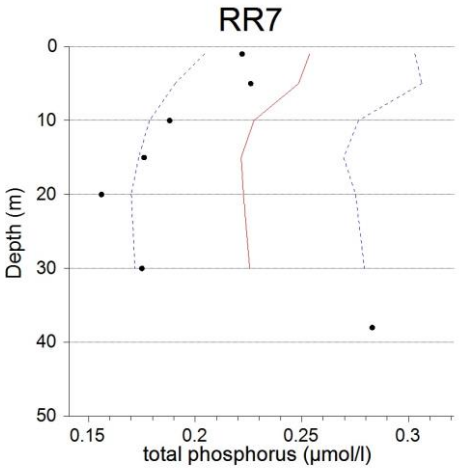

F16
Depth (m)
0
10
20
30
40
50
60
0.15
0.2
0.25
0.3
0.35
0.4
0.45
total phosphorus (µmol/l)

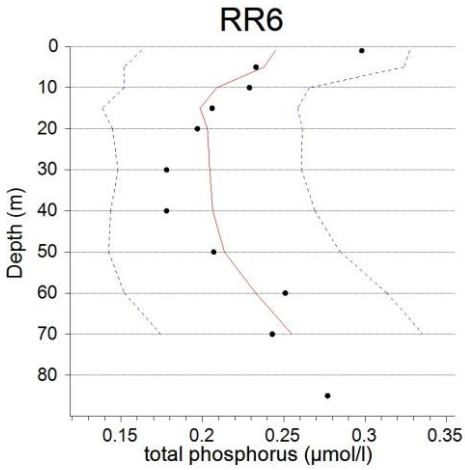

BO3
Depth (m)
0
20
40
60
80
100
0.1
0.15
0.2
0.25
0.3
0.35
total phosphorus (µmol/l)

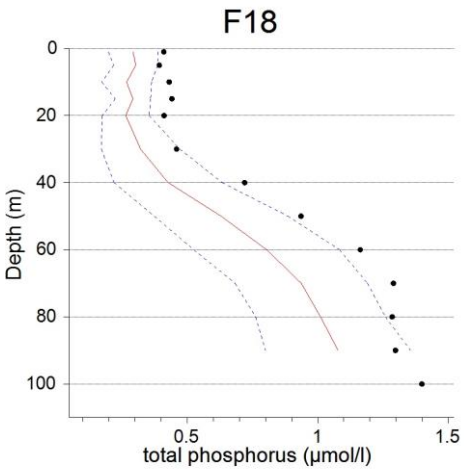

F2
Depth (m)
0
20
40
60
80
100
0.15
0.2
0.25
0.3
total phosphorus (µmol/l)

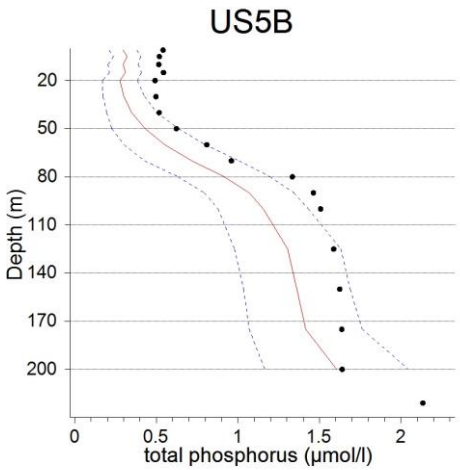

CVI
Depth (m)
0
10
20
30
40
50
60
70
80
0.1
0.15
0.2
0.25
0.3
total phosphorus (µmol/l)

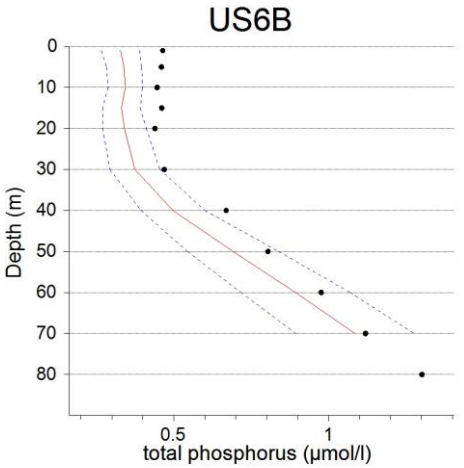

CV
Depth (m)
0
10
20
30
40
50
60
70
80
0.15
0.2
0.25
0.3
0.35
total phosphorus (µmol/l)

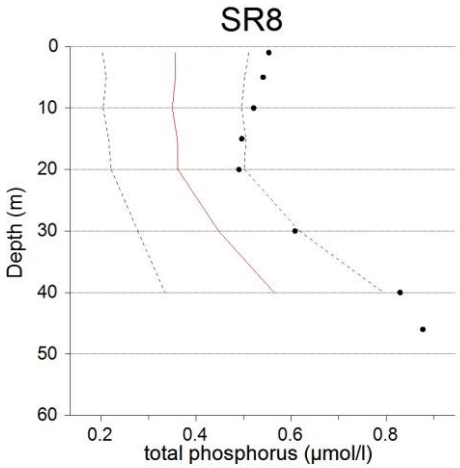

RR7
Depth (m)
0
10
20
30
40
50
0.15
0.2
0.25
0.3
total phosphorus (µmol/l)

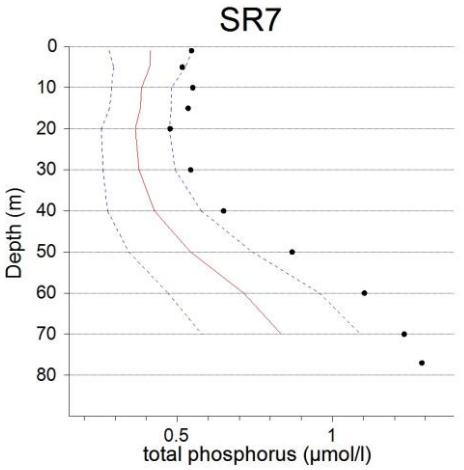

RR6
Depth (m)
0
10
20
30
40
50
60
70
80
0.15
0.2
0.25
0.3
0.35
total phosphorus (µmol/l)

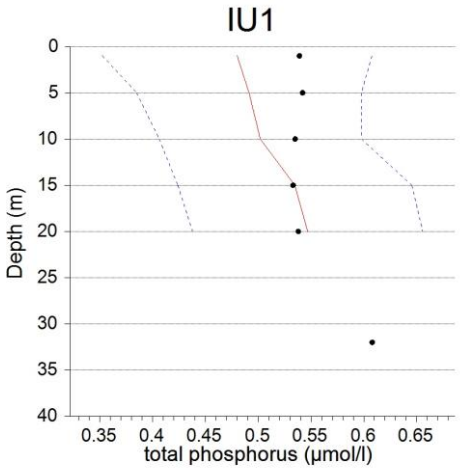

F18
Depth (m)
0
20
40
60
80
100
0.5
1
1.5
total phosphorus (µmol/l)

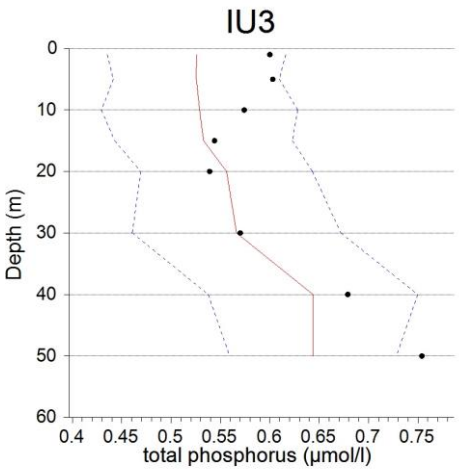

US5B
Depth (m)
20
50
80
110
140
170
200
0
0.5
1
1.5
2
total phosphorus (µmol/l)

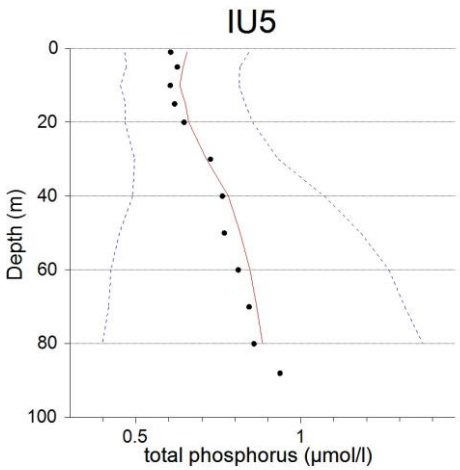

US6B
Depth (m)
0
10
20
30
40
50
60
70
80
0.5
1
total phosphorus (µmol/l)

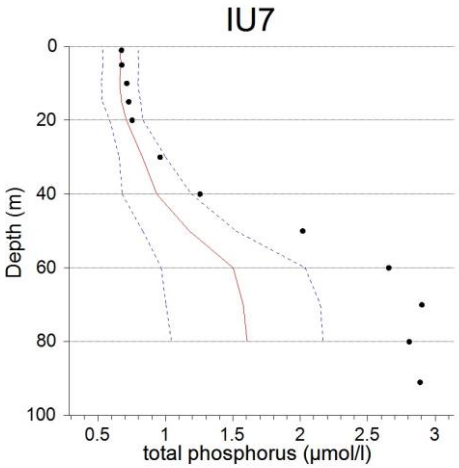

SR8
Depth (m)
0
10
20
30
40
50
60
0.2
0.4
0.6
0.8
total phosphorus (µmol/l)

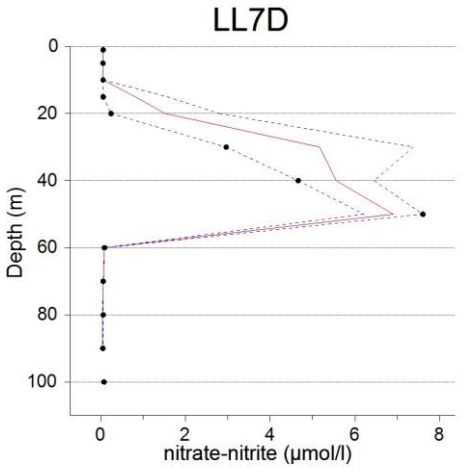

SR7
Depth (m)
0
10
20
30
40
50
60
70
80
0.5
1
total phosphorus (µmol/l)

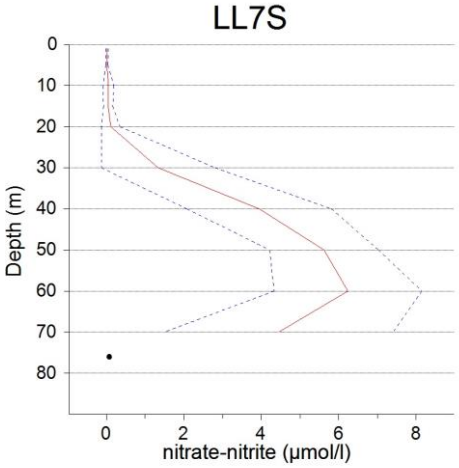

IU1
Depth (m)
0
5
10
15
20
25
30
35
40
0.35
0.4
0.45
0.5
0.55
0.6
0.65
total phosphorus (µmol/l)

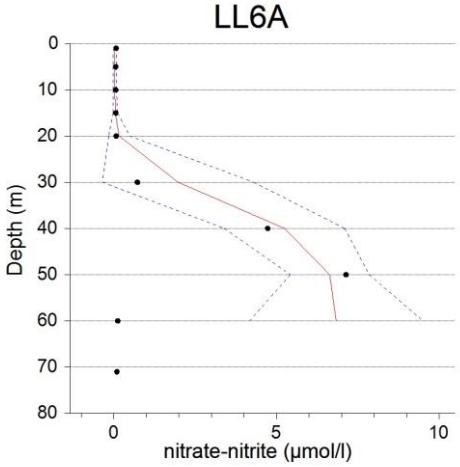

IU3
Depth (m)
0
10
20
30
40
50
60
0.4
0.45
0.5
0.55
0.6
0.65
0.7
0.75
total phosphorus (µmol/l)

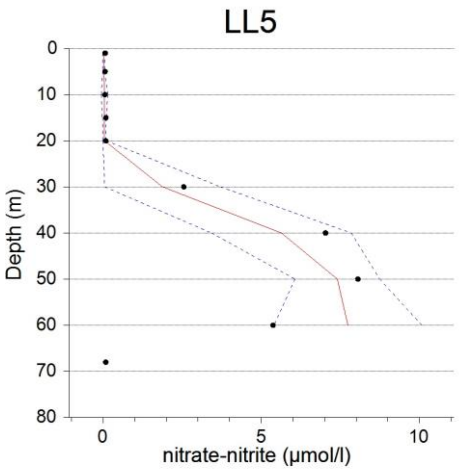

IU5
Depth (m)
0
20
40
60
80
100
0.5
1
total phosphorus (µmol/l)

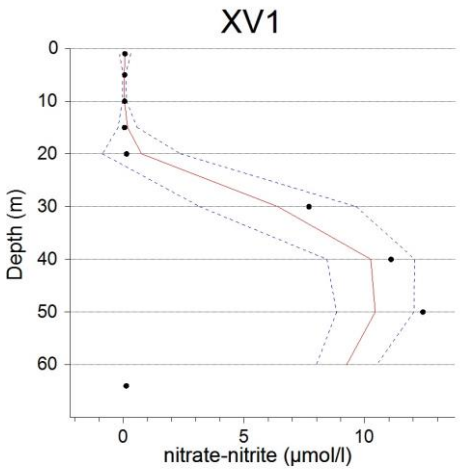

IU7
Depth (m)
0
20
40
60
80
100
0.5
1
1.5
2
2.5
3
total phosphorus (µmol/l)

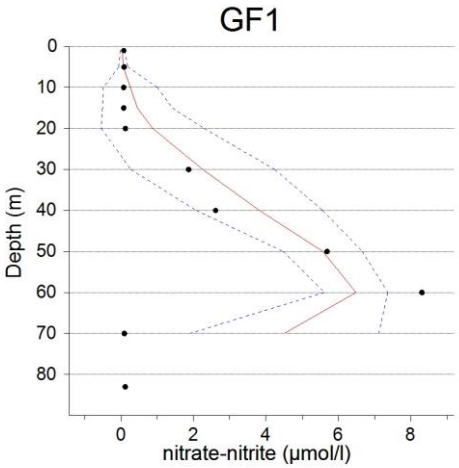

LL7D
Depth (m)
0
20
40
60
80
100
0
2
4
6
8
nitrate-nitrite (µmol/l)

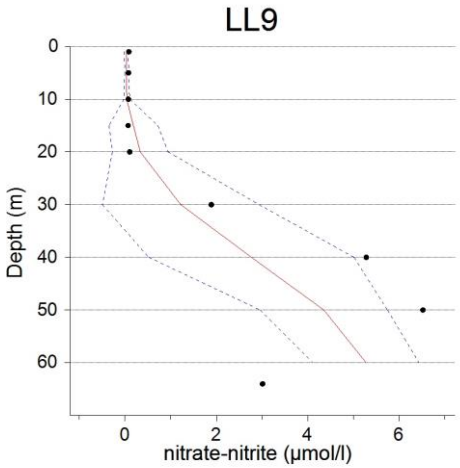

LL7S
Depth (m)
0
10
20
30
40
50
60
70
80
0
2
4
6
8
nitrate-nitrite (µmol/l)

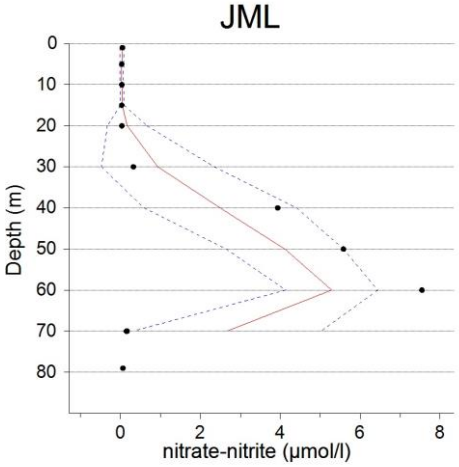

LL6A
Depth (m)
0
10
20
30
40
50
60
70
80
0
5
10
nitrate-nitrite (µmol/l)

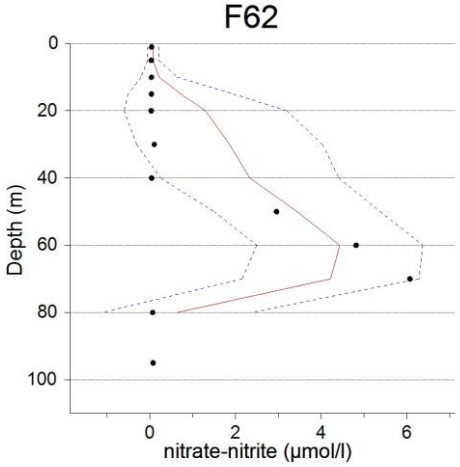

LL5
Depth (m)
nitrate-nitrite (µmol/l)

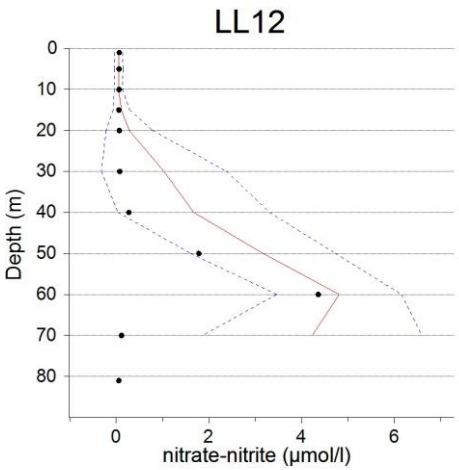

XV1
Depth (m)
nitrate-nitrite (µmol/l)

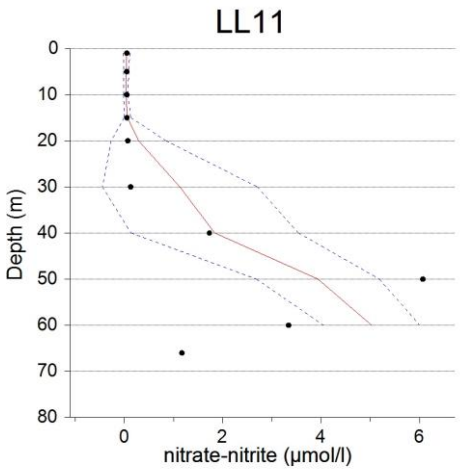

GF1
Depth (m)
nitrate-nitrite (µmol/l)

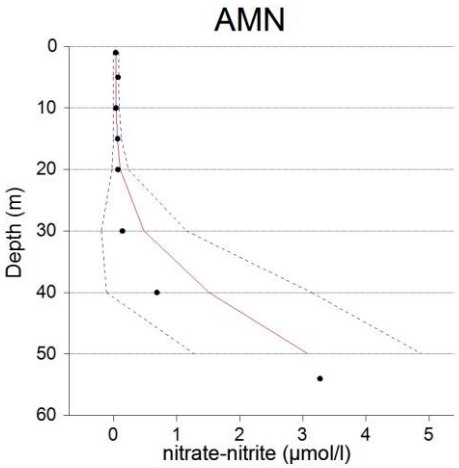

LL9
Depth (m)
nitrate-nitrite (µmol/l)

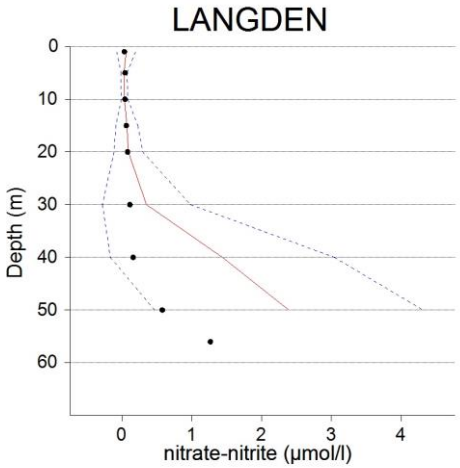

JML
Depth (m)
nitrate-nitrite (µmol/l)

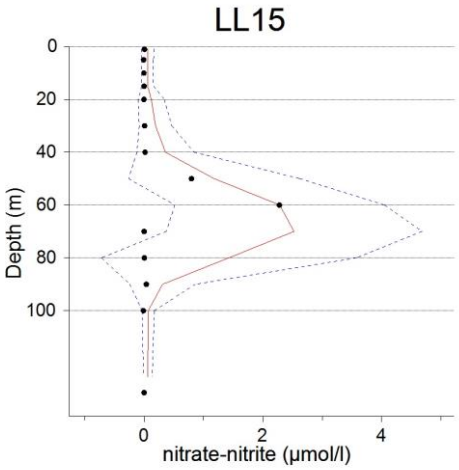

F62
Depth (m)
nitrate-nitrite (µmol/l)

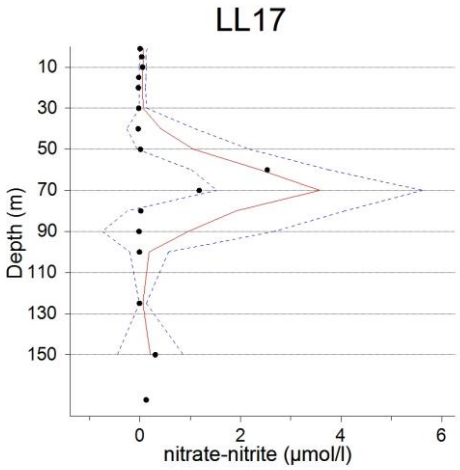

LL12
Depth (m)
0
10
20
30
40
50
60
70
80
0
2
4
6
nitrate-nitrite (µmol/l)

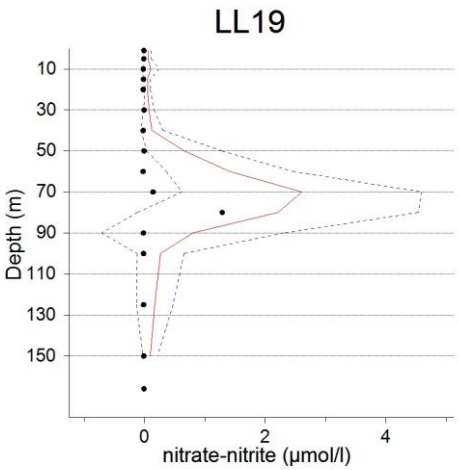

LL11
Depth (m)
0
10
20
30
40
50
60
70
80
0
2
4
6
nitrate-nitrite (µmol/l)

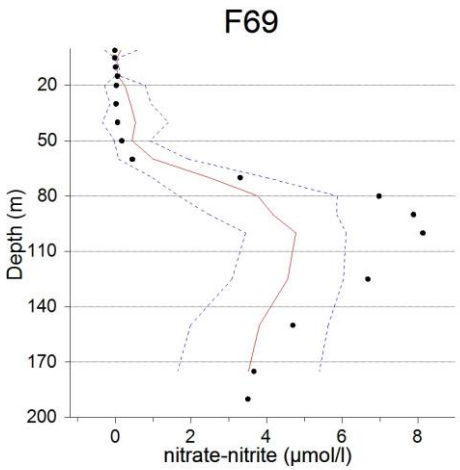

AMN
Depth (m)
0
10
20
30
40
50
60
0
1
2
3
4
5
nitrate-nitrite (µmol/l)

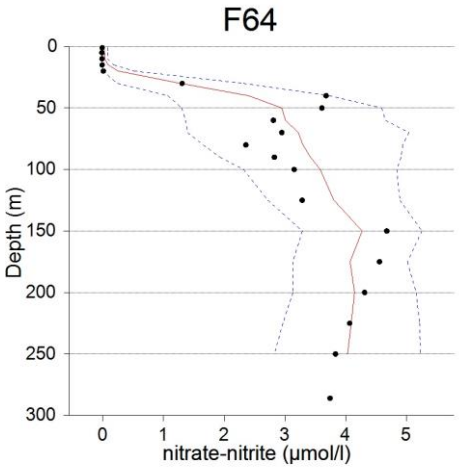

LANGDEN
Depth (m)
0
10
20
30
40
50
60
0
1
2
3
4
nitrate-nitrite (µmol/l)

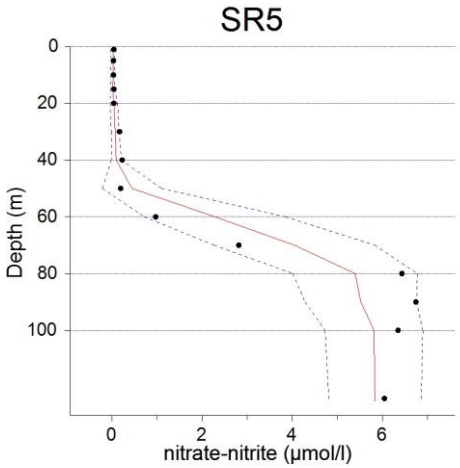

LL15
Depth (m)
0
20
40
60
80
100
0
2
4
nitrate-nitrite (µmol/l)

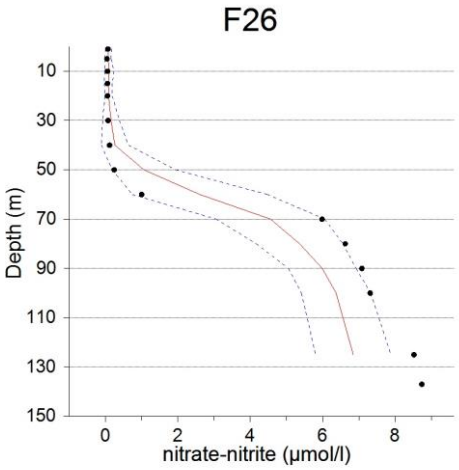

LL17
Depth (m)
10
30
50
70
90
110
130
150
0
2
4
6
nitrate-nitrite (µmol/l)

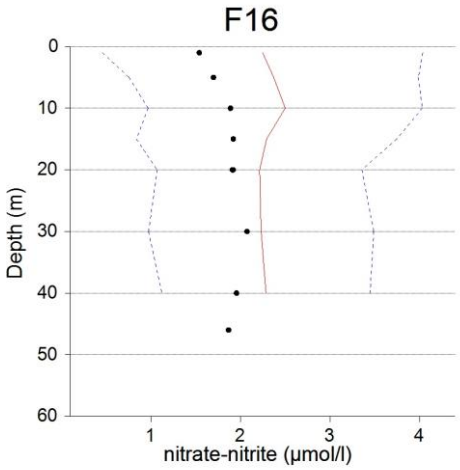

LL19
Depth (m)
10
30
50
70
90
110
130
150
0
2
4
nitrate-nitrite (µmol/l)

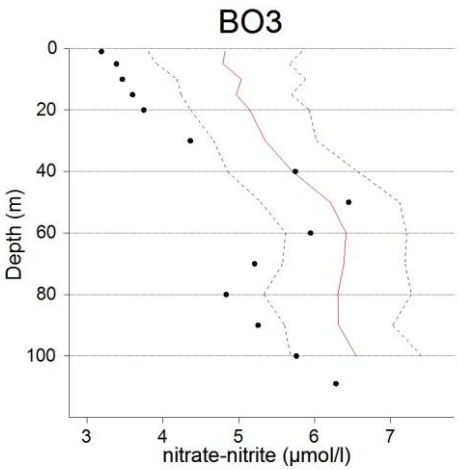

F69
Depth (m)
20
50
80
110
140
170
200
0
2
4
6
8
nitrate-nitrite (µmol/l)

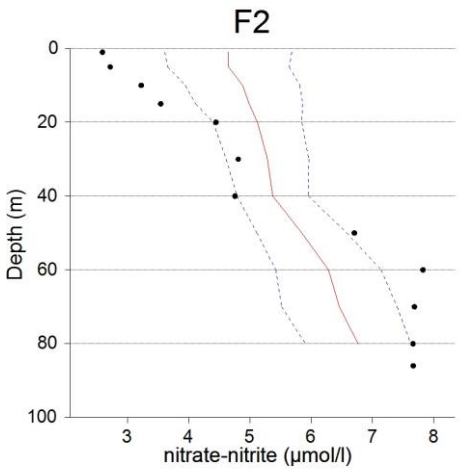

F64
Depth (m)
0
50
100
150
200
250
300
0
1
2
3
4
5
nitrate-nitrite (µmol/l)

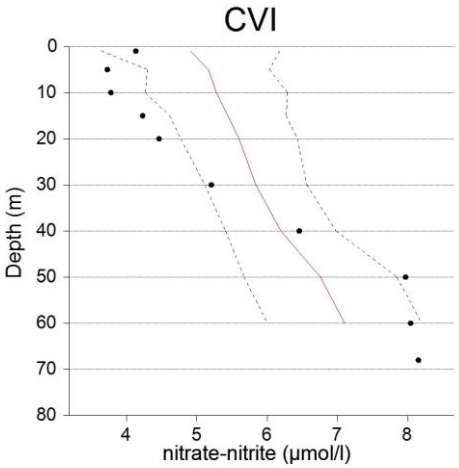

SR5
Depth (m)
0
20
40
60
80
100
0
2
4
6
nitrate-nitrite (µmol/l)

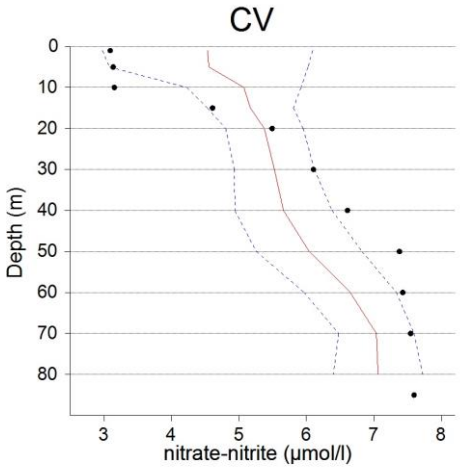

F26
Depth (m)
10
30
50
70
90
110
130
150
0
2
4
6
8
nitrate-nitrite (µmol/l)

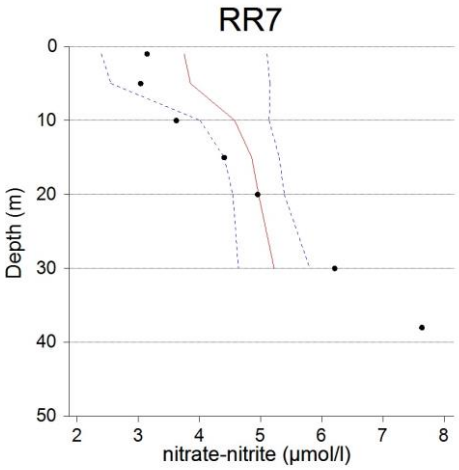

F16
Depth (m)
0
10
20
30
40
50
60
1
2
3
4
nitrate-nitrite (µmol/l)

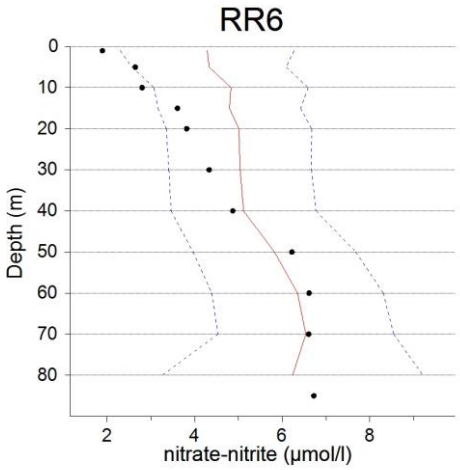

BO3
Depth (m)
0
20
40
60
80
100
3
4
5
6
7
nitrate-nitrite (µmol/l)

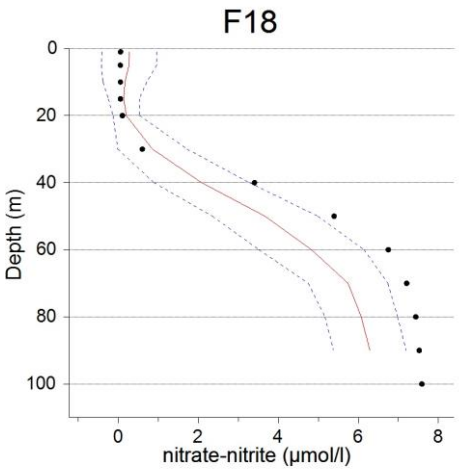

F2
Depth (m)
0
20
40
60
80
100
3
4
5
6
7
8
nitrate-nitrite (µmol/l)

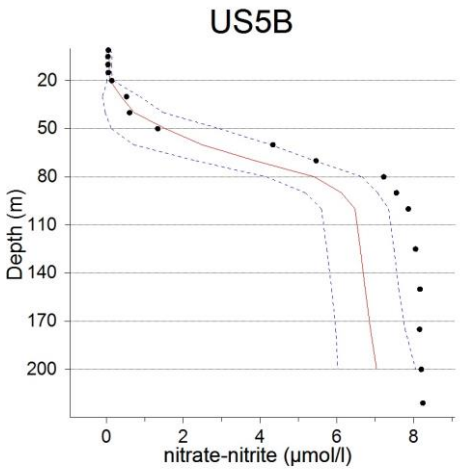

CVI
Depth (m)
0
10
20
30
40
50
60
70
80
4
5
6
7
8
nitrate-nitrite (µmol/l)

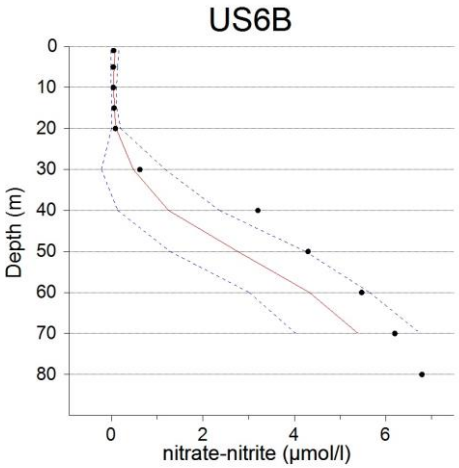

CV
Depth (m)
0
10
20
30
40
50
60
70
80
3
4
5
6
7
8
nitrate-nitrite (µmol/l)

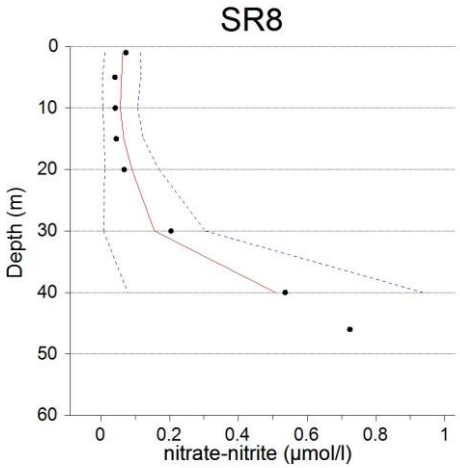

RR7
Depth (m)
0
10
20
30
40
50
2
3
4
5
6
7
8
nitrate-nitrite (µmol/l)

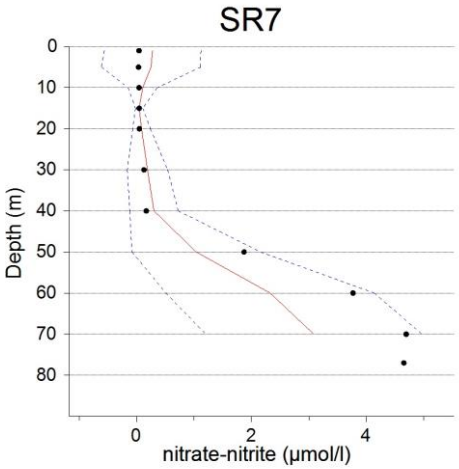

RR6
Depth (m)
0
10
20
30
40
50
60
70
80
2
4
6
8
nitrate-nitrite (µmol/l)

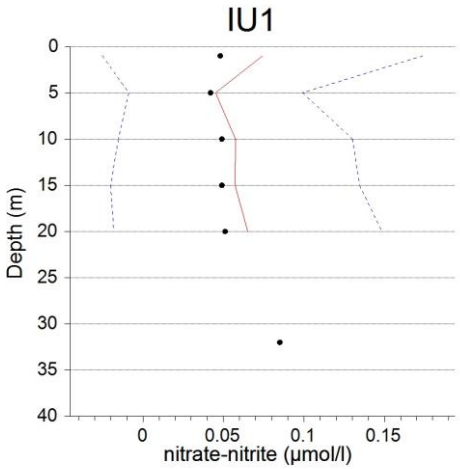

F18
Depth (m)
0
20
40
60
80
100
0
2
4
6
8
nitrate-nitrite (µmol/l)

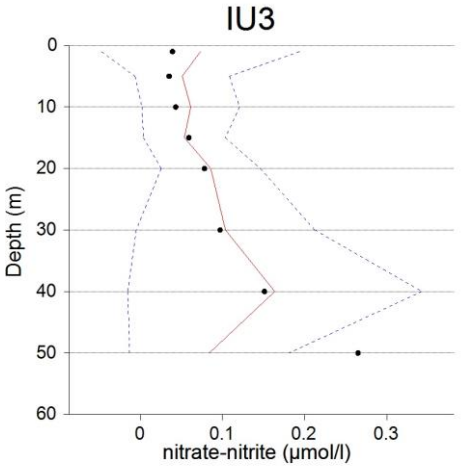

US5B
Depth (m)
20
50
80
110
140
170
200
0
2
4
6
8
nitrate-nitrite (µmol/l)

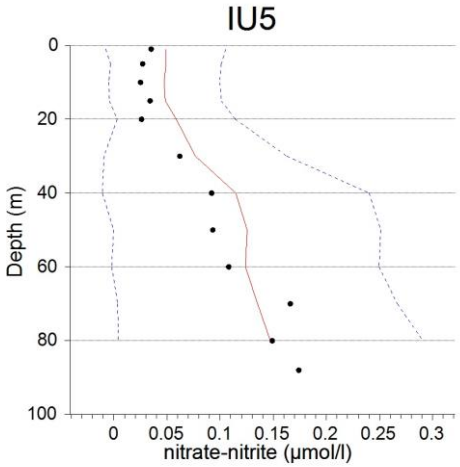

US6B
Depth (m)
0
10
20
30
40
50
60
70
80
0
2
4
6
nitrate-nitrite (µmol/l)

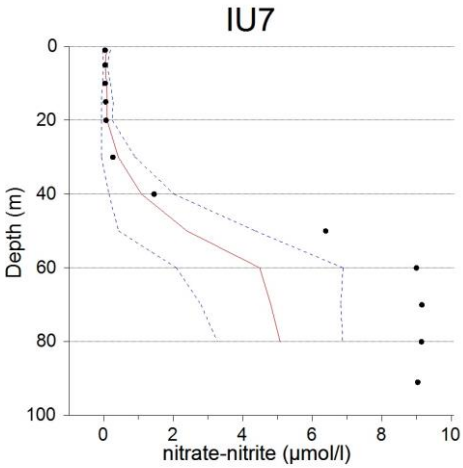

SR8
Depth (m)
0
10
20
30
40
50
60
0
0.2
0.4
0.6
0.8
1
nitrate-nitrite (µmol/l)

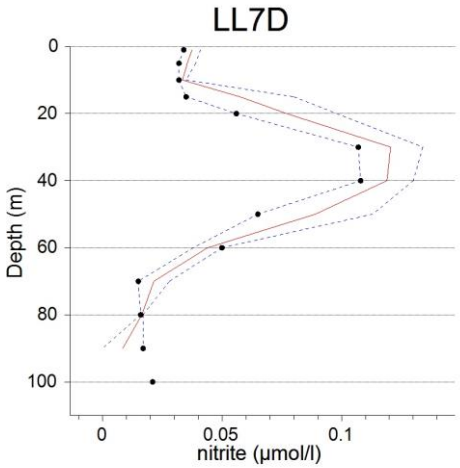

SR7
Depth (m)
0
10
20
30
40
50
60
70
80
0
2
4
nitrate-nitrite (µmol/l)

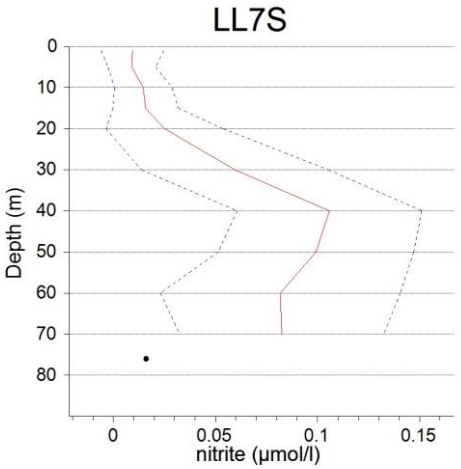

IU1
Depth (m)
0
5
10
15
20
25
30
35
40
0
0.05
0.1
0.15
nitrate-nitrite (µmol/l)

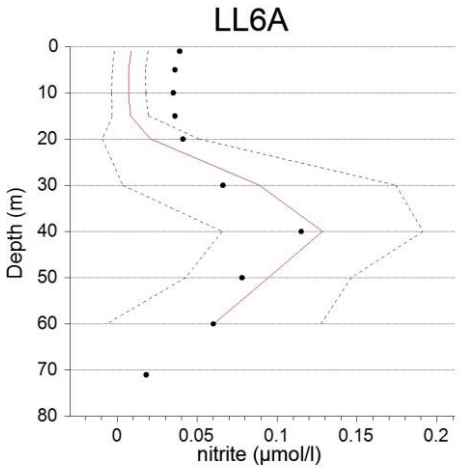

IU3
Depth (m)
0
10
20
30
40
50
60
0
0.1
0.2
0.3
nitrate-nitrite (µmol/l)

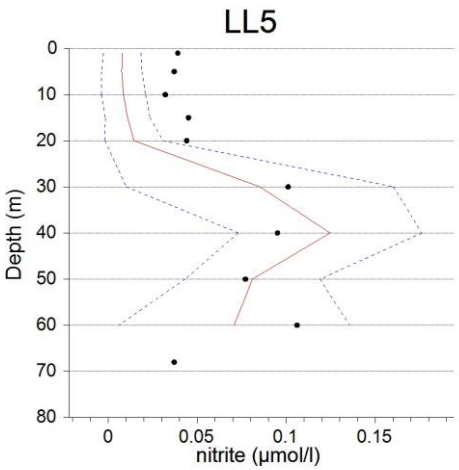

IU5
Depth (m)
0
20
40
60
80
100
0
0.05
0.1
0.15
0.2
0.25
0.3
nitrate-nitrite (µmol/l)

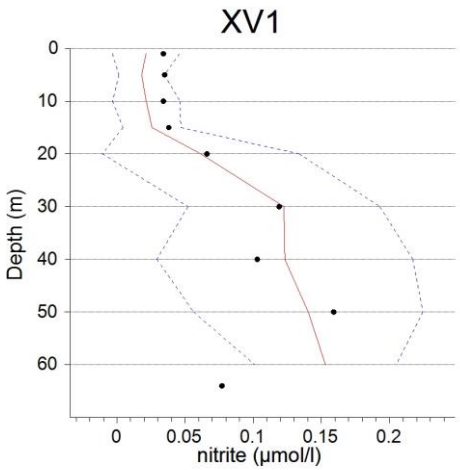

IU7
Depth (m)
0
20
40
60
80
100
0
2
4
6
8
10
nitrate-nitrite (µmol/l)

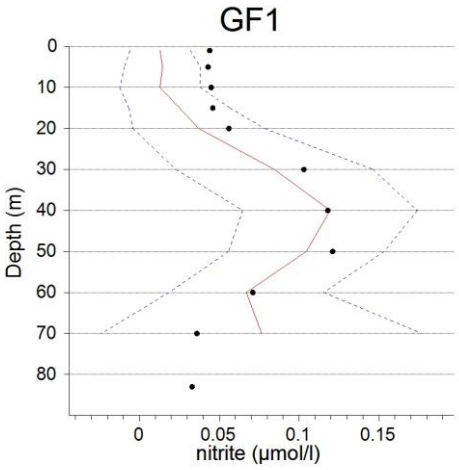

LL7D
Depth (m)
0
20
40
60
80
100
0
0.05
0.1
nitrite (µmol/l)

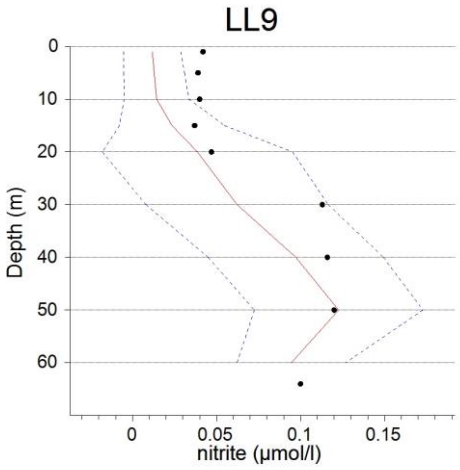

LL7S
Depth (m)
0
10
20
30
40
50
60
70
80
0
0.05
0.1
0.15
nitrite (µmol/l)

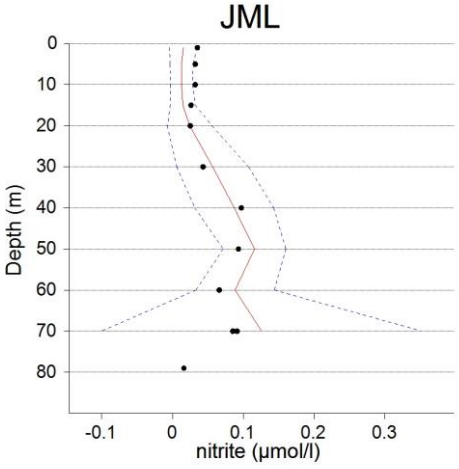

LL6A
Depth (m)
0
10
20
30
40
50
60
70
80
0
0.05
0.1
0.15
0.2
nitrite (µmol/l)

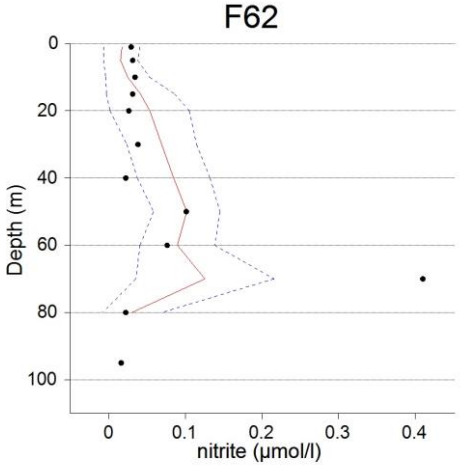

LL5
Depth (m)
0
10
20
30
40
50
60
70
80
0
0.05
0.1
0.15
nitrite (µmol/l)

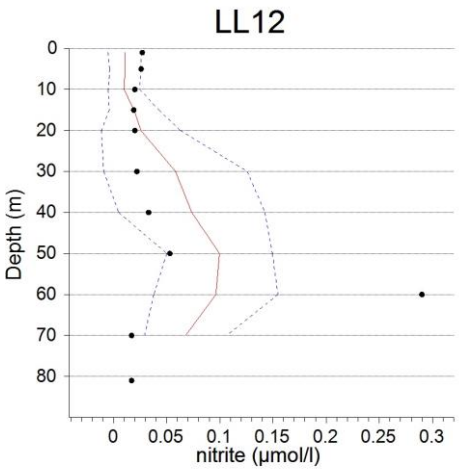

XV1
Depth (m)
0
10
20
30
40
50
60
0
0.05
0.1
0.15
0.2
nitrite (µmol/l)

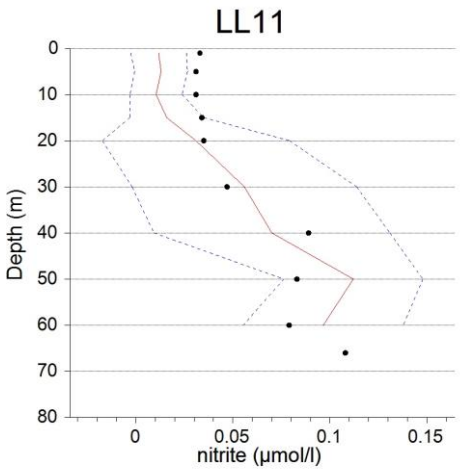

GF1
Depth (m)
0
10
20
30
40
50
60
70
80
0
0.05
0.1
0.15
nitrite (µmol/l)

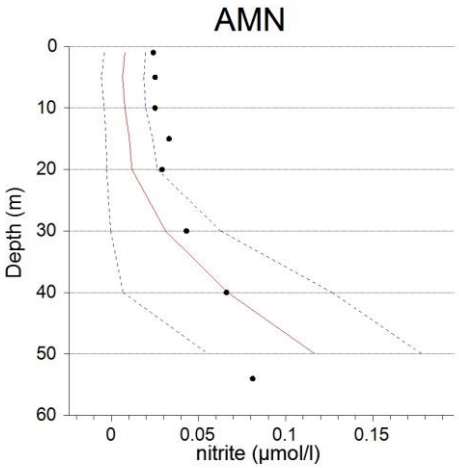

LL9
Depth (m)
0
10
20
30
40
50
60
0
0.05
0.1
0.15
nitrite (µmol/l)

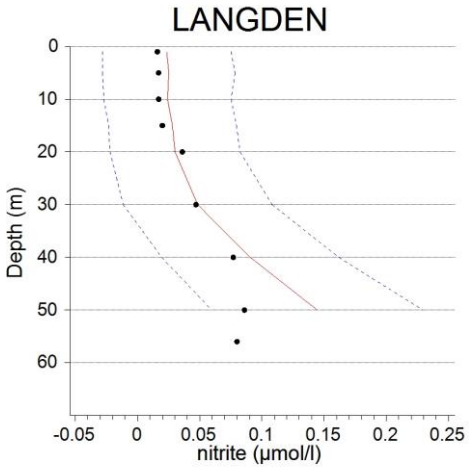

JML
Depth (m)
0
10
20
30
40
50
60
70
80
-0.1
0
0.1
0.2
0.3
nitrite (µmol/l)

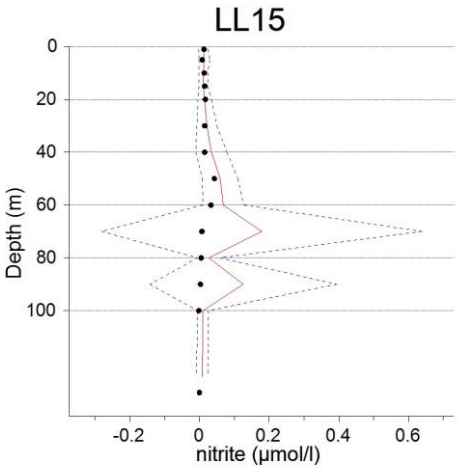

F62
Depth (m)
0
20
40
60
80
100
0
0.1
0.2
0.3
0.4
nitrite (µmol/l)

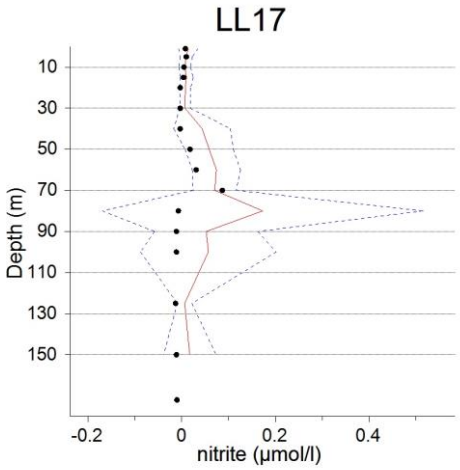

LL12
Depth (m)
0
10
20
30
40
50
60
70
80
0
0.05
0.1
0.15
0.2
0.25
0.3
nitrite (µmol/l)

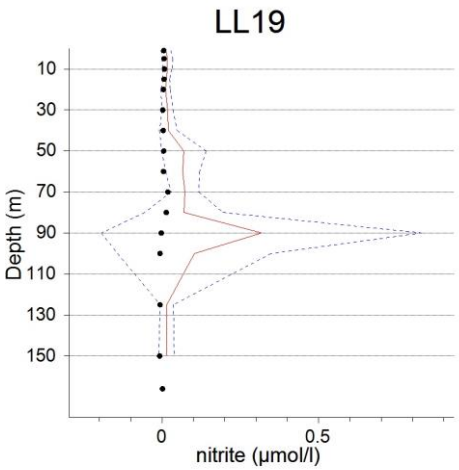

LL11
Depth (m)
0
10
20
30
40
50
60
70
80
0
0.05
0.1
0.15
nitrite (µmol/l)

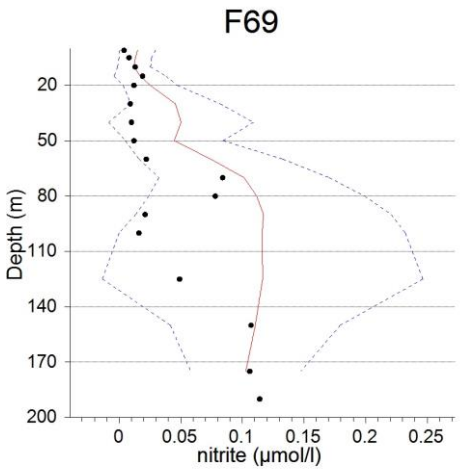

AMN
Depth (m)
0
10
20
30
40
50
60
0
0.05
0.1
0.15
nitrite (µmol/l)

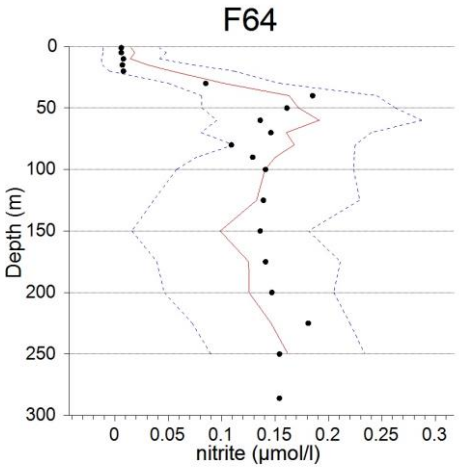

LANGDEN
Depth (m)
0
10
20
30
40
50
60
-0.05
0
0.05
0.1
0.15
0.2
0.25
nitrite (µmol/l)

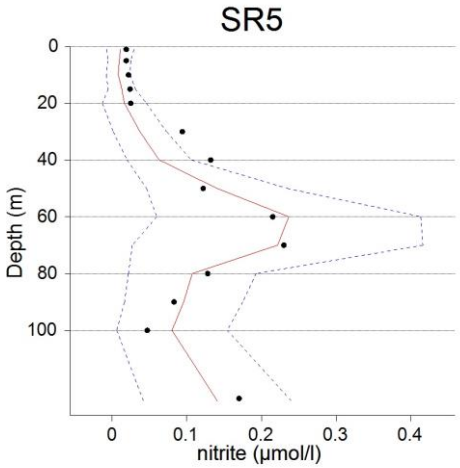

LL15
Depth (m)
0
20
40
60
80
100
-0.2
0
0.2
0.4
0.6
nitrite (µmol/l)

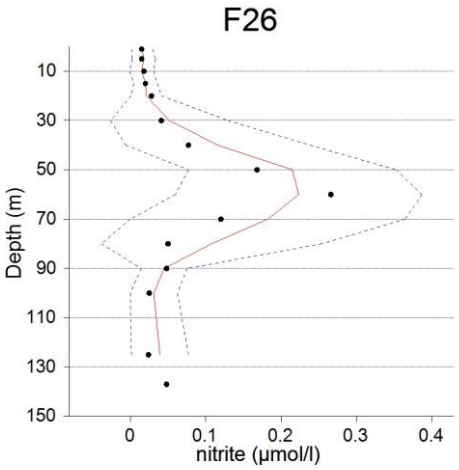

LL17
Depth (m)
10
30
50
70
90
110
130
150
-0.2
0
0.2
0.4
nitrite (µmol/l)

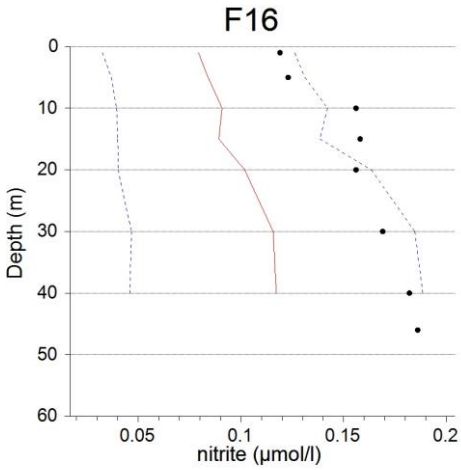

LL19
Depth (m)
10
30
50
70
90
110
130
150
0
0.5
nitrite (µmol/l)

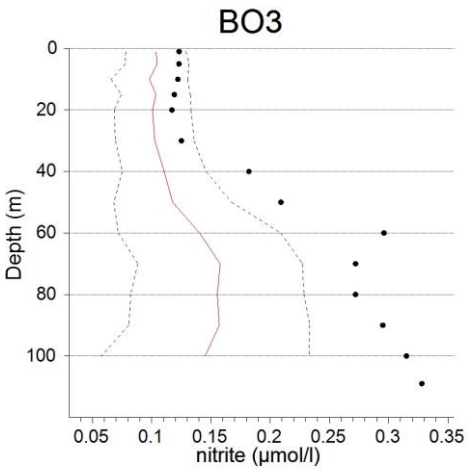

F69
Depth (m)
20
50
80
110
140
170
200
0
0.05
0.1
0.15
0.2
0.25
nitrite (µmol/l)

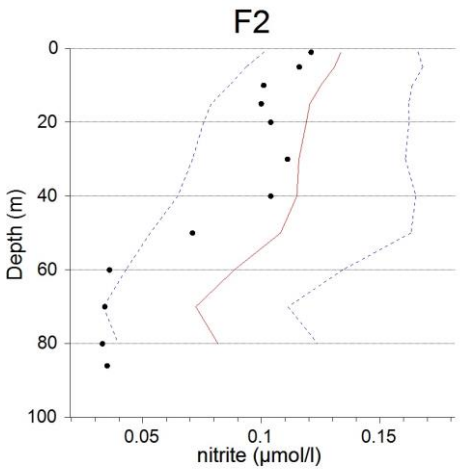

F64
Depth (m)
0
50
100
150
200
250
300
0
0.05
0.1
0.15
0.2
0.25
0.3
nitrite (µmol/l)

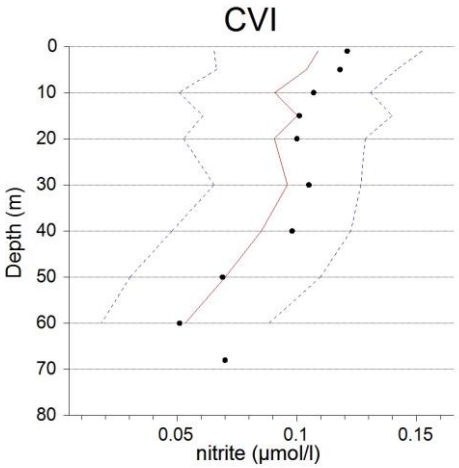

SR5
Depth (m)
0
20
40
60
80
100
0
0.1
0.2
0.3
0.4
nitrite (µmol/l)


F26
Depth (m)
10
30
50
70
90
110
130
150
0
0.1
0.2
0.3
0.4
nitrite (µmol/l)


F16
Depth (m)
0
10
20
30
40
50
60
0.05
0.1
0.15
0.2
nitrite (µmol/l)


BO3
Depth (m)
0
20
40
60
80
100
0.05
0.1
0.15
0.2
0.25
0.3
0.35
nitrite (µmol/l)


F2
Depth (m)
0
20
40
60
80
100
0.05
0.1
0.15
nitrite (µmol/l)


CVI
Depth (m)
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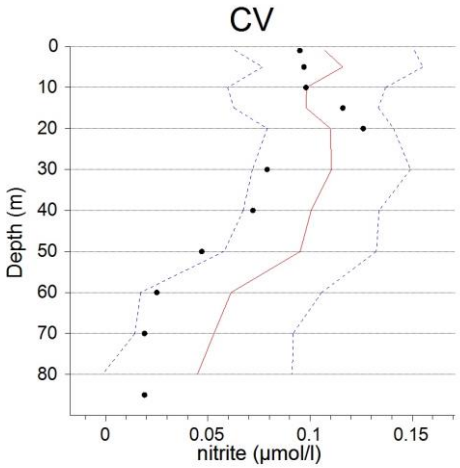
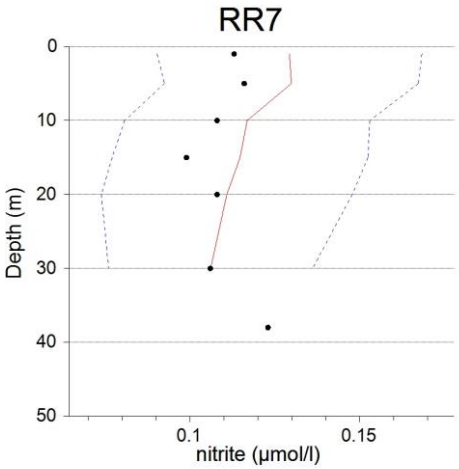
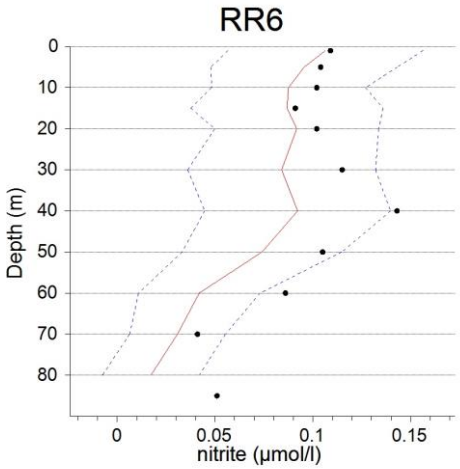
10
20
30
40
50
60
70
80
0.05
0.1
0.15
nitrite (µmol/l)


CV
Depth (m)
0
10
20
30
40
50
60
70
80
0
0.05
0.1
0.15
nitrite (µmol/l)


RR7
Depth (m)
0
10
20
30
40
50
0.1
0.15
nitrite (µmol/l)


RR6
Depth (m)
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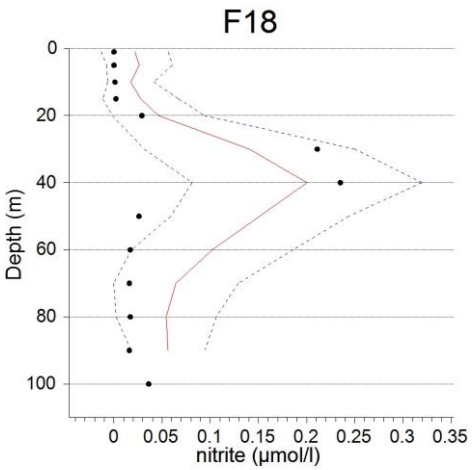
10
20
30
40
50
60
70
80
0
0.05
0.1
0.15
nitrite (µmol/l)


F18
Depth (m)
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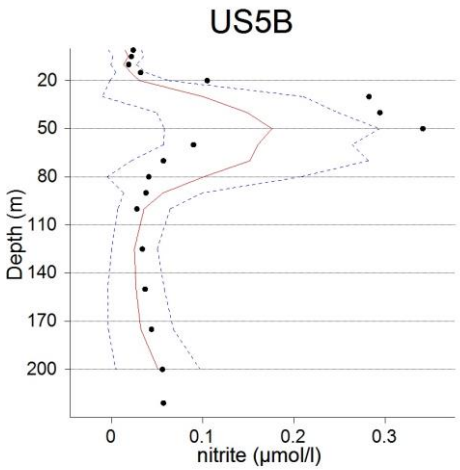
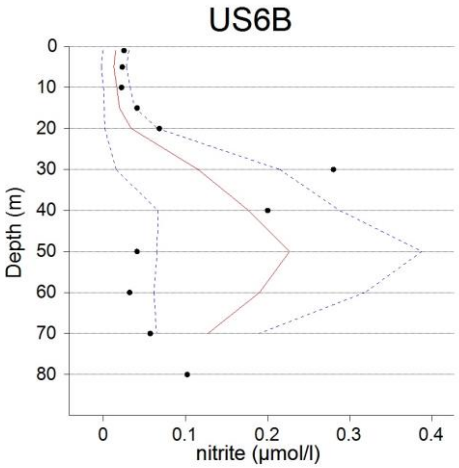
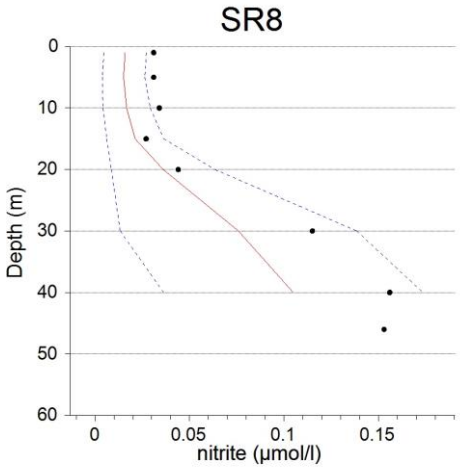
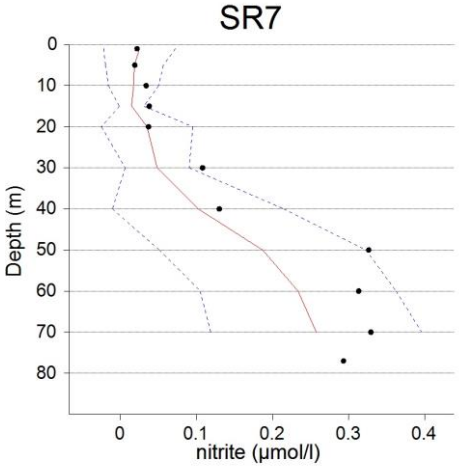
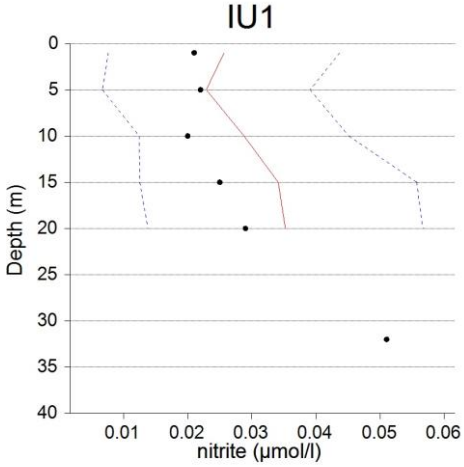
20
40
60
80
100
0
0.05
0.1
0.15
0.2
0.25
0.3
0.35
nitrite (µmol/l)

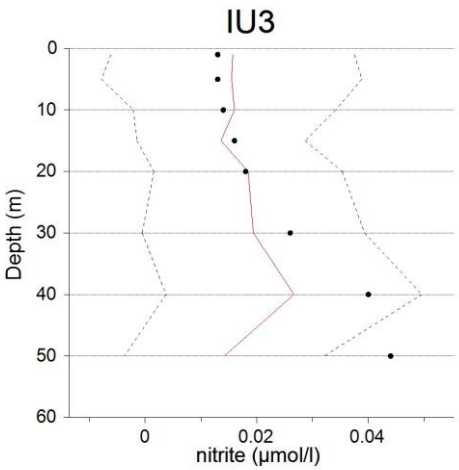

US5B
Depth (m)
20
50
80
110
140
170
200
0
0.1
0.2
0.3
nitrite (µmol/l)

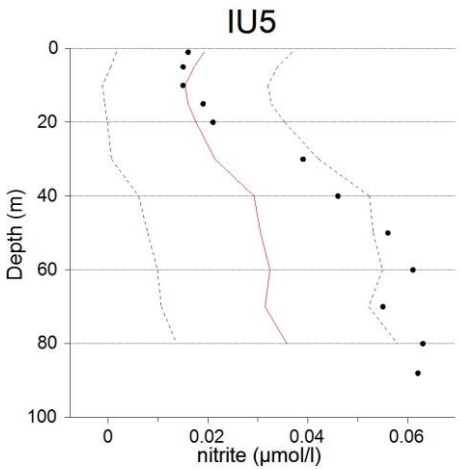

US6B
Depth (m)
0
10
20
30
40
50
60
70
80
0
0.1
0.2
0.3
0.4
nitrite (µmol/l)

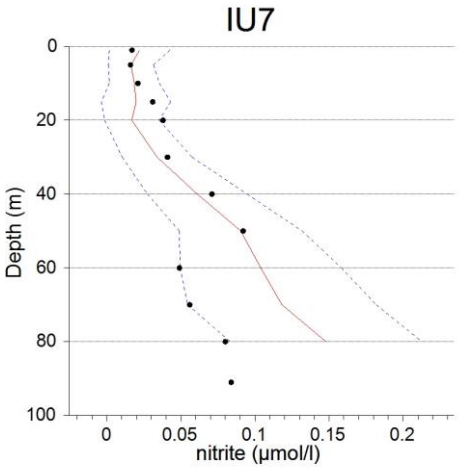

SR8
Depth (m)
0
10
20
30
40
50
60
0
0.05
0.1
0.15
nitrite (µmol/l)

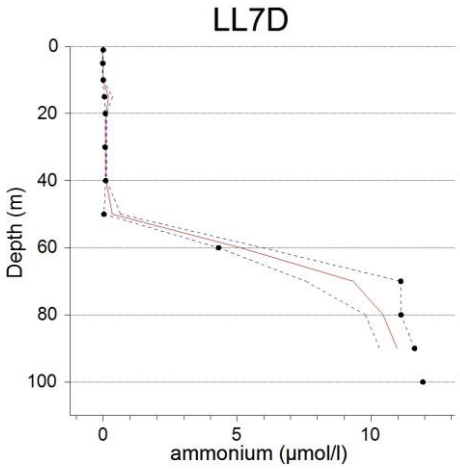

SR7
Depth (m)
0
10
20
30
40
50
60
70
80
0
0.1
0.2
0.3
0.4
nitrite (µmol/l)


IU1
Depth (m)
0
5
10
15
20
25
30
35
40
0.01
0.02
0.03
0.04
0.05
0.06
nitrite (µmol/l)


IU3
Depth (m)
0
10
20
30
40
50
60
0
0.02
0.04
nitrite (µmol/l)


IU5
Depth (m)
0
20
40
60
80
100
0
0.02
0.04
0.06
nitrite (µmol/l)


IU7
Depth (m)
0
20
40
60
80
100
0
0.05
0.1
0.15
0.2
nitrite (µmol/l)


LL7D
Depth (m)
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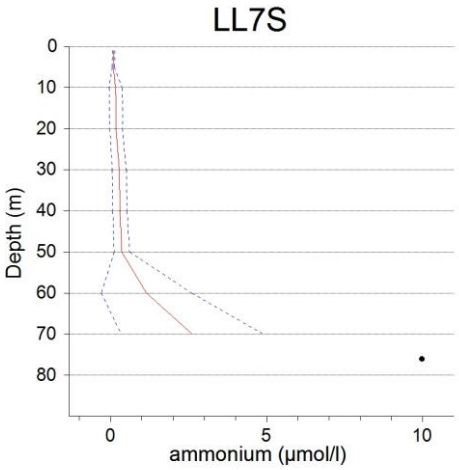
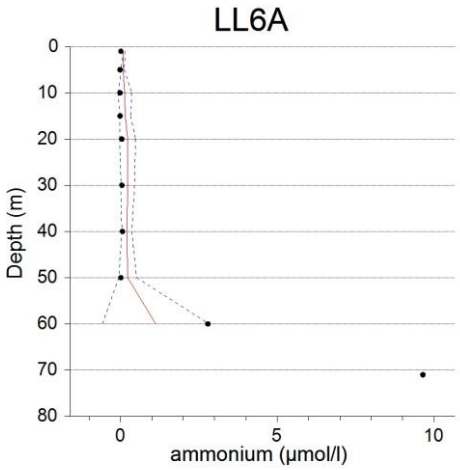
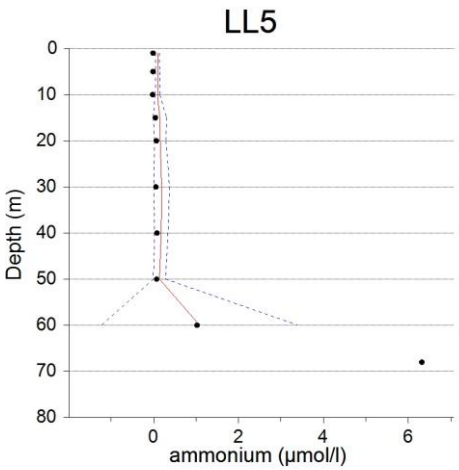
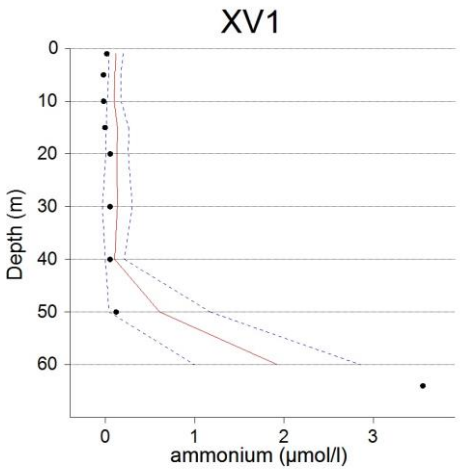
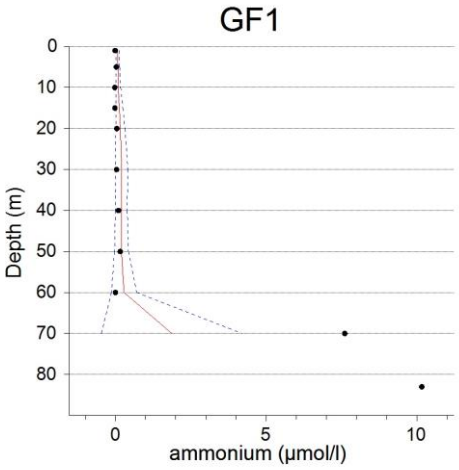
40
60
80
100
0
5
10
ammonium (µmol/l)

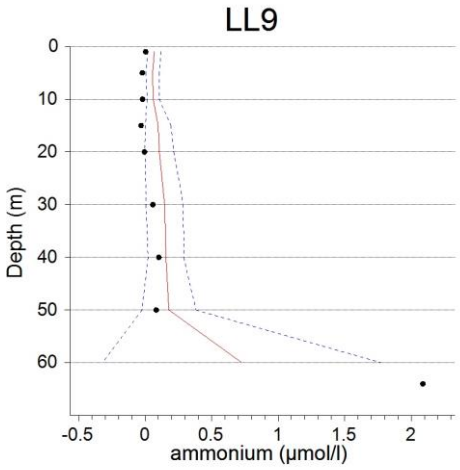

LL7S
Depth (m)
0
10
20
30
40
50
60
70
80
0
5
10
ammonium (µmol/l)

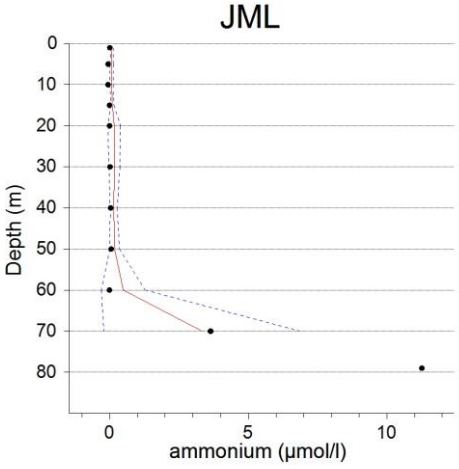

LL6A
Depth (m)
0
10
20
30
40
50
60
70
80
0
5
10
ammonium (µmol/l)

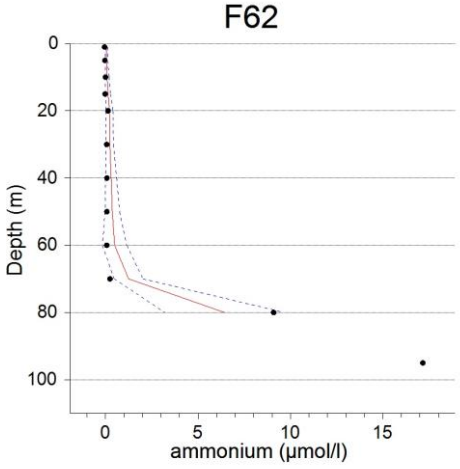

LL5
Depth (m)
0
10
20
30
40
50
60
70
80
0
2
4
6
ammonium (µmol/l)

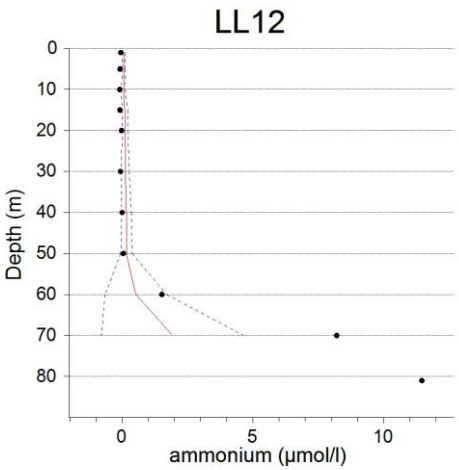

XV1
Depth (m)
0
10
20
30
40
50
60
0
1
2
3
ammonium (µmol/l)

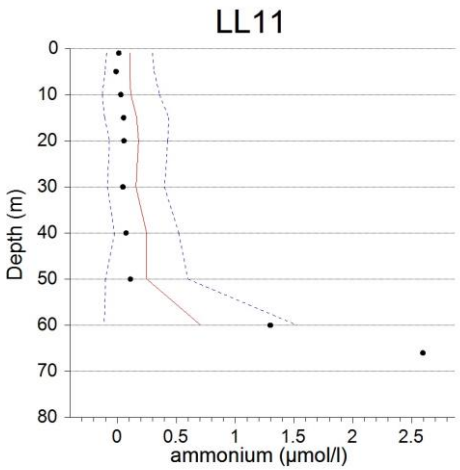

GF1
Depth (m)
0
10
20
30
40
50
60
70
80
0
5
10
ammonium (µmol/l)

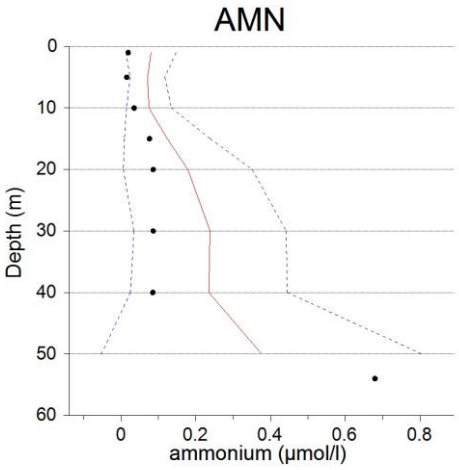

LL9
Depth (m)
0
10
20
30
40
50
60
-0.5
0
0.5
1
1.5
2
ammonium (µmol/l)


JML
Depth (m)
0
10
20
30
40
50
60
70
80
0
5
10
ammonium (µmol/l)


F62
Depth (m)
0
20
40
60
80
100
0
5
10
15
ammonium (µmol/l)


LL12
Depth (m)
0
10
20
30
40
50
60
70
80
0
5
10
ammonium (µmol/l)


LL11
Depth (m)
0
10
20
30
40
50
60
70
80
0
0.5
1
1.5
2
2.5
ammonium (µmol/l)


AMN
Depth (m)
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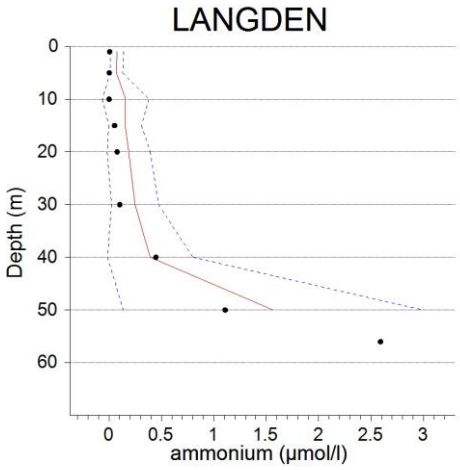
20
30
40
50
60
0
0.2
0.4
0.6
0.8
ammonium (µmol/l)


LANGDEN
Depth (m)
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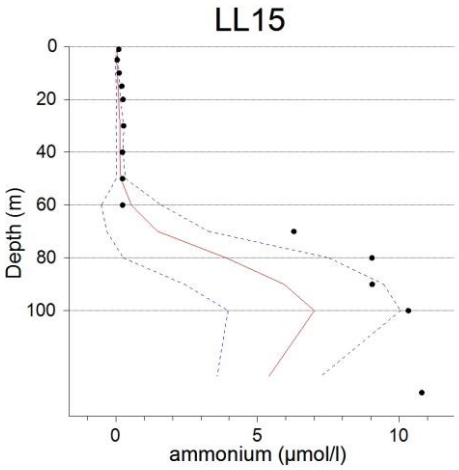
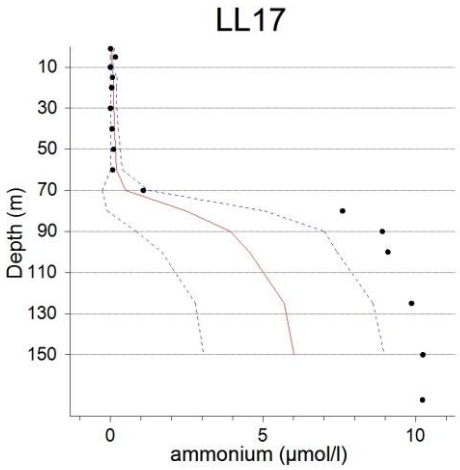
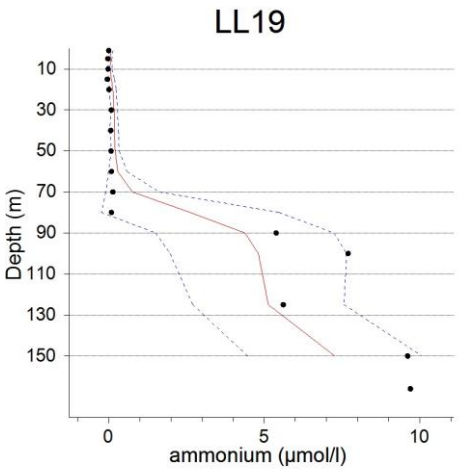
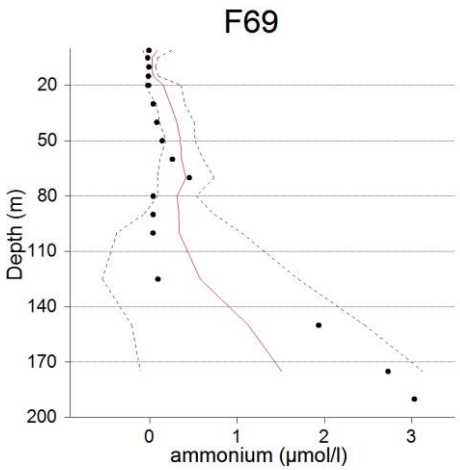
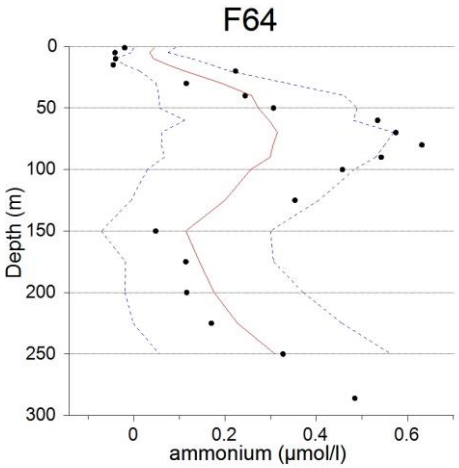
10
20
30
40
50
60
0
0.5
1
1.5
2
2.5
3
ammonium (µmol/l)

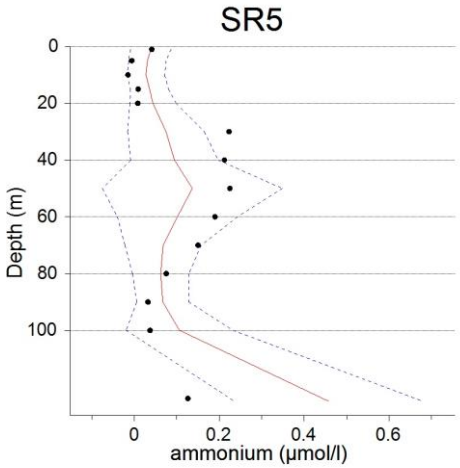

LL15
Depth (m)
0
20
40
60
80
100
0
5
10
ammonium (µmol/l)

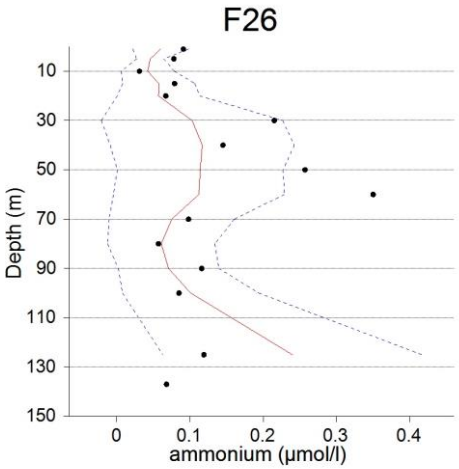

LL17
Depth (m)
10
30
50
70
90
110
130
150
0
5
10
ammonium (µmol/l)

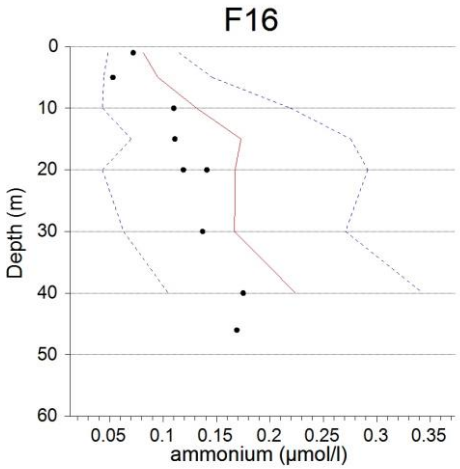

LL19
Depth (m)
10
30
50
70
90
110
130
150
0
5
10
ammonium (µmol/l)

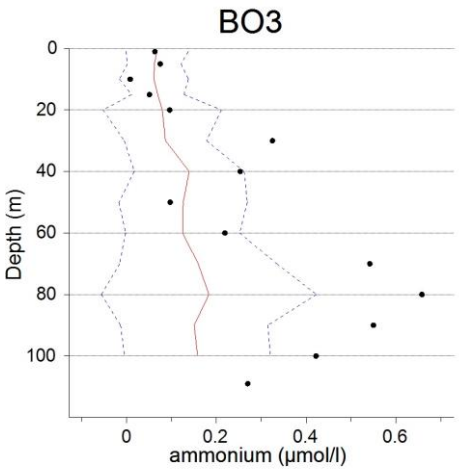

F69
Depth (m)
20
50
80
110
140
170
200
0
1
2
3
ammonium (µmol/l)

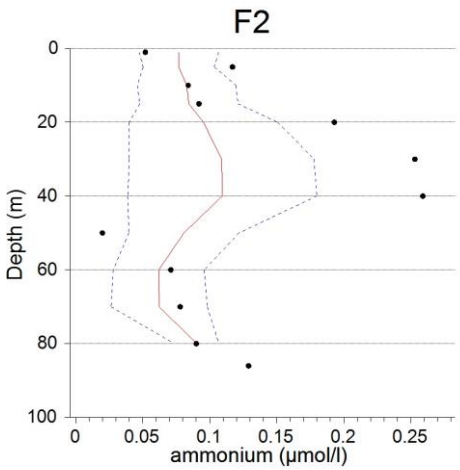

F64
Depth (m)
0
50
100
150
200
250
300
0
0.2
0.4
0.6
ammonium (µmol/l)

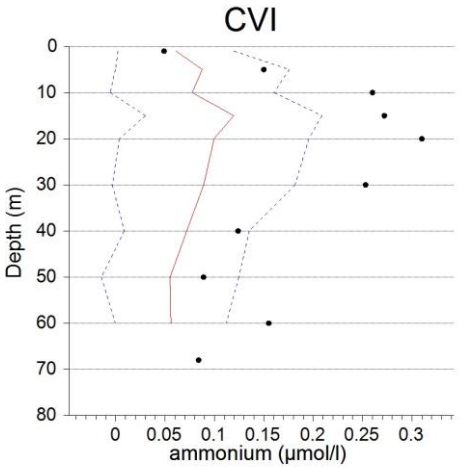

SR5
Depth (m)
0
20
40
60
80
100
0
0.2
0.4
0.6
ammonium (µmol/l)

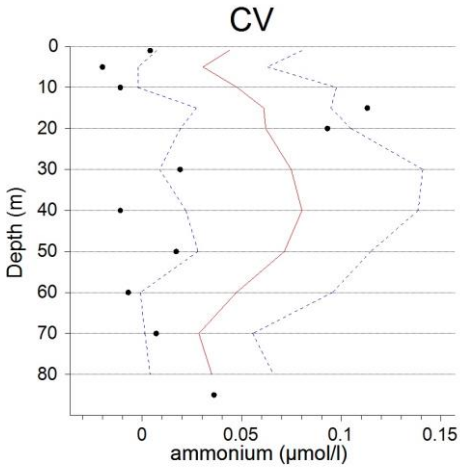

F26
Depth (m)
10
30
50
70
90
110
130
150
0
0.1
0.2
0.3
0.4
ammonium (µmol/l)

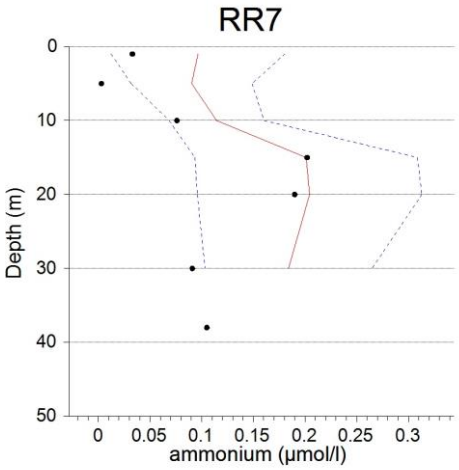

F16
Depth (m)
0
10
20
30
40
50
60
0.05
0.1
0.15
0.2
0.25
0.3
0.35
ammonium (µmol/l)

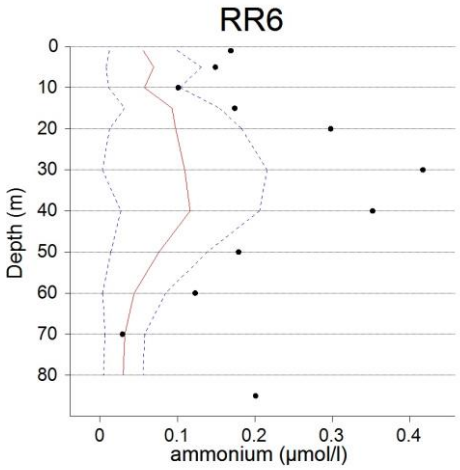

BO3
Depth (m)
0
20
40
60
80
100
0
0.2
0.4
0.6
ammonium (µmol/l)

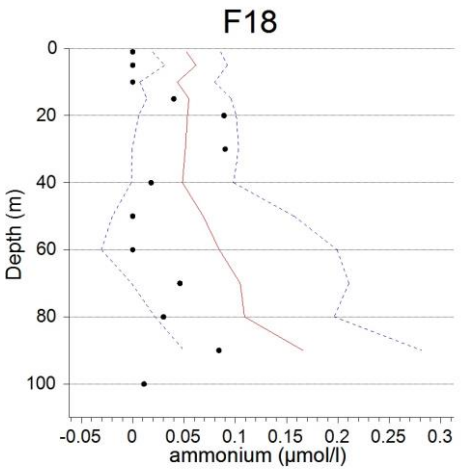

F2
Depth (m)
0
20
40
60
80
100
0
0.05
0.1
0.15
0.2
0.25
ammonium (µmol/l)

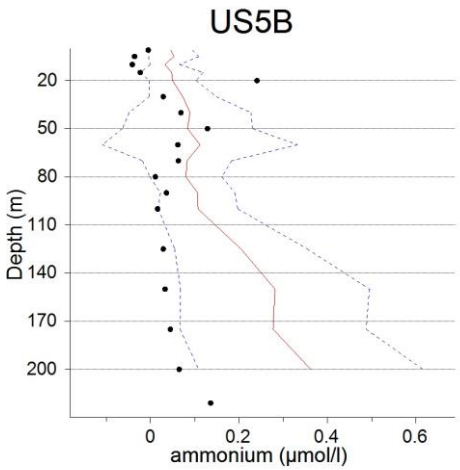

CVI
Depth (m)
0
10
20
30
40
50
60
70
80
0
0.05
0.1
0.15
0.2
0.25
0.3
ammonium (µmol/l)

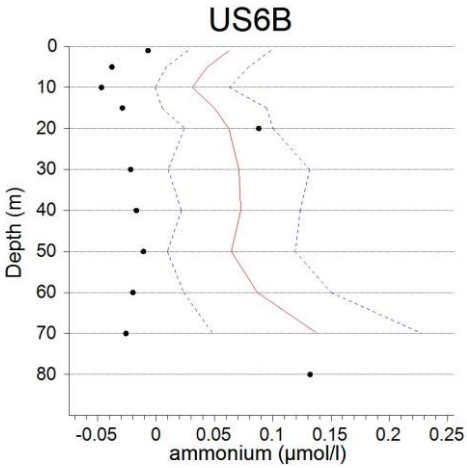

CV
Depth (m)
0
10
20
30
40
50
60
70
80
0
0.05
0.1
0.15
ammonium (µmol/l)

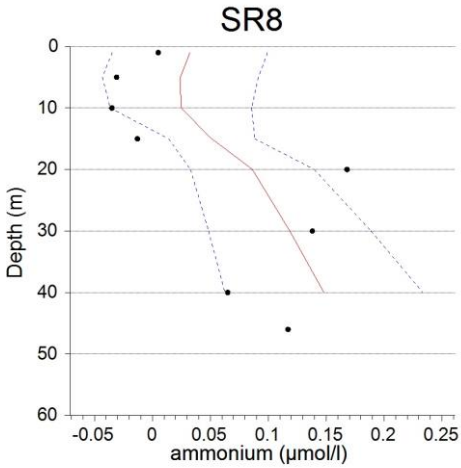

RR7
Depth (m)
0
10
20
30
40
50
0
0.05
0.1
0.15
0.2
0.25
0.3
ammonium (µmol/l)

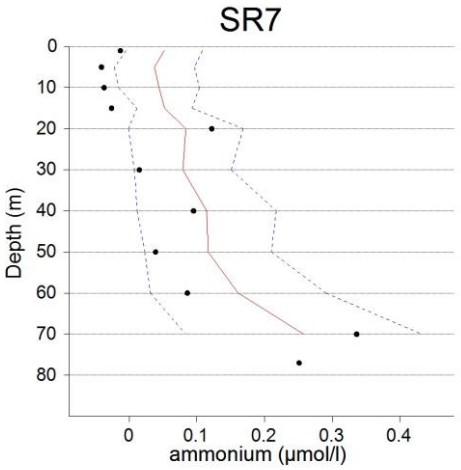

RR6
Depth (m)
0
10
20
30
40
50
60
70
80
0
0.1
0.2
0.3
0.4
ammonium (µmol/l)

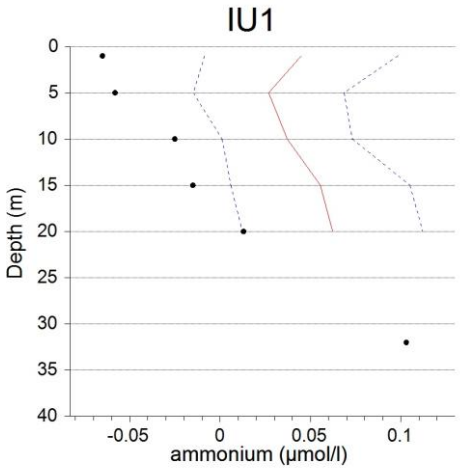

F18
Depth (m)
0
20
40
60
80
100
-0.05
0
0.05
0.1
0.15
0.2
0.25
0.3
ammonium (µmol/l)

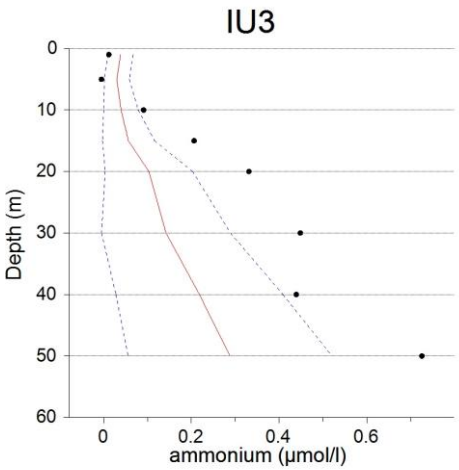

US5B
Depth (m)
20
50
80
110
140
170
200
0
0.2
0.4
0.6
ammonium (µmol/l)

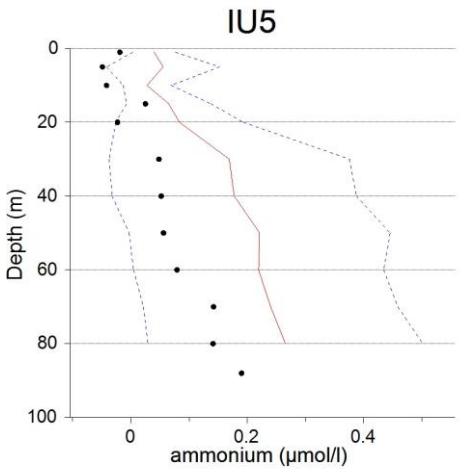

US6B
Depth (m)
0
10
20
30
40
50
60
70
80
-0.05
0
0.05
0.1
0.15
0.2
0.25
ammonium (µmol/l)

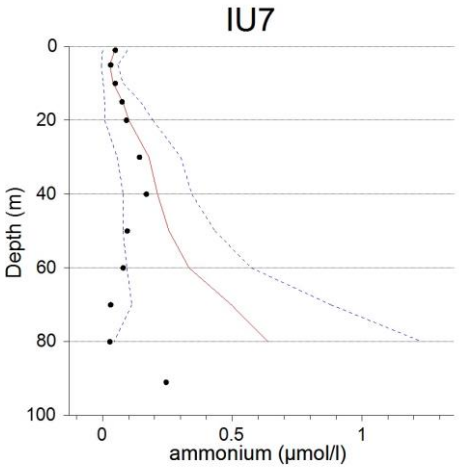

SR8
Depth (m)
0
10
20
30
40
50
60
-0.05
0
0.05
0.1
0.15
0.2
0.25
ammonium (µmol/l)

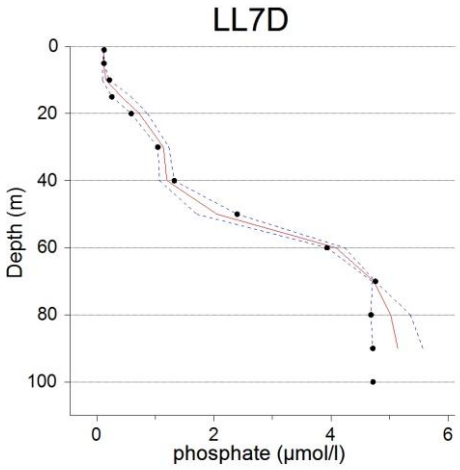

SR7
Depth (m)
0
10
20
30
40
50
60
70
80
0
0.1
0.2
0.3
0.4
ammonium (µmol/l)

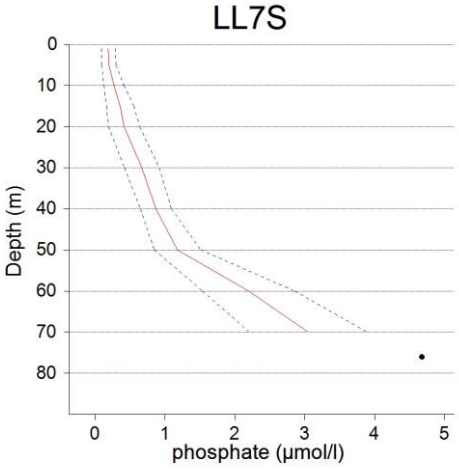

IU1
Depth (m)
0
5
10
15
20
25
30
35
40
-0.05
0
0.05
0.1
ammonium (µmol/l)

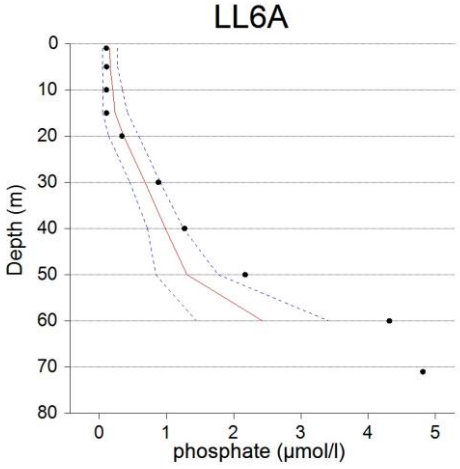

IU3
Depth (m)
0
10
20
30
40
50
60
0
0.2
0.4
0.6
ammonium (µmol/l)

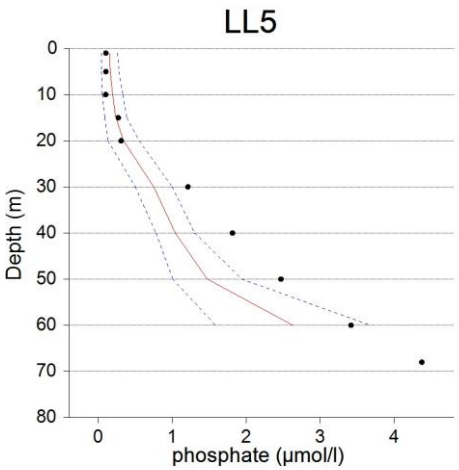

IU5
Depth (m)
0
20
40
60
80
100
0
0.2
0.4
ammonium (µmol/l)

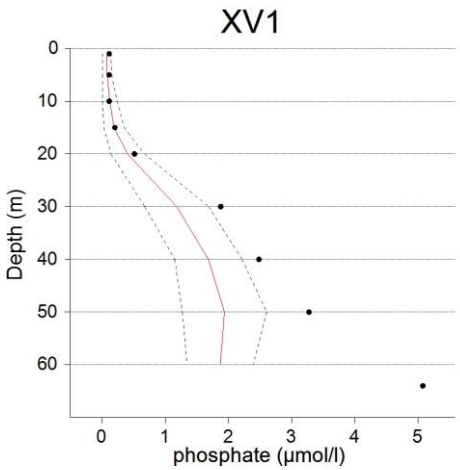

IU7
Depth (m)
0
20
40
60
80
100
0
0.5
1
ammonium (µmol/l)

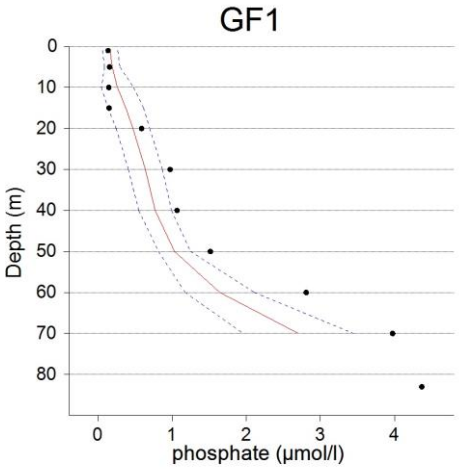

LL7D
Depth (m)
0
20
40
60
80
100
0
2
4
6
phosphate (µmol/l)

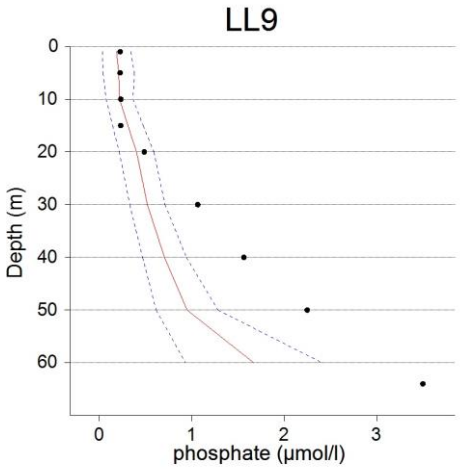

LL7S
Depth (m)
0
10
20
30
40
50
60
70
80
0
1
2
3
4
5
phosphate (µmol/l)

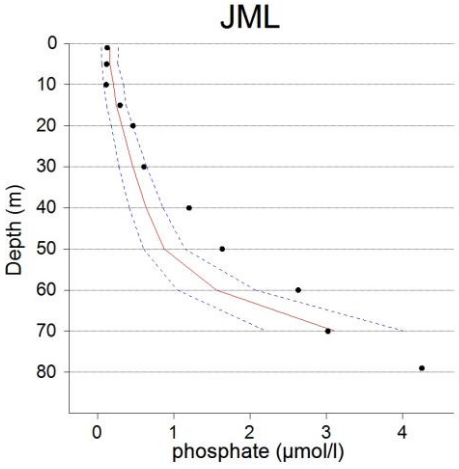

LL6A
Depth (m)
0
10
20
30
40
50
60
70
80
0
1
2
3
4
5
phosphate (µmol/l)

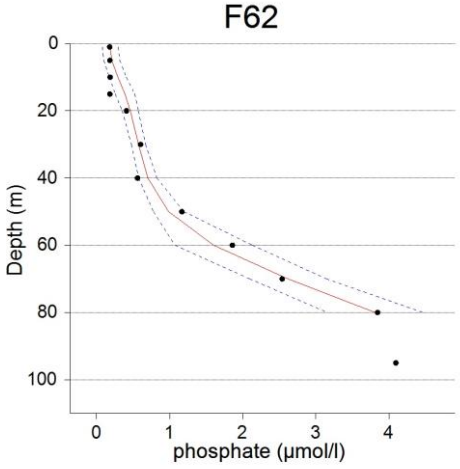

LL5
Depth (m)
0
10
20
30
40
50
60
70
80
0
1
2
3
4
phosphate (µmol/l)

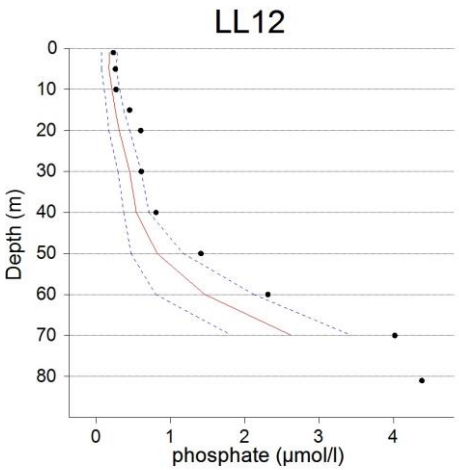

XV1
Depth (m)
0
10
20
30
40
50
60
0
1
2
3
4
5
phosphate (µmol/l)

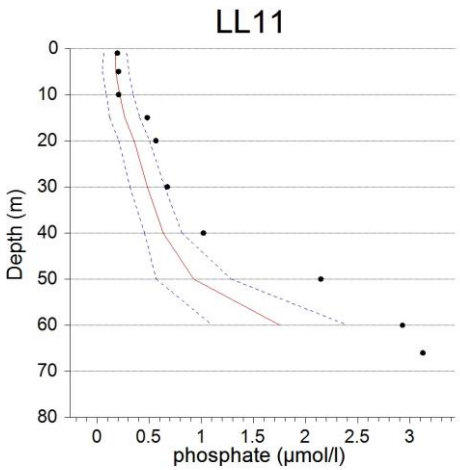

GF1
Depth (m)
0
10
20
30
40
50
60
70
80
0
1
2
3
4
phosphate (µmol/l)

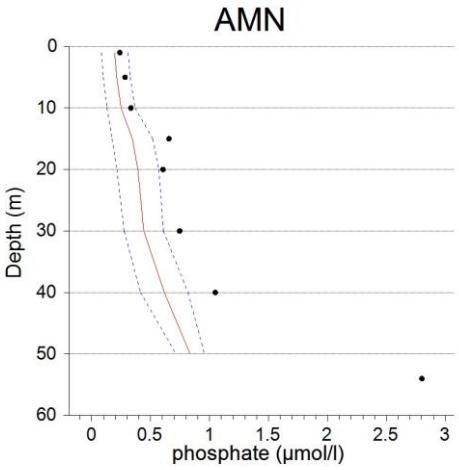

LL9
Depth (m)
0
10
20
30
40
50
60
0
1
2
3
phosphate (µmol/l)

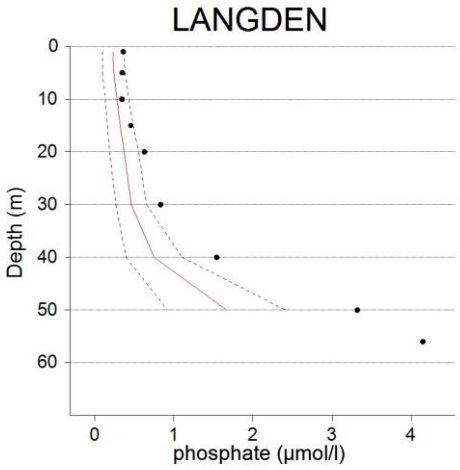

JML
Depth (m)
0
10
20
30
40
50
60
70
80
0
1
2
3
4
phosphate (µmol/l)

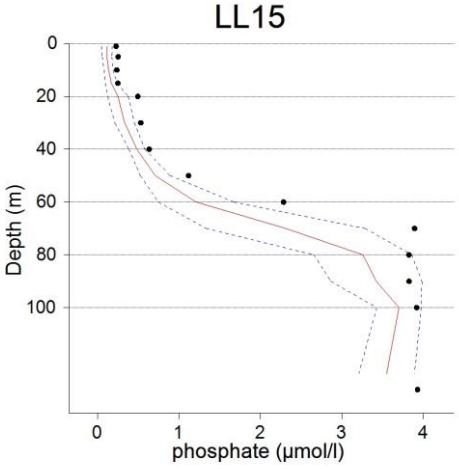

F62
Depth (m)
0
20
40
60
80
100
0
1
2
3
4
phosphate (µmol/l)

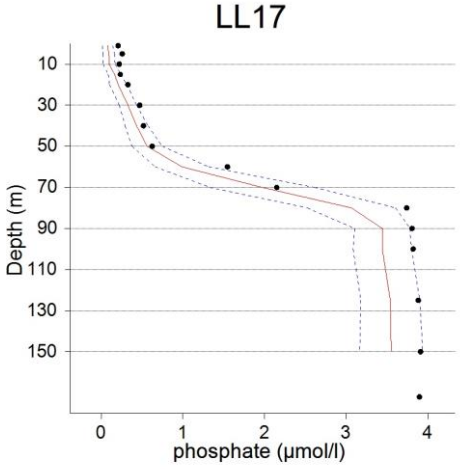

LL12
Depth (m)
0
10
20
30
40
50
60
70
80
0
1
2
3
4
phosphate (µmol/l)

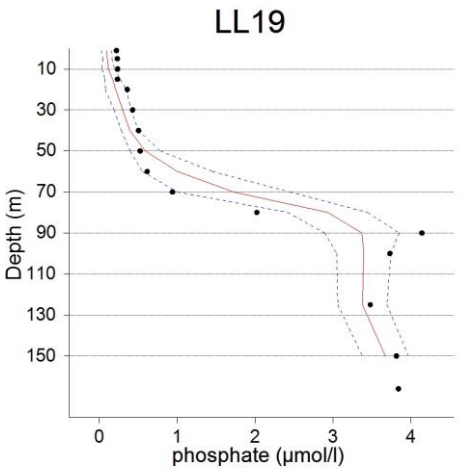

LL11
Depth (m)
0
10
20
30
40
50
60
70
80
0
0.5
1
1.5
2
2.5
3
phosphate (µmol/l)

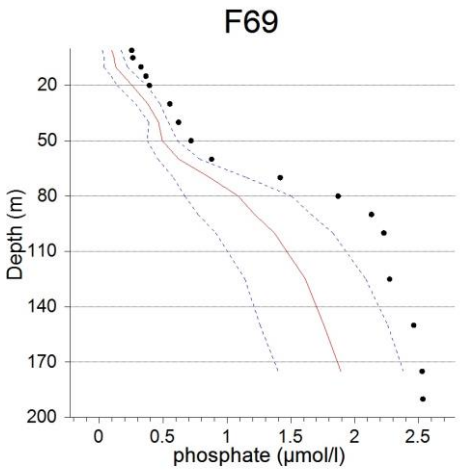

AMN
Depth (m)
0
10
20
30
40
50
60
0
0.5
1
1.5
2
2.5
3
phosphate (µmol/l)

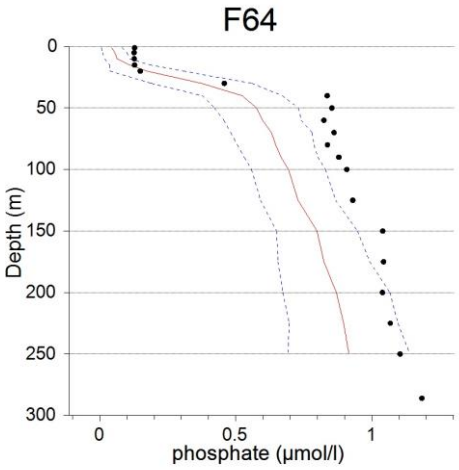

LANGDEN
Depth (m)
0
10
20
30
40
50
60
0
1
2
3
4
phosphate (µmol/l)

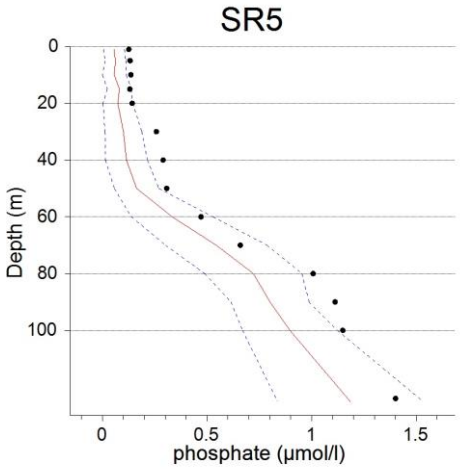

LL15
Depth (m)
0
20
40
60
80
100
0
1
2
3
4
phosphate (µmol/l)

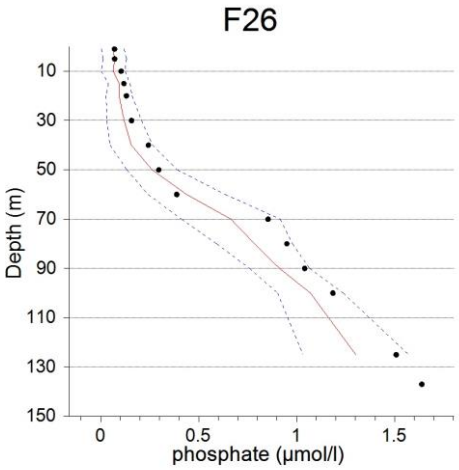

LL17
Depth (m)
10
30
50
70
90
110
130
150
0
1
2
3
4
phosphate (µmol/l)

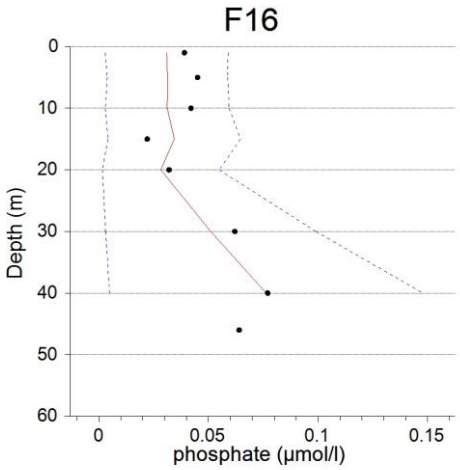

LL19
Depth (m)
10
30
50
70
90
110
130
150
0
1
2
3
4
phosphate (µmol/l)

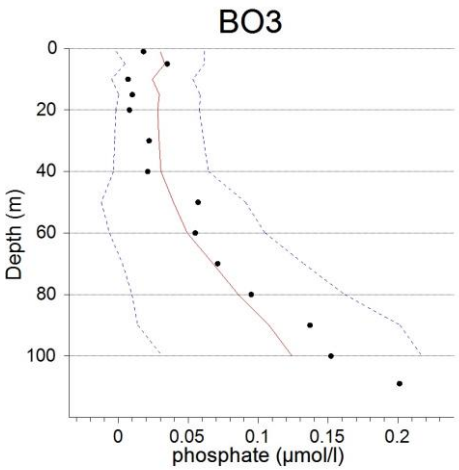

F69
Depth (m)
20
50
80
110
140
170
200
0
0.5
1
1.5
2
2.5
phosphate (µmol/l)

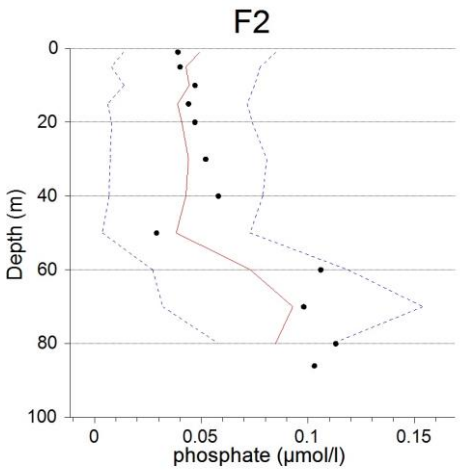

F64
Depth (m)
0
50
100
150
200
250
300
0
0.5
1
phosphate (µmol/l)

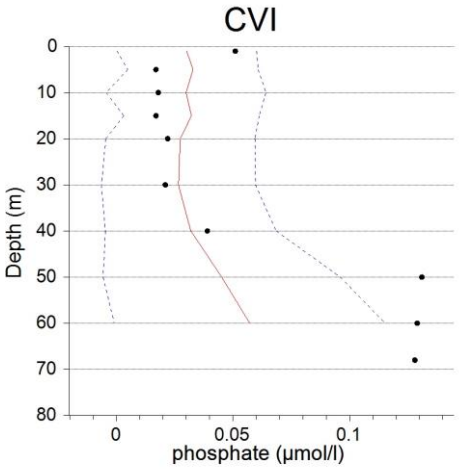

SR5
Depth (m)
0
20
40
60
80
100
0
0.5
1
1.5
phosphate (µmol/l)

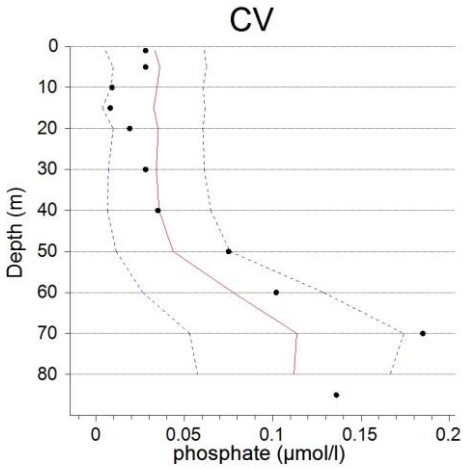

F26
Depth (m)
10
30
50
70
90
110
130
150
0
0.5
1
1.5
phosphate (µmol/l)

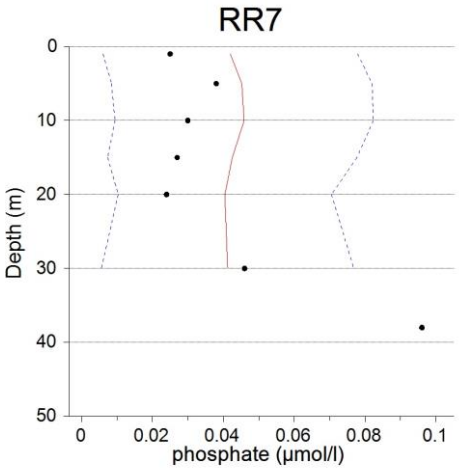

F16
Depth (m)
0
10
20
30
40
50
60
0
0.05
0.1
0.15
phosphate (µmol/l)

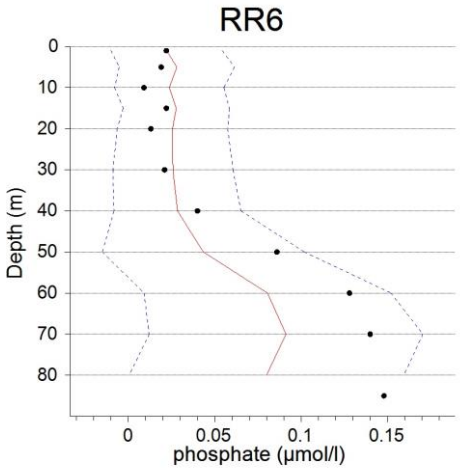

BO3
Depth (m)
0
20
40
60
80
100
0
0.05
0.1
0.15
0.2
phosphate (µmol/l)

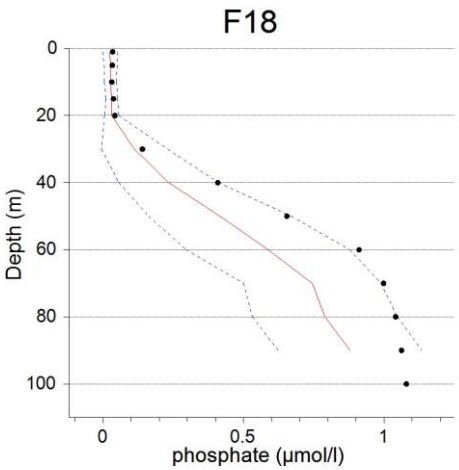

F2
Depth (m)
0
20
40
60
80
100
0
0.05
0.1
0.15
phosphate (µmol/l)

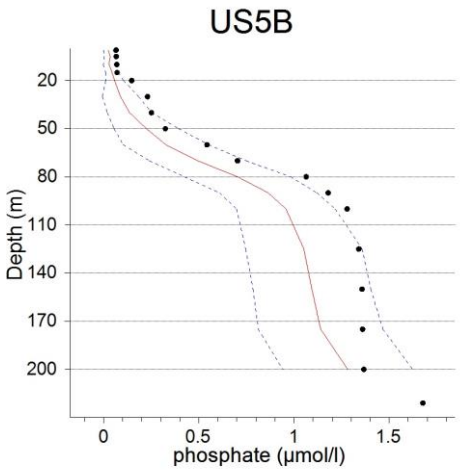

CVI
Depth (m)
0
10
20
30
40
50
60
70
80
0
0.05
0.1
phosphate (µmol/l)

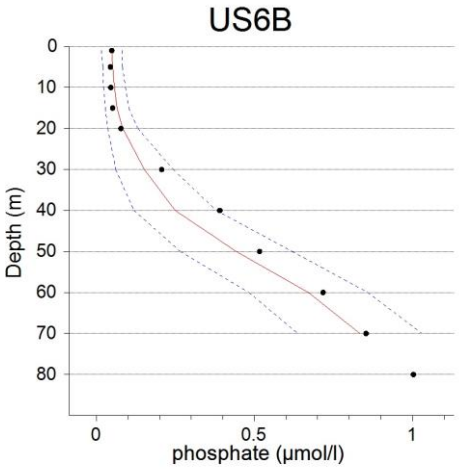

CV
Depth (m)
0
10
20
30
40
50
60
70
80
0
0.05
0.1
0.15
0.2
phosphate (µmol/l)

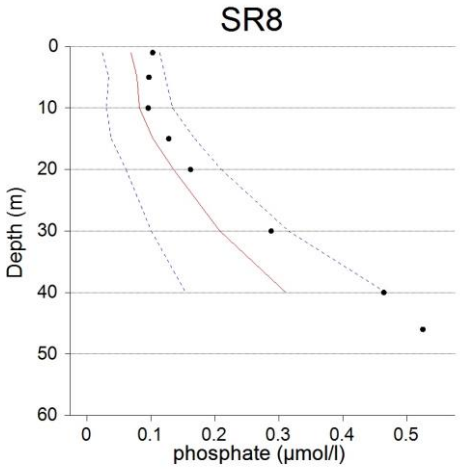

RR7
Depth (m)
0
10
20
30
40
50
0
0.02
0.04
0.06
0.08
0.1
phosphate (µmol/l)

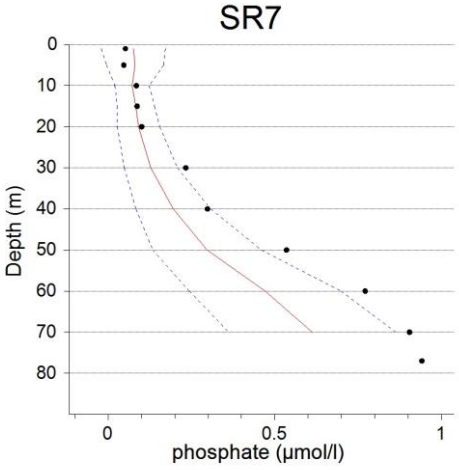

RR6
Depth (m)
0
10
20
30
40
50
60
70
80
0
0.05
0.1
0.15
phosphate (µmol/l)

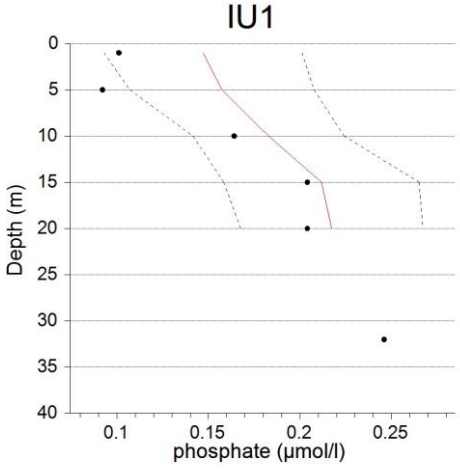

F18
Depth (m)
0
20
40
60
80
100
0
0.5
1
phosphate (µmol/l)

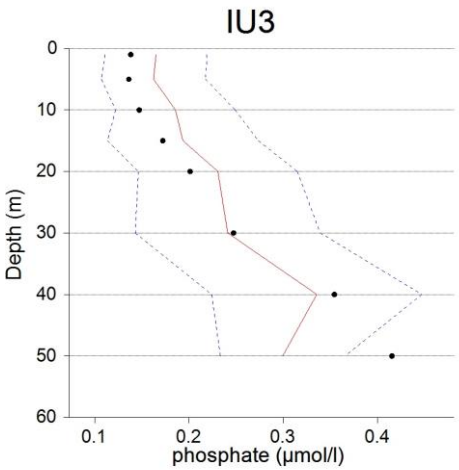

US5B
Depth (m)
20
50
80
110
140
170
200
0
0.5
1
1.5
phosphate (µmol/l)

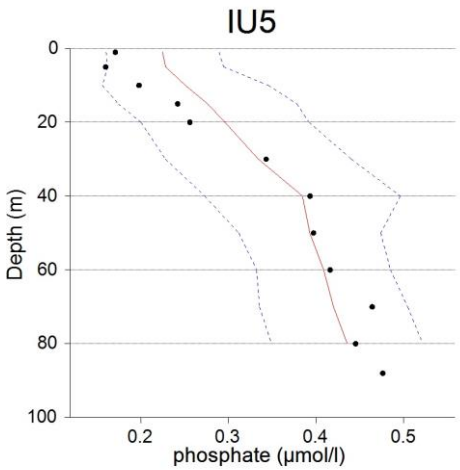

US6B
Depth (m)
0
10
20
30
40
50
60
70
80
0
0.5
1
phosphate (µmol/l)

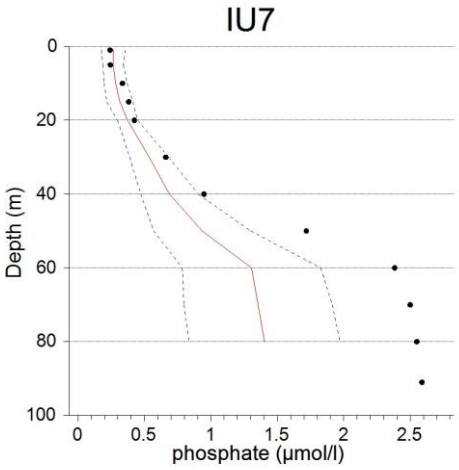

SR8
Depth (m)
0
10
20
30
40
50
60
0
0.1
0.2
0.3
0.4
0.5
phosphate (µmol/l)

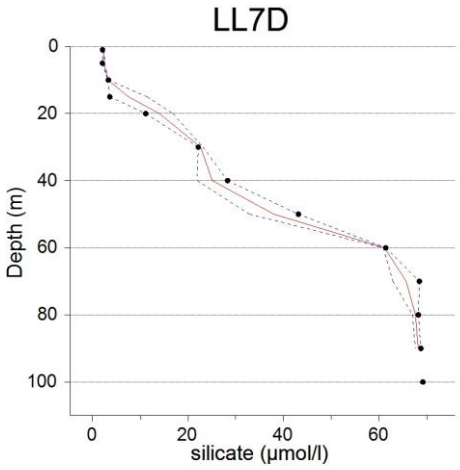

SR7
Depth (m)
0
10
20
30
40
50
60
70
80
0
0.5
1
phosphate (µmol/l)

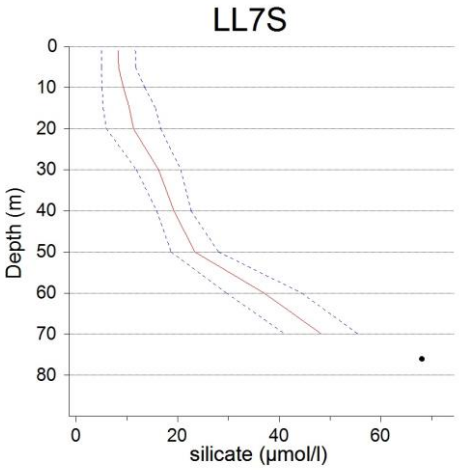

IU1
Depth (m)
0
5
10
15
20
25
30
35
40
0.1
0.15
0.2
0.25
phosphate (µmol/l)


IU3
Depth (m)
0
10
20
30
40
50
60
0.1
0.2
0.3
0.4
phosphate (µmol/l)


IU5
Depth (m)
0
20
40
60
80
100
0.2
0.3
0.4
0.5
phosphate (µmol/l)


IU7
Depth (m)
0
20
40
60
80
100
0
0.5
1
1.5
2
2.5
phosphate (µmol/l)


LL7D
Depth (m)
0
20
40
60
80
100
0
20
40
60
silicate (µmol/l)


LL7S
Depth (m)
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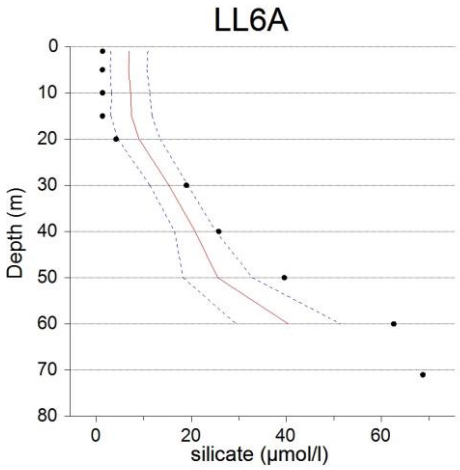
20
30
40
50
60
70
80
0
20
40
60
silicate (µmol/l)


LL6A
Depth (m)
0
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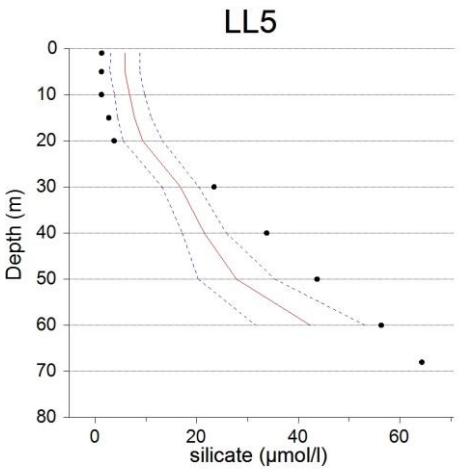
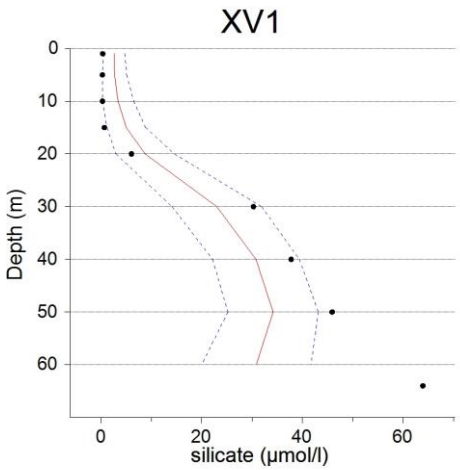
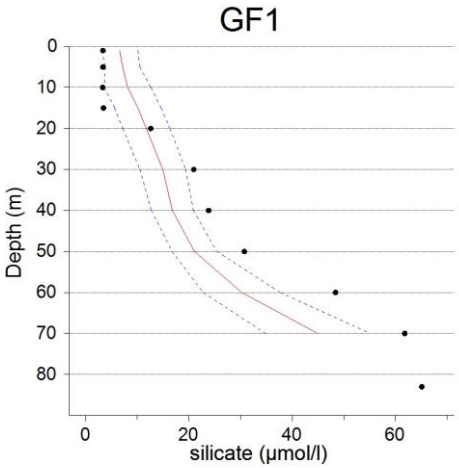
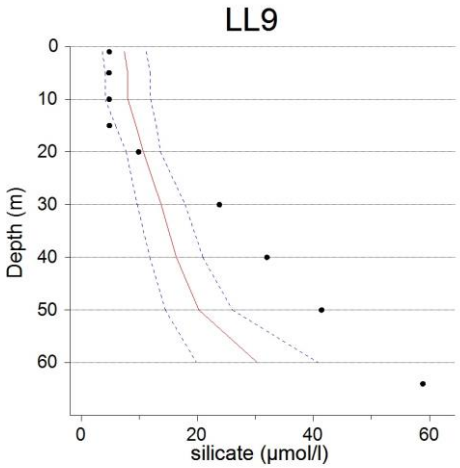
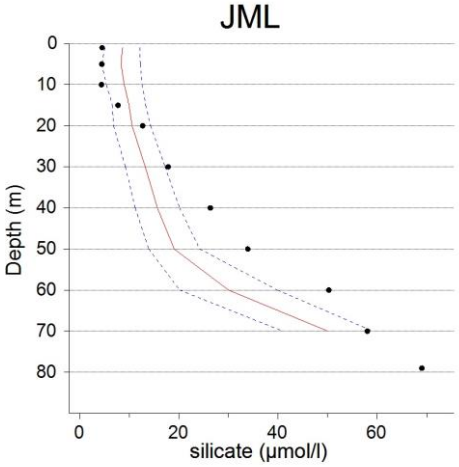
20
30
40
50
60
70
80
0
20
40
60
silicate (µmol/l)

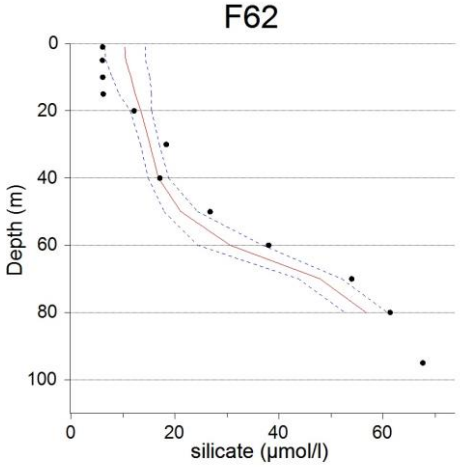

LL5
Depth (m)
0
10
20
30
40
50
60
70
80
0
20
40
60
silicate (µmol/l)

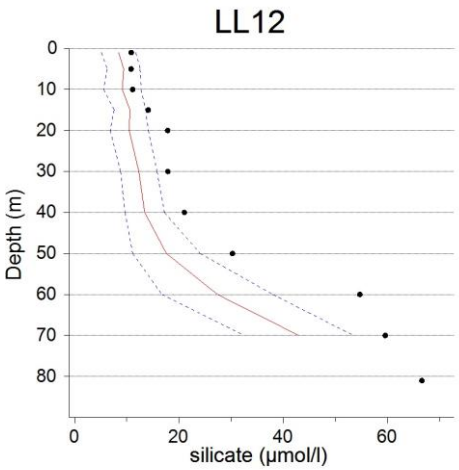

XV1
Depth (m)
0
10
20
30
40
50
60
0
20
40
60
silicate (µmol/l)

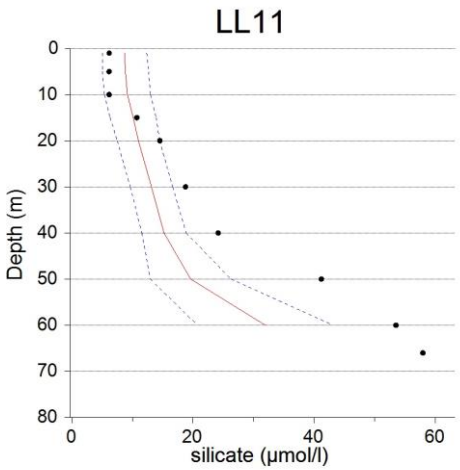

GF1
Depth (m)
0
10
20
30
40
50
60
70
80
0
20
40
60
silicate (µmol/l)

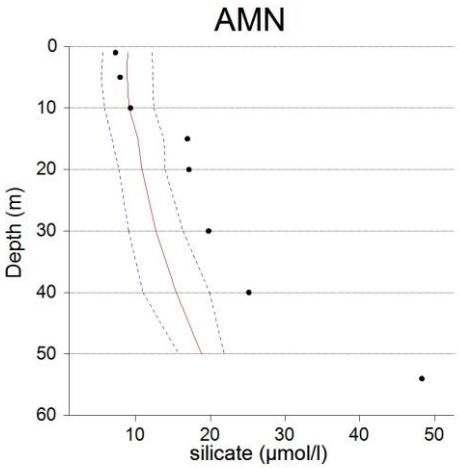

LL9
Depth (m)
0
10
20
30
40
50
60
0
20
40
60
silicate (µmol/l)


JML
Depth (m)
0
10
20
30
40
50
60
70
80
0
20
40
60
silicate (µmol/l)


F62
Depth (m)
0
20
40
60
80
100
0
20
40
60
silicate (µmol/l)


LL12
Depth (m)
0
10
20
30
40
50
60
70
80
0
20
40
60
silicate (µmol/l)


LL11
Depth (m)
0
10
20
30
40
50
60
70
80
0
20
40
60
silicate (µmol/l)


AMN
Depth (m)
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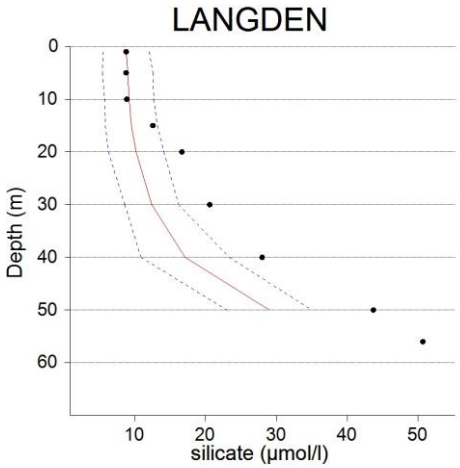
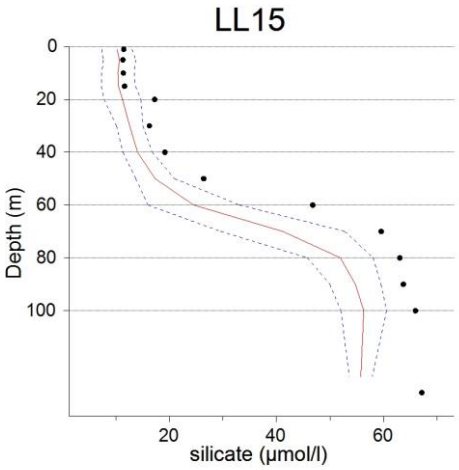
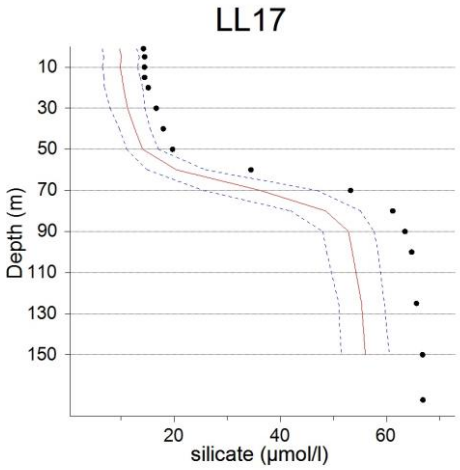
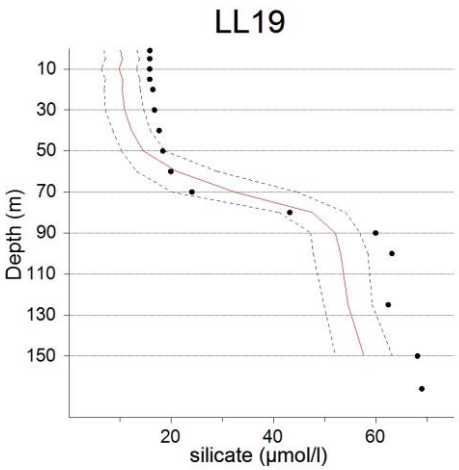
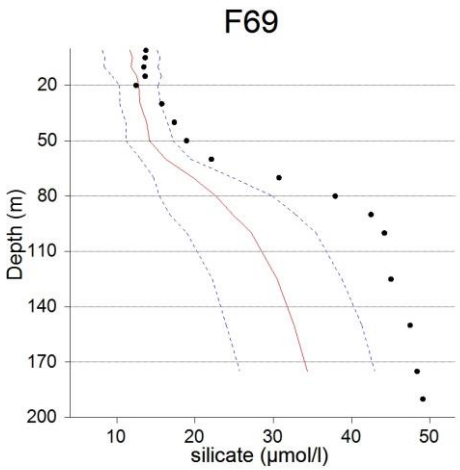
10
20
30
40
50
60
10
20
30
40
50
silicate (µmol/l)

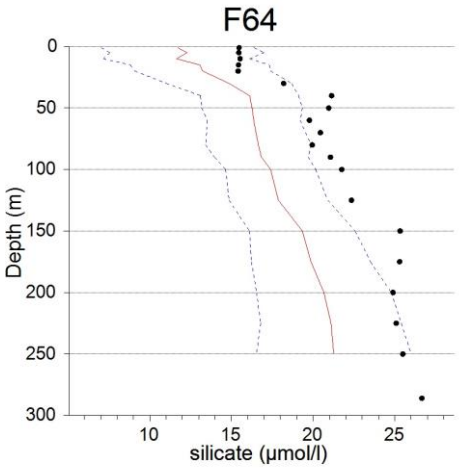

LANGDEN
Depth (m)
0
10
20
30
40
50
60
10
20
30
40
50
silicate (µmol/l)

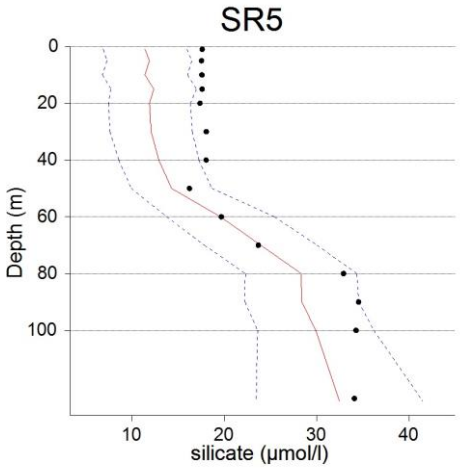

LL15
Depth (m)
0
20
40
60
80
100
20
40
60
silicate (µmol/l)


LL17
Depth (m)
10
30
50
70
90
110
130
150
20
40
60
silicate (µmol/l)


LL19
Depth (m)
10
30
50
70
90
110
130
150
20
40
60
silicate (µmol/l)


F69
Depth (m)
20
50
80
110
140
170
200
10
20
30
40
50
silicate (µmol/l)


F64
Depth (m)
0
50
100
150
200
250
300
10
15
20
25
silicate (µmol/l)


SR5
Depth (m)
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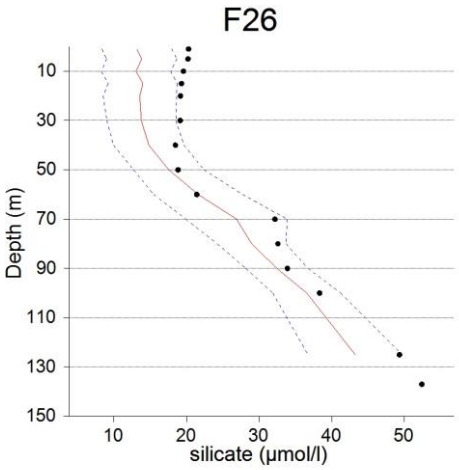
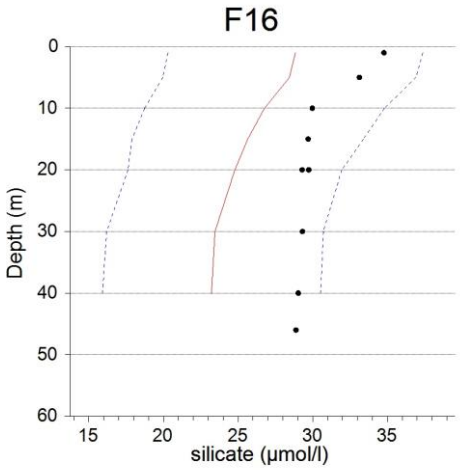
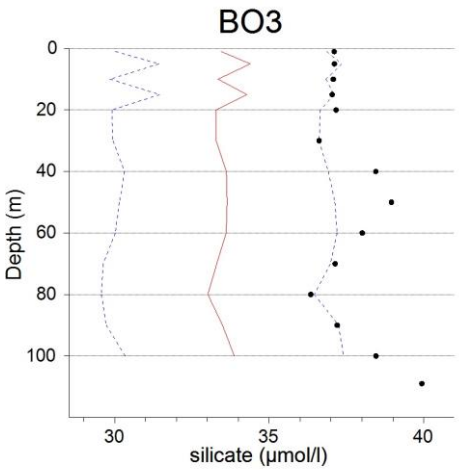
20
40
60
80
100
10
20
30
40
silicate (µmol/l)


F26
Depth (m)
10
30
50
70
90
110
130
150
10
20
30
40
50
silicate (µmol/l)


F16
Depth (m)
0
10
20
30
40
50
60
15
20
25
30
35
silicate (µmol/l)


BO3
Depth (m)
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20
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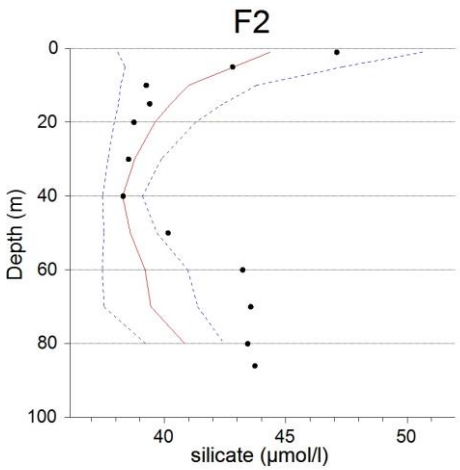
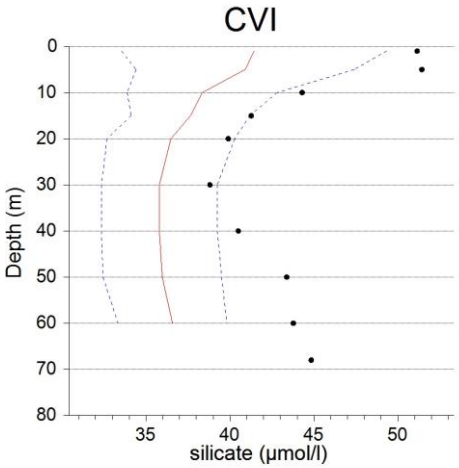
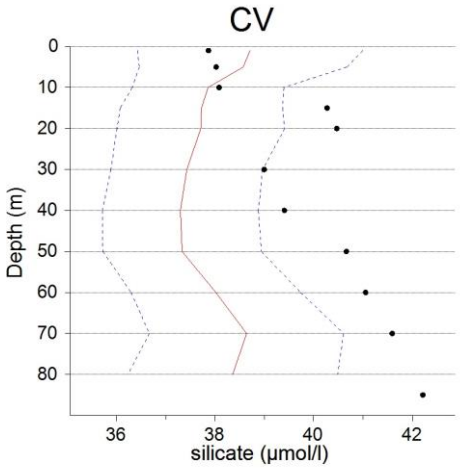
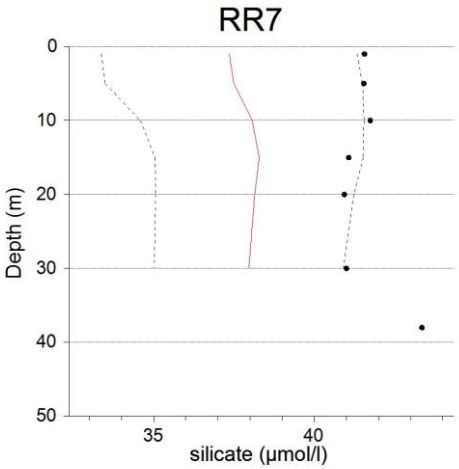
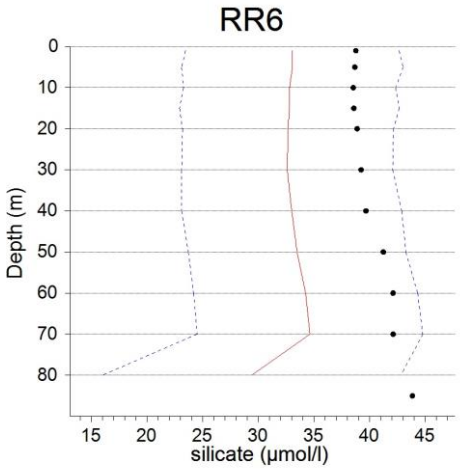
60
80
100
30
35
40
silicate (µmol/l)

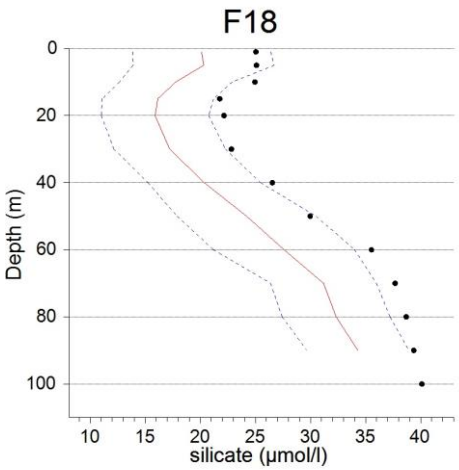

F2
Depth (m)
0
20
40
60
80
100
40
45
50
silicate (µmol/l)


CVI
Depth (m)
0
10
20
30
40
50
60
70
80
35
40
45
50
silicate (µmol/l)


CV
Depth (m)
0
10
20
30
40
50
60
70
80
36
38
40
42
silicate (µmol/l)


RR7
Depth (m)
0
10
20
30
40
50
35
40
silicate (µmol/l)


RR6
Depth (m)
0
10
20
30
40
50
60
70
80
15
20
25
30
35
40
45
silicate (µmol/l)


F18
Depth (m)
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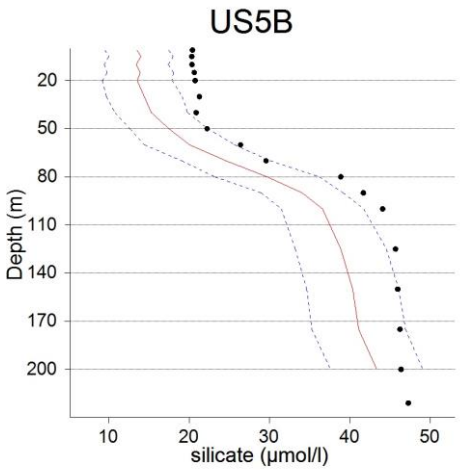
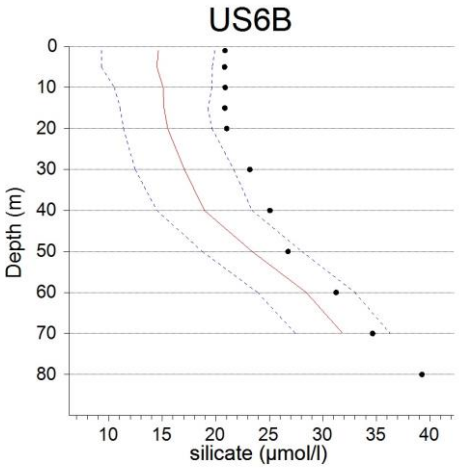
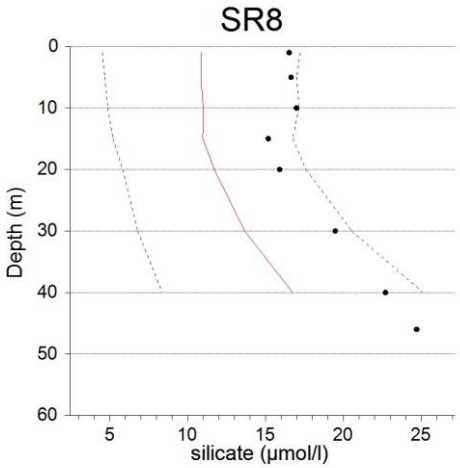
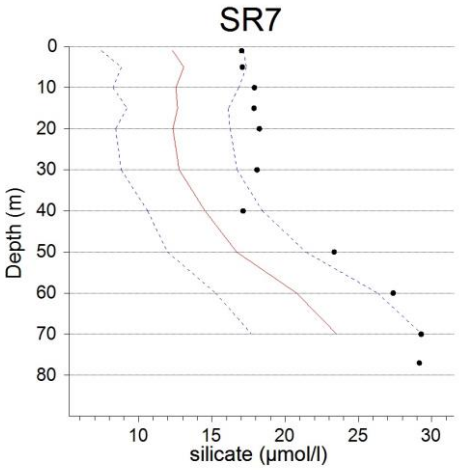
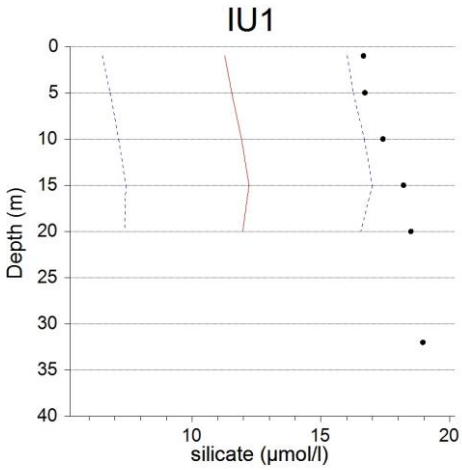
20
40
60
80
100
10
15
20
25
30
35
40
silicate (µmol/l)

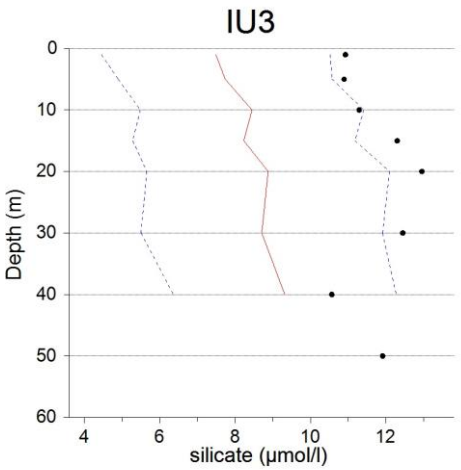

US5B
Depth (m)
20
50
80
110
140
170
200
10
20
30
40
50
silicate (µmol/l)

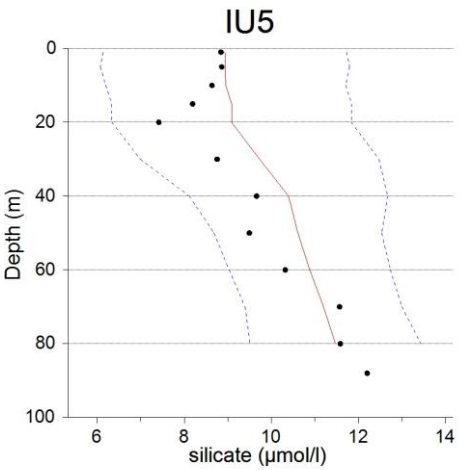

US6B
Depth (m)
0
10
20
30
40
50
60
70
80
10
15
20
25
30
35
40
silicate (µmol/l)

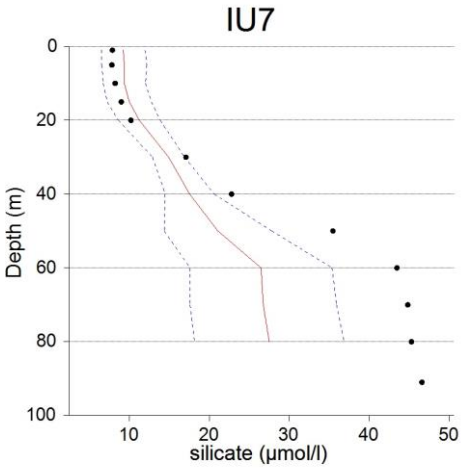

SR8
Depth (m)
0
10
20
30
40
50
60
5
10
15
20
25
silicate (µmol/l)


SR7
Depth (m)
0
10
20
30
40
50
60
70
80
10
15
20
25
30
silicate (µmol/l)


IU1
Depth (m)
0
5
10
15
20
25
30
35
40
10
15
20
silicate (µmol/l)


IU3
Depth (m)
0
10
20
30
40
50
60
4
6
8
10
12
silicate (µmol/l)


IU5
Depth (m)
0
20
40
60
80
100
6
8
10
12
14
silicate (µmol/l)


IU7
Depth (m)
0
20
40
60
80
100
10
20
30
40
50
silicate (µmol/l)