

## Report from SMHI's marine monitoring cruise with R/V Svea – January 2026

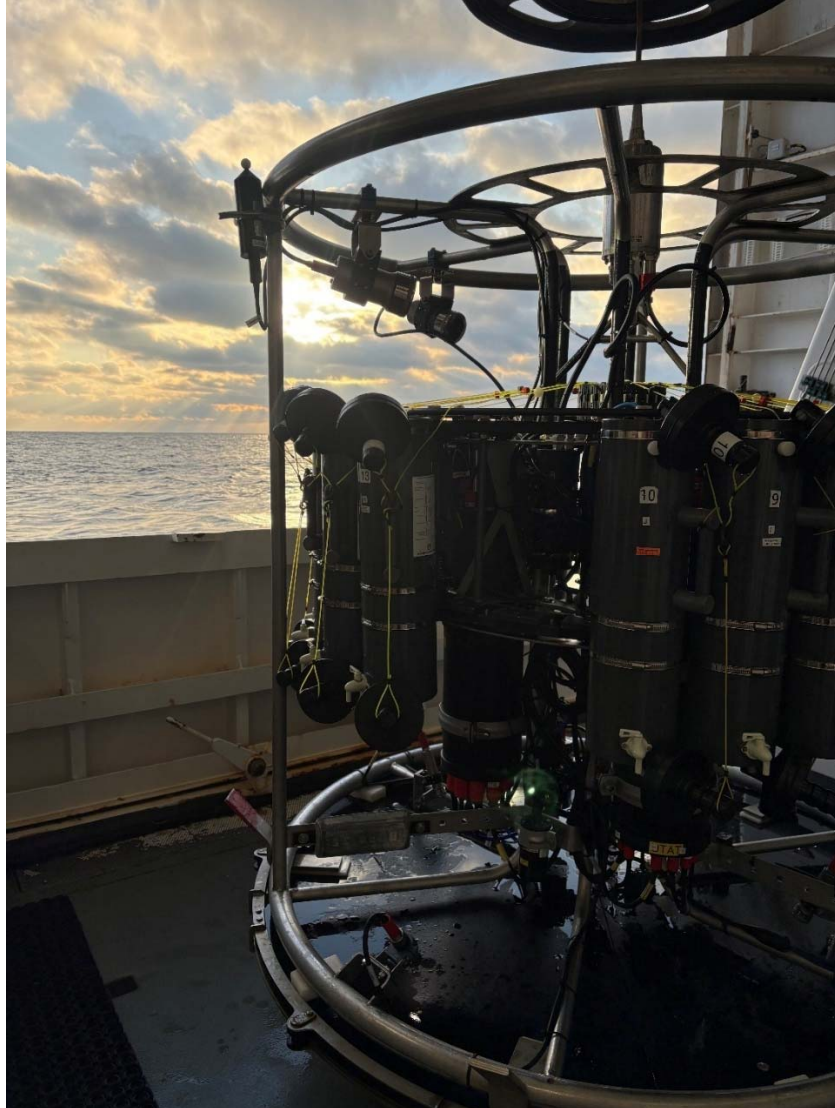


Photo: Madeleine Nilsson, SMHI

- Survey period:** 2026-01-07 to 2026-01-14
- Principals:** Swedish Meteorological and Hydrological Institute (SMHI),  
Swedish Agency for Marine and Water Management (SwAM)
- Cooperation partners:** Swedish University of Agricultural Sciences (SLU),  
Swedish Maritime Administration (SMA)

## SUMMARY

During the cruise, which is part of the Swedish pelagic monitoring programme, stations in the Skagerrak, Kattegat, Öresund and the Baltic Proper were visited. In the Kattegat, the yearly survey of the winter nutrient pool was conducted.

The temperature in the surface water was normal for the month in the Skagerrak, Kattegat, the Arkona Basin and the Hanö Bay, while it was warmer than normal in the rest of the Baltic Proper. The lowest surface water temperature was recorded in the Kattegat, ranging between 2–4 °C. In the Skagerrak, temperatures varied between 4–8 °C, and in the Baltic Proper they were around 5 °C. Surface water salinity was mostly normal for the month, slightly lower in the Öresund and slightly higher in the Eastern Gotland Basin.

The concentration of dissolved inorganic nitrogen (DIN) was below normal in most parts of the Kattegat, the Öresund, the Arkona Basin and the Western Gotland Basin. In contrast, phosphate and silicate concentrations were above normal in most parts of the Baltic Proper.

The oxygen conditions in the bottom waters were good in the Skagerrak and the Kattegat, with concentrations varying between 4–8 ml/l. In the Baltic Proper, severe hypoxia (< 2ml/l) was observed in all basins except the Arkona Basin. Hydrogen sulphide (H<sub>2</sub>S) was detected from 80 m in the Eastern Gotland Basin, except at station BY15, where it was first detected at 140 m. In the Western Gotland Basin H<sub>2</sub>S was measured from 90 m.

Upcoming cruises with R/V Svea include the International Bottom Trawl Survey (IBTS) from 18 January to 1 February, led by SLU Aqua. IBTS will depart from and return to Lysekil, with SMHI participating to collect CTD profiles at each trawl and to continue the winter nutrient pool survey. SMHI's own expedition is scheduled from 4 to 11 February, departing from Lysekil and ending in Kalmar.

## EXPEDITION OVERVIEW

The expedition was conducted aboard the research vessel R/V Svea from 7 to 14 January, departing from and returning to Lysekil.

The weather at the beginning of January was very windy, with several storms occurring in succession. On the first day of the expedition, a snowstorm moved in over Gothenburg and the archipelago, depositing several decimetres of snow. At the same time, a yellow warning for near-gale winds was issued for the Skagerrak. Despite the conditions, stations in the Skagerrak could be sampled as planned, although net and hose samples could not be collected. As the weather deteriorated over the Baltic Sea, the route was adjusted to prioritise the survey of the winter nutrient pool in the Kattegat, allowing the expedition to avoid the worst conditions in the Baltic Sea. Air temperatures ranged from  $-2$  to  $1$  °C.

When the expedition entered the Baltic Sea on Friday afternoon, 9 January, conditions were still quite windy, with waves of approximately 4 m, which resulted in the cancellation of stations BY39 and BY38. The vessel sought shelter via the Kalmarsund while heading north. During the night leading to Monday, 12 January, the winds, which had been at gale force and had prompted a yellow warning over the central Baltic Sea, subsided, allowing the expedition to continue north toward BY31, Landsort Deep. Stations BY29 and BCS III-10 had to be cancelled due to lack of time. The rest of the week was characterised by fresh to strong winds and air temperatures ranging from  $0$  to  $3$  °C.

Profiles of salinity, temperature, oxygen and fluorescence in the water column were measured using a CTD mounted on a rosette with capacity for 24 water samplers. Of the 24 standard stations 19 was sampled as planned and five had to be cancelled due to the bad weather and the following shortage of time. In the Kattegat the yearly survey of the winter nutrient pool was performed and 16 stations were visited in the area in addition to the four standard stations. At Flinten 7, a reference CTD profile was collected. To secure at least one station in the Arkona Basin a stop at the survey stations 5W BY3 was made on the way into the Baltic Proper.

The FerryBox system operated throughout the expedition, and a daily reference sample was collected for chlorophyll analysis. The Moving Vessel Profiler (MVP) was operated from Kullen, north of the Öresund to Lysekil.

This report is based on data that have undergone initial quality control and have been compared to monthly averages for the period 1991 – 2020. After further quality control, some values may be subject to change. The values are rounded to the nearest tenth and may therefore differ slightly from published values. Data are published as soon as possible on the data host's website, usually within about a week after the expedition. Some analyses are completed after the expedition and are therefore published later.

More information about our data hosting and to download data:

<https://www.smhi.se/data/oceanografi/datavardskap-oceanografi-och-marinbiologi>

For more information on the algal situation, see the AlgAware report:

<https://www.smhi.se/publikationer/publikationer/algrapporter>

## RESULTS

### Skagerrak

Surface water temperature in Skagerrak was between 4 – 8 °C, warmest closest to the coast and at the westernmost station Å17 where the temperature was above normal. The cold surface layer extends down to 20 m close to the coast and 60 m in the open sea and below the mixed layer the temperature increased to around 10 °C. The surface water salinity was between 30 – 34 psu.

The concentration of dissolved inorganic nutrients in the surface water was generally within normal for the month, but at stations Släggö silicate and DIN were elevated. The concentrations varied between 4.8 – 6.4 µmol/l for DIN, around 0.5 µmol/l for phosphate and 3.9 – 7.7 µmol/l for silicate, highest close to the coast and decreased towards the west.

The oxygen conditions close to the bottom was good at all stations and varied between 5.6 – 5.9 ml/l.

Chlorophyll fluorescence measurements that indicate plankton activity was low in Skagerrak, no peaks were noted and this together with the high nutrient concentrations indicate that the spring bloom had not started at the time.

### Kattegat and the Öresund

In the Kattegat and the Öresund, surface water temperatures had decreased since December and was around 3 – 4 °C, with the coldest temperatures observed in the Öresund. In the northern parts of Kattegat, over the GF-transect, an area of warmer water was observed, with temperatures up to 7 °C at station GF6, which is above normal for the month. Surface water salinity was 21 – 31 psu in the Kattegat increasing from the south to the north, and 9 – 15 psu in the Öresund. The salinity in the surface water was normal at all stations except at GF6, where both salinity and temperature were above normal. In the Öresund the water was mixed down to 10 – 15 m depth, at the deepest station (W Landskrona) a second gradient was observed at 20 – 30 m where salinity and temperature increased further. The salinity in the Öresund increased from 10 – 14 psu in the surface to 30 – 33 psu at the bottom and the temperature from 4 – 5 °C in the surface to 10 °C at the bottom.

Concentrations of dissolved inorganic nutrients in surface waters were unchanged since December or a little lower. Most notable were the concentrations of DIN that were below normal in large parts of the Kattegat as well as the Öresund, it was only in the north western parts of the Kattegat that the concentrations were within normal monthly values. Phosphate and silicate concentrations were within normal at most stations. In the Öresund concentrations of phosphate were within normal range while DIN concentrations were low and at some stations below normal.

The oxygen concentration close to the bottom was between 4 – 8 ml/l, no oxygen deficiency was observed.

Chlorophyll fluorescence was higher in the Kattegat than in the Skagerrak, most notably close to the coasts. No peaks were observed, although some plankton activity could be observed in the surface layer.

### **The Baltic Proper**

In the Arkona Basin and the Hanö Bay the surface water temperature was 4 – 5 °C, which was within monthly normal values. Close to the bottom at station BY2 a layer with warmer and more saline water was observed that continued into the Hanö Bay and the Bornholm Basin, 8 – 10 °C and 16 psu. In the remainder of the Baltic Proper the surface water temperature was above normal, 5 – 6 °C without any significant temperature gradient into the deep water. The surface water salinity was mostly normal, in the Arkona and Bornholm Basins 7.7 – 8.6 psu, Eastern Gotland Basin 7.2 – 7.5 psu and Western Gotland Basin 7.0 – 7.1 psu. The water was well mixed down to 50 – 60 m depth and below this the salinity ranged between 10 – 16 psu in the southern basins and 10 – 12 psu in the basins around Gotland.

The concentration of DIN in the surface water was generally within normal monthly values with exception of the Arkona and the Eastern Gotland Basin where it was below normal. Phosphate and silicate concentrations were above normal at several stations and ranged between 16.2 – 21.1 and 0.7 – 0.9 µmol/l, respectively. DIN concentrations ranged between 2.0 – 2.9 µmol /l in the southern parts and between 3.2 – 3.8 further north.

In the Arkona Basin the oxygen conditions close to the bottom were relatively good, 4.8 – 7.3 ml/l. In the Bornholm Basin and the Hanö Bay there was severe oxygen deficiency from 70 m depth with oxygen concentrations around 0.4 ml/l, however no H<sub>2</sub>S was detected. In the Western Gotland Basin severe oxygen deficiency was observed from 70 – 80 m and H<sub>2</sub>S were detected from 90 – 100 m. In the Eastern Gotland Basin the severe oxygen deficiency was observed from 80 – 90 m, with exception of the Gotland Deep (BY15) where H<sub>2</sub>S was first measured at 140 m. The highest hydrogen sulfide concentrations occur in the Eastern Gotland Basin at station BY15, but may be underestimated. Since 2023, additional samples have therefore been collected at this station to allow dilution prior to analysis, ensuring that the concentrations fall within the measurement range of the method. These data have not yet been published.

Chlorophyll fluorescence measurements showed some plankton activity in the surface waters, higher in the Arkona and Bornholm Basins than in the other areas.

# Figures

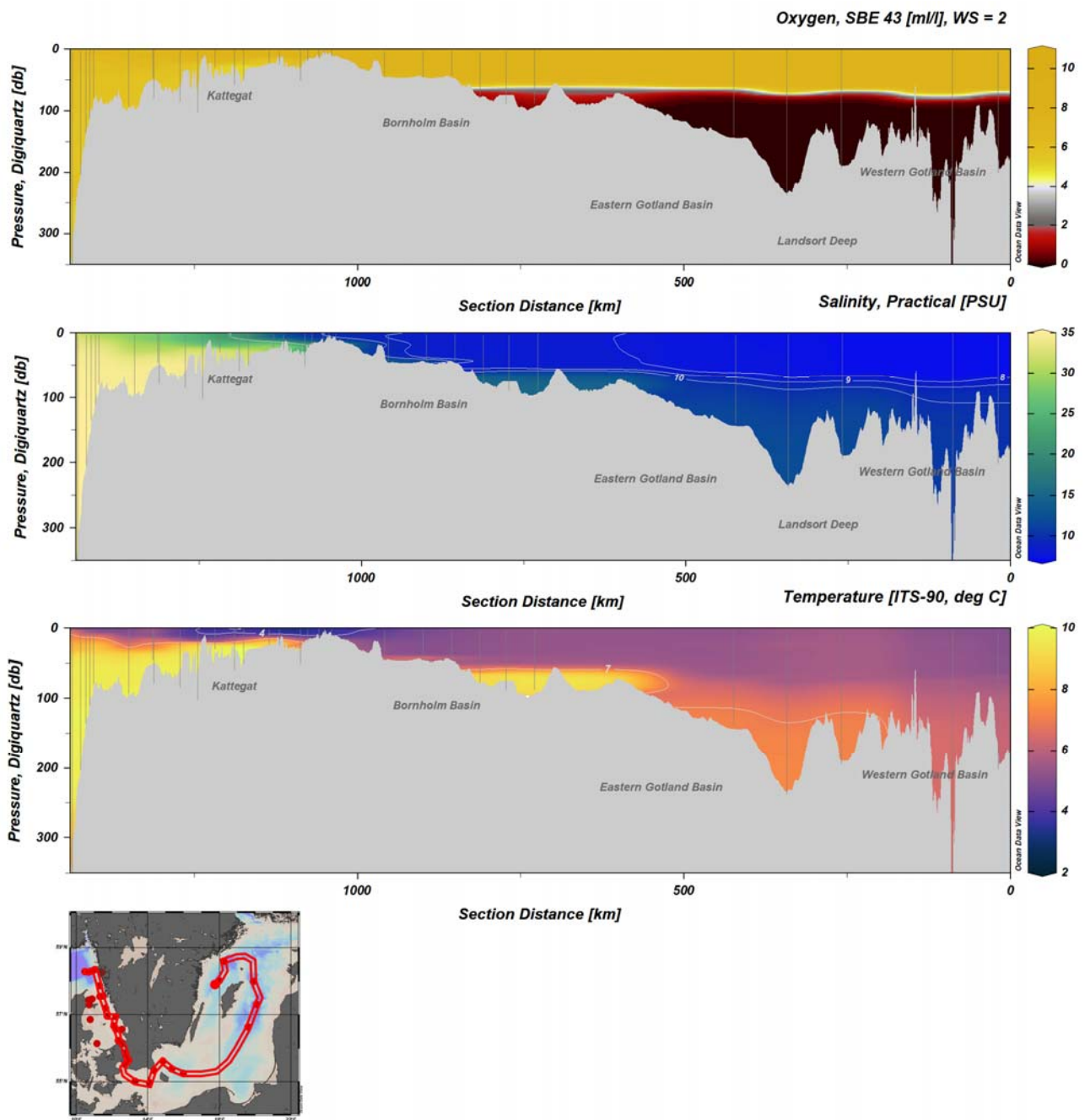


Figure 1. Section showing oxygen concentration, salinity, and temperature from CTD and MVP measurements, from the Skagerrak through the Kattegat and into the Baltic Sea according to the map (bottom).

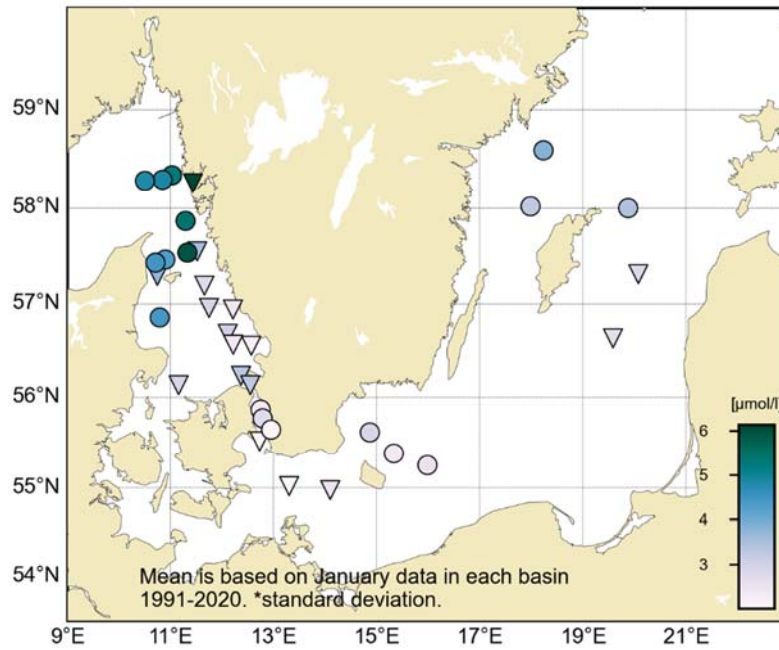


Figure 2. The concentration ( $\mu\text{mol/l}$ ) of inorganic nitrogen (DIN) in the surface water (0 – 10 m). The mean value is based on data for the month at each station during the years 1991 – 2020.

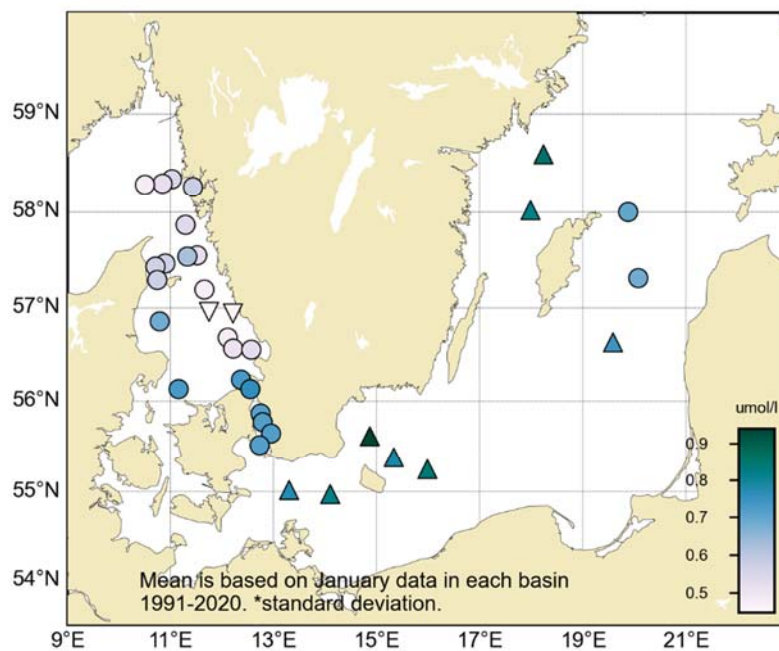


Figure 3. The concentration ( $\mu\text{mol/l}$ ) of phosphate in the surface water (0 – 10 m). The mean value is based on data for the month at each station during the years 1991 – 2020.

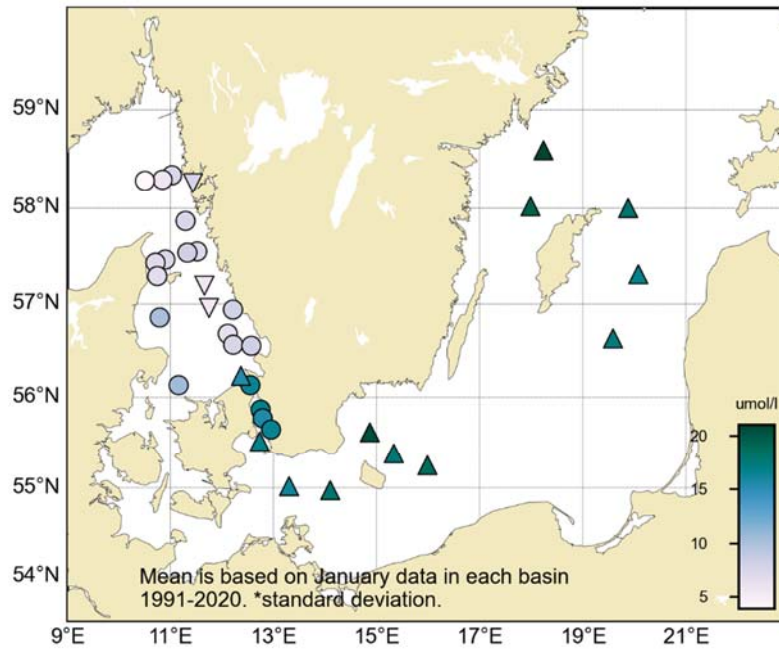


Figure 4. The concentration ( $\mu\text{mol/l}$ ) of silicate in the surface water (0 – 10 m). The mean value is based on data for the month at each station during the years 1991 – 2020.

Oxygen (bottle) (Bottom)

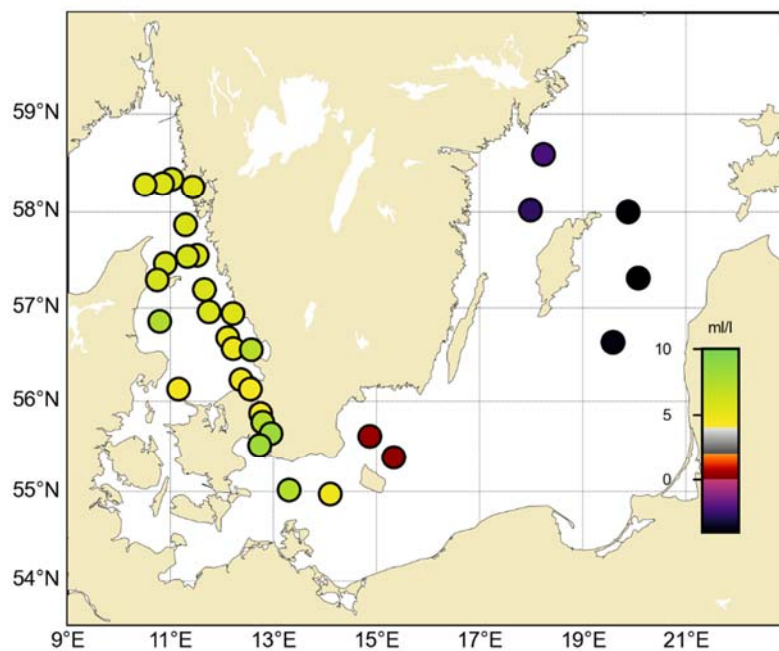


Figure 5. Dissolved oxygen concentration (ml/l) in the bottom water, approx. one meter above the seafloor. Presence of hydrogen sulphide is shown as H<sub>2</sub>S. Note that the values have not been compared to statistics as in similar figures and only circles are shown

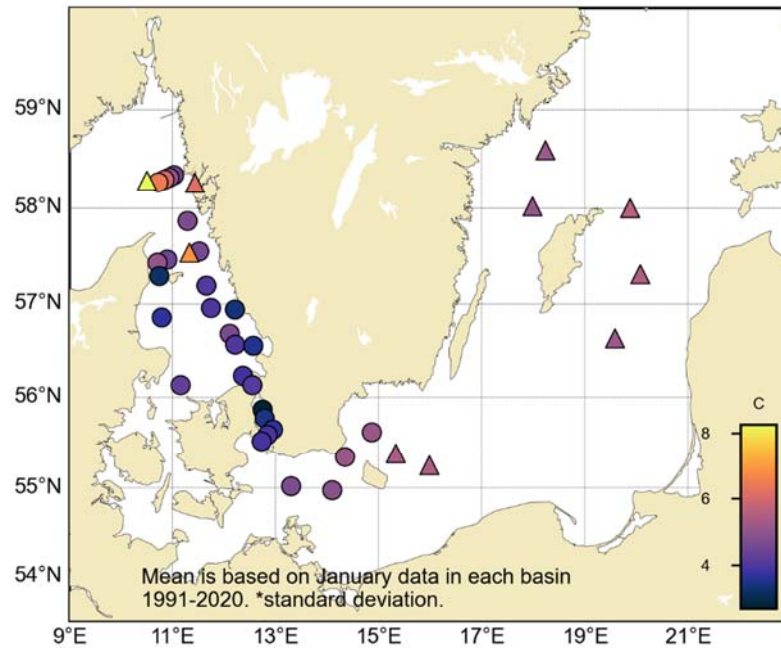


Figure 6. The temperature in the surface water (0 – 10 m). The mean value is based on data for the month at each station during the years 1991 – 2020.

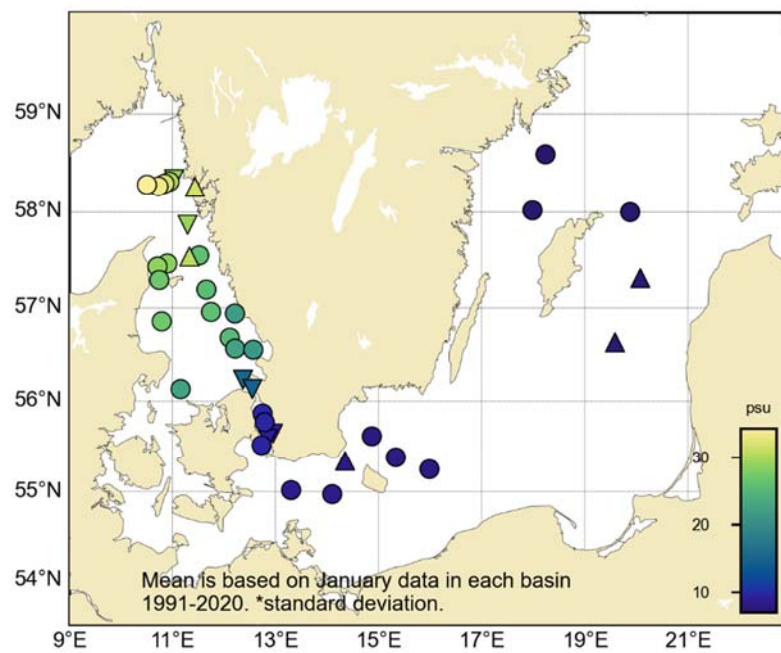


Figure 7. The salinity in the surface water (0 – 10 m). The mean value is based on data for the month at each station during the years 1991 – 2020.

## PARTICIPANTS

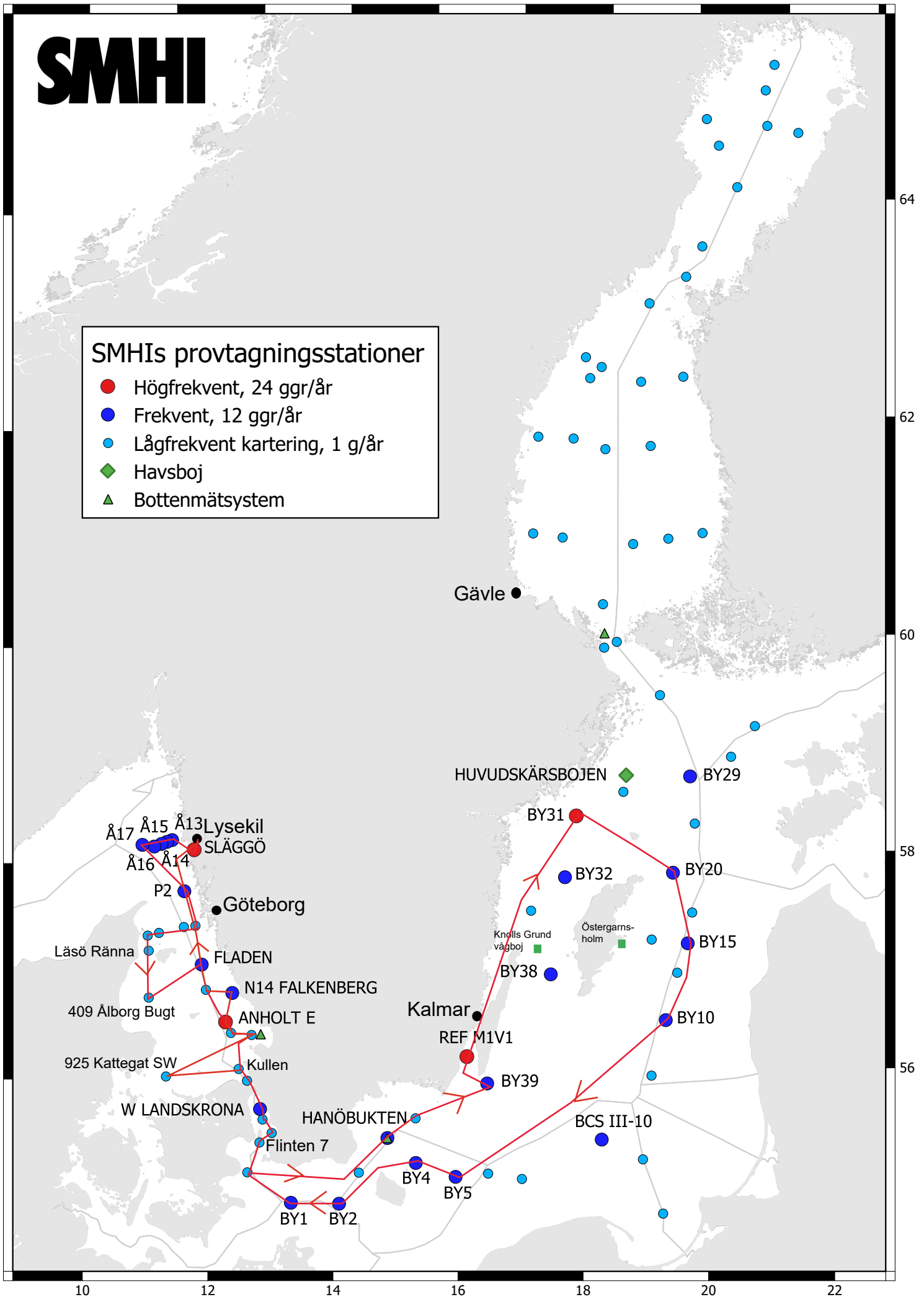
Name	Role	From
Madeleine Nilsson	Chief Scientist, water sampling and analysis	SMHI
Helena Björnberg	CTD-operations and water analysis	SMHI
Ola Kalén	CTD-operations and water analysis	SMHI
Johanna Linders	Water sampling and analysis	SMHI
Anna-Kerstin Thell	Water sampling and analysis	SMHI
Monica Lindner	Nutrient analysis and quality assurance	SMHI

## APPENDICES

- Track chart
- Table with stations, analysed parameters and number of sampling depths
- Monthly average plots for surface water
- Vertical profiles

## SMHIs provtagningsstationer

- Högfrekvent, 24 ggr/år
- Frekvent, 12 ggr/år
- Lågfrekvent kartering, 1 g/år
- ◆ Havsboj
- ▲ Bottenmätsystem



Date: 2026-02-17  
Time: 16:23

Ship: 77SE  
Year: 2026

Ser no	Cru no	Stat code	Proj	Stat name	Lat	Lon	Start date yyyymmdd	Start time hhmm	Bottom depth m	Secchi depth m	Wind dir vel	Air temp C	Air pres hPa	WCWI elac aove tueo hdsb	CZPP ho hp apt o	No de	No btl	T e e	T m m	S l l	S x x	P s s	D o o	D x x	H r r	P r r	P r o o	N k k	N r o o	N k k	N a a	N a a	S h h	C c	C c			
0001	01	FIBG27	BAS...	SLÄGGÖ	5815.58	01126.14	20260107	1916	77		17 7.6	-1.0 1004	9990 xxx-			9		x x	- x	- x	x	- x	x	x	x	x	x	x	x	x	x	x	x	x	x	- -	- -	
0002	01	SKEX14	BAS...	Å13	5820.45	01101.76	20260107	2148	80		19 14.5	0.5 1003	9990 x---			10		- x	- x	- x	x	- x	x	x	x	x	x	x	x	x	x	x	x	x	x	- -	- -	
0003	01	SKEX15	BAS...	Å14	5818.96	01056.49	20260107	2254	111		20 13.2	0.3 1003	9990 ----			11		- x	- x	- x	- x	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	
0004	01	SKEX16	BAS...	Å15	5817.68	01050.73	20260107	2346	135		20 13.2	0.2 1003	9990 x---			12		- x	- x	- x	x	- x	x	x	x	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
0005	01	SKEX17	BAS...	Å16	5816.02	01043.51	20260108	0042	203		20 14.1	0.5 1002	9990 ----			13		- x	- x	- x	- x	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
0006	01	SKEX18	BAS...	Å17	5817.04	01030.26	20260108	0202	351		35 9.9	-0.1 1003	9990 x---			15		- x	- x	x	x	x	- x	x	x	x	x	x	x	x	x	x	x	x	x	x	- x	- x
0007	01	SKEX23	BAS...	P2	5752	01117.53	20260108	0710	95		23 11	1.0 1007	9990 x---			10		x x	- x	- x	x	- x	- x	x	x	x	x	x	x	x	x	x	x	x	x	x	- x	- -
0008	01	KANX02	BAS...	SW VINGA GF4	5733.02	01131.07	20260108	1000	82	7	17 9	1.3 1009	2830 x---			12		x x	- x	- x	x	- x	- x	x	x	x	x	x	x	x	x	x	x	x	x	x	- x	- -
0009	01	KANX04	BAS...	GF6	5732.23	01119.66	20260108	1120	47	7	16 11	1.6 1009	2830 x--x			9		x x	- x	x	x	- x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	- x	- -
0010	01	KANX06	BAS...	GF8	5727.91	01054.01	20260108	1330	42	5	15 9	0.9 1009	2820 x---			8		x x	- x	- x	x	- x	- x	x	x	x	x	x	x	x	x	x	x	x	x	x	- x	- -
0011	01	KANX07	BAS...	GF9	5725.98	01042.52	20260108	1445	47		15 7.9	1.1 1010	2820 x---			6		x x	- x	- x	x	- x	- x	x	x	x	x	x	x	x	x	x	x	x	x	x	- x	- -
0012	01	KANX09	BAS...	LÄSÖ RÄNNA	5717.57	01044.63	20260108	1606	46		15 7.85	1.1 1010	9990 x---			9		x x	- x	- x	x	- x	- x	x	x	x	x	x	x	x	x	x	x	x	x	x	- x	- -
0013	01	KAWA11	BAS...	409 ÅLBORG BUGT	5651.37	01047.44	20260108	1920	15		13 11.6	0.4 1010	9990 x---			4		x x	- x	- x	x	- x	- x	x	x	x	x	x	x	x	x	x	x	x	x	- x	- -	
0014	01	KANX25	BAS...	FLADEN	5711.54	01139.46	20260109	0007	84		12 10.8	-1.271012	9990 x---			13		- x	- x	- x	x	- x	- x	x	x	x	x	x	x	x	x	x	x	x	x	x	- x	- x
0015	01	KANX26	BAS...	L:A MIDDELGRUND	5657.39	01144.84	20260109	0205	101		12 13.8	0 1011	9990 x---			14		- x	- x	- x	x	- x	- x	x	x	x	x	x	x	x	x	x	x	x	x	- x	- -	
0016	01	KANX50	BAS...	N14 FALKENBERG	5656.4	01212.71	20260109	0510	31		09 11	-1.9 1013	9990 xxx-			7		x x	- x	- x	x	- x	- x	x	x	x	x	x	x	x	x	x	x	x	x	- x	- -	
0017	01	KAEX29	BAS...	ANHOLT E	5641	01206.65	20260109	0830	57		09 17	-0.5 1012	2430 x-x-			10		x x	- x	x	x	- x	- x	x	x	x	x	x	x	x	x	x	x	x	x	x	- x	- x
0018	01	KAEX30	BAS...	ST MIDDELGRUND	5634.02	01212.98	20260109	1010	51			-0.9 1008	2630 x---			9		x x	- x	- x	x	- x	- x	x	x	x	x	x	x	x	x	x	x	x	x	- x	- -	
0019	01	KAEL63	BAS...	LAHOLM-3 (YG)	5633.31	01234.04	20260109	1150	23			-0.8 1013	2630 x---			5		x x	- x	- x	x	- x	- x	x	x	x	x	x	x	x	x	x	x	x	x	- x	- -	
0020	01	KAWX14	BAS...	925 KATTEGAT SW	5607.90	01109.43	20260109	1706	48		08 23	-0.3 1010	9999 x---			9		- x	- x	- x	x	- x	- x	x	x	x	x	x	x	x	x	x	x	x	- x	- -		
0021	01	KAEX33	BAS...	KULLEN	5613.99	01222.04	20260109	2208	24		07 18	-1.3 1013	9990 x---			6		- x	- x	- x	x	- x	- x	x	x	x	x	x	x	x	x	x	x	x	- x	- -		
0022	01	SONX33	BAS...	ÖRESUND-12X	5607.90	01232.93	20260109	2343	25		06 10	-2.071014	9990 x---			6		- x	- x	- x	x	- x	- x	x	x	x	x	x	x	x	x	x	x	- x	- -			
0023	01	SOCX39	BAS...	W LANDSKRONA	5552	01244.91	20260110	0305	51			1.3 1011	9990 x---			9		- x	- x	- x	x	- x	- x	x	x	x	x	x	x	x	x	x	x	- x	- -			
0024	01	SOCX41	BAS...	ÖRESUND-7	5546.31	01247.31	20260110	0410	20			-2.2 1011	9990 x---			5		- x	- x	- x	x	- x	- x	x	x	x	x	x	x	x	x	x	- x	- -				
0025	01	SOCX44	BAS...	ÖRESUND-4	5538.86	01257.04	20260110	0535	15			-2.1 1011	9990 x---			4		- x	- x	- x	x	- x	- x	x	x	x	x	x	x	x	x	- x	- -					
0026	01	SOSX00	EXT...	FLINTEN7	5535.32	01250.68	20260110	0655	9		04 9	-1.7 1016	9990 x---			3		- x	- x	- x	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	
0027	01	SOSX00	BAS...	ÖRESUND-2	5531.06	01243.8	20260110	0800	12			-2.6 1017	1220 x---			4		- x	- x	- x	x	- x	- x	x	x	x	x	x	x	x	x	x	- x	- x	- -	- -		
0028	01	BPSA06	EXT...	SW BY3	5520.58	01420.89	20260110	1531	45		35 15	-2.2 1017	9990 x---			8		- x	- x	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	
0029	01	BPSH05	BAS...	HANÖBUKTEN	5537.04	01452.04	20260110	1833	79		00 14	-2.2 1017	9990 x---			11		- x	- x	- x	x	- x	- x	x	x	x	x	x	x	x	x	x	- x	- -	- -	- -	- -	
0030	01	BPWX38	BAS...	BY32 NORRKÖPINGS DJ	5801.02	01759.11	20260112	0104	205		01 11	-1.6 1017	9990 x---			17		- x	- x	- x	x	- x	- x	x	x	x	x	x	x	x	x	x	- x	- -	- -	- -	- -	
0031	01	BPNX37	BAS...	BY31 LANDSORTSDJ	5835.62	01814.18	20260112	0555	449		04 10	-2.5 1018	9990 x-x-			22		- x	- x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	- x	- -	- -	- -	
0032	01	BPEX26	BAS...	BY20 FÅRÖ DJ	5759.92	01952.75	20260112	1250	197			-1.3 1018	2420 x---			17		- x	- x	x	x	x	x	x	x	x	x	x	x	x	x	x	- x	- -	- -	- -	- -	
0033	01	BPEX21	BAS...	BY15 GOTLANDSDJ	5718.72	02004.58	20260112	1656	240		09 6	-1.6 1018	9990 xxx-			24		- x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	- x	- -	- -	- -	- -	
0034	01	BPEX13	BAS...	BY10	5638.05	01935.12	20260112	2212	142		13 10.2	-0.101017	9990 x---			15		- x	- x	- x	x	- x	- x	x	x	x	x	x	x	x	x	- x	- -	- -	- -	- -		
0035	01	BPSB07	BAS...	BY5 BORNHOLMS DJ	5515.02	01559.11	20260113	1220	89	10	15 12	0.8 1016	2830 x-xx			12		x x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	- x	- -	- -	- -	- -	



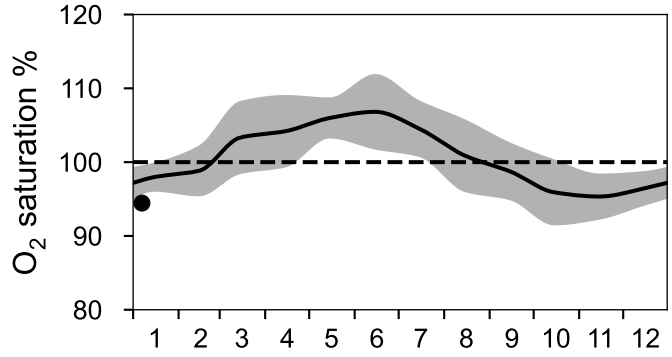
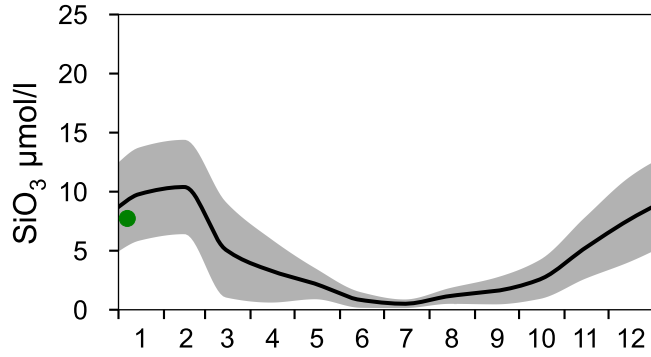
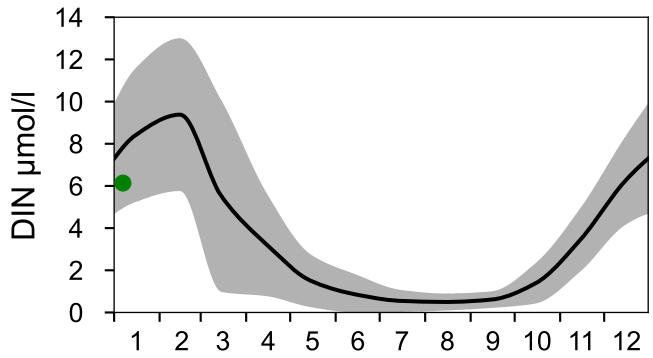
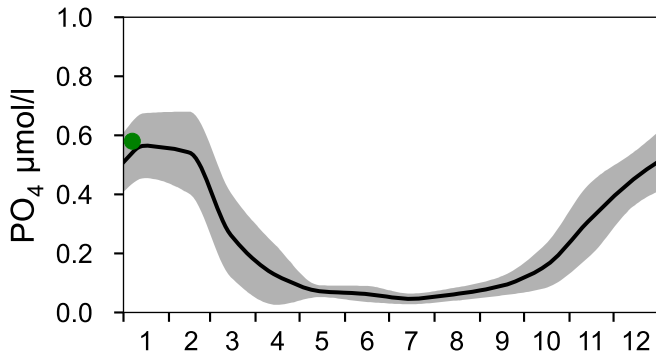
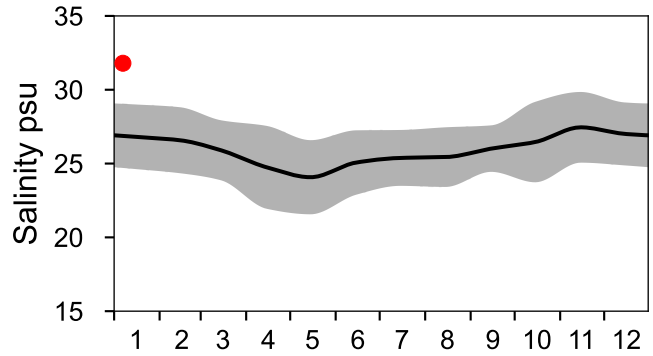
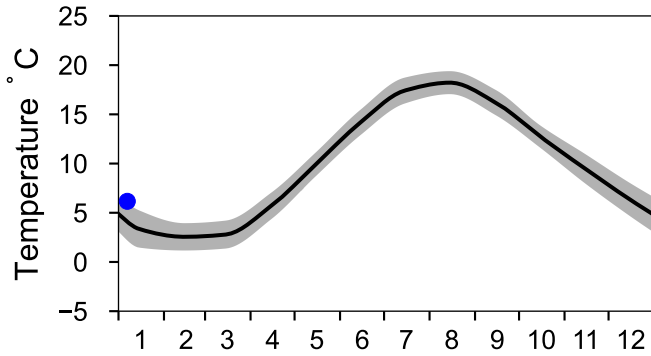
# STATION SLÄGGÖ SURFACE WATER (0-10 m)

Annual Cycles

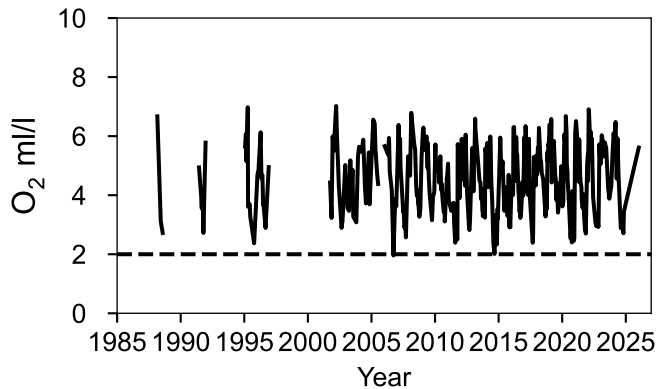
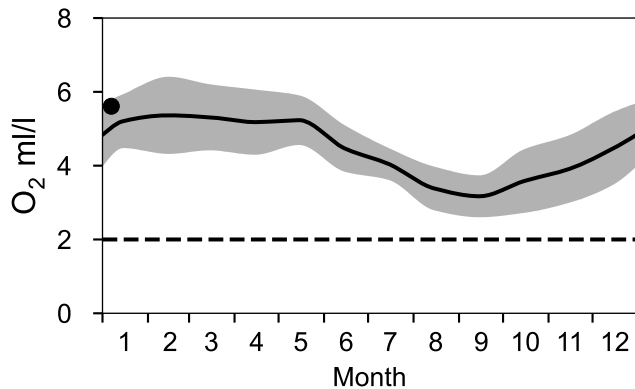
— Mean 1991-2020

■ St.Dev.

● 2026

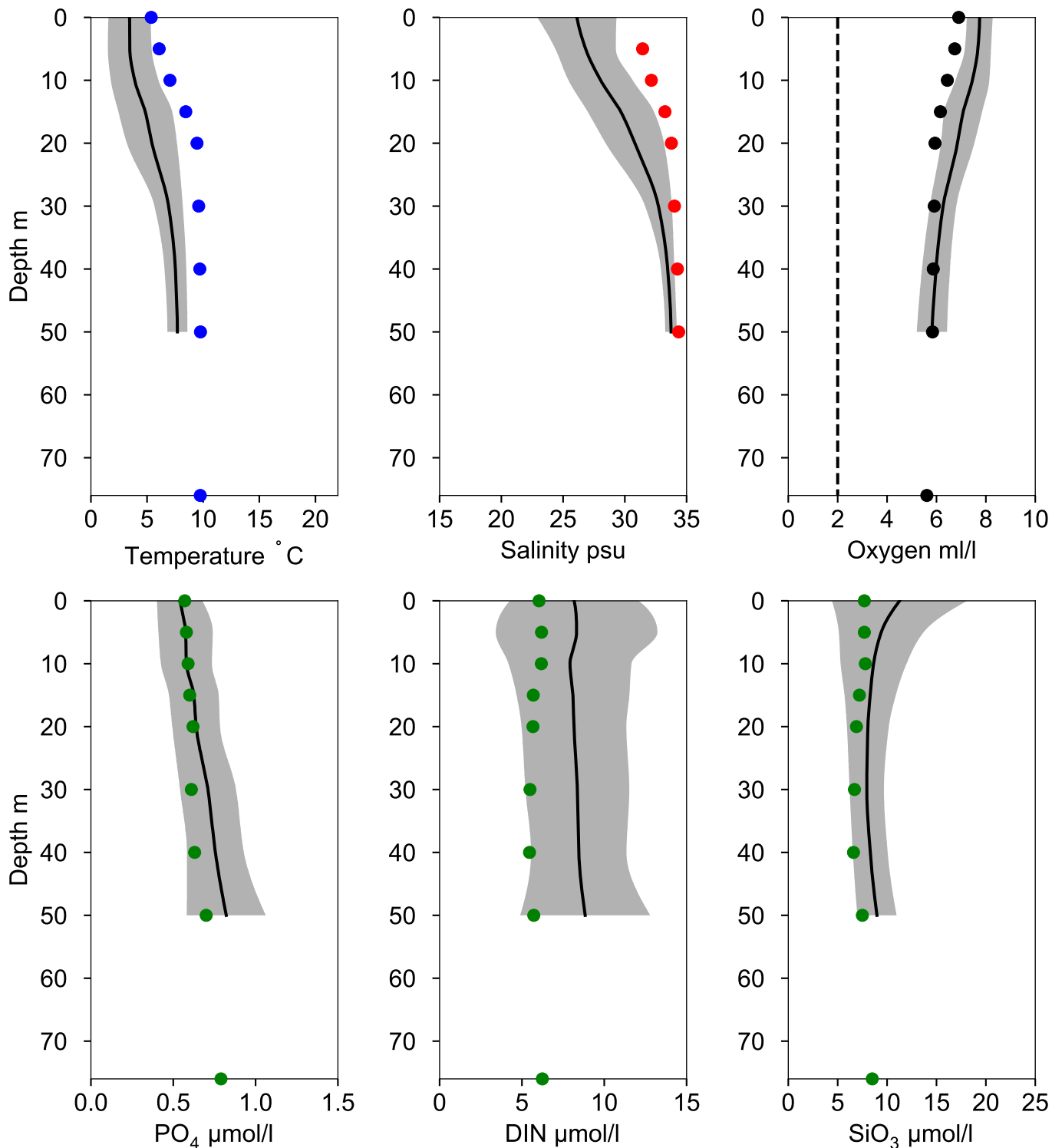


## OXYGEN IN BOTTOM WATER (depth >= 64 m)



# Vertical profiles SLÄGGÖ January

— Mean 1991-2020    St.Dev.    ● 2026-01-07



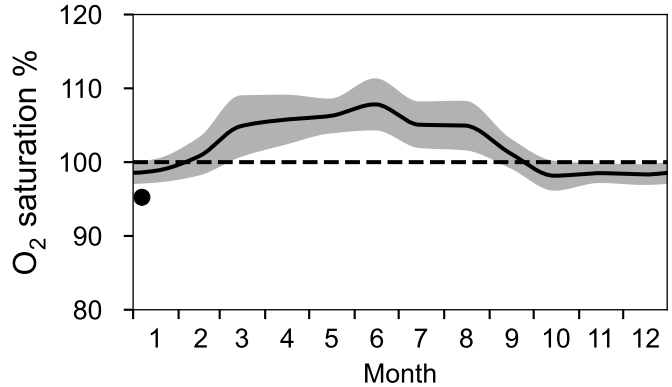
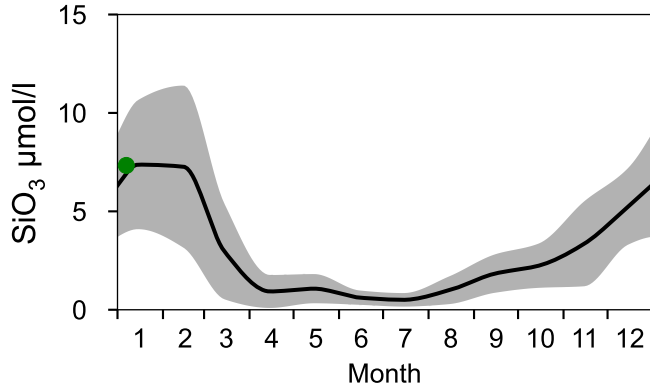
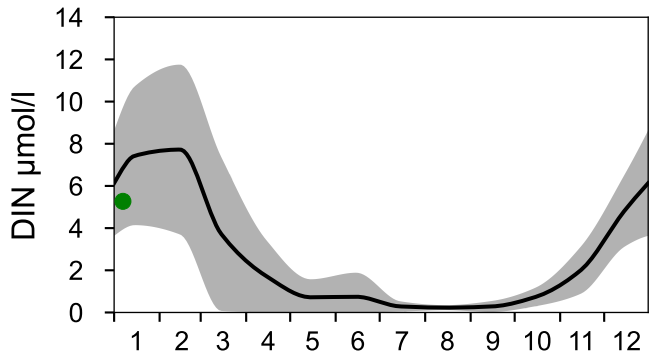
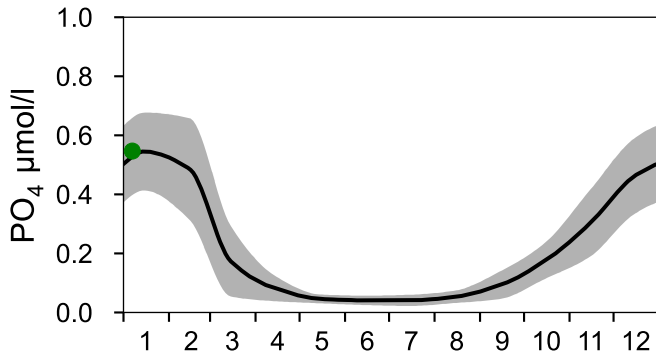
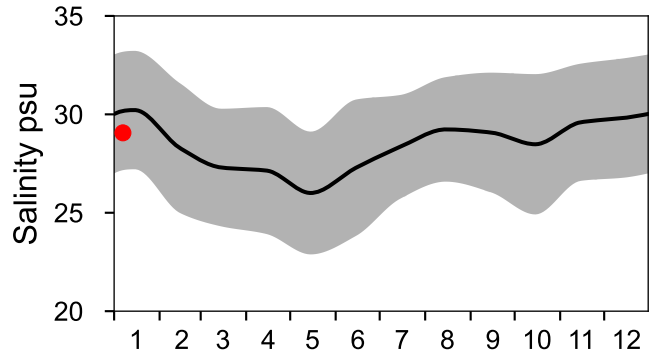
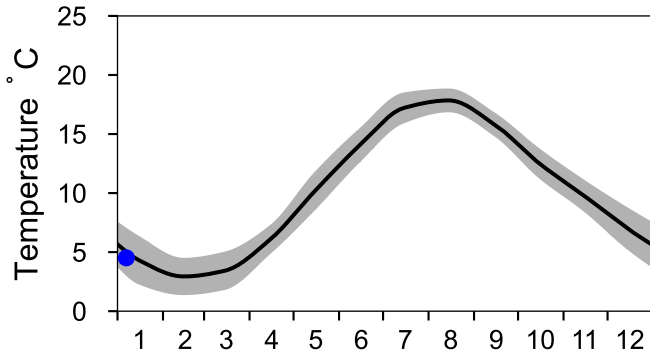
# STATION Å13 SURFACE WATER (0-10 m)

Annual Cycles

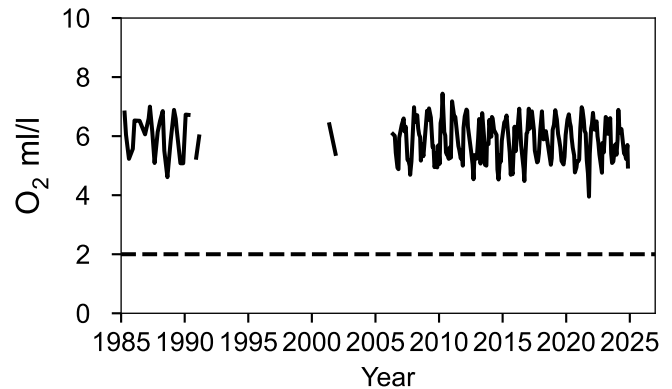
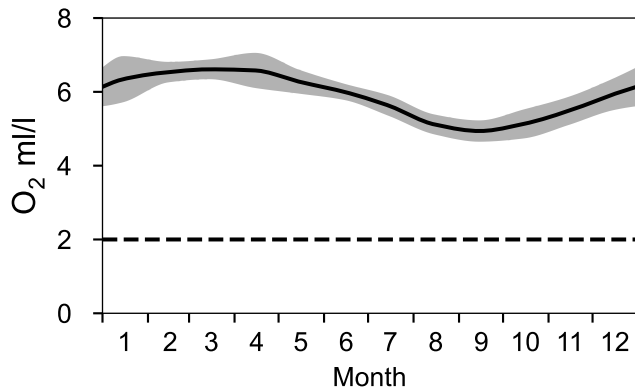
— Mean 1991-2020

■ St.Dev.

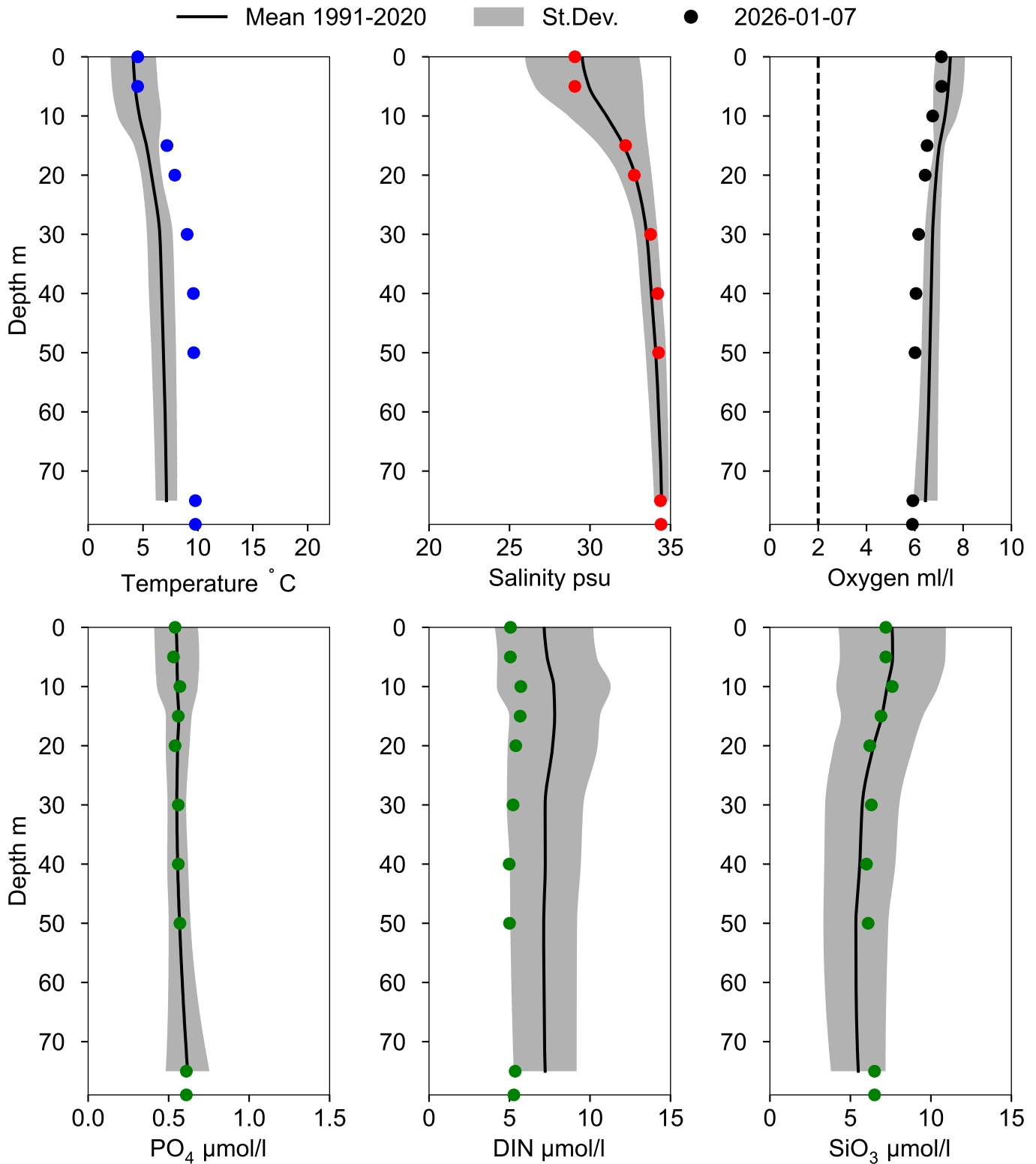
● 2026



## OXYGEN IN BOTTOM WATER (depth >= 82 m)



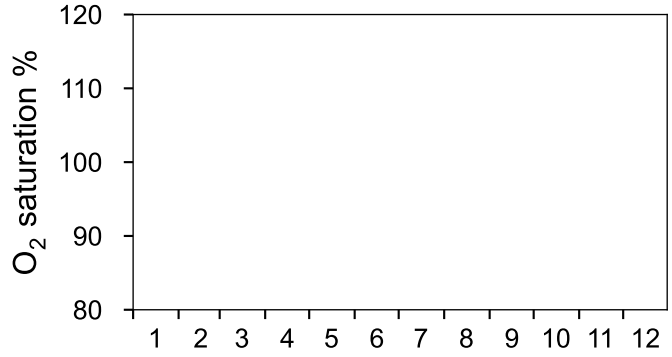
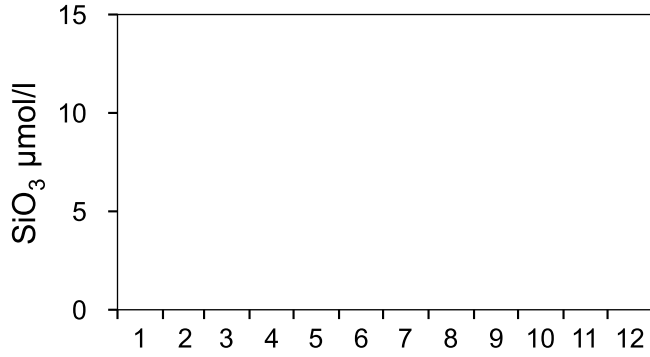
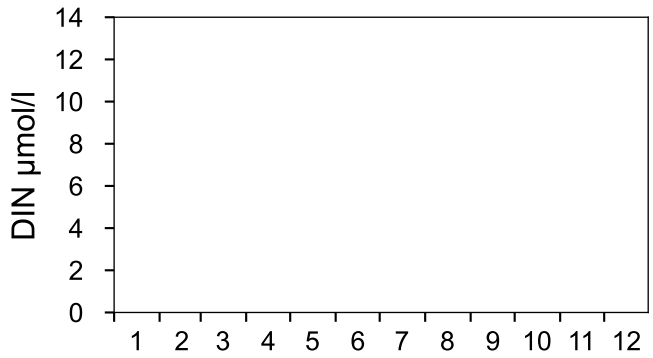
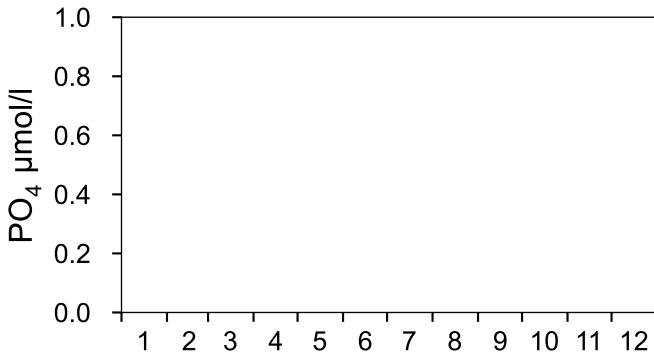
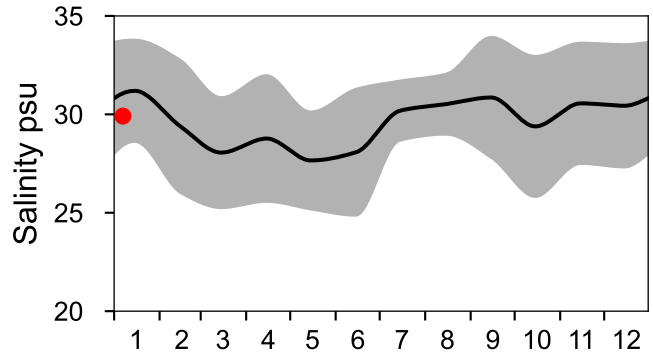
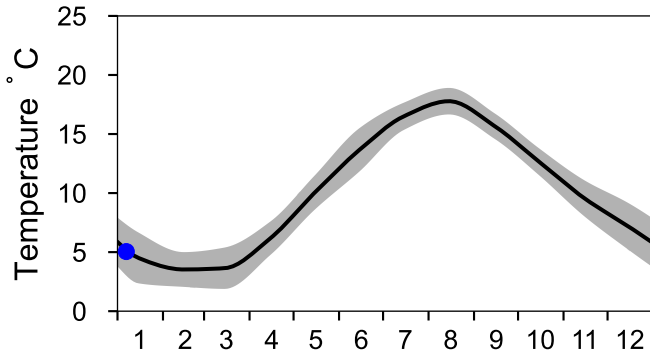
# Vertical profiles A13 January



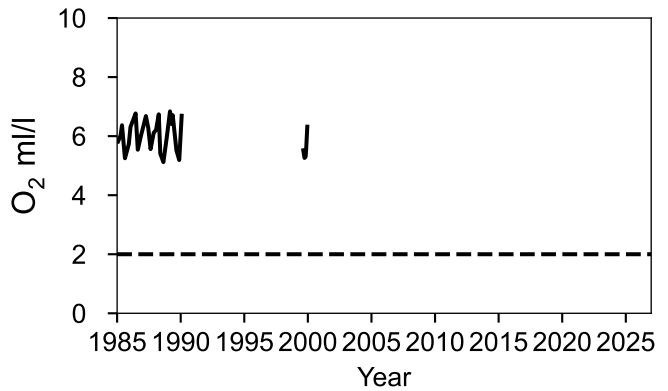
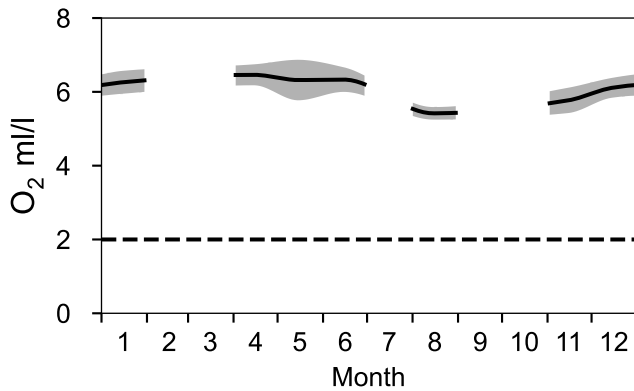
# STATION Å14 SURFACE WATER (0-10 m)

Annual Cycles

— Mean 1991-2020    St.Dev.    ● 2026

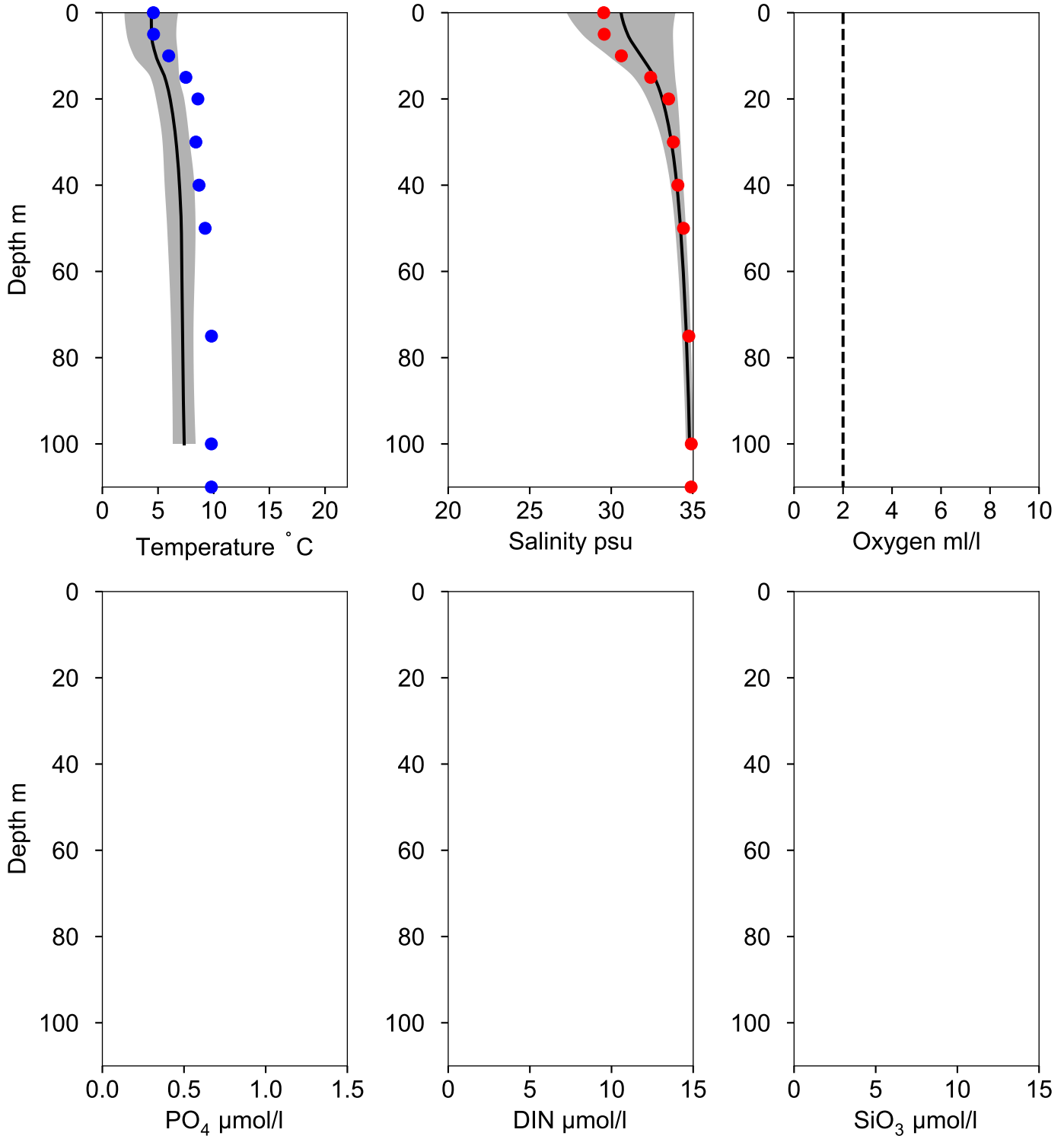


## OXYGEN IN BOTTOM WATER (depth >= 100 m)



# Vertical profiles Å14 January

— Mean 1991-2020    ■ St.Dev.    ● 2026-01-07



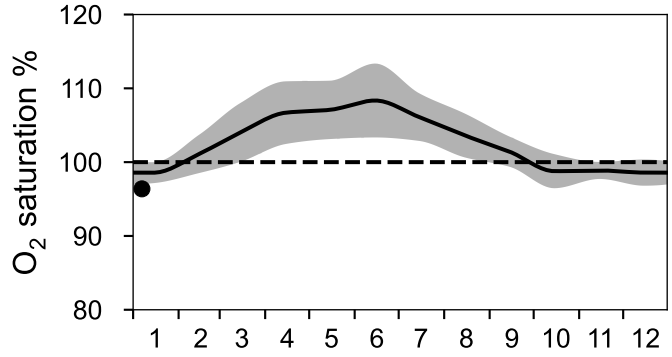
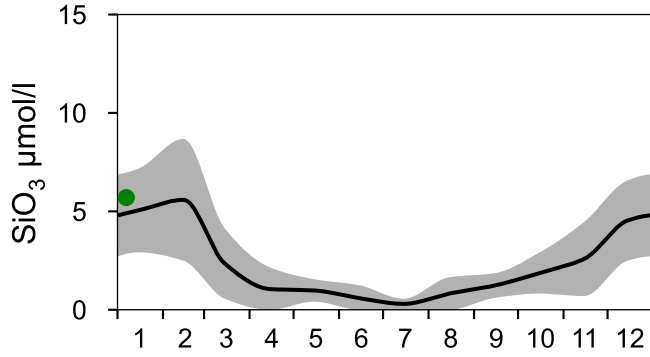
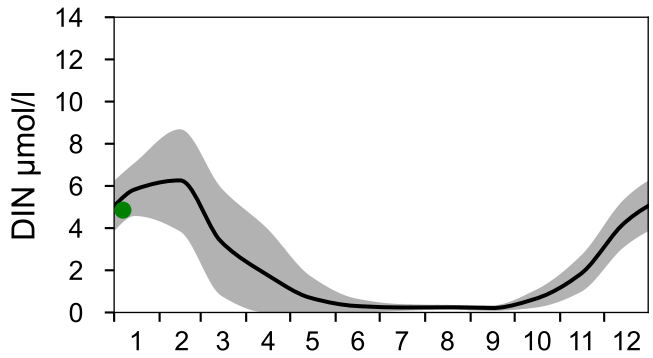
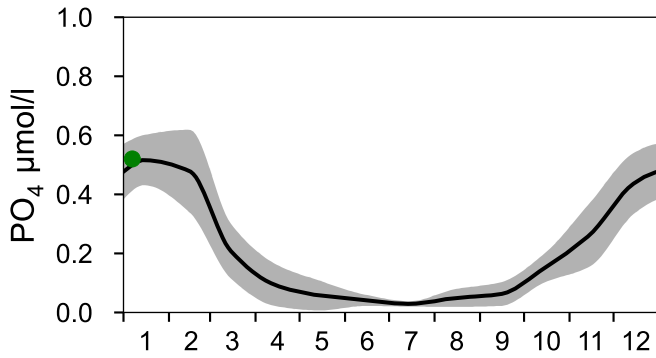
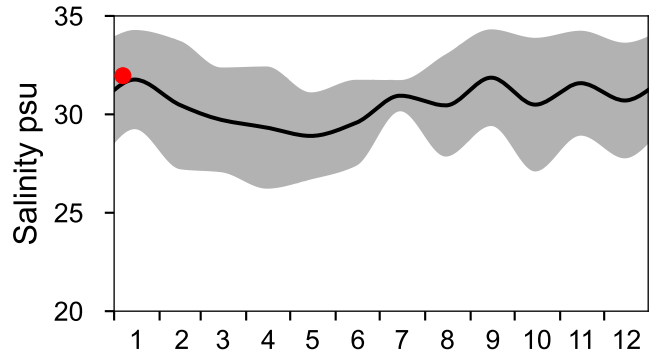
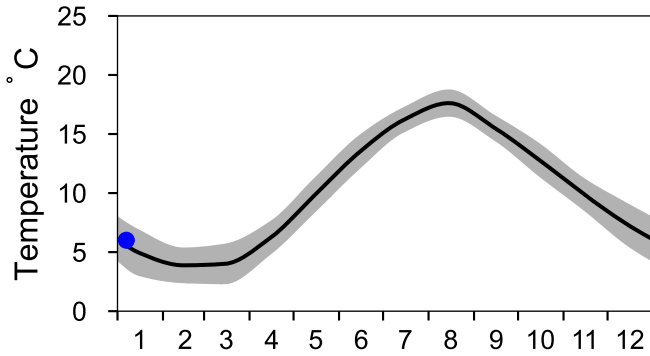
# STATION Å15 SURFACE WATER (0-10 m)

Annual Cycles

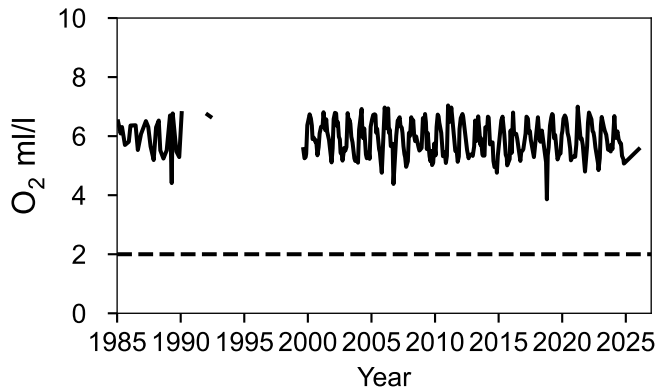
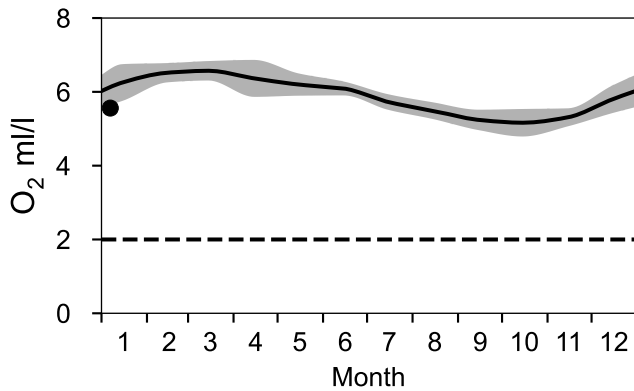
— Mean 1991-2020

■ St.Dev.

● 2026

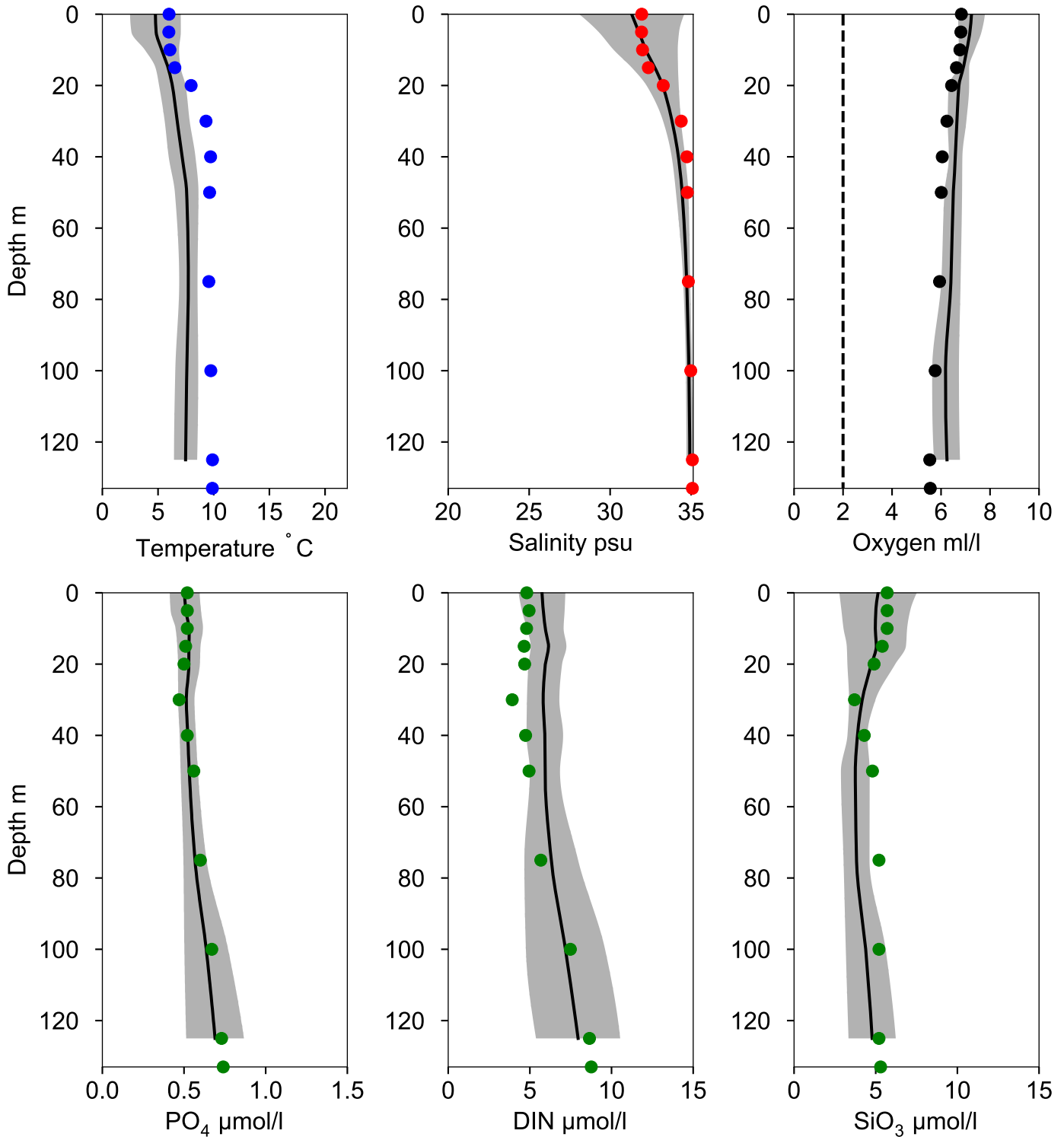


## OXYGEN IN BOTTOM WATER (depth >= 125 m)



# Vertical profiles Å15 January

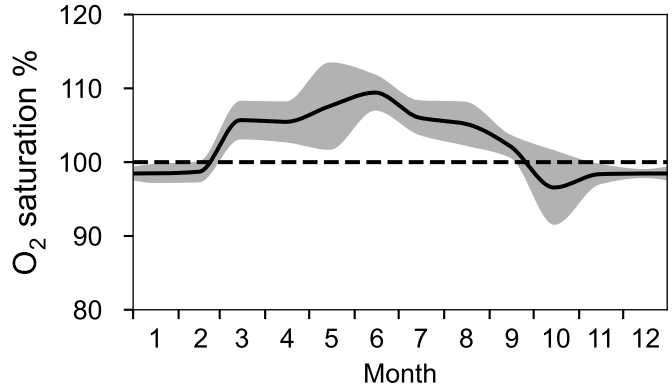
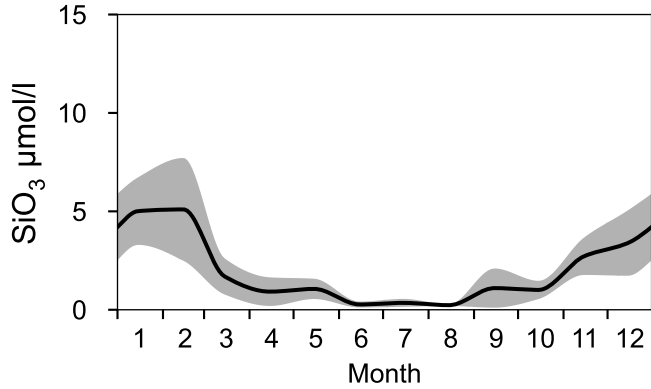
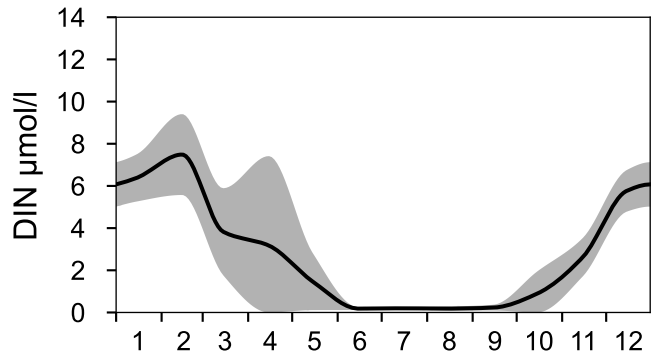
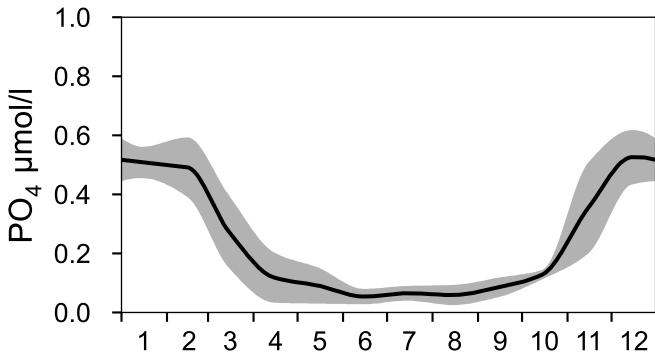
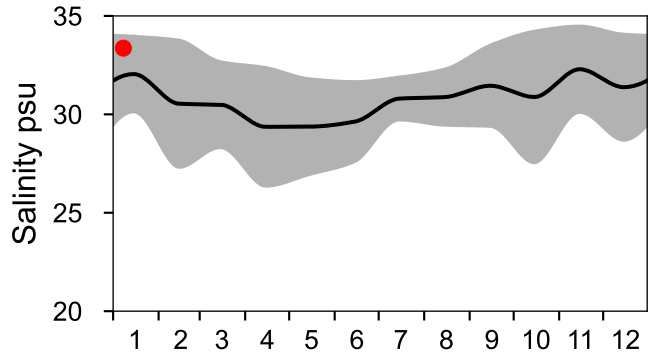
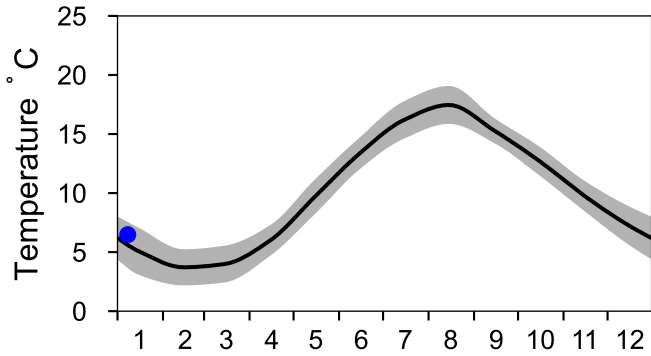
— Mean 1991-2020    St.Dev.    ● 2026-01-07



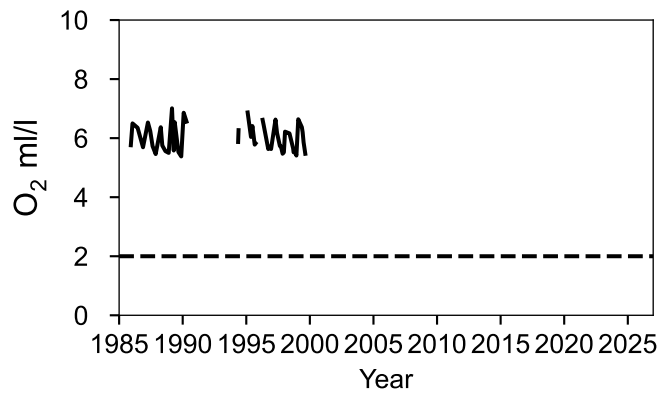
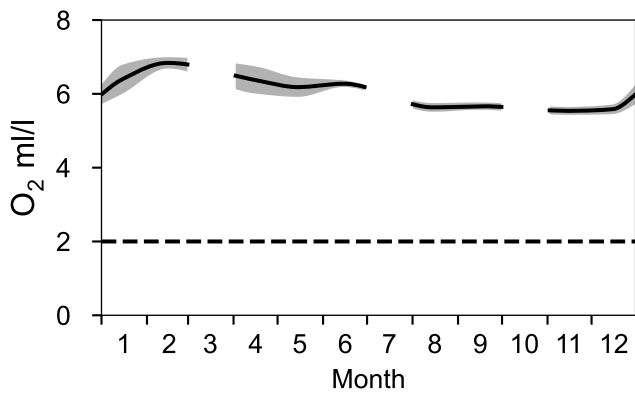
# STATION Å16 SURFACE WATER (0-10 m)

Annual Cycles

— Mean 1991-2020    St.Dev.    ● 2026

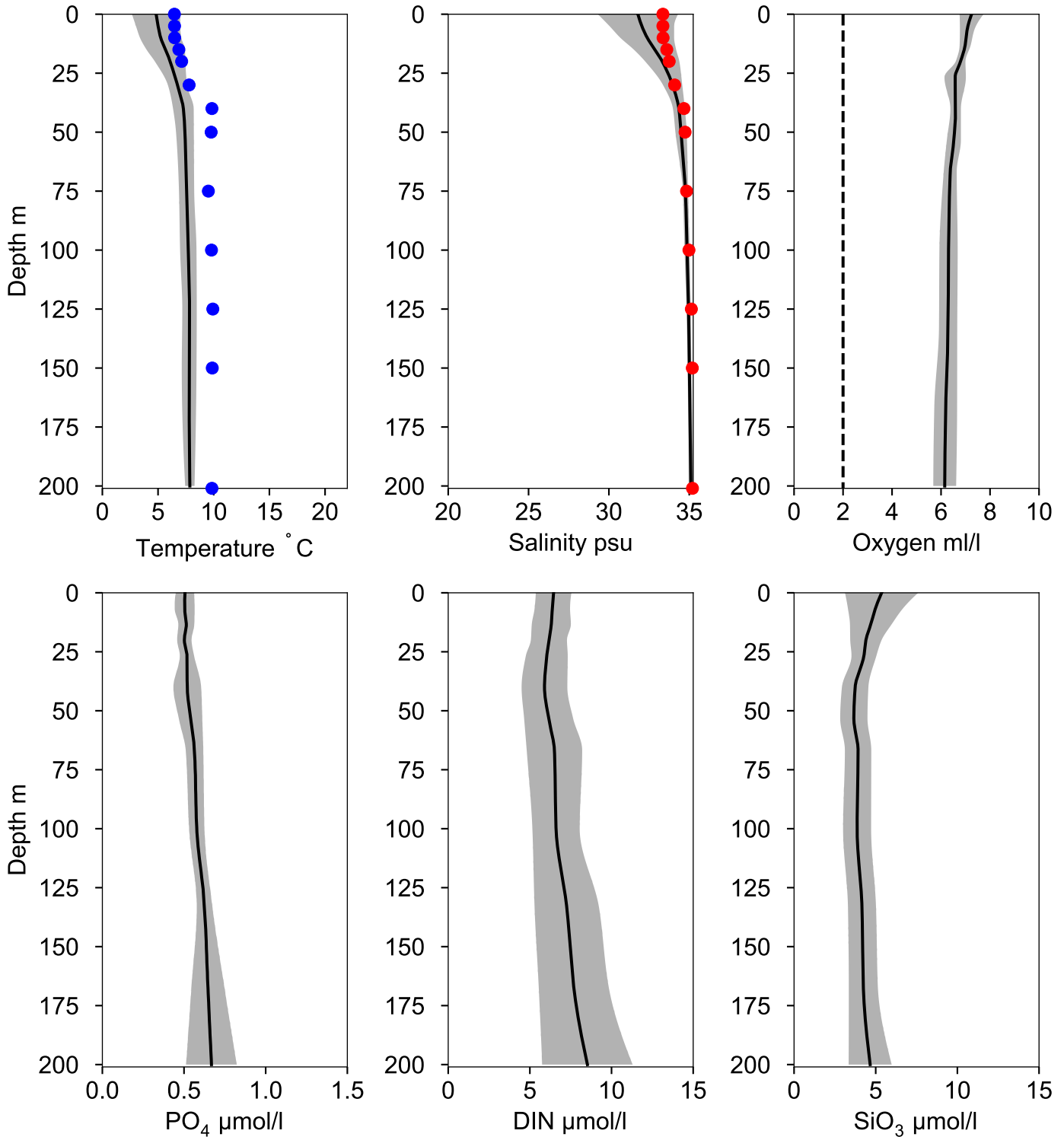


## OXYGEN IN BOTTOM WATER (depth >= 193 m)



# Vertical profiles A16 January

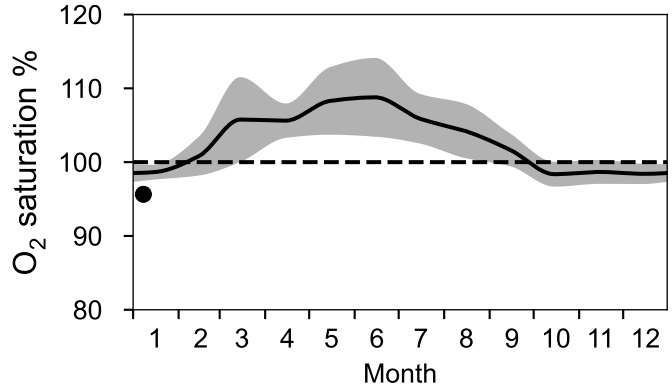
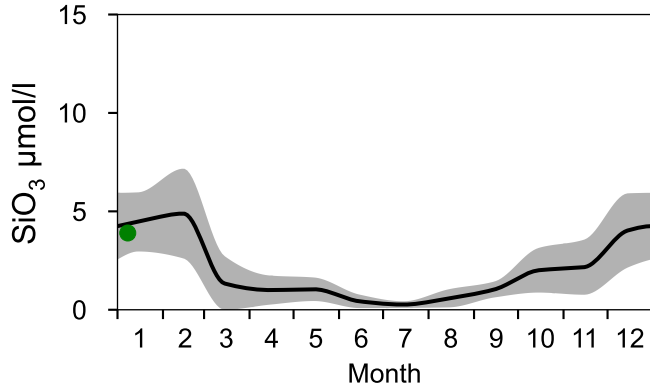
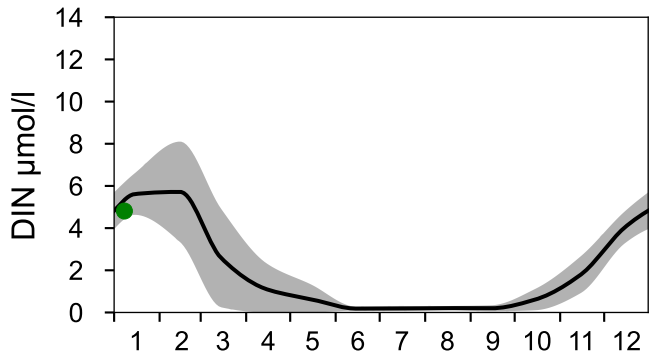
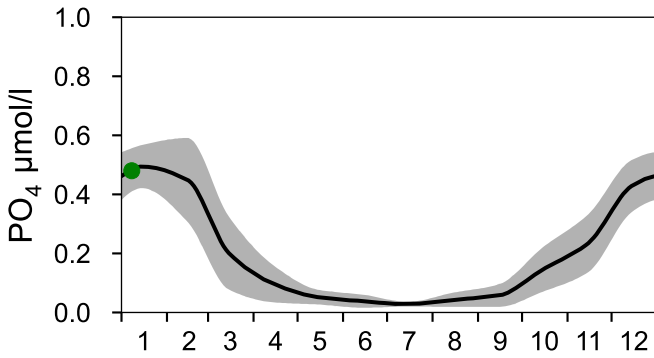
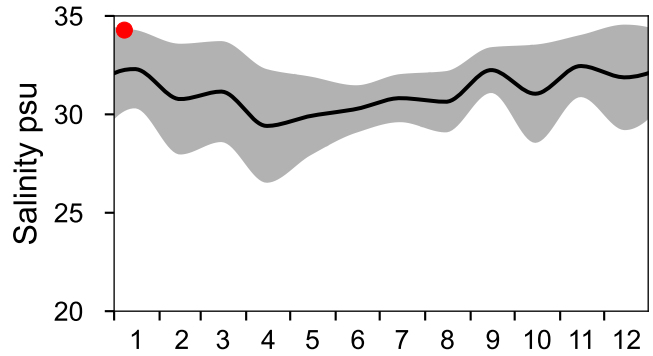
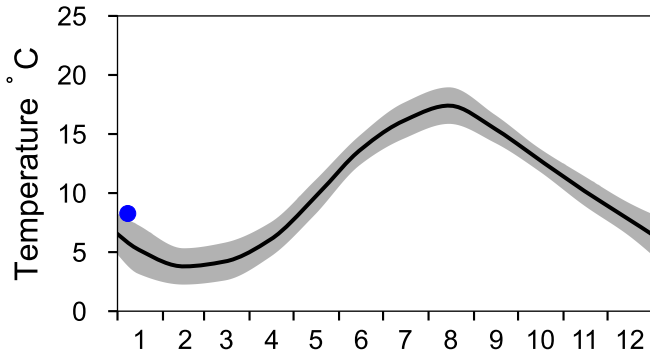
— Mean 1991-2020    ■ St.Dev.    ● 2026-01-08



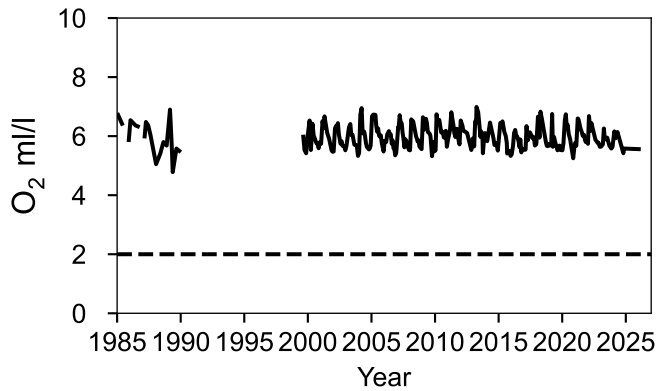
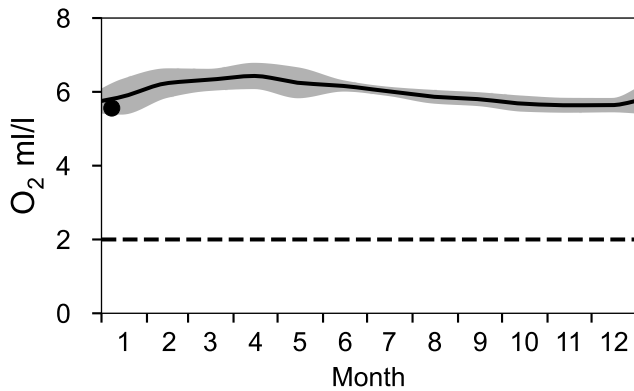
# STATION Å17 SURFACE WATER (0-10 m)

Annual Cycles

— Mean 1991-2020    St.Dev.    ● 2026

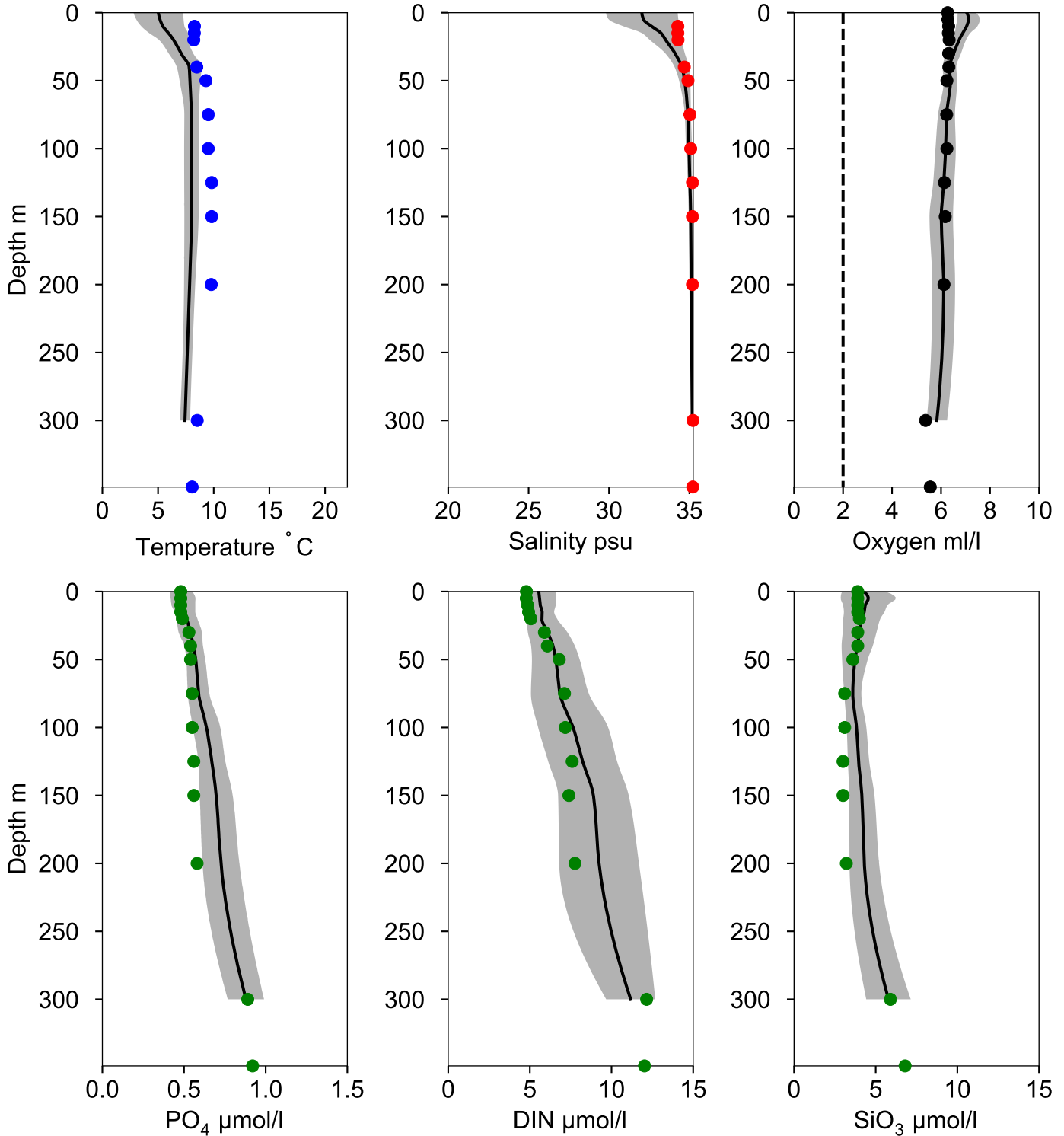


## OXYGEN IN BOTTOM WATER (depth >= 300 m)



# Vertical profiles Å17 January

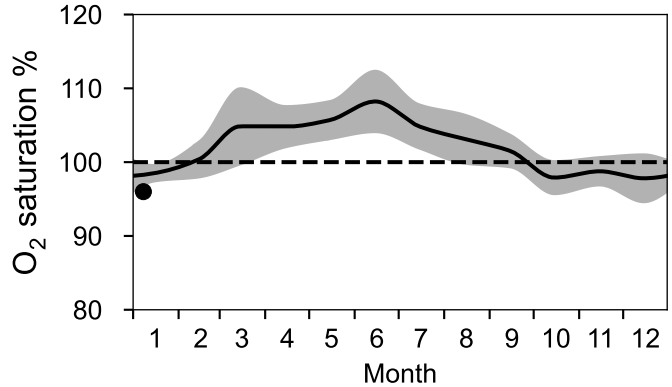
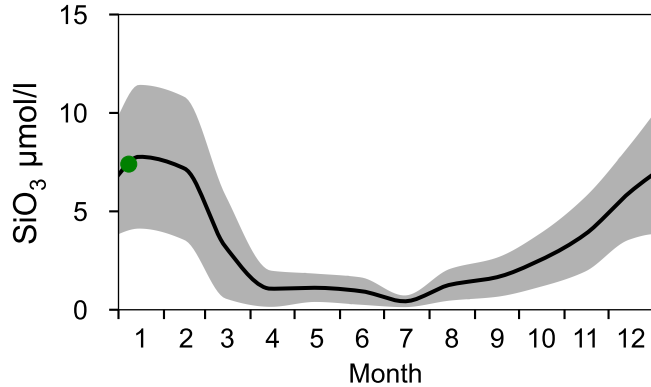
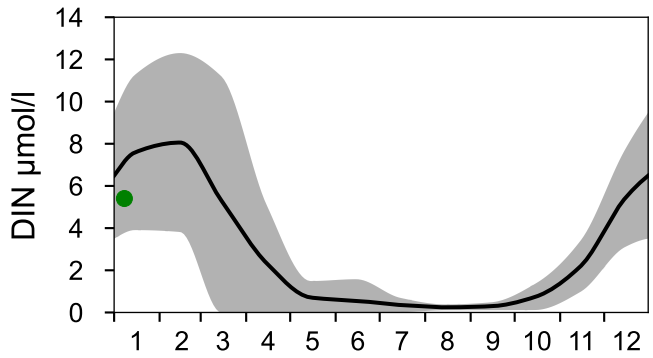
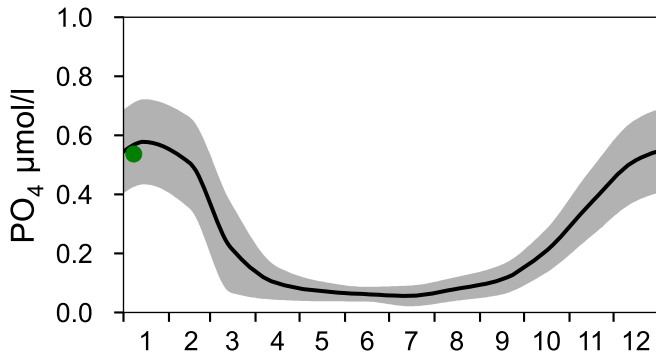
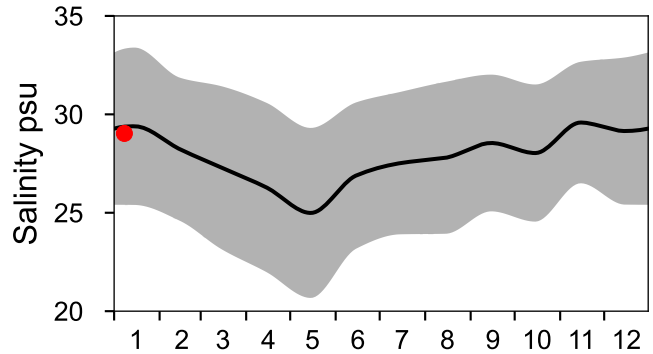
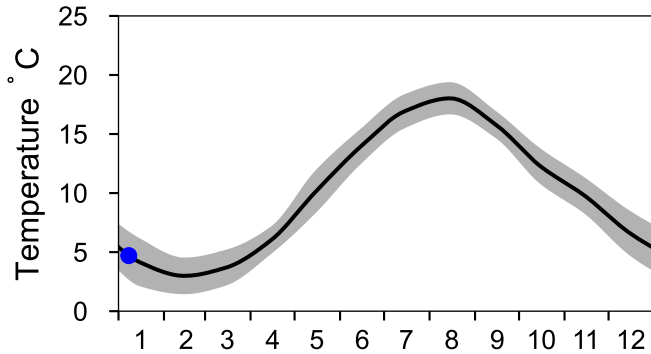
— Mean 1991-2020    St.Dev.    ● 2026-01-08



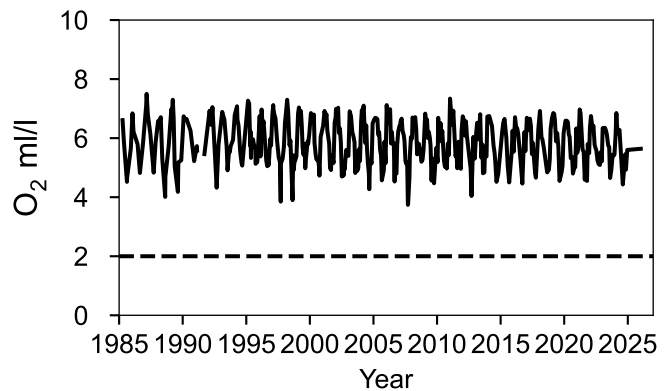
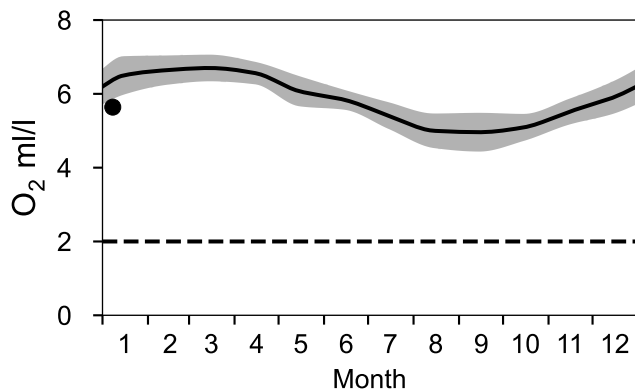
# STATION P2 SURFACE WATER (0-10 m)

Annual Cycles

— Mean 1991-2020    St.Dev.    ● 2026



## OXYGEN IN BOTTOM WATER (depth >= 75 m)

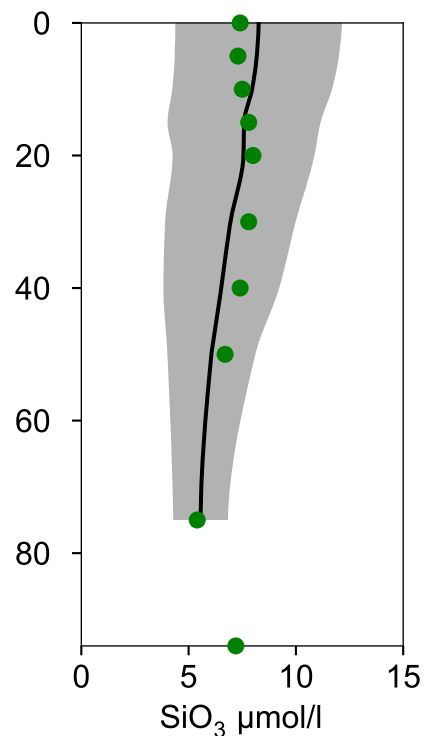
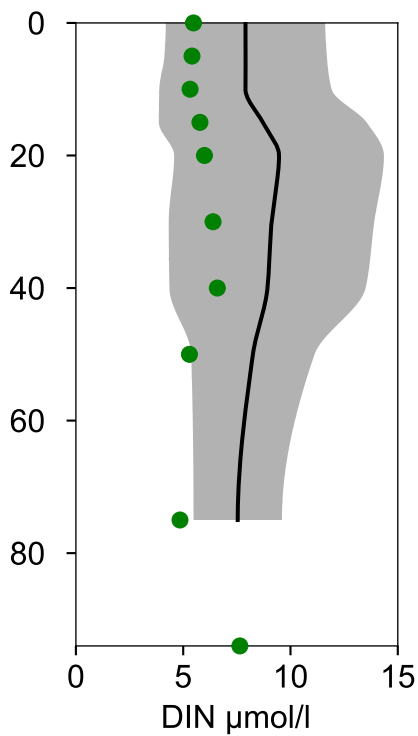
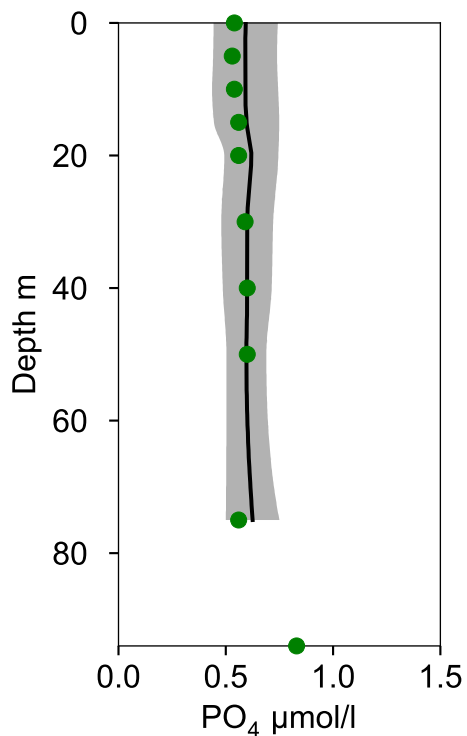
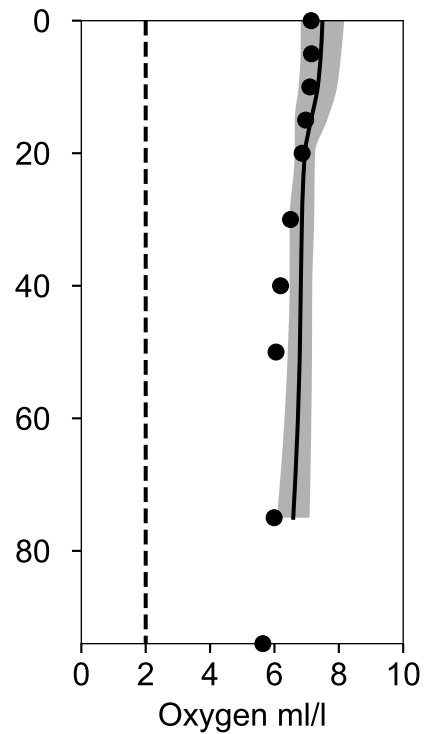
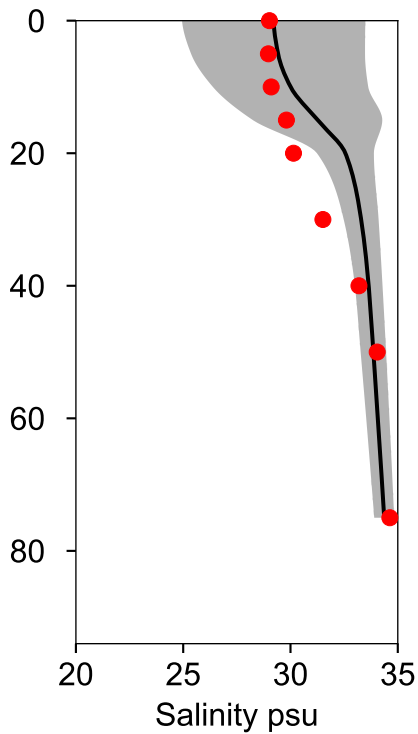
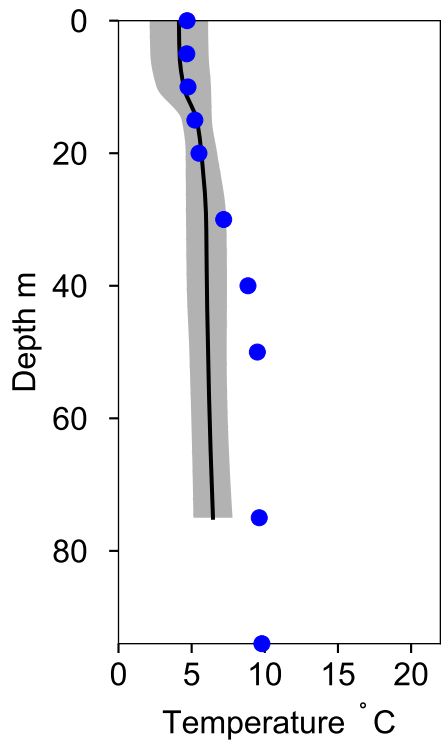


# Vertical profiles P2 January

— Mean 1991-2020

■ St.Dev.

● 2026-01-08

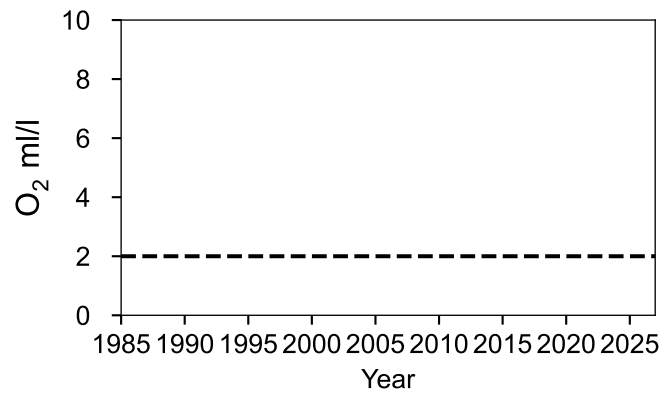
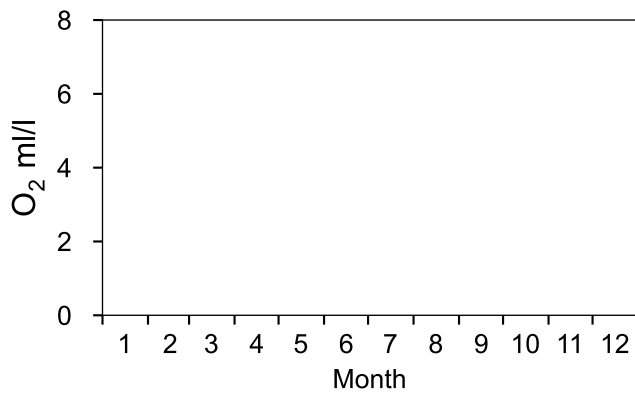
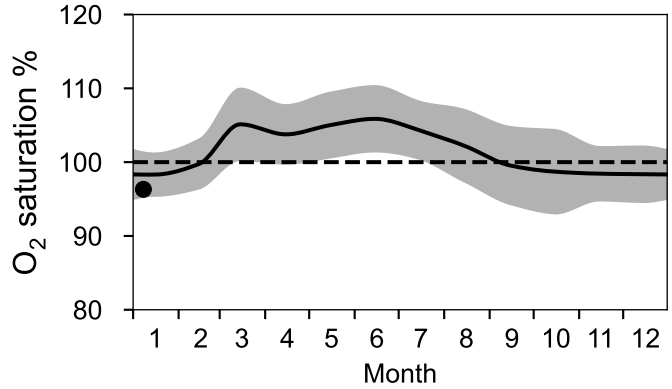
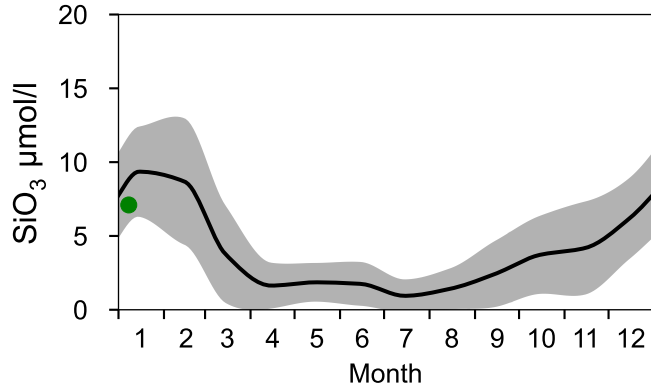
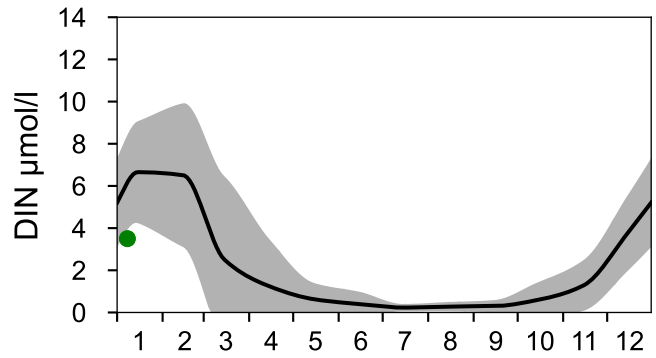
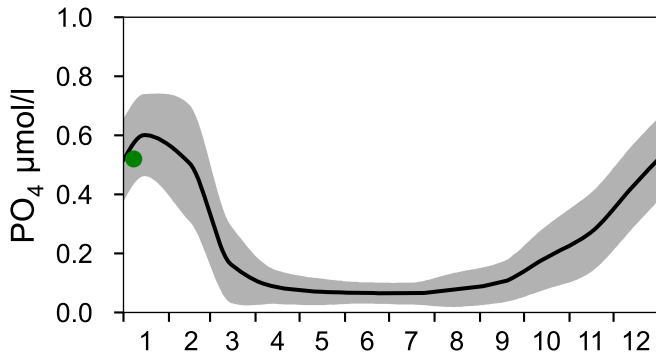
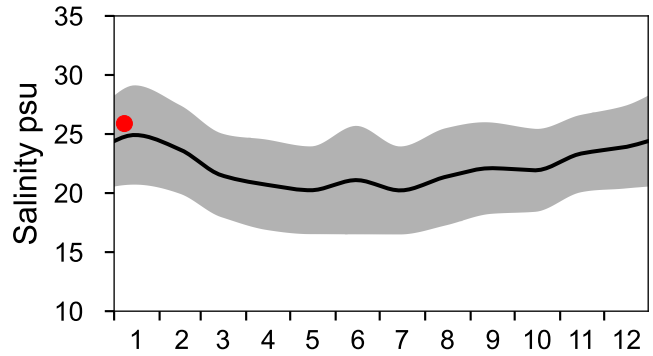
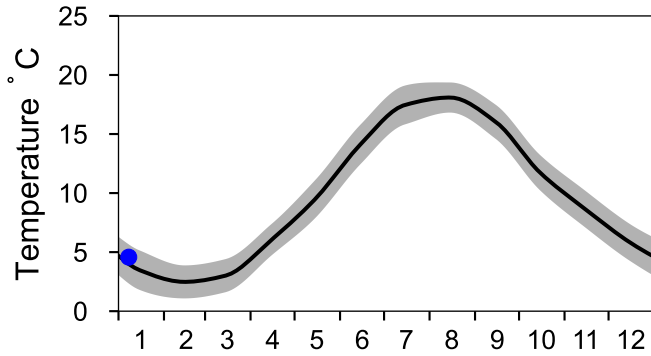


# STATION SW VINGA GF4 SURFACE WATER (0-10 m)

## Annual Cycles

Statistics based on data from: Kattegatt

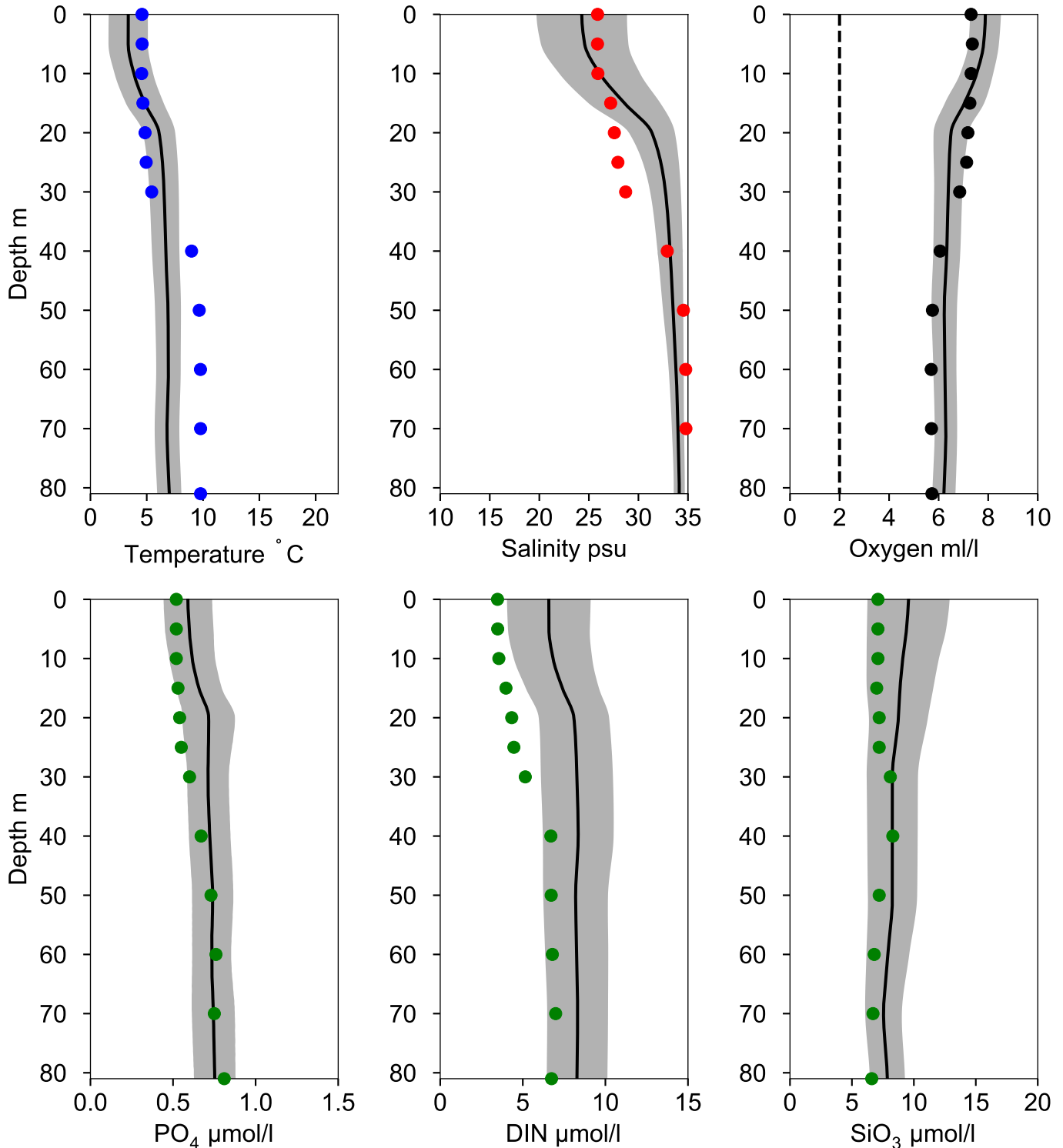
— Mean 1991-2020    St.Dev.    ● 2026



# Vertical profiles SW VINGA GF4 January

Statistics based on data from: Kattegatt

— Mean 1991-2020    St.Dev.    ● 2026-01-08

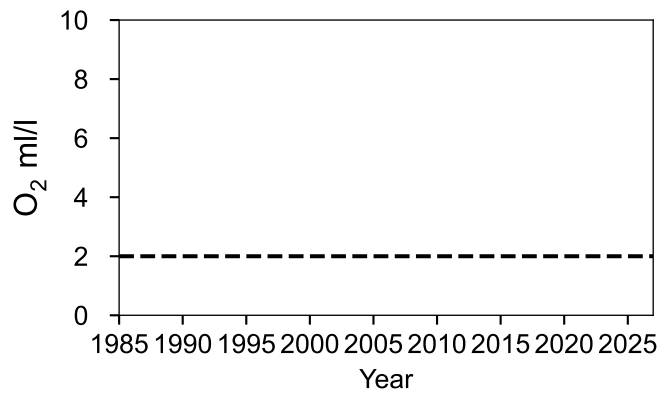
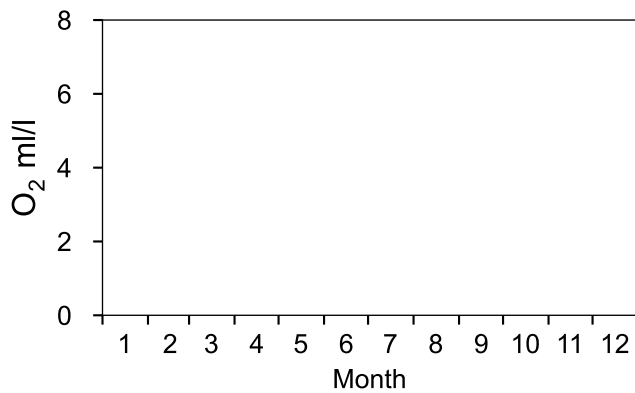
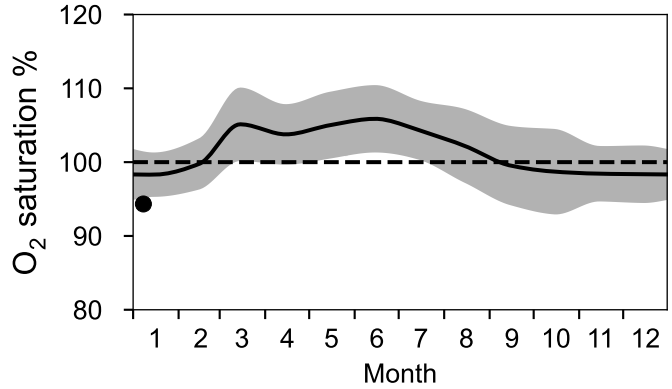
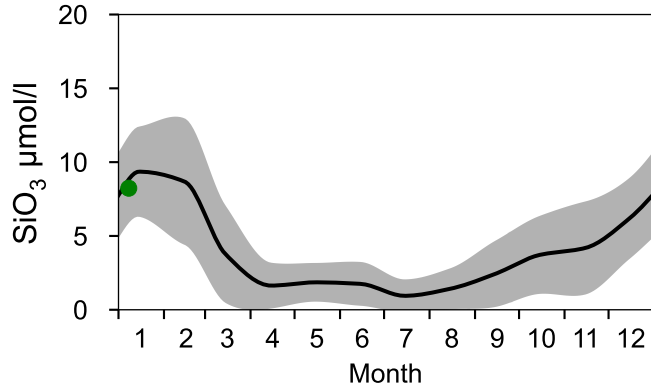
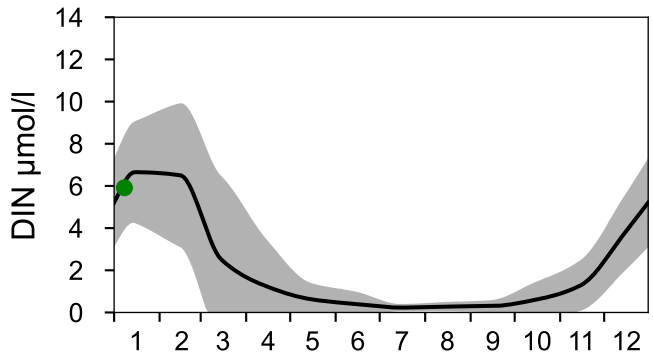
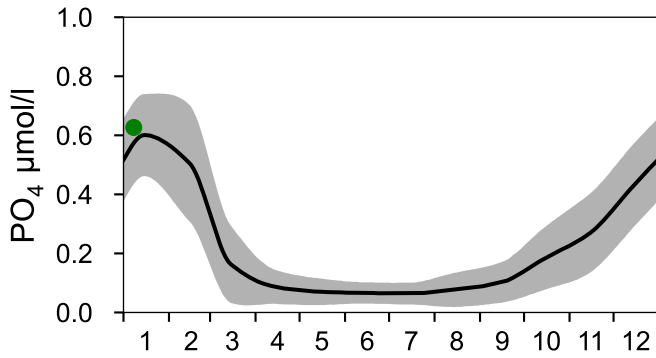
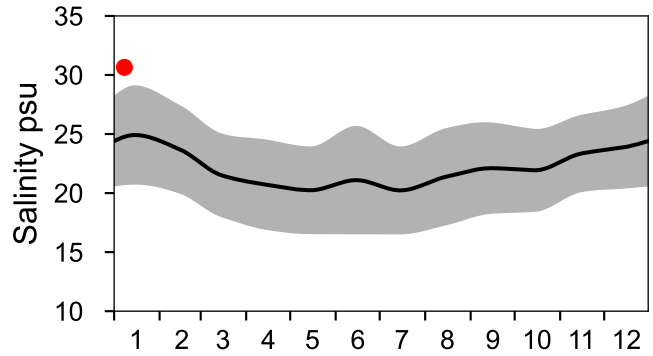
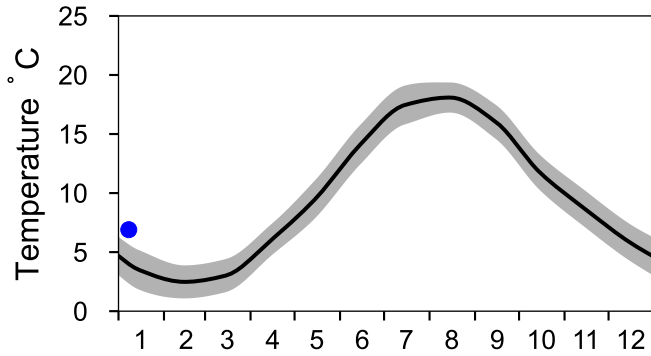


# STATION GF6 SURFACE WATER (0-10 m)

## Annual Cycles

Statistics based on data from: Kattegatt

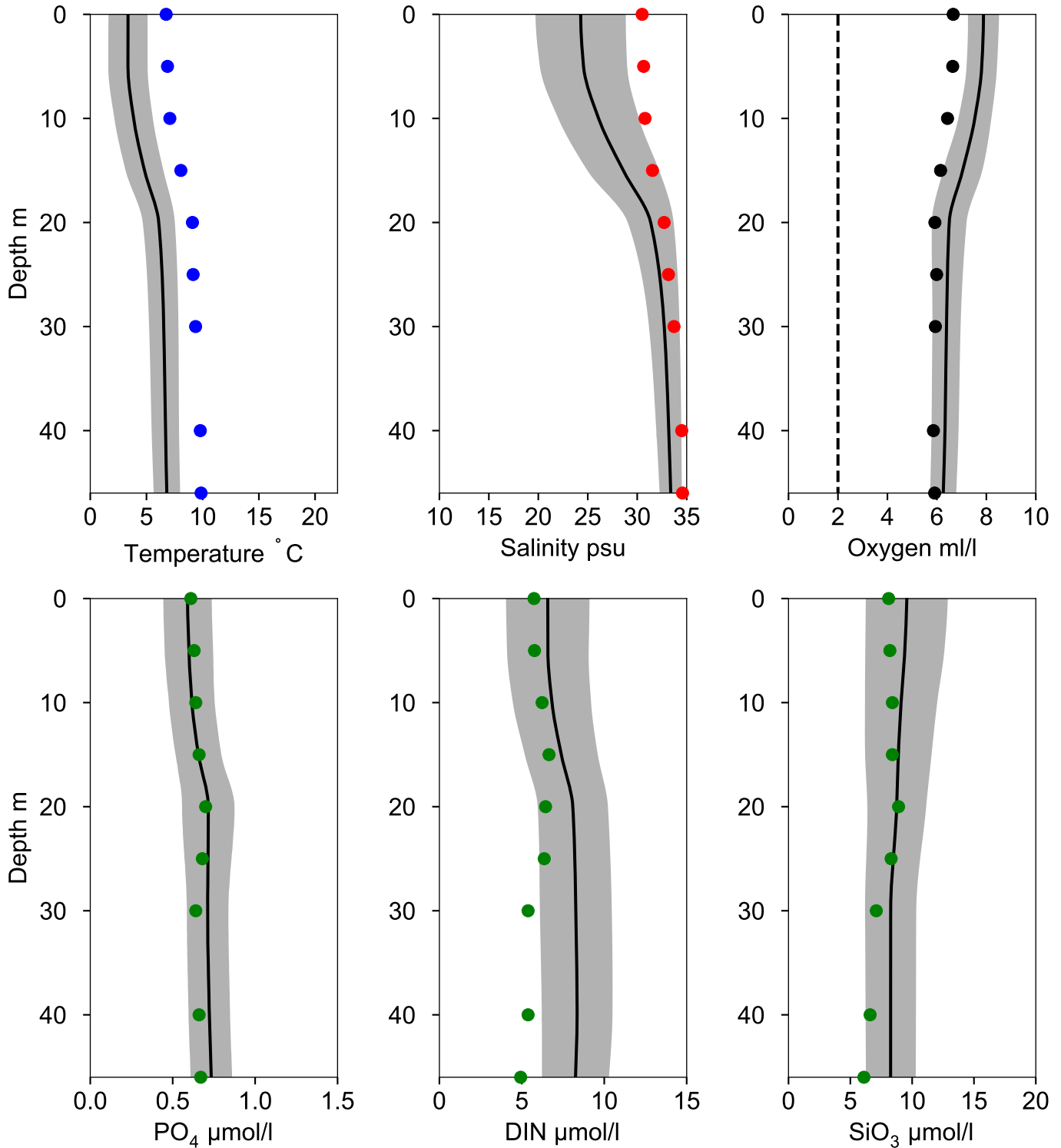
— Mean 1991-2020    St.Dev.    ● 2026



# Vertical profiles GF6 January

Statistics based on data from: Kattegatt

— Mean 1991-2020    St.Dev.    ● 2026-01-08

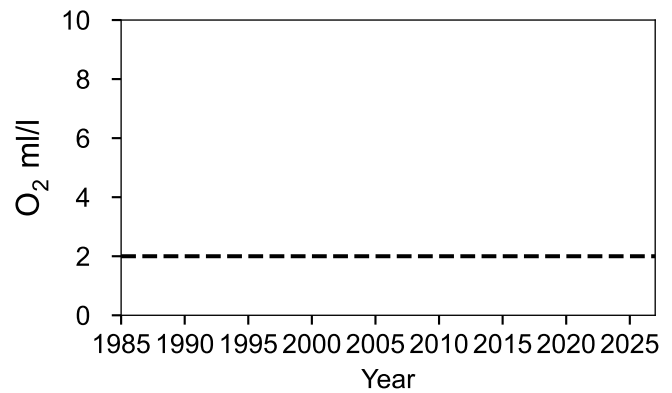
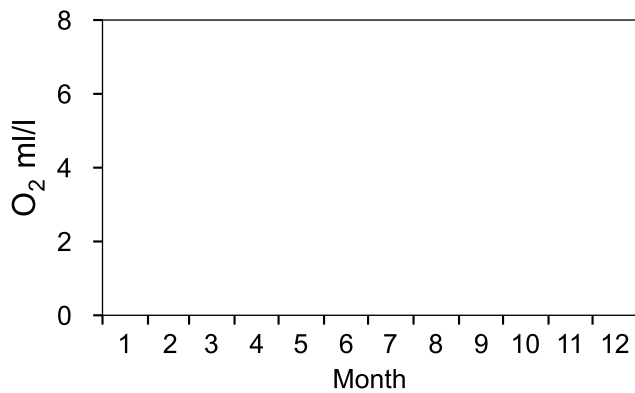
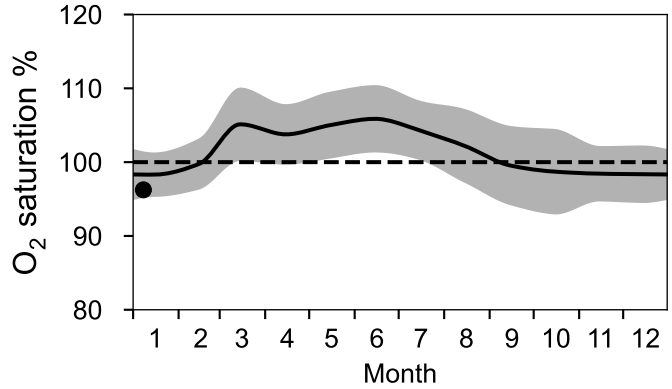
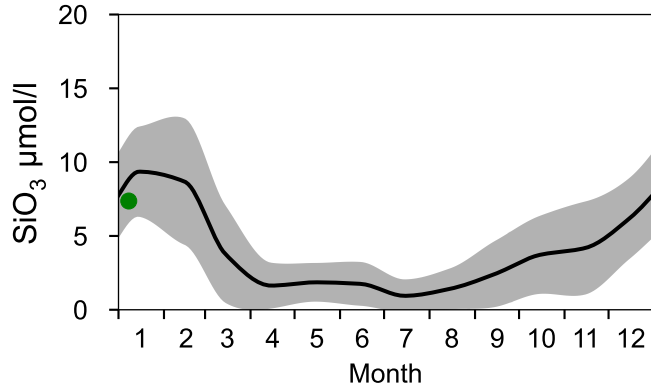
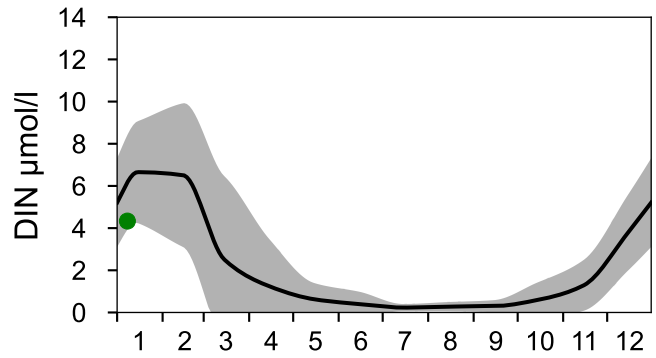
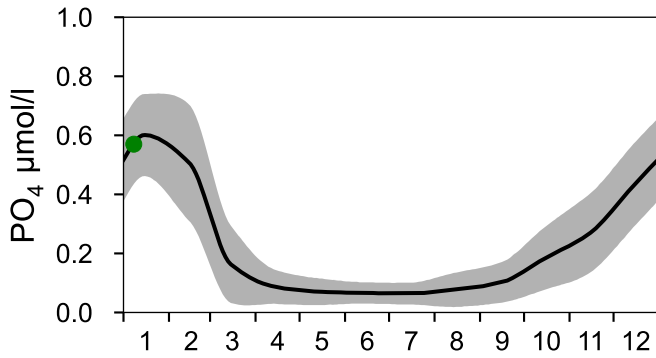
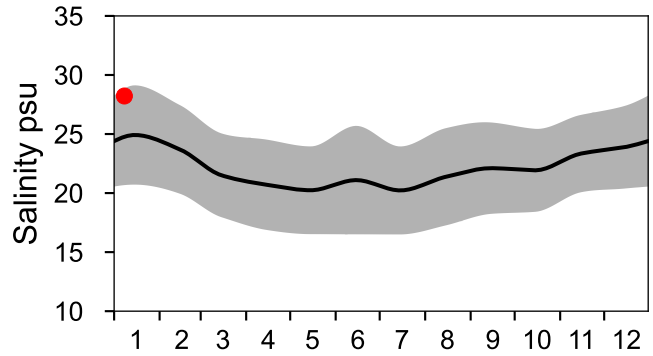
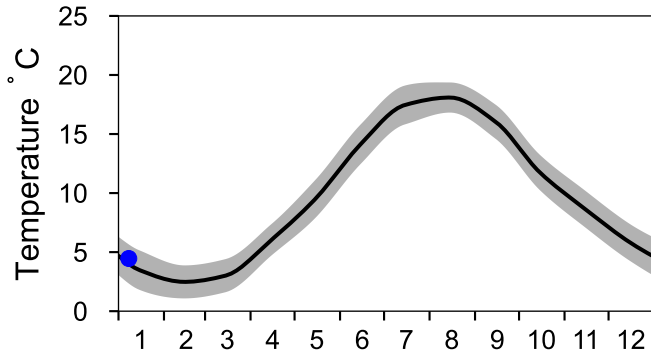


# STATION GF8 SURFACE WATER (0-10 m)

## Annual Cycles

Statistics based on data from: Kattegatt

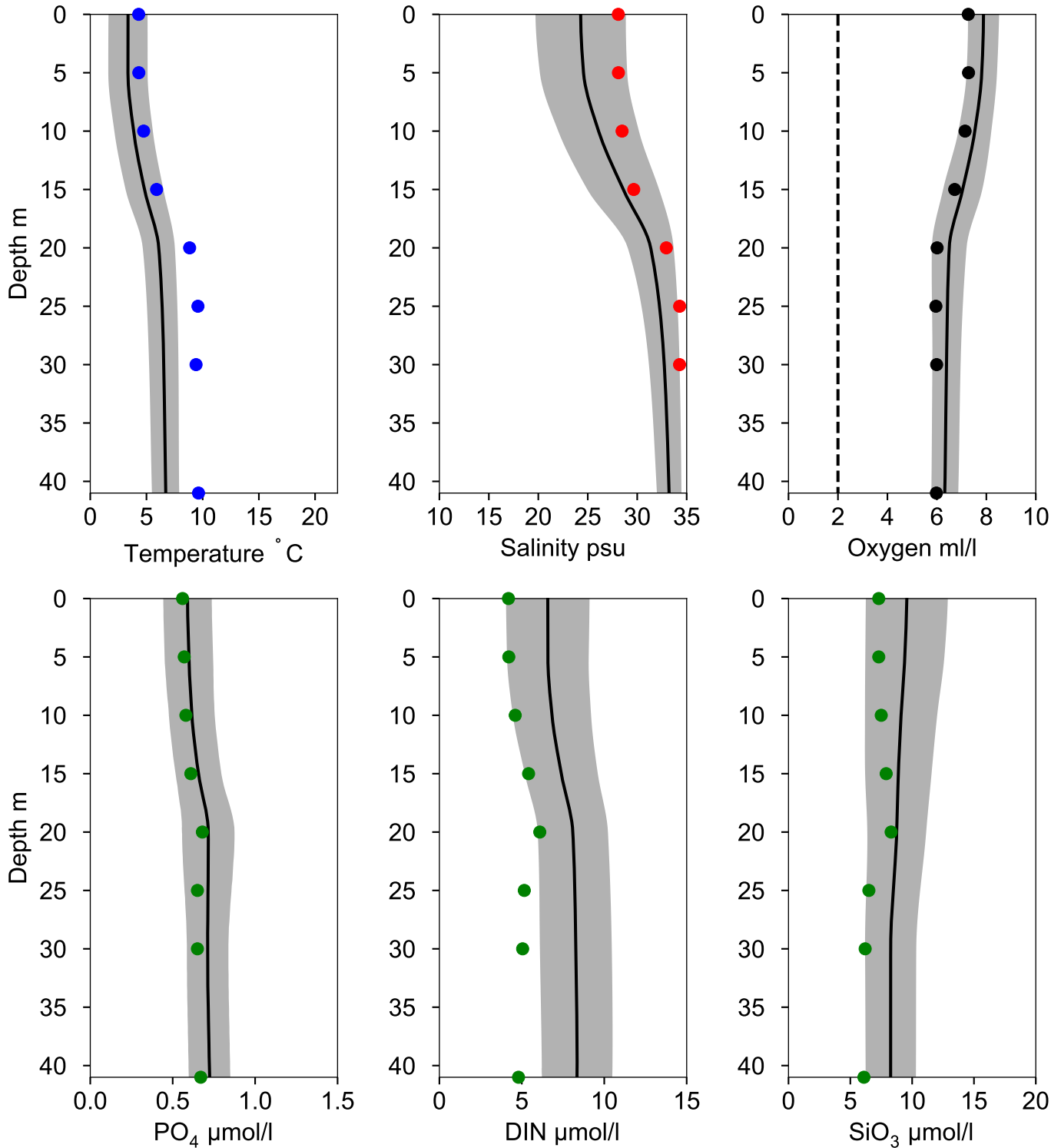
— Mean 1991-2020    St.Dev.    ● 2026



# Vertical profiles GF8 January

Statistics based on data from: Kattegatt

— Mean 1991-2020    ■ St.Dev.    ● 2026-01-08

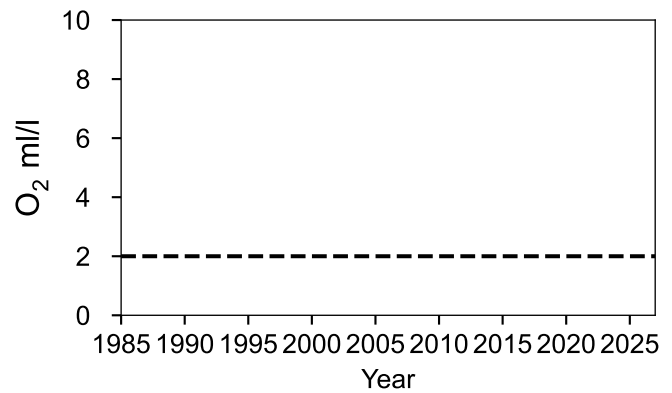
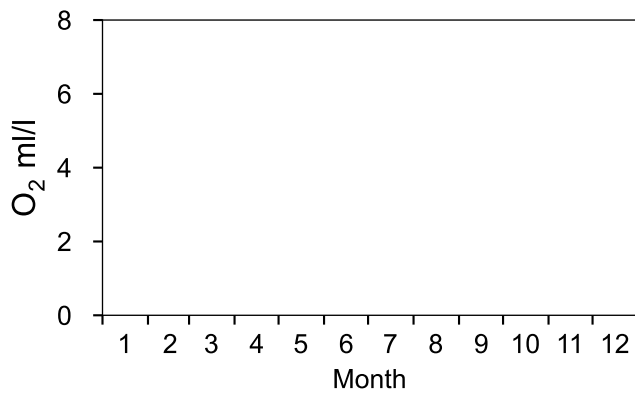
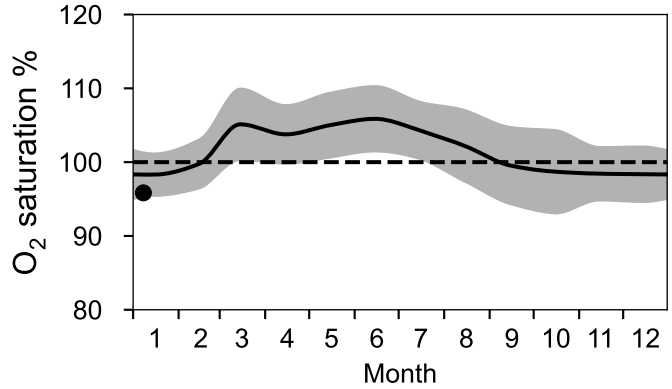
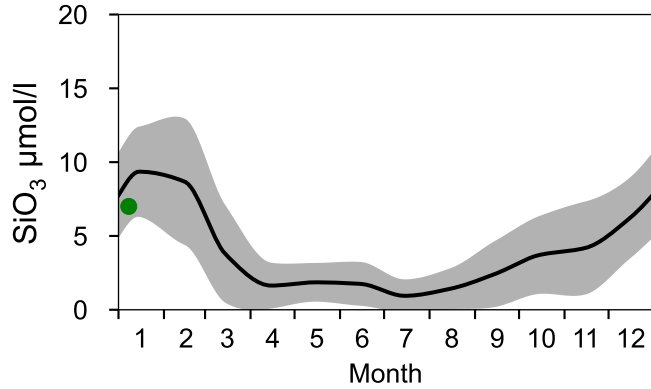
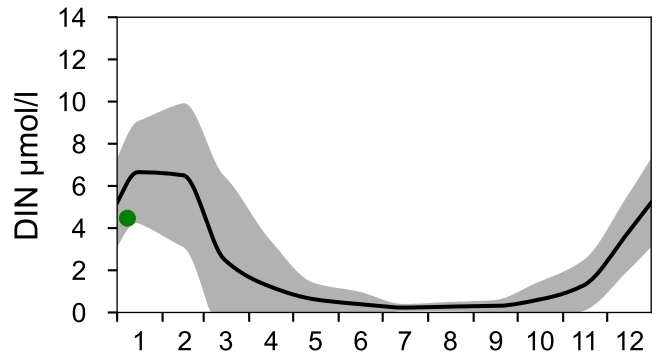
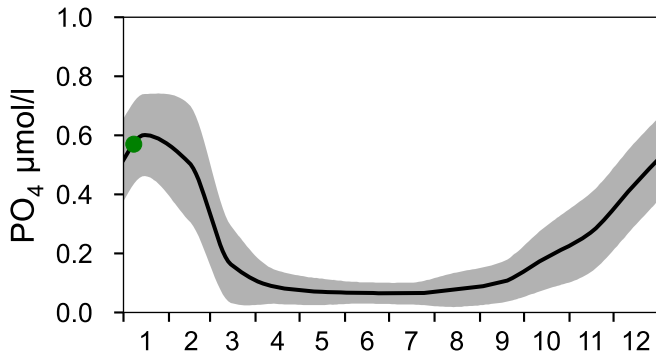
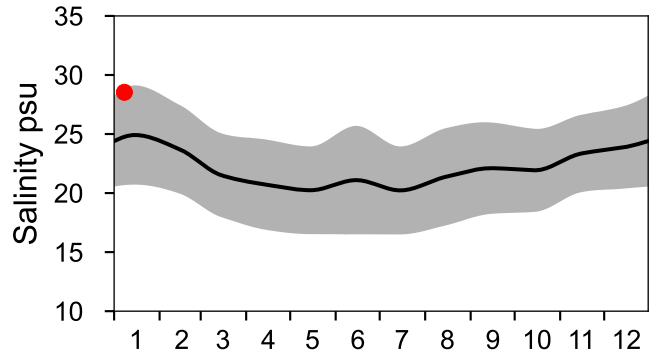
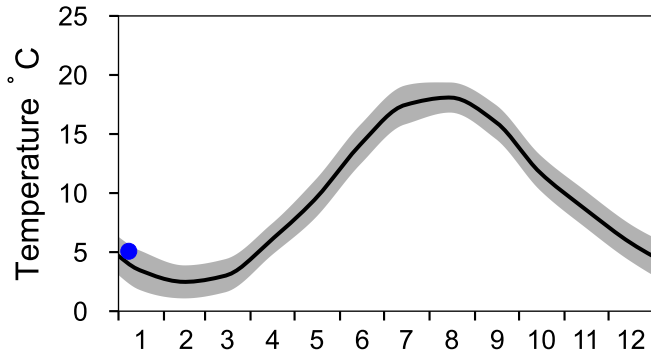


# STATION GF9 SURFACE WATER (0-10 m)

## Annual Cycles

Statistics based on data from: Kattegatt

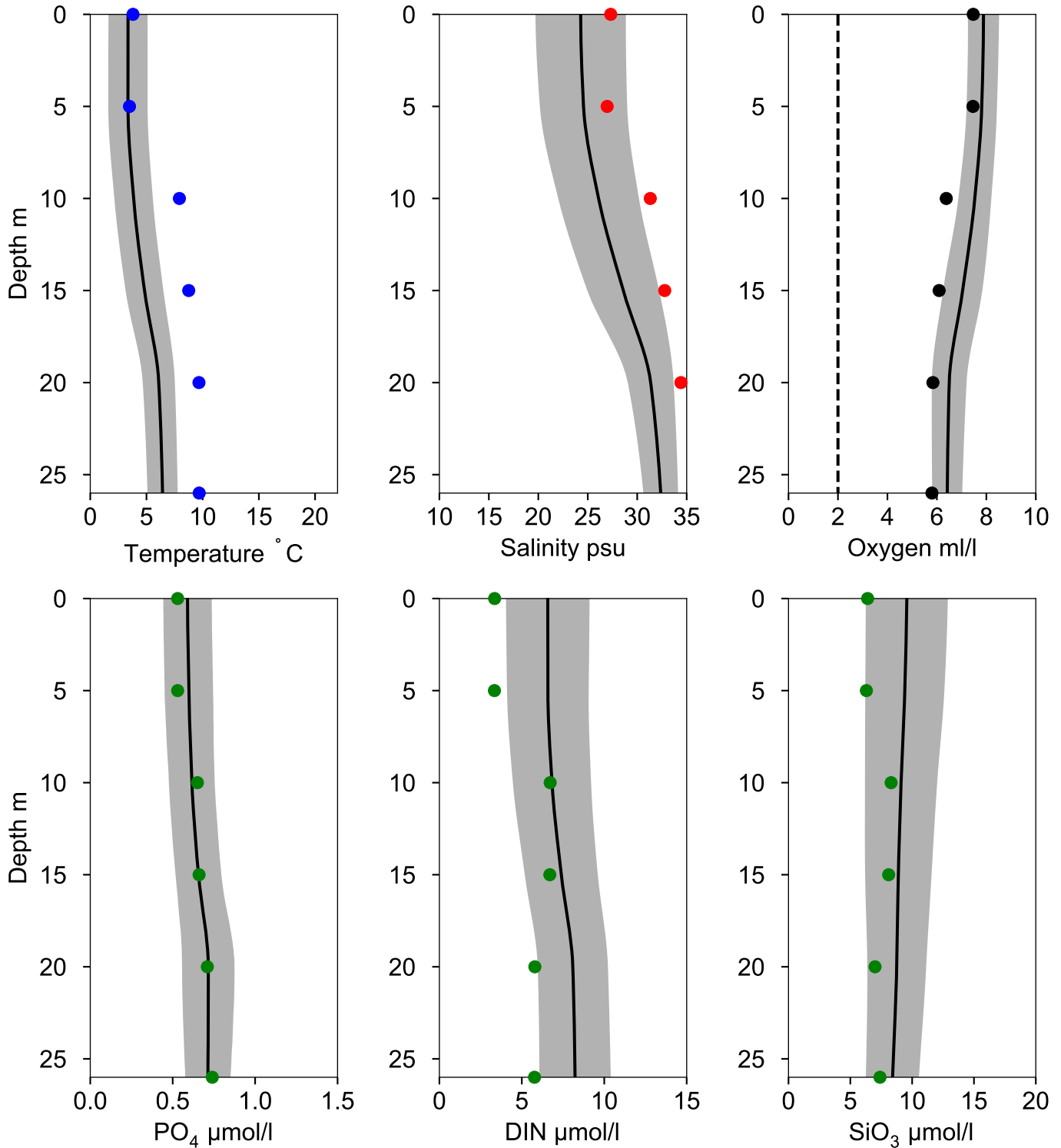
— Mean 1991-2020    St.Dev.    ● 2026



# Vertical profiles GF9 January

Statistics based on data from: Kattegatt

— Mean 1991-2020    ■ St.Dev.    ● 2026-01-08

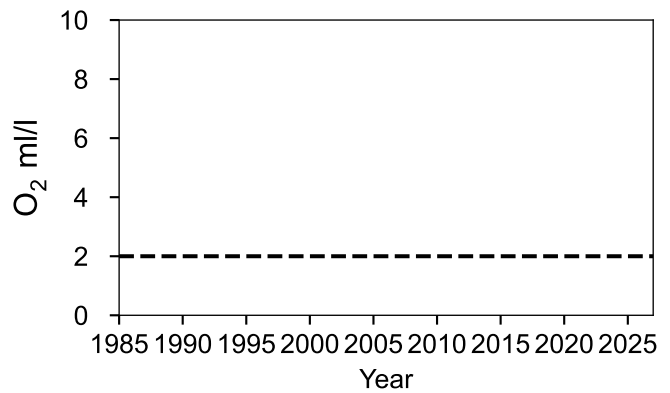
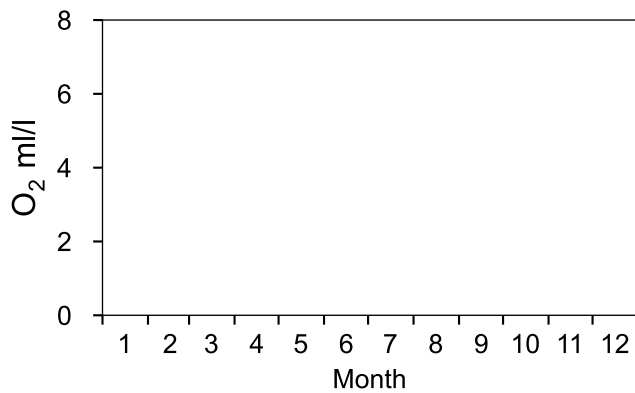
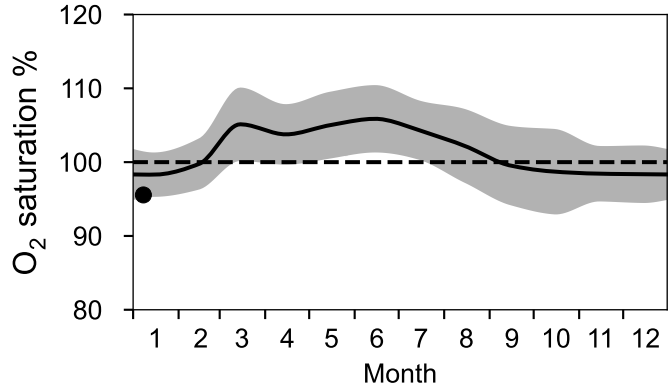
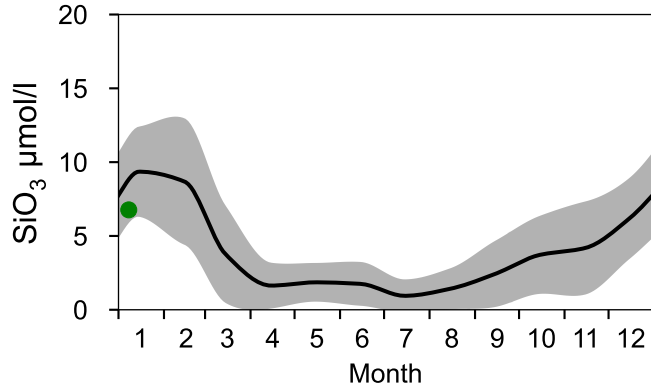
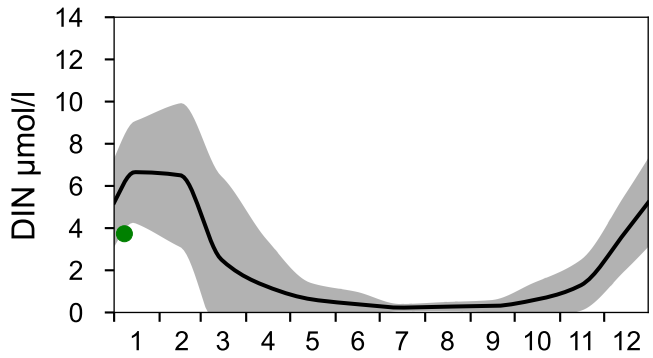
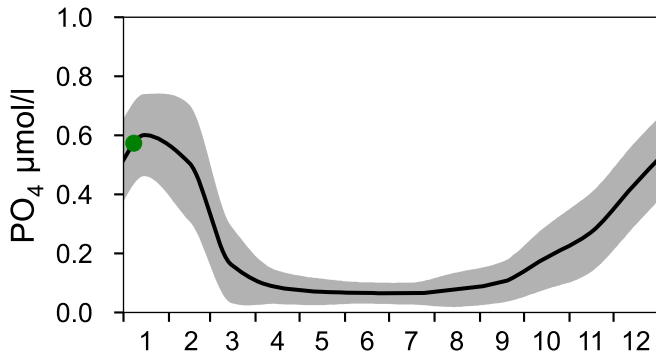
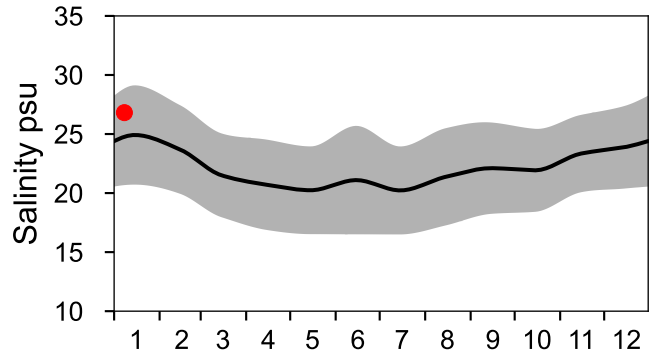
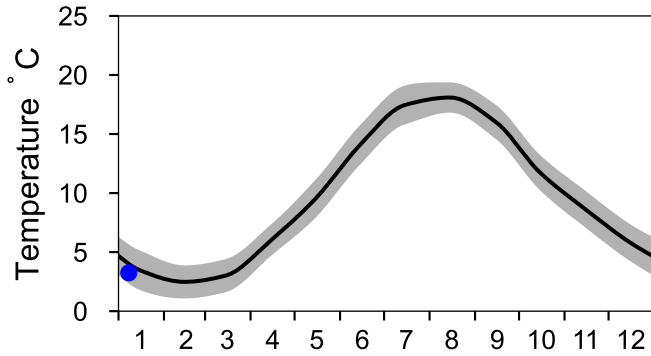


# STATION LÄSÖ RÄNNA SURFACE WATER (0-10 m)

## Annual Cycles

Statistics based on data from: Kattegatt

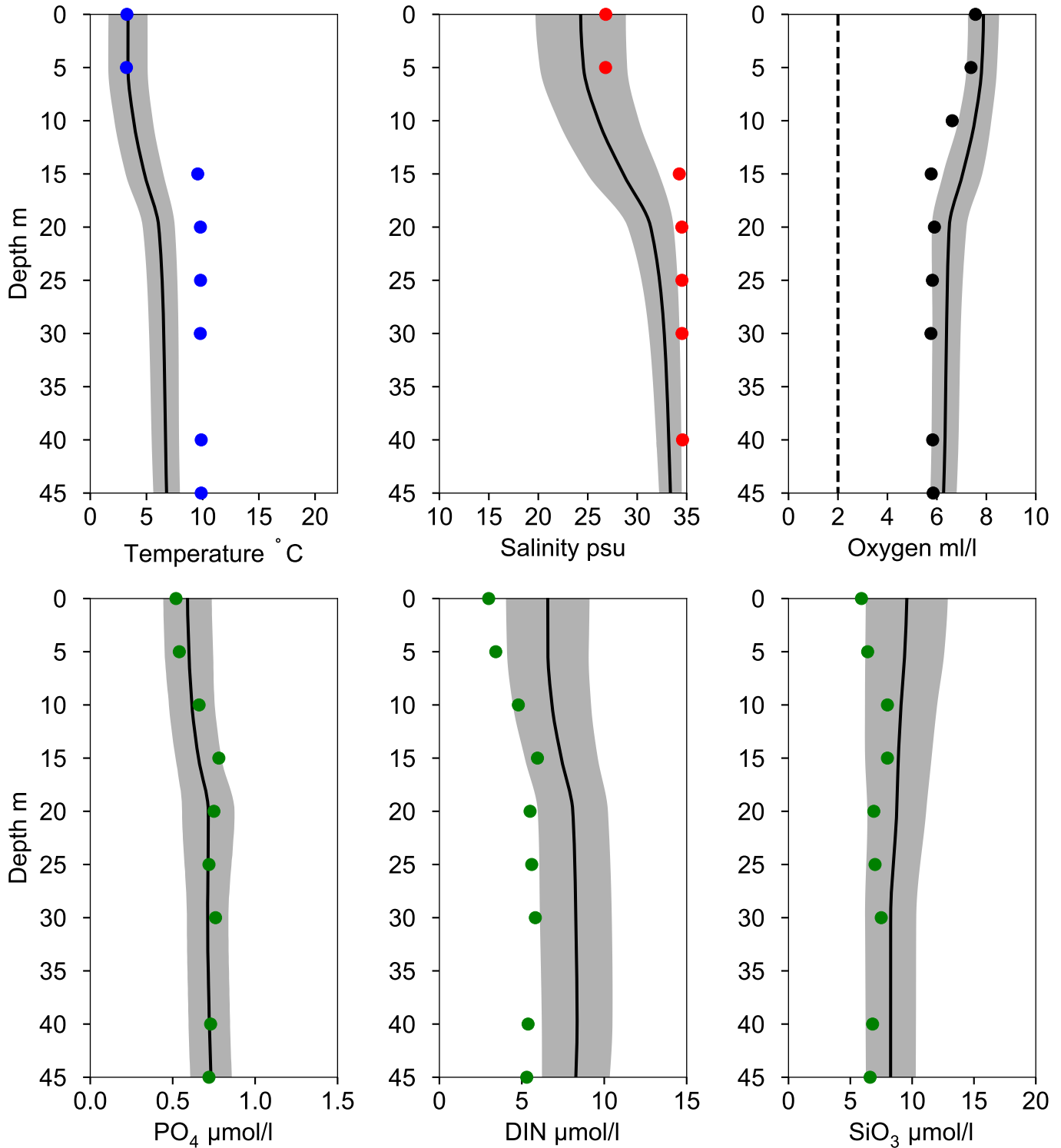
— Mean 1991-2020    St.Dev.    ● 2026



# Vertical profiles LÄSÖ RÄNNA January

Statistics based on data from: Kattegatt

— Mean 1991-2020    ■ St.Dev.    ● 2026-01-08

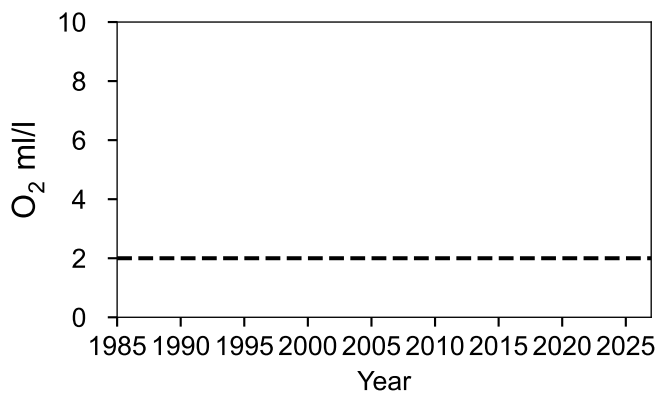
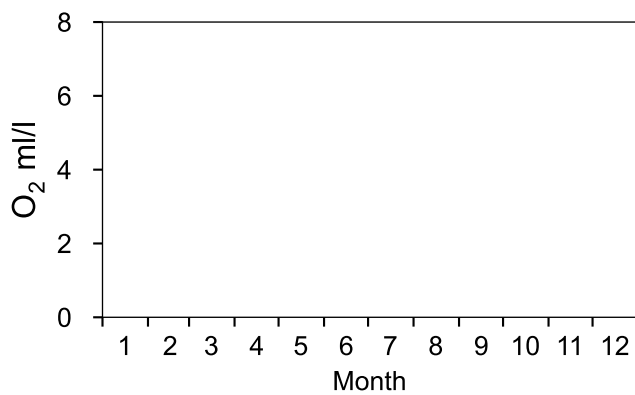
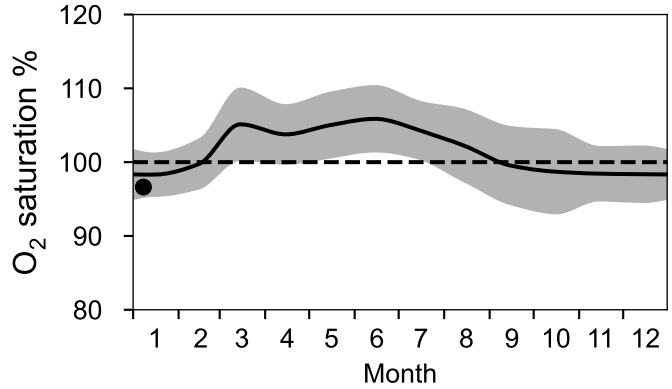
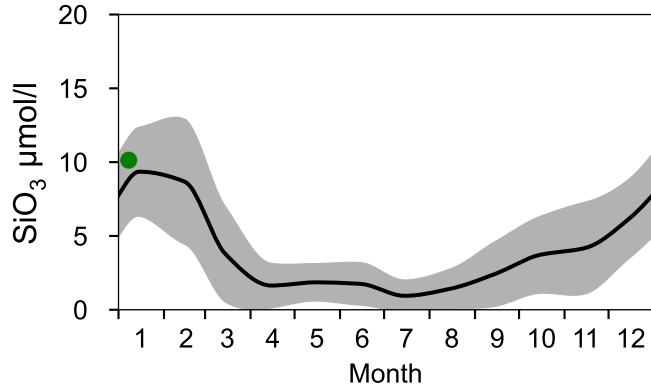
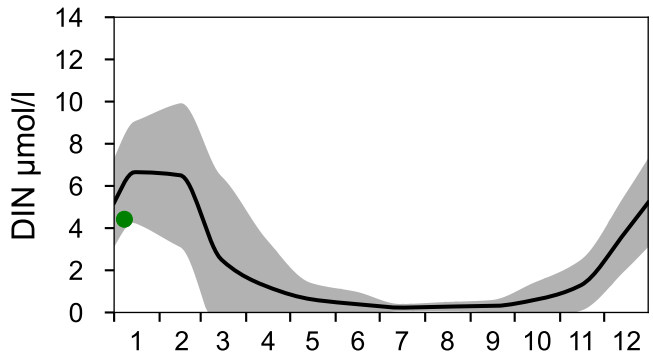
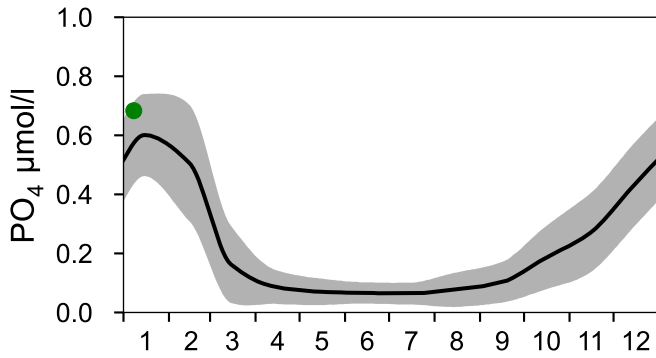
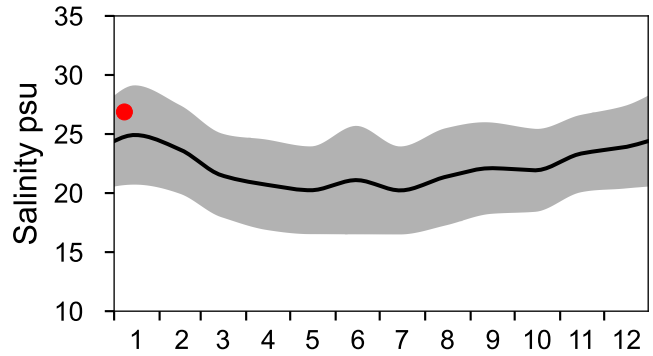
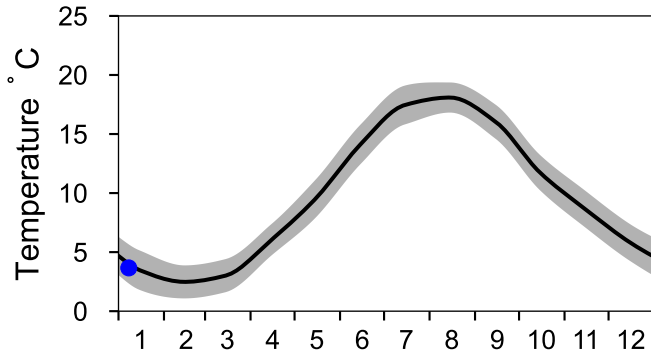


# STATION 409 ÅLBORG BUGT SURFACE WATER (0-10 m)

## Annual Cycles

Statistics based on data from: Kattegatt

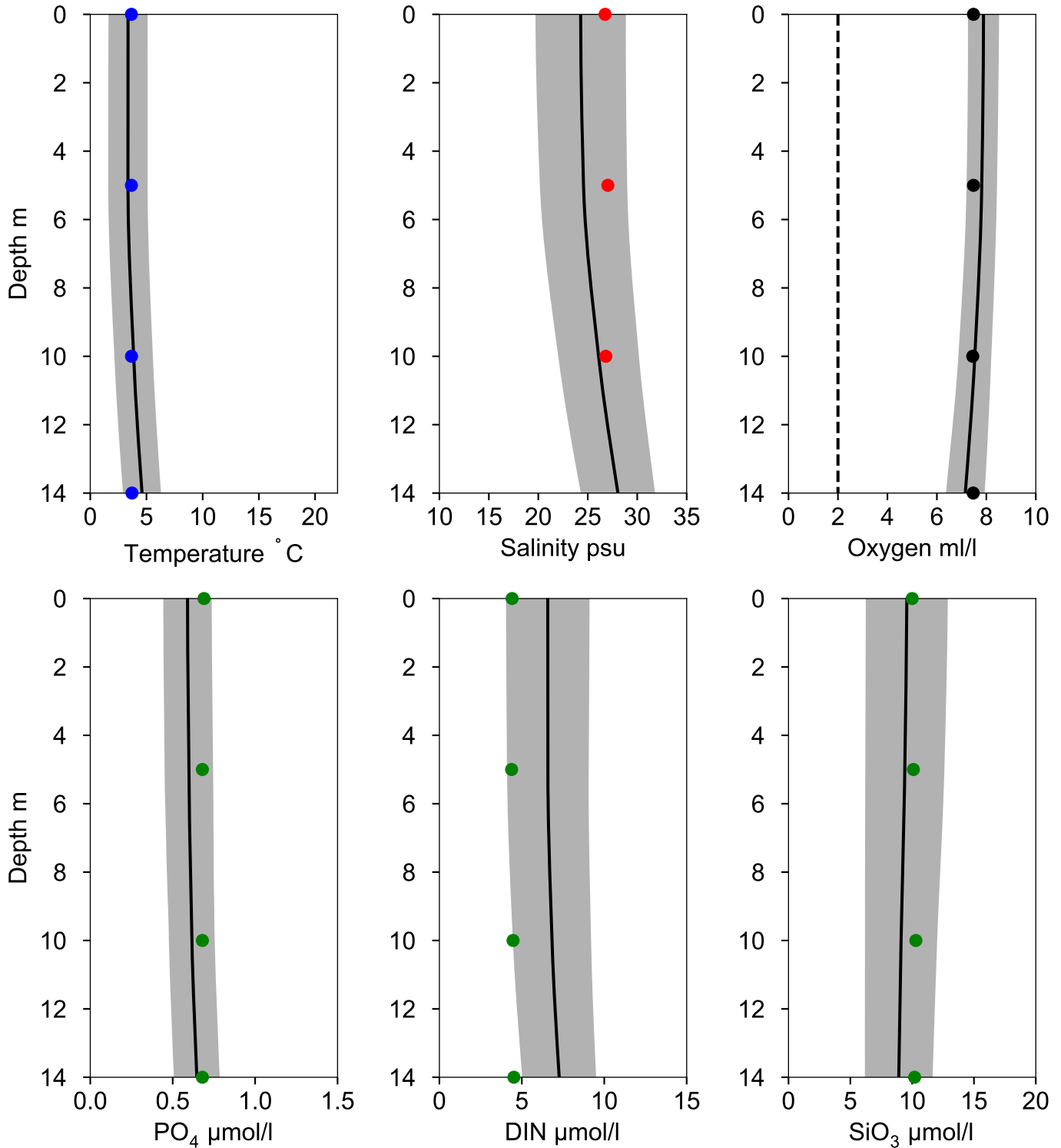
— Mean 1991-2020    St.Dev.    ● 2026



# Vertical profiles 409 ÅLBORG BUGT January

Statistics based on data from: Kattegatt

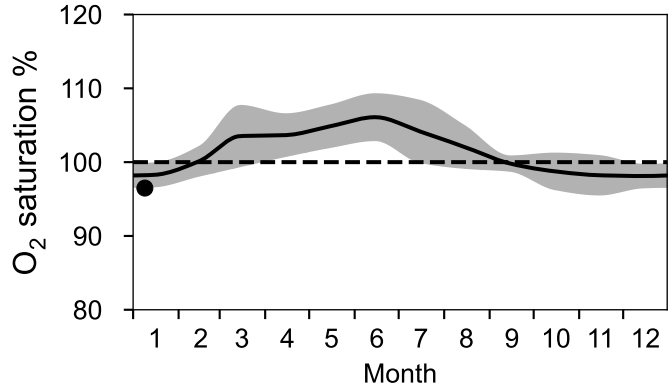
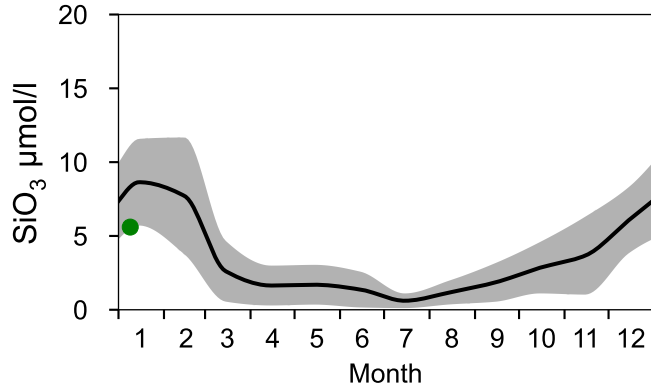
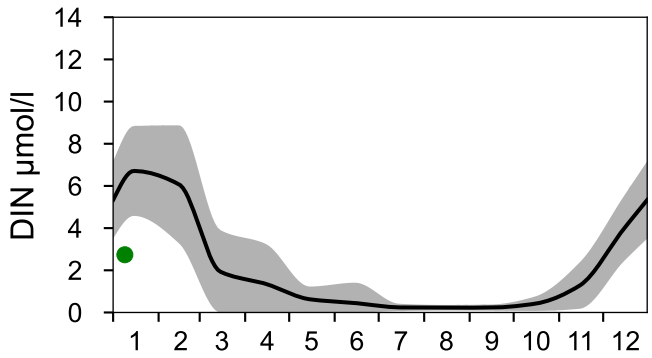
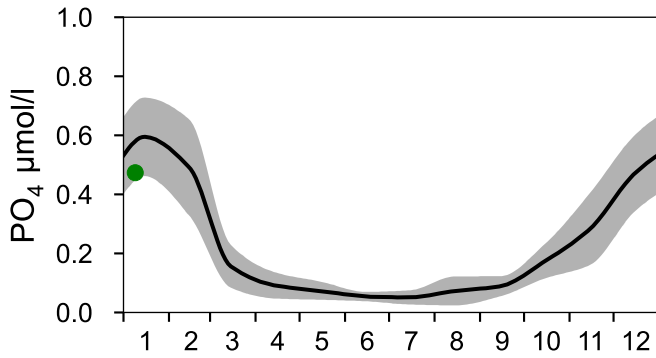
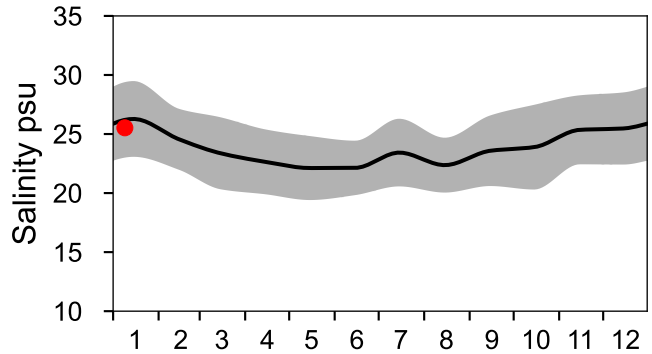
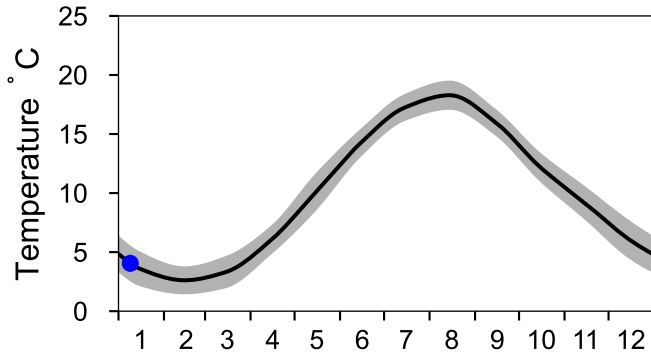
— Mean 1991-2020    ■ St.Dev.    ● 2026-01-08



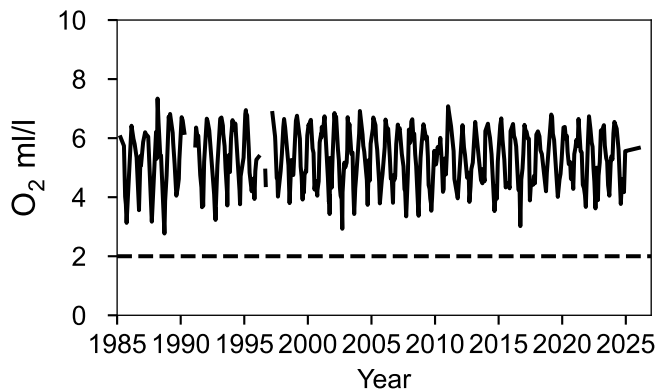
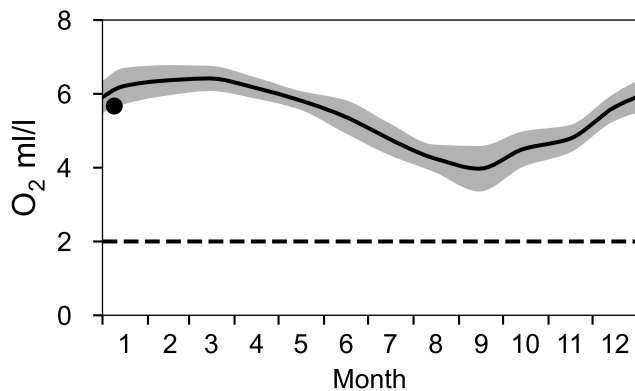
# STATION FLADEN SURFACE WATER (0-10 m)

Annual Cycles

— Mean 1991-2020    St.Dev.    ● 2026

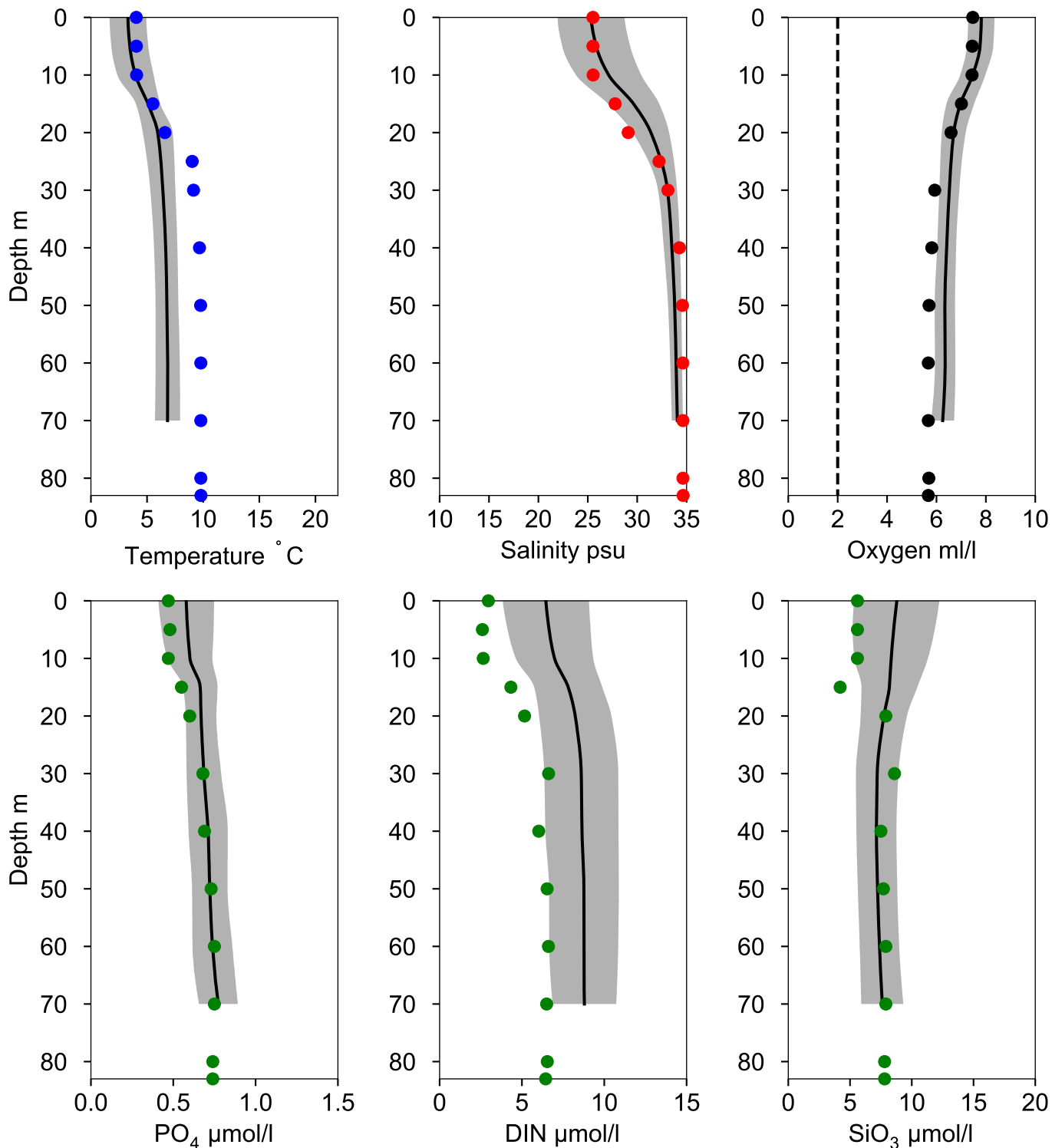


## OXYGEN IN BOTTOM WATER (depth >= 74 m)



# Vertical profiles FLADEN January

— Mean 1991-2020    St.Dev.    ● 2026-01-09

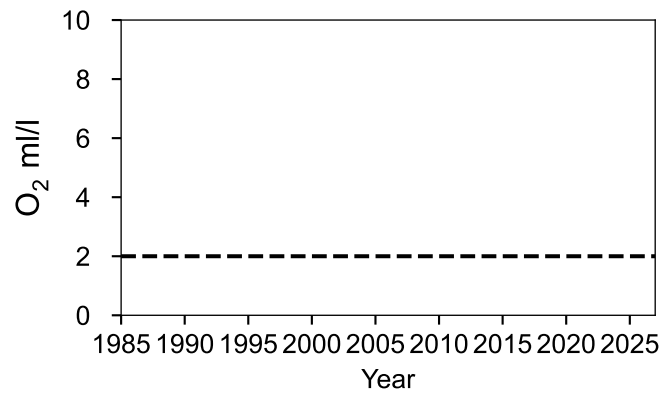
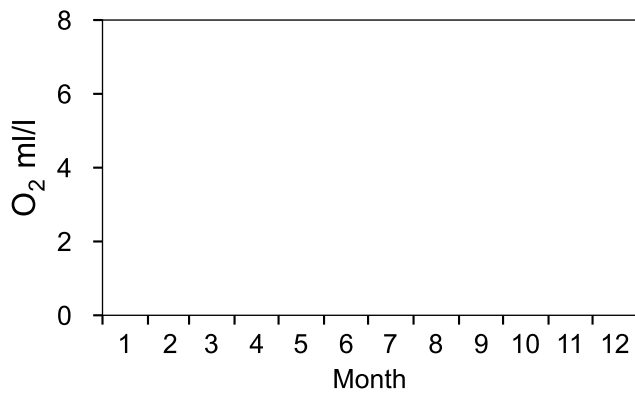
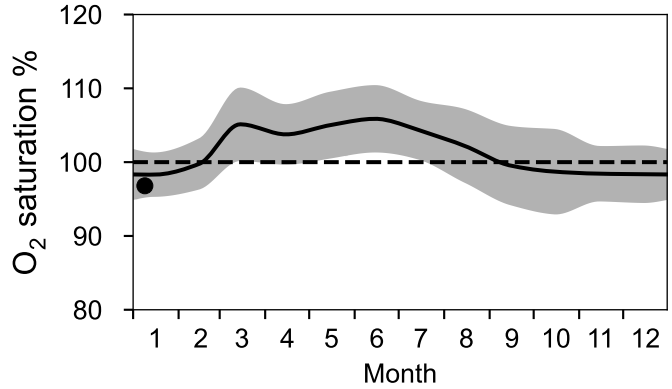
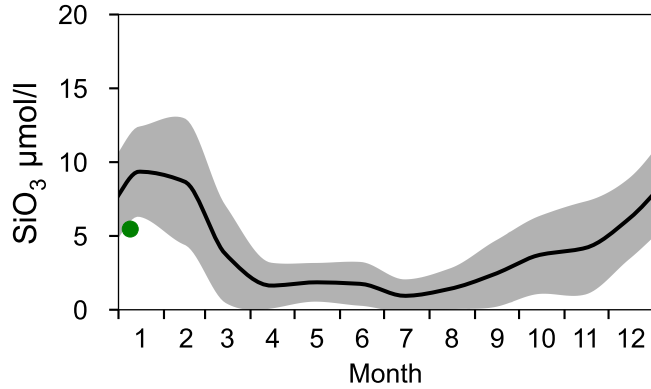
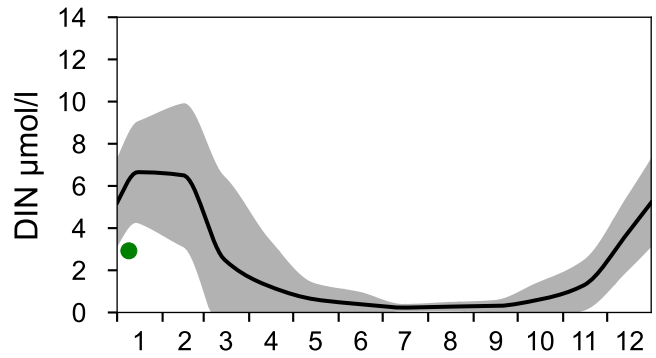
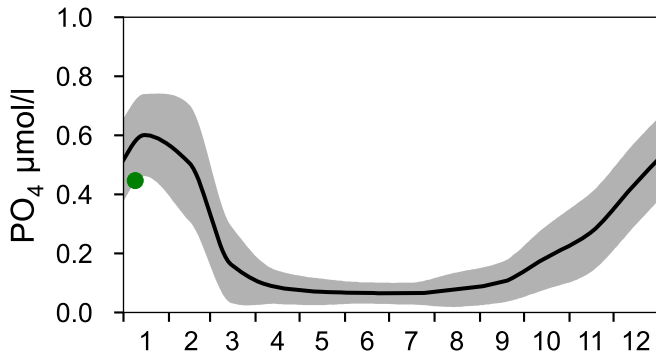
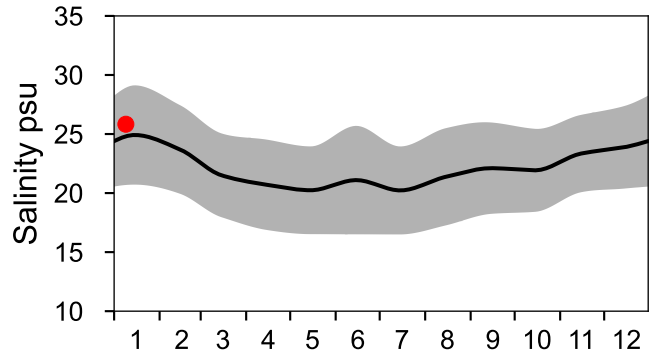
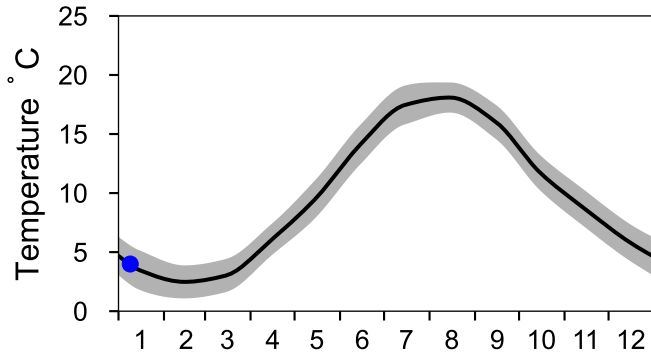


# STATION L:A MIDDELGRUND SURFACE WATER (0-10 m)

## Annual Cycles

Statistics based on data from: Kattegatt

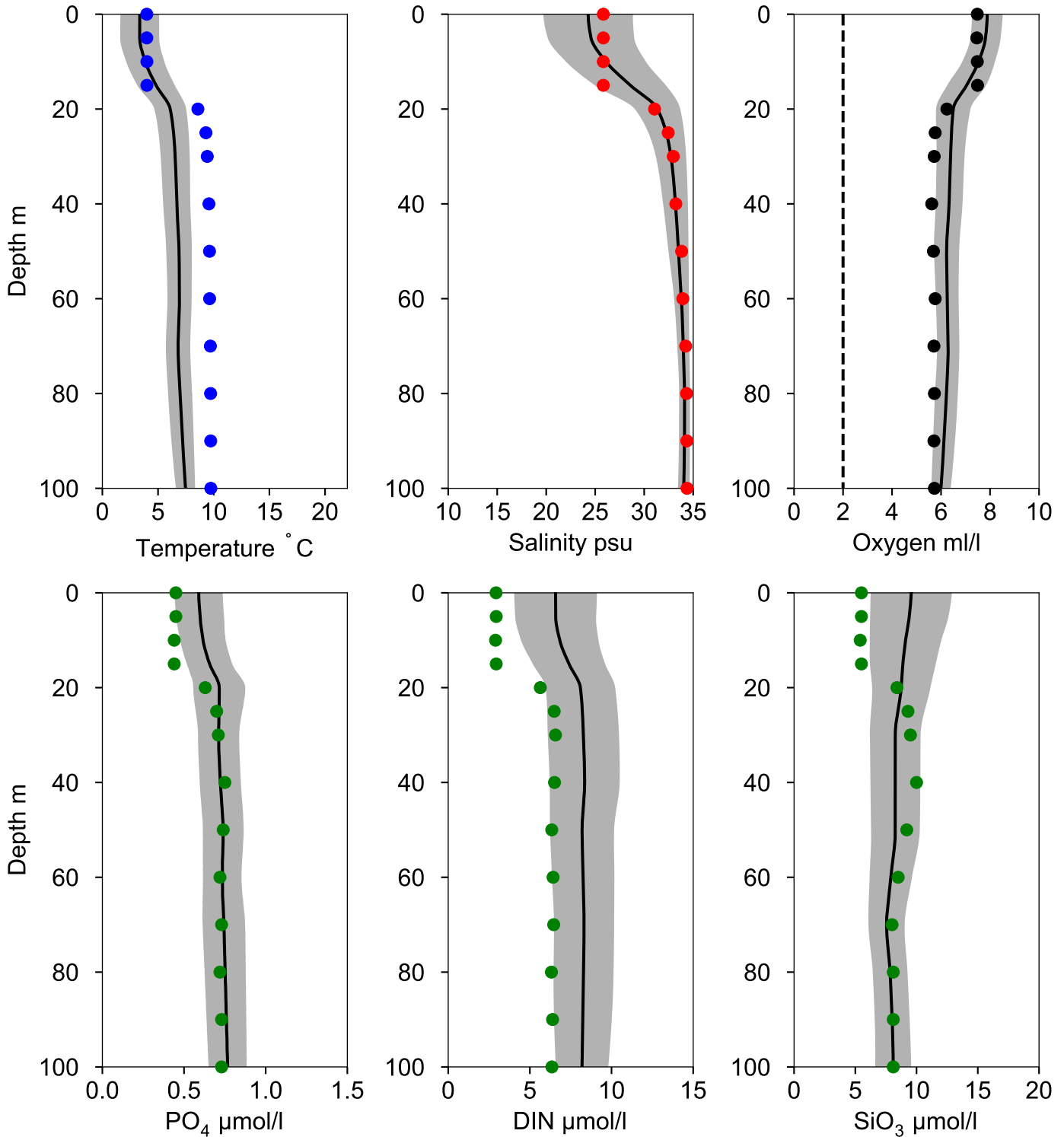
— Mean 1991-2020    St.Dev.    ● 2026



# Vertical profiles L:A MIDDELGRUND January

Statistics based on data from: Kattegatt

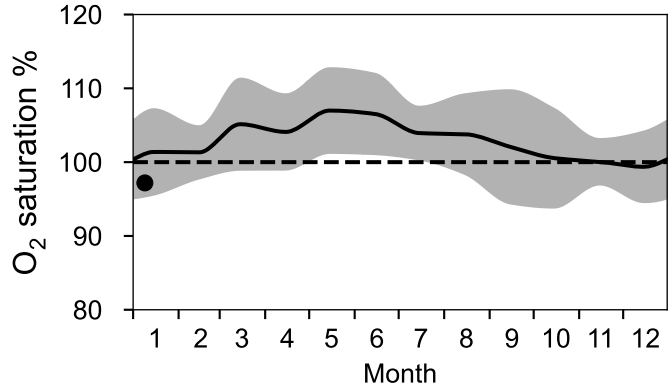
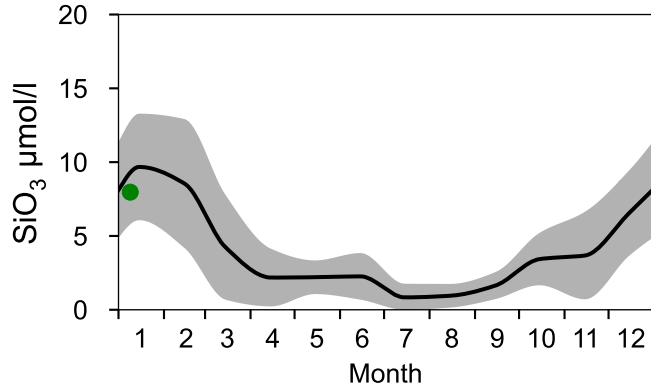
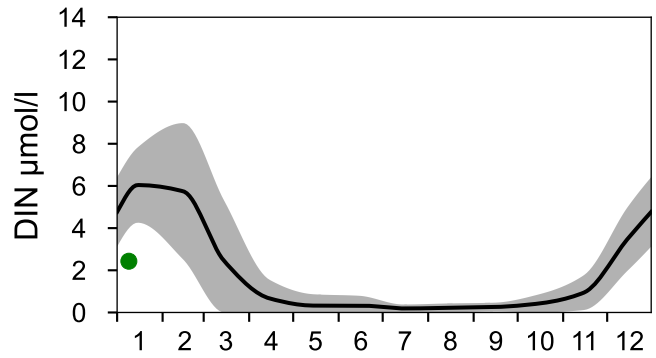
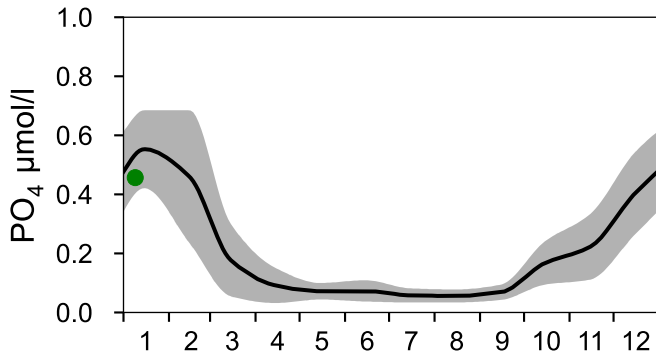
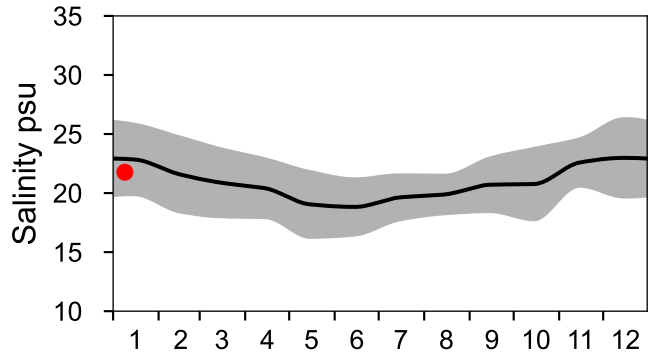
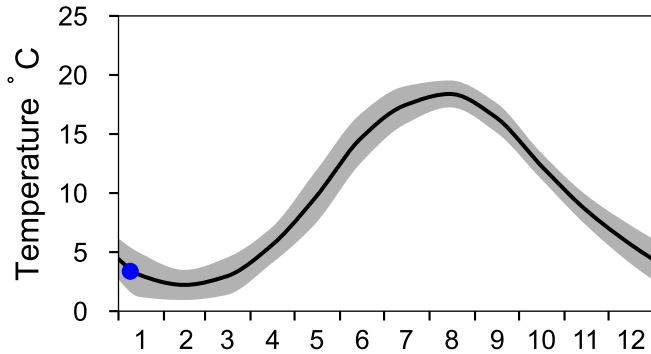
— Mean 1991-2020    St.Dev.    ● 2026-01-09



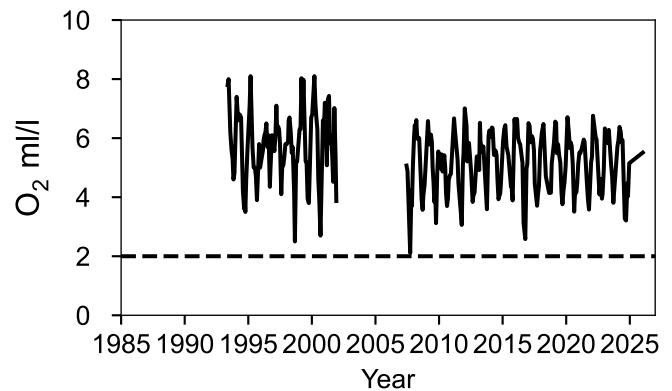
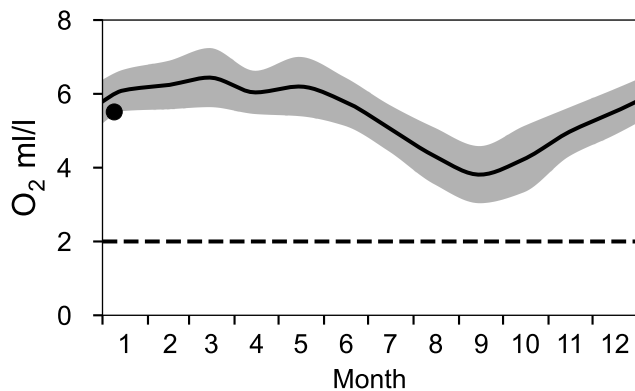
# STATION N14 FALKENBERG SURFACE WATER (0-10 m)

Annual Cycles

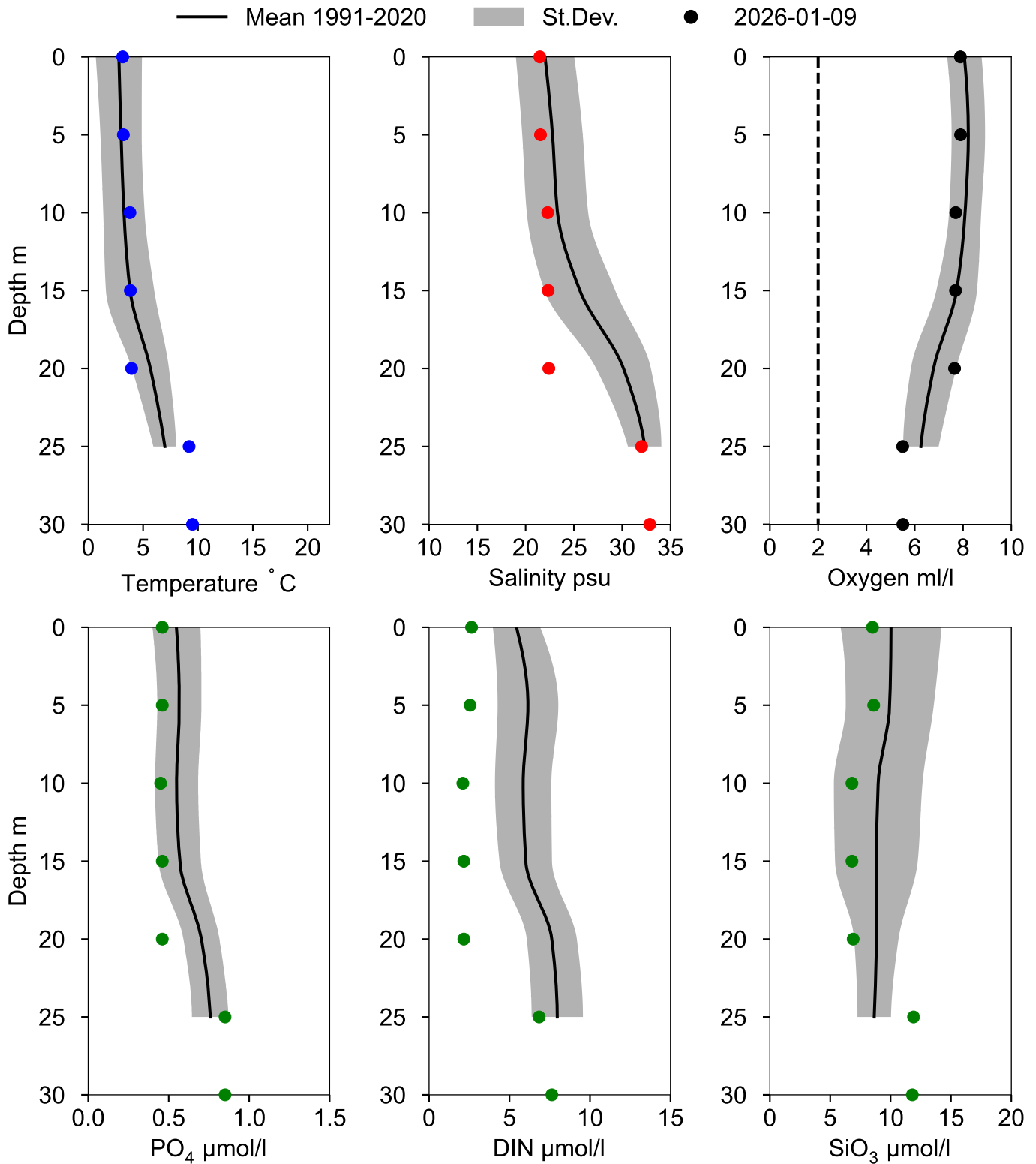
— Mean 1991-2020    St.Dev.    ● 2026



## OXYGEN IN BOTTOM WATER (depth >= 25 m)



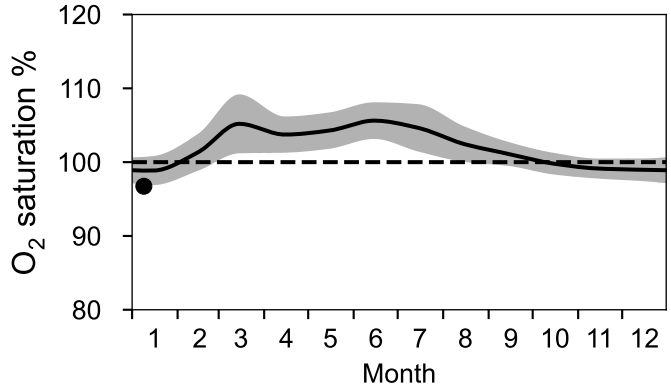
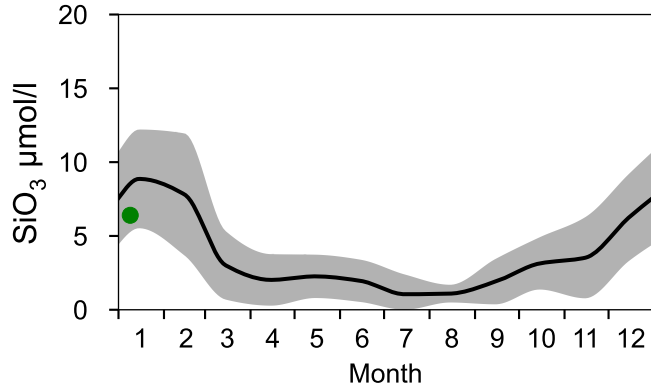
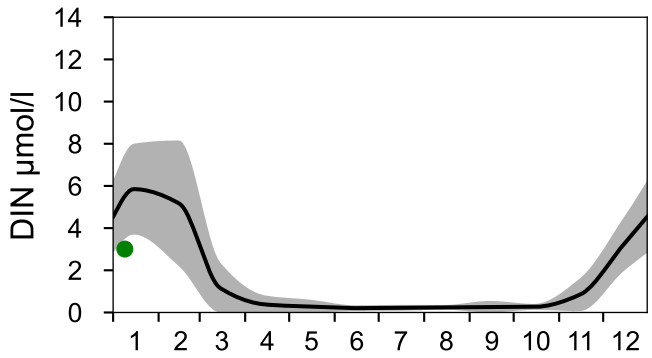
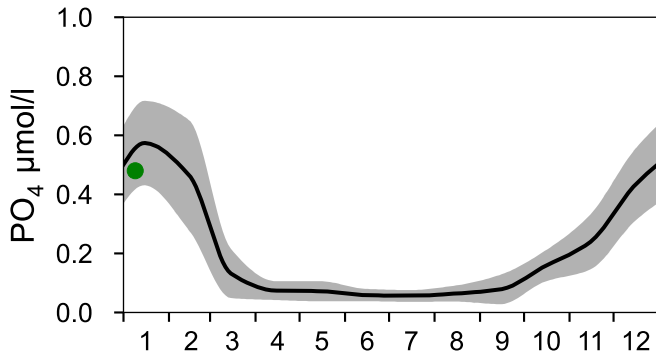
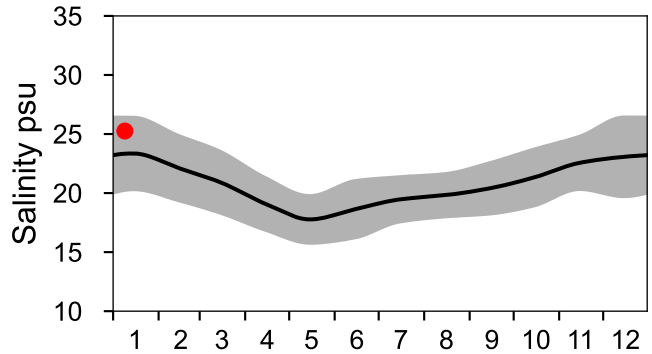
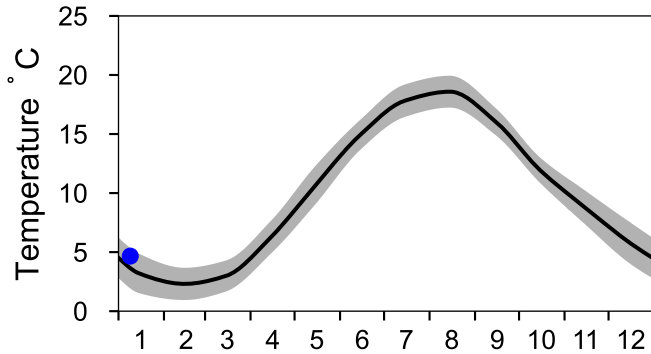
# Vertical profiles N14 FALKENBERG January



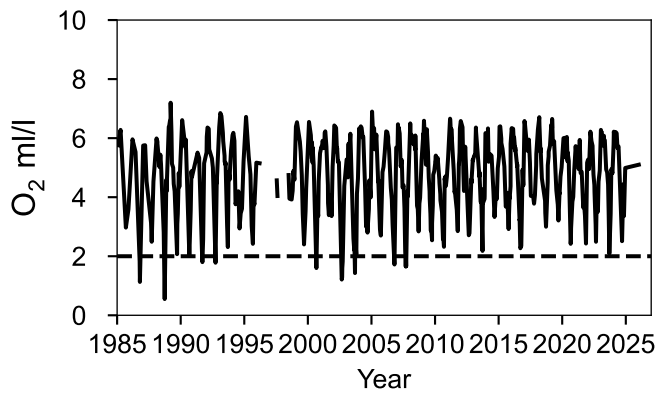
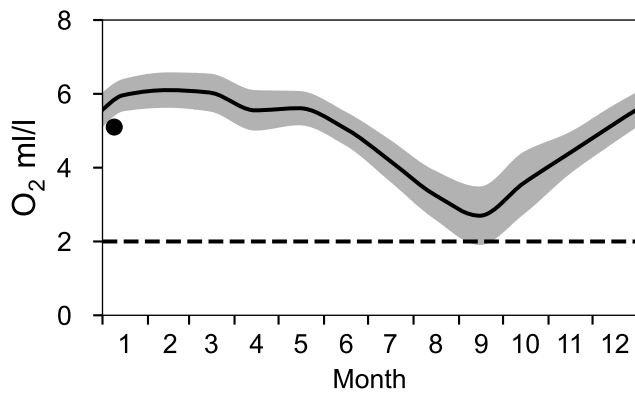
# STATION ANHOLT E SURFACE WATER (0-10 m)

Annual Cycles

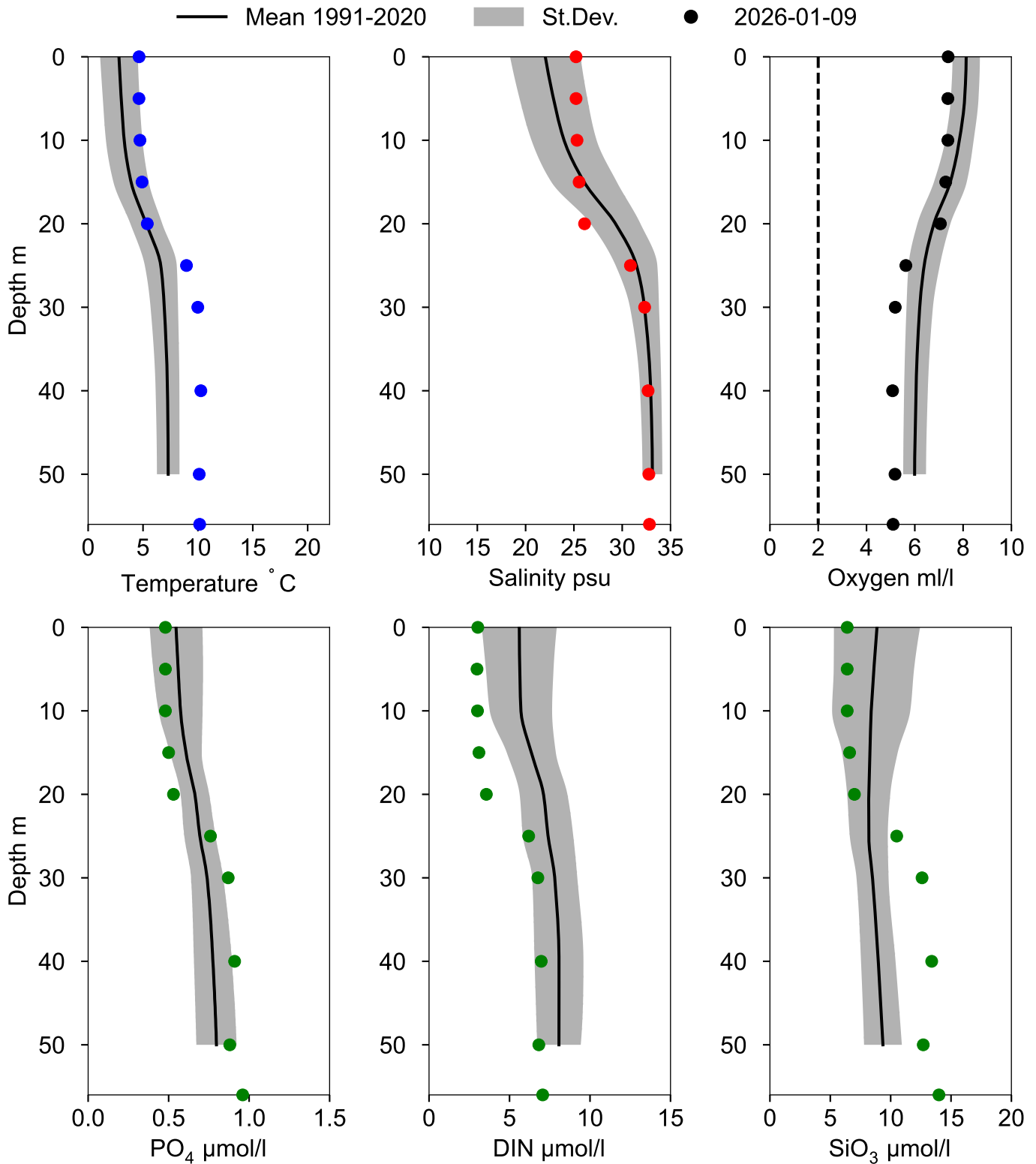
— Mean 1991-2020    St.Dev.    ● 2026



## OXYGEN IN BOTTOM WATER (depth >= 52 m)



# Vertical profiles ANHOLT E January

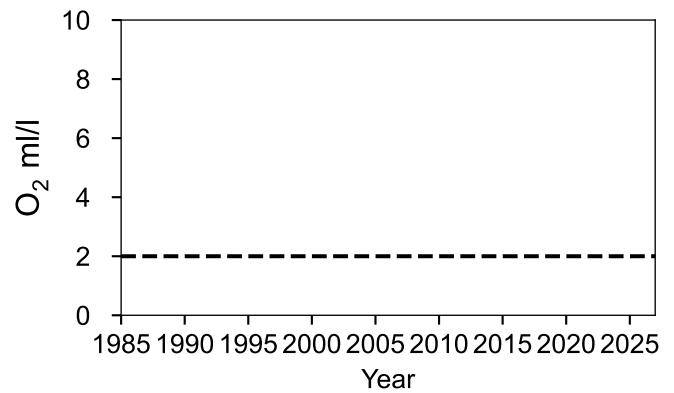
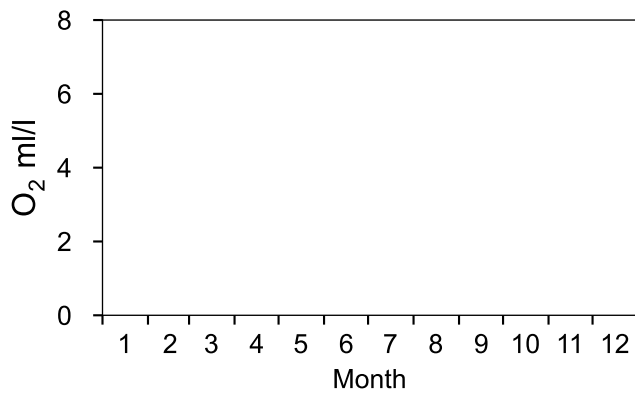
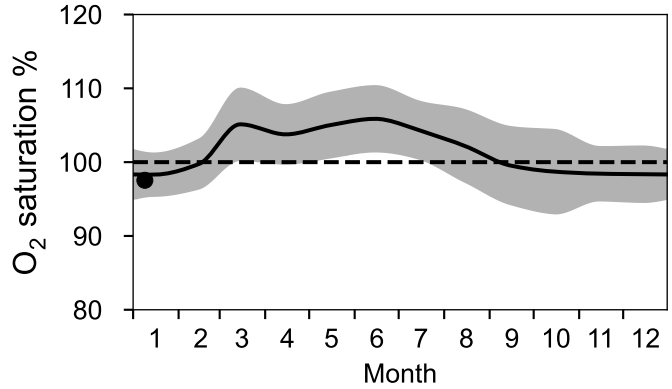
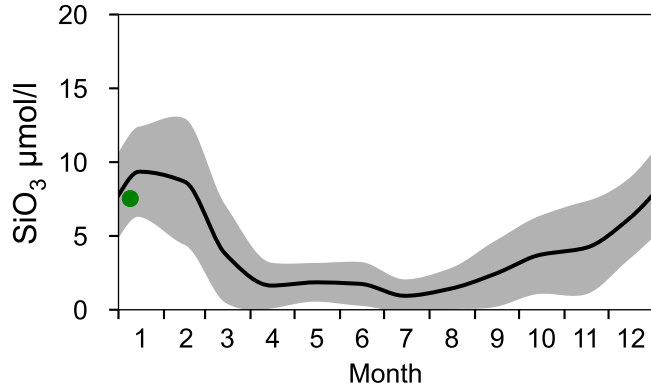
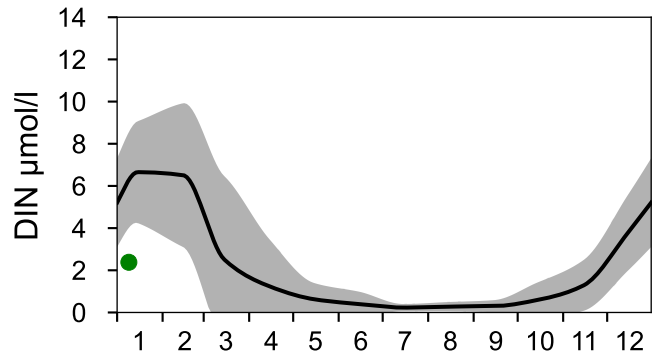
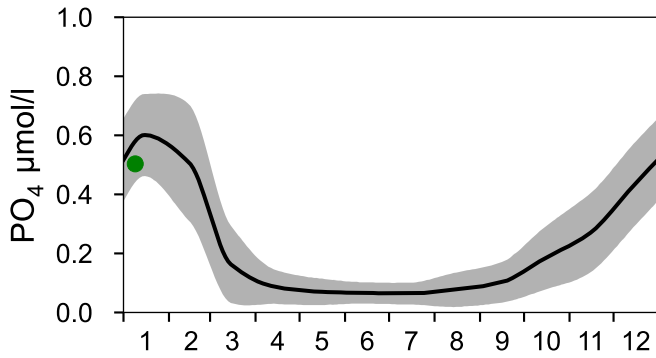
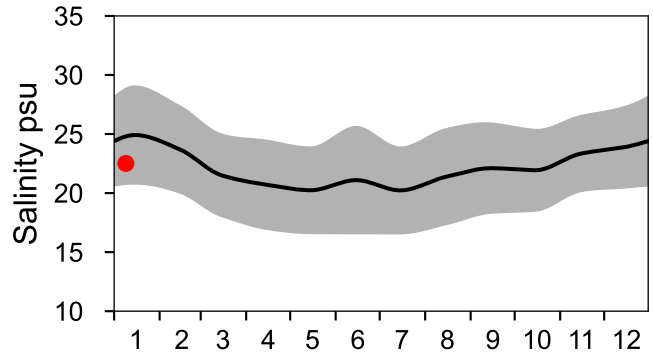
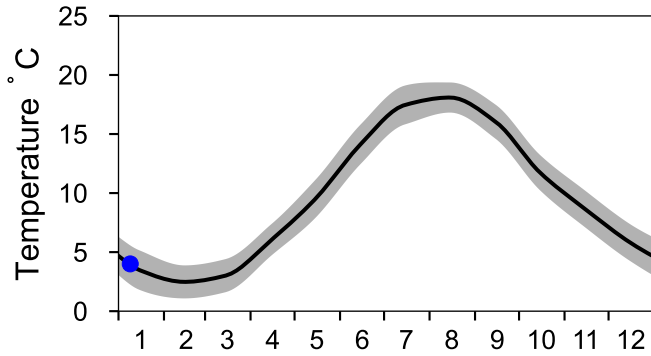


# STATION ST MIDDELGRUND SURFACE WATER (0-10 m)

## Annual Cycles

Statistics based on data from: Kattegatt

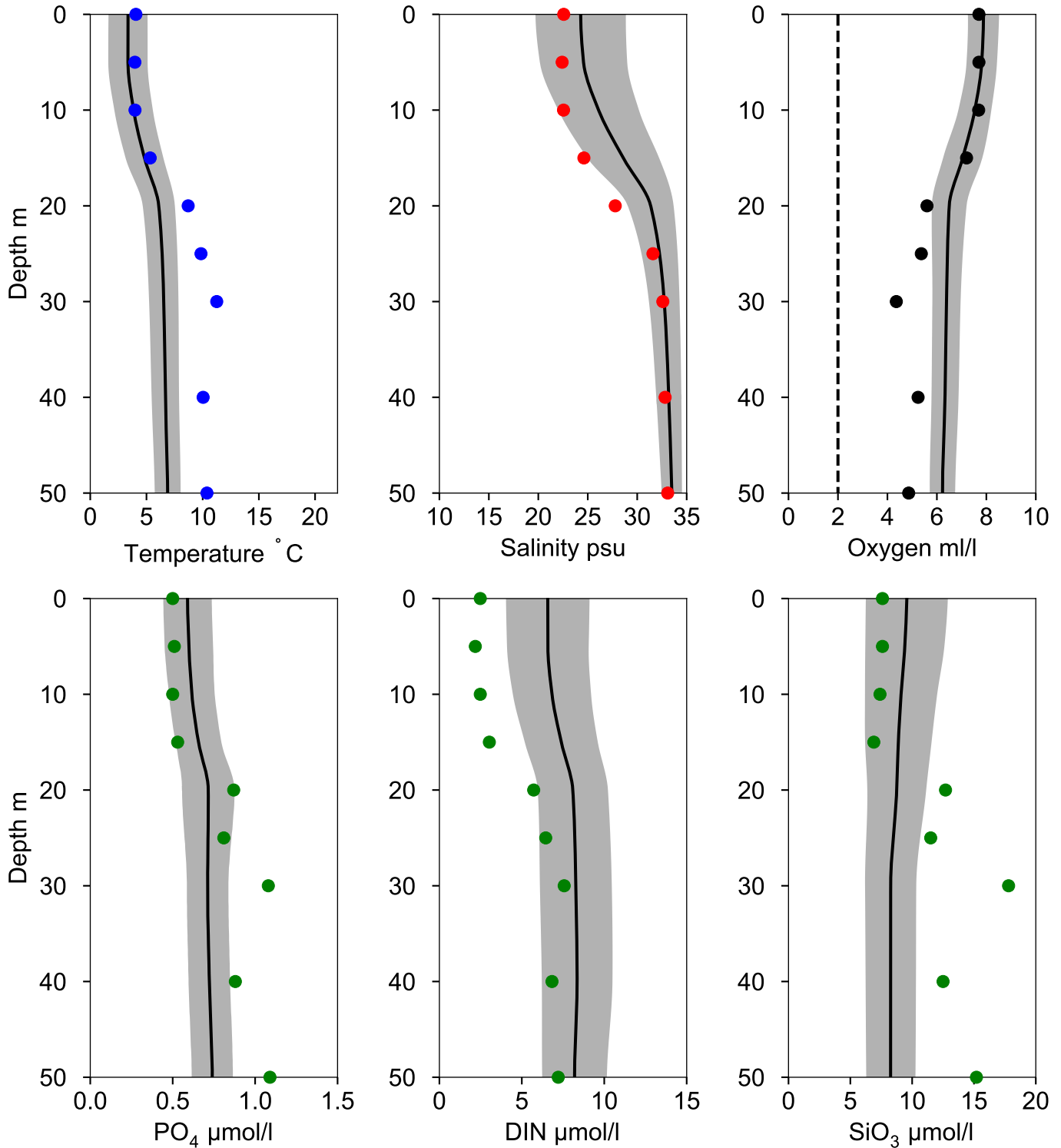
— Mean 1991-2020    St.Dev.    ● 2026



# Vertical profiles ST MIDDELGRUND January

Statistics based on data from: Kattegatt

— Mean 1991-2020    St.Dev.    ● 2026-01-09

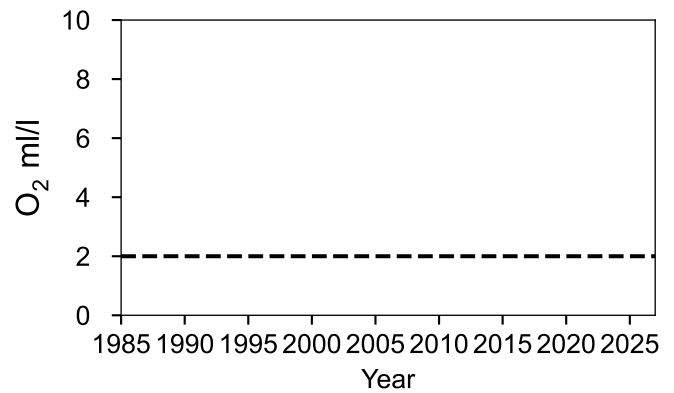
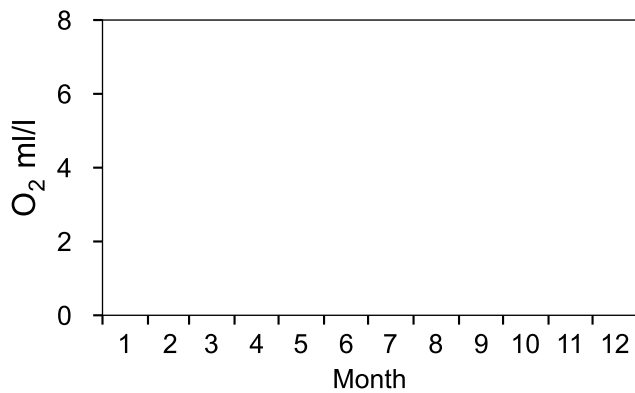
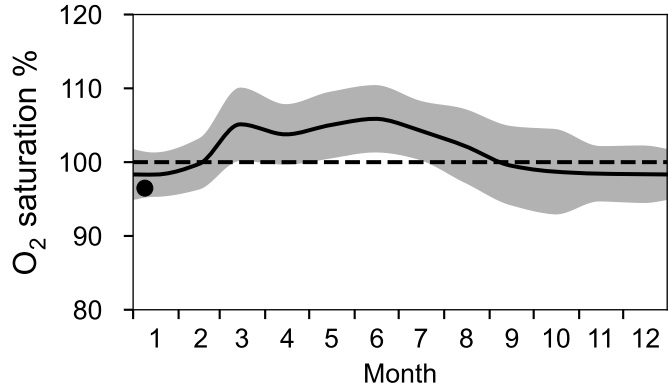
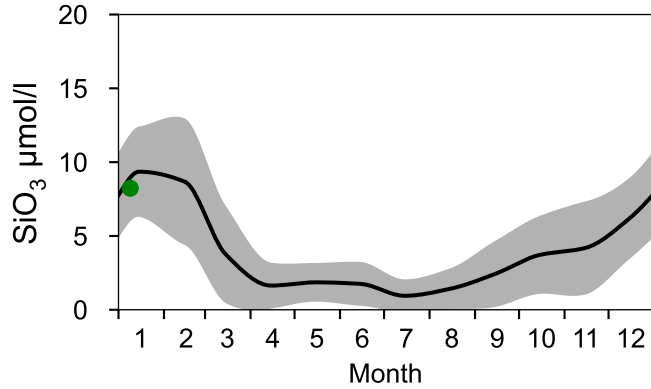
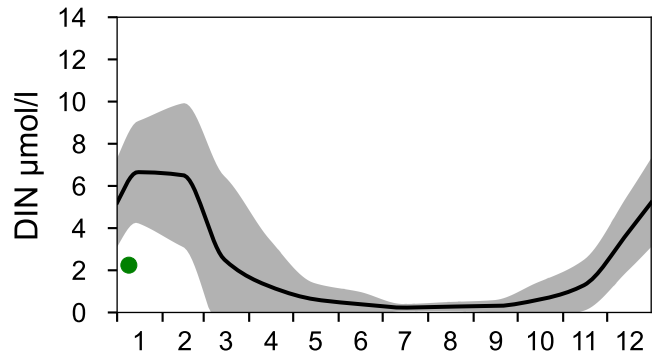
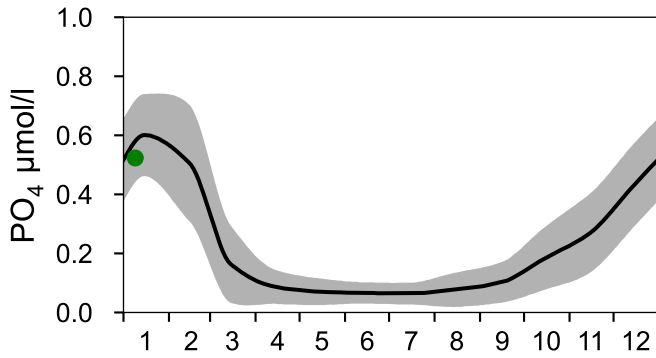
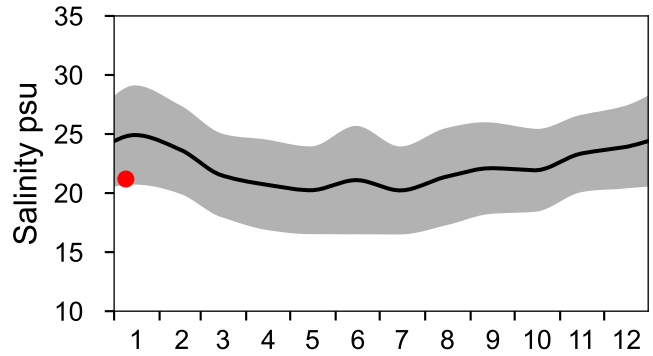
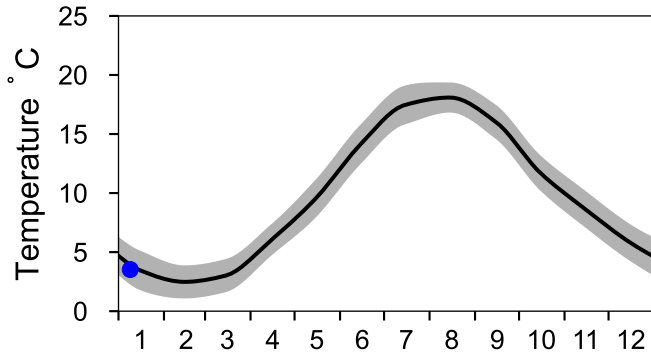


# STATION LAHOLM-3 (YG) SURFACE WATER (0-10 m)

## Annual Cycles

Statistics based on data from: Kattegatt

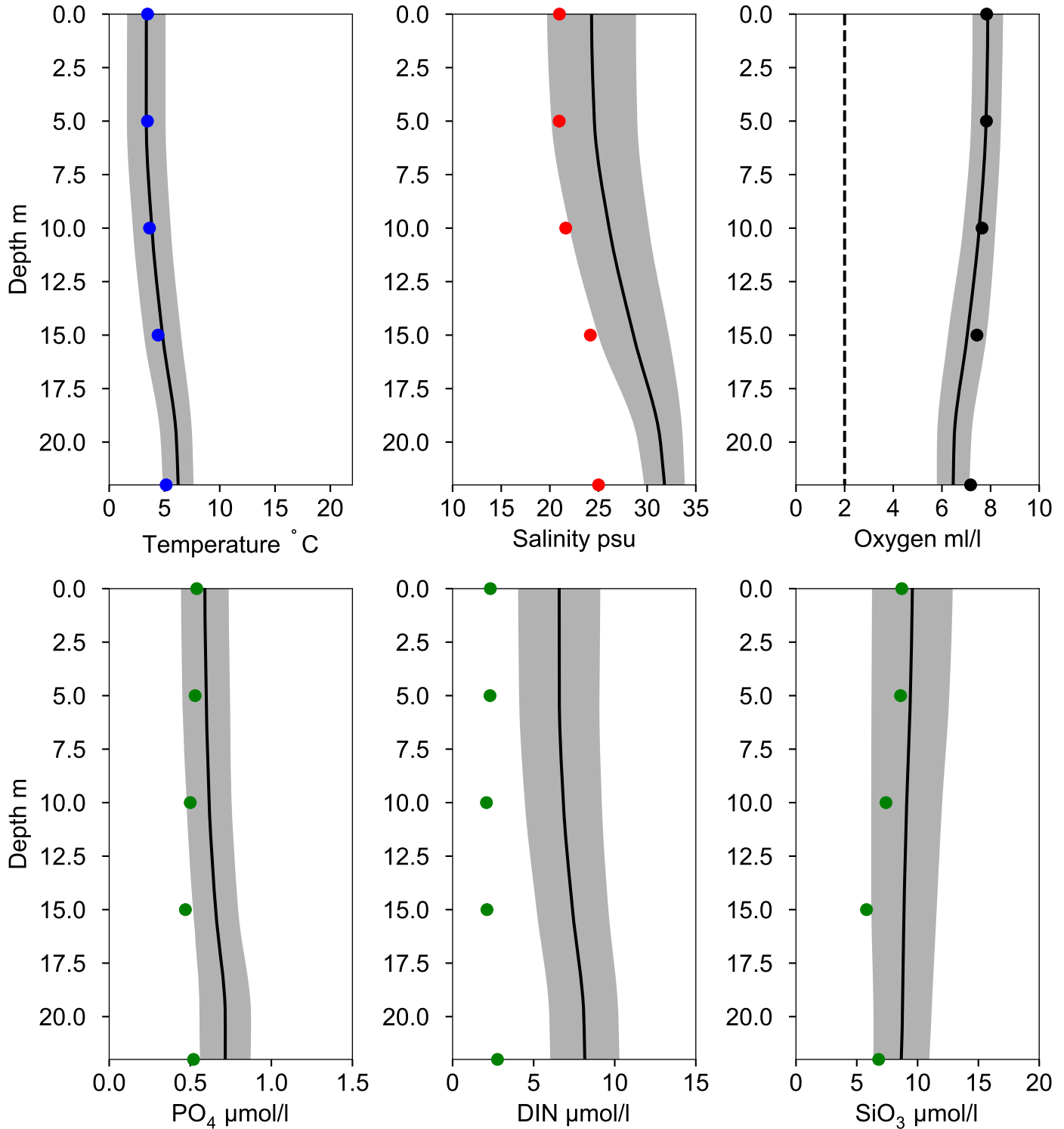
— Mean 1991-2020    St.Dev.    ● 2026



# Vertical profiles LAHOLM-3 (YG) January

Statistics based on data from: Kattegatt

— Mean 1991-2020    ■ St.Dev.    ● 2026-01-09

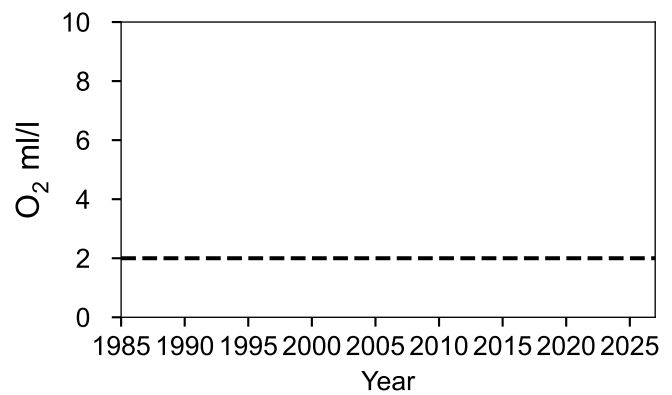
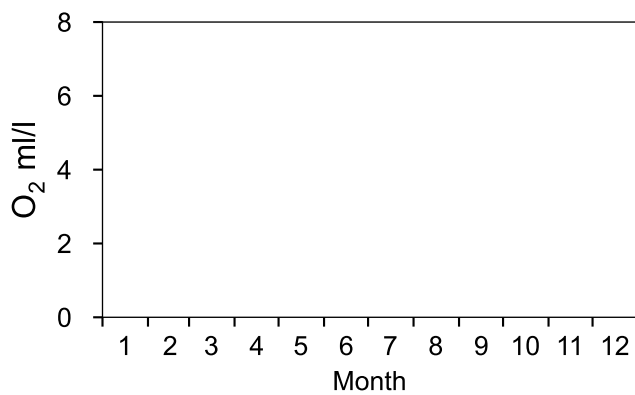
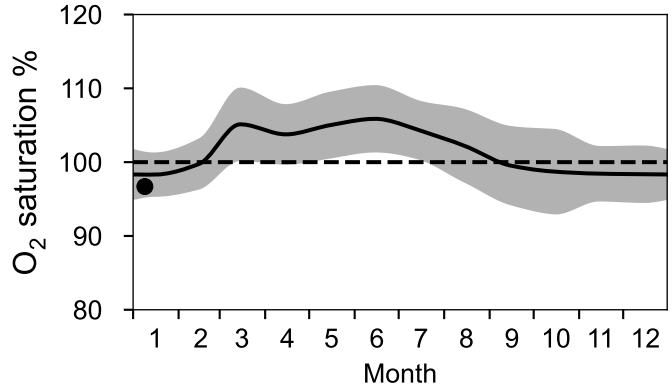
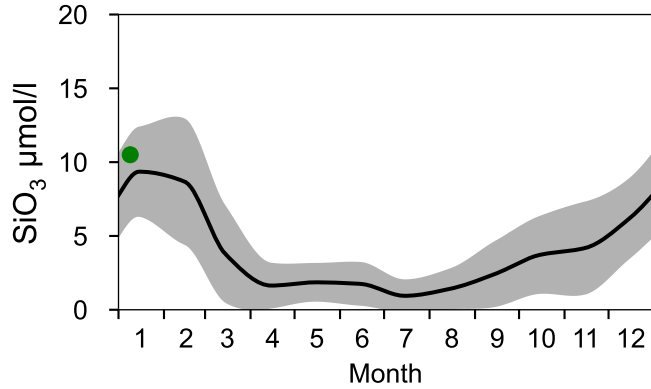
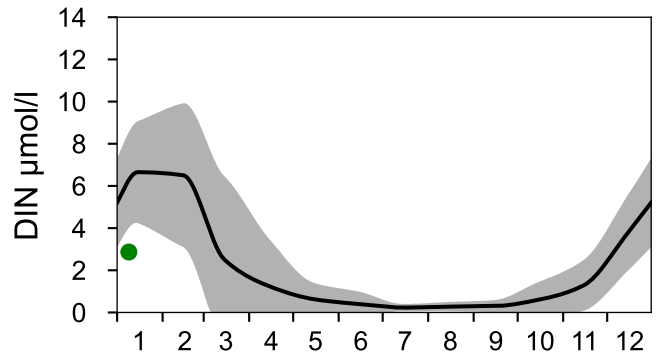
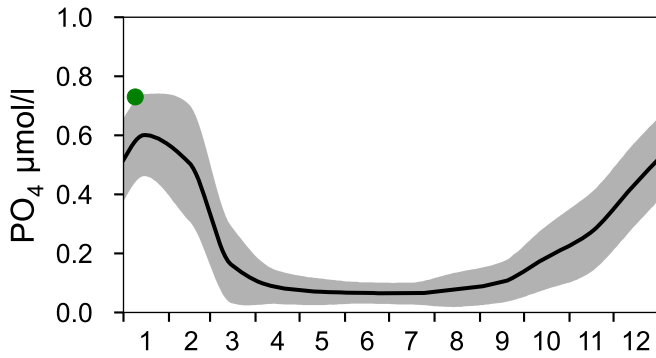
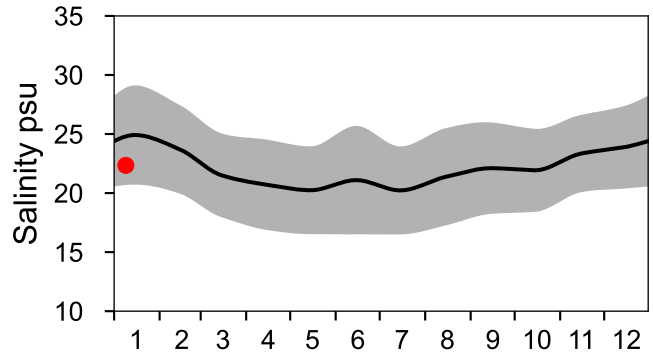
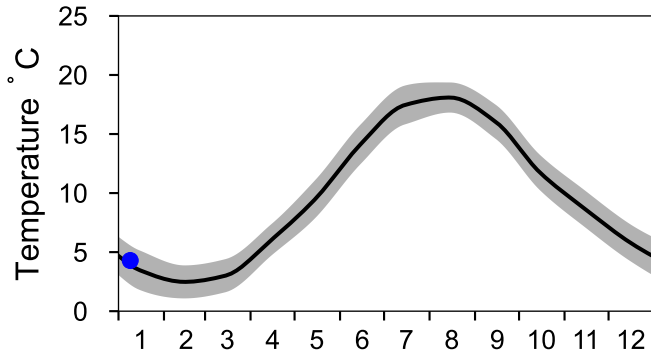


# STATION 925 KATTEGAT SW SURFACE WATER (0-10 m)

## Annual Cycles

Statistics based on data from: Kattegatt

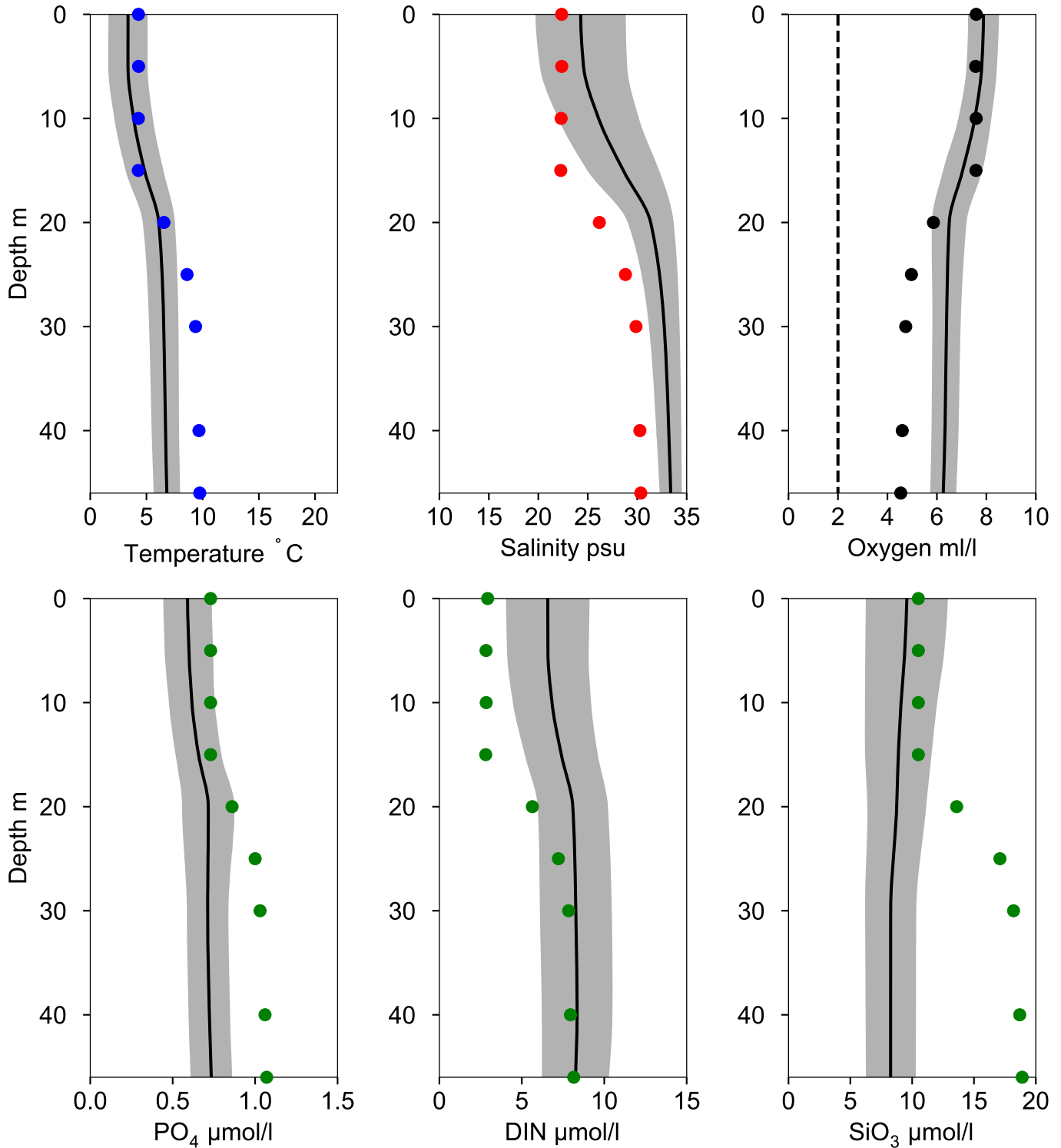
— Mean 1991-2020    St.Dev.    ● 2026



# Vertical profiles 925 KATTEGAT SW January

Statistics based on data from: Kattegatt

— Mean 1991-2020    St.Dev.    ● 2026-01-09

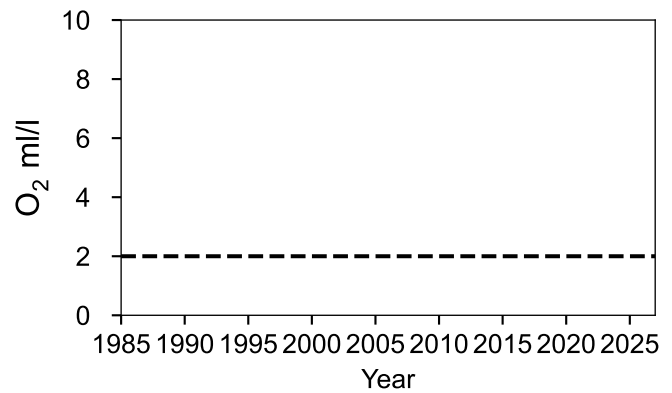
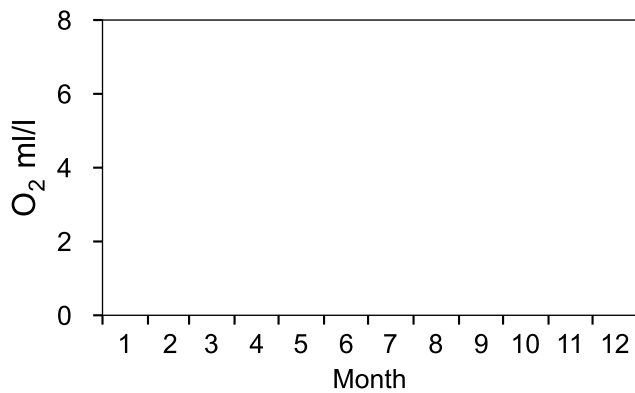
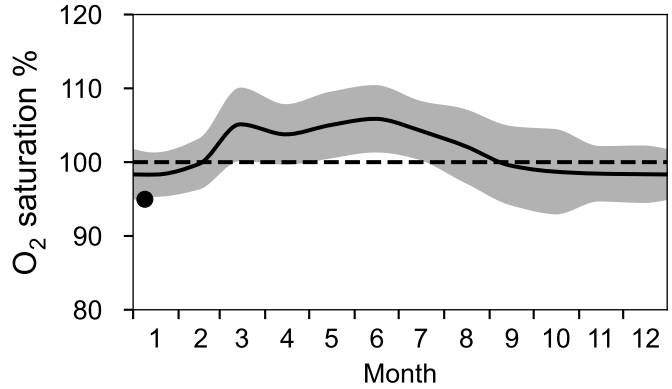
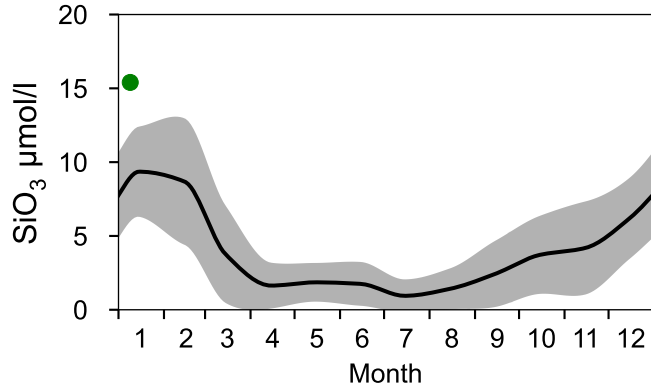
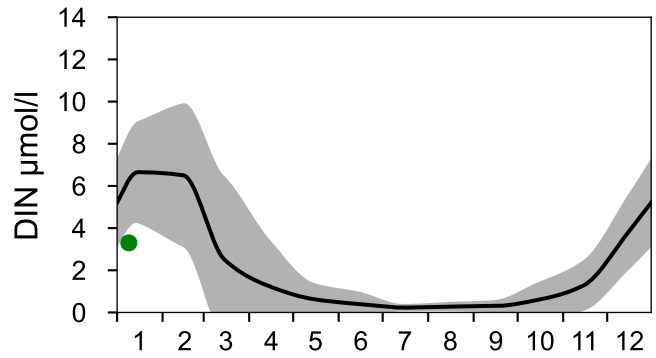
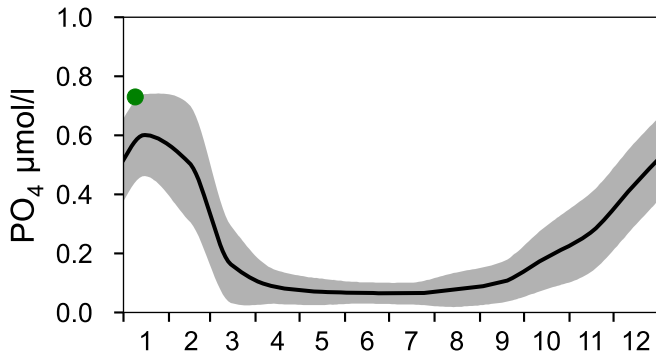
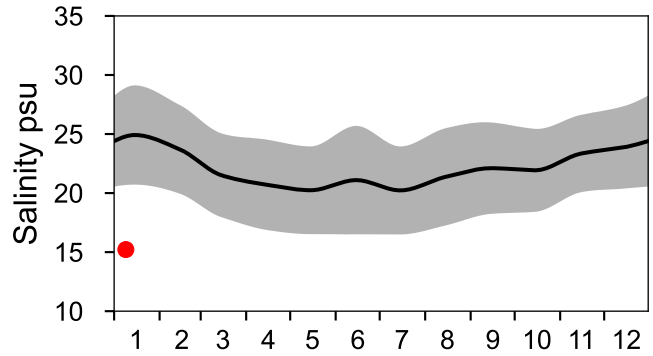
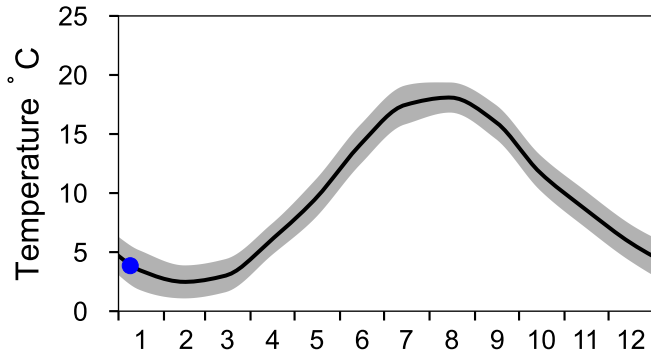


# STATION KULLEN SURFACE WATER (0-10 m)

## Annual Cycles

Statistics based on data from: Kattegatt

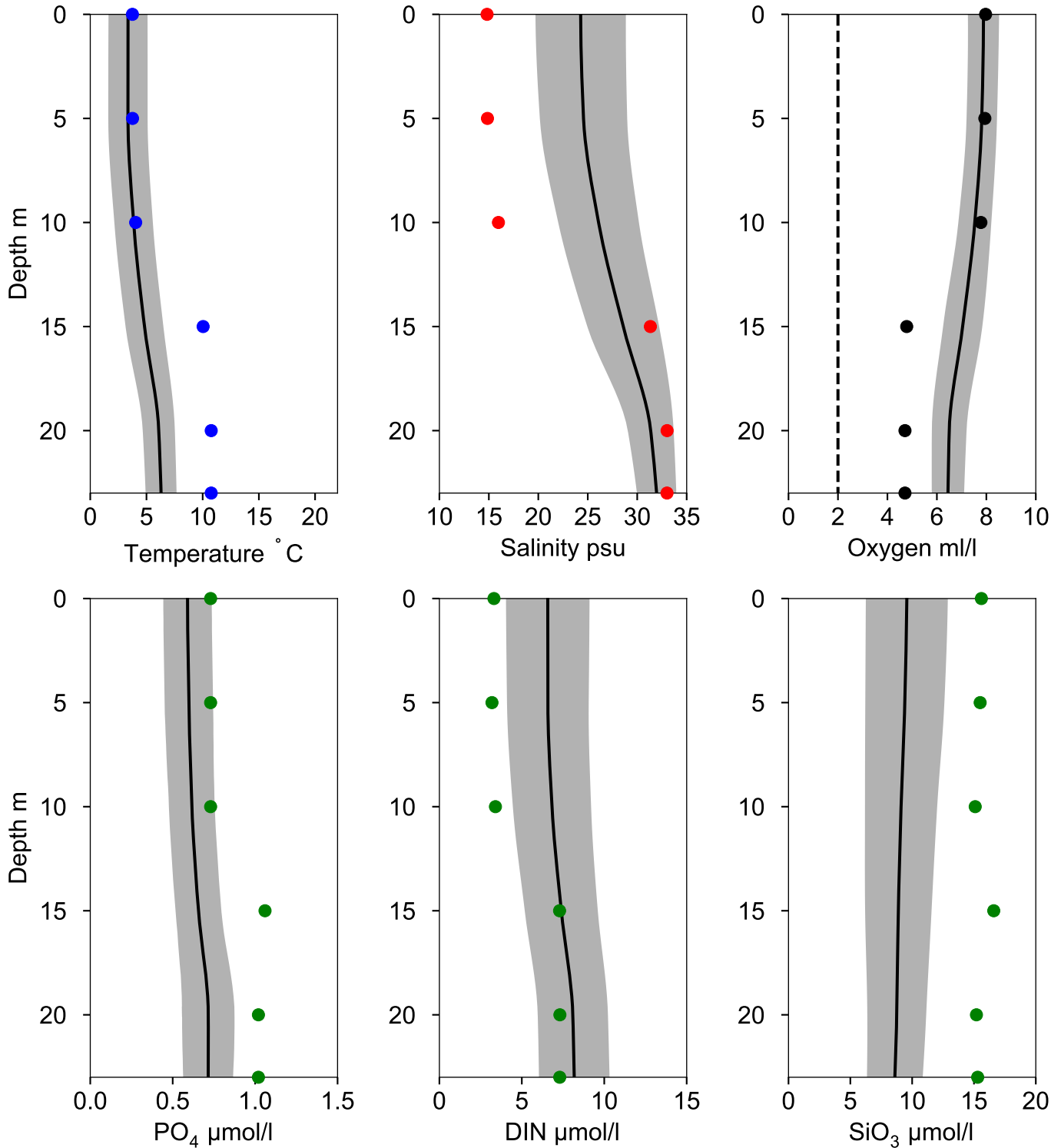
— Mean 1991-2020    St.Dev.    ● 2026



# Vertical profiles KULLEN January

Statistics based on data from: Kattegatt

— Mean 1991-2020    ■ St.Dev.    ● 2026-01-09

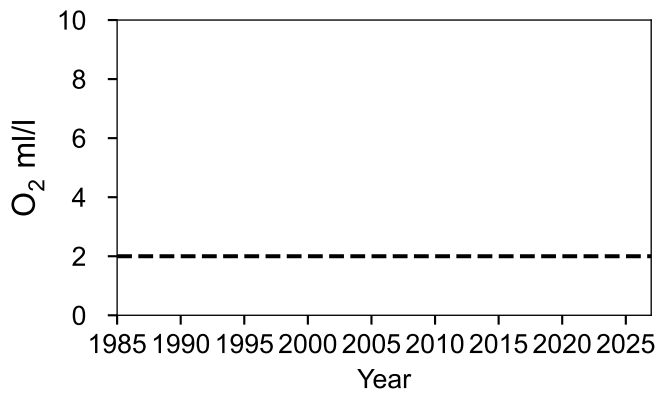
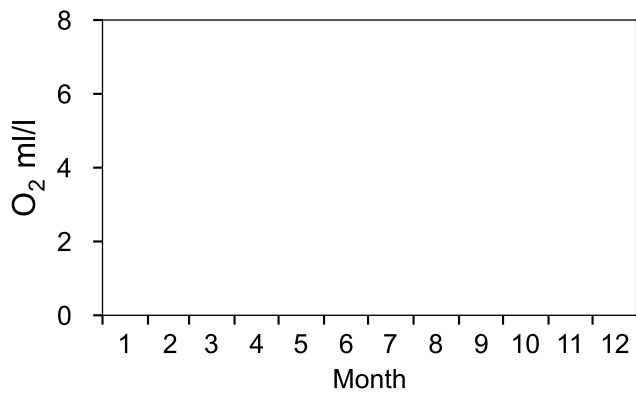
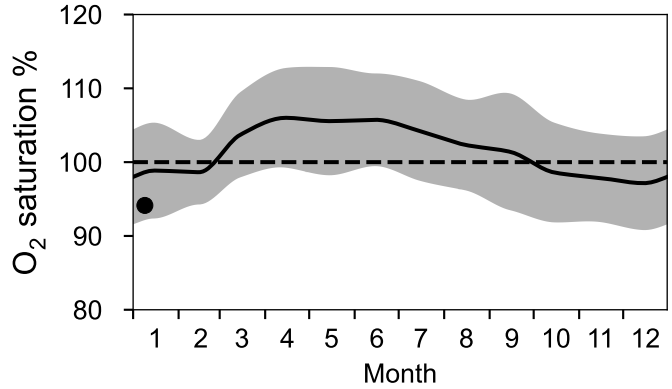
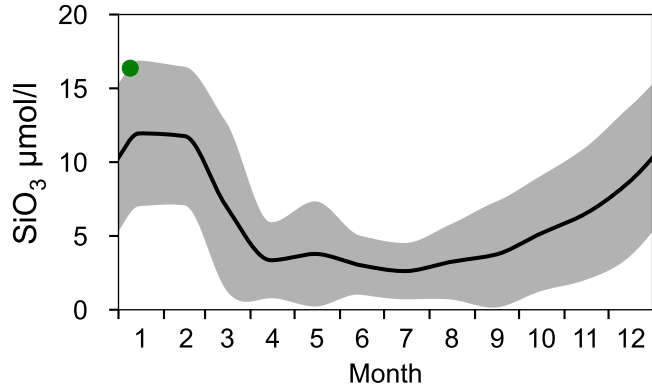
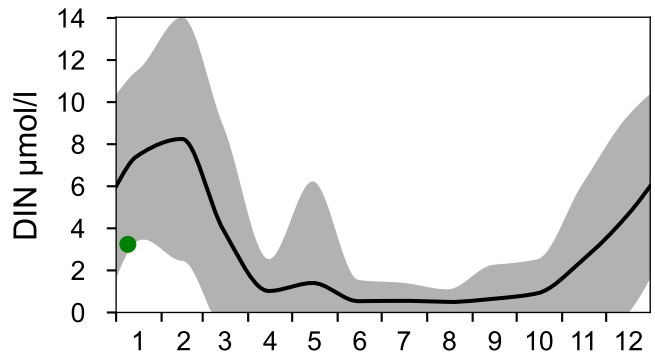
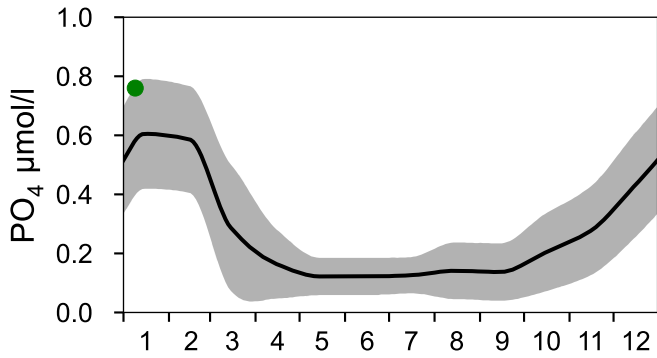
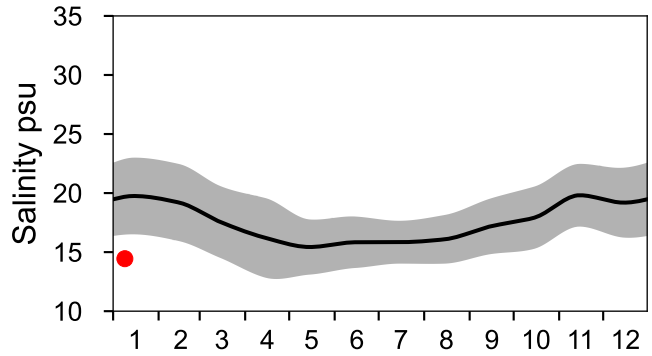
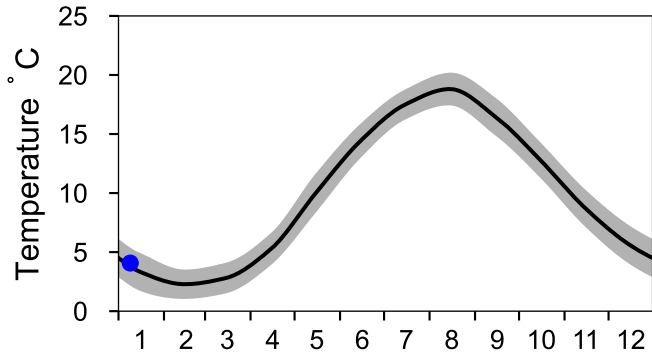


# STATION ÖRESUND-12X SURFACE WATER (0-10 m)

## Annual Cycles

Statistics based on data from: Södra Hallands och norra Öresunds kustvatten

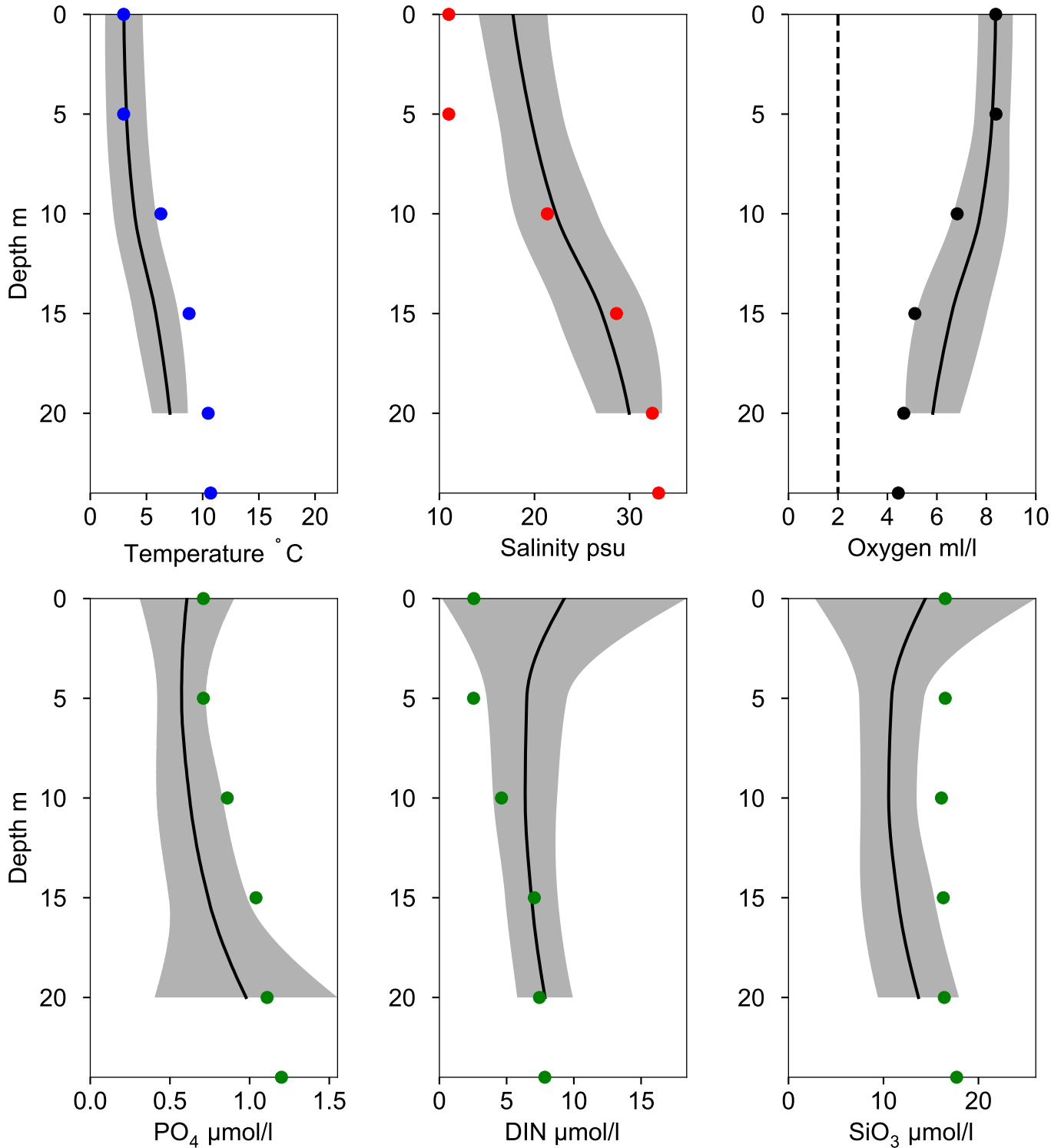
— Mean 1991-2020    St.Dev.    ● 2026



# Vertical profiles ÖRESUND-12X January

Statistics based on data from: Södra Hallands och norra Öresunds kustvatten

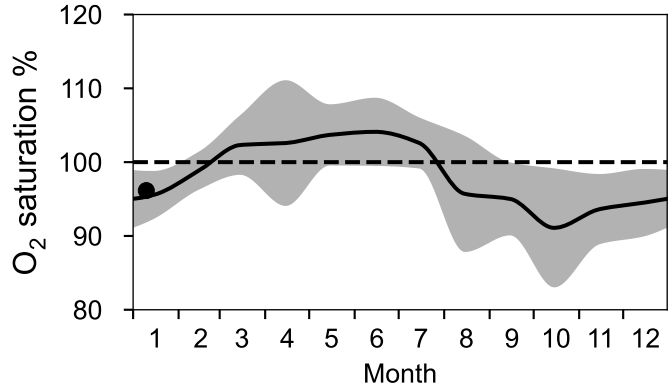
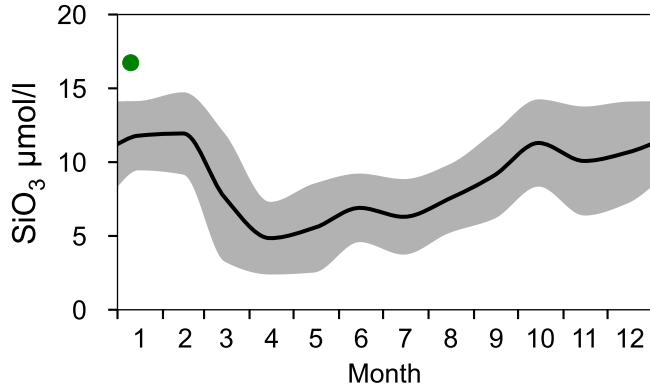
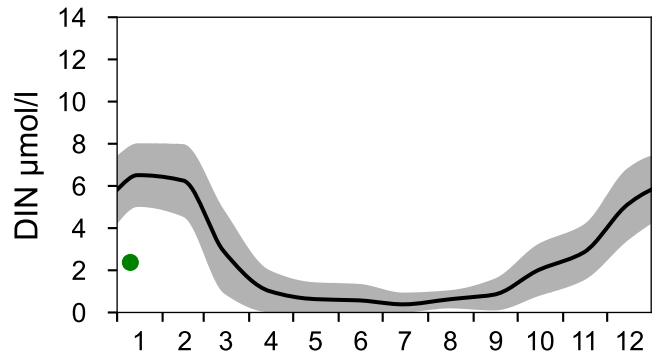
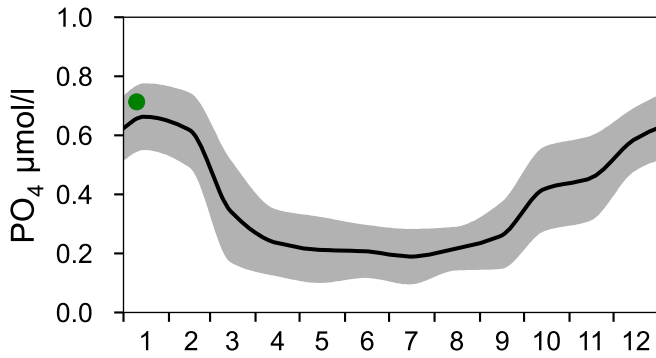
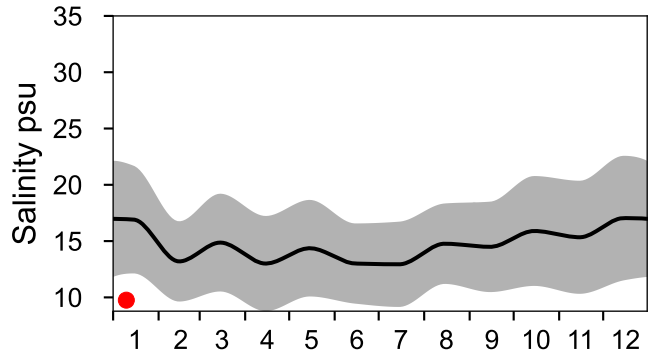
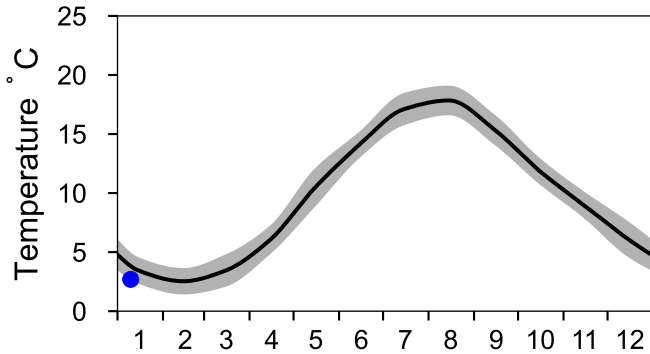
— Mean 1991-2020    ■ St.Dev.    ● 2026-01-09



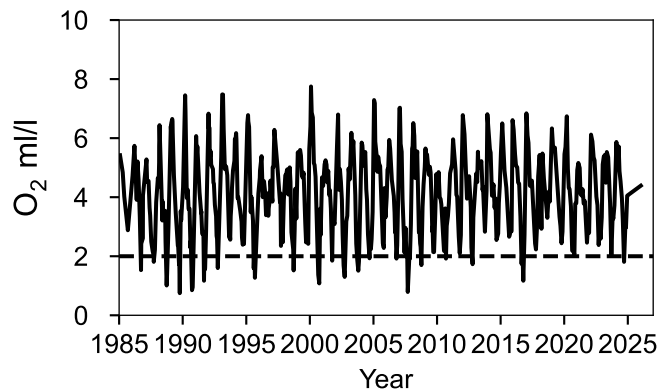
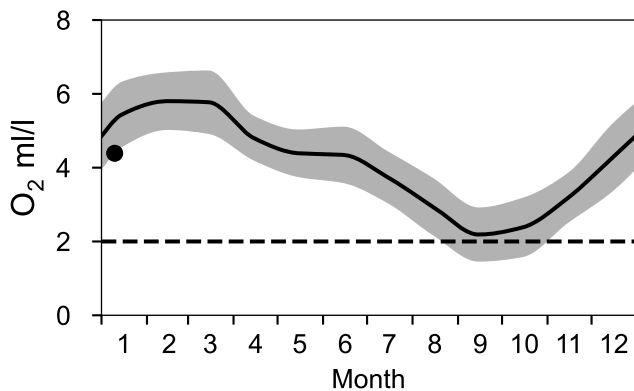
# STATION W LANDSKRONA SURFACE WATER (0-10 m)

Annual Cycles

— Mean 1991-2020    St.Dev.    ● 2026

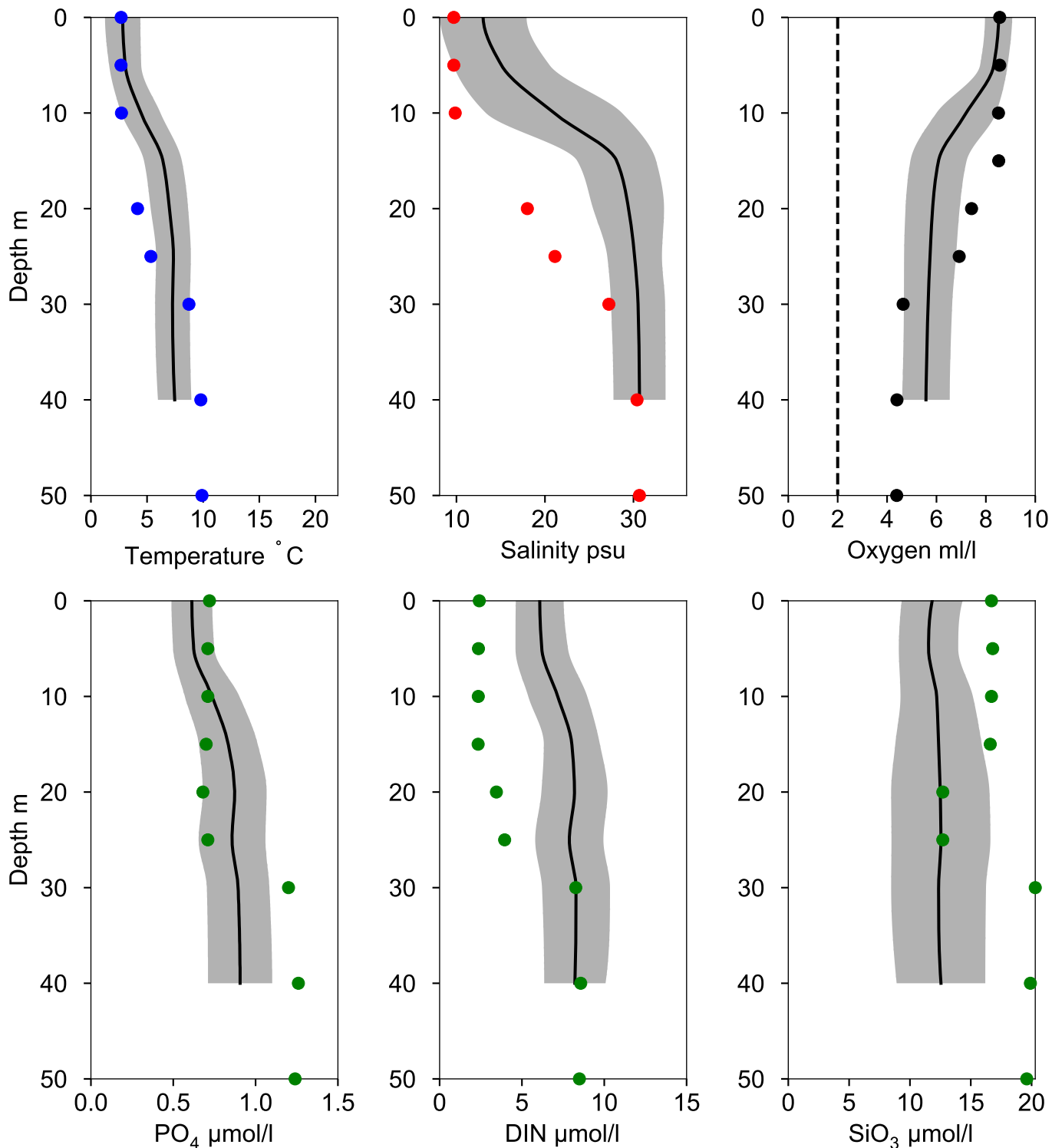


## OXYGEN IN BOTTOM WATER (depth >= 40 m)



# Vertical profiles W LANDSKRONA January

— Mean 1991-2020    St.Dev.    ● 2026-01-10

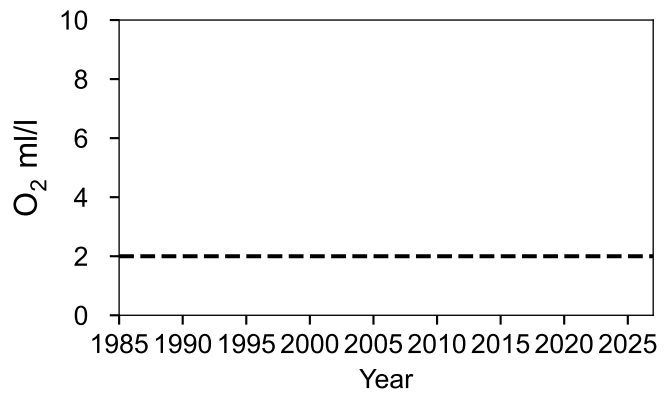
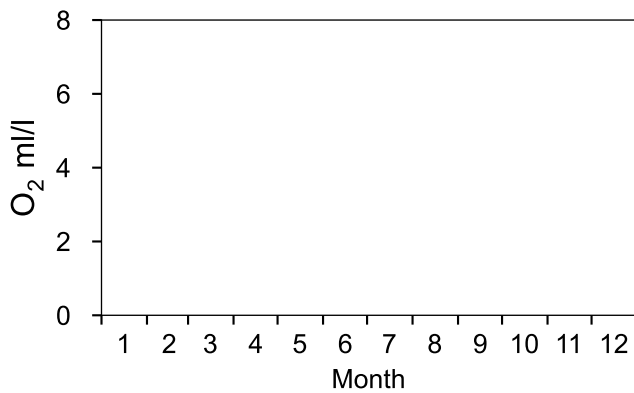
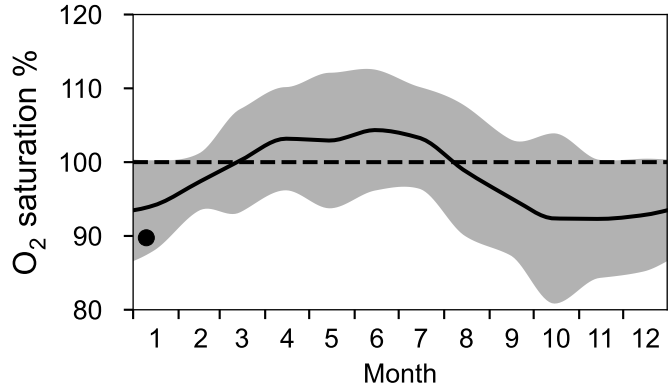
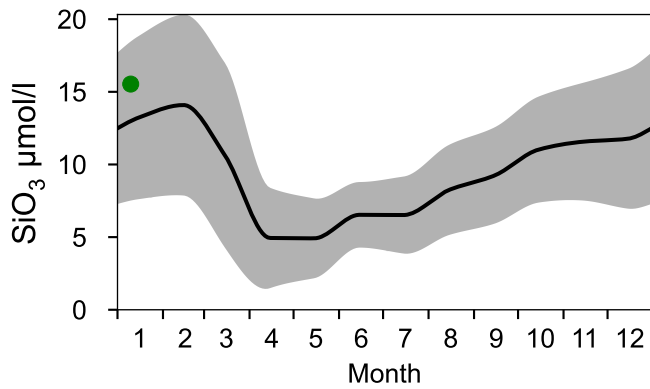
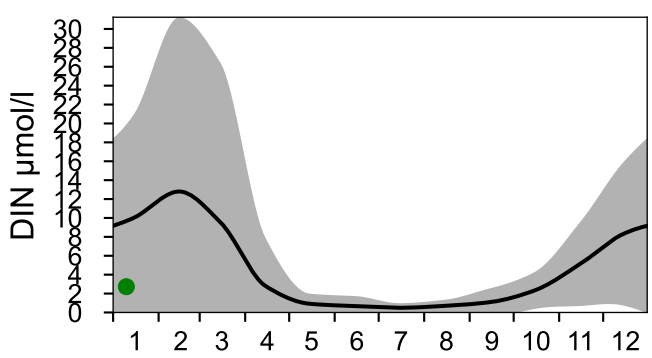
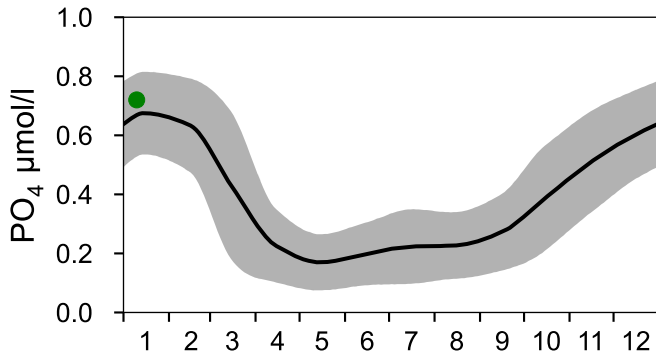
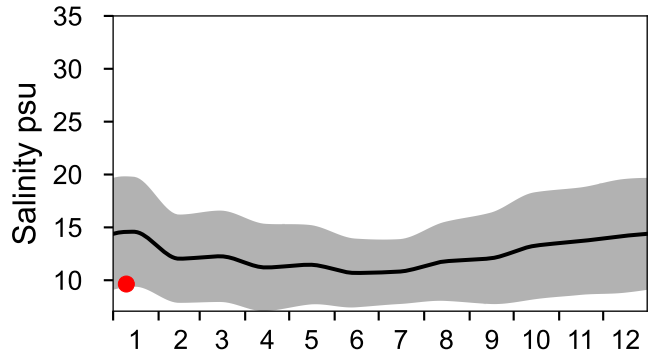
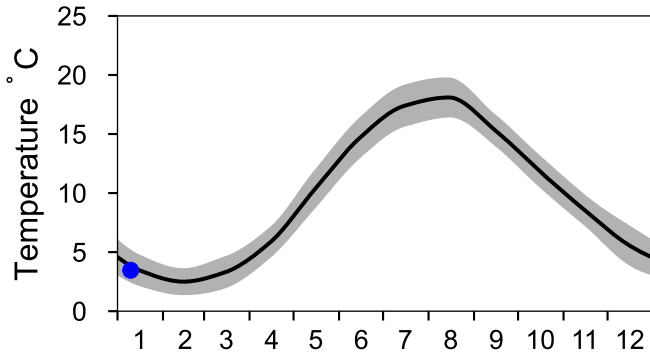


# STATION ÖRESUND-7 SURFACE WATER (0-10 m)

## Annual Cycles

Statistics based on data from: Öresund

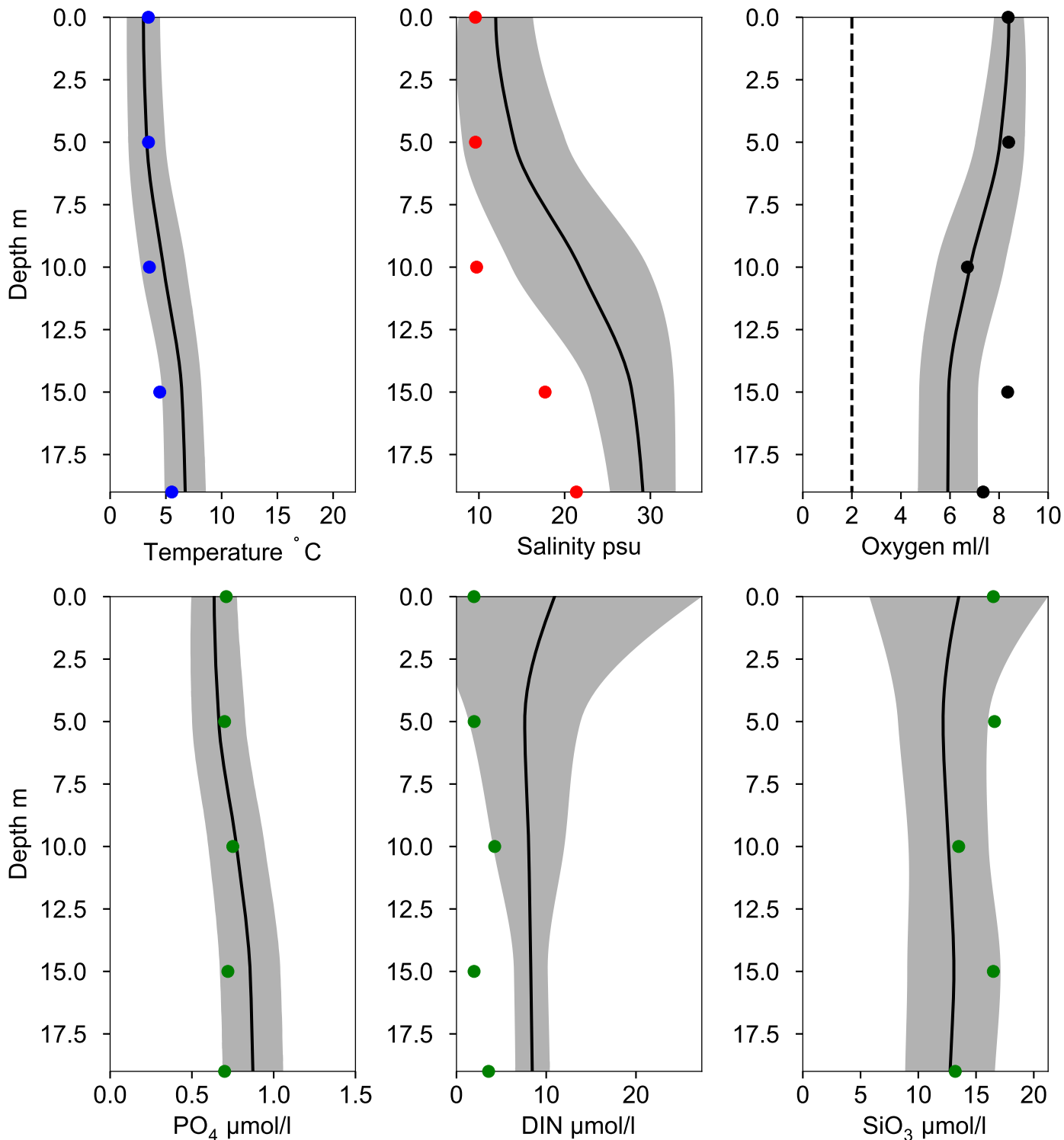
— Mean 1991-2020    ■ St.Dev.    ● 2026



# Vertical profiles ÖRESUND-7 January

Statistics based on data from: Öresund

— Mean 1991-2020    ■ St.Dev.    ● 2026-01-10

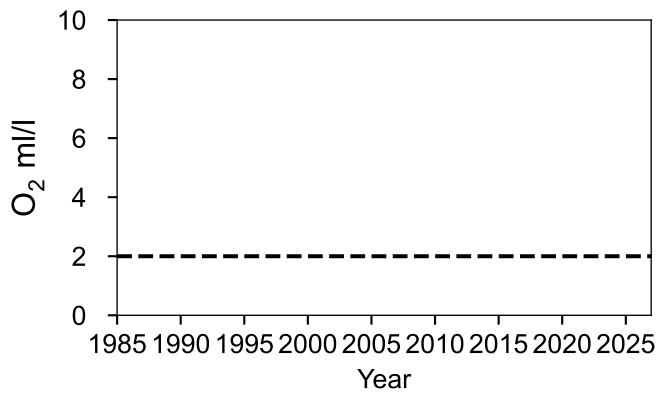
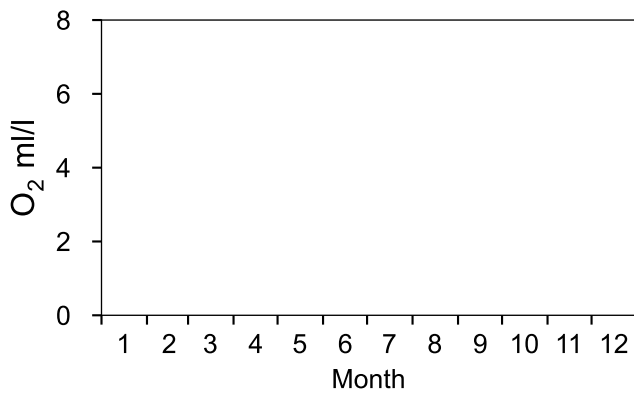
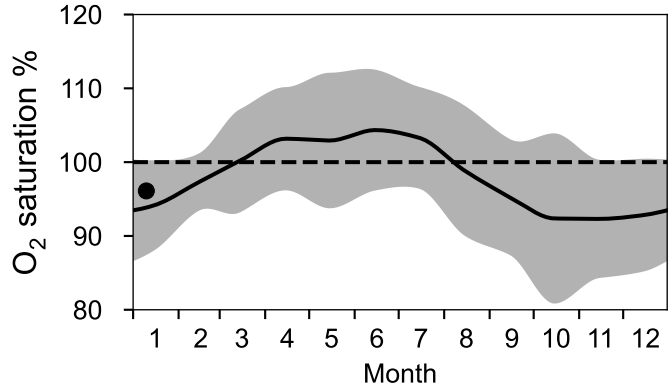
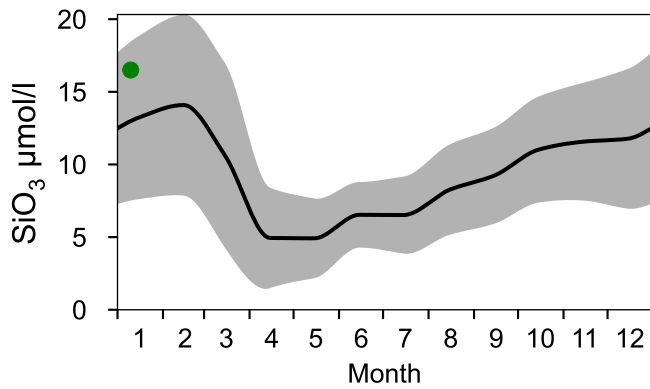
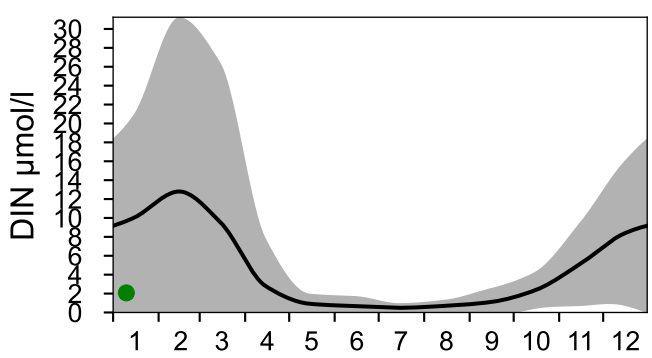
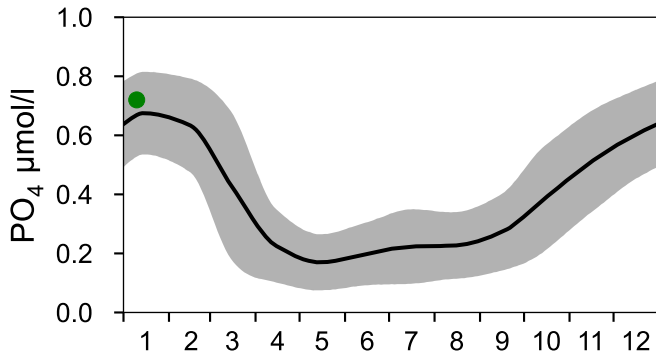
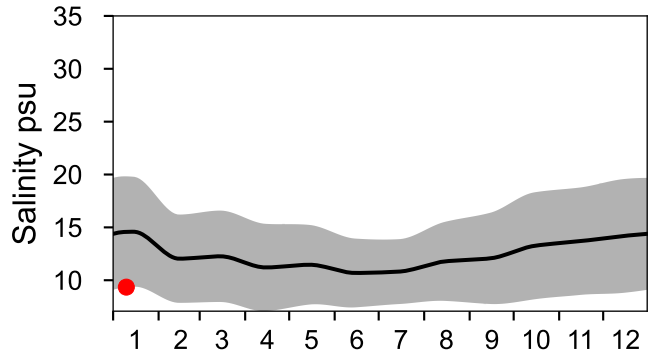
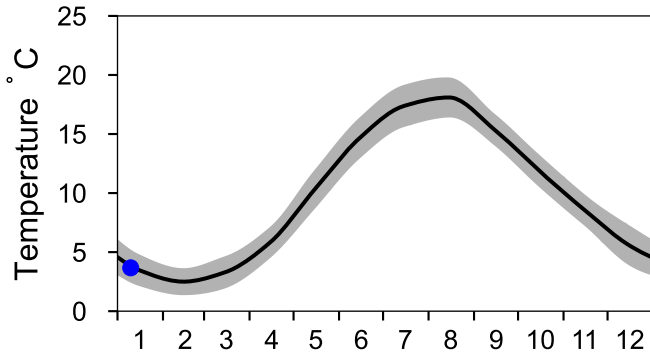


# STATION ÖRESUND-4 SURFACE WATER (0-10 m)

## Annual Cycles

Statistics based on data from: Öresund

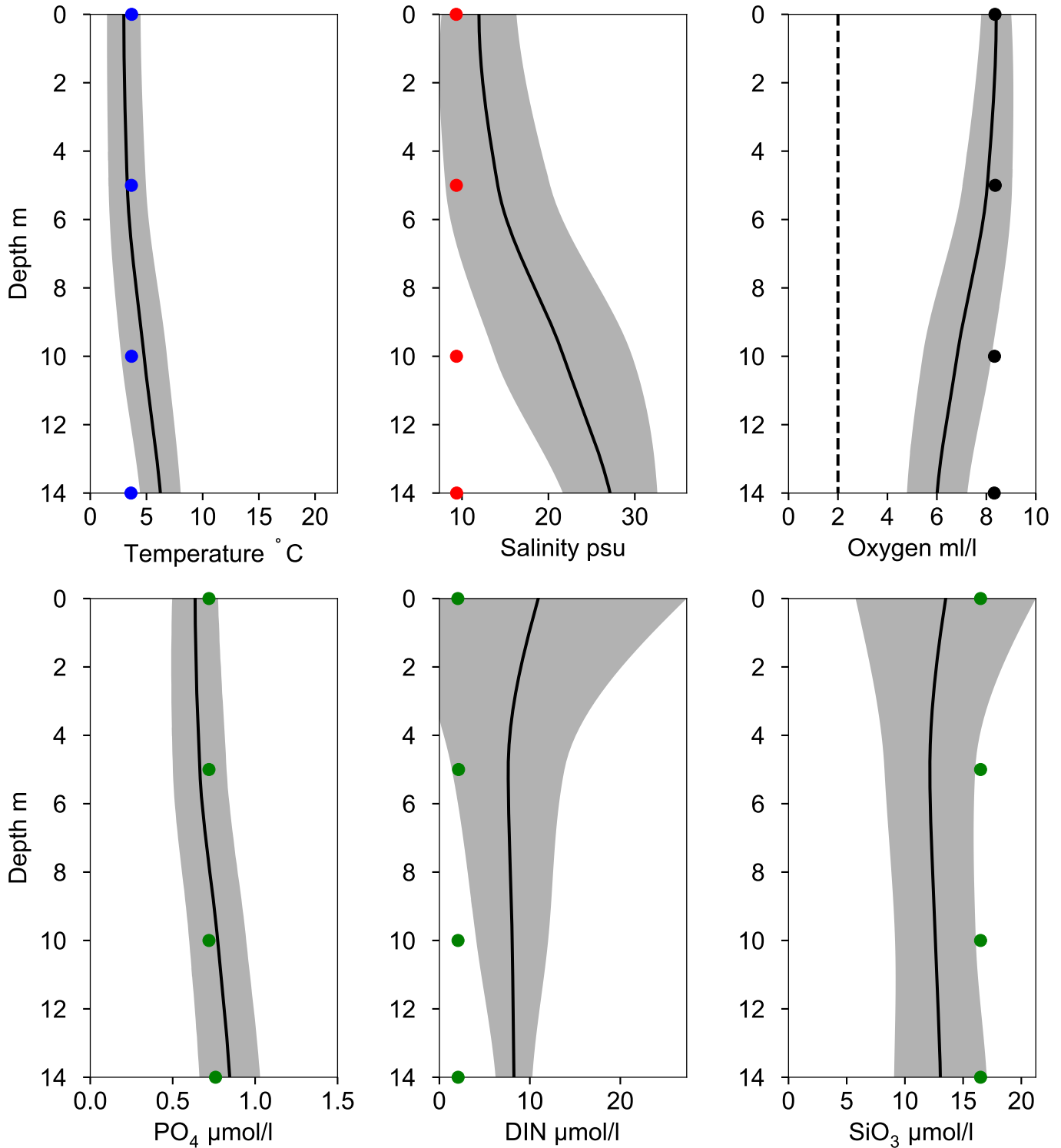
— Mean 1991-2020    St.Dev.    ● 2026



# Vertical profiles ÖRESUND-4 January

Statistics based on data from: Öresund

— Mean 1991-2020    ■ St.Dev.    ● 2026-01-10

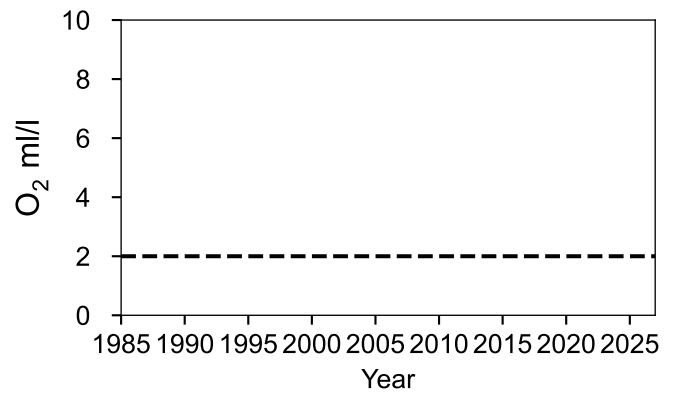
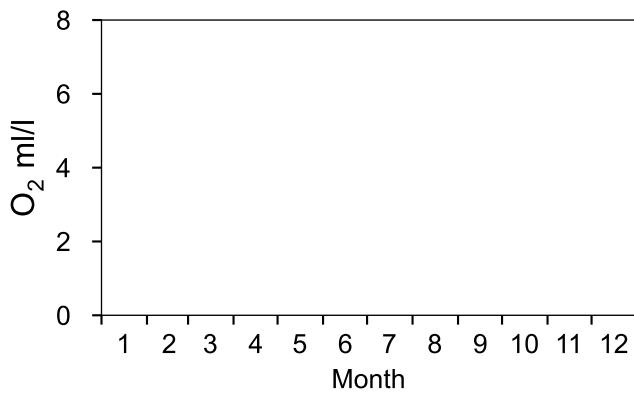
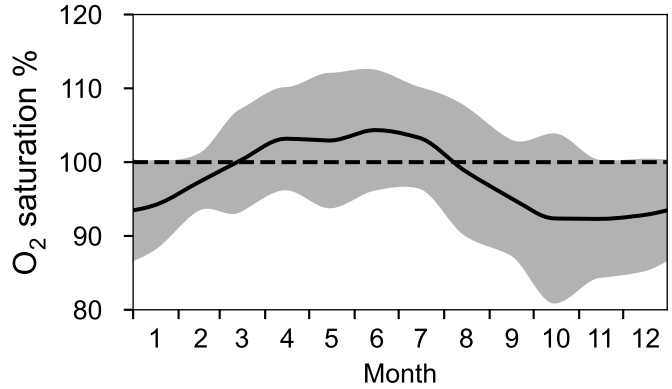
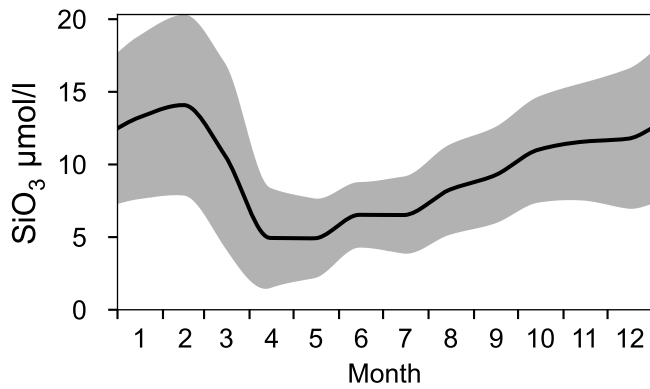
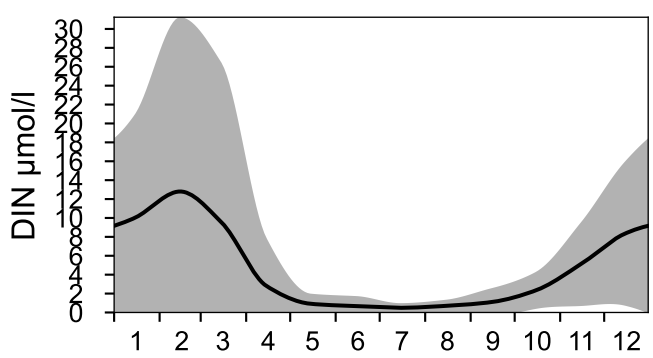
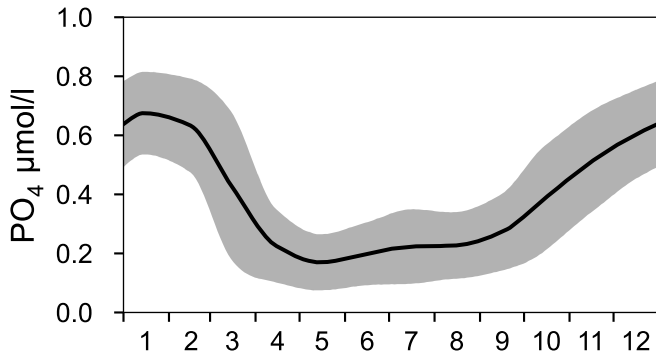
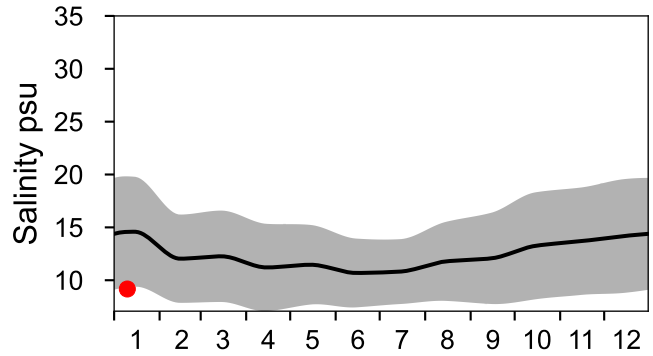
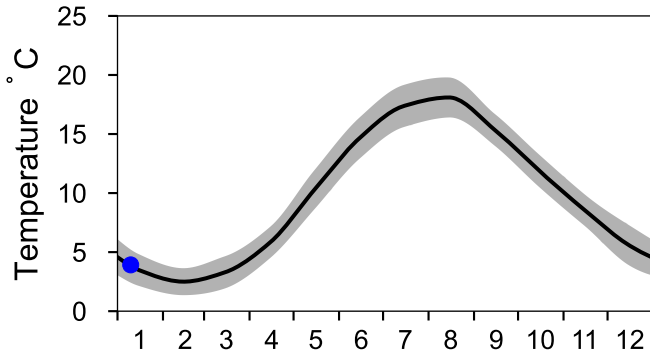


# STATION FLINTEN7 SURFACE WATER (0-10 m)

## Annual Cycles

Statistics based on data from: Öresund

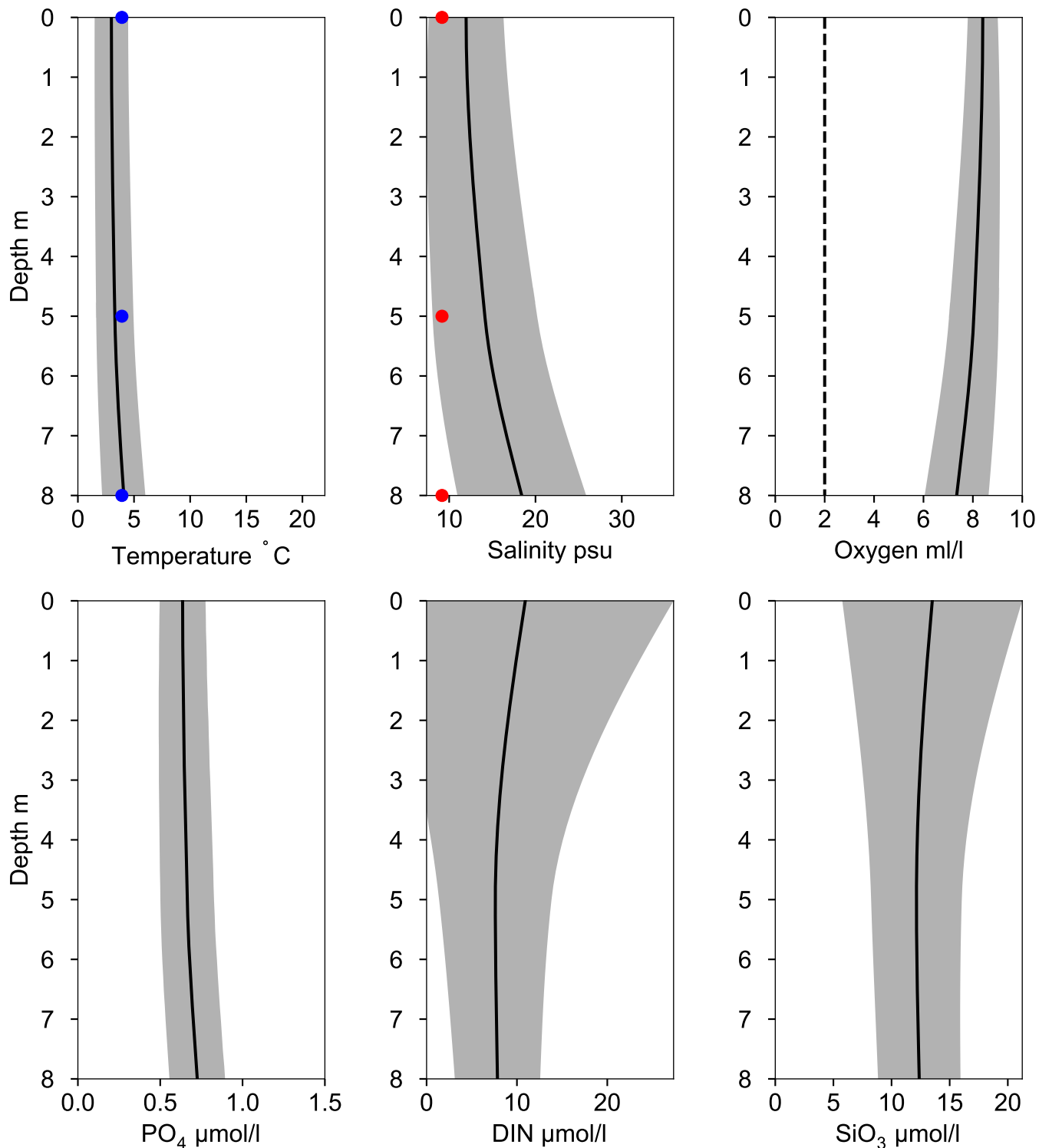
— Mean 1991-2020    ■ St.Dev.    ● 2026



# Vertical profiles FLINTEN7 January

Statistics based on data from: Öresund

— Mean 1991-2020    ■ St.Dev.    ● 2026-01-10

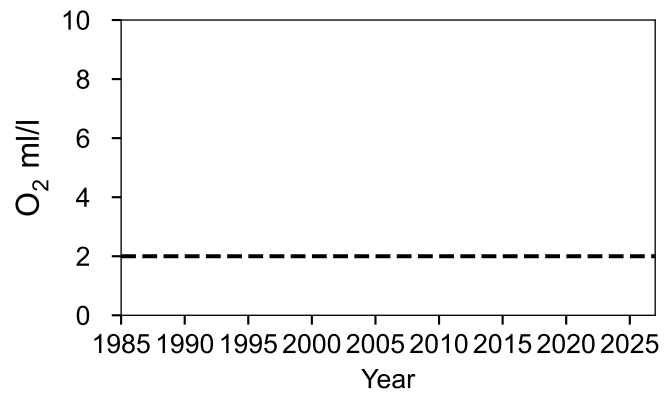
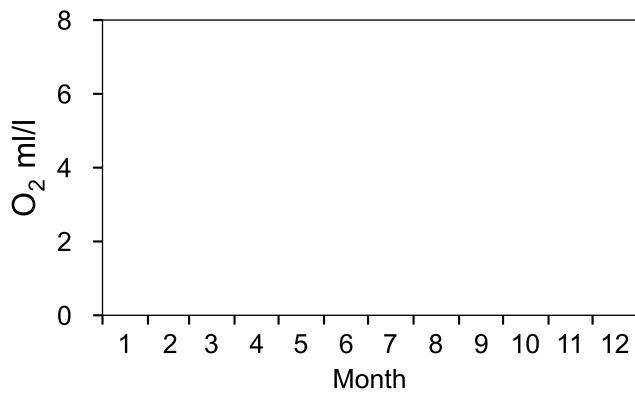
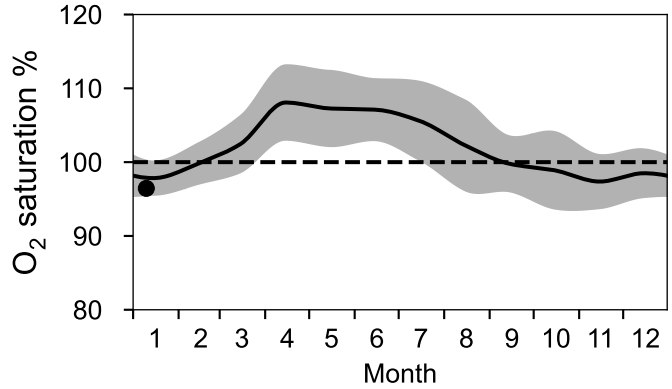
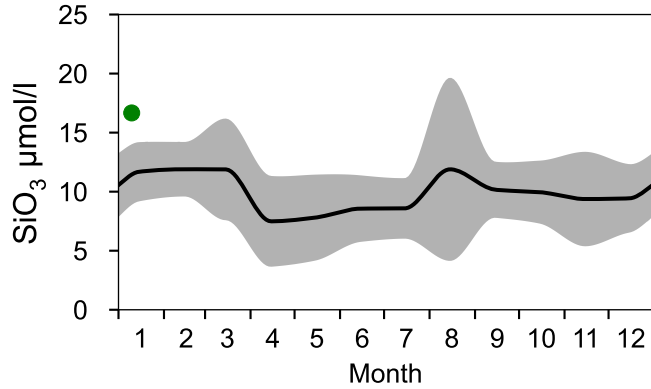
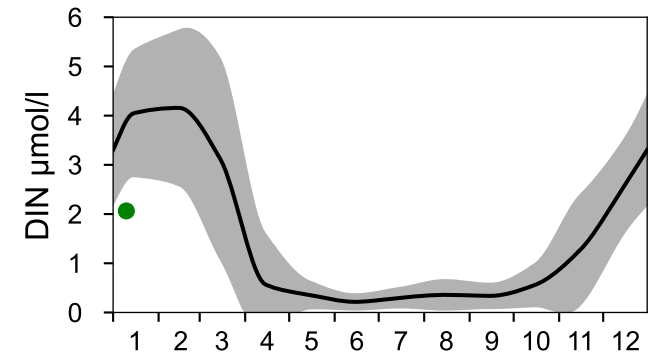
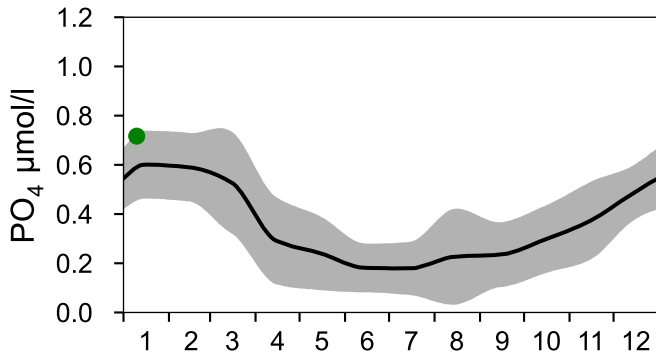
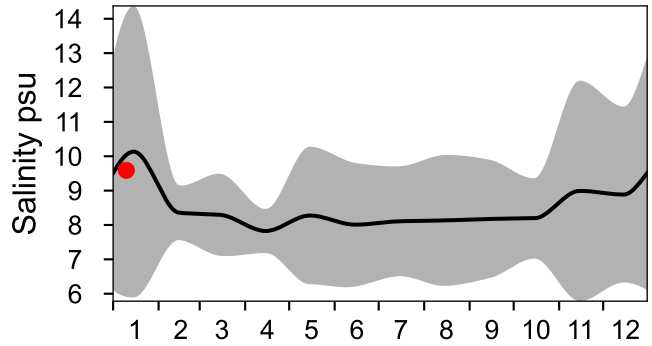
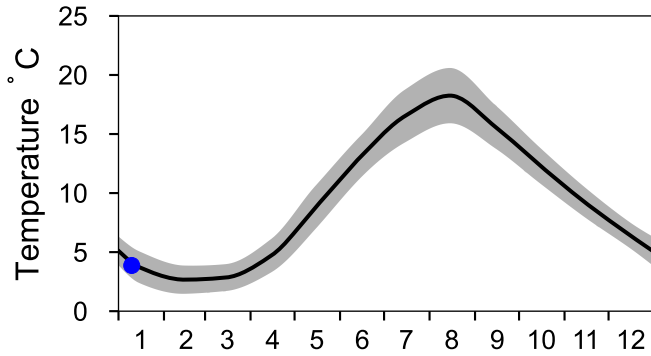


# STATION ÖRESUND-2 SURFACE WATER (0-10 m)

## Annual Cycles

Statistics based on data from: Arkonahavet

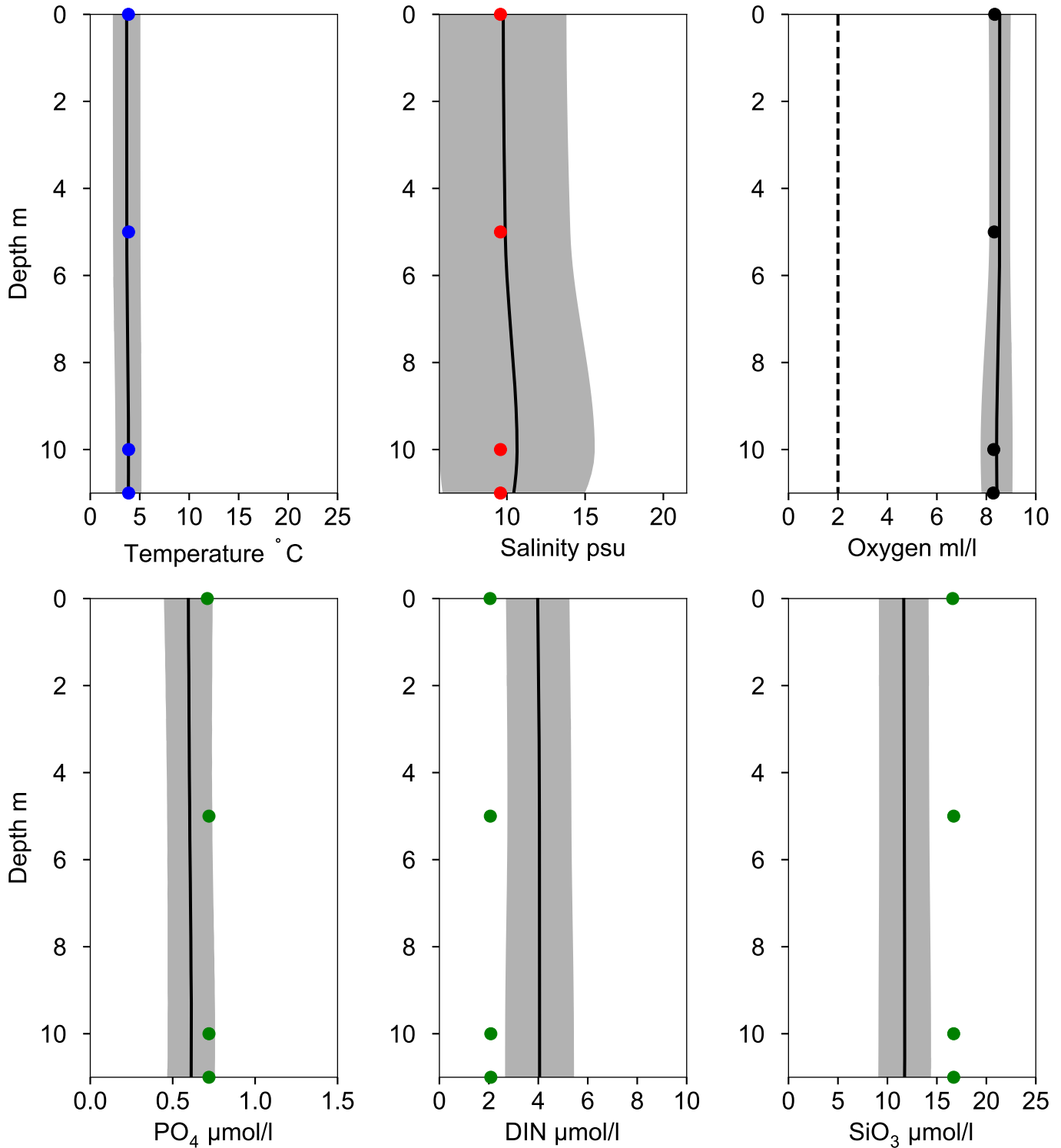
— Mean 1991-2020    St.Dev.    ● 2026



# Vertical profiles ÖRESUND-2 January

Statistics based on data from: Arkonahavet

— Mean 1991-2020    ■ St.Dev.    ● 2026-01-10

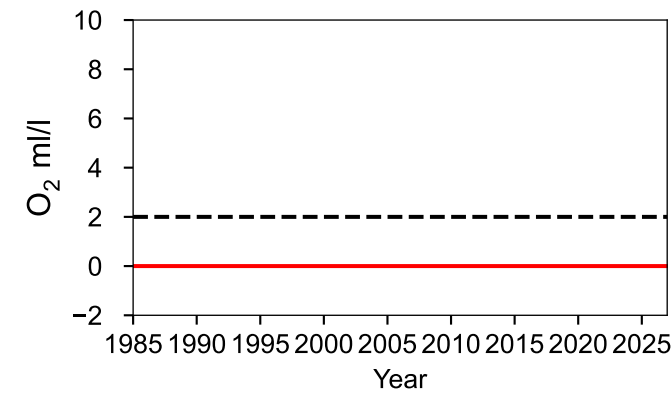
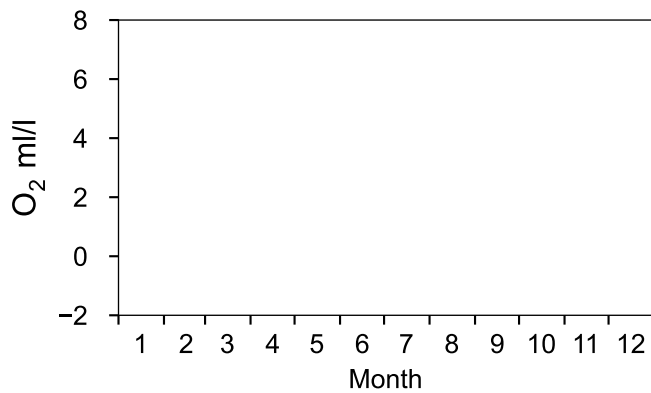
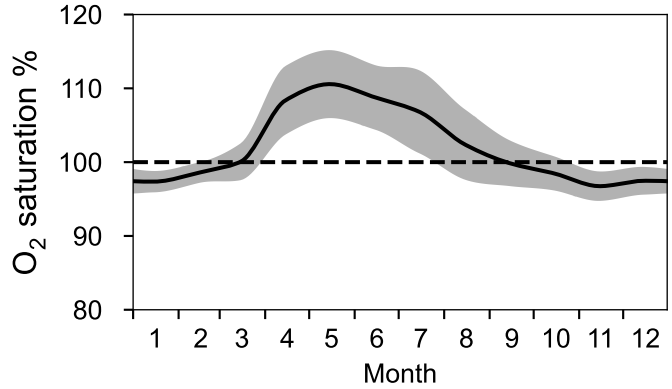
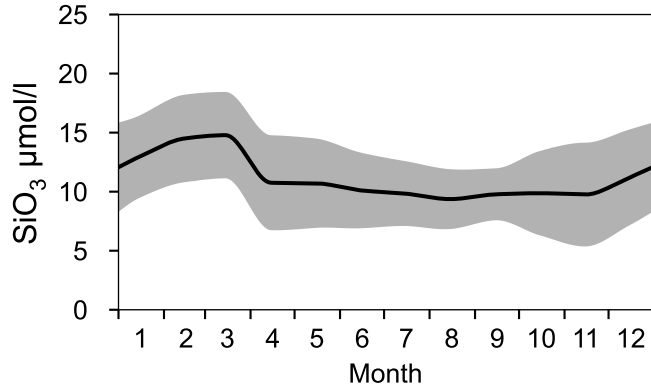
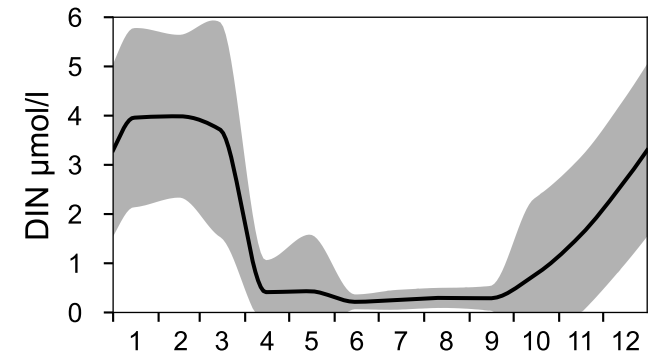
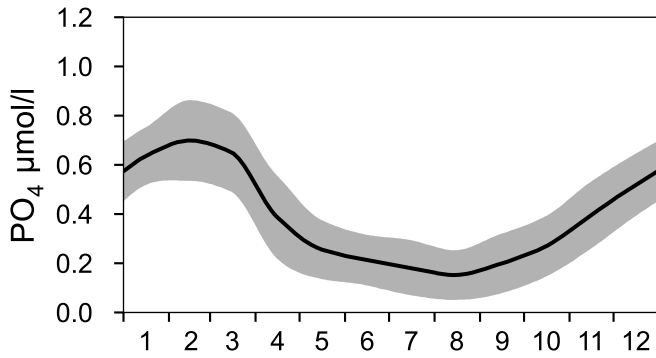
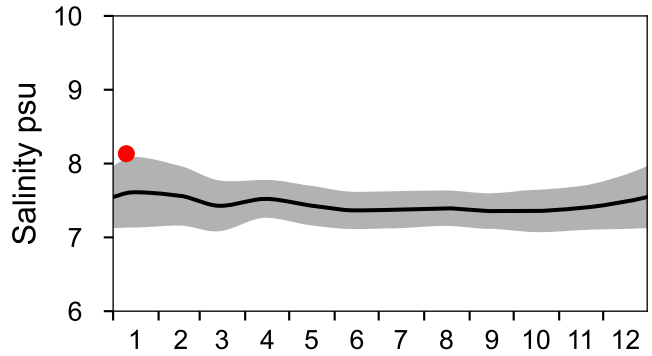
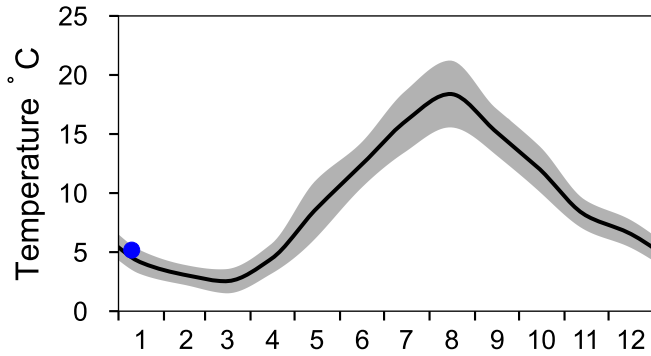


# STATION 5W BY3 SURFACE WATER (0-10 m)

## Annual Cycles

Statistics based on data from: Bornholmshavet

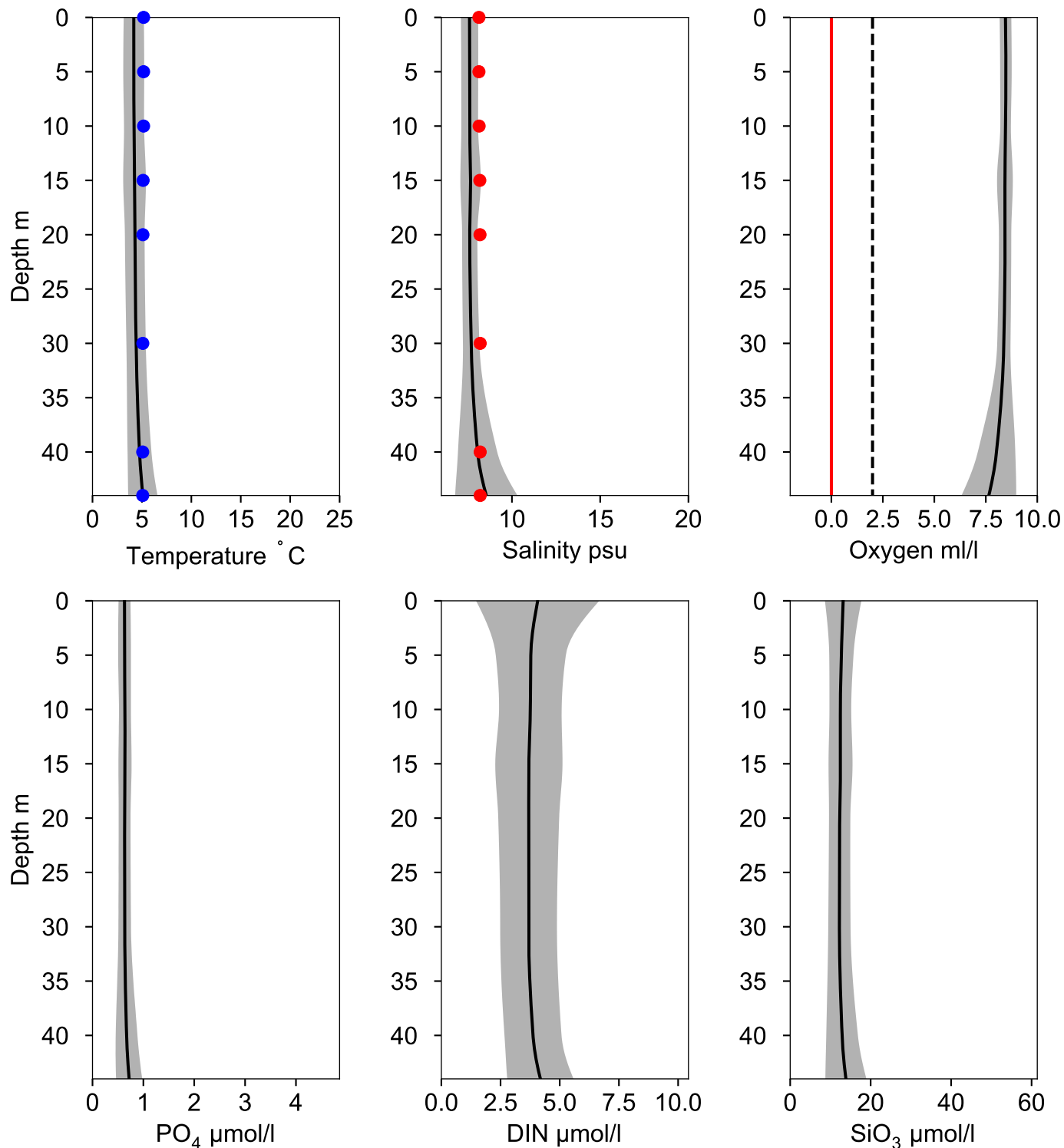
— Mean 1991-2020    St.Dev.    ● 2026



# Vertical profiles 5W BY3 January

Statistics based on data from: Bornholmshavet

— Mean 1991-2020    ■ St.Dev.    ● 2026-01-10



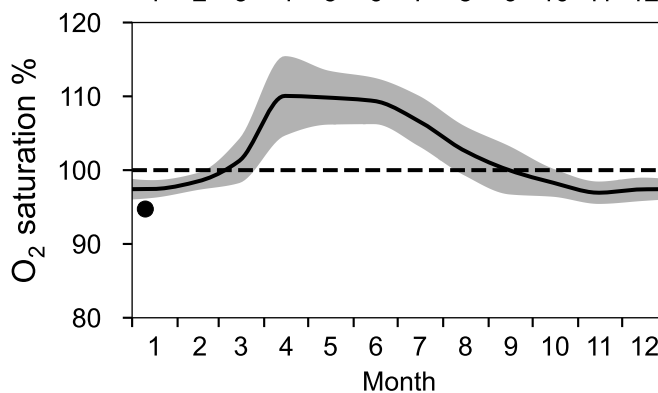
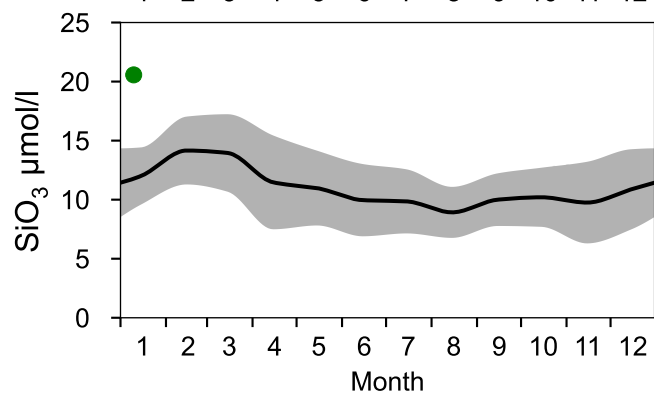
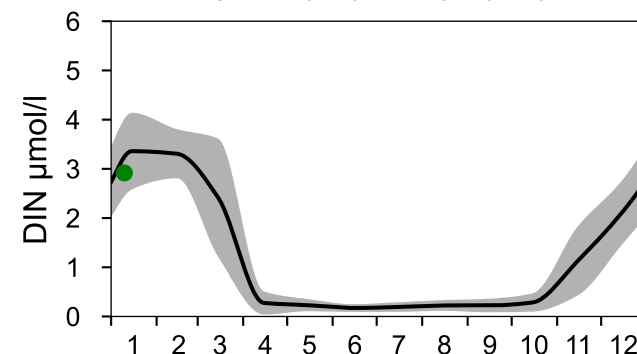
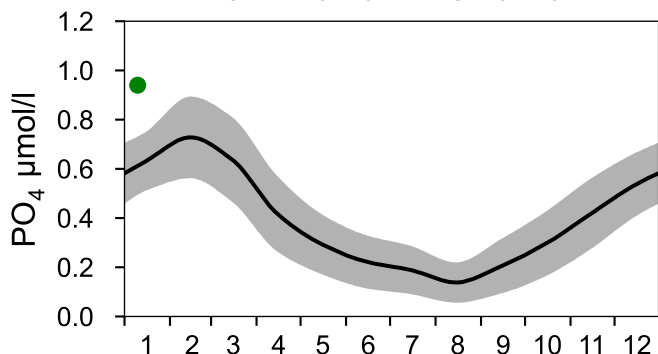
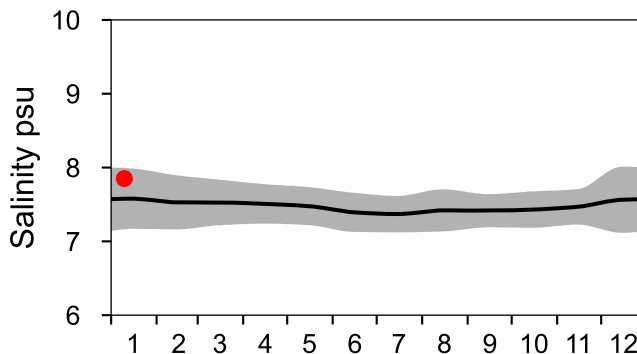
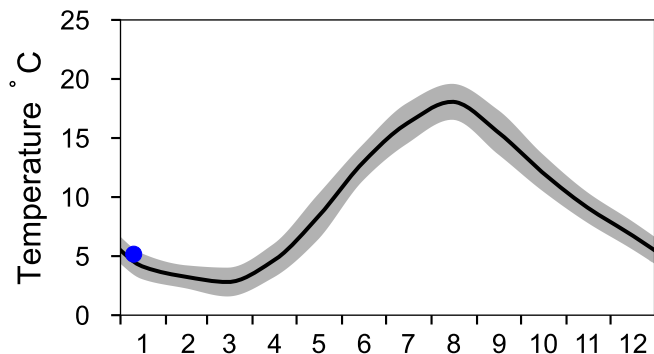
# STATION HANÖBUKTEN SURFACE WATER (0-10 m)

Annual Cycles

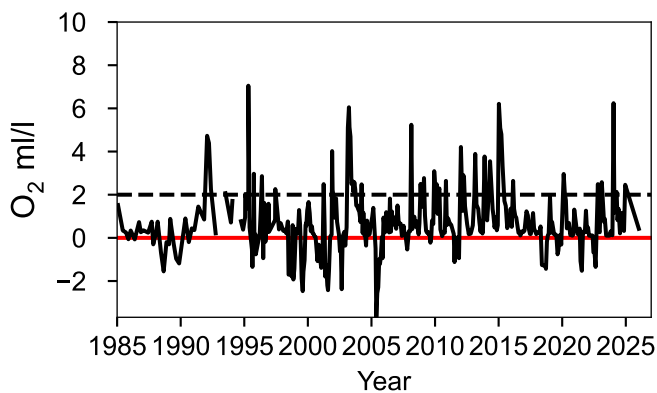
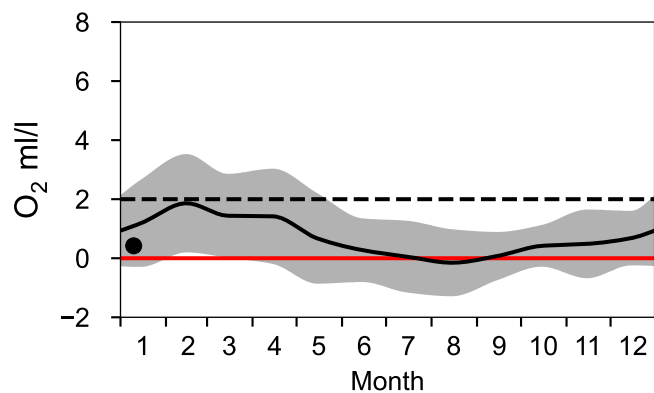
— Mean 1991-2020

■ St.Dev.

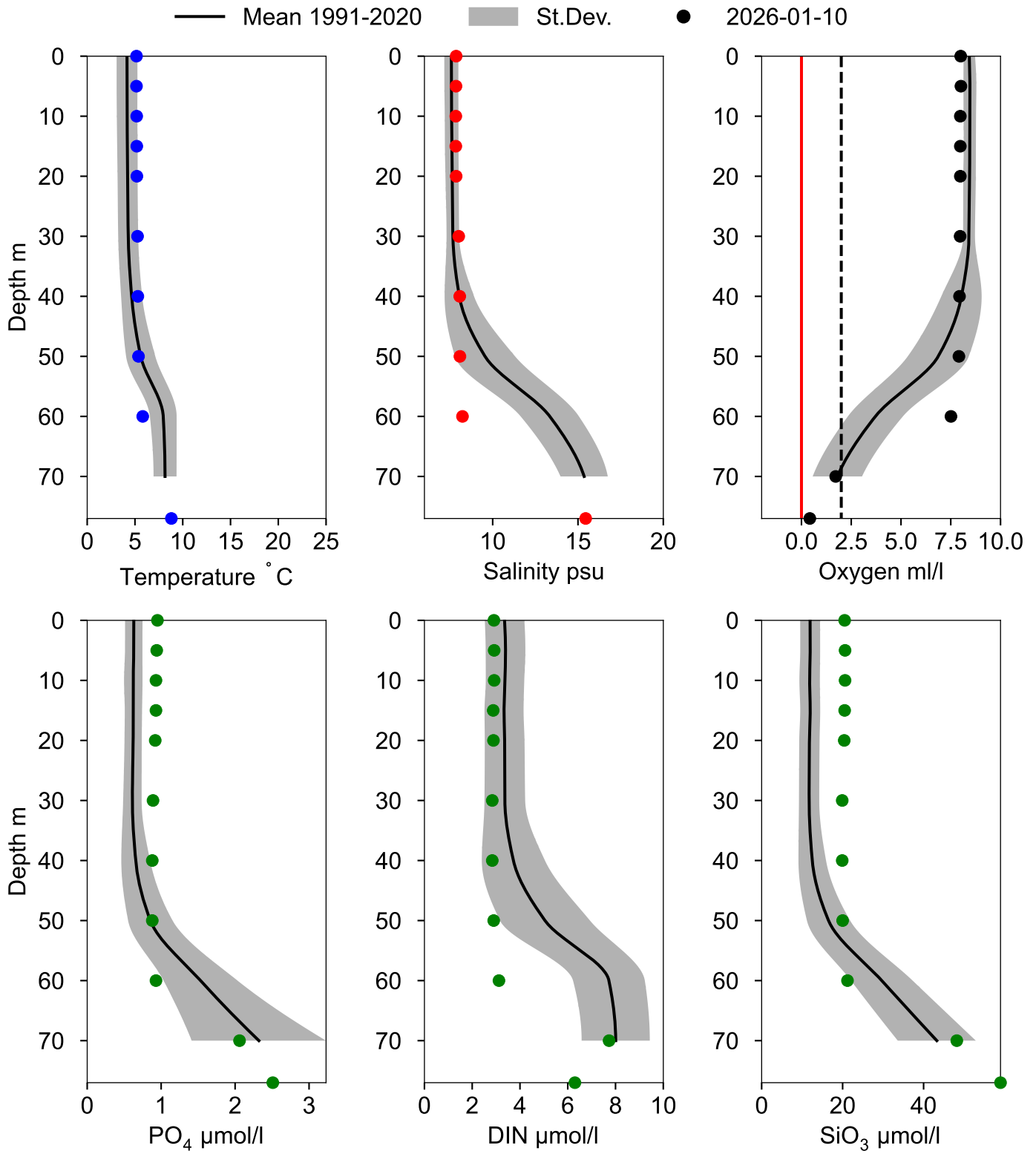
● 2026



## OXYGEN IN BOTTOM WATER (depth >= 70 m)



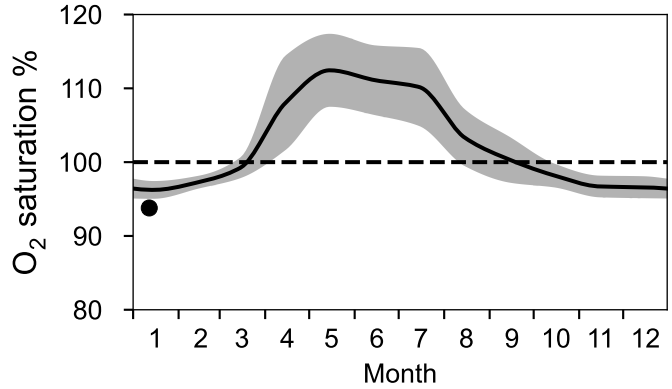
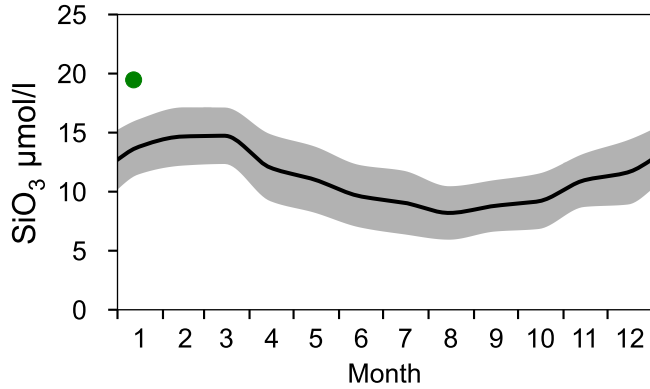
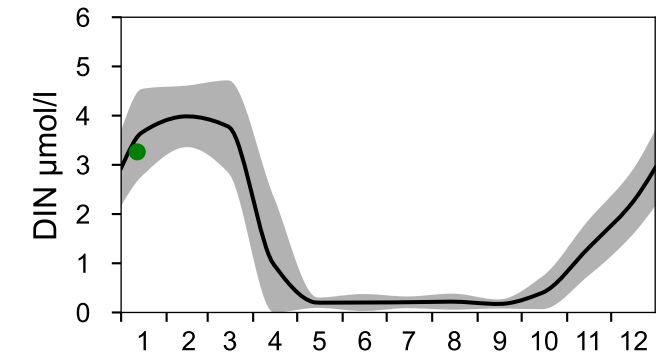
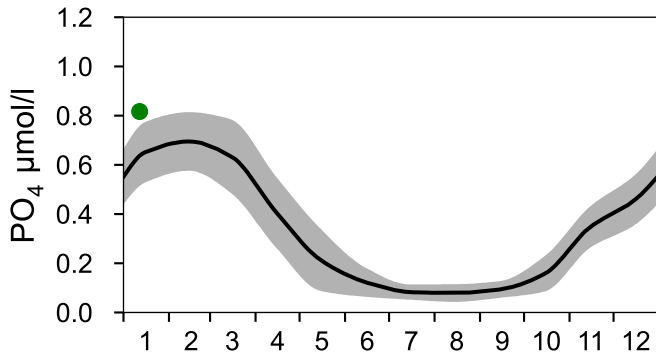
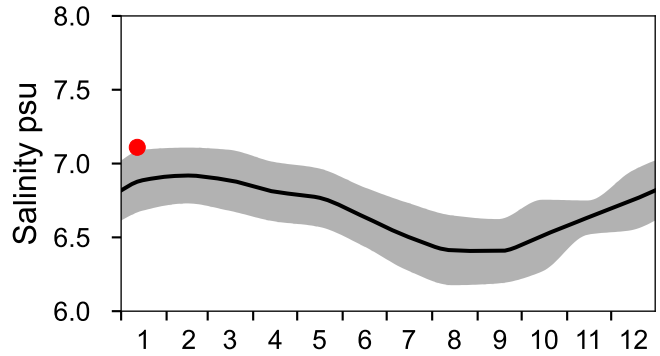
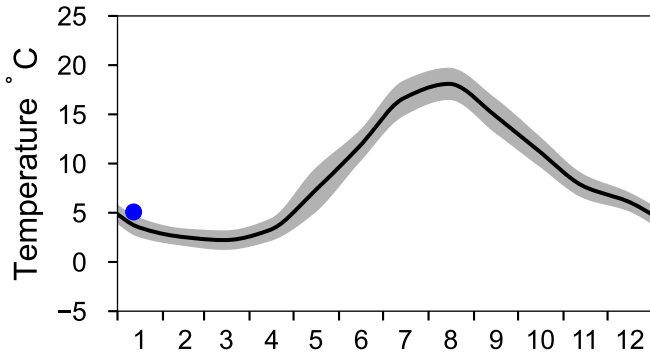
# Vertical profiles HANÖBUKTEN January



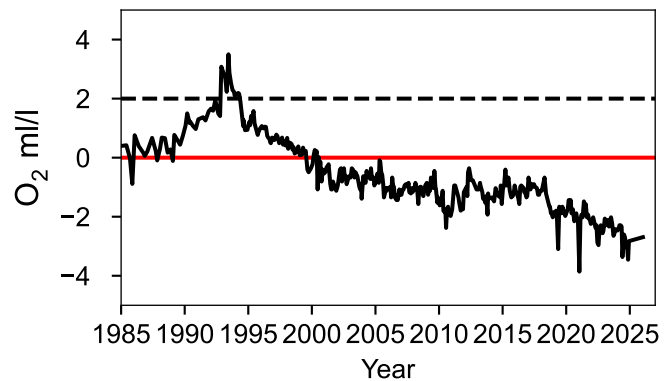
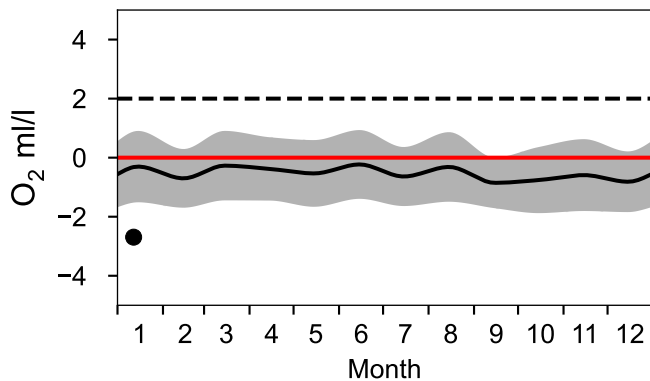
# STATION BY32 NORRKÖPINGSDJ SURFACE WATER (0-10 m)

Annual Cycles

— Mean 1991-2020    St.Dev.    ● 2026

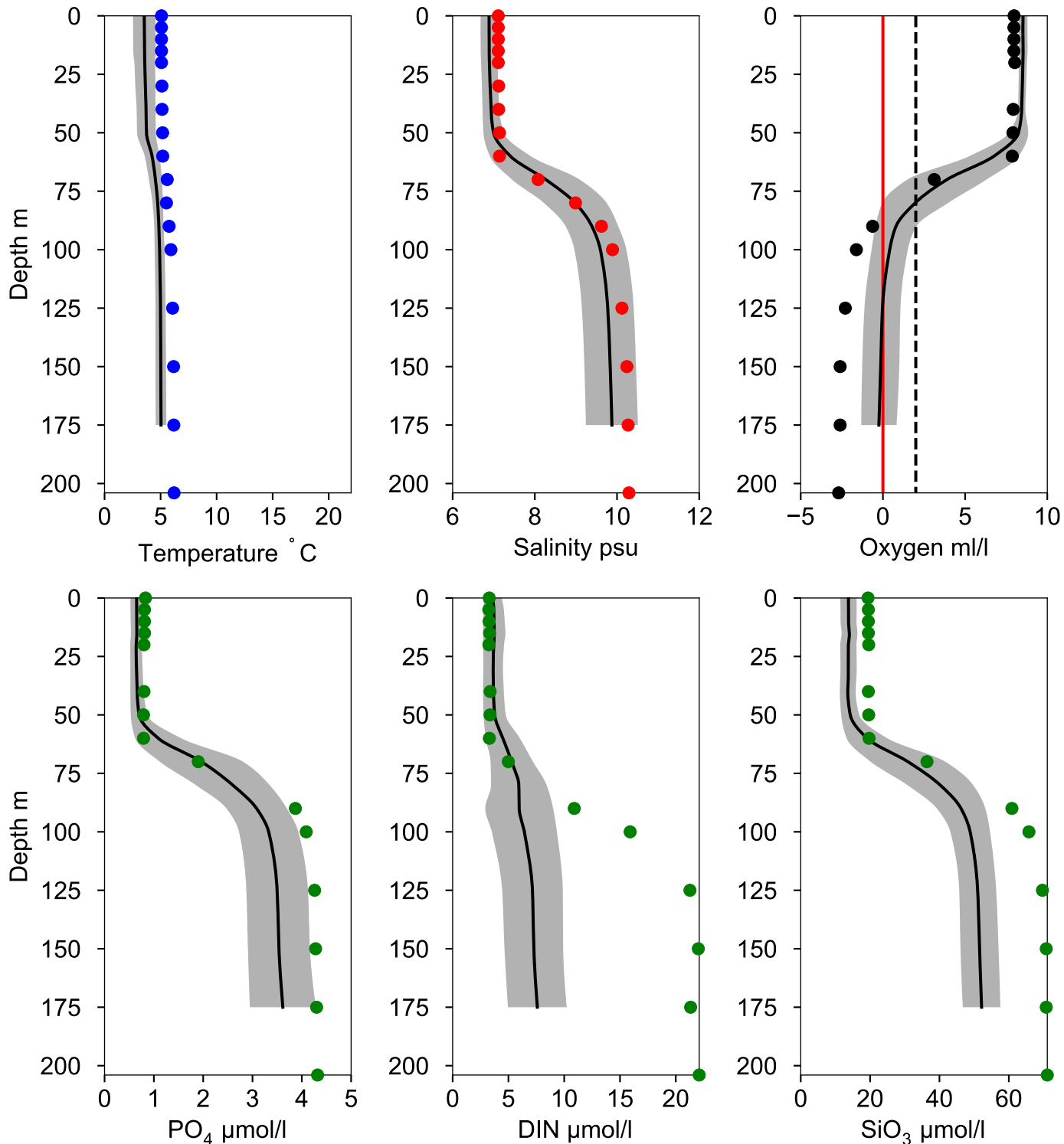


## OXYGEN IN BOTTOM WATER (depth >= 175 m)



# Vertical profiles BY32 NORRKÖPINGSDJ January

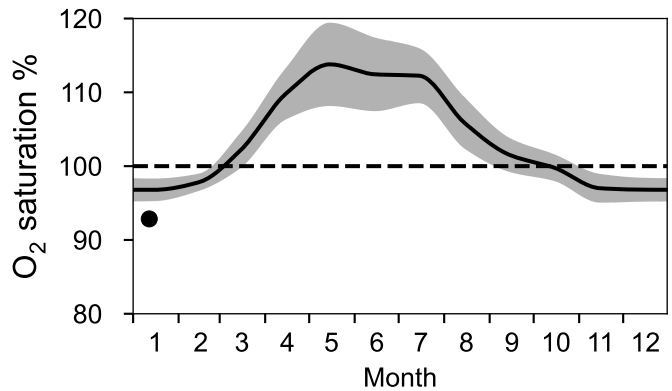
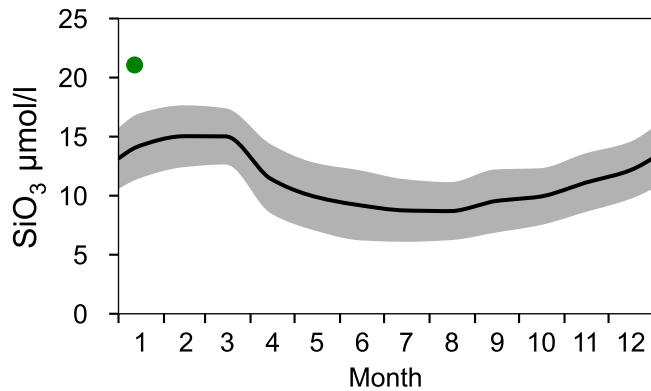
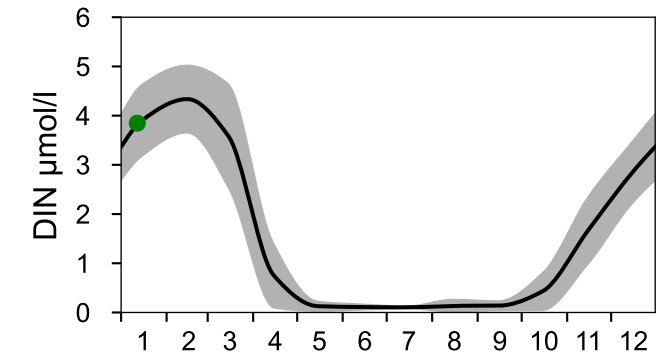
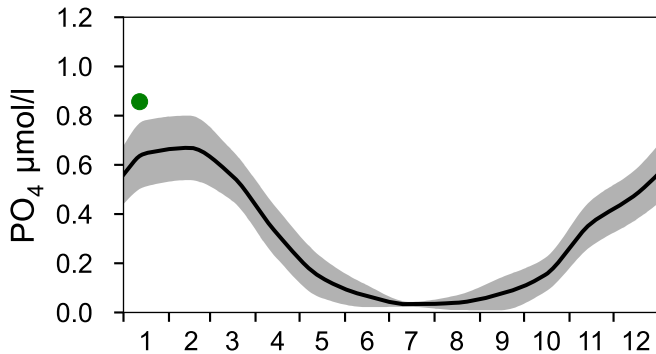
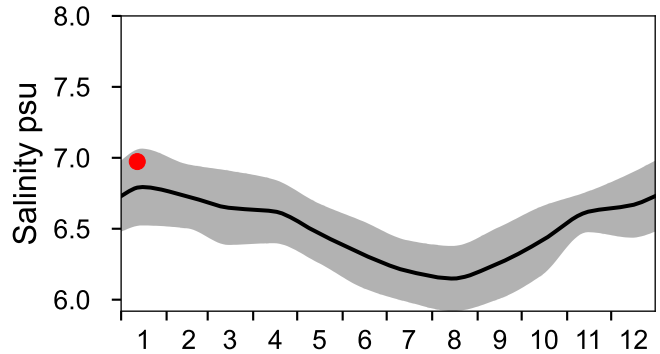
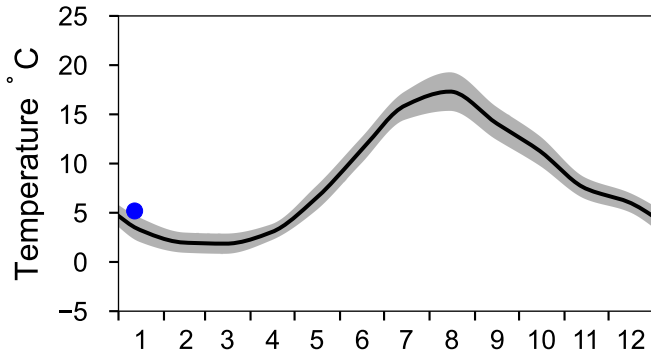
— Mean 1991-2020    ■ St.Dev.    ● 2026-01-12



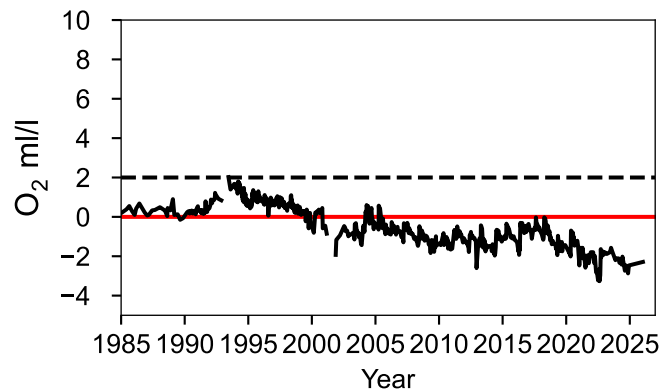
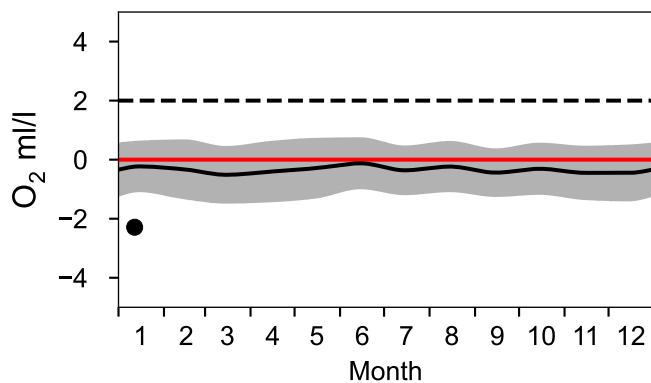
# STATION BY31 LANDSORTSDJ SURFACE WATER (0-10 m)

Annual Cycles

— Mean 1991-2020    St.Dev.    ● 2026

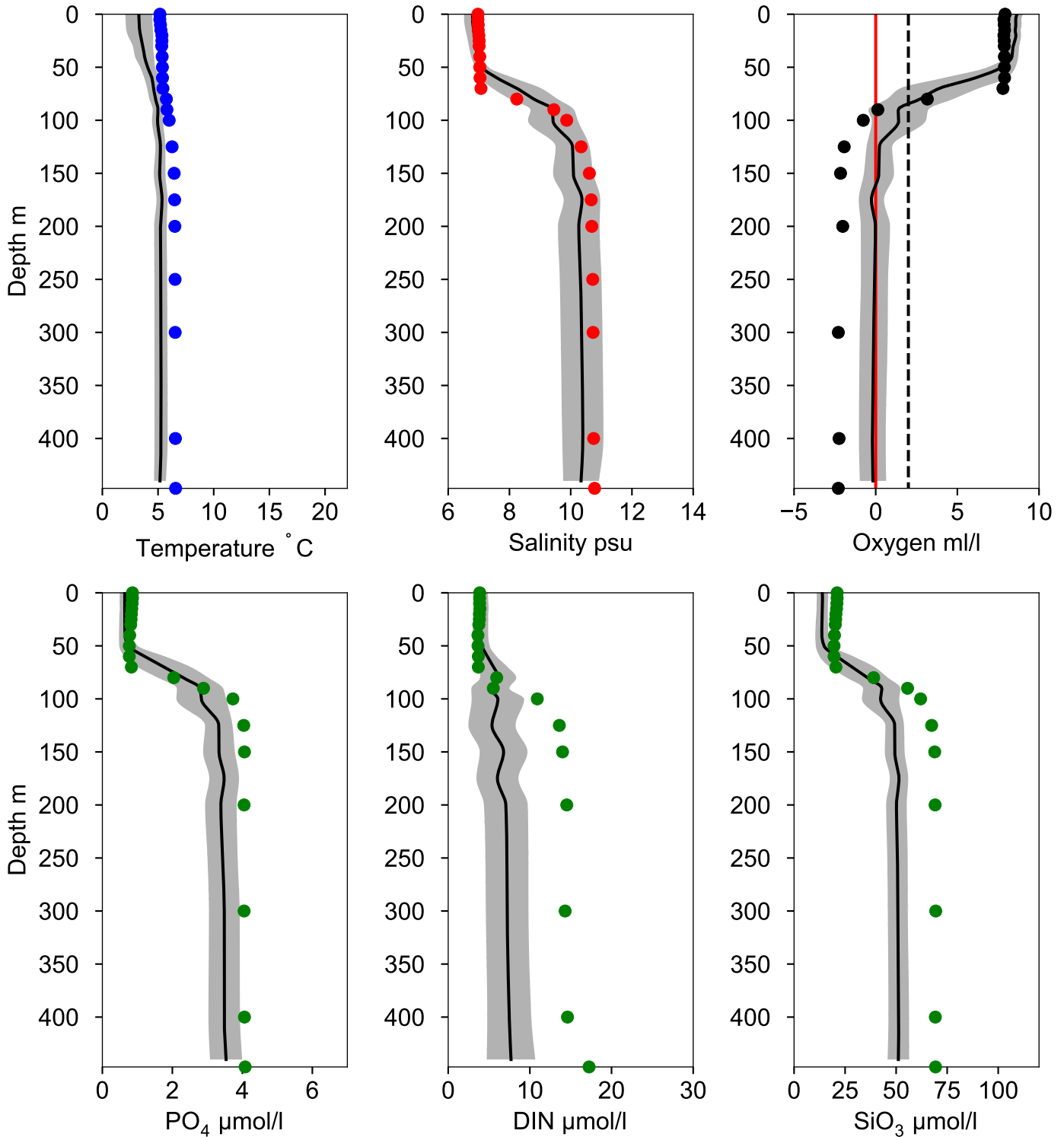


## OXYGEN IN BOTTOM WATER (depth >= 419 m)



# Vertical profiles BY31 LANDSORTSDJ January

— Mean 1991-2020    St.Dev.    ● 2026-01-12



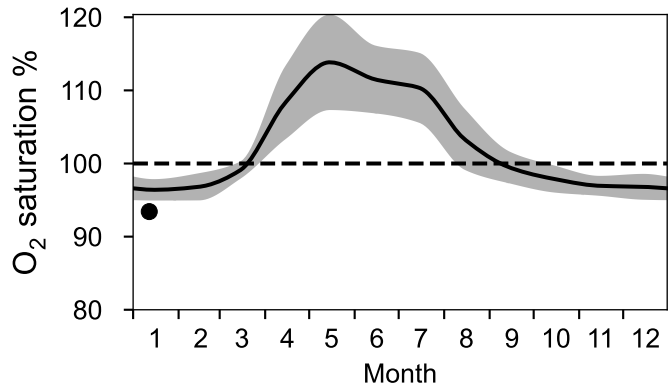
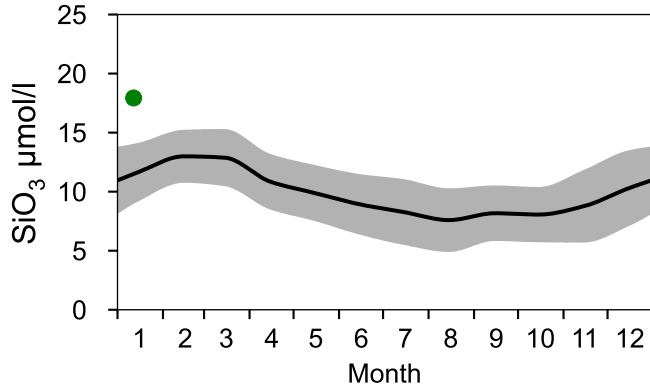
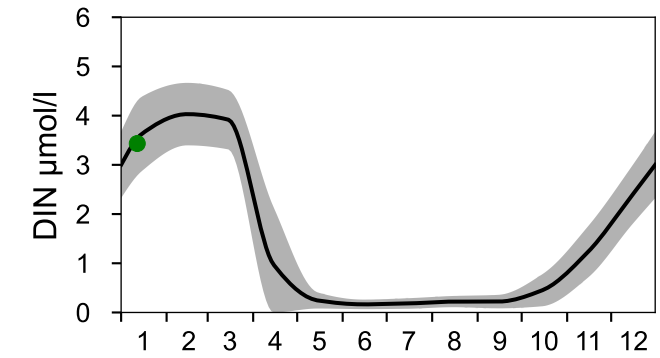
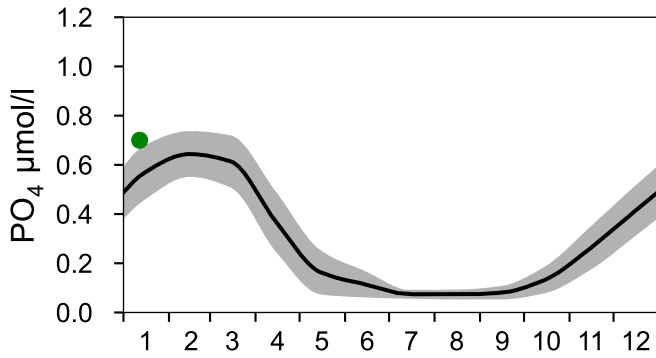
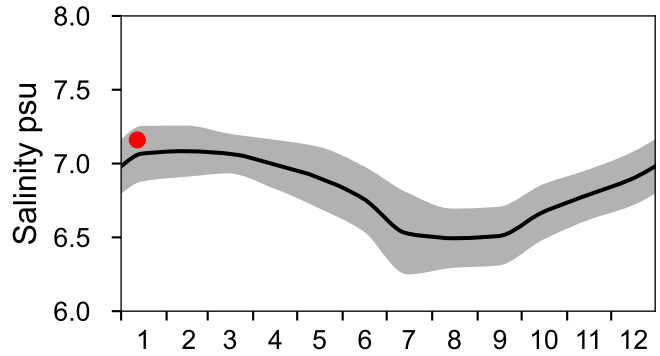
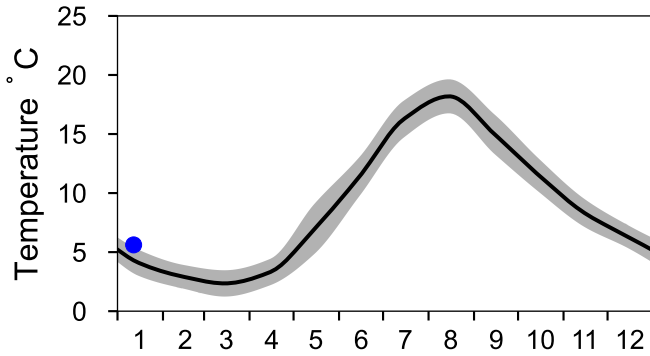
# STATION BY20 FÄRÖDJ SURFACE WATER (0-10 m)

Annual Cycles

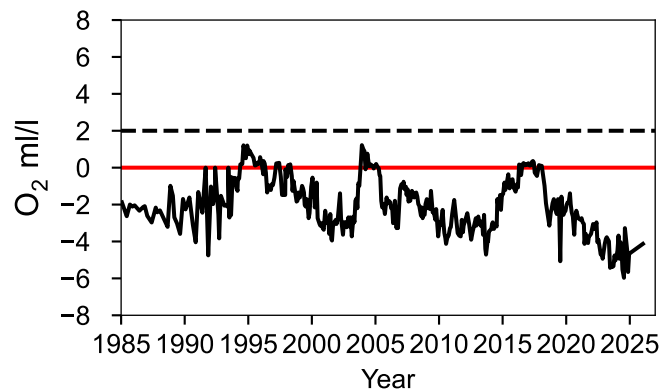
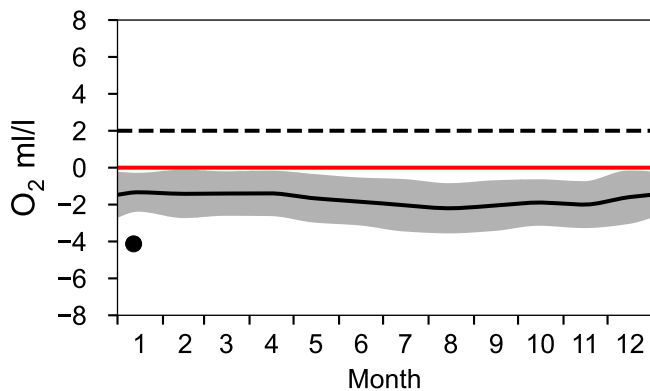
— Mean 1991-2020

■ St.Dev.

● 2026

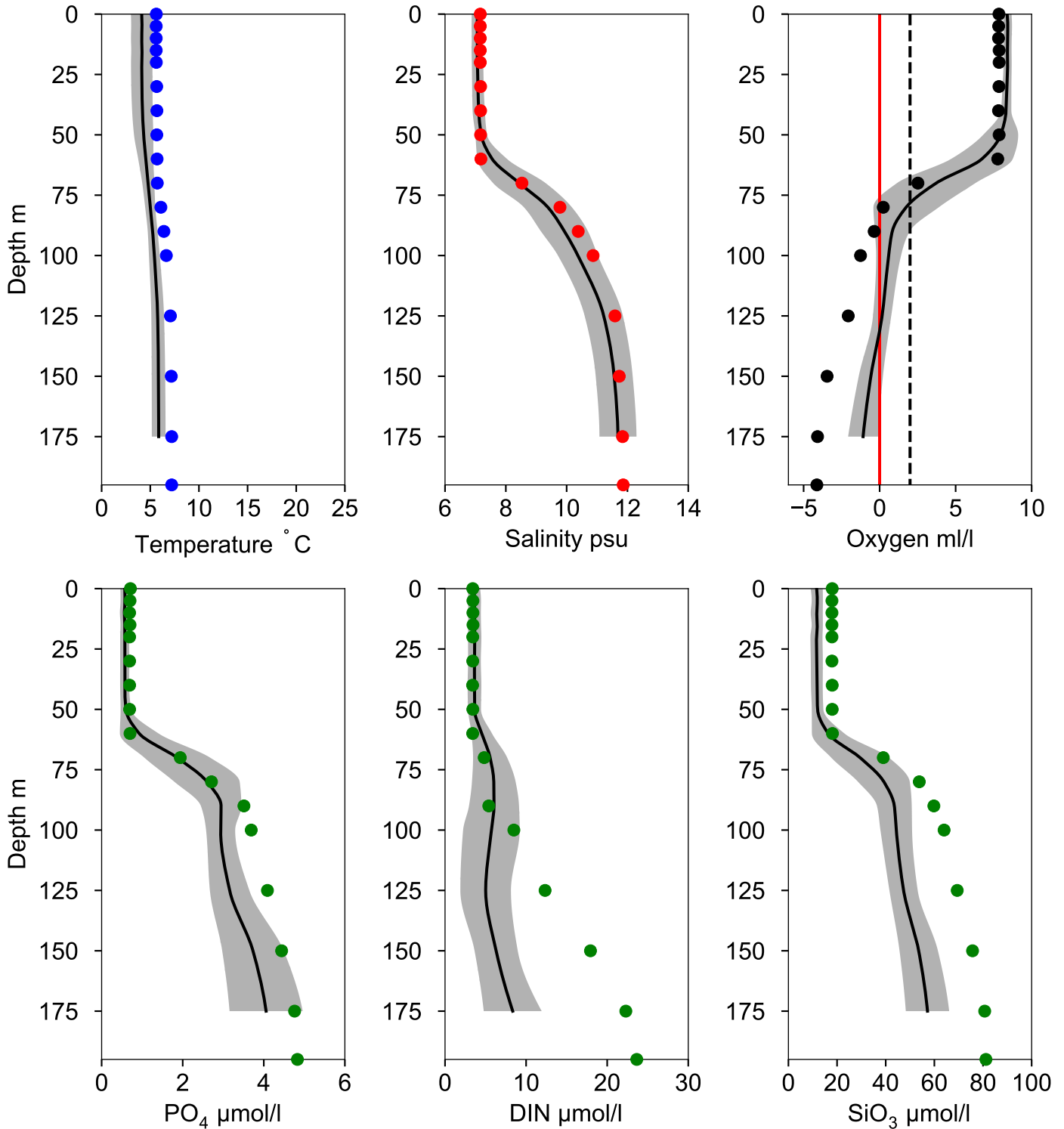


## OXYGEN IN BOTTOM WATER (depth >= 175 m)



# Vertical profiles BY20 FÅRÖDJ January

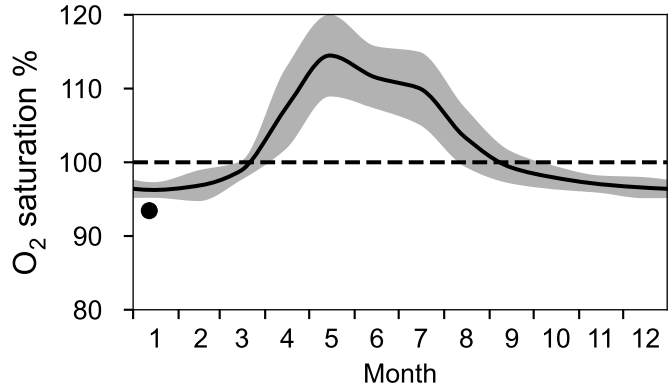
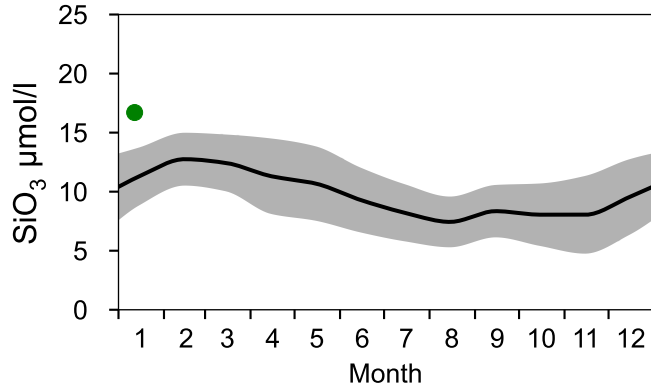
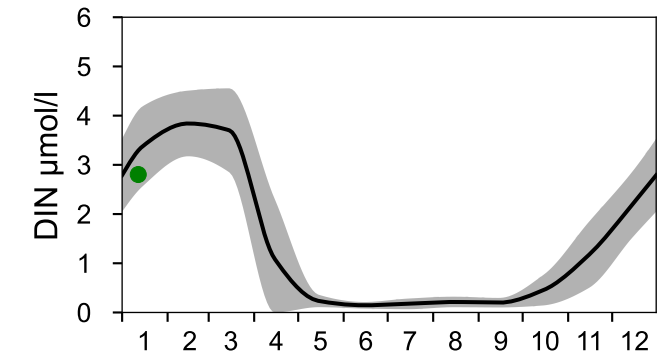
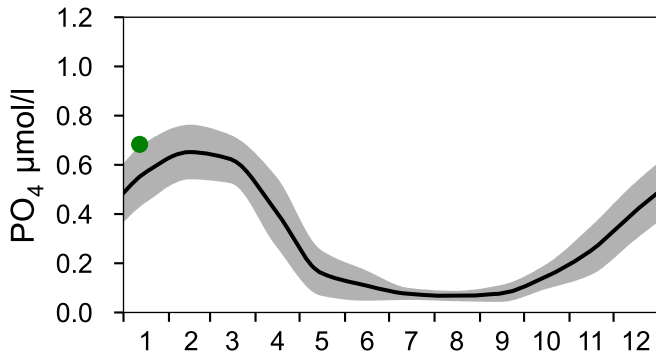
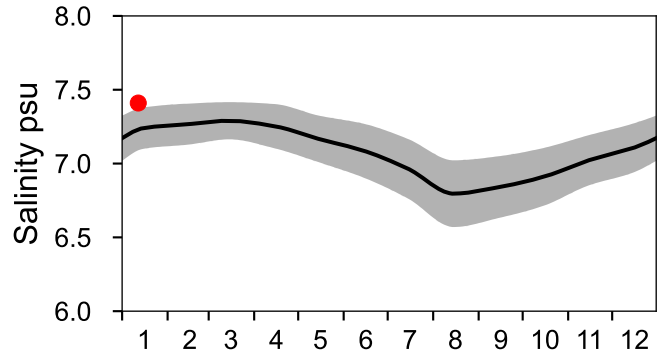
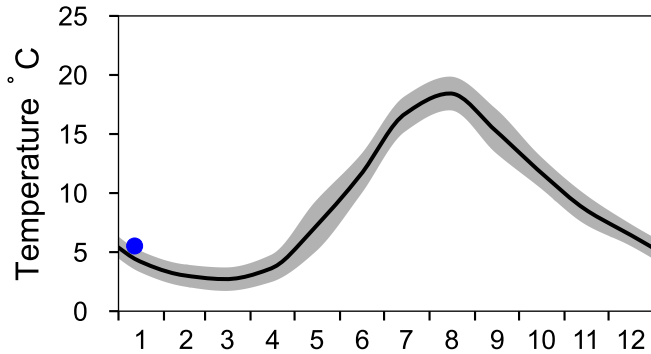
— Mean 1991-2020    St.Dev.    ● 2026-01-12



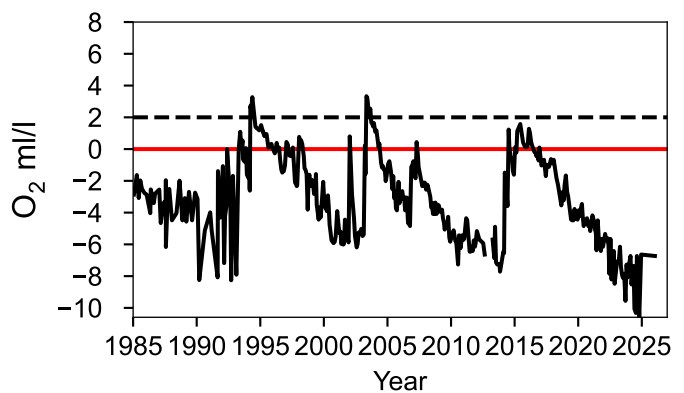
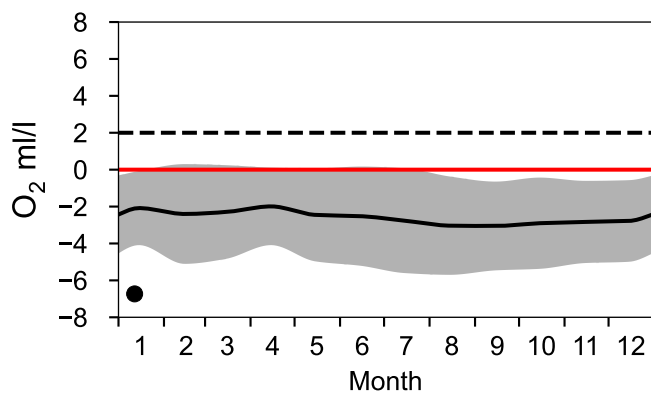
# STATION BY15 GOTLANDSDJ SURFACE WATER (0-10 m)

Annual Cycles

— Mean 1991-2020    St.Dev.    ● 2026

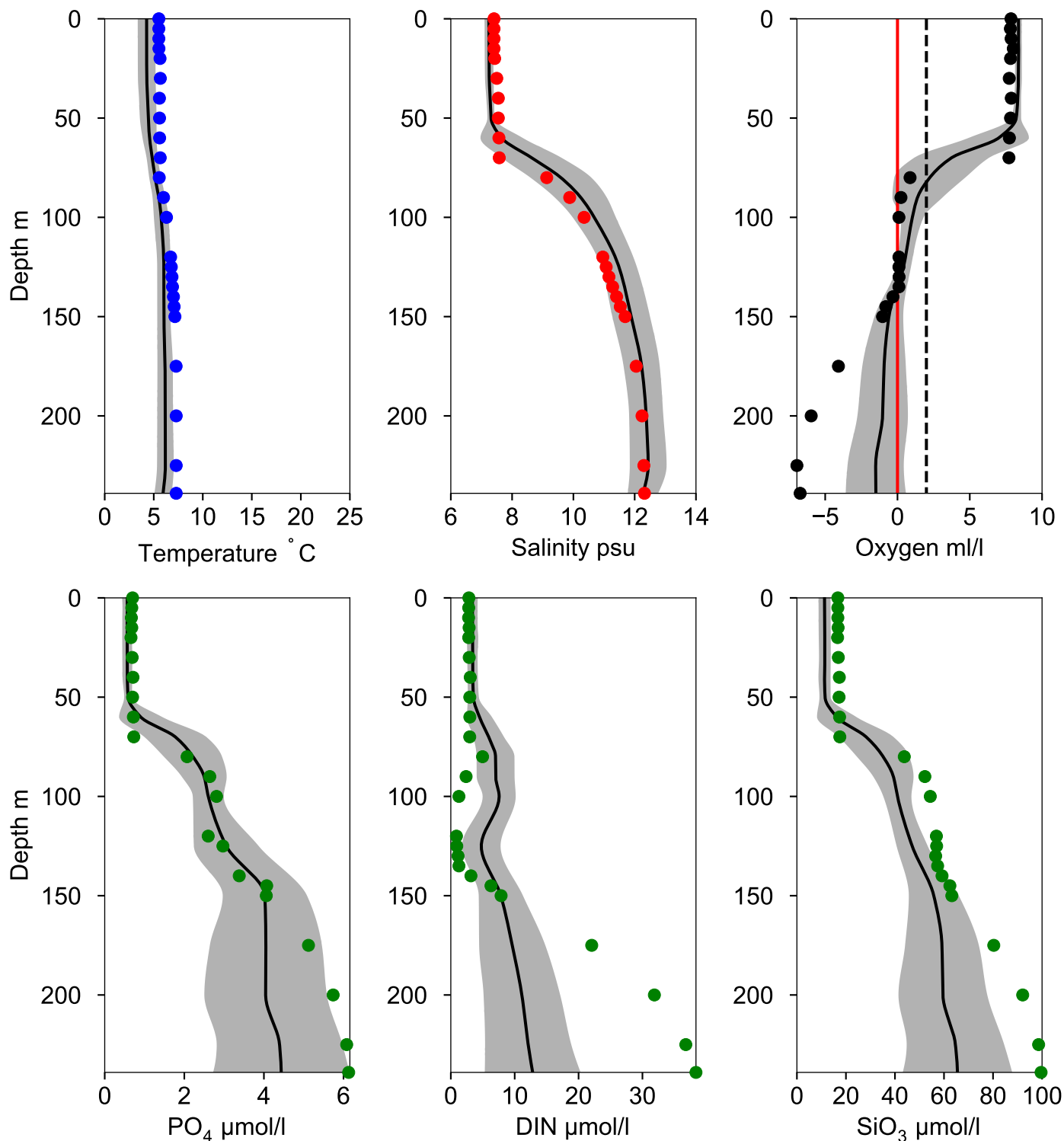


## OXYGEN IN BOTTOM WATER (depth >= 225 m)



# Vertical profiles BY15 GOTLANDSDJ January

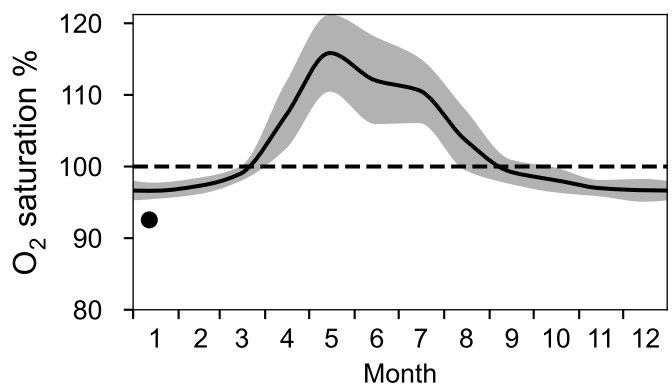
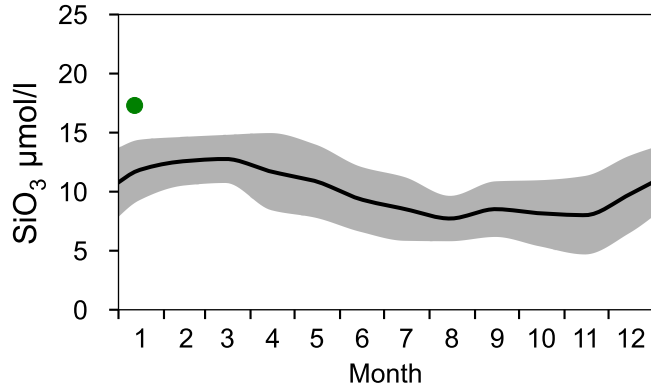
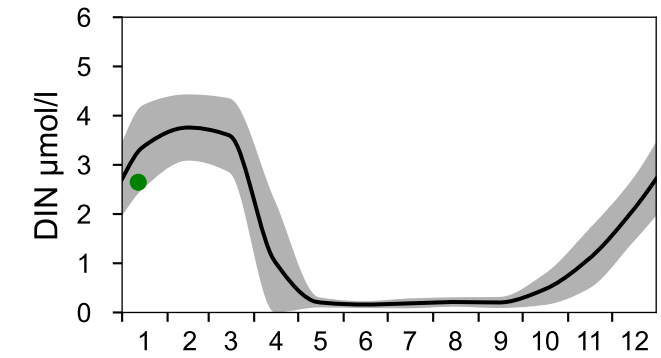
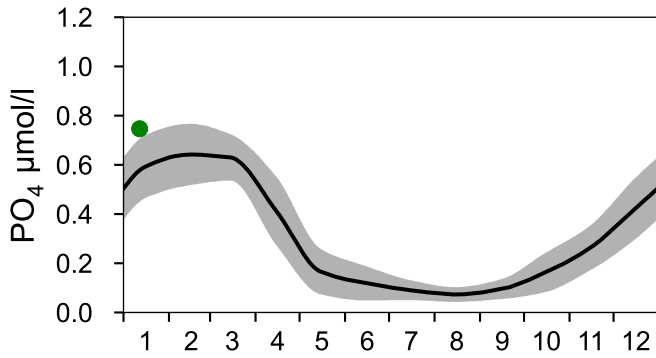
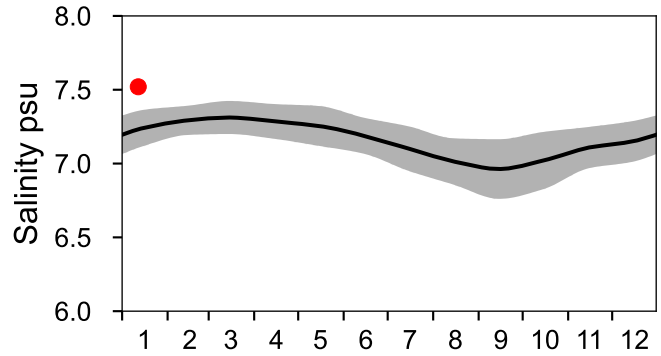
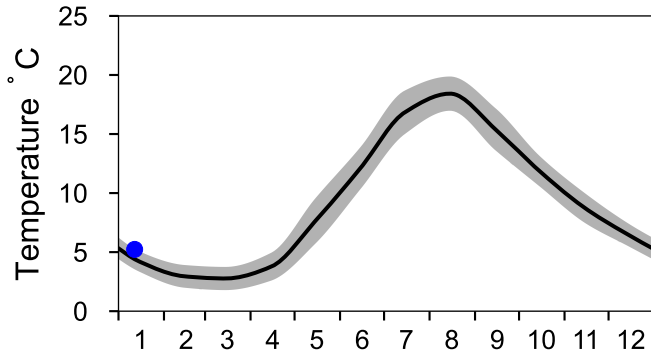
— Mean 1991-2020    ■ St.Dev.    ● 2026-01-12



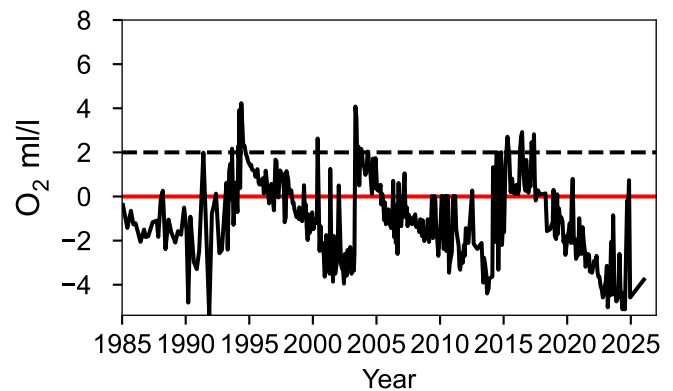
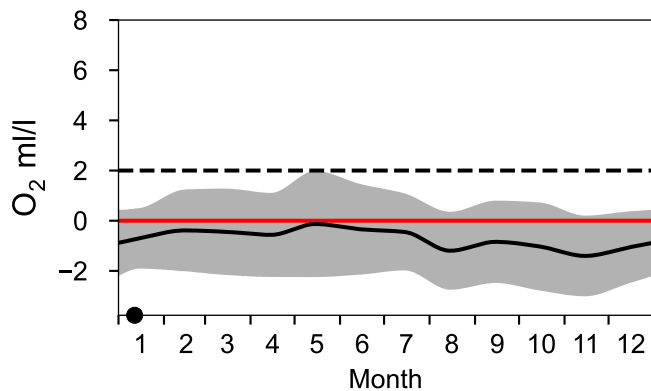
# STATION BY10 SURFACE WATER (0-10 m)

Annual Cycles

— Mean 1991-2020    St.Dev.    ● 2026

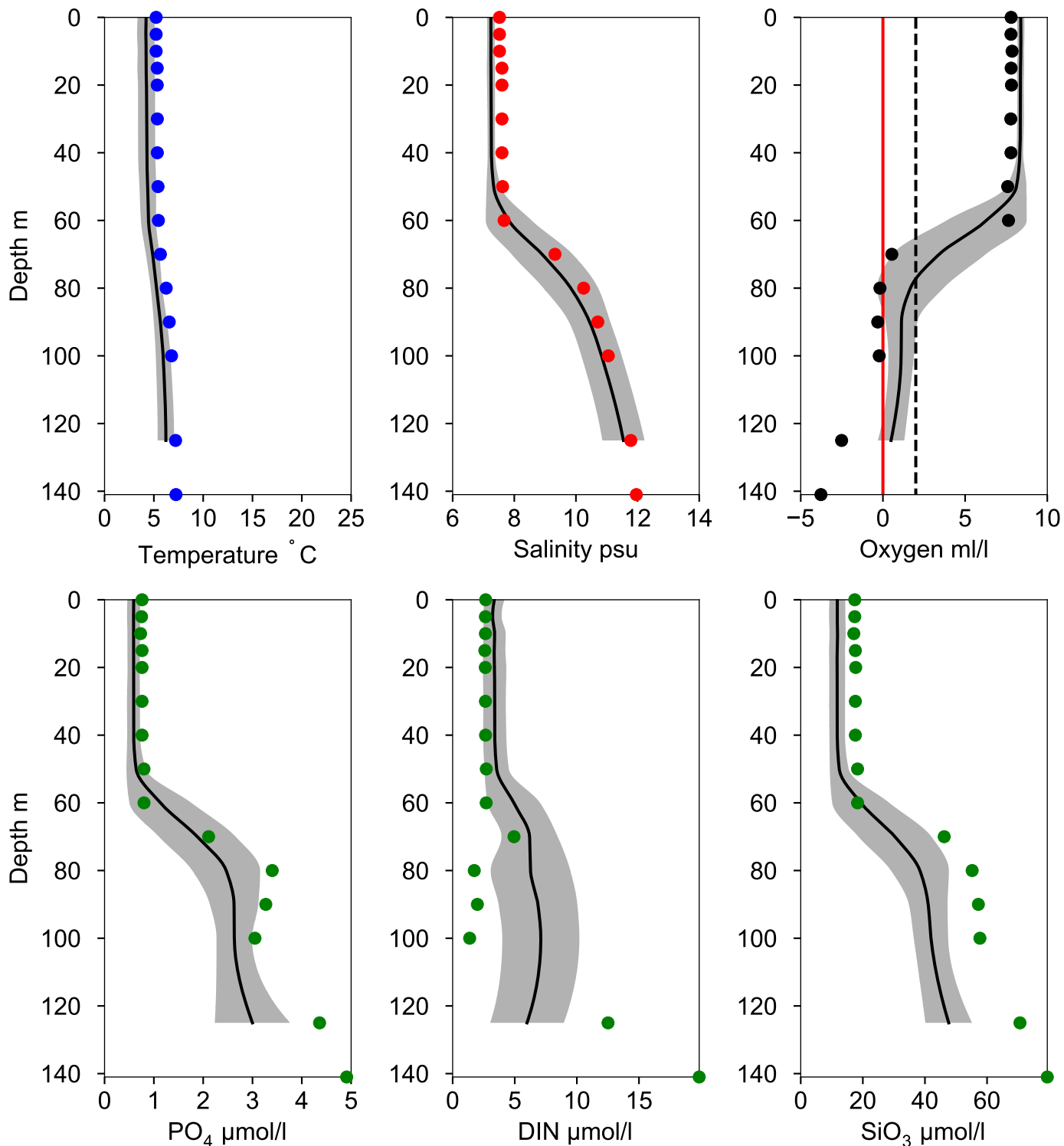


## OXYGEN IN BOTTOM WATER (depth >= 125 m)



# Vertical profiles BY10 January

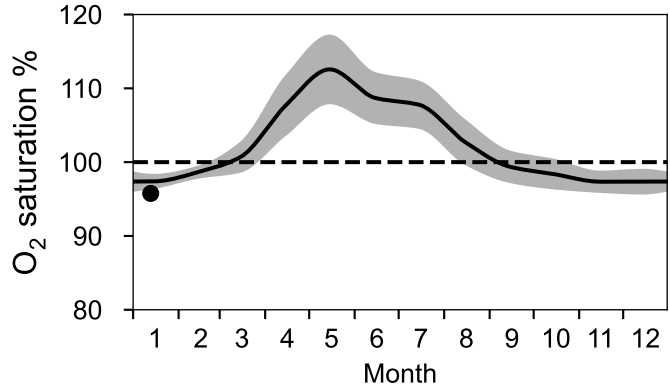
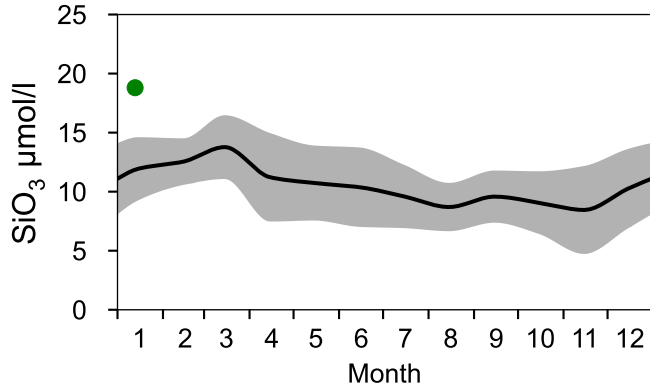
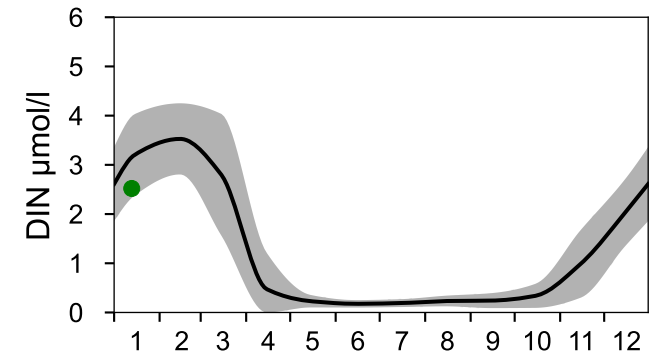
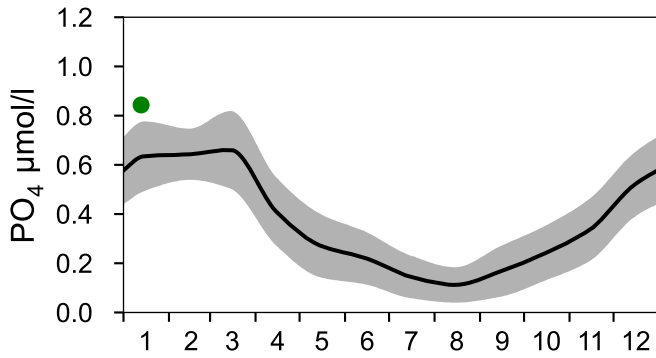
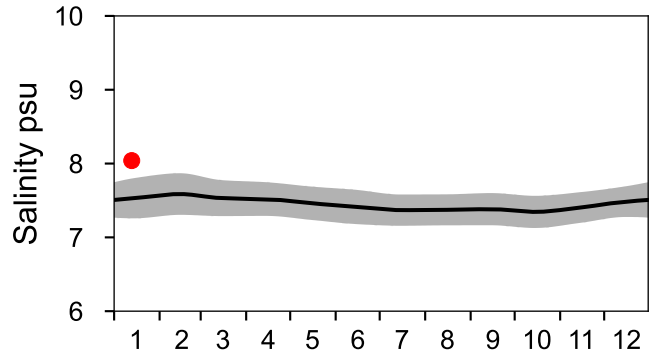
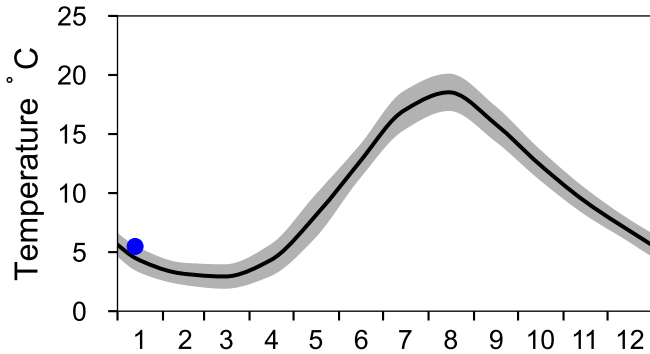
— Mean 1991-2020    ■ St.Dev.    ● 2026-01-12



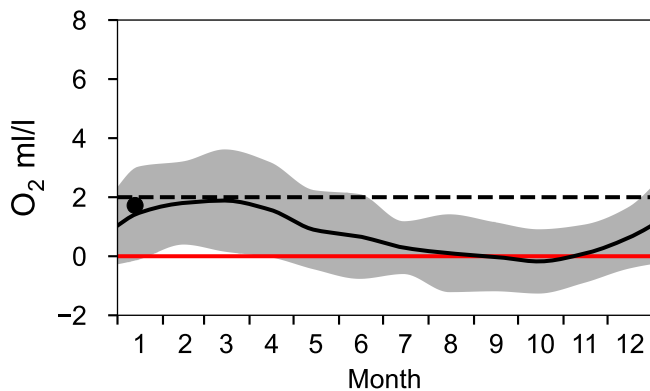
# STATION BY5 BORNHOLMSDJ SURFACE WATER (0-10 m)

Annual Cycles

— Mean 1991-2020    St.Dev.    ● 2026

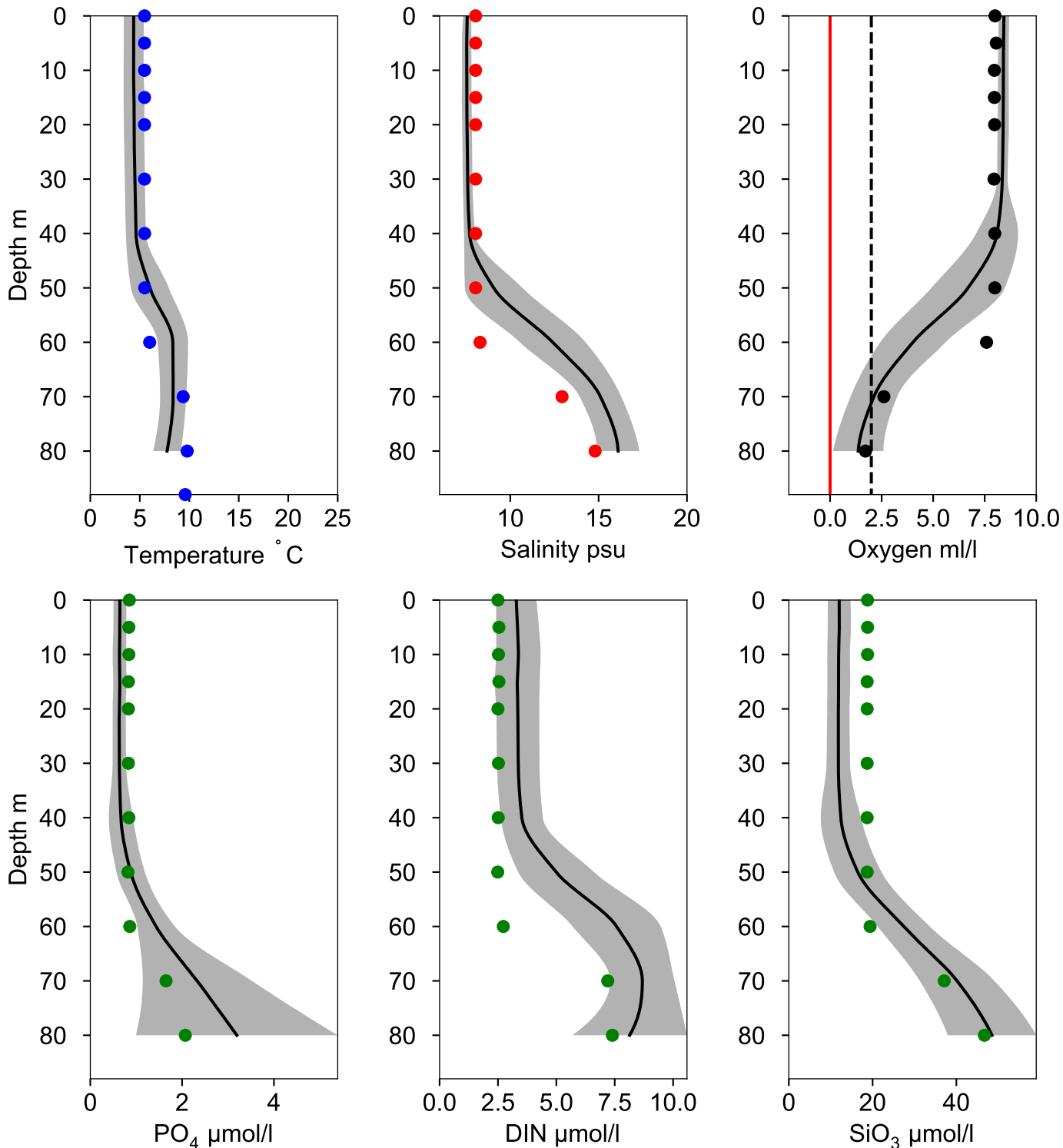


## OXYGEN IN BOTTOM WATER (depth >= 80 m)



# Vertical profiles BY5 BORNHOLMSDJ January

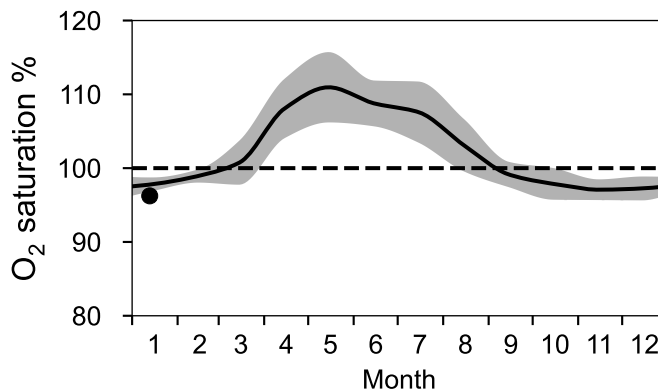
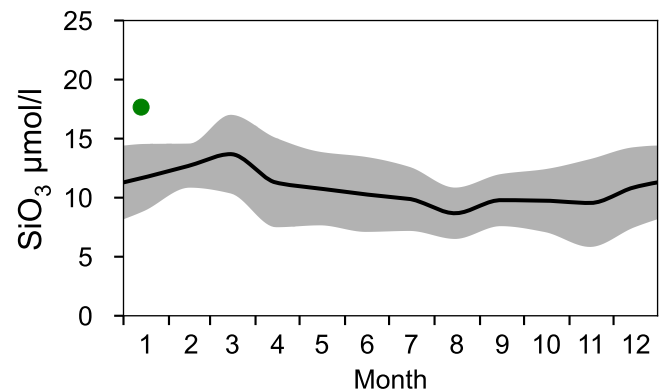
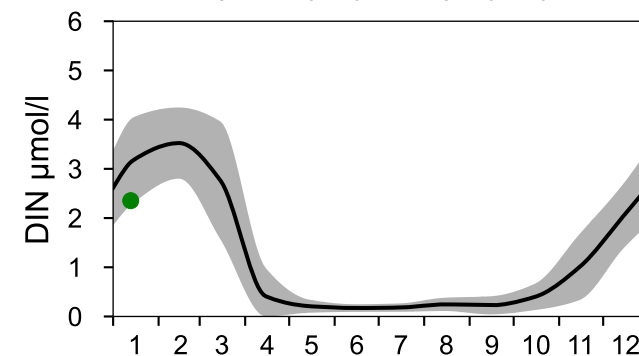
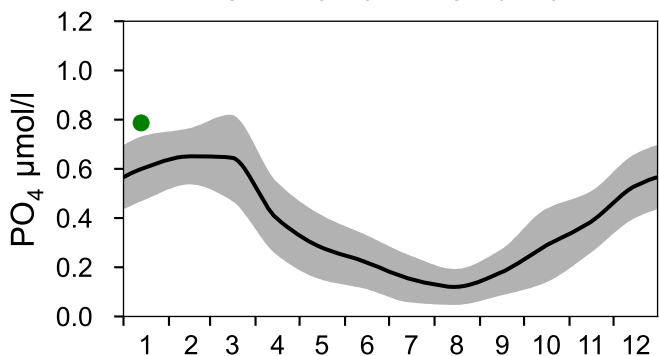
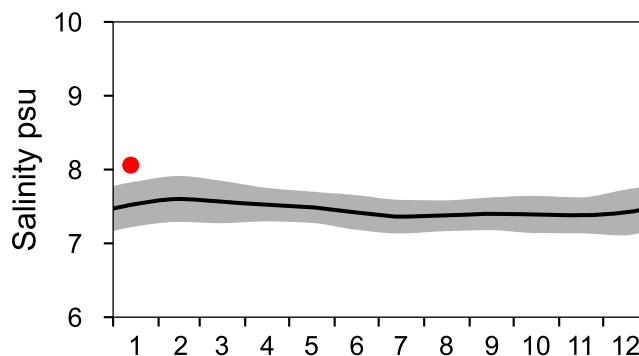
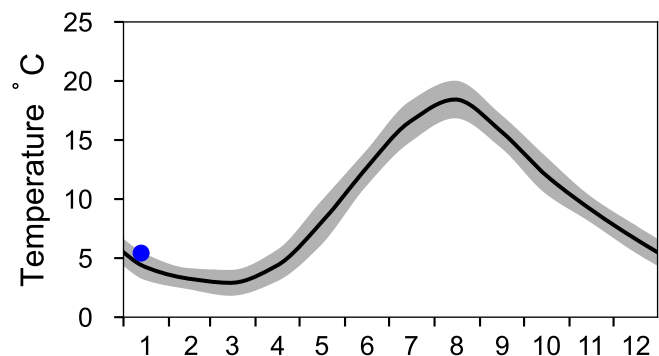
— Mean 1991-2020    ■ St.Dev.    ● 2026-01-13



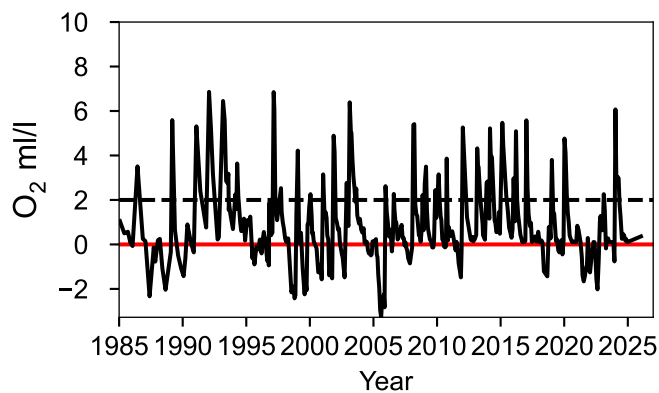
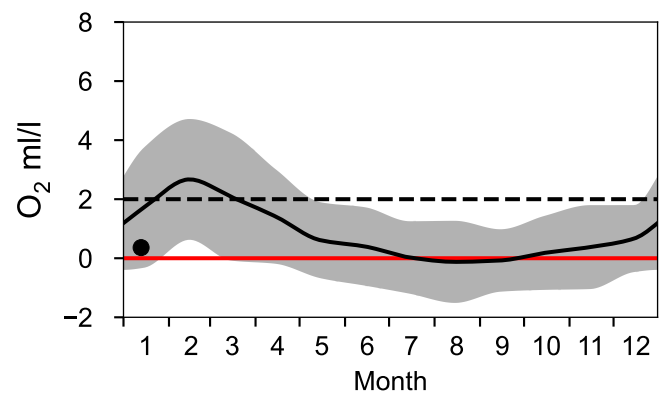
# STATION BY4 CHRISTIANSÖ SURFACE WATER (0-10 m)

Annual Cycles

— Mean 1991-2020    St.Dev.    ● 2026

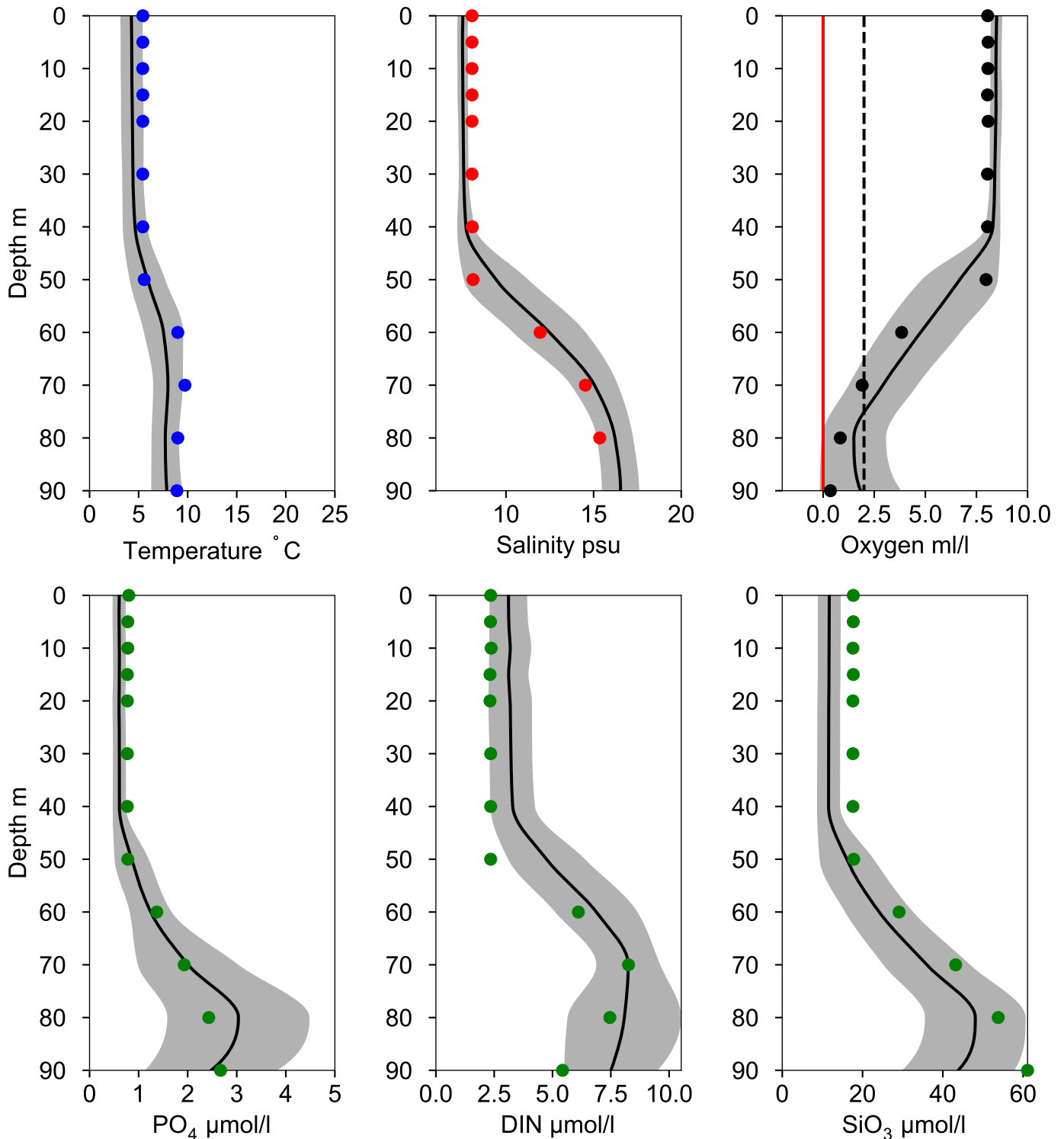


## OXYGEN IN BOTTOM WATER (depth >= 80 m)



# Vertical profiles BY4 CHRISTIANSÖ January

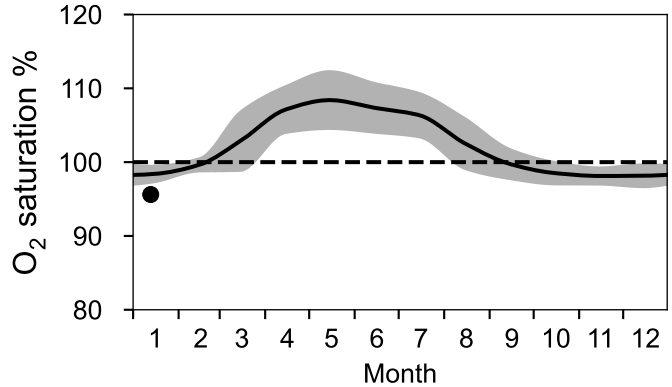
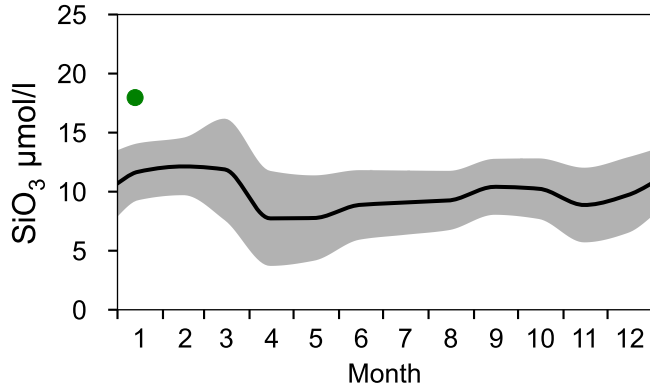
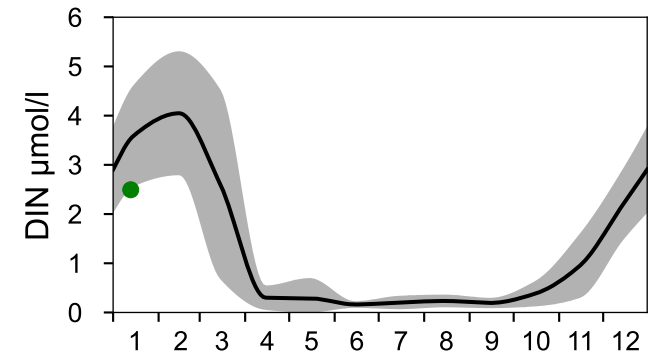
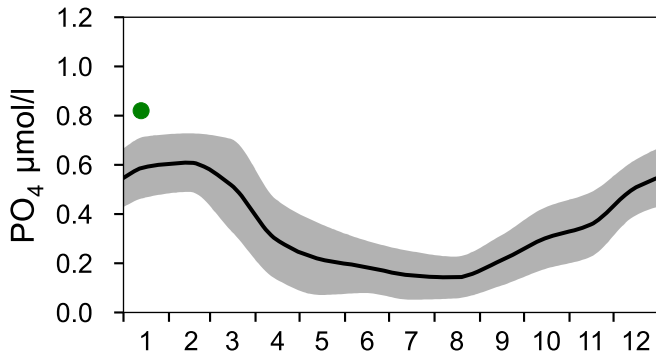
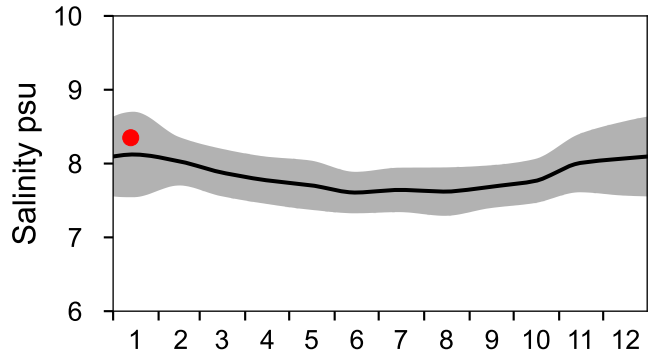
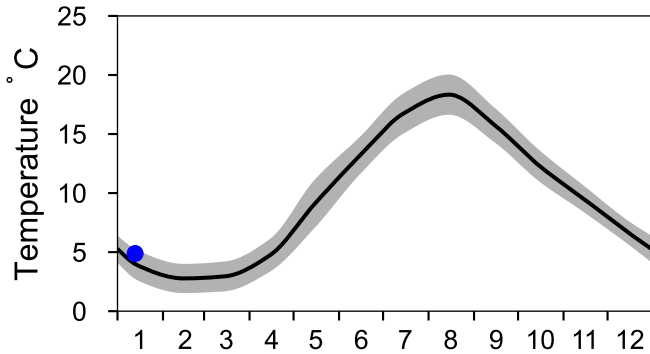
— Mean 1991-2020    ■ St.Dev.    ● 2026-01-13



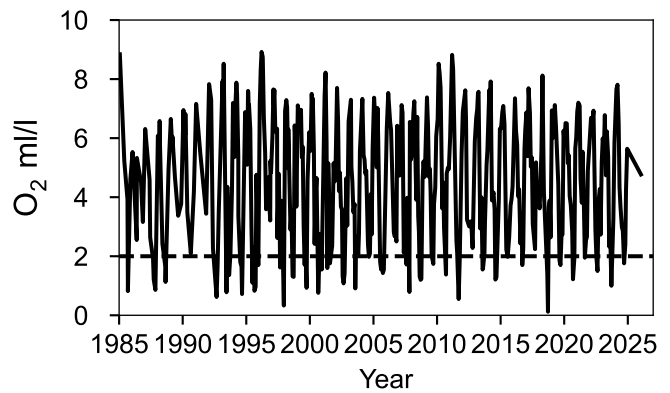
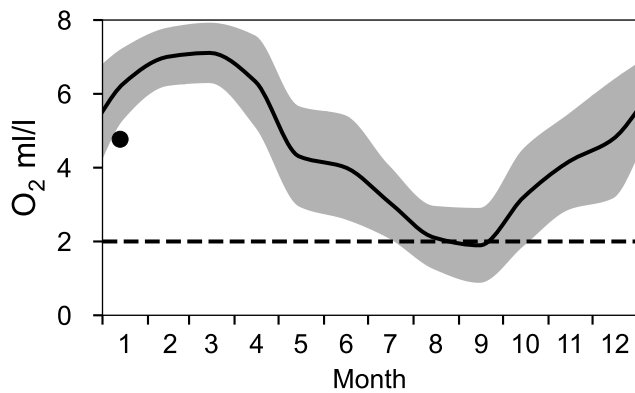
# STATION BY2 ARKONA SURFACE WATER (0-10 m)

Annual Cycles

— Mean 1991-2020    St.Dev.    ● 2026

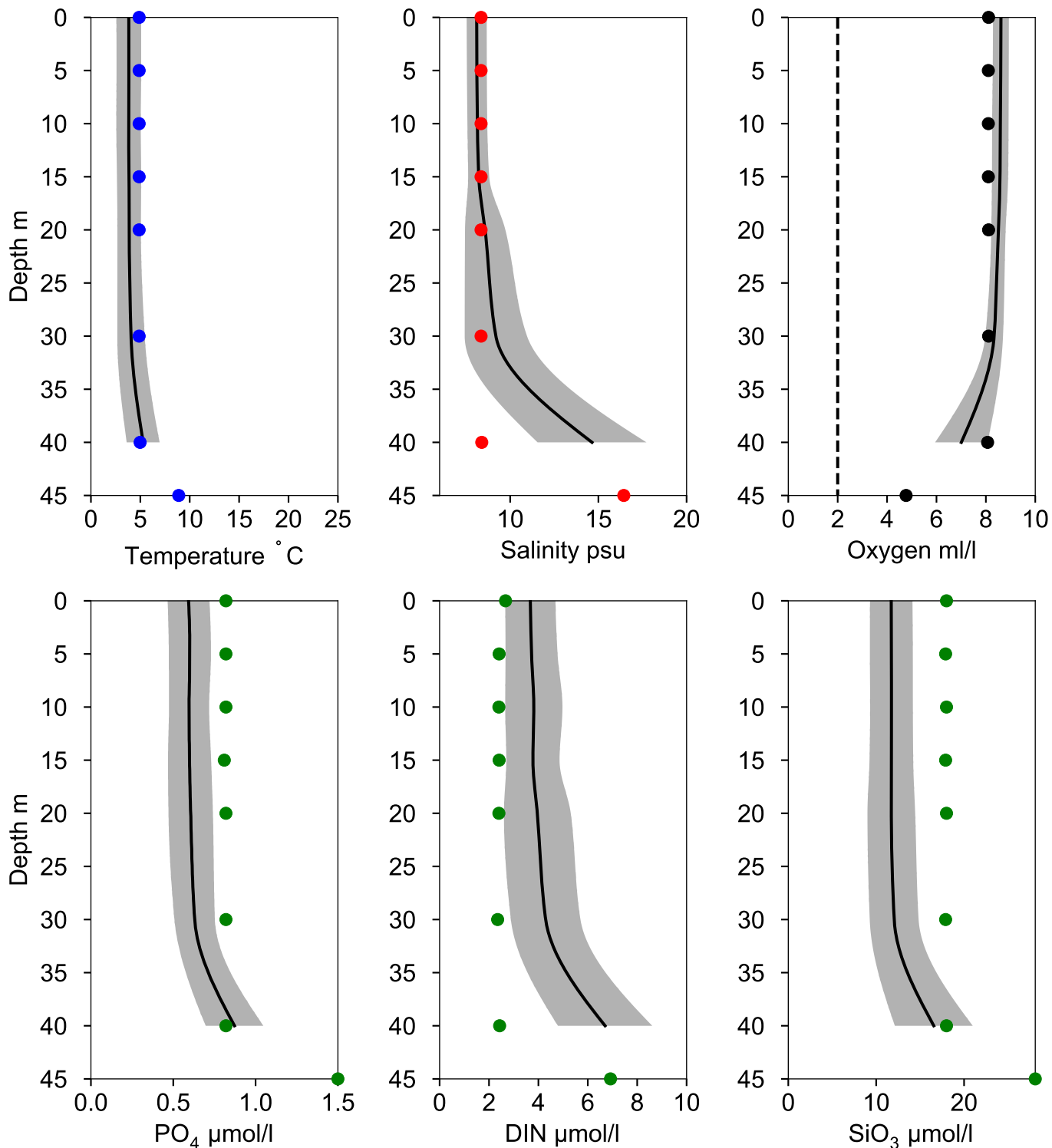


## OXYGEN IN BOTTOM WATER (depth >= 40 m)



# Vertical profiles BY2 ARKONA January

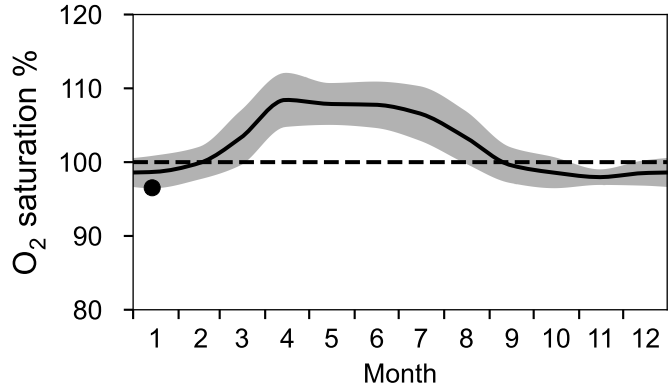
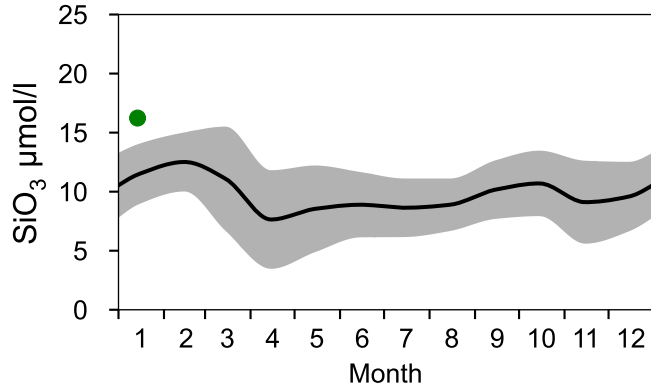
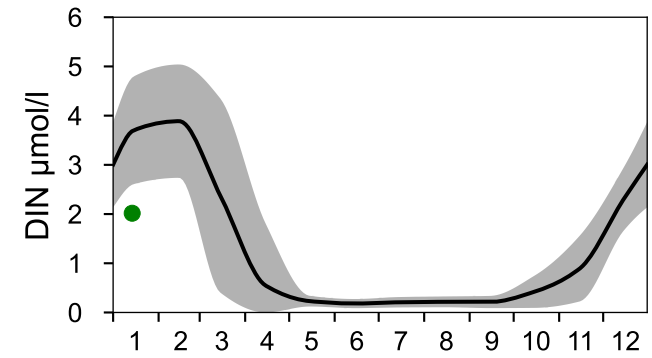
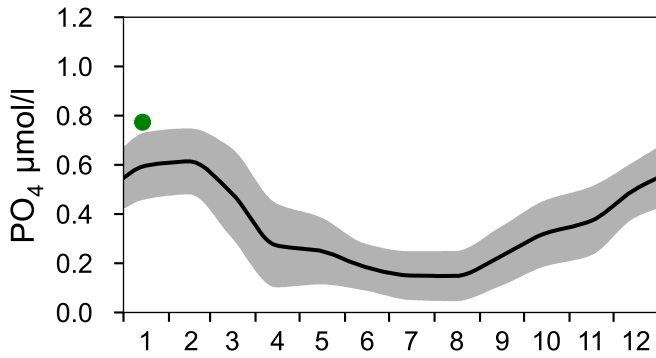
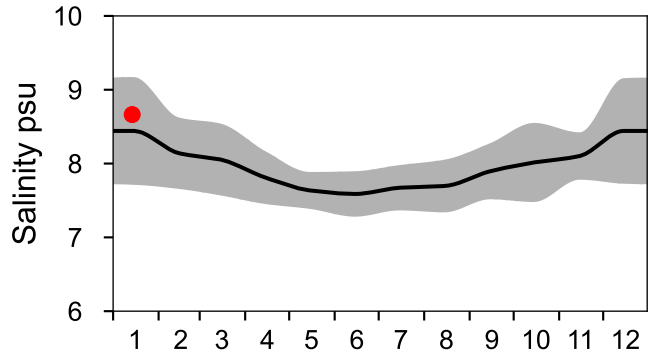
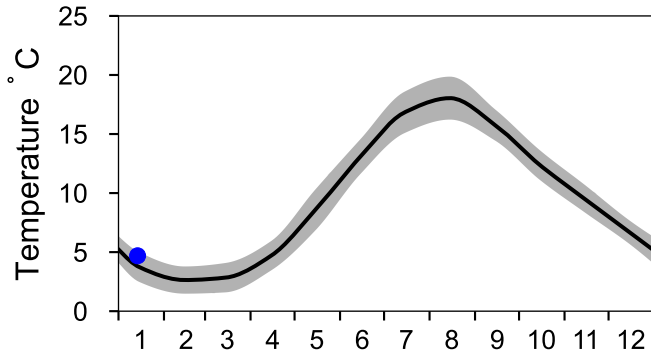
— Mean 1991-2020    ■ St.Dev.    ● 2026-01-13



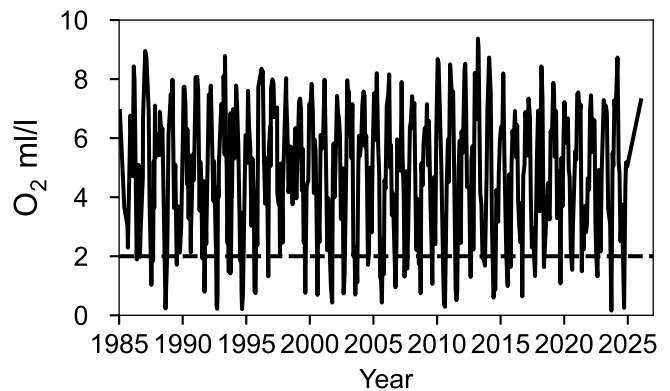
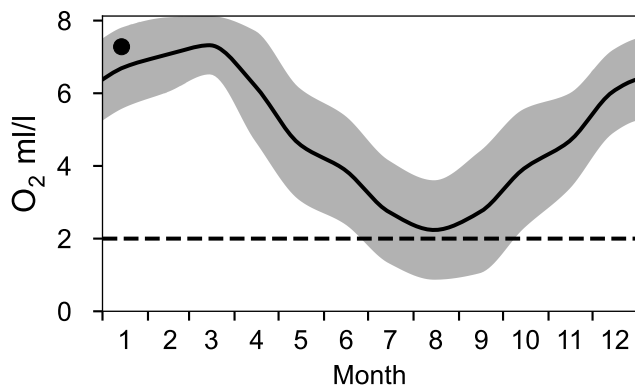
# STATION BY1 SURFACE WATER (0-10 m)

Annual Cycles

— Mean 1991-2020    St.Dev.    ● 2026



## OXYGEN IN BOTTOM WATER (depth >= 39 m)



# Vertical profiles BY1 January

— Mean 1991-2020    ■ St.Dev.    ● 2026-01-14

