

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



Cyanobacteria bloom in the Arkona basin 2026-08-12. Photo: Lena Viktorsson

Survey period: 2026-08-06 to 2026-08-13

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, the Skagerrak, Kattegat, the Sound, and the Baltic Proper were visited.

The surface water temperature was generally normal in all sea areas and had increased slightly since the July expedition. The salinity in the surface water was generally within the normal range in all areas.

Surface water phosphate concentrations were normal for the month at most stations and had decreased since July, in both the Western Sea and the Baltic Proper. Dissolved inorganic nitrogen was low (at the limit of quantification) in all sea areas. Silicate concentrations were normal for the month except in the Baltic Proper where they were higher than normal with the exception of the Arkona Basin.

The oxygen situation in the Skagerrak was good, no oxygen deficiency was measured. In the Kattegat and the Sound, the oxygen concentration was lower but no oxygen deficiency was measured (< 4 ml/l). In Arkona, the Bornholm Basin and Hanö Bight, there was oxygen deficiency in the bottom water at all stations, below 4 ml/l. In the Baltic Proper, hydrogen sulfide was measured in the bottom water at all stations except BSC-III 10 and the southern tip of Öland. In the Eastern Gotland deep there is an intermediate layer where the water is oxygen-free but hydrogen sulphide can be measured. The thickness of this layer has increased and now extends between 90-140 m. At other stations north and west of the deep hole of the Eastern Gotland Basin, hydrogen sulphide is found from about 70-80 m down to the bottom and oxygen deficiency from 60-70 m depth.

Chlorophyll fluorescence was relatively high in the surface water and there were sharp and high peaks at several stations in connection with the stratification. In the Arkona basin, a strong bloom of cyanobacteria was underway at the time of sampling the stations there.

SMHI's next regular cruise with R/V Svea is planned for 8–13 September, starting in Lysekil and ending in Kalmar. Before that SMHI will participate in the IBTS Q3 fisheries expedition 15-28 August, run by the department of Aquatic Resources at the Swedish University of Agricultural Sciences (SLU Aqua).

CRUISE OVERVIEW

The cruise was carried out on board R/V Svea, starting in Lysekil on 6 August and ending in Lysekil on 13 August.

The expedition began with strong southwesterly winds (12-18 m/s) and sampling with the large nets for gelatinous plankton (WP3) and zooplankton (WP2) was cancelled at station Å17 in the outer Skagerrak. The wind subsided during the second day of the expedition, and the rest of the expedition continued with moderate winds and mostly sunny weather. During the last day of the expedition, the weather was clear and calm. A strong bloom of cyanobacteria was then passed in the Arkona basin on the way back to Lysekil (front picture).

At Östergarnsholm, a sensor for Uppsala University was replaced. The purpose of the sensor is to measure partial pressure of carbon dioxide within ICOS – Integrated Carbon Observation System – a European research infrastructure to quantify and understand the greenhouse gas balance of the European continent and adjacent regions (www.icos-sweden.se/). A reference CTD profile was also taken at this site. Additional reference CTD casts were conducted in the southern Kattegat at a bottom-mounted measurement system (P22), at Flinten 7 in the Sound and at the Huvudskär buoy.

Svea's instrument for measuring profiles under way (MVP) was recovered in the Bornholm Basin using Svea's ROV (Remote Operated Vehicle) and is expected to be back in service in September. The recovery was carried out with the help of personnel from the University of Gothenburg, Tjärnö Marine Biological Research Station. The personnel were picked up in Karlskrona and dropped off in Malmö the next day. The instrument could be quickly located on the bottom as its position was known. The recovery went as planned, but was a bit complicated as the bottom where it was located was very soft and sediment was easily stirred up by the ROV's propellers. The recovery, which was carried out in Danish waters, took about three hours.

Measurements of eDNA/barcoding have been part of the monitoring programme since February this year, and surface water samples are filtered at four stations: BY31, BY5, Anholt E, and Å17. The ferrybox system, which continuously measures a range of oceanographic parameters in surface waters, was operated throughout the entire cruise. Reference samples for chlorophyll-a were taken daily between 08:00-12:00 and reference samples for pH and alkalinity were taken three times in the Skagerrak between stations Släggö and P2. The ADCP was also operated continuously.

This report is based on data that have undergone initial quality control and have been compared with monthly averages for the period 1991–2020. Further quality checks may lead to adjustments. Reported values are rounded to one decimal place and may therefore differ slightly from published data. Data are typically made available within about one week after the expedition. Some analyses are conducted afterward and are published later.

More information about our data hosting service 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

The surface water temperature was normal to below normal and was around 17 degrees in the open sea (Å section and station P2) and approx. one degree warmer at Släggö at the mouth of the Gullmars fjord.

Stratification separated a well-mixed surface layer from the deep water and was found at a depth of 15 meters except at stations Å13 and Släggö where the surface layer only extended to a depth of five meters. Below the well-mixed surface layer, the salinity increased while the temperature decreased with increasing depth. In the deep water, the salinity was about 35 psu and the temperature about 8.5 degrees.

Nutrient concentrations in surface waters were generally normal. Dissolved inorganic nitrogen was below the limit of quantification at all stations, while there were measurable levels of phosphate (0.02-0.17 $\mu\text{mol/l}$). Station P2 outside Marstrand deviated from the other stations with above-normal concentrations of both phosphate (0.17 $\mu\text{mol/l}$) and silicate (2.2 $\mu\text{mol/l}$) in the surface water. At the stations in the Å-transect, there were concentrations of ammonium and/or nitrate that were above normal just below the stratification and peaks of chlorophyll fluorescence was noted there. At station P2, the concentration of ammonium was above normal in the deep water.

The oxygen situation in the bottom water was good at all stations in Skagerrak, normal values for the season were measured with concentrations between 5.7-6.2 ml/l. At the coastal station Släggö, where the concentration in July was about 3.2 ml/l closest to the bottom, the concentration had now increased slightly to 3.9 ml/l, which corresponded to an oxygen saturation of only 60%.

Chlorophyll fluorescence, which is an indicator of plankton activity and is measured using a sensor mounted on the CTD¹. Below the stratification, there were one or more peaks in chlorophyll fluorescence and there was also an increase in oxygen concentration and the water was supersaturated with oxygen, which clearly shows a lot of plankton activity. Plankton activity was lowest closest to the coast and higher further west.

Kattegat and The Sound

The temperature was normal for the month, 18.1-18.6°C in the surface water. The salinity varied around 18-26 psu in the Kattegat and 9-13 psu in the Sound. The surface water in the Kattegat was well mixed down to 5-10 m where the salinity increased and the temperature decreased. In the Sound, at the stations W Landskrona and Flinten 7, the water flowed out of the Baltic Sea at the surface, hence the low salinity. At five meters there was a sharp halocline where the salinity increased to 25 psu at the bottom.

Dissolved inorganic nitrogen in the surface water was below the limit of quantification, which is normal in August. Phosphate, which is also used by plants as a nutrient, was about 0.2 $\mu\text{mol/l}$ in the surface water at de Fladen which is above normal, at the other

¹ CTD är ett profilerande mätinstrument och står för Conductivity, Temperature, Depth. SMHI:s CTD är även bestyckad med sensorer som mäter syre och fluorescens bland annat.

stations and in the Sound the concentration was around 0.1 $\mu\text{mol/l}$ which is normal for Kattegat but below normal for the Sound. The concentration of silicate varied between 1.0-2.2 in Kattegat and was 8.4 in the Sound. Just like phosphate, silicate was above normal at Fladen and normal at the other stations.

The oxygen levels in the Kattegat bottom water were normal for the month, between 4.1-5.8 ml/l. The lower concentrations were measured in the southern Kattegat and the Sound and these levels are close to the limit for oxygen deficiency which is usually set at <4 ml/l.

The chlorophyll fluorescence was relatively high in connection with the stratification, but with less defined peaks than in Skagerrak.

Baltic Proper

The temperature in the surface layer varied between 17-18 degrees, except at the southern tip of Öland (BY39) where it was colder due to upwelling, 15 degrees. The salinity in the surface water varied between 6-8 and was normal to slightly above normal for the month. The summer-warm surface water extended down to 15-20 m where the temperature quickly decreased to about 4 degrees, and then increased slightly below the halocline where the temperature was higher than normal at most stations in the deep basins around Gotland. The halocline, was between 70-80 m, slightly shallower in the Bornholm Basin 50-60 m.

The concentration of phosphate in the surface water had decreased since July and now varied between 0.03-0.11 $\mu\text{mol/l}$ and was within normal for the month. Only station BY39 at the southern tip of Öland deviated from this with phosphate around 0.27 $\mu\text{mol/l}$ in the surface water. The concentration of dissolved inorganic nitrogen remained at very low levels at or near the limit of quantification. Station BY5 in the Bornholm Basin deviated where ammonium was measured in the entire water column with a concentration of about 0.3 $\mu\text{mol/l}$ in the surface water. The concentration of silicate in the surface water was above normal at all stations and varied between 13-15 $\mu\text{mol/l}$. Higher concentrations of nutrients than normal were measured in the deeper water, particularly near the bottom at all stations in the Eastern and Western Gotland Basins.

In the Arkona Basin and Hanö Bay there was oxygen deficiency in the bottom water, 3-4 ml/l, and in the Bornholm basin there was an acute oxygen deficiency in the bottom water, 2 ml/l. At the southernmost station in the Eastern Gotland Basin (BCS-III 10), the oxygen concentration decreased to below 2 ml/l just below the halocline and then increased to around 4 ml/l at the bottom. Even further north in the Eastern Gotland Basin, the oxygen decreased just below the halocline at 80 m and then increased slightly again. At the Gotland deep (BY15), hydrogen sulphide was found at 80 m and then replaced by very low oxygen concentrations and hydrogen sulphide was not measured again until 140 m. Throughout the year, there has been a layer down to about 125-130 m where it has been oxygen-free with unmeasurable concentrations of hydrogen sulphide, this layer has now become about 10 m deeper. Hydrogen sulphide concentrations below 140 m increased rapidly. At the stations north and west of Gotland, hydrogen sulphide was measured from

70-80 m depth and then increased with depth. Hydrogen sulphide concentrations are still highest in the Eastern Gotland Basin.

Fluorescence measurements from the CTD showed biological activity in the Baltic Proper in the surface layer down to the thermocline. The highest activity was noted at stations Hanöbukten, Fårödjupet and BY29. During the passage through the Arkona Basin on 12 August, an intense bloom of cyanobacteria was in progress, visible both on satellite images and from the boat in large areas. At station BY2, large numbers of gelatinous plankton (common jelly, *Aurelia aurita*) also occurred.

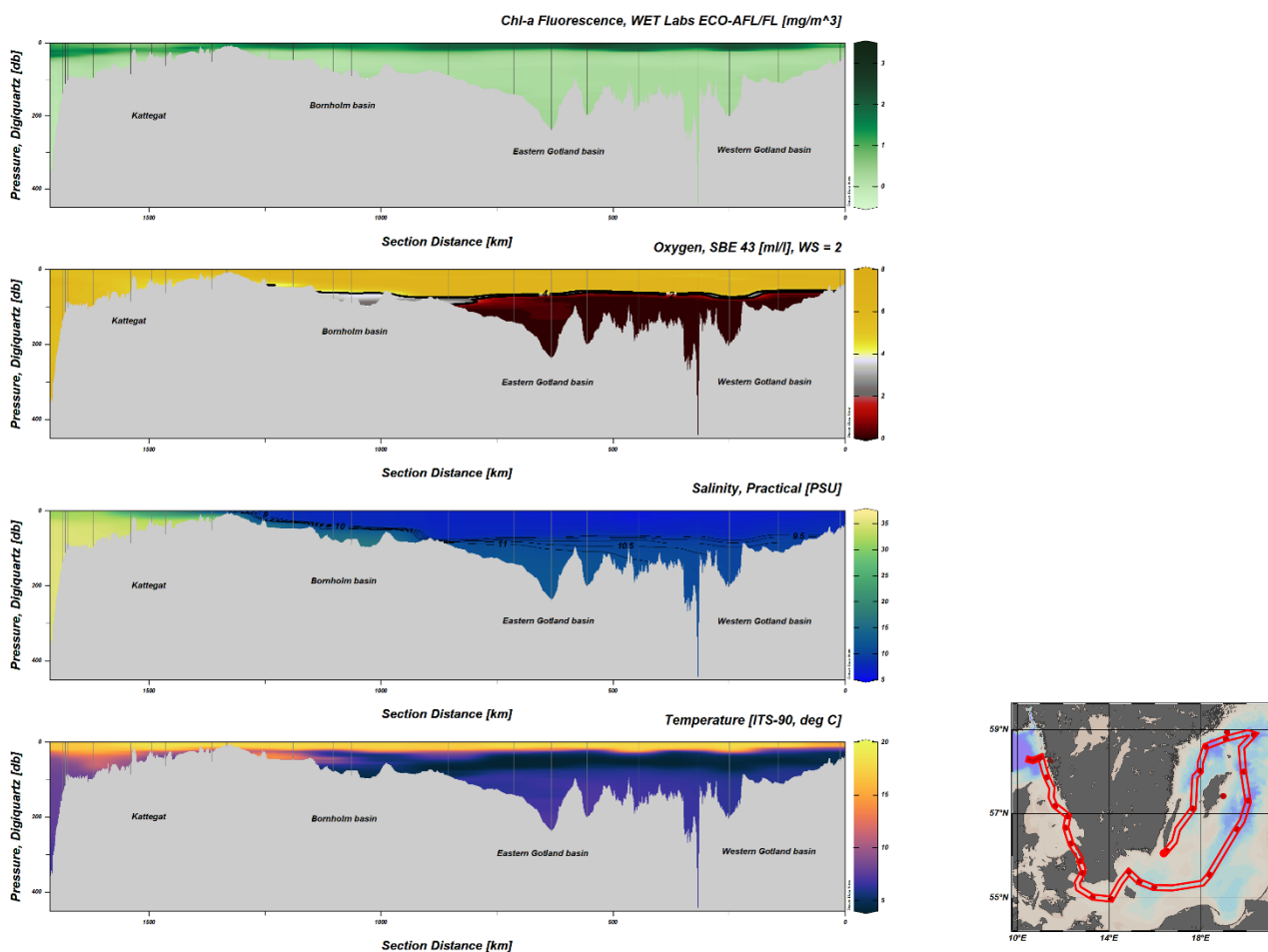


Figure 1. Cross section showing chlorophyll fluorescence, oxygen concentration, salinity and temperature from measurements with CTD and MVP, from Skagerrak to the Eastern Gotland Basin and further into the Western Gotland Basin.

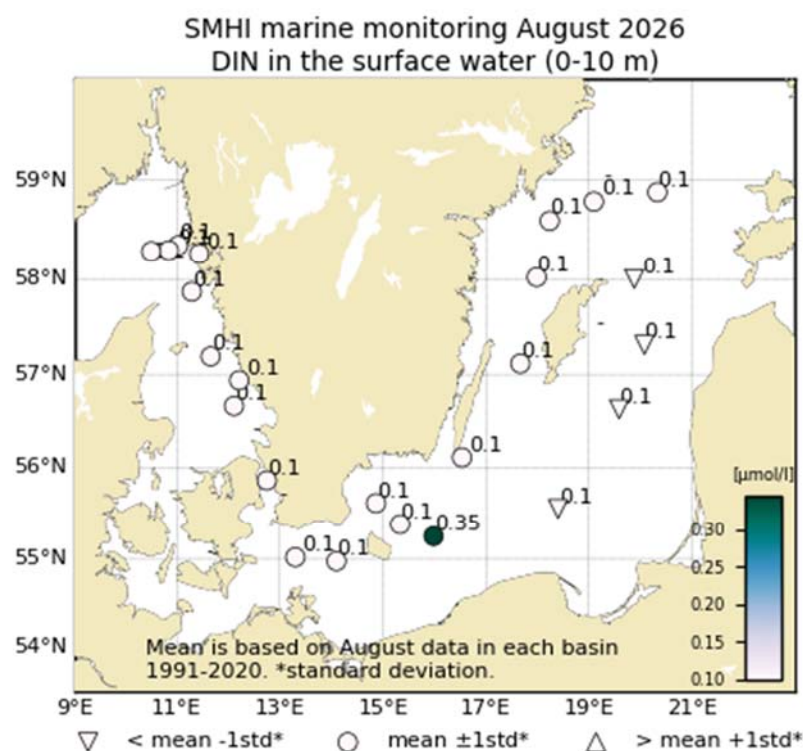


Figure 2. The concentration ($\mu\text{mol/l}$) of inorganic nitrogen (DIN) in the surface water (0 – 10 m). The mean value is based on data for the month at each station during the years 1991 – 2020.

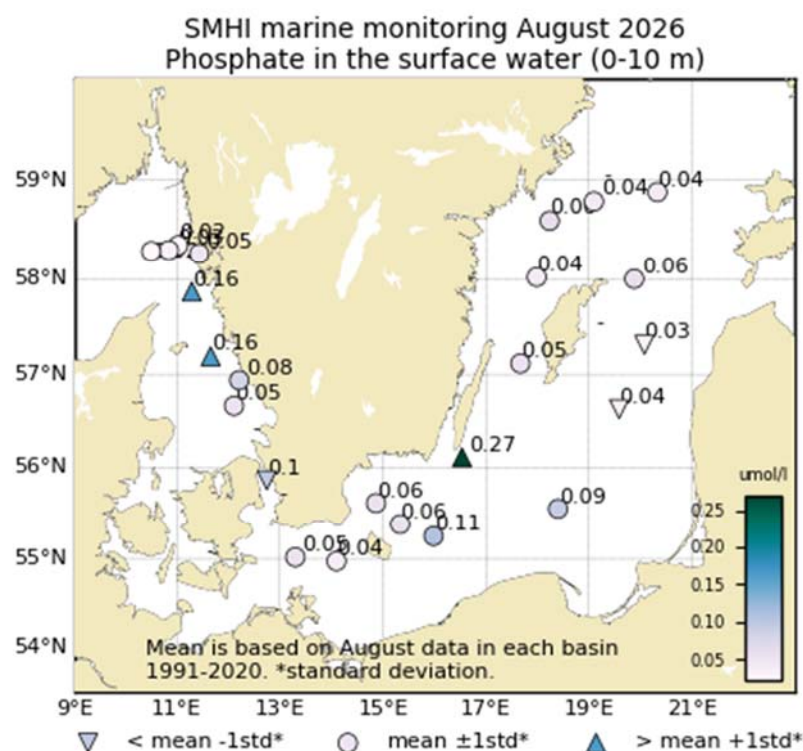


Figure 3. The concentration ($\mu\text{mol/l}$) of phosphate in the surface water (0 – 10 m). The mean value is based on data for the month at each station during the years 1991 – 2020.

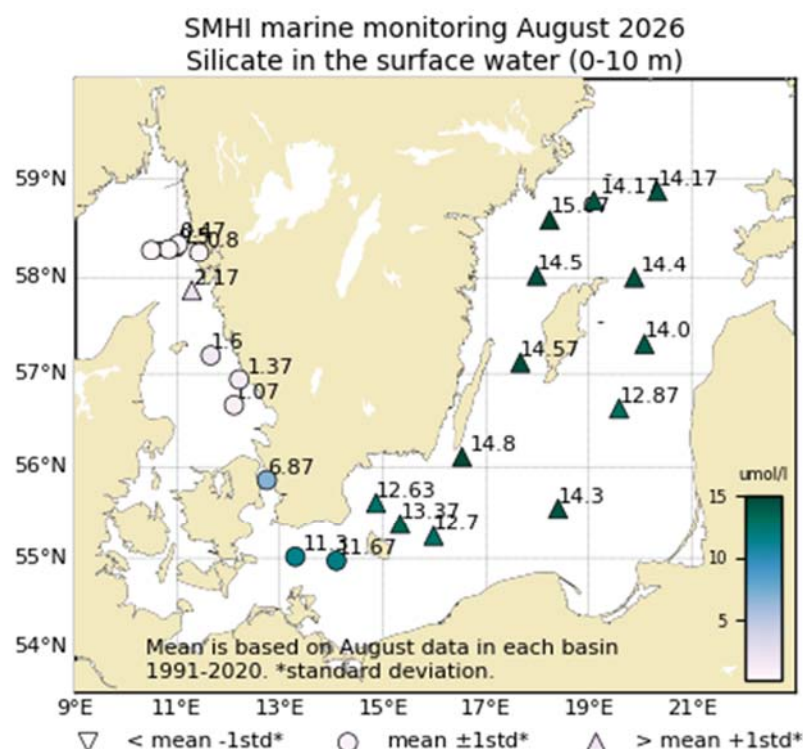


Figure 4. The concentration ($\mu\text{mol/l}$) of silicate in the surface water (0 – 10 m). The mean value is based on data for the month at each station during the years 1991 – 2020.

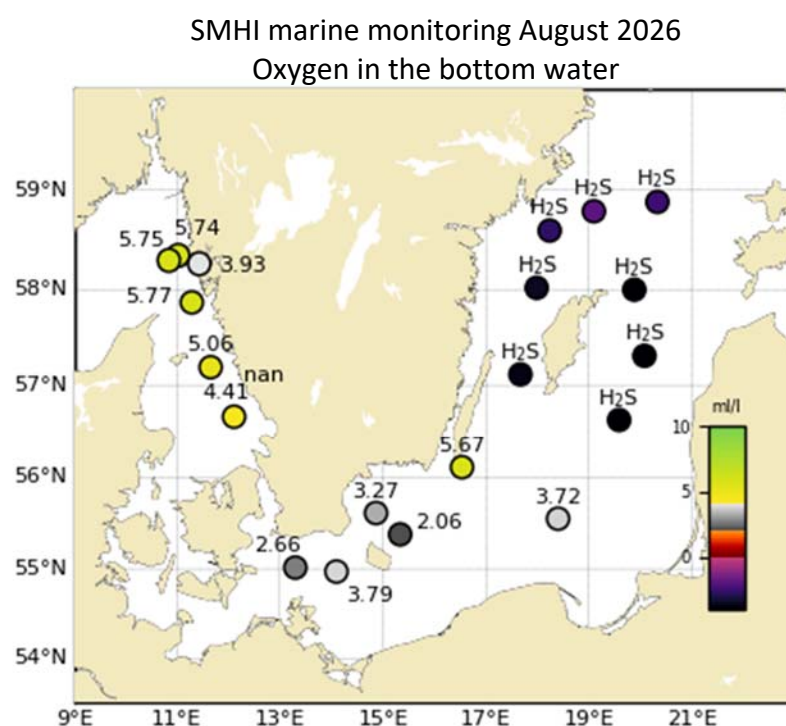


Figure 5. Dissolved oxygen concentration (ml/l) in the bottom water, approx. one metre above the seafloor. Presence of hydrogen sulphide is shown as H₂S. Note that the values have not been compared to statistics as in similar figures (containing surface data) and only circles are shown.

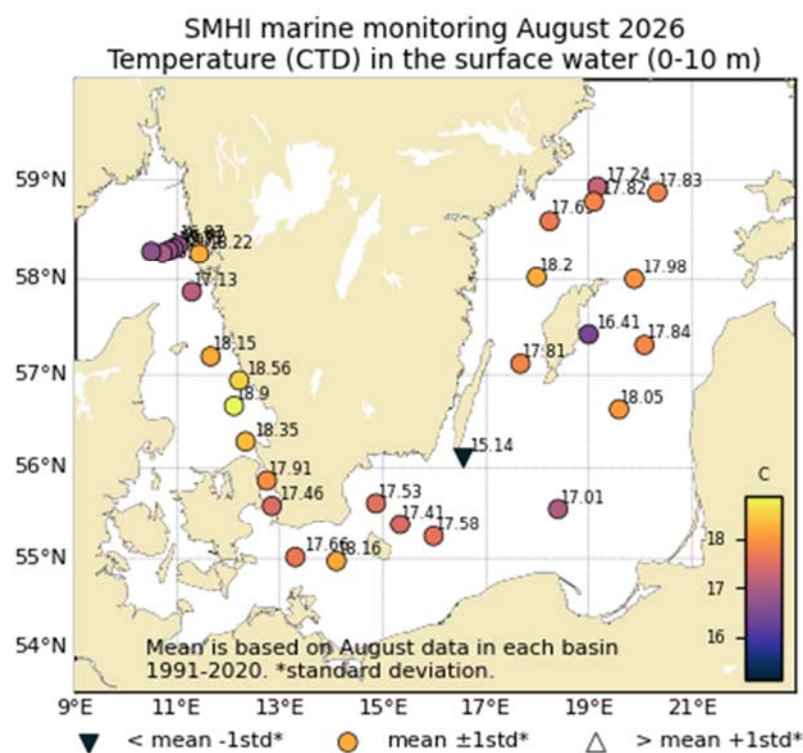


Figure 6. Temperature in the surface water (0 – 10 m). The mean value is based on data for the month at each station during the years 1991 – 2020.

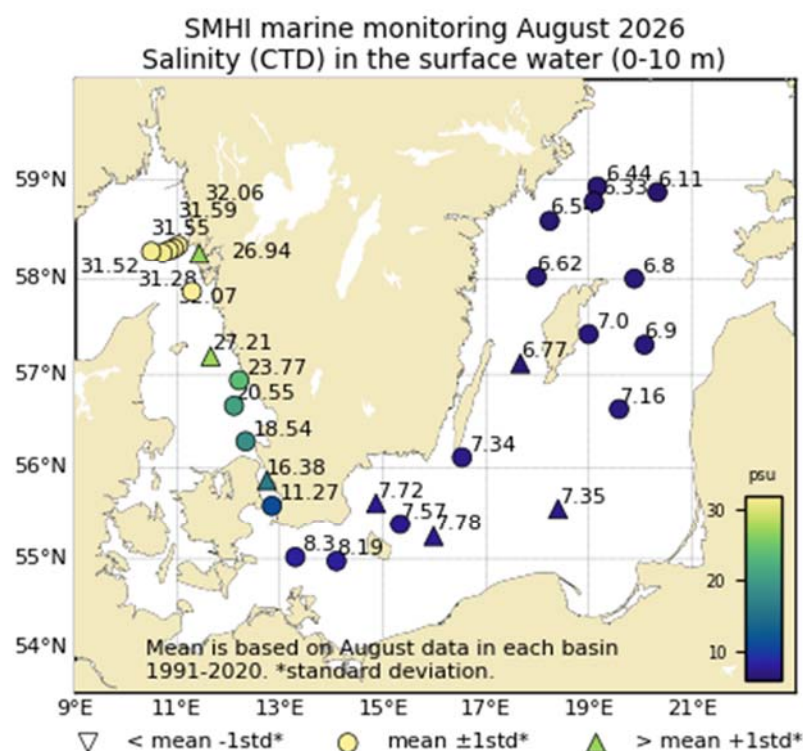


Figure 7. Salinity in the surface water (0 – 10 m). The mean value is based on data for the month at each station during the years 1991 – 2020.

PARTICIPANTS

Name	Role	From
Lena Viktorsson	Chief Scientist, Oceanographer	SMHI
Alex Rockström	Oceanographic engineer	SMHI
Johanna Linders	Oceanographer	SMHI
Ola Kalén	Oceanographer	SMHI
Sari Sipilä	Chemist	SMHI
Monica Linders	Chemist	SMHI
Ebba Odhe	Master student, marine sciences	GU
Kajsa Hansson	College student	Lund

APPENDICES

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

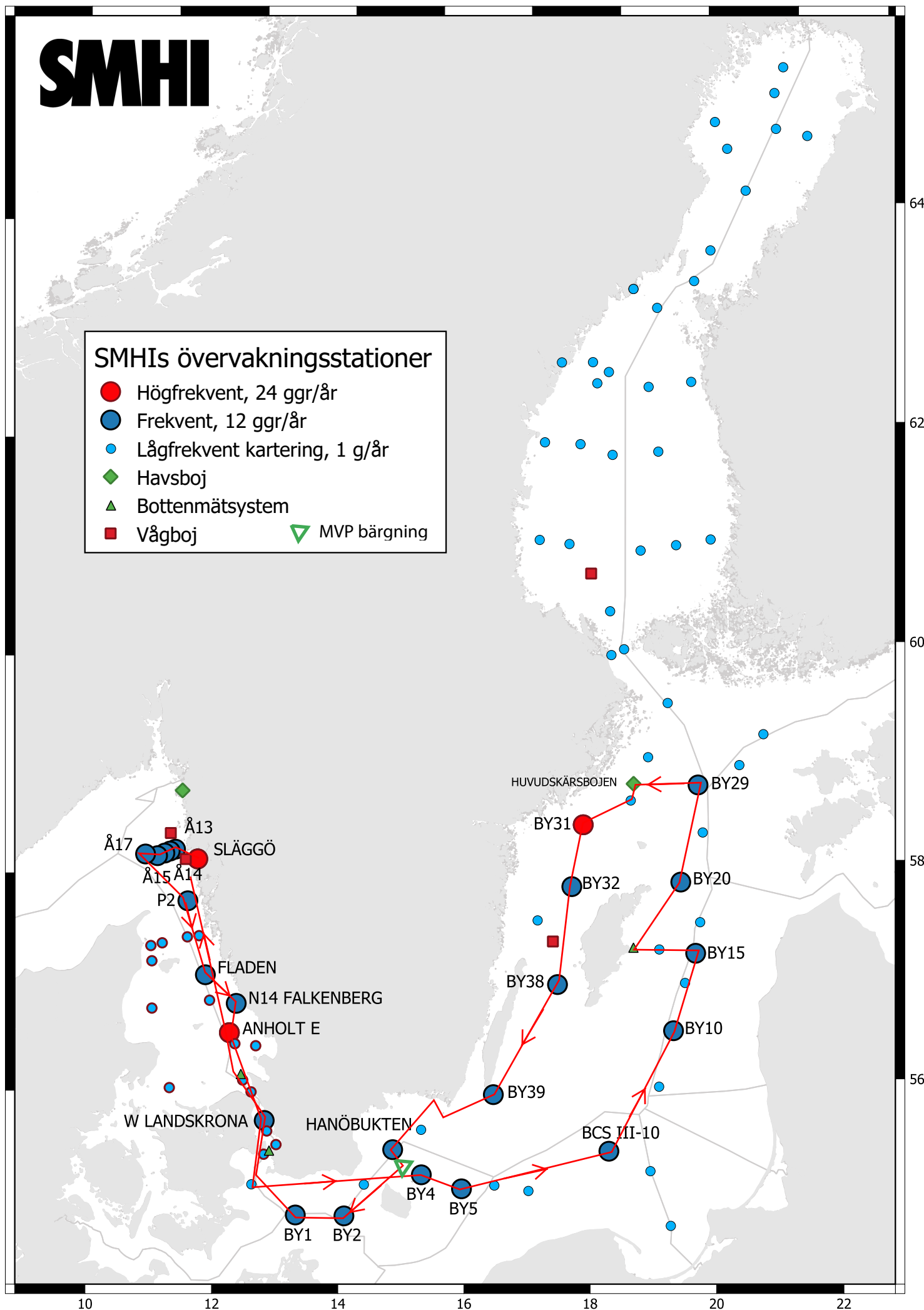


Havs
och Vatten
myndigheten



SMHI:s övervakningsstationer

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



Date: 2026-08-14
Time: 18:05

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	CZPP ho h poy	No de	No btl	T e	T e	S a	P h	D o	D o	H 2	P h	P t	N t	N t	N t	N t	A m	A t	S h	C c	
																		m	m	l	l	x	x	s	o	r	r	r	r	r	r	r	r	r	
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																		l	d	l	d	l	d												
0615	16	FIBG27	BAS...	SLÄGGÖ	5815.59	01126.14	20260806	1200	74		22 12	16.8	1009	2820	xxx-	9 9		-	x	x	x	x	x	-	x	x	x	x	x	x	x	x	x	-	-
0616	16	SKEX14	BAS...	Å13	5820.66	01101.66	20260806	1520	90		24 12	16.7	1008	2530	x---	10 10		-	x	x	x	x	x	-	x	x	x	x	x	x	x	x	-	-	
0617	16	SKEX15	BAS...	Å14	5818.94	01056.54	20260806	1630	110		23 12	16.6	1008	2530	----	10 0		-	x	-	x	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0618	16	SKEX16	BAS...	Å15	5817.66	01050.74	20260806	1730	135		23 13	16.4	1008	2630	x---	12 12		-	x	x	x	-	x	x	x	x	x	x	x	-	-	-	-	-	-
0619	16	SKEX17	BAS...	Å16	5816.04	01043.48	20260806	1830	202		23 11	16.8	1008	2430	----	12 0		-	x	-	x	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0620	16	SKEX18	BAS...	Å17	5817.05	01030.29	20260806	2010	340		25 10	17.6	1008	9990	x---	15 15		-	x	-	x	x	x	-	x	x	x	x	x	x	-	-	-	-	-
0621	16	SKEX23	BAS...	P2	5752	01117.52	20260807	0055	93		26 13	15.9	1011	9990	x---	10 10		-	x	x	x	-	x	x	x	x	x	x	-	-	-	-	-	-	-
0622	16	KANX25	BAS...	FLADEN	5711.53	01139.43	20260807	0540	84		27 13.8	15.1	1014	1340	x---	13 13		-	x	x	x	x	x	-	x	x	x	x	x	x	-	-	-	-	-
0623	16	KANX50	BAS...	N14 FALKENBERG	5656.39	01212.72	20260807	0850	30	11	27 13.2	15.9	1016	2730	xxx-	7 7		-	x	x	x	-	x	x	x	x	x	x	-	-	-	-	-	-	-
0624	16	KAEX29	BAS...	ANHOLT E	5640.12	01206.67	20260807	1150	62		26 11	16.4	1018	2630	xxxx	10 10		x	x	x	x	x	-	x	x	x	x	x	x	x	-	-	-	-	-
0625	16	KAEX00	EXT...	P22	5617.35	01220.19	20260807	1445	26		29 10	16.7	1020	2820	----	0 0		-	x	-	x	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0626	16	SOCX39	BAS...	W LANDSKRONA	5552.01	01244.88	20260807	1745	50		28 6	15.2	1007	2610	x---	9 9		x	x	x	-	x	x	-	x	x	x	x	x	-	-	x	x	-	-
0627	16	SOSX00	EXT...	FLINTEN 7	5535.33	01250.74	20260807	2015	9		28 7	16.7	1022	9990	----	3		-	x	-	x	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0628	16	BPSB06	BAS...	BY4 CHRISTIANSÖ	5522.97	01520.08	20260808	0730	94	6	11 4.8	16.3	1024	1120	x---	12 12		x	x	x	-	x	x	-	x	x	x	x	x	-	-	-	-	-	-
0629	16	BPSB07	BAS...	BY5 BORNHOLMSDJ	5515	01559.05	20260808	1030	91	7	27 6	18.3	1025	1230	xxxx	12 12		x	x	x	x	x	-	x	x	x	x	x	x	x	-	-	-	-	-
0630	16	BPSE11	BAS...	BCS III-10	5533.32	01824	20260808	1945	90		24 8	16.9	1024	9990	x---	12 12		x	x	x	-	x	x	-	x	x	x	x	x	-	-	x	x	-	-
0631	16	BPEX13	BAS...	BY10	5638.01	01935.08	20260809	0330	147		26 5.2	17.3	1022	1220	x---	15 15		-	x	x	-	x	x	x	x	x	x	x	-	-	-	-	-	-	-
0632	16	BPEX21	BAS...	BY15 GOTLANDSDJ	5718.73	02004.56	20260809	0756	249	5	23 7.6	19.4	1022	0020	xxxx	24 24		-	x	-	x	x	x	x	x	x	x	x	x	x	-	-	-	-	-
0633	16	BPEX00	EXT...	ÖSTERGARNSHOLM	5725.43	01859.62	20260809	1330	20		19 10.8	18.3	1019	1320	----	2 0		-	x	-	x	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0634	16	BPEX26	BAS...	BY20 FÄRÖDJ	5759.88	01952.75	20260809	1800	203		19 12	17.8	1017	2720	x---	17 17		-	x	-	x	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0635	16	BPNX35	BAS...	BY29 / LL19	5852.9	02019.67	20260810	0010	178		19 10	17.9	1013	9990	x---	16 16		-	x	-	x	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0636	16	BPNX00	EXT...	HUVUDSKÄR BUOY	5856.23	01909.67	20260810	0430	89		19 8.0	17.2	1008	2820	----	2 0		-	x	-	x	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0637	16	BPNX36	BAS...	BY30	5847.29	01905.72	20260810	0600	191	6	15 7.6	17.6	1006	2820	----	16 16		-	x	-	x	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0638	16	BPNX37	BAS...	BY31 LANDSORTSDJ	5835.62	01814.18	20260810	0924	459	5	29 7.9	17.4	1005	1630	xxxx	20 20		-	x	-	x	x	x	x	x	x	x	x	x	-	-	x	-	-	-
0639	16	BPWX38	BAS...	BY32 NORRKÖPINGSDJ	5801.02	01759.09	20260810	1430	205		23 10	18.5	1007	2620	x---	17 17		-	x	-	x	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0640	16	BPWX45	BAS...	BY38 KARLSÖDJ	5707.03	01740.12	20260810	2050	114		26 11	18.0	1010	9990	x---	14 14		-	x	x	-	x	x	-	x	x	x	x	x	-	-	x	-	-	-
0641	16	BPSE49	BAS...	BY39 ÖLANDS S UDDE	5606.98	01632.14	20260811	0640	50	6	28 11.7	14.4	1015	0020	xxx-	8 8		x	x	x	x	x	-	x	x	x	x	x	x	-	-	-	-	-	-
0642	16	BPSH05	BAS...	HANÖBUKTEN	5537.05	01452.02	20260811	1650	80		28 8	18.2	1023	1220	x---	11 11		x	x	x	-	x	-	-	-	-	-	-	-	-	-	-	-	-	-
0643	16	BPSA03	BAS...	BY2 ARKONA	5458.27	01405.93	20260812	0700	47	6	31 4.5	15.8	1029	0020	xxx-	8 8		x	x	x	x	x	-	x	x	x	x	x	x	-	-	x	-	-	-
0644	16	BPSA02	BAS...	BY1	5500.95	01318.04	20260812	1130	47	2	31 3.7	15.2	1031	1420	x---	8 8		x	x	x	-	x	-	-	-	-	-	-	-	-	-	-	-	-	-
0645	16	KAEX29	BAS...	ANHOLT E	5640.12	01206.68	20260813	0005	62		20 3	17.1	1027	9990	xxxx	10 10		x	x	x	x	x	-	x	x	x	x	x	x	-	-	-	-	-	-

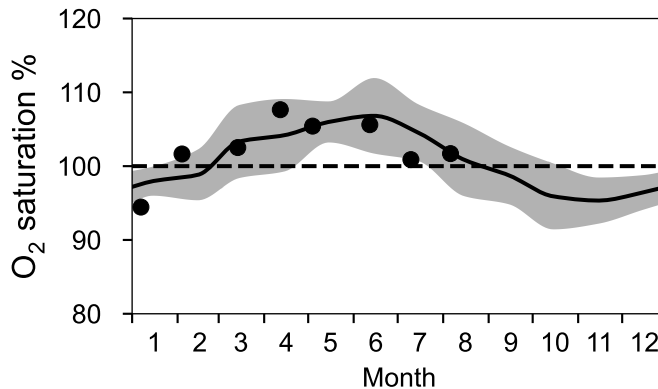
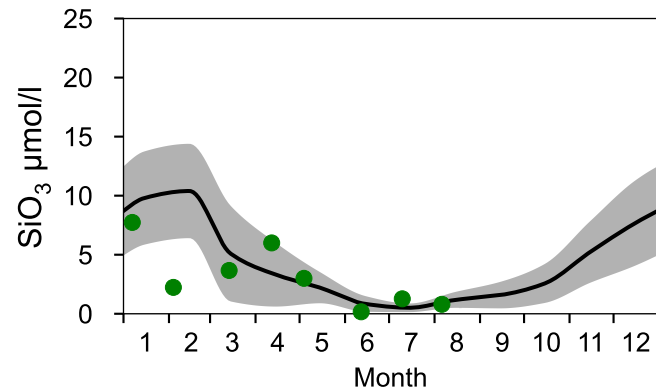
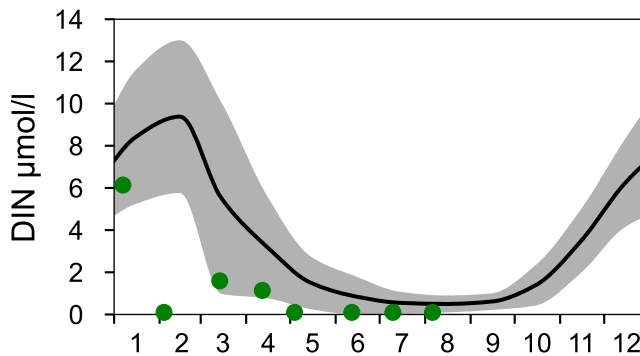
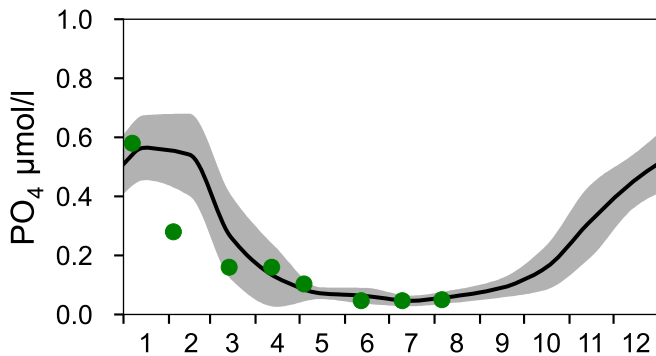
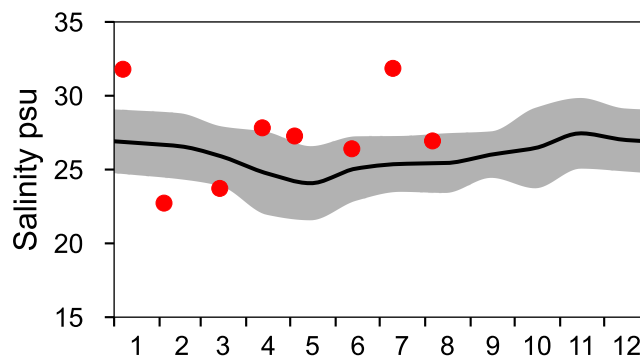
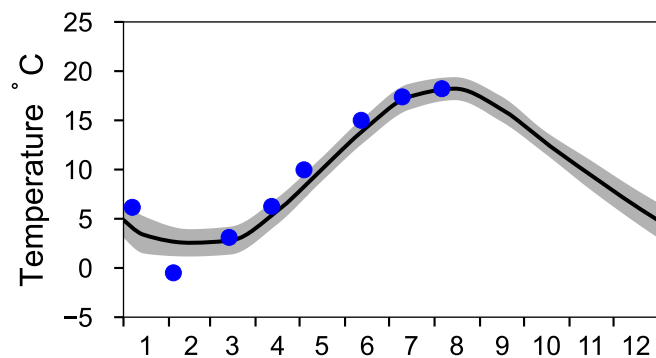
STATION SLÄGGÖ SURFACE WATER (0-10 m)

Annual Cycles

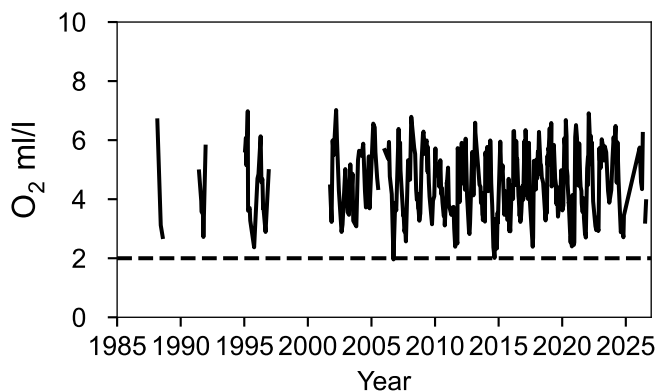
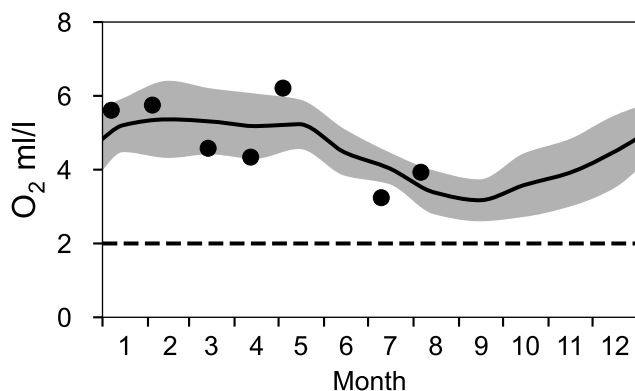
— Mean 1991-2020

■ St.Dev.

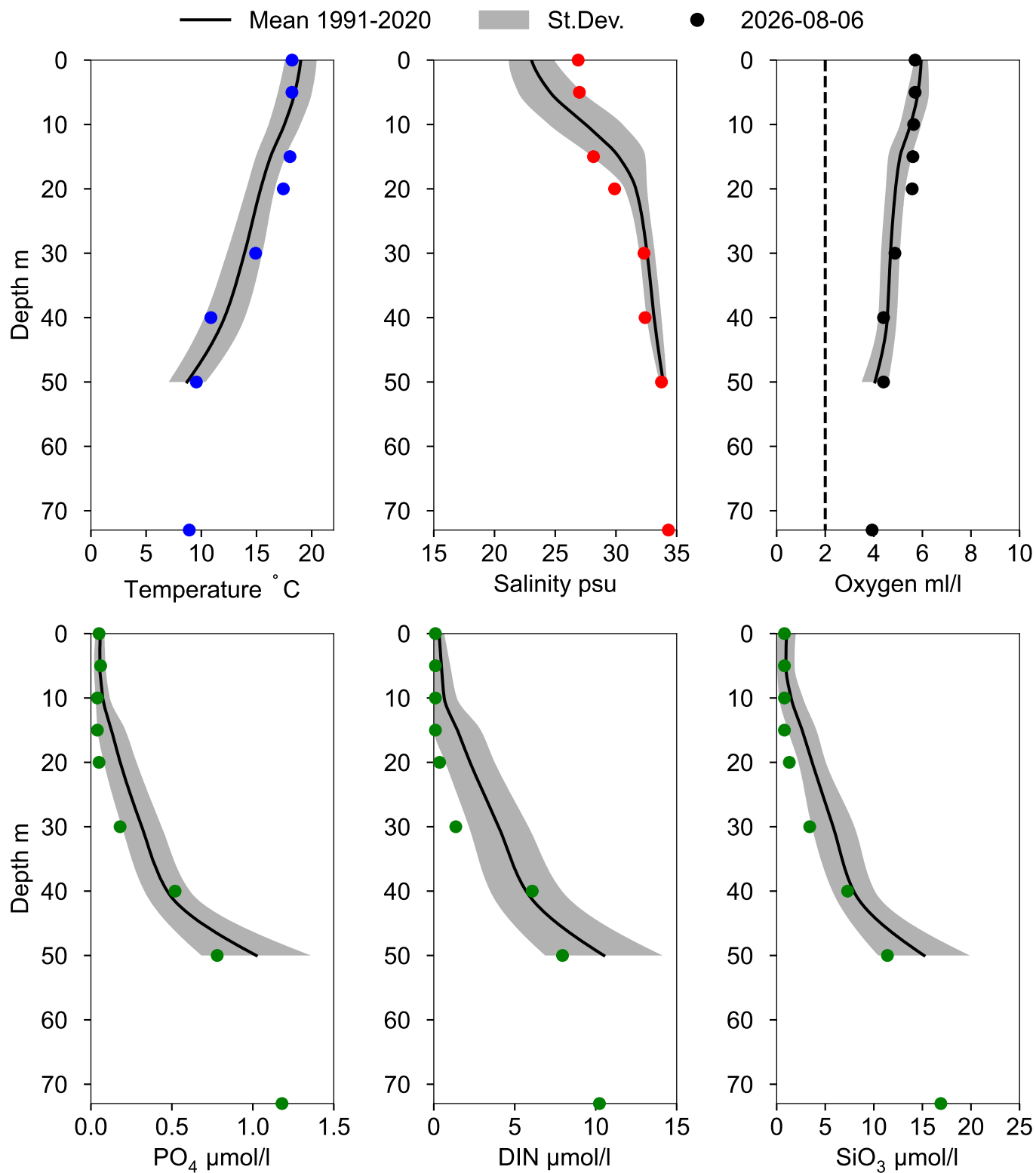
● 2026



OXYGEN IN BOTTOM WATER (depth >= 64 m)



Vertical profiles SLÄGGÖ August



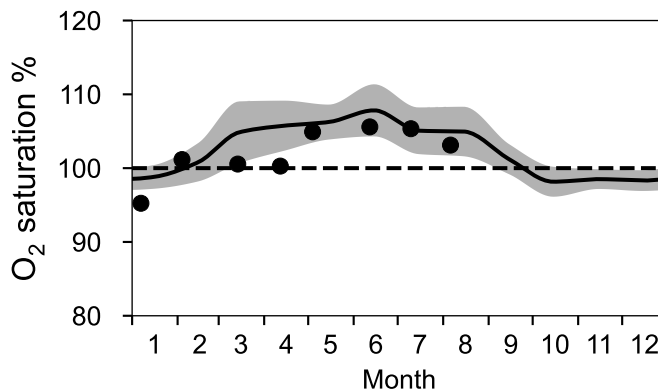
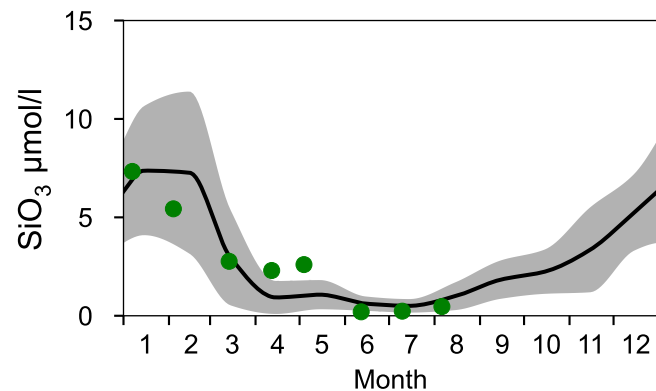
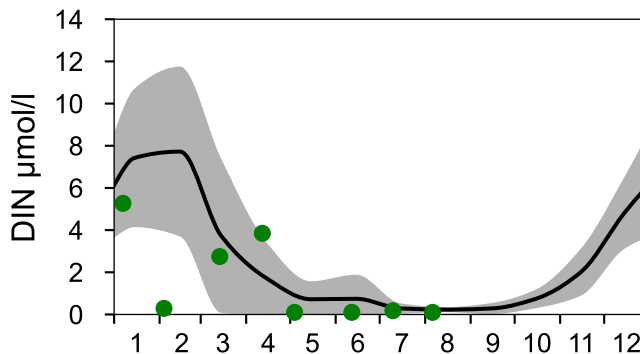
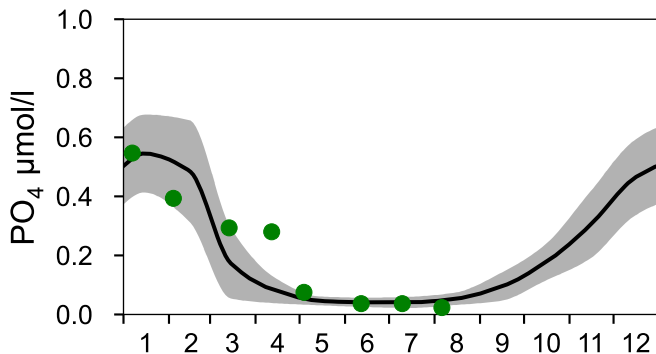
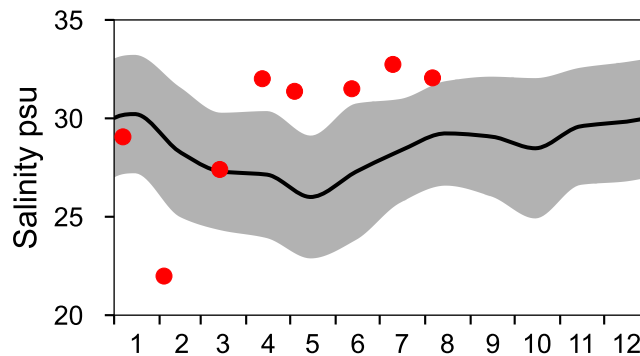
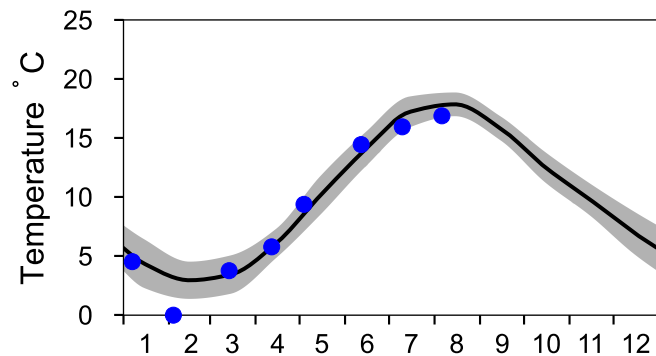
STATION Å13 SURFACE WATER (0-10 m)

Annual Cycles

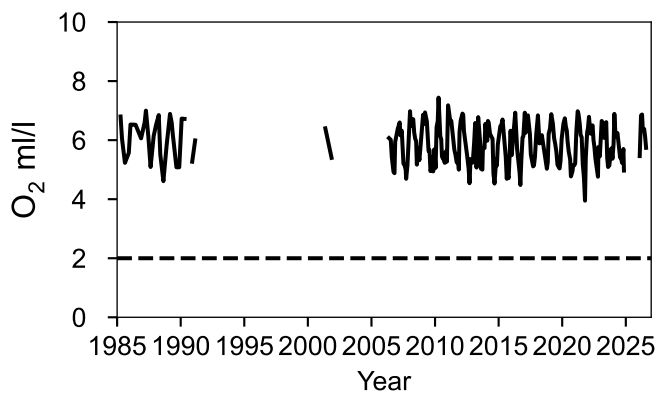
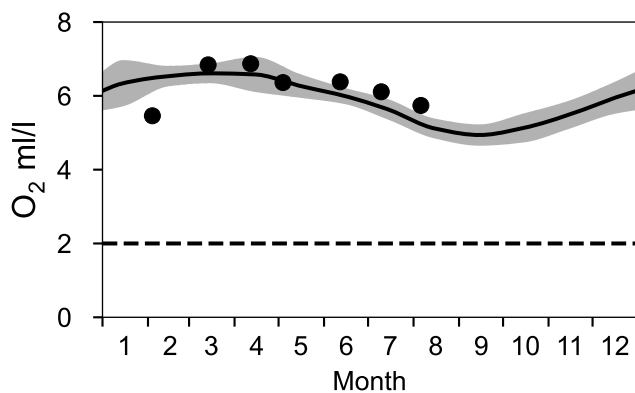
— Mean 1991-2020

■ St.Dev.

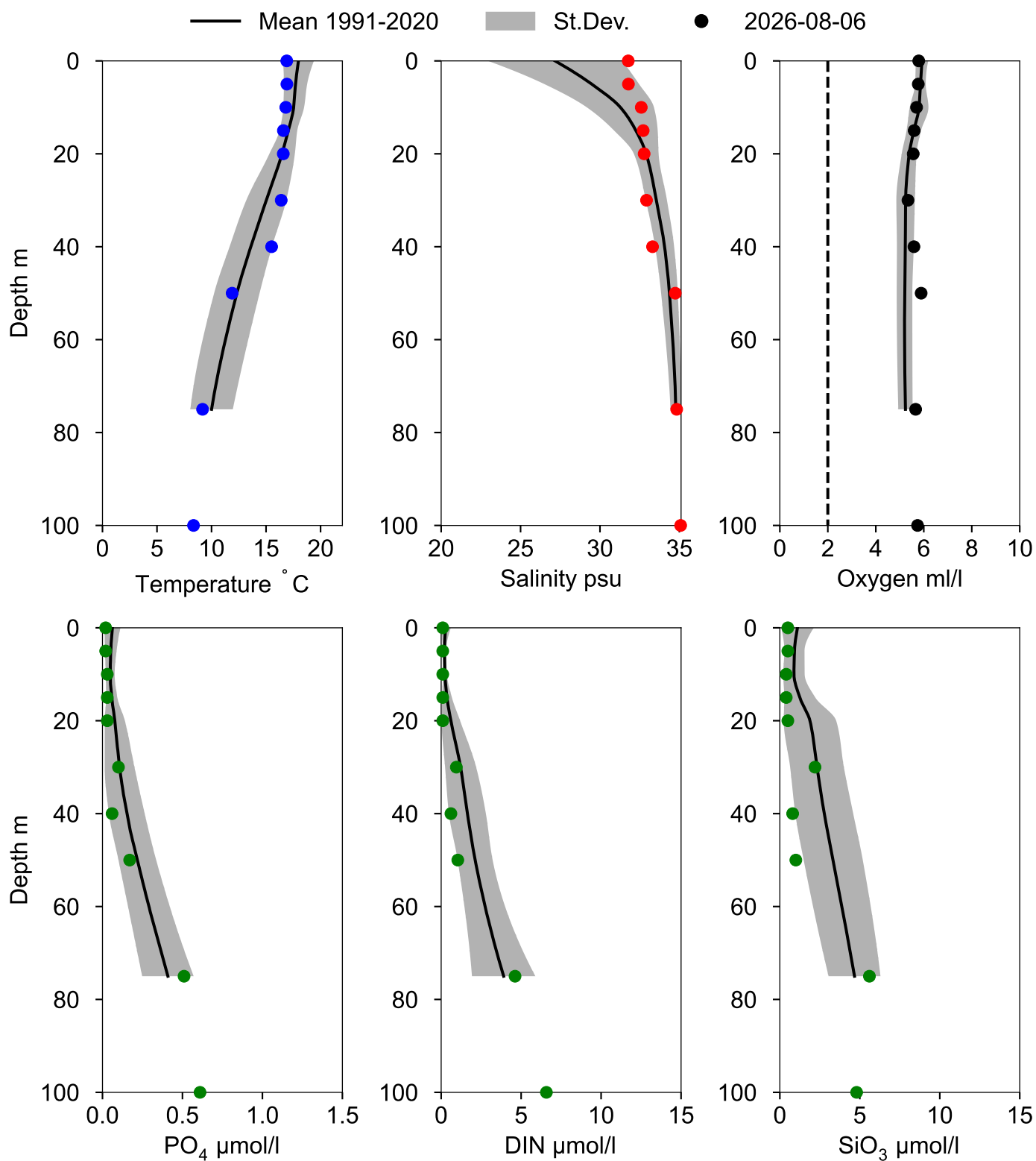
● 2026



OXYGEN IN BOTTOM WATER (depth >= 82 m)



Vertical profiles Å13 August



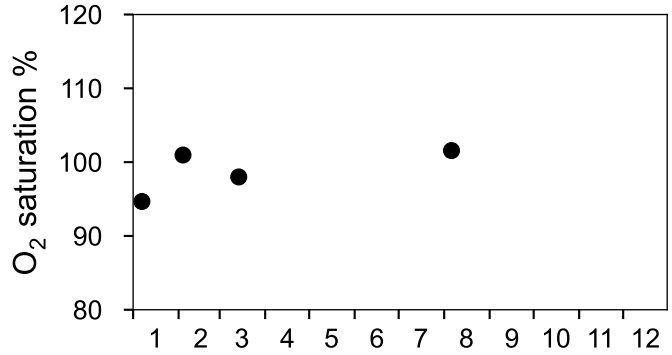
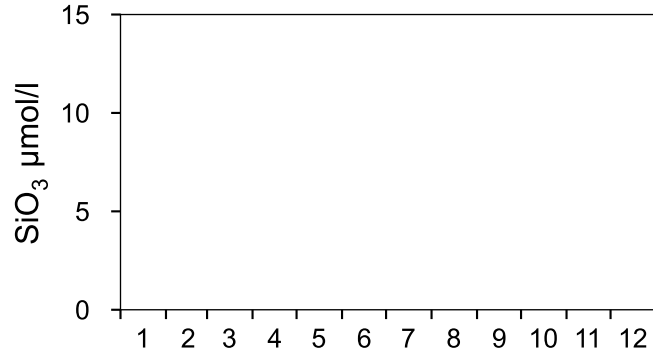
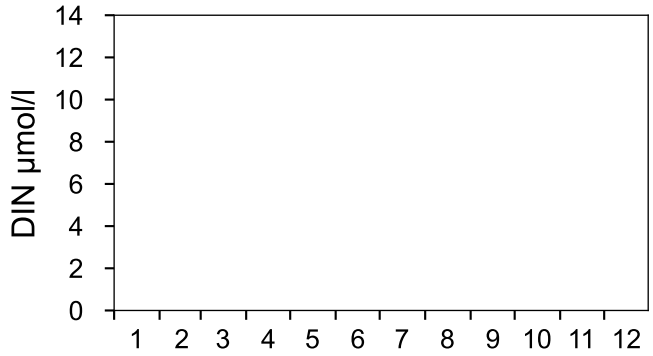
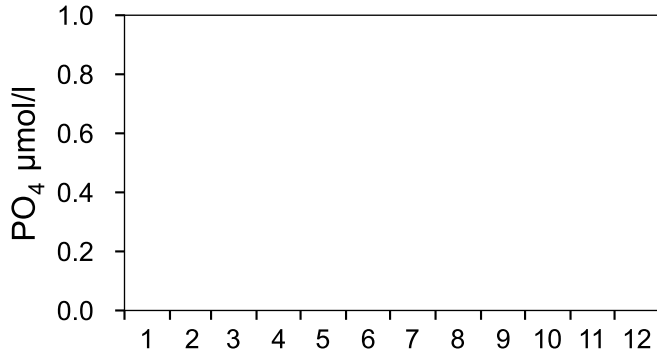
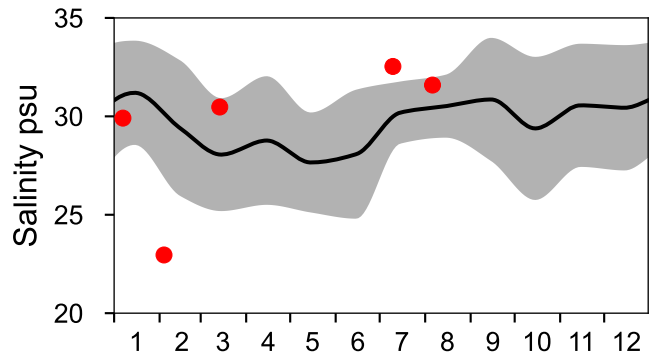
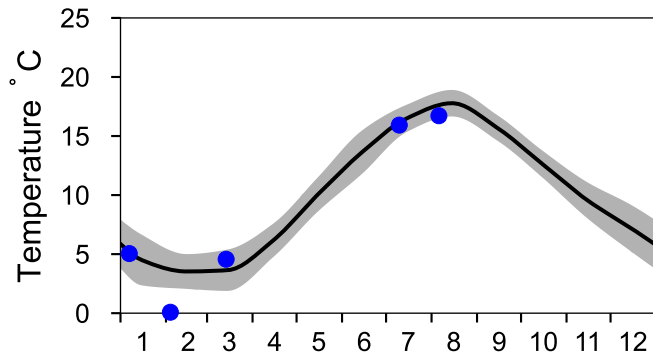
STATION Å14 SURFACE WATER (0-10 m)

Annual Cycles

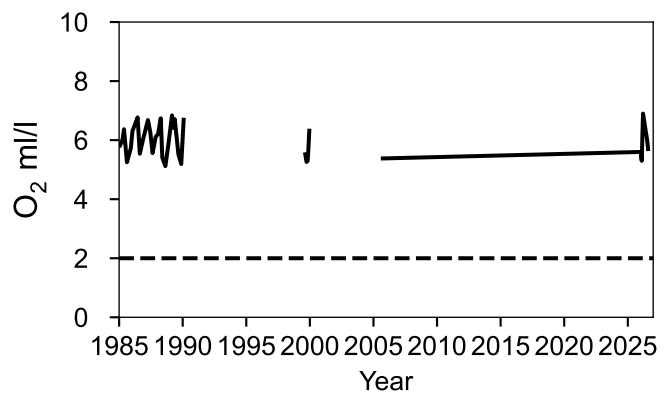
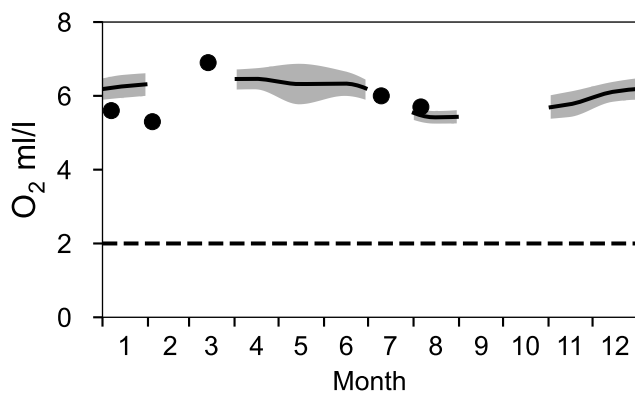
— Mean 1991-2020

■ St.Dev.

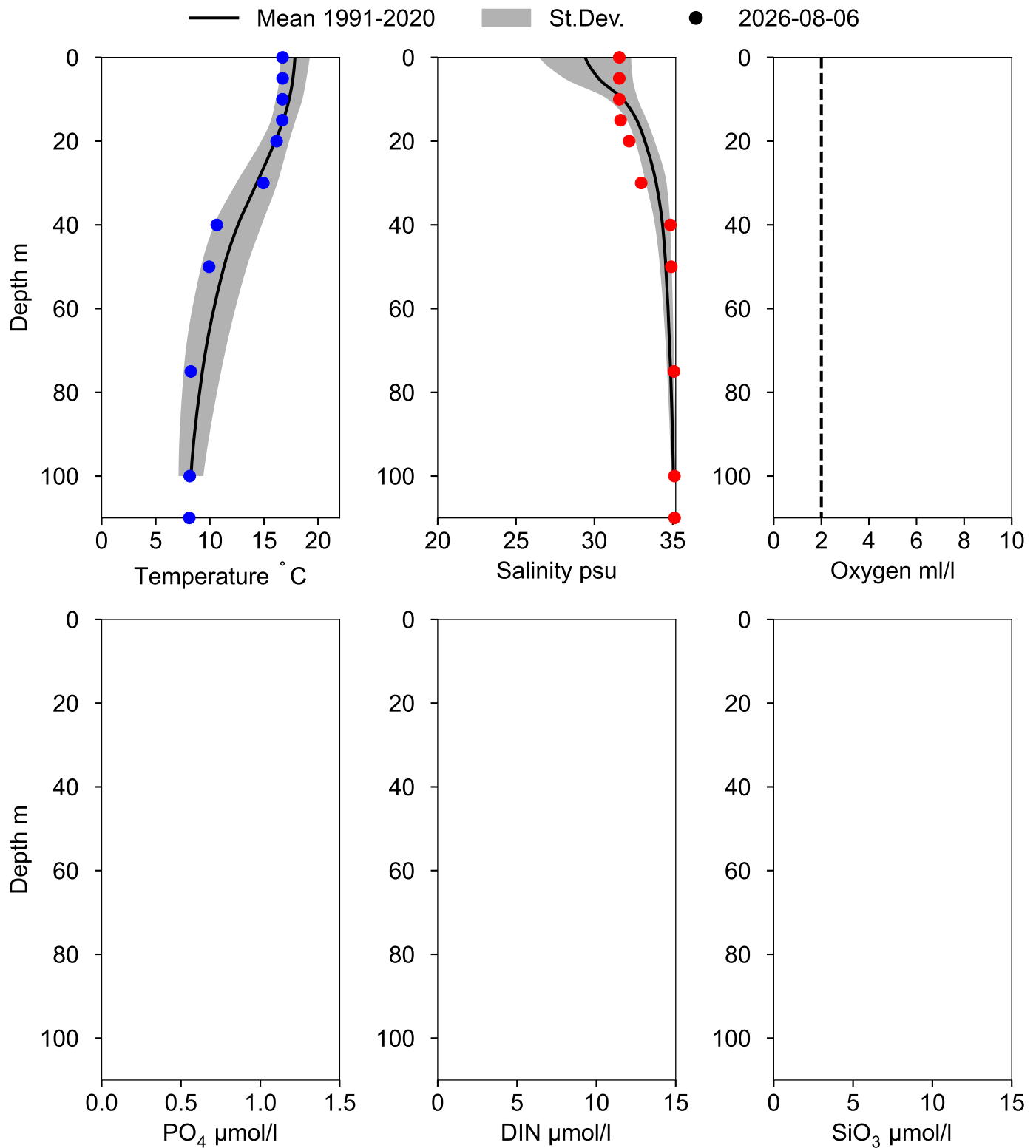
● 2026



OXYGEN IN BOTTOM WATER (depth >= 100 m)



Vertical profiles Å14 August



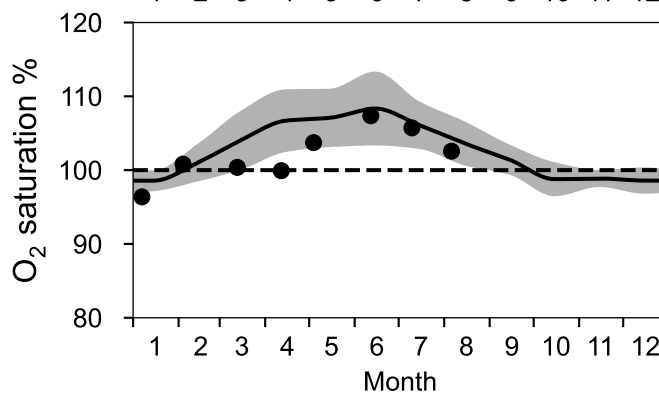
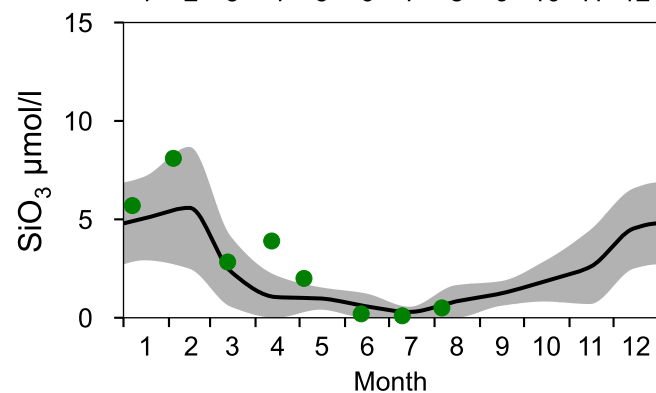
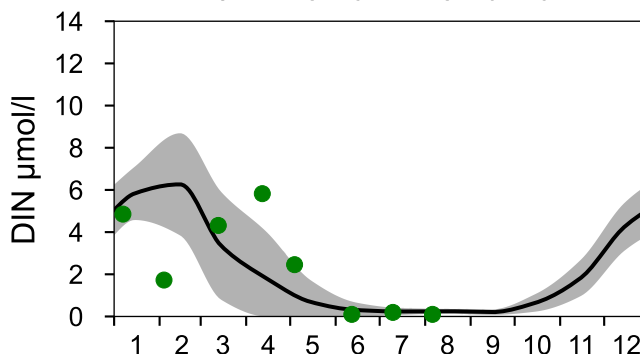
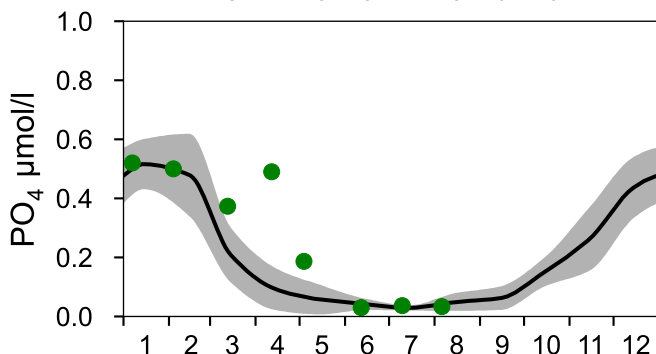
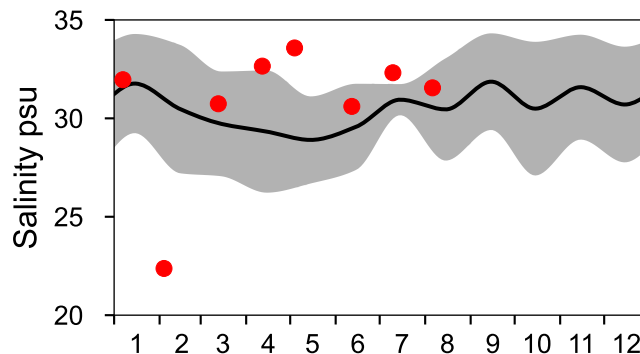
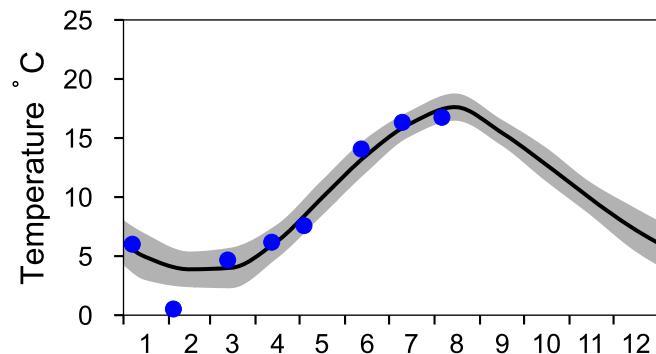
STATION Å15 SURFACE WATER (0-10 m)

Annual Cycles

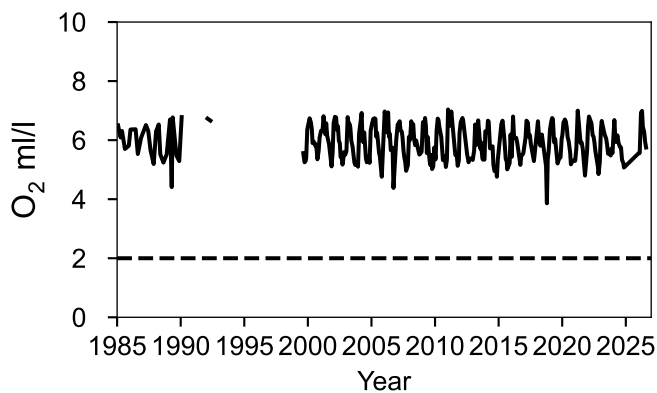
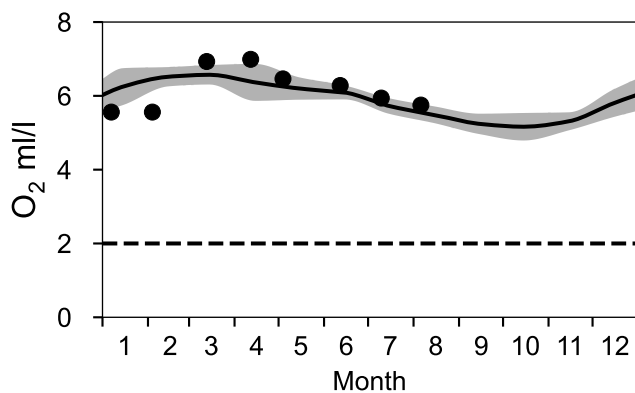
— Mean 1991-2020

■ St.Dev.

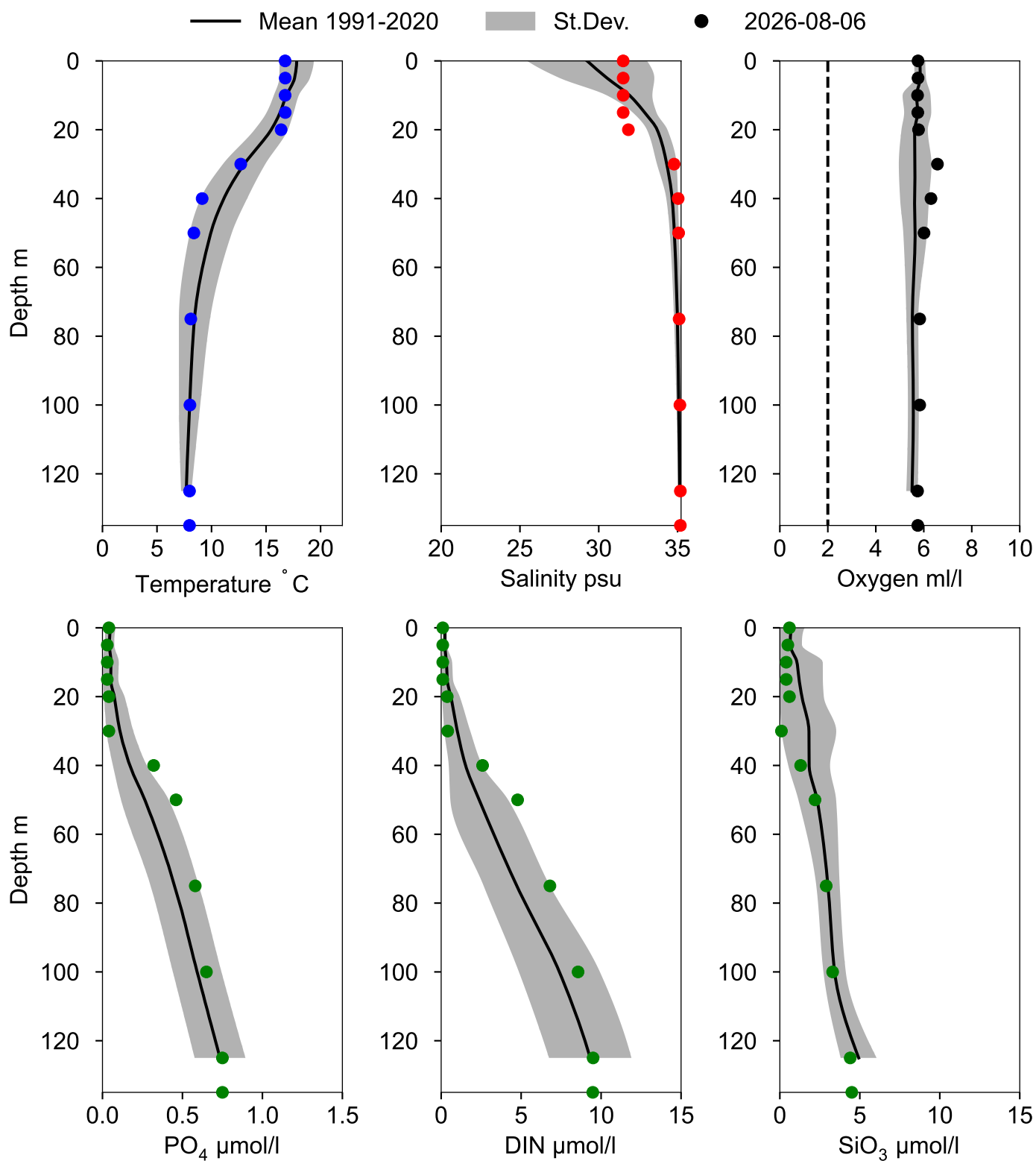
● 2026



OXYGEN IN BOTTOM WATER (depth >= 125 m)



Vertical profiles Å15 August



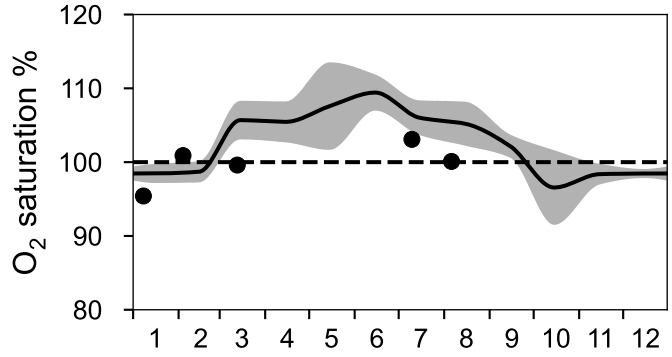
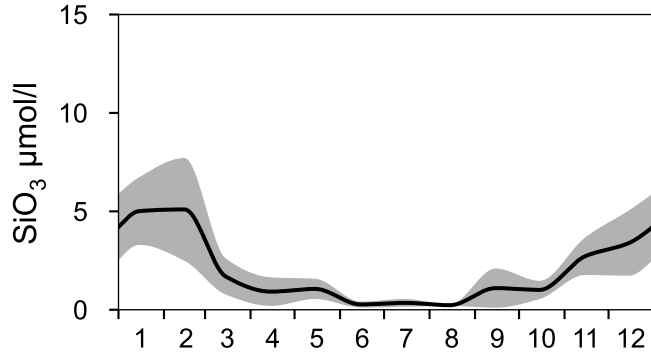
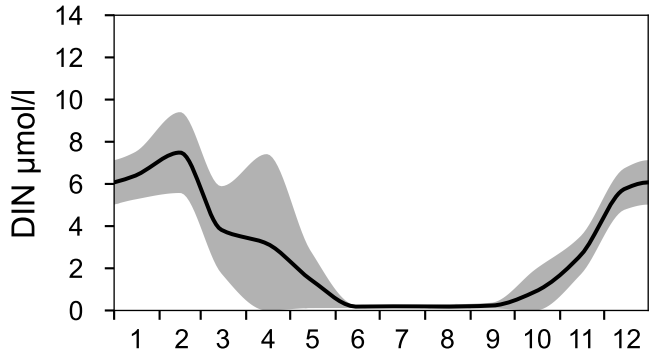
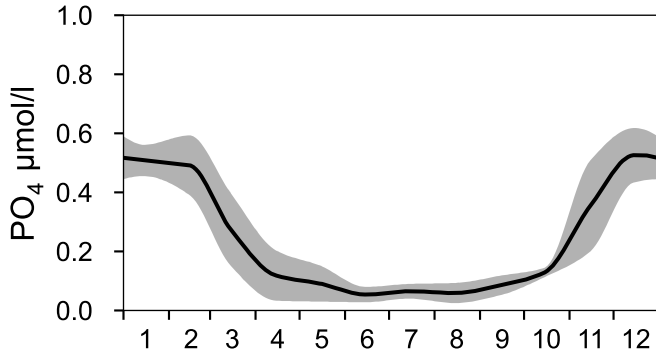
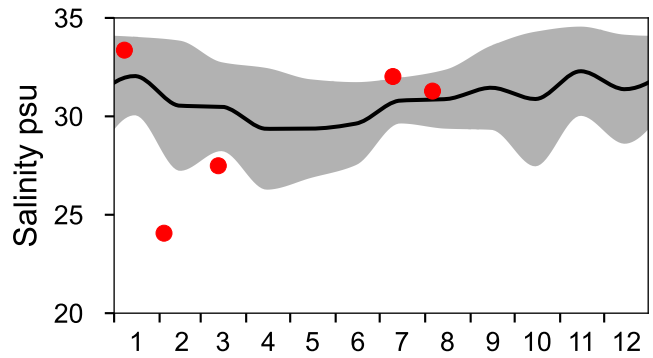
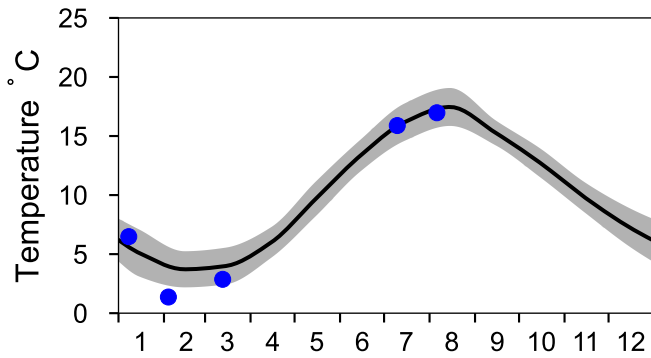
STATION Å16 SURFACE WATER (0-10 m)

Annual Cycles

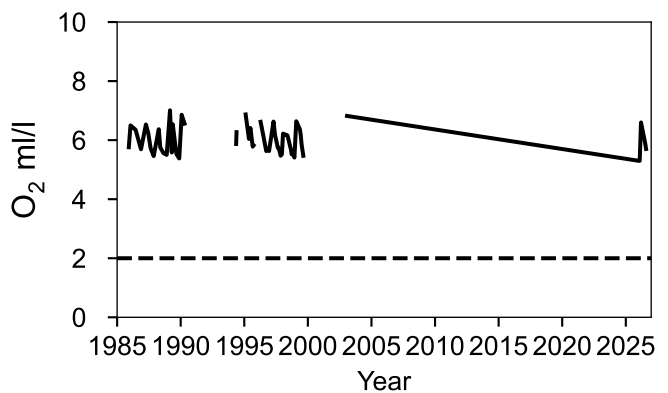
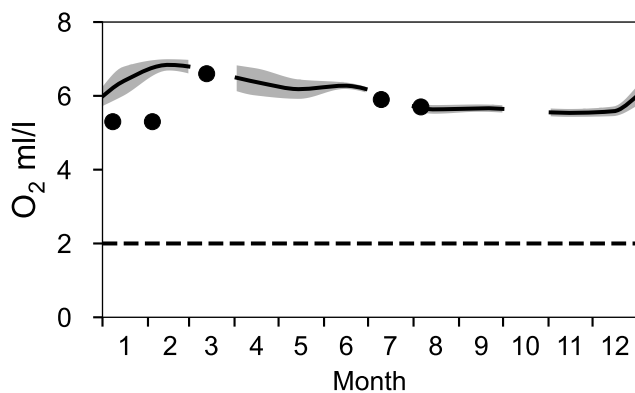
— Mean 1991-2020

■ St.Dev.

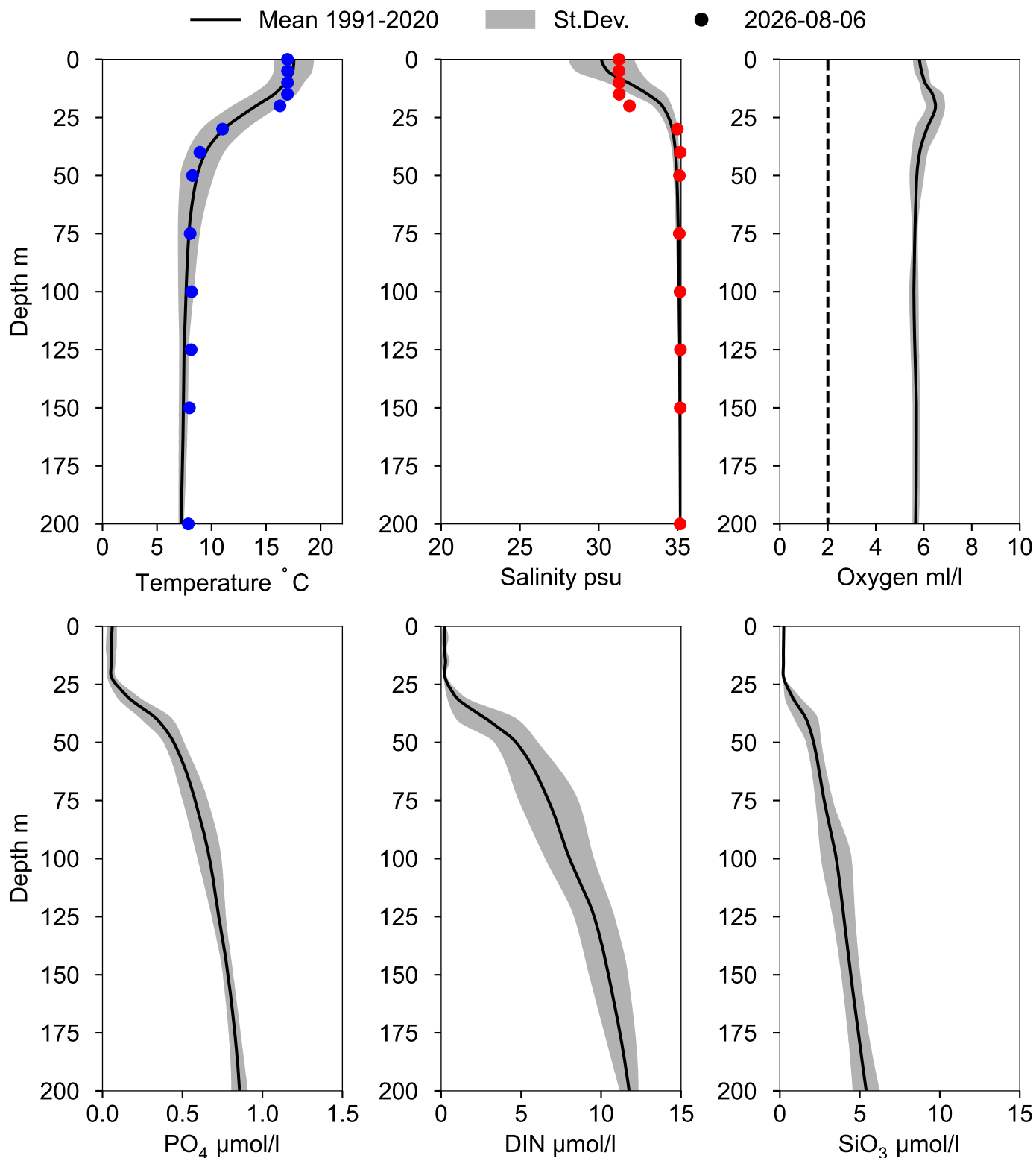
● 2026



OXYGEN IN BOTTOM WATER (depth >= 193 m)



Vertical profiles A16 August



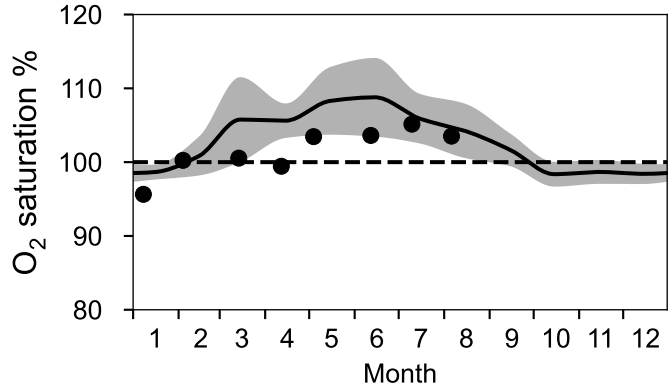
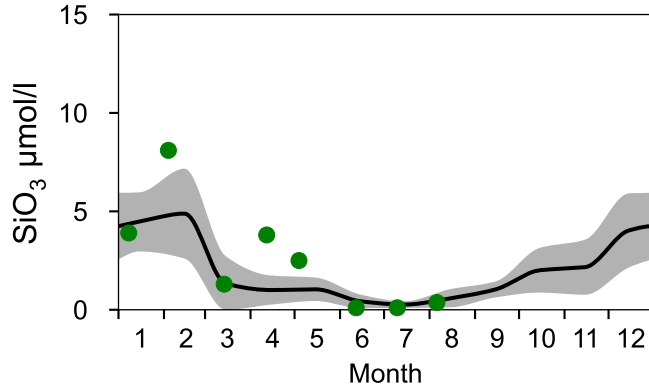
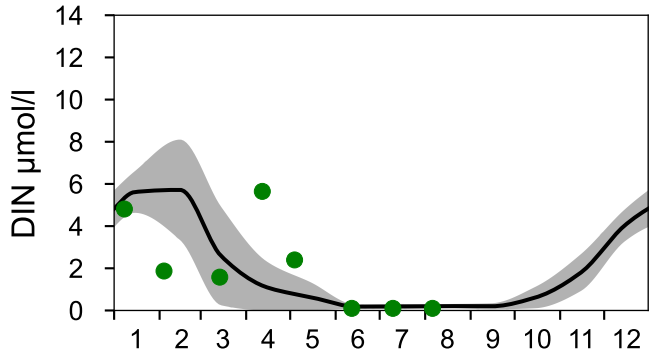
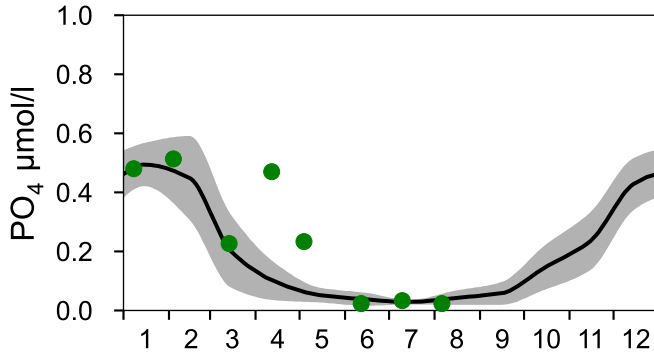
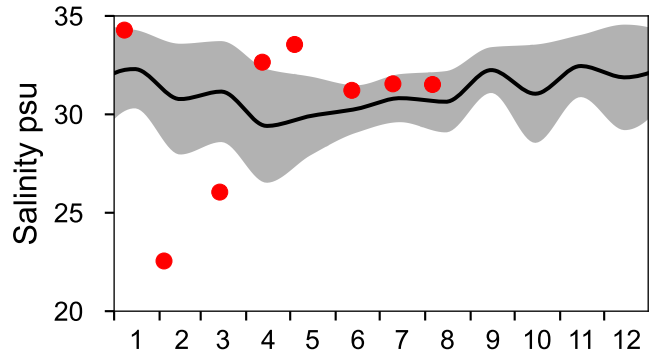
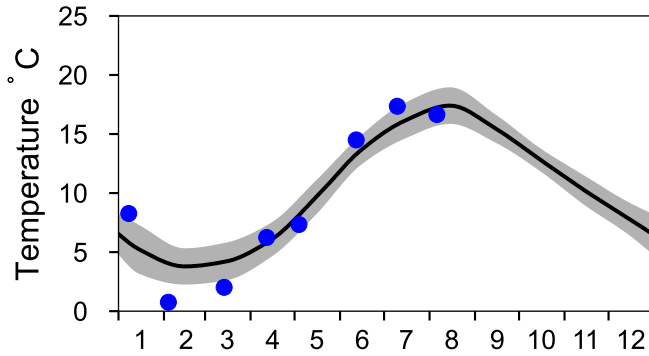
STATION Å17 SURFACE WATER (0-10 m)

Annual Cycles

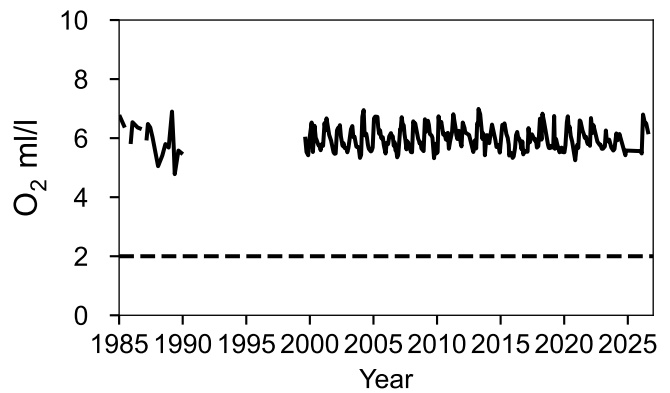
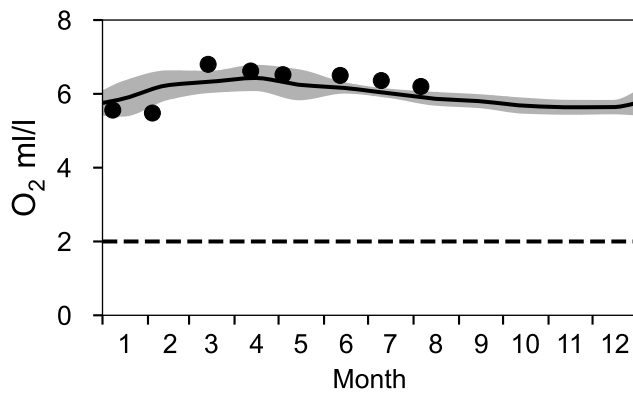
— Mean 1991-2020

■ St.Dev.

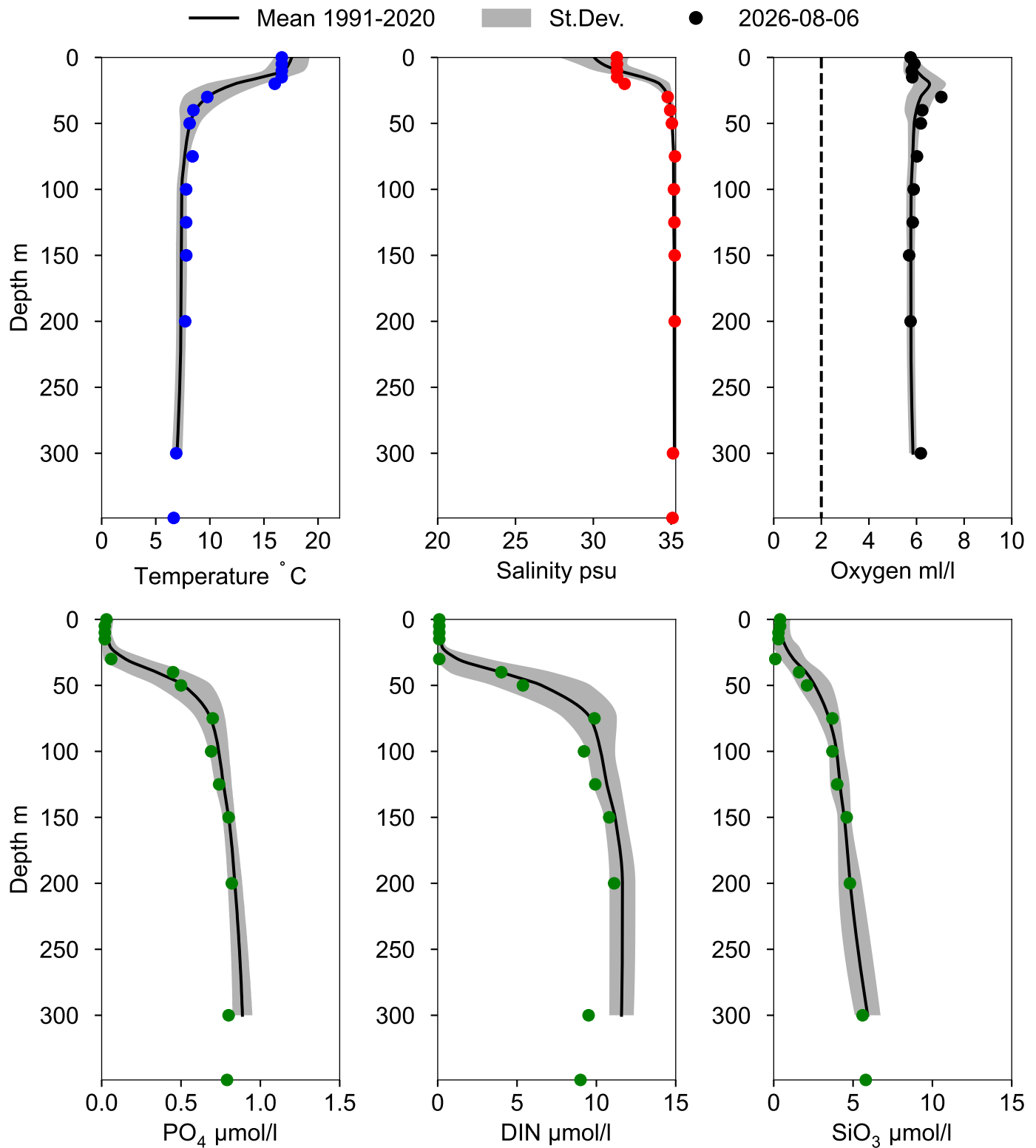
● 2026



OXYGEN IN BOTTOM WATER (depth >= 300 m)



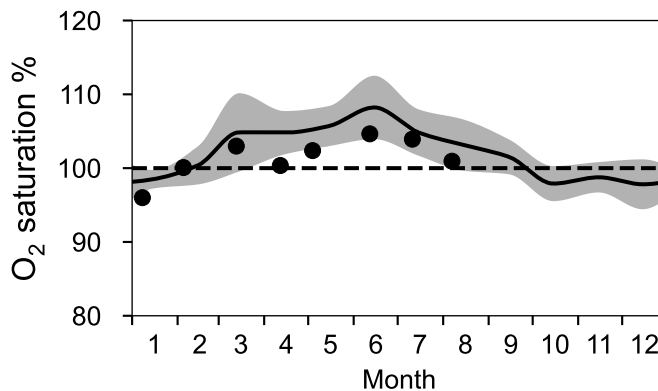
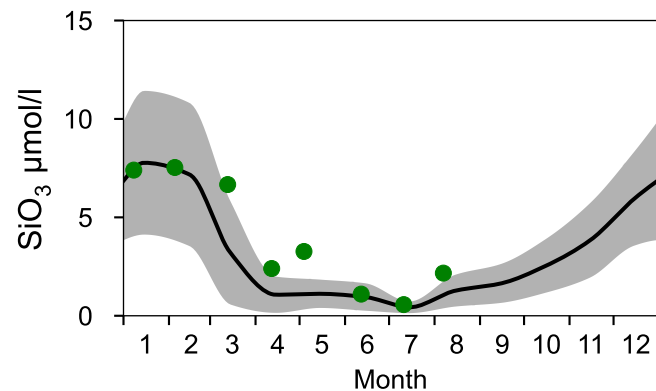
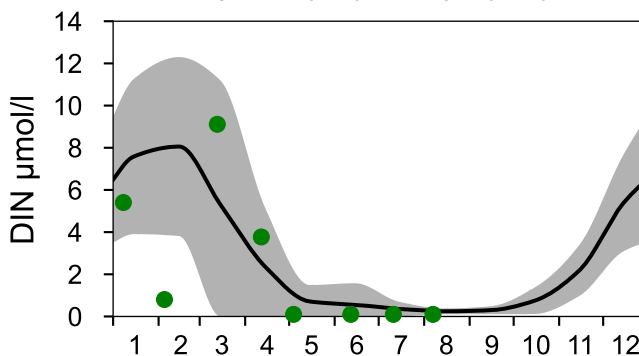
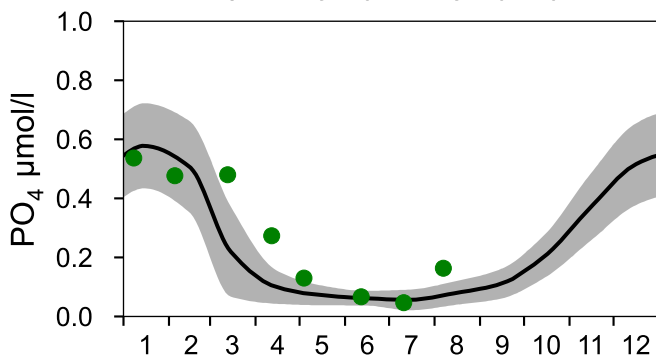
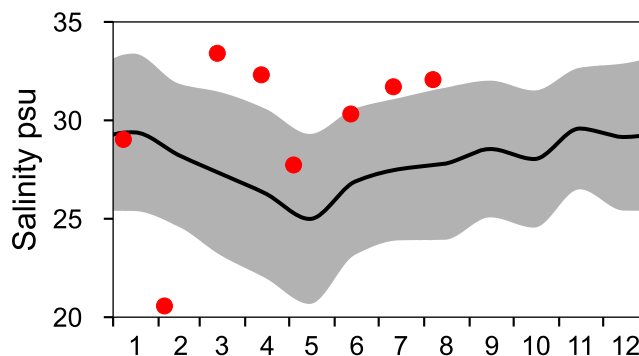
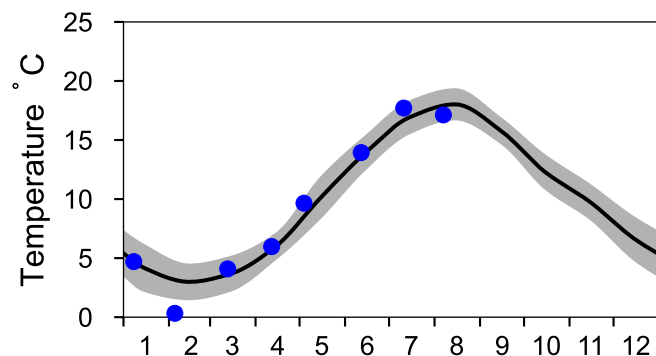
Vertical profiles Å17 August



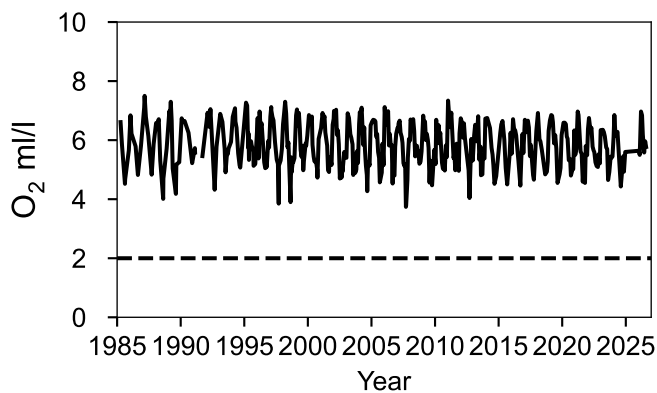
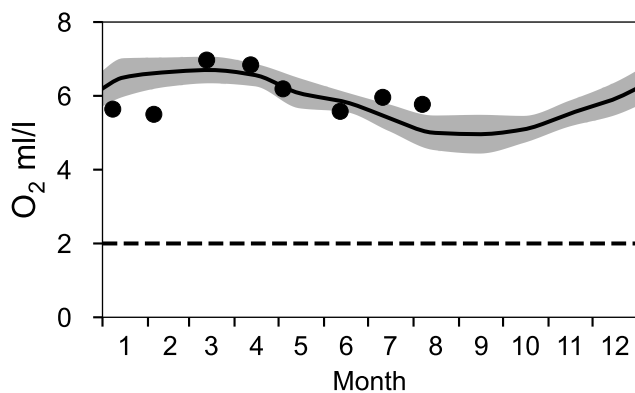
STATION P2 SURFACE WATER (0-10 m)

Annual Cycles

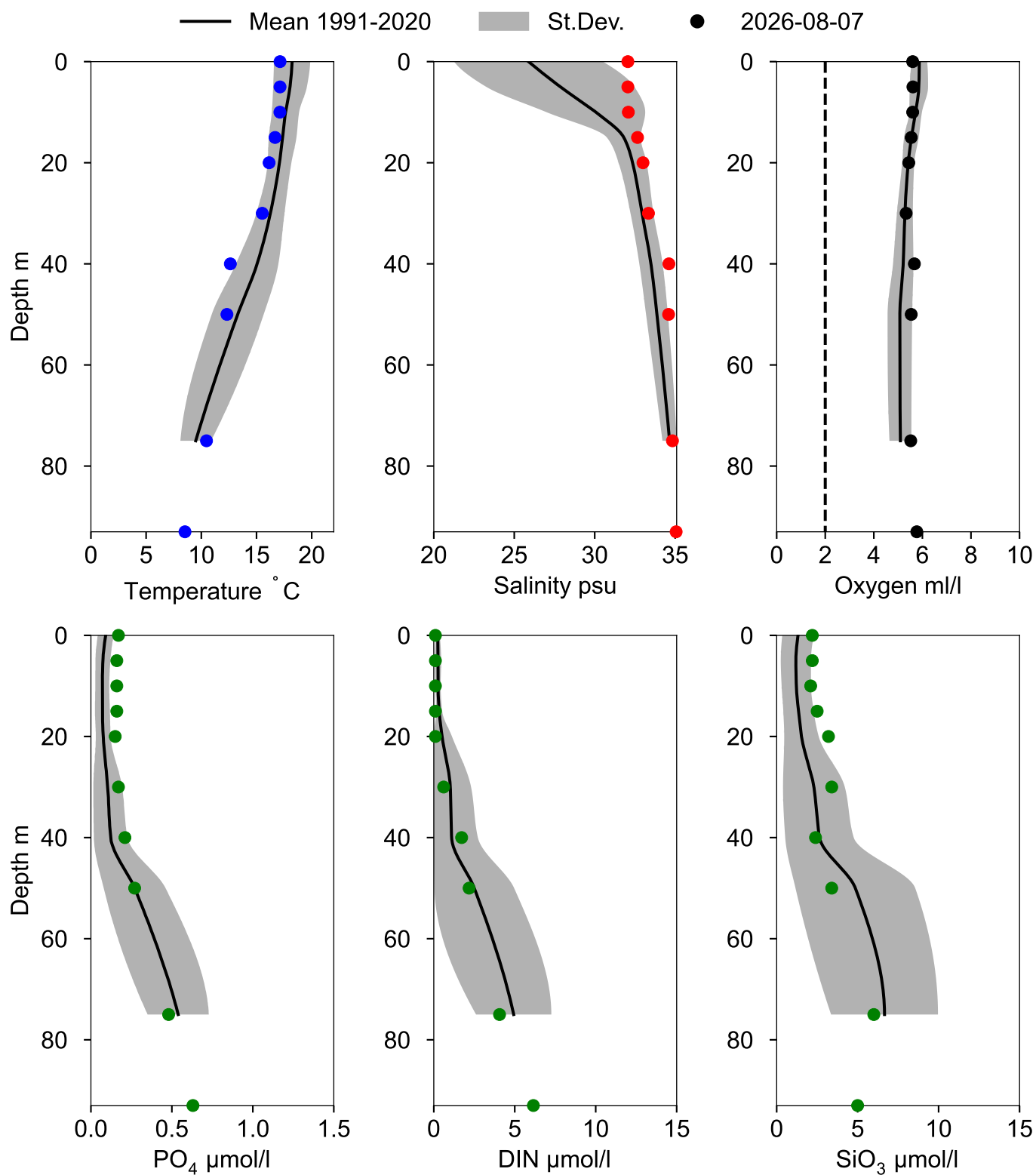
— Mean 1991-2020 St.Dev. ● 2026



OXYGEN IN BOTTOM WATER (depth >= 75 m)



Vertical profiles P2 August



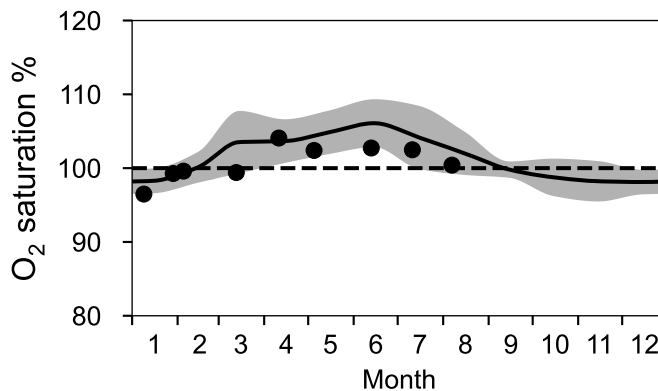
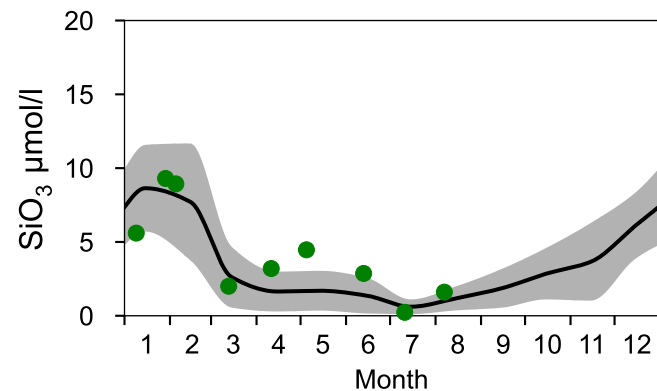
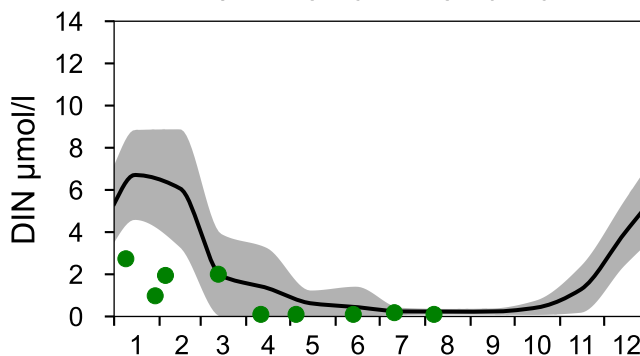
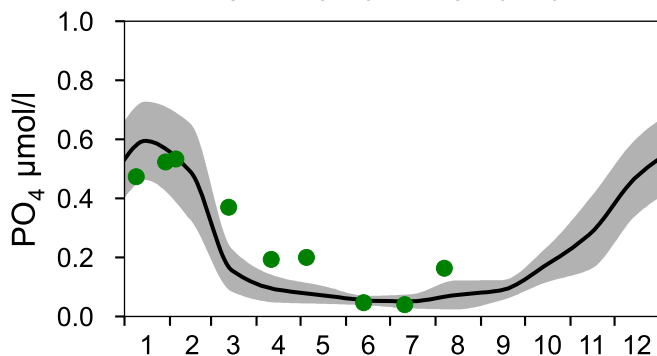
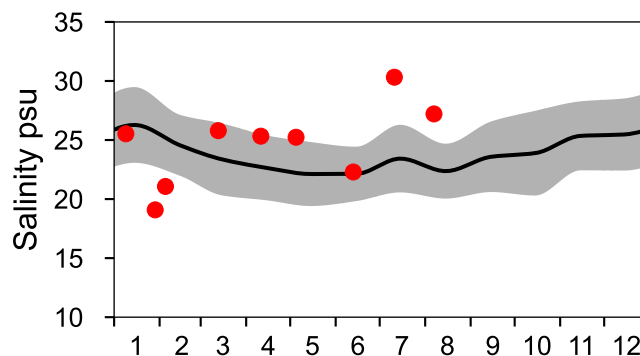
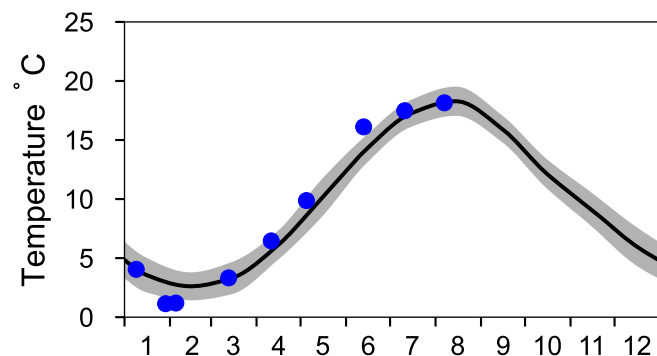
STATION FLADEN SURFACE WATER (0-10 m)

Annual Cycles

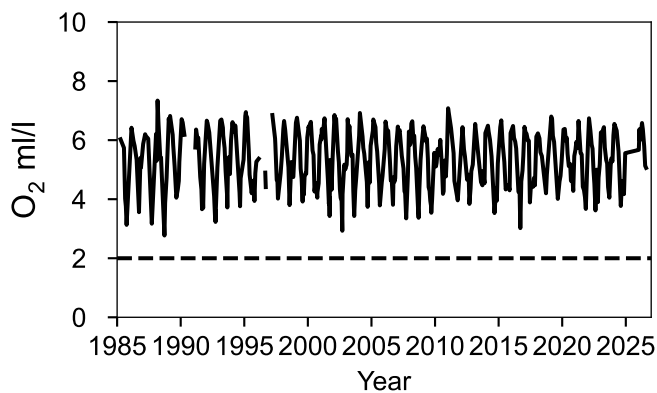
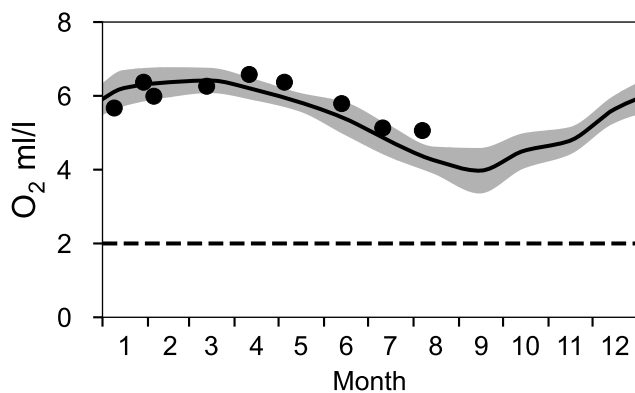
— Mean 1991-2020

■ St.Dev.

● 2026



OXYGEN IN BOTTOM WATER (depth >= 74 m)

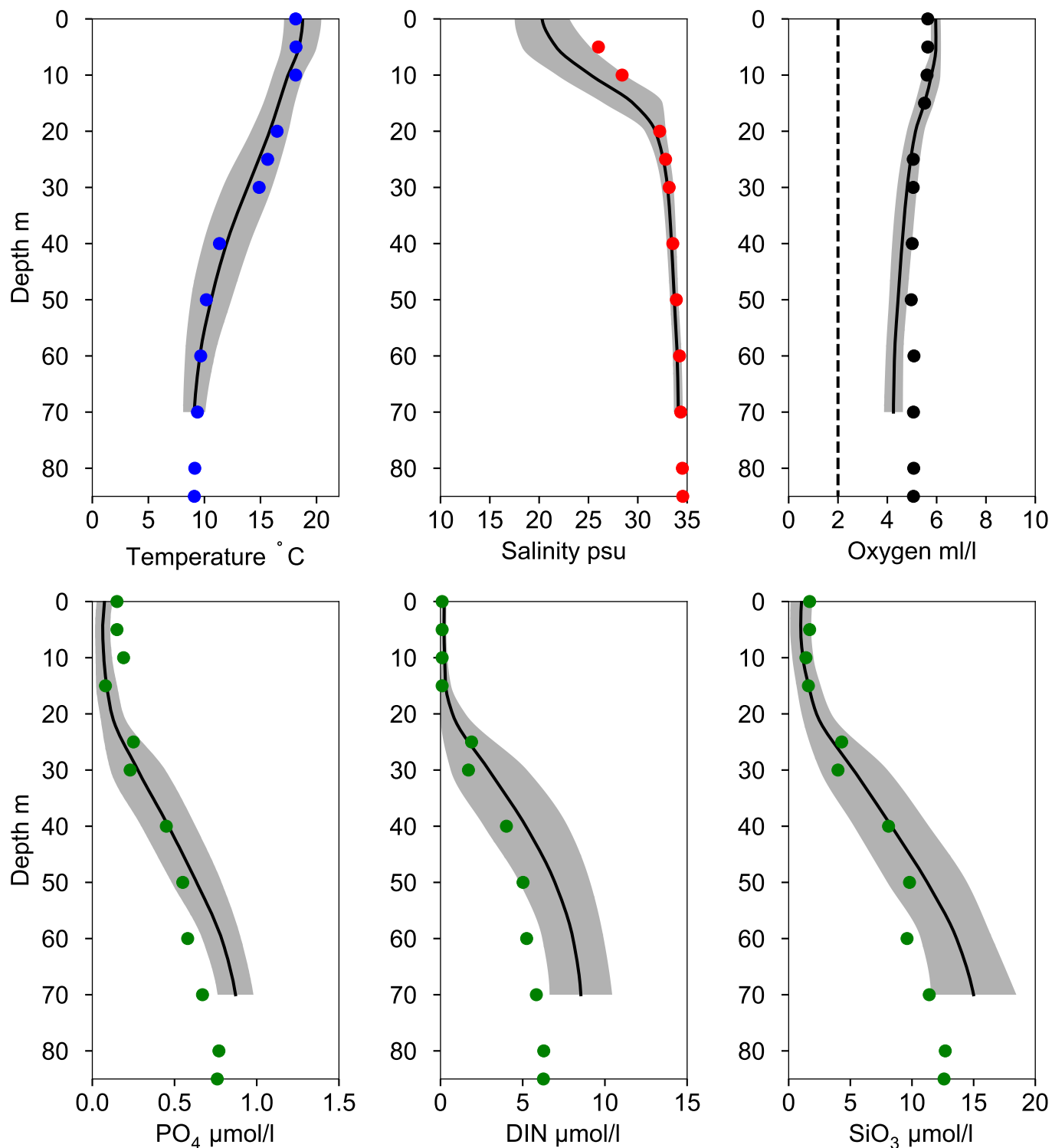


Vertical profiles FLADEN August

— Mean 1991-2020

■ St.Dev.

● 2026-08-07



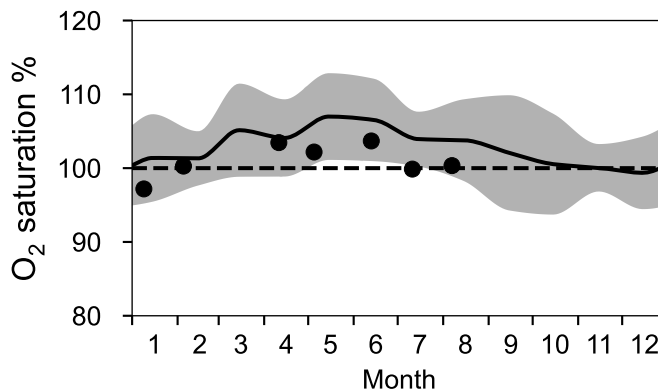
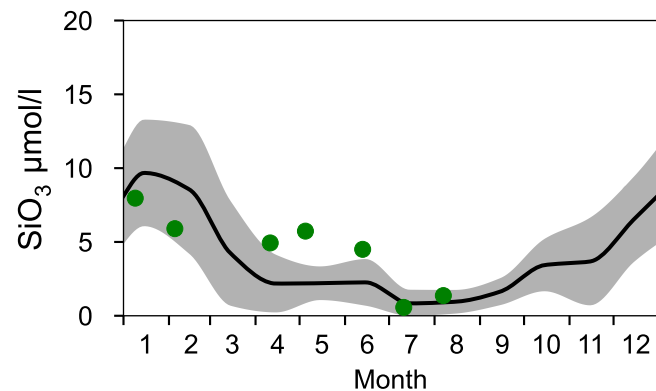
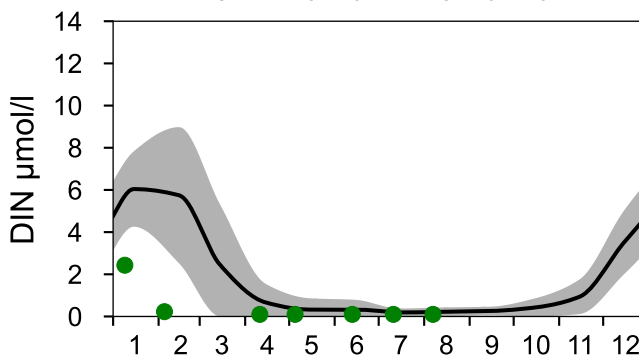
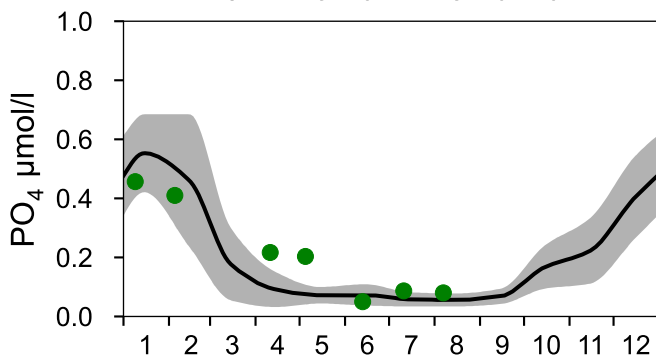
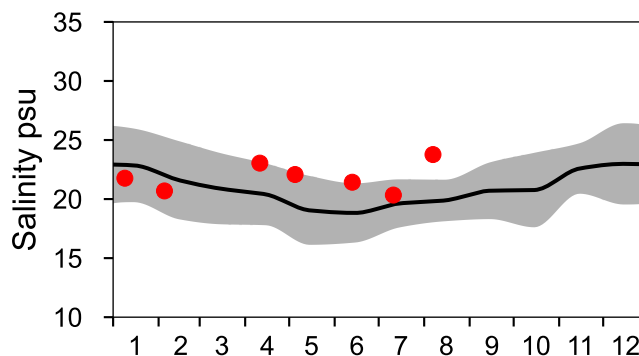
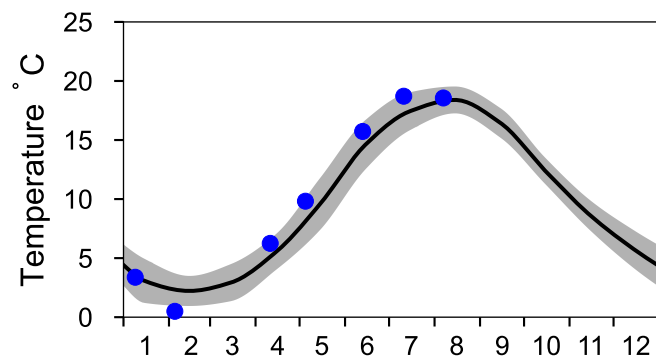
STATION N14 FALKENBERG SURFACE WATER (0-10 m)

Annual Cycles

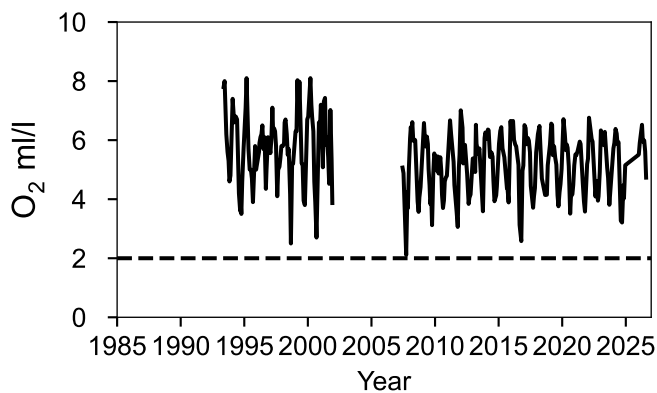
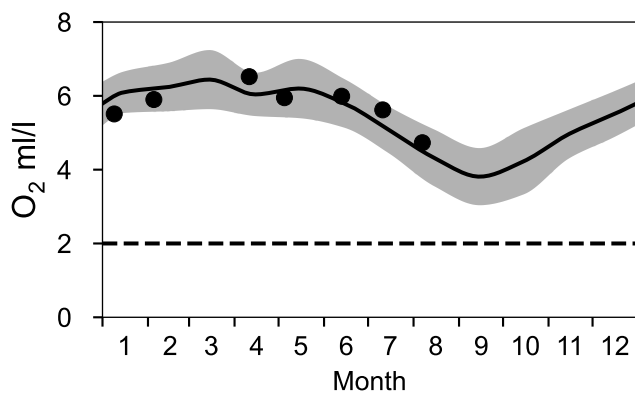
— Mean 1991-2020

■ St.Dev.

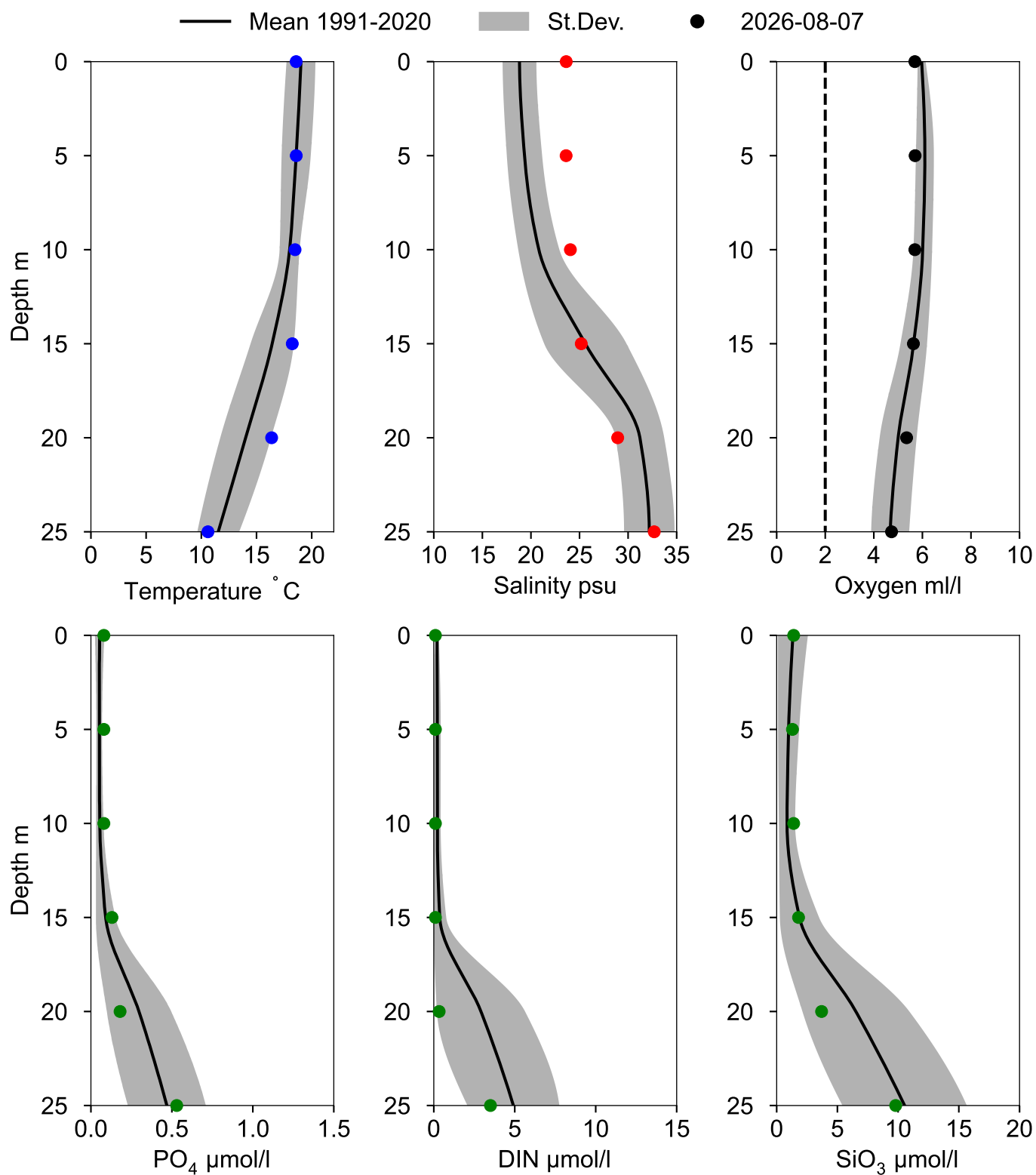
● 2026



OXYGEN IN BOTTOM WATER (depth >= 25 m)



Vertical profiles N14 FALKENBERG August



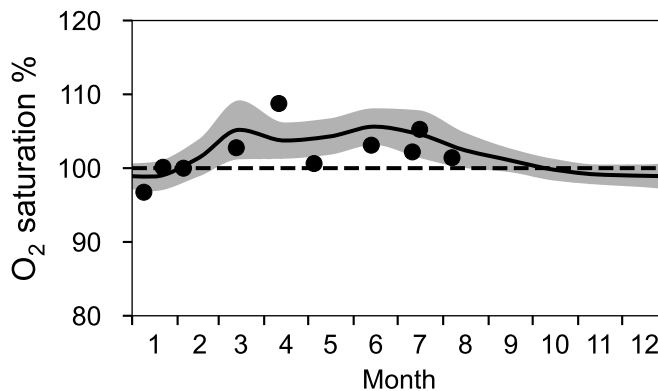
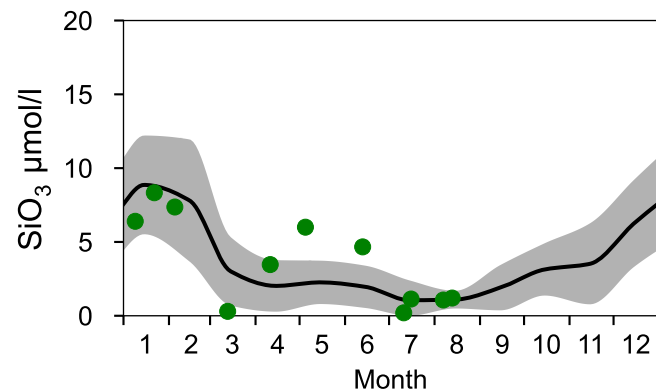
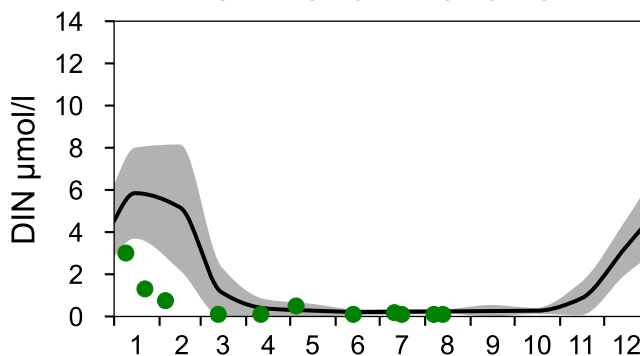
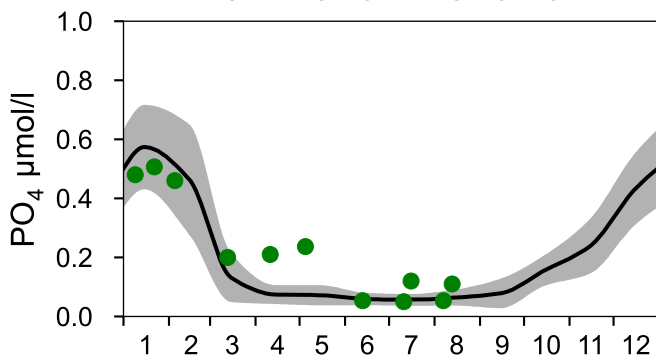
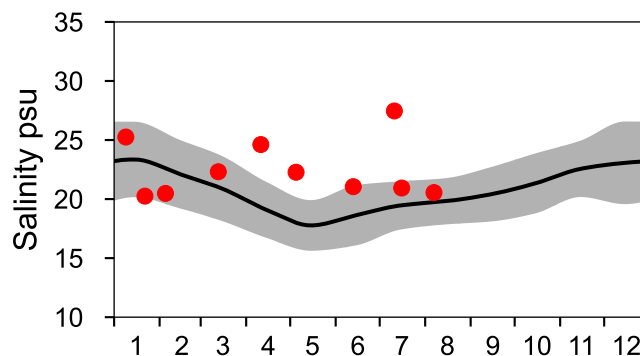
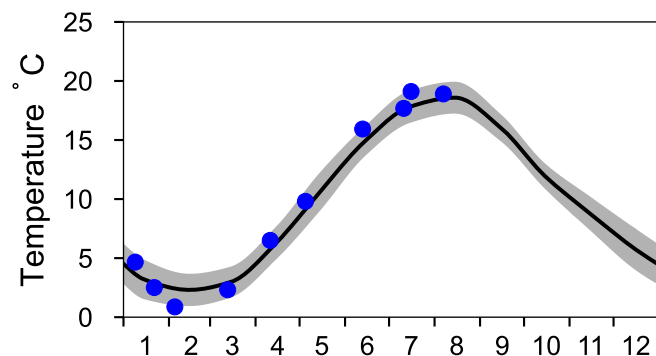
STATION ANHOLT E SURFACE WATER (0-10 m)

Annual Cycles

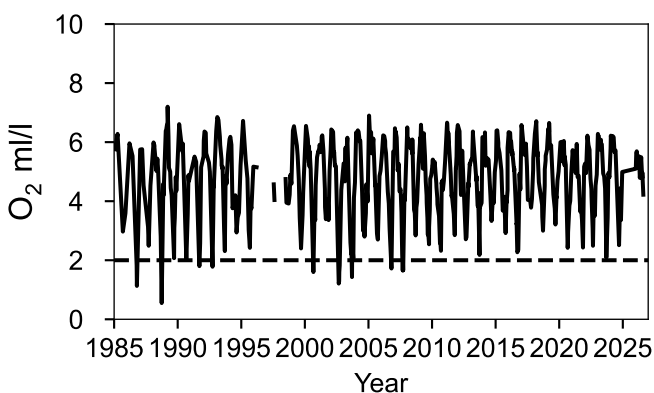
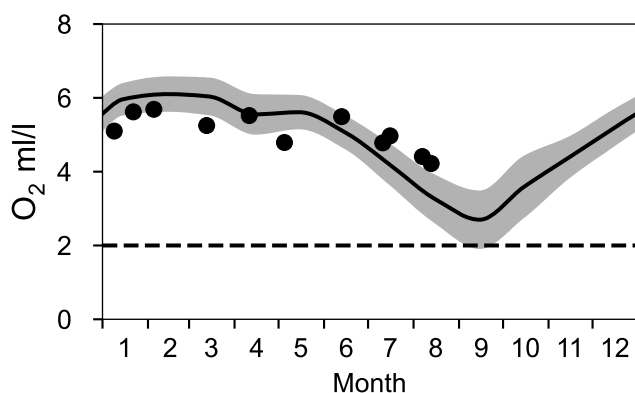
— Mean 1991-2020

■ St.Dev.

● 2026



OXYGEN IN BOTTOM WATER (depth >= 52 m)

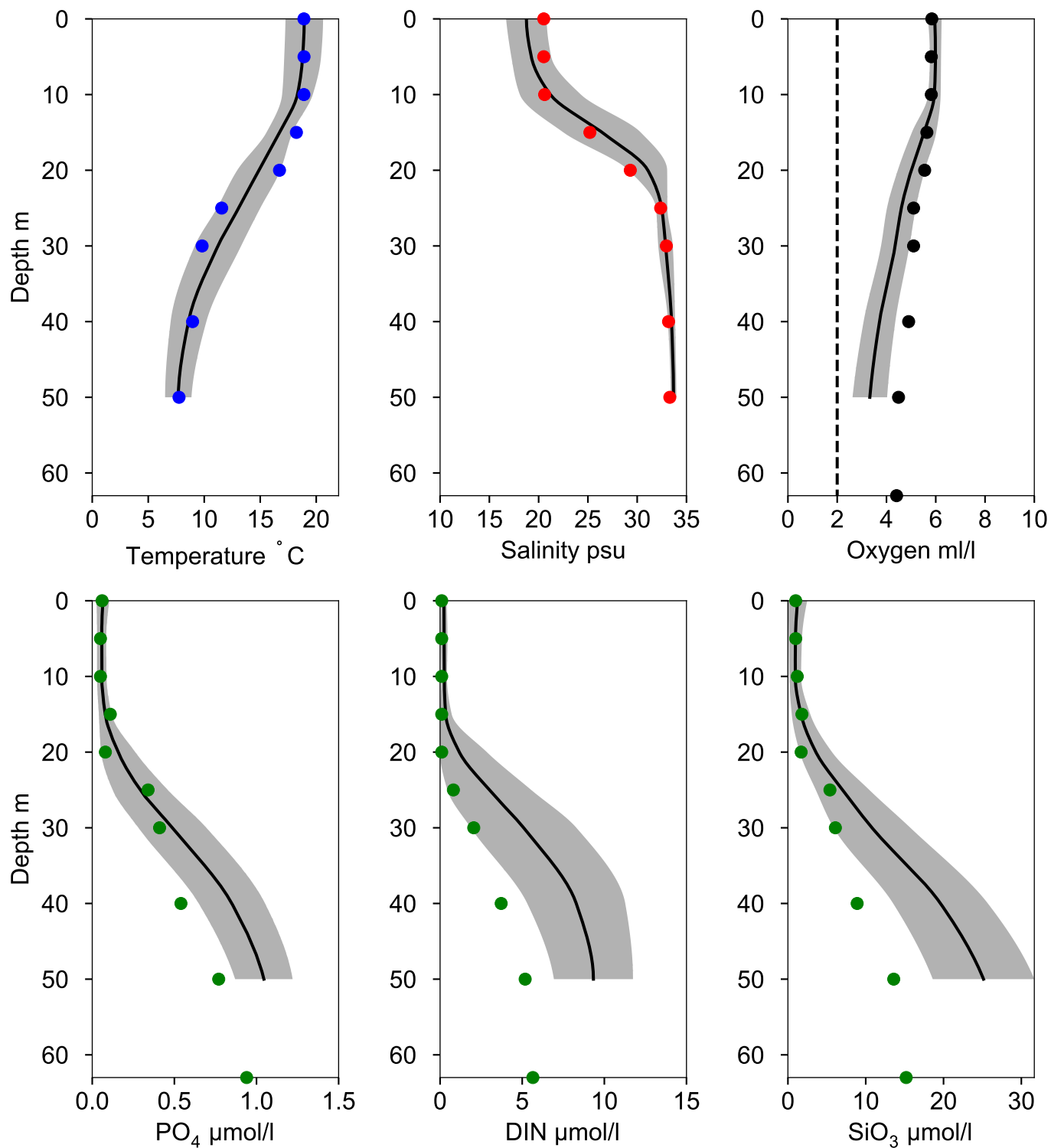


Vertical profiles ANHOLT E August

— Mean 1991-2020

■ St.Dev.

● 2026-08-07



STATION P22 SURFACE WATER (0-10 m)

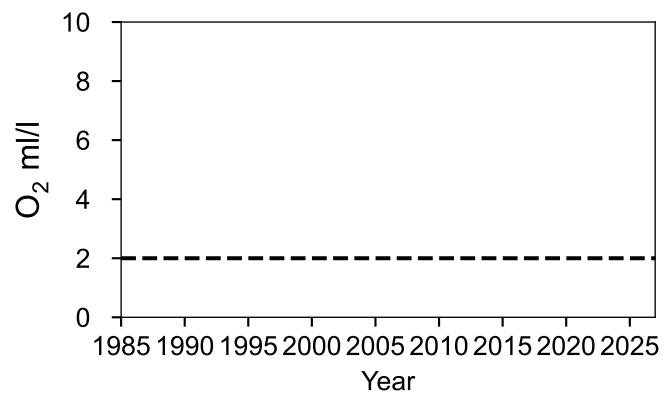
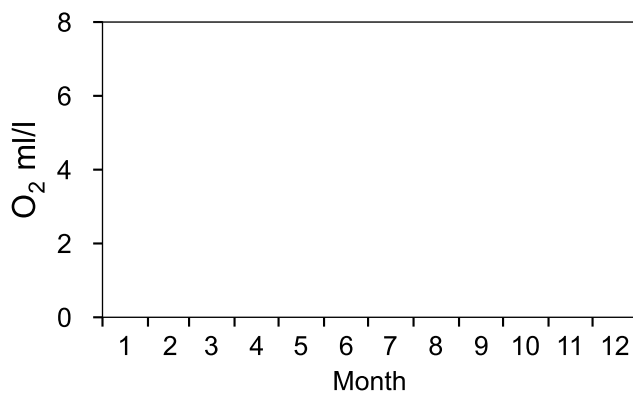
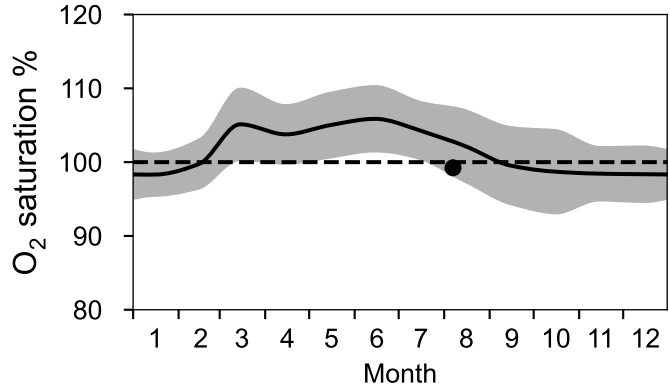
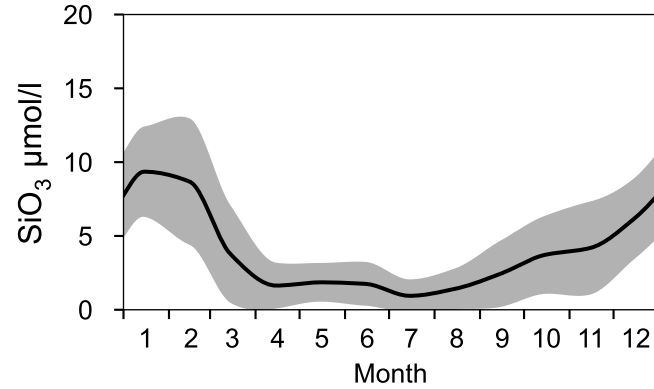
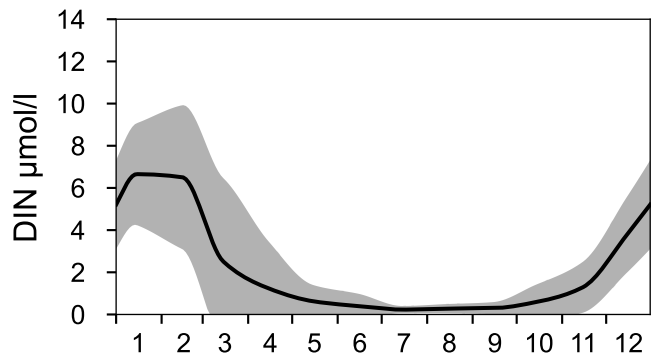
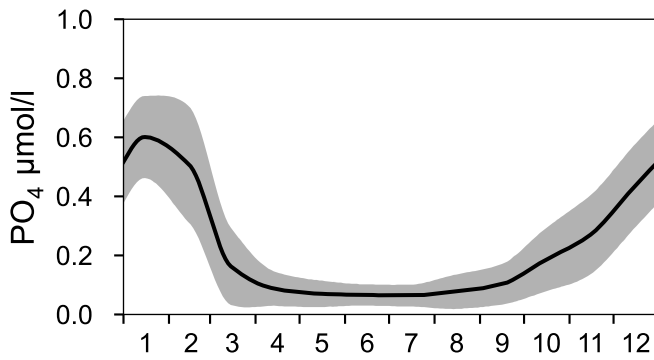
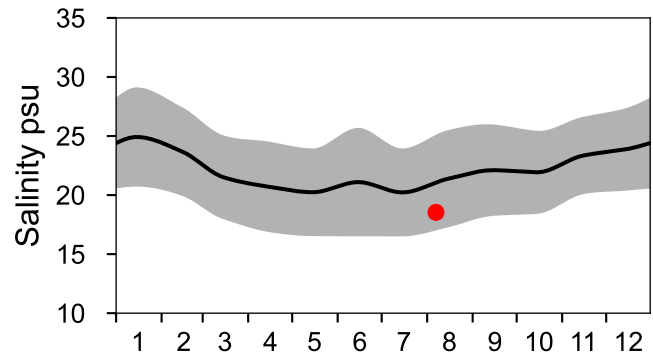
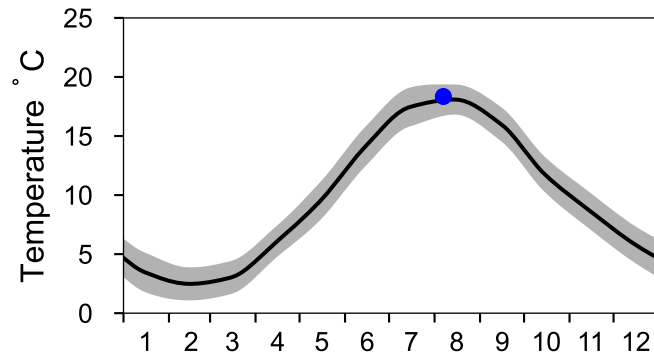
Annual Cycles

Statistics based on data from: Kattegatt

— Mean 1991-2020

■ St.Dev.

● 2026



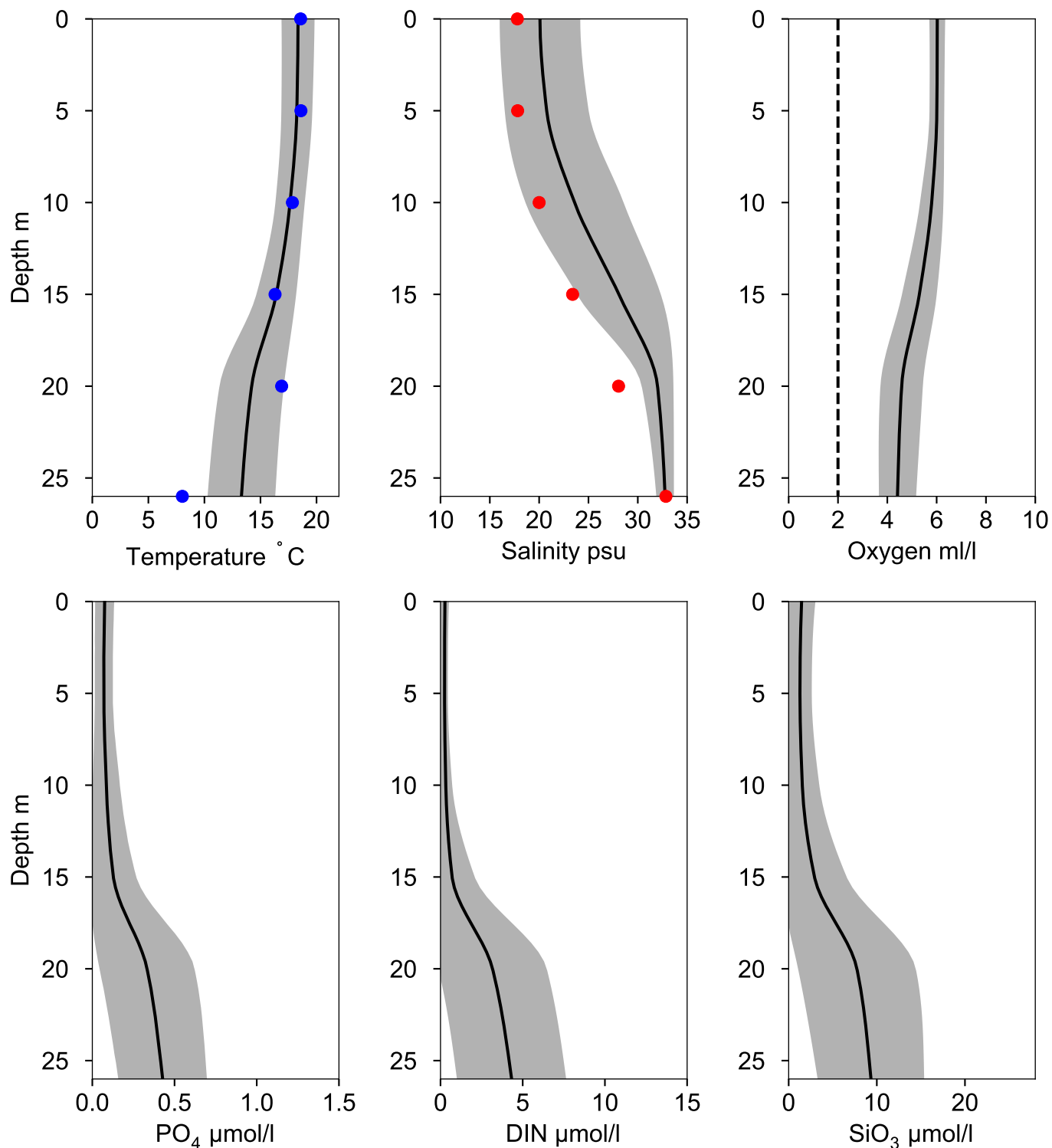
Vertical profiles P22 August

Statistics based on data from: Kattegatt

— Mean 1991-2020

■ St.Dev.

● 2026-08-07



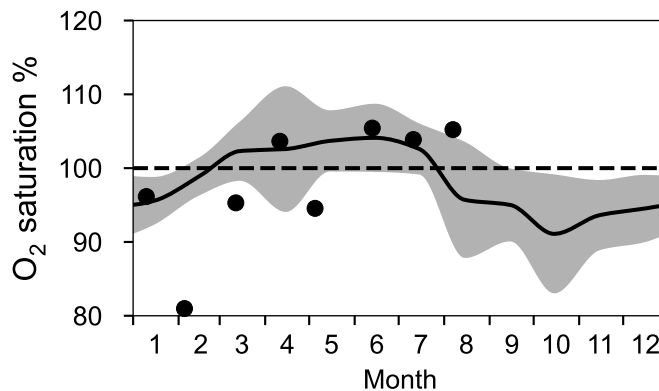
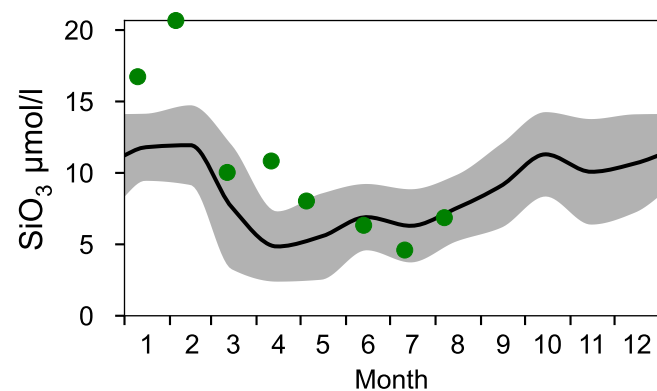
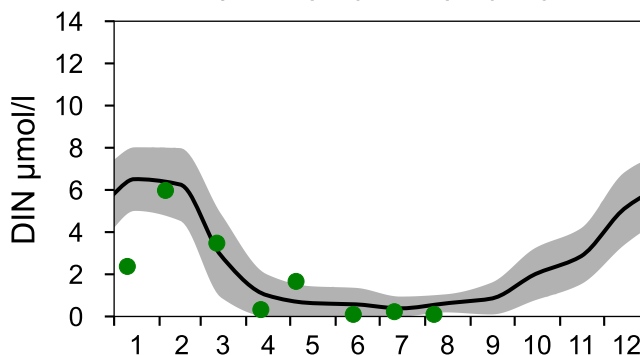
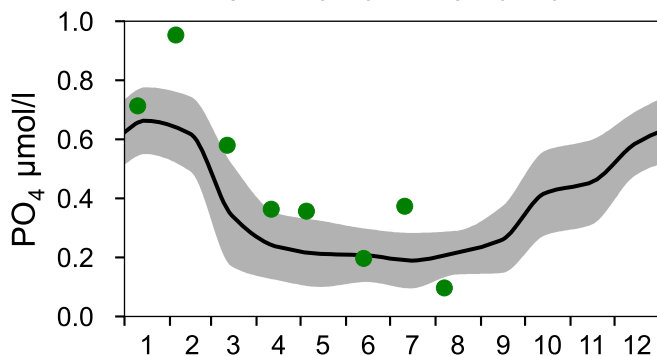
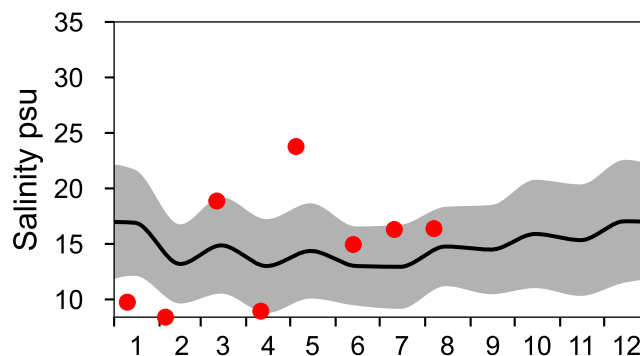
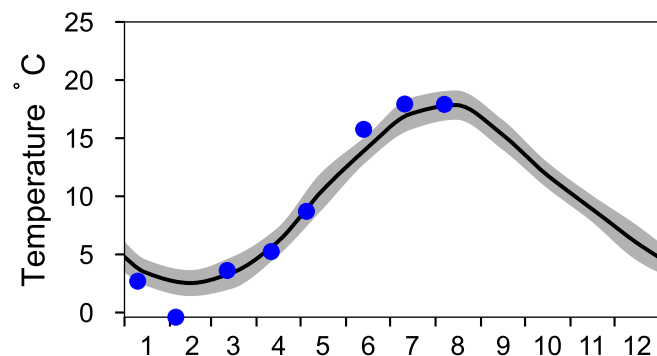
STATION W LANDSKRONA SURFACE WATER (0-10 m)

Annual Cycles

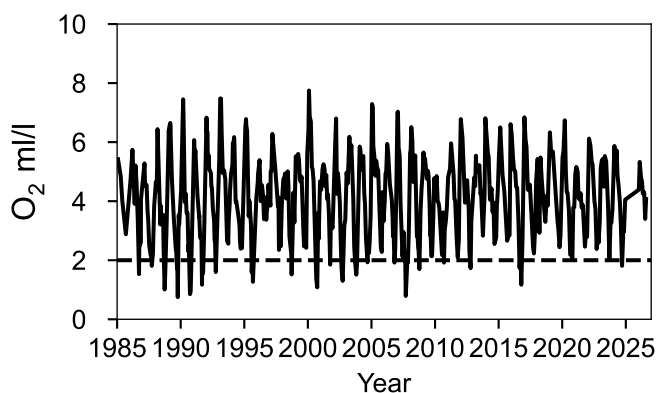
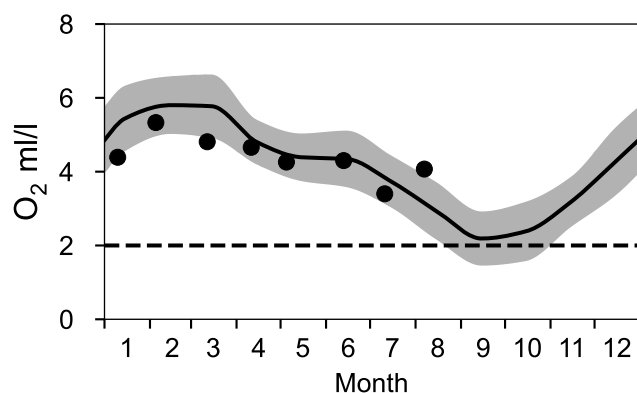
— Mean 1991-2020

■ St.Dev.

● 2026



OXYGEN IN BOTTOM WATER (depth >= 40 m)

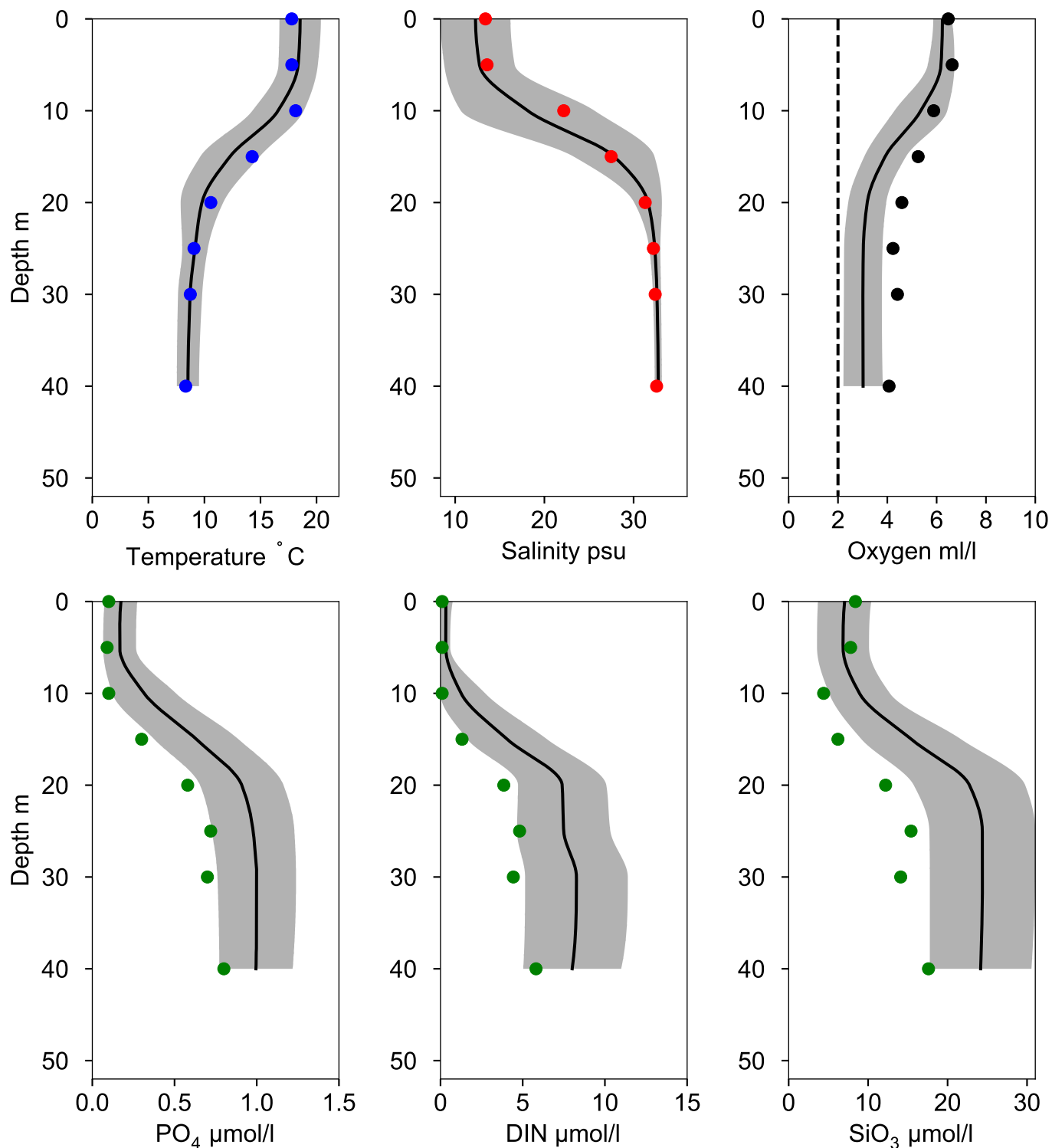


Vertical profiles W LANDSKRONA August

— Mean 1991-2020

■ St.Dev.

● 2026-08-07



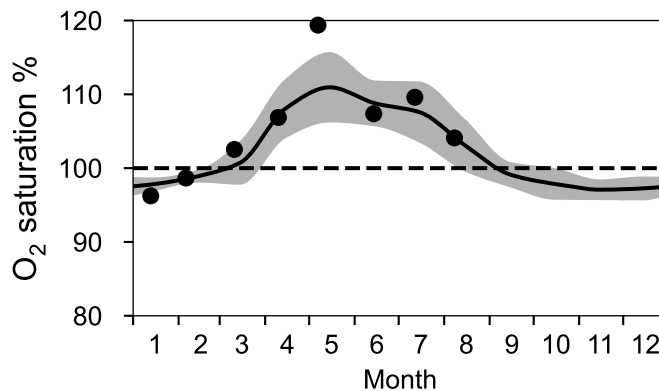
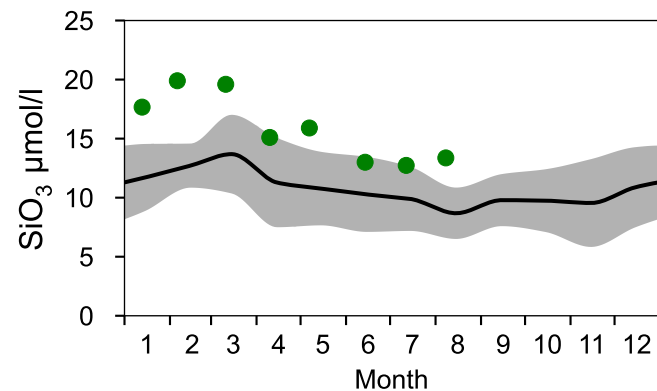
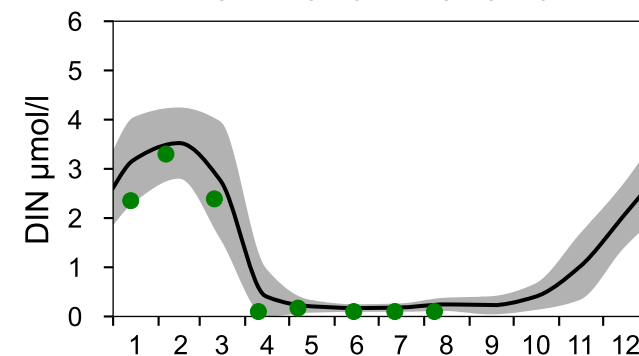
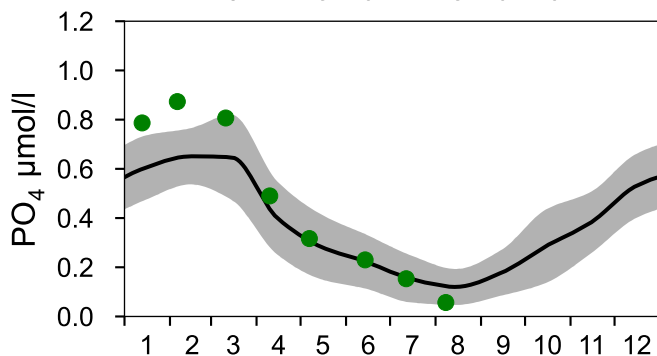
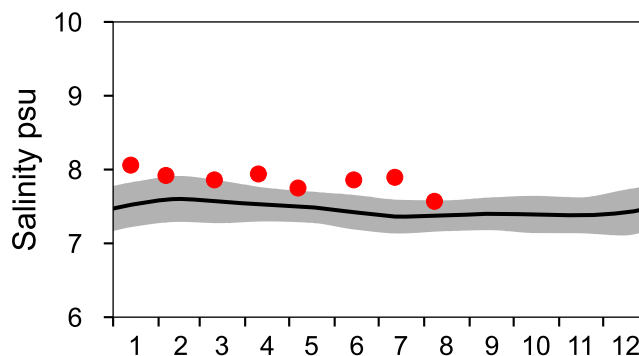
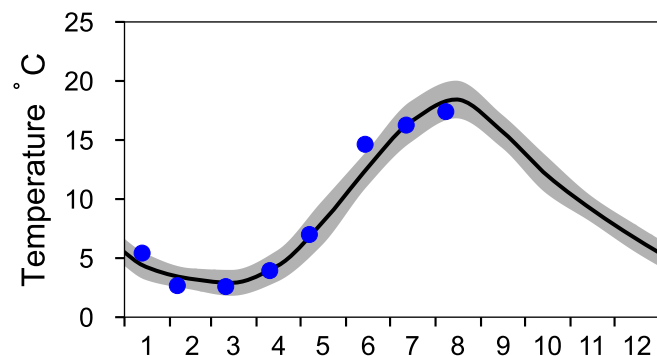
STATION BY4 CHRISTIANSÖ SURFACE WATER (0-10 m)

Annual Cycles

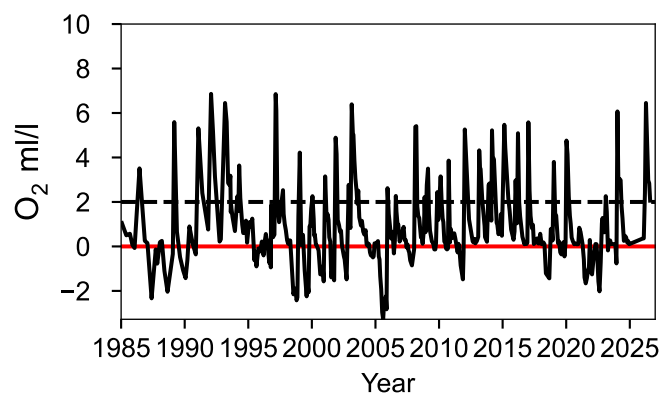
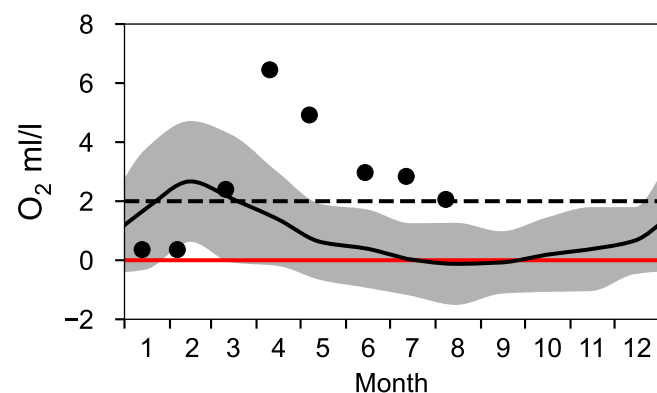
— Mean 1991-2020

■ St.Dev.

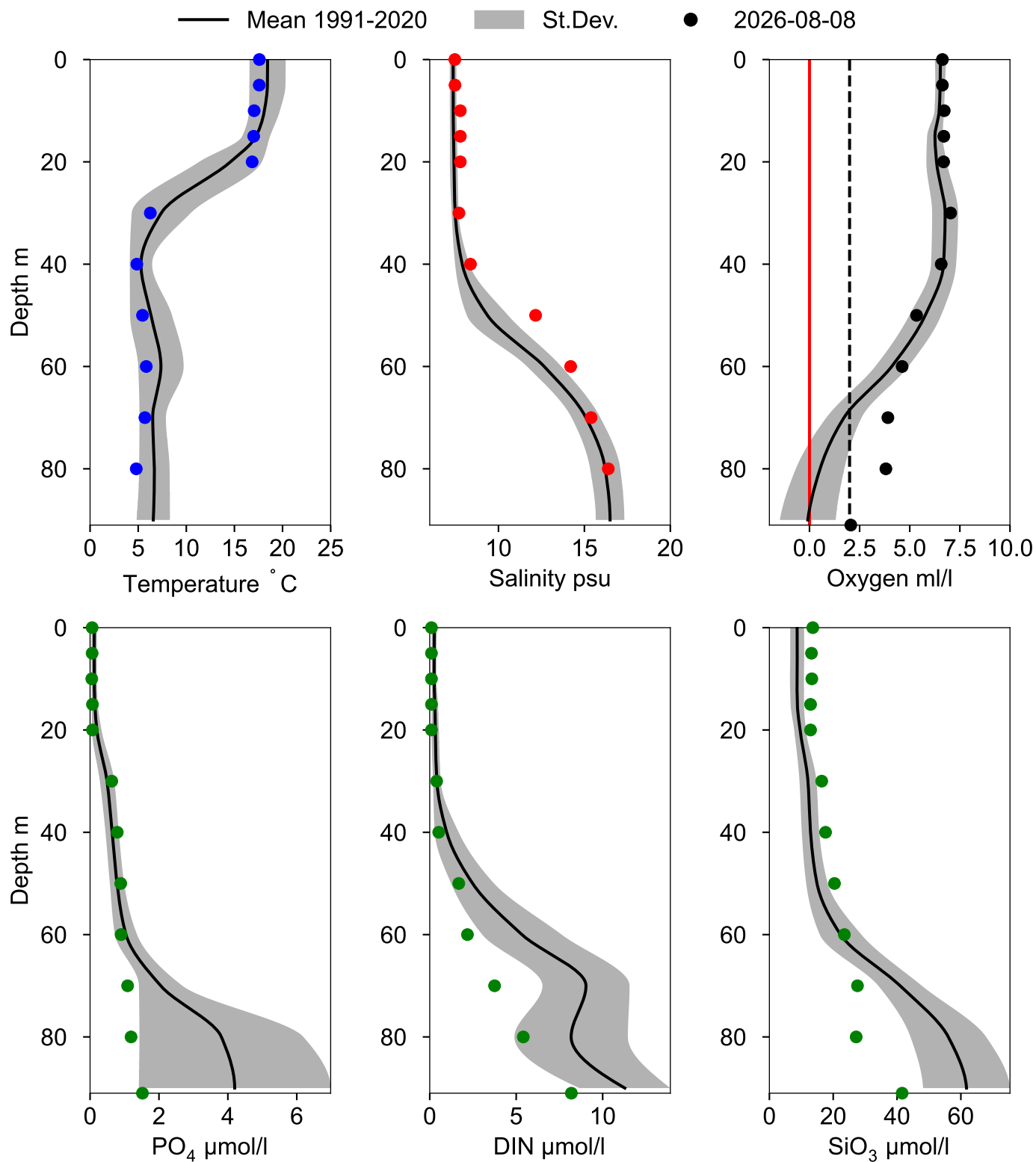
● 2026



OXYGEN IN BOTTOM WATER (depth >= 80 m)



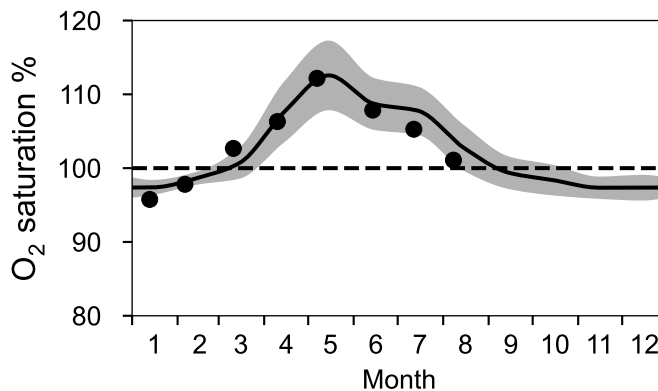
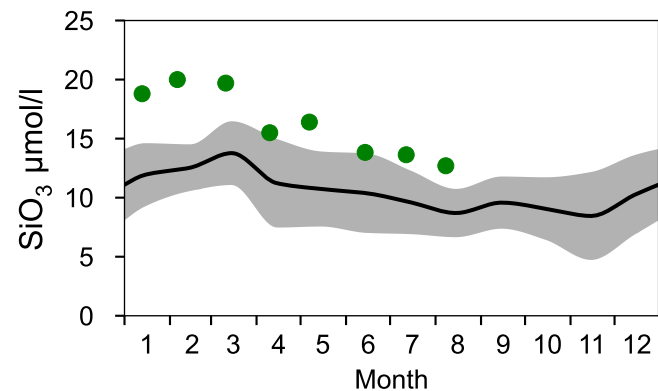
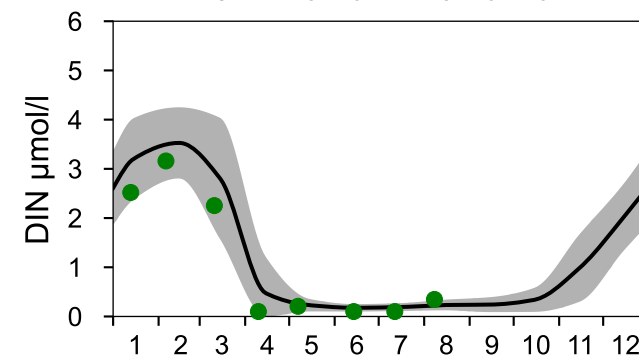
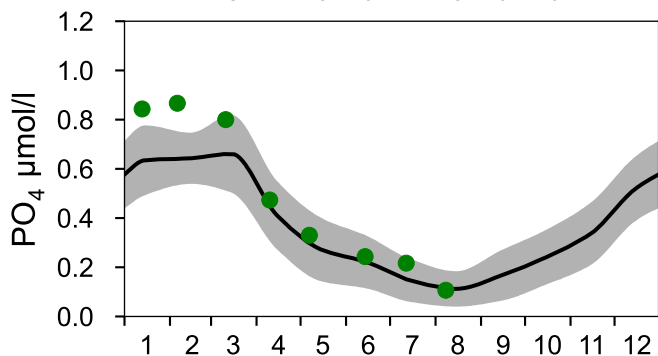
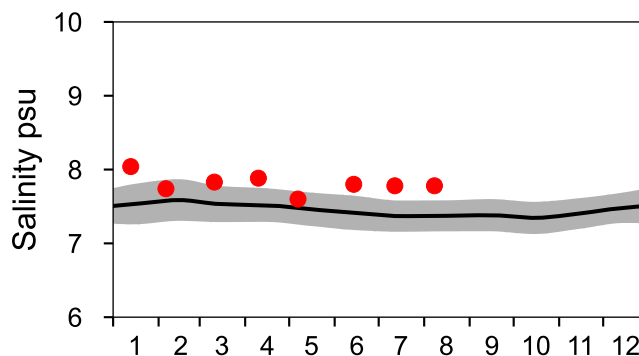
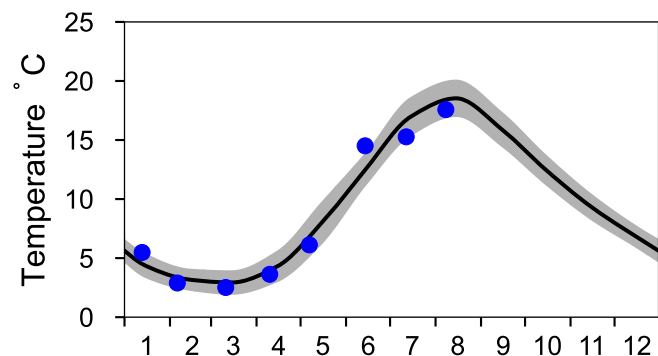
Vertical profiles BY4 CHRISTIANSÖ August



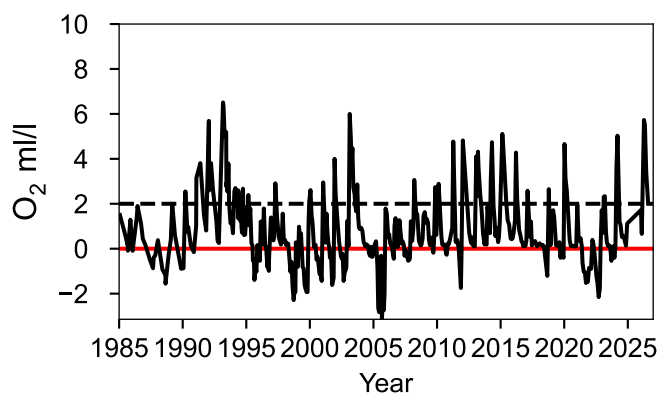
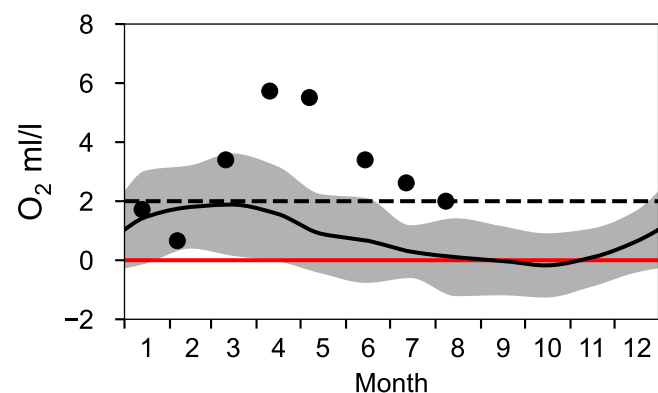
STATION BY5 BORNHOLMSDJ SURFACE WATER (0-10 m)

Annual Cycles

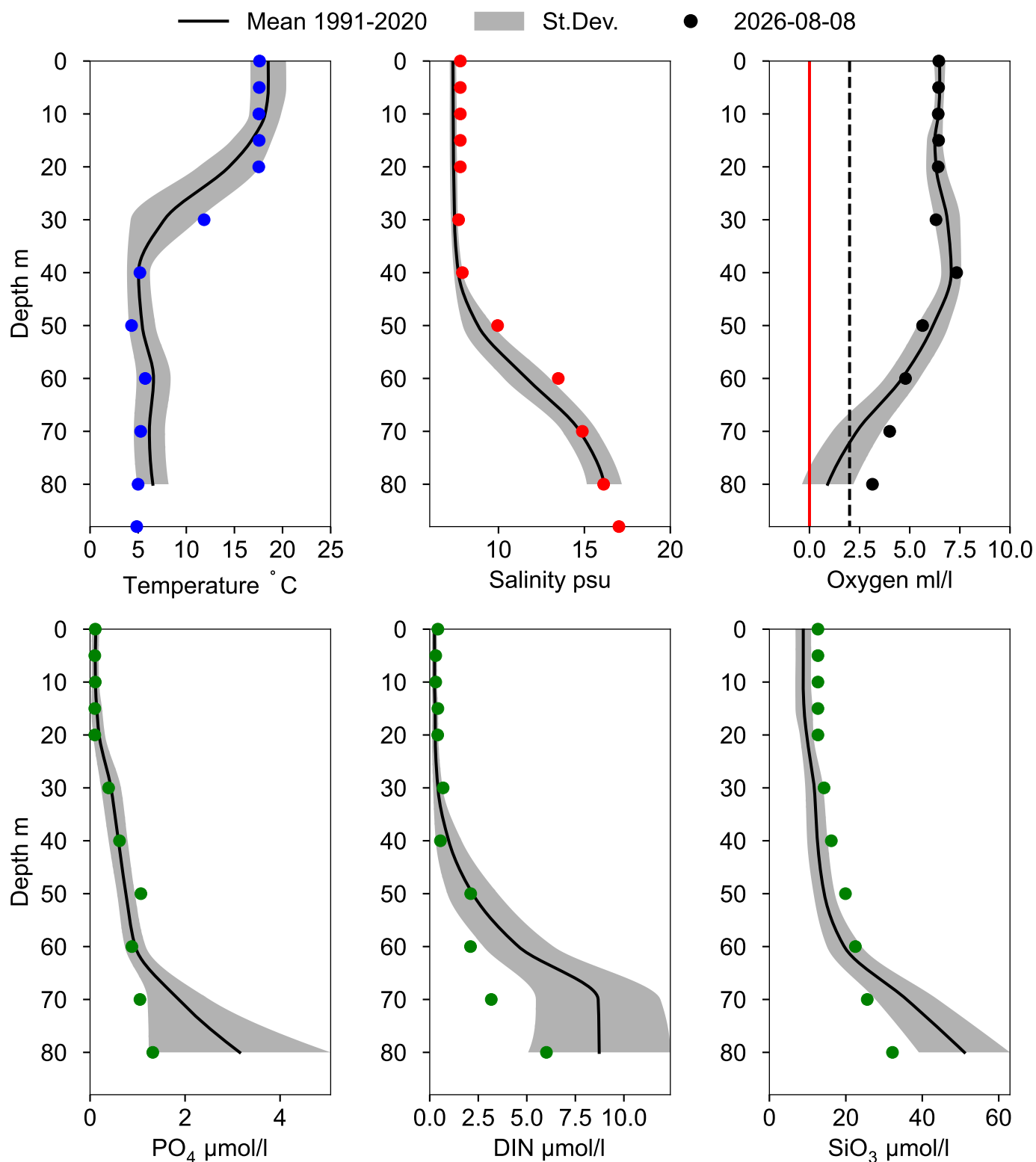
— Mean 1991-2020 St.Dev. ● 2026



OXYGEN IN BOTTOM WATER (depth >= 80 m)



Vertical profiles BY5 BORNHOLMSDJ August



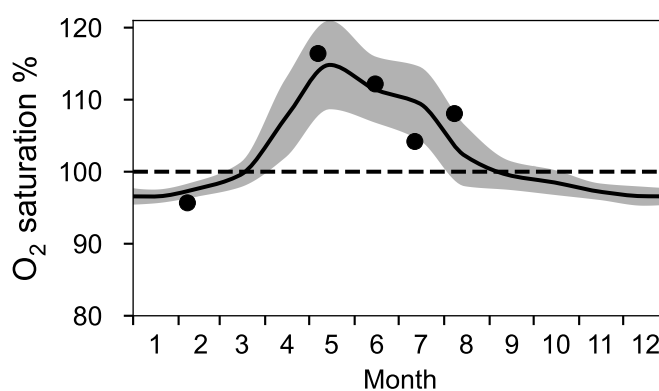
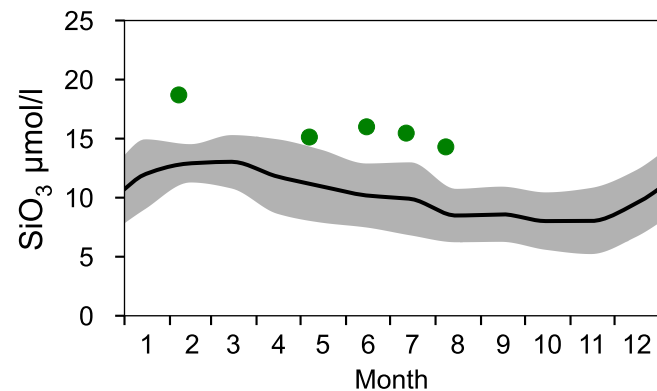
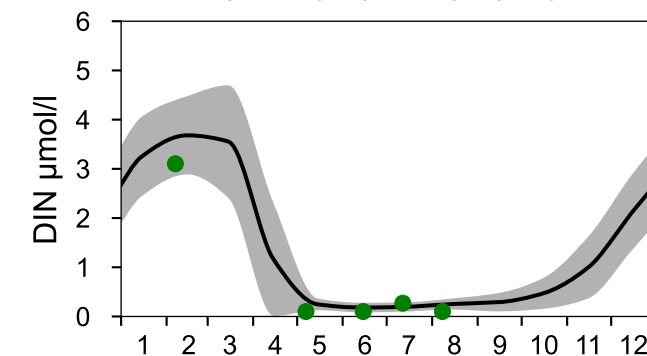
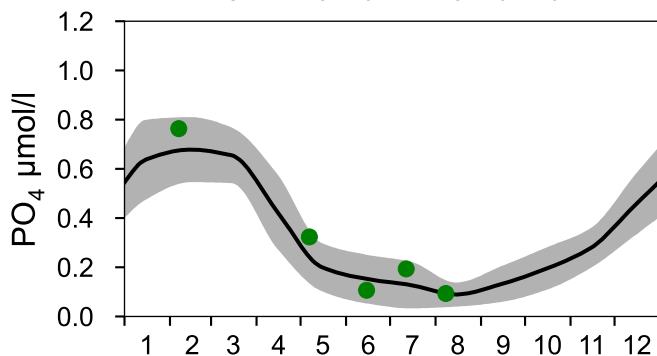
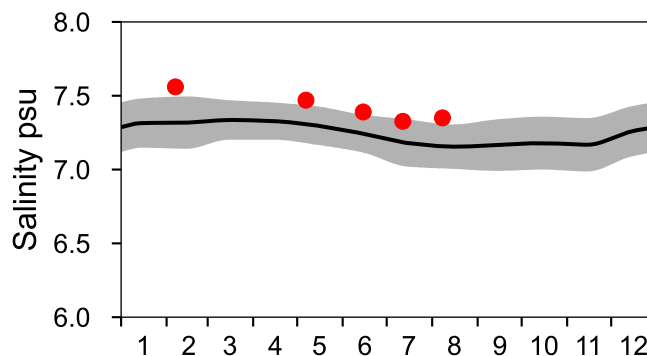
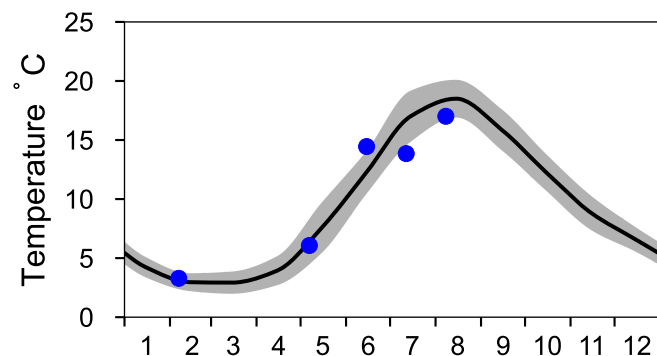
STATION BCS III-10 SURFACE WATER (0-10 m)

Annual Cycles

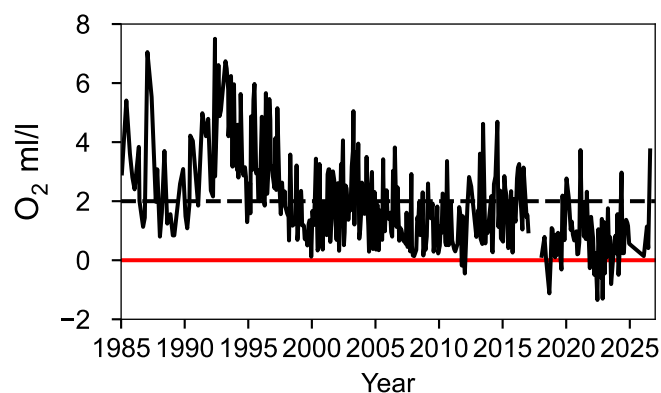
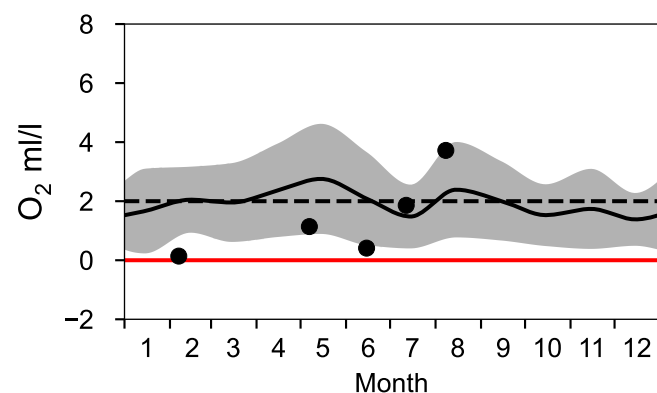
— Mean 1991-2020

■ St.Dev.

● 2026

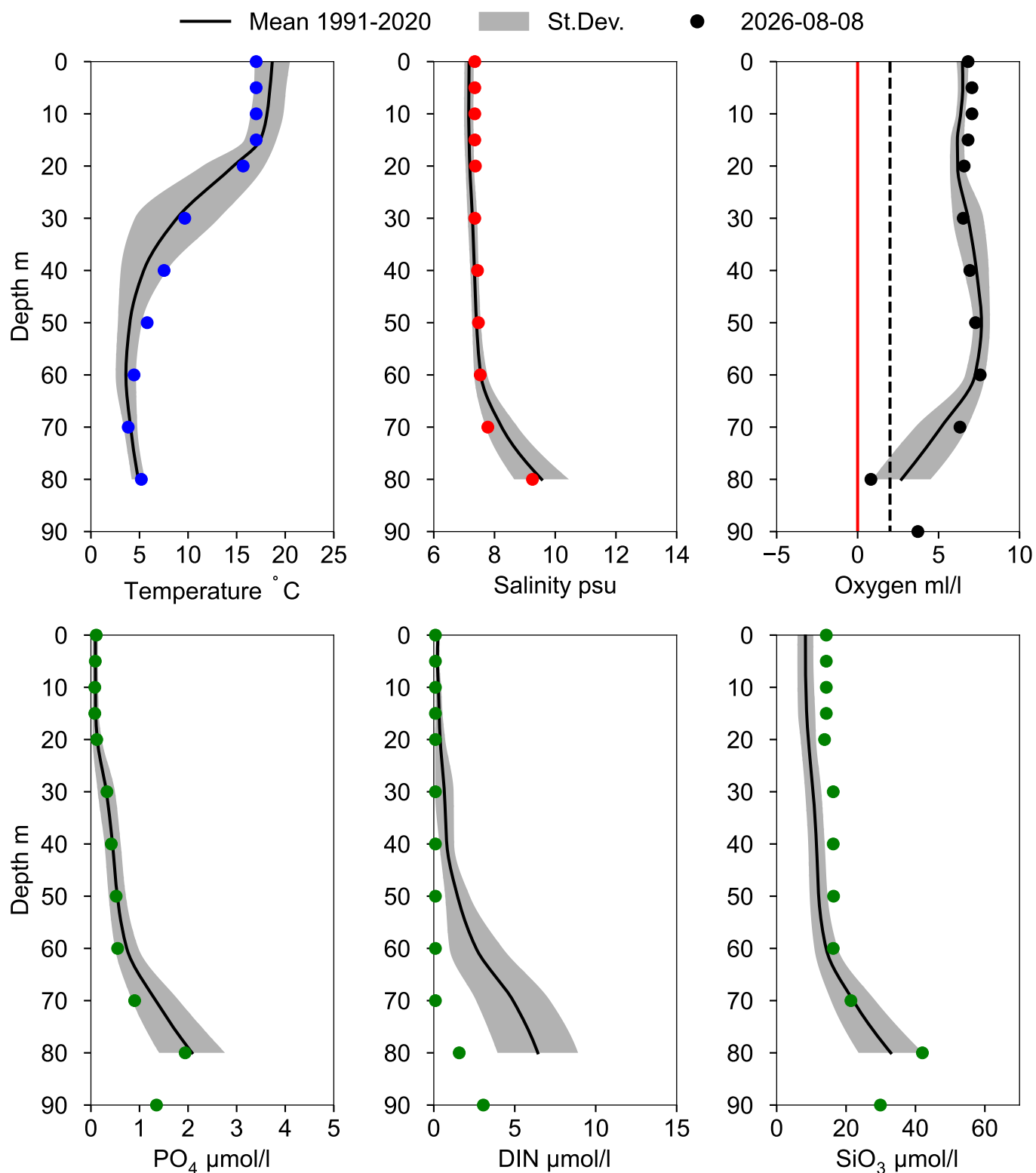


OXYGEN IN BOTTOM WATER (depth >= 80 m)



Vertical profiles BCS III-10

August



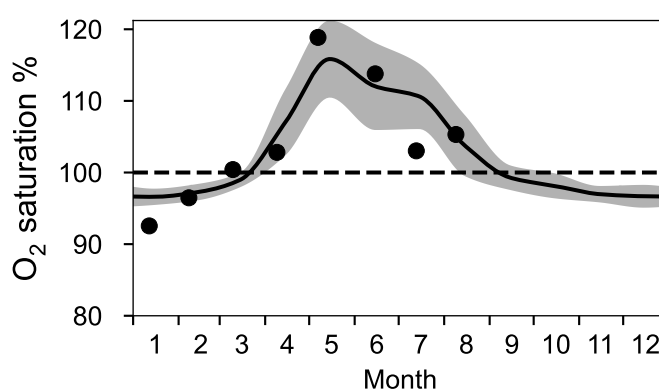
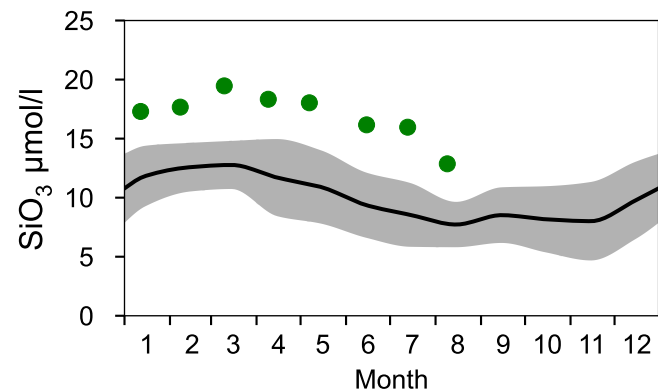
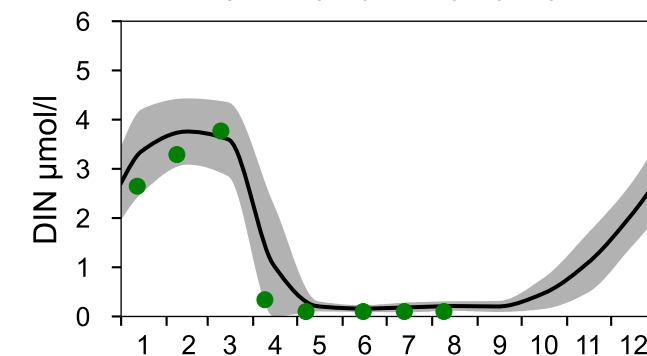
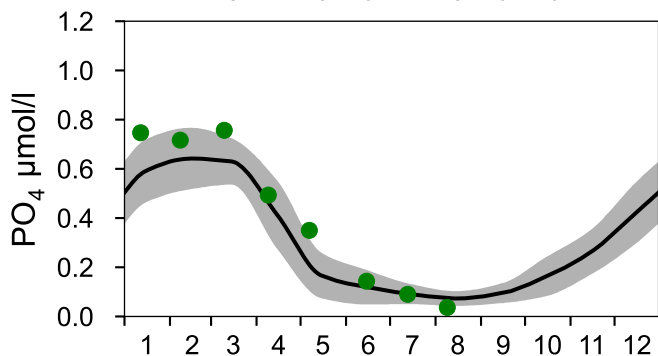
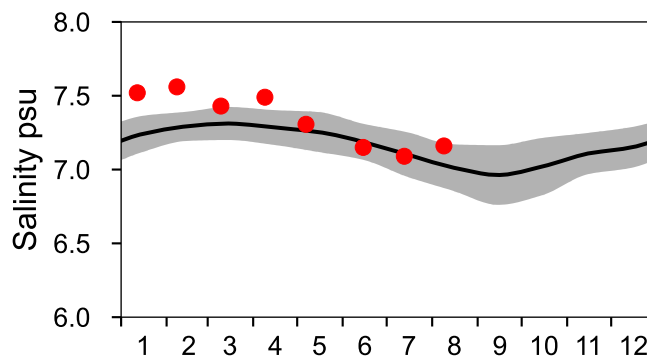
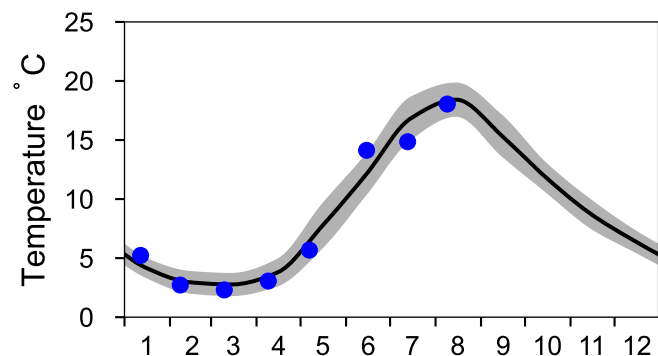
STATION BY10 SURFACE WATER (0-10 m)

Annual Cycles

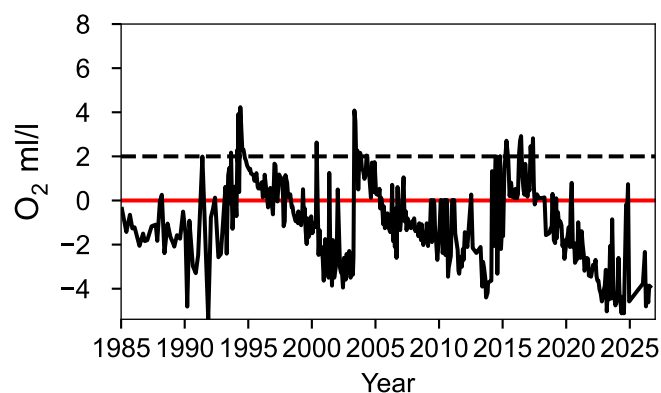
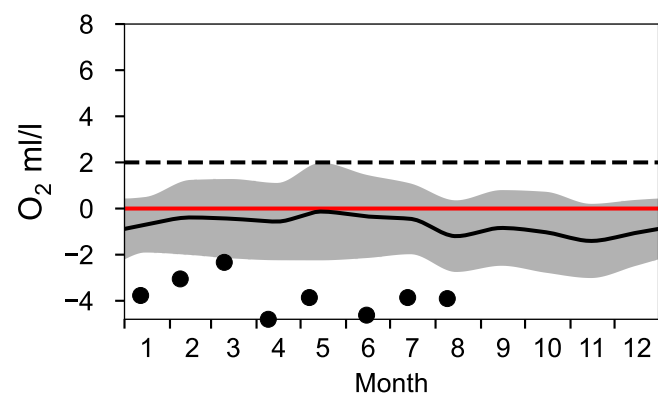
— Mean 1991-2020

■ St.Dev.

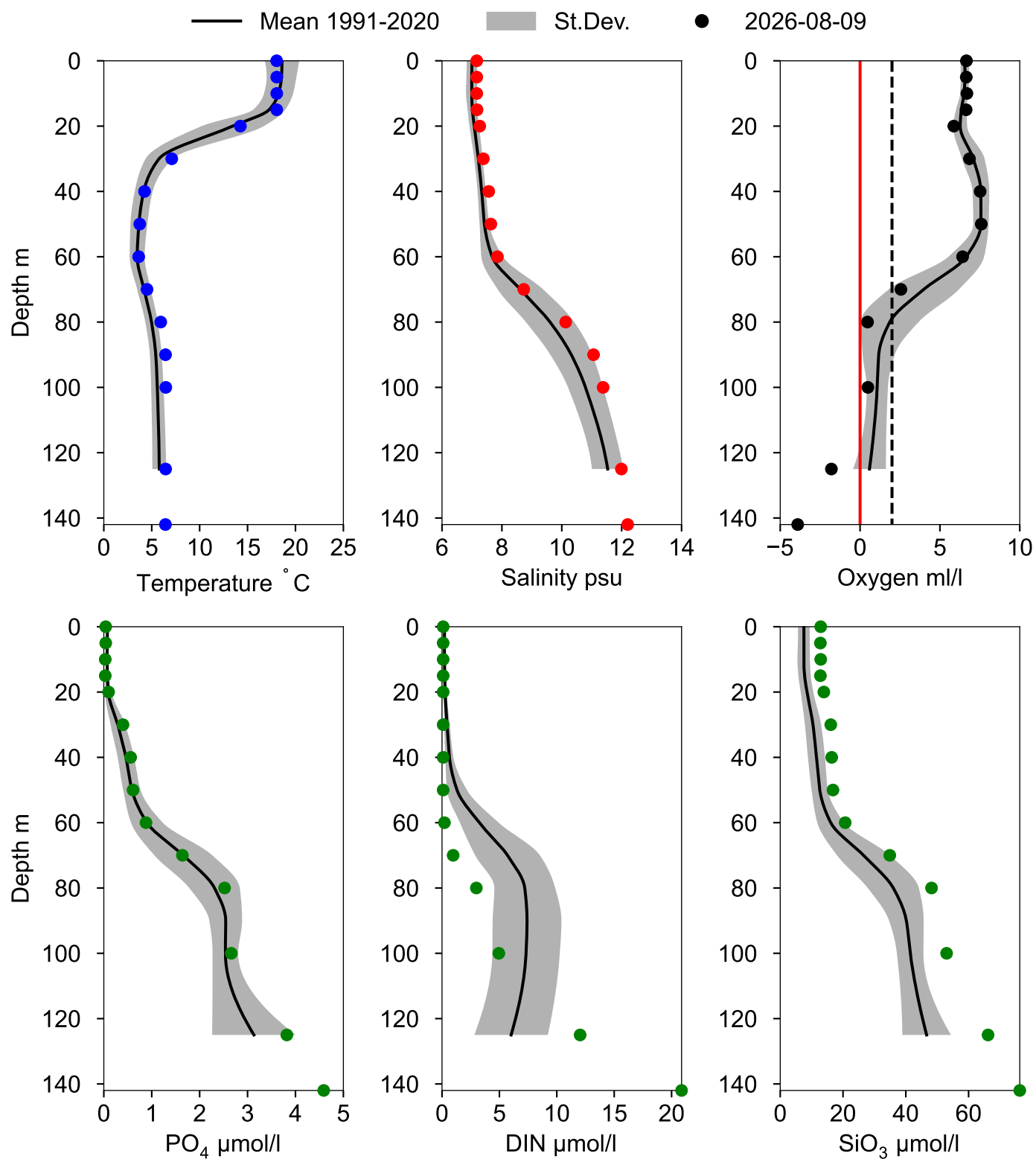
● 2026



OXYGEN IN BOTTOM WATER (depth >= 125 m)



Vertical profiles BY10 August



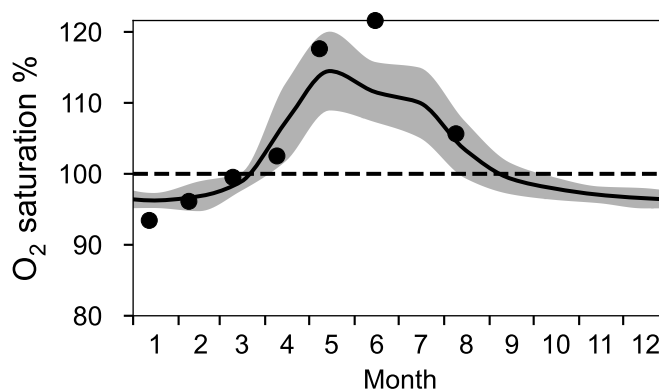
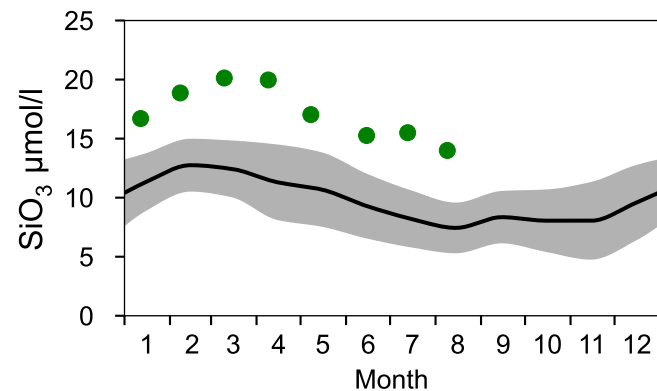
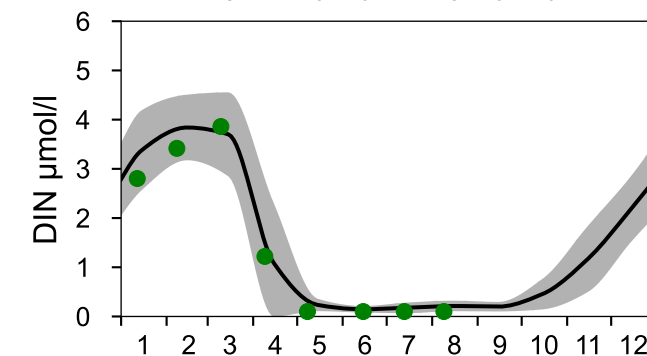
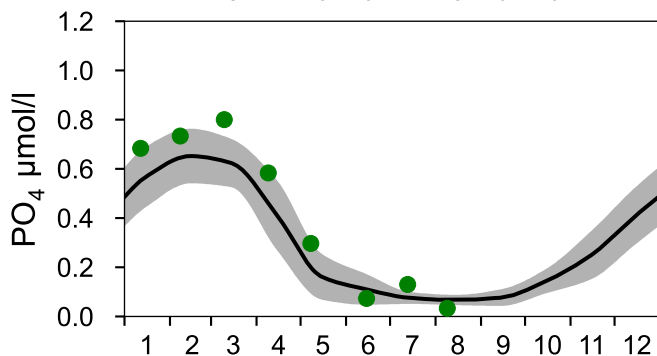
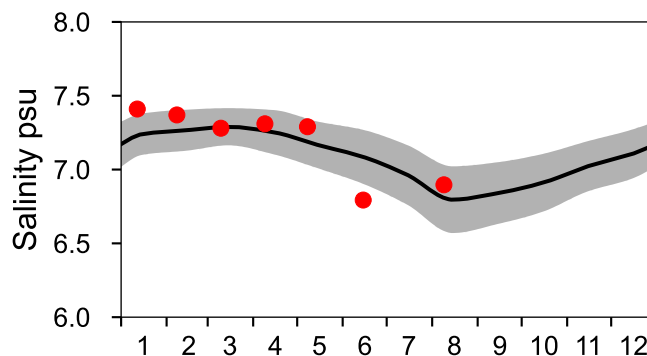
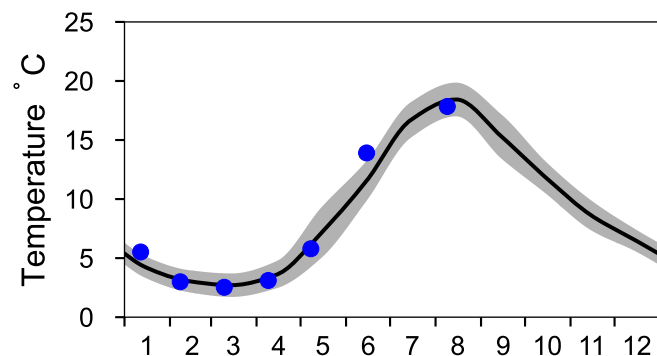
STATION BY15 GOTLANDSDJ SURFACE WATER (0-10 m)

Annual Cycles

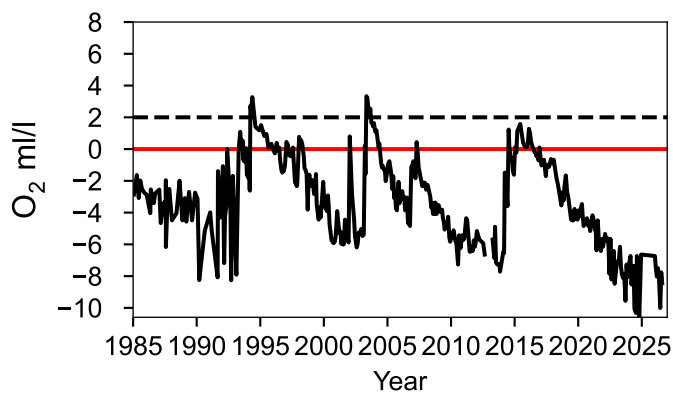
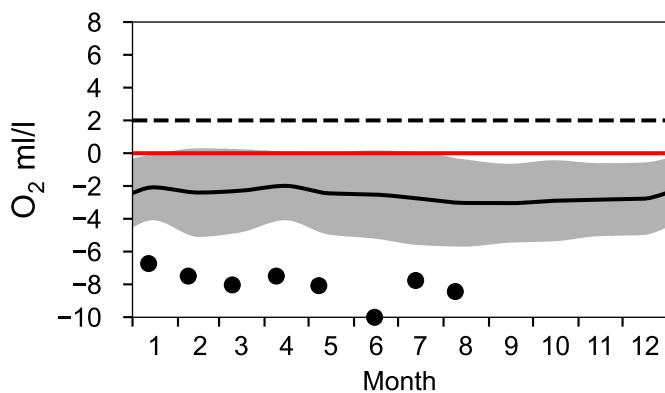
— Mean 1991-2020

■ St.Dev.

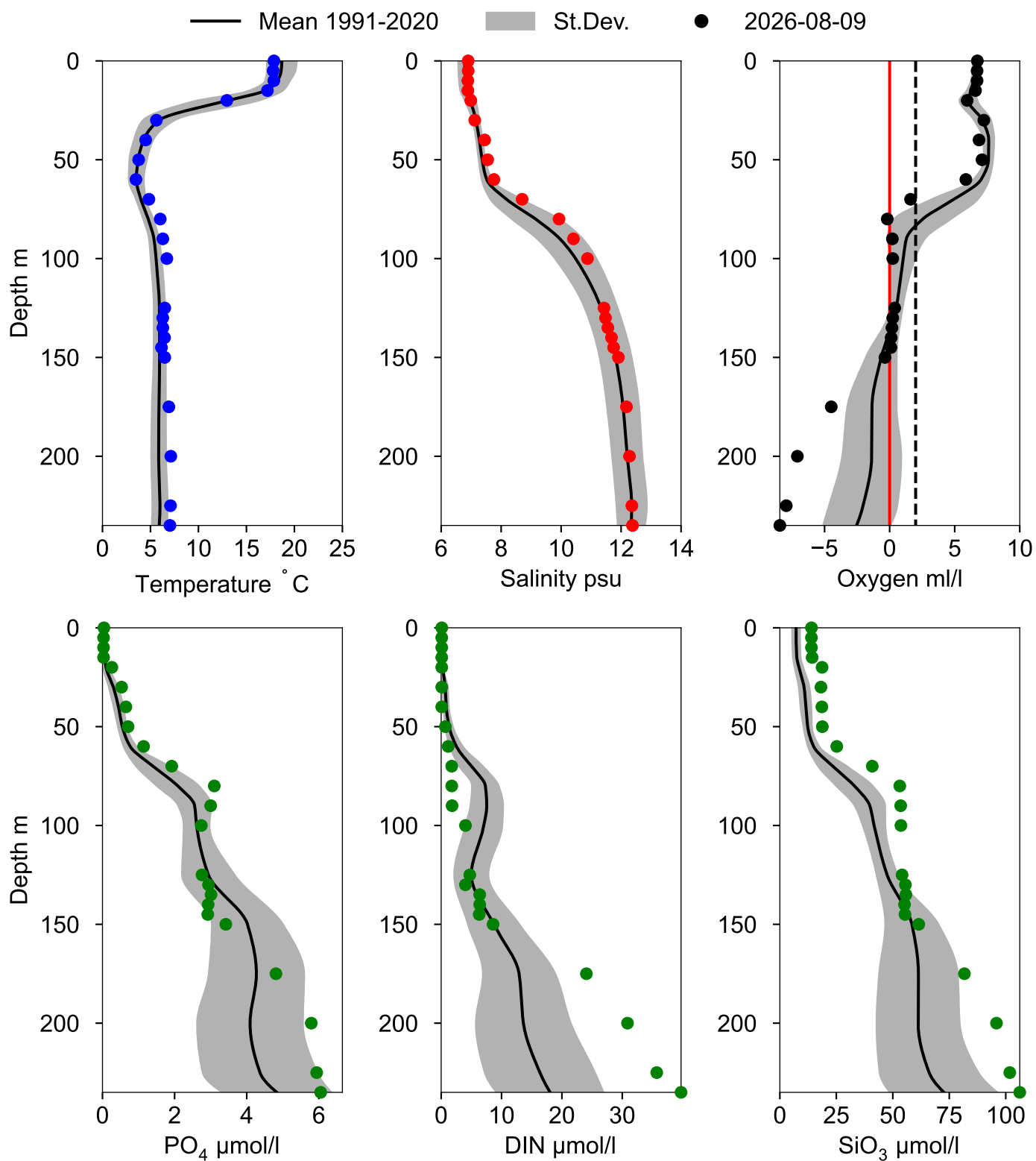
● 2026



OXYGEN IN BOTTOM WATER (depth >= 225 m)



Vertical profiles BY15 GOTLANDSDJ August



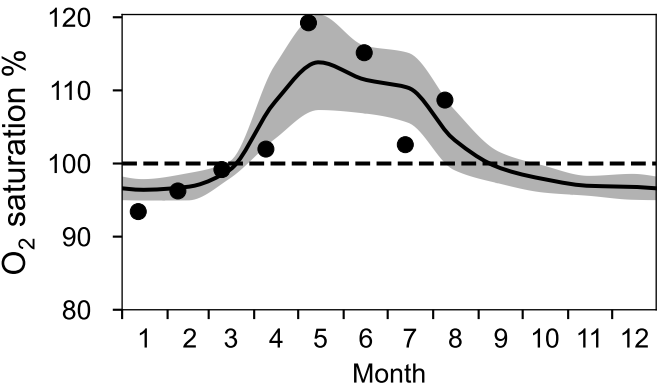
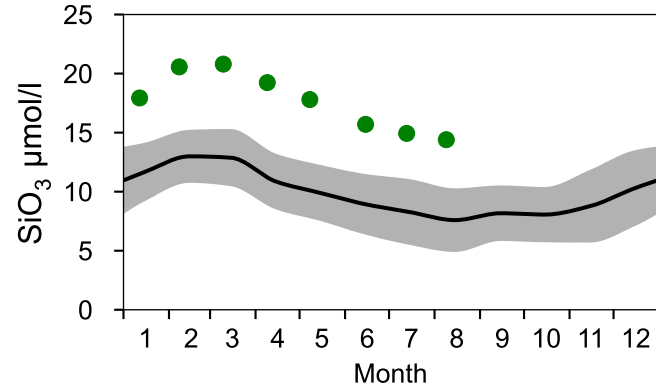
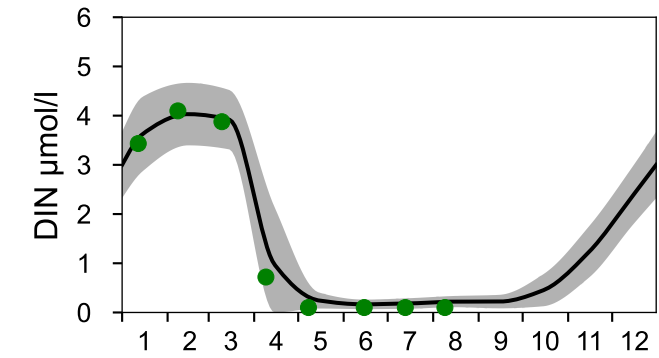
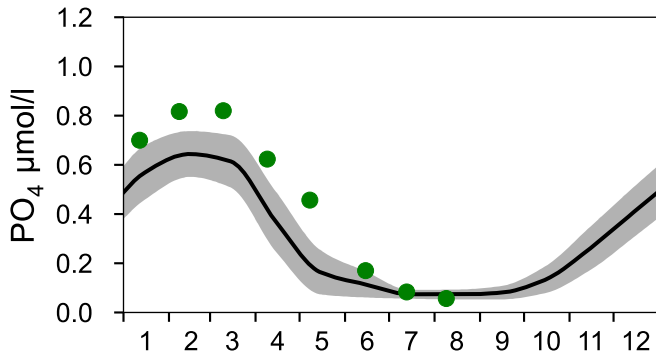
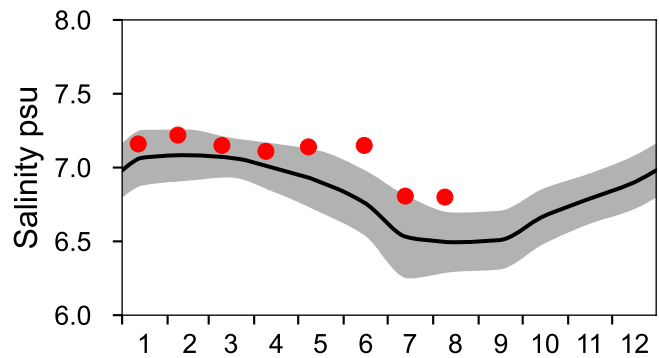
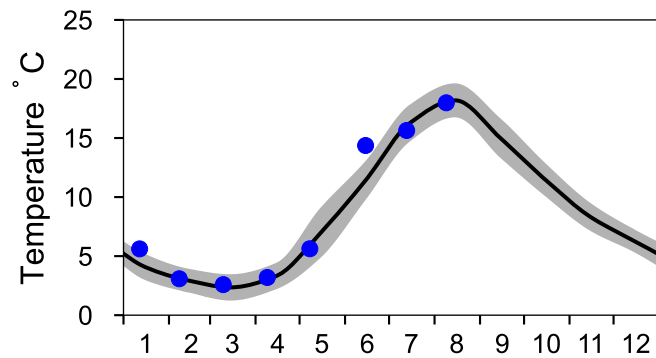
STATION BY20 FÄRÖDJ SURFACE WATER (0-10 m)

Annual Cycles

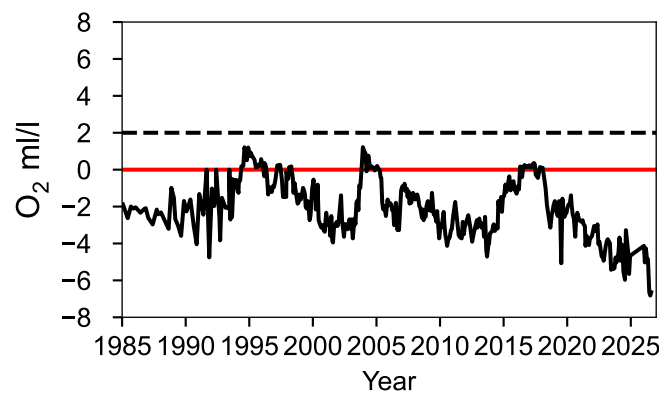
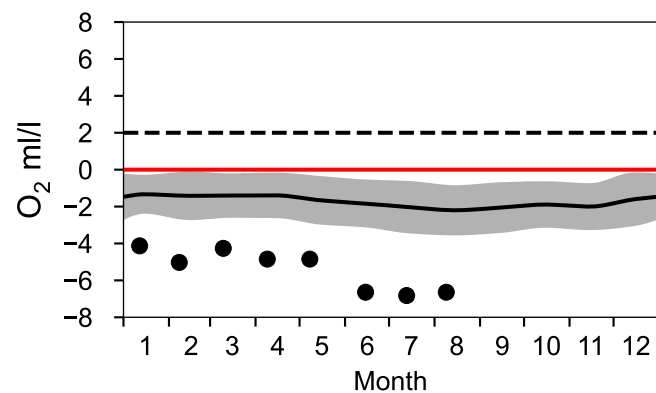
— Mean 1991-2020

■ St.Dev.

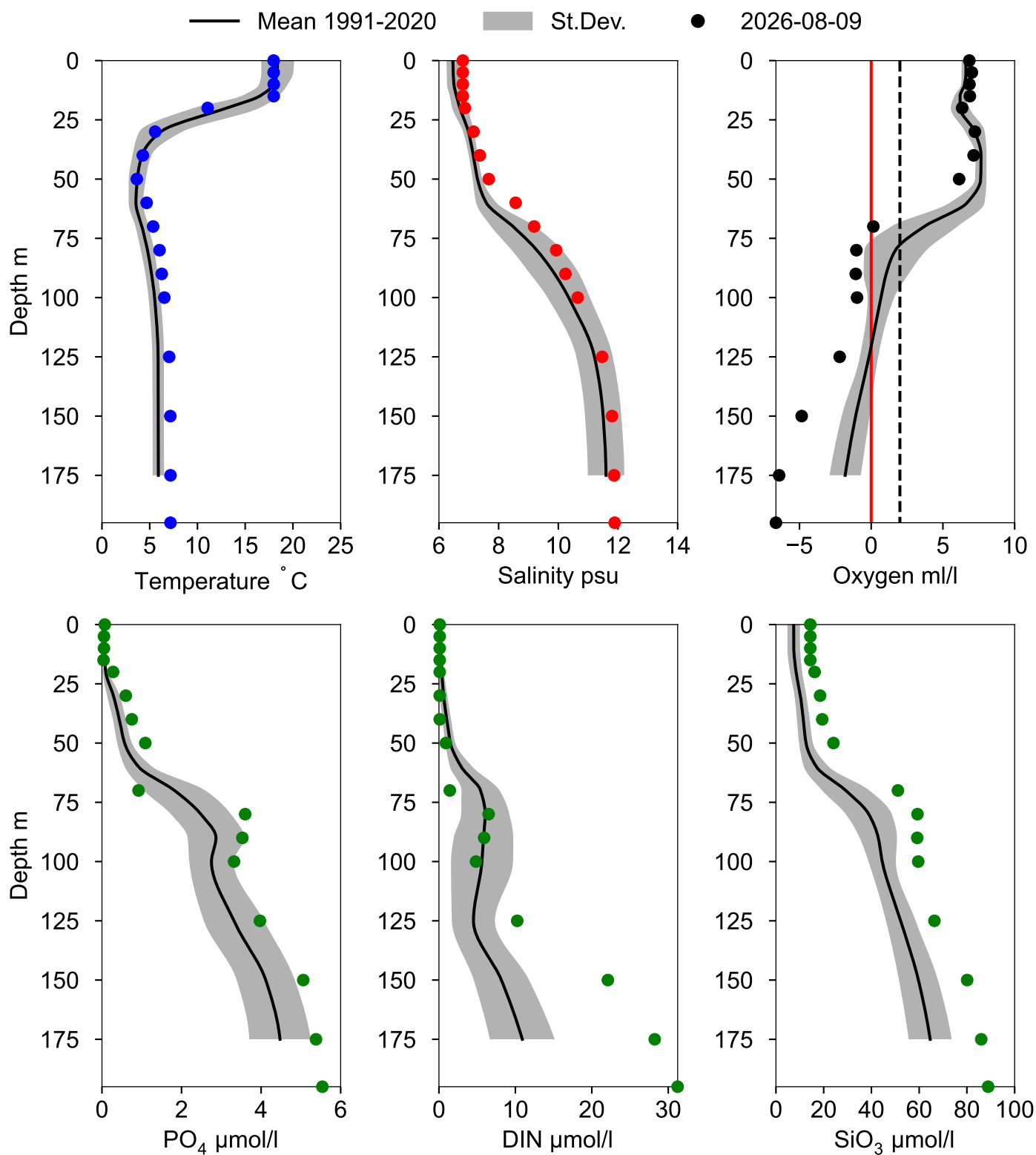
● 2026



OXYGEN IN BOTTOM WATER (depth >= 175 m)



Vertical profiles BY20 FÅRÖDJ August



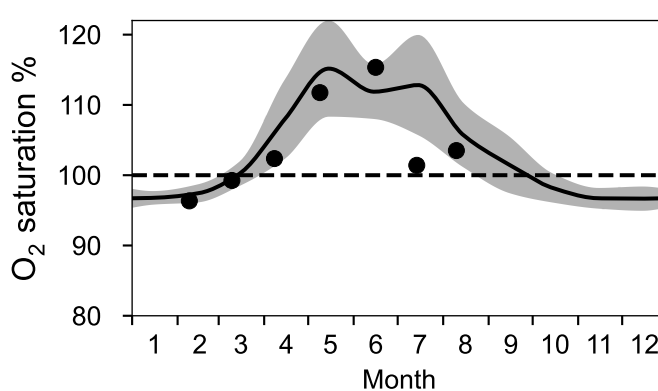
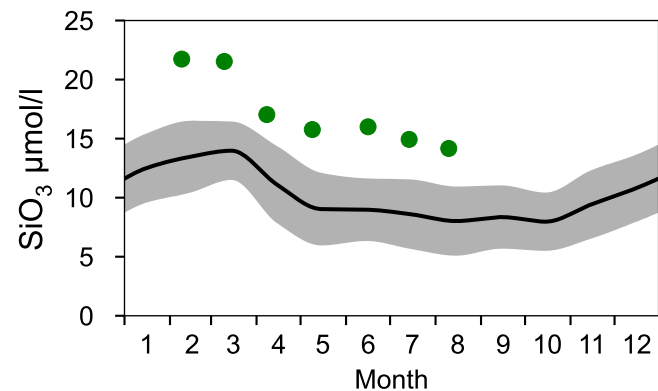
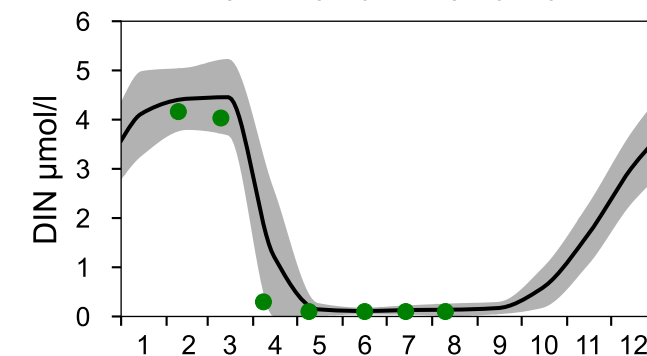
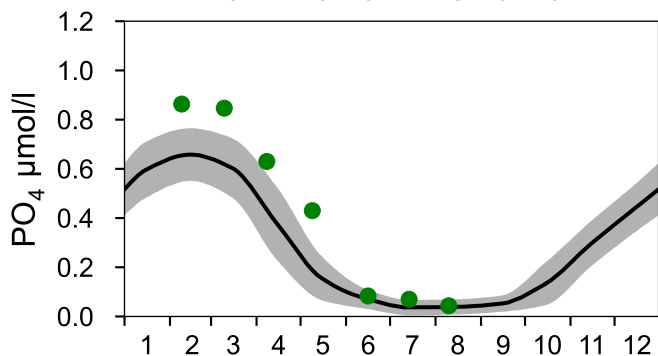
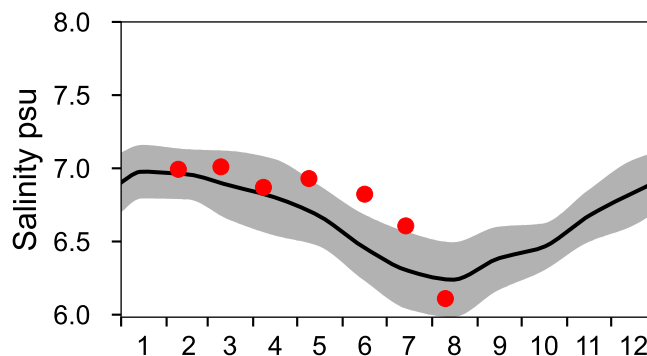
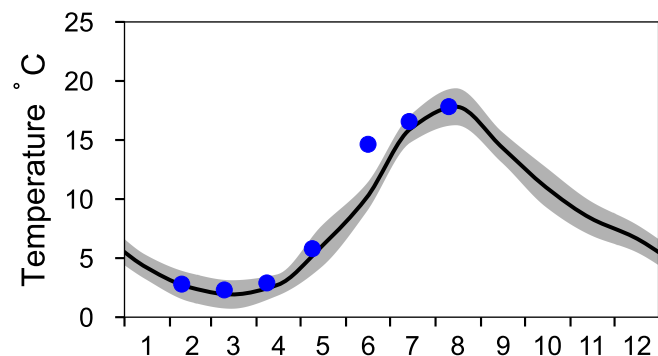
STATION BY29 / LL19 SURFACE WATER (0-10 m)

Annual Cycles

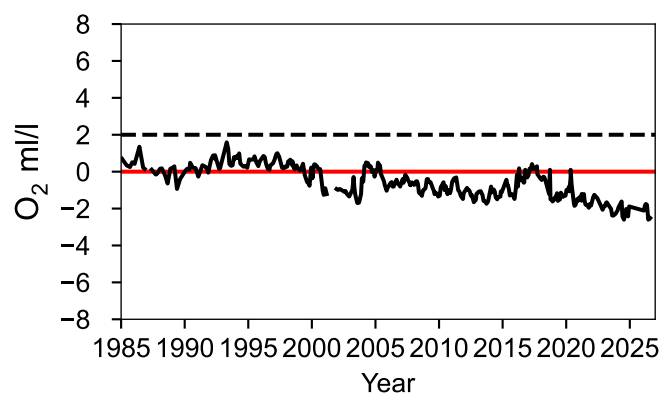
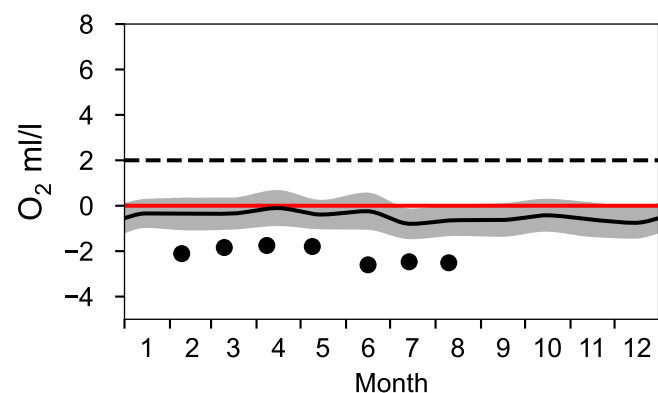
— Mean 1991-2020

■ St.Dev.

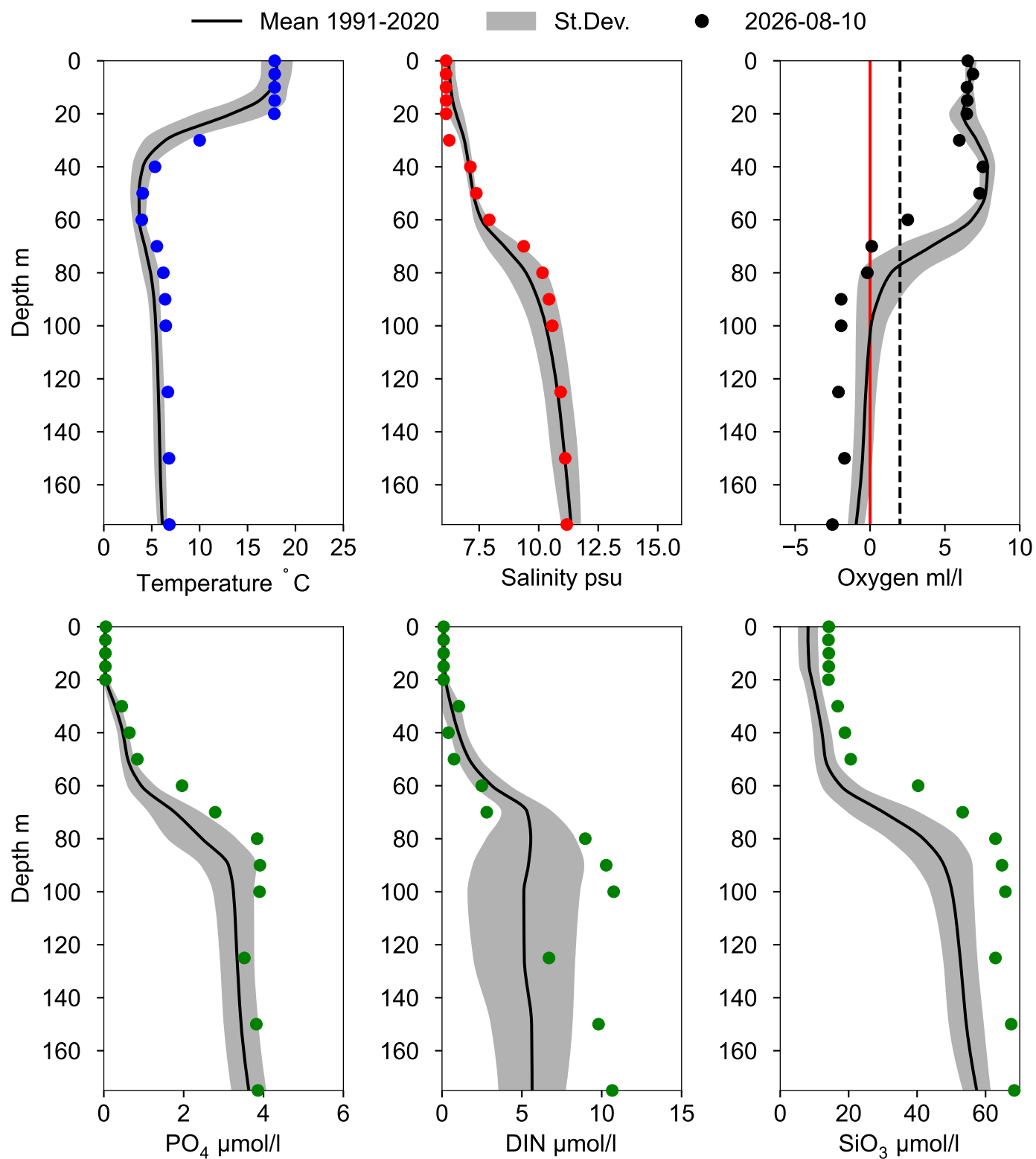
● 2026



OXYGEN IN BOTTOM WATER (depth >= 150 m)



Vertical profiles BY29 / LL19 August



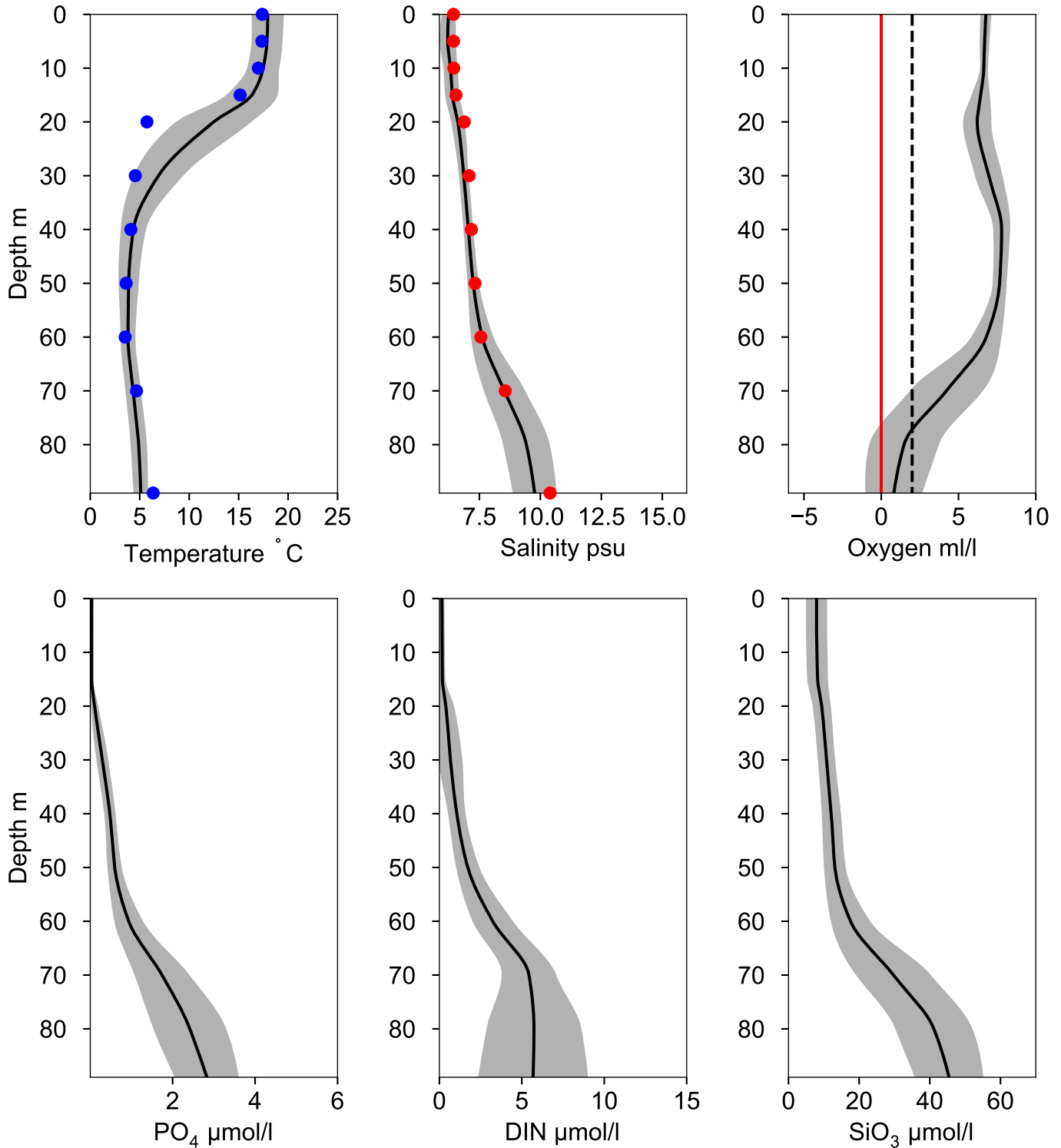
Vertical profiles HUVUDSKÄR BUOY August

Statistics based on data from: Norra Egentliga Östersjön

— Mean 1991-2020

■ St.Dev.

● 2026-08-10



STATION BY30 SURFACE WATER (0-10 m)

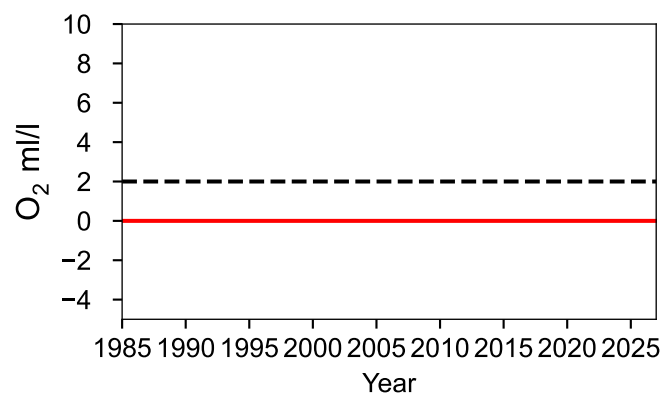
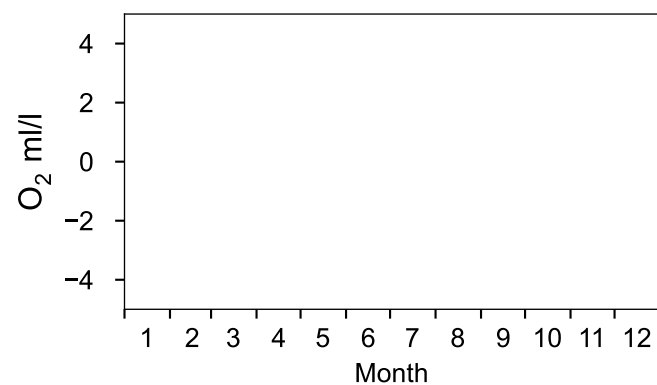
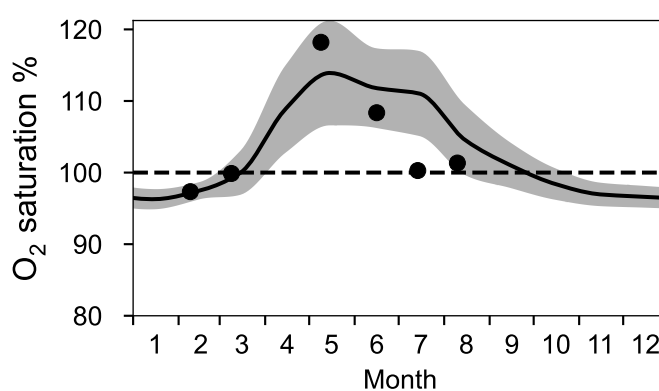
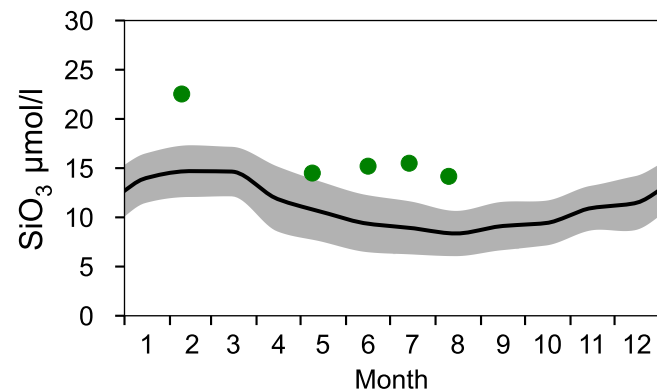
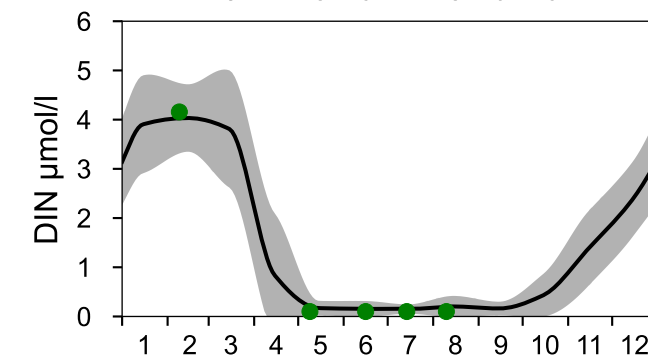
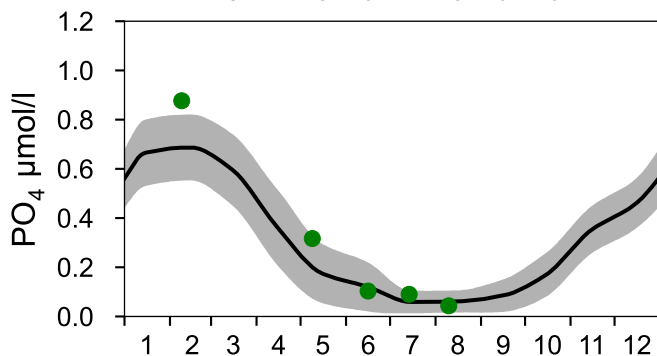
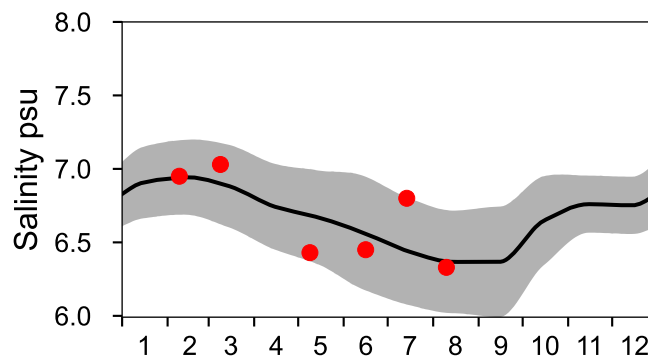
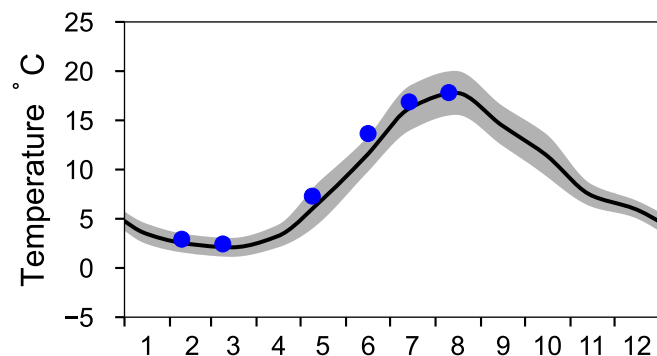
Annual Cycles

Statistics based on data from: Västra Gotlandshavet

— Mean 1991-2020

■ St.Dev.

● 2026



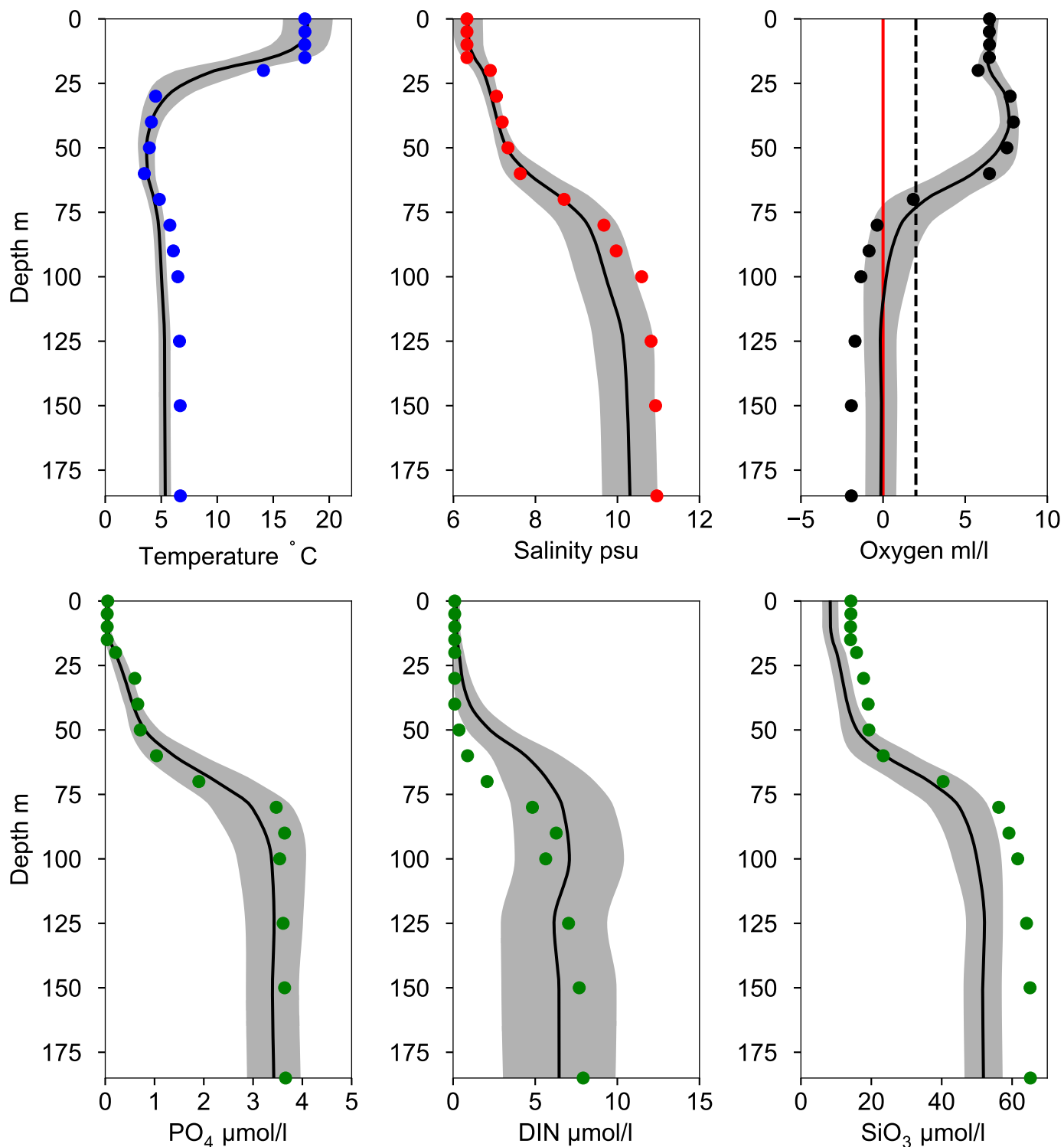
Vertical profiles BY30 August

Statistics based on data from: Västra Gotlandshavet

— Mean 1991-2020

■ St.Dev.

● 2026-08-10



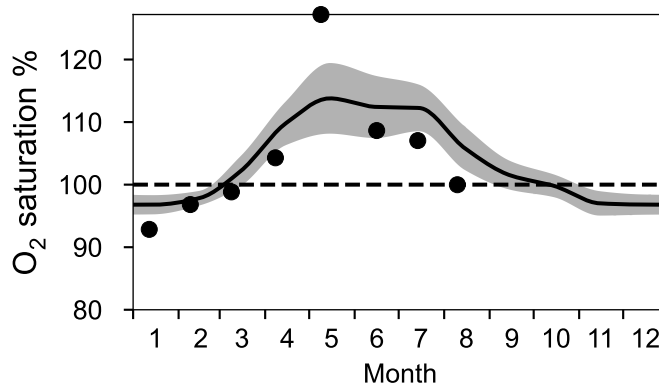
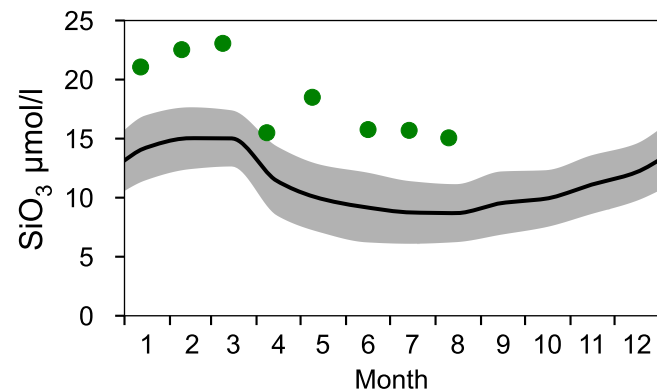
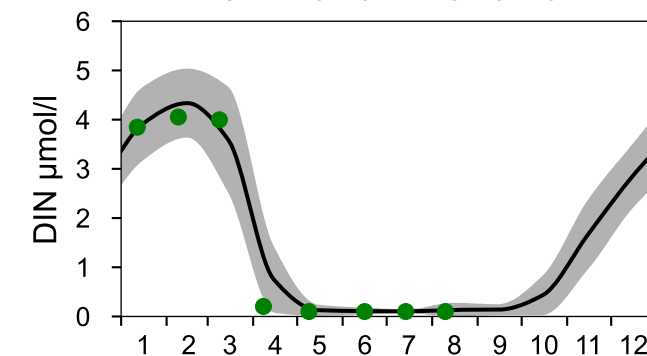
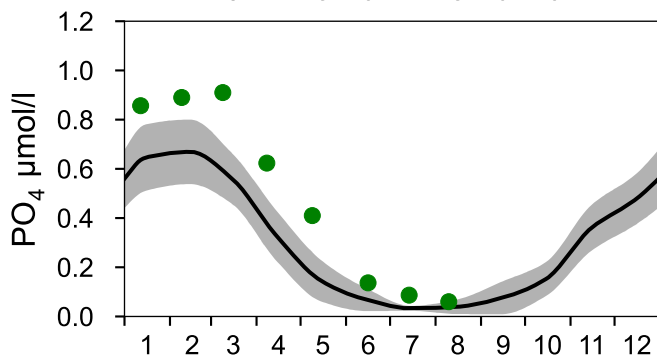
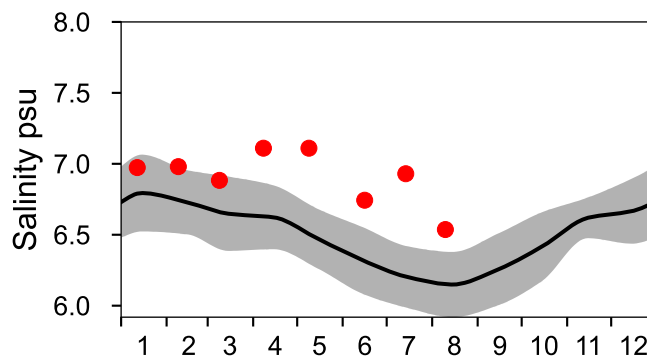
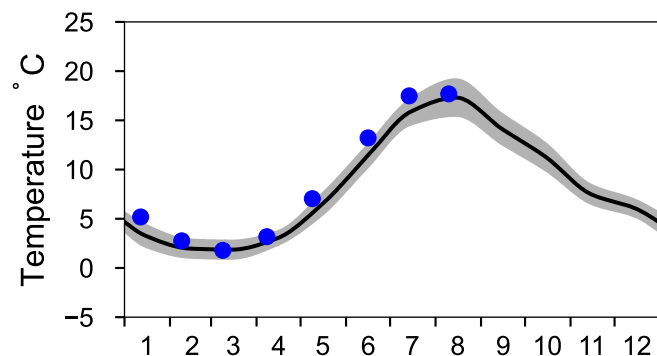
STATION BY31 LANDSORTSDJ SURFACE WATER (0-10 m)

Annual Cycles

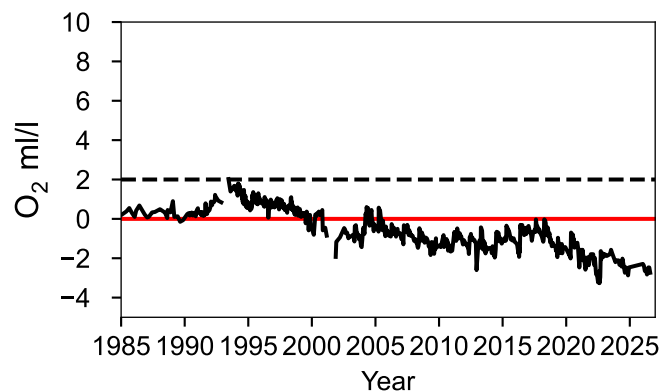
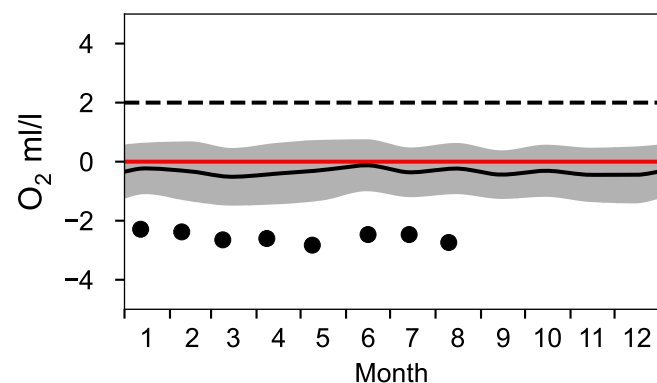
— Mean 1991-2020

■ St.Dev.

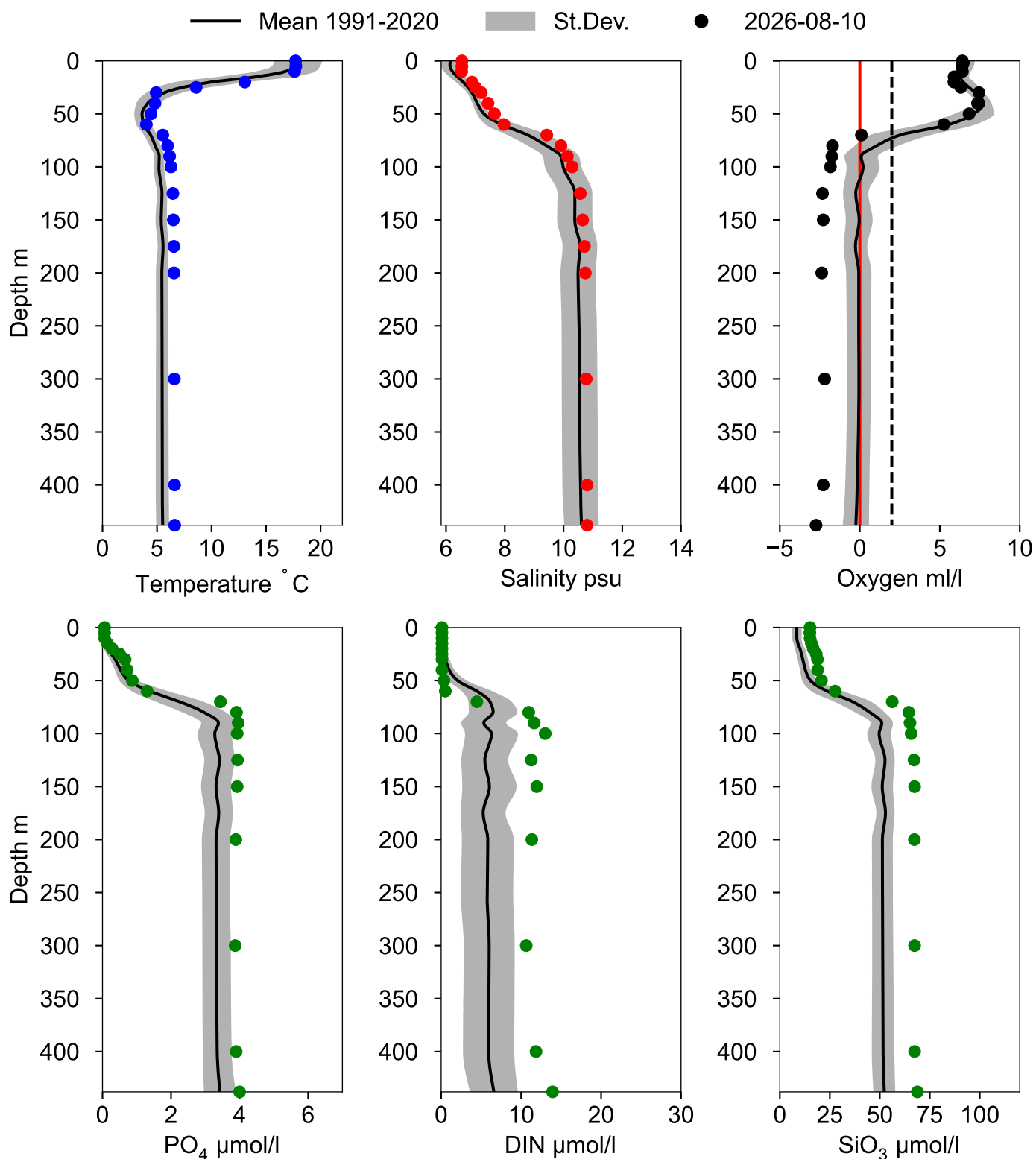
● 2026



OXYGEN IN BOTTOM WATER (depth >= 419 m)



Vertical profiles BY31 LANDSORTSDJ August



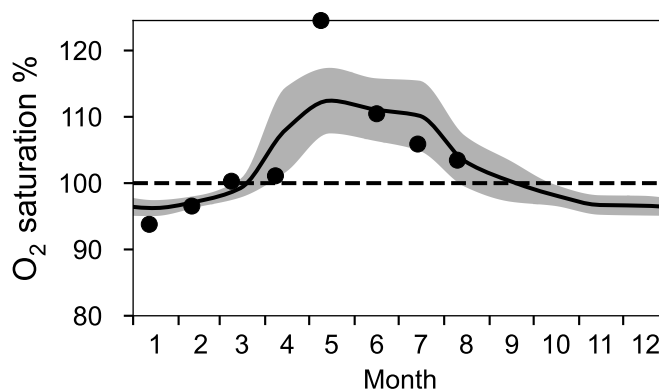
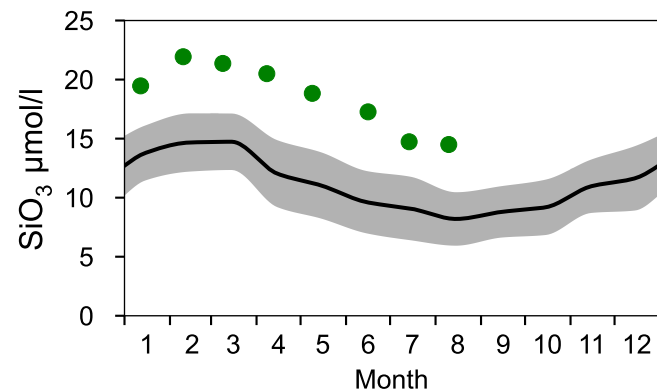
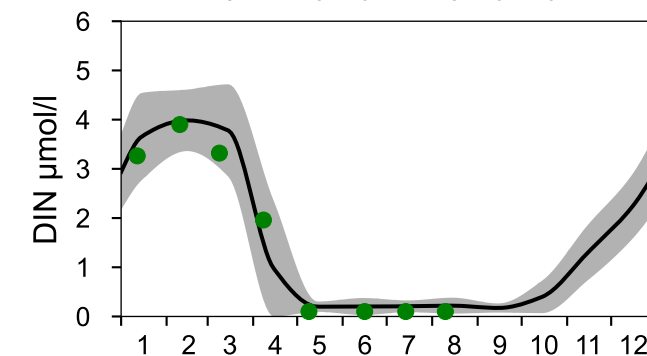
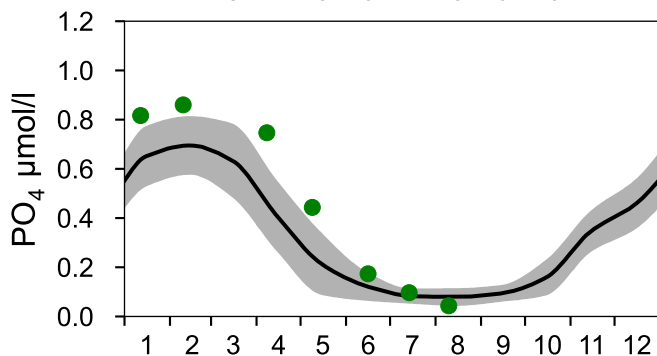
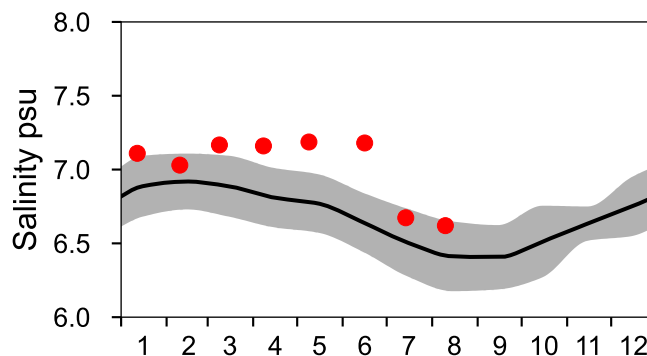
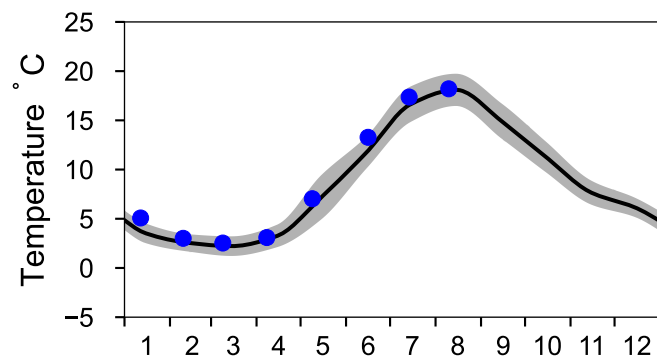
STATION BY32 NORRKÖPINGSDJ SURFACE WATER (0-10 m)

Annual Cycles

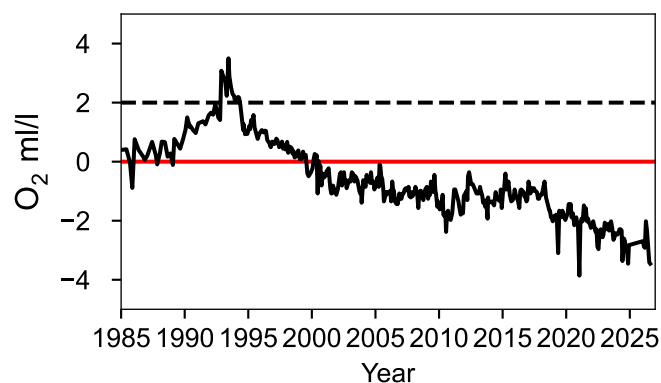
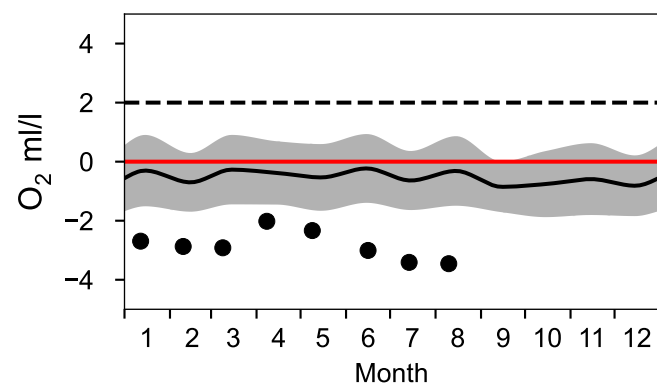
— Mean 1991-2020

■ St.Dev.

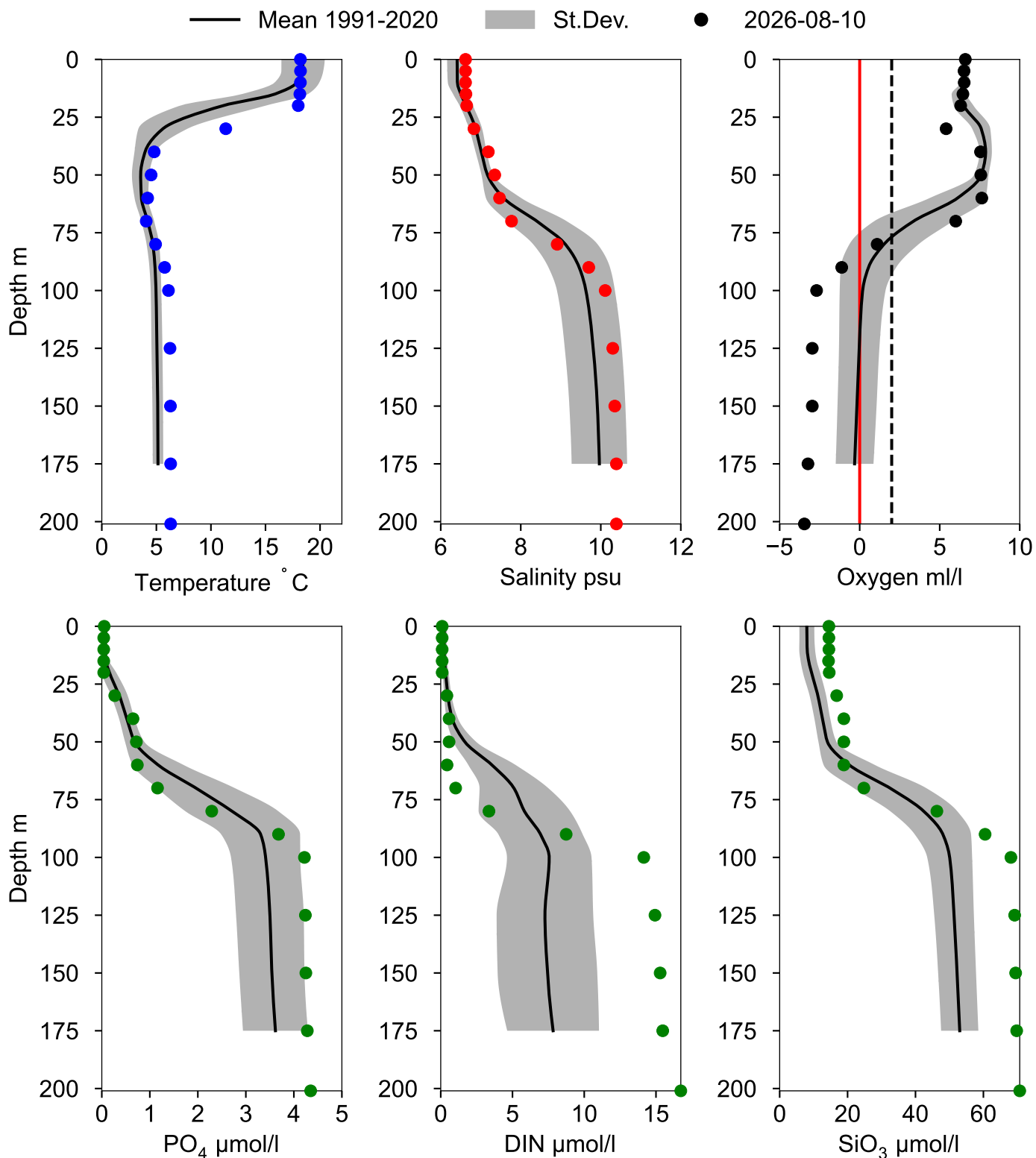
● 2026



OXYGEN IN BOTTOM WATER (depth >= 175 m)



Vertical profiles BY32 NORRKÖPINGSDJ August



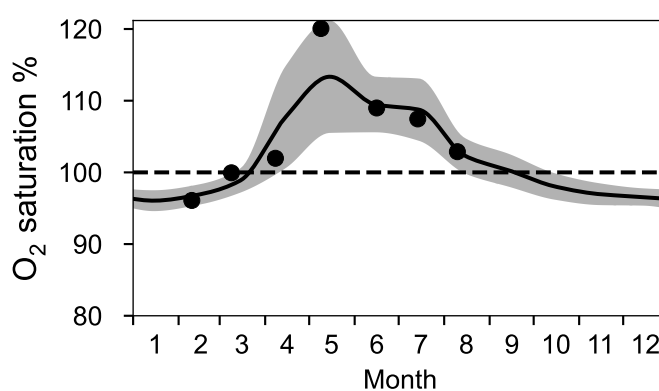
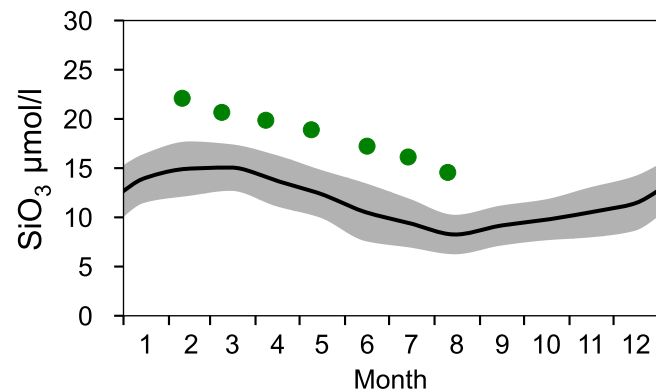
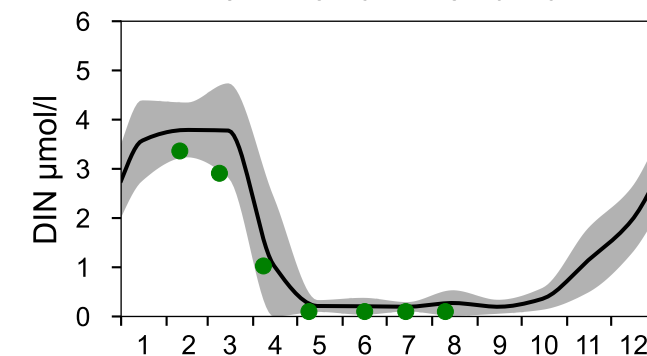
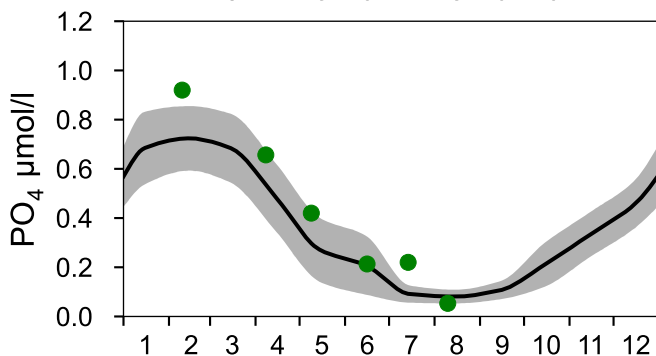
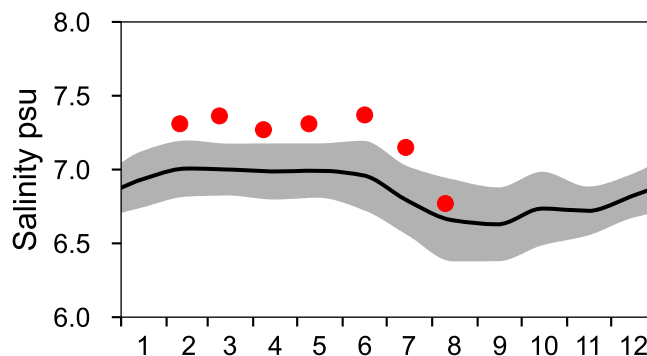
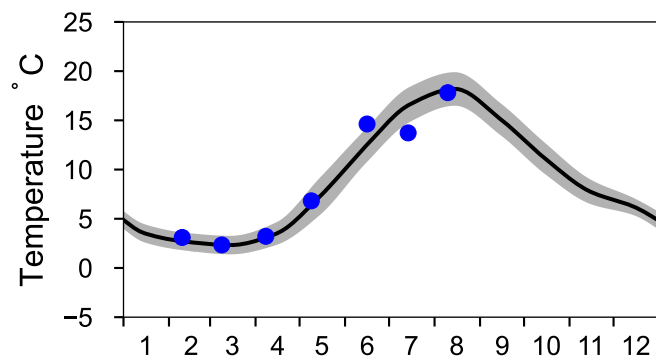
STATION BY38 KARLSÖDJ SURFACE WATER (0-10 m)

Annual Cycles

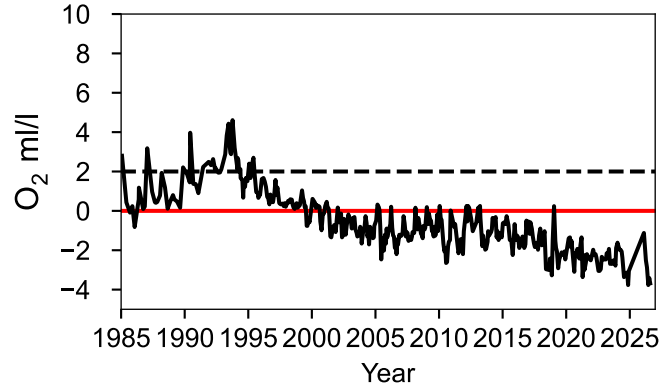
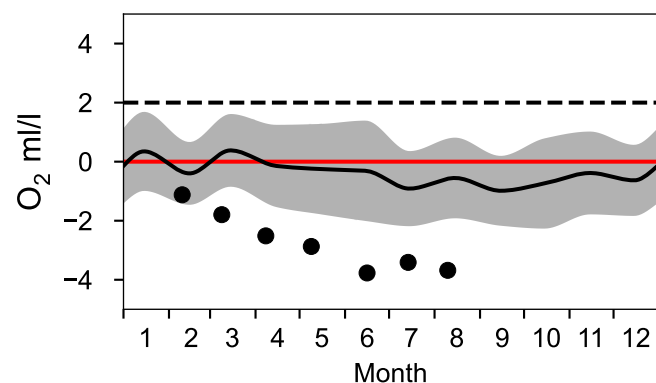
— Mean 1991-2020

■ St.Dev.

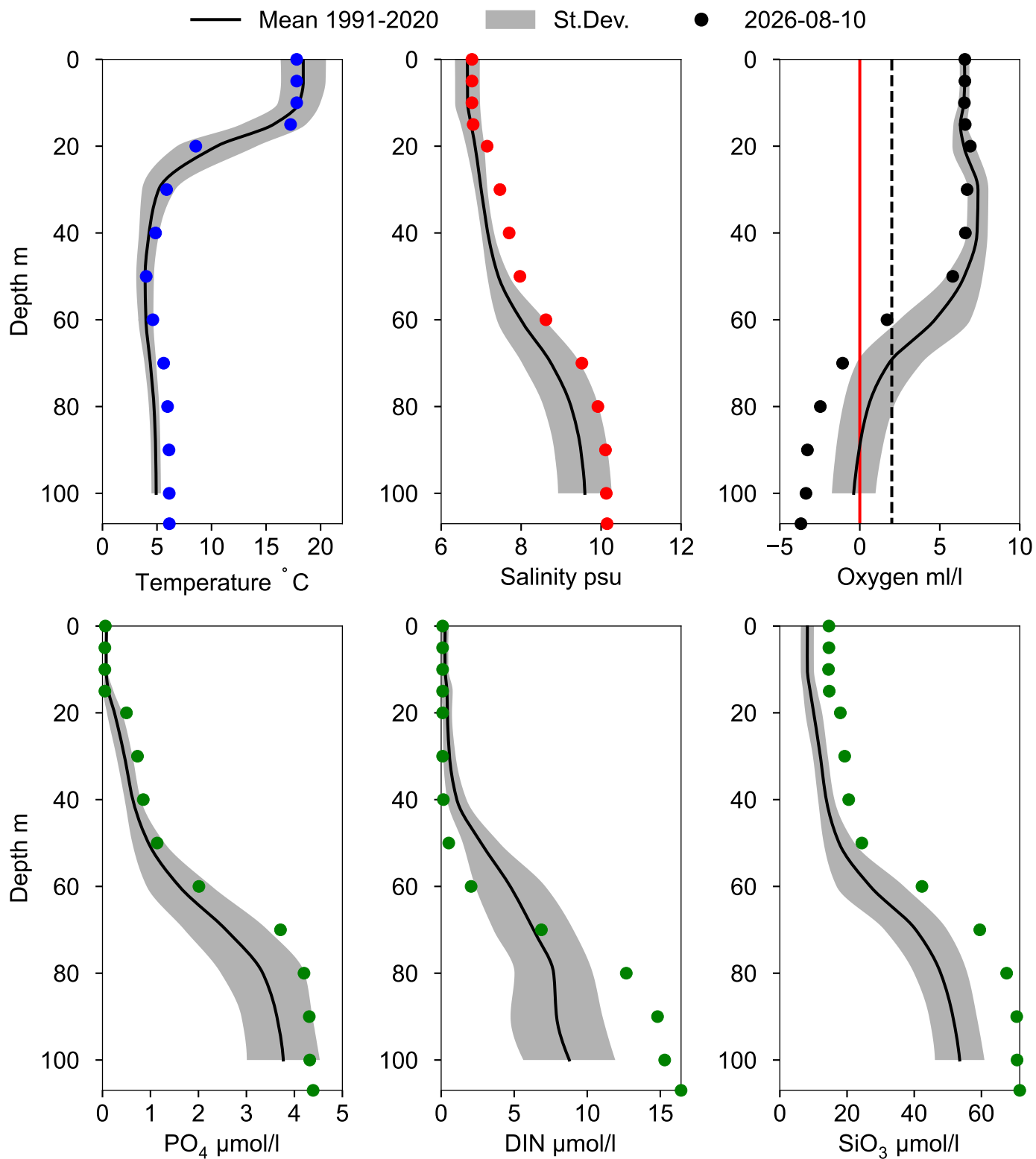
● 2026



OXYGEN IN BOTTOM WATER (depth >= 100 m)



Vertical profiles BY38 KARLSÖDJ August



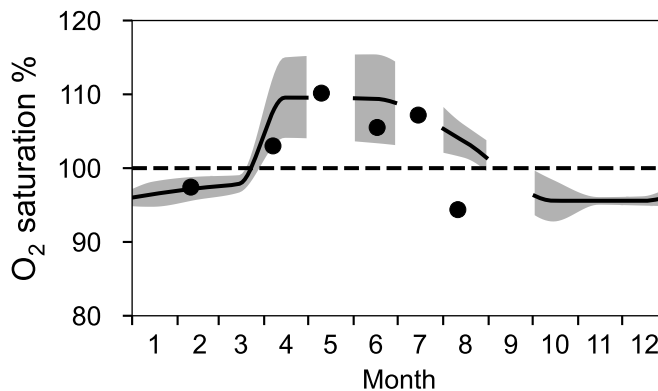
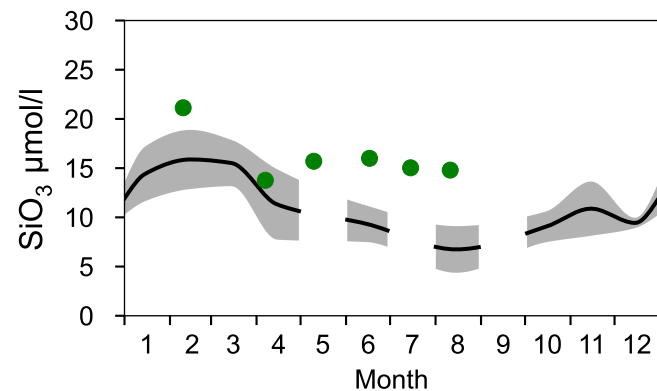
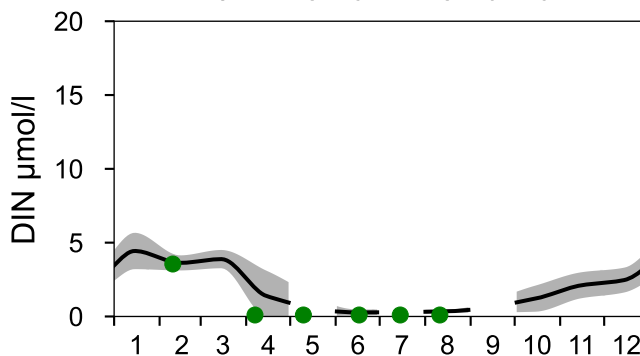
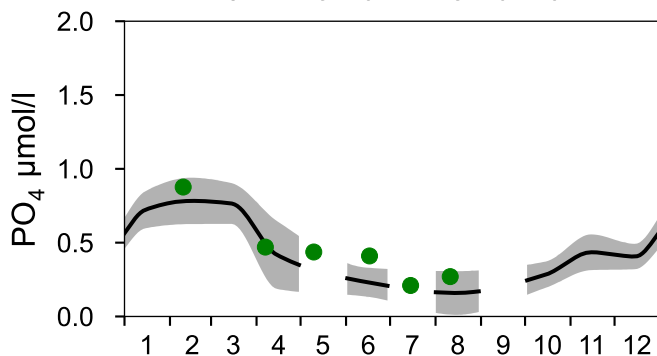
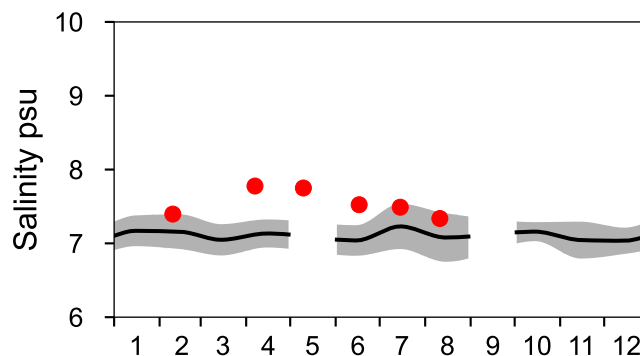
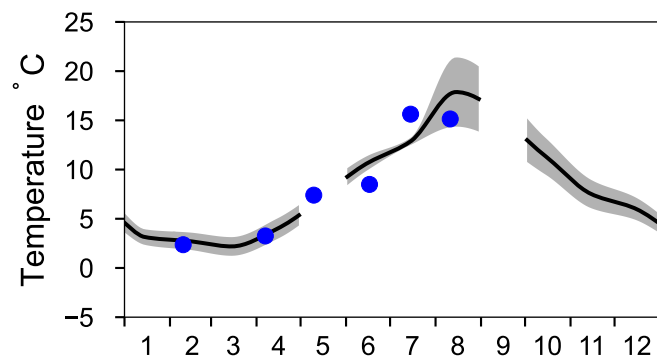
STATION BY39 ÖLANDS S UDDE SURFACE WATER (0-10 m)

Annual Cycles

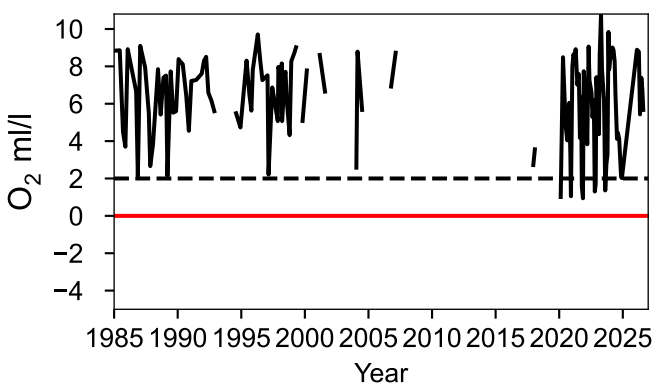
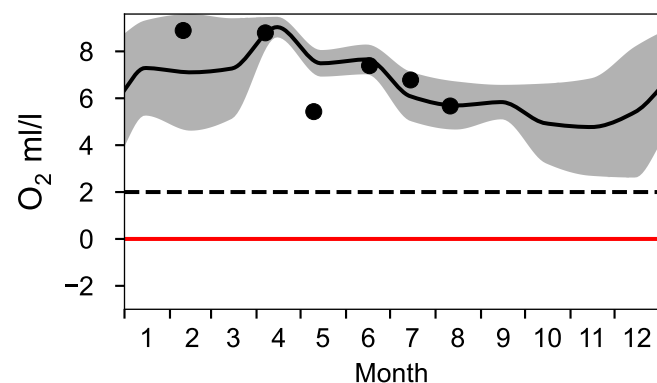
— Mean 1991-2020

■ St.Dev.

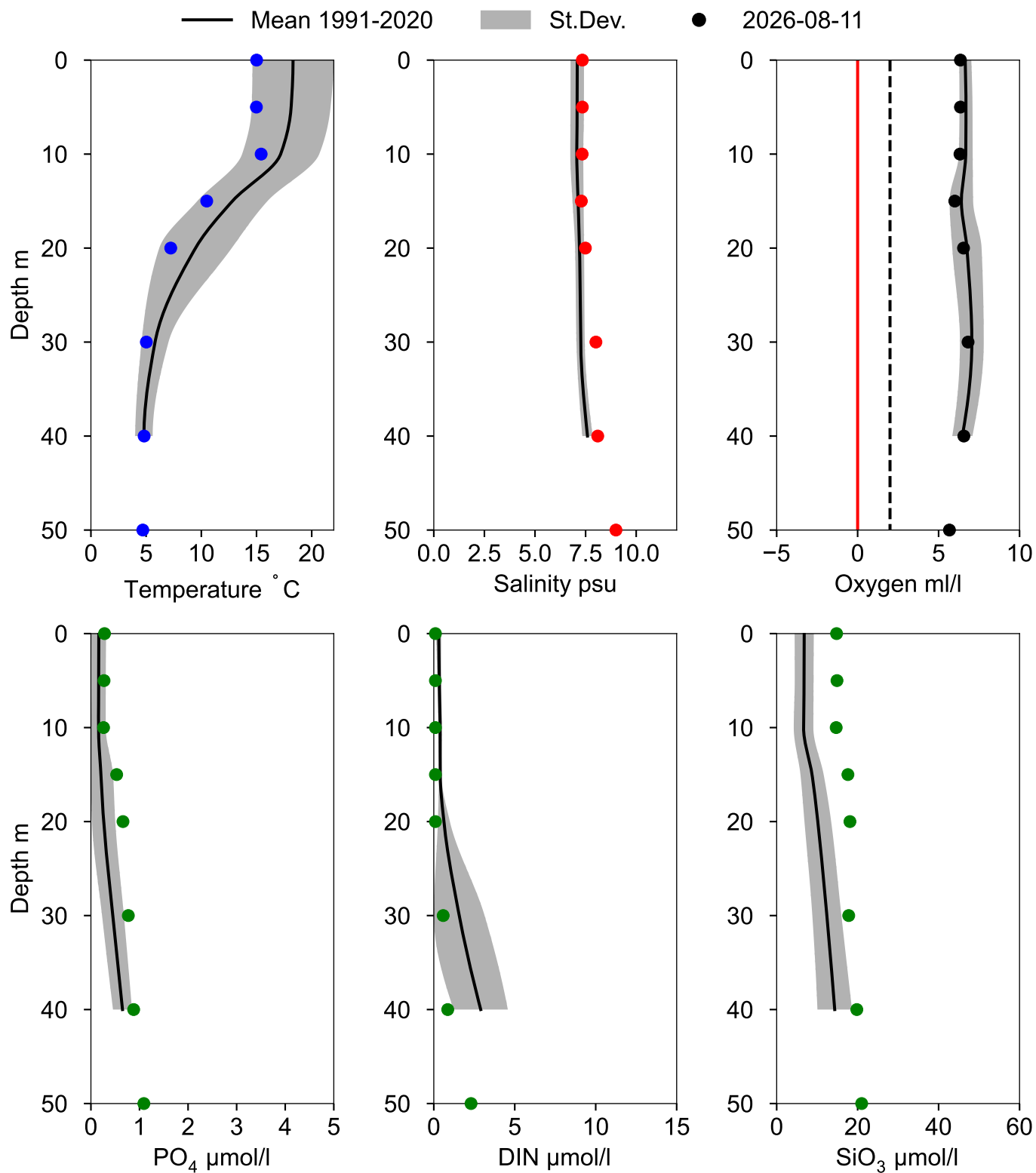
● 2026



OXYGEN IN BOTTOM WATER (depth >= 40 m)



Vertical profiles BY39 ÖLANDS S UDDE August



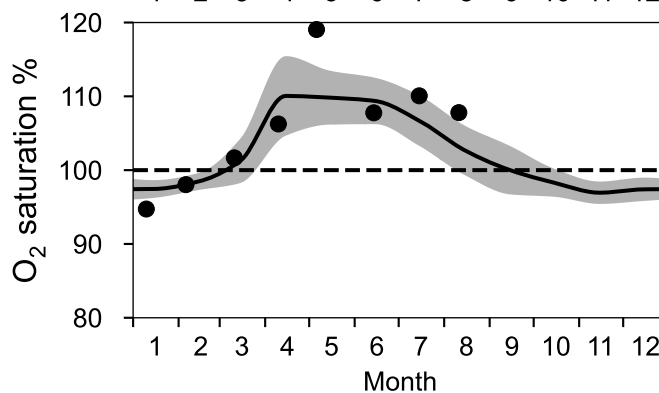
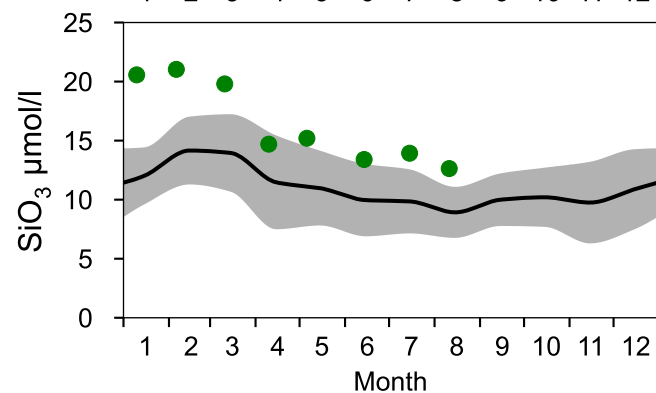
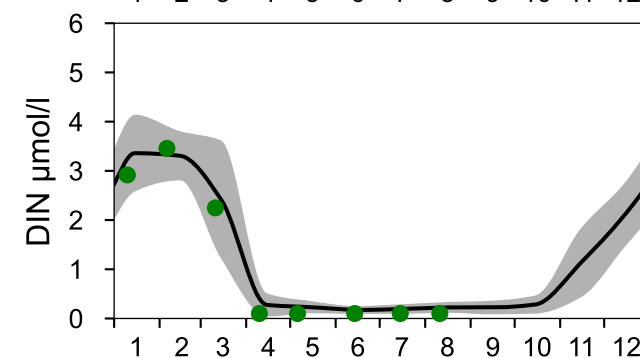
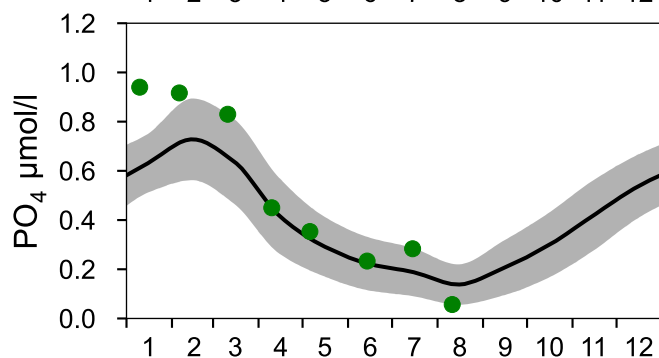
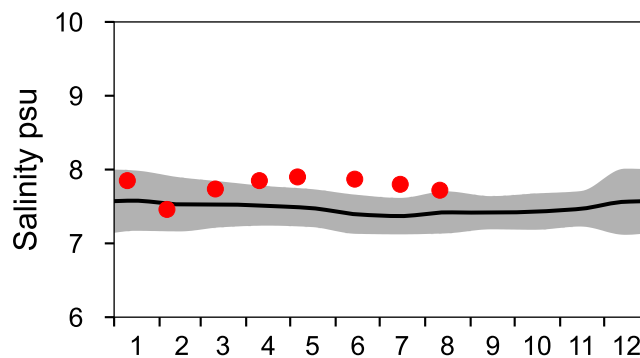
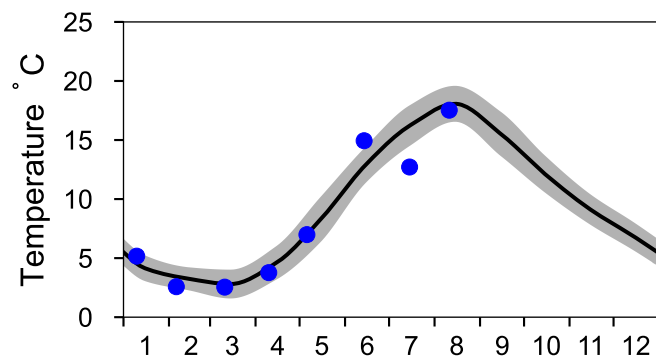
STATION HANÖBUKTEN SURFACE WATER (0-10 m)

Annual Cycles

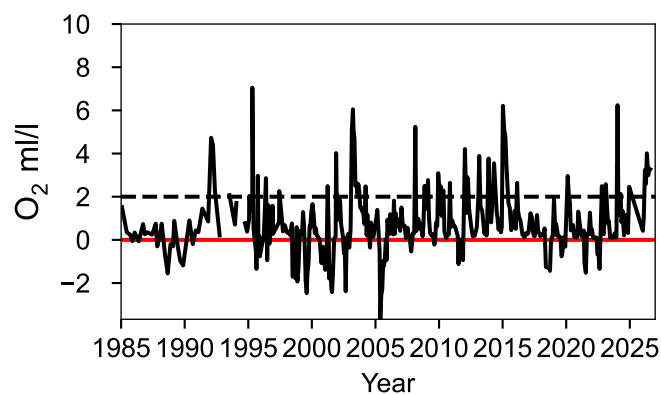
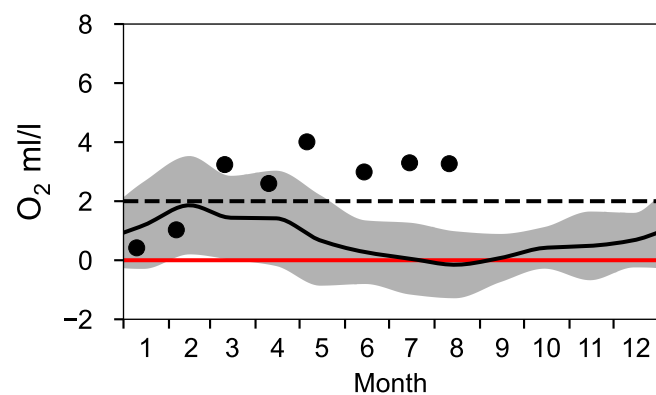
— Mean 1991-2020

■ St.Dev.

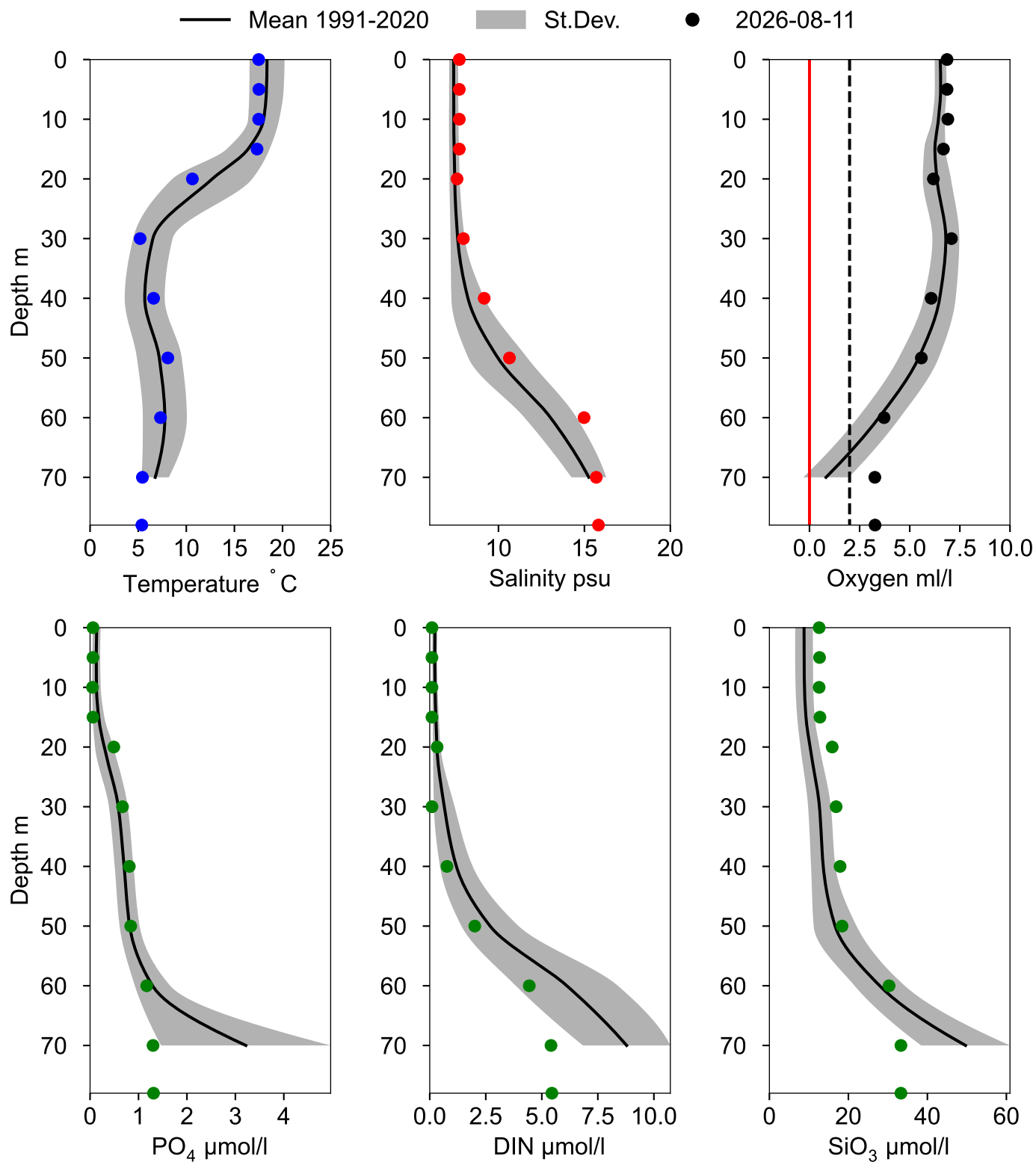
● 2026



OXYGEN IN BOTTOM WATER (depth >= 70 m)



Vertical profiles HANÖBUKTEN August



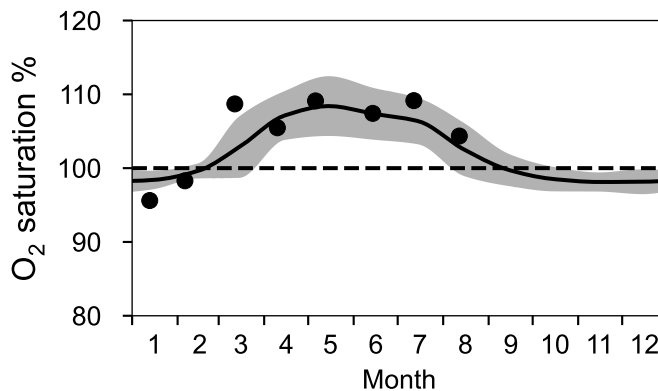
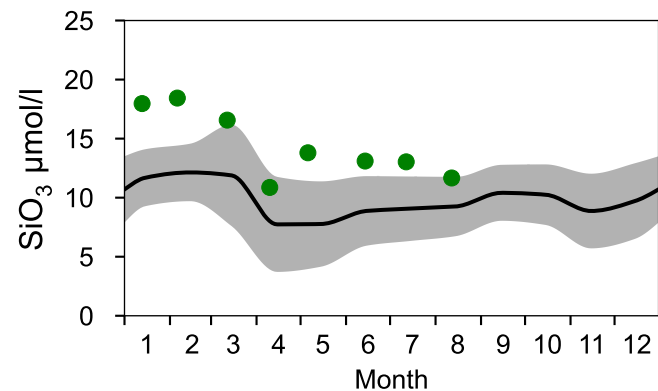
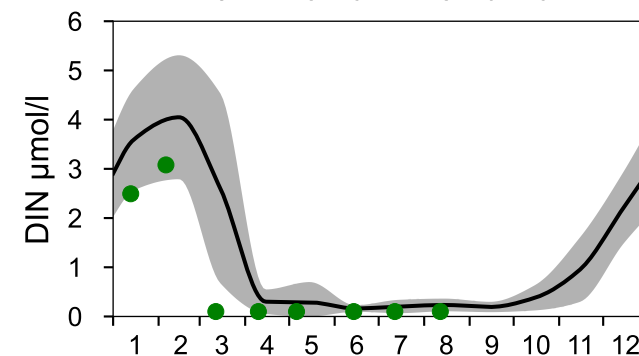
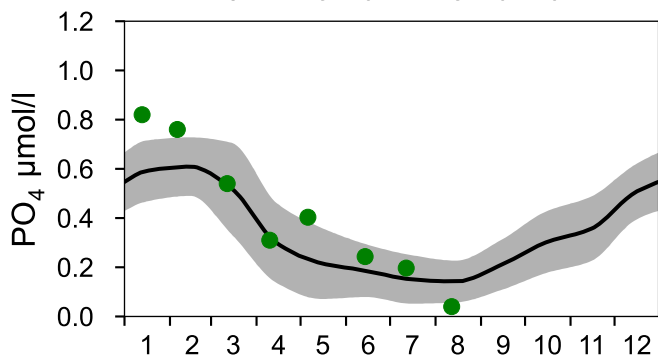
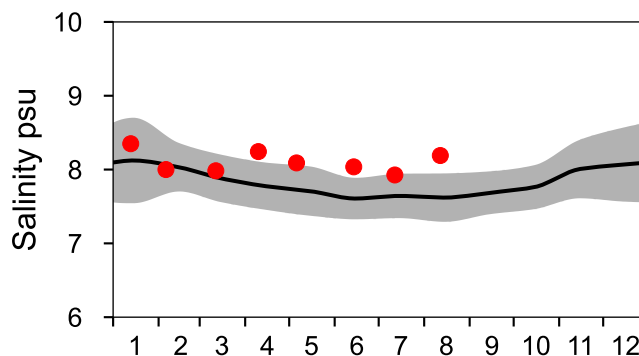
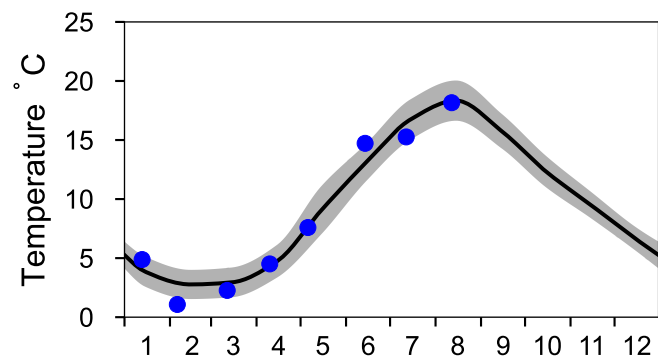
STATION BY2 ARKONA SURFACE WATER (0-10 m)

Annual Cycles

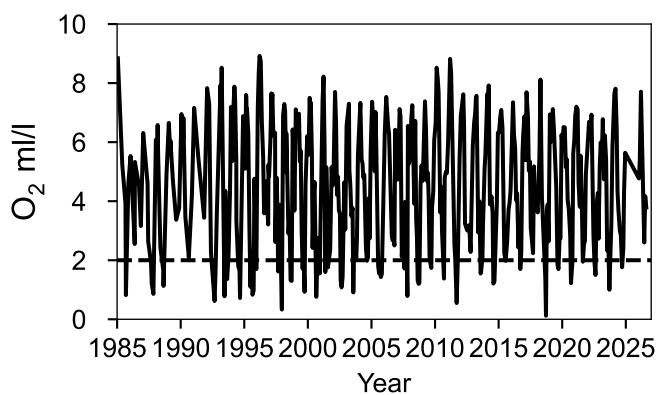
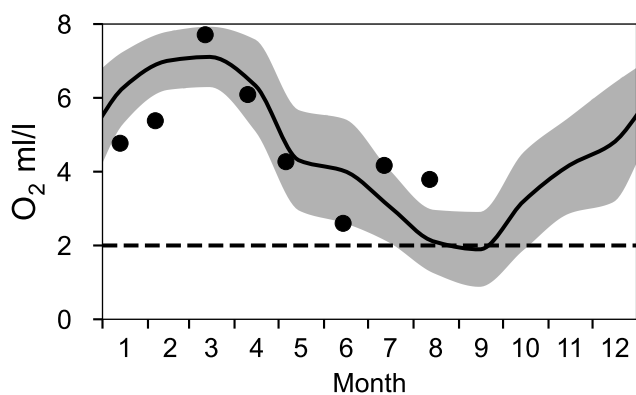
— Mean 1991-2020

■ St.Dev.

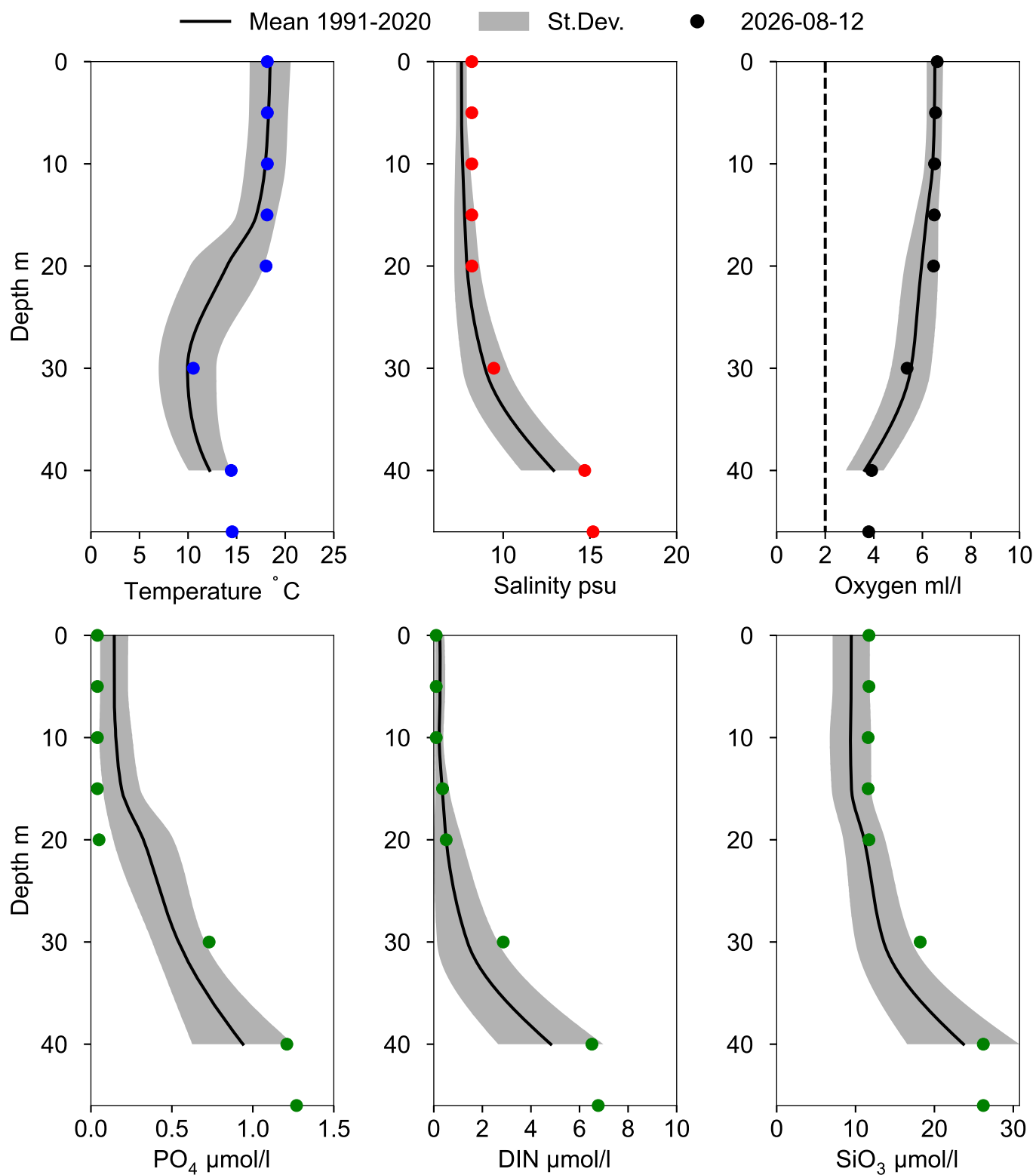
● 2026



OXYGEN IN BOTTOM WATER (depth >= 40 m)



Vertical profiles BY2 ARKONA August



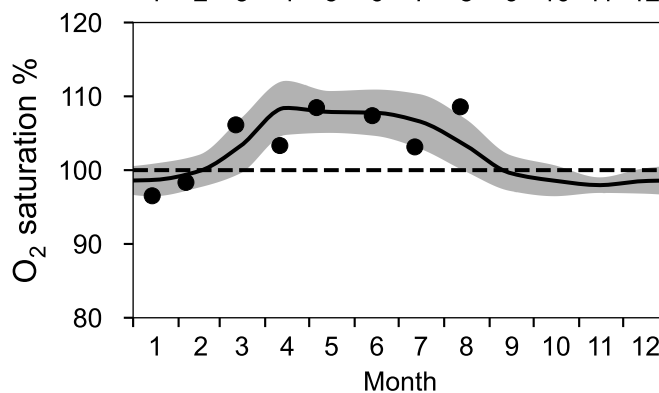
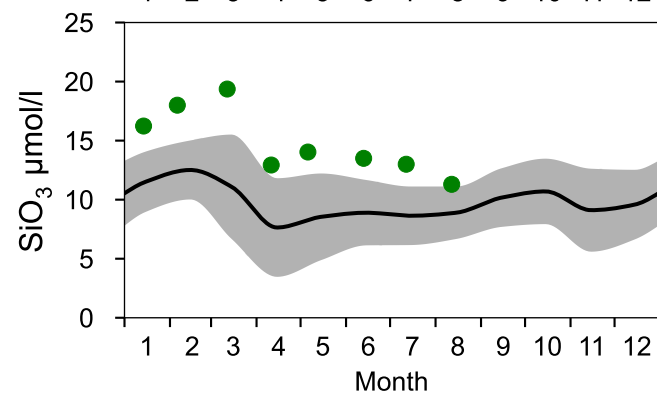
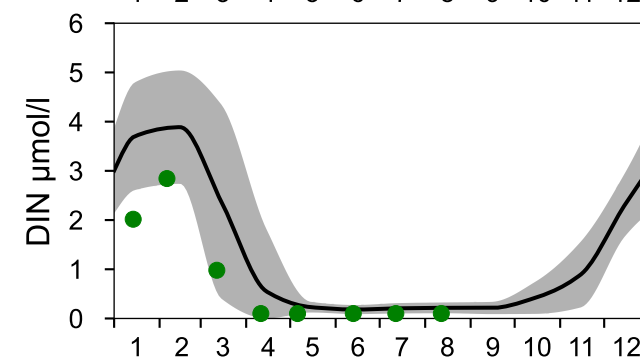
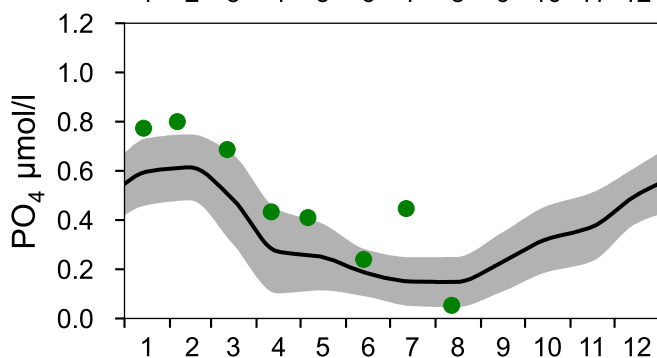
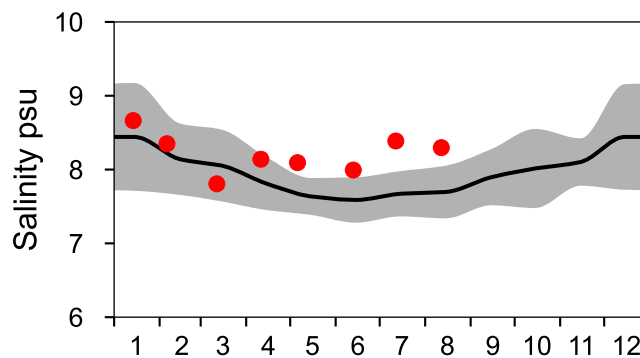
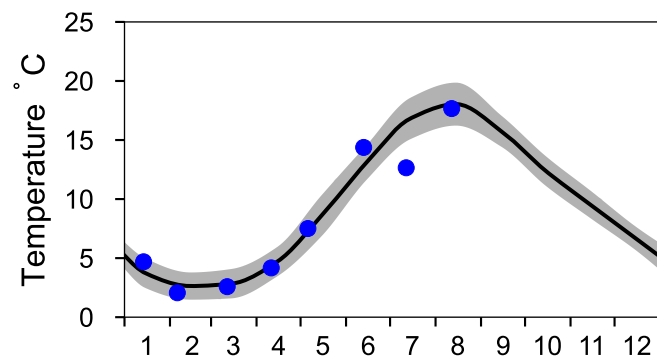
STATION BY1 SURFACE WATER (0-10 m)

Annual Cycles

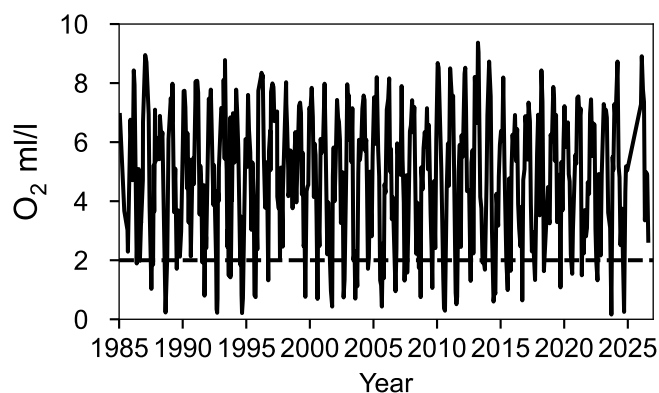
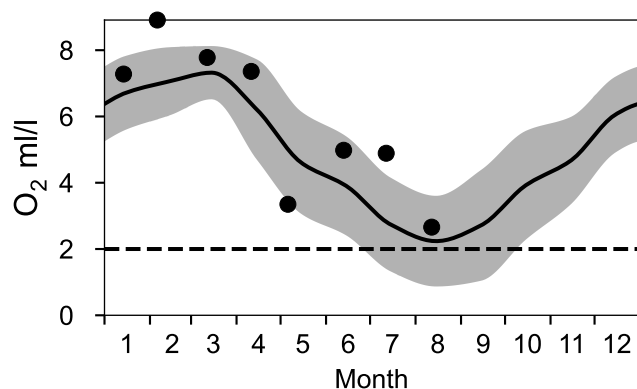
— Mean 1991-2020

■ St.Dev.

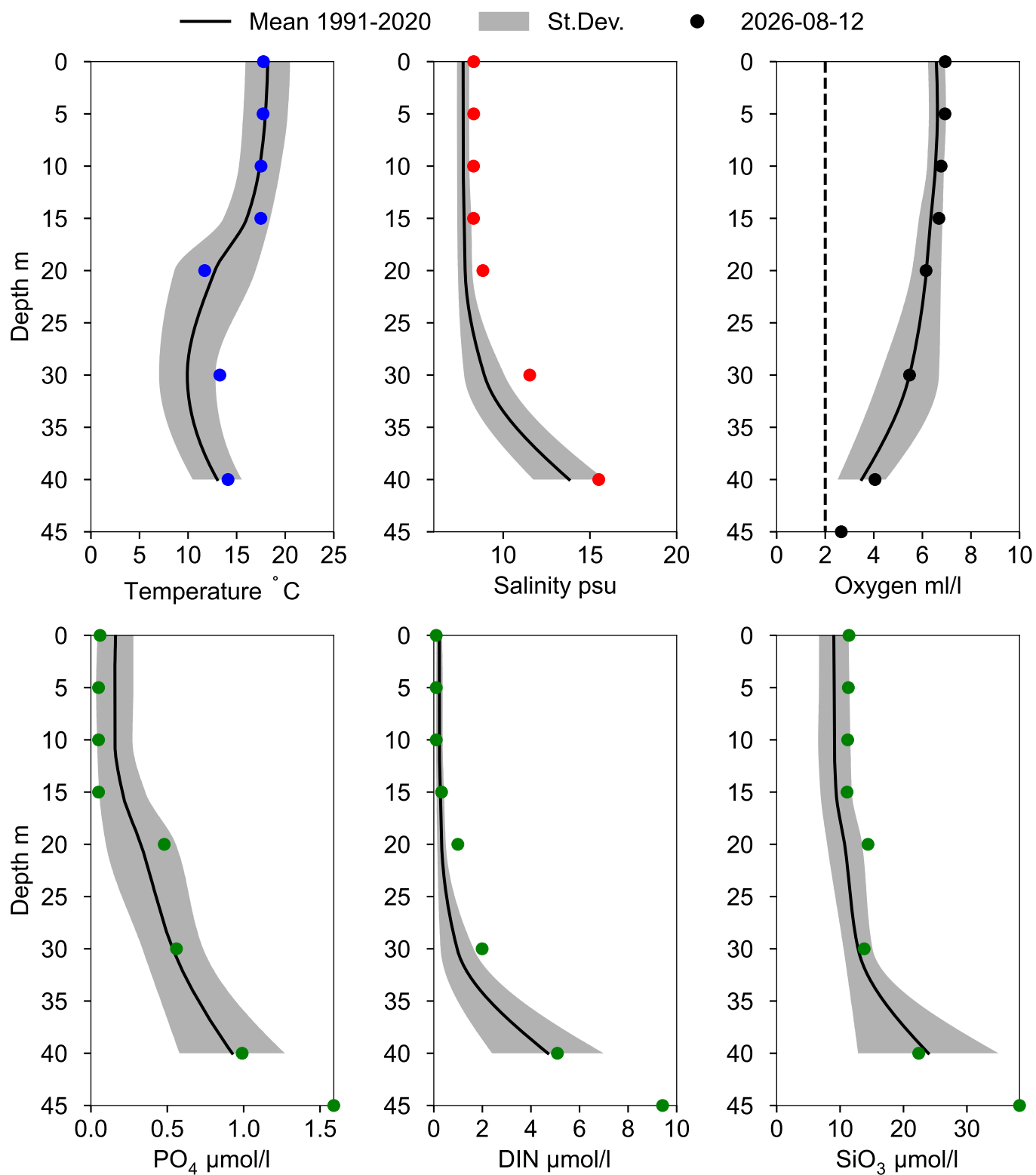
● 2026



OXYGEN IN BOTTOM WATER (depth >= 39 m)



Vertical profiles BY1 August



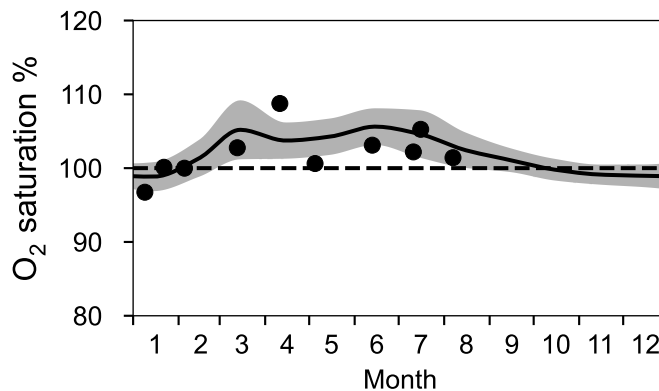
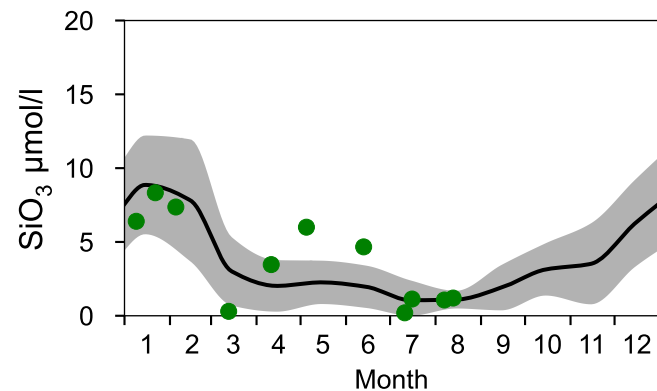
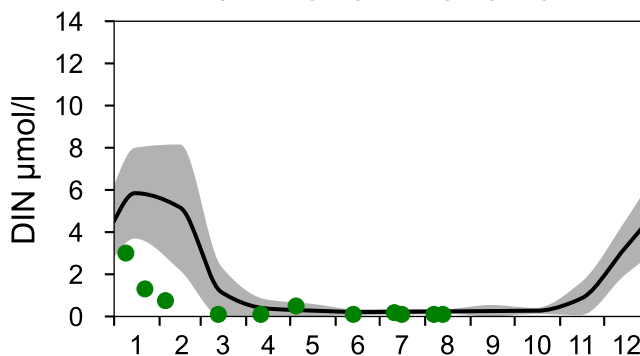
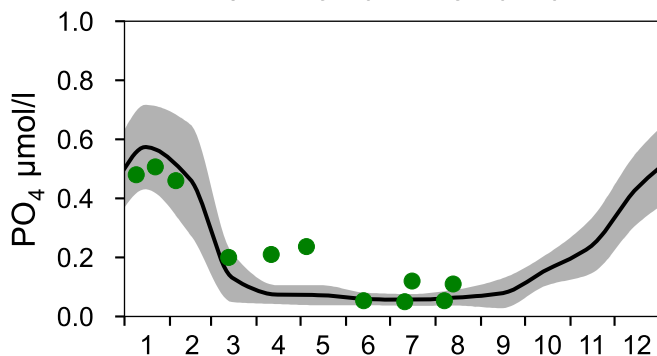
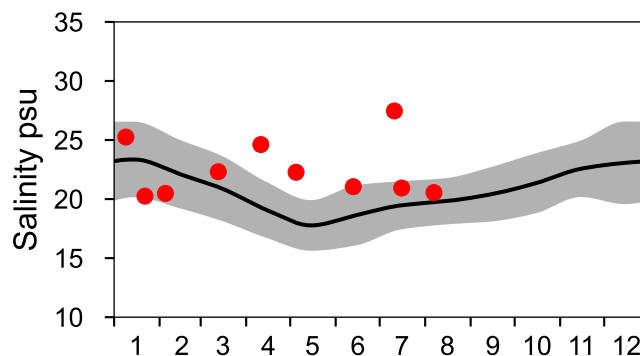
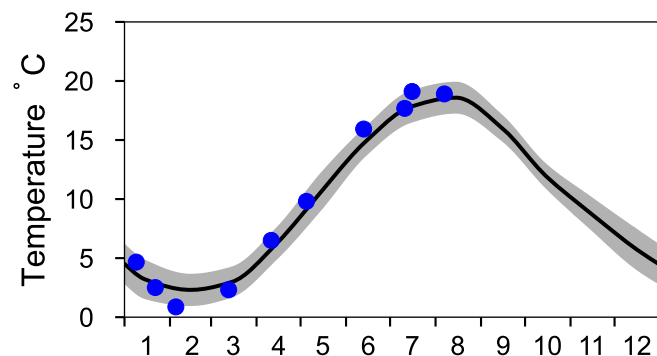
STATION ANHOLT E SURFACE WATER (0-10 m)

Annual Cycles

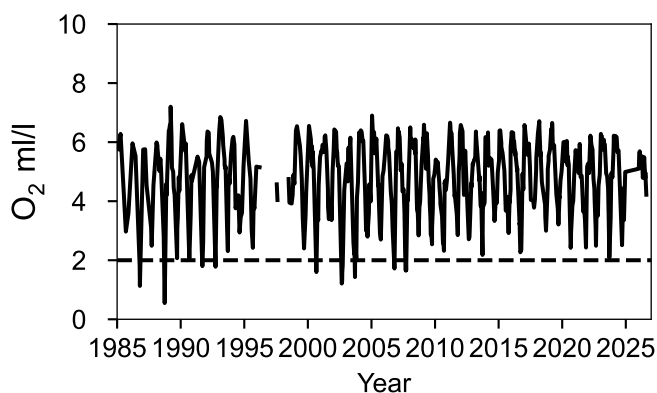
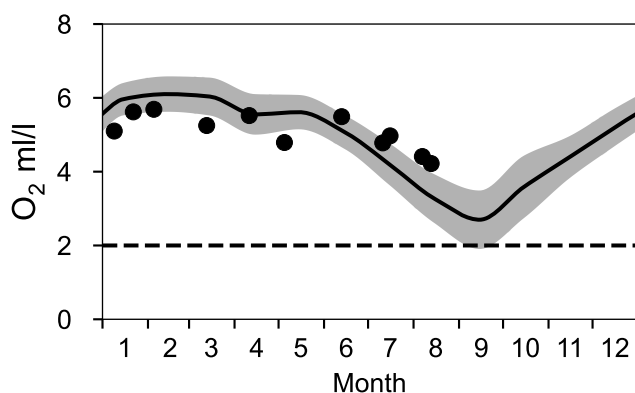
— Mean 1991-2020

■ St.Dev.

● 2026



OXYGEN IN BOTTOM WATER (depth >= 52 m)



Vertical profiles ANHOLT E August

— Mean 1991-2020

■ St.Dev.

● 2026-08-13

