

Rapport från SMHIs utsjöexpedition med R/V Svea-januari 2026

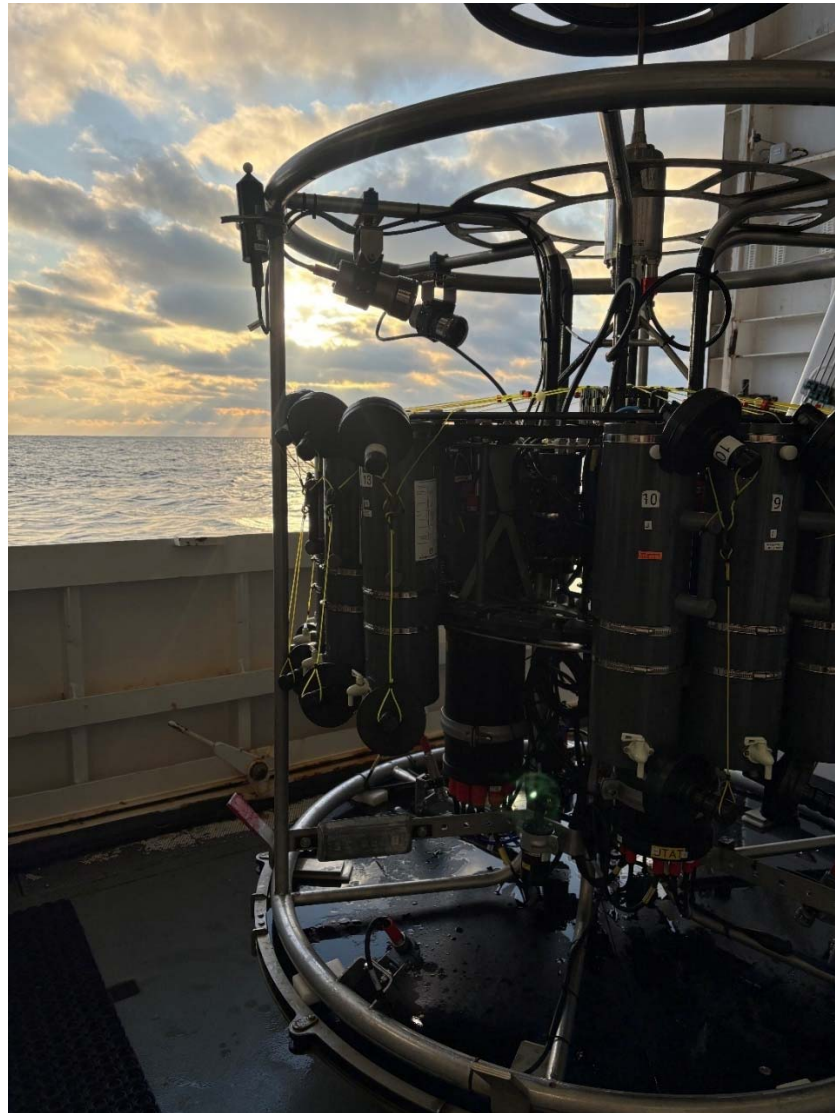


Foto: Madeleine Nilsson, SMHI

Expeditionens varaktighet: 2026-01-07 till 2026-01-14

Uppdragsgivare: Sveriges Meteorologiska och Hydrologiska Institut (SMHI),
Havs- och Vattenmyndigheten (HaV)

Samarbetspartners: Sveriges Lantbruksuniversitet (SLU),
Sjöfartsverket (SjöV)

SAMMANFATTNING

Under expeditionen, som ingår i det svenska pelagiala övervakningsprogrammet, besöktes Skagerrak, Kattegatt, Öresund och Egentliga Östersjön. I Kattegatt utfördes närsaltskartering.

Temperaturen i ytvattnet var normal för månaden i Västerhavet, Arkonabassängen samt Hanöbukten, medan den var över normal i Bornholmsbasängen samt i Östra- och Västra Gotlandsbassängen. Kallast var det i Kattegatt med temperaturer omkring 2–4 grader medan det i Skagerrak låg mellan 4–8 grader och i Egentliga Östersjön omkring 5 grader.

Salthalten i ytvattnet var mestadels normal för månaden i hela undersökningsområdet, men avvikande främst i Öresund och Östra Gotlandsbassängen där något lägre, respektive högre värden än normalt noterades. I Skagerrak låg salthalten mellan 30–34 psu, i Kattegatt 21–31 psu, i Öresund 9–15 psu och i Östersjön 7–8 psu.

Halten av löst oorganiskt kväve (DIN) var under det normala i stora delar av Kattegatt, Öresund, Arkonabassängen och Västra Gotlandsbassängen och låg mellan 2–3 $\mu\text{mol/l}$. Fosfat- och silikathalterna var över det normala i stort sett hela Egentliga Östersjön förutom vid ett par stationer i Västra Gotlandsbassängen och låg mellan 0,7–0,9 $\mu\text{mol/l}$ och 16–21 $\mu\text{mol/l}$ respektive.

Syresituationen i Västerhavet var god med syrgaskoncentrationer i bottenvattnet på mellan 4 och 8 ml/l. I Arkonabassängen noterades ingen akut syrebrist (<2 ml/l) men i resterande delar av Östersjön råder akut syrebrist redan från 70 meter. Svavelväte (H_2S) förekommer i Västra- och Östra Gotlandsbassängen från 90 och 80 m respektive med undantag från stationen BY15 Gotlandsdjupet där H_2S uppmättes först vid 140 m.

Kommande expeditioner med R/V Svea är SLUs International Bottom Trawl Survey (IBTS) den 18 januari till 1 februari med start och slut i Lysekil, samt SMHIs egna expedition den 4 till 11 februari med start i Lysekil och avslut i Kalmar.

EXPEDITIONSÖVERSIKT

Expeditionen genomfördes med forskningsfartyget R/V Svea mellan den 7 och 14 januari med start och slut i Lysekil.

Vädret var under januari månads inledning mycket blåsigt med flera stormar och oväder som avlöste varandra. Under expeditionens första dag kom ett snöoväder in över Göteborg och skärgården som gav flera decimeter snö och i samband med det låg en gul varning för kuling över Skagerrak. Stationerna i Skagerrak kunde dock provtas som planerat förutom att inte håv- och slangprov kunde tas. Då vädret försämrades över Östersjön ju närmare vi kom lades rutten om så att karteringen av näringsämnen i Kattegatt kunde prioriteras, på så sätt väntade vi också ut de värsta förhållandena i Östersjön. Lufttemperaturen låg omkring -2 till 1 °C.

När vi kom in i Östersjön under fredagseftermiddagen den 9:e var det fortfarande rejält blåsigt med vågor på omkring 4 m vilket gjorde att stationerna BY39 och BY38 fick strykas och vi sökte skydd genom Kalmarsund på resan norrut. Natten mot måndag den 12:e lugnade sig vindarna, som varit i kulingstyrka, med gul varning utfärdad över mellersta Östersjön och vi kunde fortsätta resan norrut mot BY31 Landsortsdjupet. Stationerna BY29 och BCS III-10 fick strykas då vi förlorat för mycket tid på grund av ovädret. Resten av veckan präglades av friska till hårda vindar och lufttemperaturer mellan 0 och 3 °C.

Profiler av salt, temperatur, syre och fluorescens i vattenkolumnen mättes med CTD monterad på en rosett med plats för 24 vattenhämtare. Av SMHIs 24 ordinarie stationer kunde 19 provtas som planerat och fem fick strykas på grund av dåligt väder och tidsbrist. Närsaltskartering utfördes i Kattegatt där 16 stationer besöktes utöver de fyra ordinarie stationerna. Vid Flinten 7 gjordes en referensmätning. Vi stannade även vid karteringsstationen 5W BY3 för att säkra en mätning i Arkonabassängen då vädret hindrade oss från att gå till BY1 och BY2 på utresan, dessa kunde däremot tas på hemresan då vädret stabiliserat sig.

Sveas FerryBox var igång under hela expeditionen och dagligen togs ett referensprov för klorofyllanalys. Sveas Moving Vessel Profiler (MVP) kördes bara vid en transekt, från norra Öresund (Kullen) till Lysekil eftersom lufttemperaturen varit omkring noll.

Rapporten är baserad på data som genomgått en första kvalitetskontroll och som är jämförd mot månadsmedelvärde för perioden 1991–2020. När ytterligare kvalitetskontroller gjorts kan värden komma att ändras. Värden har avrundats till närmaste tiondel och kan därför skilja sig från publicerade värden. Data publiceras på datavärdens hemsida, normalt inom ca en vecka efter avslutad expedition. Vissa analyser utförs efter expeditionen och publiceras därför senare.

Mer information om vårt datavärdskap och för att ladda ner data se denna länk:

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

Mer information om algsituationen finns att läsa i Algaware-rapporten:

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

RESULTAT

Skagerrak

Temperaturen i Skagerraks ytvatten låg omkring 4–8 °C, varmast var det närmast kusten samt längst ut vid stationen Å17 där temperaturerna låg över det normala för månaden. Det avkylda ytvattnet sträckte sig ner till mellan 20 och 60 m, grundare närmast kusten och därunder låg temperaturen omkring 10 grader. Salthalten i ytvattnet låg mellan 30–34 psu, närmast kusten var den avvikande från normala värden för månaden.

Koncentrationen av lösta oorganiska näringsämnen i ytvattnet var generellt normala för månaden, men vid Släggö uppmättes förhöjda halter av silikat och DIN. Koncentrationerna låg mellan 4,8–6,4 µmol/l för DIN, omkring 0,5 µmol/l för fosfat och 3,9–7,7 µmol/l för silikat i Skagerrak med högst halter närmast kusten.

Syrehalten vid botten var god vid samtliga stationer i Skagerrak, normala halter för månaden uppmättes med koncentrationer mellan 5,6–5,9 ml/l.

Fluorescensmätningar som visar på planktonaktivitet gav låga utslag i Skagerrak, inga toppar noterades och detta tillsammans med de höga halterna av näringsämnen indikerar att någon blomning ännu inte börjat under expeditionen.

Kattegatt och Öresund

Ytvattentemperaturen hade minskat ytterligare sedan i december och låg nu generellt mellan 3–4 grader, kallast var det i Öresund. I de norra delarna av Kattegatt, i GF-snittet observerades ett stråk med varmare temperaturer, upp till 7 grader på stationen GF6, vilket är över det normala. Salthalten i ytvattnet låg i Kattegatt mellan 21–31 psu, i Öresund lägre, omkring 9–15 psu.

I Kattegatts ytvatten observerades en nord-sydlig gradient i salthalt från 30 psu i norr till 15 psu i söder. Salthalten i ytvattnet var normal för månaden vid samtliga stationer utom vid stationen GF6, där både salthalt och temperatur var över det normala. I Öresund var vattnet välblandat ner till 10–15 meters djup, vid den djupaste stationen i Öresund (W Landskrona) fanns även en gradient mellan 20–30 m där salthalten och temperaturen ökade ytterligare. Salthalten vid dessa stationer ökade från 10–14 psu i ytan till 30–33 psu vid botten och likaså temperaturen från 4–5 grader i ytan till omkring 10 grader i bottenvattnet.

Koncentrationerna av lösta oorganiska näringsämnen i ytvattnet var i stort sett oförändrade eller lägre sedan december månad. Speciellt anmärkningsvärt var halterna av DIN som var under det normala i stora delar av Kattegatt och Öresund, endast i de nordvästra delarna var halterna normala för januari månad. Fosfat- och silikathalterna var inom det normala förutom vid ett par stationer där låga halter förekom. I Öresund uppmättes normala halter av fosfat, medan DIN halterna var låga och i vissa fall under det normala för månaden, dock noteras de högsta ammoniumhalterna för området i Öresund.

Syresituationen i Kattegatts- och Öresunds bottenvatten var god med halter mellan 4–8 ml/l.

Klorofyllfluorescensen var högre i Kattegatt än i Skagerrak, speciellt närmast den svenska och den danska kusten. Men inga toppar noterades, viss planktonaktivitet finns alltså i havsområdet.

Egentliga Östersjön

I Arkonabassängen och Hanöbukten var ytvattentemperaturen normal för månaden och låg mellan 4–5 grader, vid botten på stationen BY2 noterades ett lager med varmare och saltare vatten, omkring 8–10 grader och 16 psu som sträckte sig vidare in i Hanöbukten och Bornholmsbassängen. I resterande delar av Östersjön uppmättes temperaturer i ytan som var över det normala och låg mellan 5 och 6 grader utan några större skillnader i djupvattnet.

Salthalten i ytvattnet var i stort sett normal i hela Östersjön, i Arkona- och Bornholmsbassängen låg den mellan 7,7–8,6 psu, i Östra Gotlandsbassängen mellan 7,2–7,5 psu och i Västra Gotlandsbassängen 7,0–7,1 psu. Vattnet var välblandat ner till omkring 50–60 m och under det var salthalten mellan 10–16 psu i de södra delarna och något lägre, omkring 10–12 i Östra- och Västra Gotlandsbassängen.

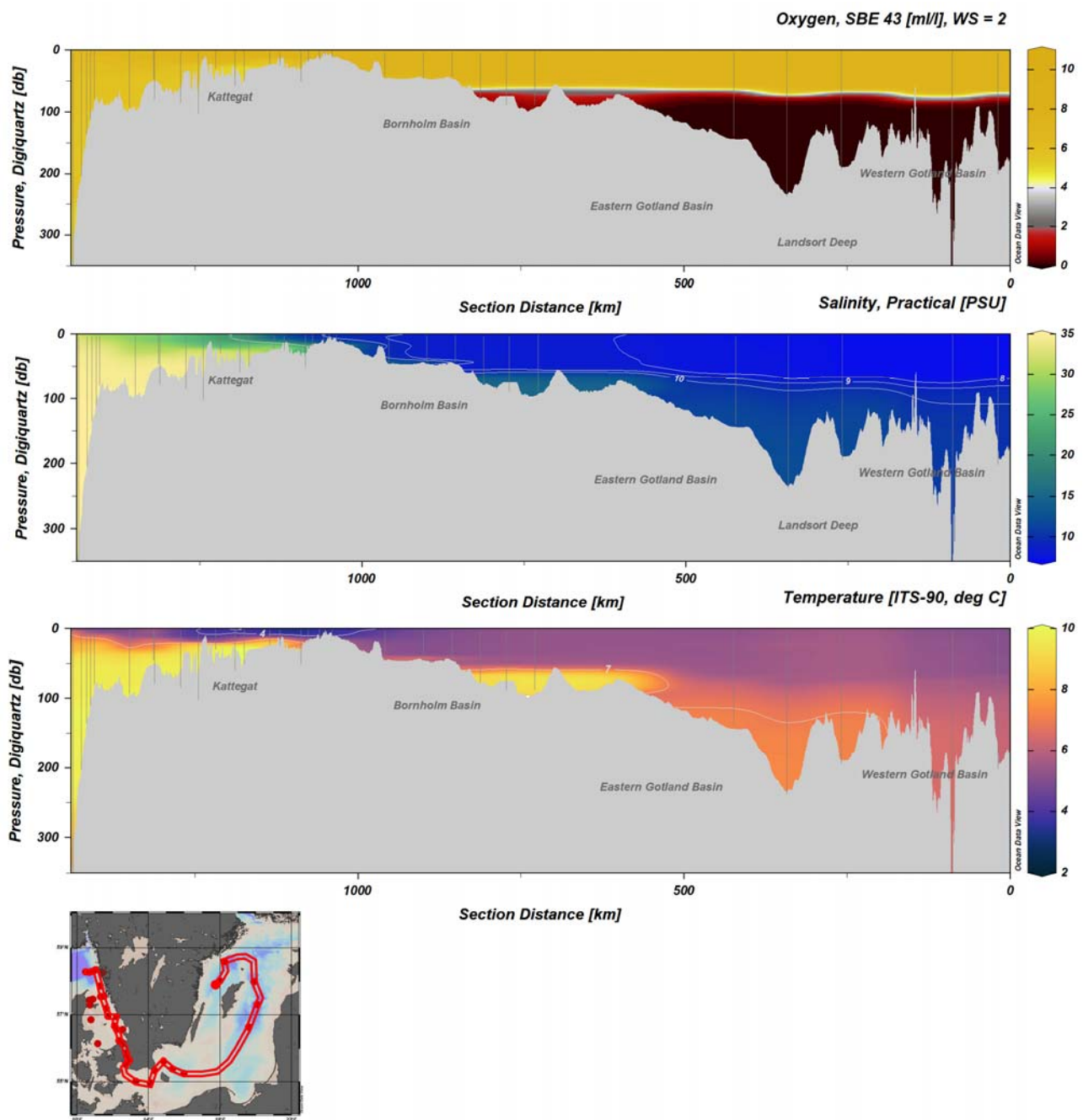
Halterna av DIN i ytvattnet var mestadels normala för månaden, silikat- och fosfatkoncentrationerna var högre än normalt vid flertal stationer och låg mellan 16,2–21,1 respektive 0,7–0,9 $\mu\text{mol/l}$. DIN-koncentrationerna i ytvattnet låg mellan 2,0–2,9 $\mu\text{mol/l}$ i de södra delarna av Östersjön och mellan 3,2–3,8 $\mu\text{mol/l}$ längre norrut vilket var något under det normala för Arkonabassängen och Östra Gotlandsbassängen.

I Arkonabassängen var syresituationen i bottenvattnet relativt god och det uppmättes en syrekonzentration på 7,3 ml/l vid BY2 samt 4,8 ml/l vid BY1. I Bornholmsbassängen och Hanöbukten råder akut syrebrist från 70 meter, syrgaskonzentrationer omkring 0,4 ml/l uppmättes i bottenvattnet men inget H₂S förekom i området.

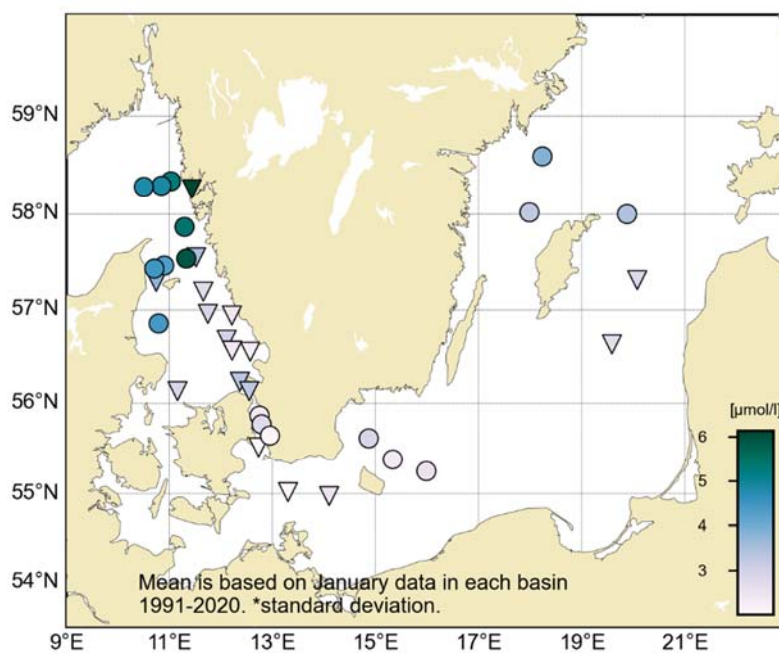
I Västra Gotlandsbassängen råder akut syrebrist från 80–90 m och H₂S förekom från 90–100 meter. I Östra Gotlandsbassängen råder akut syrebrist från 70–80 meter och H₂S uppmättes från 80–90 m, med undantag från stationen BY15 Gotlandsdjupet där H₂S uppmättes först vid 140 m. De högsta halterna av H₂S förekommer i Östra Gotlandsbassängen vid BY15 Gotlandsdjupet, men kan vara underskattade. Extra prover tas därför, sedan 2023 från denna station för att kunna spädas före analys för att säkerställa att koncentrationerna ligger inom metodens mätområde, dessa data är ännu inte publicerade.

Fluorescensmätningarna visade på låg planktonaktivitet i ytlagret, något högre i Arkona- och Bornholmsbassängen.

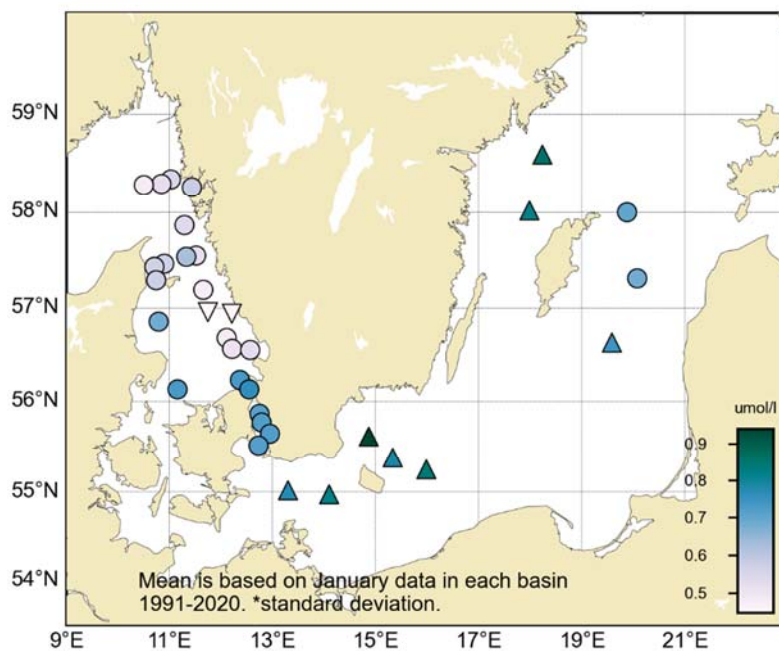
Figurer



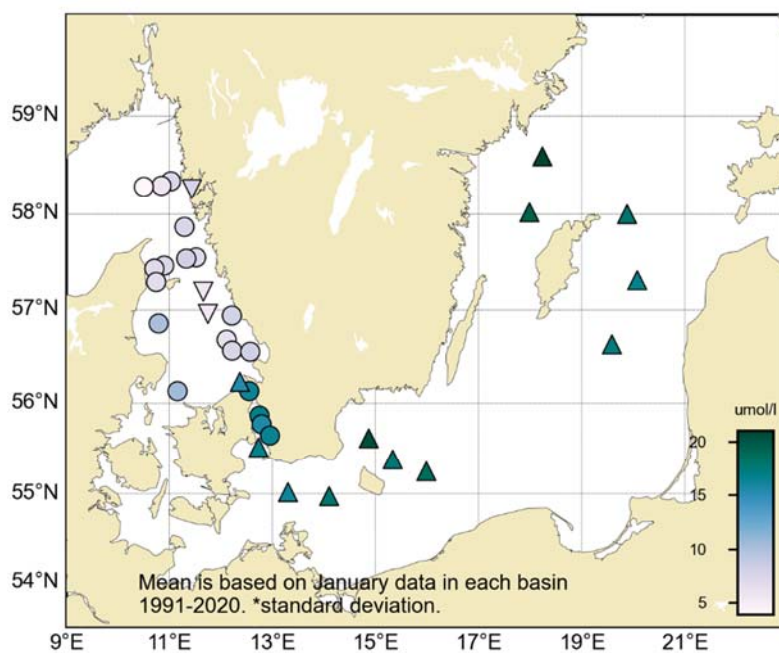
Figur 1. Snitt som visar syrekonzentration, salthalt och temperatur från mätningar med CTD och MVP, från Skagerrak genom Kattegatt och vidare in i Egntliga Östersjön, enligt kartan (längs ner).



Figur 2. Koncentrationen ($\mu\text{mol/l}$) av löst oorganiskt kväve (DIN) i ytvattnet (0–10 m). Medelvärdet är baserat på aktuell månads data för respektive station 1991–2020.

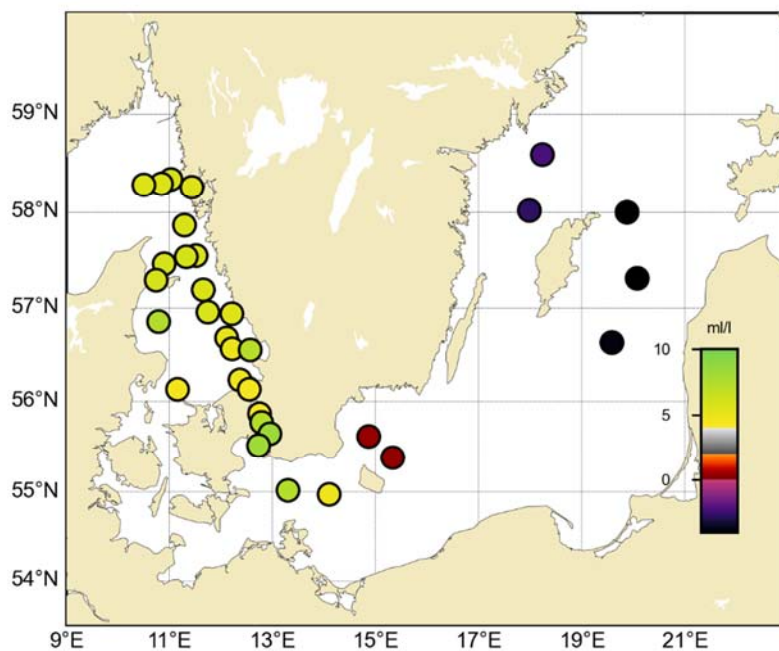


Figur 3. Koncentrationen ($\mu\text{mol/l}$) av fosfat i ytvattnet (0–10 m). Medelvärdet är baserat på aktuell månads data för respektive station 1991–2020.

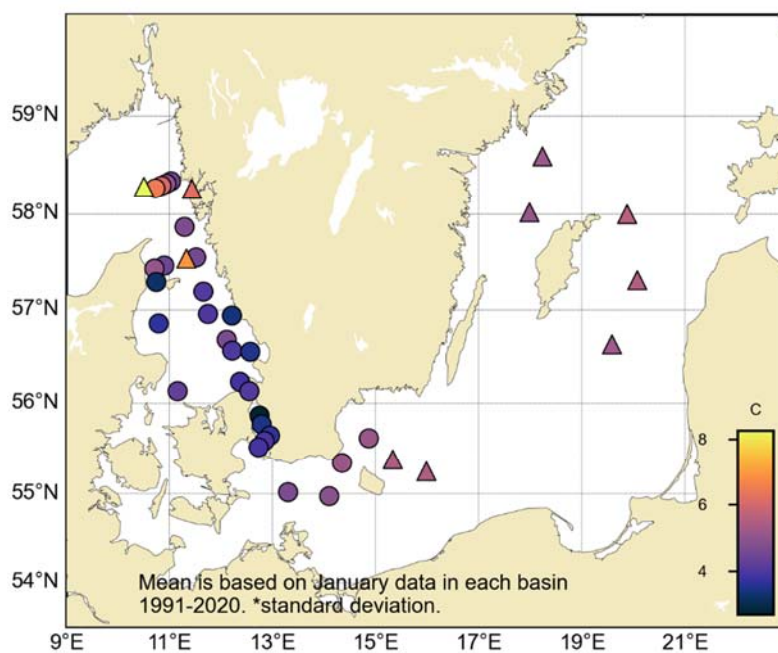


Figur 4. Koncentrationen ($\mu\text{mol/l}$) av silikat i ytvattnet (0–10 m). Medelvärdet är baserat på aktuell månads data för respektive station 1991–2020.

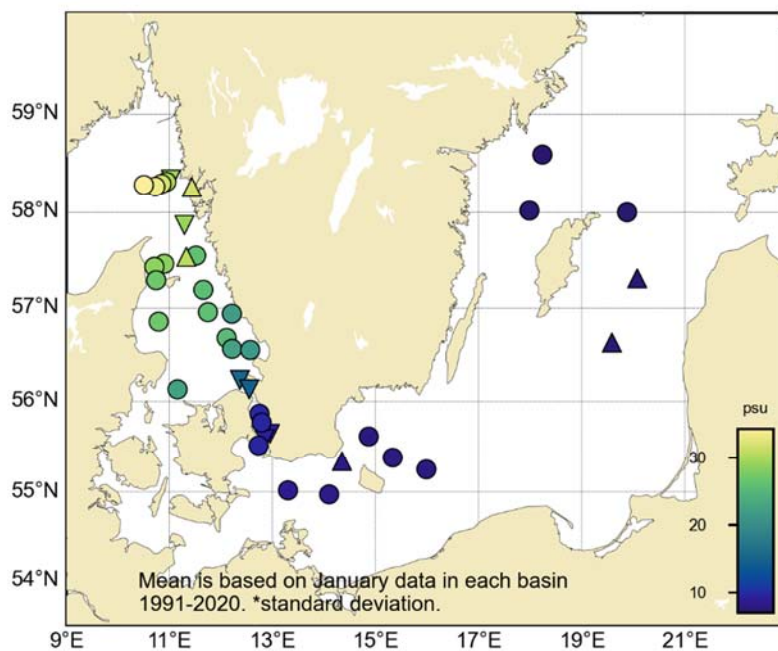
Oxygen (bottle) (Bottom)



Figur 5. Syrekoncentrationen (ml/l) i bottenvattnet. Förekomst av svavelväte visas som H_2S . Notera att värdena inte har jämförts mot statistik som i liknande figurer och enbart cirklar visas.



Figur 6. Temperaturen i ytvattnet (0–10 m). Medelvärdet är baserat på aktuell månads data för respektive station 1991–2020.



Figur 7. Salthalten i ytvattnet (0–10 m). Medelvärdet är baserat på aktuell månads data för respektive station 1991–2020.

DELTAGARE

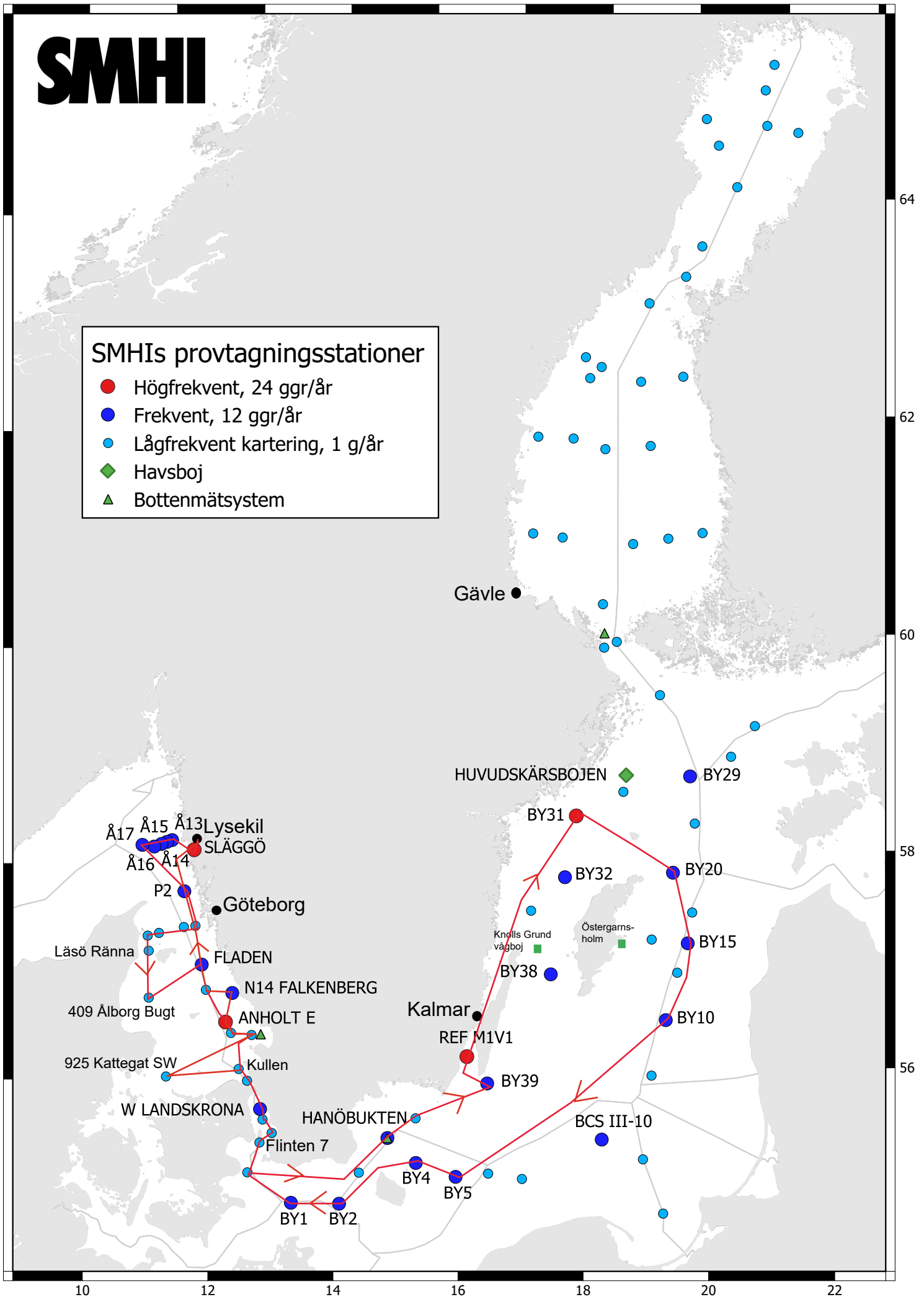
Namn	Roll	Från
Madeleine Nilsson	Expeditionsledare	SMHI
Helena Björnberg	CTD- och plattformarbete	SMHI
Ola Kalén	CTD- och plattformarbete	SMHI
Johanna Linders	Vattenprovtagning	SMHI
Anna-Kerstin Thell	Vattenprovtagning	SMHI
Monica Lindner	Närsaltsanalyser, kvalitetsansvarig	SMHI

BILAGOR

- Färdkarta
- Tabell över stationer, analyserade parametrar och antal provtagningsdjup
- Figurer över månadsmedelvärden
- Vertikalprofiler

SMHIs provtagningsstationer

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



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

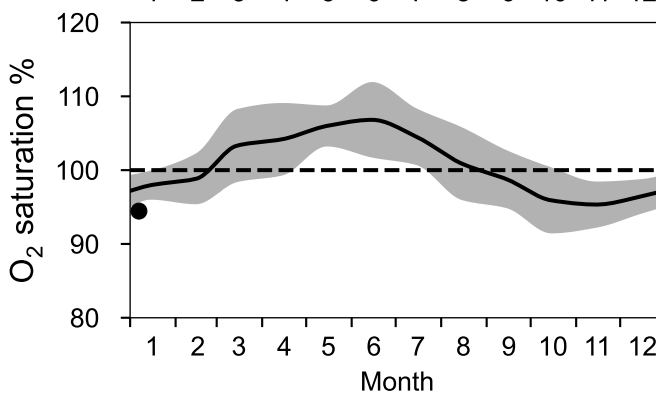
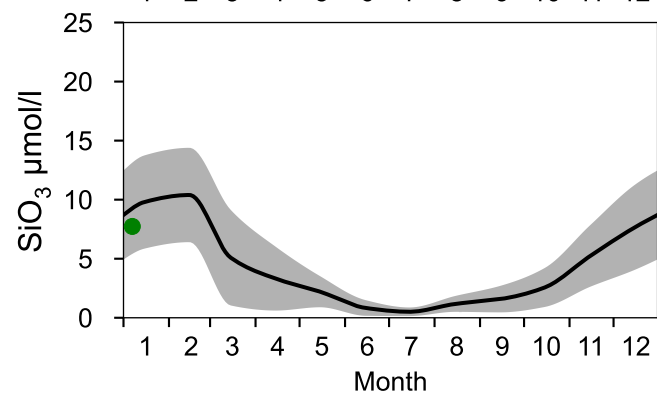
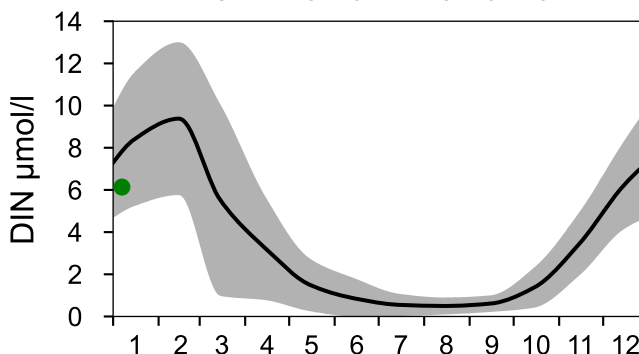
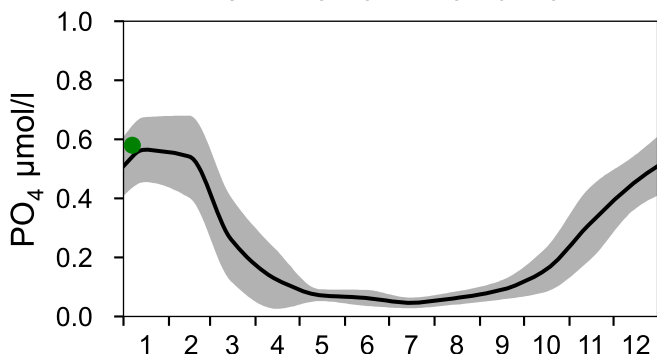
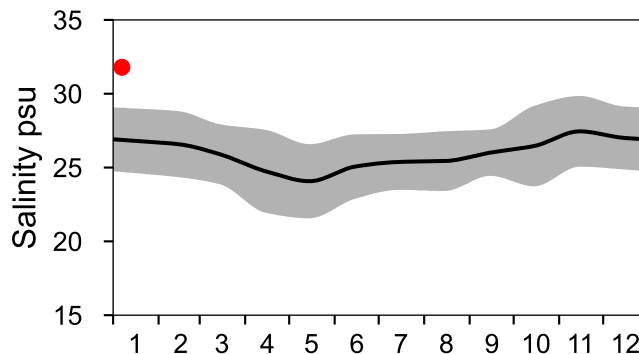
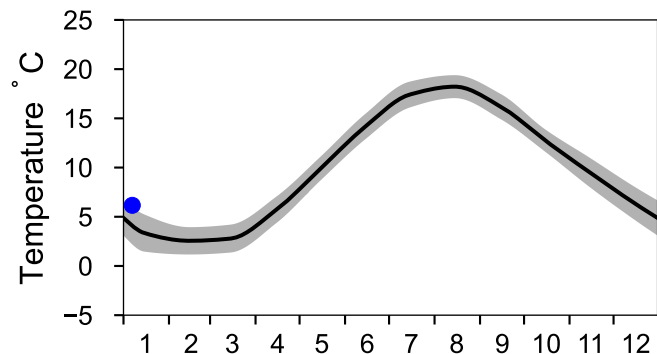
Ship: 77SE
Year: 2026

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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	-	-	-	-
0003	01	SKEX15	BAS...	Å14	5818.96	01056.49	20260107	2254	111		20 13.2	0.3 1003	9990	----	11			-	x	-	x	-	x	-	x	-	x	-	x	-	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	-	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	-	x	-	x	-	x	-	x	-	x	-	x	-	-	-	-
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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	-	-	-	-
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	-	-	-	-
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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	-	-	-	-
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	-	-	-	-
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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	-	-	-	-
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	-	-	-	-
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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	-	-	-	-
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	-	-	-	-
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	-	-	-	-
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	-	-	-	-
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	-	-	-	-
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	-	-	-	-
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	-	-	-	-
0026	01	SOSX00	EXT...	FLINTEN7	5535.32	01250.68	20260110	0655	9		04 9	-1.7 1016	9990	x---	3			-	x	-	x	-	x	-	x	-	x	-	x	-	x	-	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	-	-	-	-
0028	01	BPSA06	EXT...	SW BY3	5520.58	01420.89	20260110	1531	45		35 15	-2.2 1017	9990	x---	8			-	x	-	x	-	x	-	x	-	x	-	x	-	x	-	x	-	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	-	-	-	-
0030	01	BPWX38	BAS...	BY32 NORRKÖPINGSDJ	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	-	-	-	-
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	-	-	-	-
0032	01	BPEX26	BAS...	BY20 FÅRÖDJ	5759.92	01952.75	20260112	1250	197			-1.3 1018	2420	x---	17			-	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	-	-	-	-
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	-	-	-	-
0035	01	BPSB07	BAS...	BY5 BORNHOLMSDJ	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	-	-	-	-

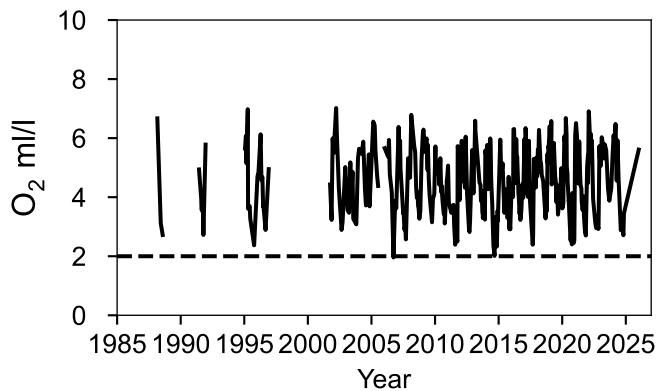
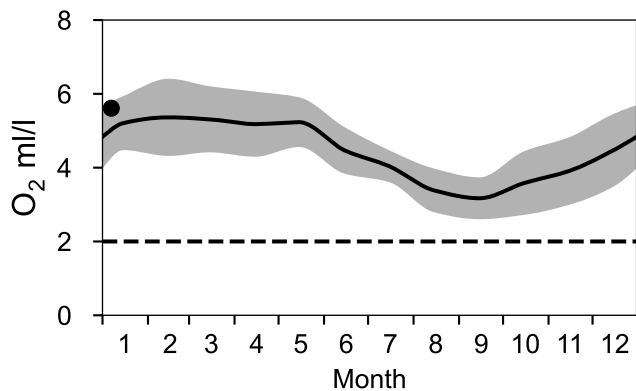
STATION SLÄGGÖ SURFACE WATER (0-10 m)

Annual Cycles

— Mean 1991-2020 St.Dev. ● 2026



OXYGEN IN BOTTOM WATER (depth >= 64 m)

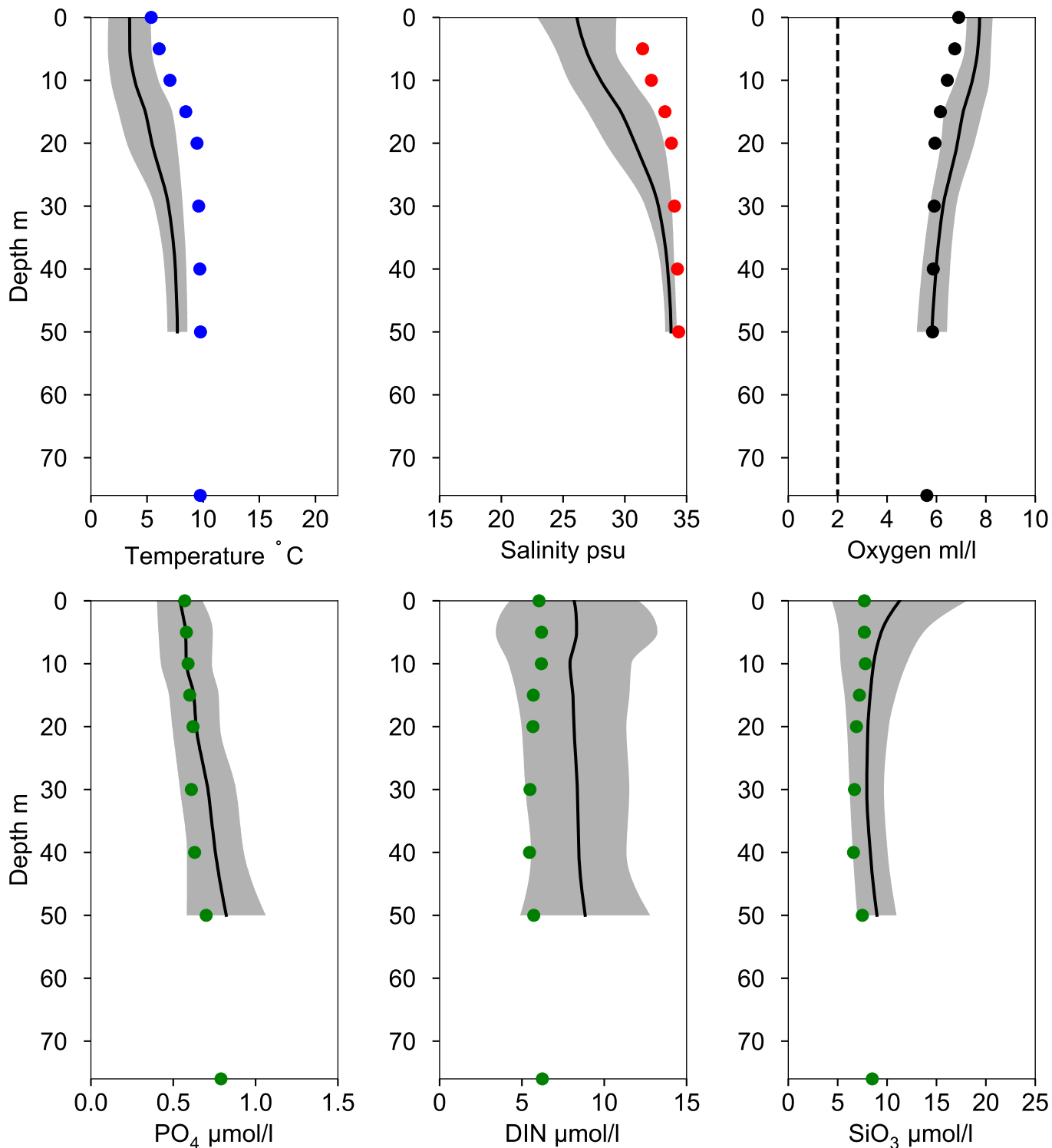


Vertical profiles SLÄGGÖ January

— Mean 1991-2020

■ St.Dev.

● 2026-01-07



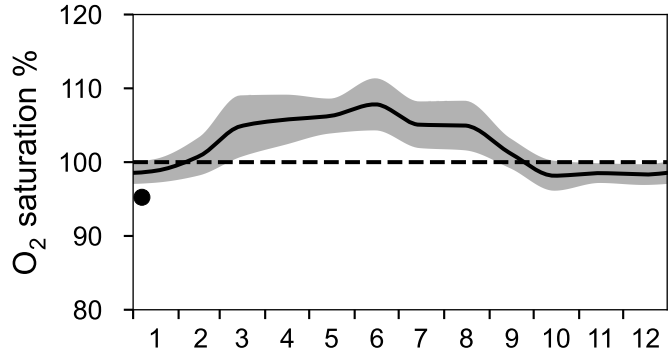
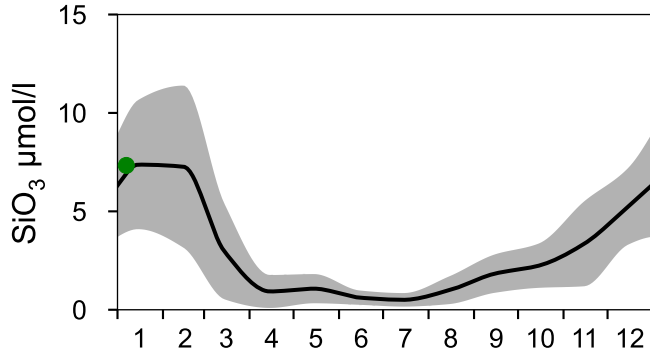
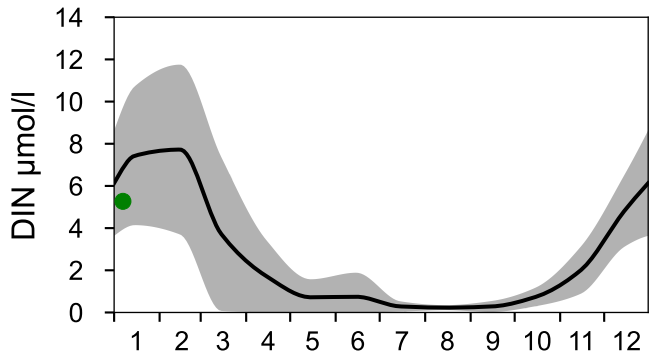
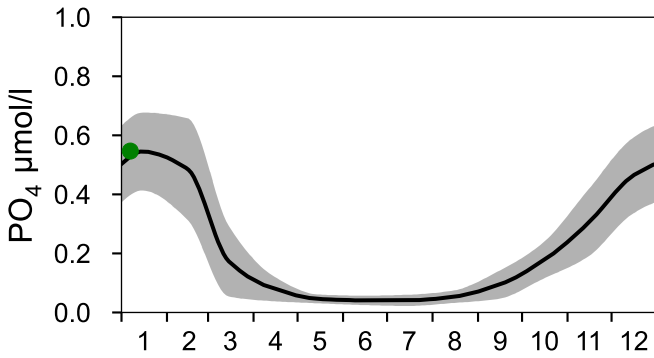
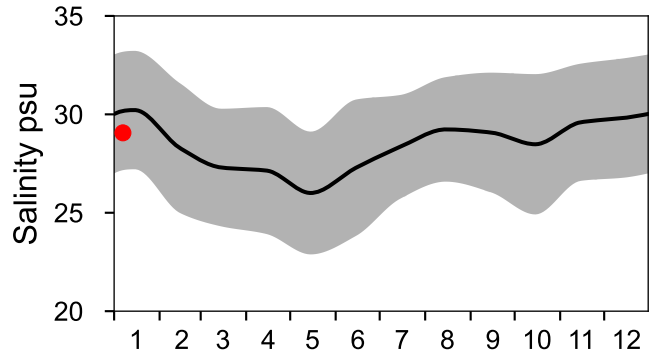
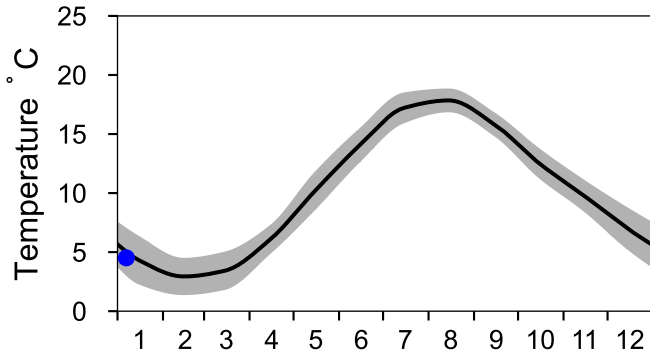
STATION Å13 SURFACE WATER (0-10 m)

Annual Cycles

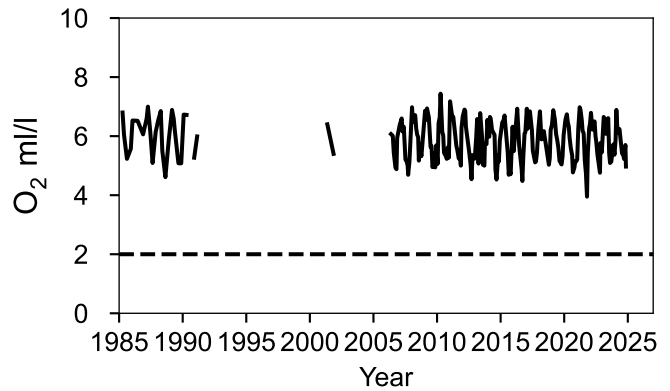
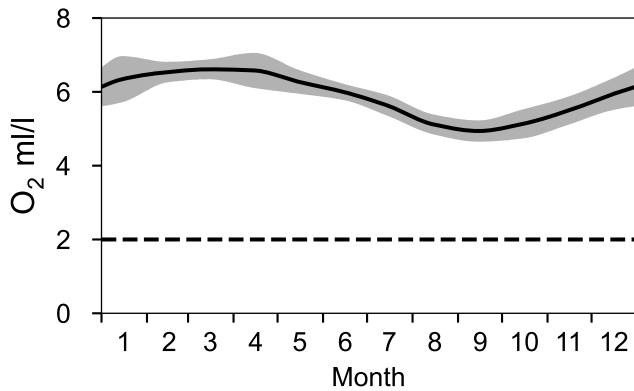
— Mean 1991-2020

■ St.Dev.

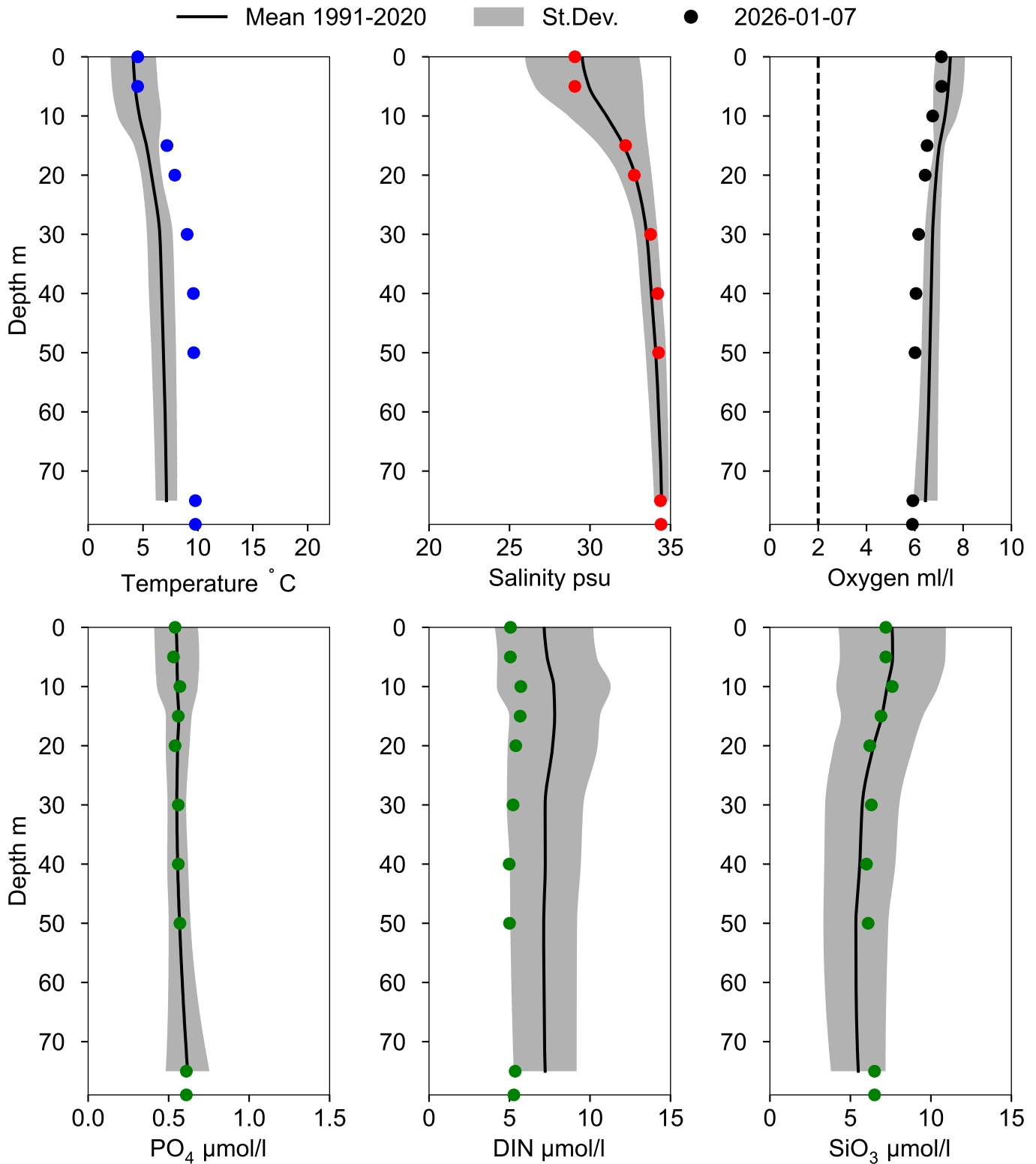
● 2026



OXYGEN IN BOTTOM WATER (depth >= 82 m)



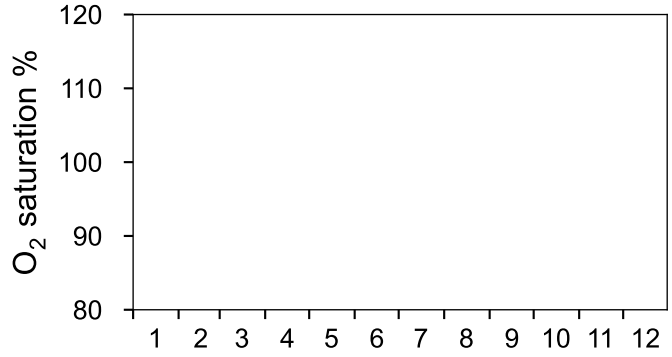
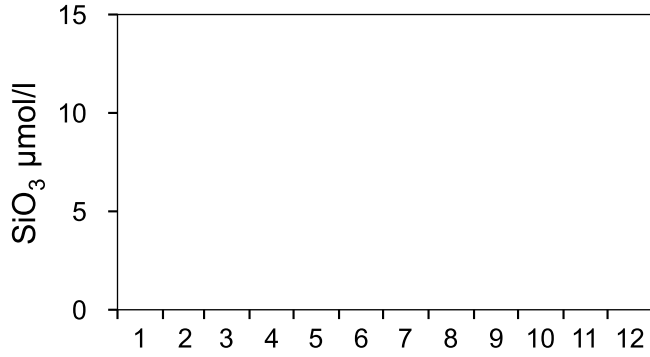
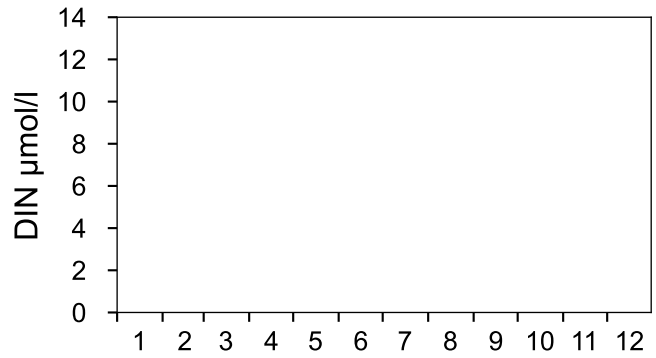
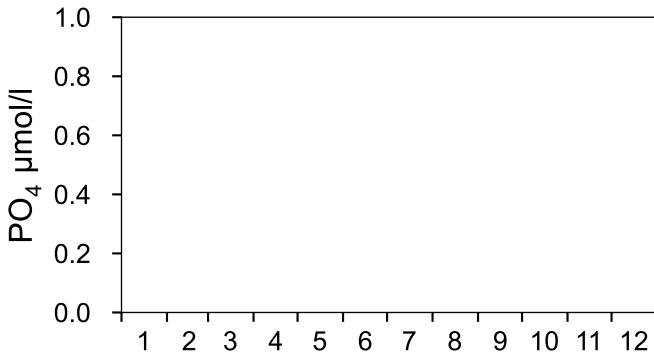
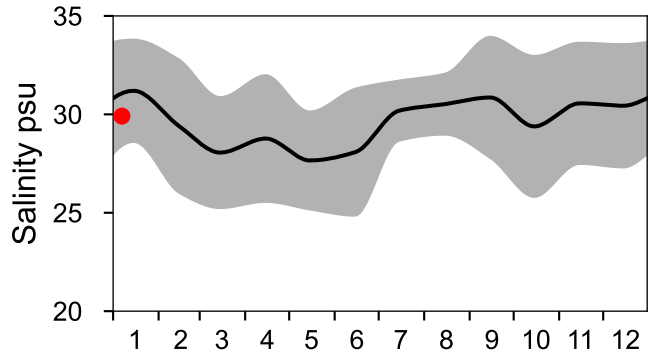
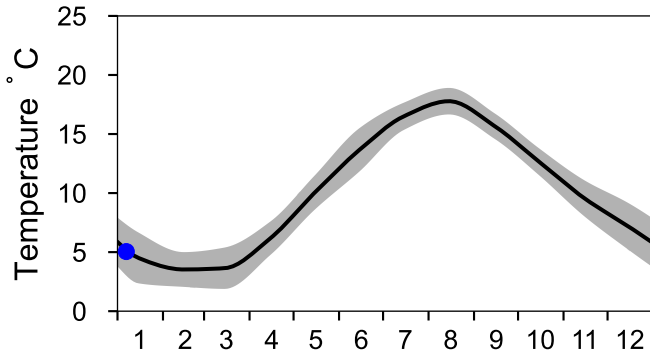
Vertical profiles Å13 January



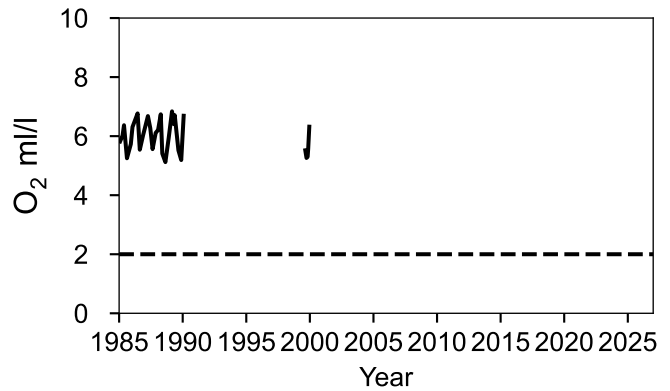
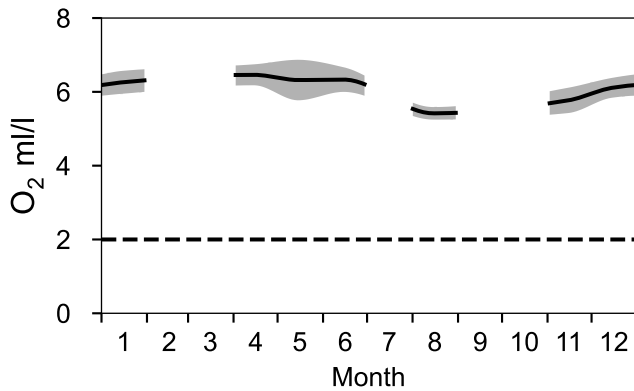
STATION Å14 SURFACE WATER (0-10 m)

Annual Cycles

— Mean 1991-2020 St.Dev. ● 2026

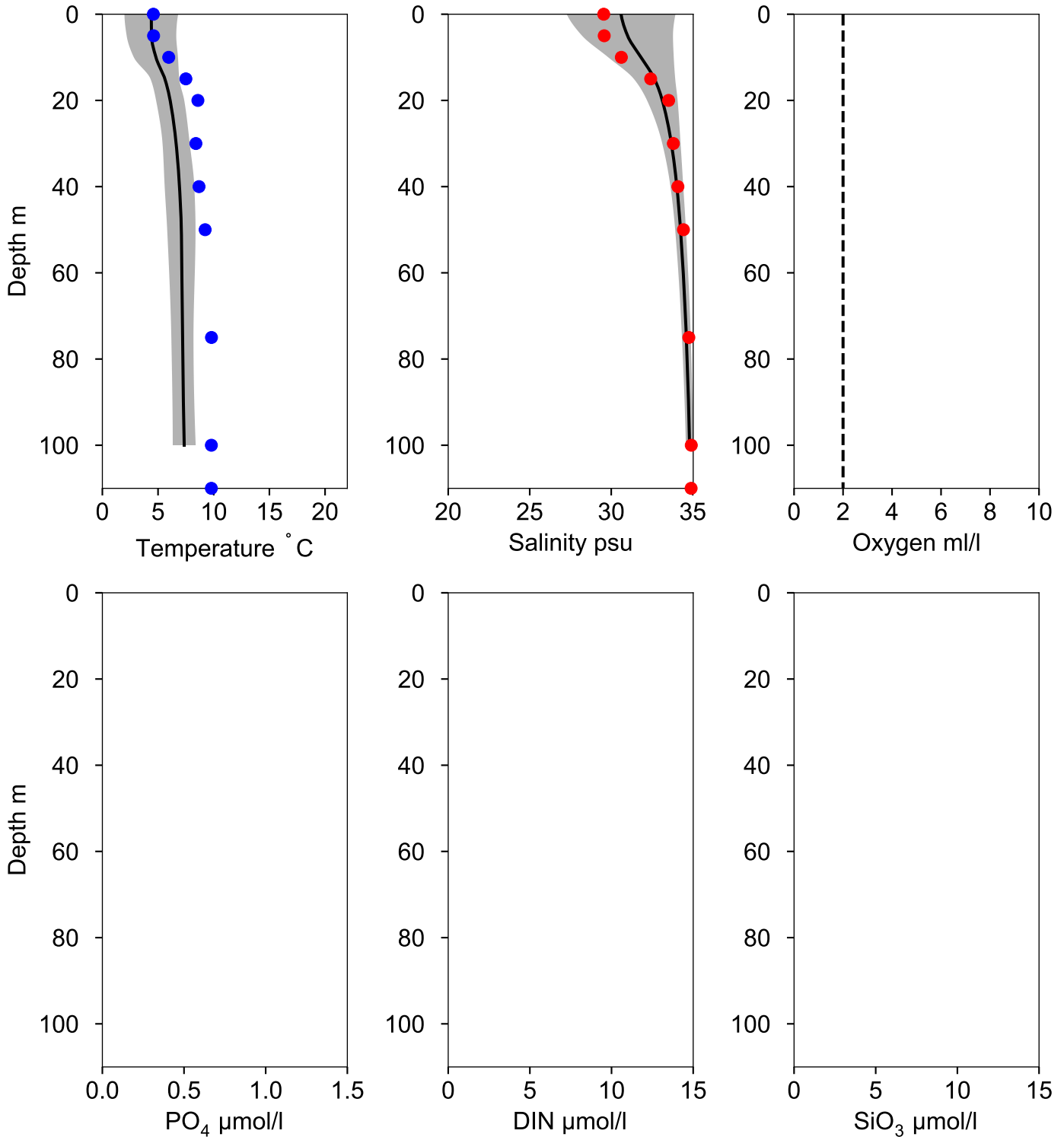


OXYGEN IN BOTTOM WATER (depth >= 100 m)



Vertical profiles Å14 January

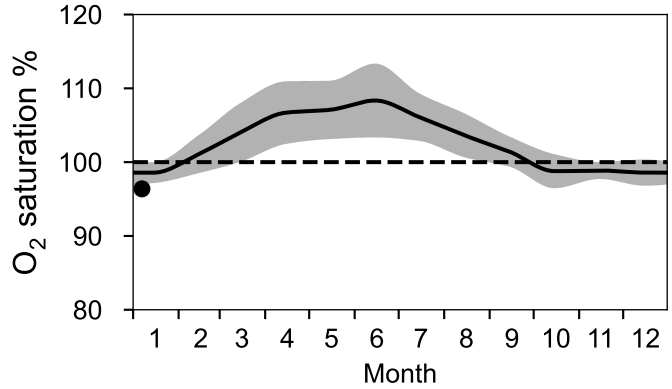
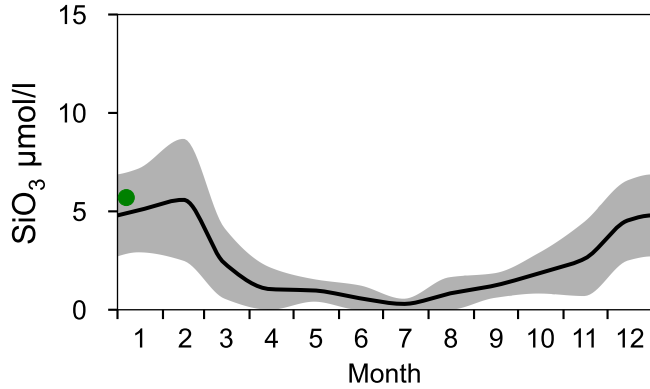
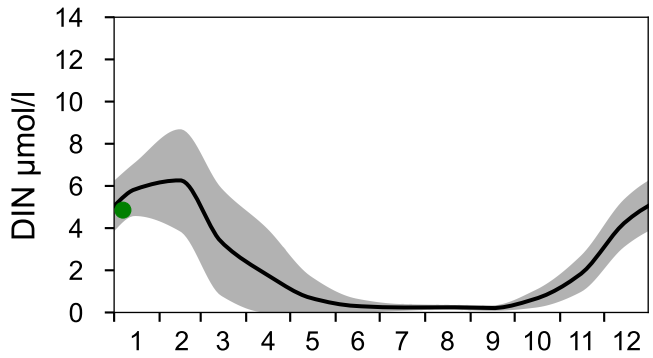
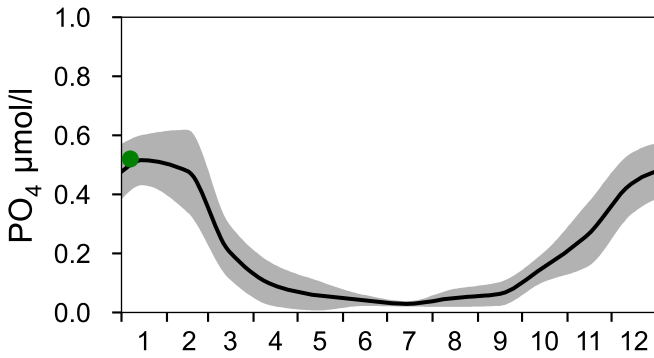
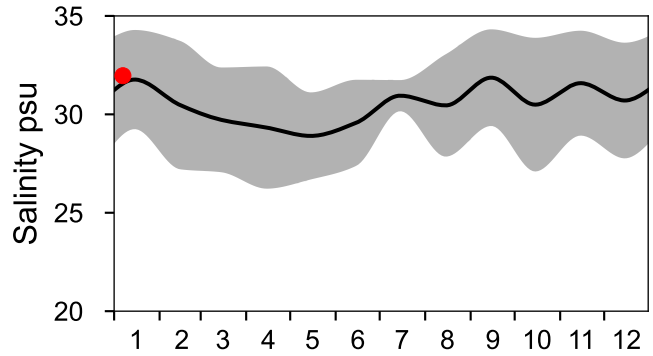
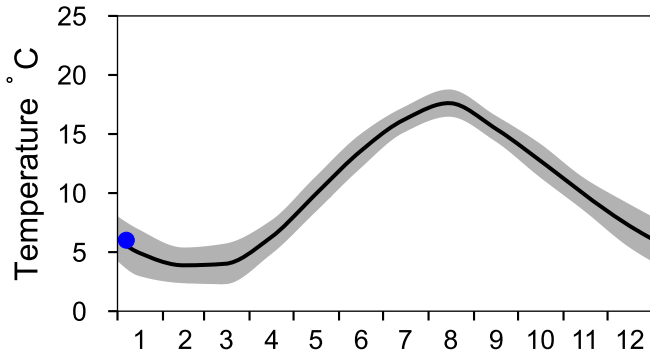
— Mean 1991-2020 ■ St.Dev. ● 2026-01-07



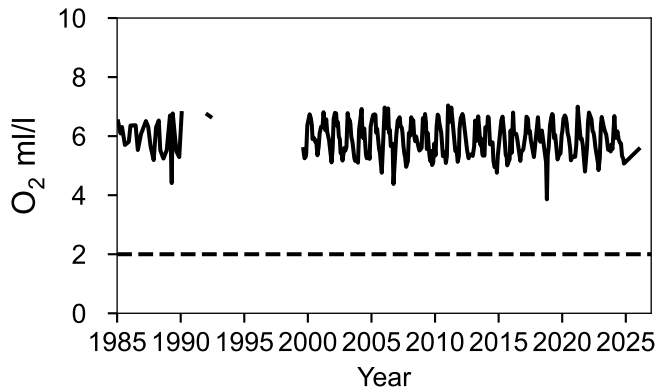
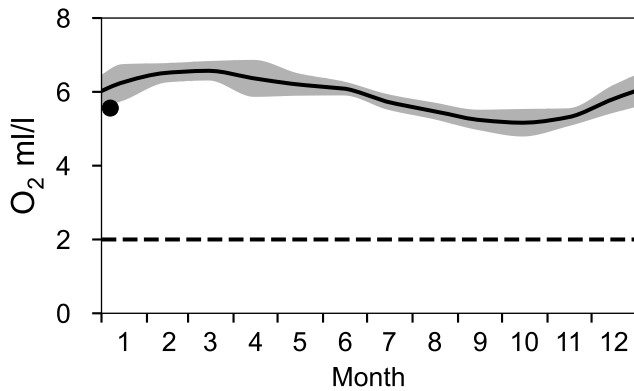
STATION Å15 SURFACE WATER (0-10 m)

Annual Cycles

— Mean 1991-2020 St.Dev. ● 2026

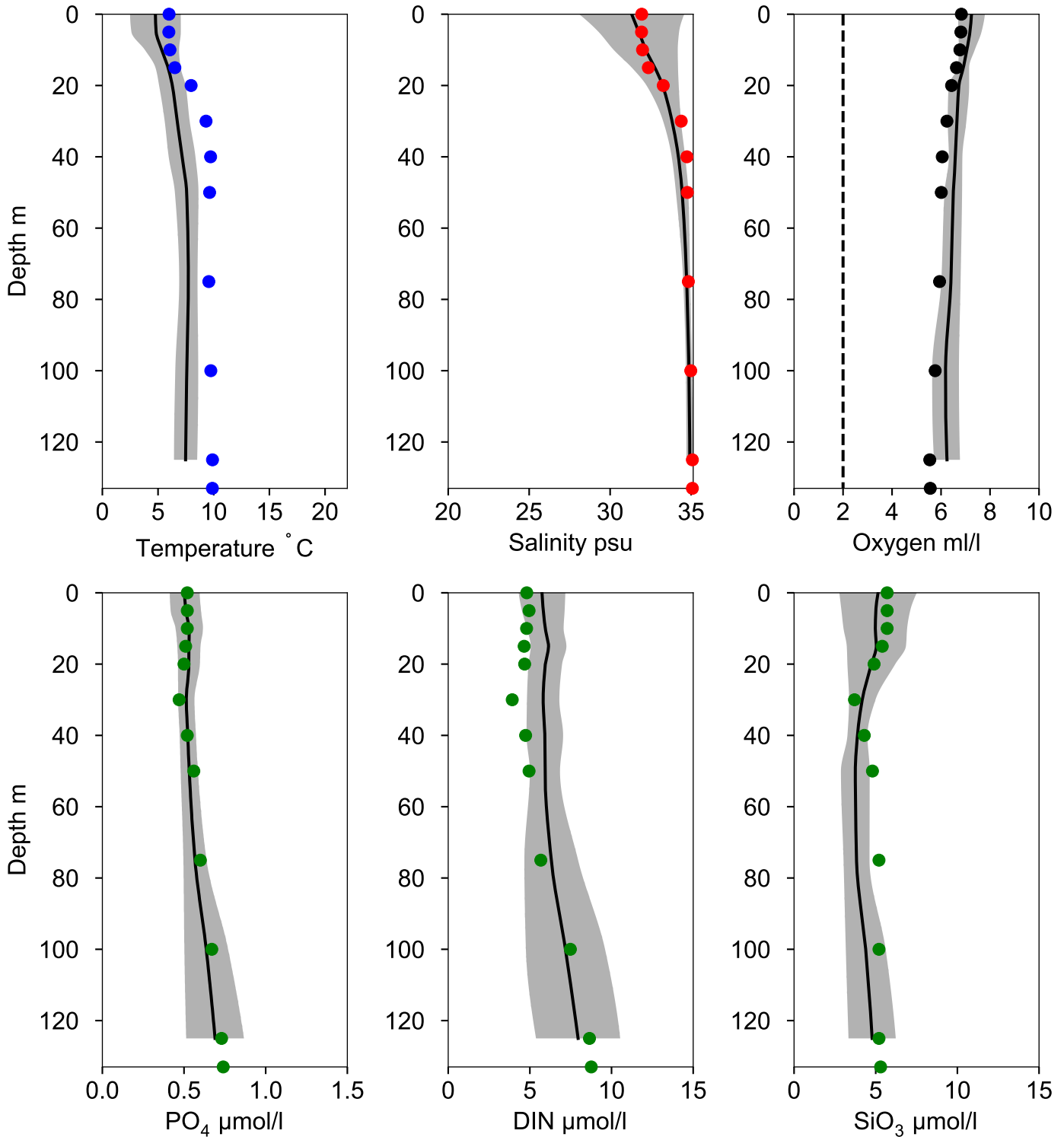


OXYGEN IN BOTTOM WATER (depth >= 125 m)



Vertical profiles Å15 January

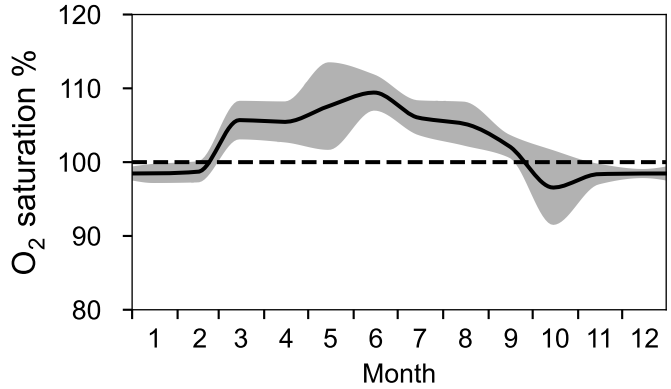
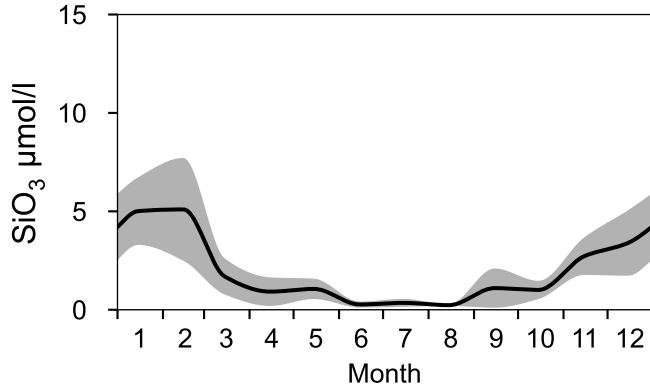
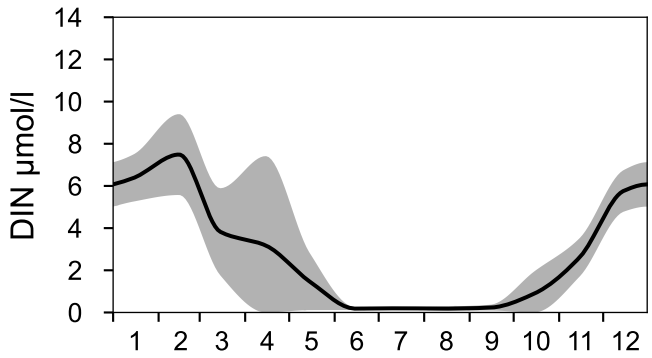
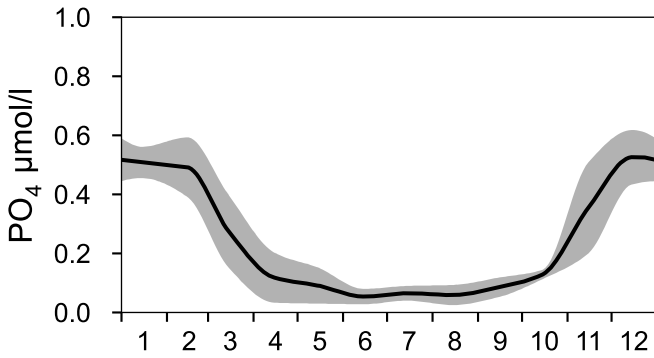
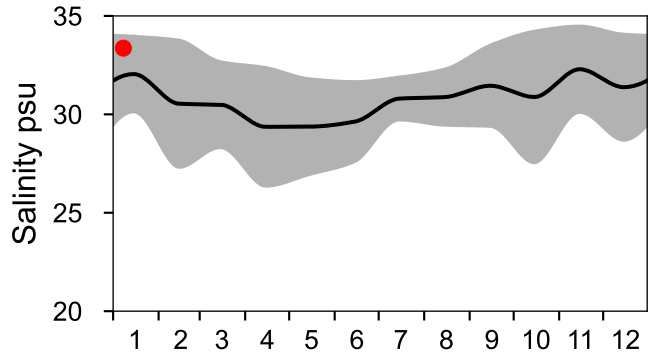
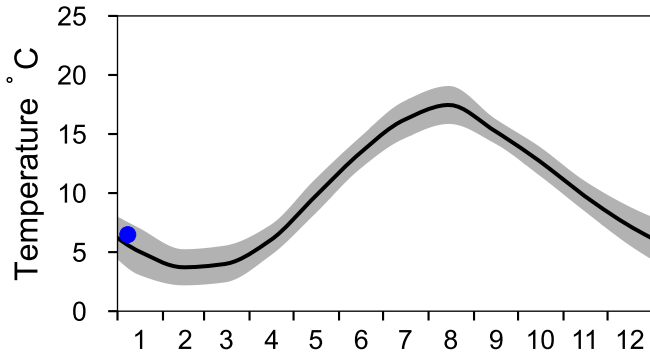
— Mean 1991-2020 St.Dev. ● 2026-01-07



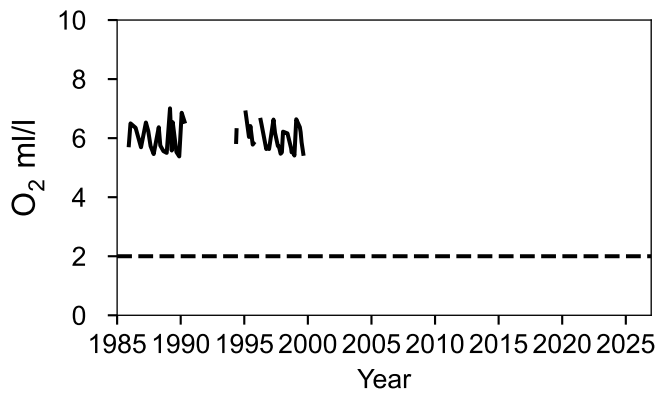
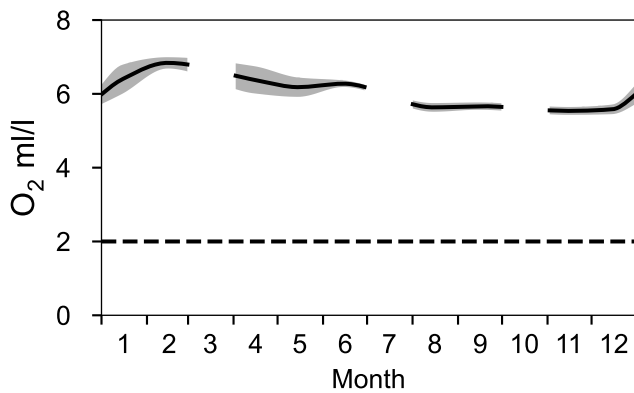
STATION Å16 SURFACE WATER (0-10 m)

Annual Cycles

— Mean 1991-2020 St.Dev. ● 2026

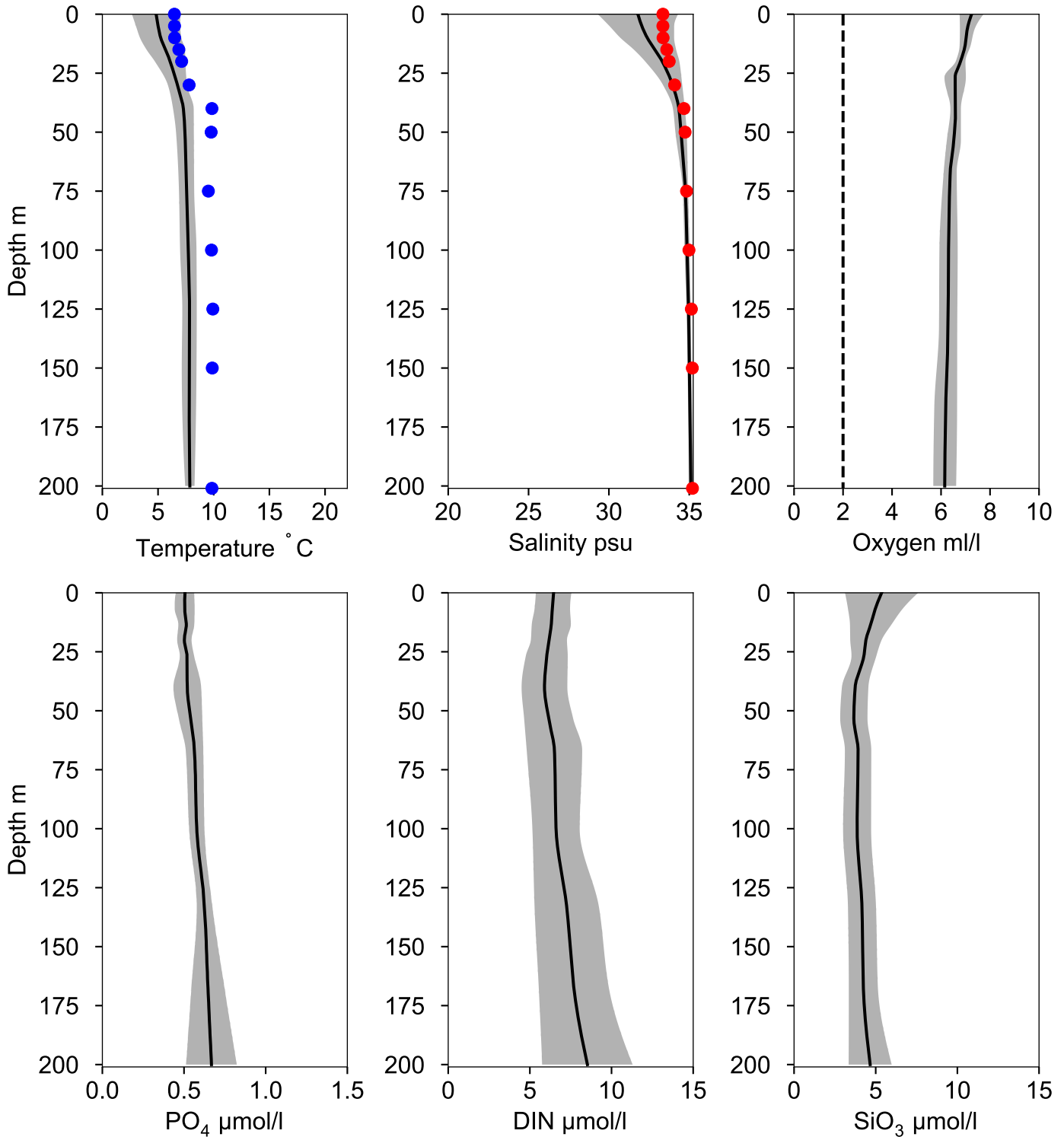


OXYGEN IN BOTTOM WATER (depth >= 193 m)



Vertical profiles A16 January

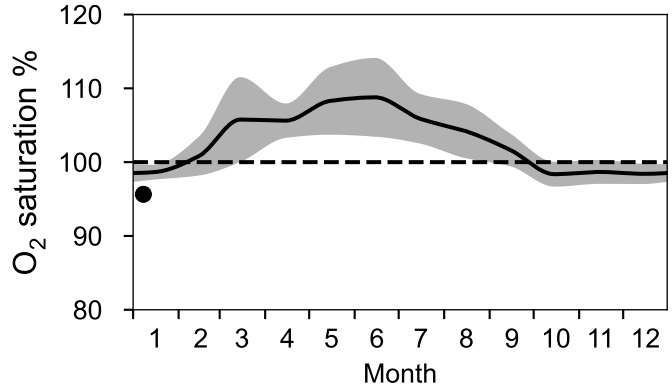
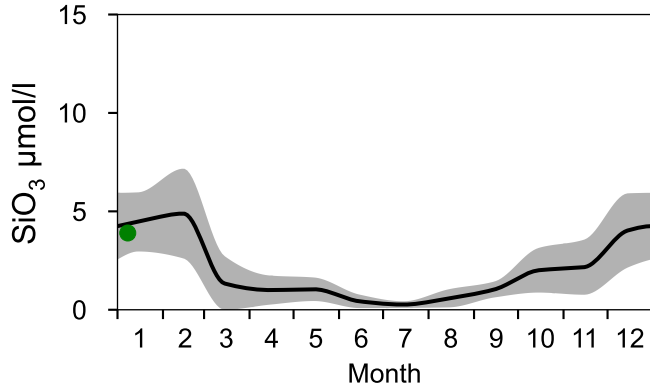
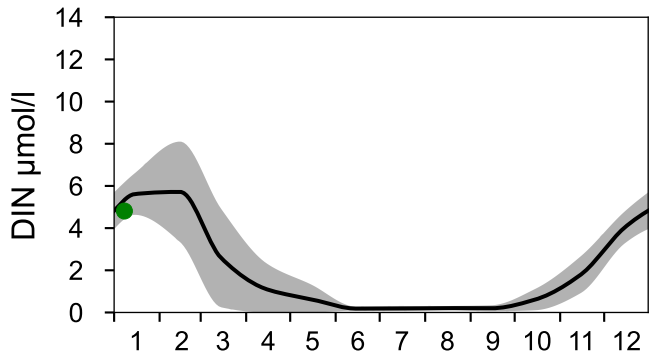
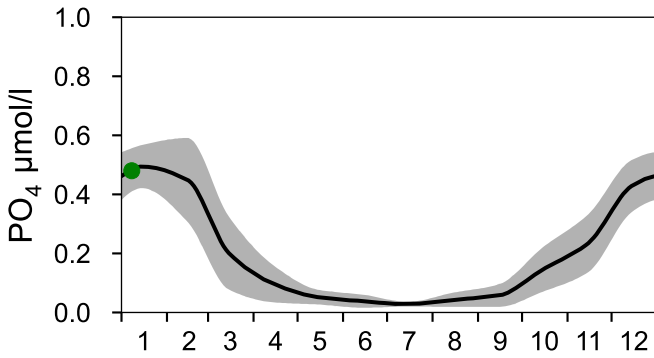
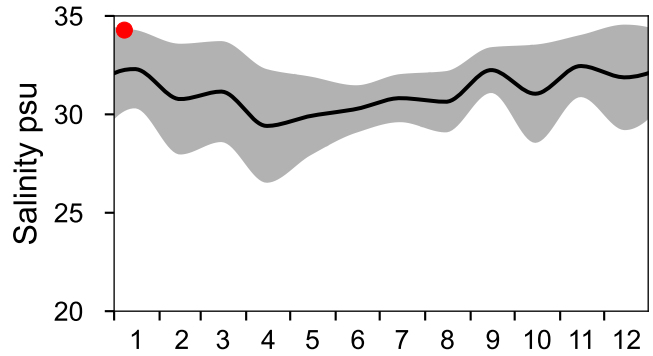
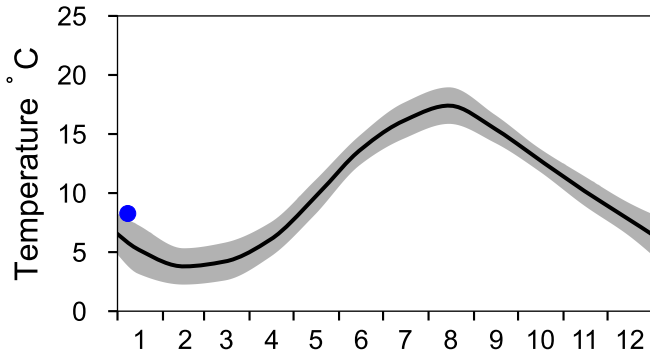
— Mean 1991-2020 ■ St.Dev. ● 2026-01-08



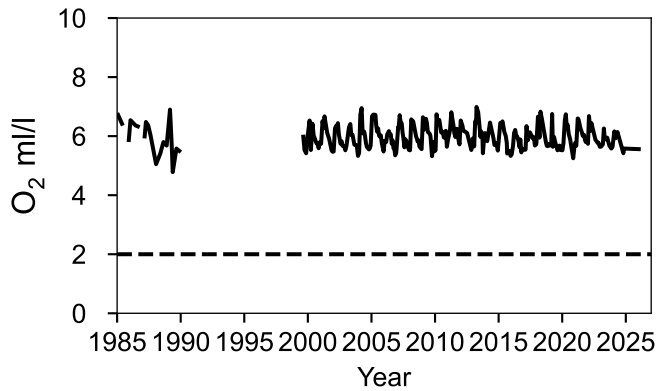
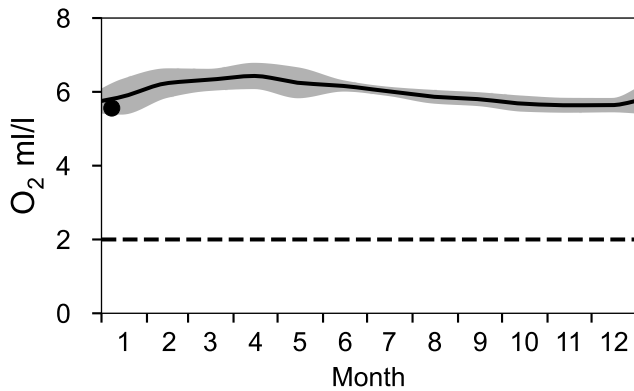
STATION Å17 SURFACE WATER (0-10 m)

Annual Cycles

— Mean 1991-2020 St.Dev. ● 2026

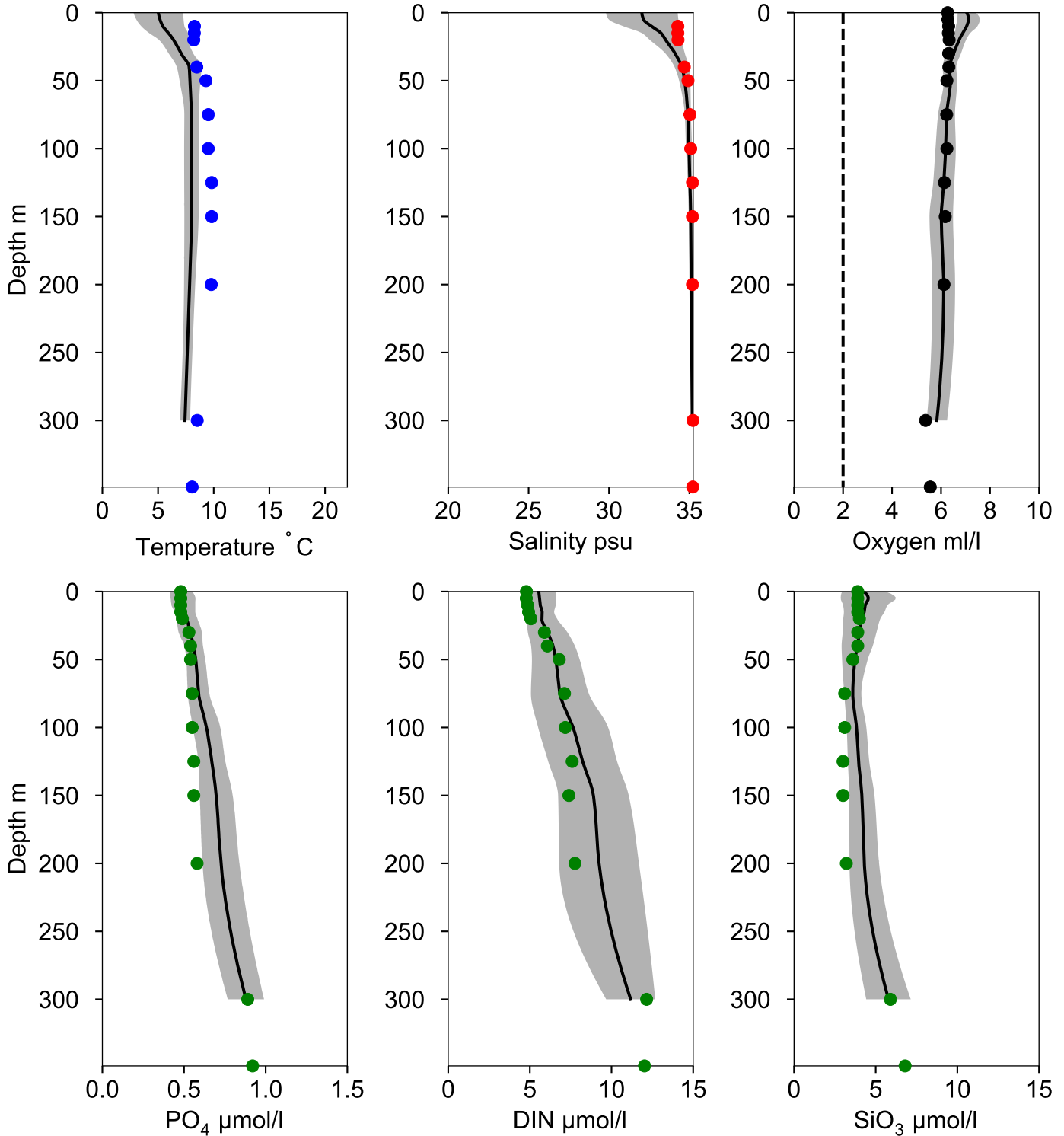


OXYGEN IN BOTTOM WATER (depth >= 300 m)



Vertical profiles Å17 January

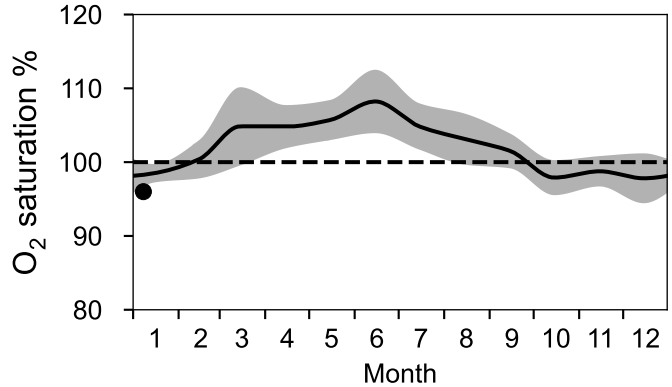
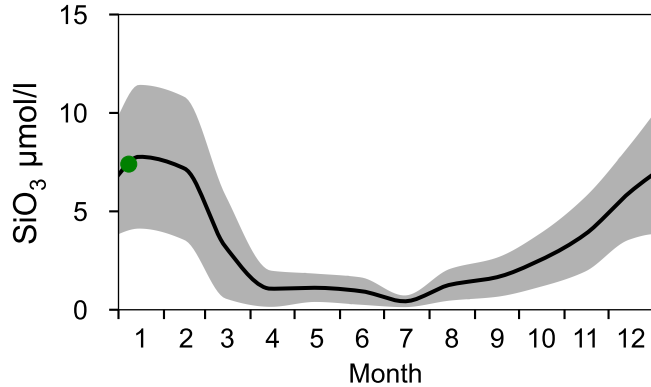
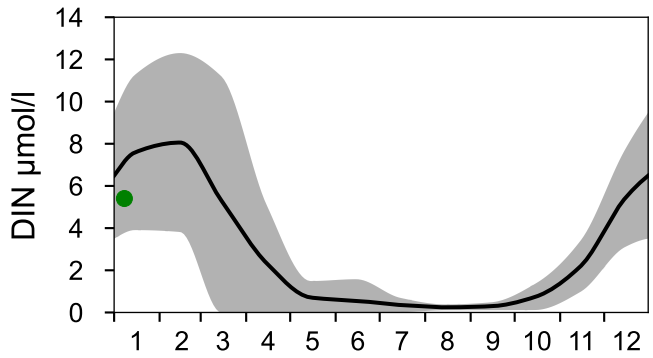
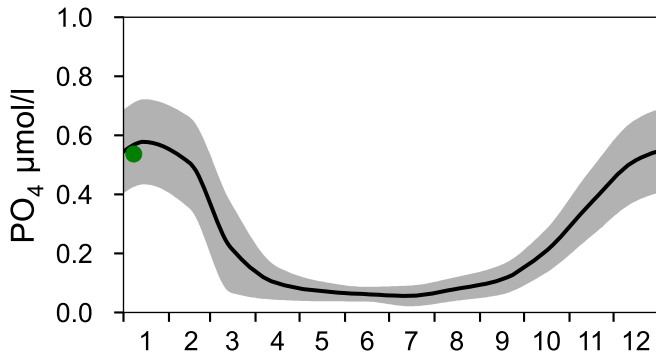
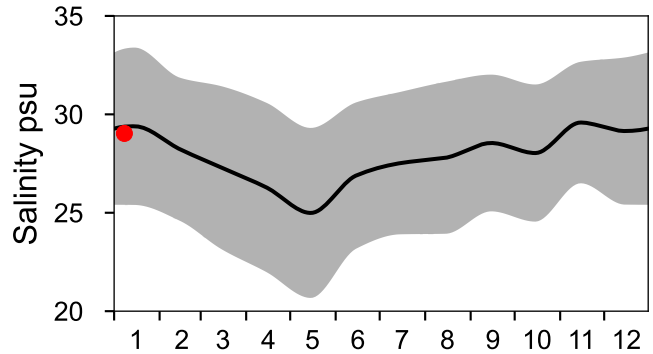
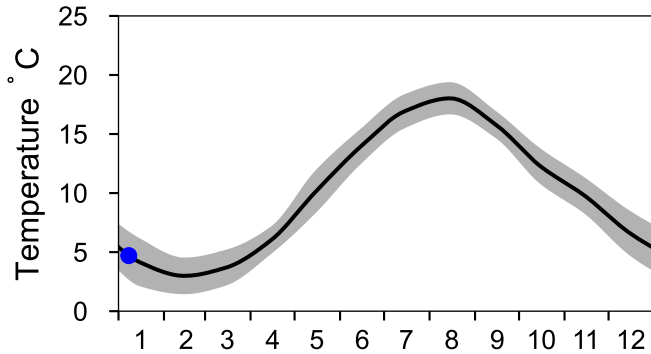
— Mean 1991-2020 St.Dev. ● 2026-01-08



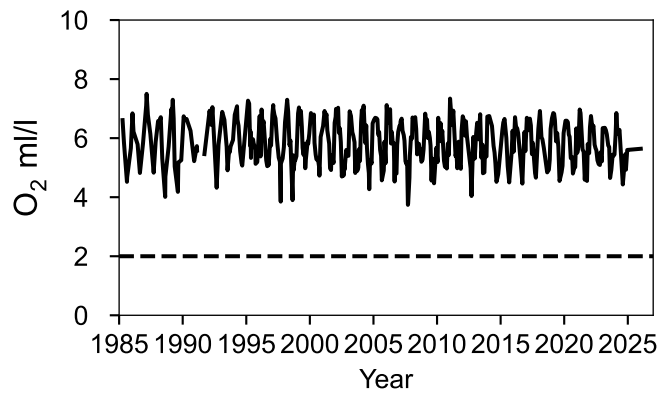
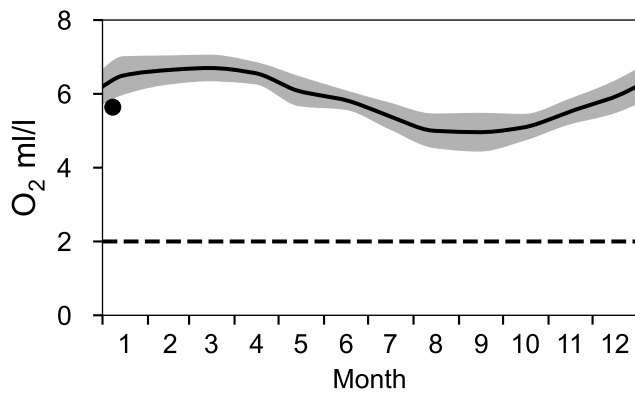
STATION P2 SURFACE WATER (0-10 m)

Annual Cycles

— Mean 1991-2020 St.Dev. ● 2026



OXYGEN IN BOTTOM WATER (depth >= 75 m)

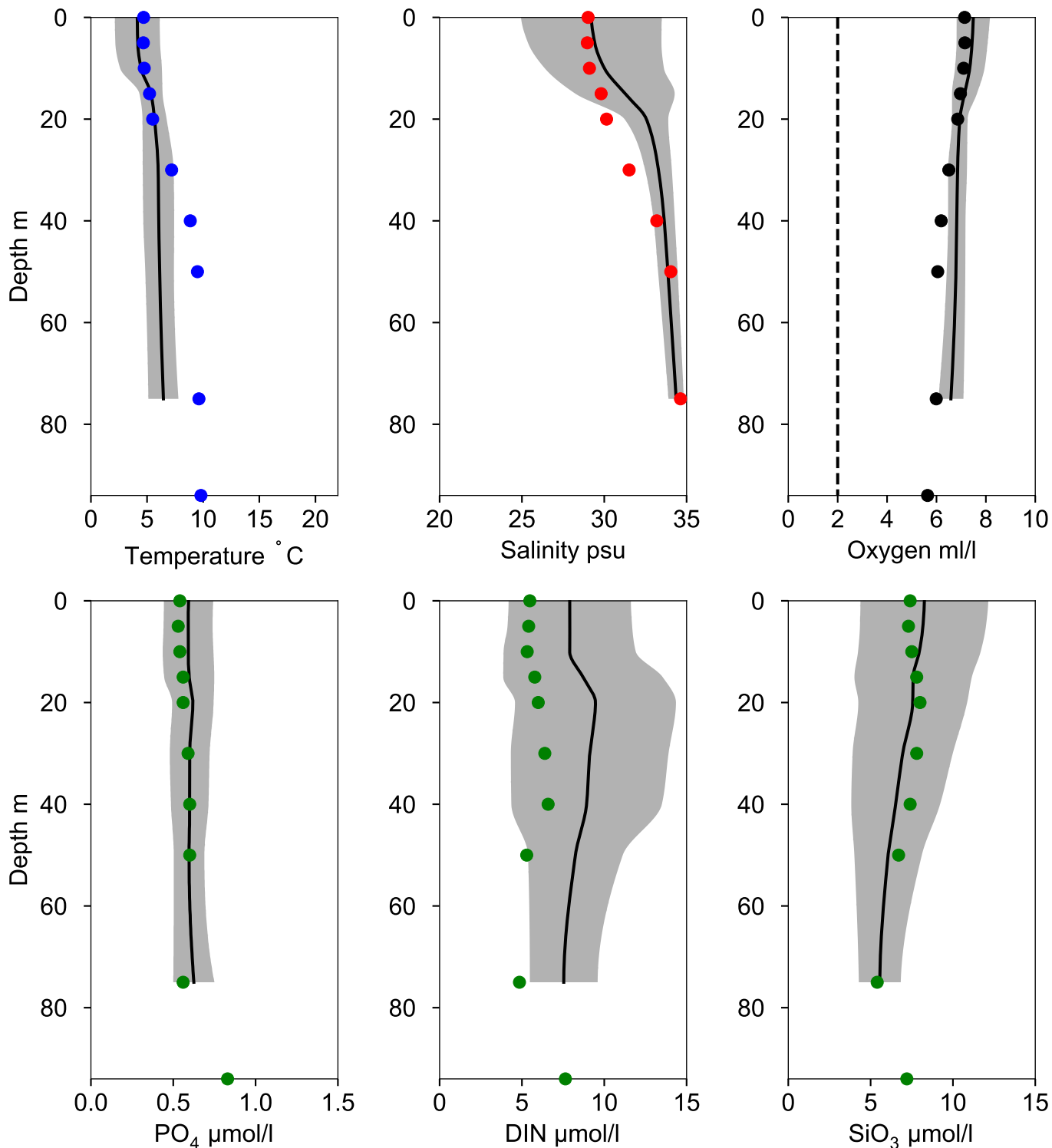


Vertical profiles P2 January

— Mean 1991-2020

■ St.Dev.

● 2026-01-08

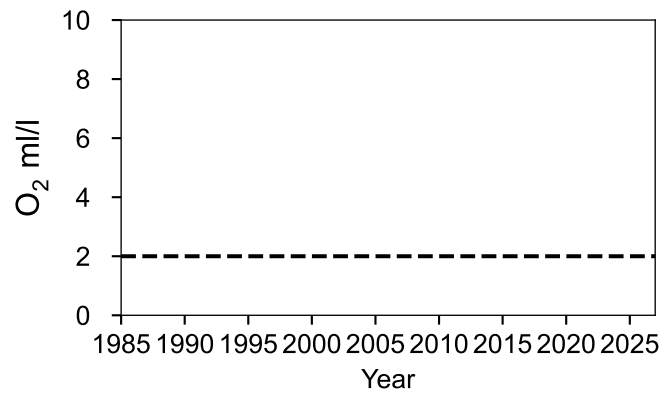
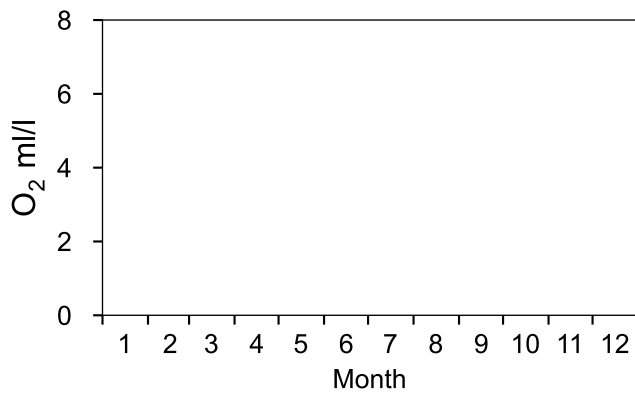
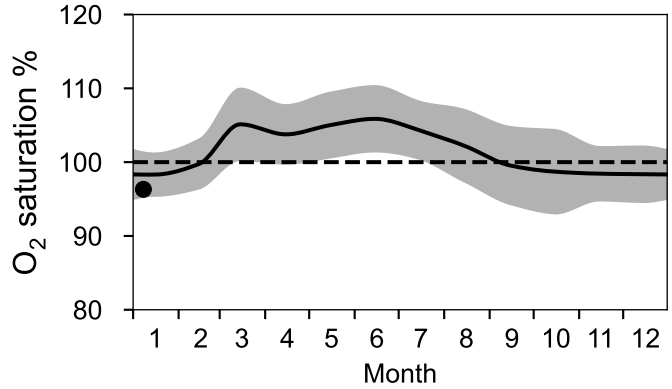
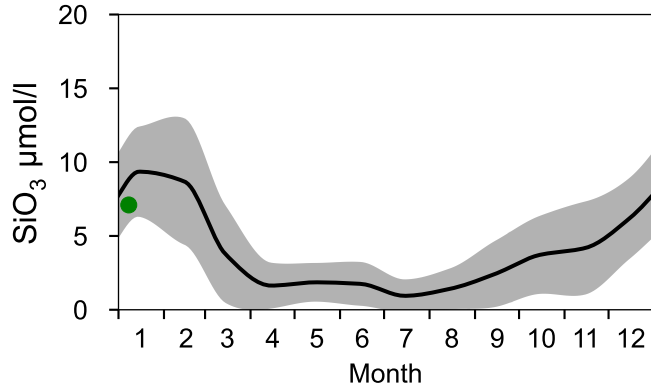
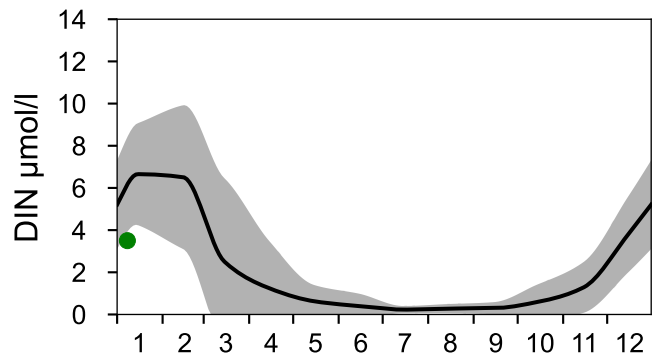
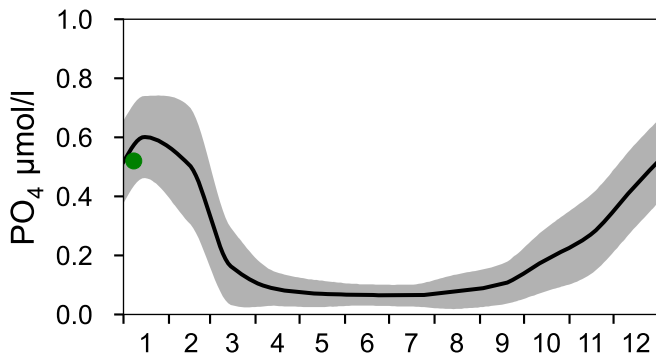
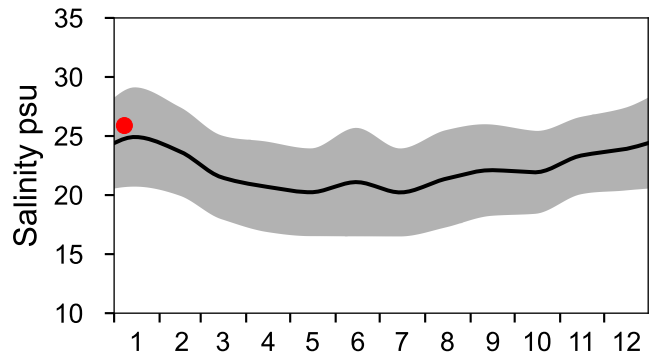
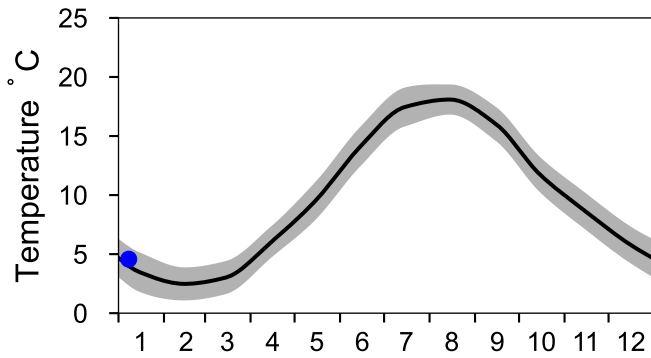


STATION SW VINGA GF4 SURFACE WATER (0-10 m)

Annual Cycles

Statistics based on data from: Kattegatt

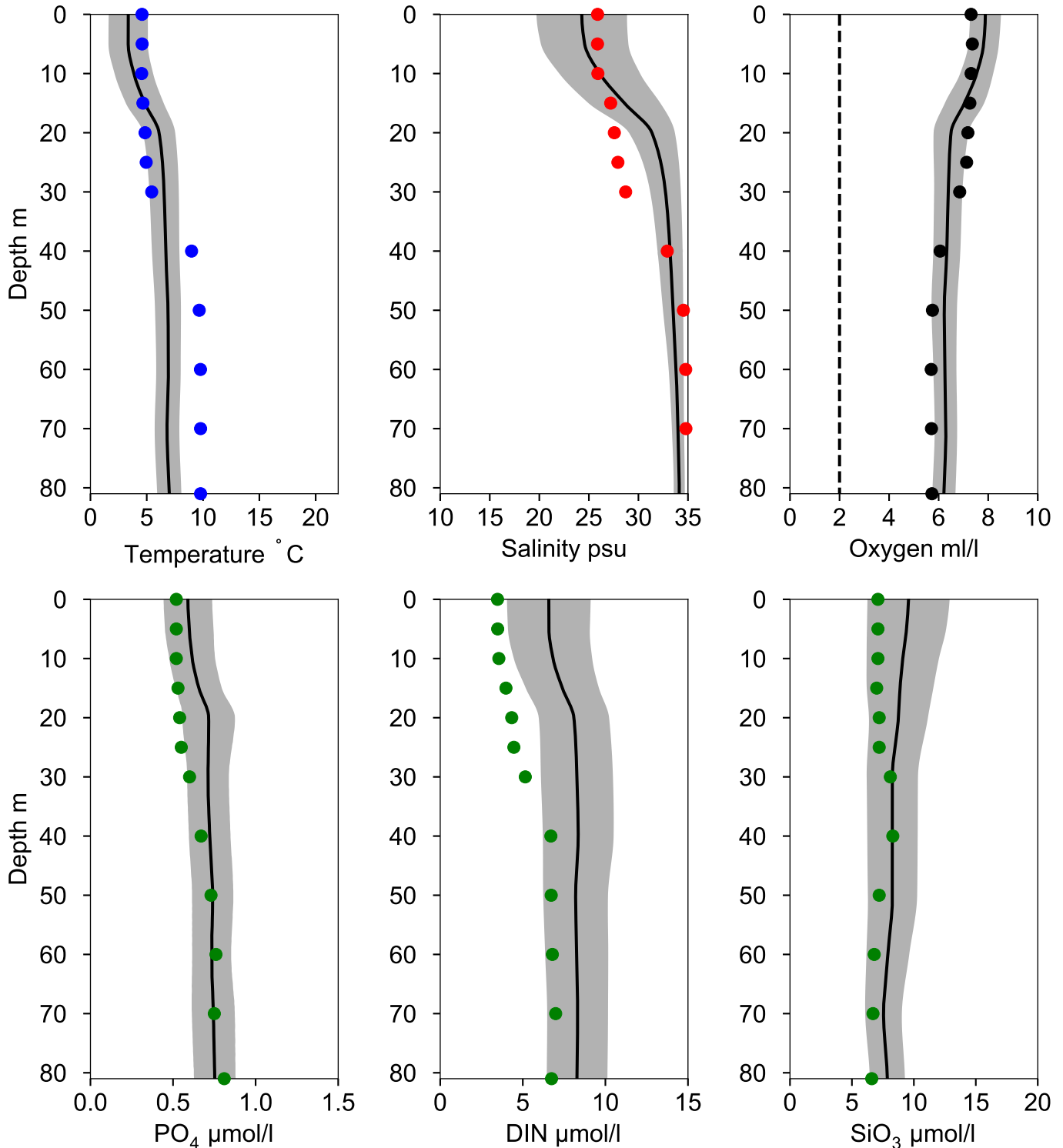
— Mean 1991-2020 St.Dev. ● 2026



Vertical profiles SW VINGA GF4 January

Statistics based on data from: Kattegatt

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

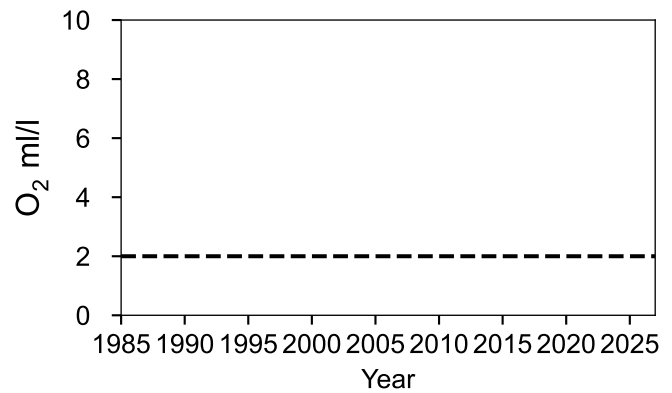
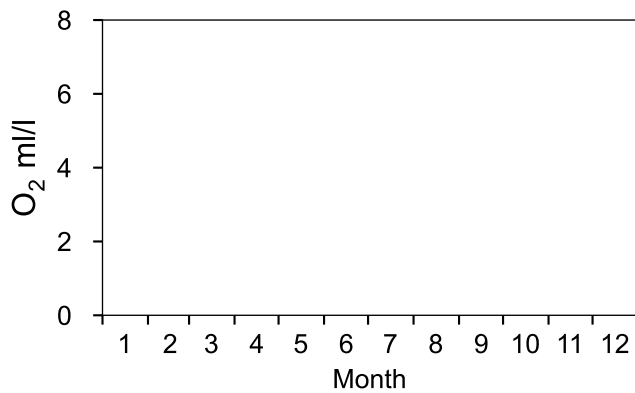
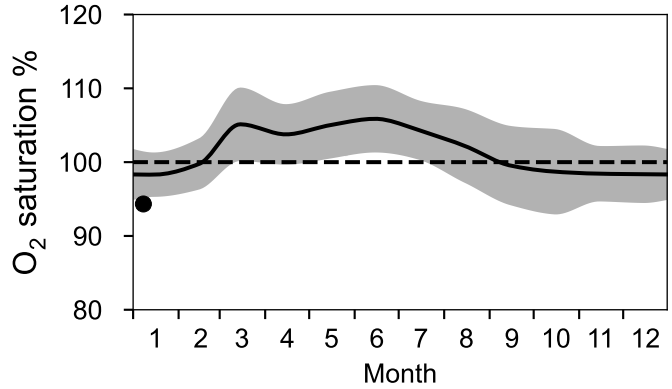
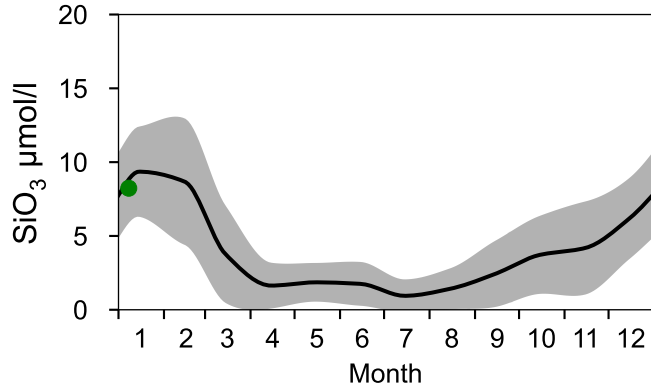
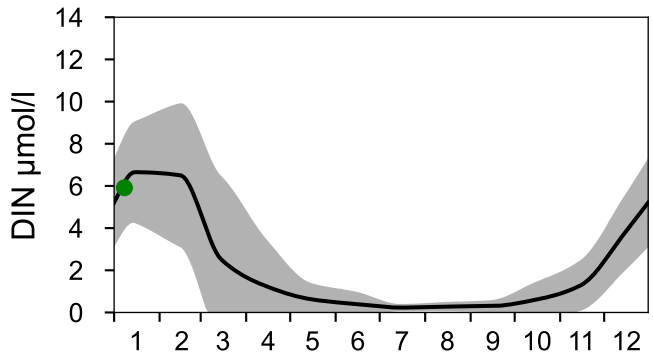
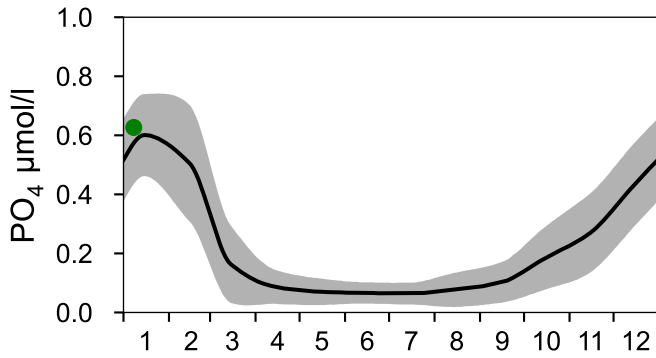
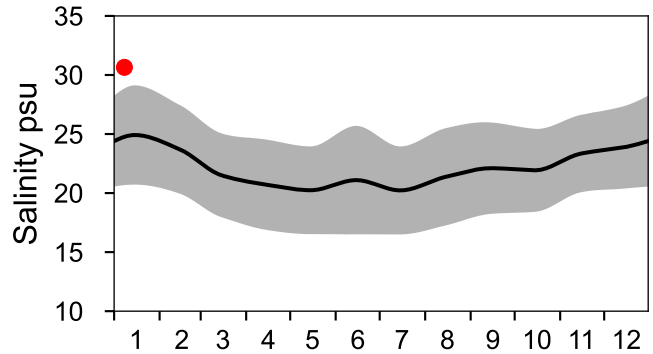
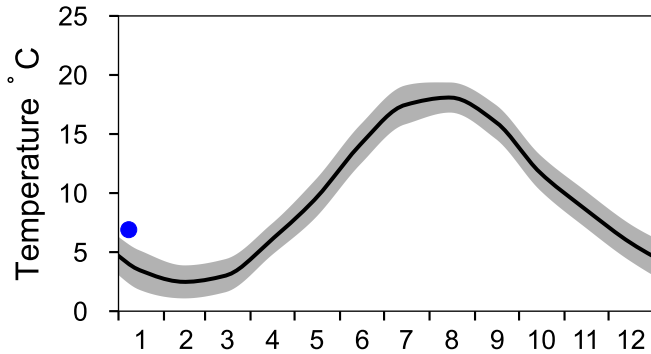


STATION GF6 SURFACE WATER (0-10 m)

Annual Cycles

Statistics based on data from: Kattegatt

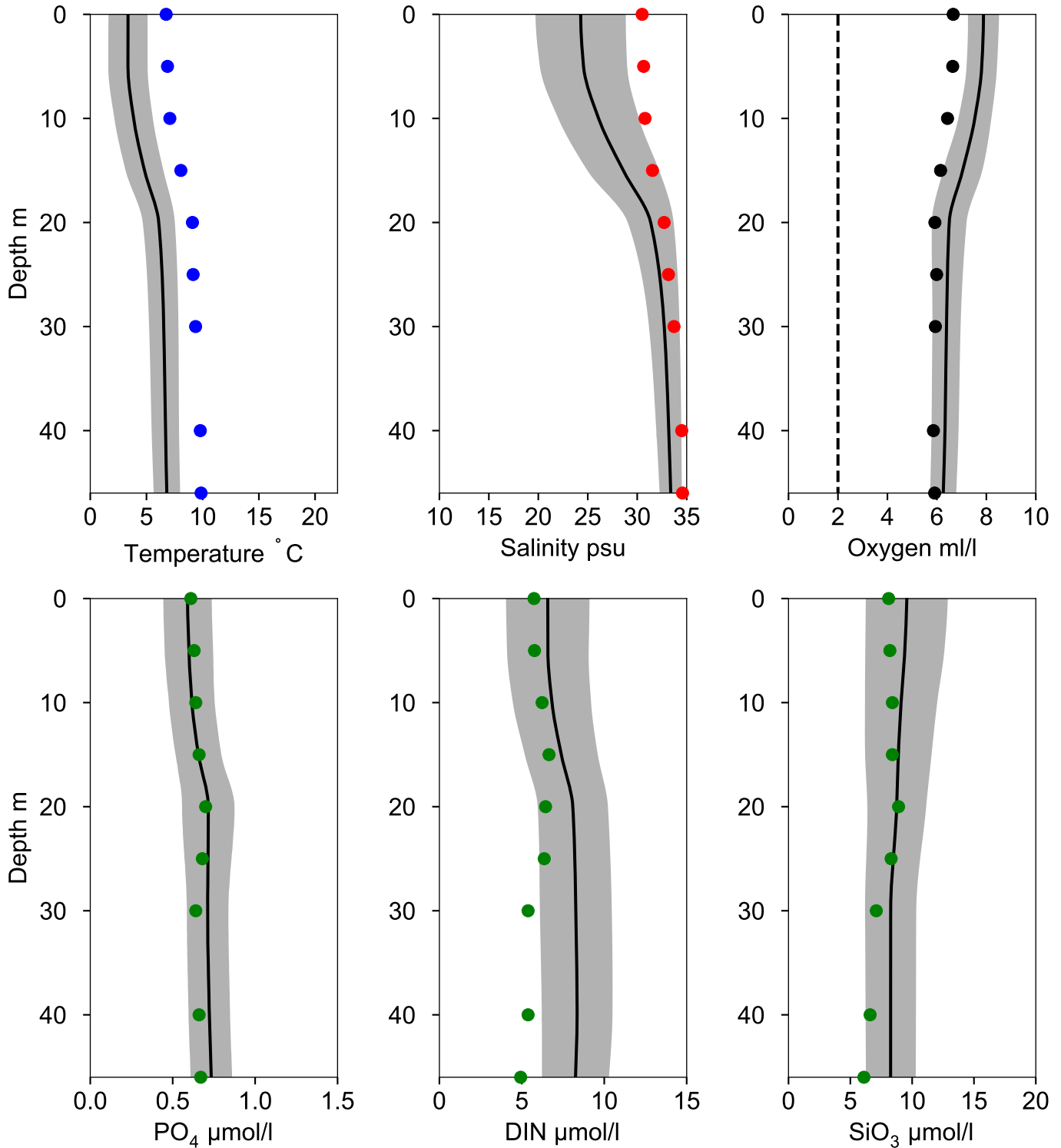
— Mean 1991-2020 St.Dev. ● 2026



Vertical profiles GF6 January

Statistics based on data from: Kattegatt

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

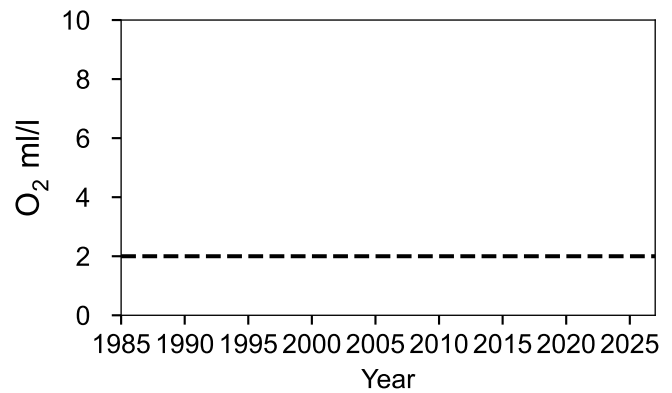
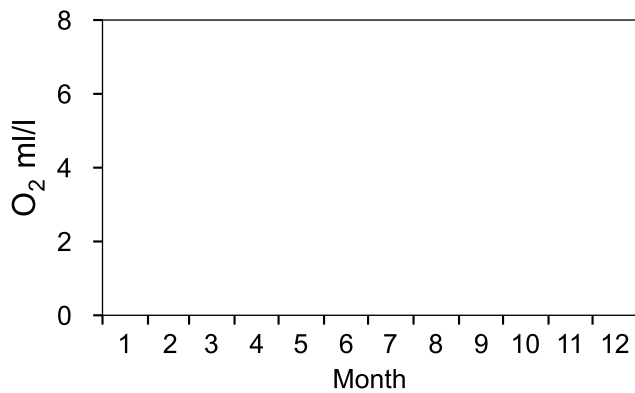
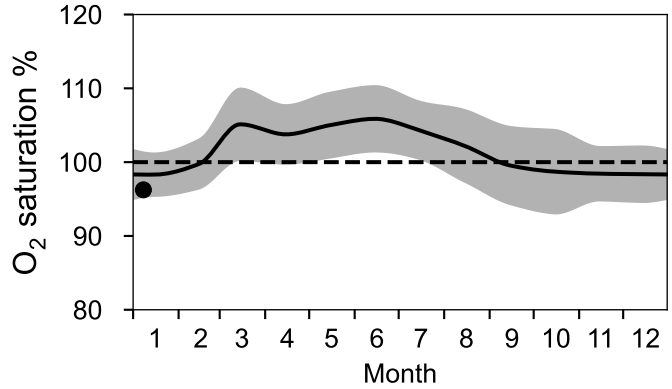
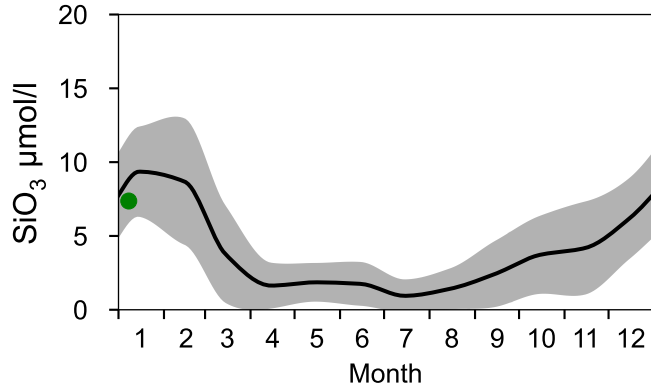
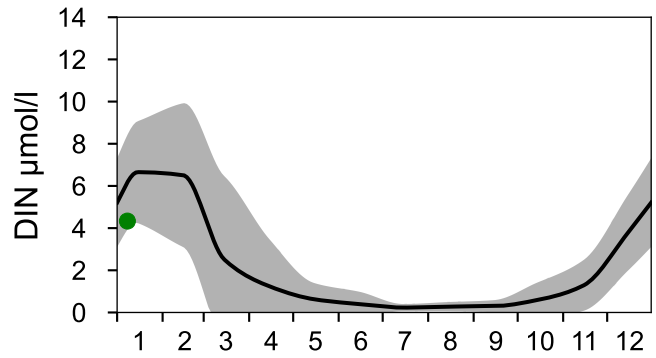
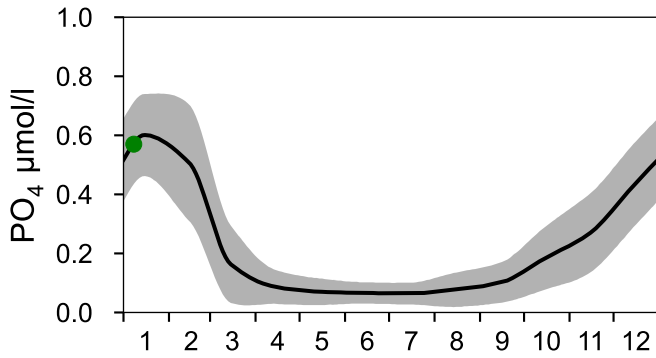
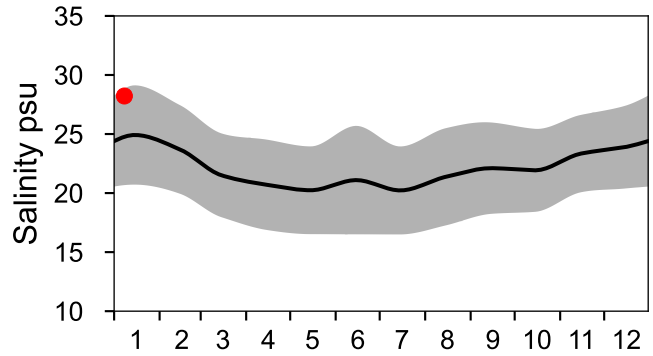
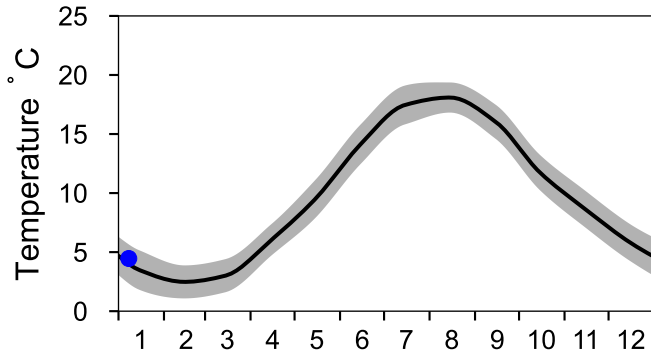


STATION GF8 SURFACE WATER (0-10 m)

Annual Cycles

Statistics based on data from: Kattegatt

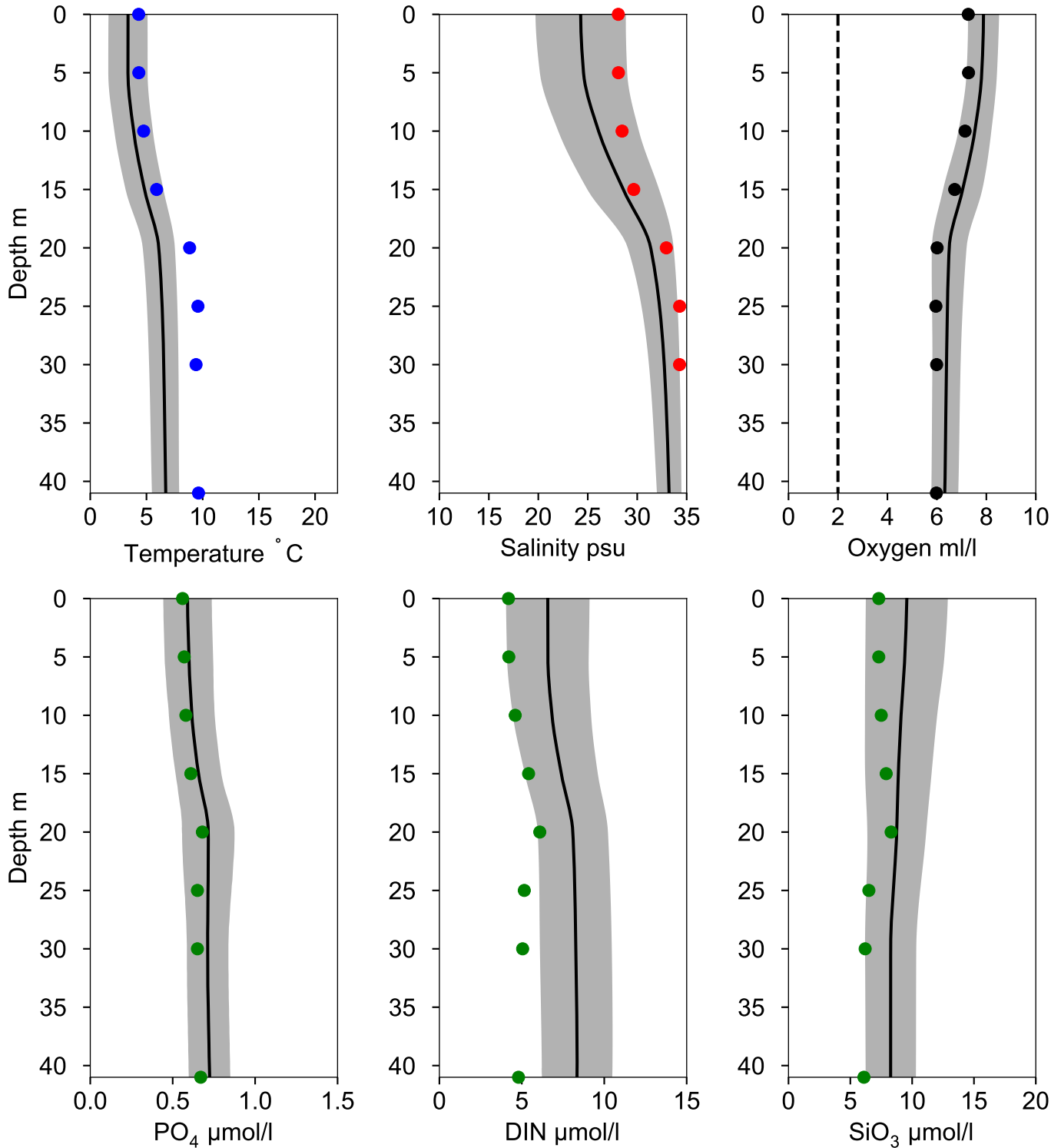
— Mean 1991-2020 St.Dev. ● 2026



Vertical profiles GF8 January

Statistics based on data from: Kattegatt

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

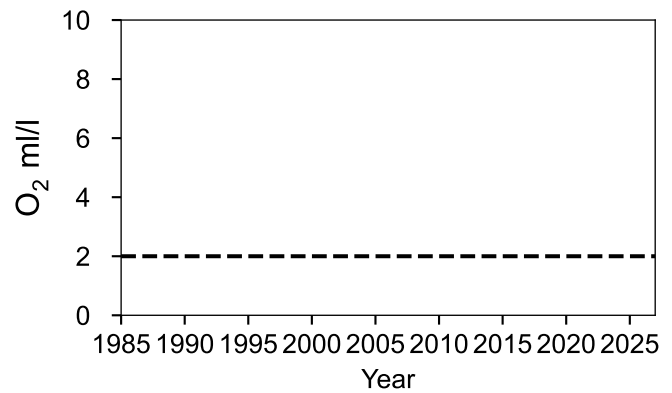
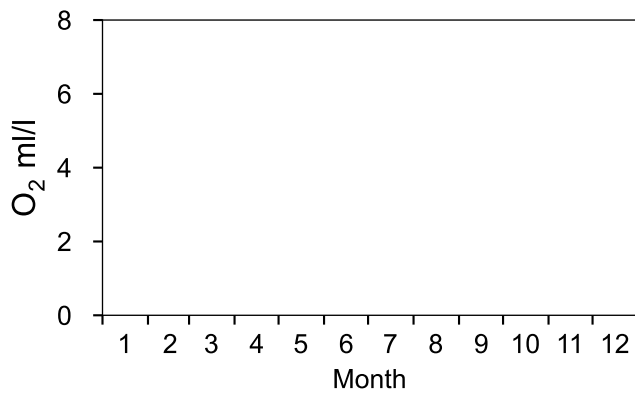
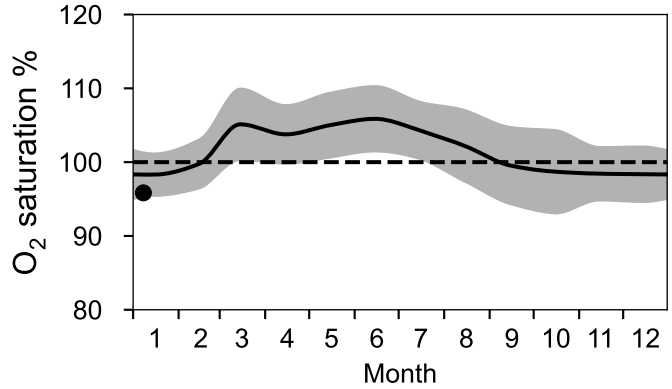
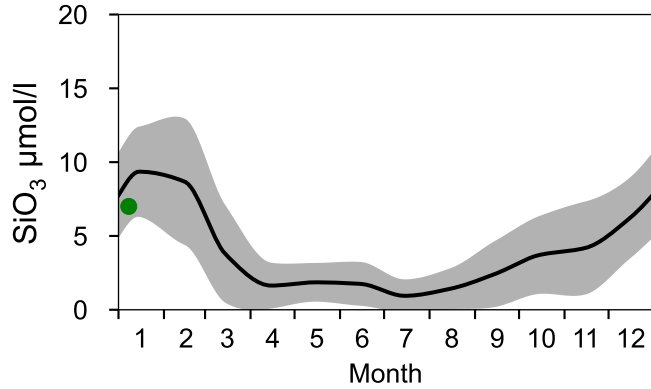
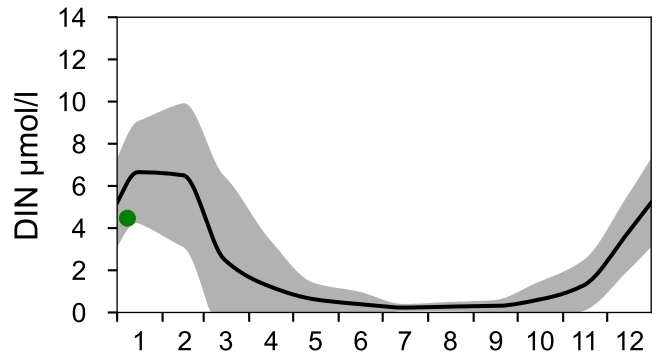
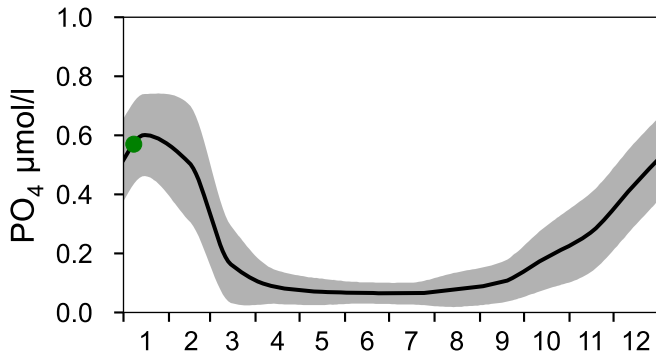
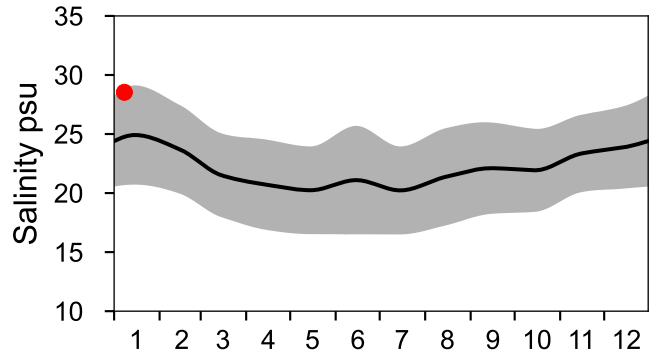
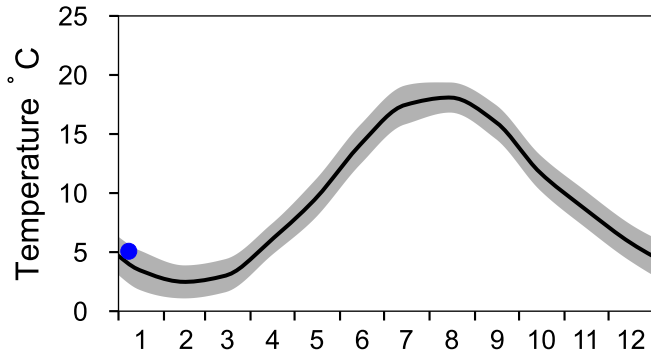


STATION GF9 SURFACE WATER (0-10 m)

Annual Cycles

Statistics based on data from: Kattegatt

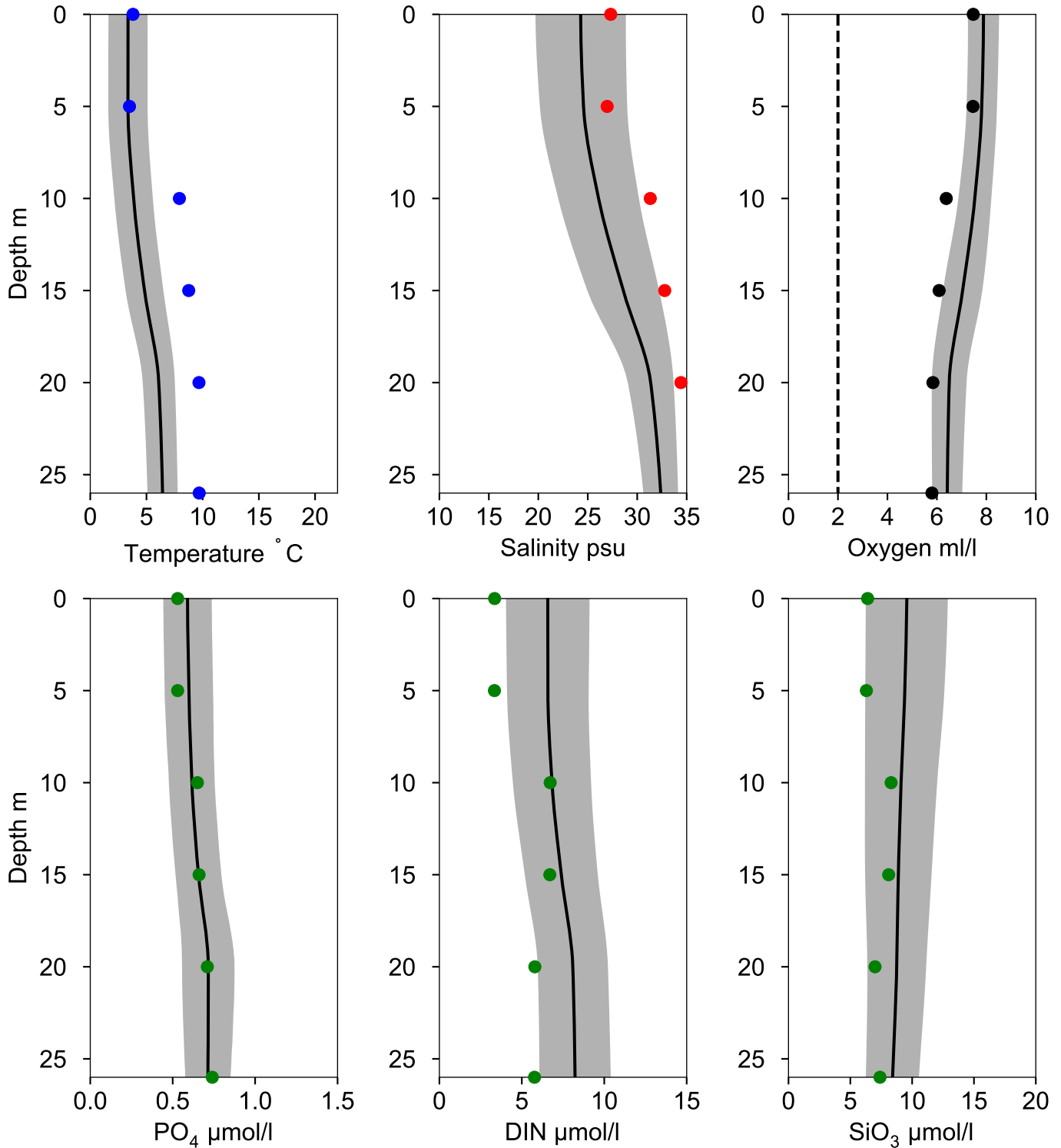
— Mean 1991-2020 St.Dev. ● 2026



Vertical profiles GF9 January

Statistics based on data from: Kattegatt

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

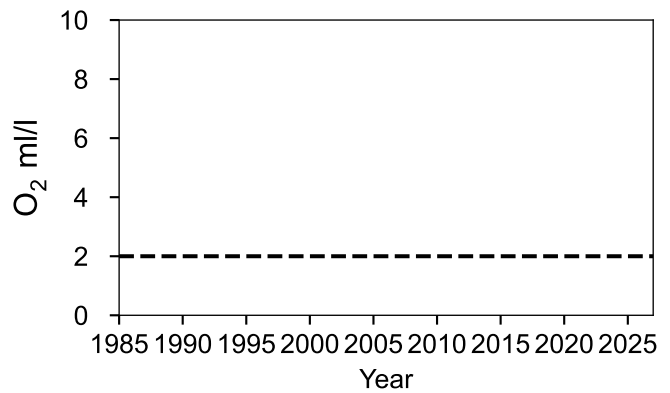
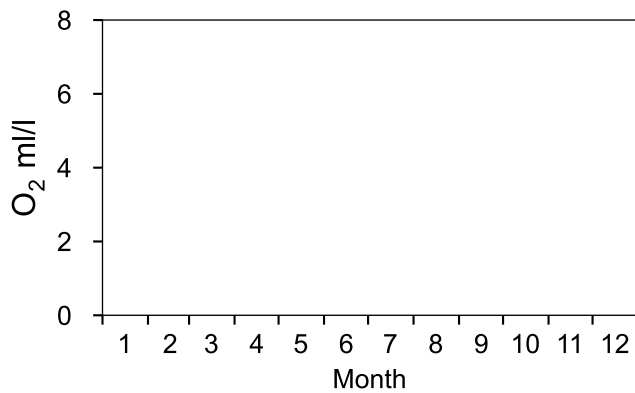
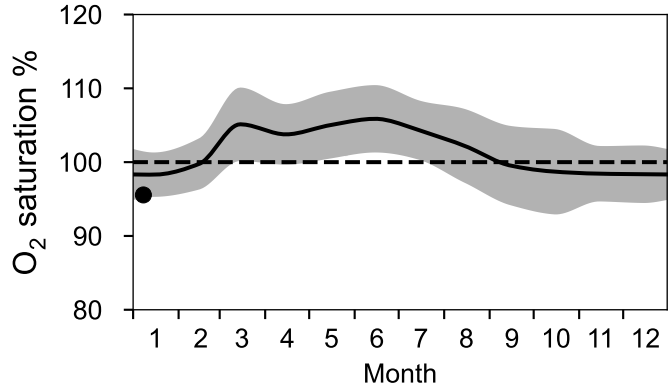
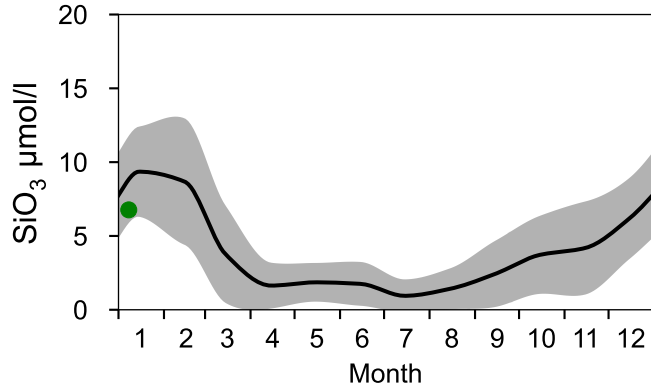
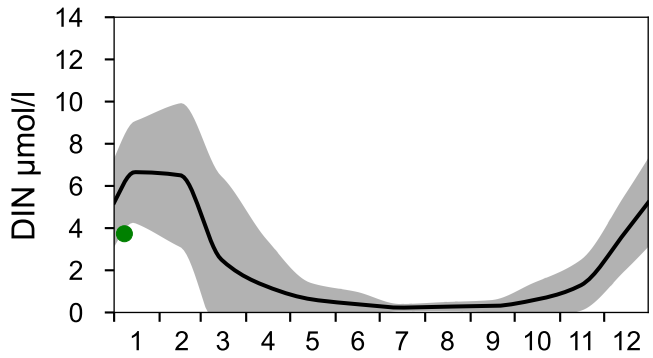
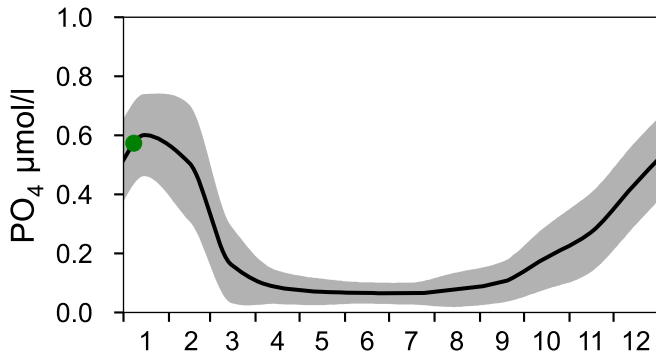
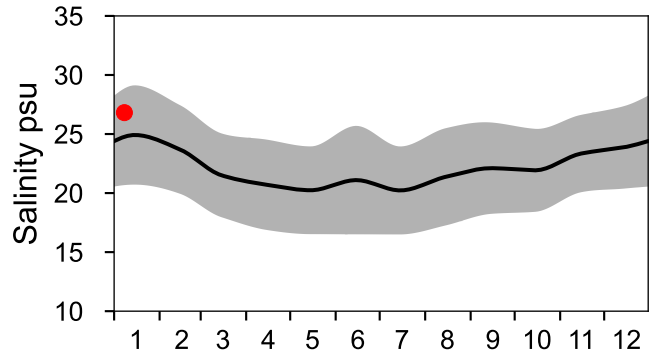
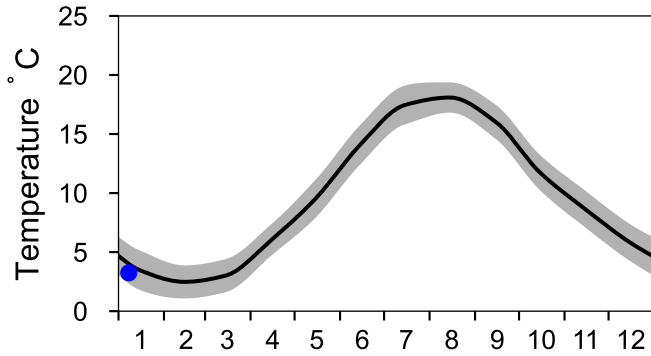


STATION LÄSÖ RÄNNA SURFACE WATER (0-10 m)

Annual Cycles

Statistics based on data from: Kattegatt

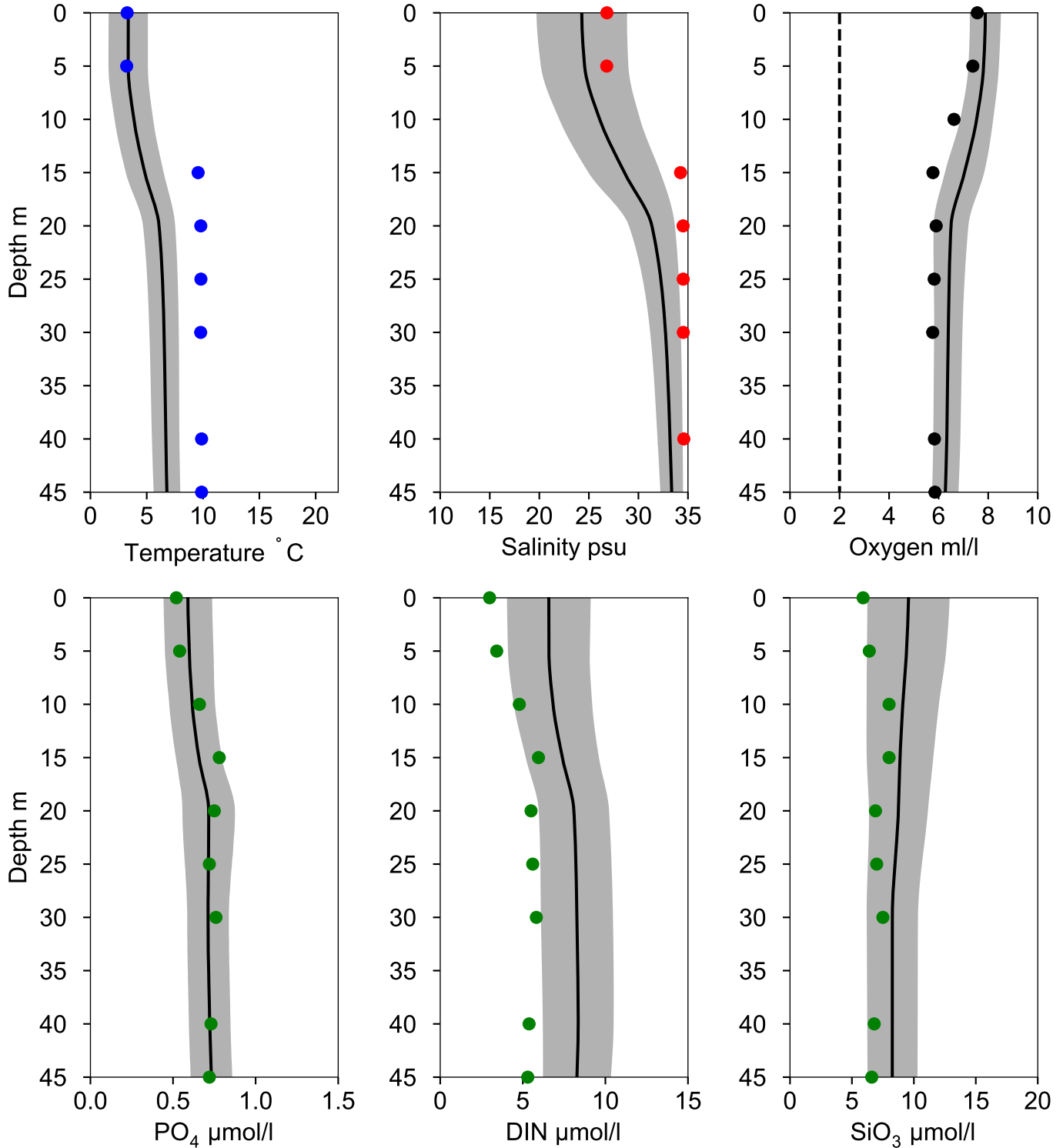
— Mean 1991-2020 St.Dev. ● 2026



Vertical profiles LÄSÖ RÄNNA January

Statistics based on data from: Kattegatt

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

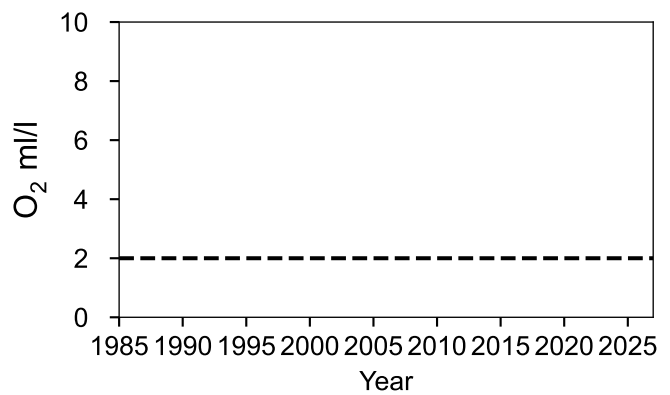
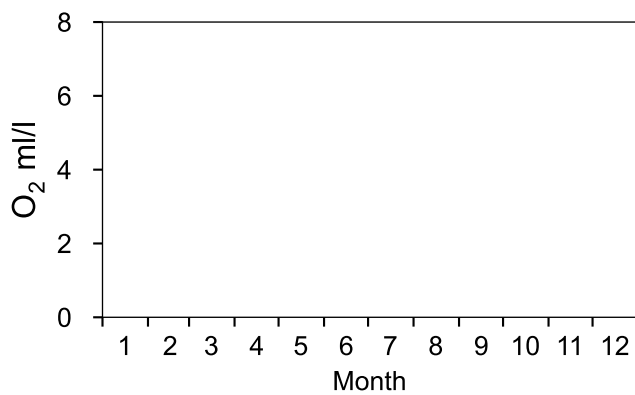
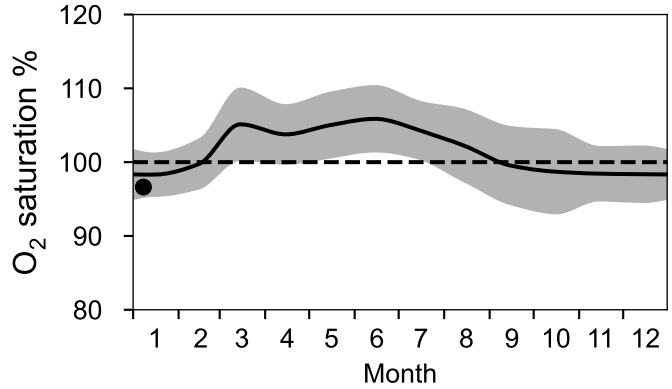
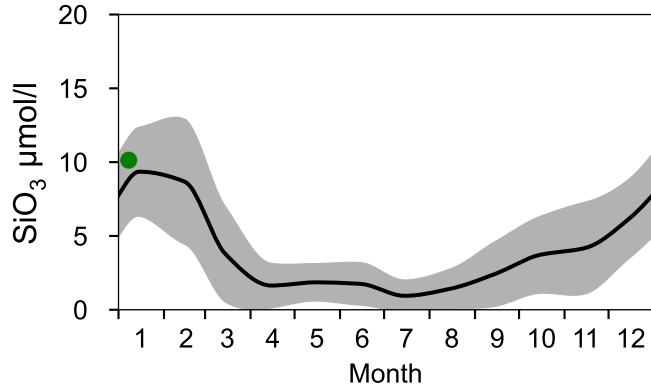
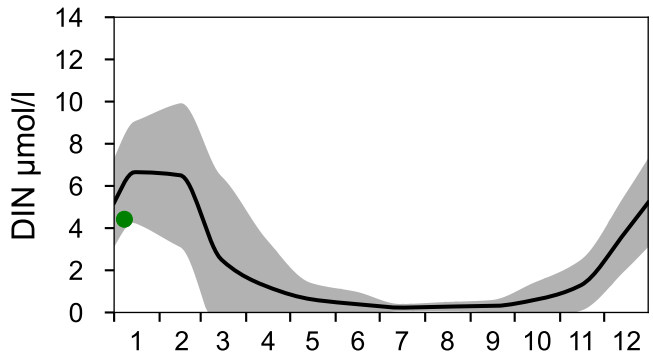
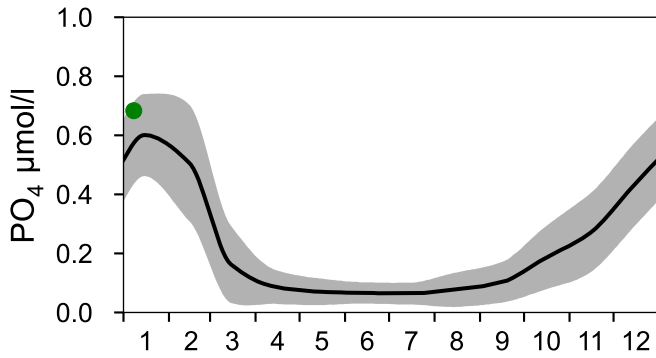
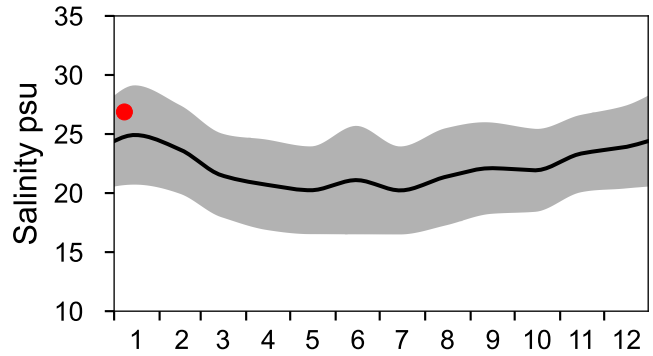
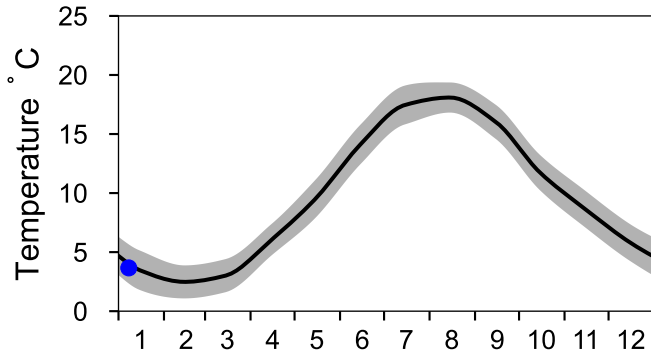


STATION 409 ÅLBORG BUGT SURFACE WATER (0-10 m)

Annual Cycles

Statistics based on data from: Kattegatt

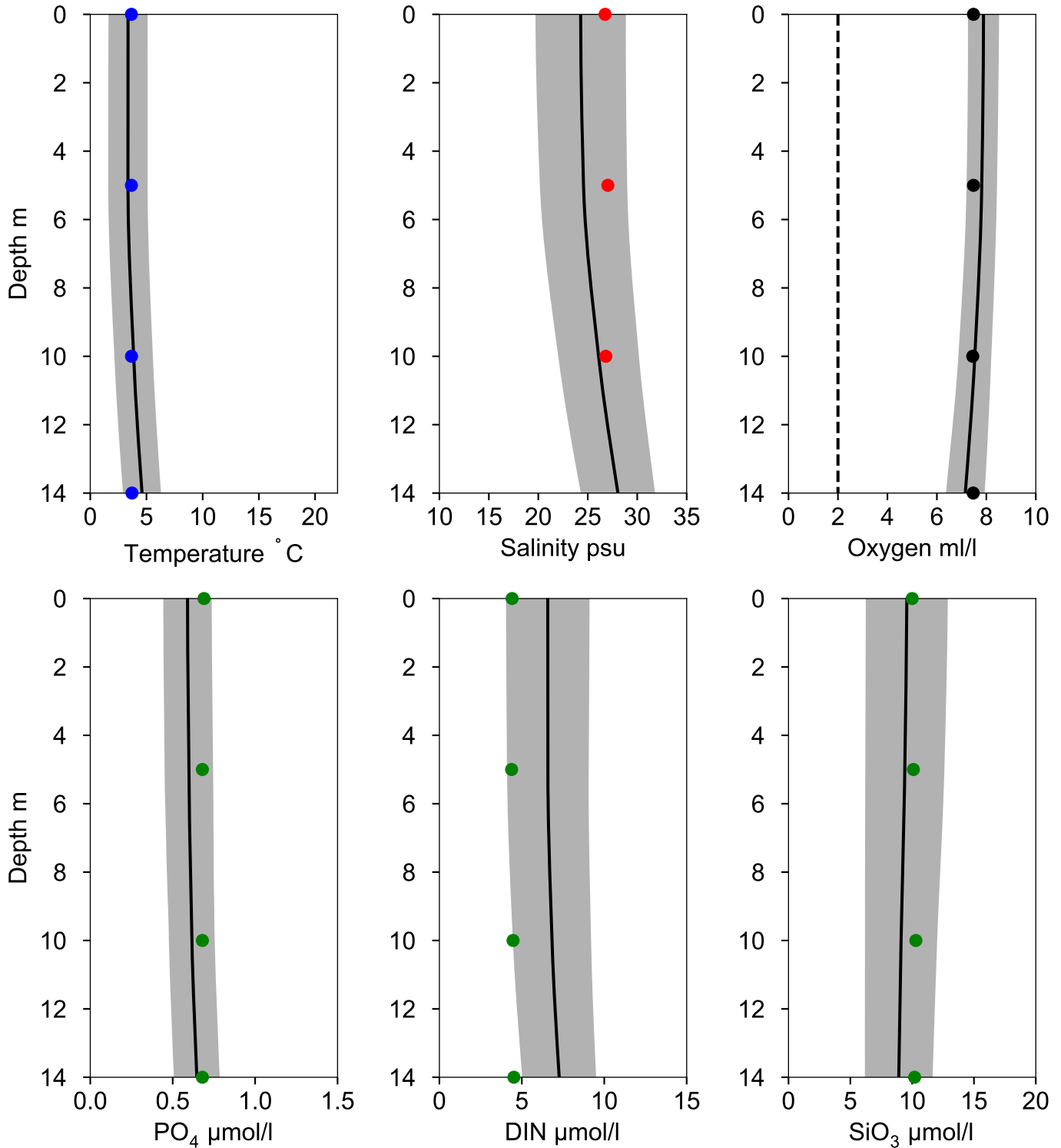
— Mean 1991-2020 St.Dev. ● 2026



Vertical profiles 409 ÅLBORG BUGT January

Statistics based on data from: Kattegatt

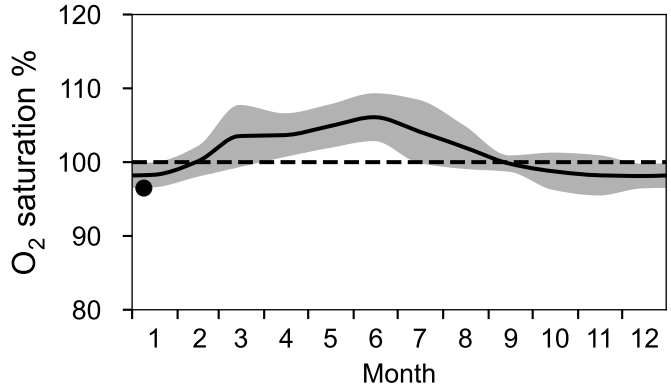
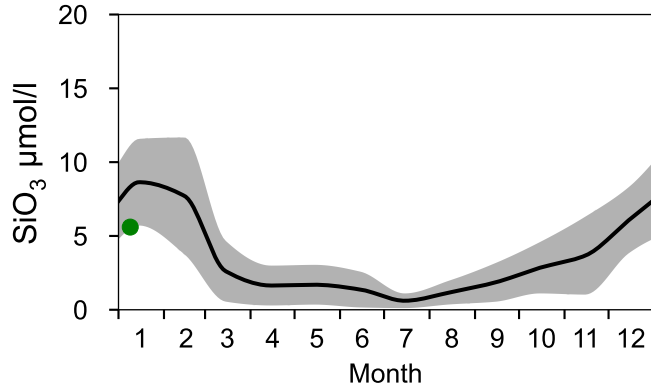
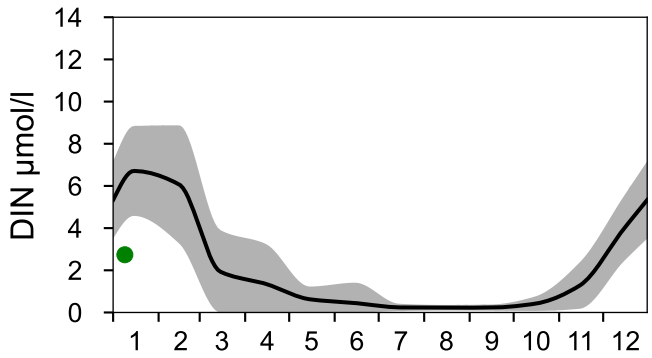
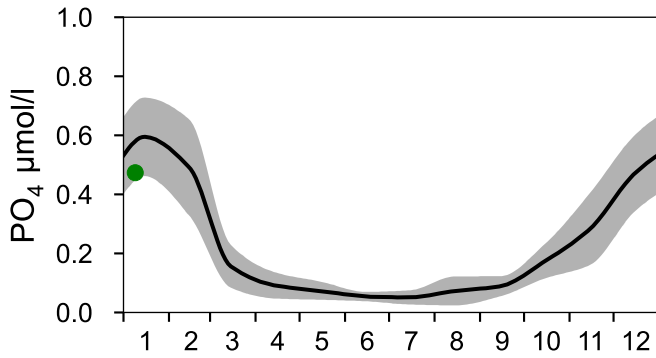
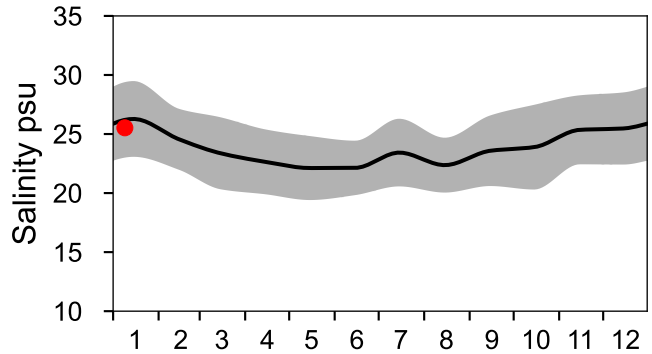
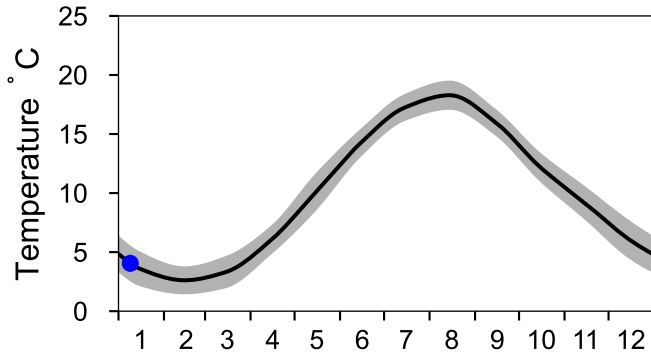
— Mean 1991-2020 ■ St.Dev. ● 2026-01-08



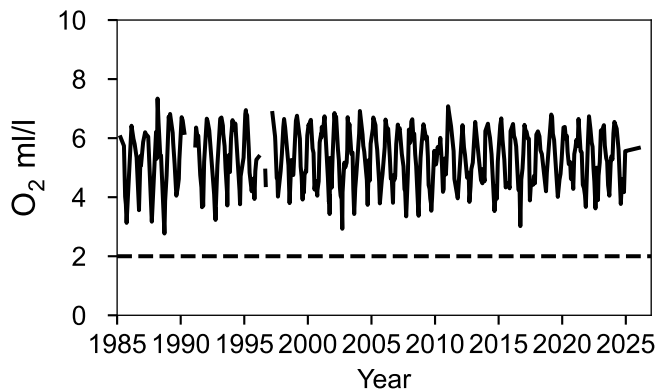
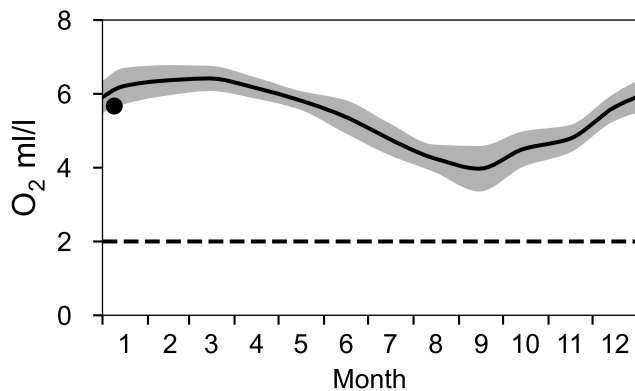
STATION FLADEN SURFACE WATER (0-10 m)

Annual Cycles

— Mean 1991-2020 St.Dev. ● 2026

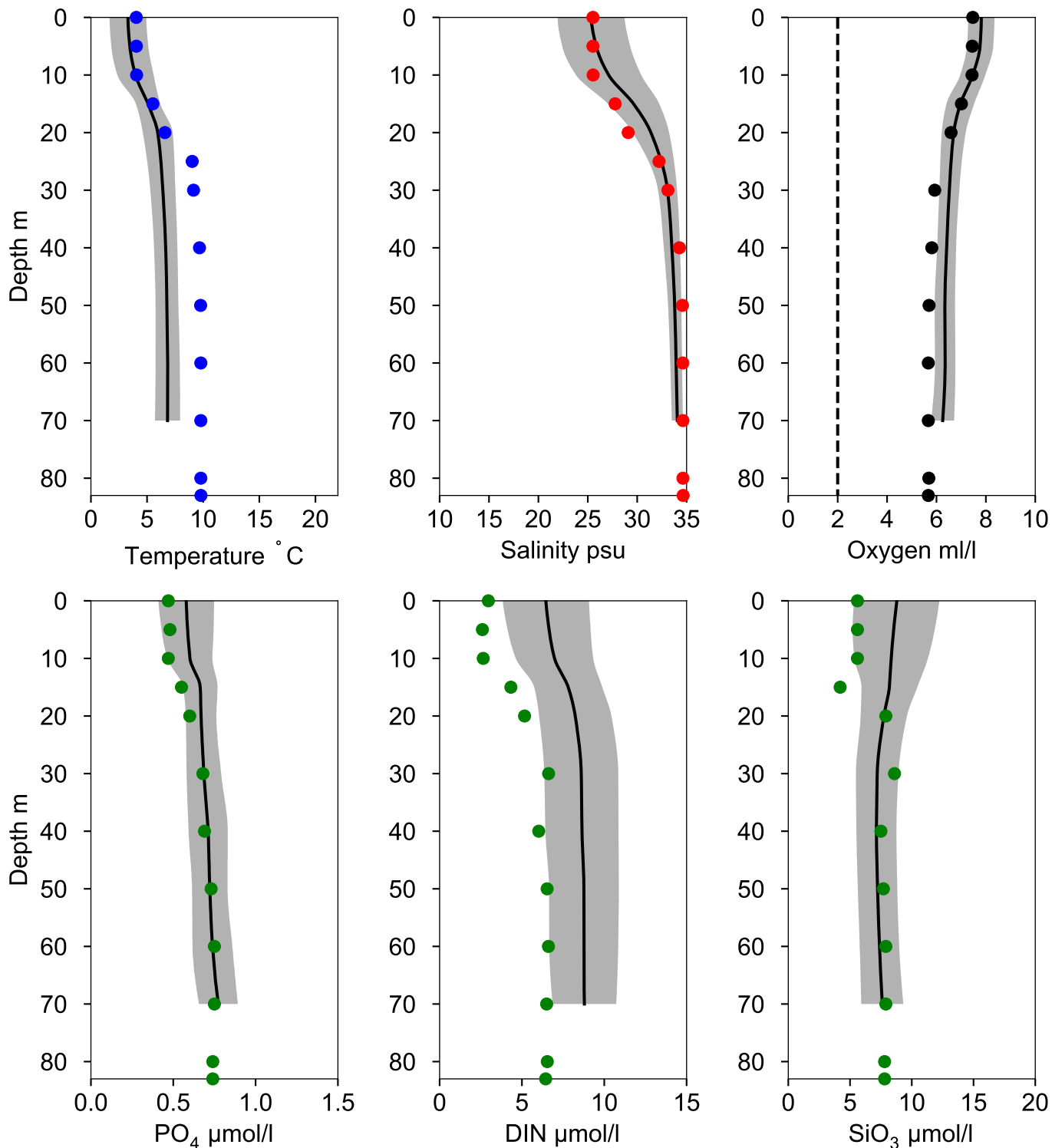


OXYGEN IN BOTTOM WATER (depth >= 74 m)



Vertical profiles FLADEN January

— Mean 1991-2020 St.Dev. ● 2026-01-09

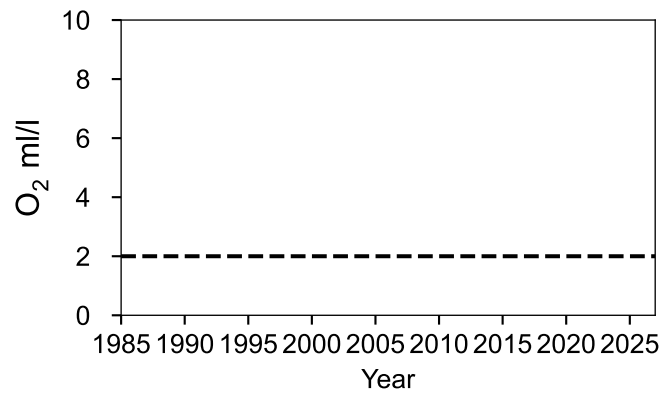
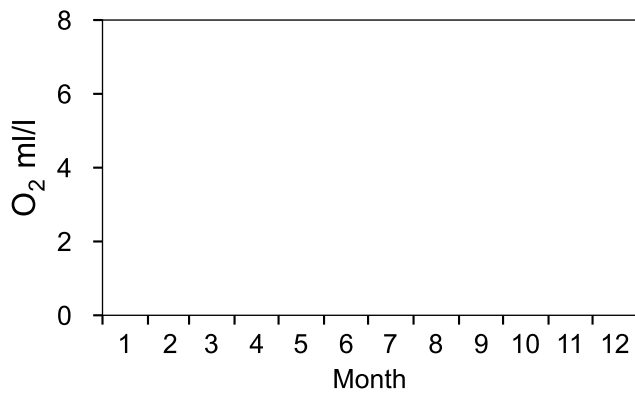
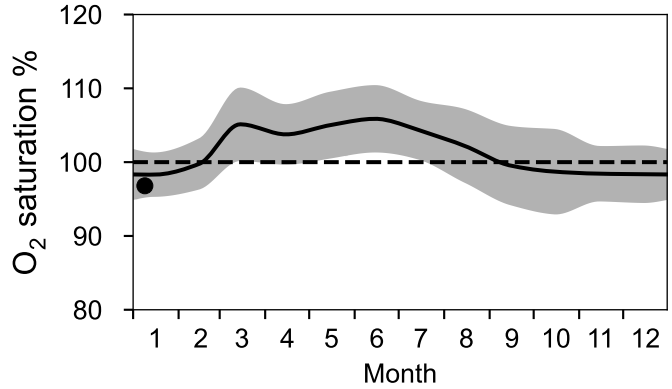
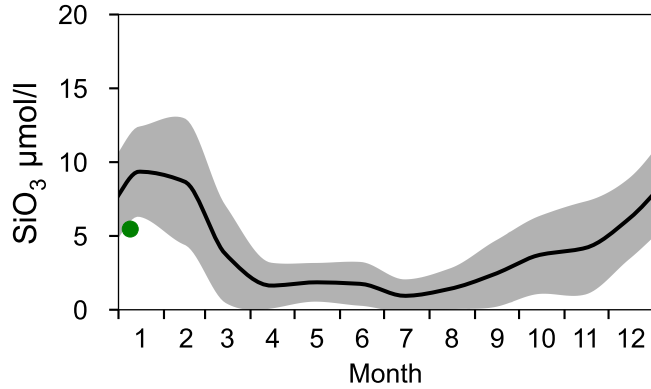
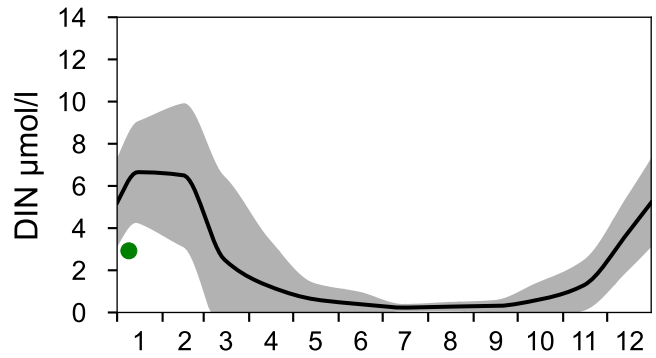
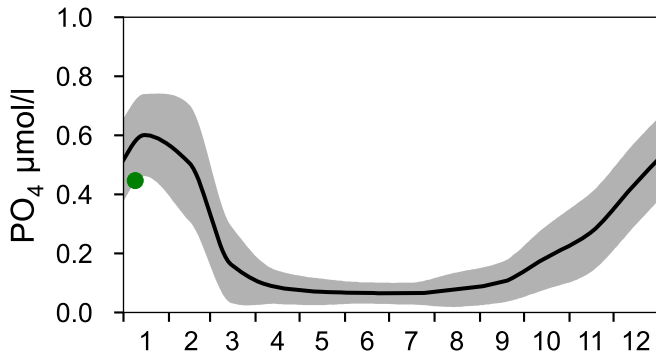
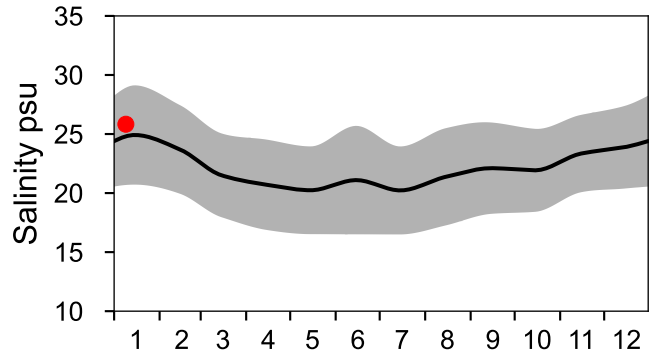
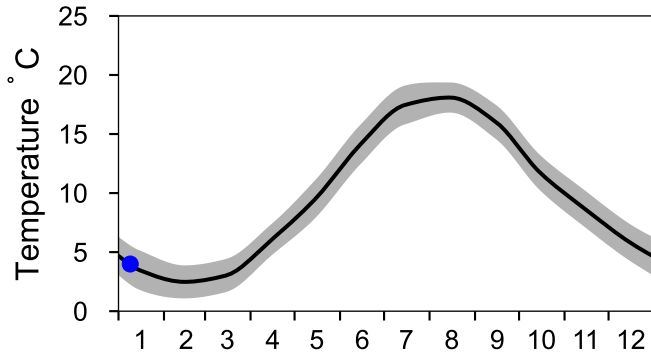


STATION L:A MIDDELGRUND SURFACE WATER (0-10 m)

Annual Cycles

Statistics based on data from: Kattegatt

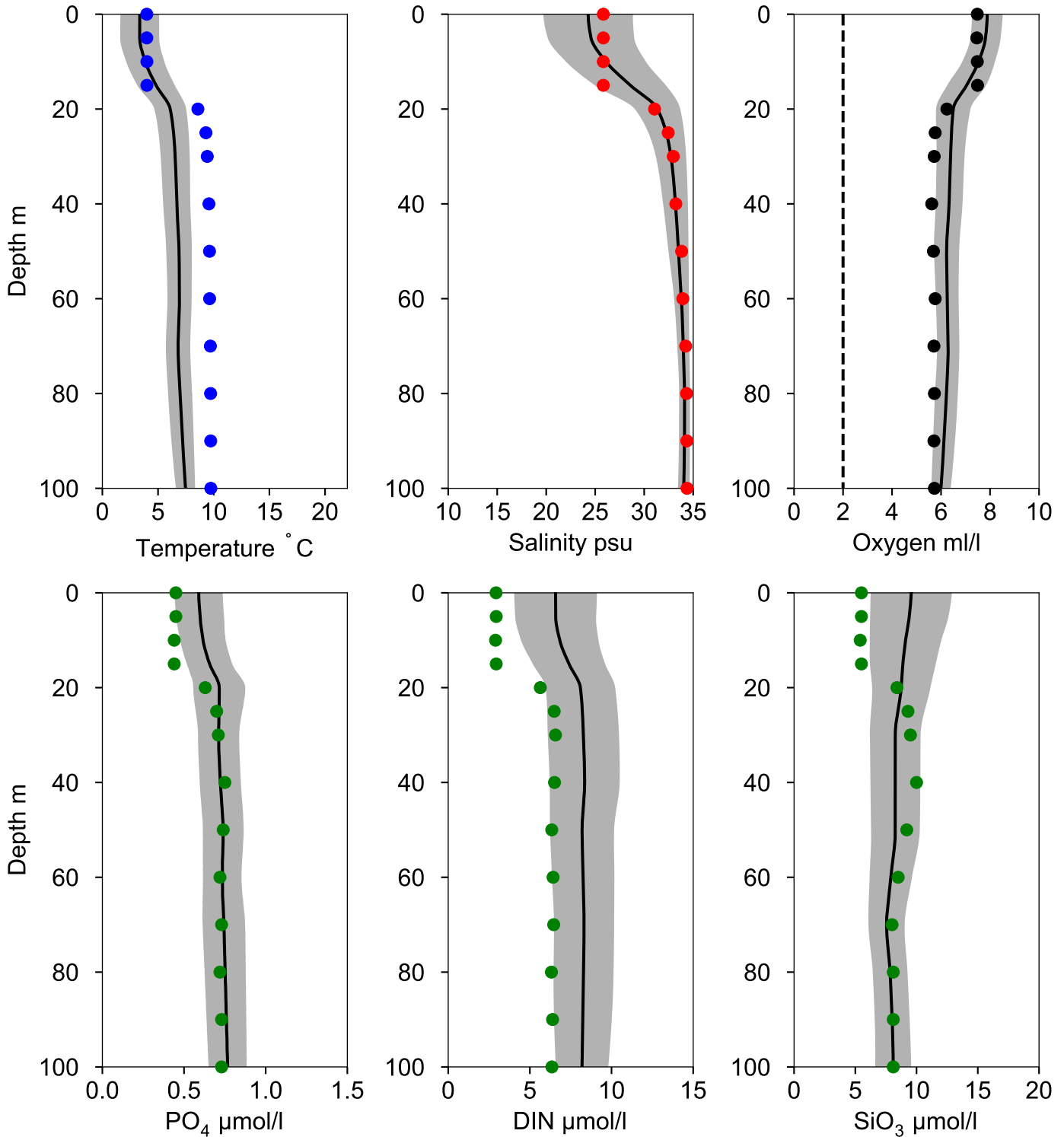
— Mean 1991-2020 St.Dev. ● 2026



Vertical profiles L:A MIDDELGRUND January

Statistics based on data from: Kattegatt

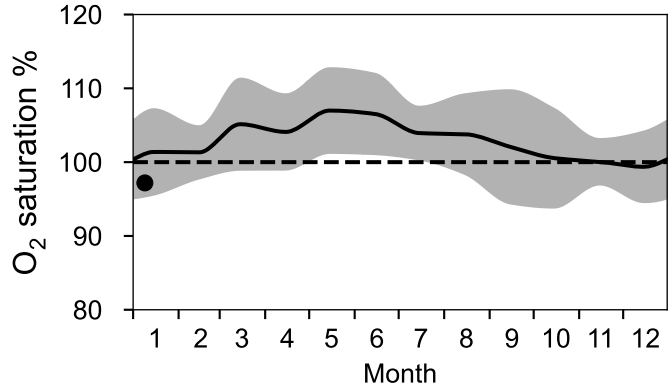
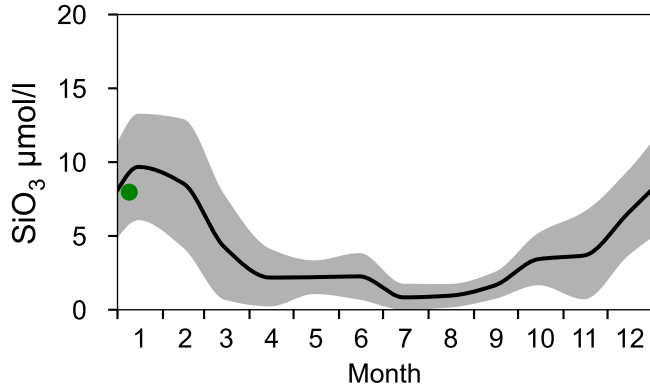
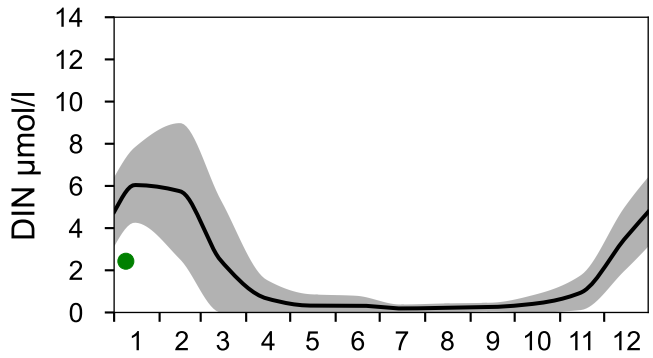
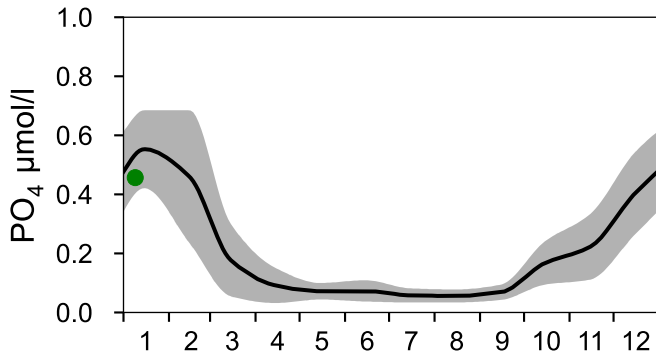
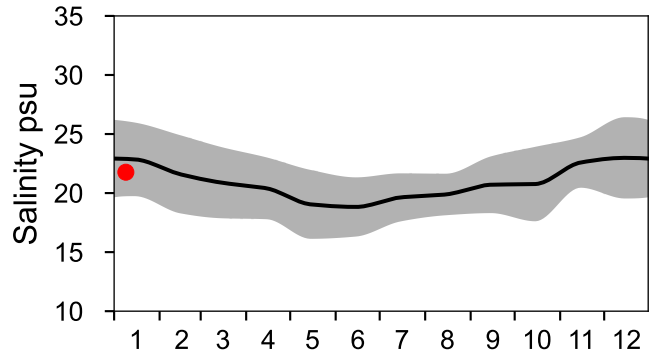
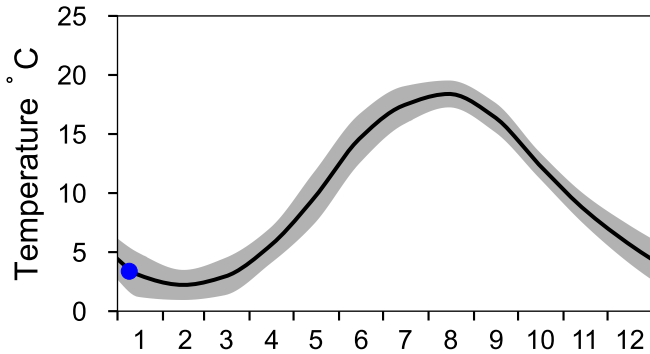
— Mean 1991-2020 ■ St.Dev. ● 2026-01-09



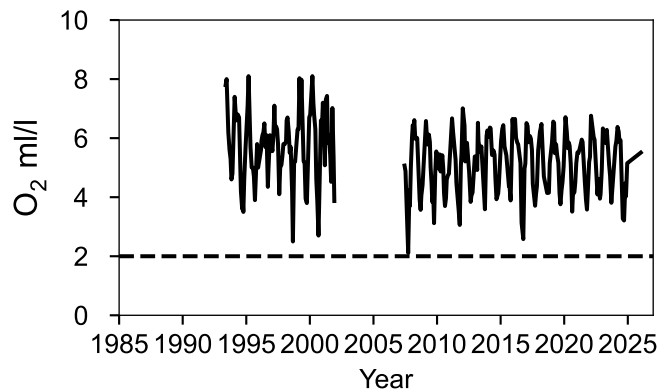
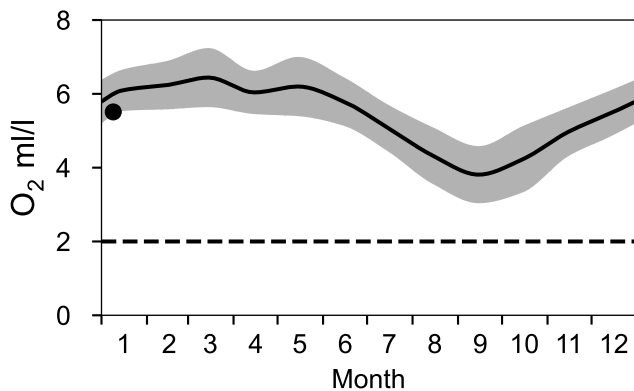
STATION N14 FALKENBERG SURFACE WATER (0-10 m)

Annual Cycles

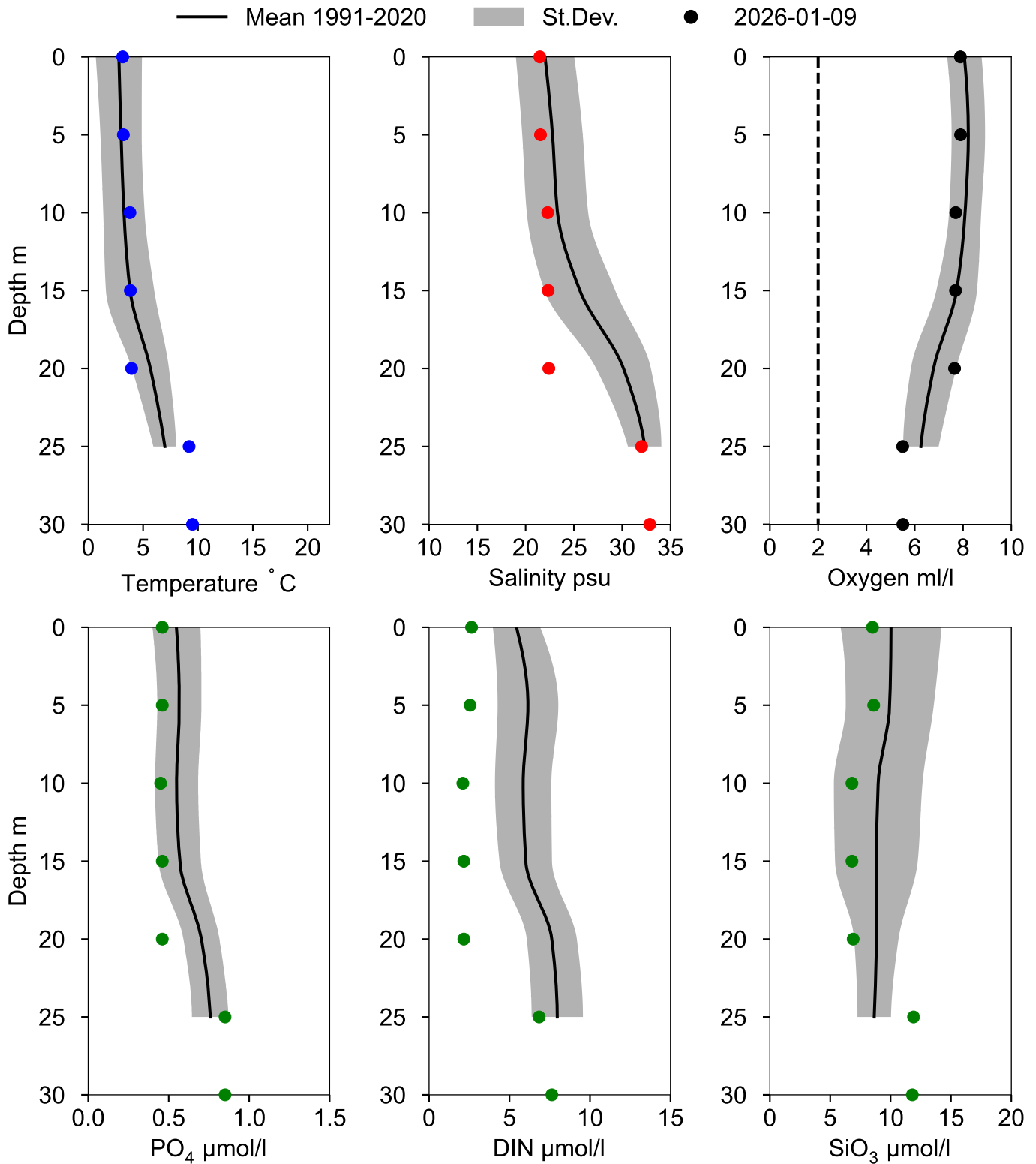
— Mean 1991-2020 St.Dev. ● 2026



OXYGEN IN BOTTOM WATER (depth >= 25 m)



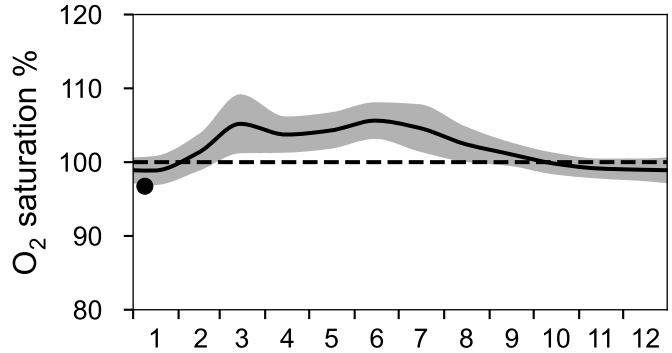
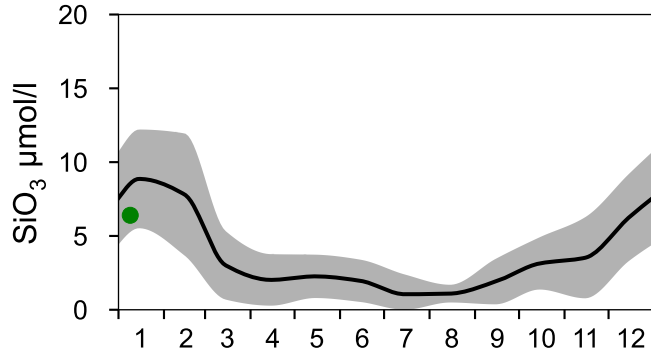
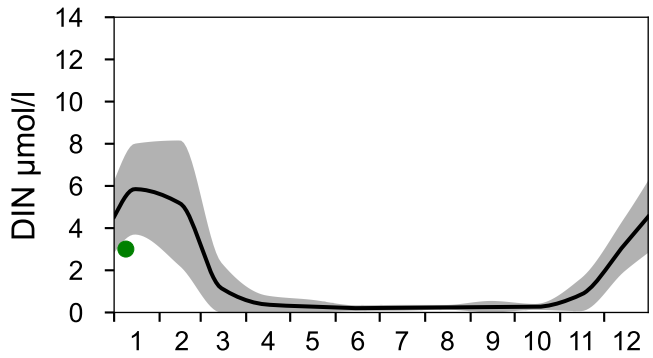
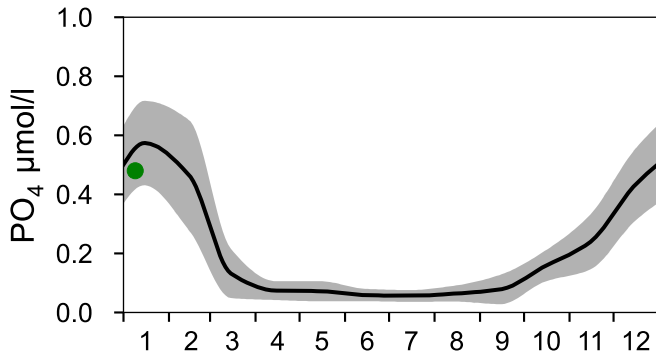
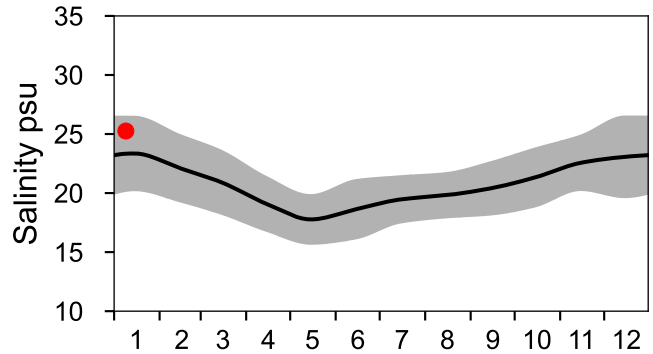
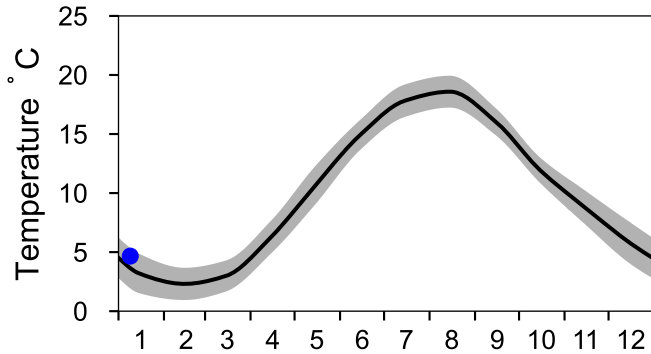
Vertical profiles N14 FALKENBERG January



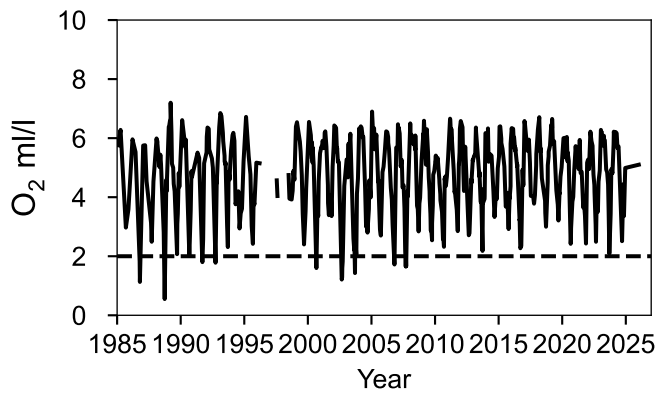
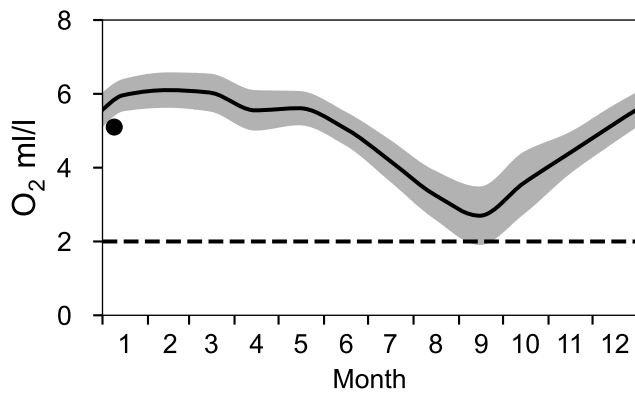
STATION ANHOLT E SURFACE WATER (0-10 m)

Annual Cycles

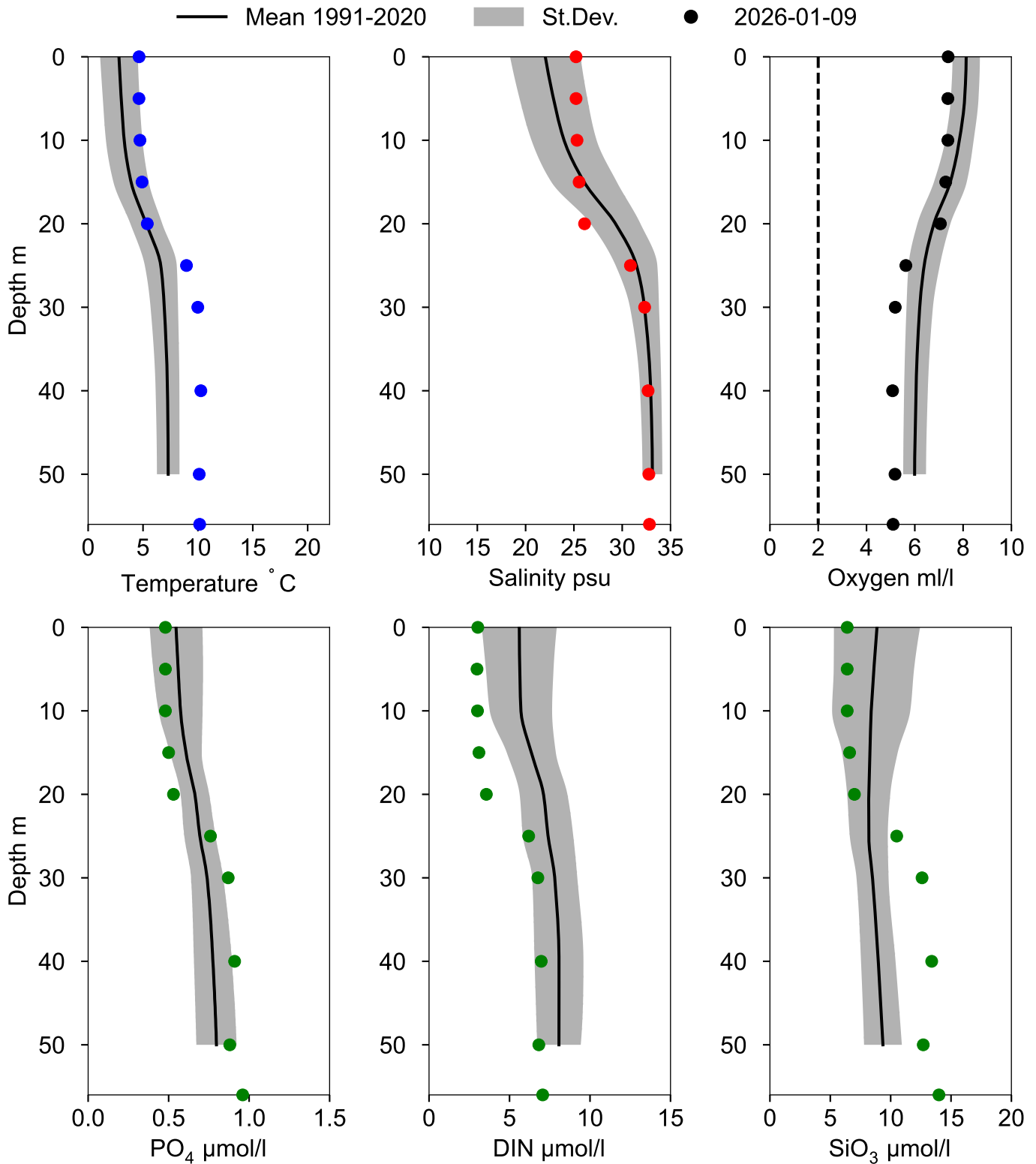
— Mean 1991-2020 St.Dev. ● 2026



OXYGEN IN BOTTOM WATER (depth >= 52 m)



Vertical profiles ANHOLT E January

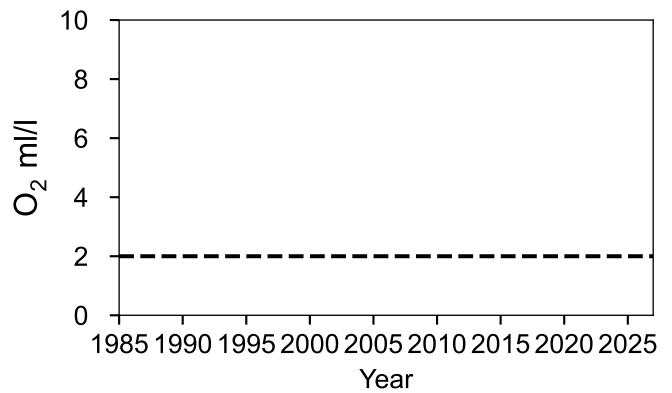
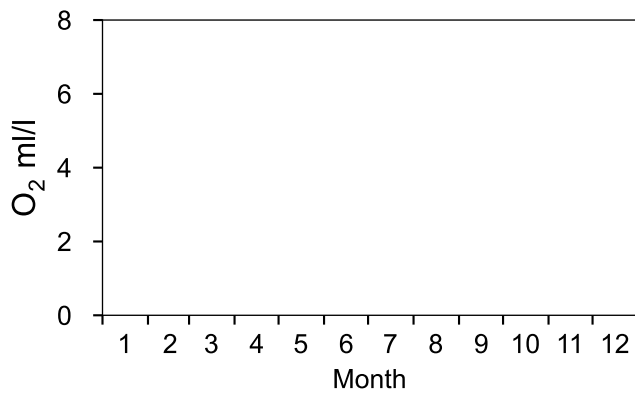
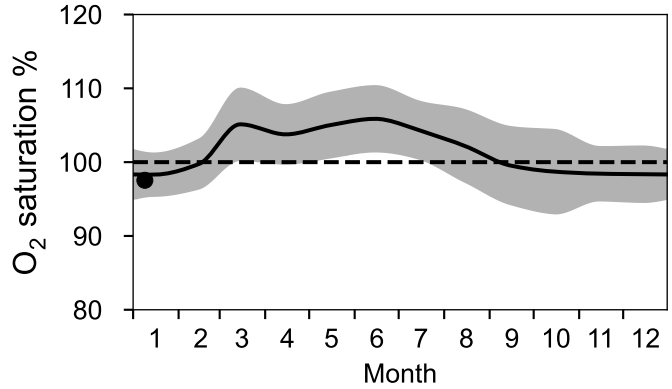
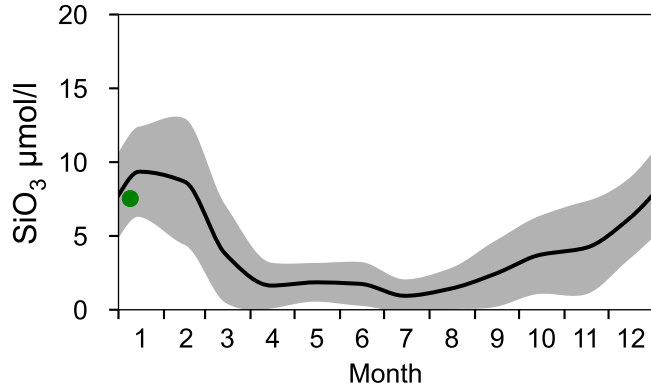
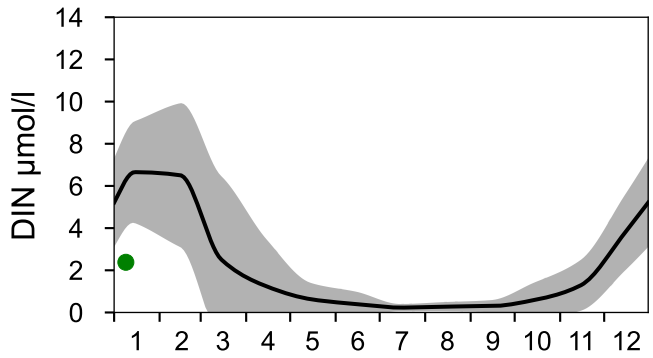
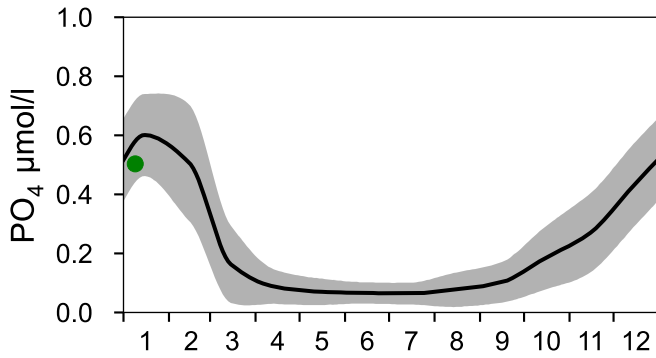
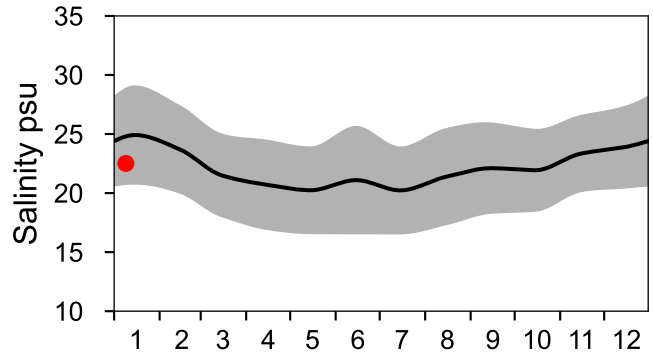
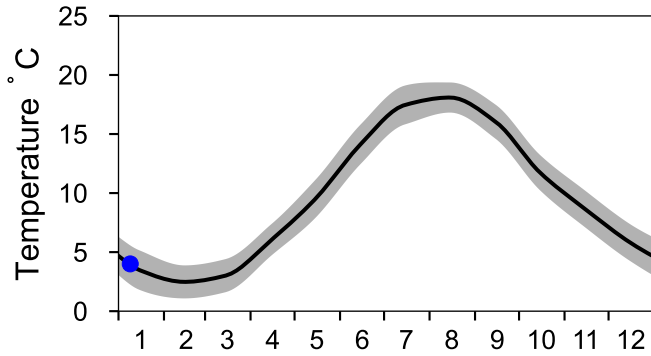


STATION ST MIDDELGRUND SURFACE WATER (0-10 m)

Annual Cycles

Statistics based on data from: Kattegatt

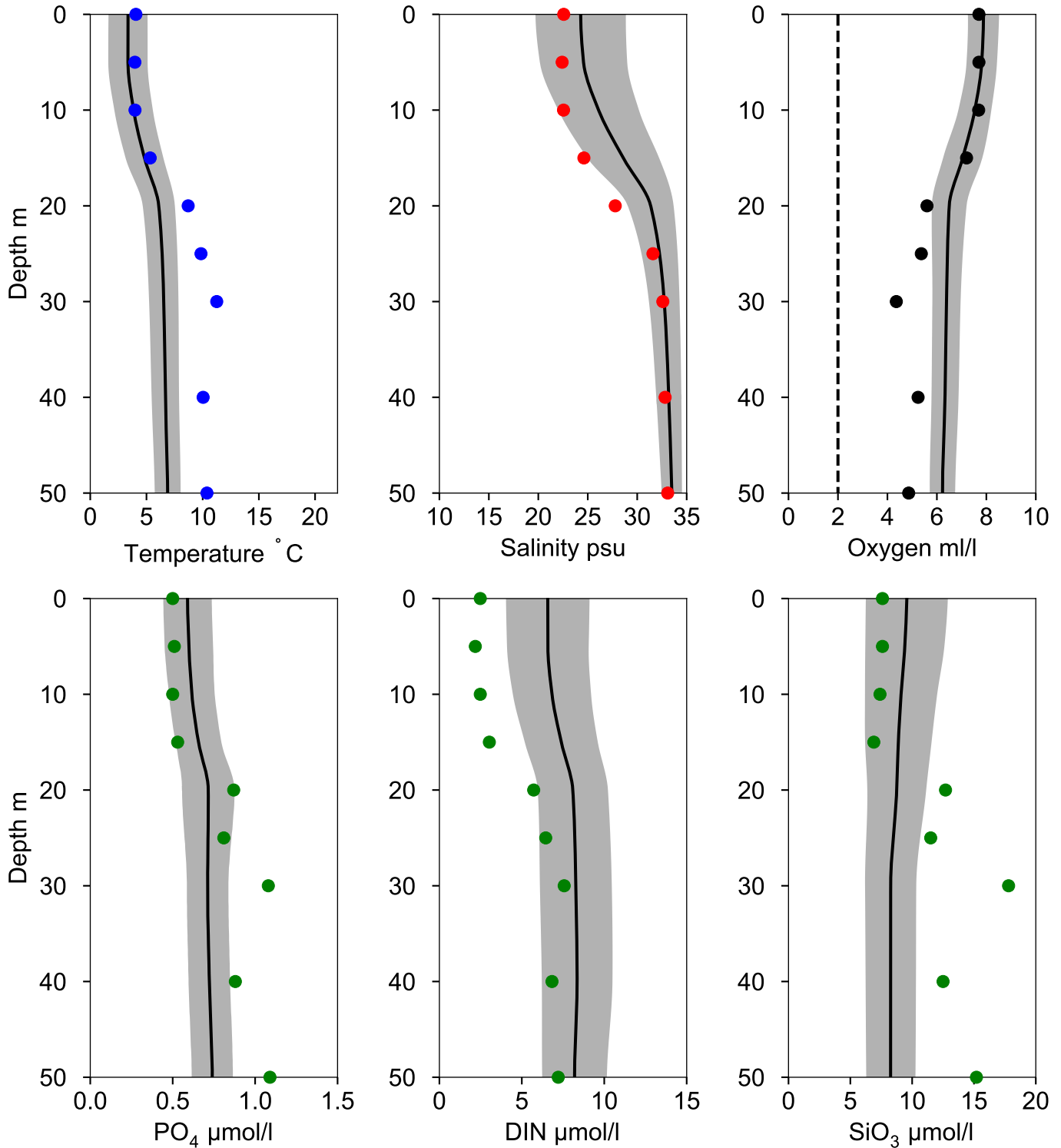
— Mean 1991-2020 St.Dev. ● 2026



Vertical profiles ST MIDDELGRUND January

Statistics based on data from: Kattegatt

— Mean 1991-2020 St.Dev. ● 2026-01-09

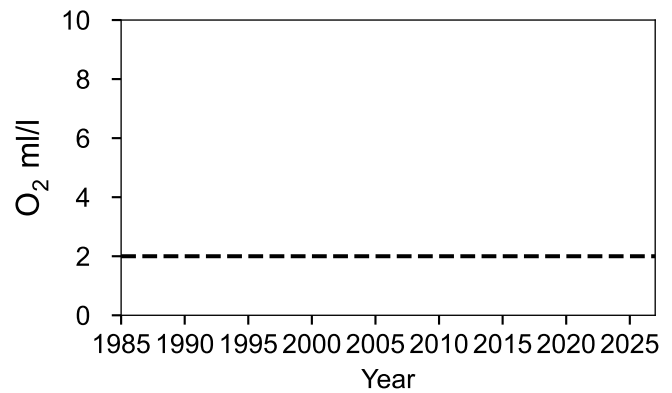
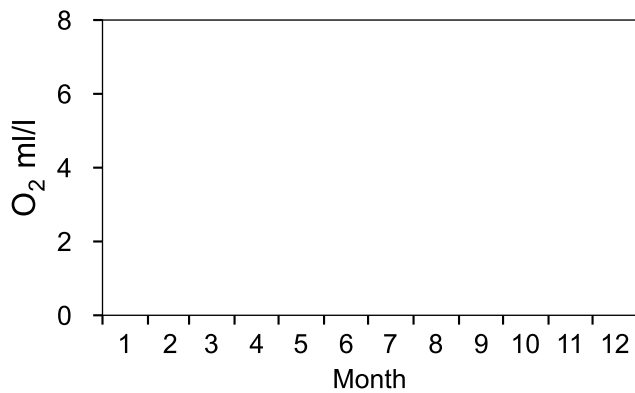
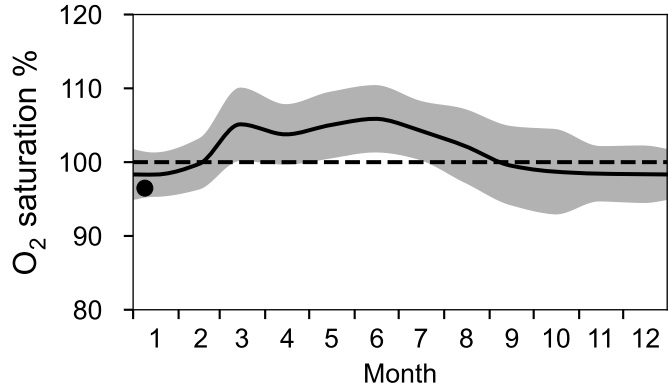
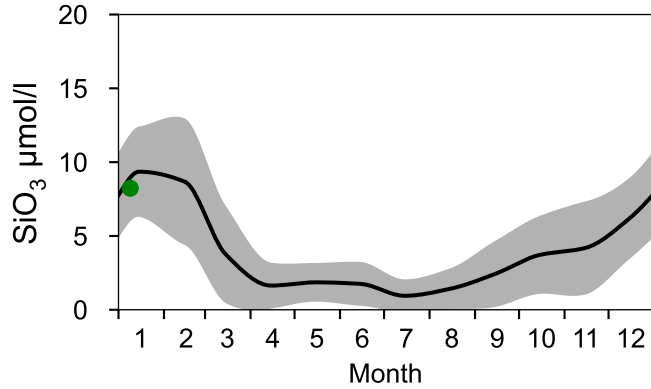
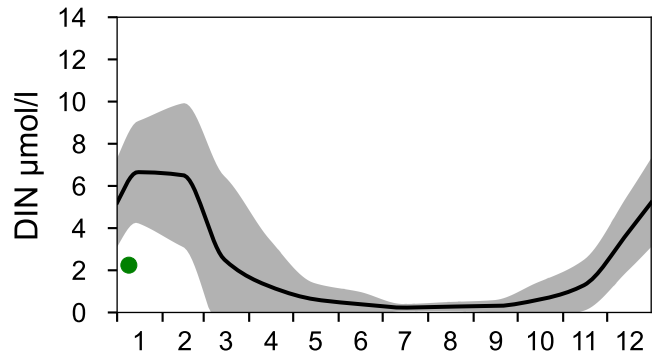
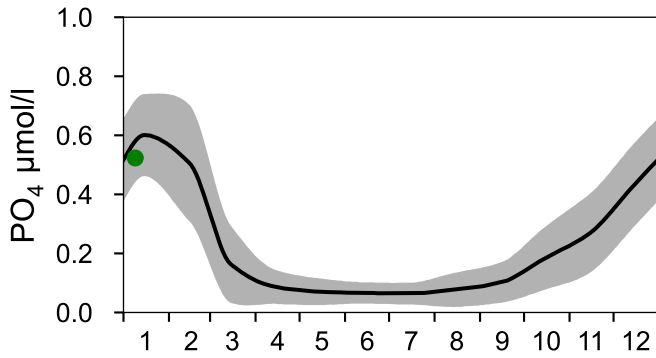
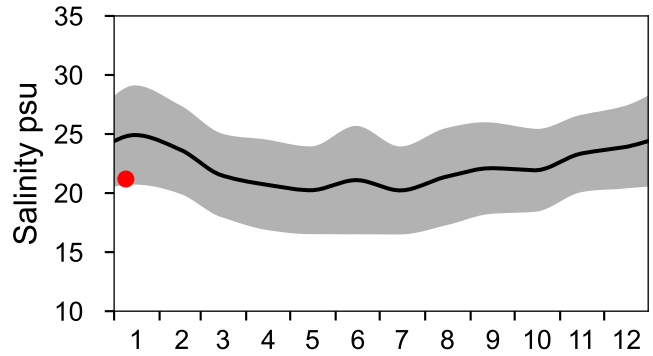
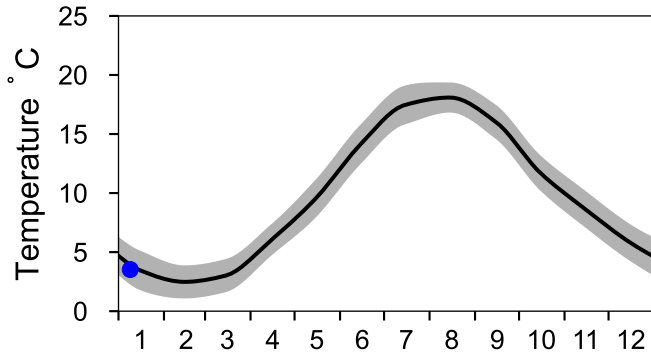


STATION LAHOLM-3 (YG) SURFACE WATER (0-10 m)

Annual Cycles

Statistics based on data from: Kattegatt

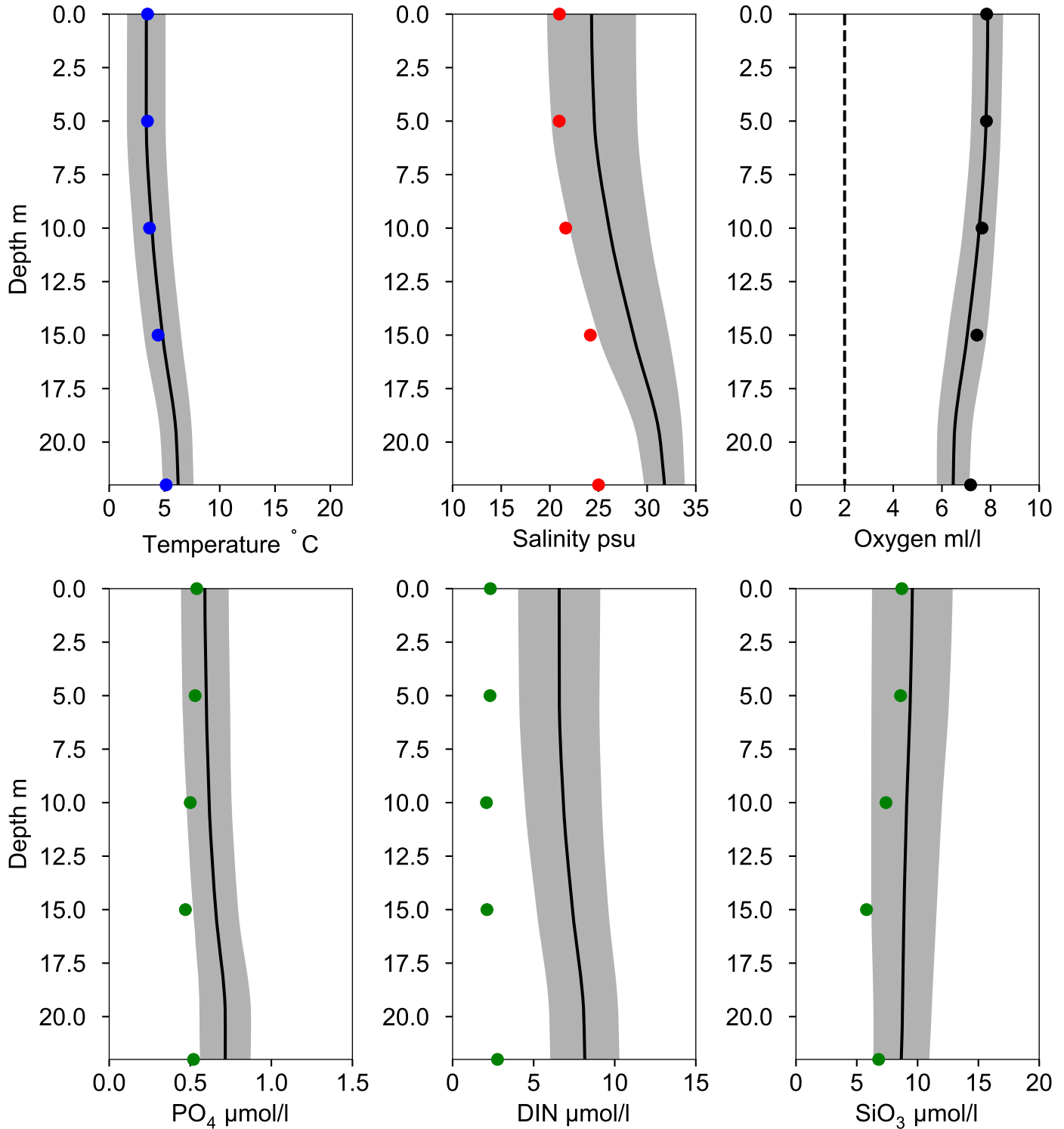
— Mean 1991-2020 St.Dev. ● 2026



Vertical profiles LAHOLM-3 (YG) January

Statistics based on data from: Kattegatt

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

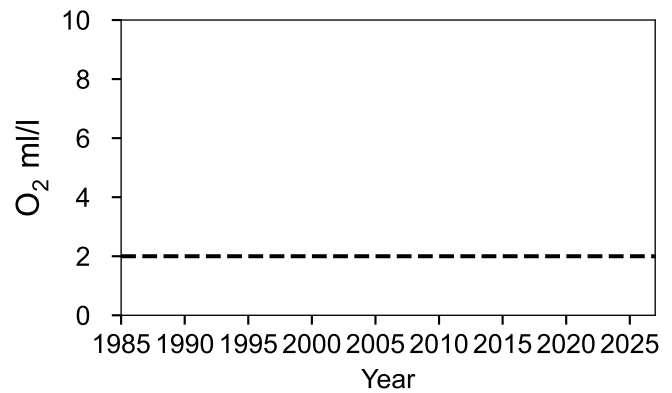
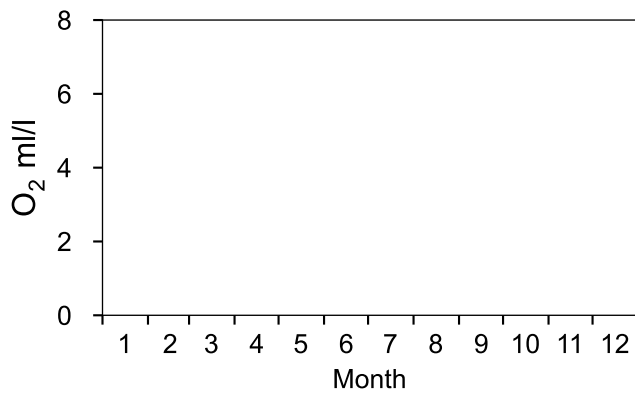
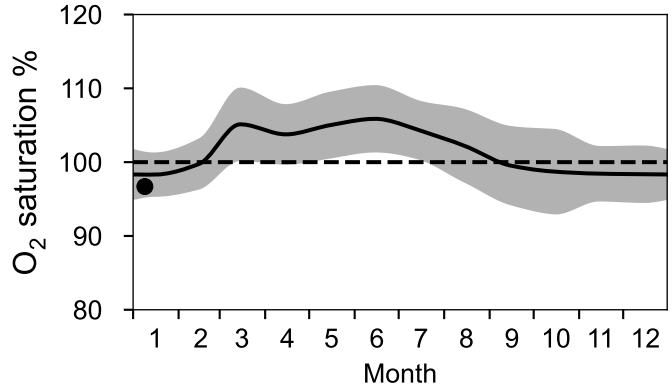
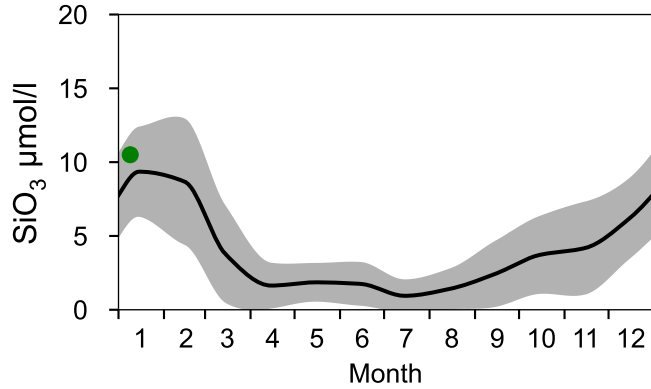
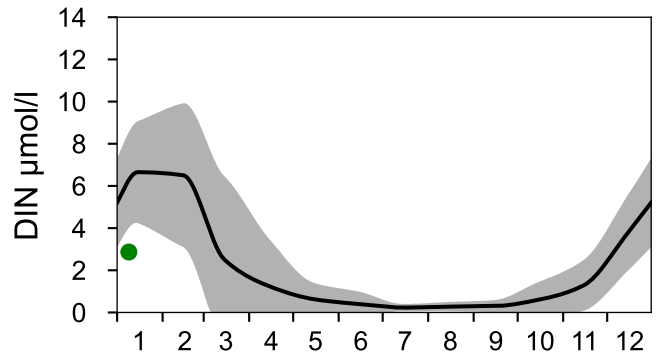
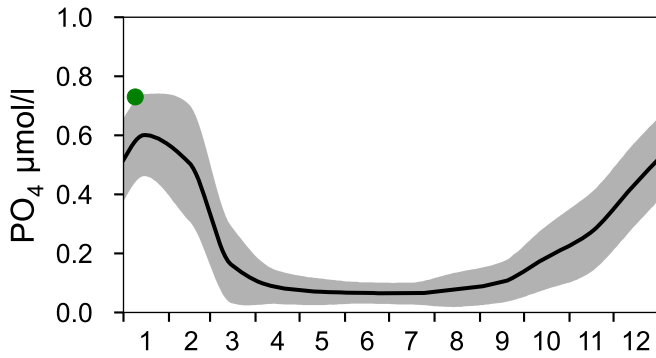
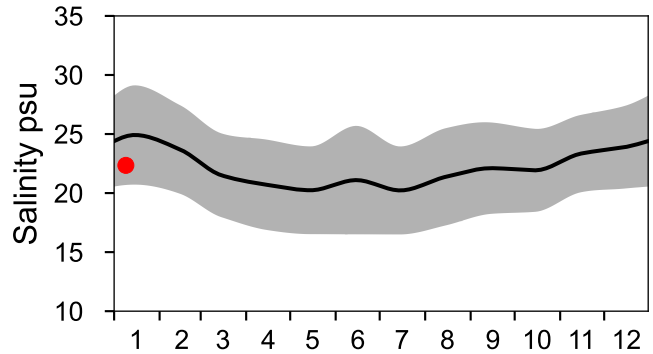
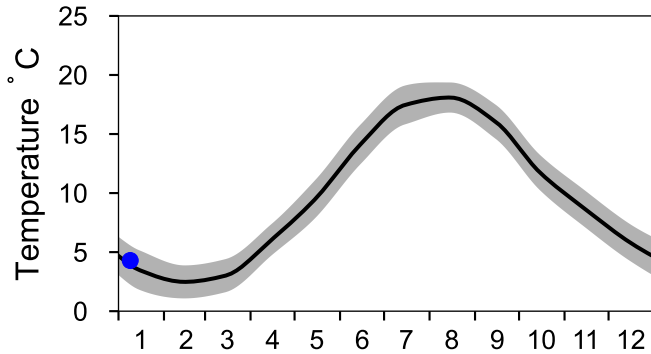


STATION 925 KATTEGAT SW SURFACE WATER (0-10 m)

Annual Cycles

Statistics based on data from: Kattegatt

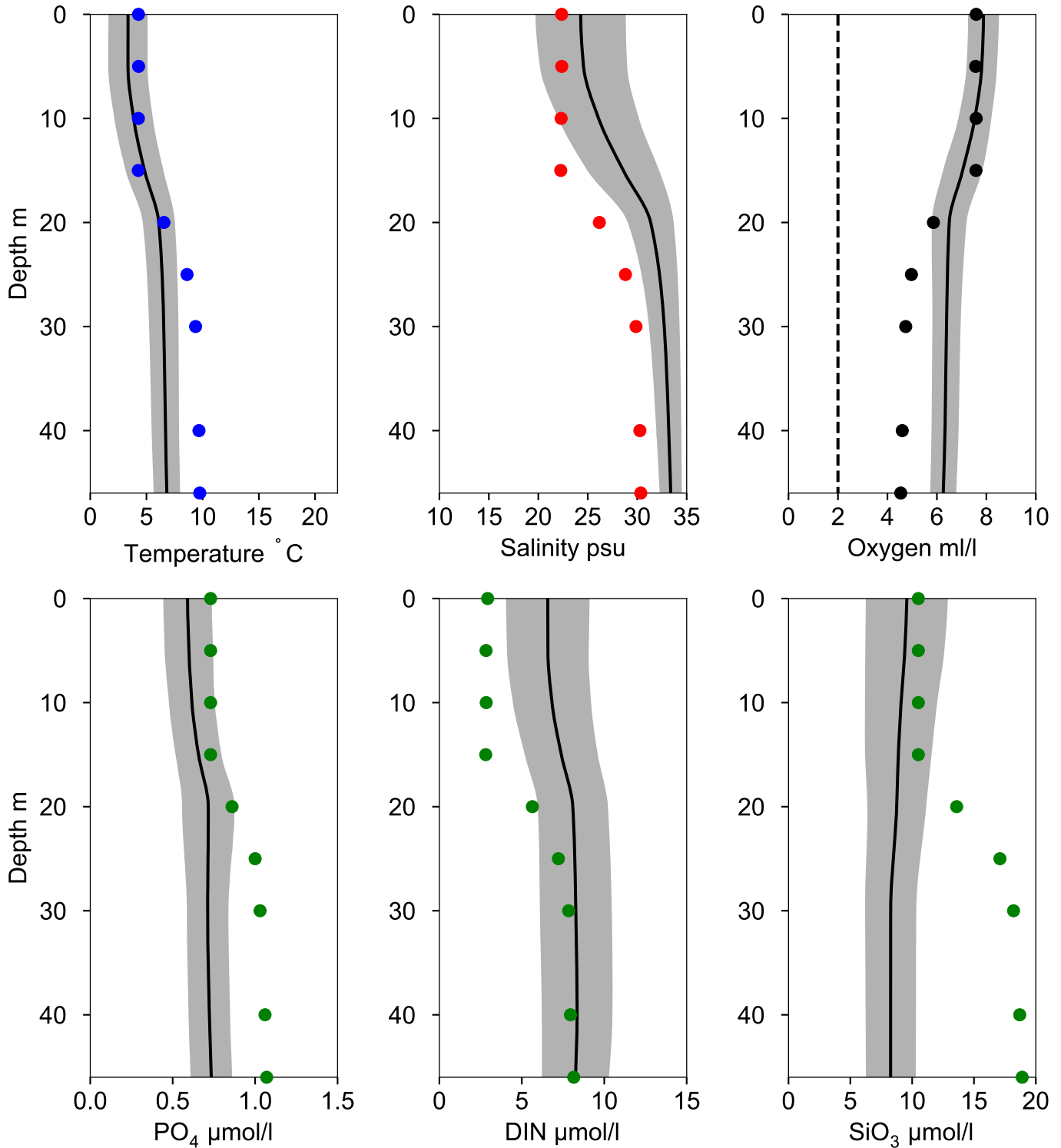
— Mean 1991-2020 St.Dev. ● 2026



Vertical profiles 925 KATTEGAT SW January

Statistics based on data from: Kattegatt

— Mean 1991-2020 St.Dev. ● 2026-01-09

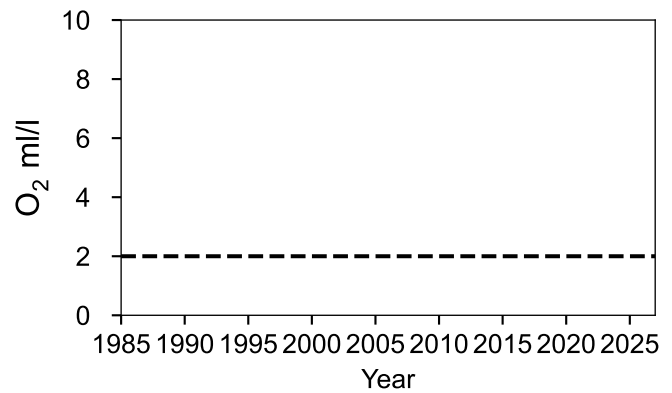
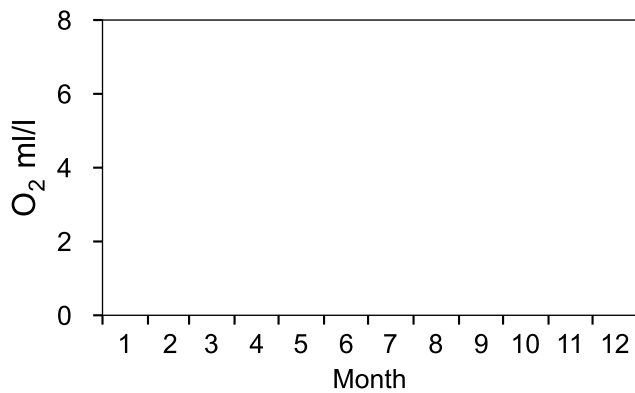
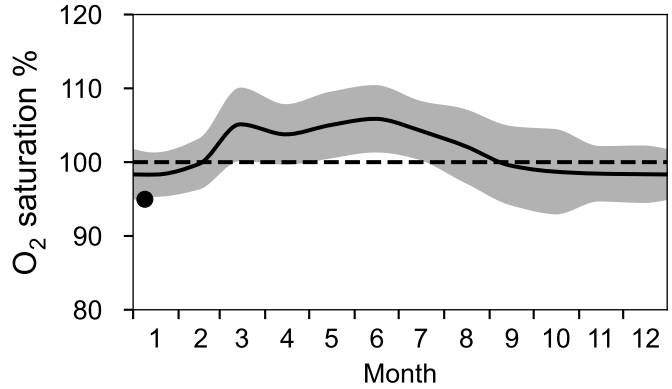
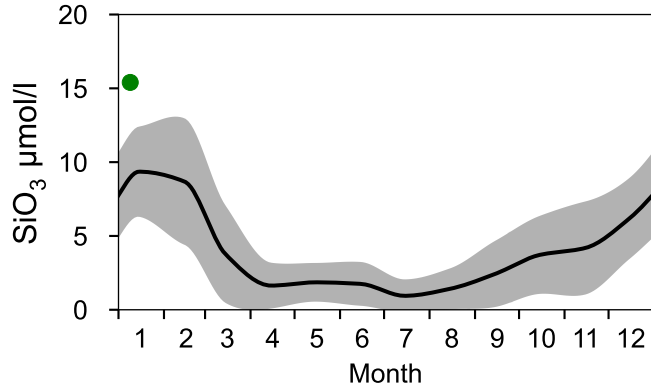
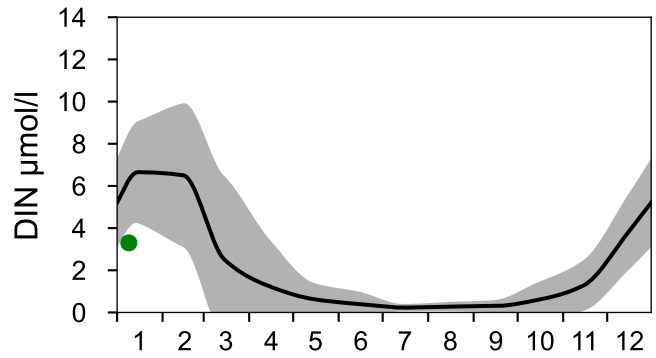
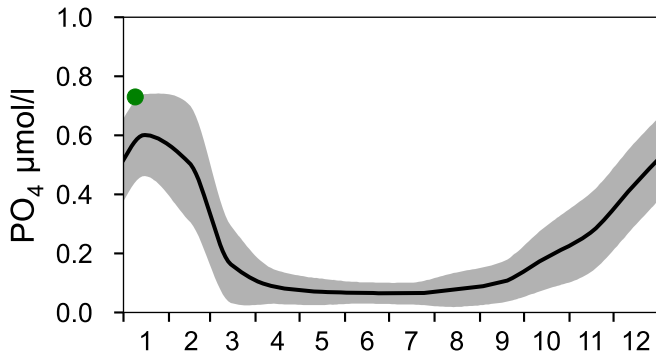
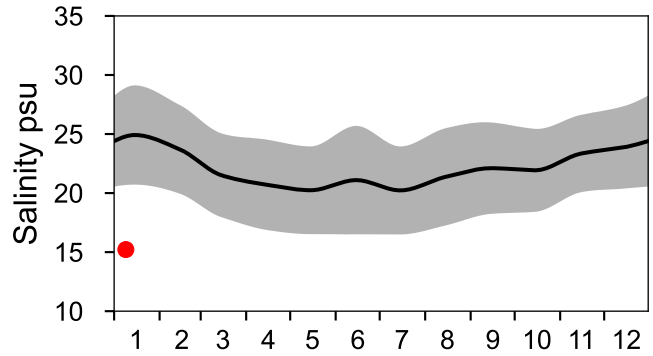
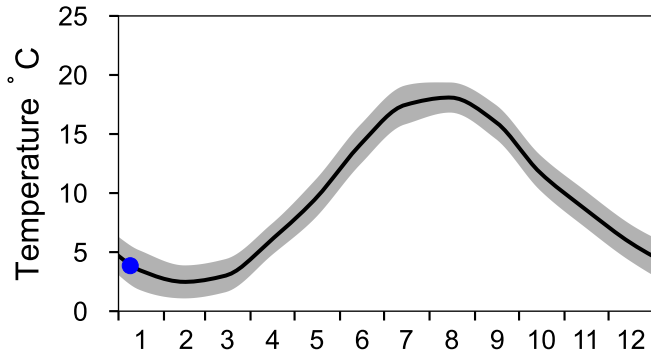


STATION KULLEN SURFACE WATER (0-10 m)

Annual Cycles

Statistics based on data from: Kattegatt

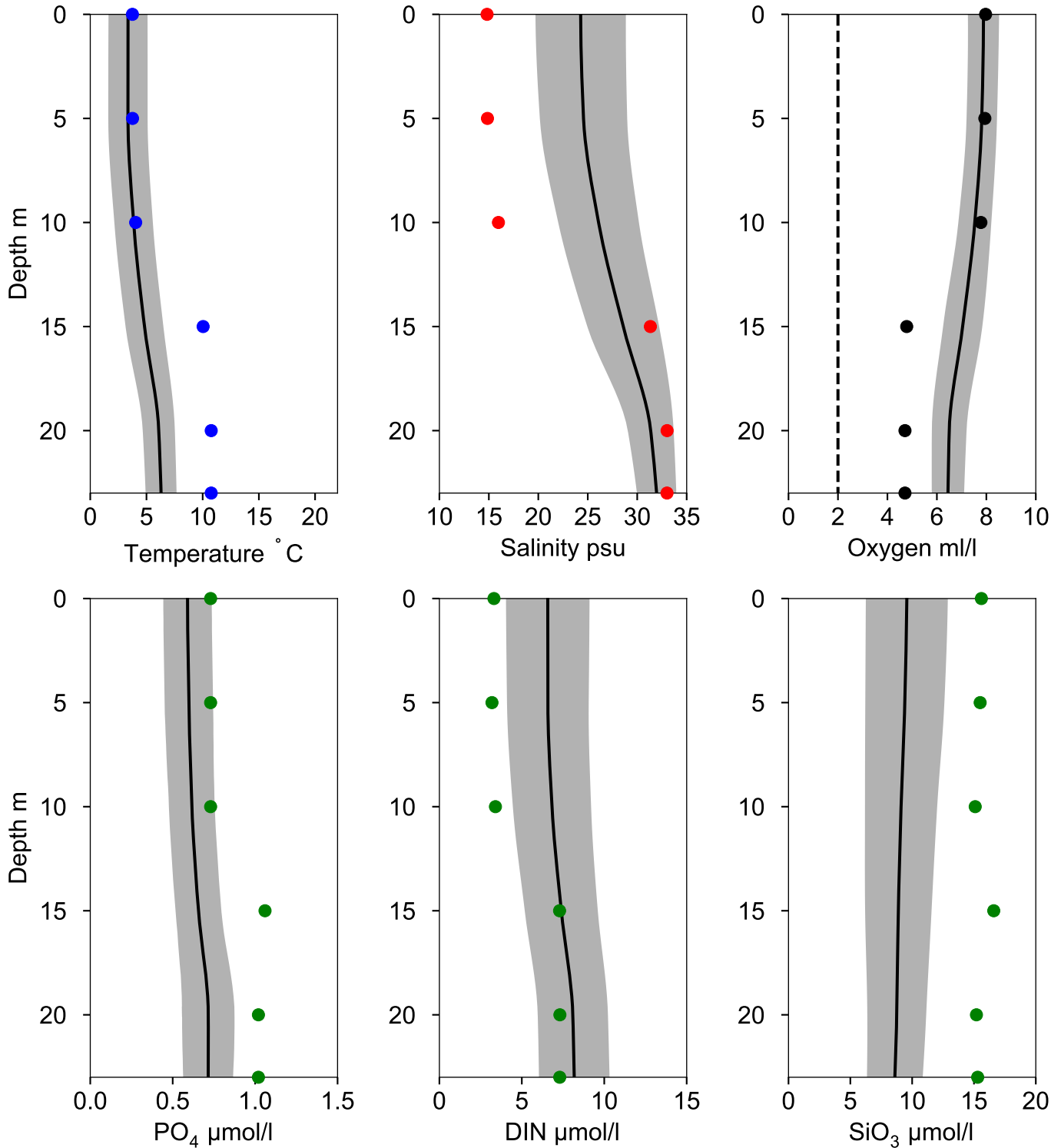
— Mean 1991-2020 St.Dev. ● 2026



Vertical profiles KULLEN January

Statistics based on data from: Kattegatt

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

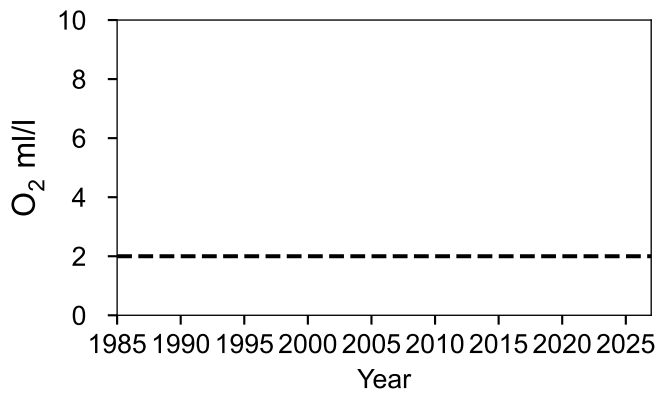
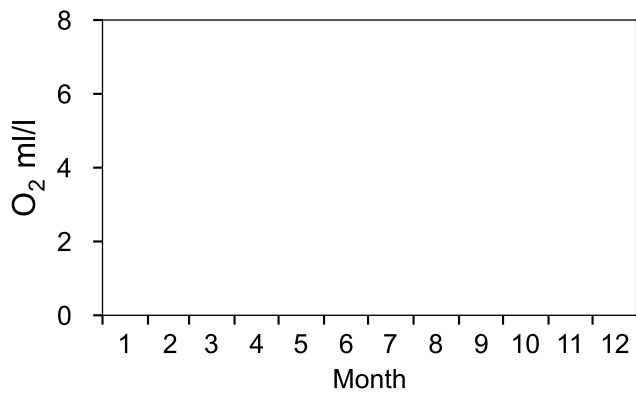
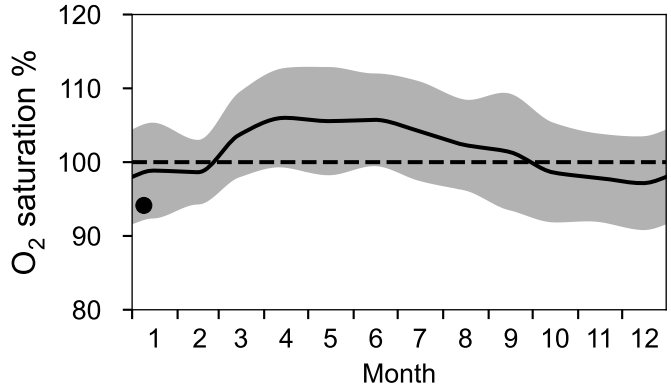
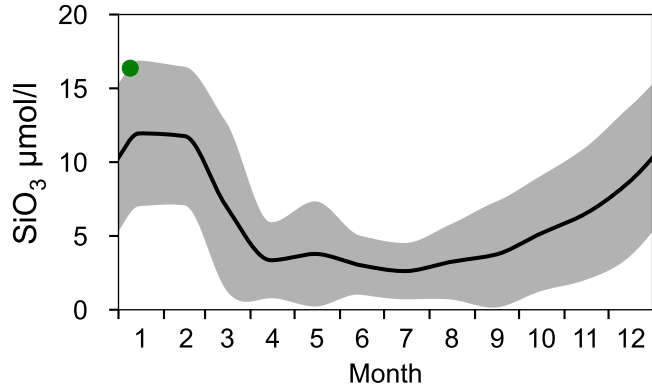
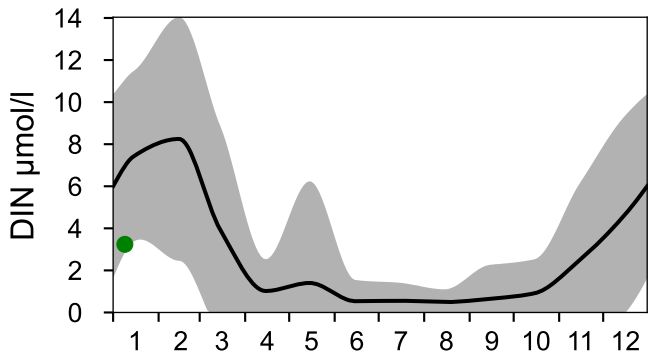
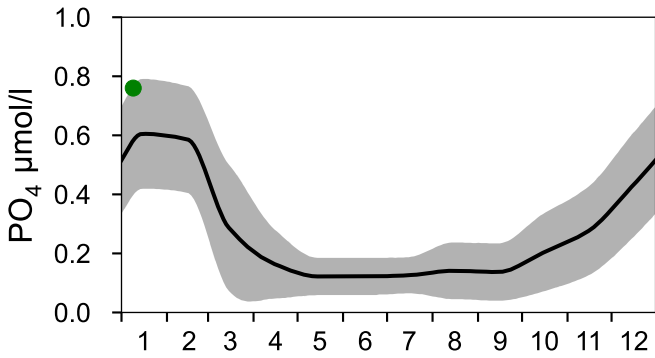
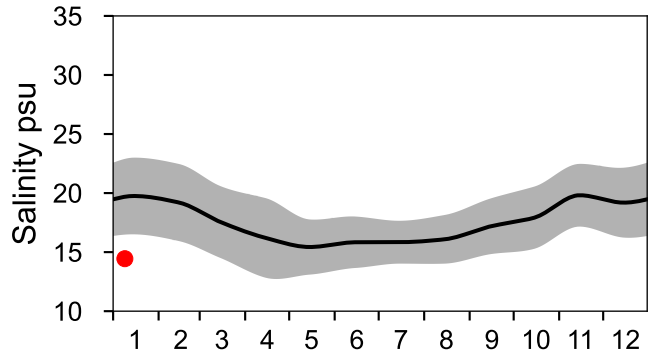
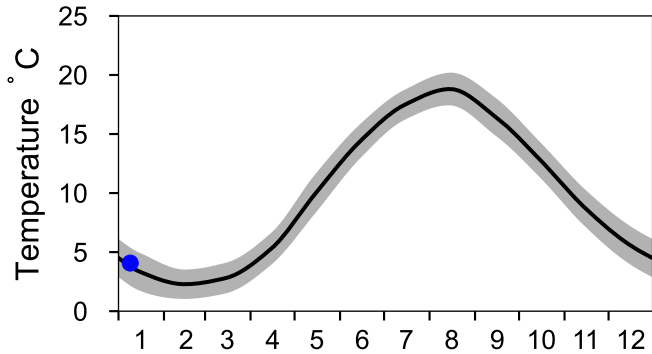


STATION ÖRESUND-12X SURFACE WATER (0-10 m)

Annual Cycles

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

— Mean 1991-2020 St.Dev. ● 2026



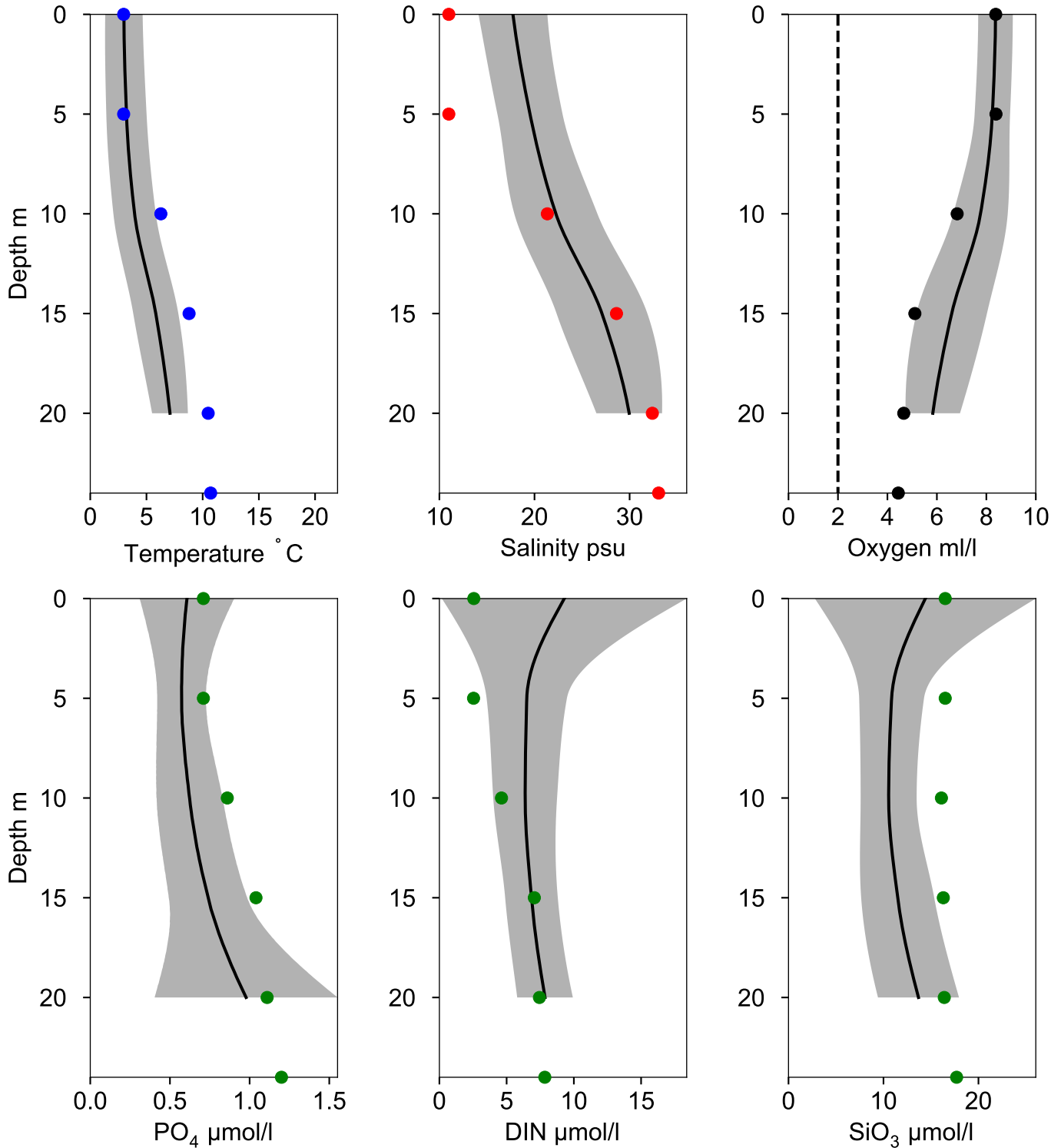
Vertical profiles ÖRESUND-12X January

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

— Mean 1991-2020

■ St.Dev.

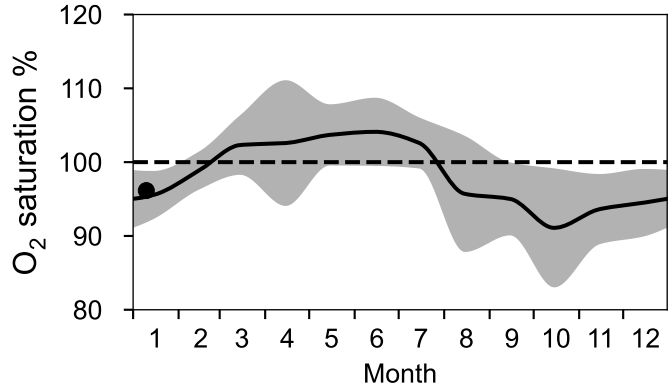
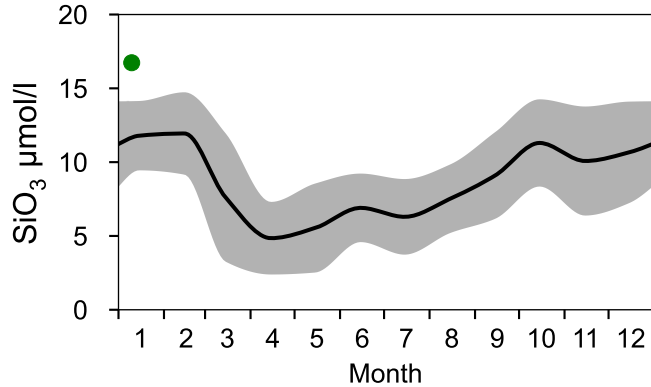
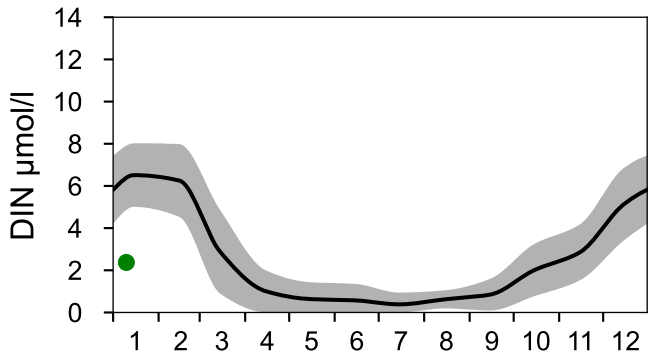
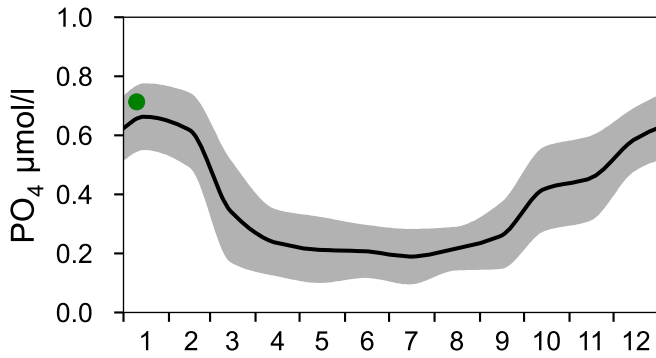
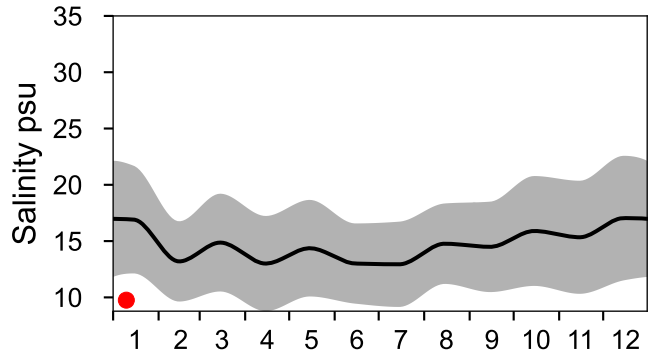
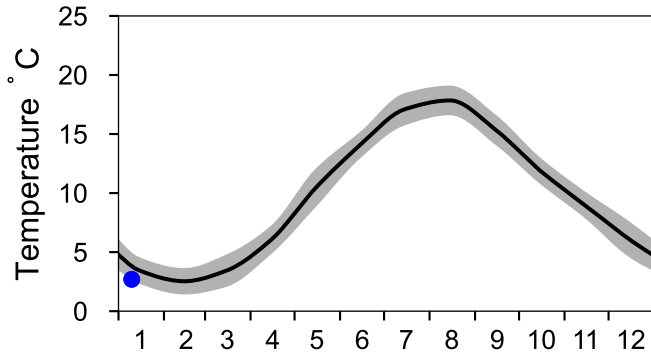
● 2026-01-09



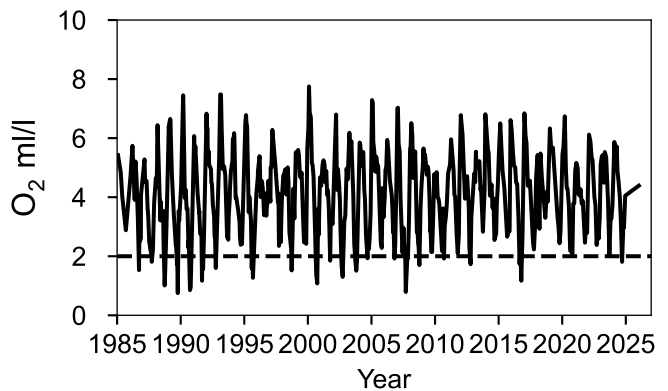
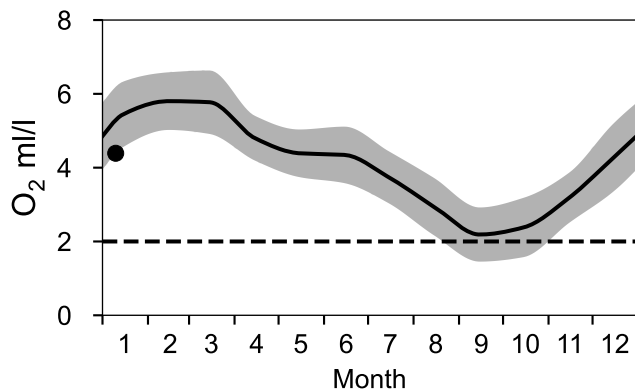
STATION W LANDSKRONA SURFACE WATER (0-10 m)

Annual Cycles

— Mean 1991-2020 St.Dev. ● 2026

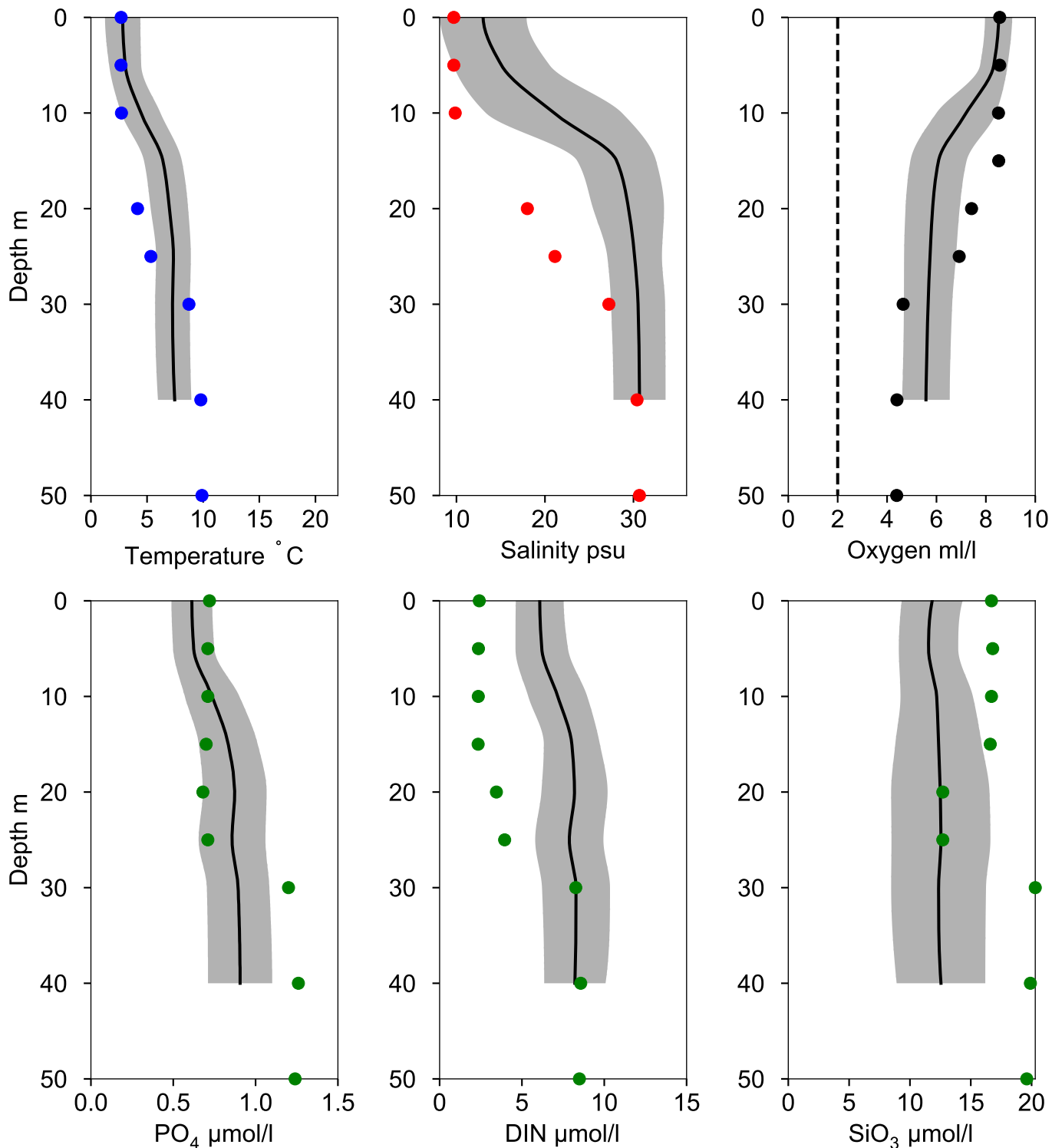


OXYGEN IN BOTTOM WATER (depth >= 40 m)



Vertical profiles W LANDSKRONA January

— Mean 1919-2020 St.Dev. ● 2026-01-10

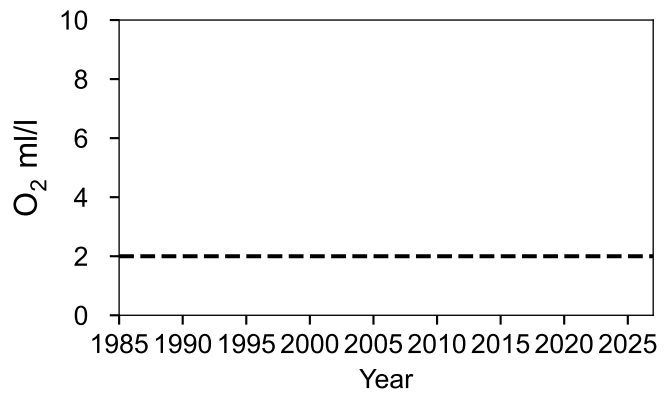
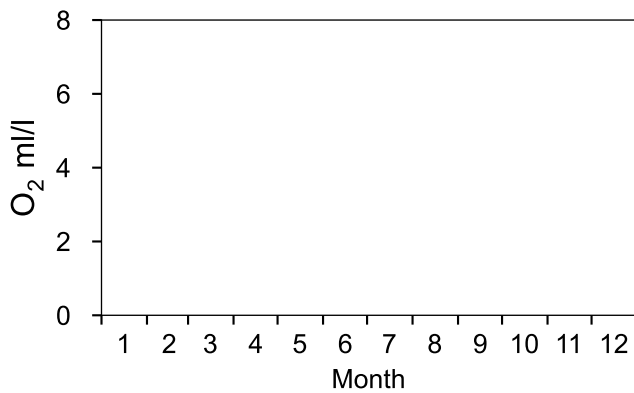
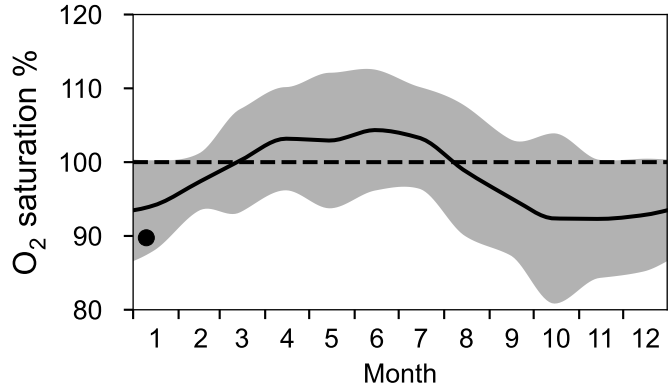
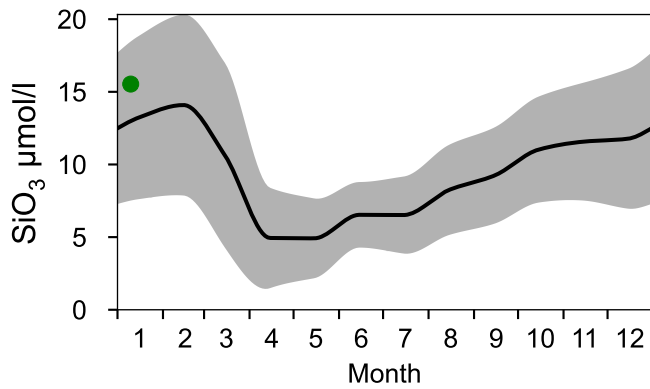
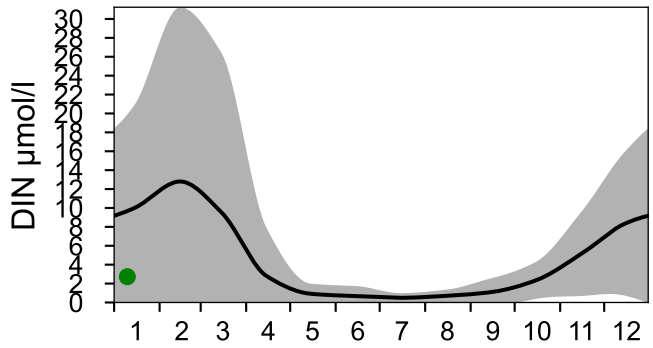
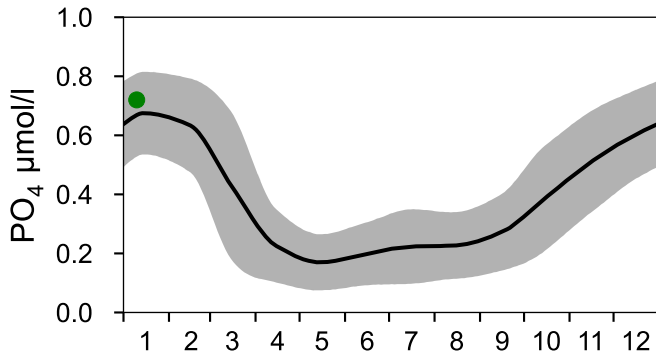
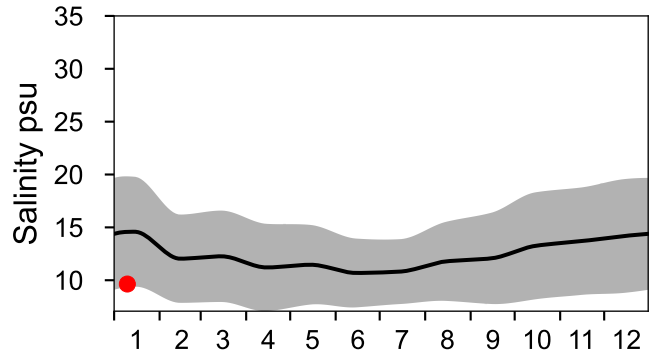
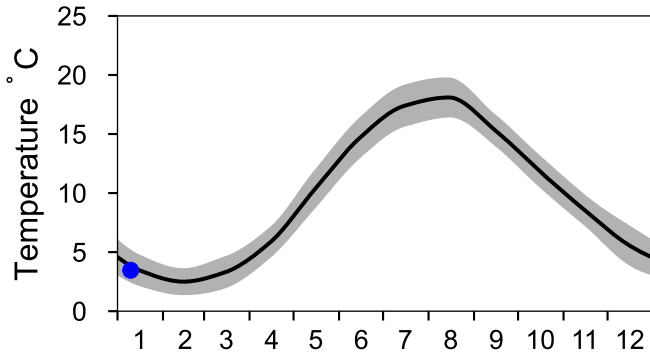


STATION ÖRESUND-7 SURFACE WATER (0-10 m)

Annual Cycles

Statistics based on data from: Öresund

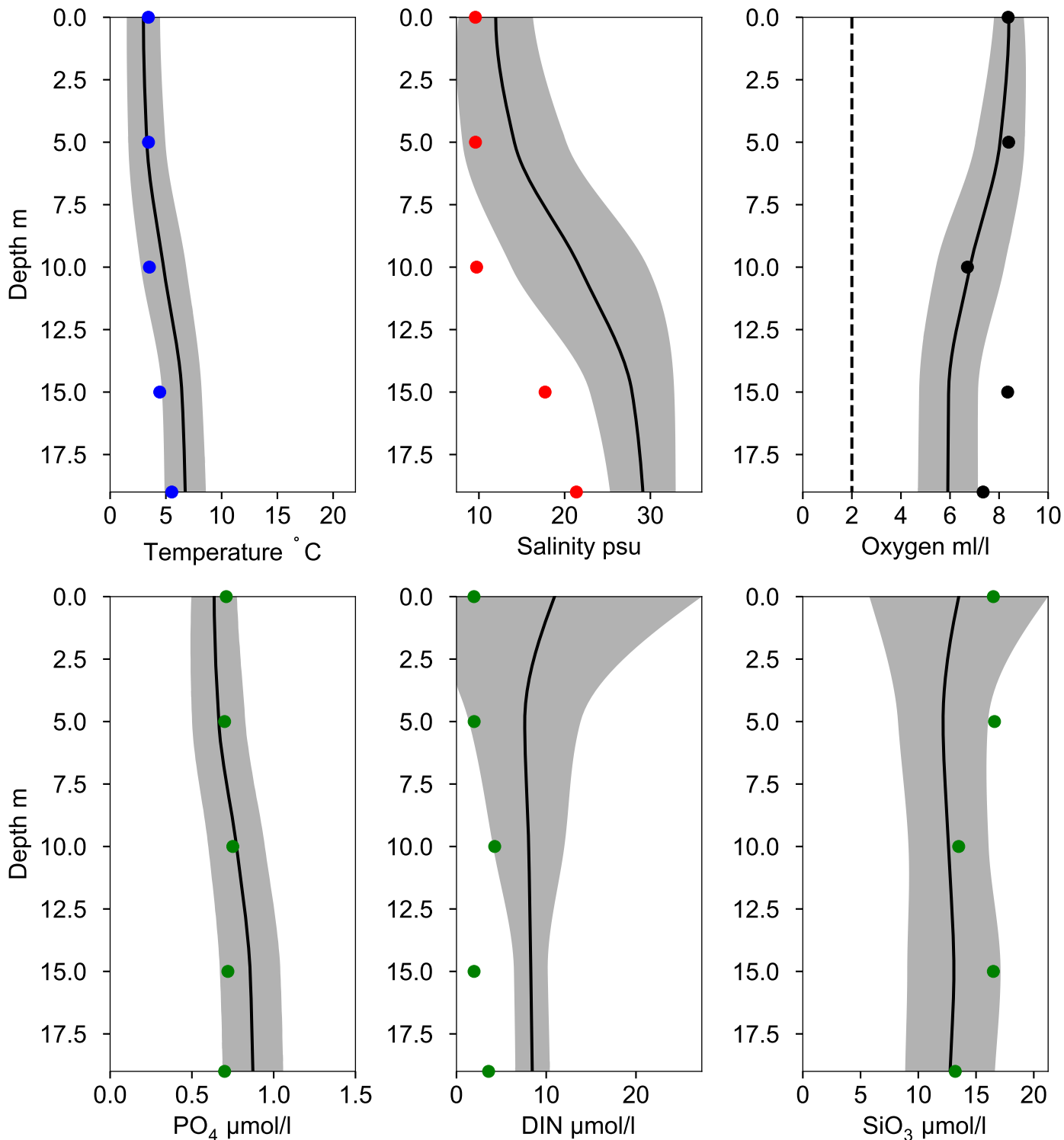
— Mean 1991-2020 St.Dev. ● 2026



Vertical profiles ÖRESUND-7 January

Statistics based on data from: Öresund

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

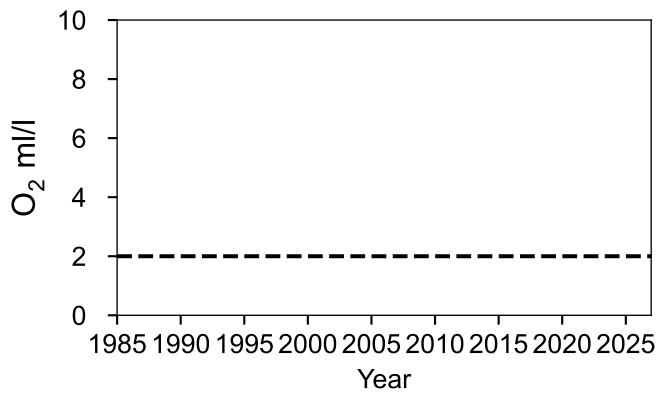
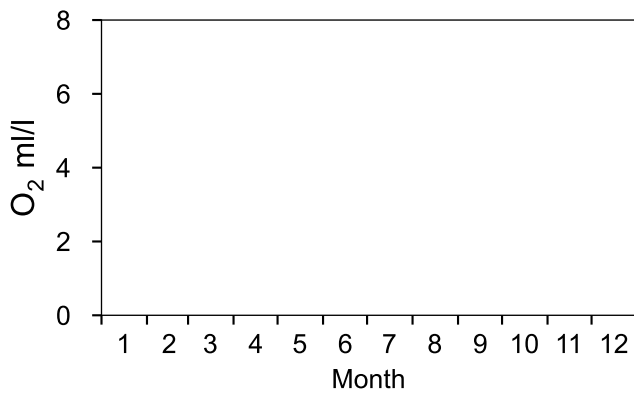
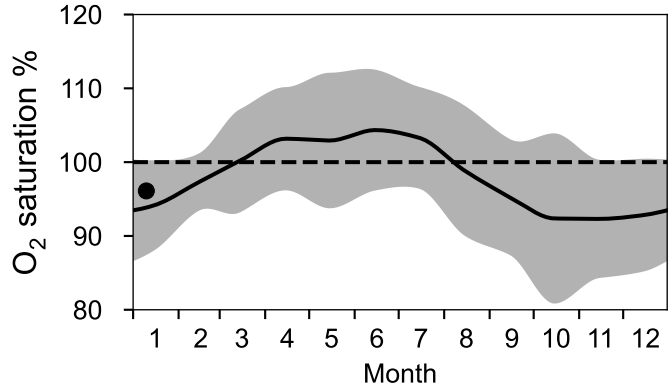
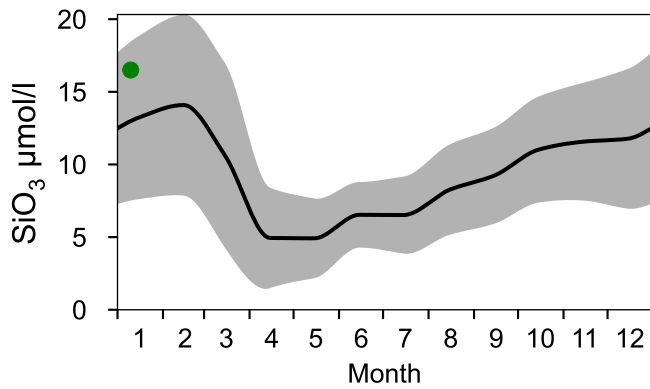
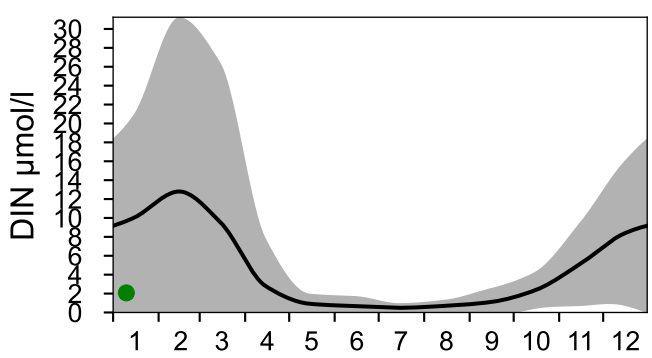
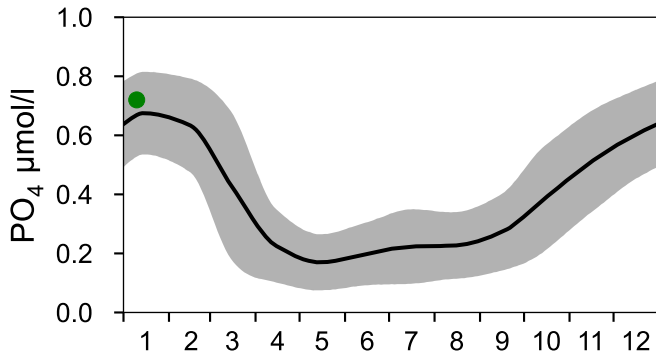
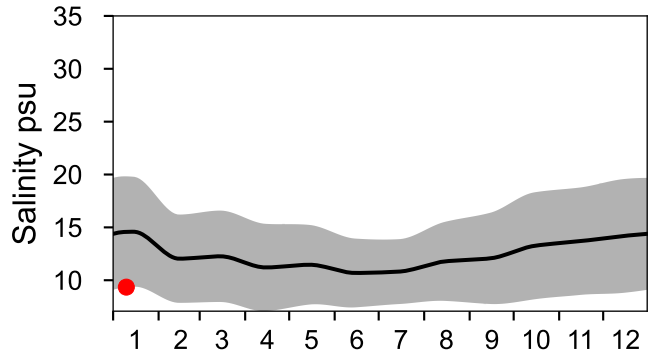
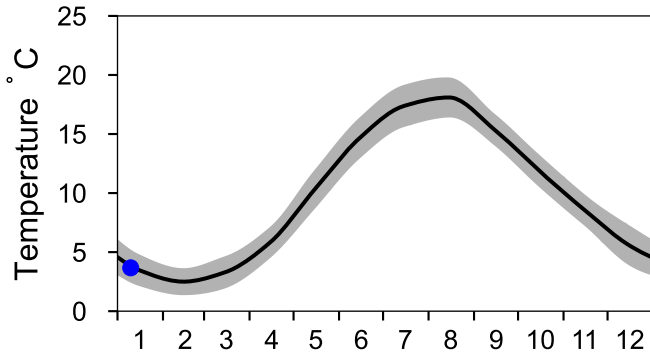


STATION ÖRESUND-4 SURFACE WATER (0-10 m)

Annual Cycles

Statistics based on data from: Öresund

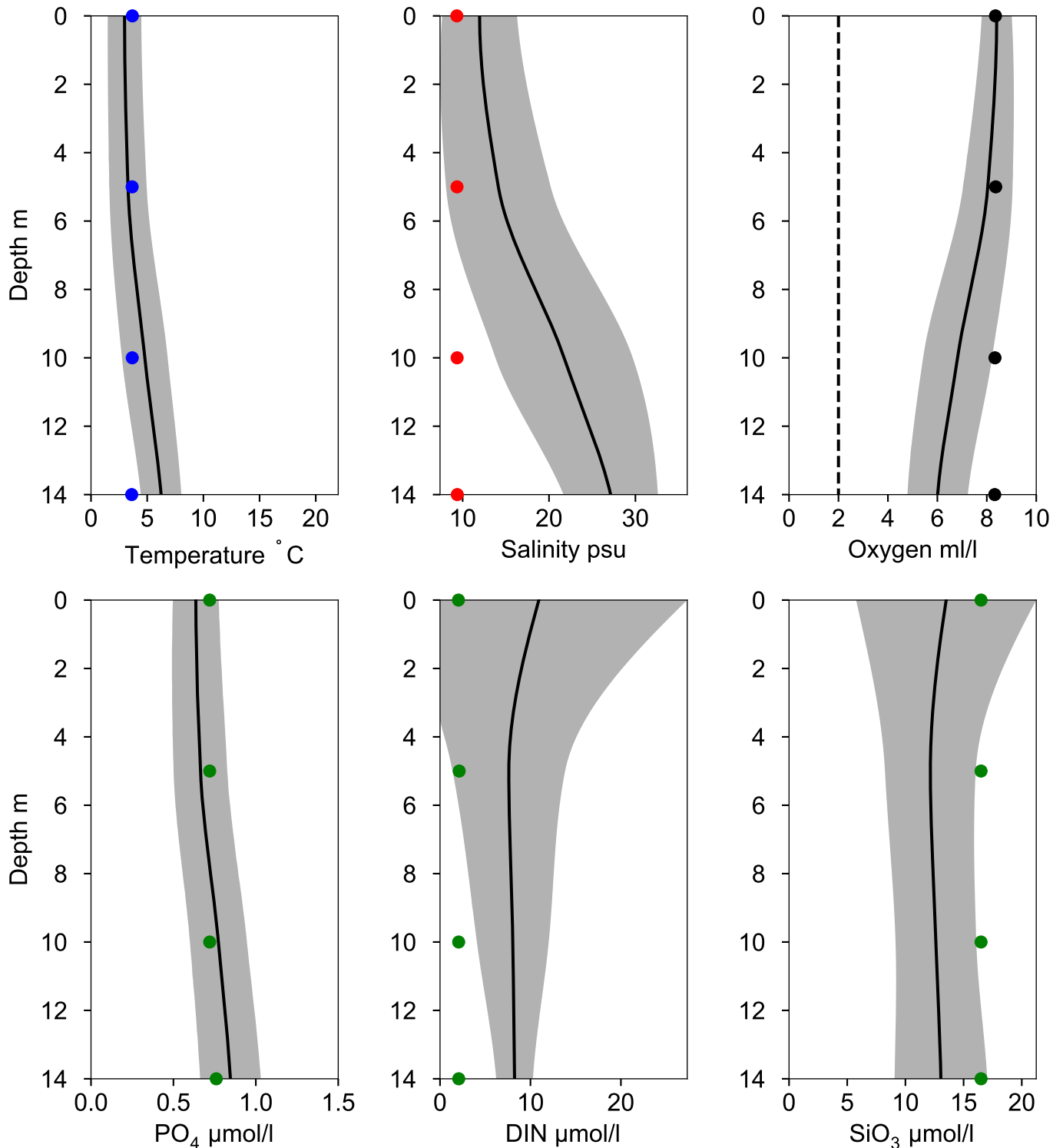
— Mean 1991-2020 St.Dev. ● 2026



Vertical profiles ÖRESUND-4 January

Statistics based on data from: Öresund

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

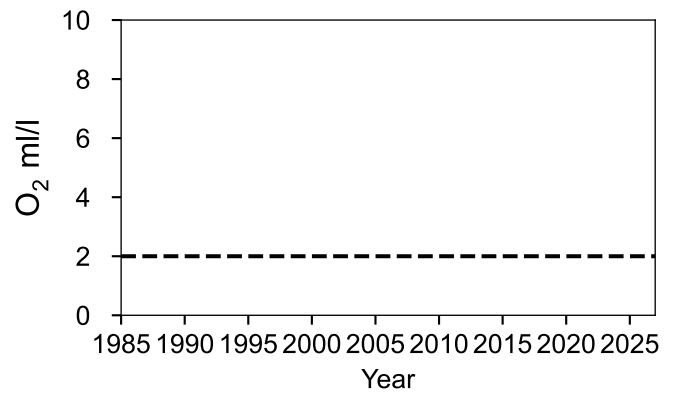
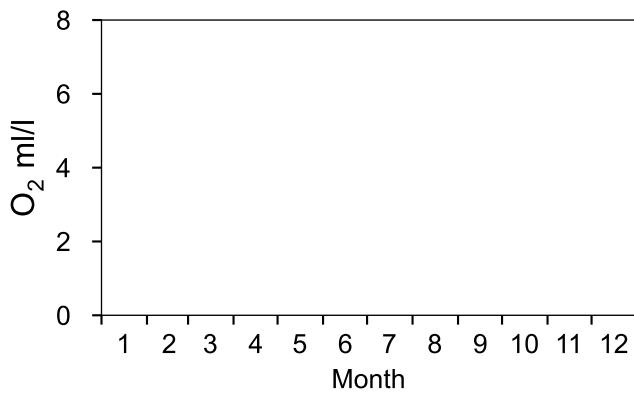
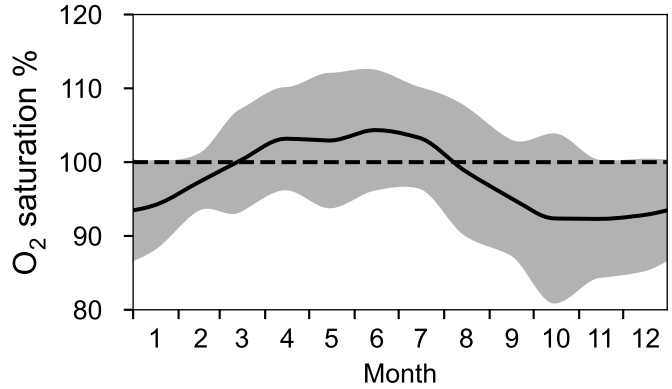
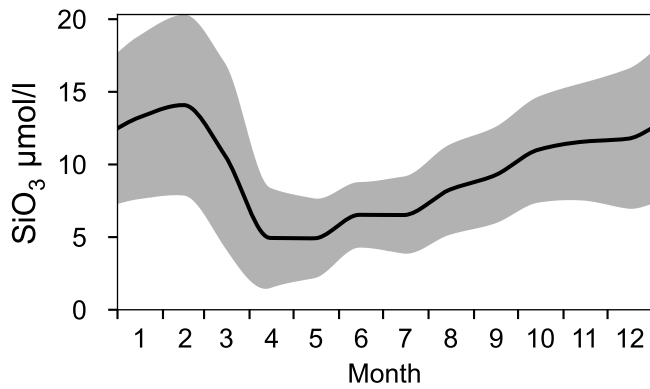
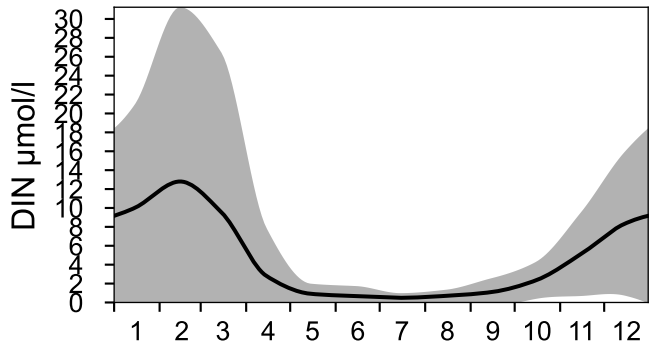
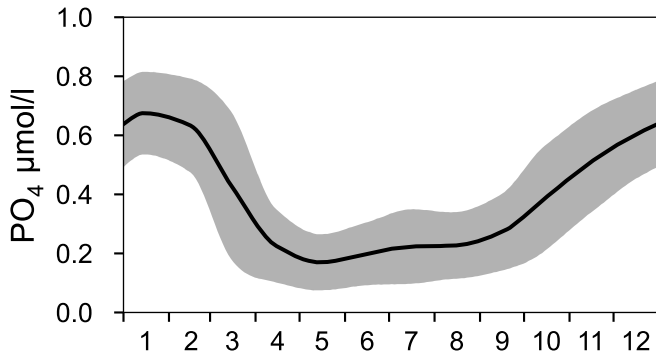
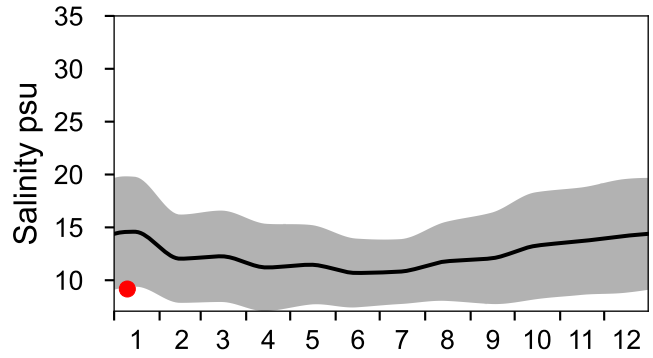
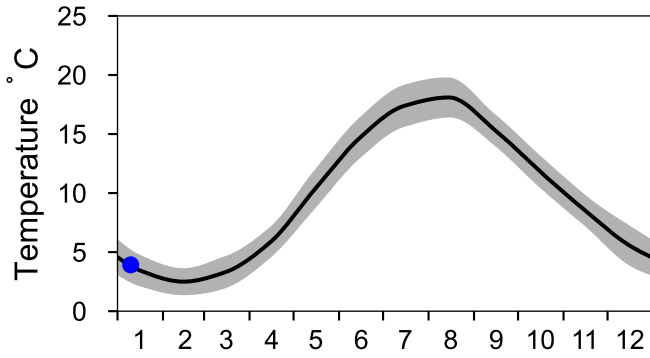


STATION FLINTEN7 SURFACE WATER (0-10 m)

Annual Cycles

Statistics based on data from: Öresund

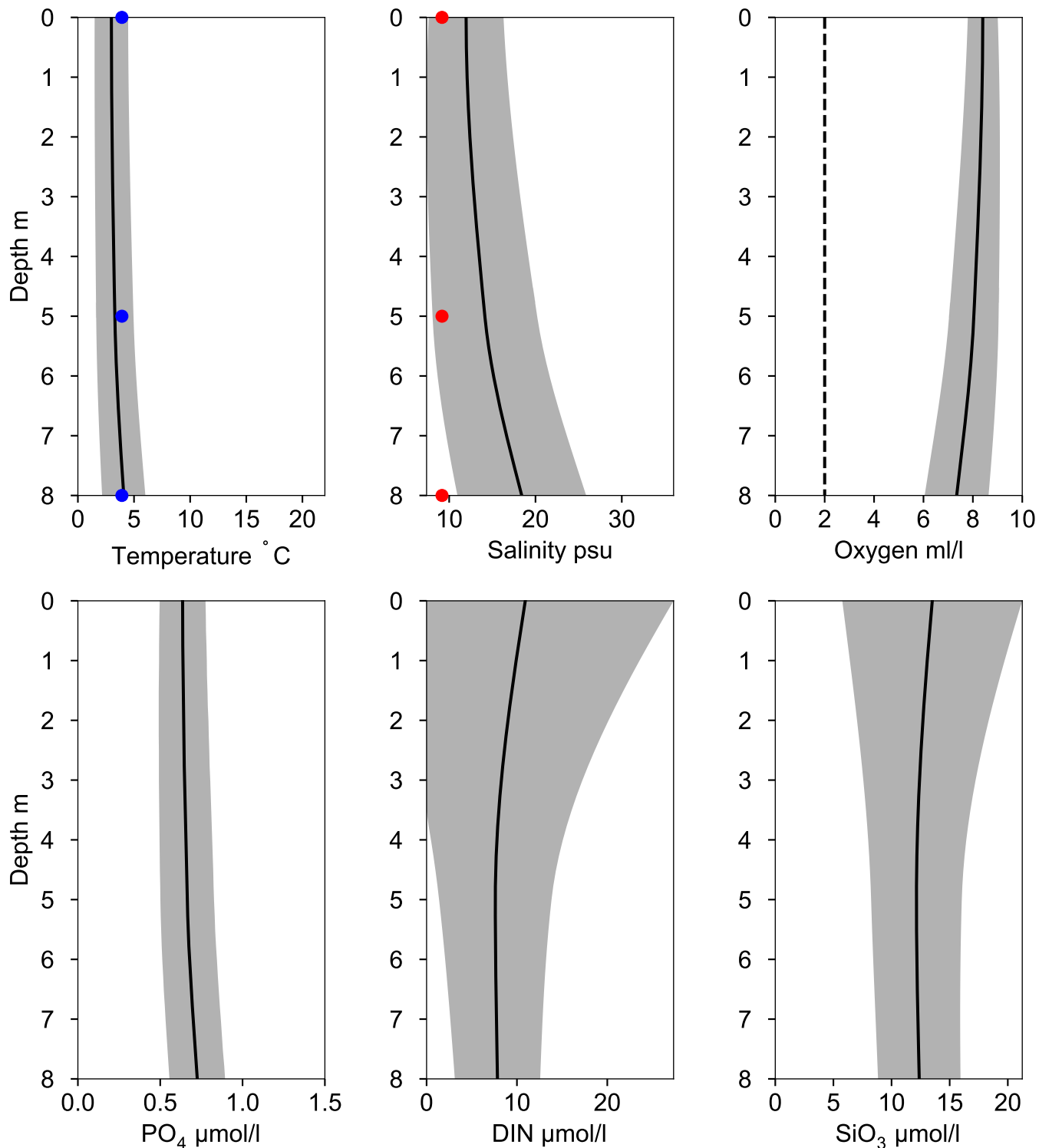
— Mean 1991-2020 ■ St.Dev. ● 2026



Vertical profiles FLINTEN7 January

Statistics based on data from: Öresund

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

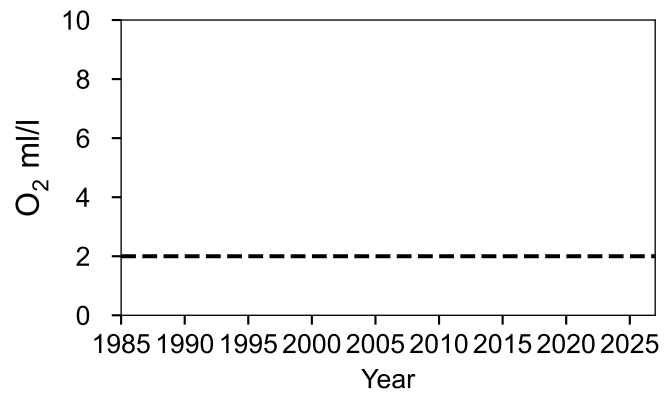
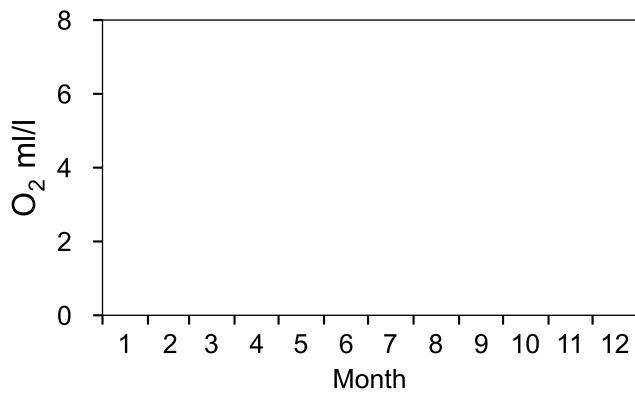
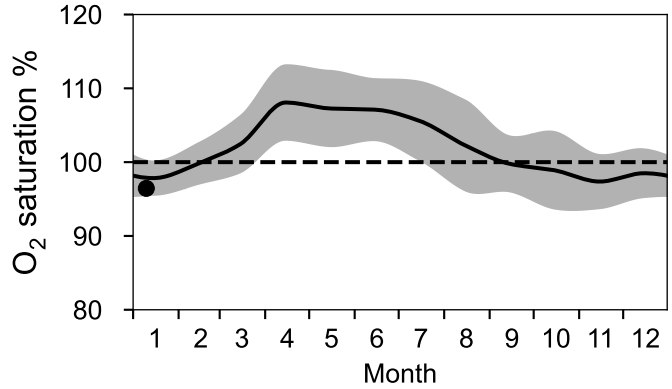
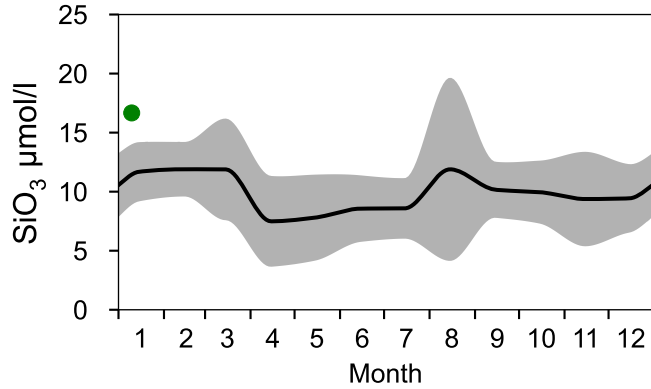
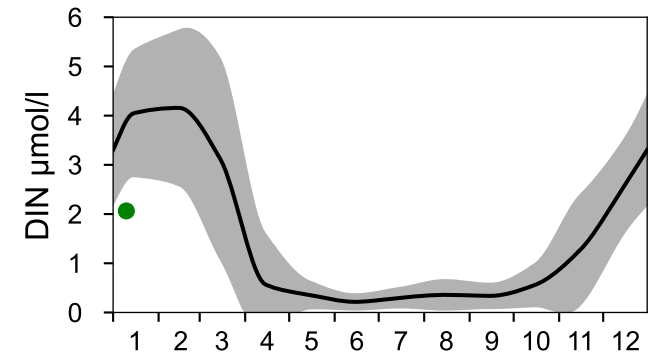
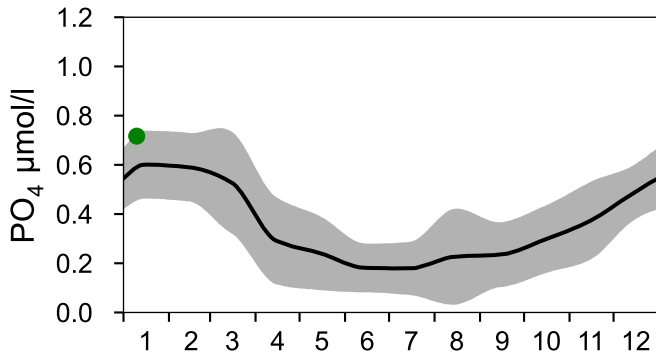
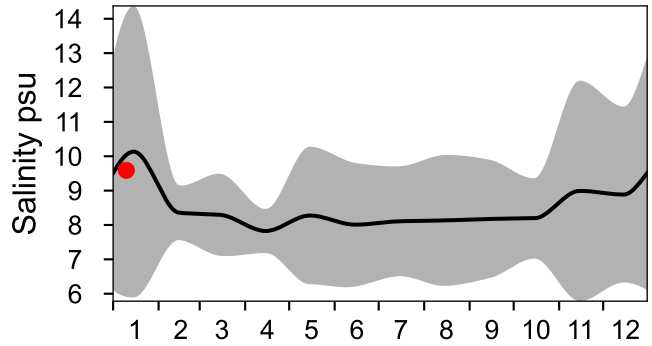
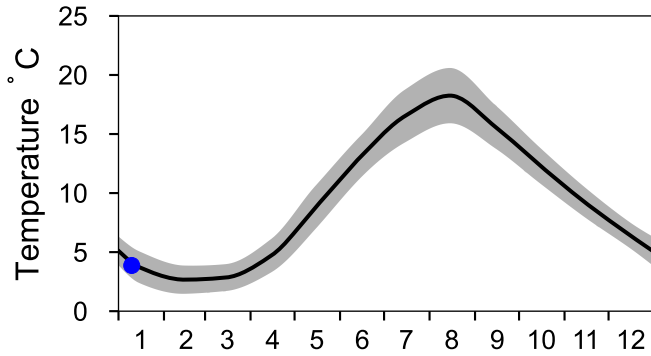


STATION ÖRESUND-2 SURFACE WATER (0-10 m)

Annual Cycles

Statistics based on data from: Arkonahavet

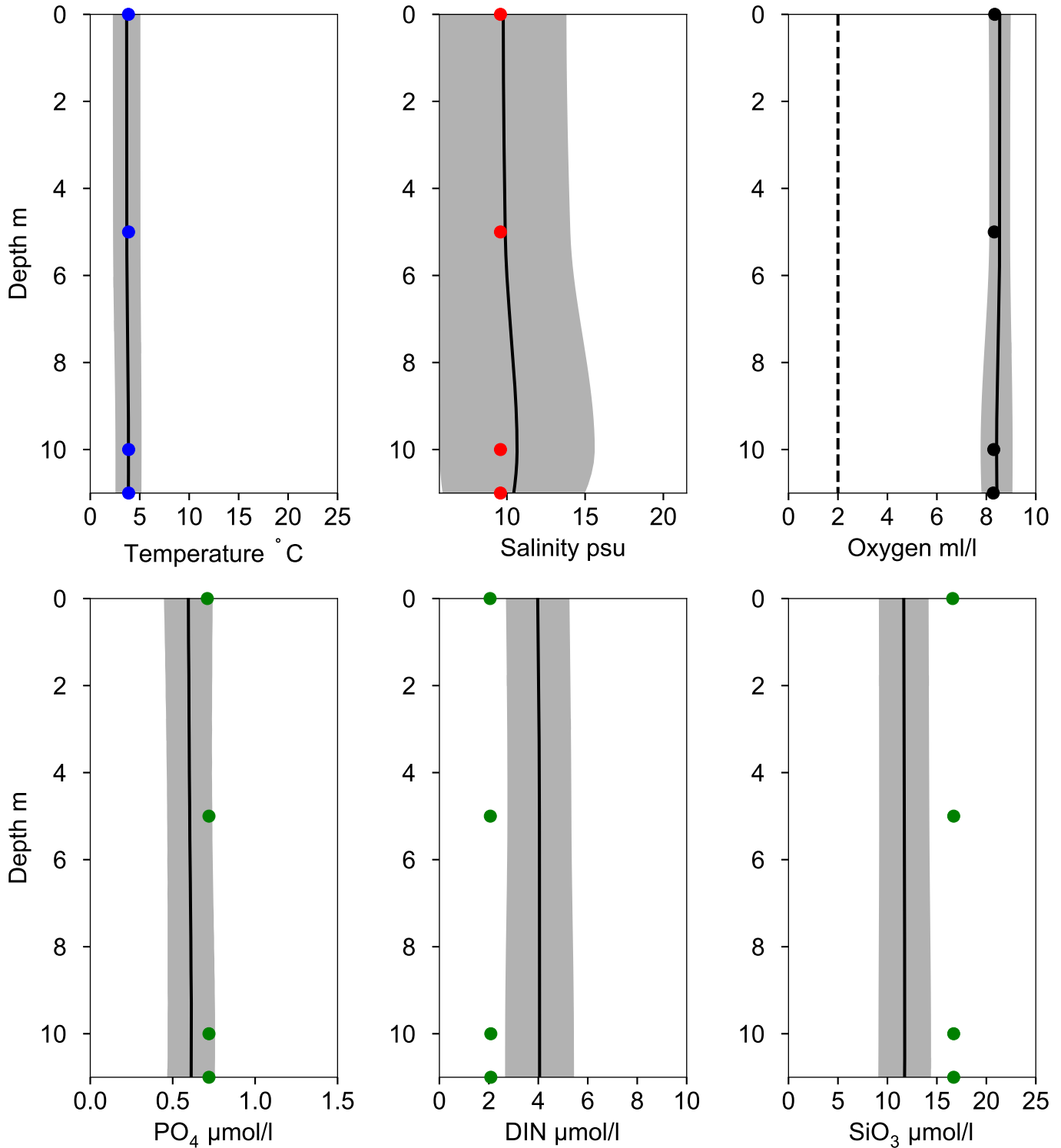
— Mean 1991-2020 St.Dev. ● 2026



Vertical profiles ÖRESUND-2 January

Statistics based on data from: Arkonahavet

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

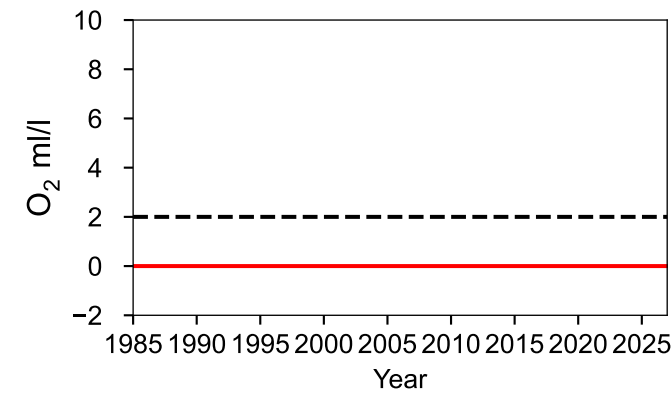
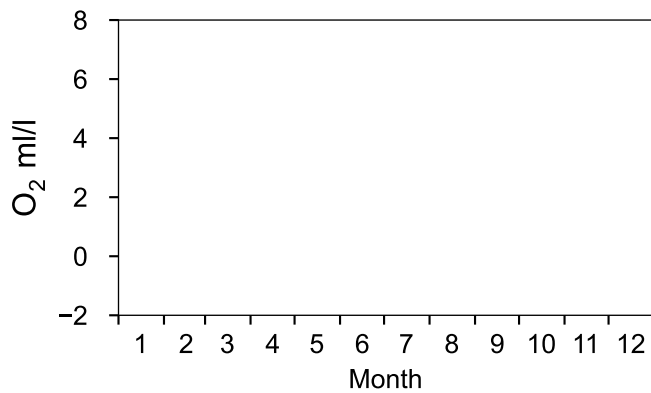
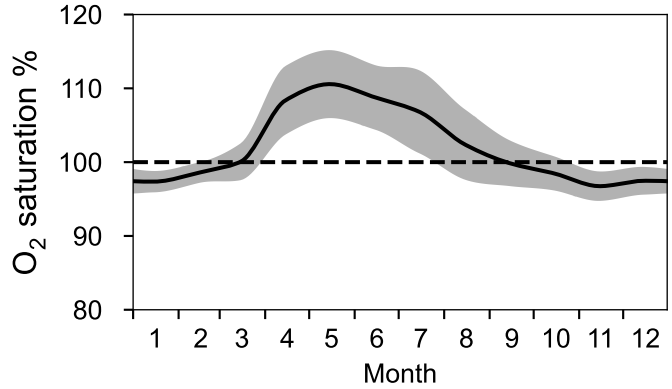
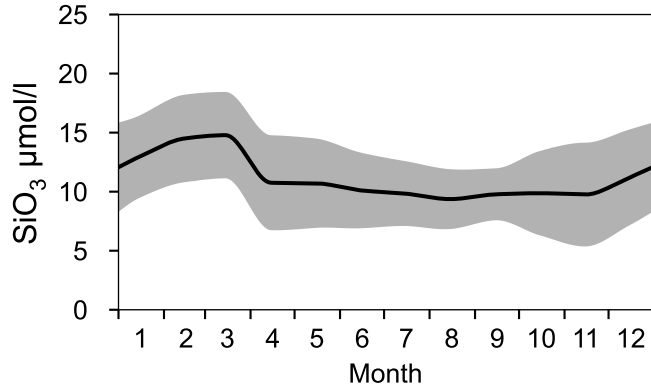
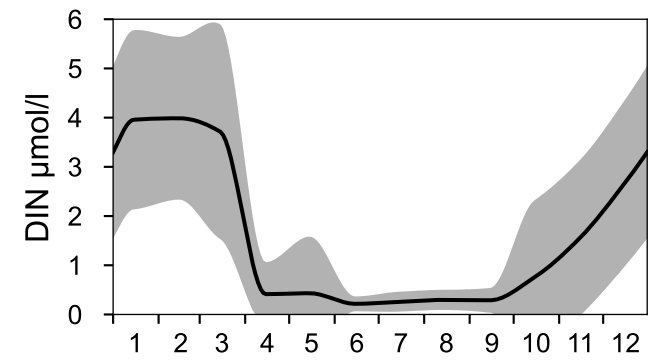
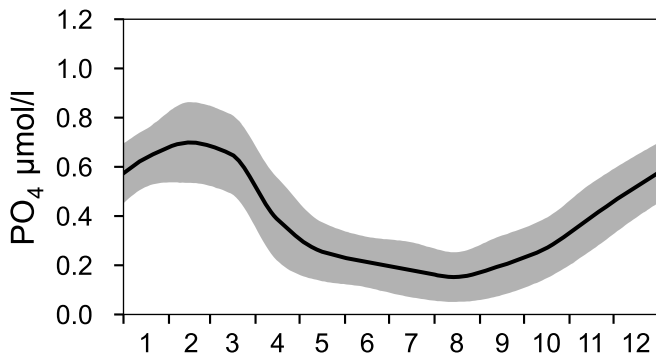
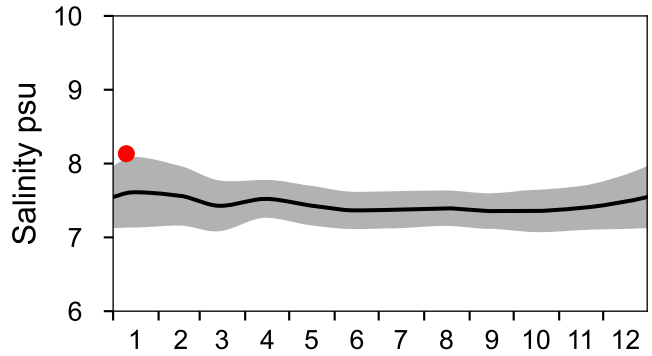
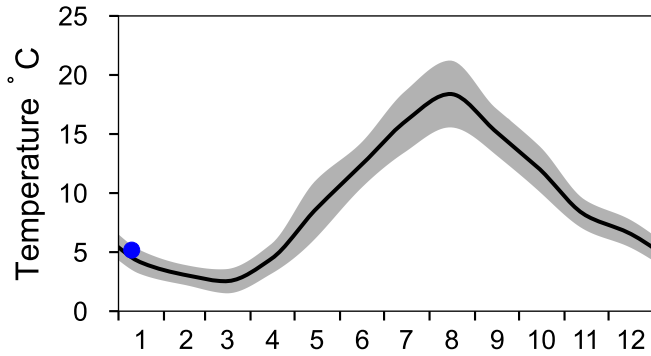


STATION 5W BY3 SURFACE WATER (0-10 m)

Annual Cycles

Statistics based on data from: Bornholmshavet

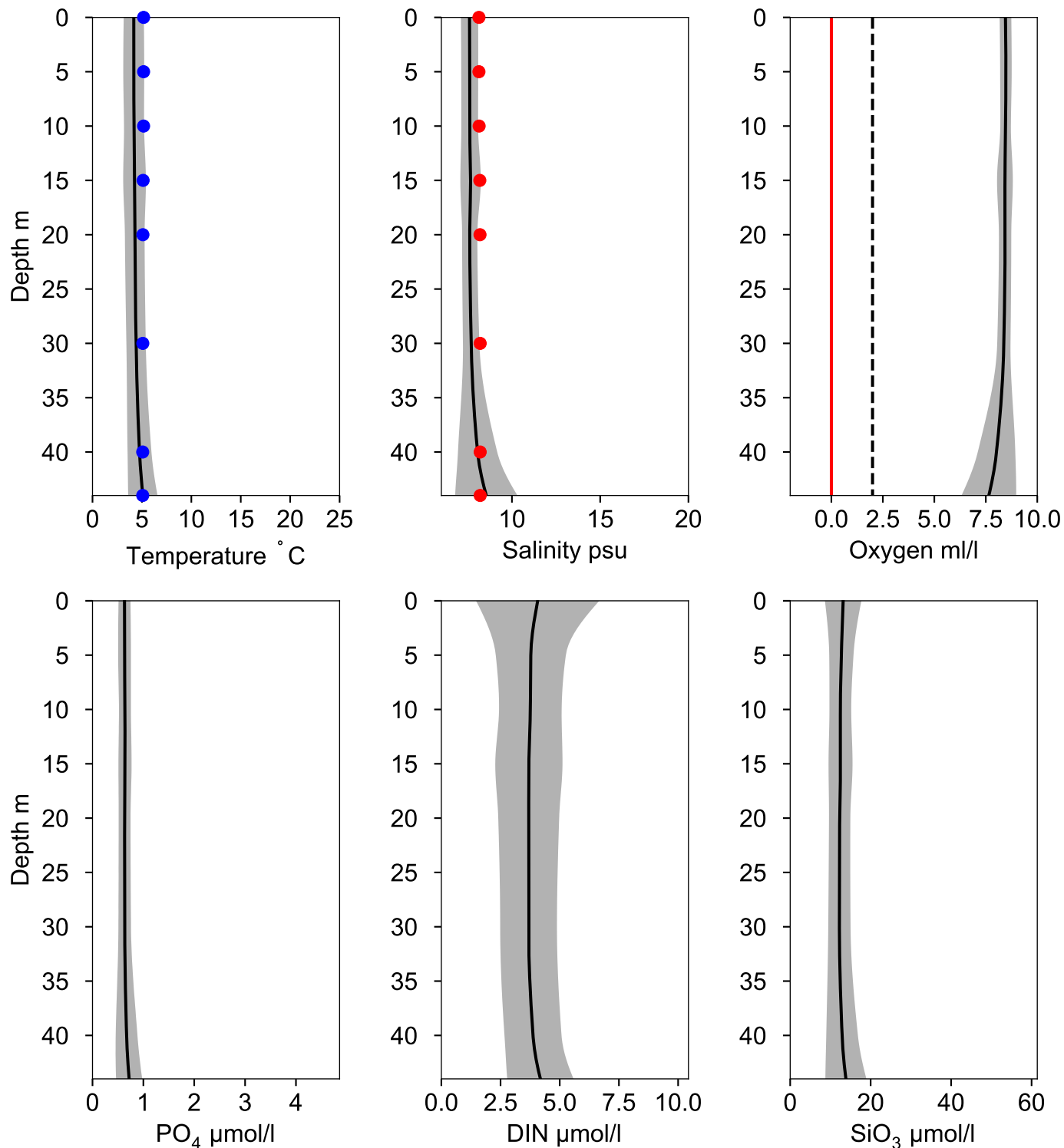
— Mean 1991-2020 St.Dev. ● 2026



Vertical profiles 5W BY3 January

Statistics based on data from: Bornholmshavet

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



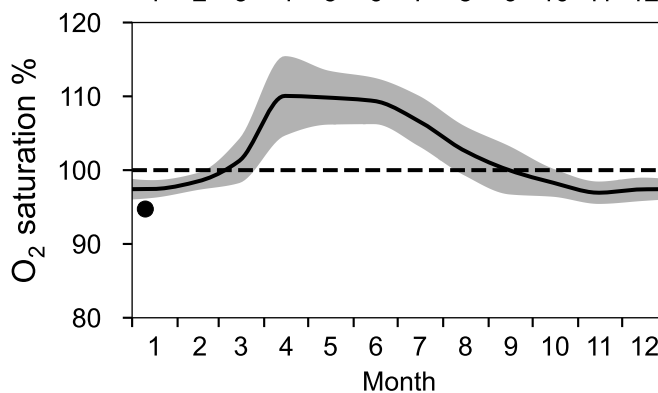
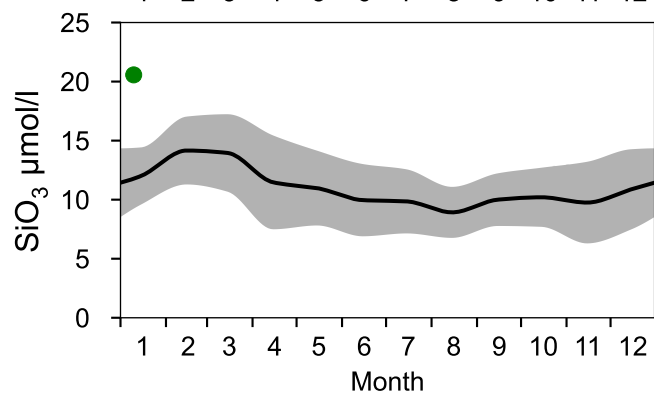
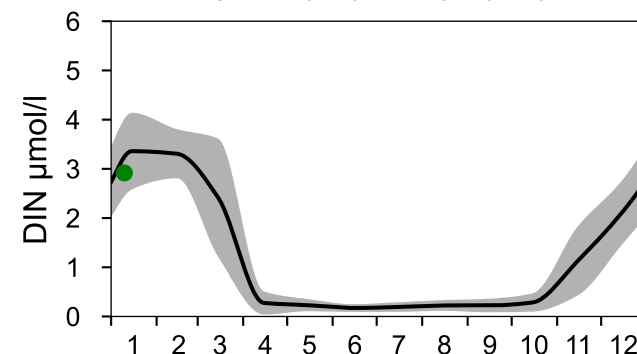
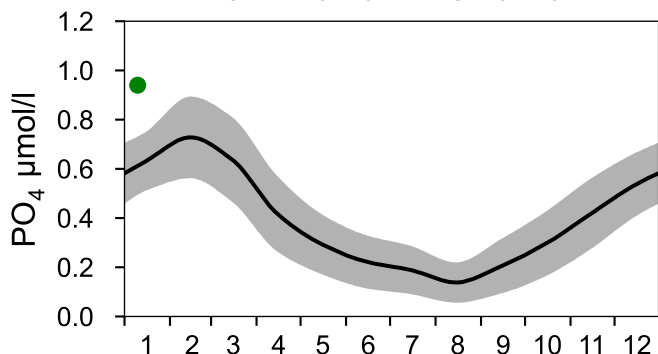
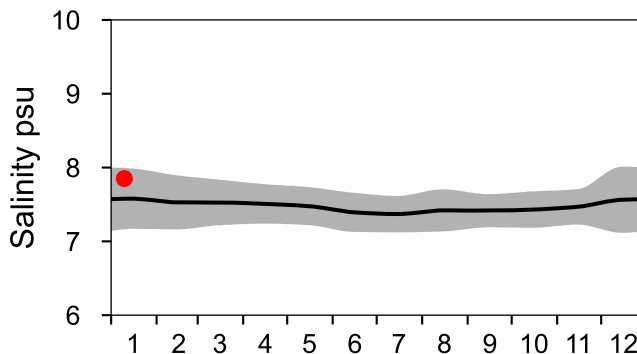
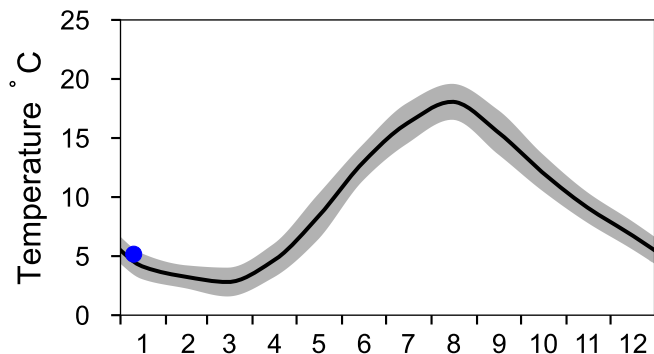
STATION HANÖBUKTEN SURFACE WATER (0-10 m)

Annual Cycles

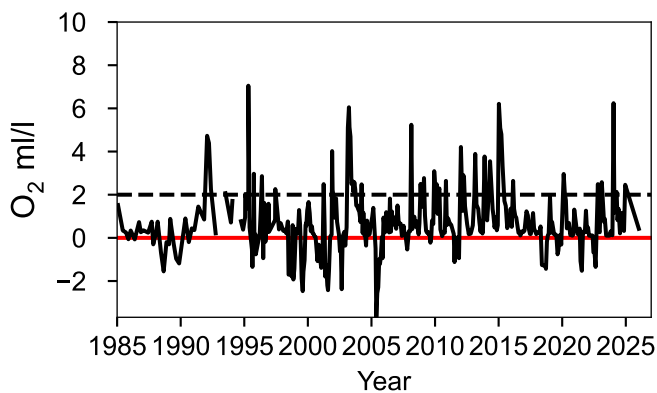
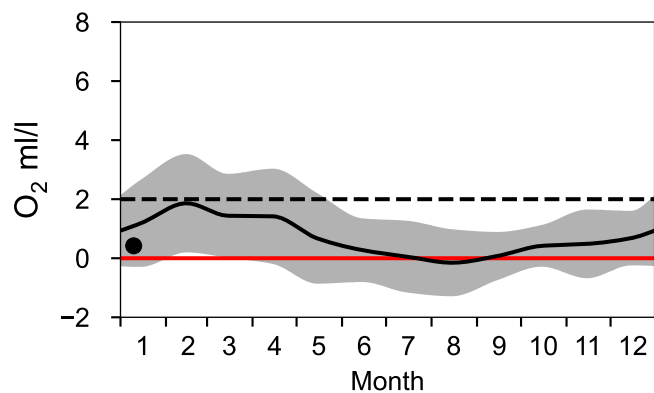
— Mean 1991-2020

■ St.Dev.

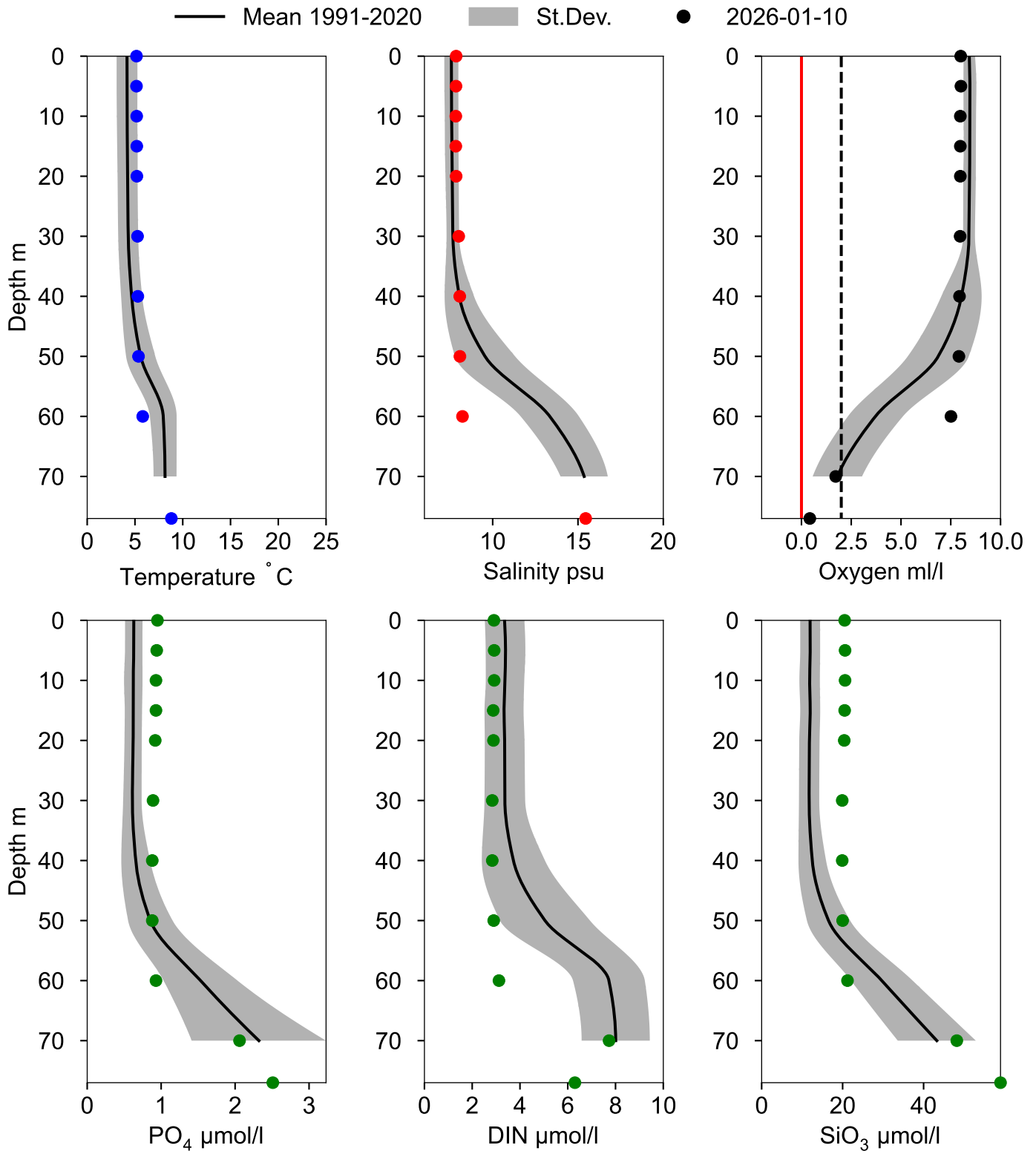
● 2026



OXYGEN IN BOTTOM WATER (depth >= 70 m)



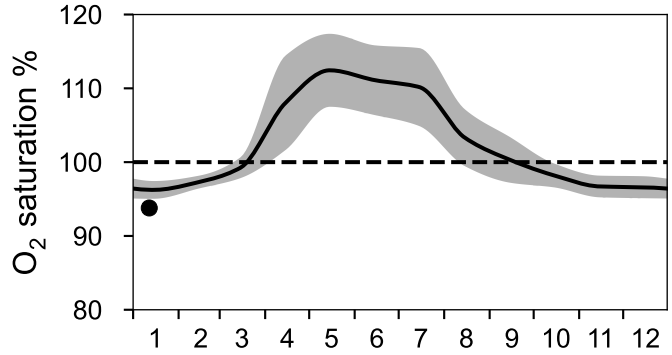
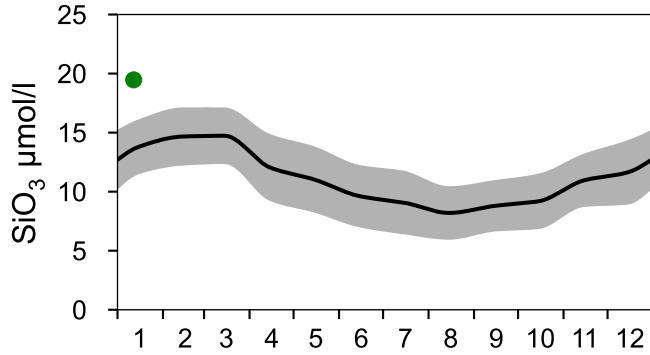
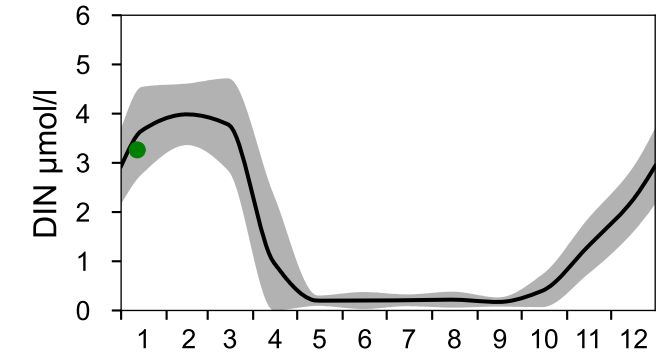
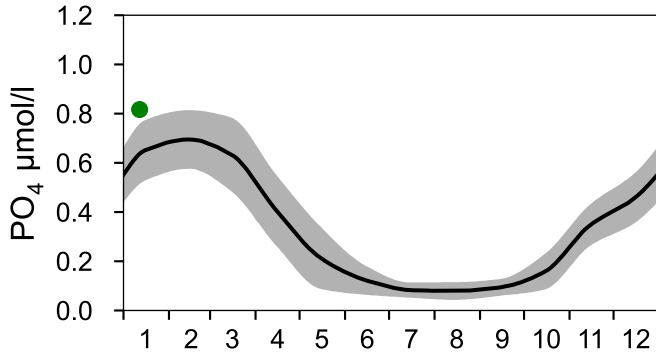
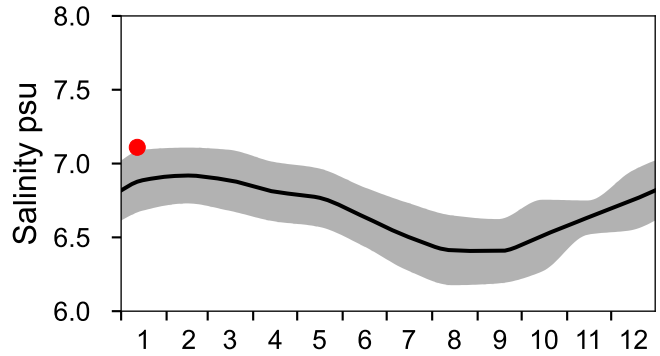
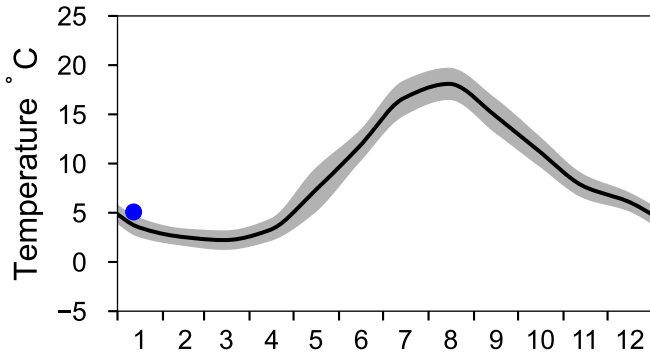
Vertical profiles HANÖBUKTEN January



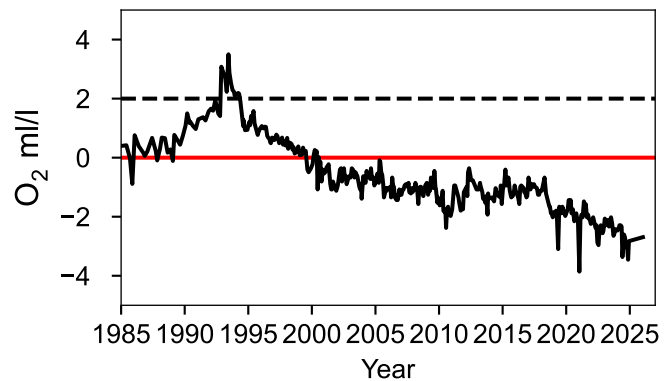
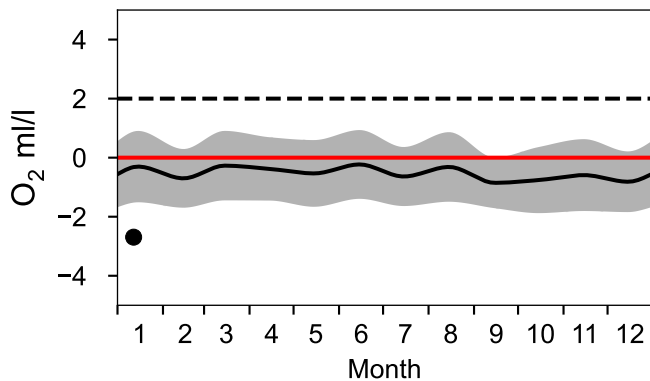
STATION BY32 NORRKÖPINGSDJ SURFACE WATER (0-10 m)

Annual Cycles

— Mean 1991-2020 St.Dev. ● 2026

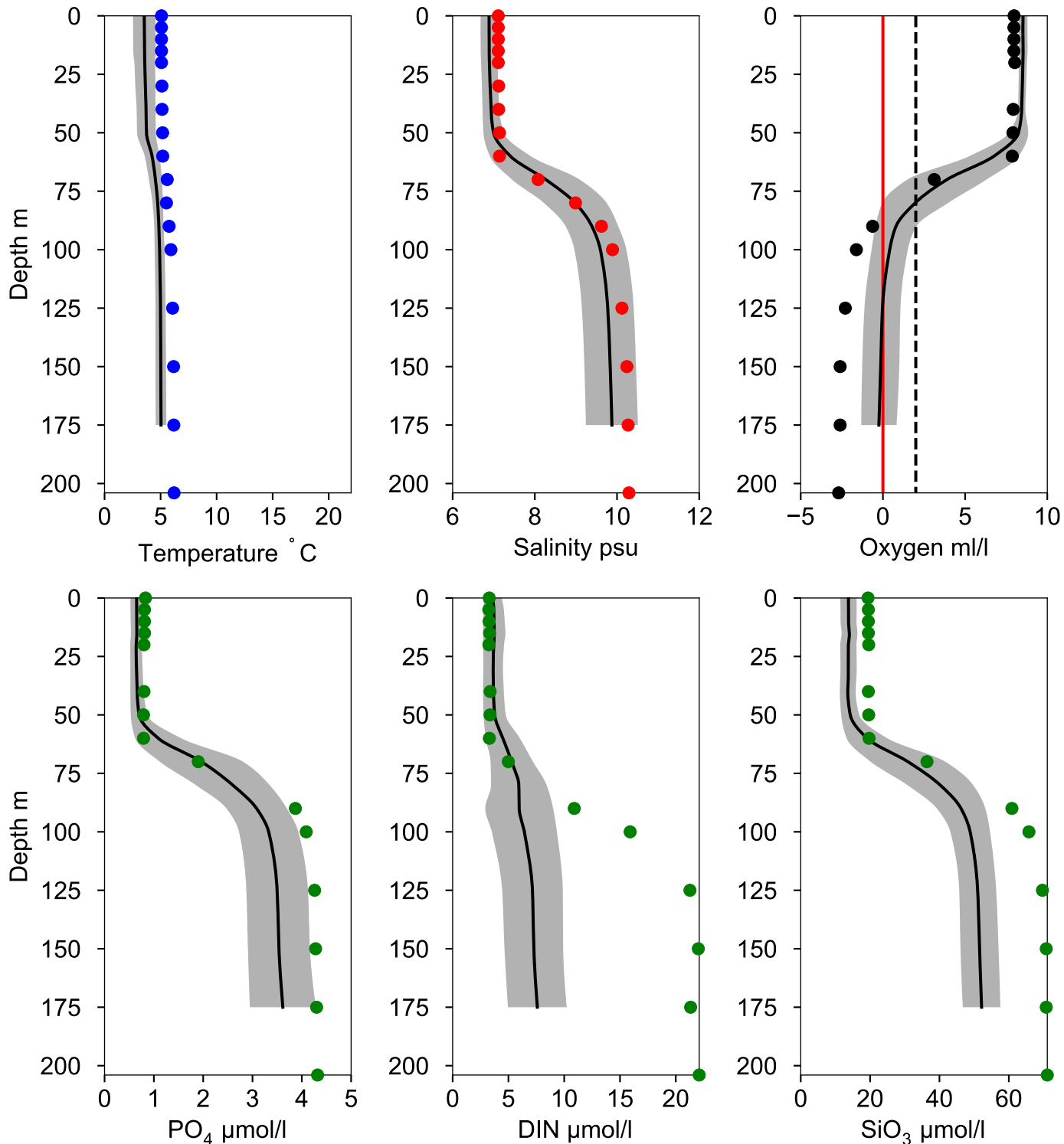


OXYGEN IN BOTTOM WATER (depth >= 175 m)



Vertical profiles BY32 NORRKÖPINGSDJ January

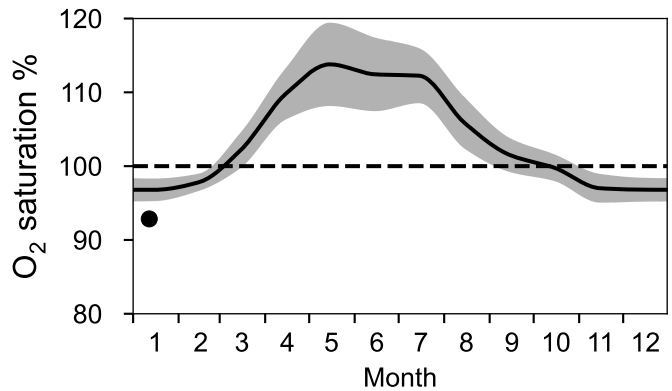
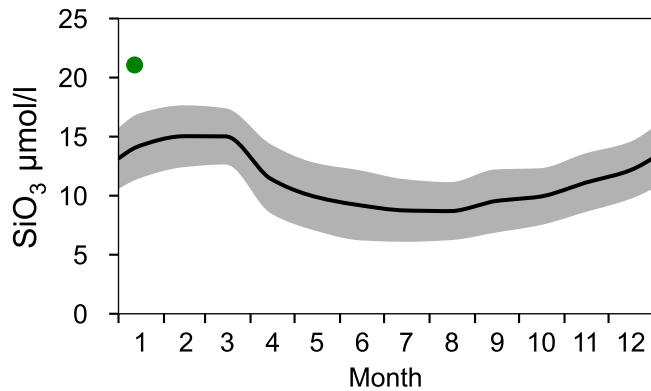
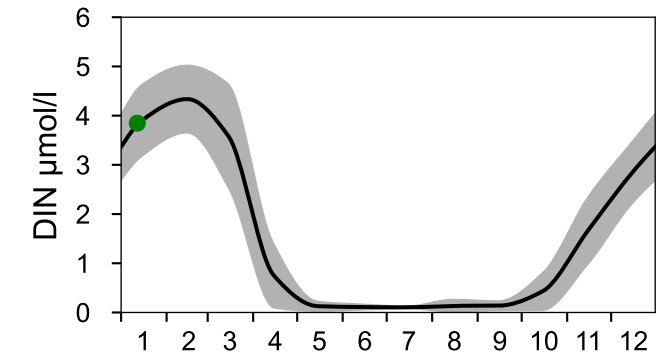
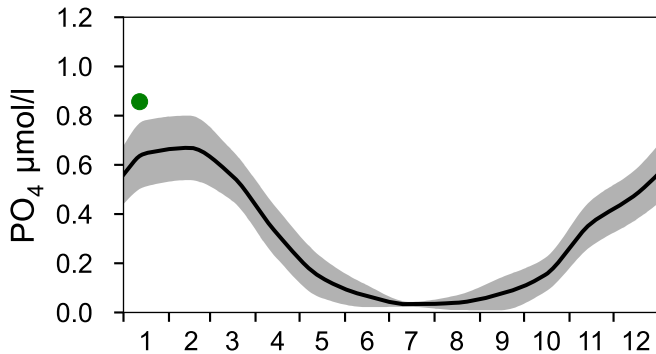
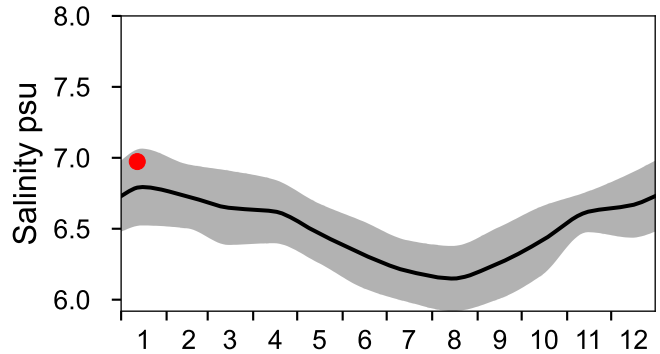
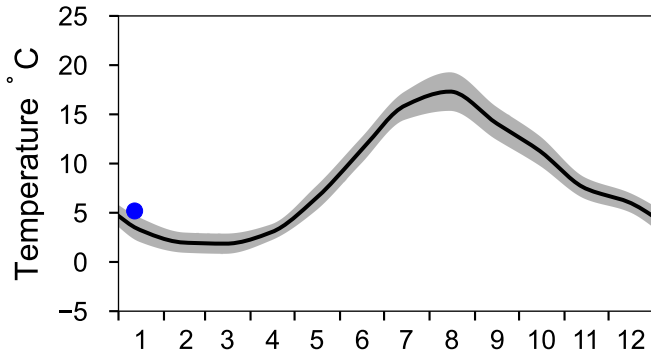
— Mean 1991-2020 ■ St.Dev. ● 2026-01-12



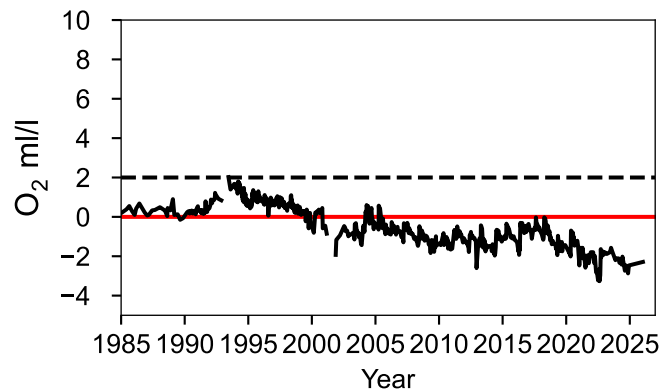
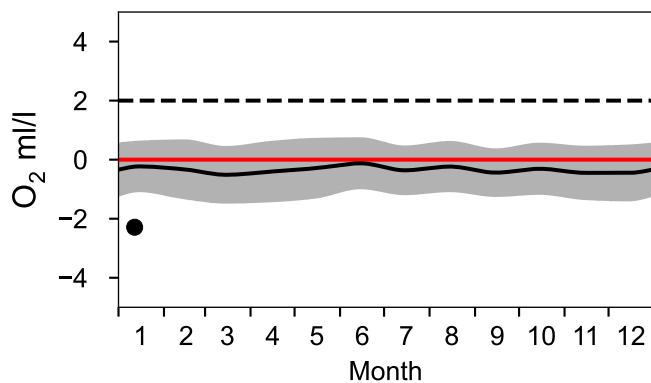
STATION BY31 LANDSORTSDJ SURFACE WATER (0-10 m)

Annual Cycles

— Mean 1991-2020 St.Dev. ● 2026

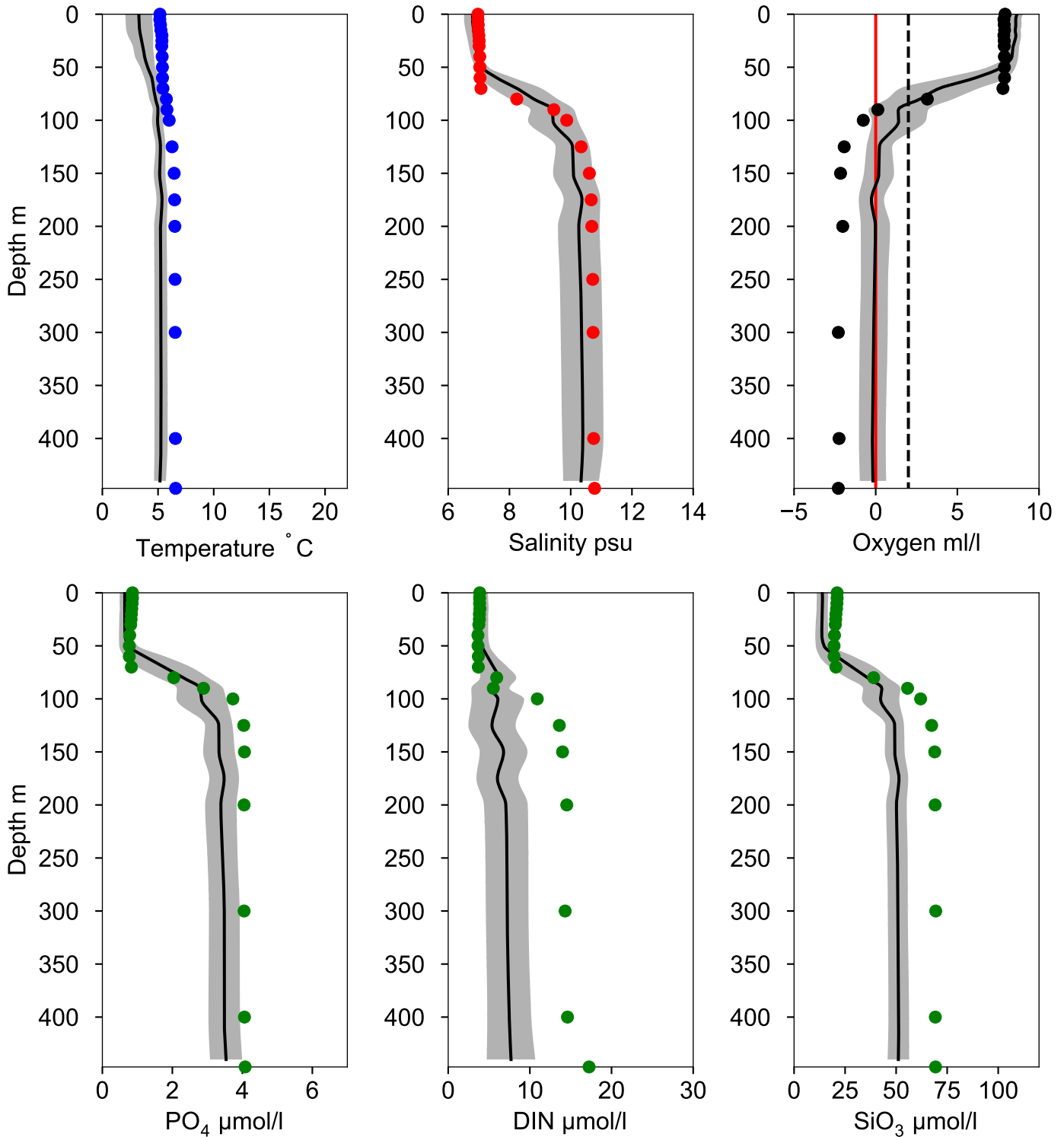


OXYGEN IN BOTTOM WATER (depth >= 419 m)



Vertical profiles BY31 LANDSORTSDJ January

— Mean 1991-2020 St.Dev. ● 2026-01-12



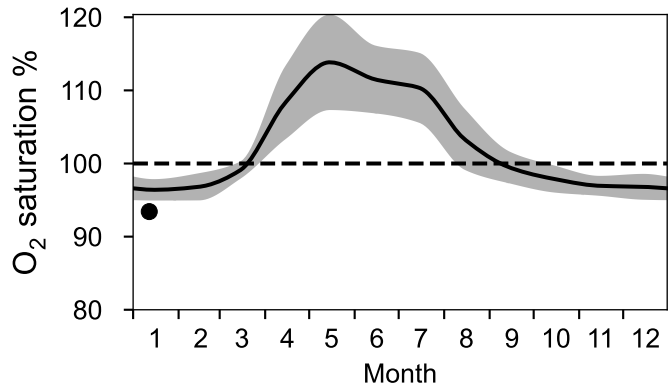
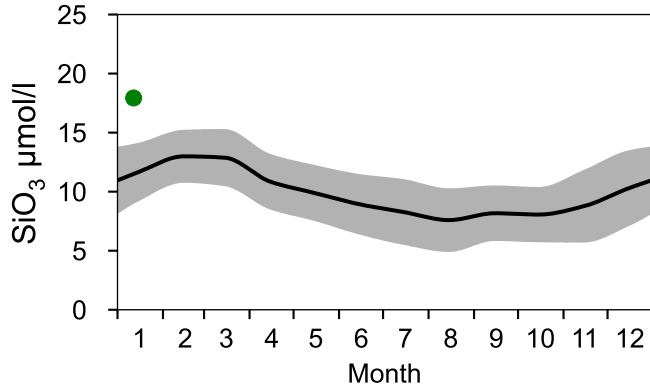
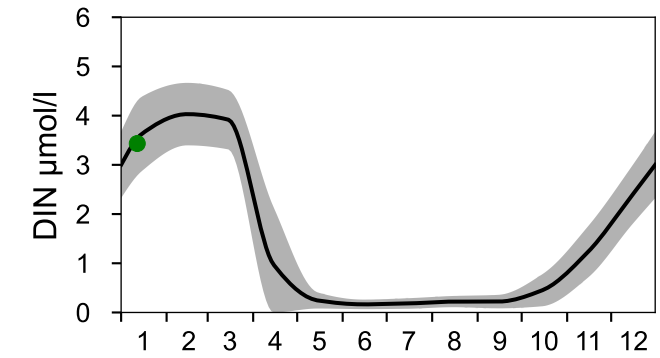
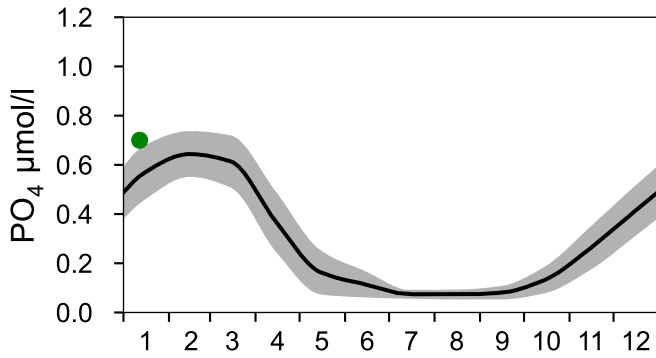
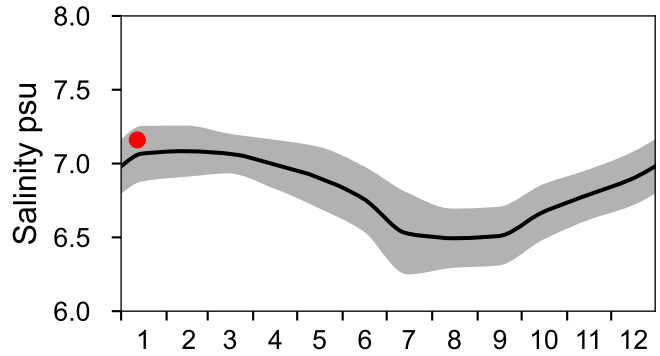
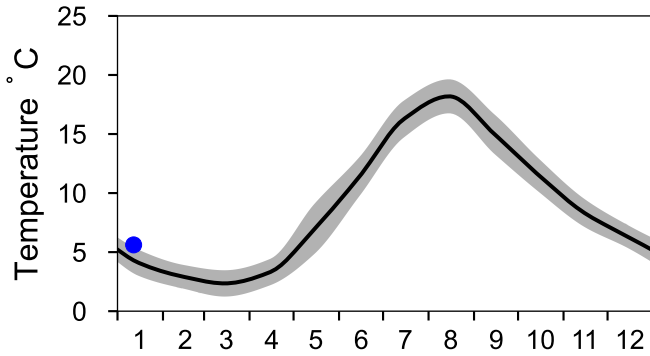
STATION BY20 FÄRÖDJ SURFACE WATER (0-10 m)

Annual Cycles

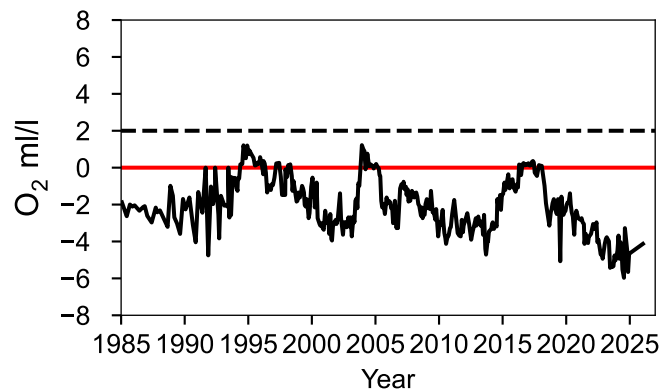
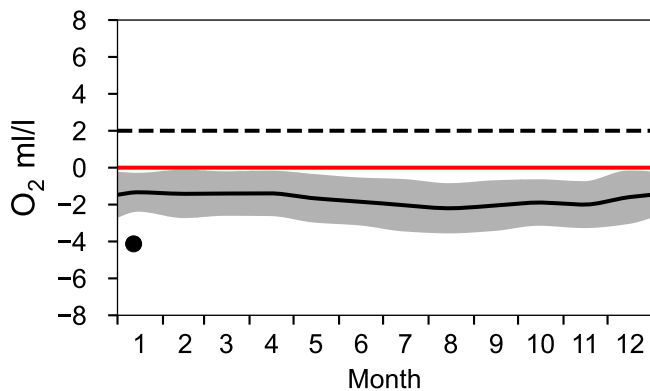
— Mean 1991-2020

■ St.Dev.

● 2026

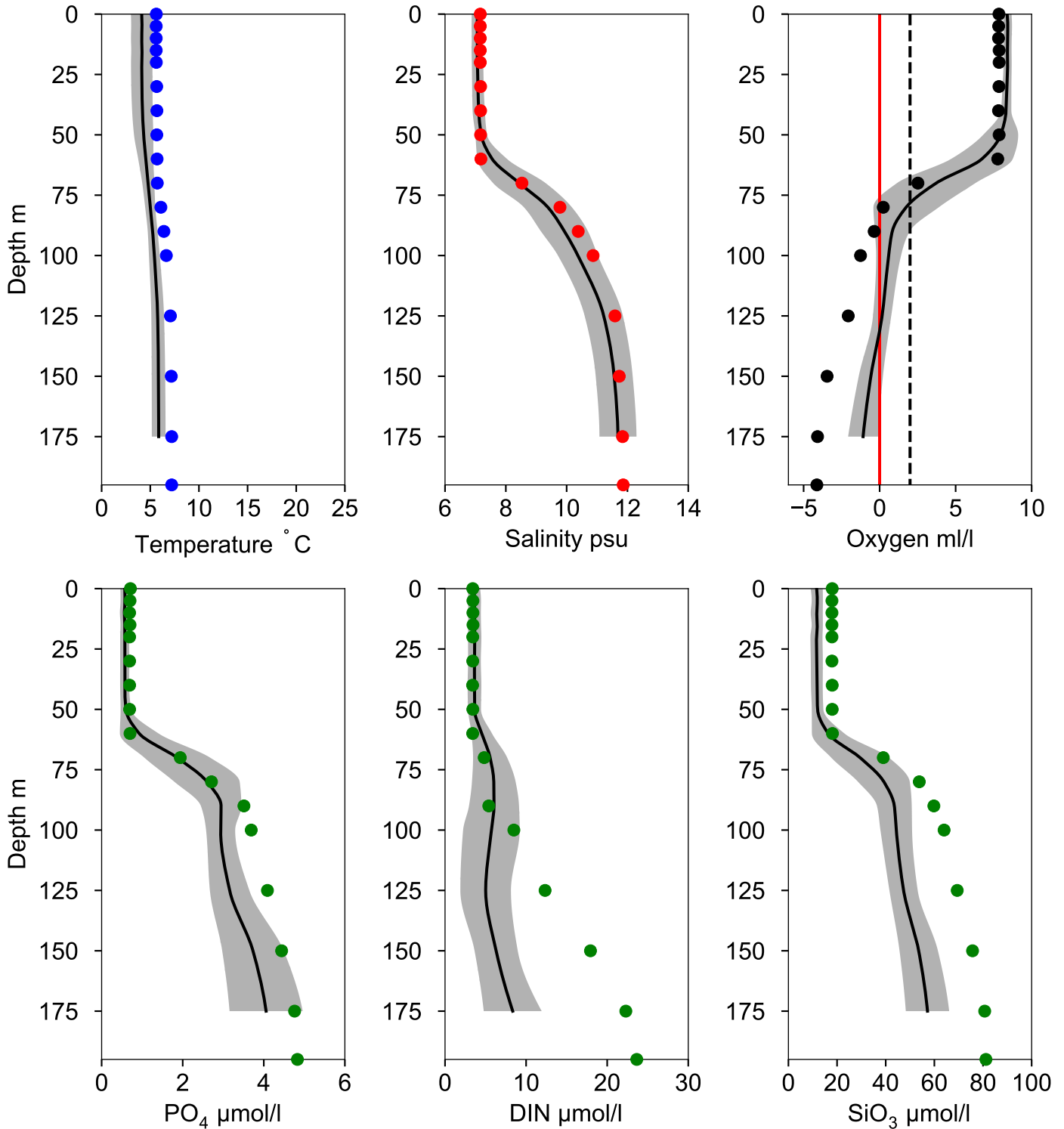


OXYGEN IN BOTTOM WATER (depth >= 175 m)



Vertical profiles BY20 FÅRÖDJ January

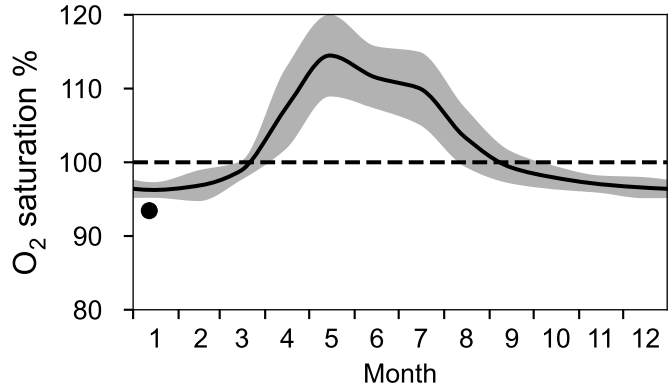
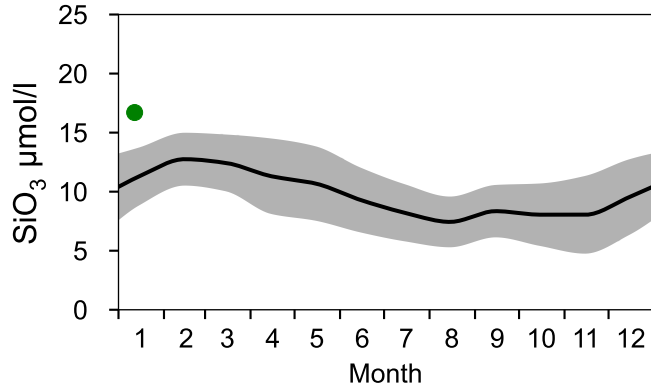
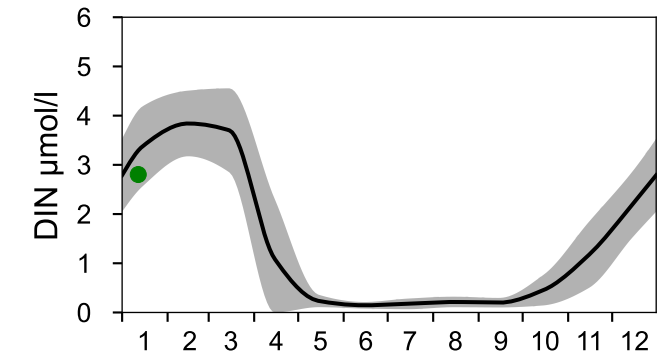
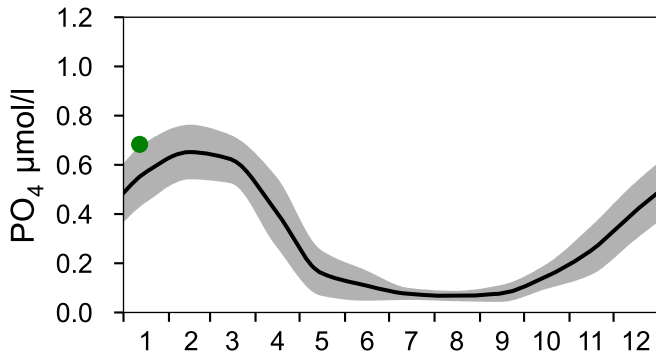
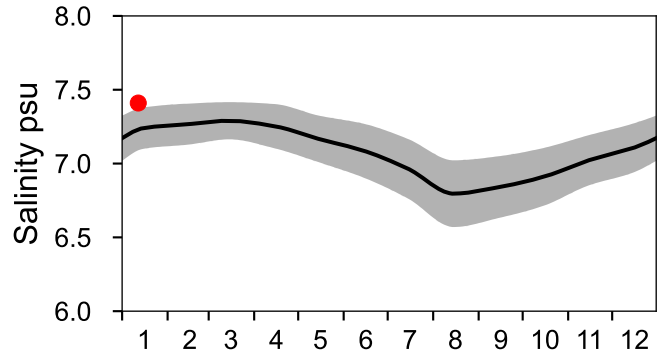
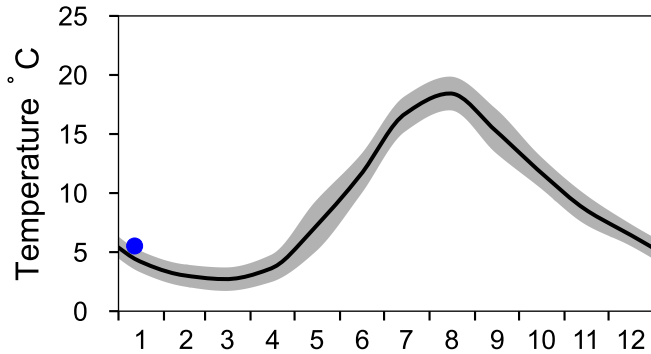
— Mean 1991-2020 St.Dev. ● 2026-01-12



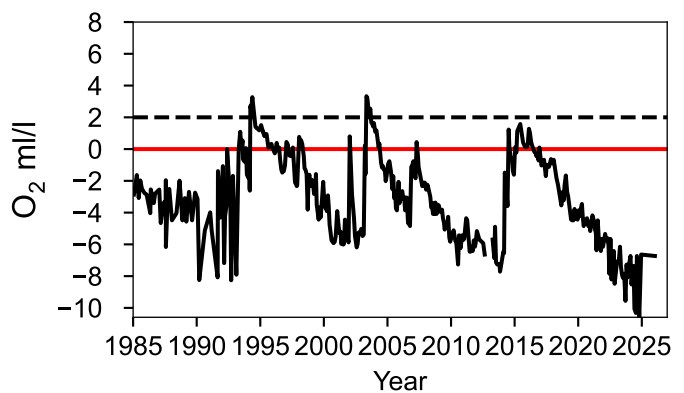
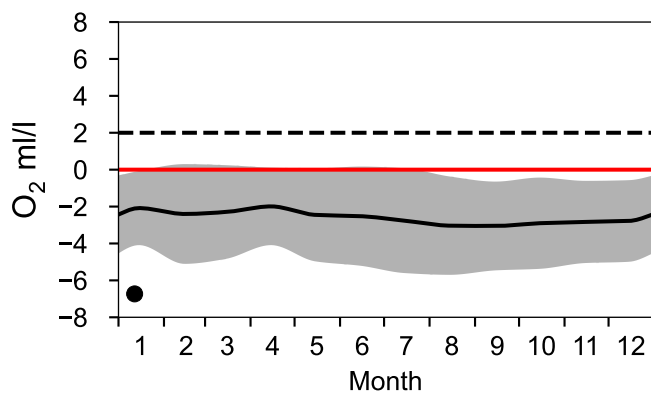
STATION BY15 GOTLANDSDJ SURFACE WATER (0-10 m)

Annual Cycles

— Mean 1991-2020 St.Dev. ● 2026

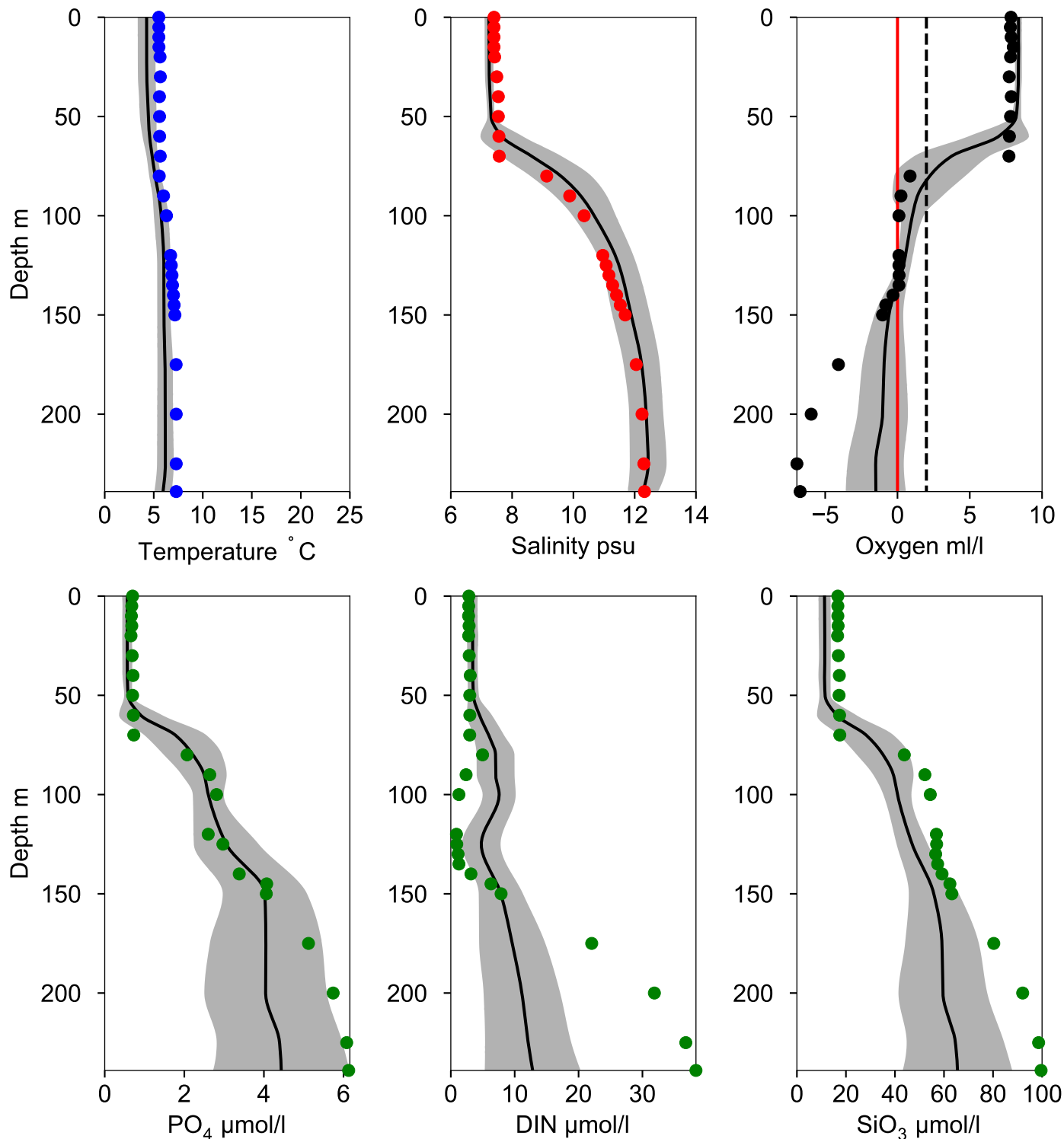


OXYGEN IN BOTTOM WATER (depth >= 225 m)



Vertical profiles BY15 GOTLANDSDJ January

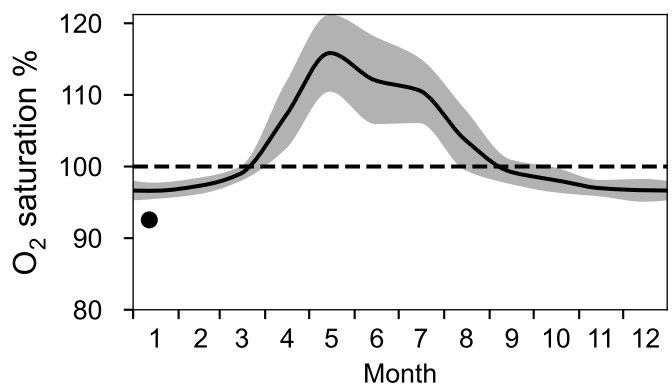
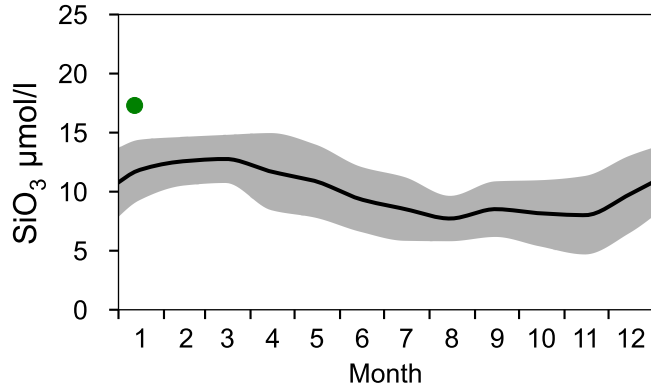
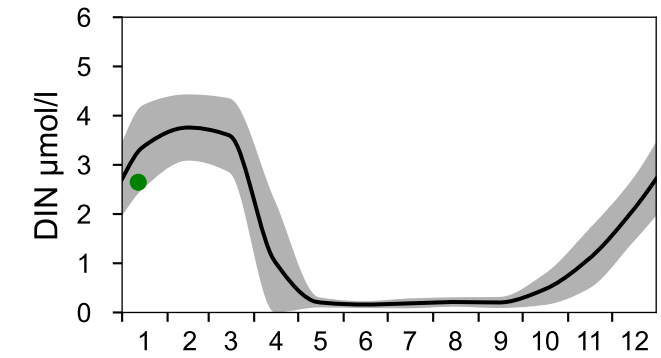
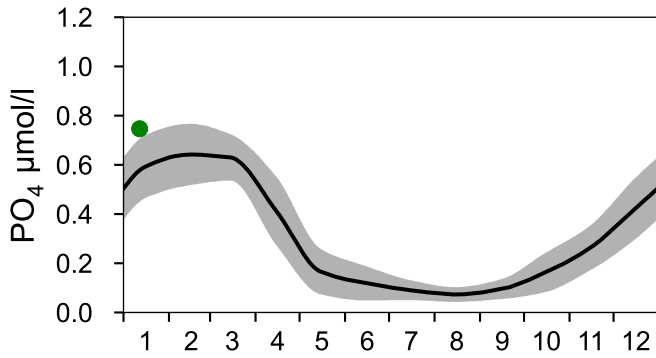
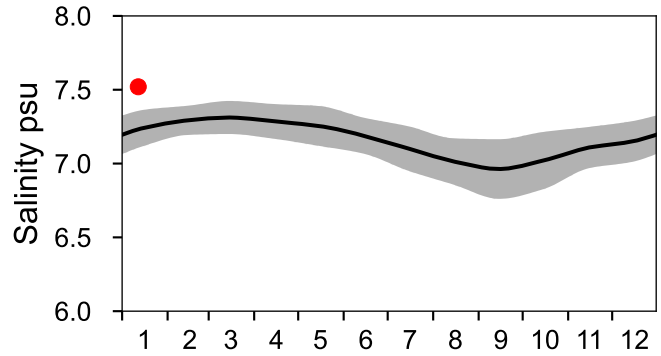
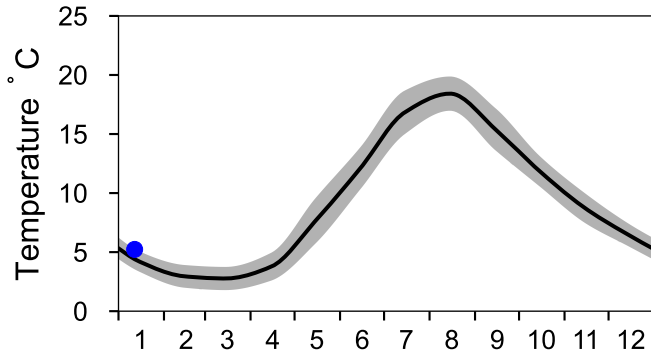
— Mean 1991-2020 ■ St.Dev. ● 2026-01-12



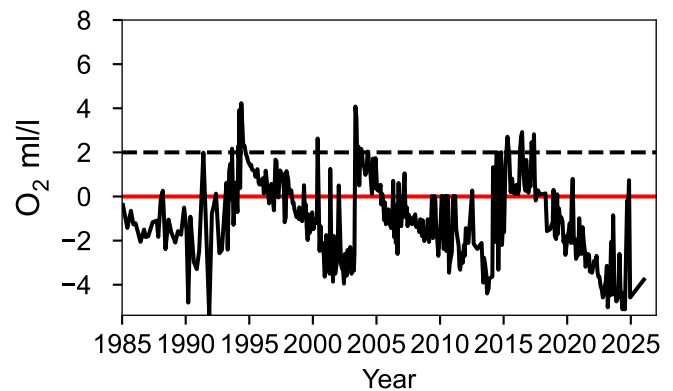
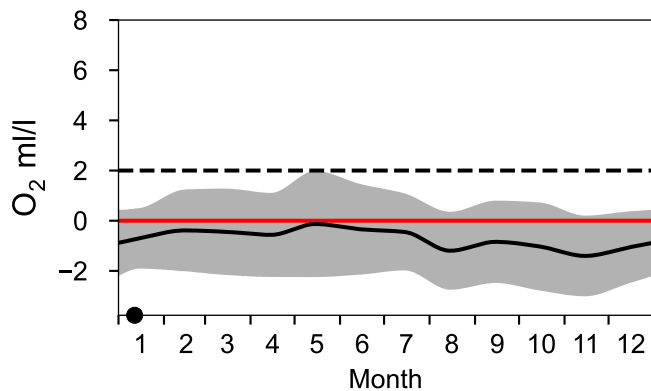
STATION BY10 SURFACE WATER (0-10 m)

Annual Cycles

— Mean 1991-2020 St.Dev. ● 2026

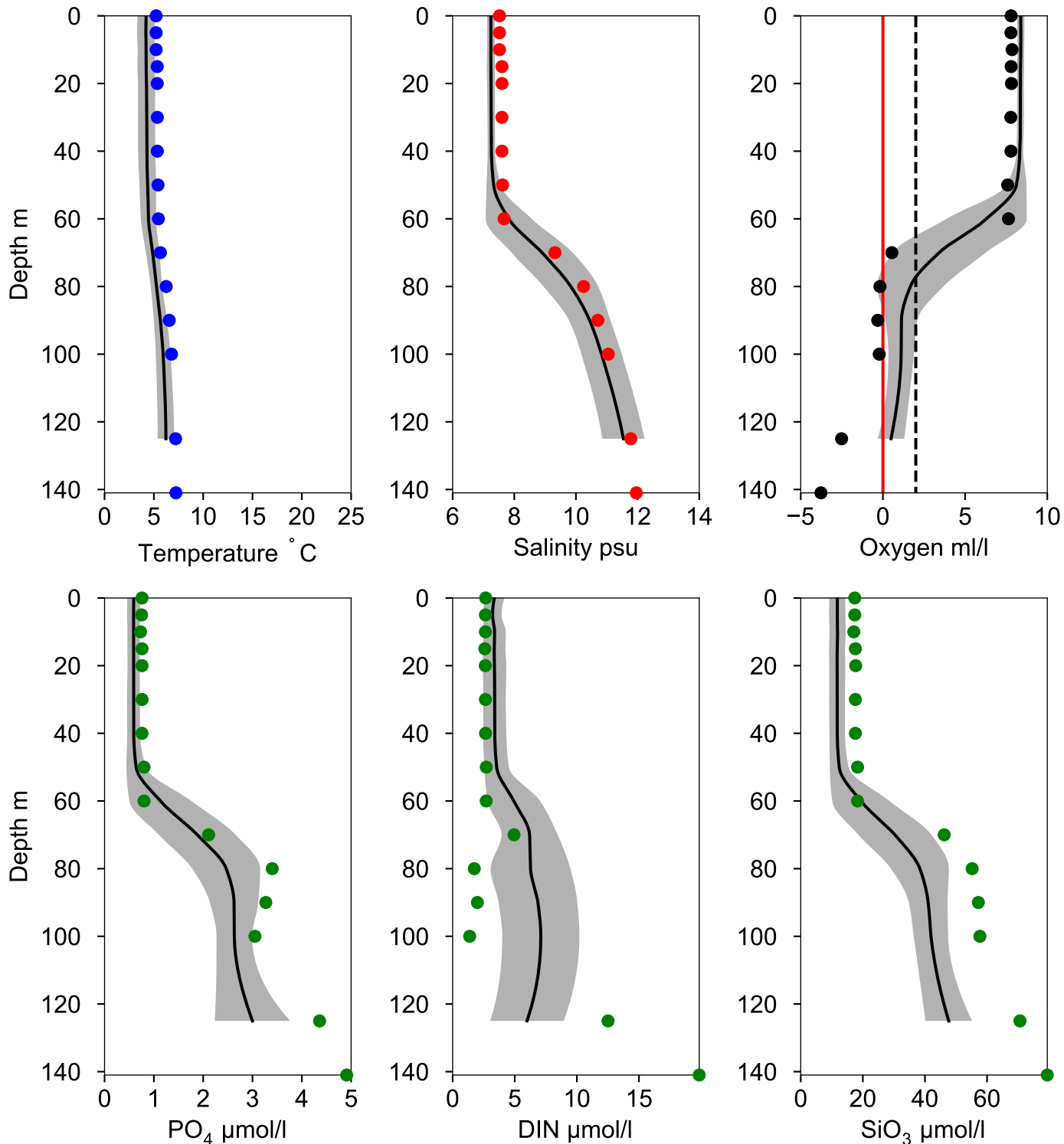


OXYGEN IN BOTTOM WATER (depth >= 125 m)



Vertical profiles BY10 January

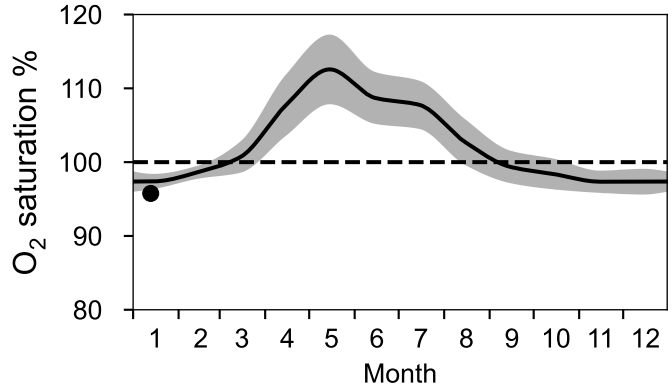
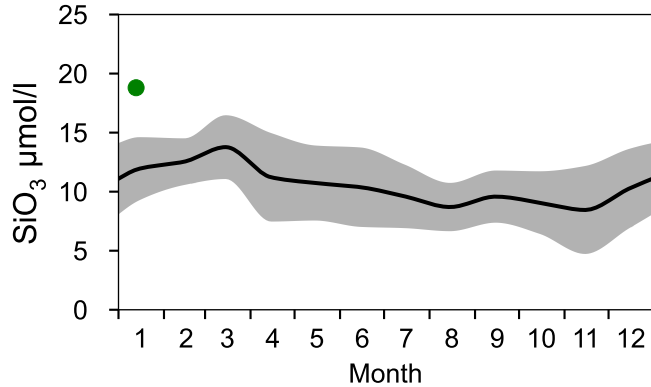
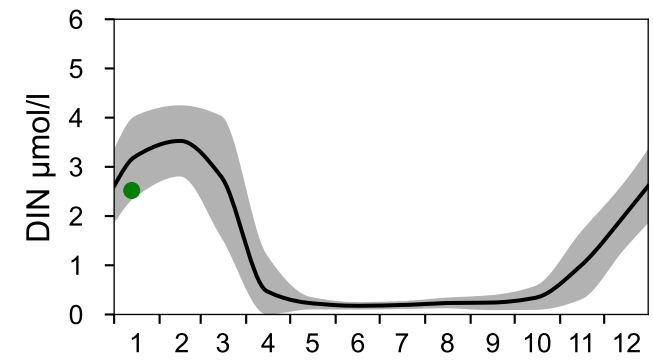
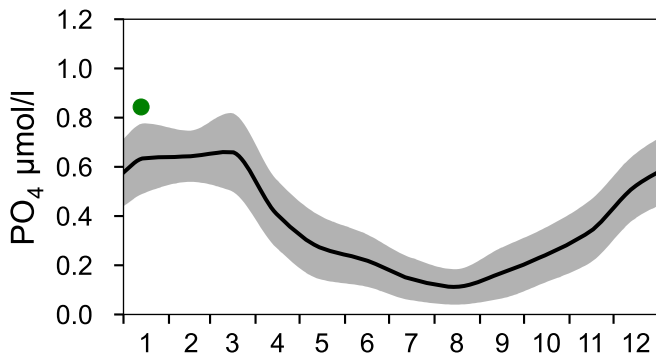
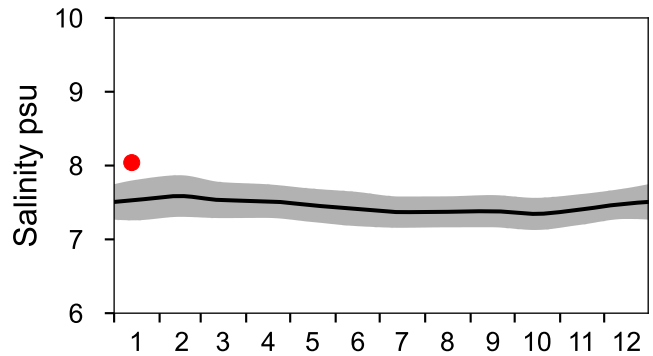
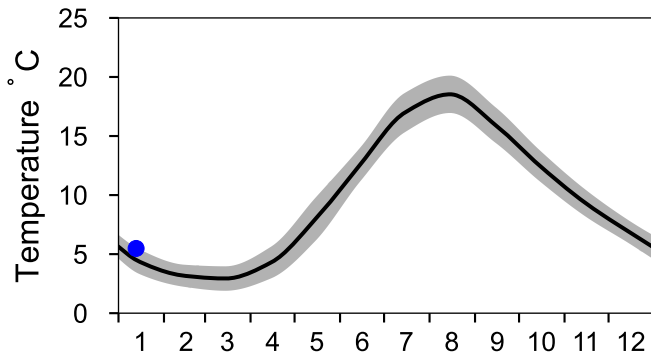
— Mean 1991-2020 ■ St.Dev. ● 2026-01-12



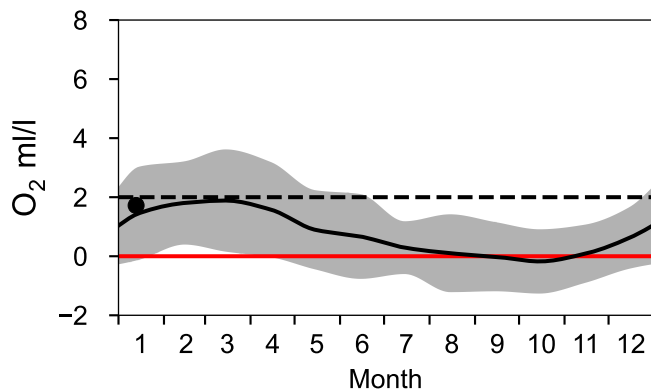
STATION BY5 BORNHOLMSDJ SURFACE WATER (0-10 m)

Annual Cycles

— Mean 1991-2020 St.Dev. ● 2026

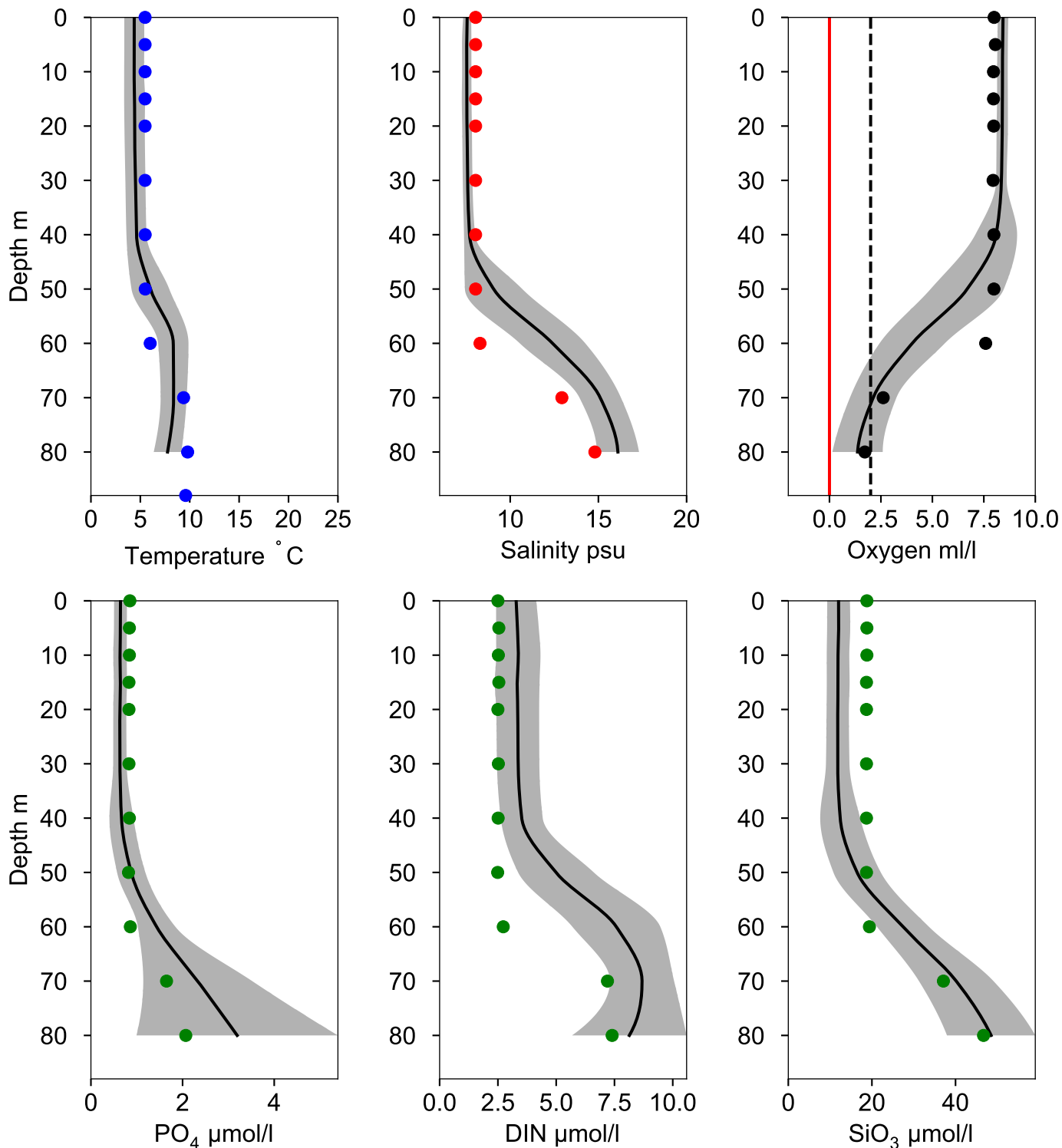


OXYGEN IN BOTTOM WATER (depth >= 80 m)



Vertical profiles BY5 BORNHOLMSDJ January

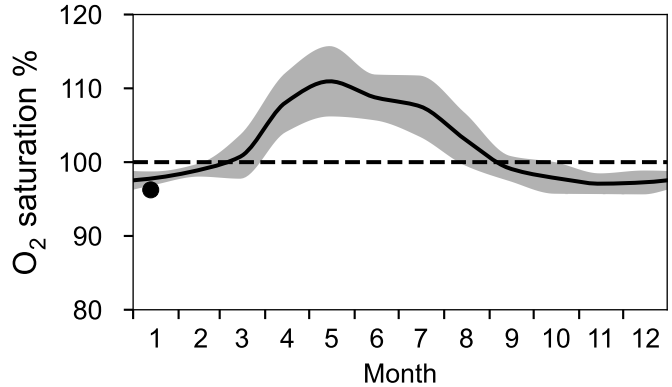
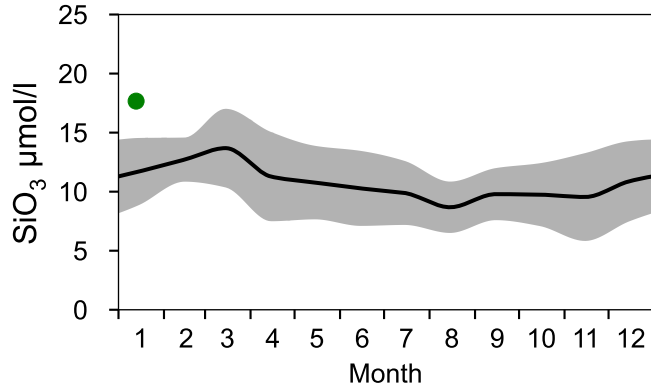
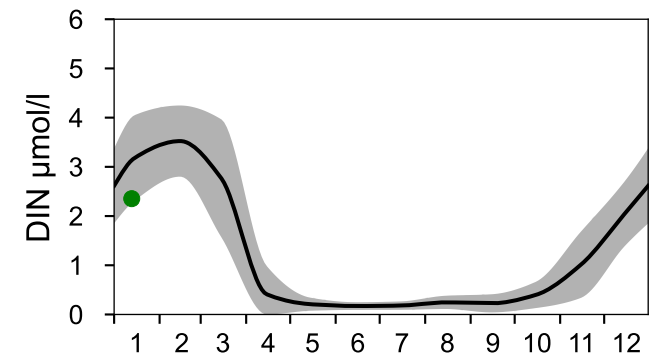
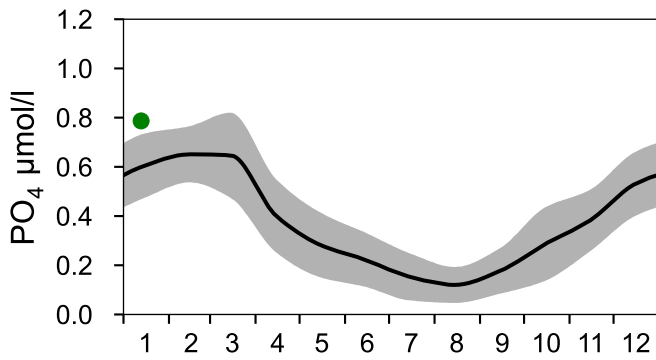
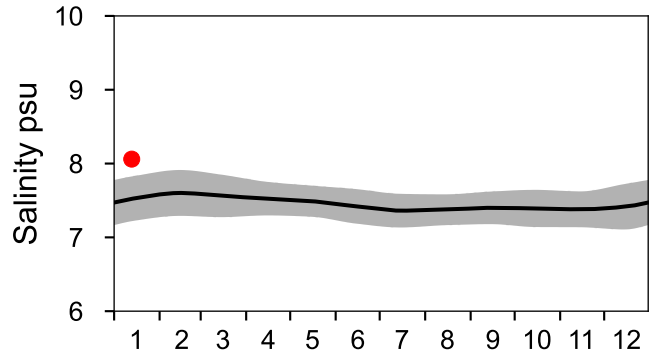
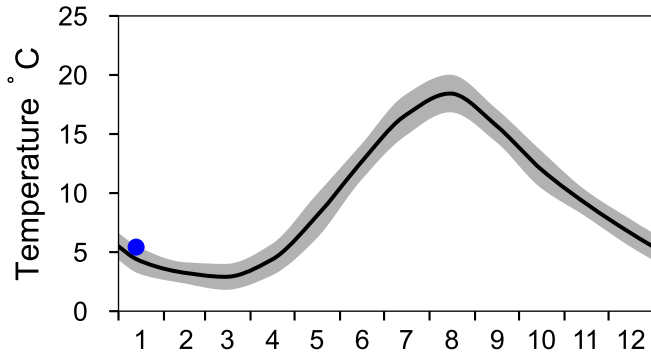
— Mean 1991-2020 ■ St.Dev. ● 2026-01-13



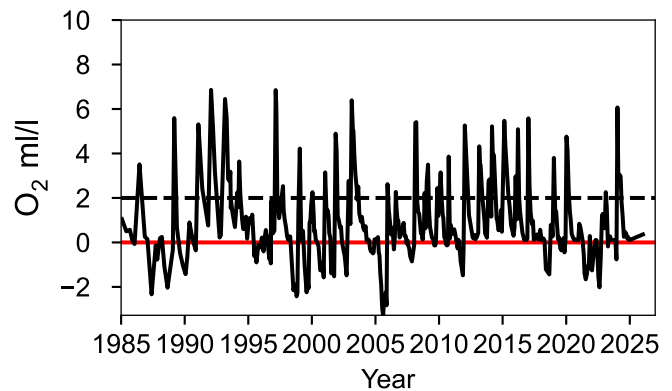
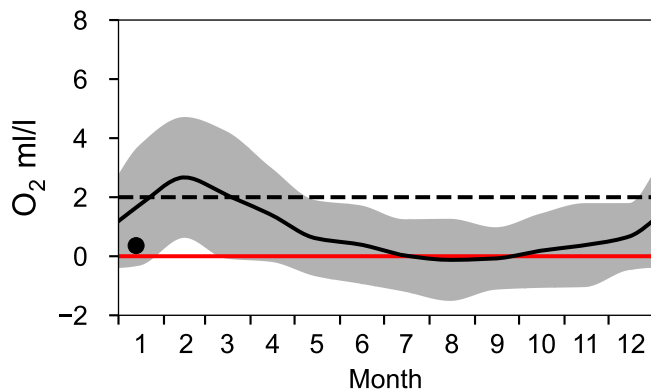
STATION BY4 CHRISTIANSÖ SURFACE WATER (0-10 m)

Annual Cycles

— Mean 1991-2020 St.Dev. ● 2026

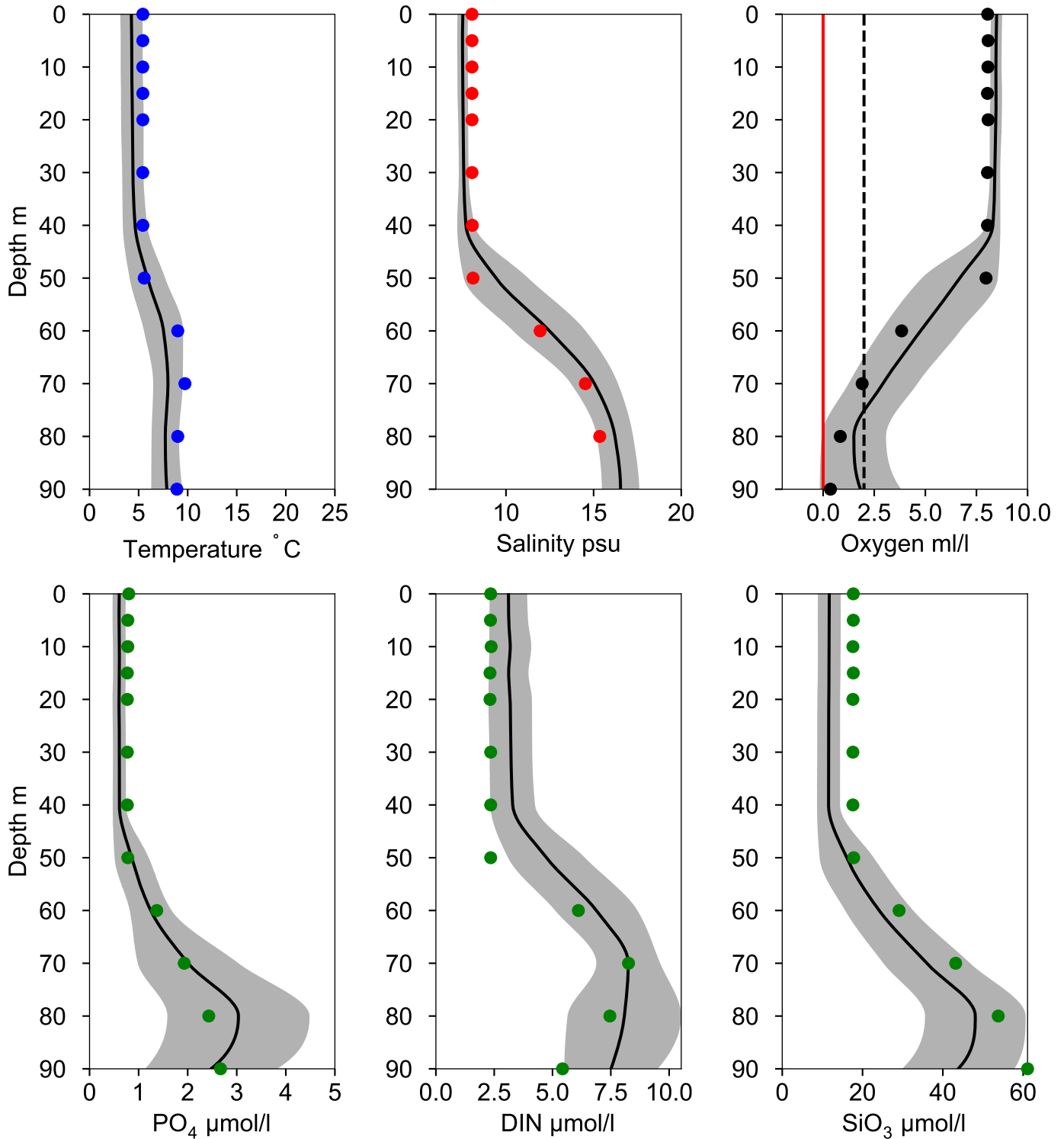


OXYGEN IN BOTTOM WATER (depth >= 80 m)



Vertical profiles BY4 CHRISTIANSÖ January

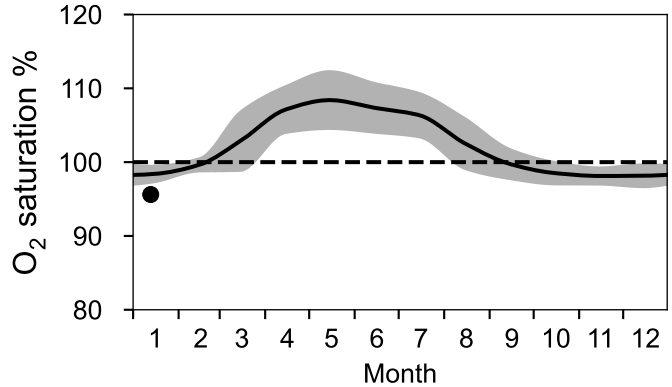
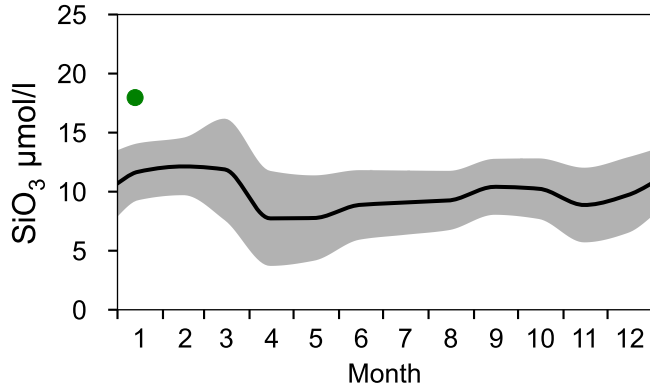
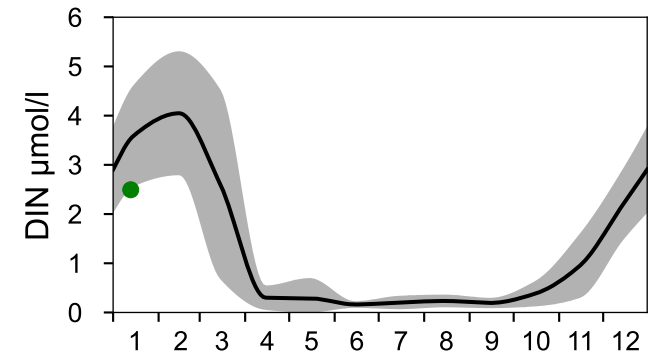
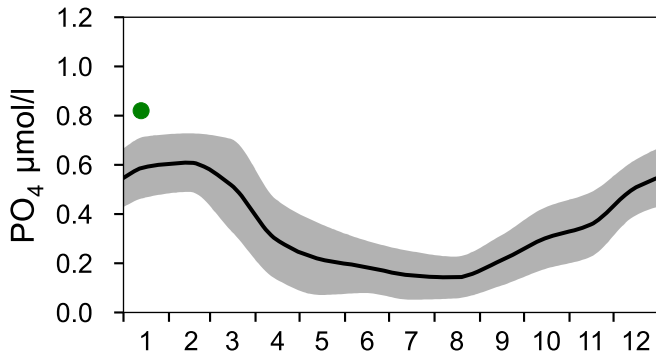
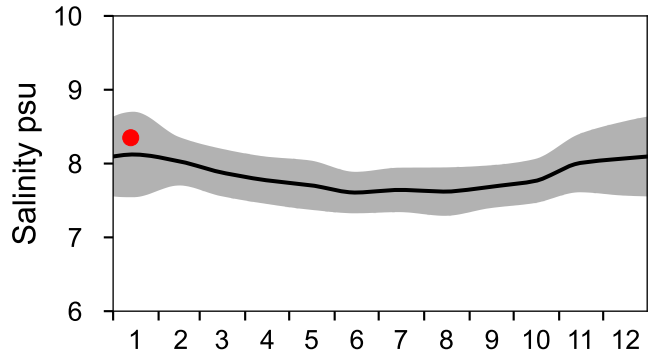
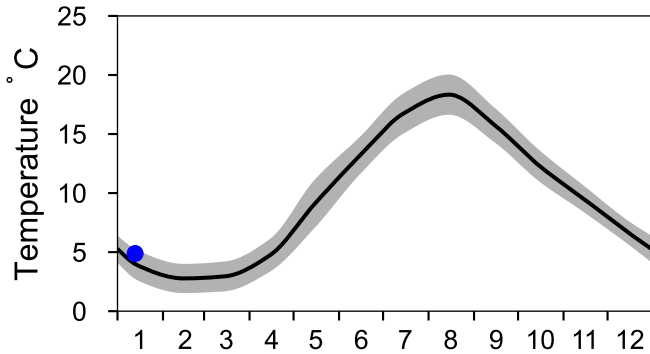
— Mean 1991-2020 ■ St.Dev. ● 2026-01-13



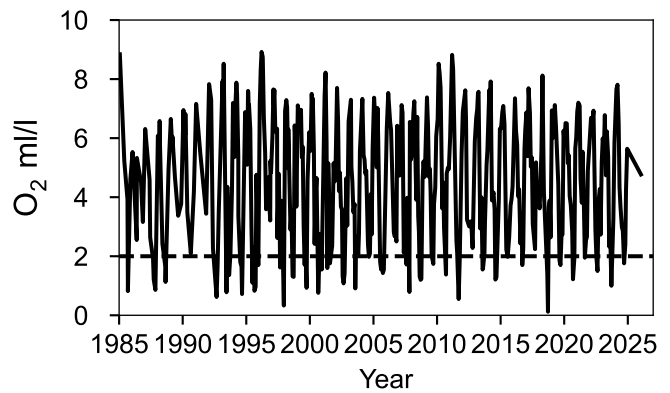
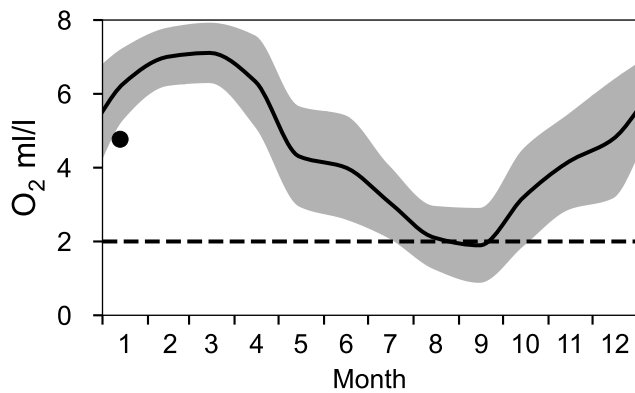
STATION BY2 ARKONA SURFACE WATER (0-10 m)

Annual Cycles

— Mean 1991-2020 St.Dev. ● 2026

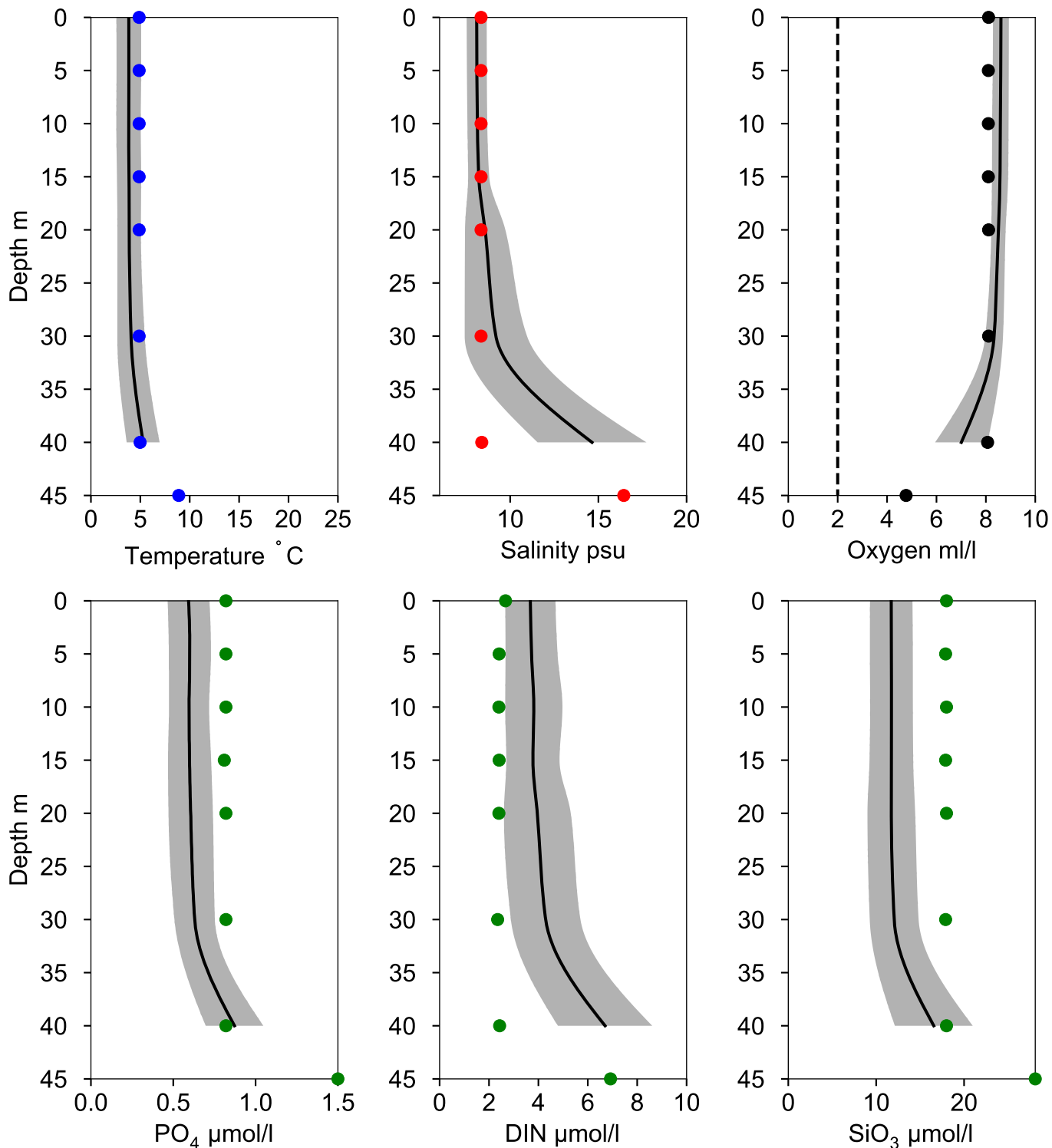


OXYGEN IN BOTTOM WATER (depth >= 40 m)



Vertical profiles BY2 ARKONA January

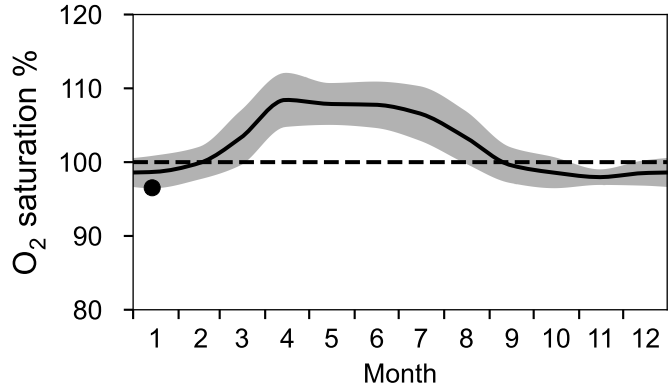
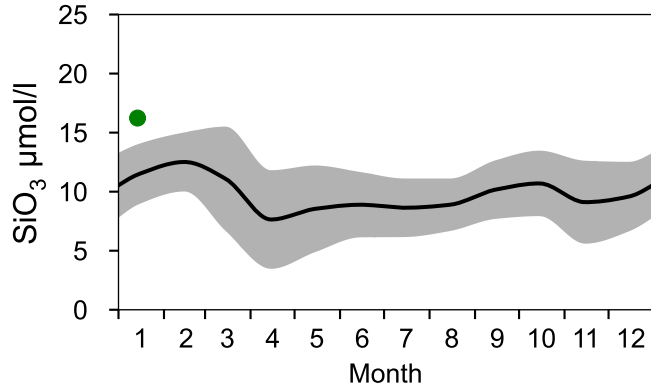
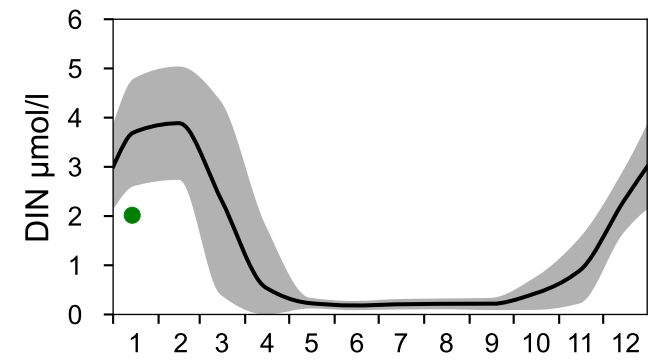
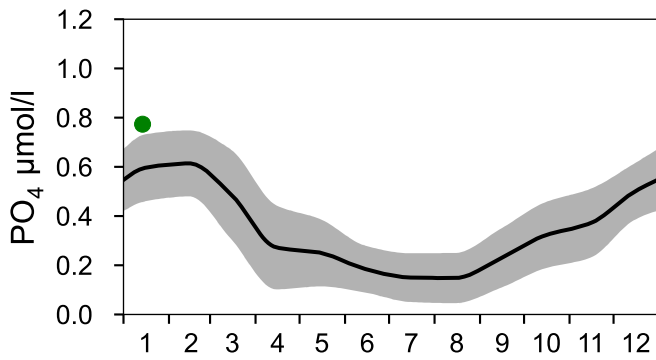
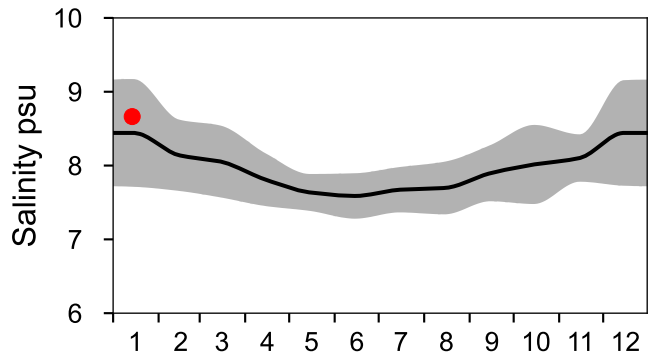
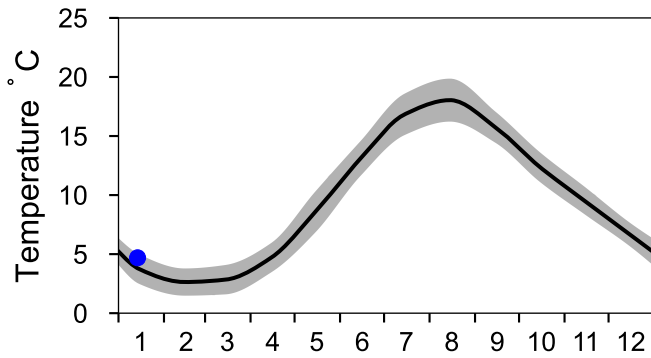
— Mean 1991-2020 ■ St.Dev. ● 2026-01-13



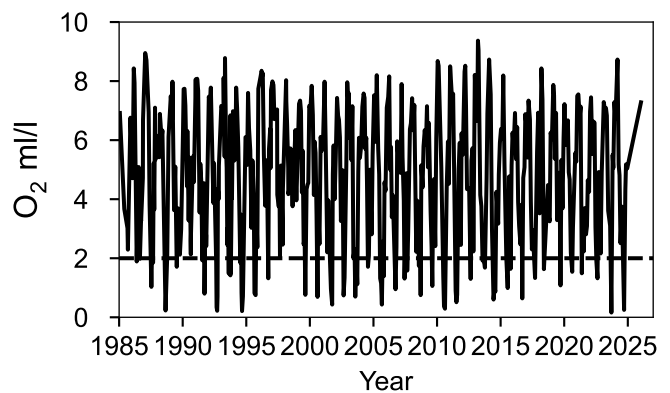
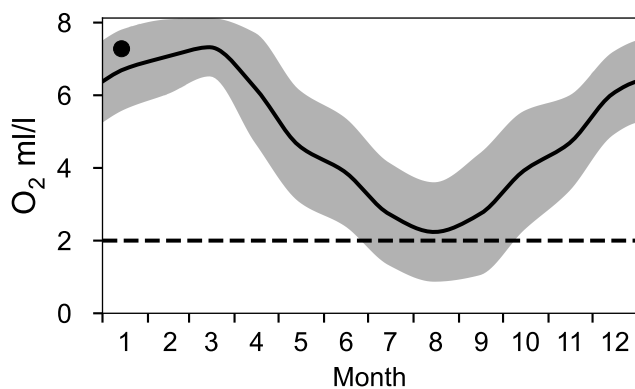
STATION BY1 SURFACE WATER (0-10 m)

Annual Cycles

— Mean 1991-2020 St.Dev. ● 2026



OXYGEN IN BOTTOM WATER (depth >= 39 m)



Vertical profiles BY1 January

