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Report from SMHI's marine monitoring cruise with R/V Svea – August 2025

Photo: Helena Björnberg, SMHI

Survey period:	2025-08-09 till 2025-08-15
Principals:	Swedish Meteorological and Hydrological Institute (SMHI), Swedish Agency for Marine and Water Management (SwAM)
Cooperation partners:	Swedish University of Agricultural Sciences (SLU), Swedish Maritime Administration

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SUMMARY

During the expedition, which is part of the Swedish pelagic monitoring program, Skagerrak, Kattegat, the Öresund Strait, and the Baltic Proper were visited.

Surface water temperatures ranged from 16 to 19 °C in Skagerrak, around 18 °C in Kattegat and the Öresund, and between 18 and 19 °C in the Baltic Sea. The surface water salinity was 25 – 32 psu in Skagerrak, 16 – 26 in Kattegat, and 6 – 8 in the Baltic Sea. Windy weather along the west coast had mixed the warm surface water down and weakened the halocline in parts of Skagerrak and Kattegat.

Concentrations of dissolved inorganic nutrients (nitrogen, phosphate, and silicate) were generally low or below the detection limit throughout most of the surveyed area, except in the Baltic Sea, where elevated levels of silicate persist. Elevated phosphate levels combined with low surface water temperatures at the southern coast of Öland suggest upwelling in the area.

Oxygen levels in the bottom waters of the west coast were good (3.0 – 5.8 ml/l). In the Arkona Basin, oxygen levels were close to the limit for severe oxygen deficiency (2.0 ml/l), which is a worsening compared to July. In the Bornholm Basin, severe oxygen deficiency persists from 70 – 80 meters depth, while oxygen levels in the Hanö bay have increased since July and are now around 4 ml/l. In the Eastern Gotland Basin severe oxygen deficiency was observed from 70 meters and hydrogen sulphide was present from somewhere between 125 and 150 meters and deeper, unfortunately not detected with higher vertical resolution. In the Western Gotland Basin, severe oxygen deficiency was found from 60 – 70 meters, and hydrogen sulphide occurred from 80 meters.

The next expedition with R/V Svea is scheduled for September 24 – 29, starting in Lysekil and ending in Kalmar.

EXPEDITION OVERVIEW

The expedition was carried out aboard the research vessel R/V Svea and took place between August 9th and 15th, starting and ending in Lysekil.

Profiles of salinity, temperature, oxygen, and fluorescence in the water column were measured using a CTD[1] mounted on a rosette equipped with 24 water sampling bottles. SMHI's 26 regular monitoring stations were sampled as planned, and in addition, both the Huvudskär buoy and Flinten 7 were visited for CTD reference measurements. At 13 stations in the Baltic Sea, as well as in the Öresund Strait, additional sampling was conducted for DNA barcoding and analysis of algal toxins (microcystin and nodularin) produced by cyanobacteria.

Gelatinous zooplankton was sampled with a large net at 1 station in the Kattegat and 4 stations in the Baltic Sea. The samples were photographed in a photo box and the images will be analysed by the University of Gothenburg. Environmental DNA (eDNA) was sampled at 7 stations in the Baltic Sea within the SAMBAH II project, aimed at mapping the presence of harbour porpoises in the Baltic Proper.

During the expedition, the CTD rosette was equipped with an RBR Tridente sensor that measures phycocyanin – a pigment found in cyanobacteria. At station BY38, a reference measurement was successfully conducted together with Voice of the Ocean's (VOTO's) glider, which was nearby and equipped with the same type of sensor. Complementary filtered water samples for phycocyanin analysis were also taken at BY38, as well as at BY5.

Svea's FerryBox system and the instrument for measuring oxygen, salinity and temperature profiles while underway – the Moving Vessel Profiler (MVP), were frequently operated during the expedition.

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

More information about our data hosting and to download data:
https://www.smhi.se/data/oceanografi/datavardskap-oceanografi-och-marinbiologi
For more information on the algal situation, see the AlgAware report:
https://www.smhi.se/publikationer/publikationer/algrapporter

[1]CTD is a profiling instrument and is short for Conductivity, Temperature and Depth

RESULTS

Initially windy with quite heavy seas in Skagerrak following the storm Floris from earlier in the week. After that, mostly clear weather with light winds and air temperatures ranging between 13 and 19 °C over Skagerrak and Kattegat, and between 16 and 20 °C over the Baltic Sea.

Skagerrak

Surface water temperatures in Skagerrak were normal for the month, ranging between 16 and 19 °C, with the warmest temperatures near the coast. In some parts of Skagerrak, the warm surface water had mixed down as deep as 50 – 60 meters, and a weakened halocline was noted in the shallower areas (stations Å13 – Å15 and P2). Salinity in the surface water was around 25 psu near the coast and 32 psu offshore.

The concentration of dissolved inorganic nutrients in the surface water remained low at all stations, with levels near or below the detection limit. Dissolved inorganic nitrogen (DIN) was around 0.1 µmol/l, silicate between 0.4 and 1.8 µmol/l, and phosphate between 0.03 and 0.1 µmol/l.

Oxygen concentrations at the bottom were normal for the month, ranging between 3.8 and 5.8 ml/l, with the lowest concentration recorded at Släggö.

A strong fluorescence peak was observed at 50 meters depth at station Å17, although generally, the fluorescence maximum was found between 15 and 30 meters.

Kattegat and the Öresund Strait

The warm surface water, with temperatures around 15 – 18 °C, extended down to 50 – 60 meters in some parts of Kattegat. Surface salinity was higher than normal in Kattegat, ranging between 22 and 26 psu, and around 16 psu in the Öresund.

The halocline was observed at 10 – 15 meters depth in the Öresund, while in Kattegat it was slightly deeper, at around 20 – 30 meters. Below the thermocline, salinity levels were around 32 – 34 psu and temperatures near the bottom were 8 – 10 °C.

Chlorophyll fluorescence was highest in the Öresund, where a strong fluorescence peak was recorded at 15 meters; additional plankton samples were collected for identification. At other stations, the fluorescence peak was generally deeper, around 20 – 25 meters.

Concentrations of dissolved inorganic nutrients in surface waters remained low throughout the area. DIN and phosphate were measured at approximately 0.1 and between 0.1 – 0.2 µmol/l, respectively. Silicate concentrations were higher than normal at all stations in Kattegat, ranging from about 2.0 to 2.4 µmol/l, and were 8.2 µmol/l in the Öresund.

The oxygen situation in bottom waters of Kattegat and the Öresund had slightly declined since July, with concentrations between 3.2 and 4.4 ml/l.

THE BALTIC SEA

Surface water temperatures were normal in most of the Baltic Proper, ranging between 18 and 19 °C, while salinity was slightly above normal at several stations, measured between 6.5 and 8.1 psu. At the southern coast of Öland (station BY39), signs of upwelling were observed as surface temperatures were unusually low in combination with elevated phosphate concentration.

In the Arkona Basin, the water was well-mixed down to 15 – 20 meters. Below this depth, salinity was around 14 psu and temperature approximately 10 °C. In the Bornholm Basin and Hanö Bay, a thermocline was observed at around 20 meters, while the halocline was deeper, around 50 meters. In the central parts of the Baltic Sea, the thermocline was found at 20 – 30 meters and the halocline at 60 – 80 meters. An intermediate cold-water layer was also noted between 50 and 80 meters.

The concentration of DIN in surface waters was at or below the detection limit (0.1 µmol/l), with values lower than normal for the month in the Eastern Gotland Basin. Phosphate concentrations were normal for the month, with levels between 0.1 and 0.5 µmol/l at the surface. Silicate concentrations in surface waters were above normal at most stations, with measured values between 14 and 15 µmol/l.

In the Arkona Basin, bottom oxygen levels had decreased since July and were now around 2 ml/l, close to the limit for severe oxygen deficiency (<2 ml/l). In the Bornholm Basin, severe oxygen deficiency was present from 70 meters depth, with bottom oxygen concentrations around 0.1 – 0.4 ml/l. No hydrogen sulphide was detected in the area.
In the Eastern Gotland Basin, hydrogen sulphide was present from somewhere between 125 and 150 meters depth and deeper. However, the exact depth (within a 5 m resolution) could not be determined due to limitations in number of sampling depths in combination with presence of low oxygen levels already from 70 m depth.
In the Western Gotland Basin, severe oxygen deficiency was present from 60 – 70 meters, and hydrogen sulphide was found from about 80 meters. The highest concentrations of hydrogen sulphide were found in the Eastern Gotland Basin at station BY15 - Gotland Deep. Since 2023, samples from this station have also been diluted before analysis, as it is suspected that hydrogen sulphide levels are being underestimated.

Fluorescence measurements indicated high plankton activity in the upper 20 meters in the northern and central parts of the Baltic Sea, particularly at stations BY10, BY20, and BY29, with a pronounced fluorescence maximum at BY20 between 10 and 15 meters. In the southern parts, the surface layer was more homogeneous, and fluorescence levels were slightly lower. In the Western Gotland Basin, the highest fluorescence was observed between 5 and 15 meters.

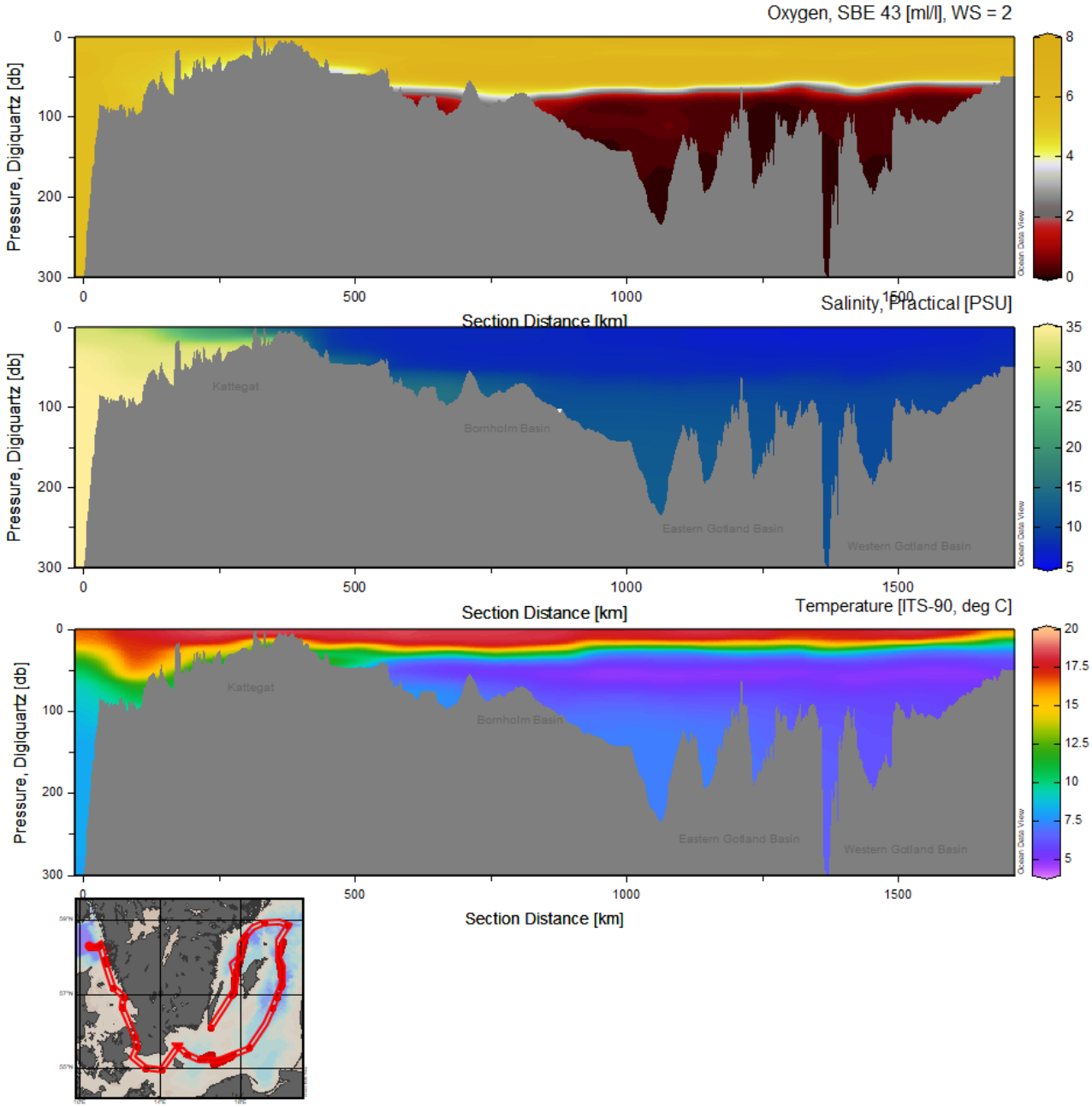


Figure 1. Section showing oxygen concentration, salinity, and temperature from CTD and MVP measurements, from the Skagerrak through the Kattegat and into the Baltic Sea according to the map (bottom).

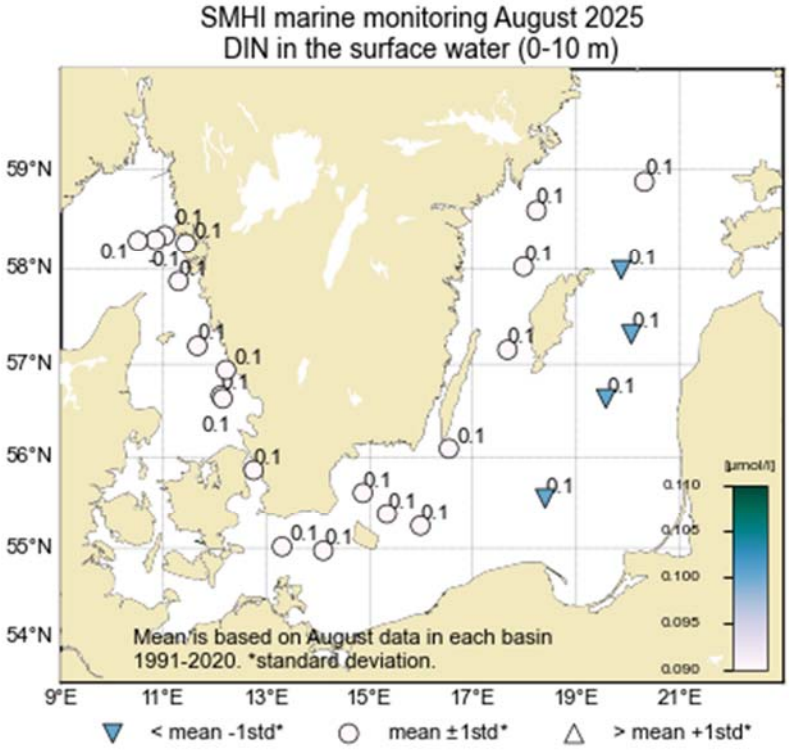


Figure 2. The concentration (µmol/l) of inorganic nitrogen (DIN) in the surface water (0 – 10 m). The mean value is based on data for the month at each station during the years 1991 – 2020.

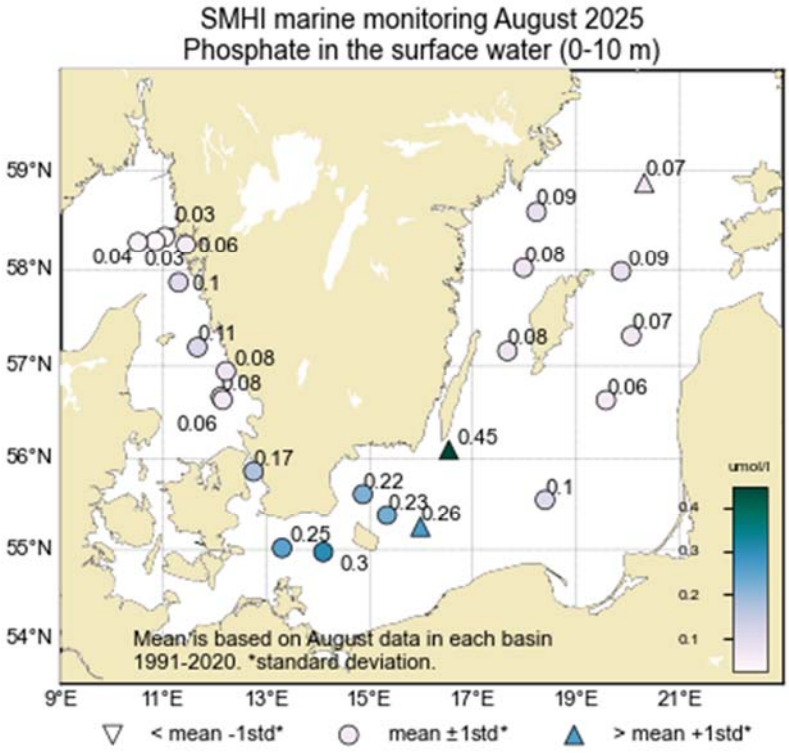


Figure 3. The concentration (µmol/l) of phosphate in the surface water (0 – 10 m). The mean value is based on data for the month at each station during the years 1991 – 2020.

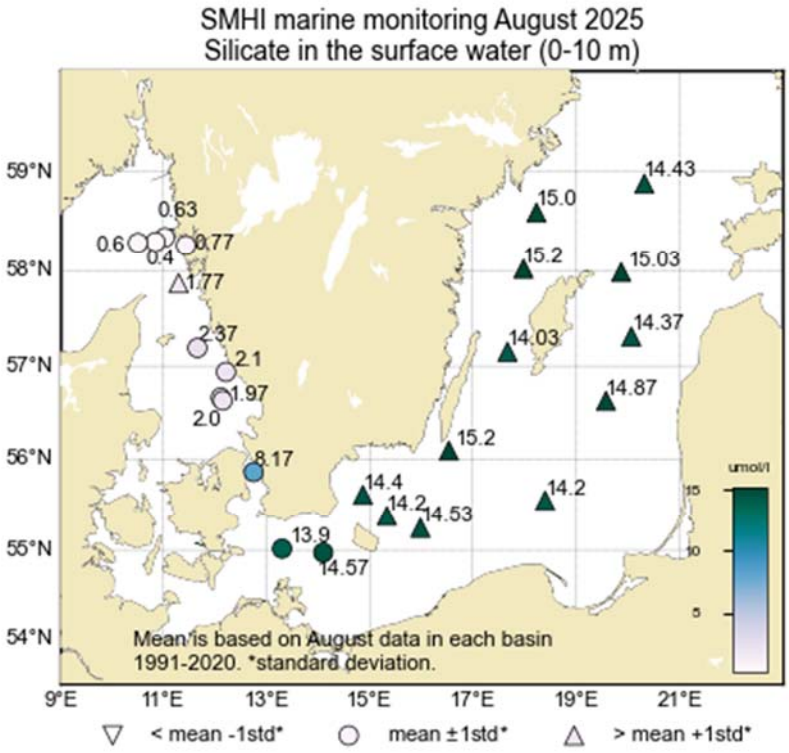


Figure 4. The concentration (µmol/l) of silicate in the surface water (0 – 10 m). The mean value is based on data for the month at each station during the years 1991 – 2020.

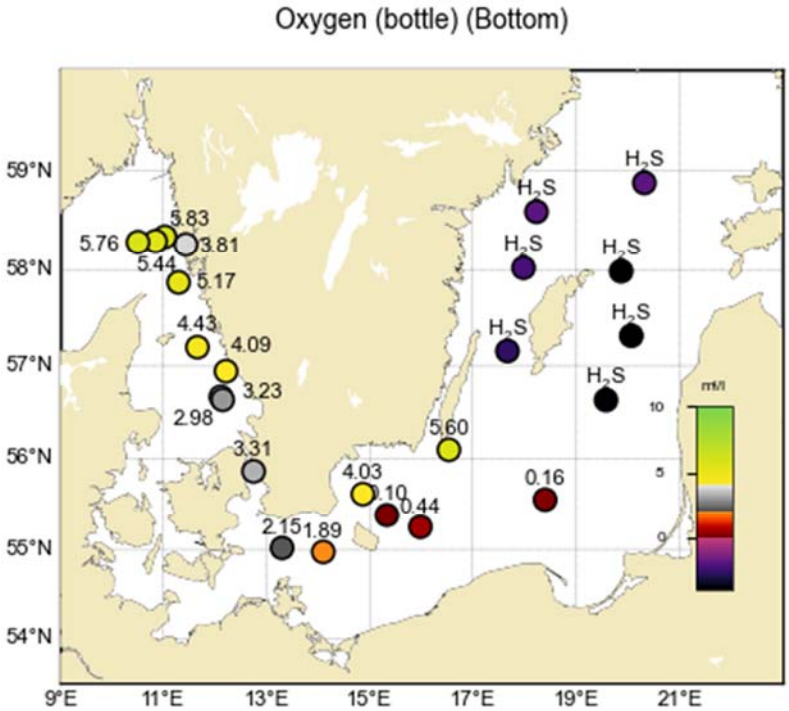


Figure 5. Dissolved oxygen concentration (ml/l) in the bottom water, approx. one meter above the seafloor. Presence of hydrogen sulphide is shown as H2S. Note that the values have not been compared to statistics as in similar figures and only circles are shown

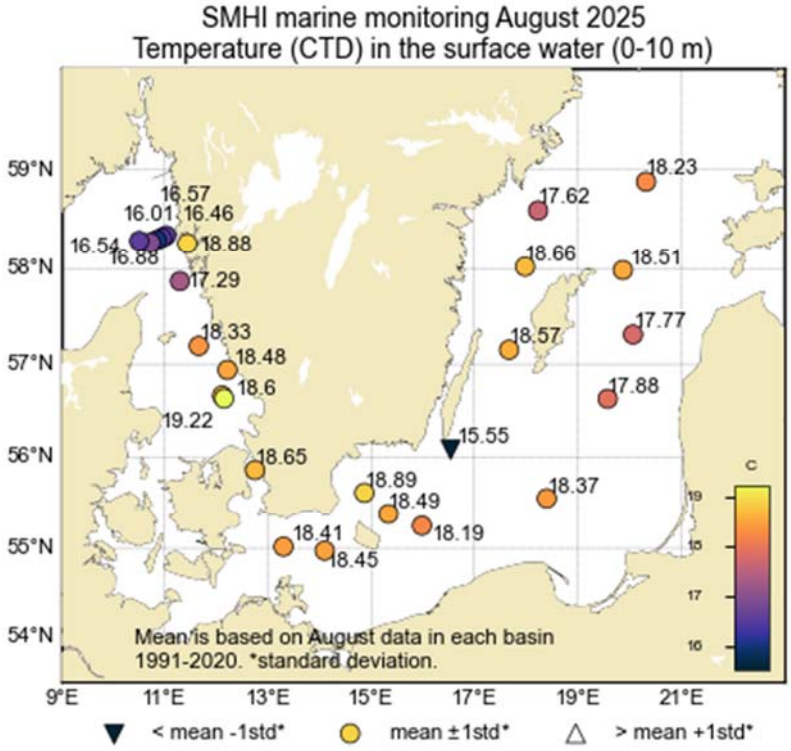


Figure 6. The temperature in the surface water (0 – 10 m). The mean value is based on data for the month at each station during the years 1991 – 2020.

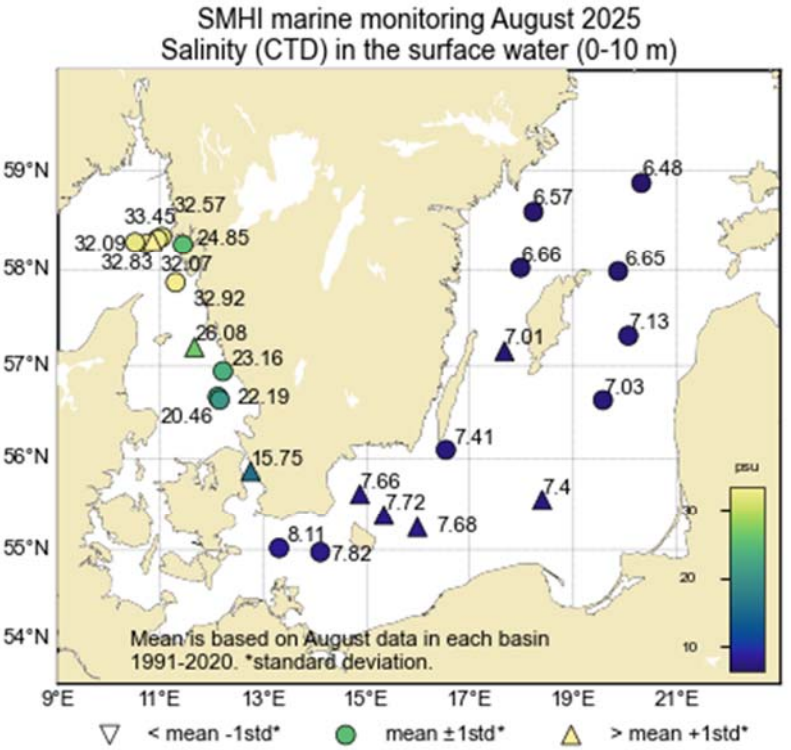


Figure 7. The salinity in the surface water (0 – 10 m). The mean value is based on data for the month at each station during the years 1991 – 2020.

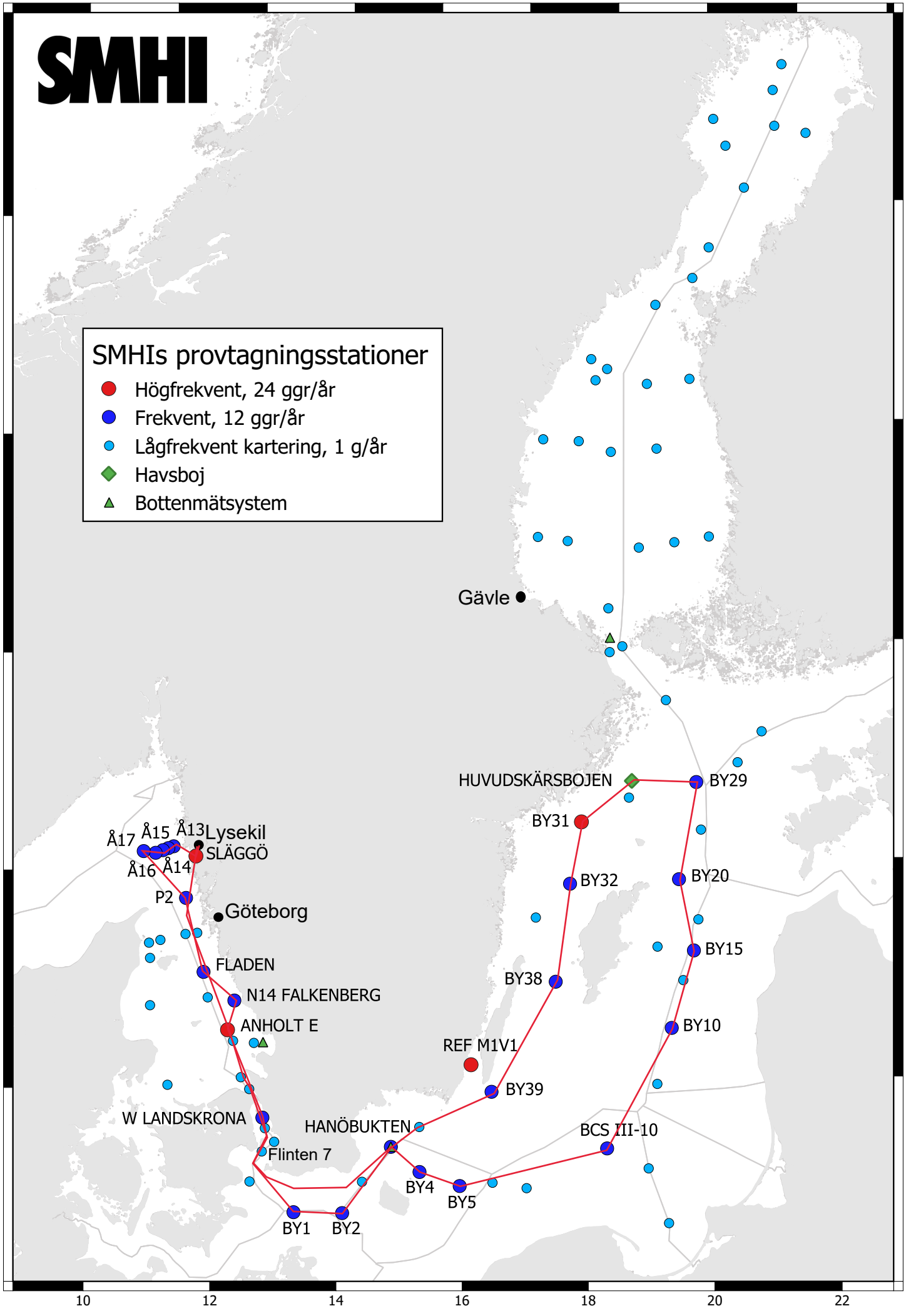
PARTICIPANTS

Name	Role	Organisation
Madeleine Nilsson	Cruise leader and water analysis	SMHI
Ola Kalén	CTD-operations and water analysis	SMHI
Helena Björnberg	CTD-operations and water analysis	SMHI
Johanna Linders	Water sampling and analysis	SMHI
Amanda Nylund	Water sampling and analysis	SMHI
Monica Lindner	Nutrient analysis, quality assurance	SMHI

APPENDICES

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

SMHI SWEDAC ACKREDITERING Ackred. nr. 1420 Provning ISO/IEC 17025 Havs och Vatten myndigheten


SMHI
SMHIs provtagningsstationer
Högfrekvent, 24 ggr/år
Frekvent, 12 ggr/år
Lågfrekvent kartering, 1 g/år
Havsboj
Bottenmätsystem
Gävle
HUVUDSKÄRSBOJEN
BY29
BY31
BY32
BY20
BY15
BY38
BY10
REF M1V1
BY39
BCS III-10
HANÖBUKTEN
BY4
BY5
BY1
BY2
Å17
Å15
Å13
Lysekil
SLÄGGÖ
Å16
Å14
P2
Göteborg
FLADEN
N14 FALKENBERG
ANHOLT E
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Date: 2025-08-26
Time: 10:37

Ship: 77SE
Year: 2025

Ser no	Cru no	Stat code	Proj	Stat name	Lat	Lon	Start date yyyymmdd	Start time hhmm	Bottom depth m	Secchi depth m	Wind dir	Wind vel	Air temp C	Air pres hPa	WCWI	CZPP	No de	No btl	Temp_btl	Temp_ctd	Salt_btl	Salt_ctd	Ph	Doxy_btl	Doxy_ctd	H2s	Phos	Ptot	Ntri	Ntra	Ntrz	Amon	Ntot	Alky	Sio3-si	Humus	Comnt_visit	Comnt_samp
0594	19	FIBG27	BAS...	SLÄGGÖ	5815.58	01126.14	20250809	1045	75	7	25	7	16.5	1019	1620	--x-	9		-	x	-	x	-	x	x	-	x	-	x	x	x	x	-	-	x	-	-	x
0595	19	SKEX14	BAS...	Å13	5820.38	01101.63	20250809	1330	107		21	7	16.7	1018	6130	----	10		-	x	-	x	-	x	x	-	x	-	x	x	x	x	-	-	x	-	-	-
0596	19	SKEX15	BAS...	Å14	5818.95	01056.56	20250809	1507	112		21	9.6	16.7	1016	6140	----	11		-	x	-	x	-	-	x	-	-	-	-	-	-	-	-	-	-	-	-	-
0597	19	SKEX16	BAS...	Å15	5817.66	01050.71	20250809	1552	136		22	7.8	16.8	1016	6140	----	12		-	x	-	x	-	x	x	-	x	-	x	x	x	x	-	-	x	-	-	-
0598	19	SKEX17	BAS...	Å16	5816.05	01043.47	20250809	1644	200		23	9.9	17.2	1015	6140	----	13		-	x	-	x	-	-	x	-	-	-	-	-	-	-	-	-	-	-	-	-
0599	19	SKEX18	BAS...	Å17	5817.06	01030.28	20250809	1759	352		28	7.7	17.4	1015	6140	-xx-	15		-	x	-	x	x	x	x	-	x	-	x	x	x	x	-	-	x	-	-	-
0600	19	SKEX23	BAS...	P2	5751.99	01117.59	20250809	2216	93		31	7.9	16.6	1017	9990	----	10		-	x	-	x	-	x	x	-	x	-	x	x	x	x	-	-	x	-	-	-
0601	19	KANX25	BAS...	FLADEN	5711.55	01139.49	20250810	0310	83		32	7	16.1	1018	9990	----	13		-	x	-	x	-	x	x	-	x	-	x	x	x	x	-	-	x	-	-	-
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0603	19	KAEX29	BAS...	ANHOLT E	5640.1	01206.66	20250810	0915	61	10	33	7	13.3	1018	2430	-xxx	10		x	x	-	x	x	x	x	-	x	-	x	x	x	x	-	-	x	-	-	-
0604	19	SOCX39	BAS...	W LANDSKRONA	5551.97	01244.89	20250810	1425	52	7	01	9.1	18.8	1025	3130	----	9		x	x	-	x	-	x	x	-	x	-	x	x	x	x	-	-	x	-	x	-
0606	19	BPSA02	BAS...	BY1	5500.94	01318.03	20250810	2146	46		35	4.8	18.2	1027	9990	----	8		x	x	-	x	-	x	x	-	x	-	x	x	x	x	-	-	x	-	x	-
0607	19	BPSA03	BAS...	BY2 ARKONA	5458.27	01405.95	20250811	0015	47		27	3.3	17.6	1027	9990	--x-	8		x	x	-	x	-	x	x	-	x	-	x	x	x	x	-	-	x	-	x	-
0608	19	BPSB06	BAS...	BY4 CHRISTIANSÖ	5522.97	01520.05	20250811	0630	92	7	35	5	16.2	1027	1420	----	12		x	x	-	x	-	x	x	-	x	-	x	x	x	x	-	-	x	-	x	-
0609	19	BPSB07	BAS...	BY5 BORNHOLMSDJ	5515	01559.05	20250811	0935	91	8	34	5	16.8	1027	2720	-xxx	12		x	x	-	x	x	x	x	-	x	-	x	x	x	x	-	-	x	-	x	-
0610	19	BPSE11	BAS...	BCS III-10	5533.34	01824.22	20250811	2016	90		30	7.55	18.4	1022	9990	----	12		x	x	-	x	-	x	x	-	x	-	x	x	x	x	-	-	x	-	x	-
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0612	19	BPEX21	BAS...	BY15 GOTLANDSDJ	5718.73	02004.57	20250812	0910	241	5	33	7	17.0	1021	2420	-xxx	24		-	x	-	x	x	x	x	x	x	-	x	x	x	x	-	-	x	-	x	-
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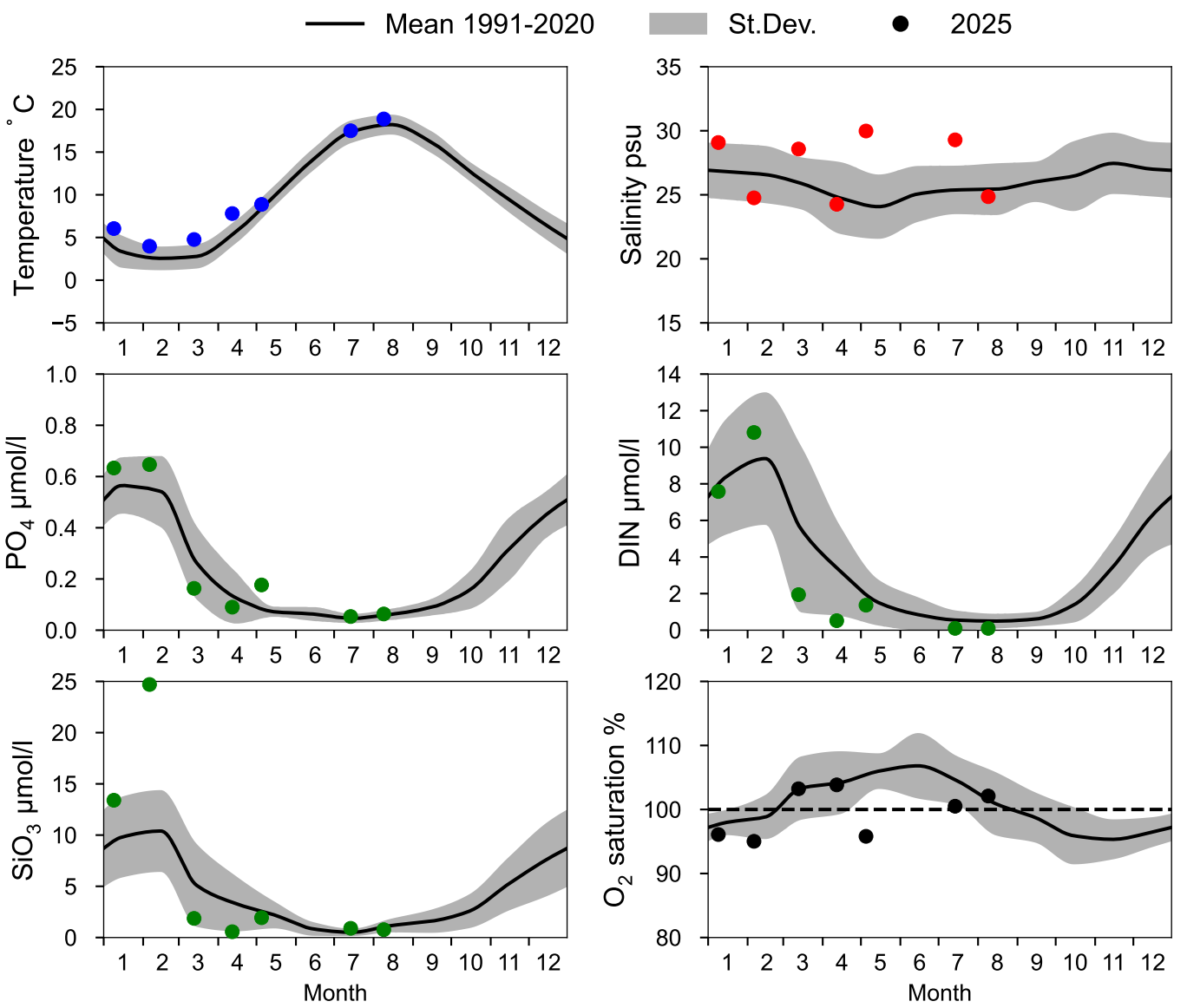
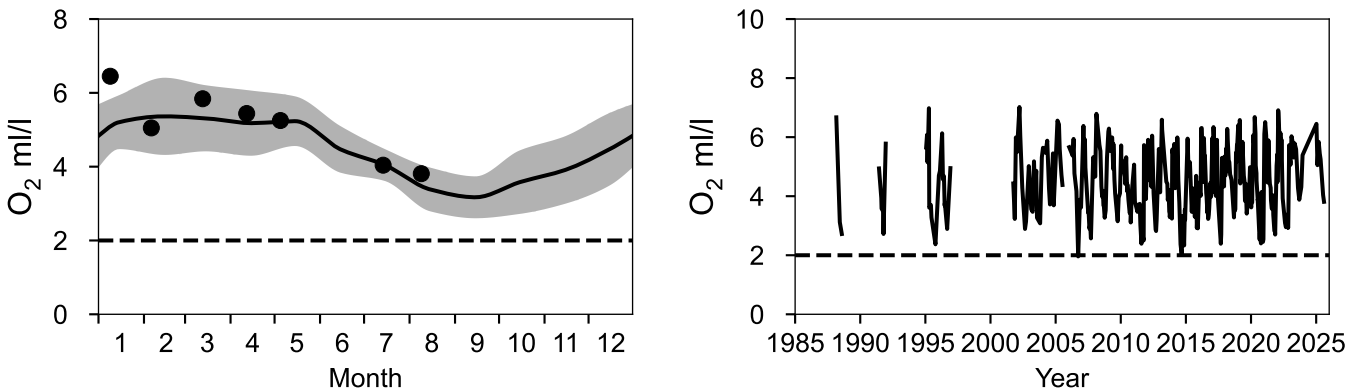
0614	19	BPNX35	BAS...	BY29 / LL19	5852.96	02019.73	20250812	2010	168		15	6.4	17.4	1021	9990	--x-	16		-	x	-	x	-	x	x	x	x	-	x	x	x	x	-	-	x	-	x	-
0616	19	BPNX37	BAS...	BY31 LANDSORTSDJ	5835.62	01814.17	20250813	0530	449	7	08	2	17.7	1022	2610	-xxx	22		-	x	-	x	x	x	x	x	x	-	x	x	x	x	-	-	x	-	x	-
0617	19	BPWX38	BAS...	BY32 NORRKÖPINGSDJ	5801.02	01759.08	20250813	1030	203	7	27	2	19	1023	1220	----	17		-	x	-	x	-	x	x	x	x	-	x	x	x	x	-	-	x	-	x	x
0618	19	BPWX45	BAS...	BY38 KARLSÖDJ	5709.12	01740.38	20250813	1601	111		28	7.0	18.9	1023	0020	--x-	14		x	x	-	x	-	x	x	x	x	-	x	x	x	x	-	-	x	-	x	x
0619	19	BPSE49	BAS...	BY39 ÖLANDS S UDDE	5605.98	01632.17	20250813	2322	52		01	3.3	17.5	1024	9990	-xx-	8		x	x	-	x	-	x	x	-	x	-	x	x	x	x	-	-	x	-	x	-
0620	19	BPSH05	BAS...	HANÖBUKTEN	5537.04	01452.07	20250814	0645	79	7	17	5	19.3	1024	1220	----	11		x	x	-	x	-	x	x	-	x	-	x	x	x	x	-	-	x	-	x	-
0621	19	KAEX29	BAS...	ANHOLT E	5638.17	01208.87	20250814	2233	63		15	7.6	19.9	1021	9990	-xx-	10		x	x	-	x	x	x	x	-	x	-	x	x	x	x	-	-	x	-	-	-

STATION SLÄGGÖ SURFACE WATER (0-10 m)

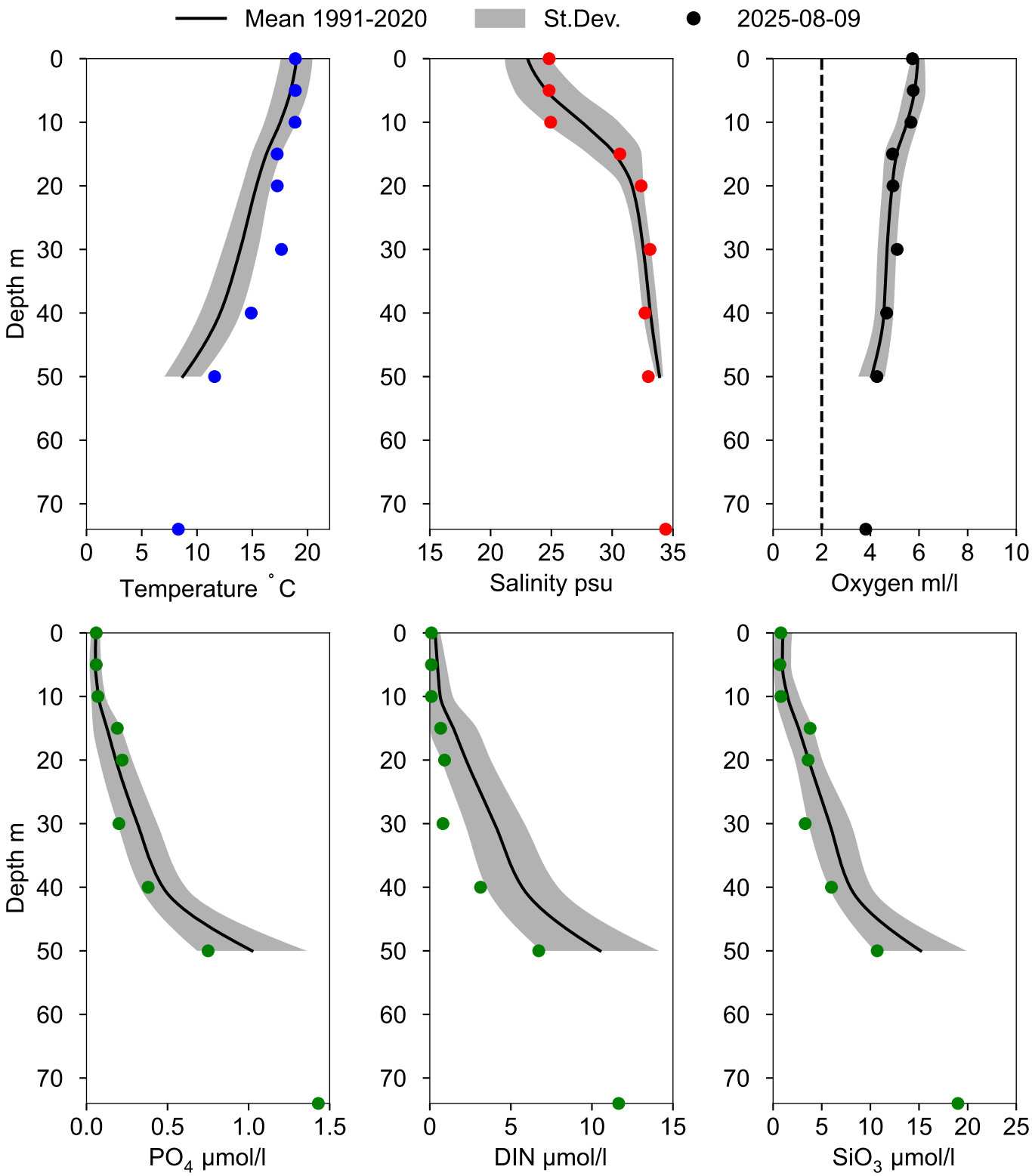
Annual Cycles



OXYGEN IN BOTTOM WATER (depth >= 64 m)

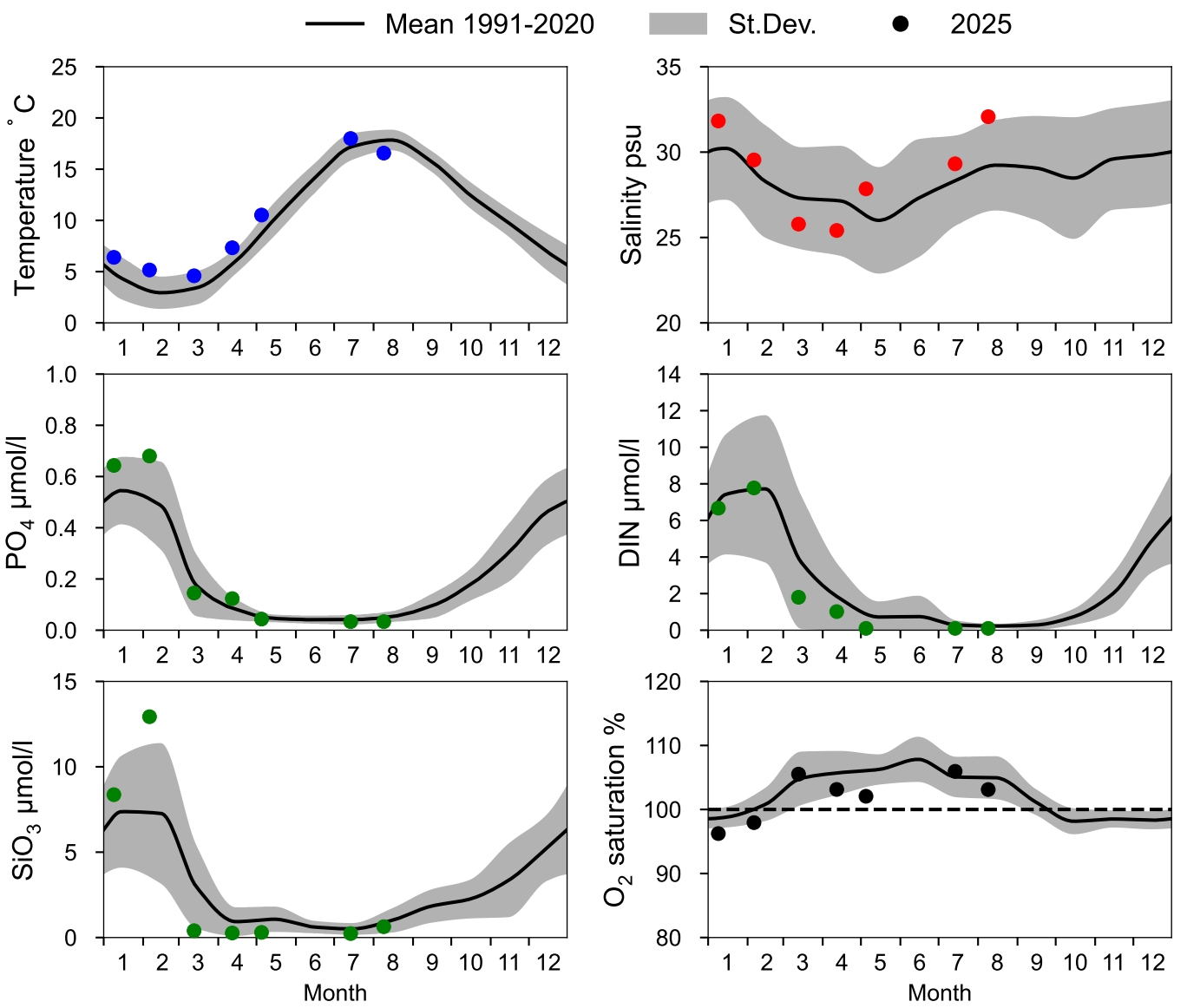


Vertical profiles SLÄGGÖ
August

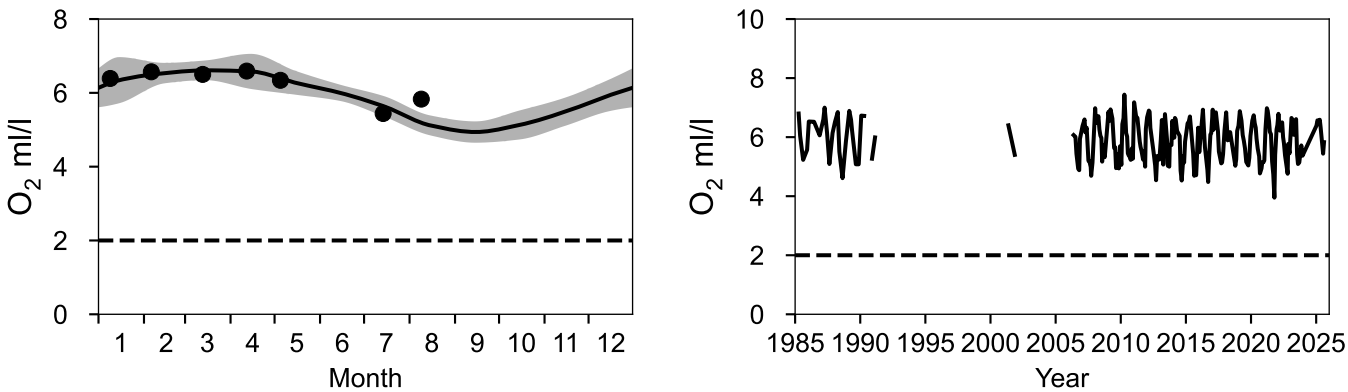


STATION Å13 SURFACE WATER (0-10 m)

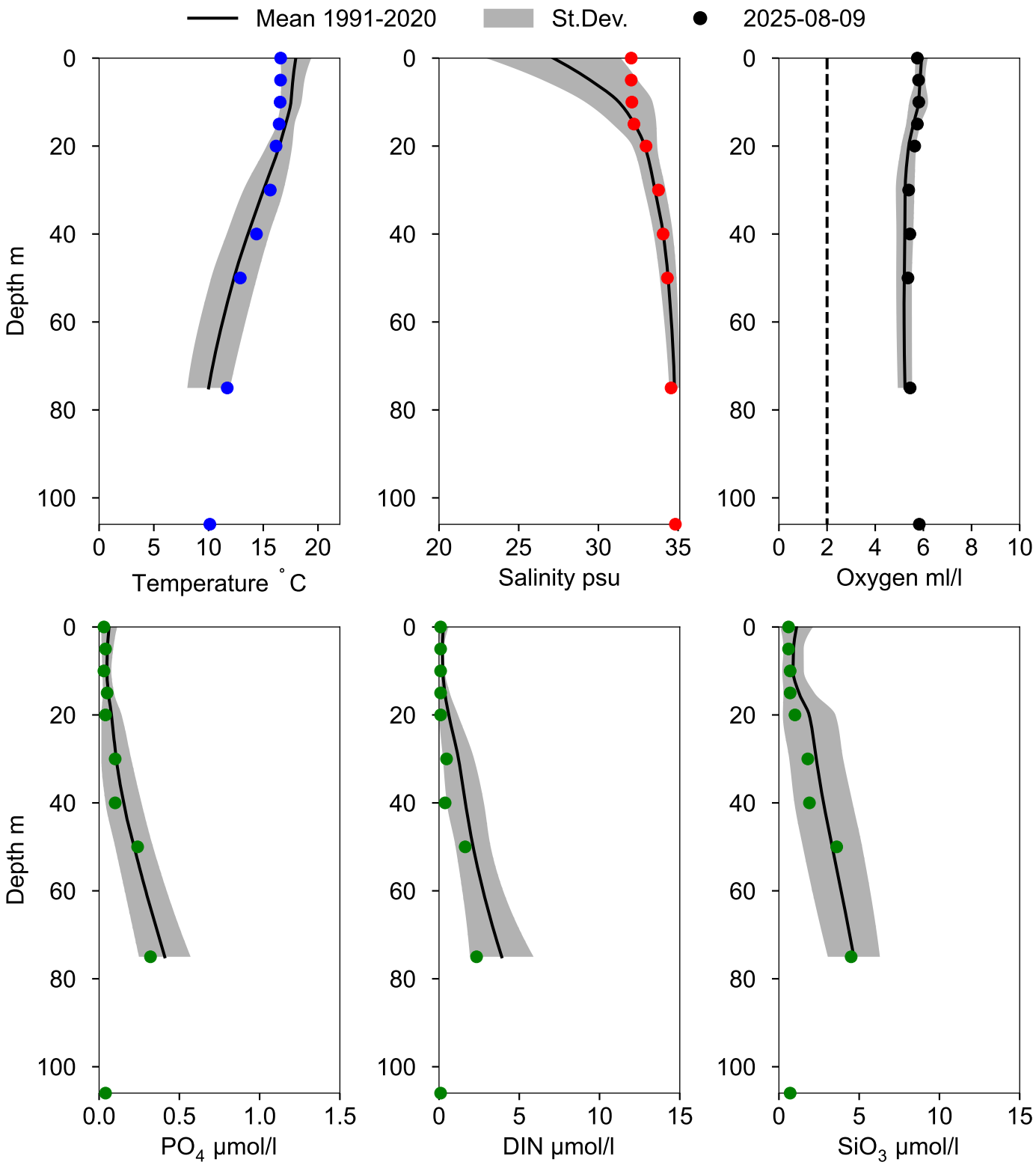
Annual Cycles



OXYGEN IN BOTTOM WATER (depth >= 82 m)

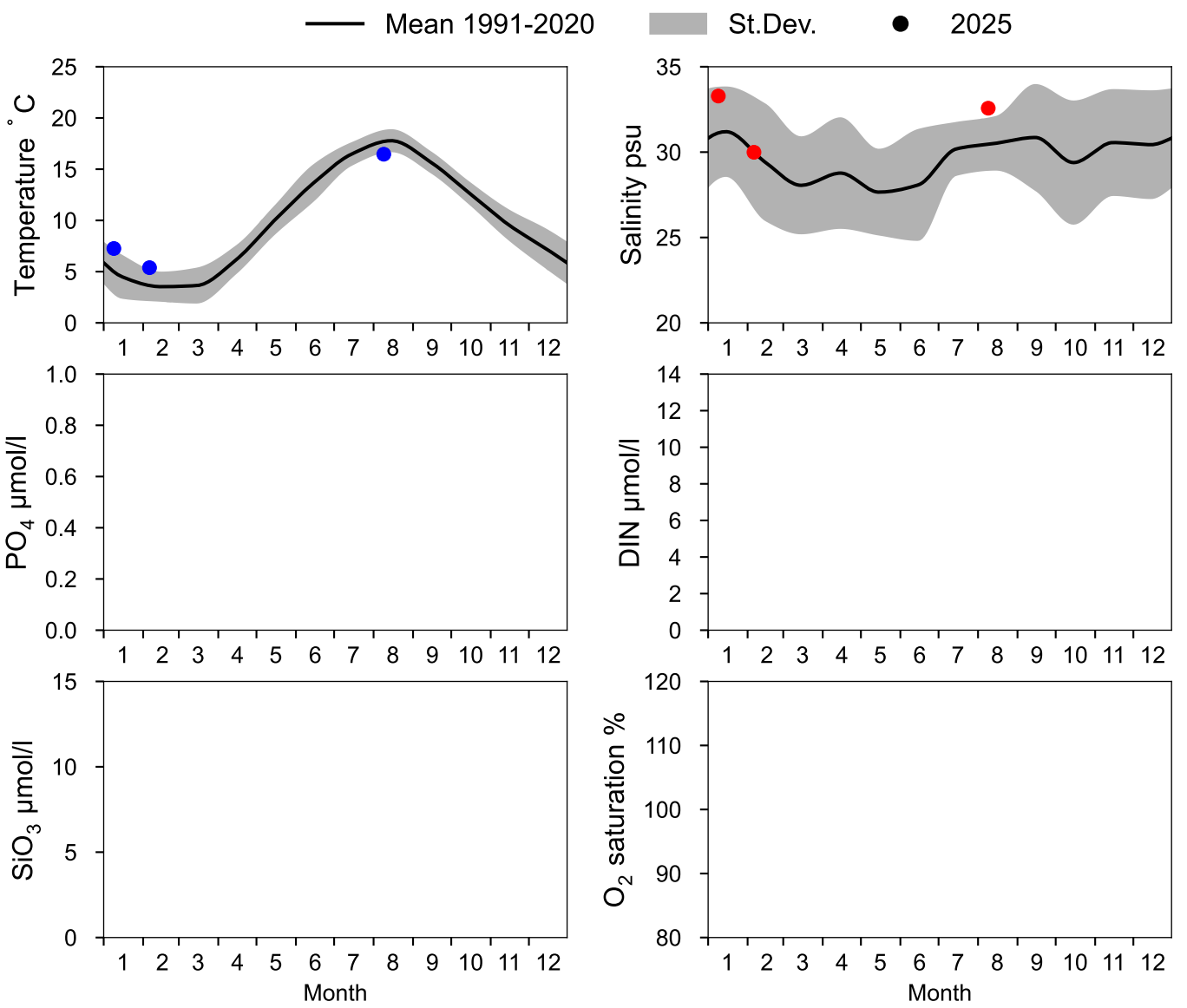


Vertical profiles Å13
August

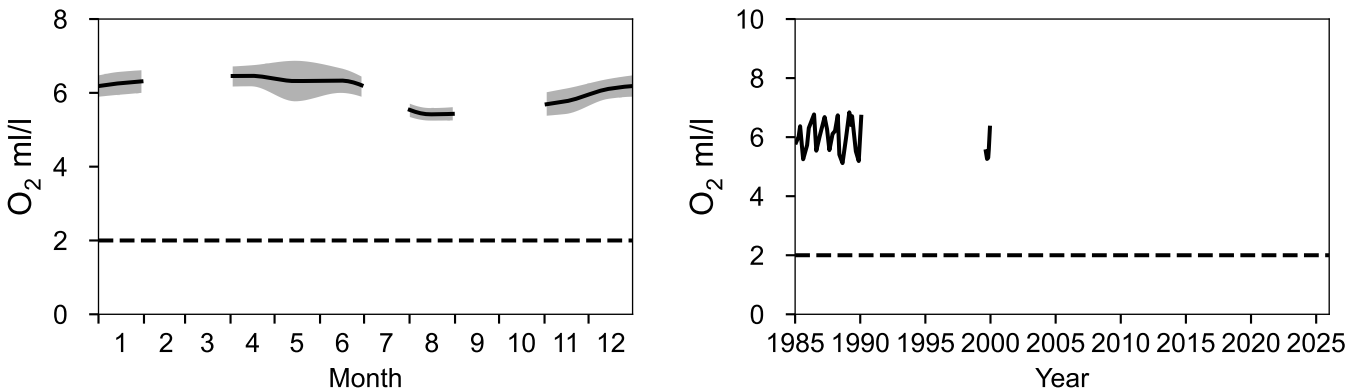


STATION Å14 SURFACE WATER (0-10 m)

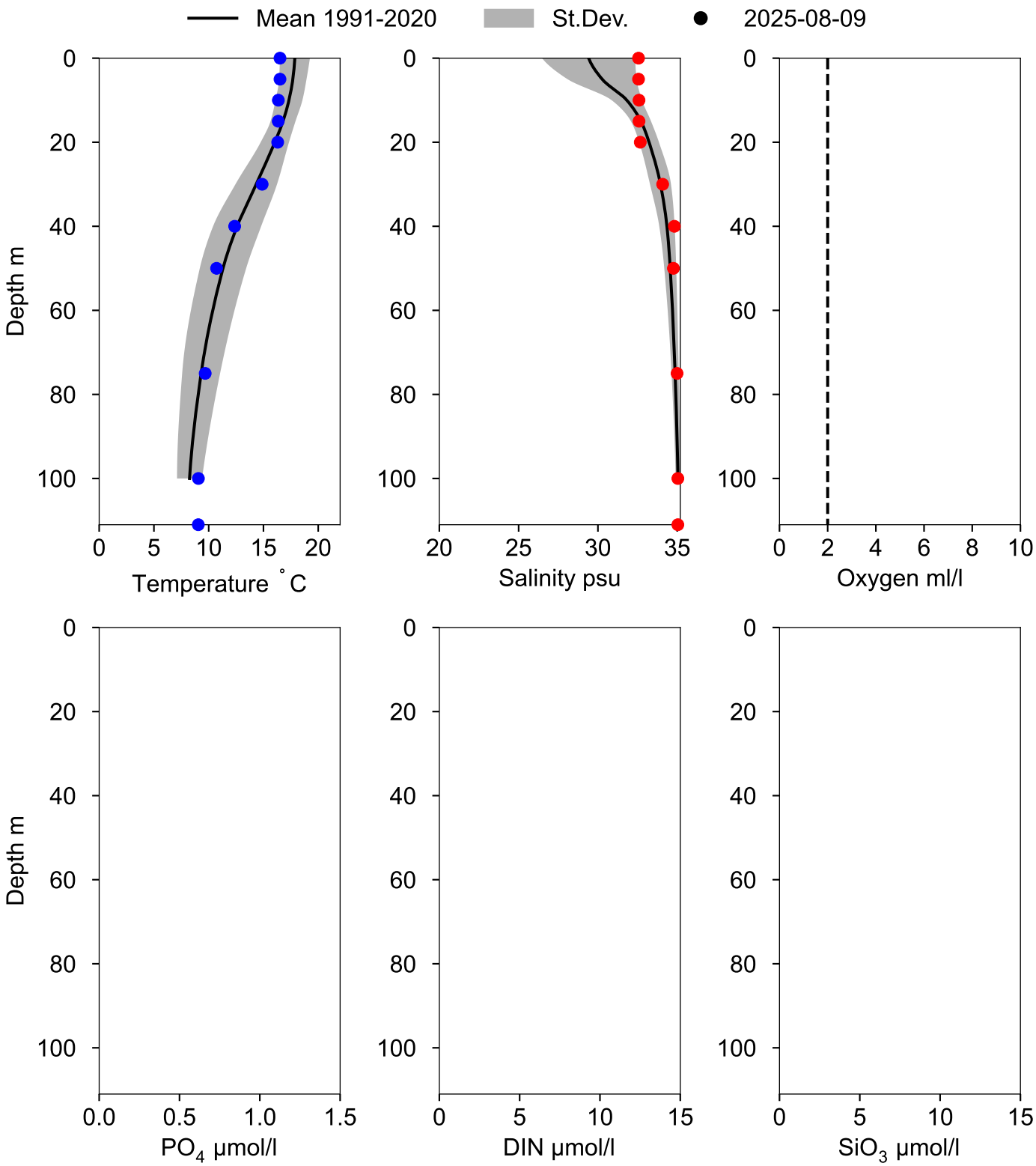
Annual Cycles



OXYGEN IN BOTTOM WATER (depth >= 100 m)

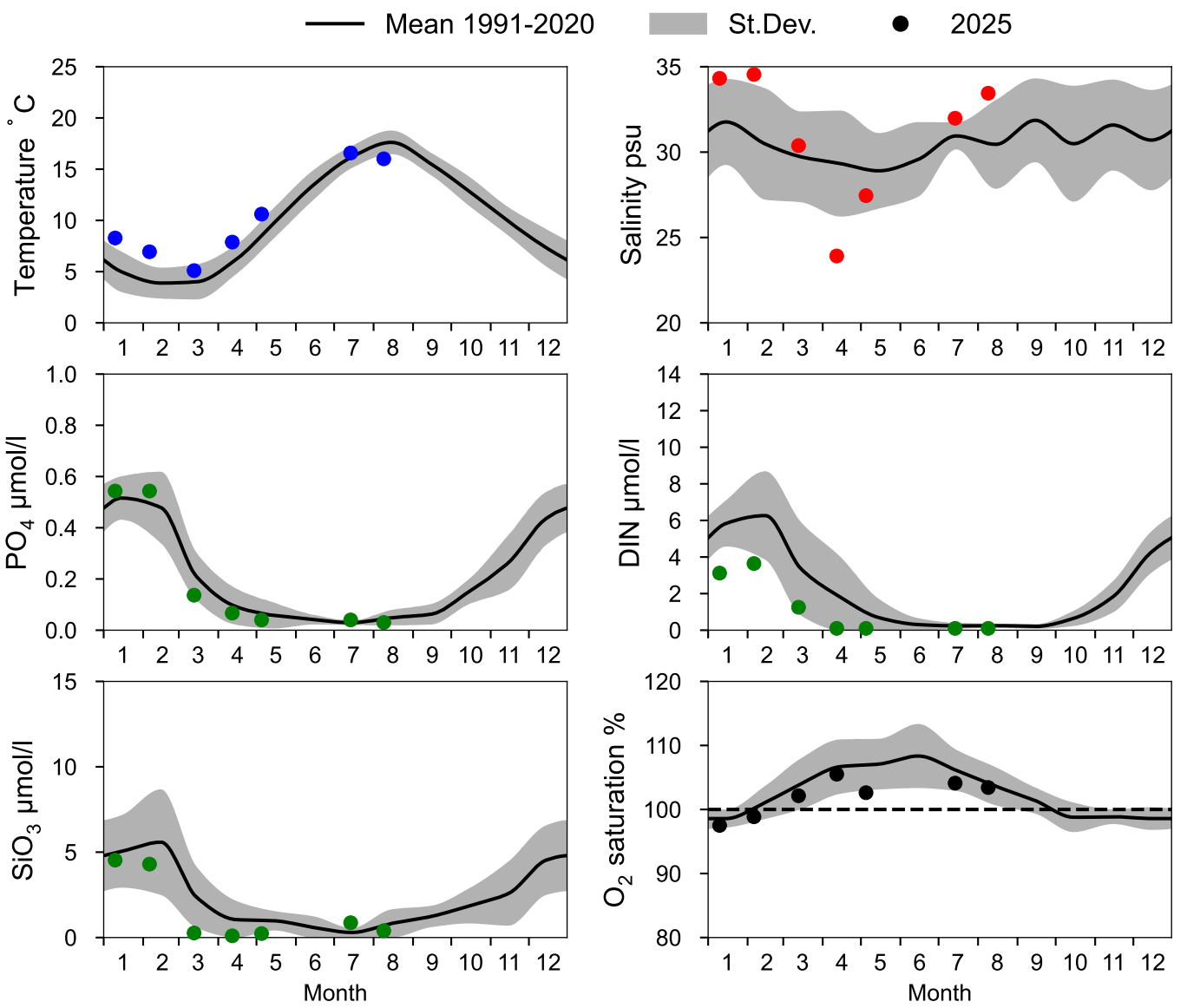


Vertical profiles Å14
August

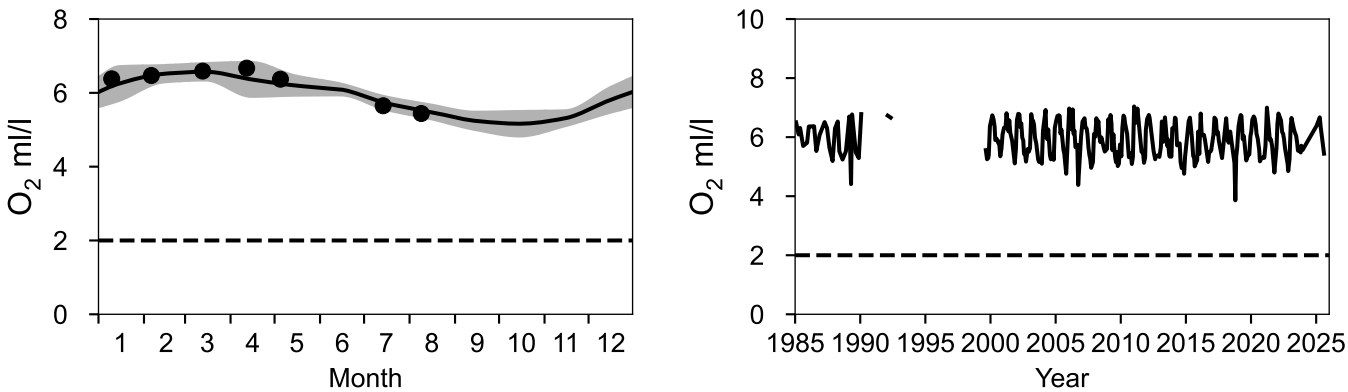


STATION Å15 SURFACE WATER (0-10 m)

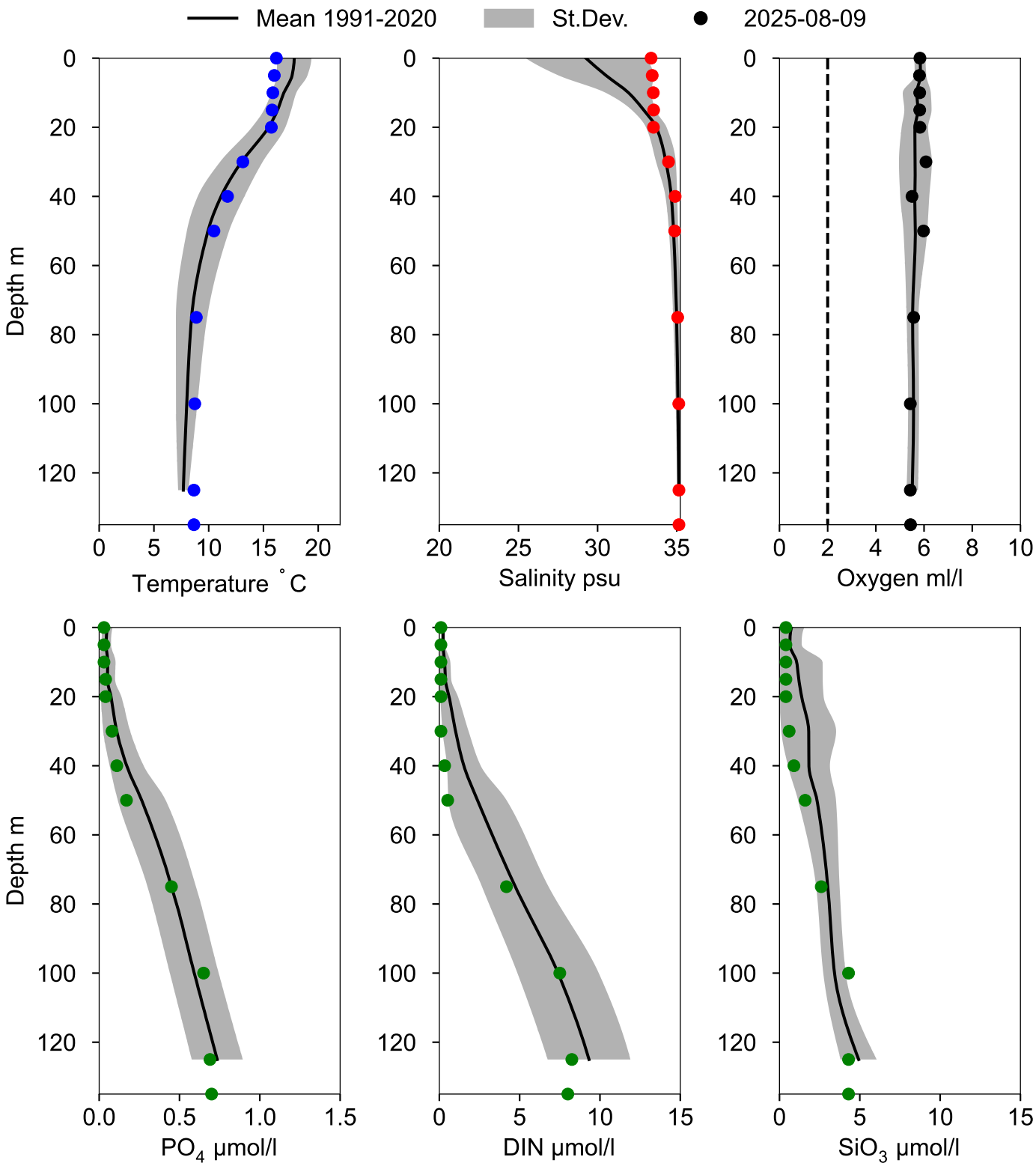
Annual Cycles



OXYGEN IN BOTTOM WATER (depth >= 125 m)

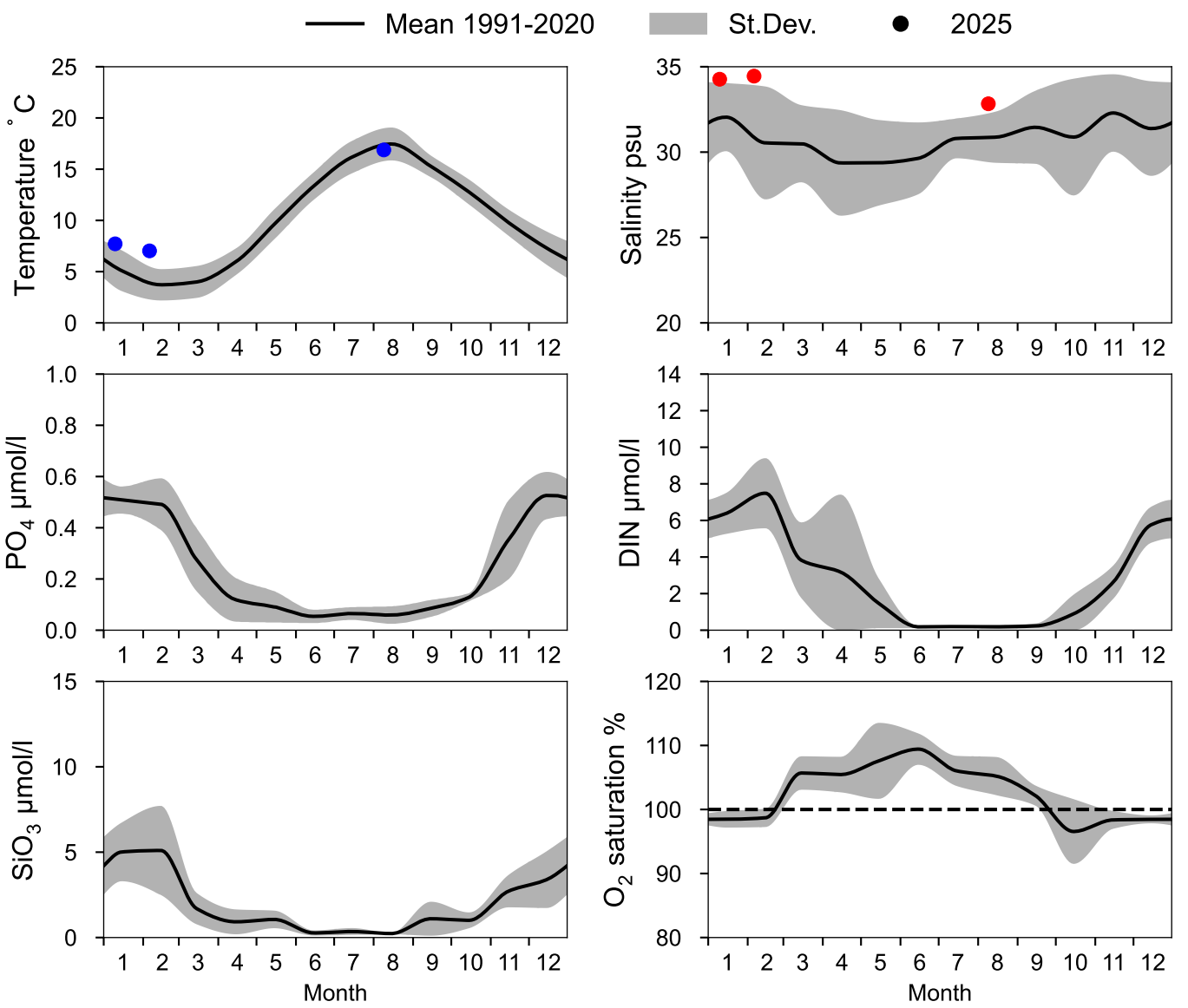


Vertical profiles Å15
August

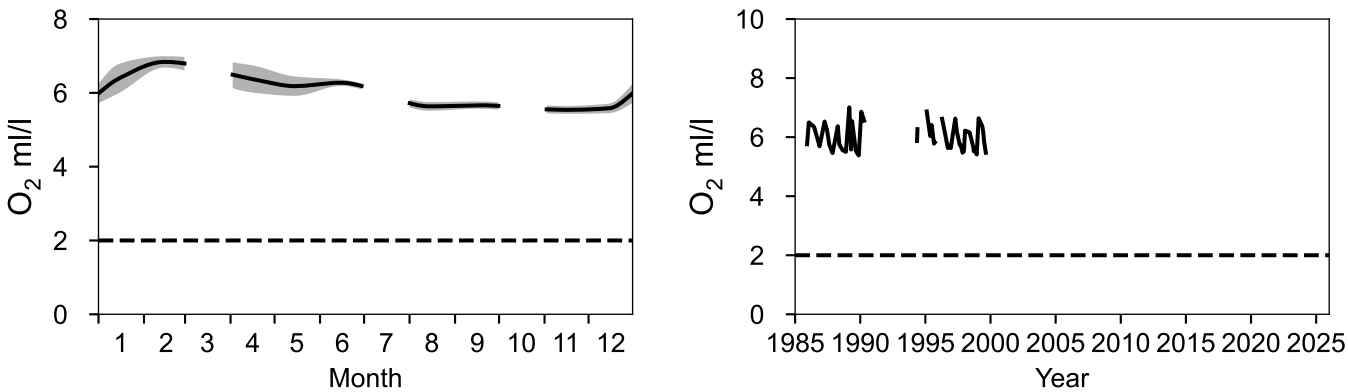


STATION Å16 SURFACE WATER (0-10 m)

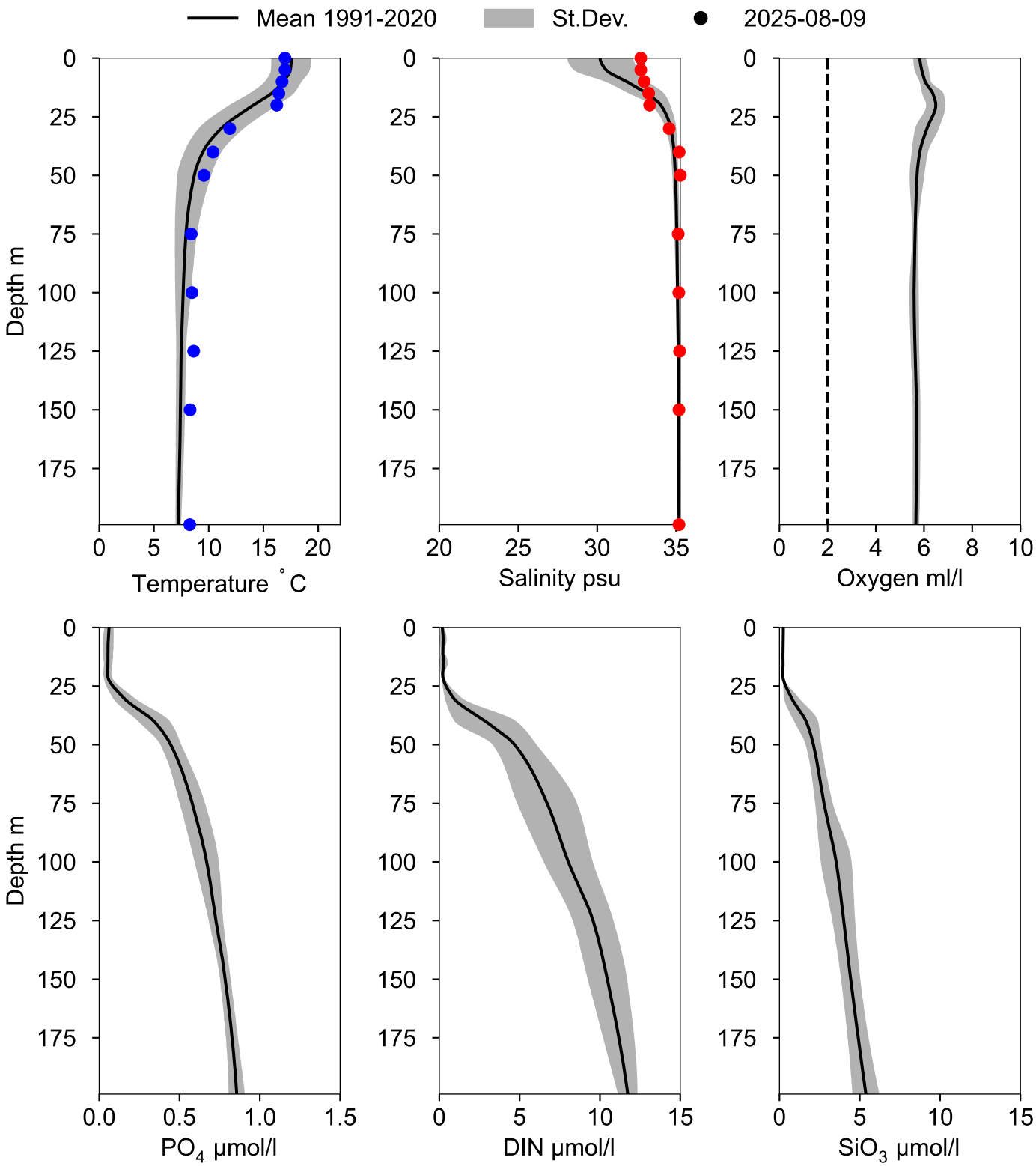
Annual Cycles



OXYGEN IN BOTTOM WATER (depth >= 193 m)

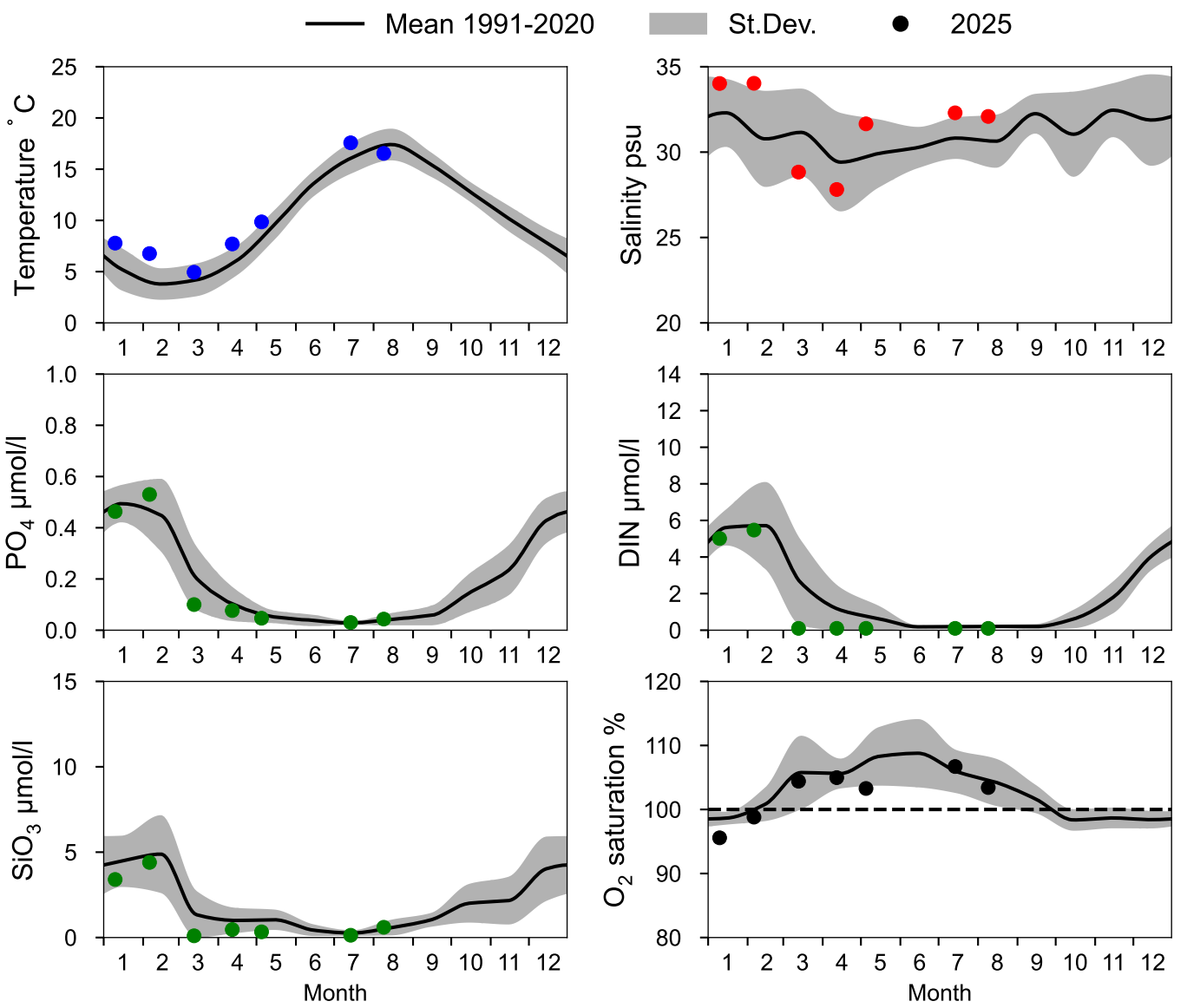


Vertical profiles Å16
August

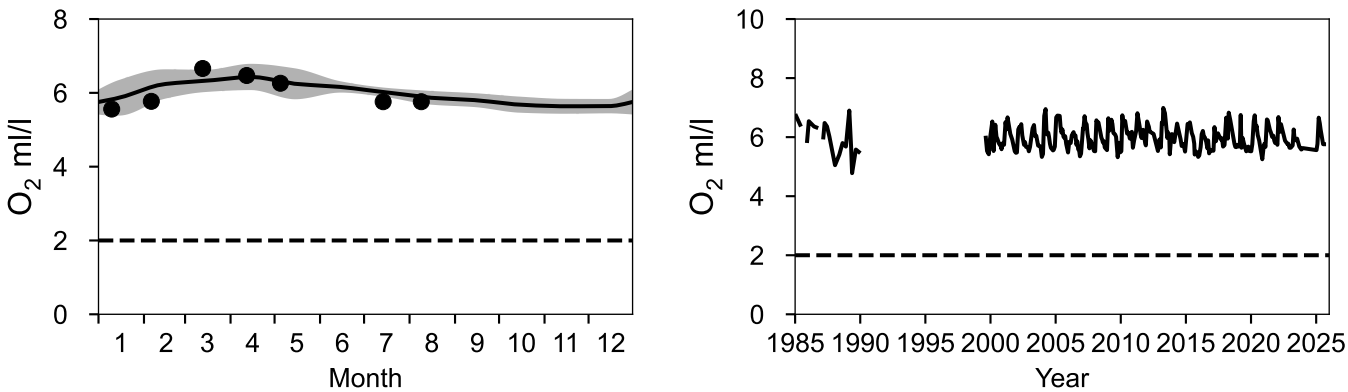


STATION Å17 SURFACE WATER (0-10 m)

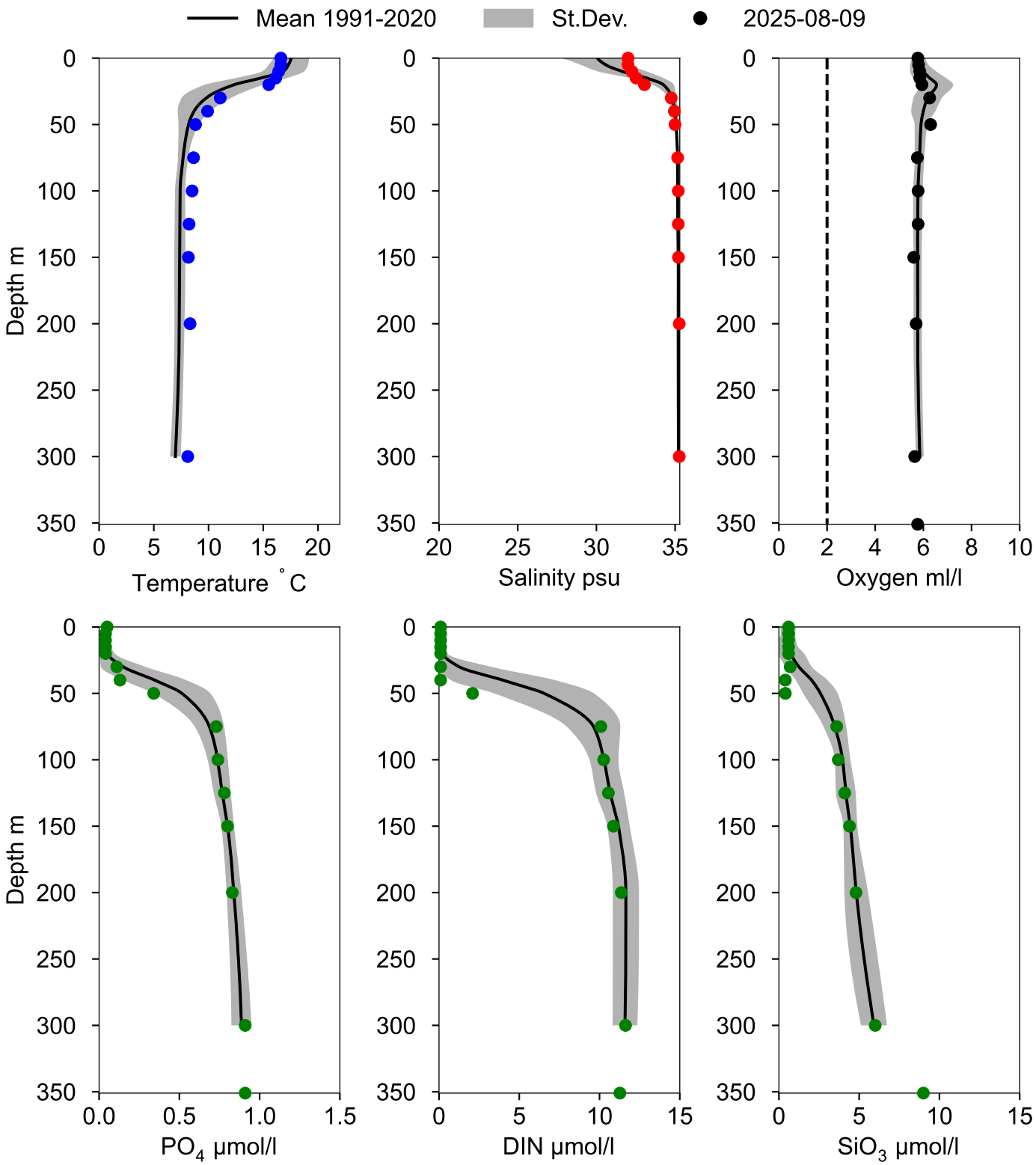
Annual Cycles



OXYGEN IN BOTTOM WATER (depth >= 300 m)

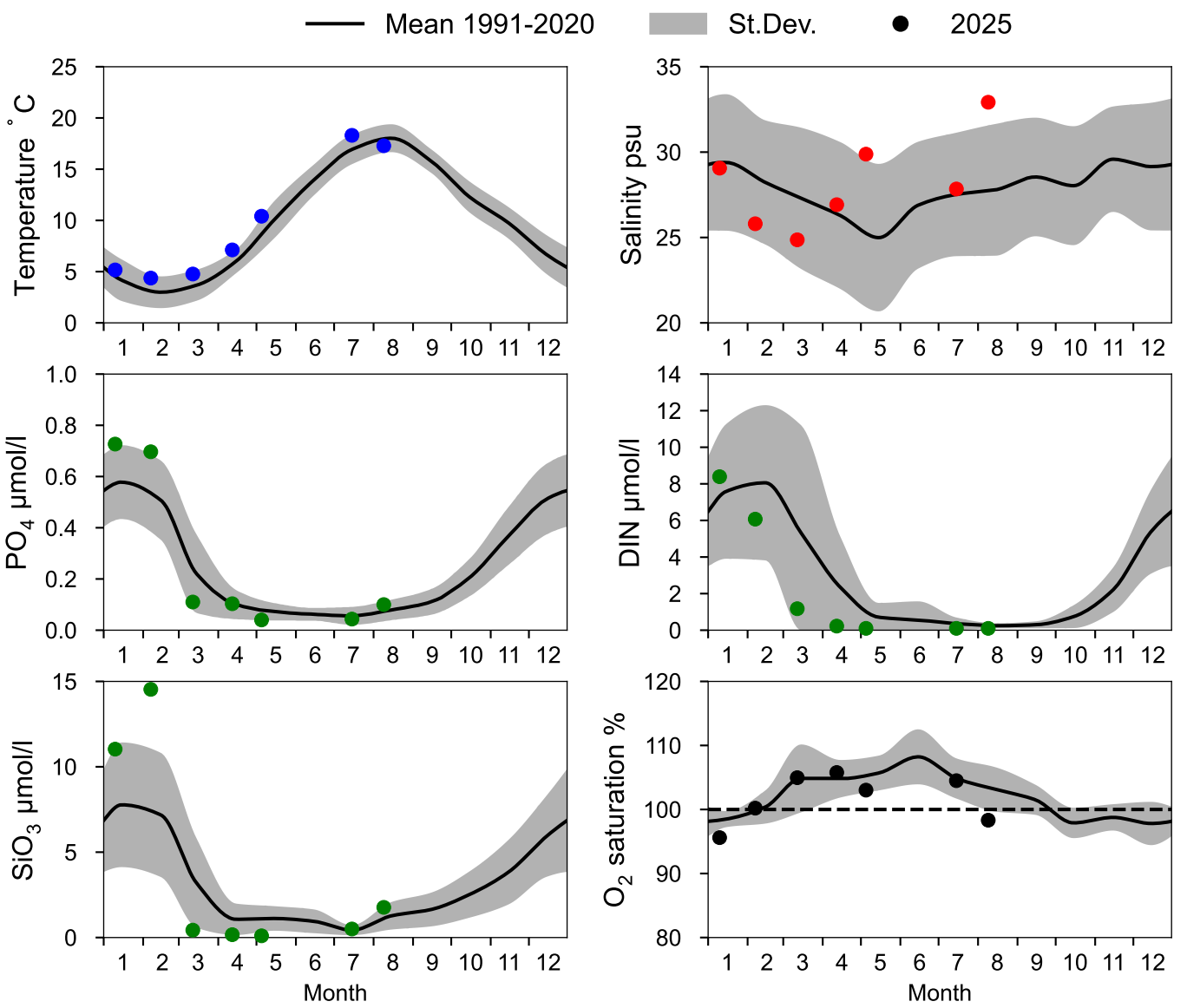


Vertical profiles Å17
August

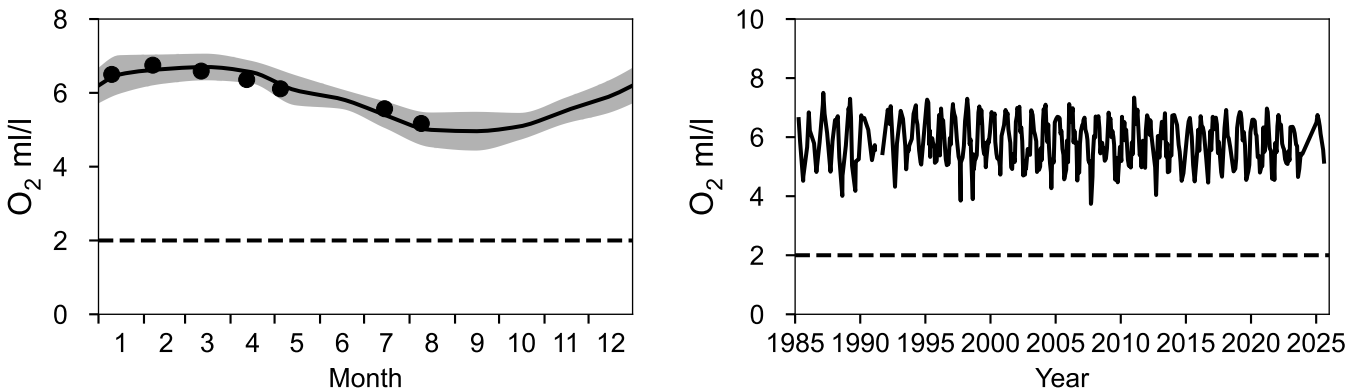


STATION P2 SURFACE WATER (0-10 m)

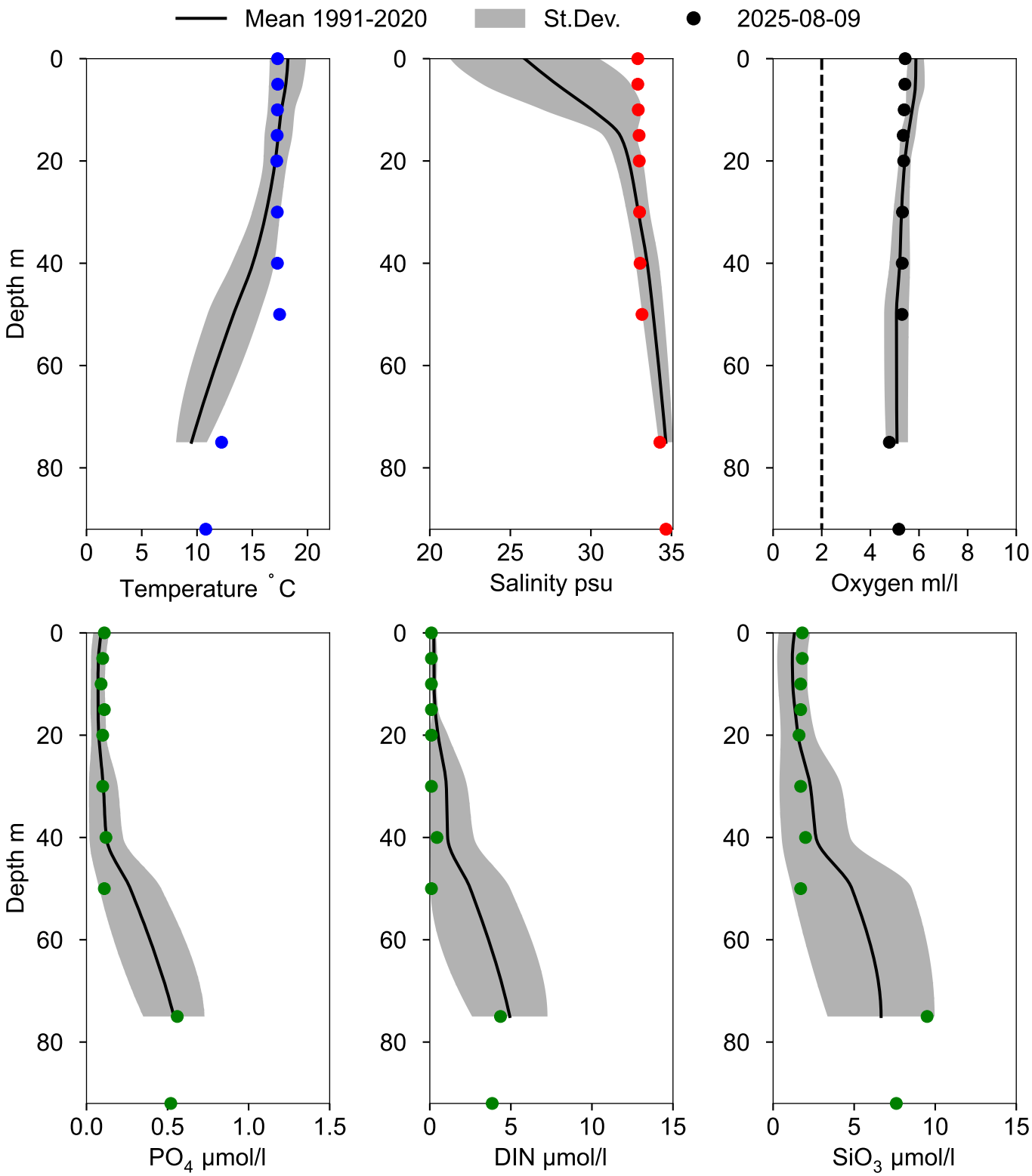
Annual Cycles



OXYGEN IN BOTTOM WATER (depth >= 75 m)

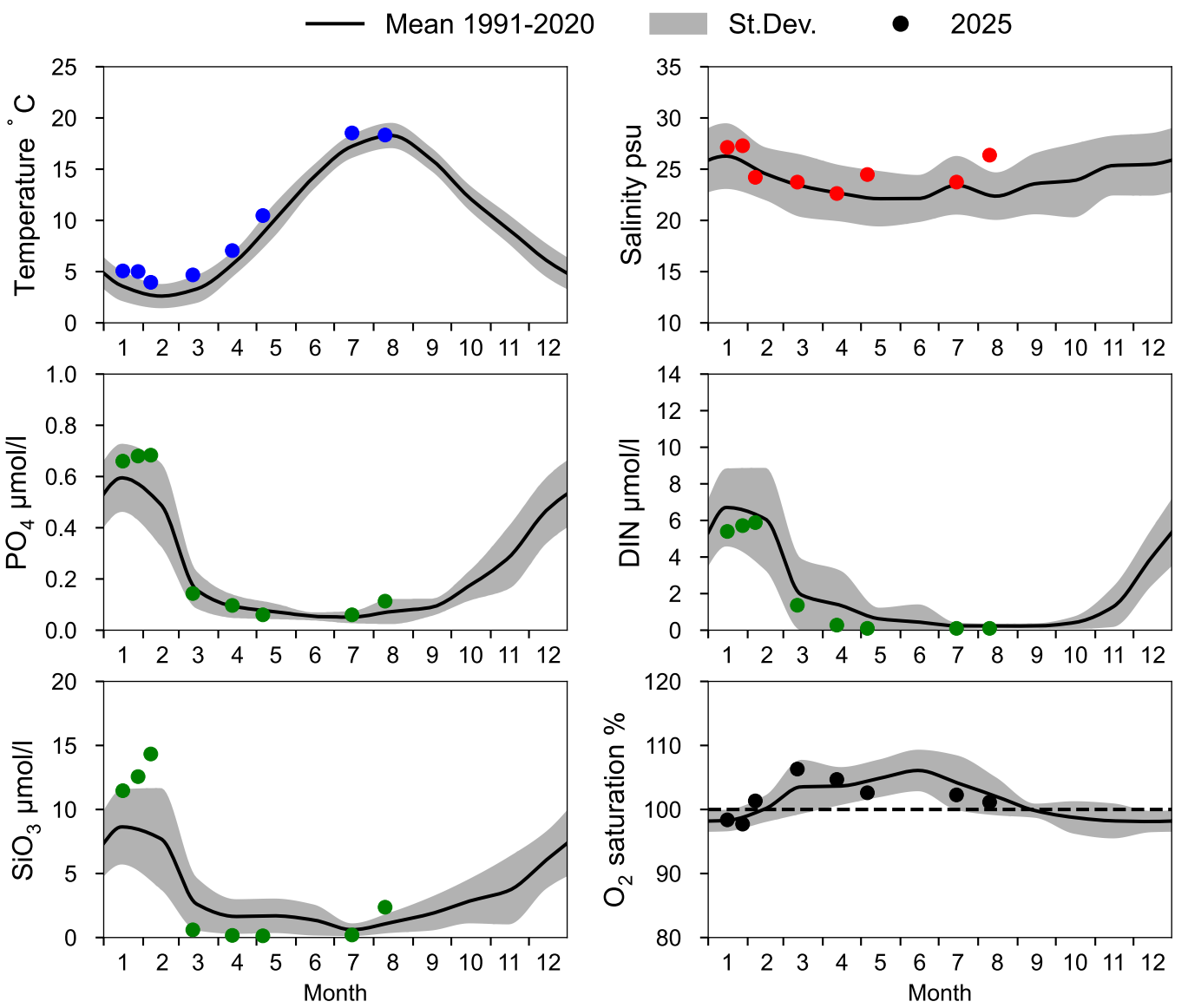


Vertical profiles P2
August

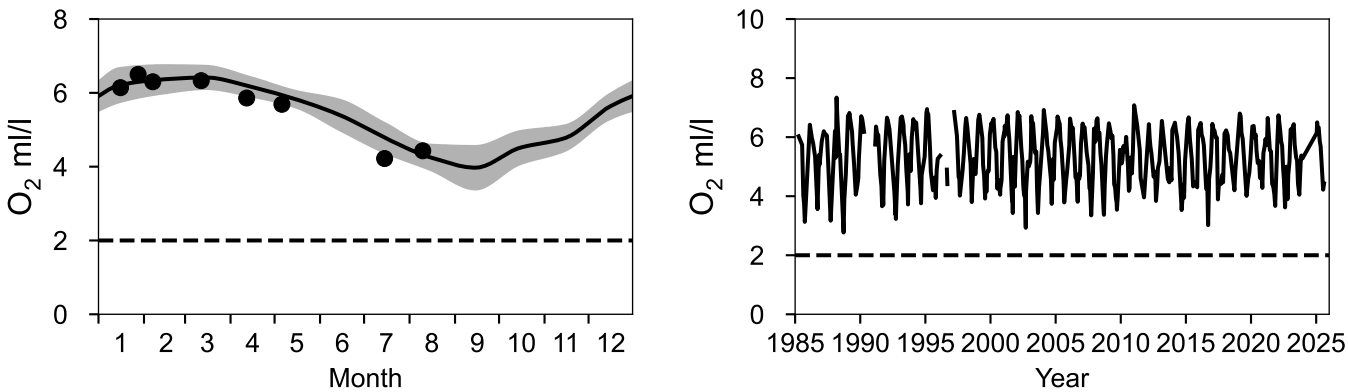


STATION FLADEN SURFACE WATER (0-10 m)

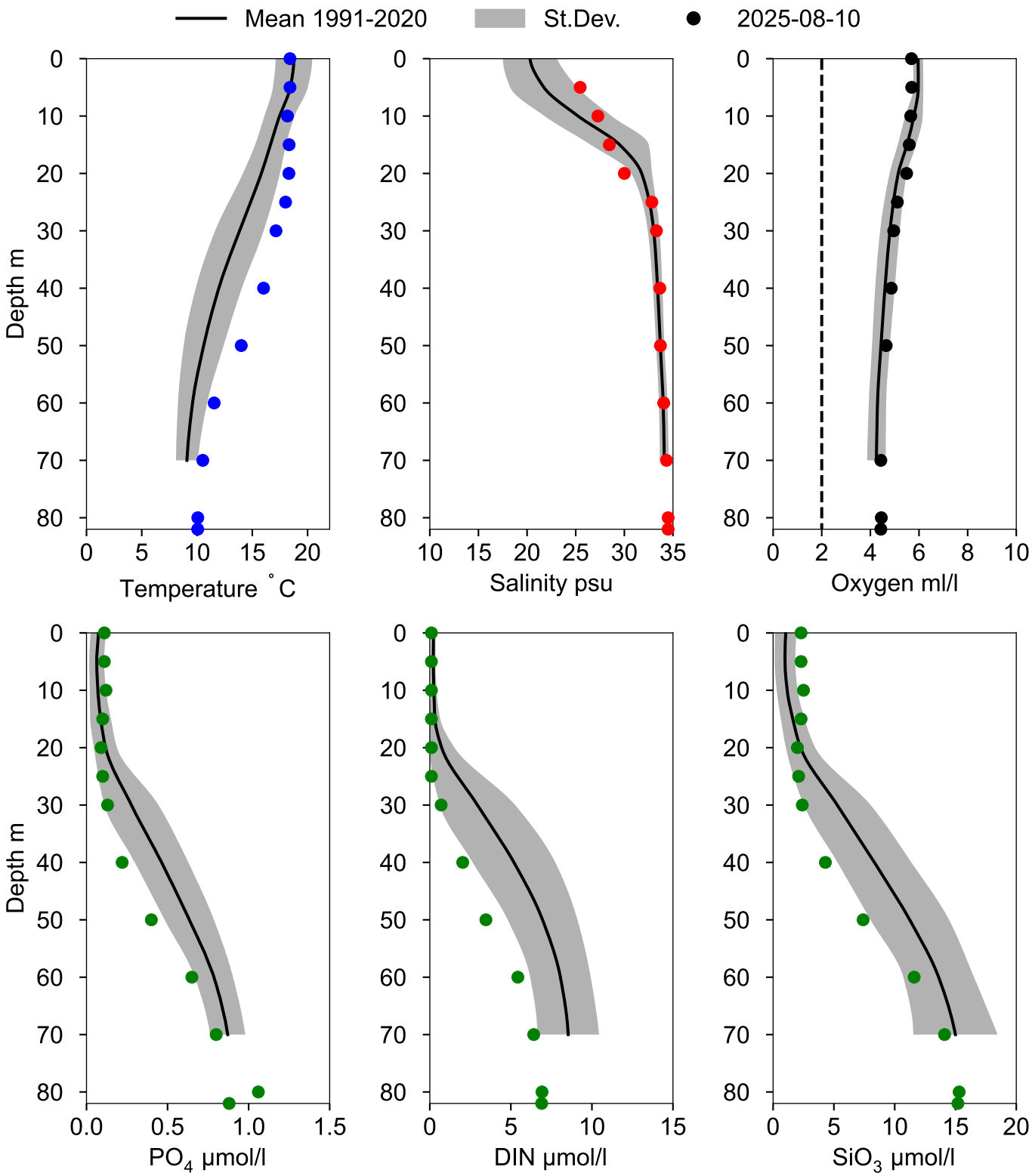
Annual Cycles



OXYGEN IN BOTTOM WATER (depth >= 74 m)

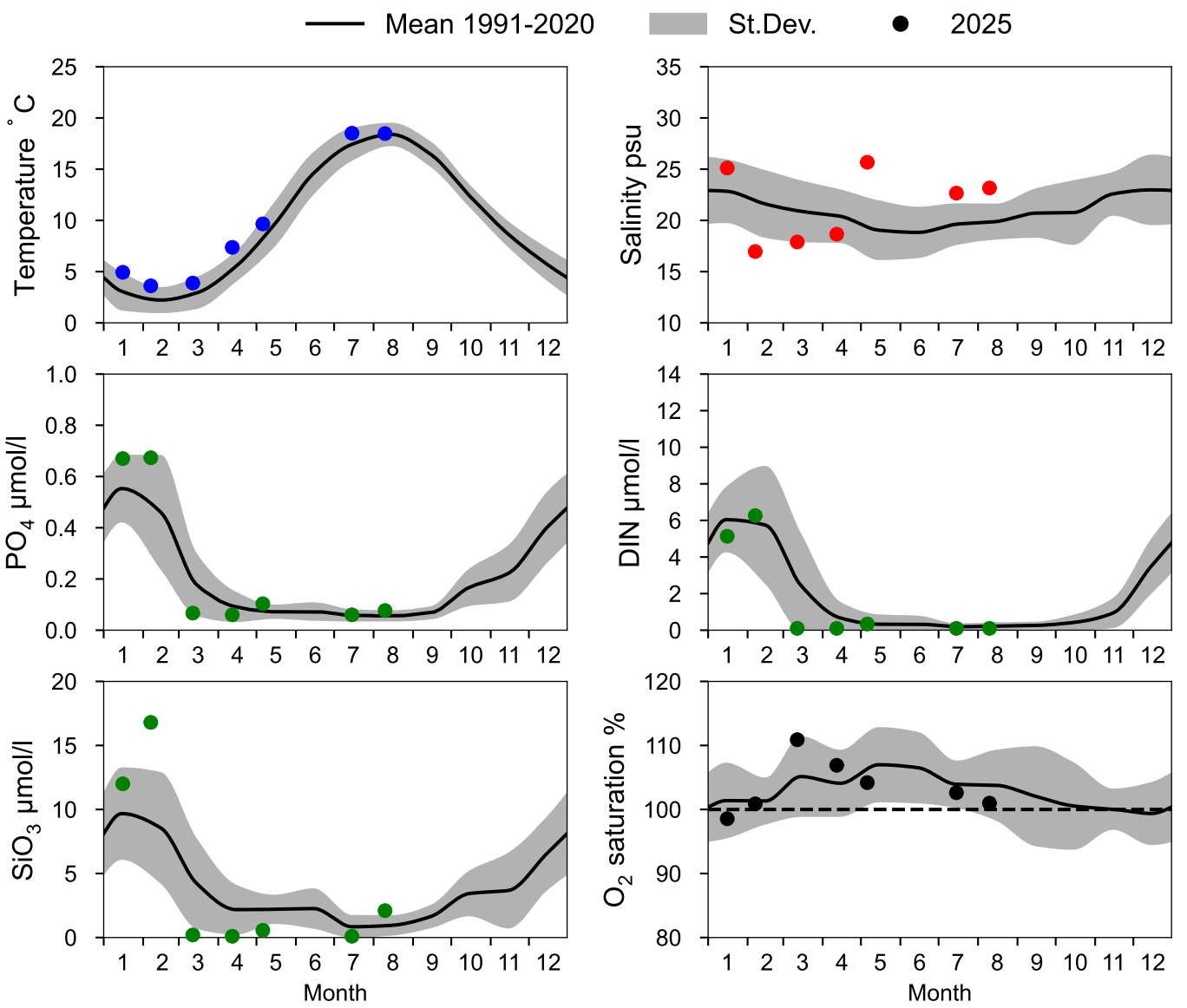


Vertical profiles FLADEN
August

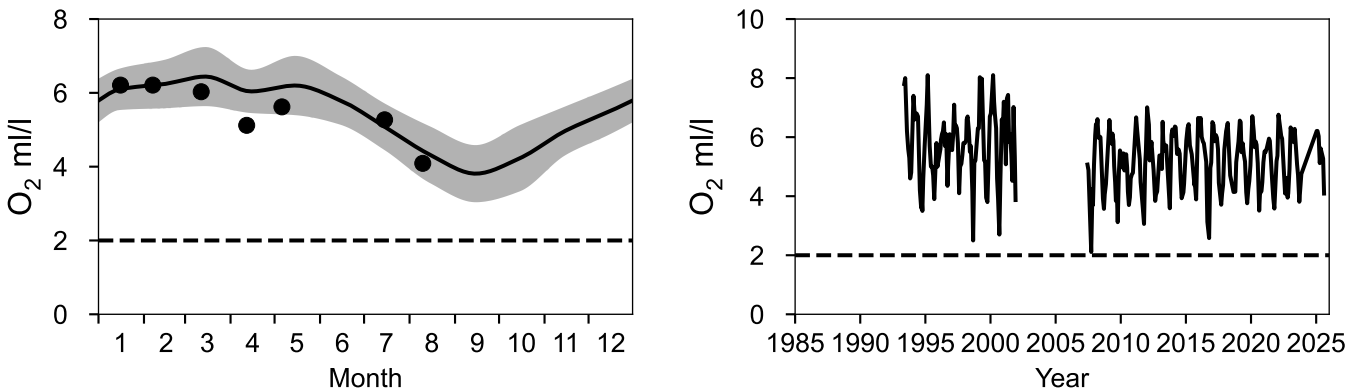


STATION N14 FALKENBERG SURFACE WATER (0-10 m)

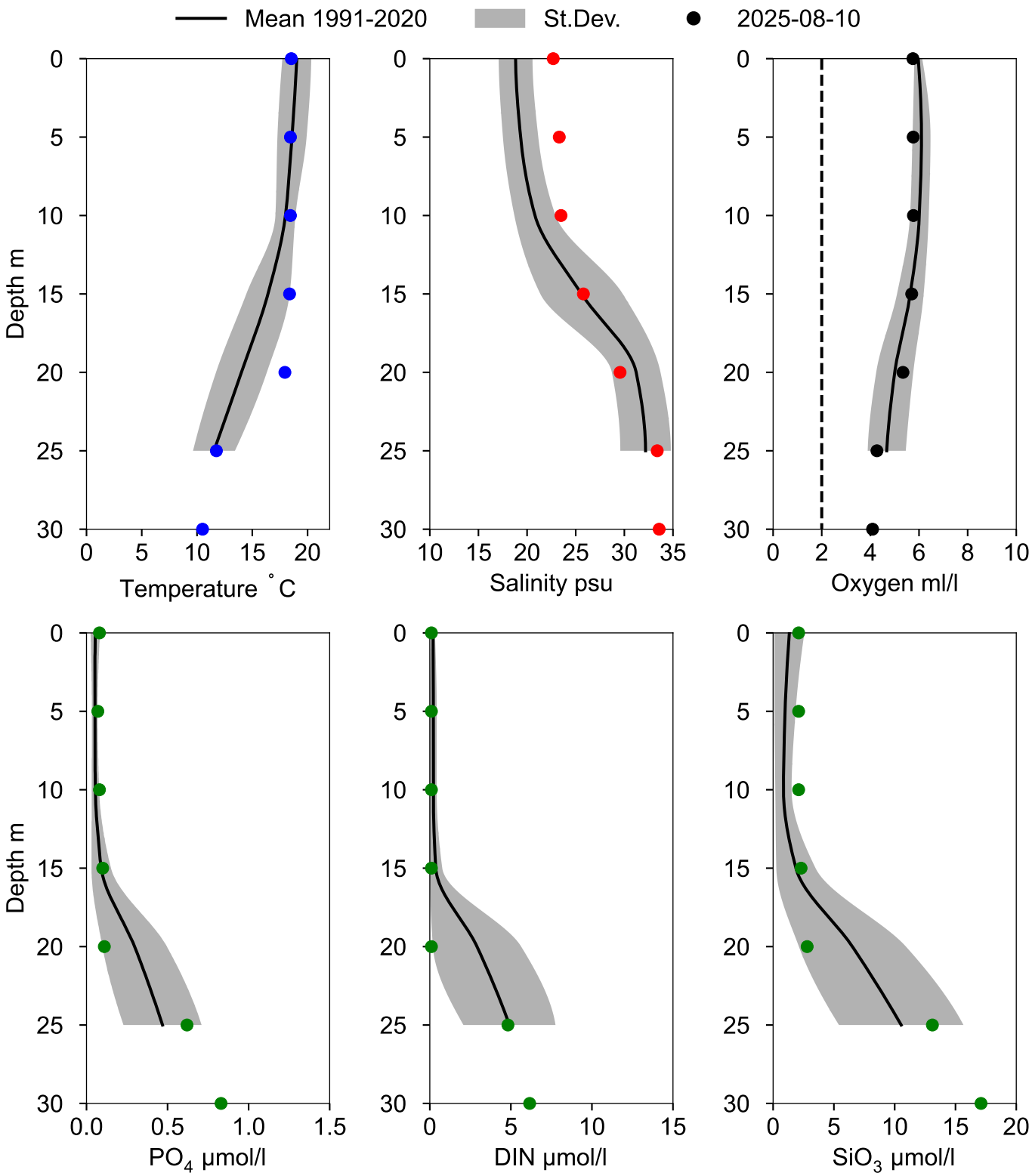
Annual Cycles



OXYGEN IN BOTTOM WATER (depth >= 25 m)

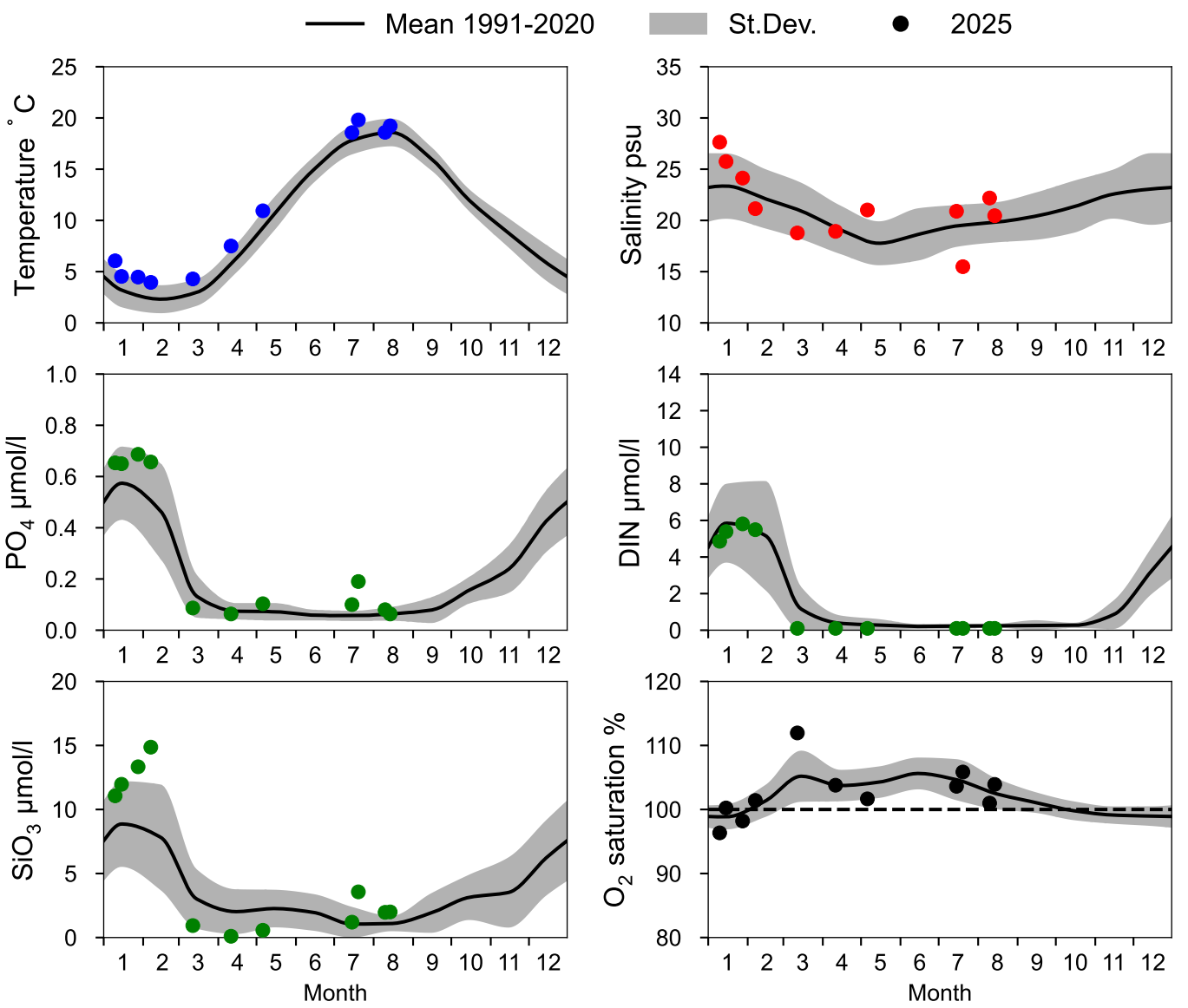


Vertical profiles N14 FALKENBERG
August

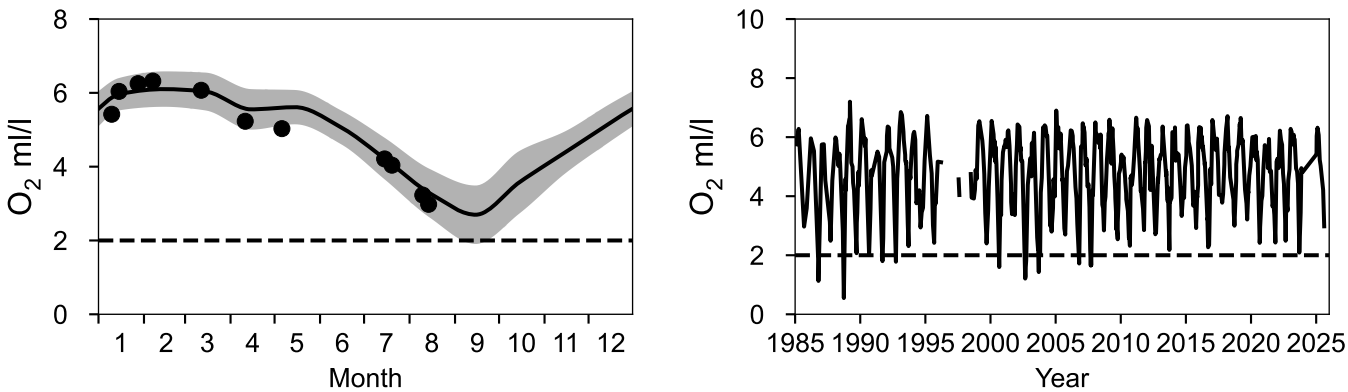


STATION ANHOLT E SURFACE WATER (0-10 m)

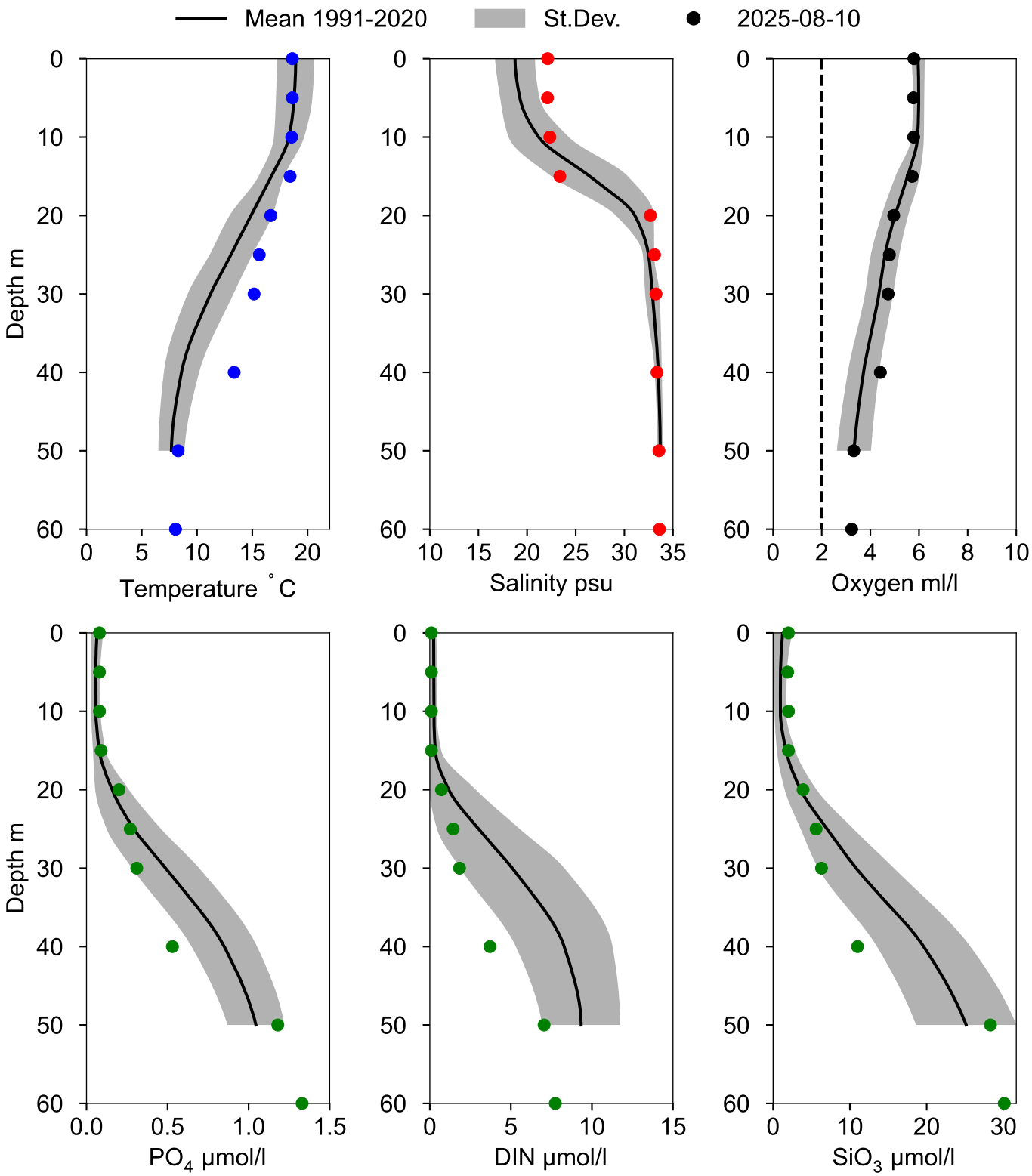
Annual Cycles



OXYGEN IN BOTTOM WATER (depth >= 52 m)

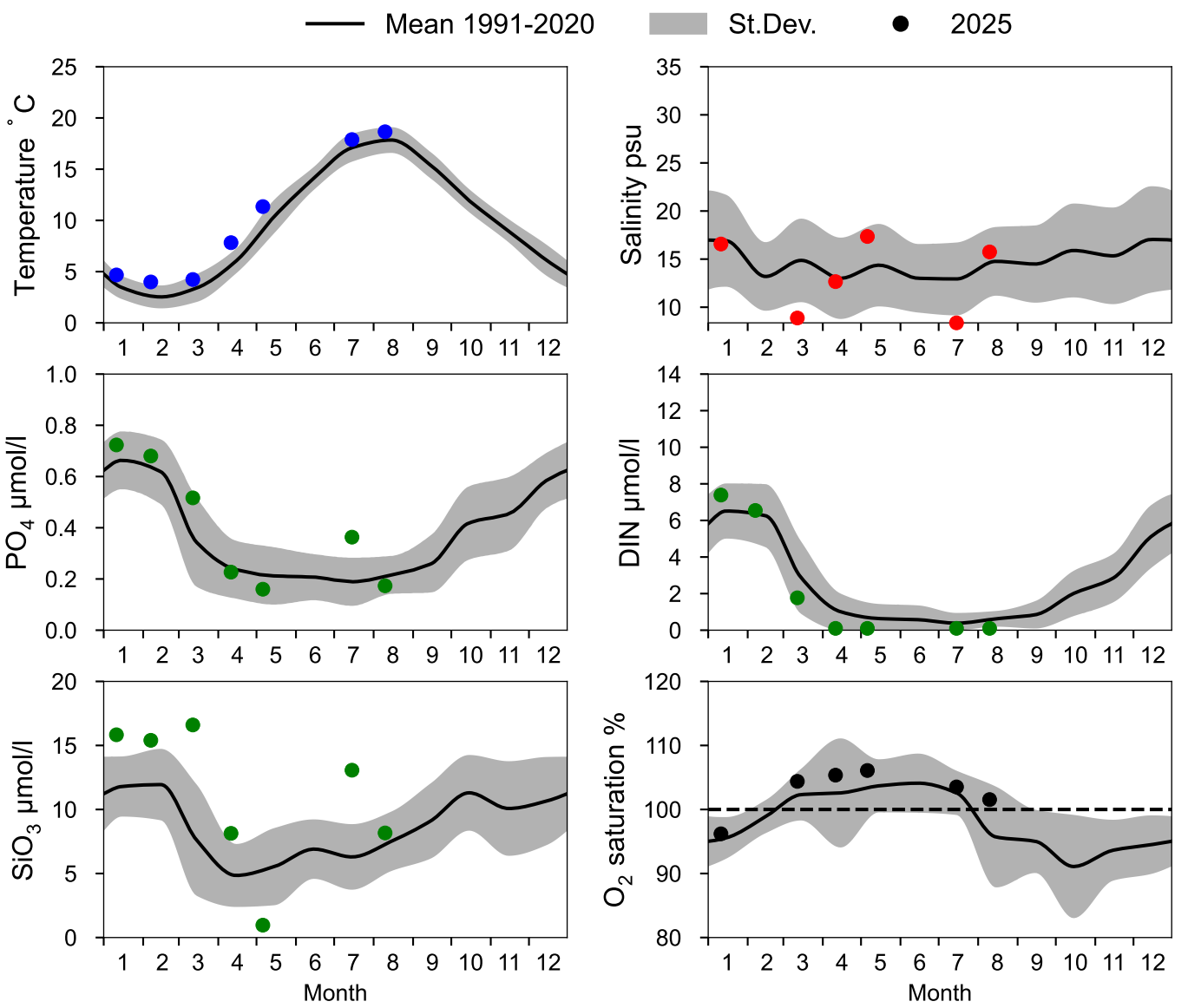


Vertical profiles ANHOLT E
August

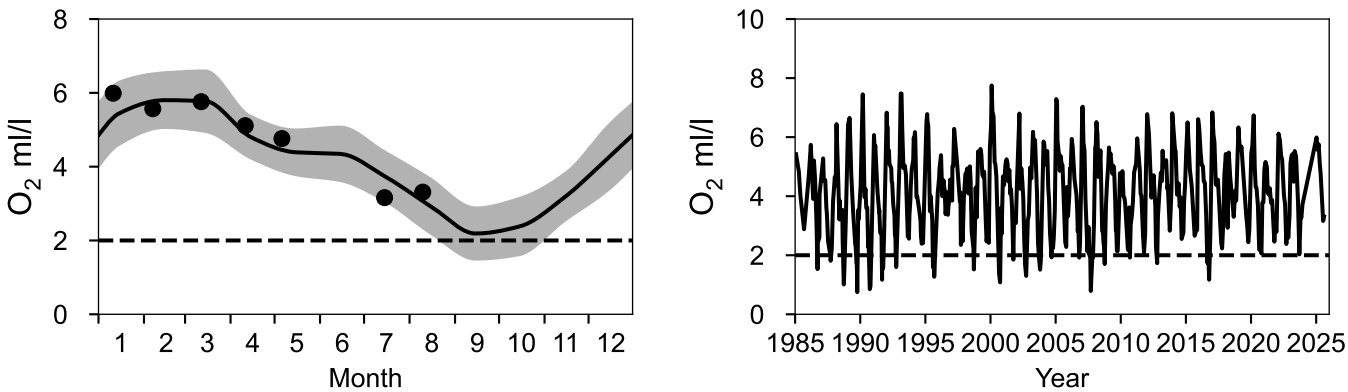


STATION W LANDSKRONA SURFACE WATER (0-10 m)

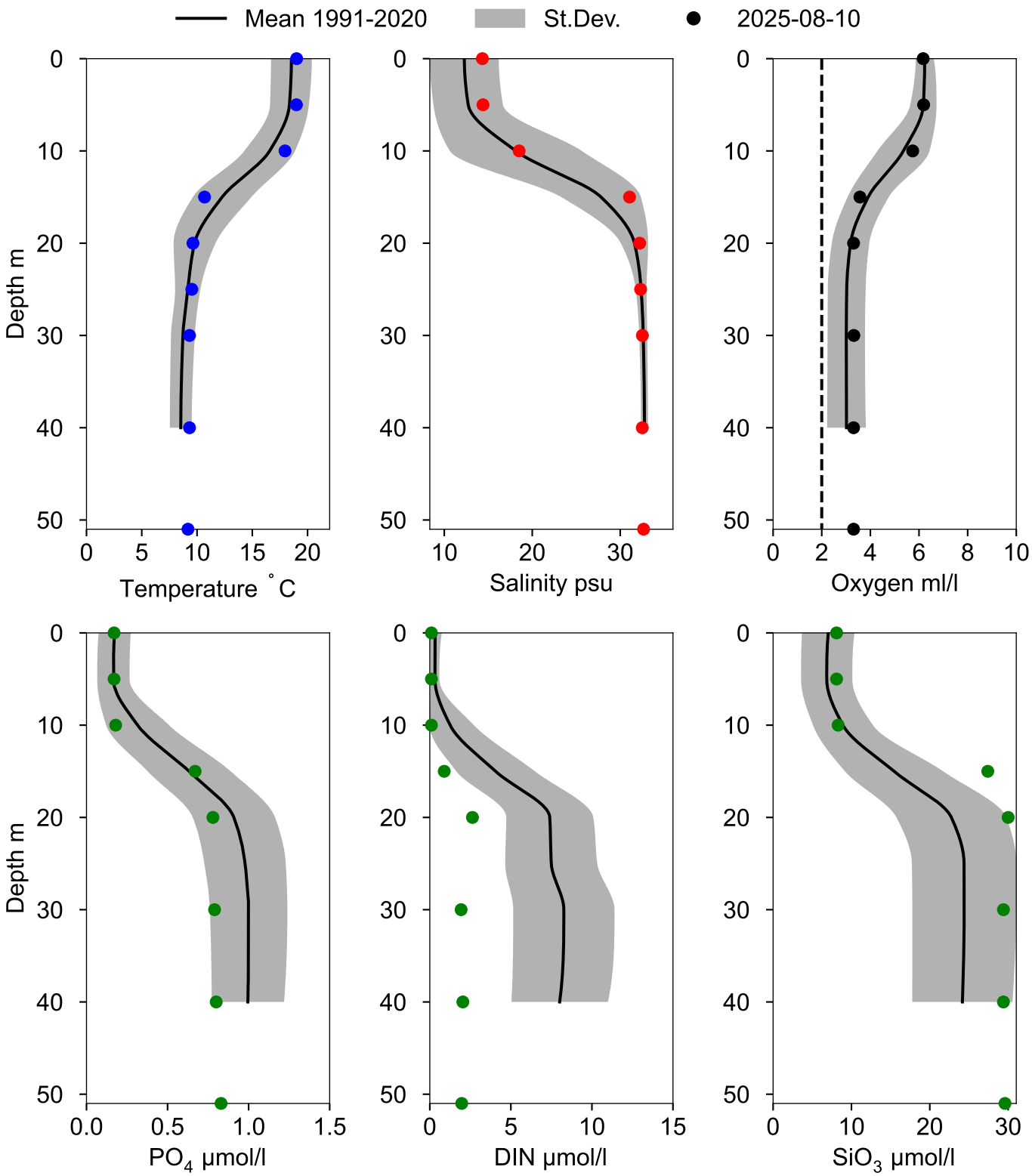
Annual Cycles



OXYGEN IN BOTTOM WATER (depth >= 40 m)

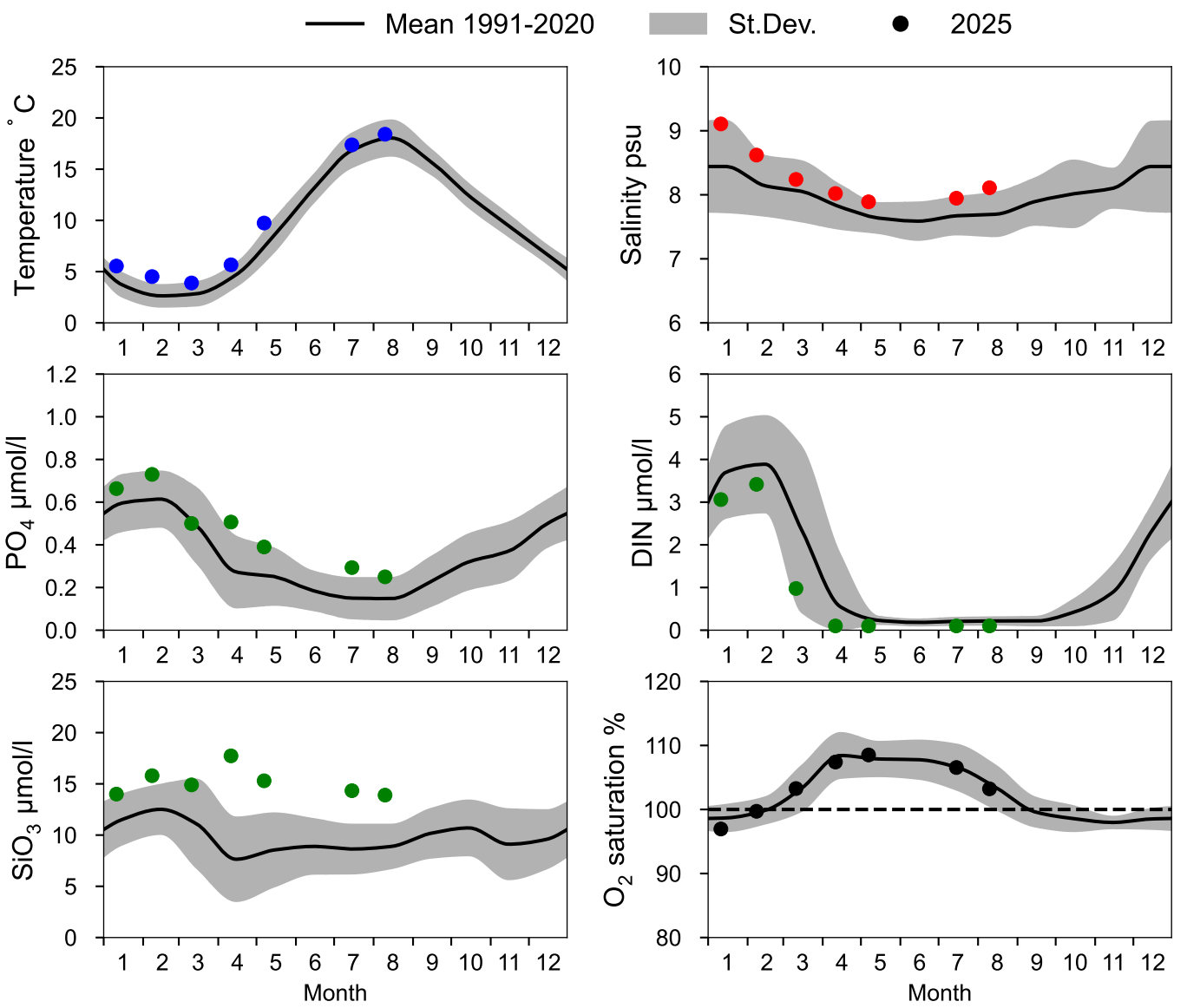


Vertical profiles W LANDSKRONA
August

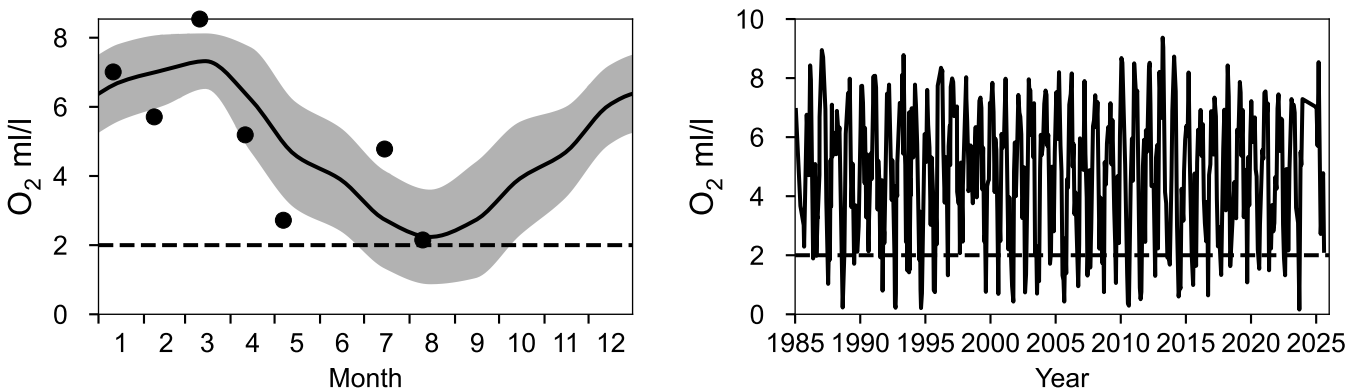


STATION BY1 SURFACE WATER (0-10 m)

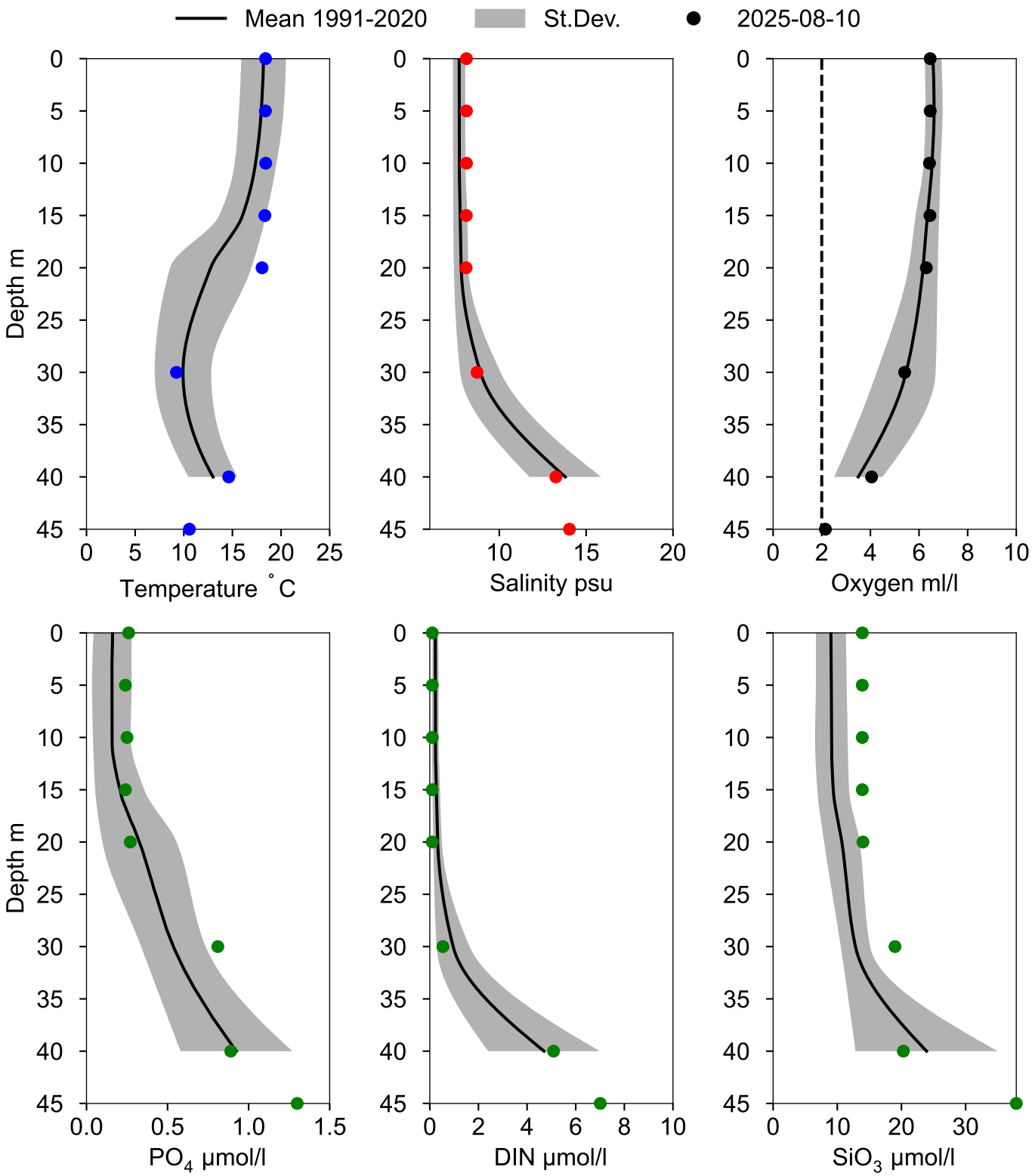
Annual Cycles



OXYGEN IN BOTTOM WATER (depth >= 39 m)

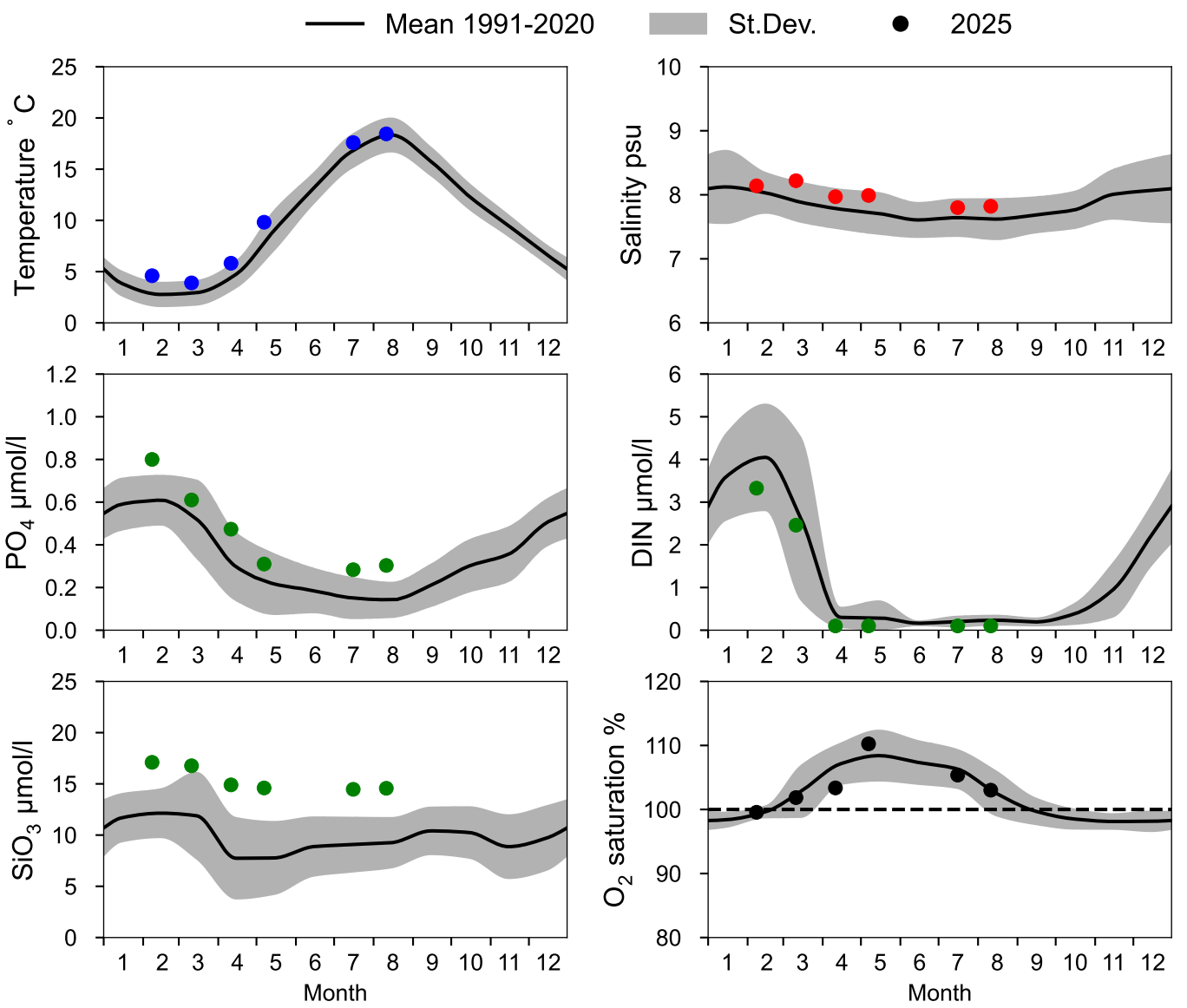


Vertical profiles BY1
August

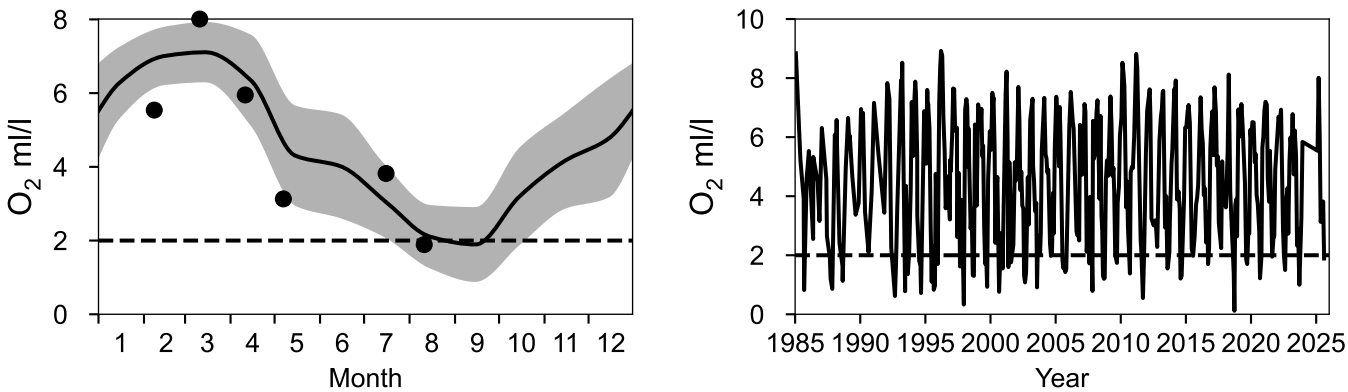


STATION BY2 ARKONA SURFACE WATER (0-10 m)

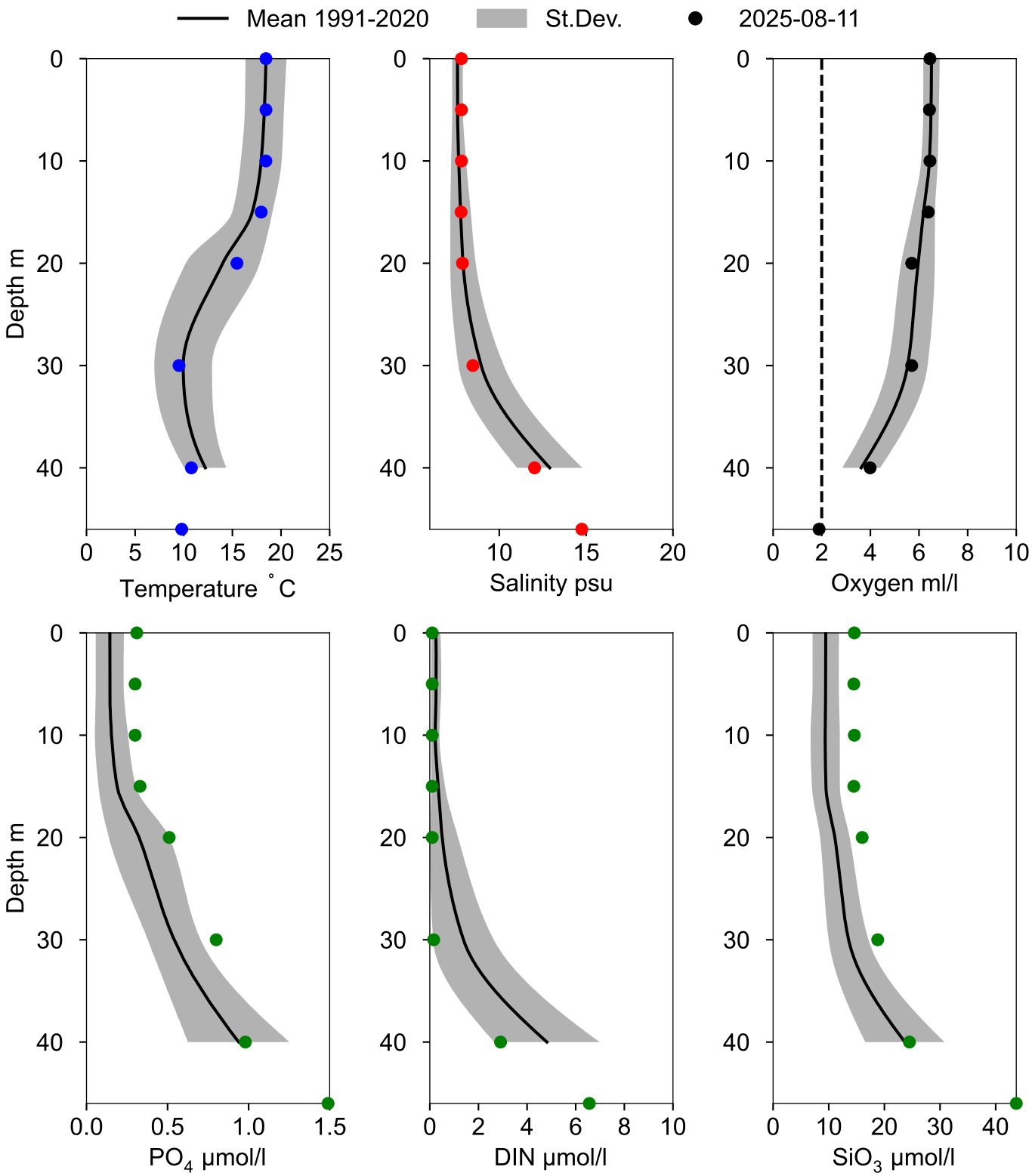
Annual Cycles



OXYGEN IN BOTTOM WATER (depth >= 40 m)

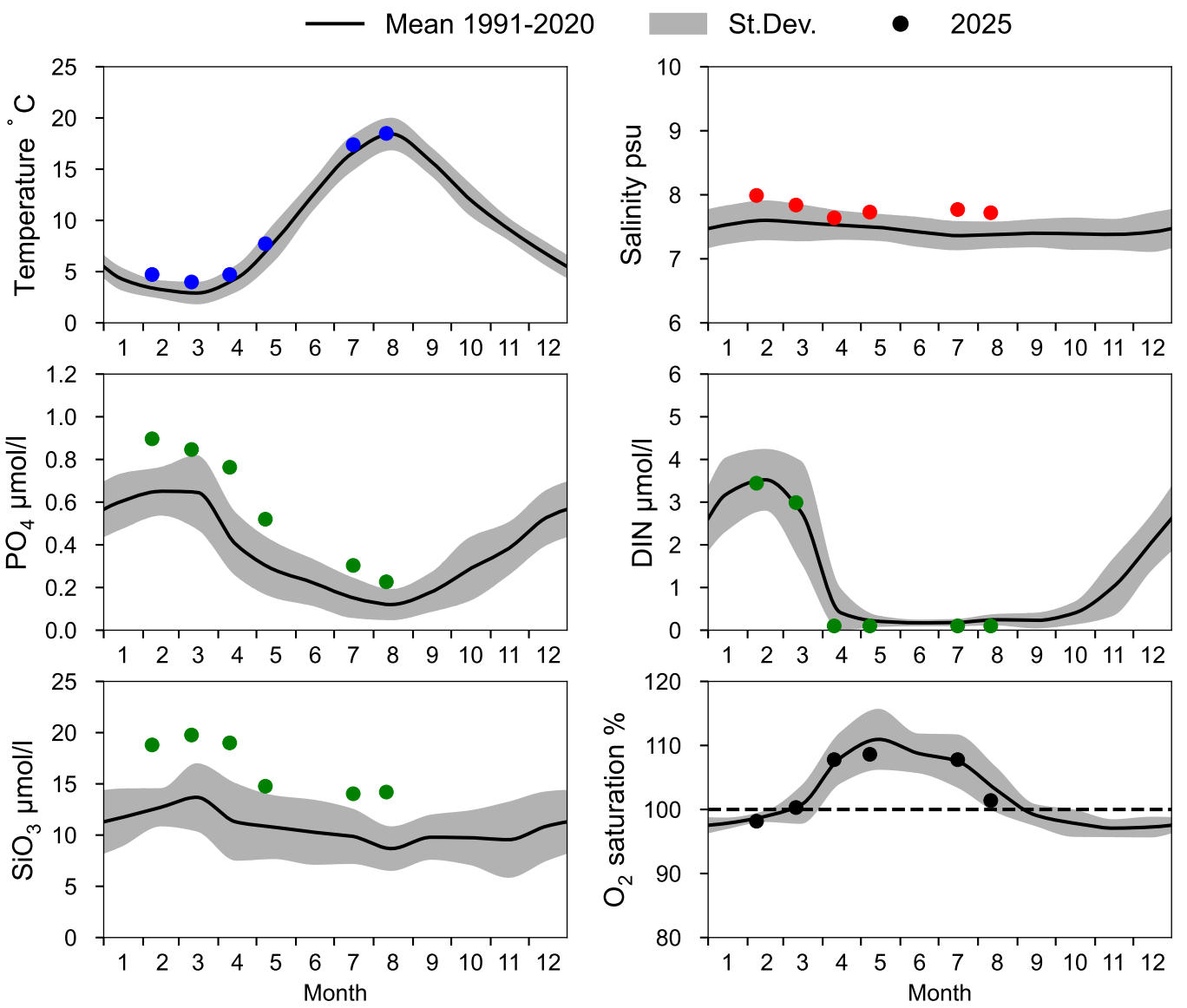


Vertical profiles BY2 ARKONA
August

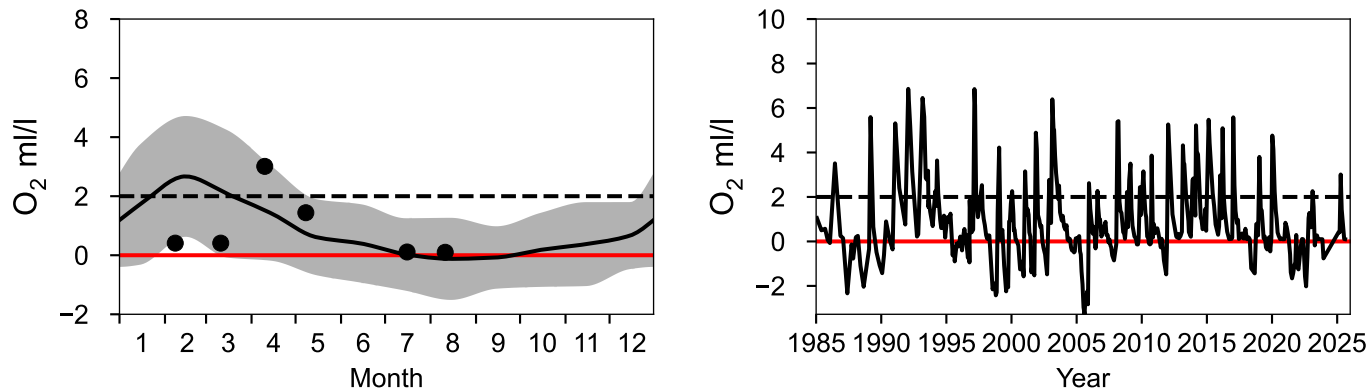


STATION BY4 CHRISTIANSÖ SURFACE WATER (0-10 m)

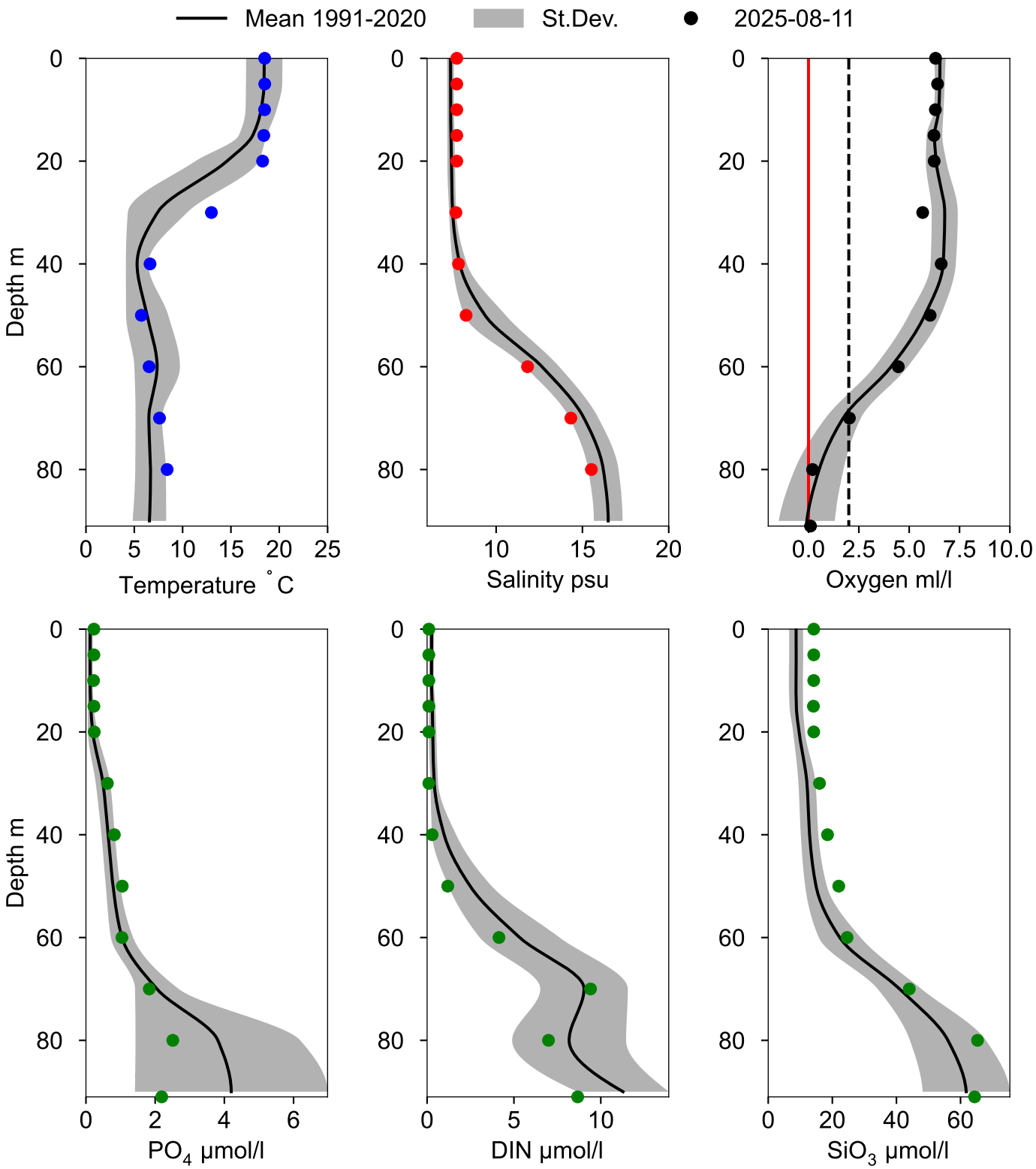
Annual Cycles



OXYGEN IN BOTTOM WATER (depth >= 80 m)

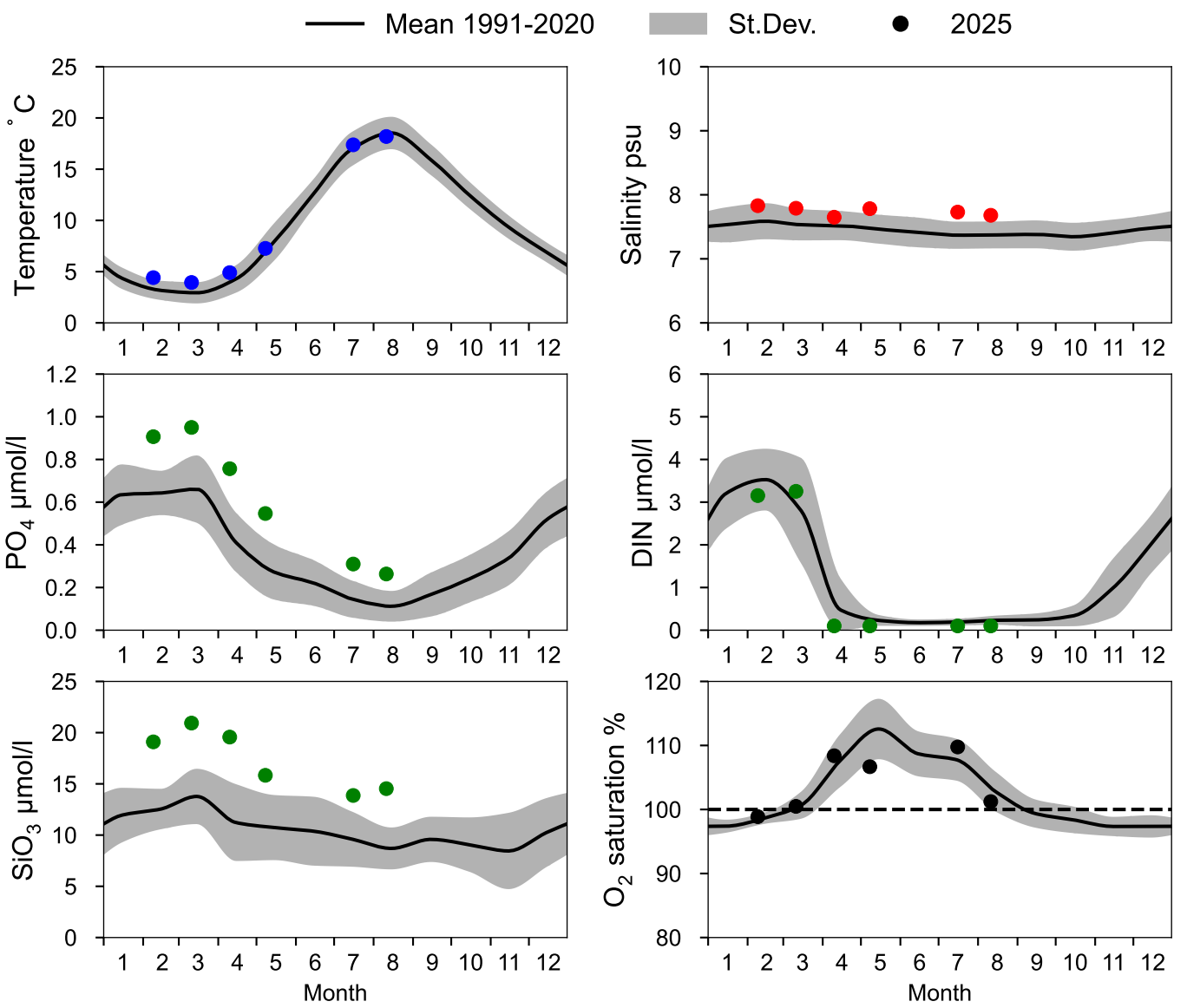


Vertical profiles BY4 CHRISTIANSÖ
August

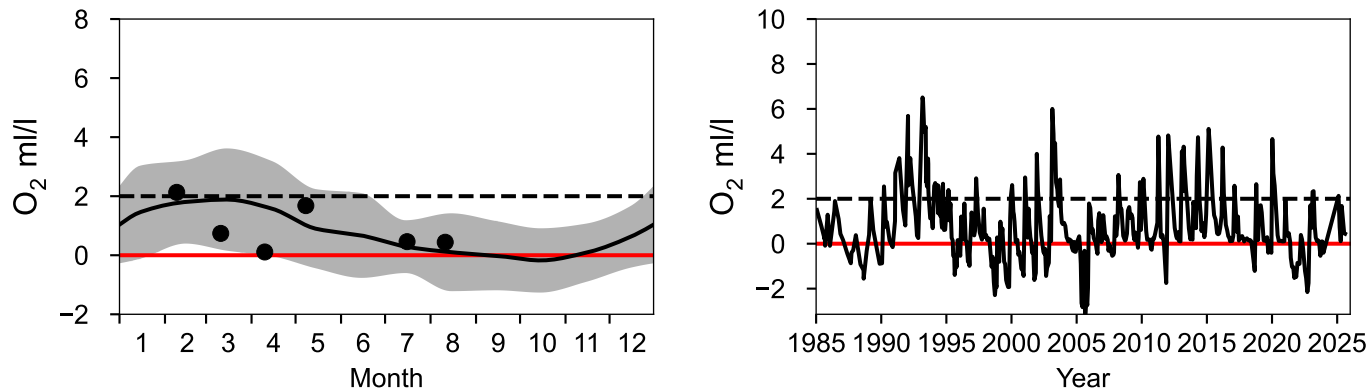


STATION BY5 BORNHOLMSDJ SURFACE WATER (0-10 m)

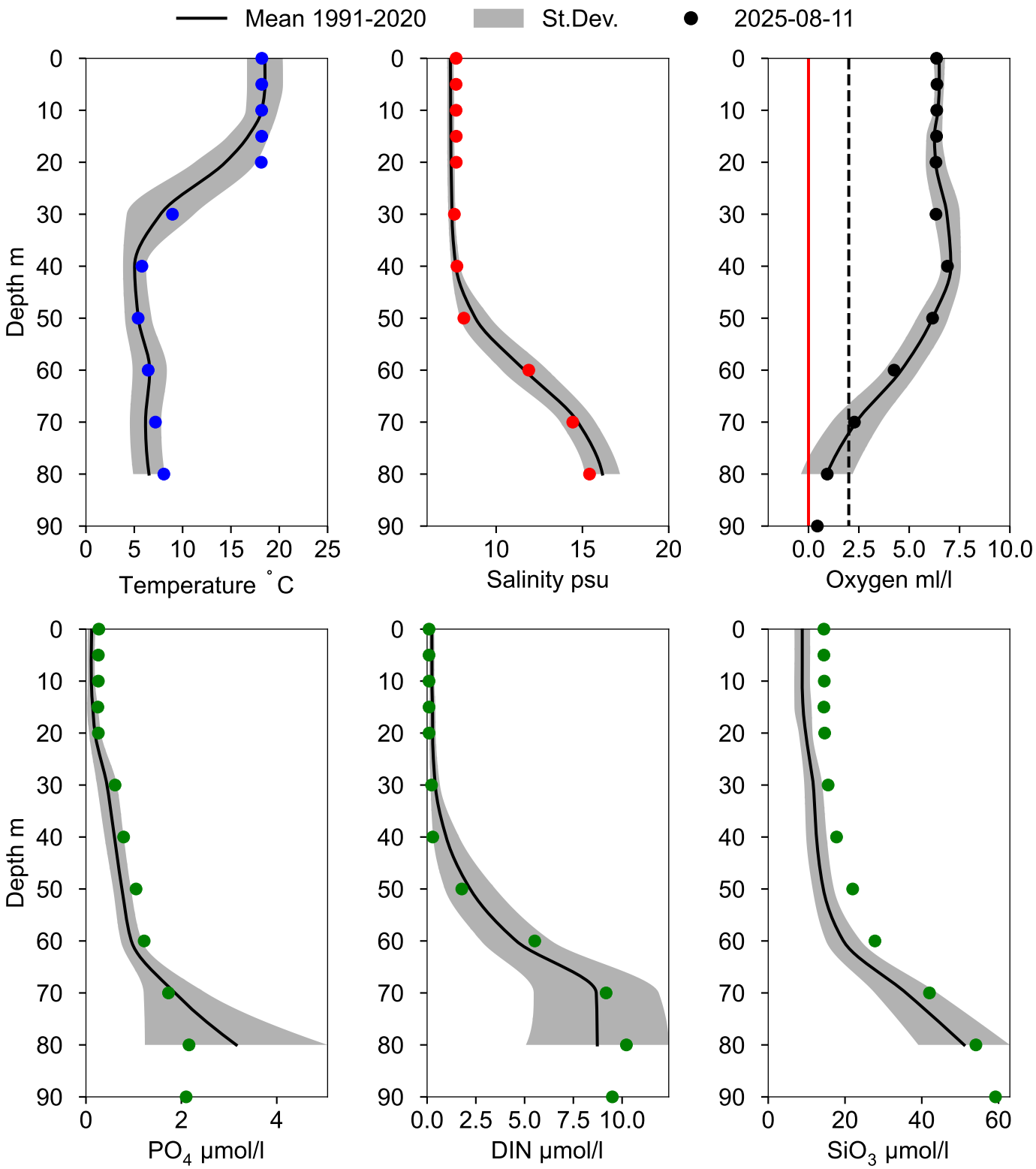
Annual Cycles



OXYGEN IN BOTTOM WATER (depth >= 80 m)

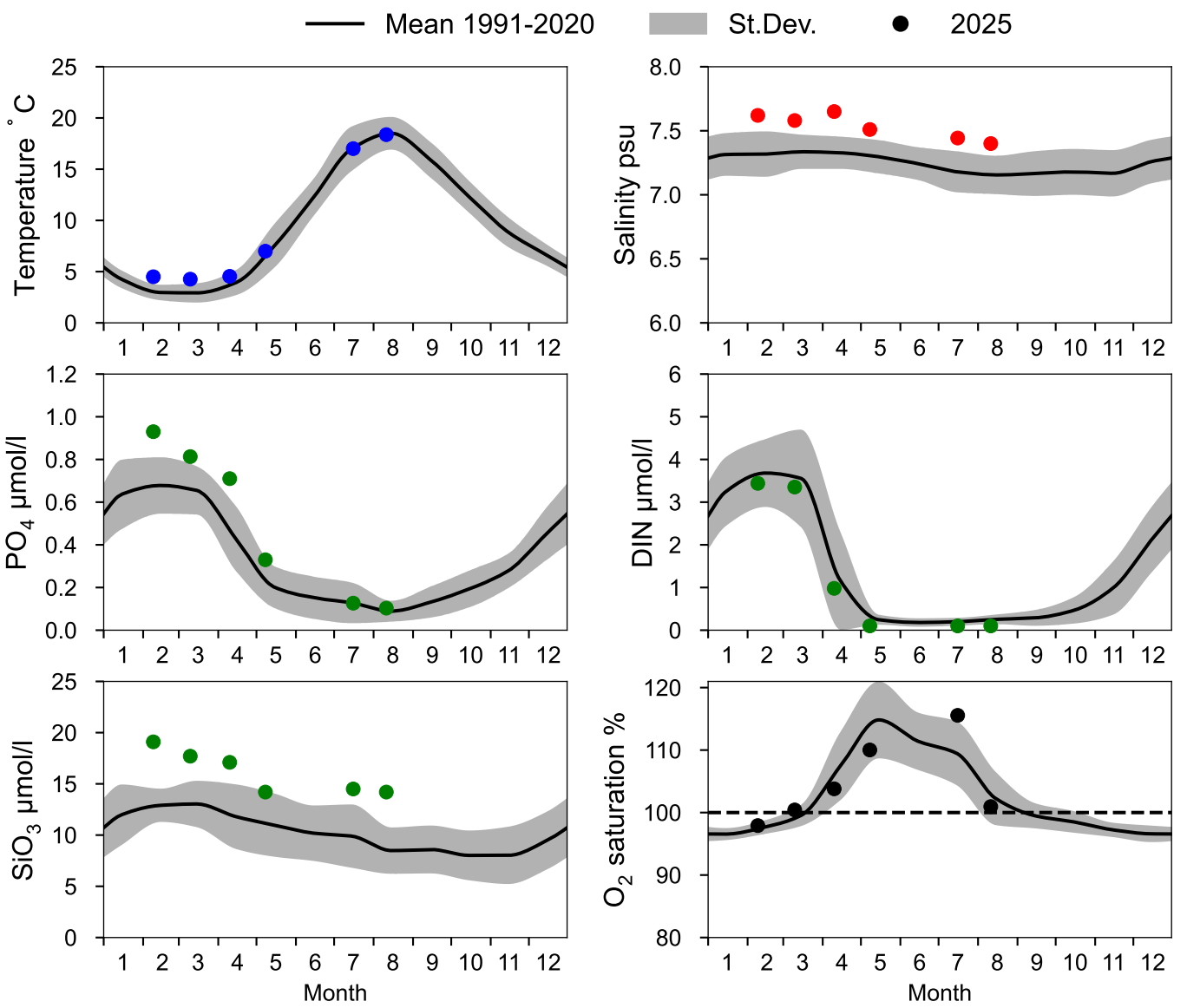


Vertical profiles BY5 BORNHOLMSDJ
August

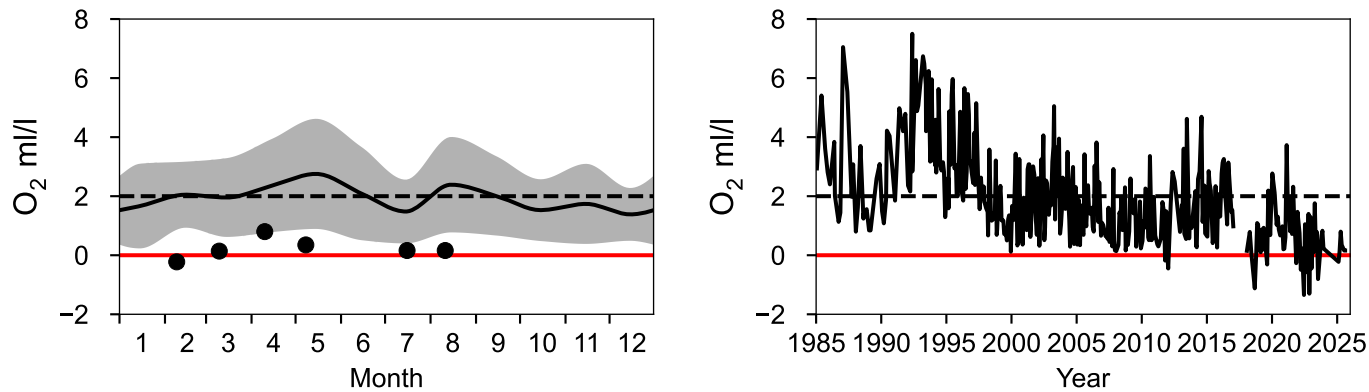


STATION BCS III-10 SURFACE WATER (0-10 m)

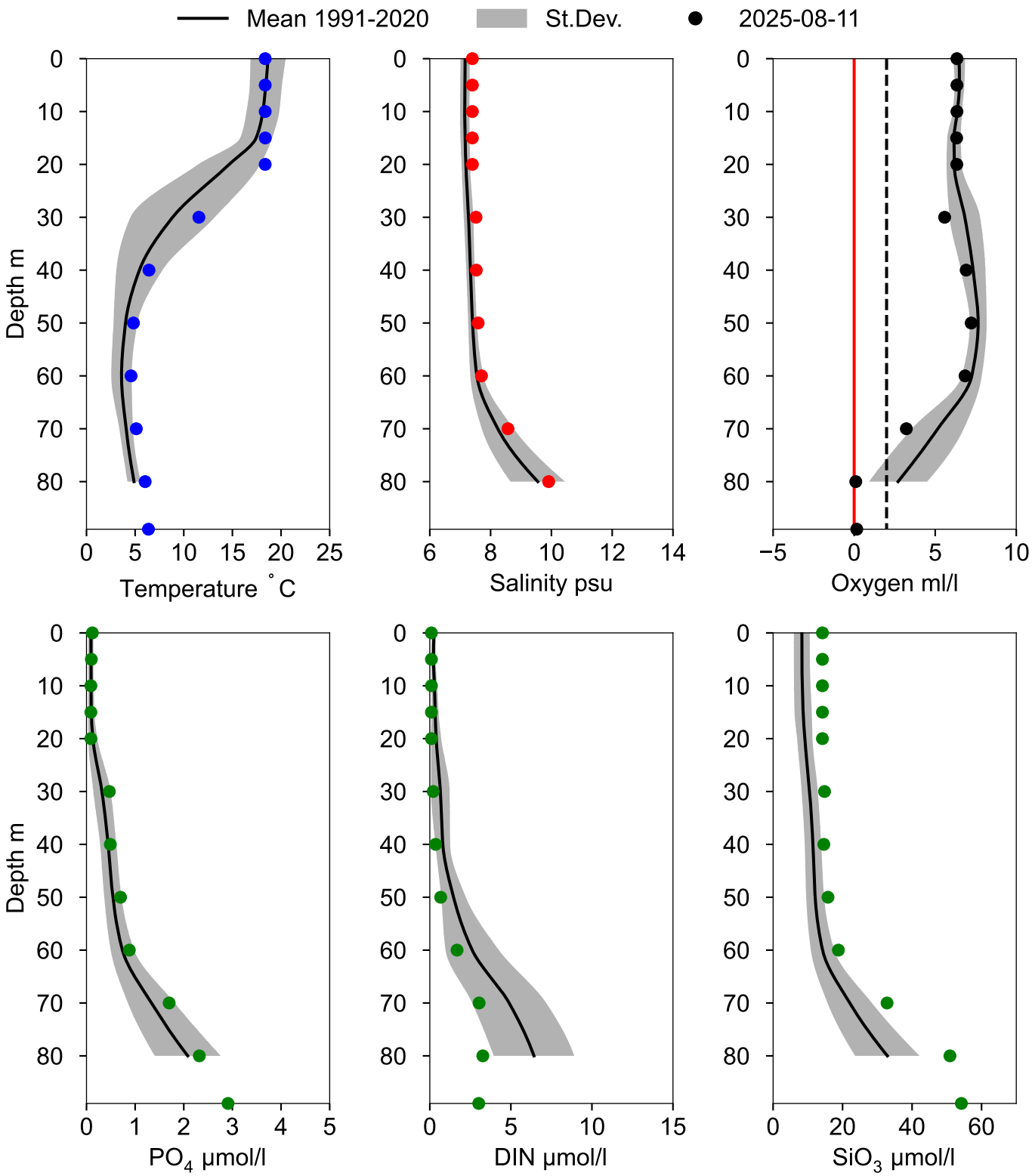
Annual Cycles



OXYGEN IN BOTTOM WATER (depth >= 80 m)

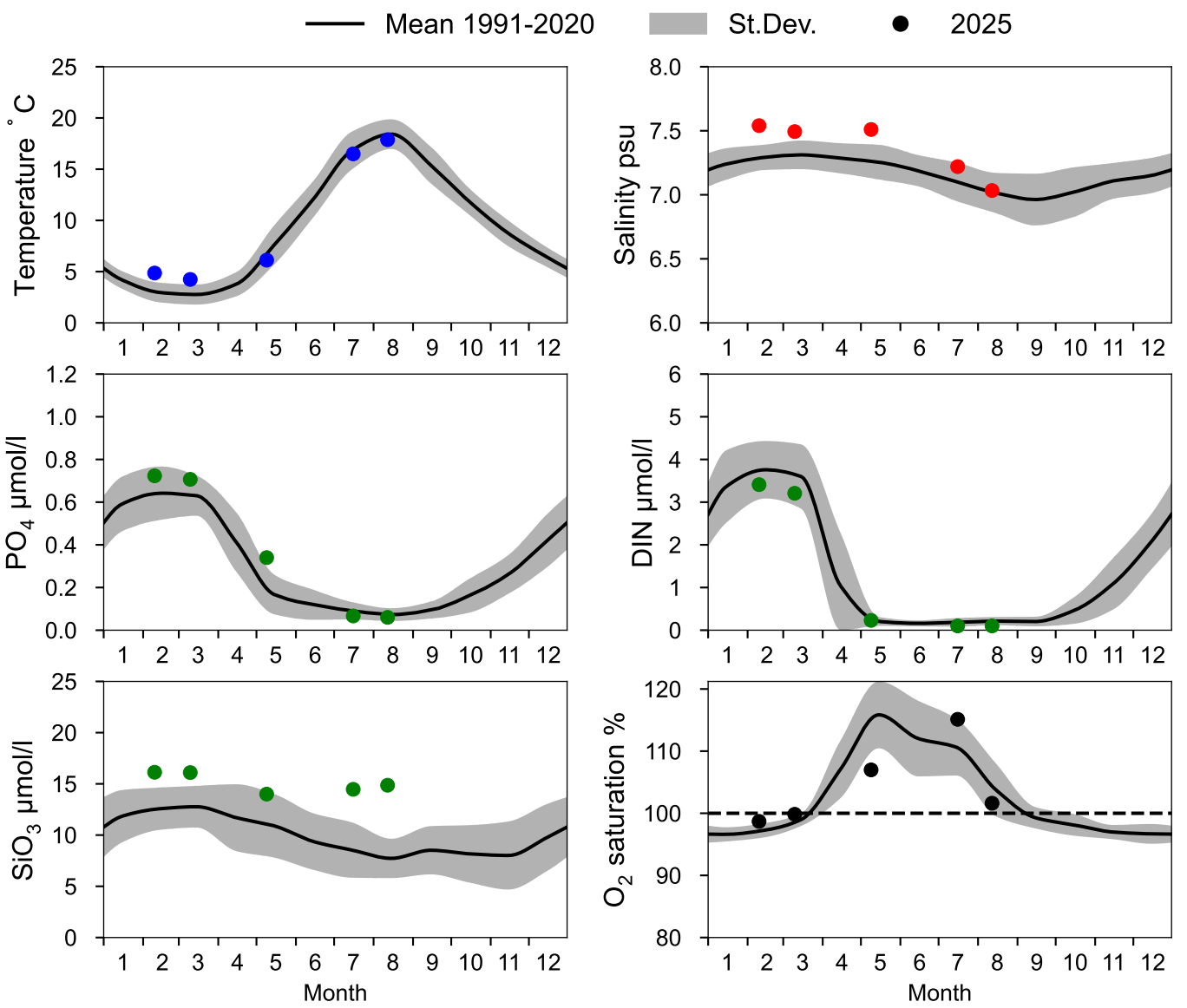


Vertical profiles BCS III-10
August

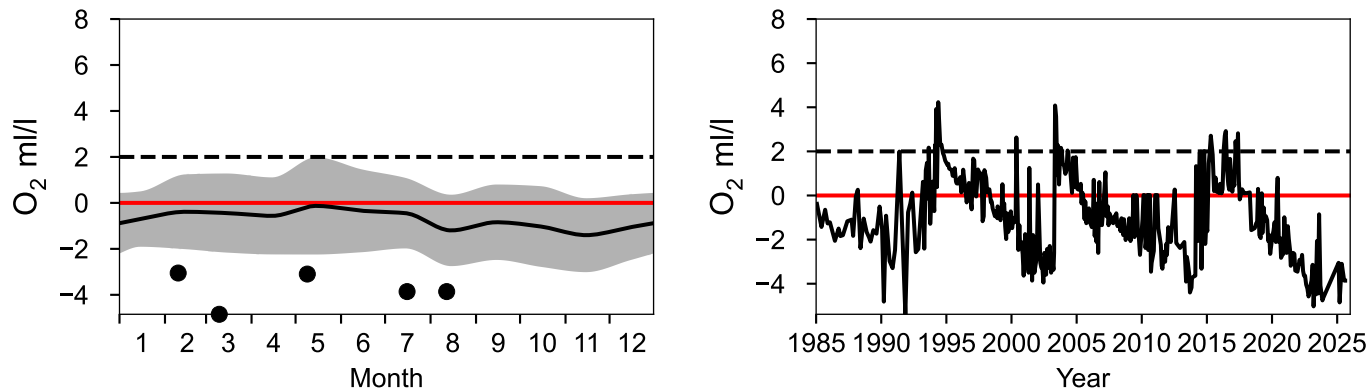


STATION BY10 SURFACE WATER (0-10 m)

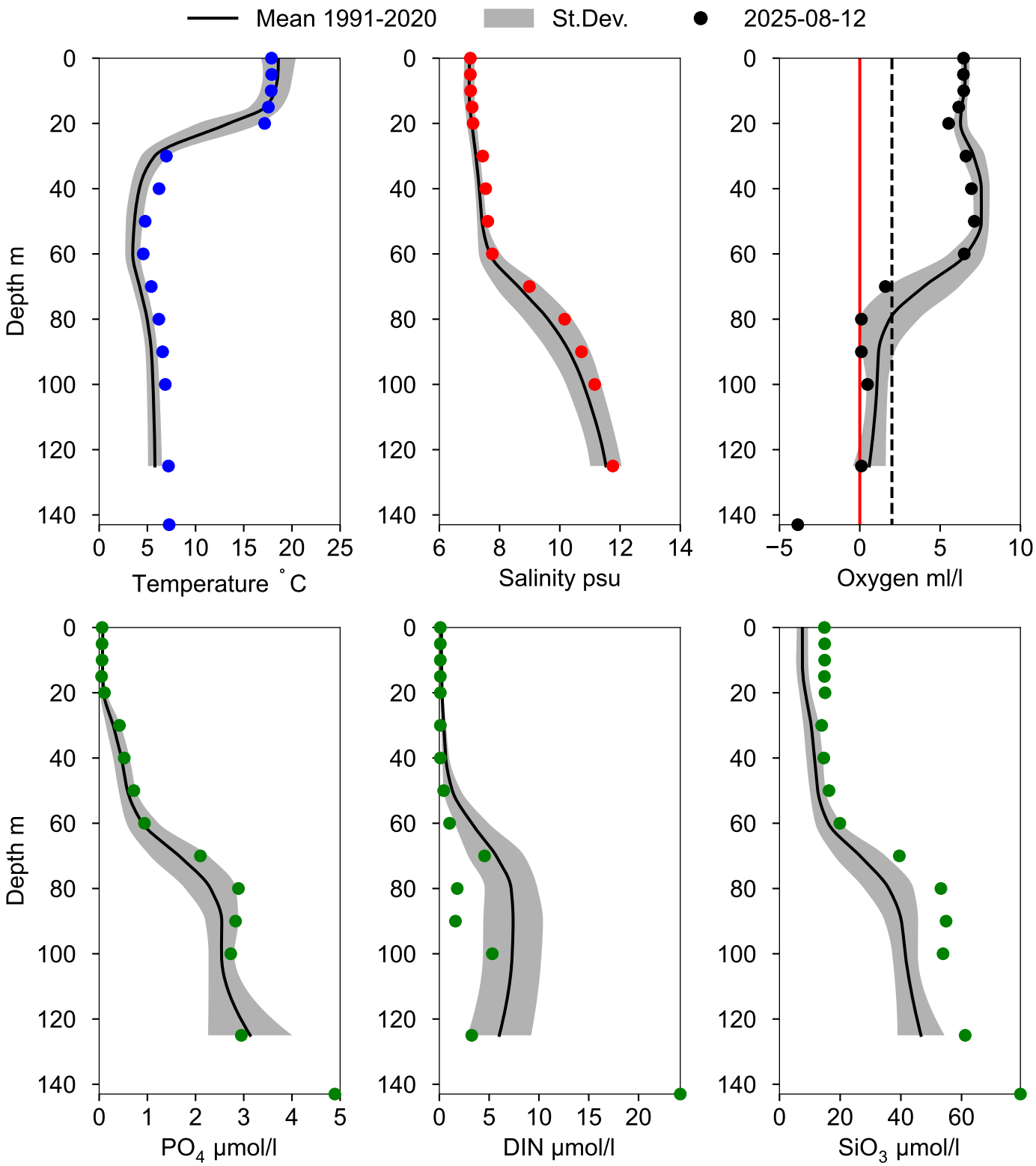
Annual Cycles



OXYGEN IN BOTTOM WATER (depth >= 125 m)

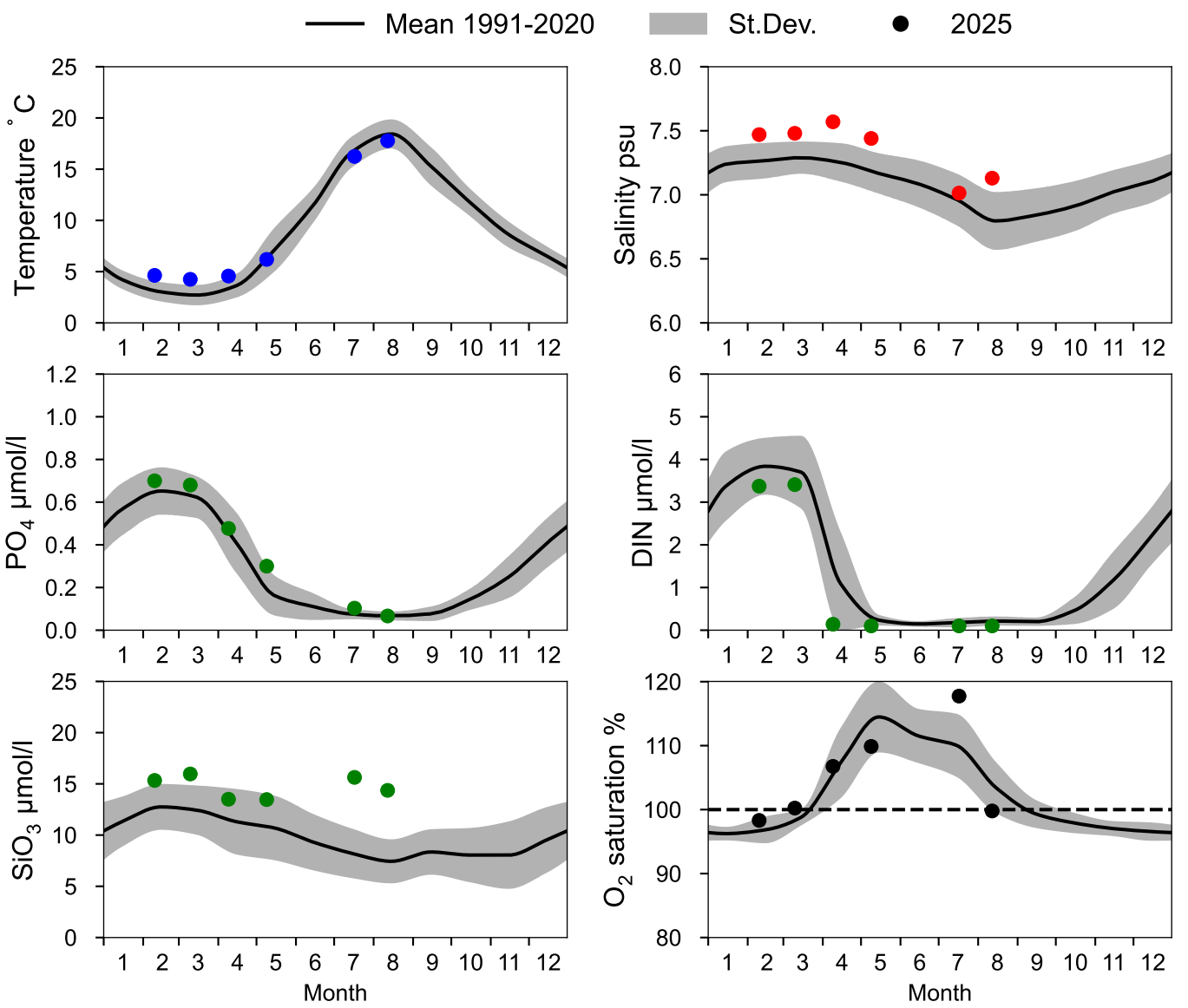


Vertical profiles BY10
August

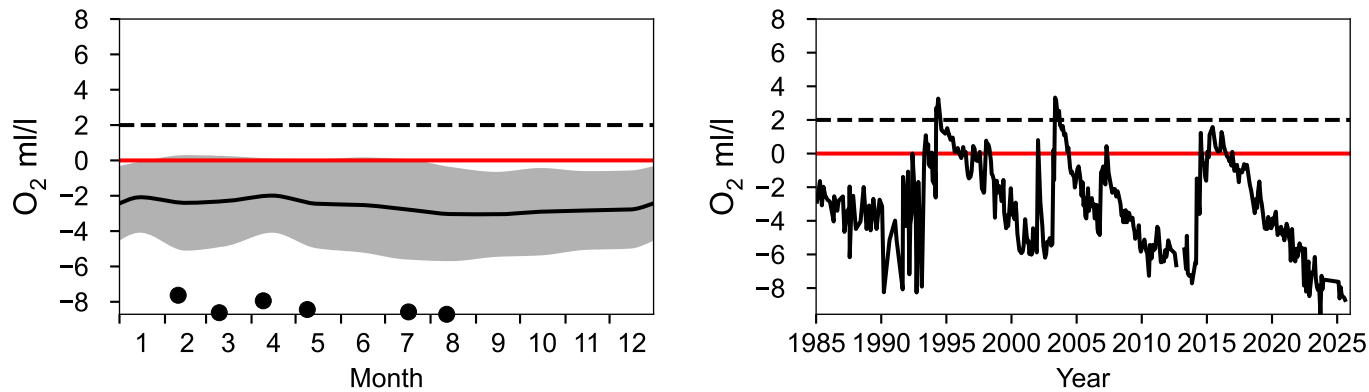


STATION BY15 GOTLANDSDJ SURFACE WATER (0-10 m)

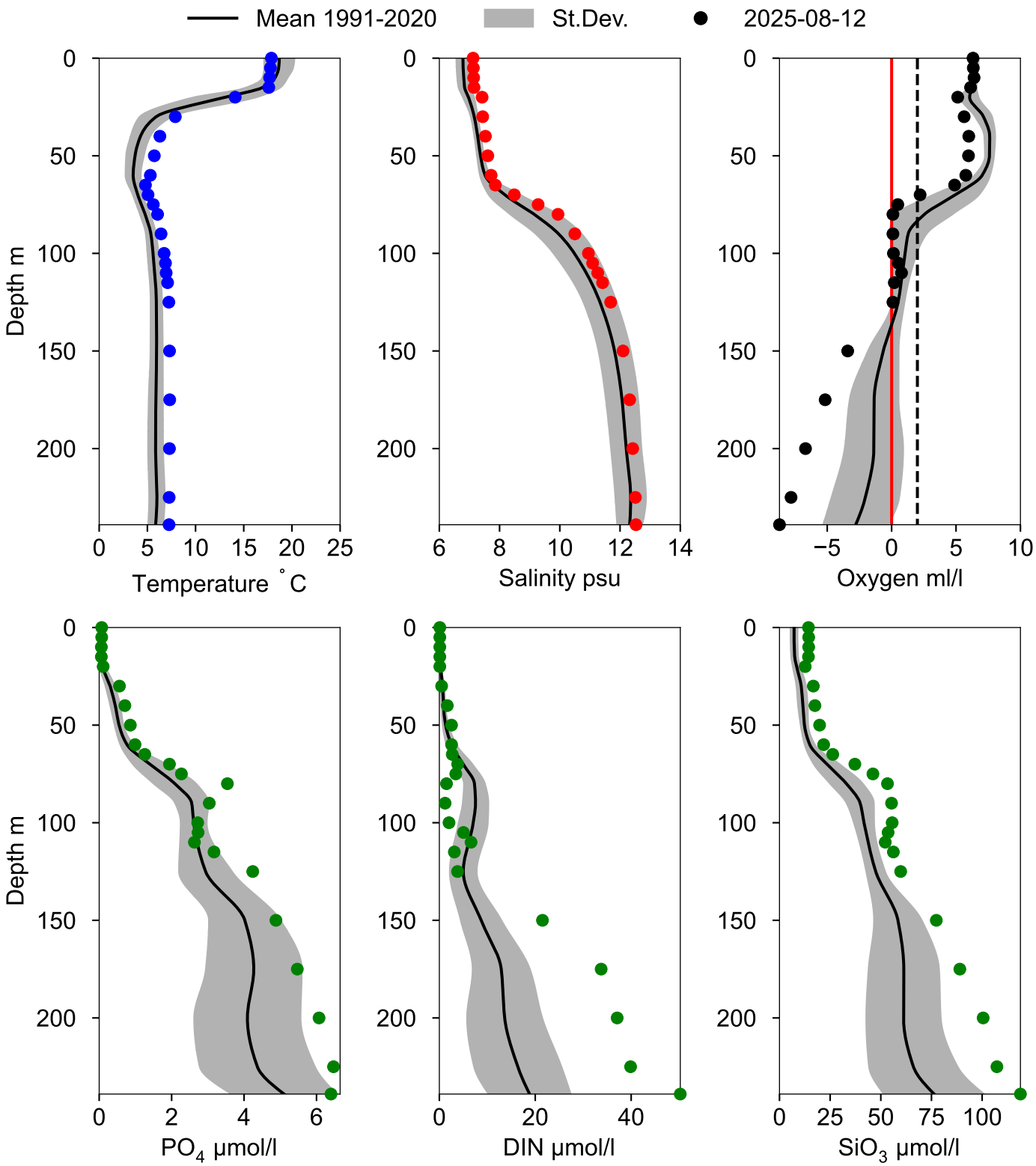
Annual Cycles



OXYGEN IN BOTTOM WATER (depth >= 225 m)

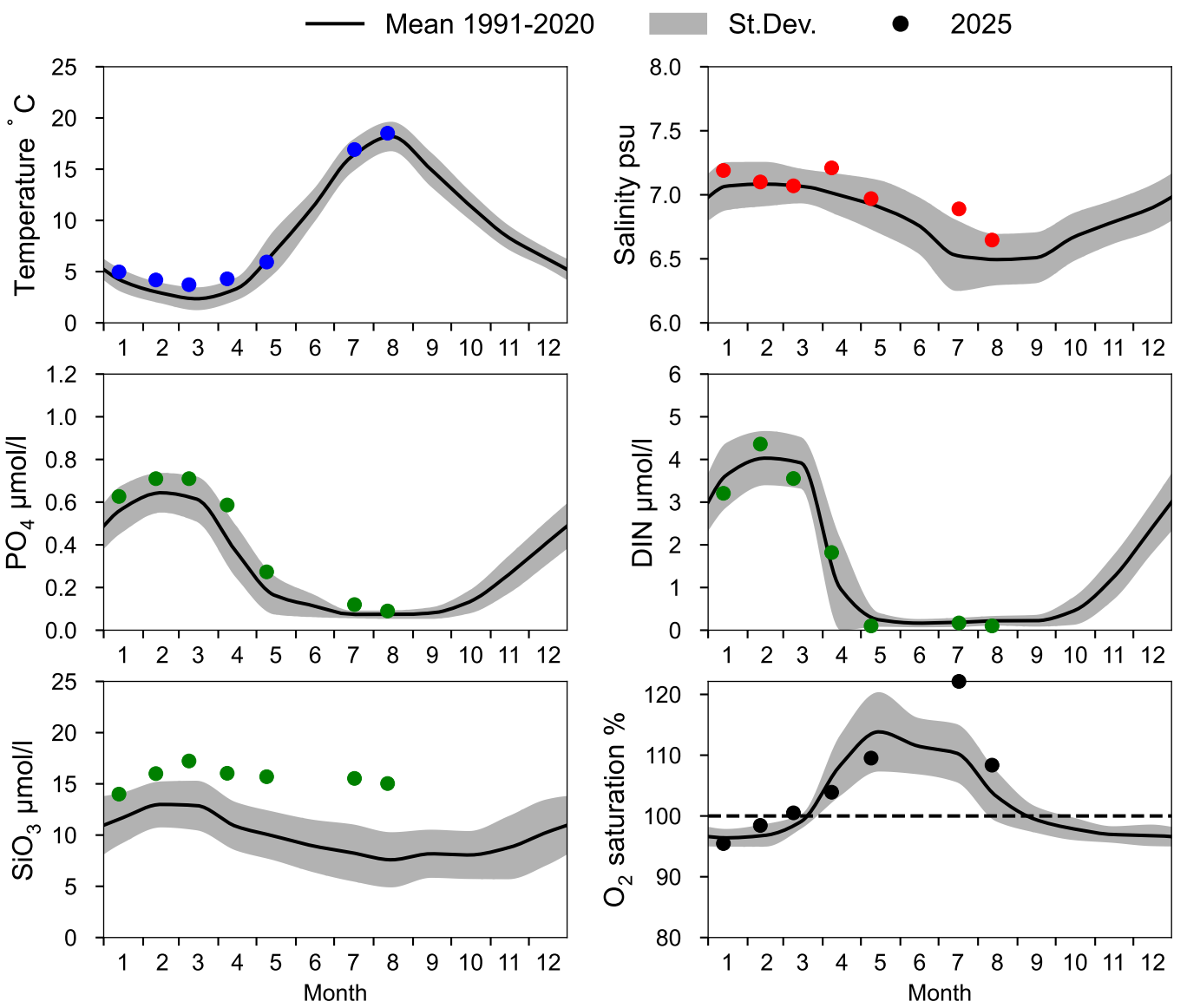


Vertical profiles BY15 GOTLANDSDJ
August

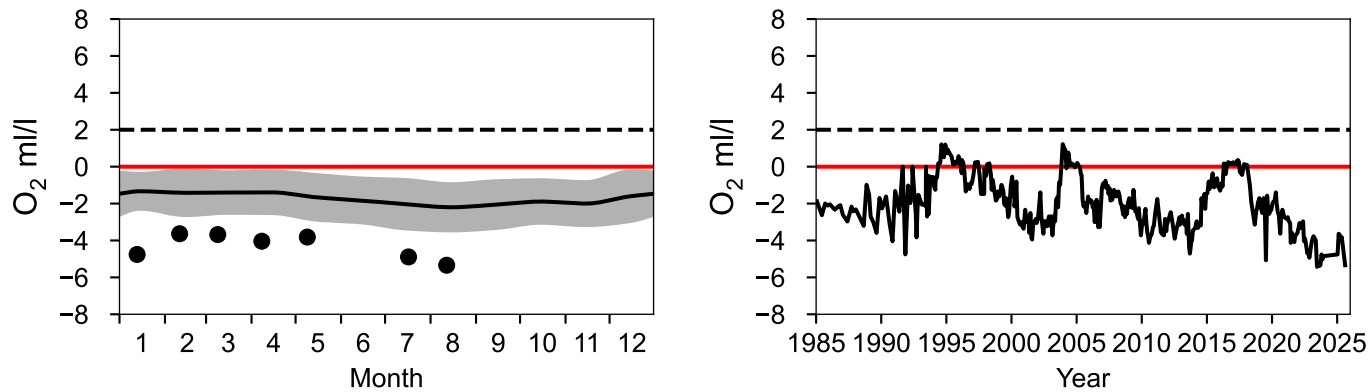


STATION BY20 FÅRÖDJ SURFACE WATER (0-10 m)

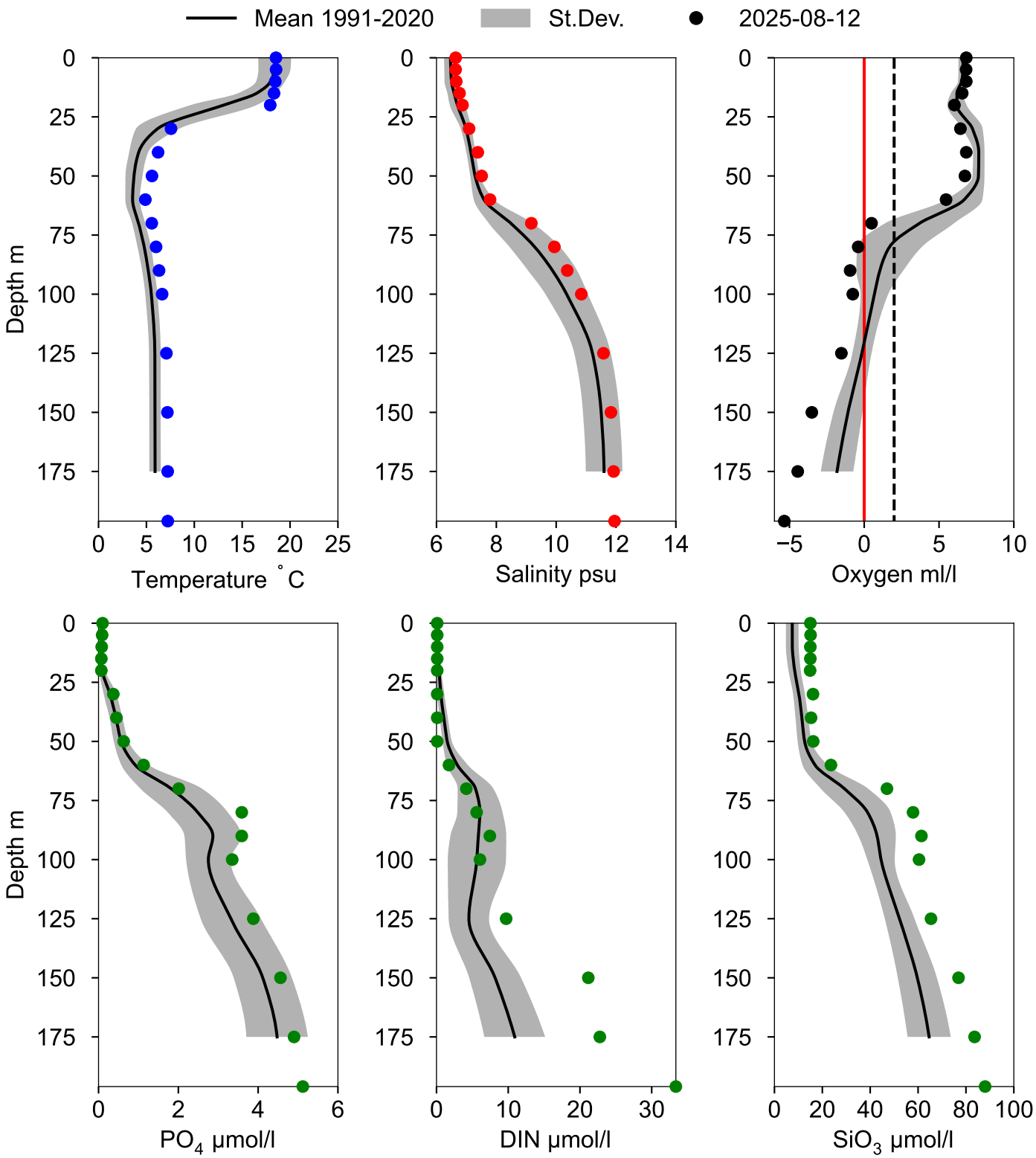
Annual Cycles



OXYGEN IN BOTTOM WATER (depth >= 175 m)

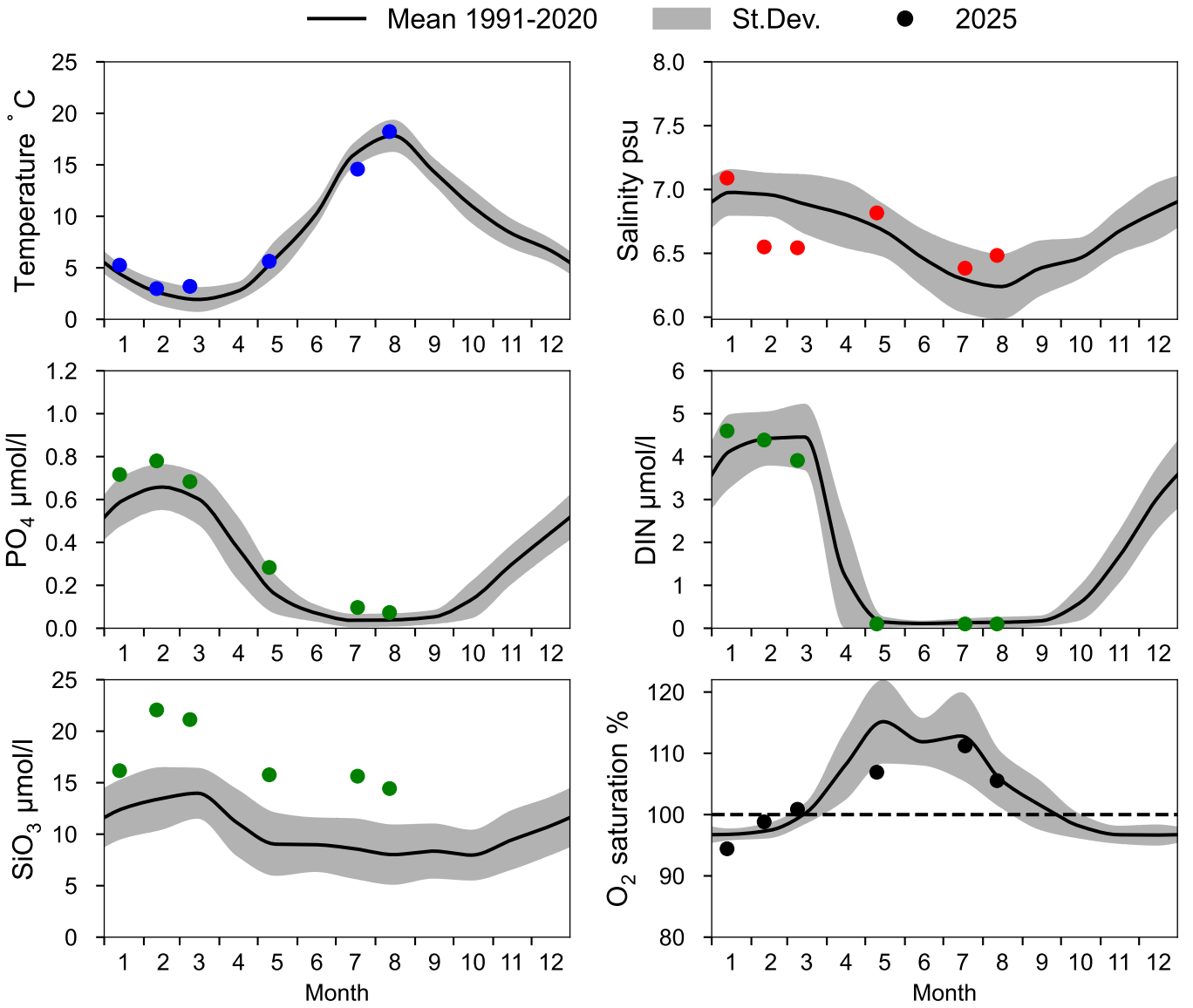


Vertical profiles BY20 FÅRÖDJ
August

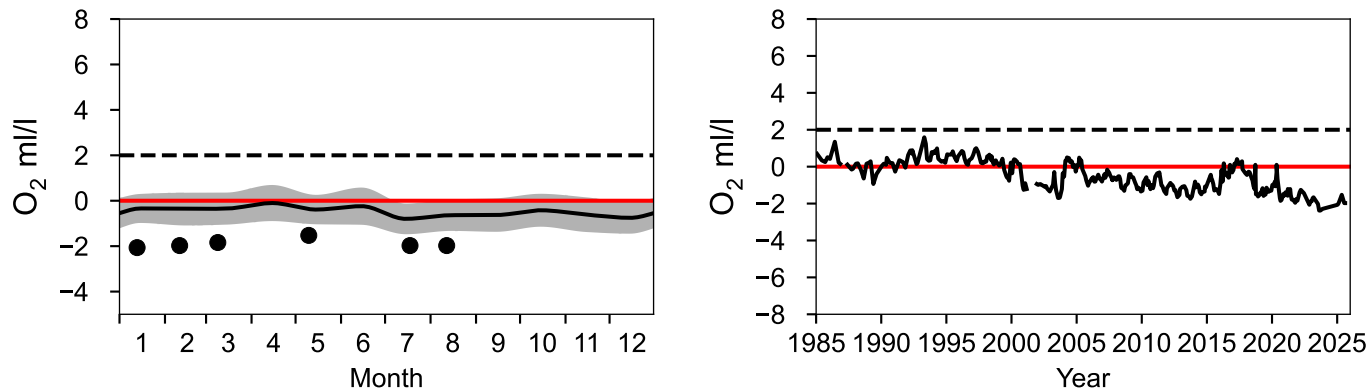


STATION BY29 / LL19 SURFACE WATER (0-10 m)

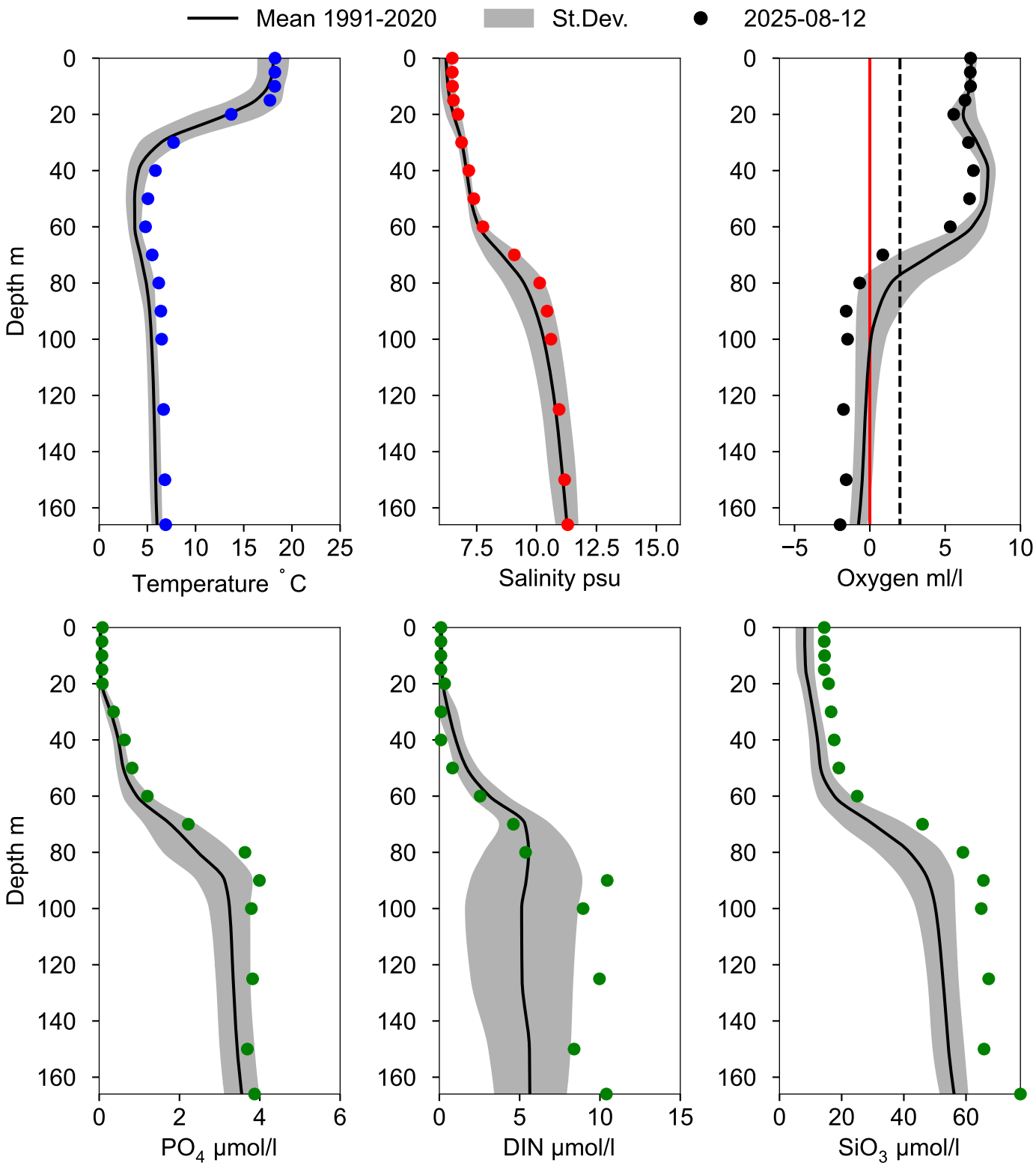
Annual Cycles



OXYGEN IN BOTTOM WATER (depth >= 150 m)

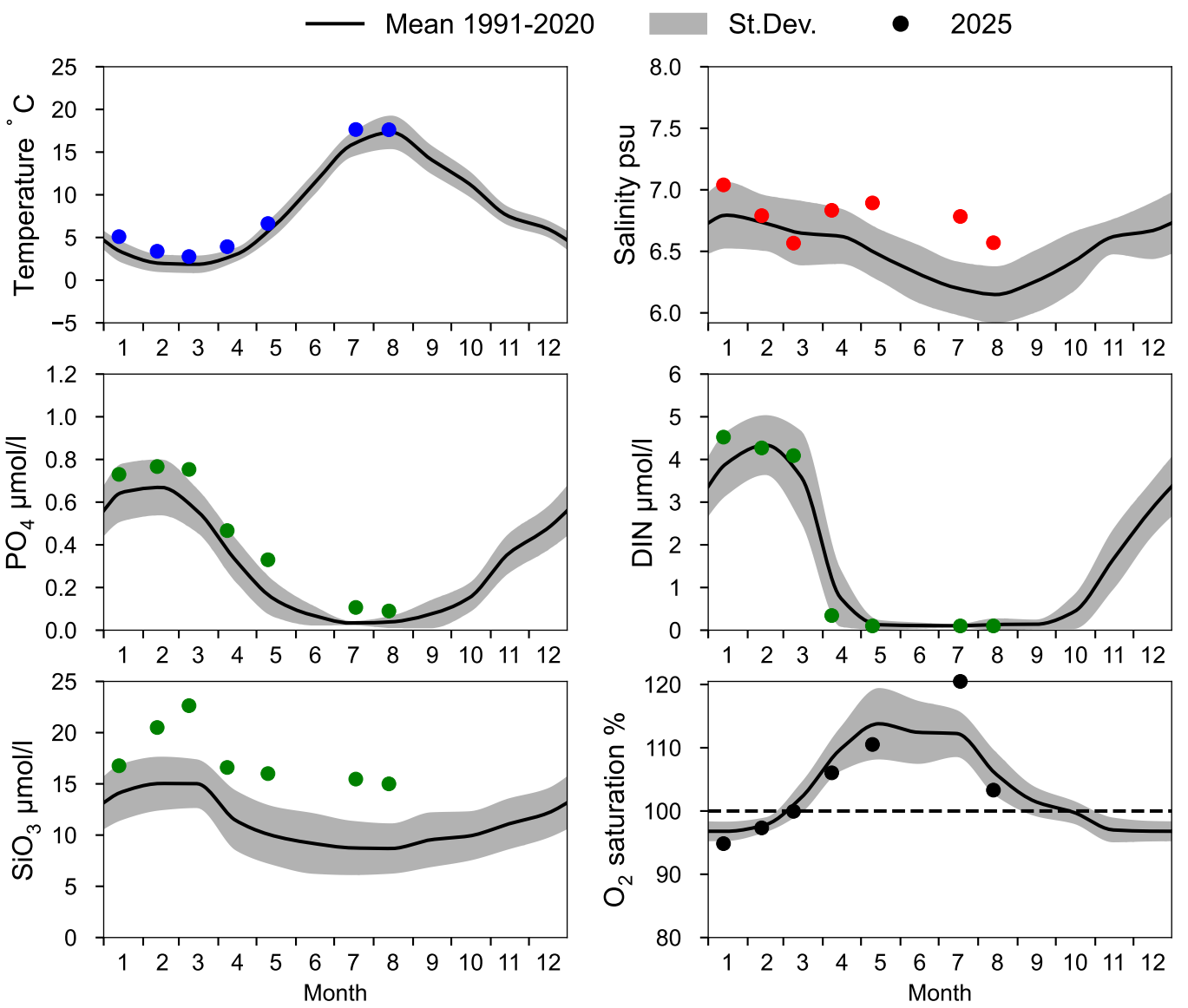


Vertical profiles BY29 / LL19
August

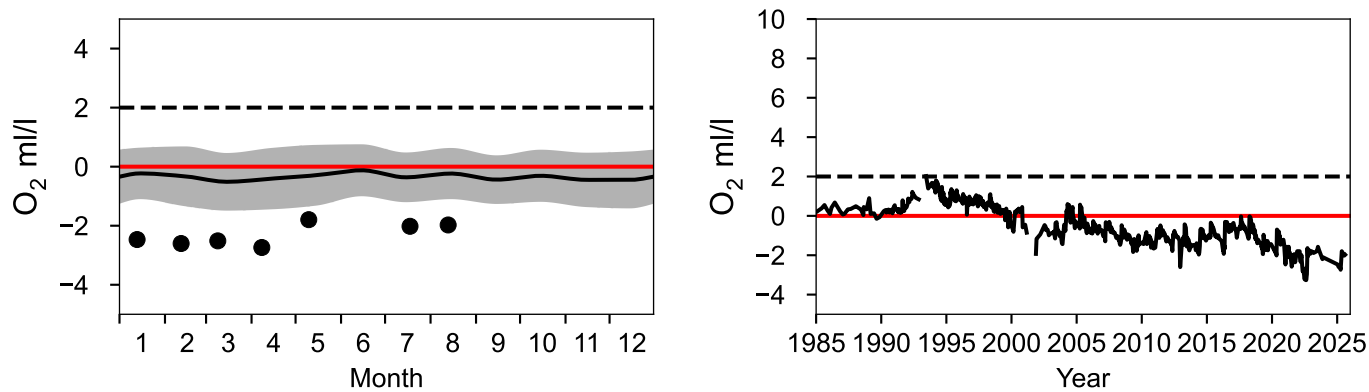


STATION BY31 LANDSORTSDJ SURFACE WATER (0-10 m)

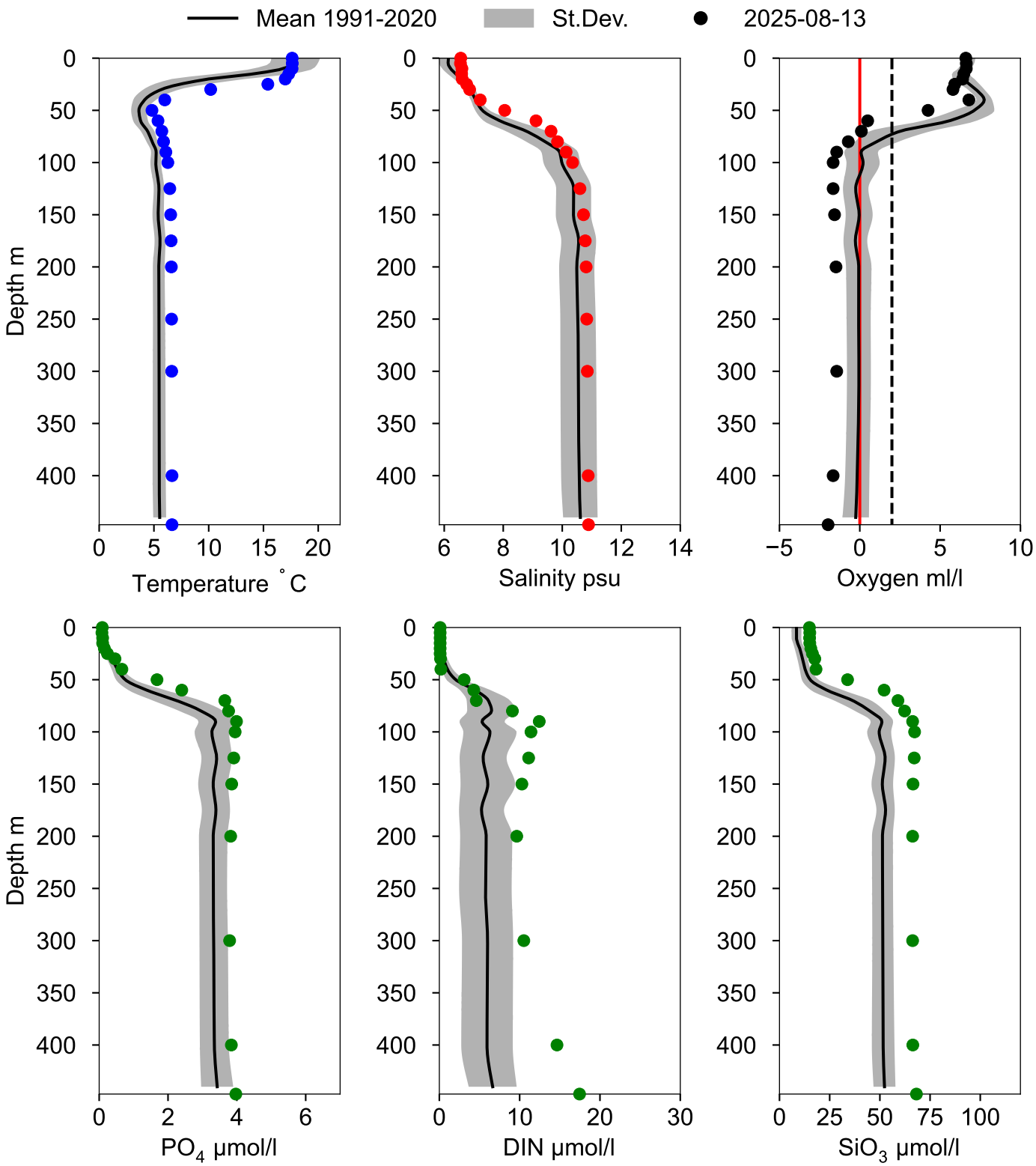
Annual Cycles



OXYGEN IN BOTTOM WATER (depth >= 419 m)

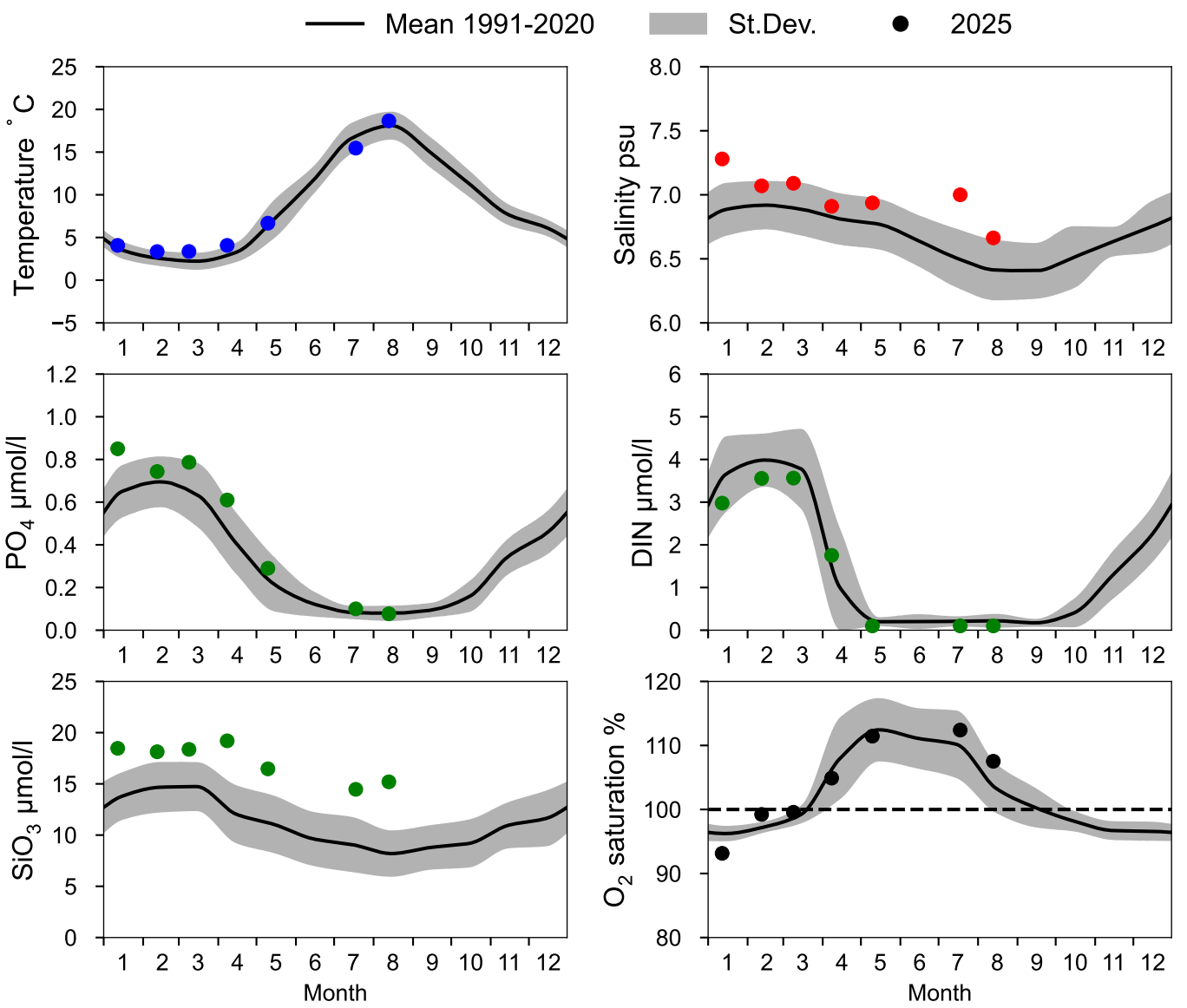


Vertical profiles BY31 LANDSORTSDJ
August

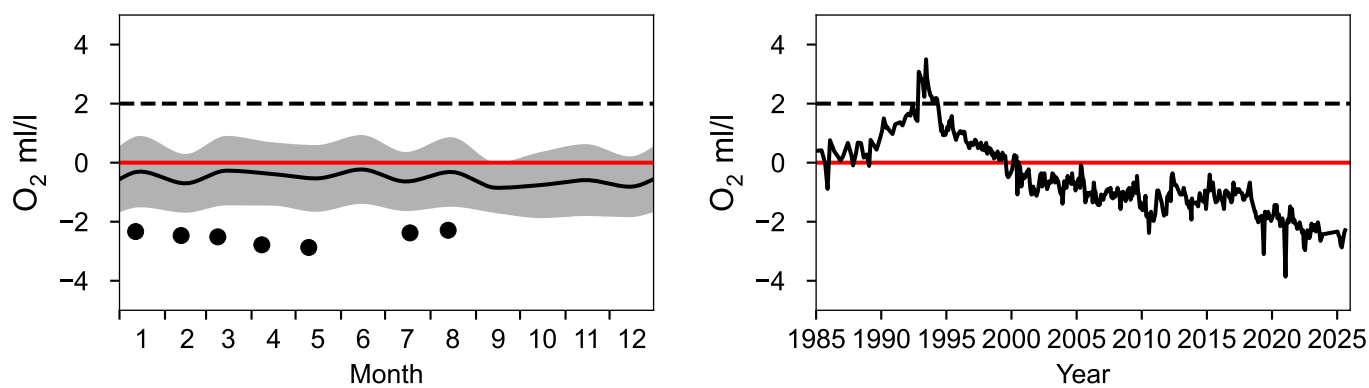


STATION BY32 NORRKÖPINGSDJ SURFACE WATER (0-10 m)

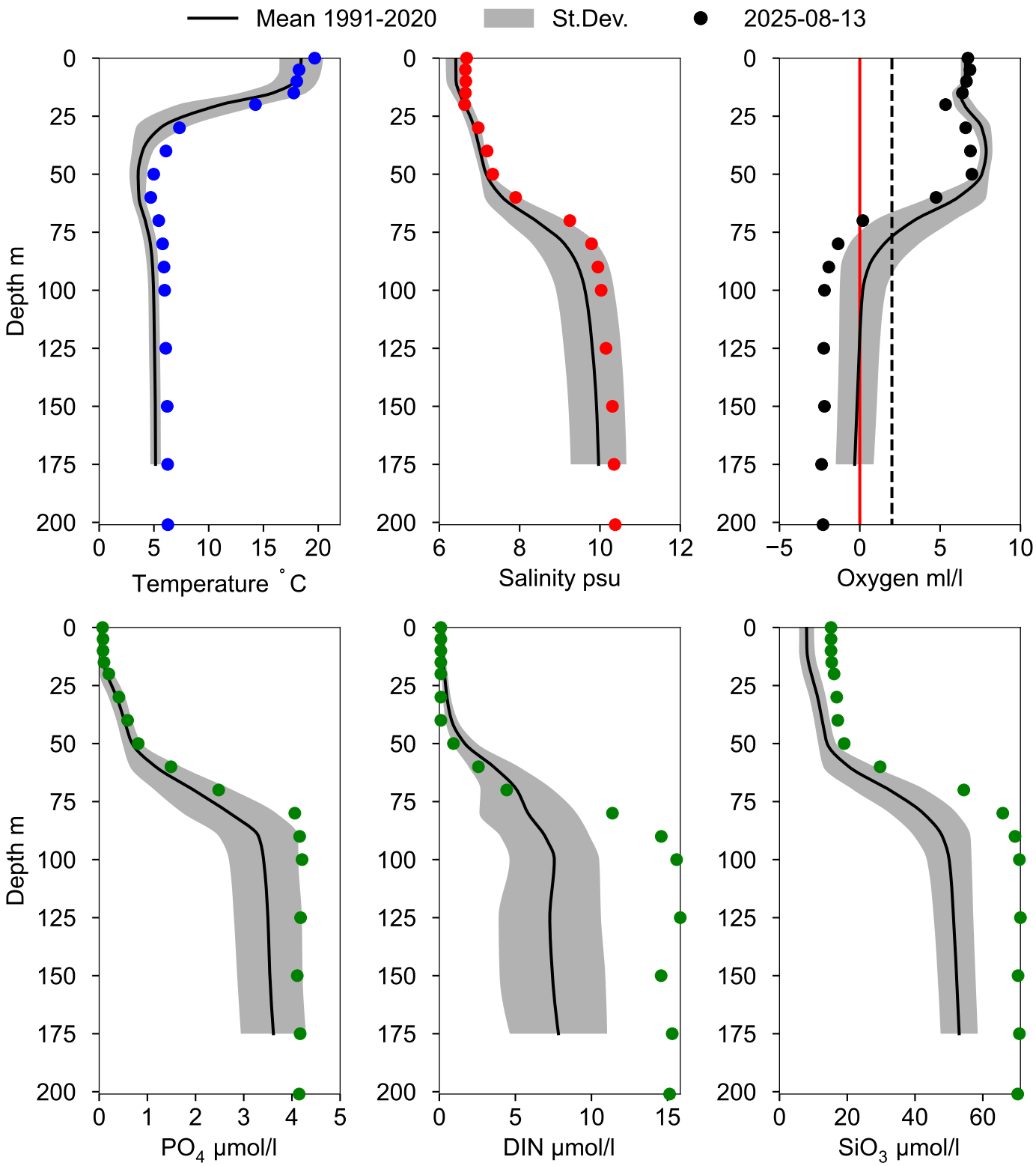
Annual Cycles



OXYGEN IN BOTTOM WATER (depth >= 175 m)

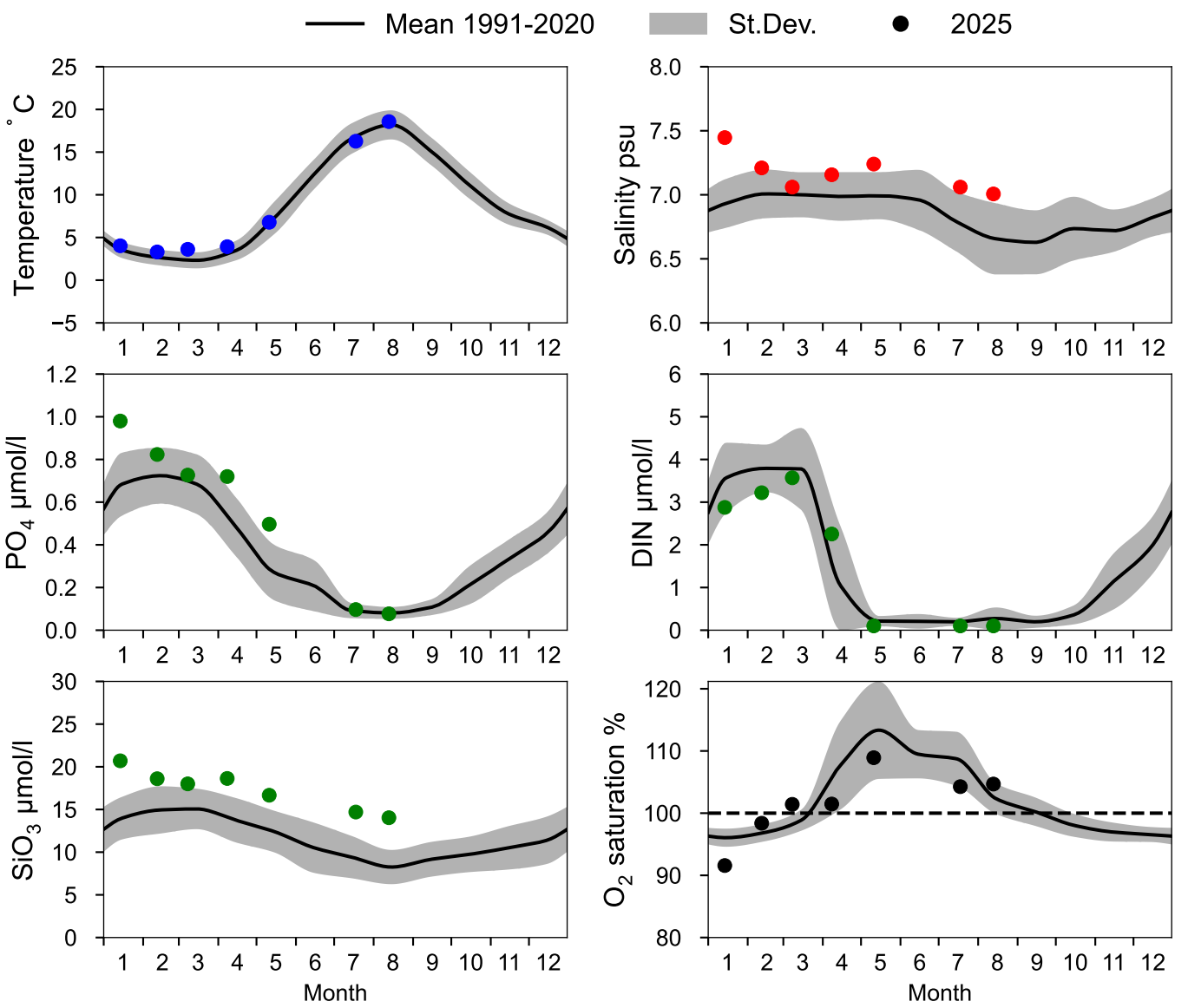


Vertical profiles BY32 NORRKÖPINGSDJ
August

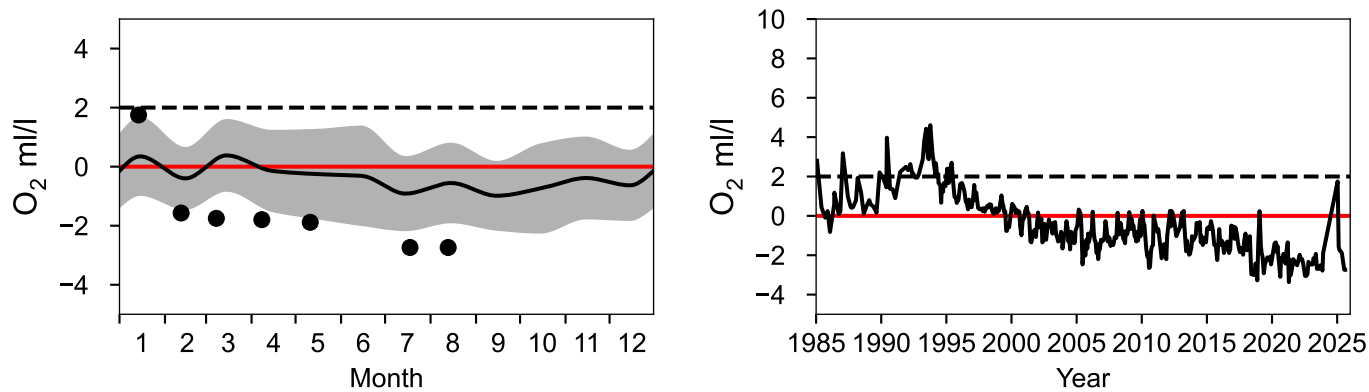


STATION BY38 KARLSÖDJ SURFACE WATER (0-10 m)

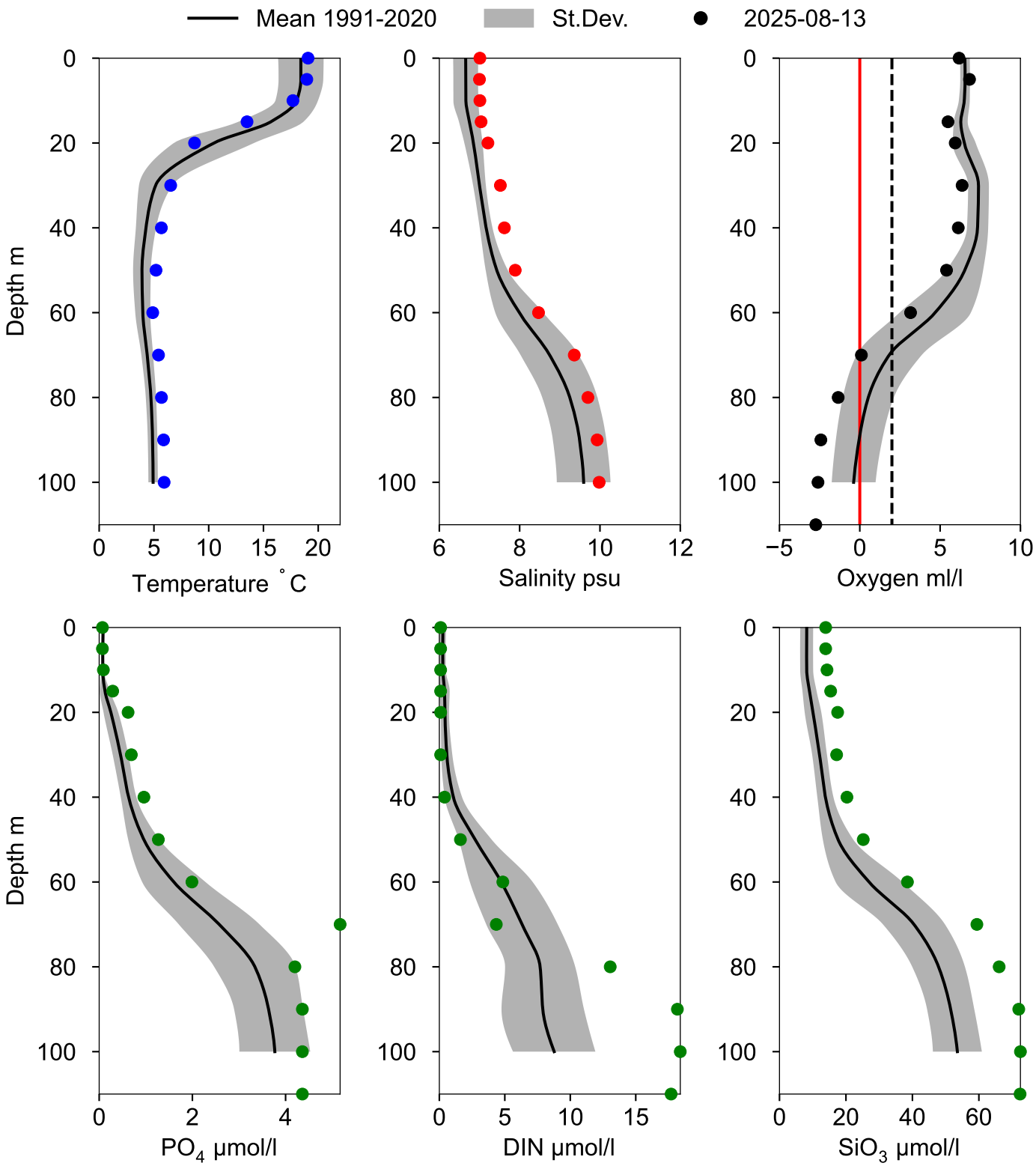
Annual Cycles



OXYGEN IN BOTTOM WATER (depth >= 100 m)

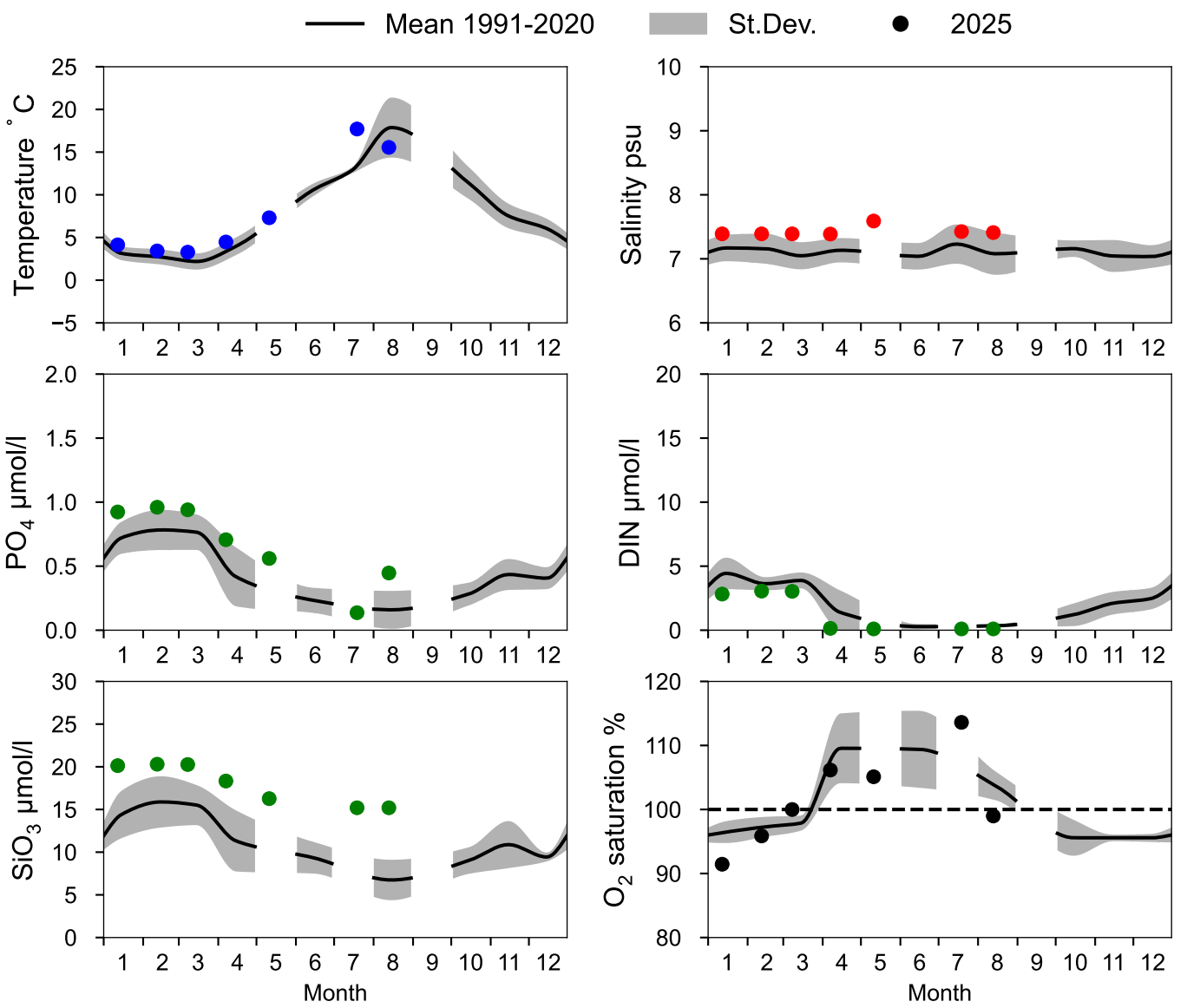


Vertical profiles BY38 KARLSÖDJ
August

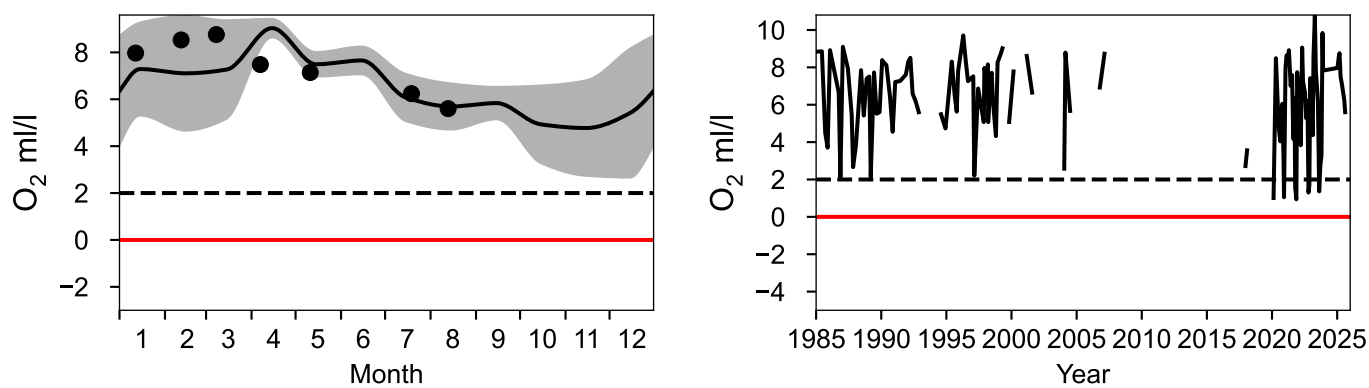


STATION BY39 ÖLANDS S UDDE SURFACE WATER (0-10 m)

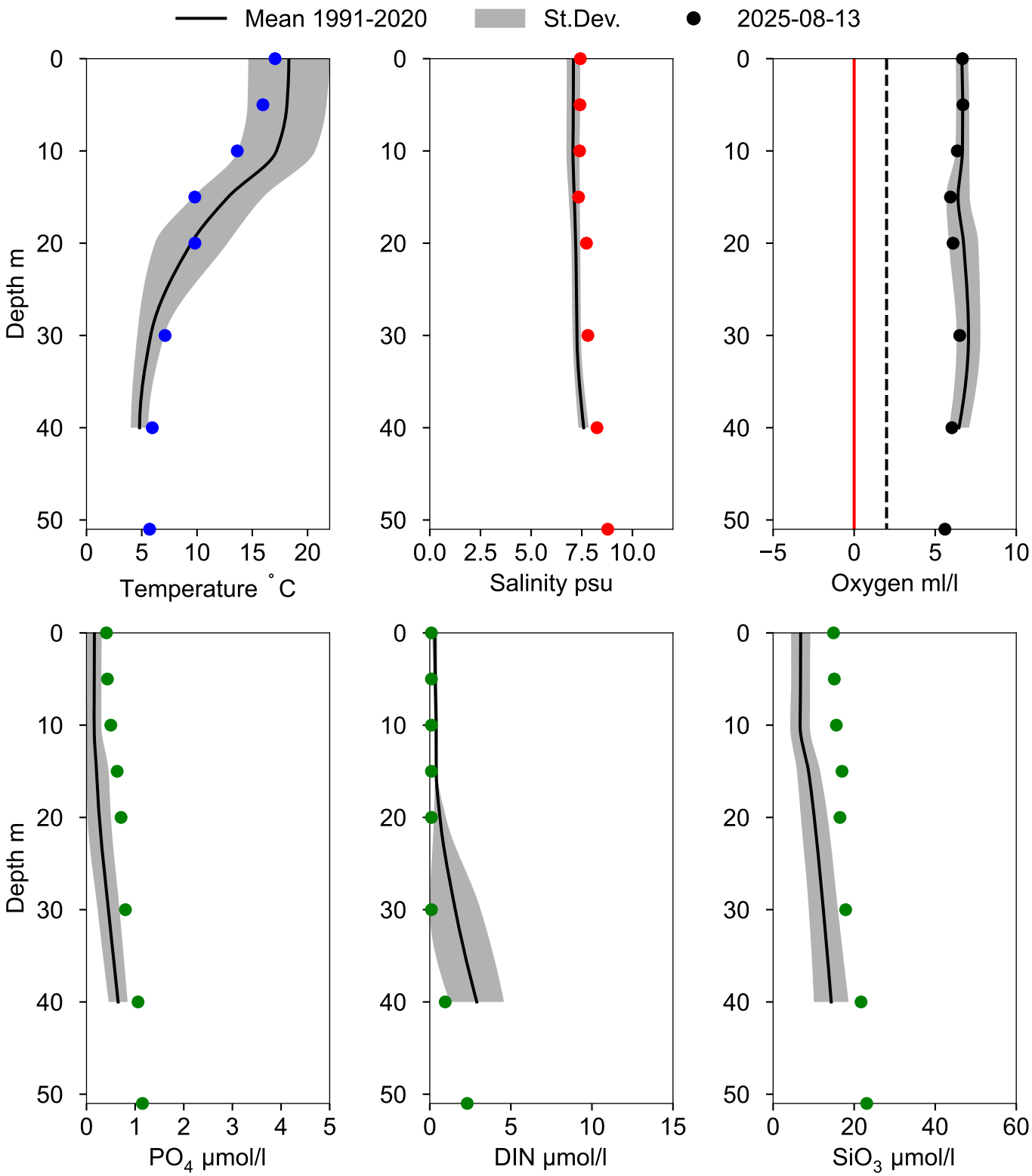
Annual Cycles



OXYGEN IN BOTTOM WATER (depth >= 40 m)

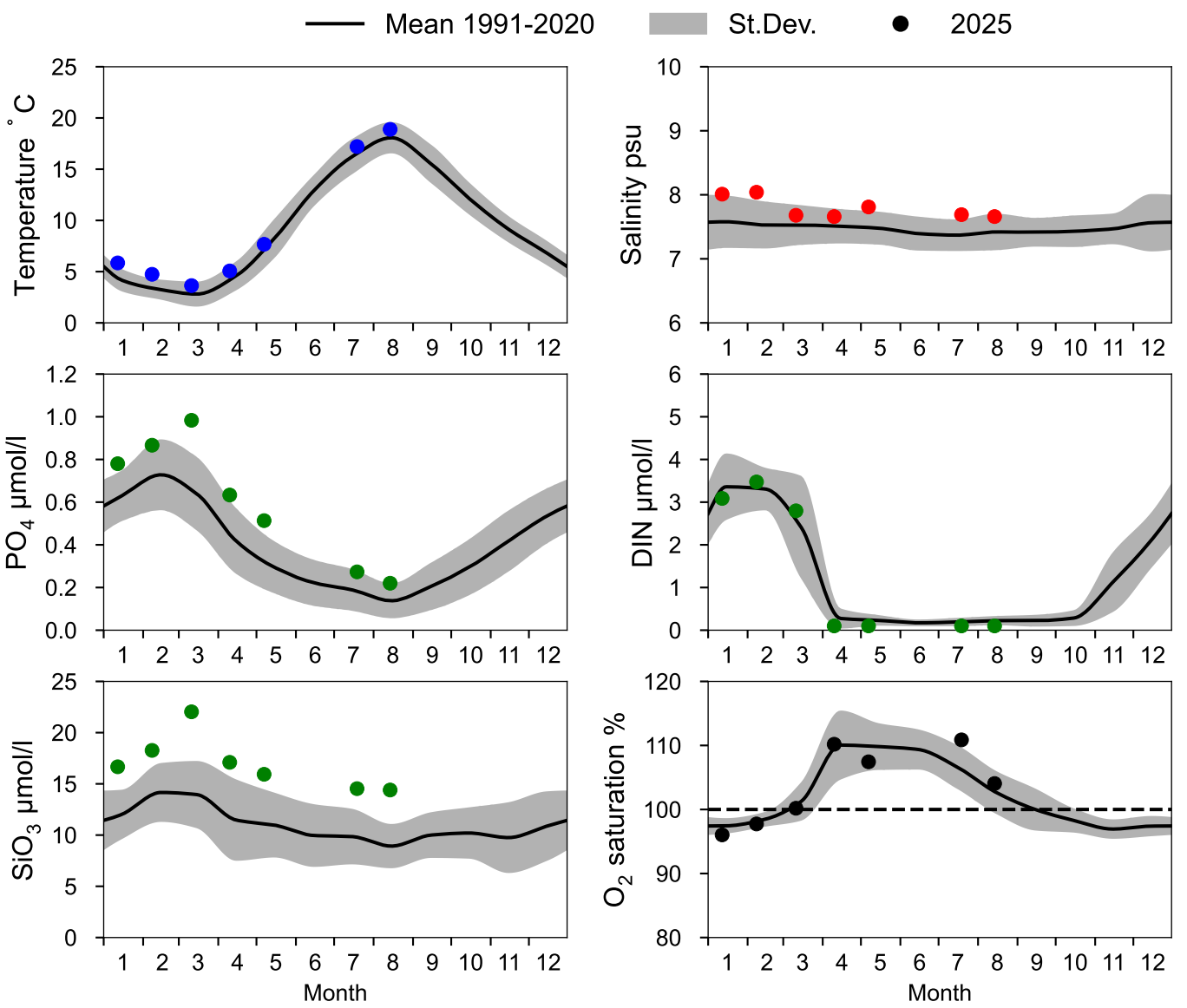


Vertical profiles BY39 ÖLANDS S UDDE
August

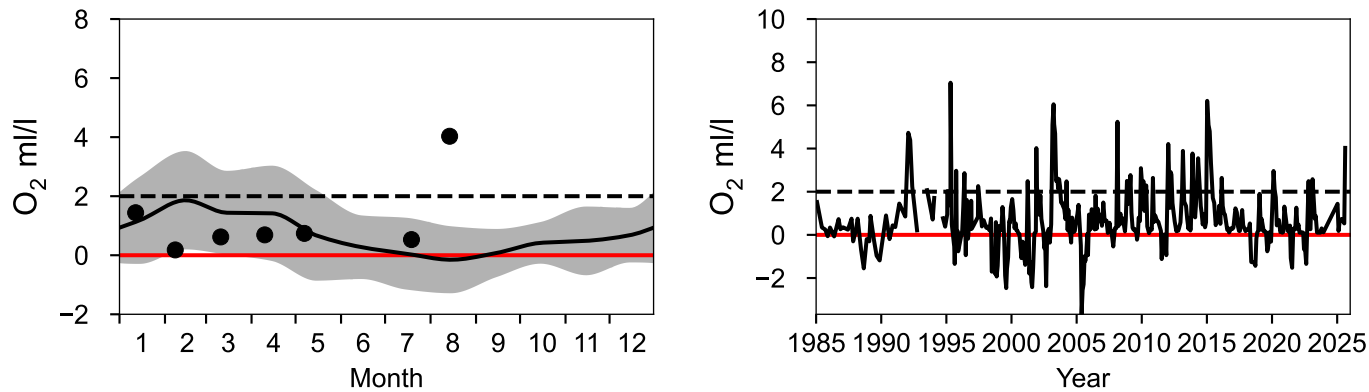


STATION HANÖBUKTEN SURFACE WATER (0-10 m)

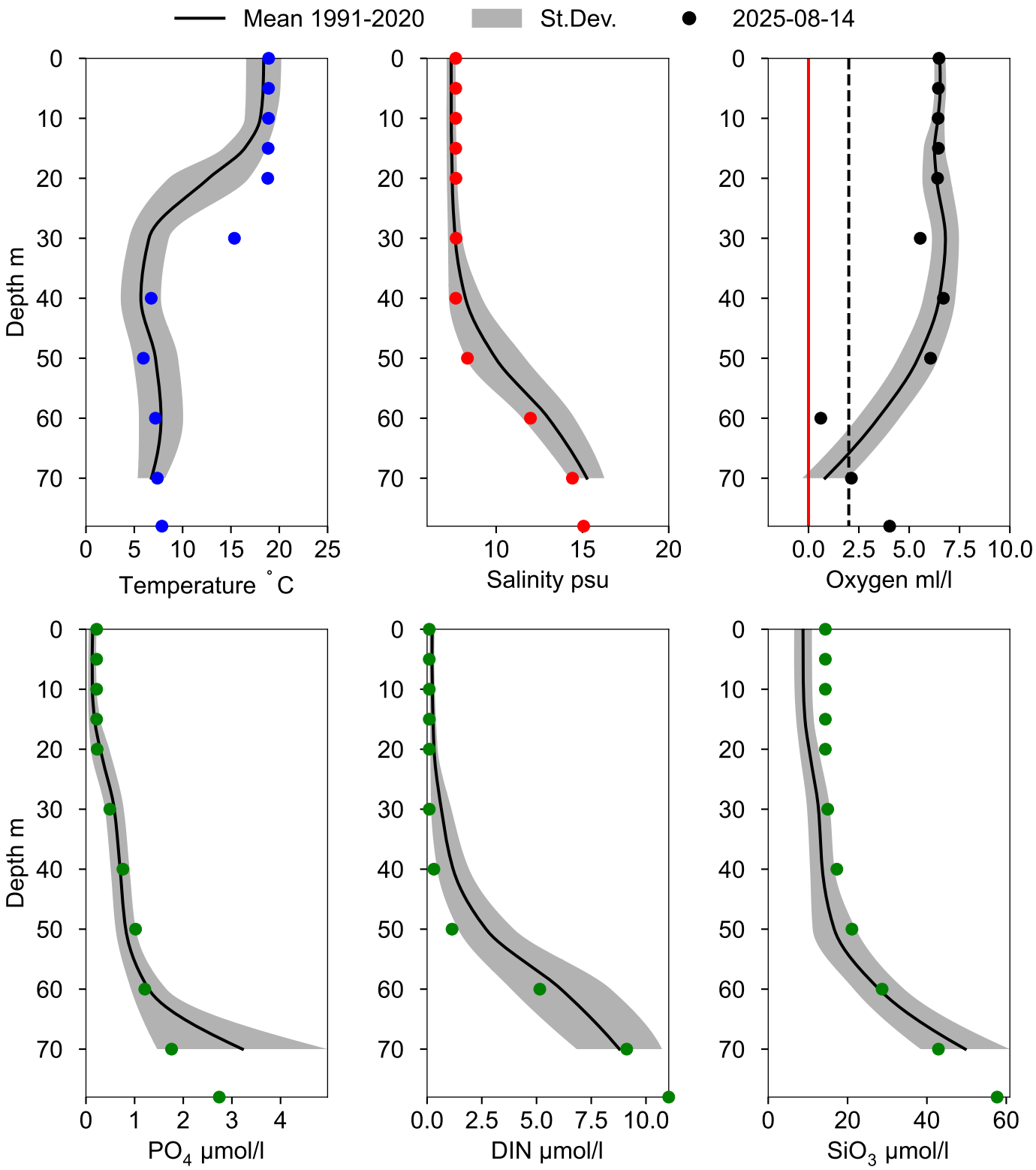
Annual Cycles



OXYGEN IN BOTTOM WATER (depth >= 70 m)

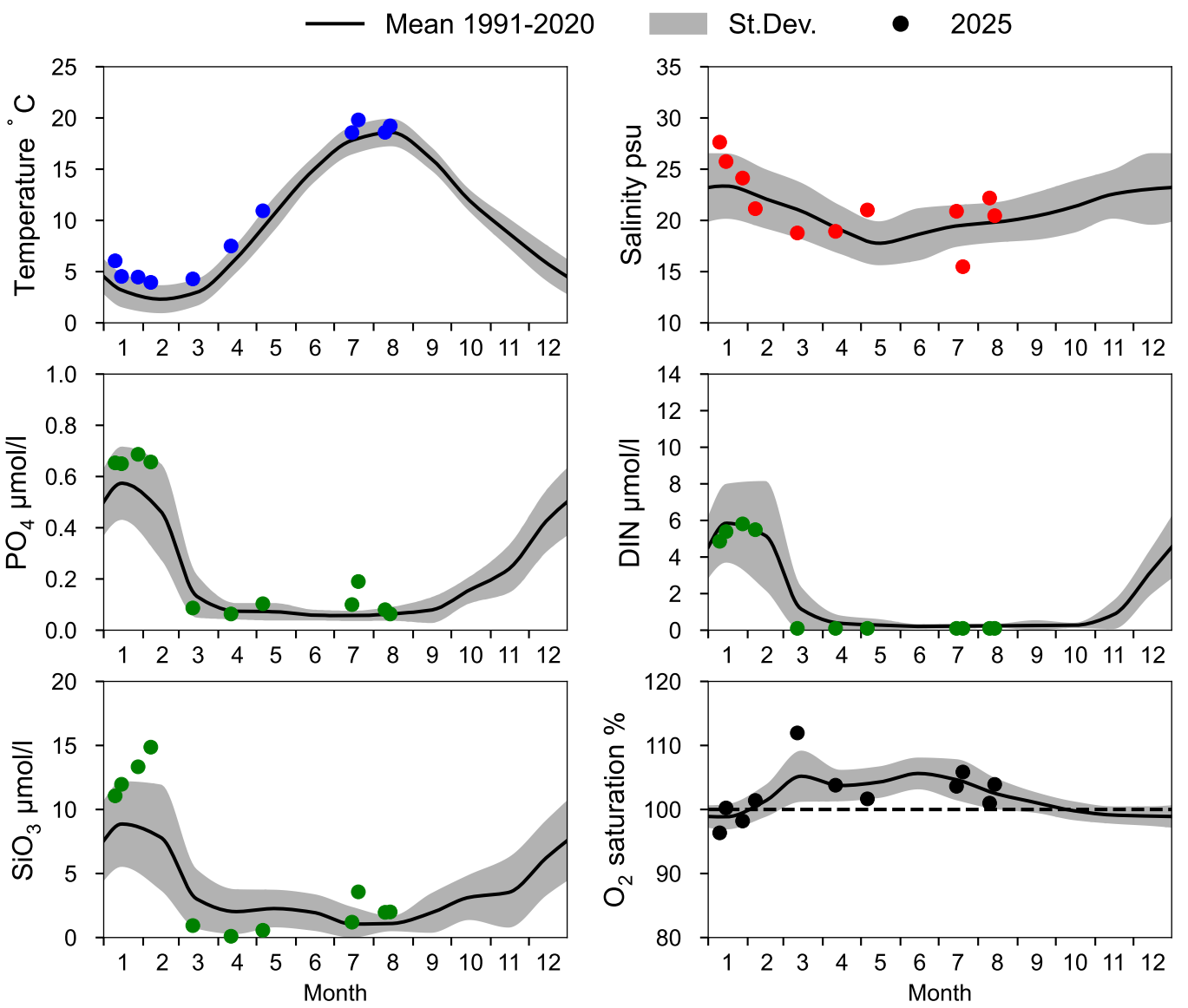


Vertical profiles HANÖBUKTEN
August

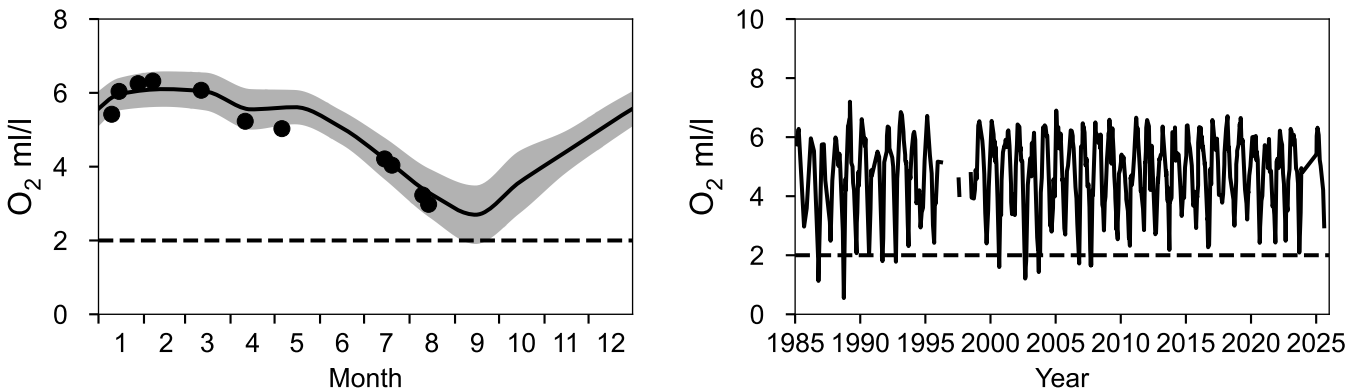


STATION ANHOLT E SURFACE WATER (0-10 m)

Annual Cycles



OXYGEN IN BOTTOM WATER (depth >= 52 m)



Vertical profiles ANHOLT E
August