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2019-02-27
Dnr: S/Gbg-2019-20

Report from the SMHI monitoring cruise with R/V Aranda

Survey period:	2019-02-15 - 2019-02-25
Principal:	Swedish Meteorological and Hydrological Institute (SMHI), Swedish Agency for Marine and Water Management (SwAM).
Cooperation partners:	Finnish Environment Institute (SYKE)

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SUMMARY

The February cruise, which is part of the Swedish national marine monitoring program, covered the Skagerrak, the Kattegat, the Sound and the Baltic Proper. In the Baltic Proper winter mapping of nutrients was performed.

In the northern and westerns parts of the Baltic Proper there was hydrogen sulfide from 80 m depth to the bottom. In the Eastern Gotland Basin from BY15 and to the south there were traces of a smaller inflow with warmer water than the ambient water and low concentrations of oxygen (<0.5 ml/l) at around 100-115 m. From the station BY9 Klaipeda and south of this there was no hydrogen sulphide. At BCS III-10 in the south-east there was no hydrogen sulfide but the oxygen was below the reporting limit (<0.1ml/l). In the Bornholm basin and Hanö bay it was oxic down to the bottom but with concentrations <2ml/l from 80 m depth. There was no oxygen deficiency in the Arkona basin where the oxygen concentration was >4ml/l in the whole profile.

In Kattegat the nutrient concentrations were unusually low, as they were already in January. The concentrations were not as low in Skagerrak, but in both sea areas the phytoplankton production seemed to have started, which is earlier than normal. The winter mapping of nutrients in the Baltic Proper showed that the concentration of silica in the surface water (0-10 m) was above normal in almost the whole sea area. The concentrations of dissolved inorganic nitrogen and phosphorus were lower than normal in the southern parts of the Baltic Proper, similarly to the Kattegat.

The sea surface water temperature was between 2-5□, coldest in the northern parts of the Baltic Proper and warmest in the Skagerrak, The sea surface temperature was slightly above normal at the stations in the Eastern Gotland Basin, the Sound and at P2 in Skagerrak, The sea surface salinity was slightly higher than normal in parts of the Eastern Gotland Basin, the Sound and the Skagerrak. In the Skagerrak and the Kattegat the halocline was at around 10-20 m depth with colder winter water on the surface. In the Baltic Proper the halocline was at 60 m, as normal.

Next regular cruise is scheduled to 14:e – 21:e march.

RESULTS

The expedition was conducted aboard the Finnish research vessel Aranda and started in Helsinki on February 15th and ended in the same port on February 26th. The weather was warm for the tie of year, with temperatures above zero almost the whole expedition, some days with sunny weather at the end but mostly clouded. Winds were mostly weak.

In total 42 stations were visited of which 17 were nutrient mapping stations in the Baltic Proper. An overview of stations and which parameters were measured and is summarized in the Appendix.

During the expedition additional sampling was performed for analysis of DNA-barcoding for the project "*DNA-metabarcoding of marine phytoplankton*" supported by the Swedish Agency for Marine and Water Management (SwAM). The project covers all national marine monitoring stations in the open sea where plankon sampling is done.

This report is based on data that have passed a first quality control. When data are published at the national oceanographic data centre some values might have changed after further quality controls have been performed. Data from this cruise will be published as soon as possible on the data center's webpage, normally within a week after the cruise.

Data can be downloaded here: http://www.smhi.se/klimatdata/oceanografi/havsmiljodata (only available in Swedish)

Skagerrak

Temperature and salinity in the surface waters (0-10 m) was normal in the Skagerrak, except at P2 where the salinity and temperature was slightly higher than normal (4.5□ and around 32 psu). There was a sharp halocline at around 10 m at Å17 and Å15, at Å14 the halocline was deeper at18-22 m and at Å13 it was divided in two with an upper halocline at 6 m and a lower at ca 16 m. The shallowest layer was winter water with lower temperature at 4.0-4.5 □ while the water below the halocline was warmer (ca 5-7 □, coldest at the stations closest to the coast). The salinity in the surface (0-10 m) was ca 32 and 34-35 psu in the water below the halocline. The sea surface temperature (0-10 m) was ca 4 □ and 6-7 □ below the halocline at the westernmost stations and lower, 5 □, at P2 and Å13 closer to the coast.

Generally, the nutrient profiles followed the halocline with slightly lower concentrations above the halocline than below. But the profile at Å15 differs with lower concentrations of inorganic dissolved nitrogen (DIN) below the halocline than above. This is associated with deviating low concentration for DIN in general in the deep water. At the coastal stations, phosphate (0.4-0.5 µmol/l) and silicon (3.3-3.5 µmol/l) are unusually low in the deep water, while the concentrations in the deep water are normal at the westernmost stations (Å16 and Å17). The concentrations of all nutrients in the surface water (0-10 m) are normal (DIN 4.4-5.7 µmol/l, phosphate ~0.4 µmol/l and silicon 3.2-4.3 µmol/l). The oxygen concentrations are normal except at P2 where they are slightly below normal. This due to the somewhat higher temperatures than normal, which means that less oxygen can be dissolved in the water.

No fluorescence peaks were measured at the stations in the Skagerrak, but the relatively low concentrations of nutrients in the surface water indicate that the production of phytoplankton has already started.

Kattegatt and the Sound

The day before the measurements were made in Arkona and Bornholm, westerly winds blew and the water level north of the strait was higher than south of the strait and there was a strong southern current at the passage north (February 20). In the Sound (station W Landskrona) there was unusually high salinity (20.41), which is also in line with the strong current towards the Baltic with water from the Kattegat. The temperature at W Landskrona was slightly above normal for the month (4.16°C). In the Kattegat, the temperature and salinity of the surface water were normal for the month (20.7-23.5 psu and 3.2-3.5 □ respectively).

In the sound, the surface water was well mixed down to 12 m where there was a sharp halocline that separated a sweeter and colder surface layer from a deeper warmer and saltier layer. At the stations in the Kattegat, the halocline was less sharp and started at about 10 m and continued down to about 25 m where the salinity became more constant at 34-35 psu (as Skagerrak's deep water).

The concentration of nutrients in the surface water (0-10 m) was generally low, especially for phosphate and silica. Phosphate was below normal in the surface water at all stations (0.1-0.4 µmol/l). DIN was below normal in the surface water at Fladen (2.2 µmol/l) and Anholt E (0.3 µmol/l) but normal at N14 Falkenberg and W Landskrona (3.5-4.9 µmol/l). Silica in the surface water varied between 0.6-7.0 µmol/l and was below normal at all stations except N14 Falkenberg. Also under the halocline, the concentrations were low at the three stations in the Kattegat with levels below normal for the season for all three nutrients. In the Sound at W Landskrona, it was only the concentration of DIN that was below normal under the halocline.

Just as in January, there was apparently an unusually large amount of chlorophyll in the water and larger amounts of plankton when sampling both phyto- and zooplankton. At Anholt E, the secchi depth was 6 m and there was a peak in chlorophyll fluorescence at 5 m depth. Here the halocline was just below 10 m.

There were no unusually low oxygen concentrations in the bottom water at any of the stations.

Baltic Proper

The temperature at 5 m depth varied between 2-4 □ with temperatures <3 □ north of the Fårö deep BY20 and BY36. The lowest temperature was measured at the coast station Ref M1V1 where it was only 1.87 □ at 5 m. In the Arkona and Bornholm basins and the southern parts of the Eastern Gotland Basin, surface salinity was around 7.5-7.6 psu, while the Western and Northern Gotland Basins had a surface salinity of about 6.6-7.4 psu.

In the Eastern and Western Gotland Basin, the halocline started at 60 m while it was somewhat shallower at BY20 Fårö deep and up in the Northern Baltic Proper at BY29 and BY31. In the Arkona and Bornholm basins, the halocline was even shallower and began at about 40 m depth. At BY31 and BY30 there was colder surface water down to about 25 m. In the rest of the Baltic Sea the surface water was well mixed down to the halocline.

The winter mapping of nutrients shows that the concentration of silicate was above normal in the surface water in almost the entire Baltic Sea (13-20 µmol/l) while the concentration of DIN and phosphate was lower than normal in the southernmost parts of the Baltic Proper. Only the southern

parts of the Eastern Gotland Basin had normal silicate content. The concentration of DIN varied between 1.86-5.78 µmol/l which was below normal in the southern parts of the Baltic Proper (as well as in the Kattegat). Three mapping stations in the Baltic Sea stands out with higher DIN levels than normal (BY39, BY36 and BY27). Phosphate varied between 0.5-0.9 µmol/l and there were lower levels than normal in the southeastern parts of the Baltic Proper (as well as in the Kattegat).

Salinity, temperature, phosphate and silicate were above normal in the deep water at BY4 in the Bornholm Basin, while oxygen was somewhat below normal. At BY10 there was a maximum in phosphate at 80 m where the oxygen first went below zero, this coincided with low concentrations of DIN. At 100 m there were low concentrations of oxygen and the phosphate concentration then dropped again. A similar tendency was found at BY15 where a reduction of phosphate at 100-115 m was found where there was a layer of oxygenated water.

In the northern parts of the Baltic Proper it was anoxic below 70-80 m depth and down to the bottom, in the same way as it has looked since the oxygen was consumed after the last inflow in 2014. In the Eastern Gotland Basin at the Gotland deep (BY15), however, it was oxygenated in a smaller layer between 100-115 m, but very low levels (<0.5 ml/l). This means that a smaller inflow has reached the Gotland deep. The traces of this water could also be seen in the oxygen and temperature profiles further south, at BY10 and the mapping stations south of BY15 (Figure 1 and vertical profiles in the appendix). The stored water with low concentrations of oxygen was also slightly warmer (slightly more than 7□) than surrounding water (6-7□).

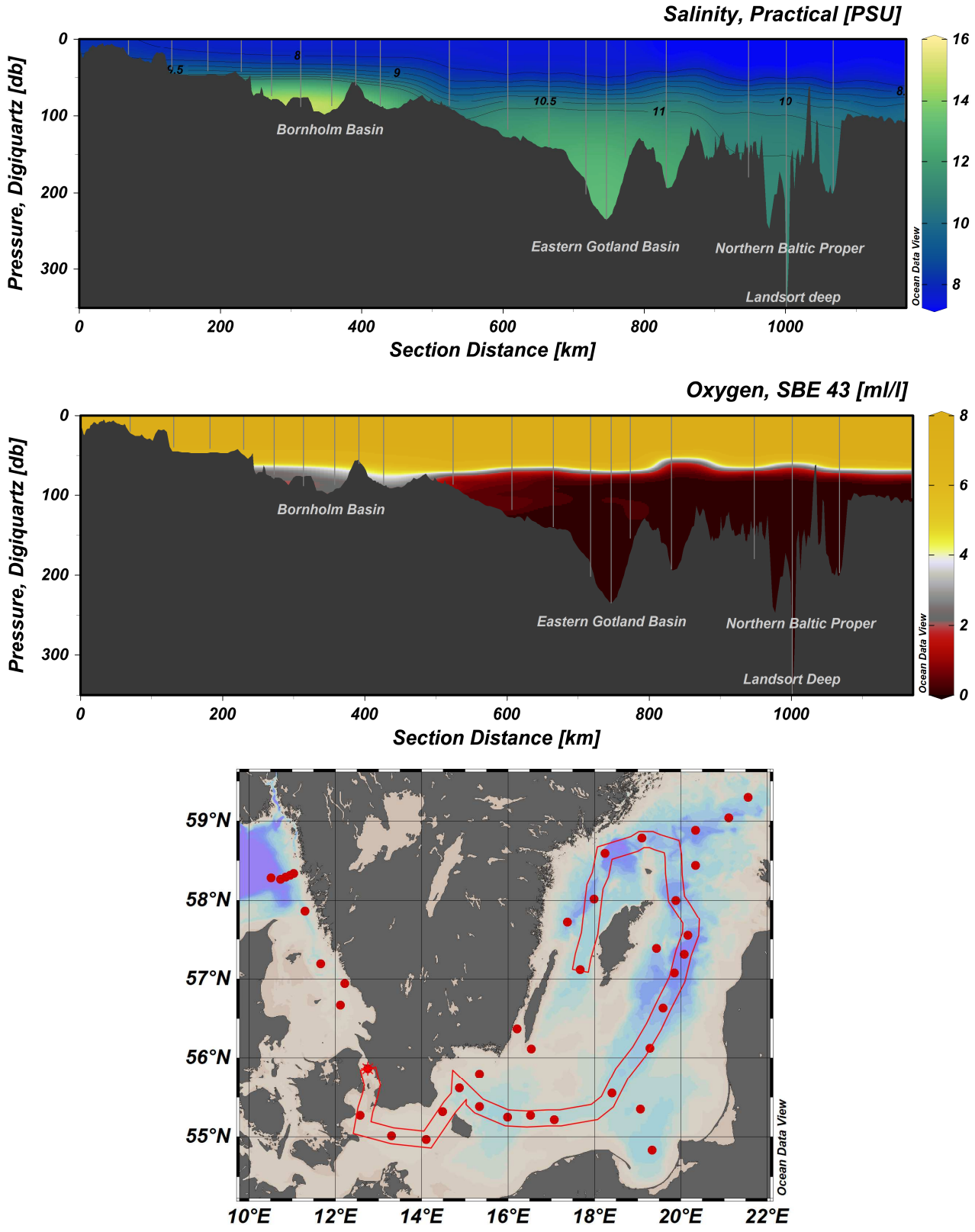

Figure 1. Transect showing dissolved oxygen and salinity from the Sound, through the Baltic Proper, to the Western Gotland Basin.

Participants

Name	Leg	Responsibility	Institute
Lena Viktorsson		Chief scientist	SMHI
Sari Sipilä			SMHI
Sara Johansson			SMHI
Ann-Turi Skjevik	Göteborg- Helsingfors		SMHI
Anna-Kerstin Thell	Helsingfors-Göteborg		SMHI
Kristin Andreasson		Quality manager	SMHI

Appendix

- Track chart
- Table over stations, sampled parameters and number of sampling depths
- Map showing bottom oxygen concentrations and surface nutrient concentrations
- Vertical profiles for regular monitoring stations
- Monthly average surface water plots for regular monitoring stations

SMHI
Havs
och Vatten
myndigheten

TRACKCHART
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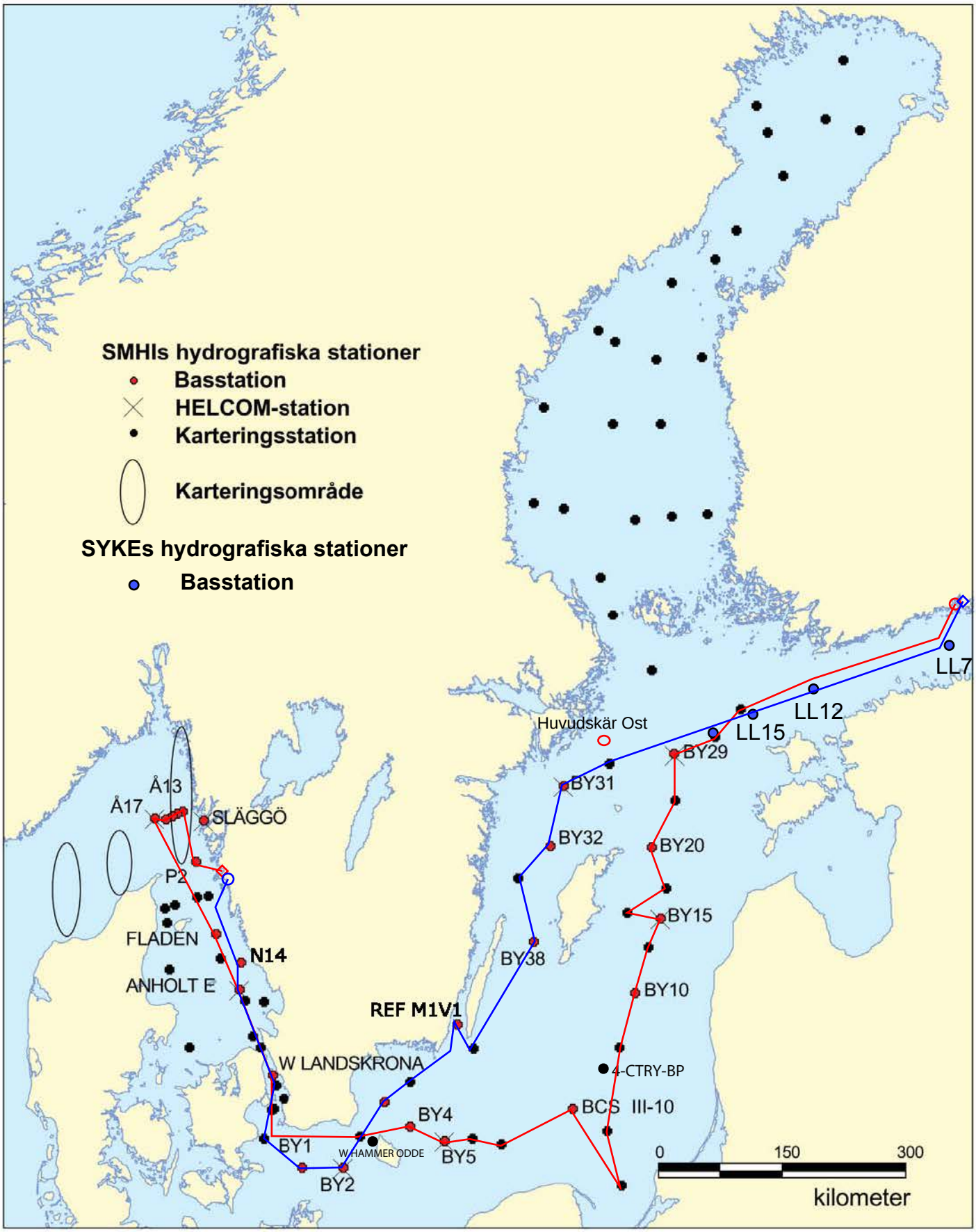
Ship: R/V Aranda
Date: 20190215-20190225
Series:



Date: 2019-02-28
Time: 10:46

Ship: AR
Year: 2019

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 elacaoveteohdsb	CZPP hohploypto p	No de	No btl	Temp_bottle	Temp_cbtl	Salt_bottle	Salt_cbtl	Oxy_bottle	Oxy_cbtl	H2S	Phosphate	Nitrite	Nitrate	Ammonia	Alkalinity	Silicate	Oxygen3	Humus
0090	3	BPNX33	BAS...	BY27	5917.93	02133.18	20190216	1050	180		23	16	4.6	1006	1150	----	16	16	x	x	-	x	-	x	x	x	x	x	x	x	x	-	x	-
0091	3	BPNX34	BAS...	BY28	5902.51	02106.06	20190216	1510	200		23	15	4.9	1002	1650	----	17	17	x	x	-	x	-	x	x	x	x	x	x	x	x	-	x	-
0092	3	BPNX35	BAS...	BY29 / LL19	5852.91	02019.64	20190216	1940	178		30	9	4.1	1006	9990	x---	16	16	x	x	-	x	-	x	x	x	x	x	x	x	x	-	x	-
0093	3	BPNX27	BAS...	BY21	5826.52	02020.03	20190216	2355	122		29	6.8	3.8	1011	9990	----	14	14	x	x	x	x	-	x	x	x	x	x	x	x	x	-	x	-
0094	3	BPEX26	BAS...	BY20 FÅRÖDJ	5759.88	01952.72	20190217	0404	203		33	5.8	3.4	1013	9990	x---	17	17	x	x	-	x	-	x	x	x	x	x	x	x	x	-	x	-
0095	3	BPEX25	BAS...	BY19	5733.04	02009.67	20190217	0805	160		31	4	3.1	1014	1130	---x	15	15	x	x	-	x	x	x	x	x	x	x	x	x	x	x	x	-
0096	3	BPEX19	BAS...	BY13	5723.24	01926.02	20190217	1140	122		03	2	3.1	1016	2730	----	14	14	x	x	x	x	-	x	x	x	x	x	x	x	x	-	x	-
0097	3	BPEX21	BAS...	BY15 GOTLANDSDJ	5718.73	02004.53	20190217	1435	249		34	1	3.3	1017	1720	xxx-	24	24	x	x	-	x	x	x	x	x	x	x	x	x	x	x	x	x
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0099	3	BPEX14	BAS...	BY11	5704.46	01950.55	20190217	1930	213		12	3	3.6	1019	9990	----	17	17	x	x	-	x	-	x	x	x	x	x	x	x	x	-	x	-
0100	3	BPEX13	BAS...	BY10	5638.03	01935.12	20190217	2320	147		14	2	3.6	1020	9990	x---	15	15	x	x	x	x	-	x	x	x	x	x	x	x	x	-	x	-
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0104	3	BPSE11	BAS...	BCS III-10	5533.32	01824.01	20190218	2015	90		20	7	4.4	1012	9990	x---	12	12	x	x	x	x	-	x	x	x	x	x	x	x	x	-	x	x
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0106	3	BPSE08	BAS...	STOLPE TRÖSKEL	5516.50	01630.99	20190219	0515	63		22	9	4.7	1005	9990	----	10	10	x	x	x	x	-	x	x	-	x	x	x	x	x	-	x	-
0107	3	BPSB07	BAS...	BY5 BORNHOLMSDJ	5515.00	01559.05	20190219	0800	91	9	22	9	4.3	1004	2830	xxxx	12	12	x	x	x	x	x	x	-	x	x	x	x	x	x	x	x	x
0108	3	BPSB06	BAS...	BY4 CHRISTIANSÖ	5522.98	01520.02	20190219	1200	94	8	24	13	4.8	1006	2740	x---	12	12	x	x	x	x	-	x	x	-	x	x	x	x	x	-	x	-
0109	3	BPSA00	BAS...	BY3 HAMRARNE SUND	5519.11	01428.96	20190219	1640	48		25	15	4.7	1004	1640	----	8	8	x	x	x	x	-	x	x	-	x	x	x	x	x	-	x	-
0110	3	SOCX39	BAS...	W LANDSKRONA	5551.99	01244.86	20190220	0455	50		27	8	5.1	1008	9990	x---	9	9	x	x	x	x	-	x	x	-	x	x	x	x	x	-	x	-
0111	3	KAEX29	BAS...	ANHOLT E	5640.11	01206.67	20190220	1145	62	5	26	6	4.0	1011	2830	xxxx	10	10	x	x	x	x	x	x	-	x	x	x	x	x	x	x	x	x
0112	3	KANX25	BAS...	FLADEN	5711.54	01139.46	20190220	1625	84		20	6	4.3	1012	2830	x---	12	12	x	x	x	x	-	x	x	-	x	x	x	x	x	-	x	-
0113	3	SKEX18	BAS...	Å17	5817.06	01030.26	20190221	0110	340		18	7	4.7	1009	6990	xxx-	15	14	x	x	-	x	x	x	x	-	x	x	x	x	x	x	x	-
0114	3	SKEX17	BAS...	Å16	5816.03	01043.47	20190221	0320	202		20	6	4.3	1008	6990	----	14	0	-	x	-	x	-	-	x	-	-	-	-	-	-	-	-	-
0115	3	SKEX16	BAS...	Å15	5817.66	01050.75	20190221	0440	135		22	8	4.3	1009	6990	x---	12	12	x	x	x	x	-	x	x	-	x	x	x	x	x	-	x	-
0116	3	SKEX15	BAS...	Å14	5818.92	01056.55	20190221	0555	110		24	7	4.2	1008	9990	----	11	0	-	x	-	x	-	-	x	-	-	-	-	-	-	-	-	-
0117	3	SKEX14	BAS...	Å13	5820.39	01101.64	20190221	0655	90		27	4	3.2	1008	5830	x---	10	10	x	x	x	x	-	x	x	-	x	x	x	x	x	-	x	-
0118	3	SKEX23	BAS...	P2	5751.99	01117.52	20190221	1050	93		33	6	3.1	1011	6830	x---	10	10	x	x	x	x	-	x	x	-	x	x	x	x	x	-	x	-
0120	3	KAEX29	BAS...	ANHOLT E	5640.11	01206.66	20190222	0230	62		10	11.5	0.6	1031	9990	xxxx	10	10	x	x	x	x	x	x	-	x	x	x	x	x	x	x	x	x
0121	3	BPSA01	BAS...	441 STEVNS KLINT	5516.30	01234.34	20190222	1330	26		12	9	1.3	1060	1230	----	6	6	x	x	x	x	-	x	x	-	x	x	x	x	x	-	x	-
0122	3	BPSA02	BAS...	BY1	5500.95	01318.03	20190222	1730	47		12	5.8	0.7	1041	9990	x---	8	8	x	x	x	x	-	x	x	-	x	x	x	x	x	-	x	-
0123	3	BPSA03	BAS...	BY2 ARKONA	5458.27	01405.92	20190222	2030	47		13	8.5	0.3	1042	9990	xxx-	8	8	x	x	x	x	-	x	x	-	x	x	x	x	x	-	x	x

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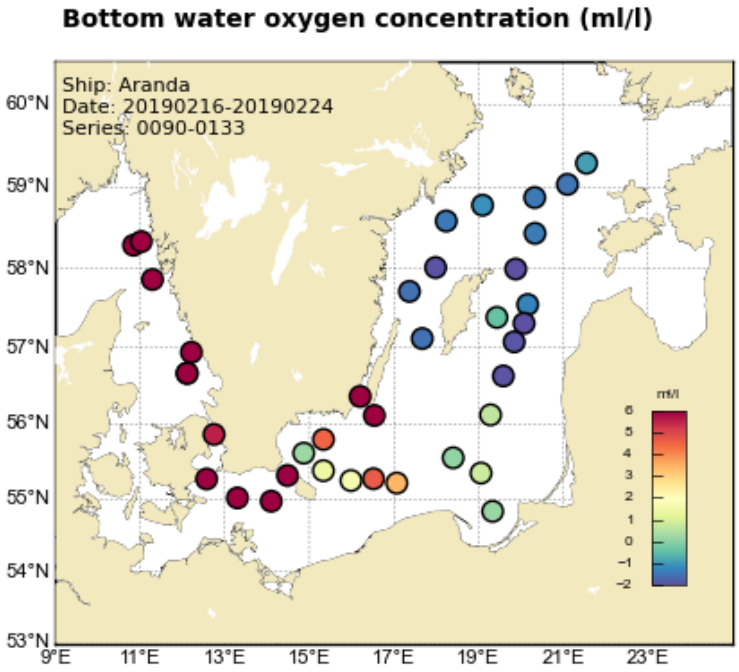
Sveriges Meteorologiska och Hydrologiska Institut

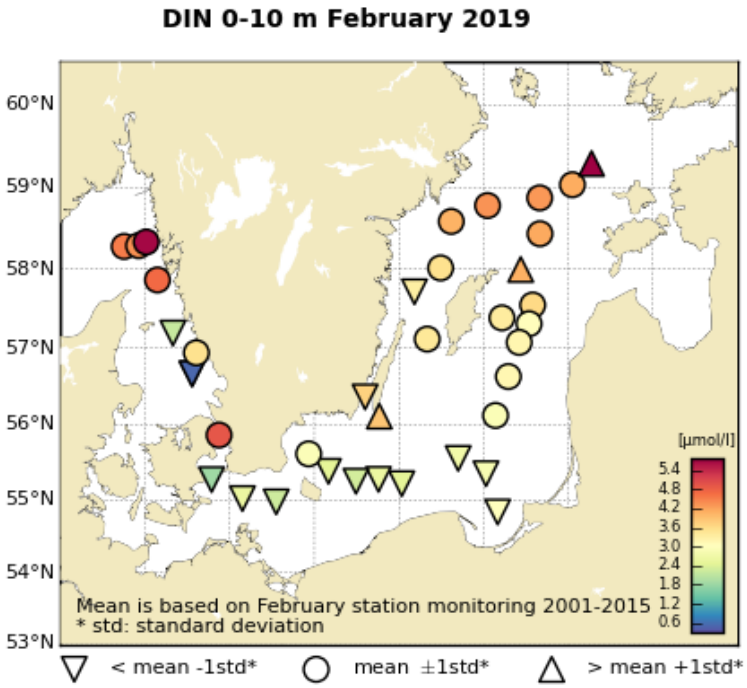
Oceanografiska Laboratoriet

2019-02-01

Dnr: S/Gbg-2019-20

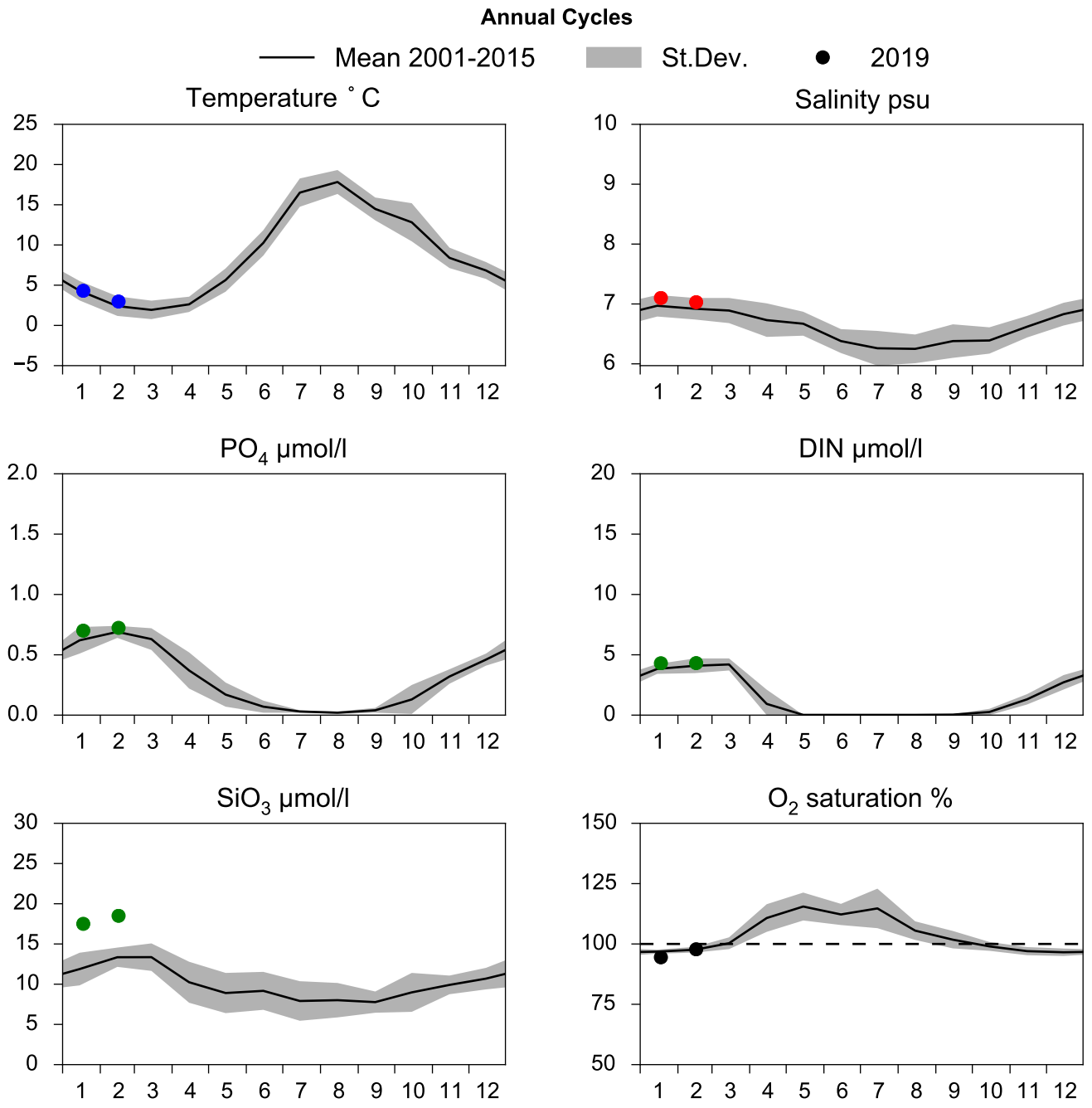


Syrekoncentration i bottenvattnet vid besökta stationer. Blå och mörkt grön visar svavelväte och mörkt röd är värden över 6 ml/l.

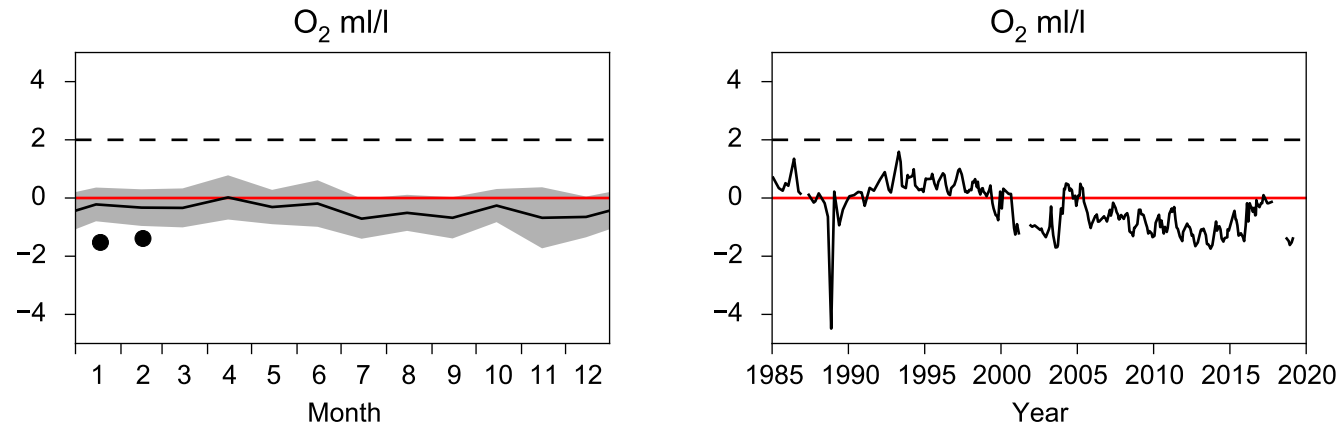


Löst oorganisk kväve (till största delen nitrat) i ytvattnet (0-10 m). Koncentrationerna är under normalt i de södra delarna av Egentliga Östersjön och i Kattegatt.

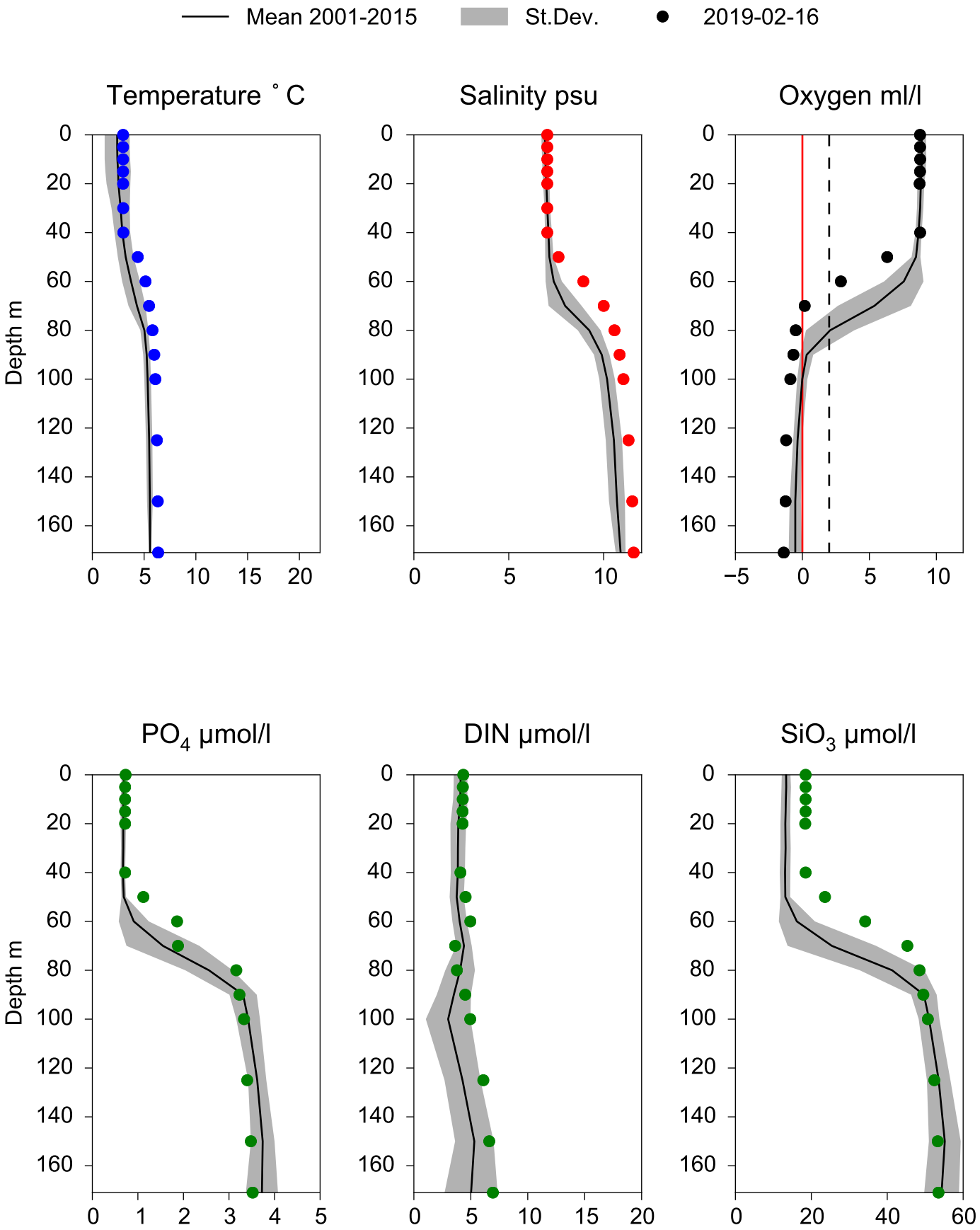
STATION BY29 / LL19 SURFACE WATER (0-10 m)



OXYGEN IN BOTTOM WATER (depth >= 150 m)



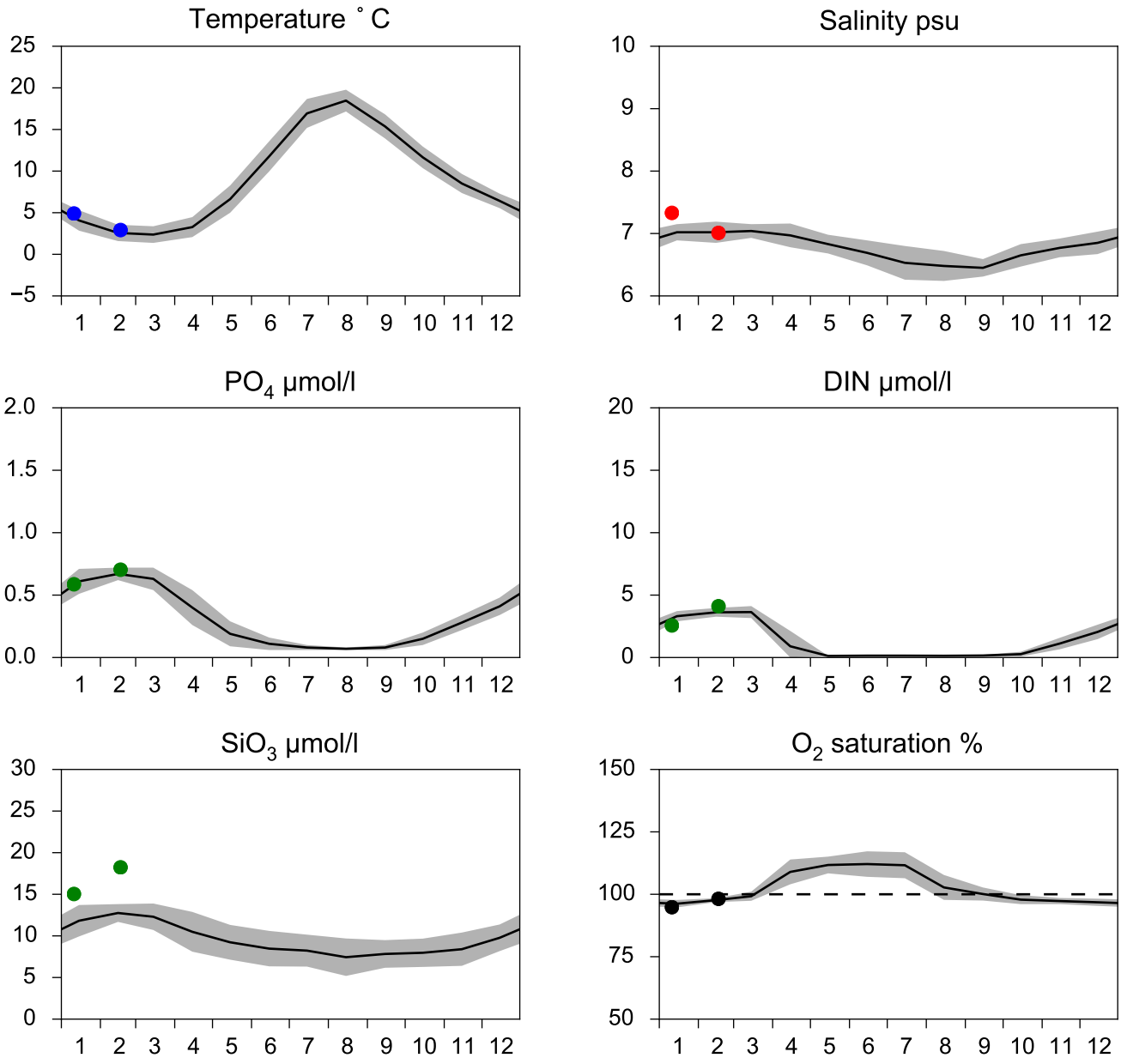
Vertical profiles BY29 / LL19
February



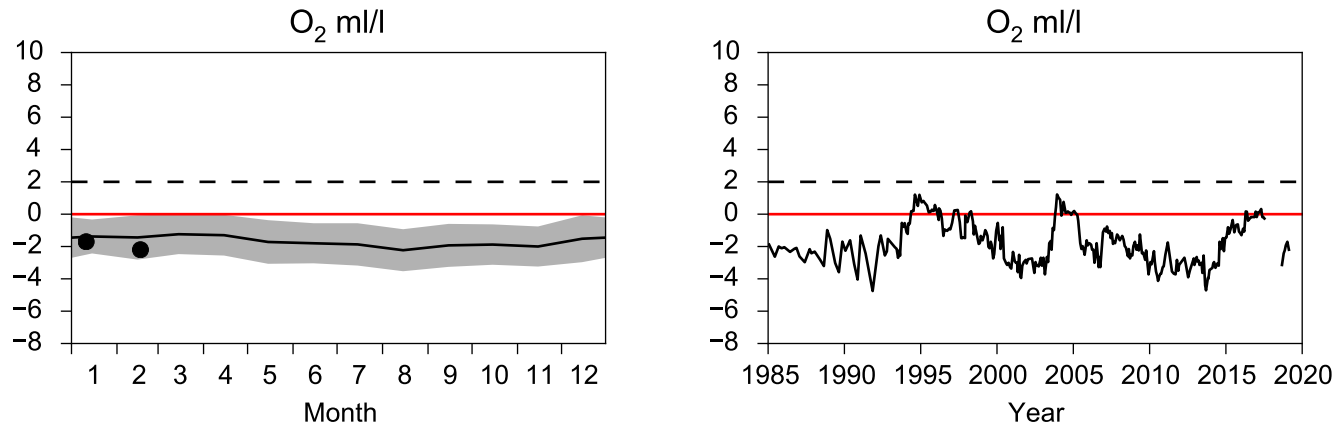
STATION BY20 FÅRÖDJ SURFACE WATER (0-10 m)

Annual Cycles

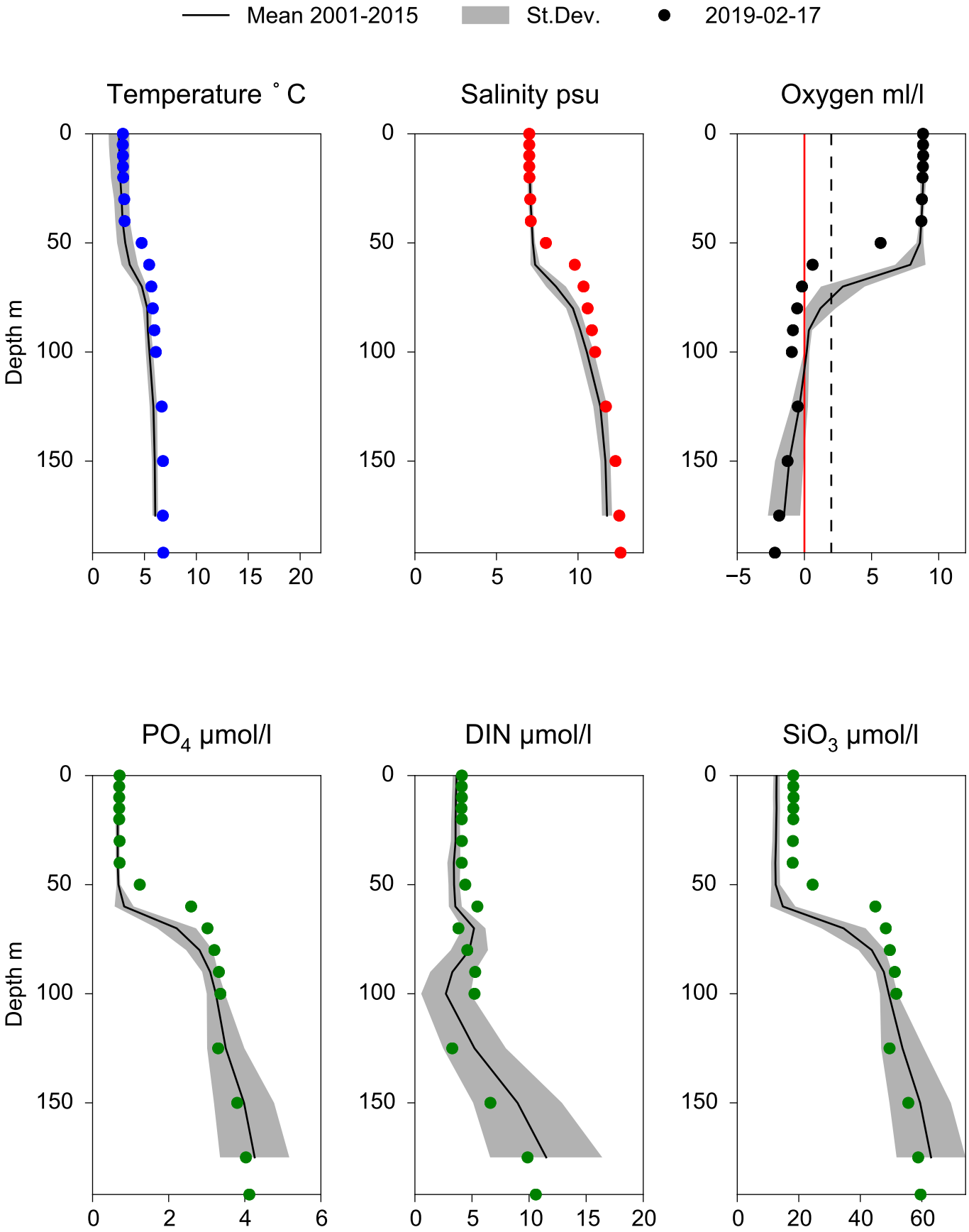
Mean 2001-2015 | St.Dev. | 2019



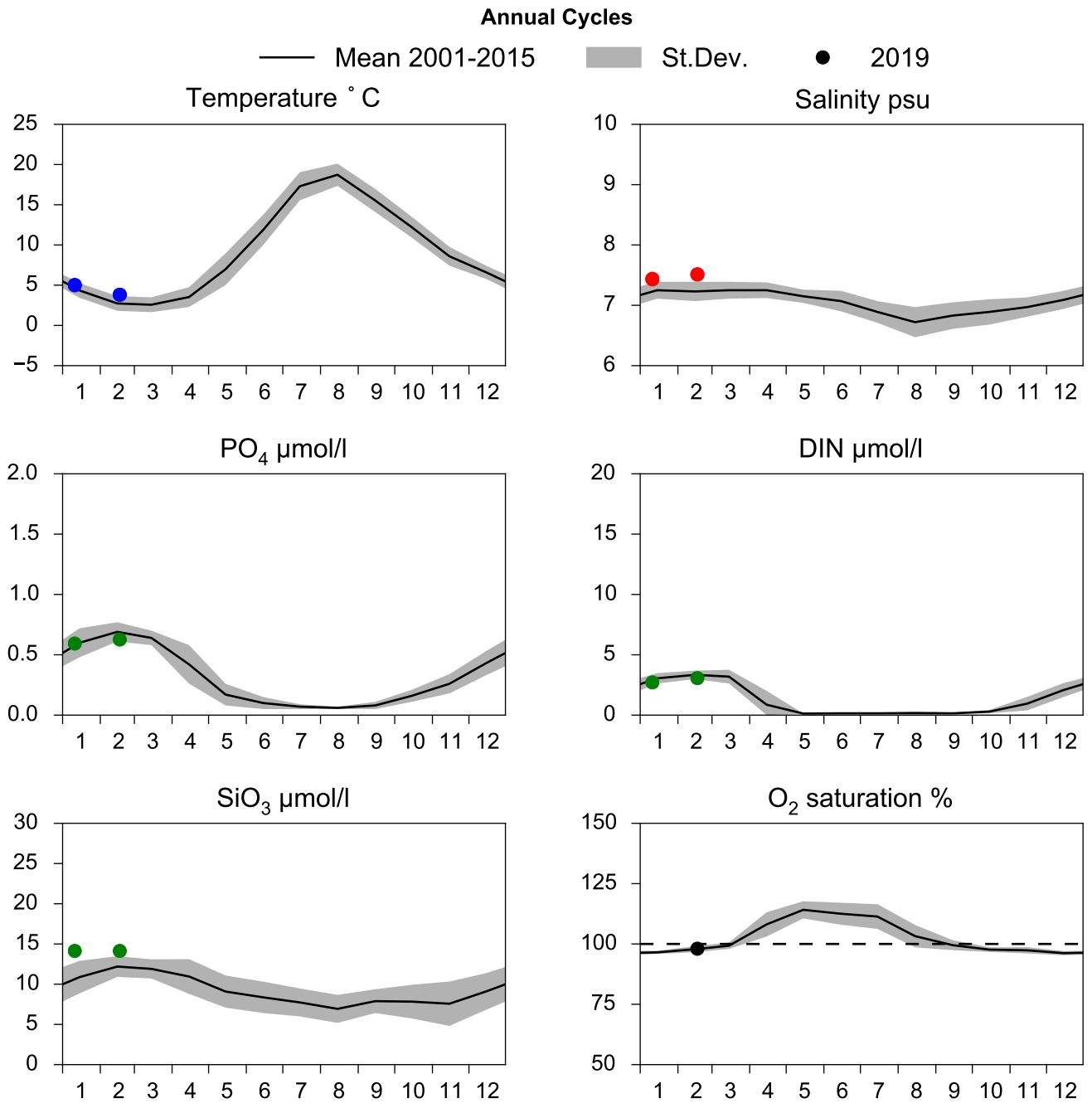
OXYGEN IN BOTTOM WATER (depth >= 175 m)



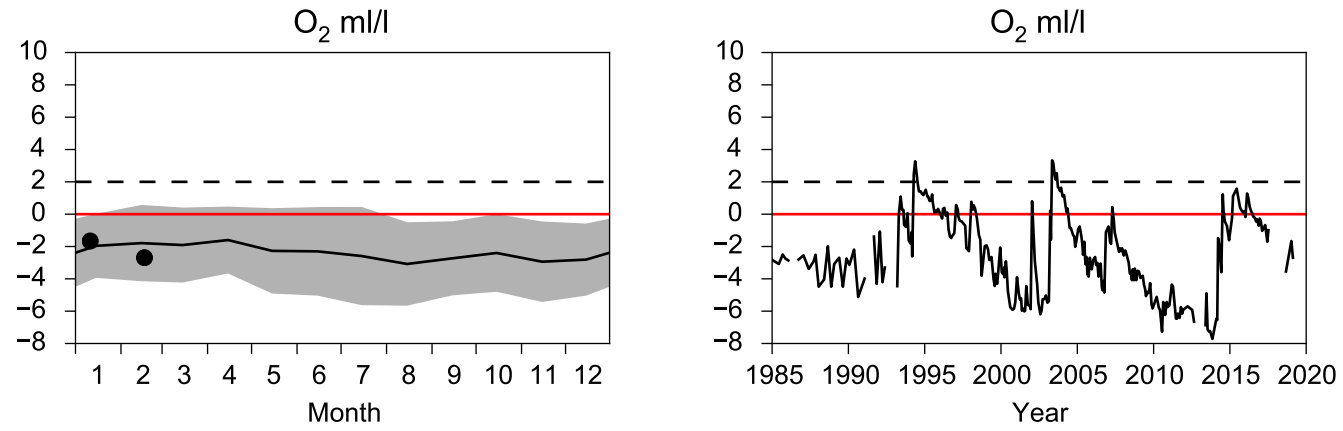
Vertical profiles BY20 FÅRÖDJ
February



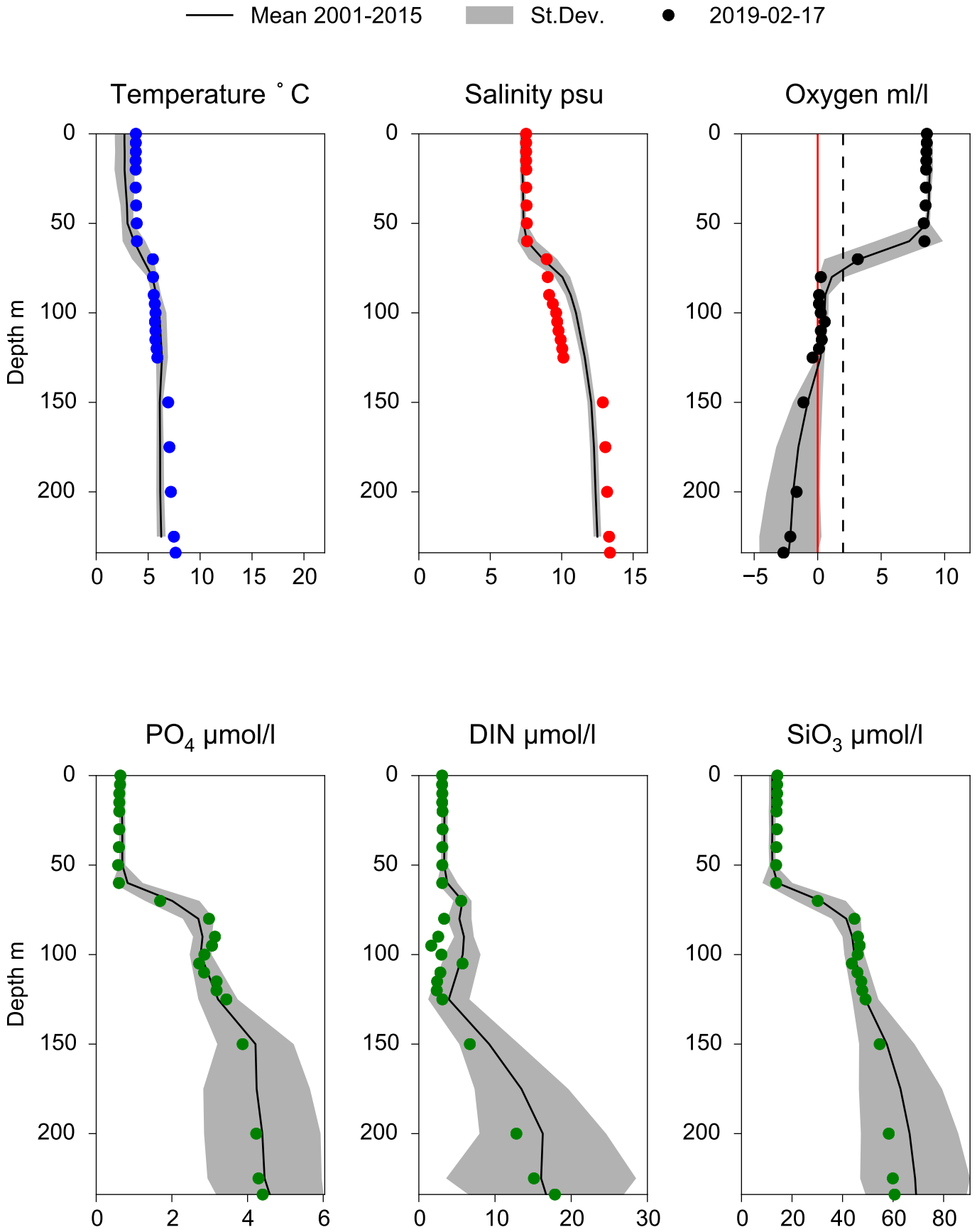
STATION BY15 GOTLANDSDJ SURFACE WATER (0-10 m)



OXYGEN IN BOTTOM WATER (depth >= 225 m)

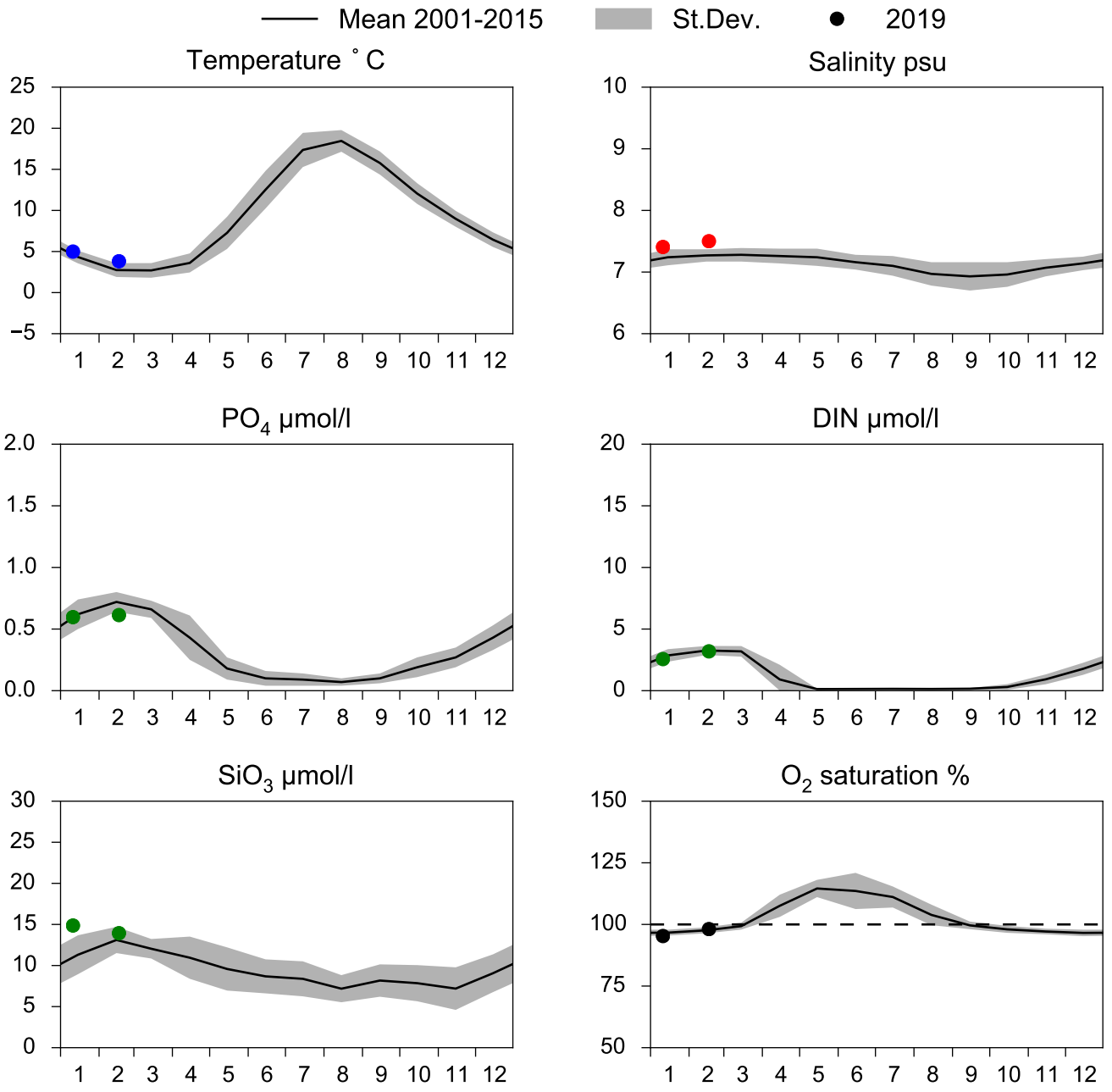


Vertical profiles BY15 GOTLANDSDJ
February

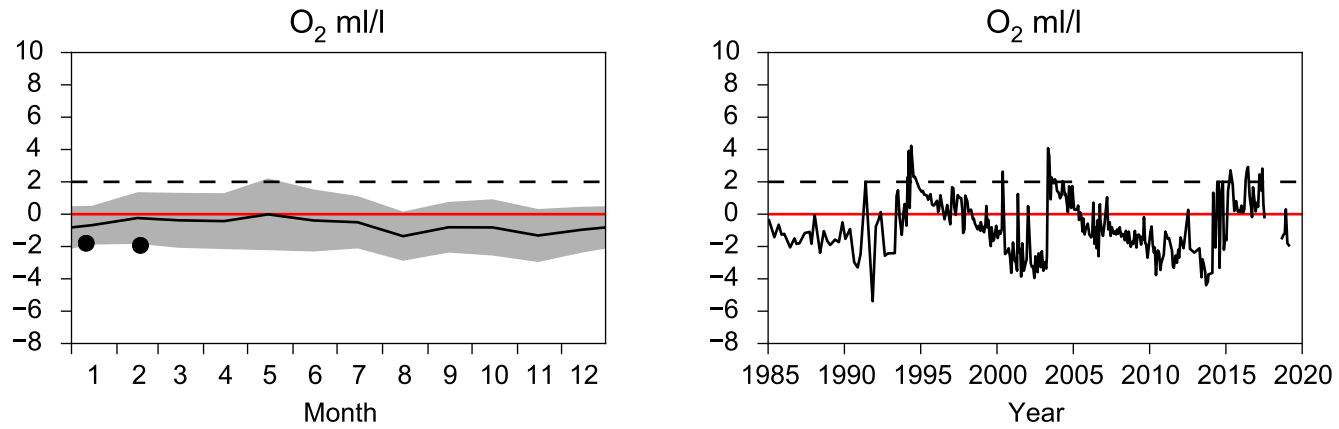


STATION BY10 SURFACE WATER (0-10 m)

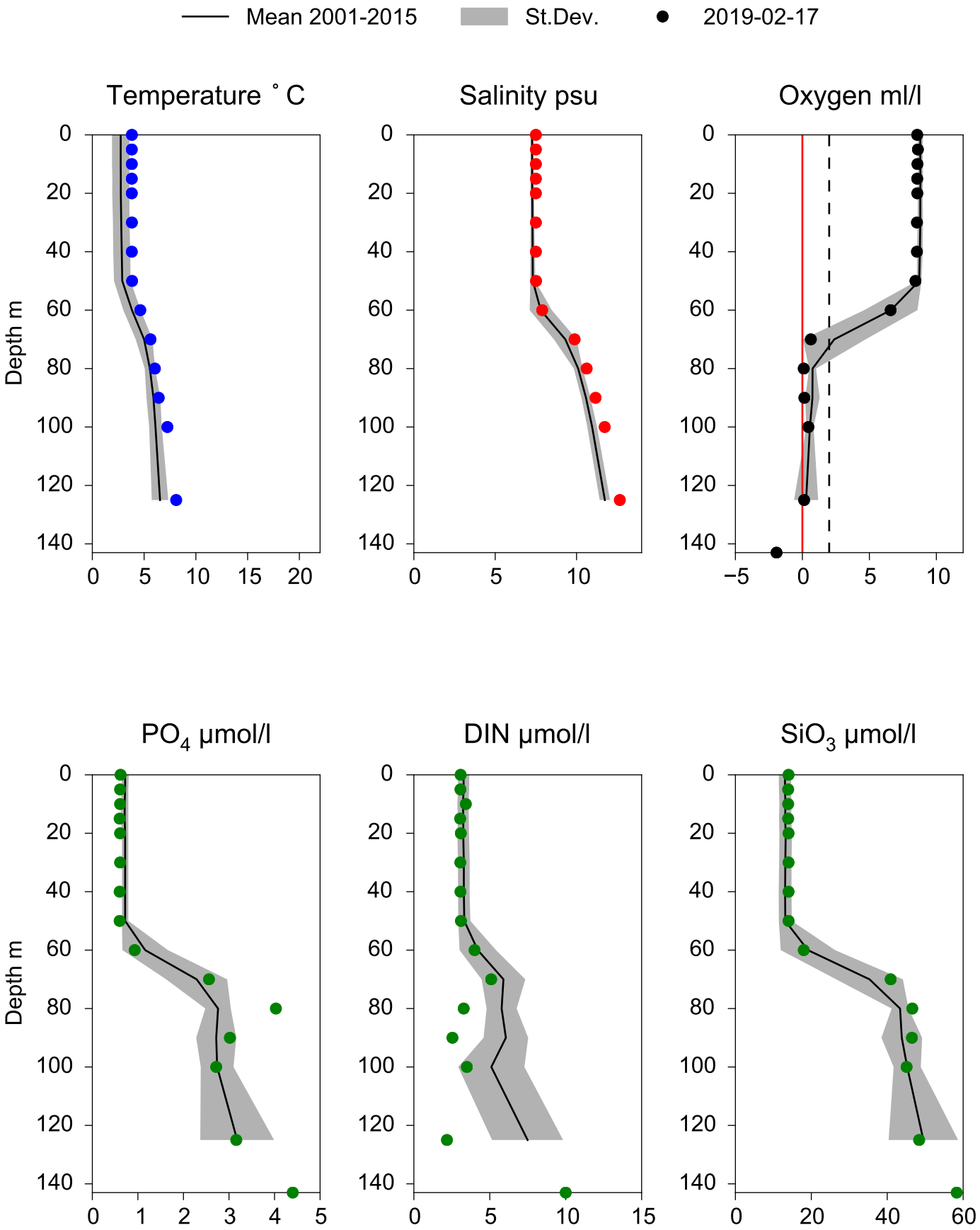
Annual Cycles



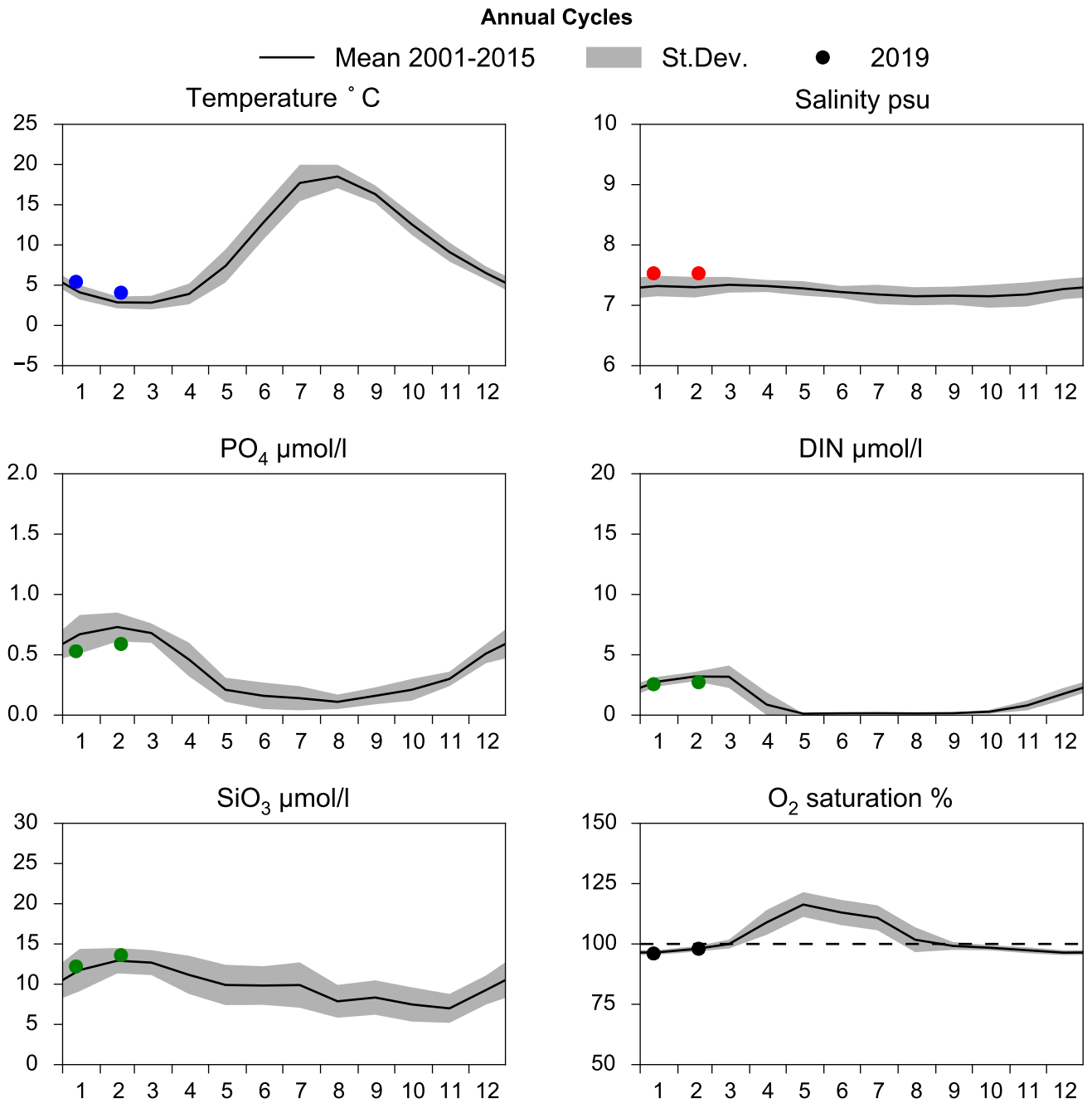
OXYGEN IN BOTTOM WATER (depth >= 125 m)



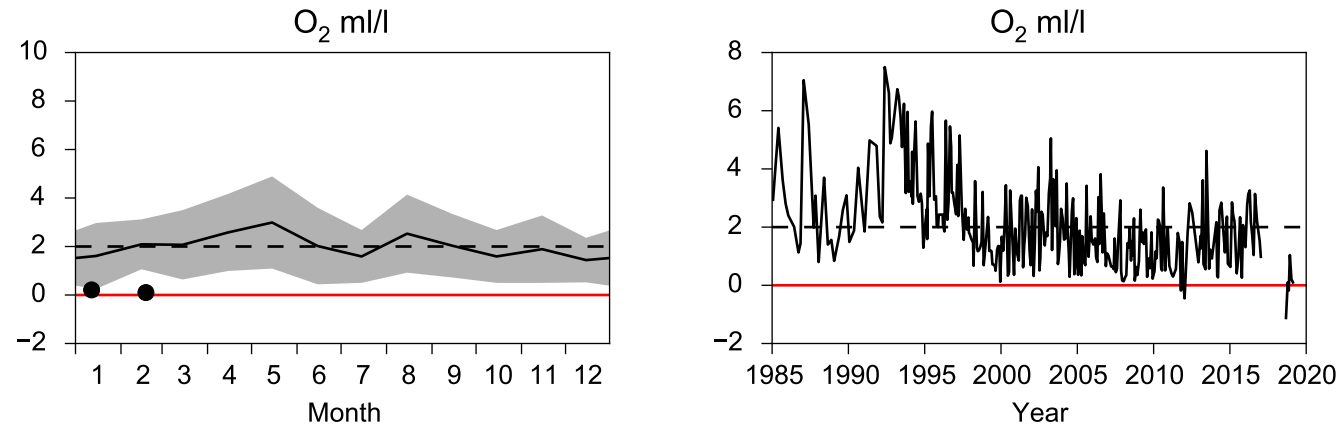
Vertical profiles BY10
February



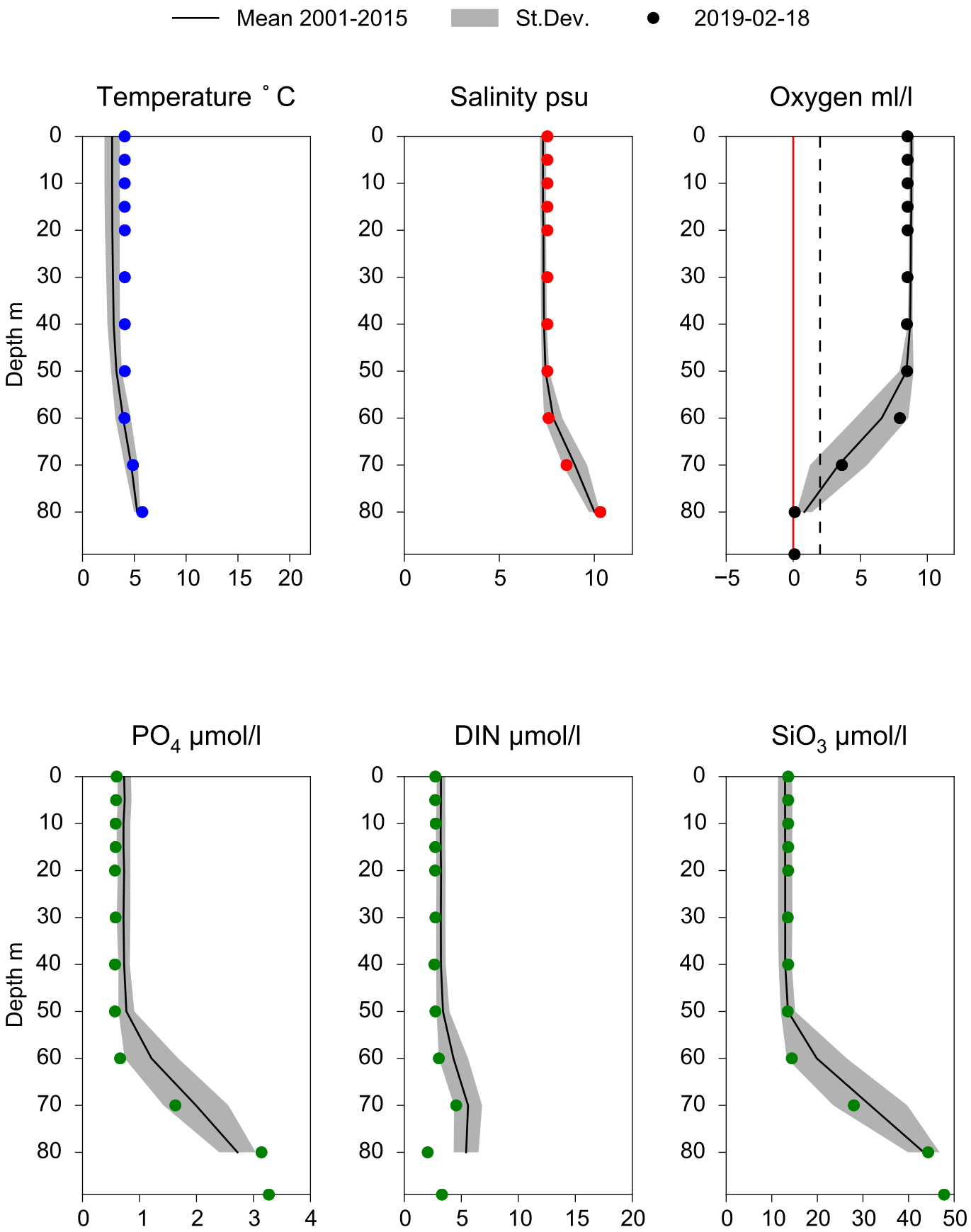
STATION BCS III-10 SURFACE WATER (0-10 m)



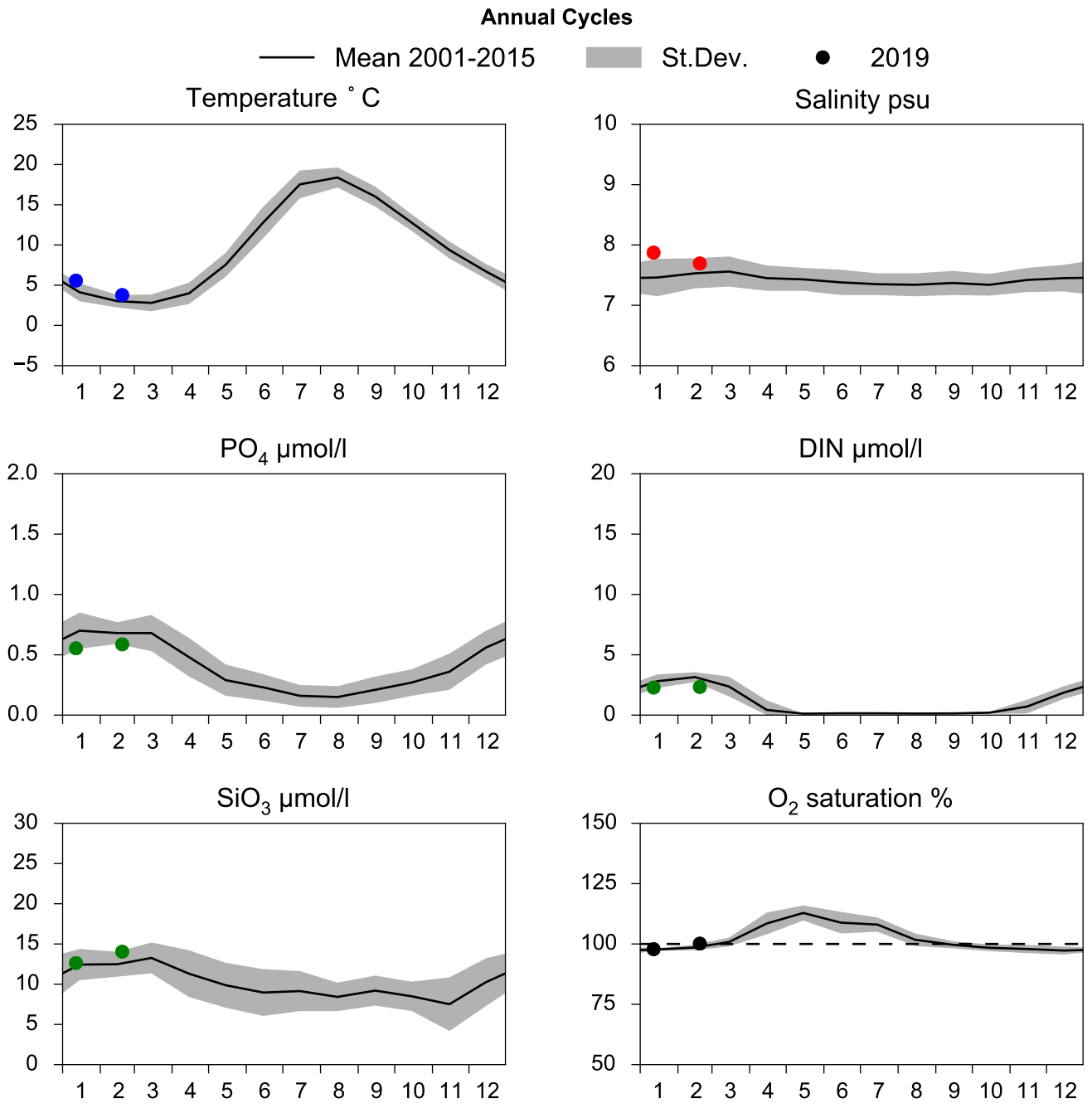
OXYGEN IN BOTTOM WATER (depth >= 80 m)



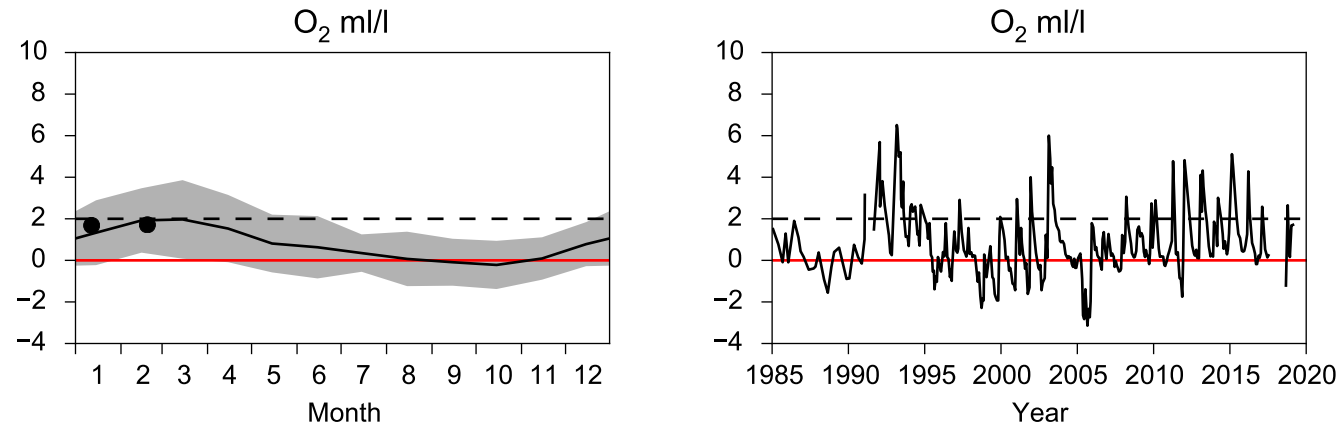
Vertical profiles BCS III-10
February



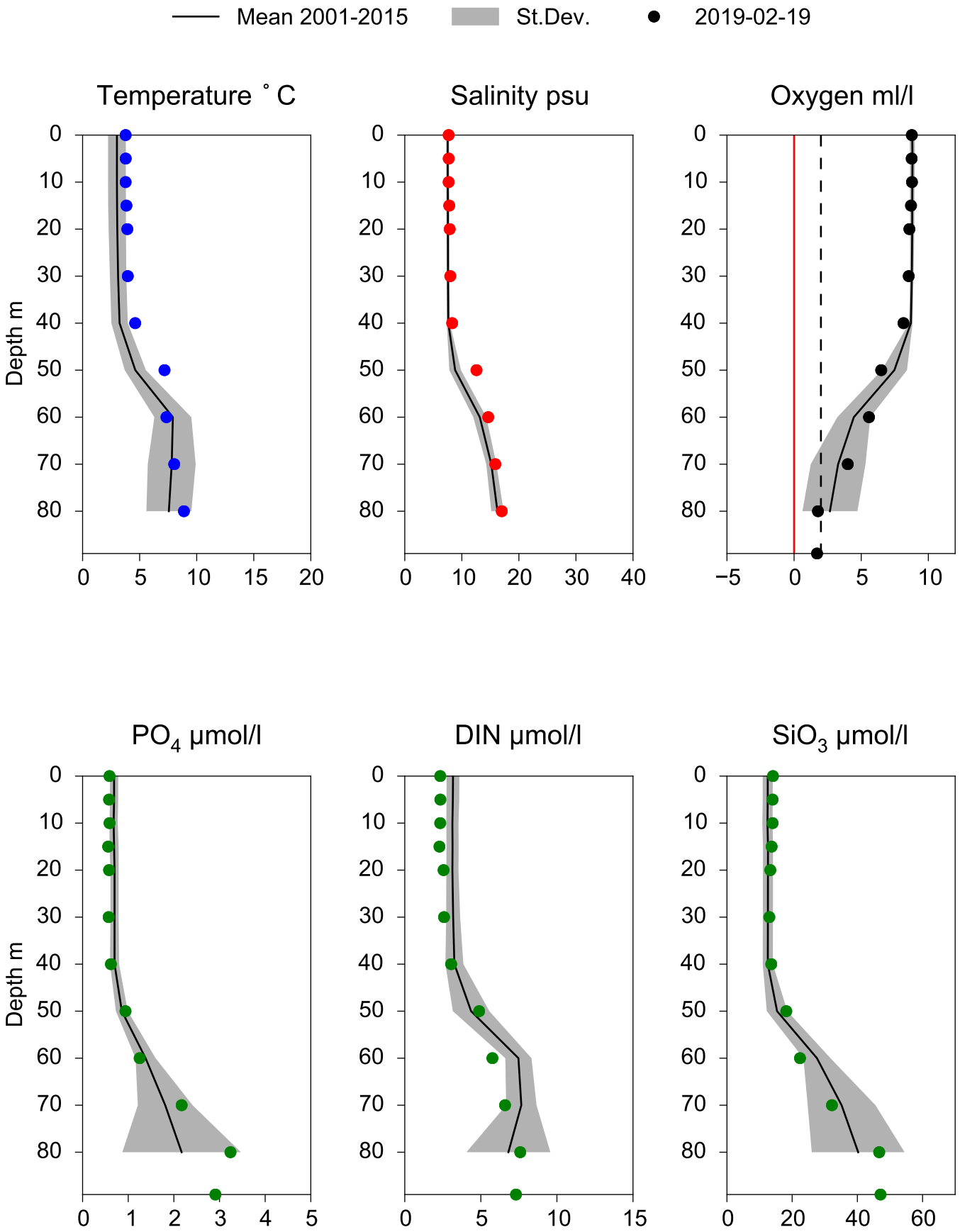
STATION BY5 BORNHOLMSDJ SURFACE WATER (0-10 m)



OXYGEN IN BOTTOM WATER (depth >= 80 m)



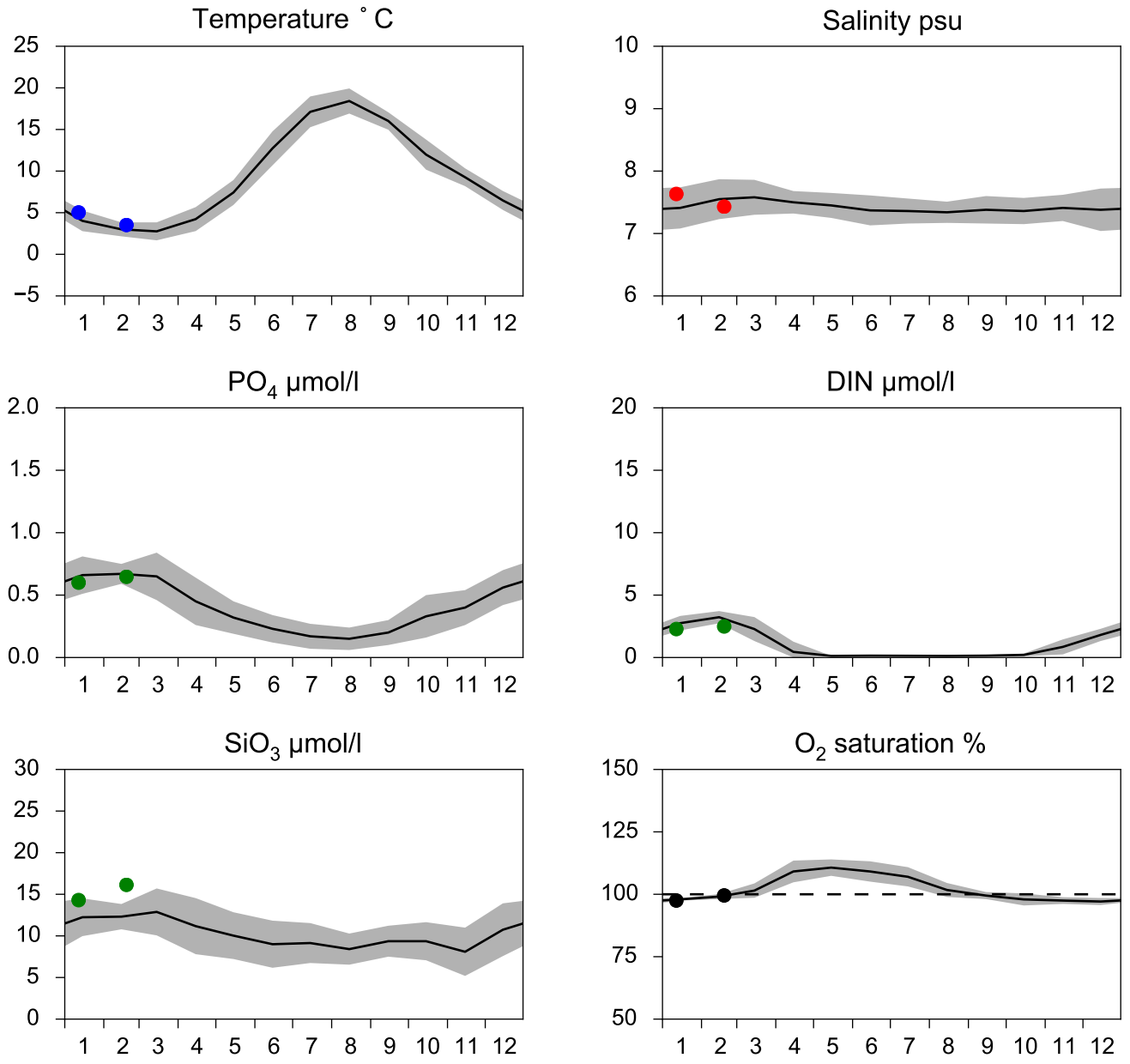
Vertical profiles BY5 BORNHOLMSDJ
February



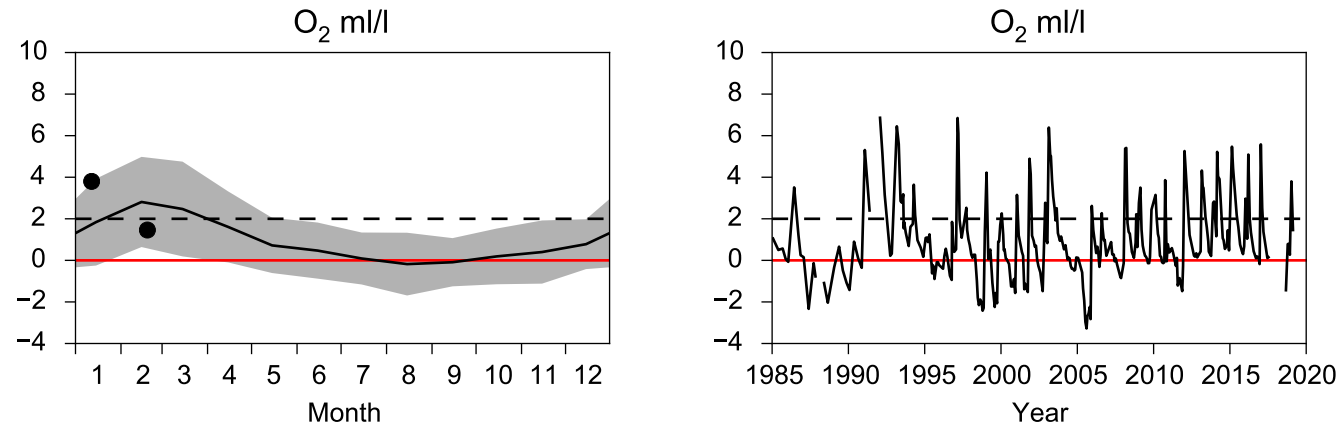
STATION BY4 CHRISTIANSÖ SURFACE WATER (0-10 m)

Annual Cycles

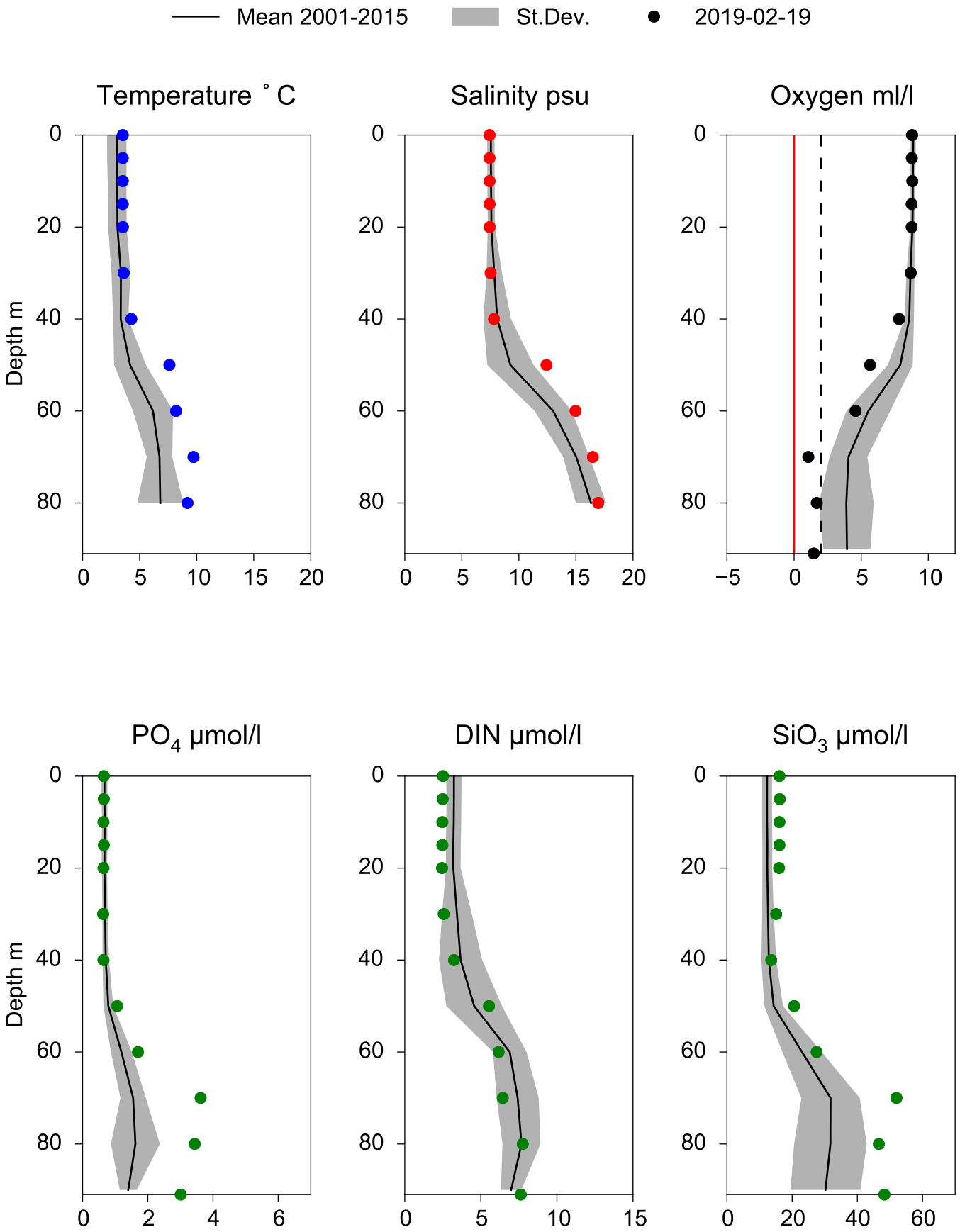
Mean 2001-2015 | St.Dev. | 2019



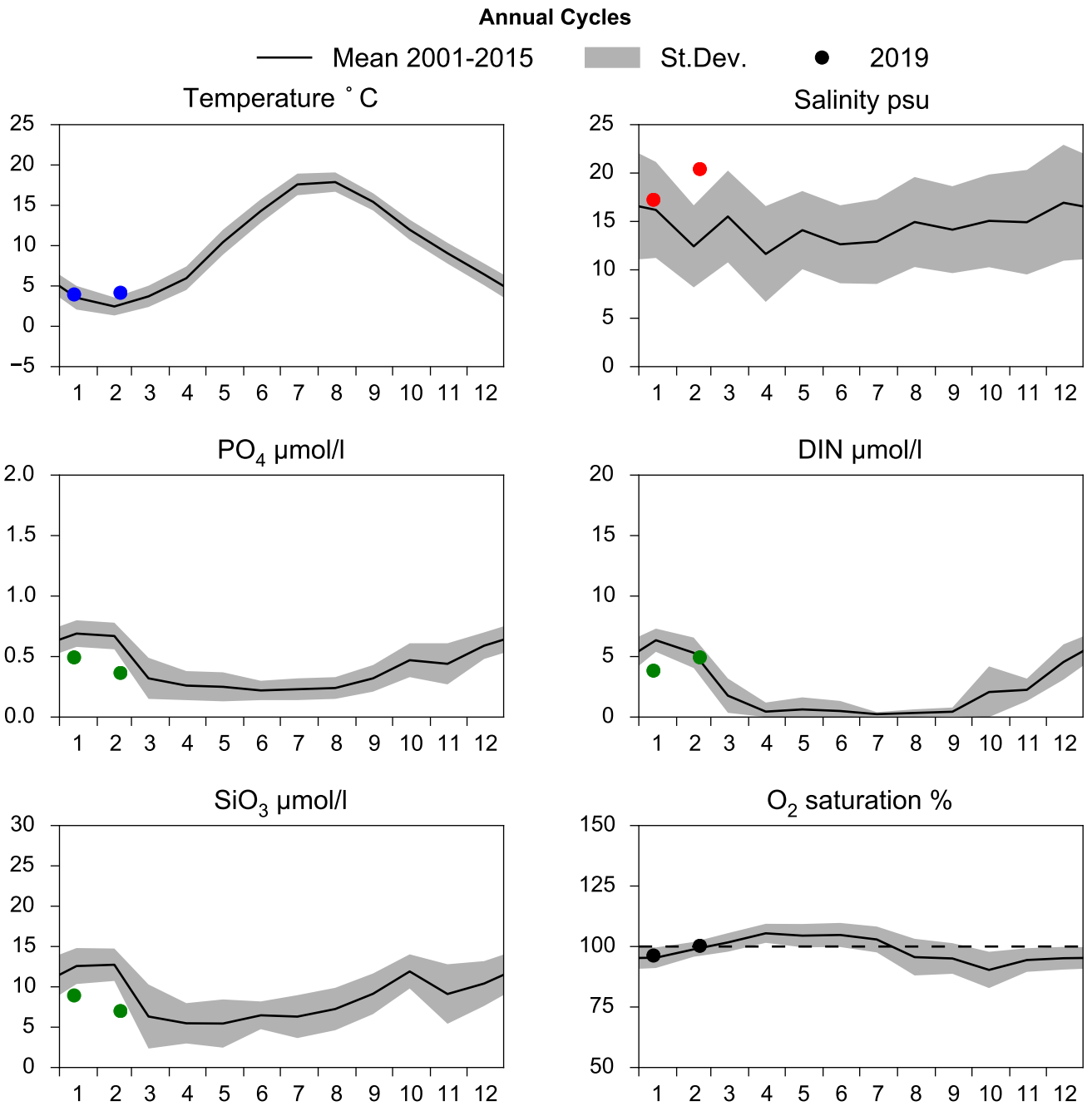
OXYGEN IN BOTTOM WATER (depth >= 80 m)



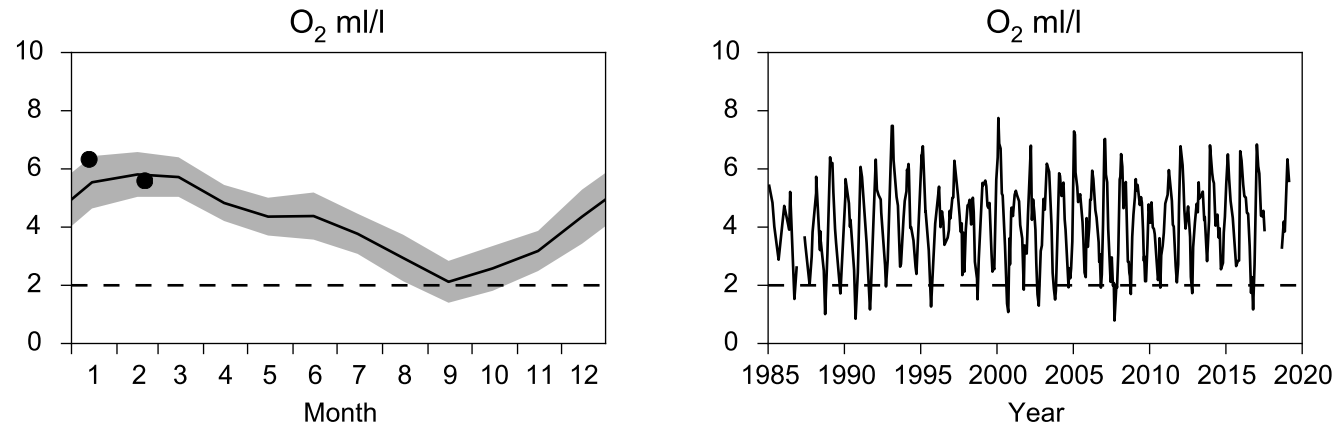
Vertical profiles BY4 CHRISTIANSÖ
February



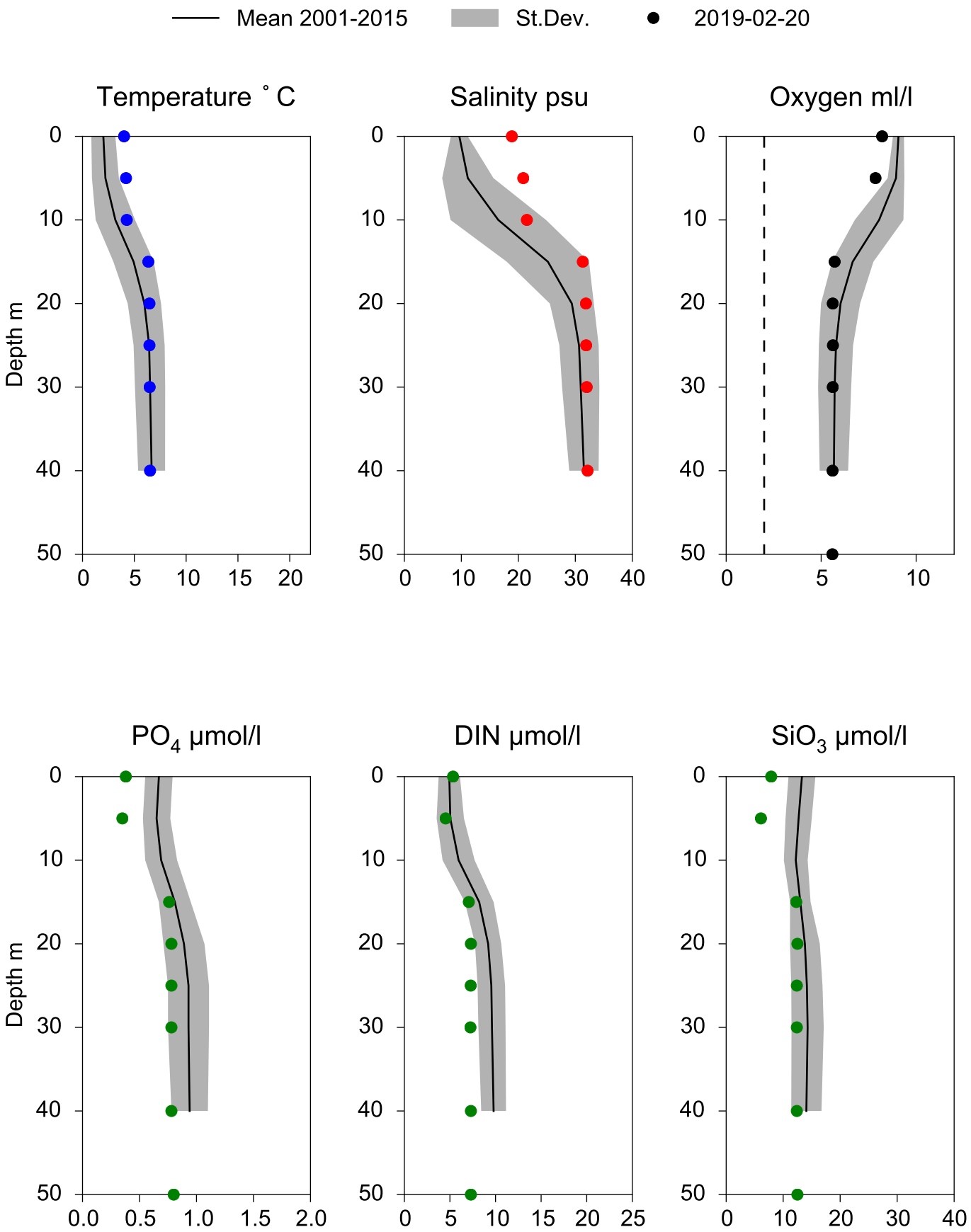
STATION W LANDSKRONA SURFACE WATER (0-10 m)



OXYGEN IN BOTTOM WATER (depth >= 40 m)



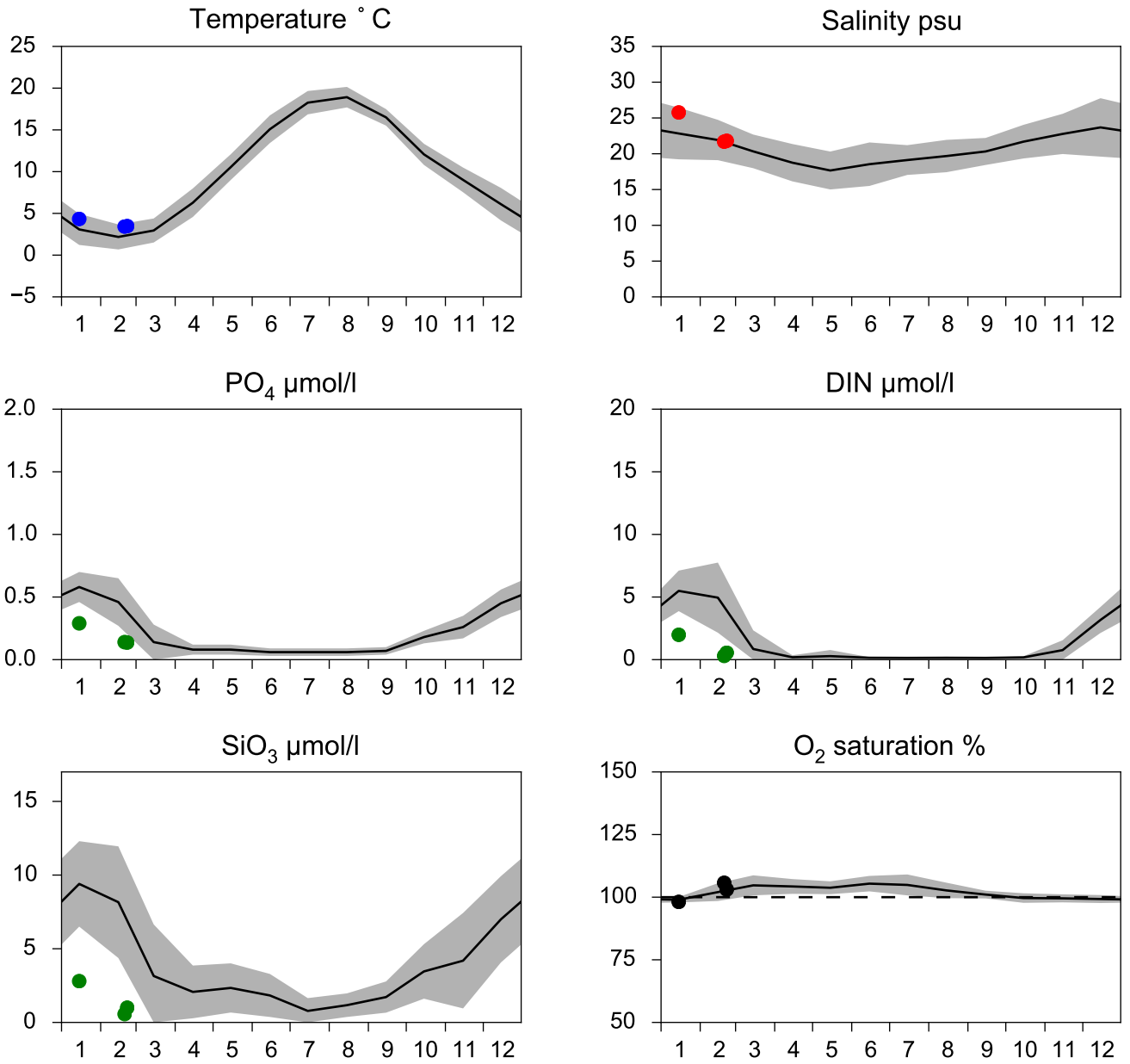
Vertical profiles W LANDSKRONA
February



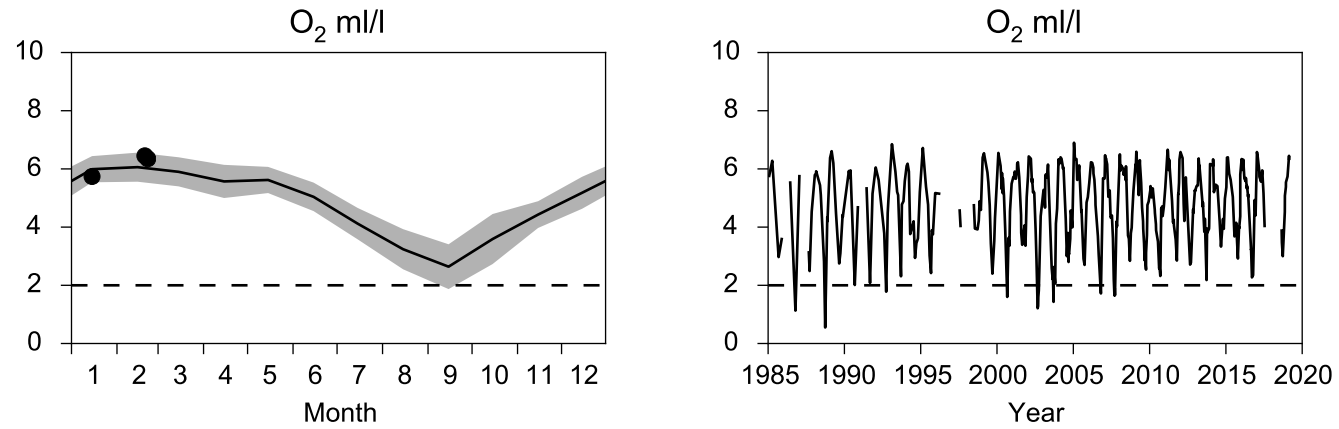
STATION ANHOLT E SURFACE WATER (0-10 m)

Annual Cycles

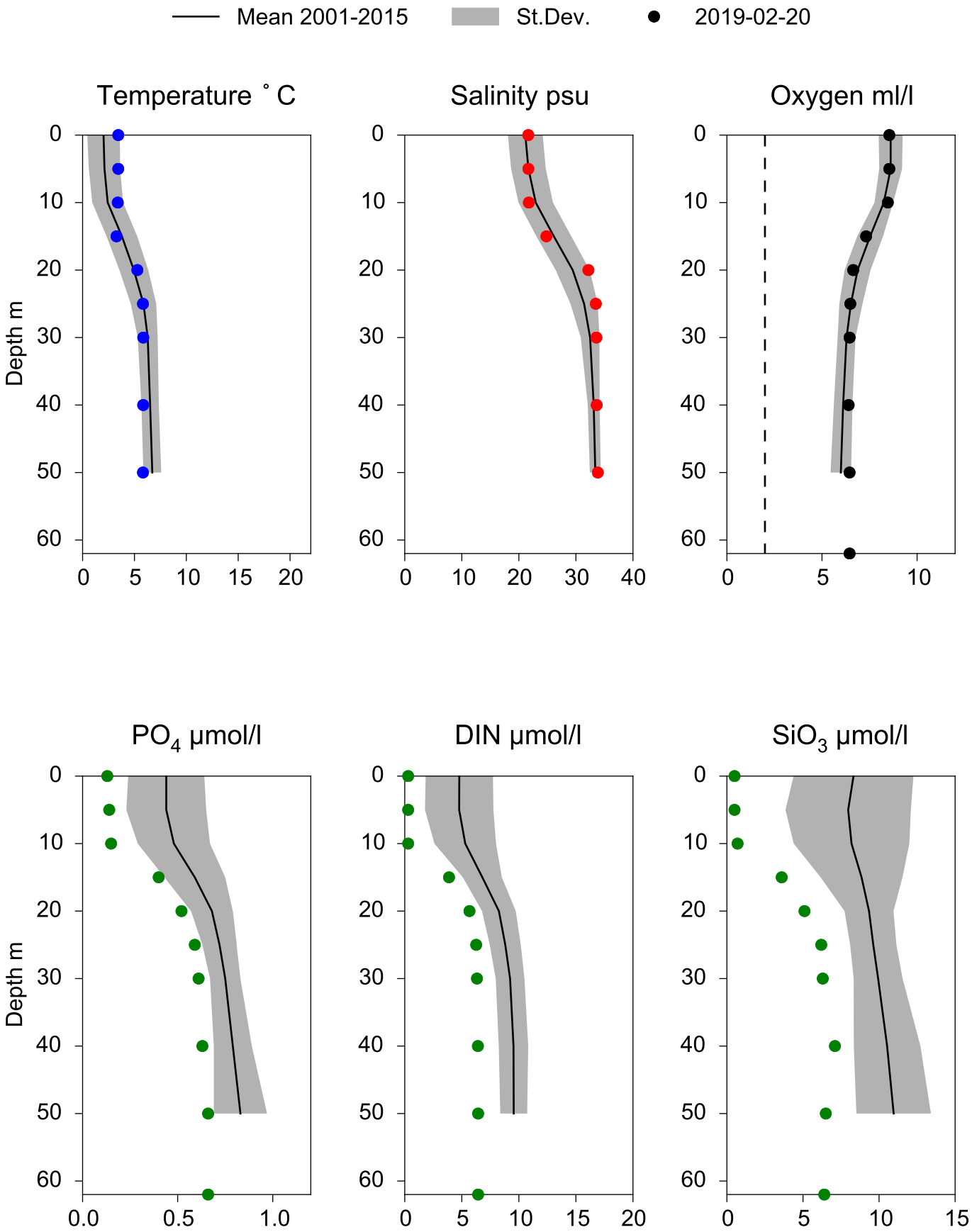
Mean 2001-2015 | St.Dev. | 2019



OXYGEN IN BOTTOM WATER (depth >= 52 m)



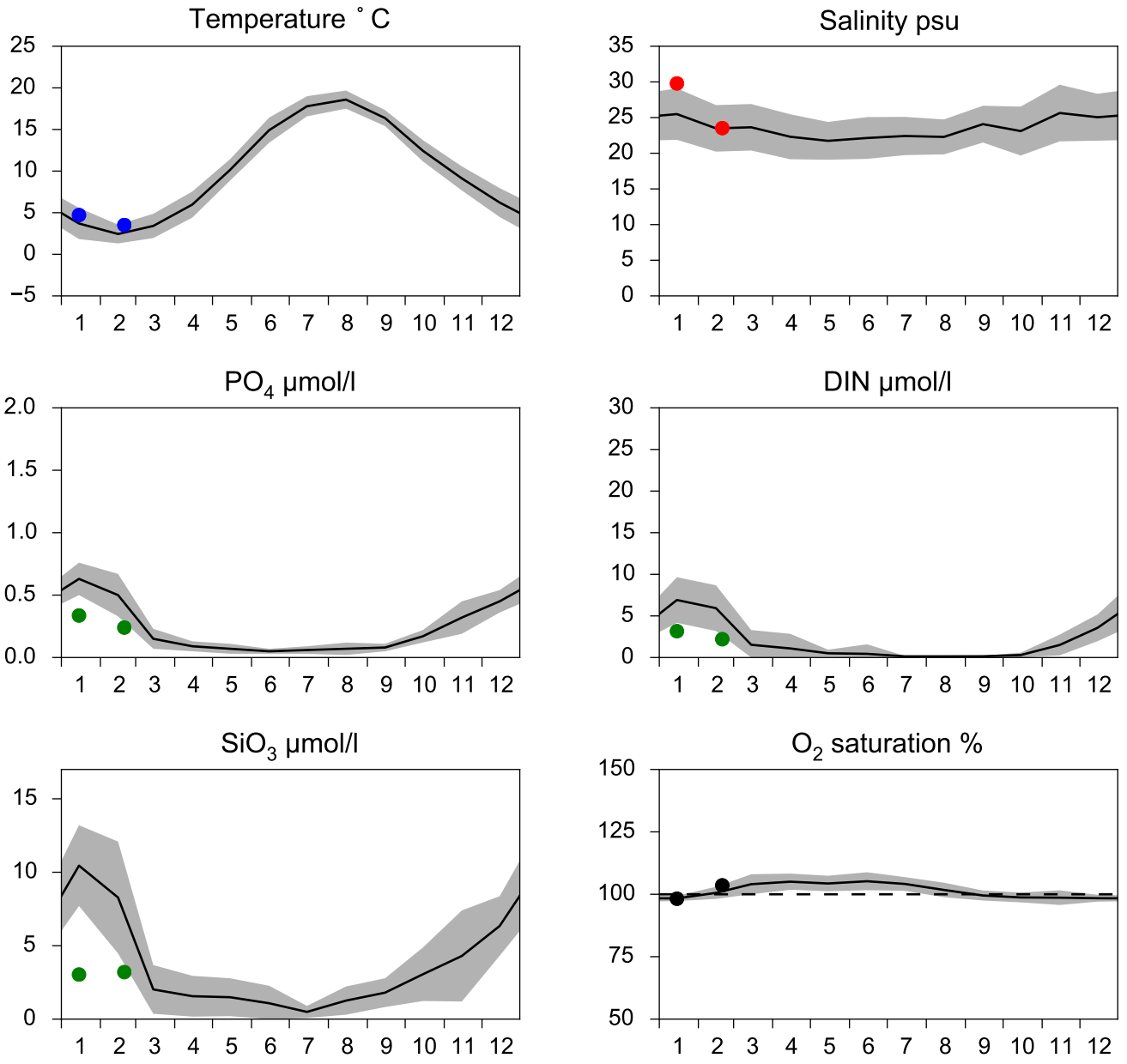
Vertical profiles ANHOLT E
February



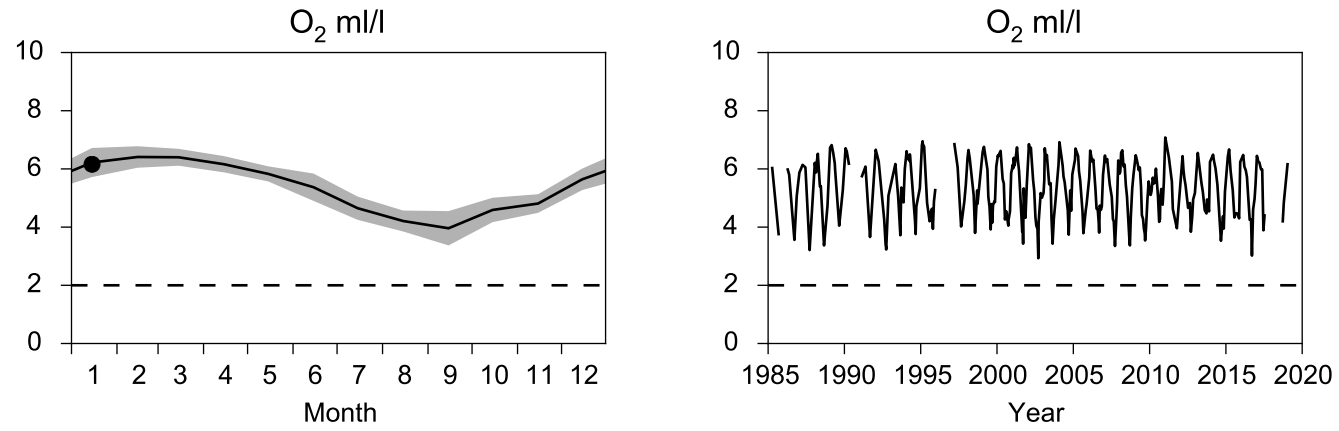
STATION FLADEN SURFACE WATER (0-10 m)

Annual Cycles

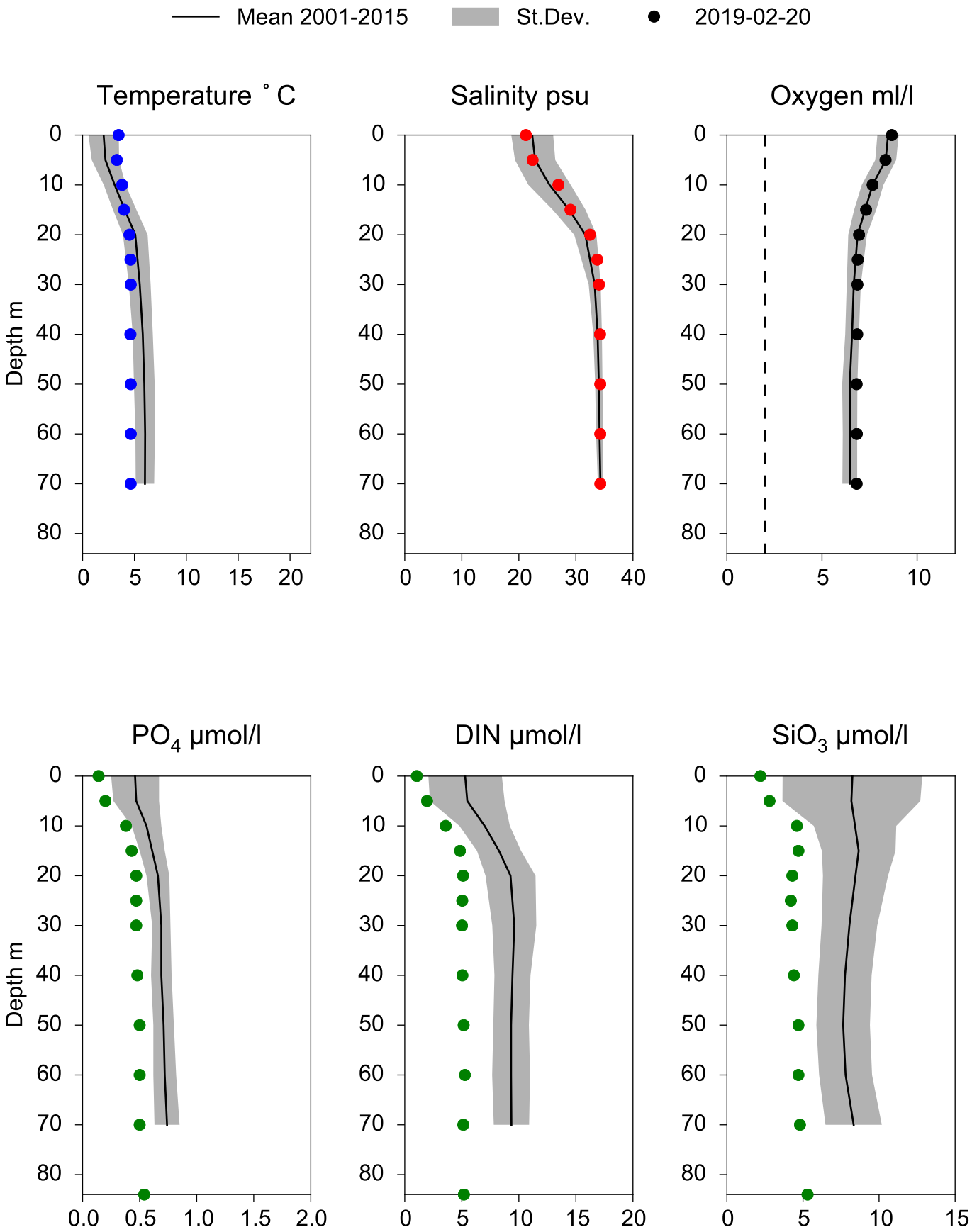
Mean 2001-2015 | St.Dev. | 2019



OXYGEN IN BOTTOM WATER (depth >= 74 m)

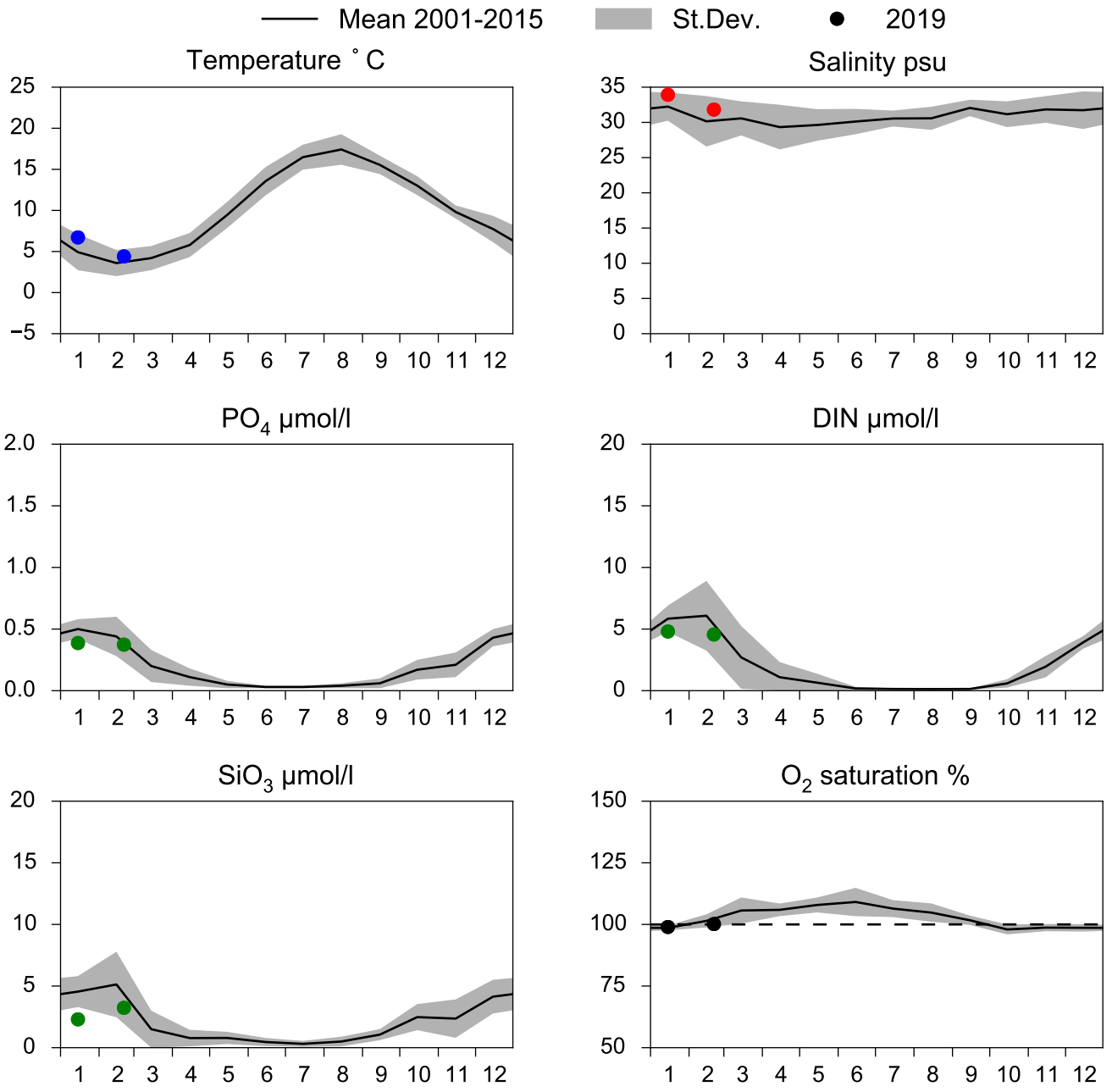


Vertical profiles FLADEN
February

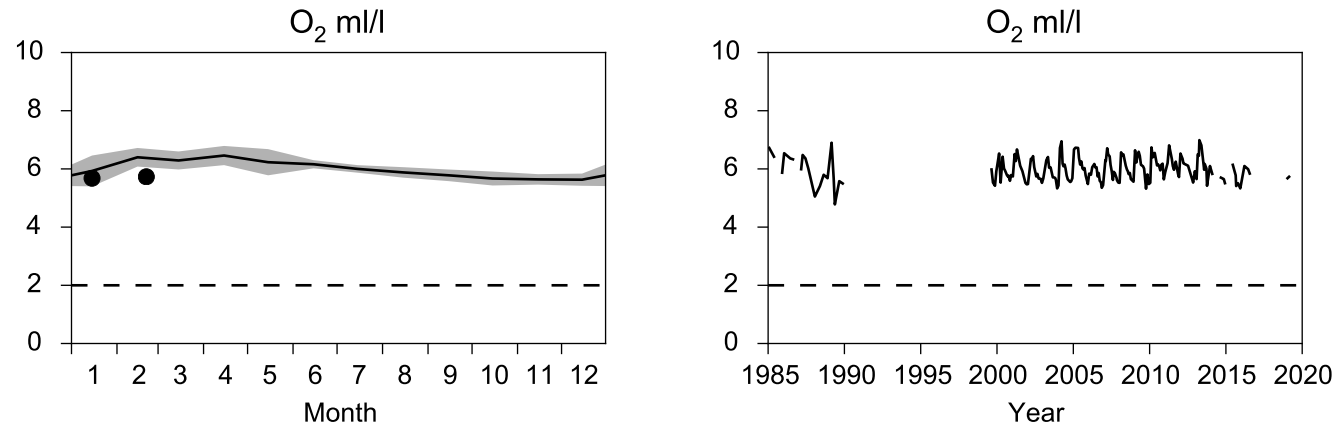


STATION Å17 SURFACE WATER (0-10 m)

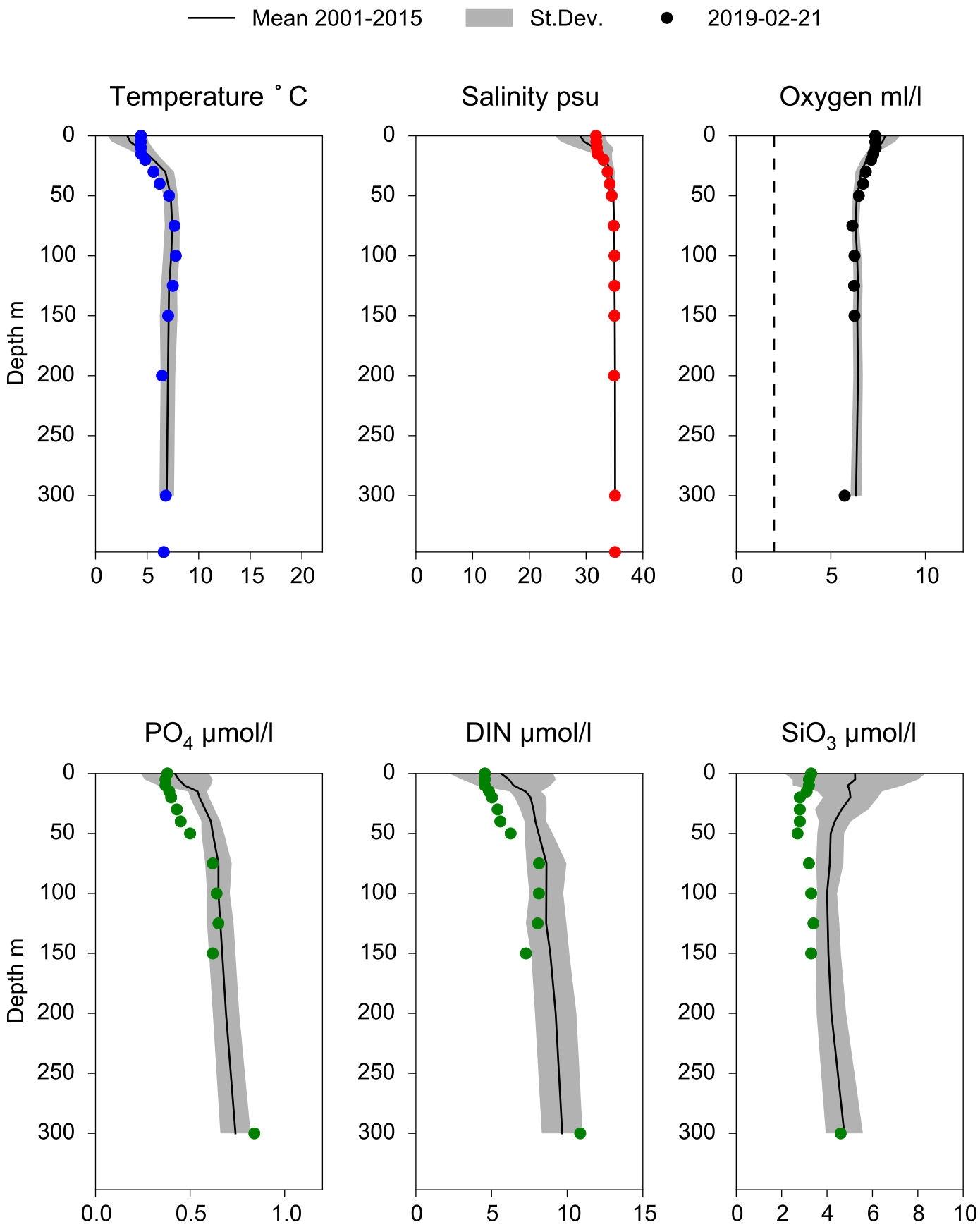
Annual Cycles



OXYGEN IN BOTTOM WATER (depth >= 300 m)

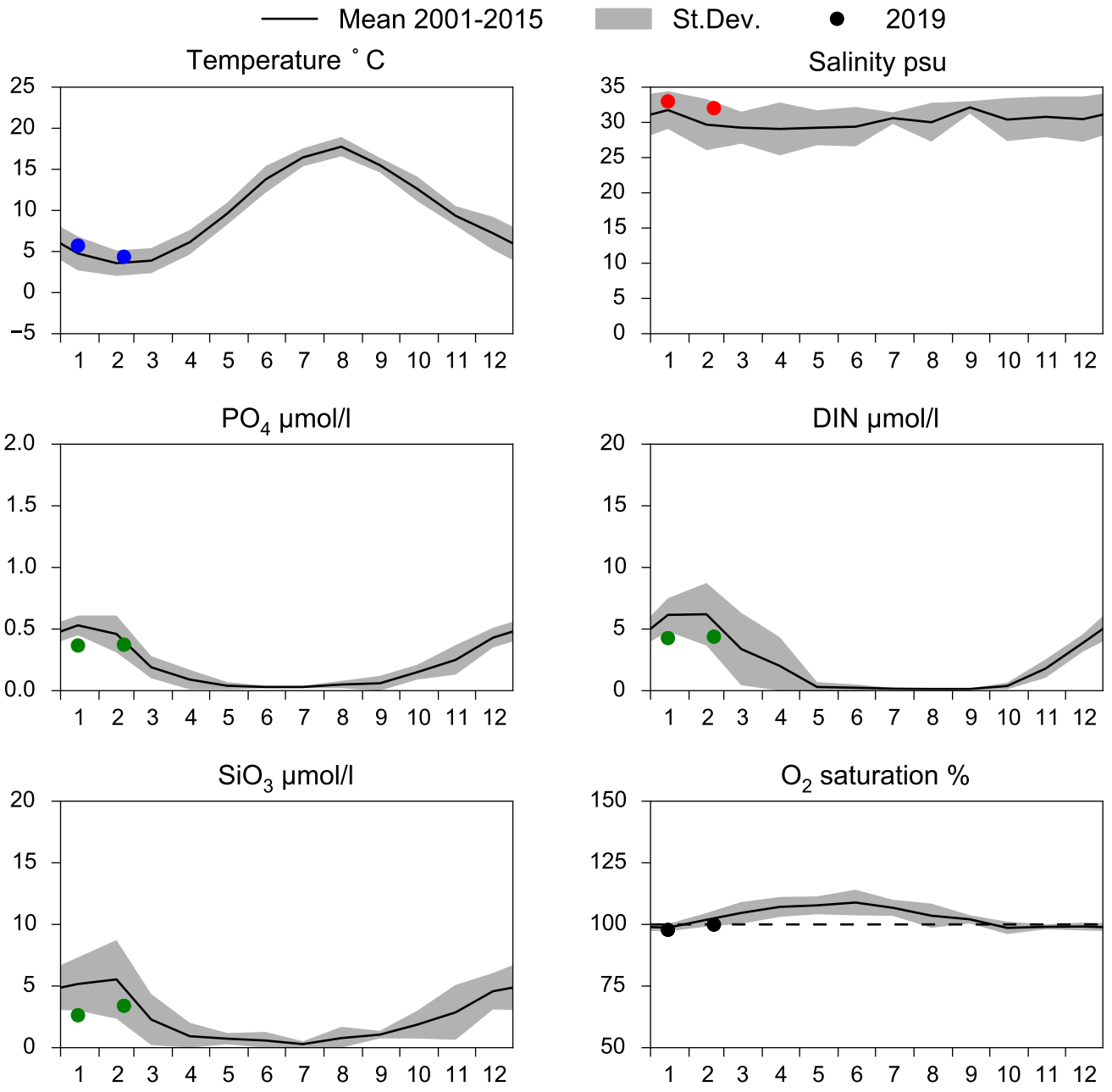


Vertical profiles Å17
February

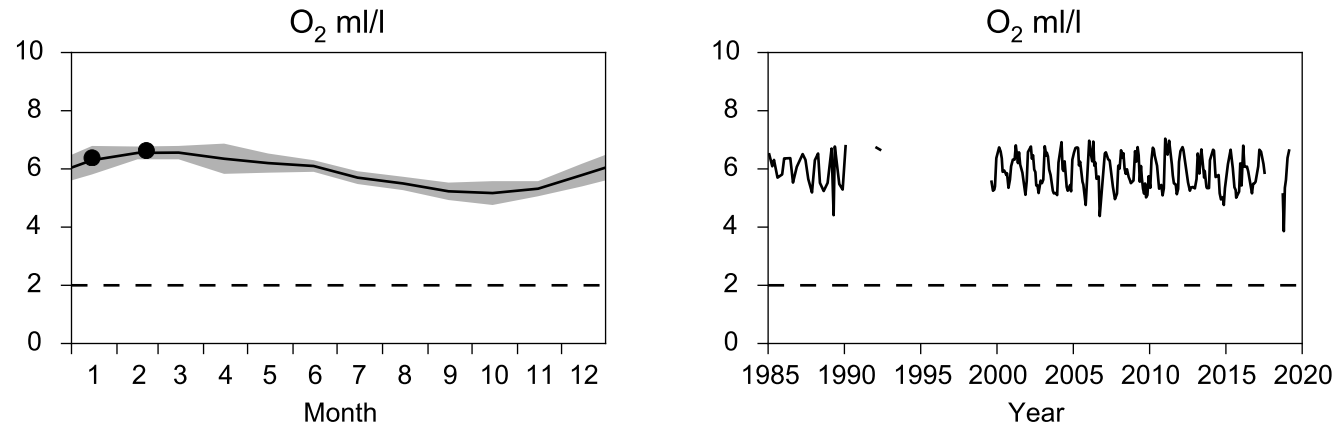


STATION Å15 SURFACE WATER (0-10 m)

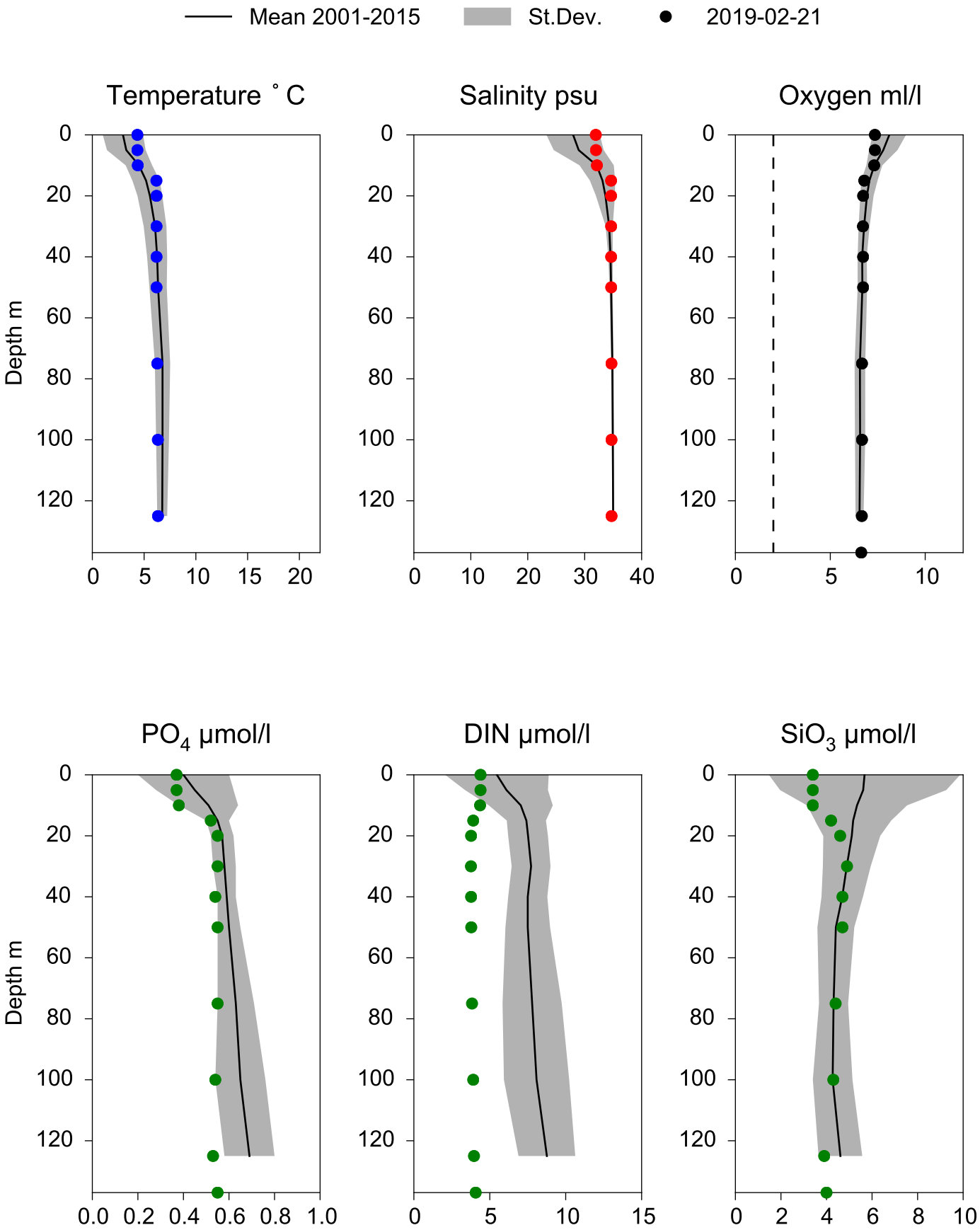
Annual Cycles



OXYGEN IN BOTTOM WATER (depth >= 125 m)



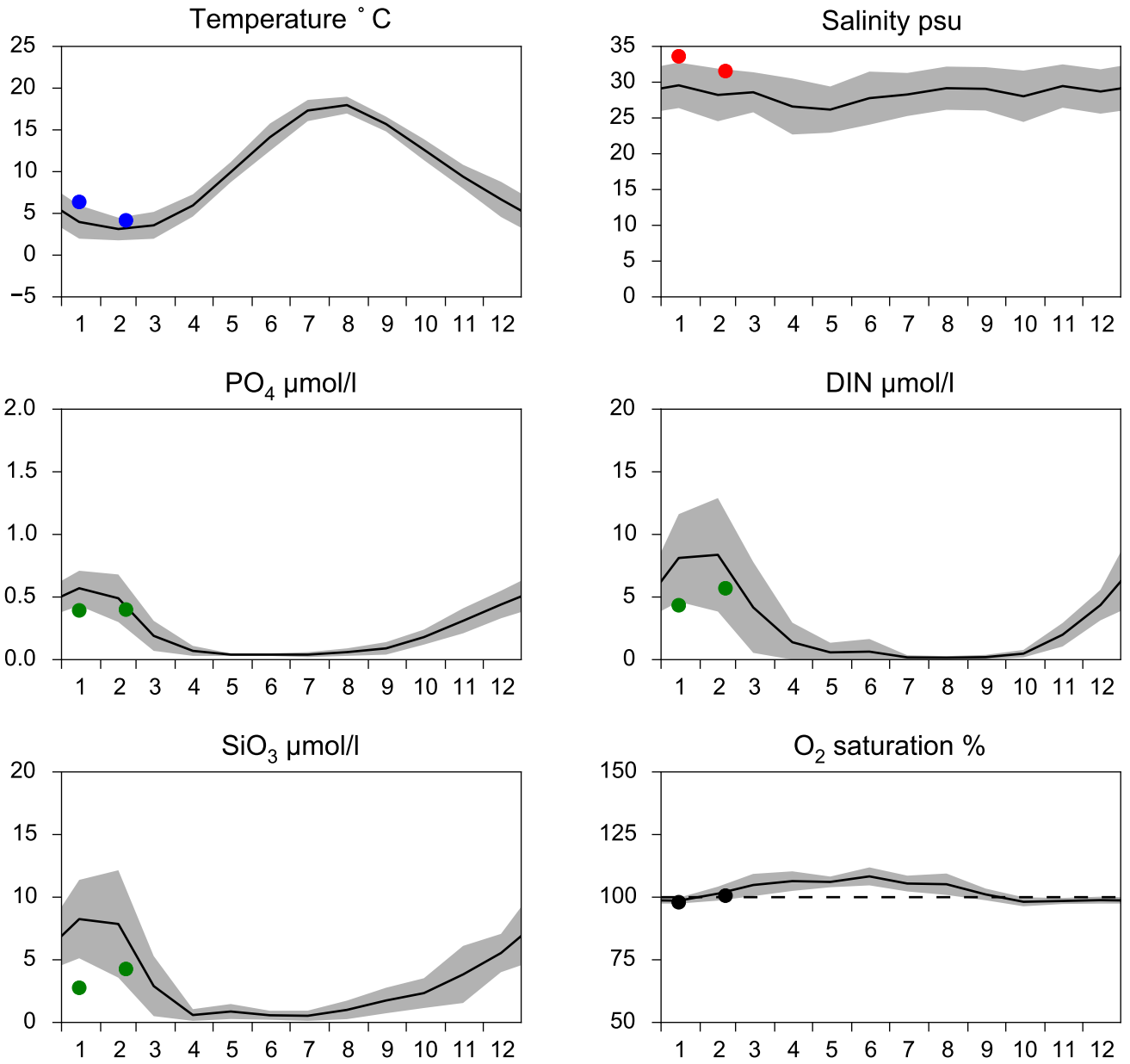
Vertical profiles Å15
February



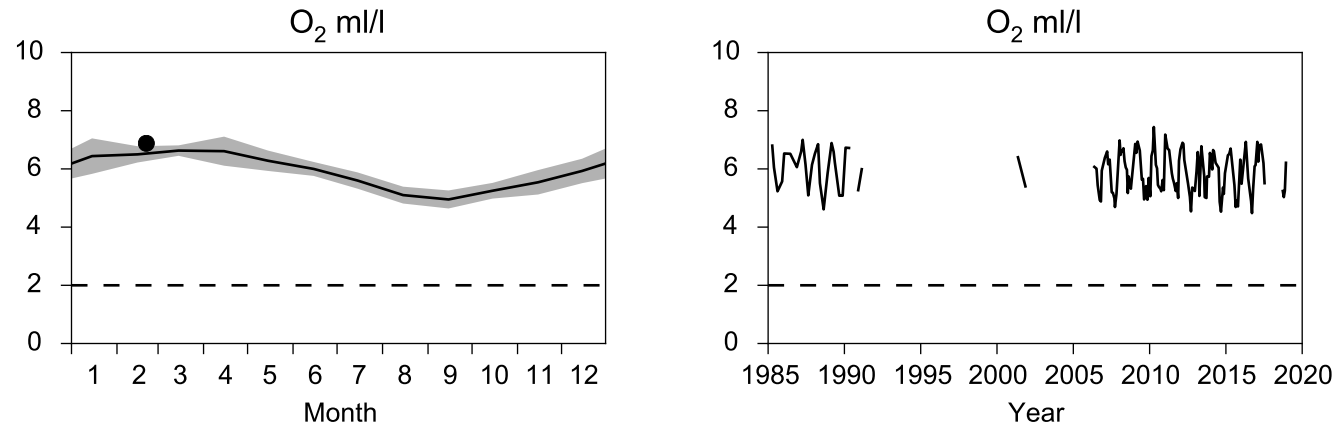
STATION Å13 SURFACE WATER (0-10 m)

Annual Cycles

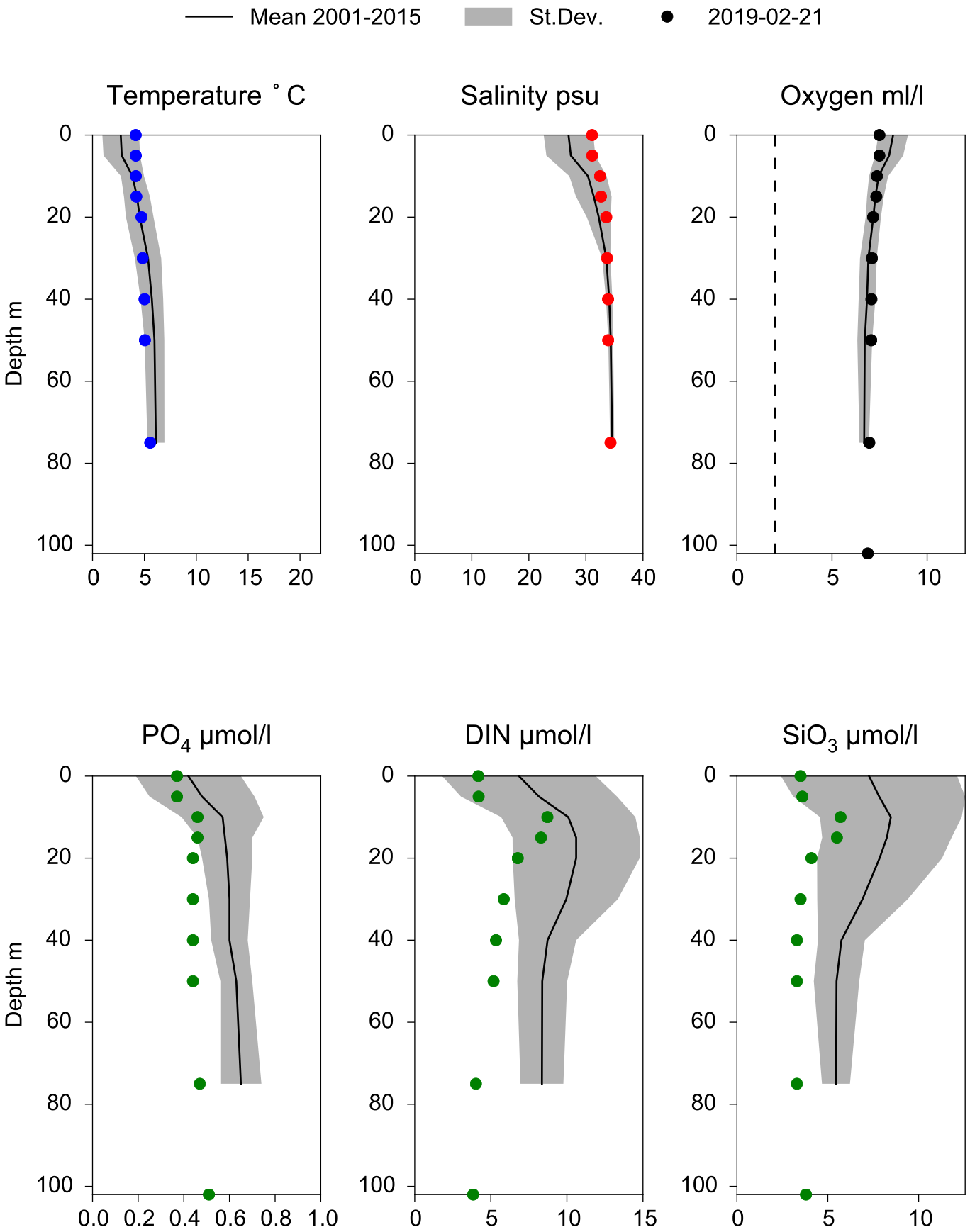
Mean 2001-2015 St.Dev. 2019



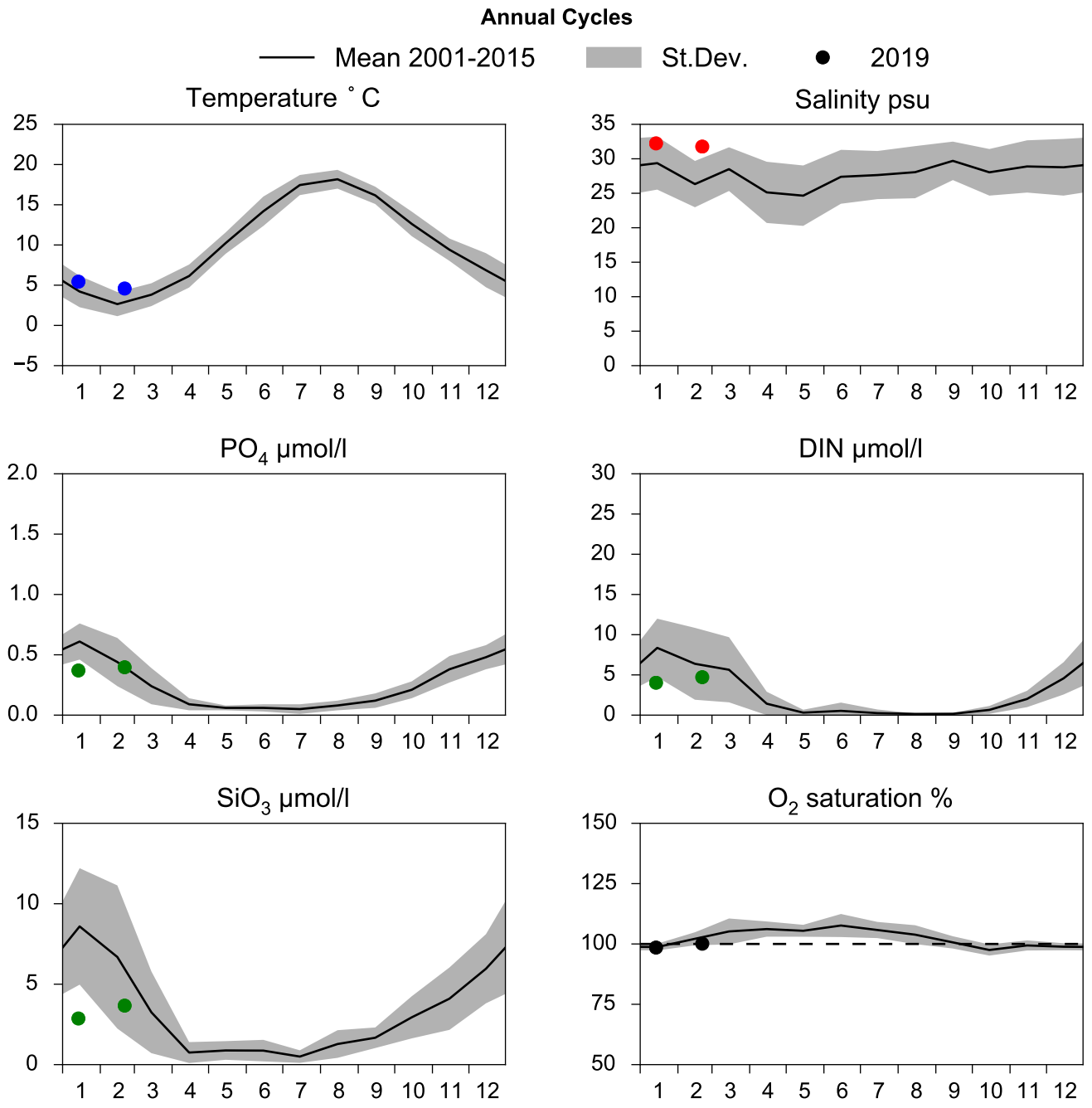
OXYGEN IN BOTTOM WATER (depth >= 80 m)



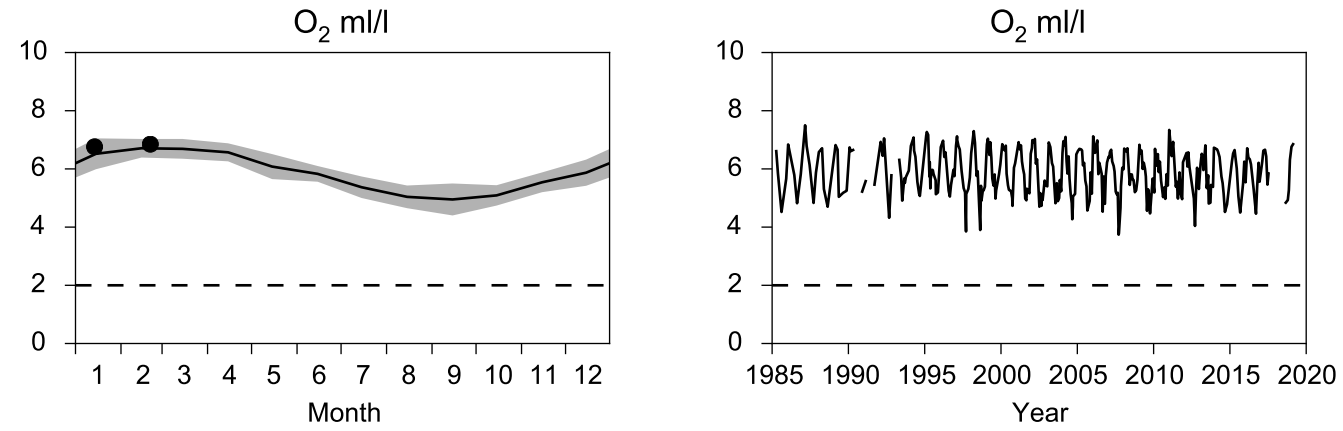
Vertical profiles Å13
February



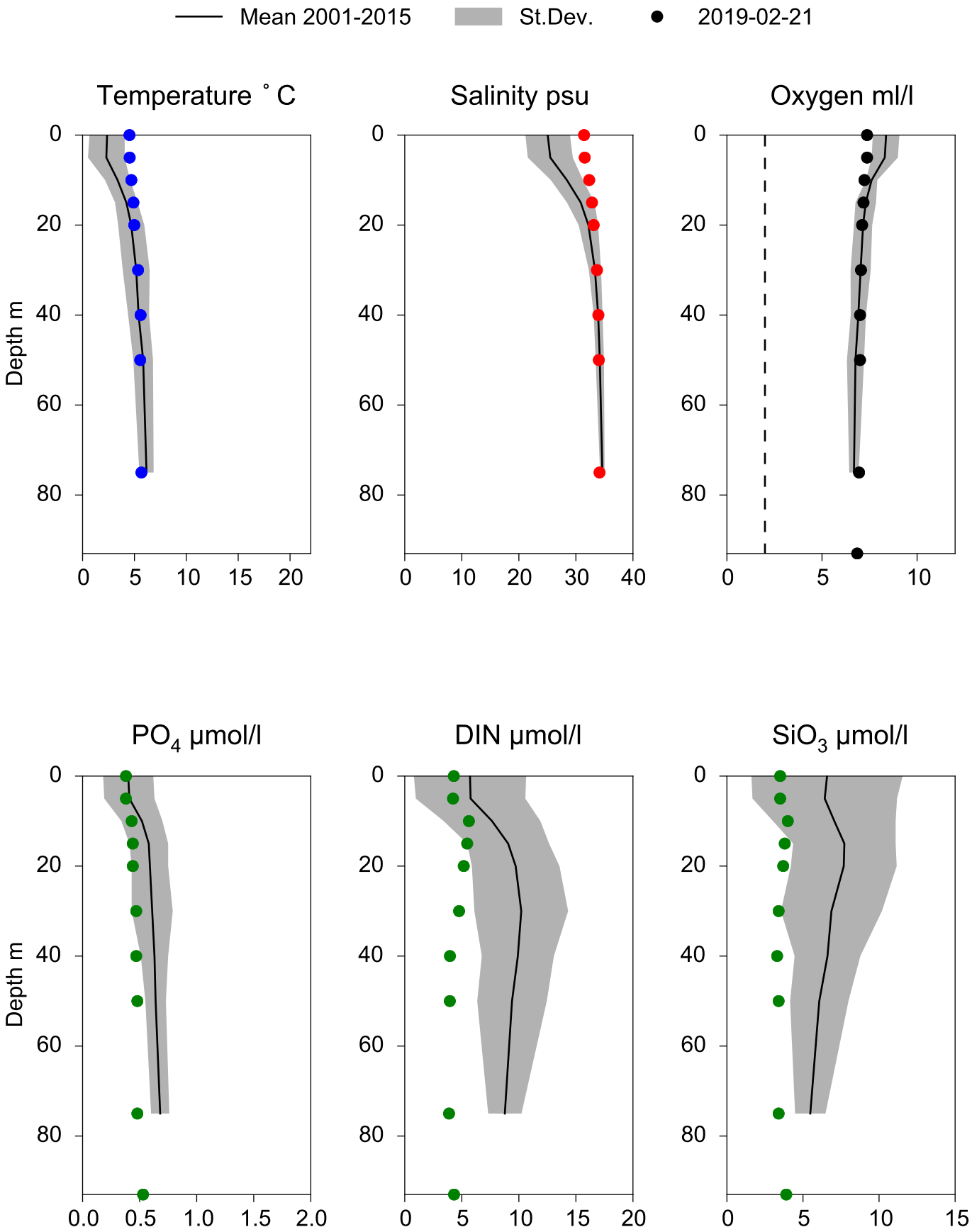
STATION P2 SURFACE WATER (0-10 m)



OXYGEN IN BOTTOM WATER (depth >= 75 m)



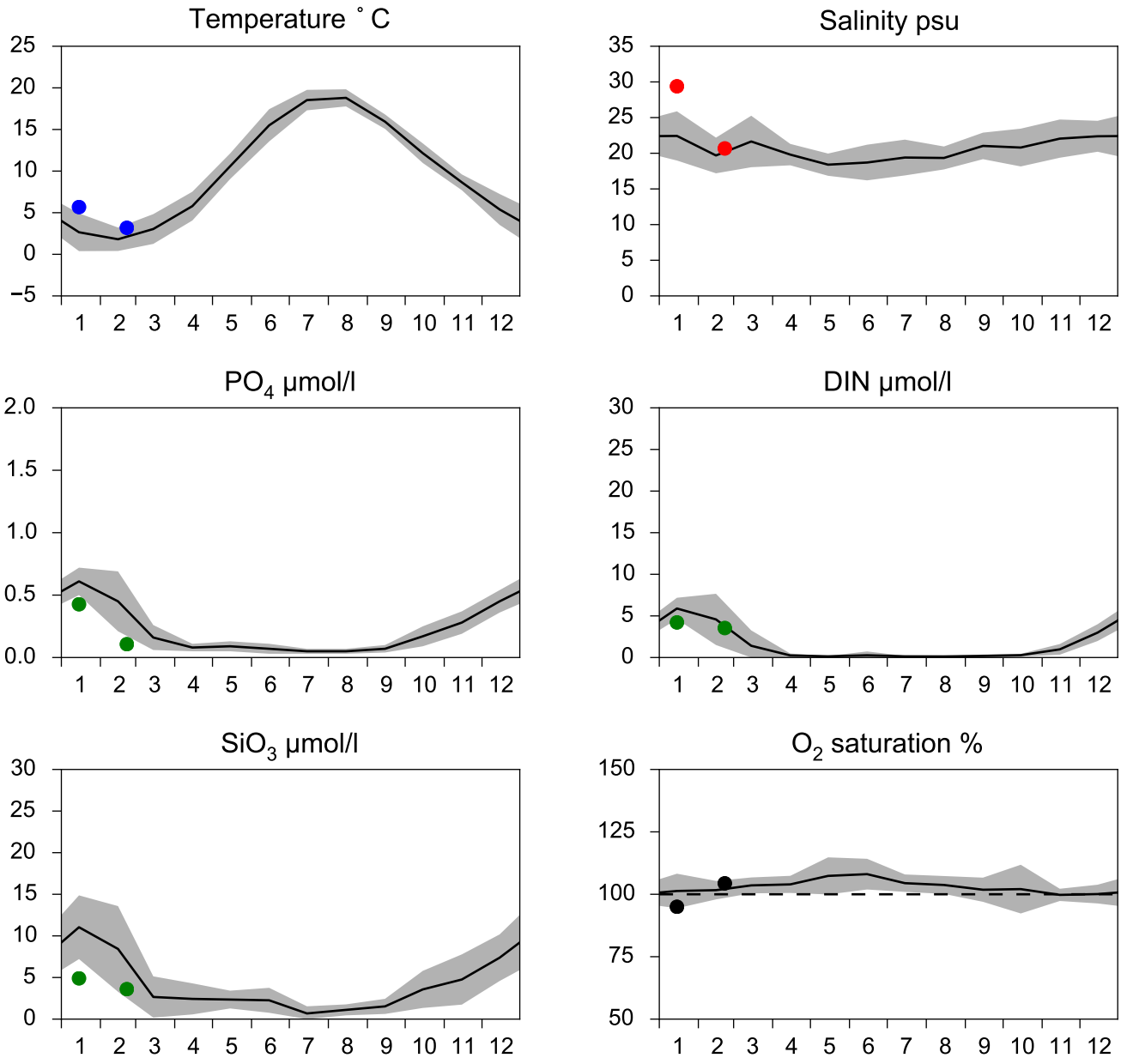
Vertical profiles P2
February



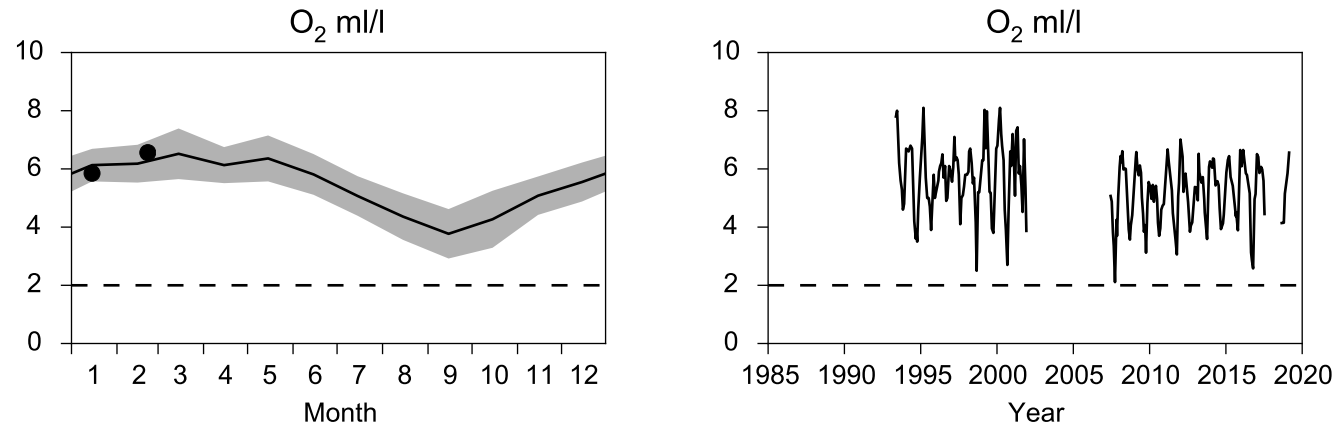
STATION N14 FALKENBERG SURFACE WATER (0-10 m)

Annual Cycles

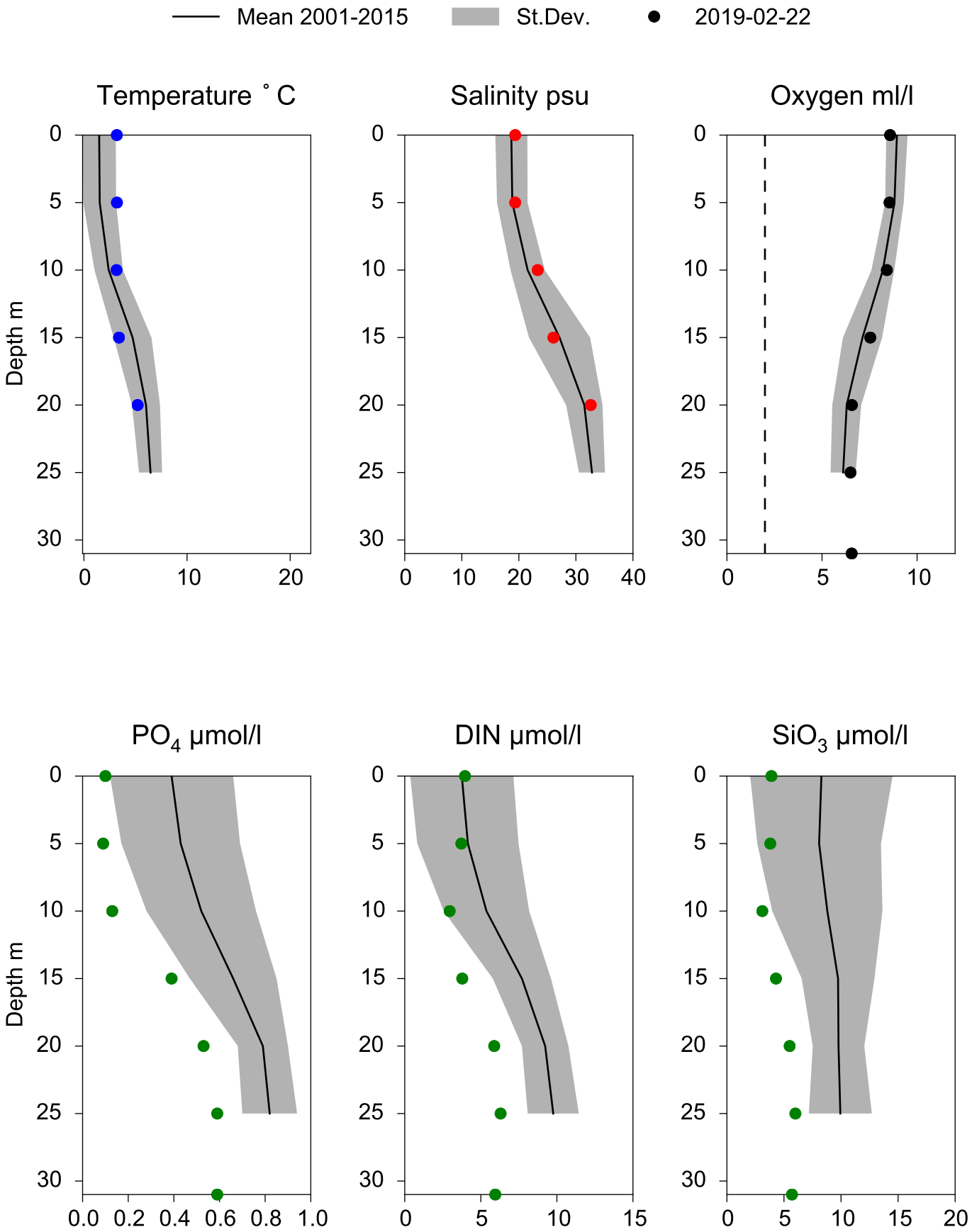
Mean 2001-2015 | St.Dev. | 2019



OXYGEN IN BOTTOM WATER (depth >= 25 m)



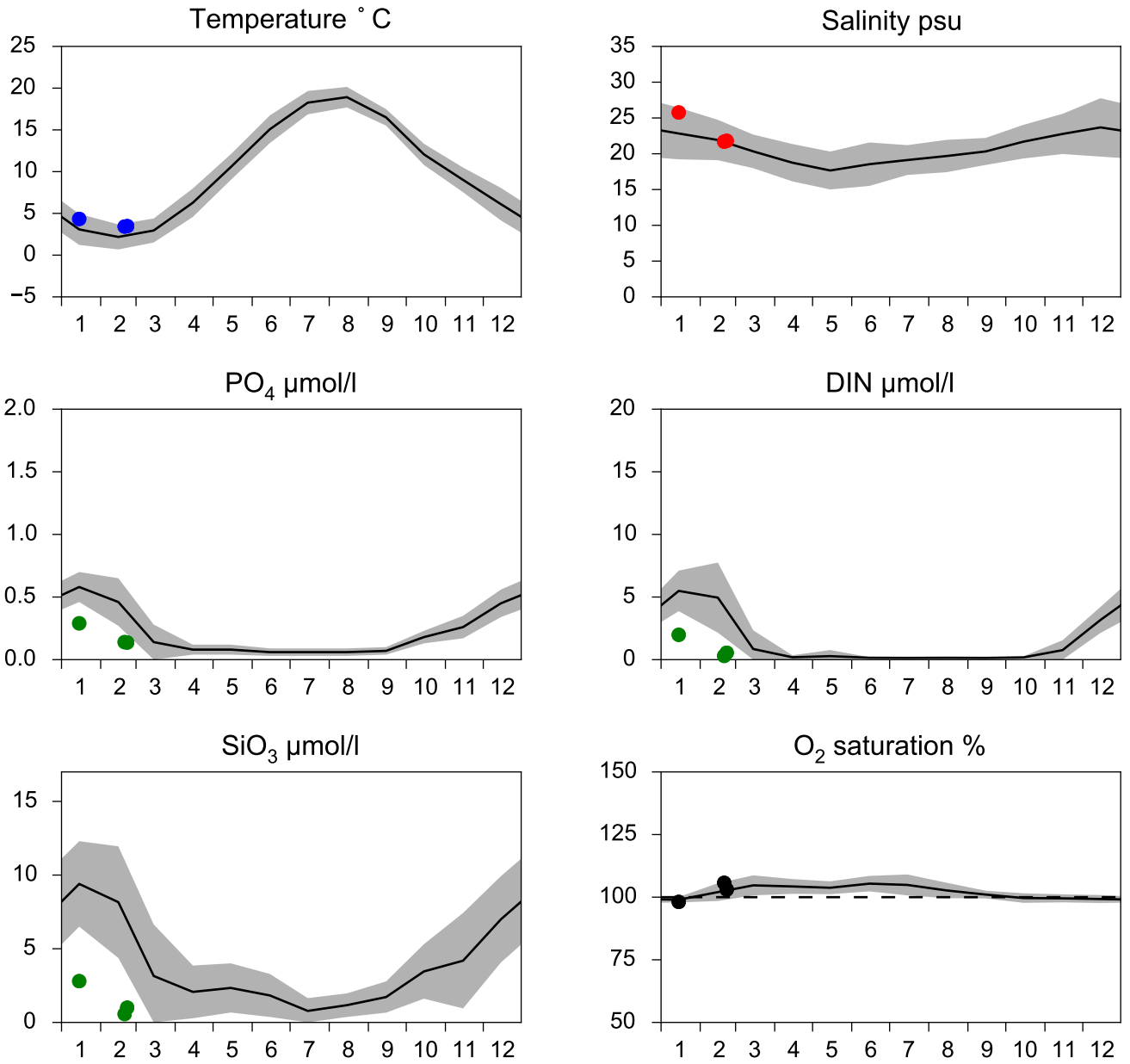
Vertical profiles N14 FALKENBERG
February



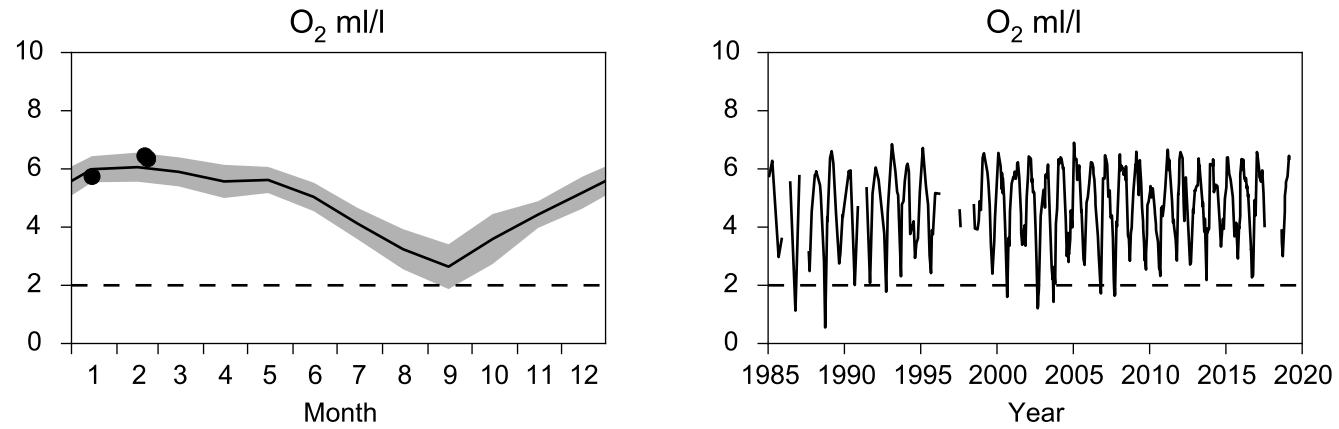
STATION ANHOLT E SURFACE WATER (0-10 m)

Annual Cycles

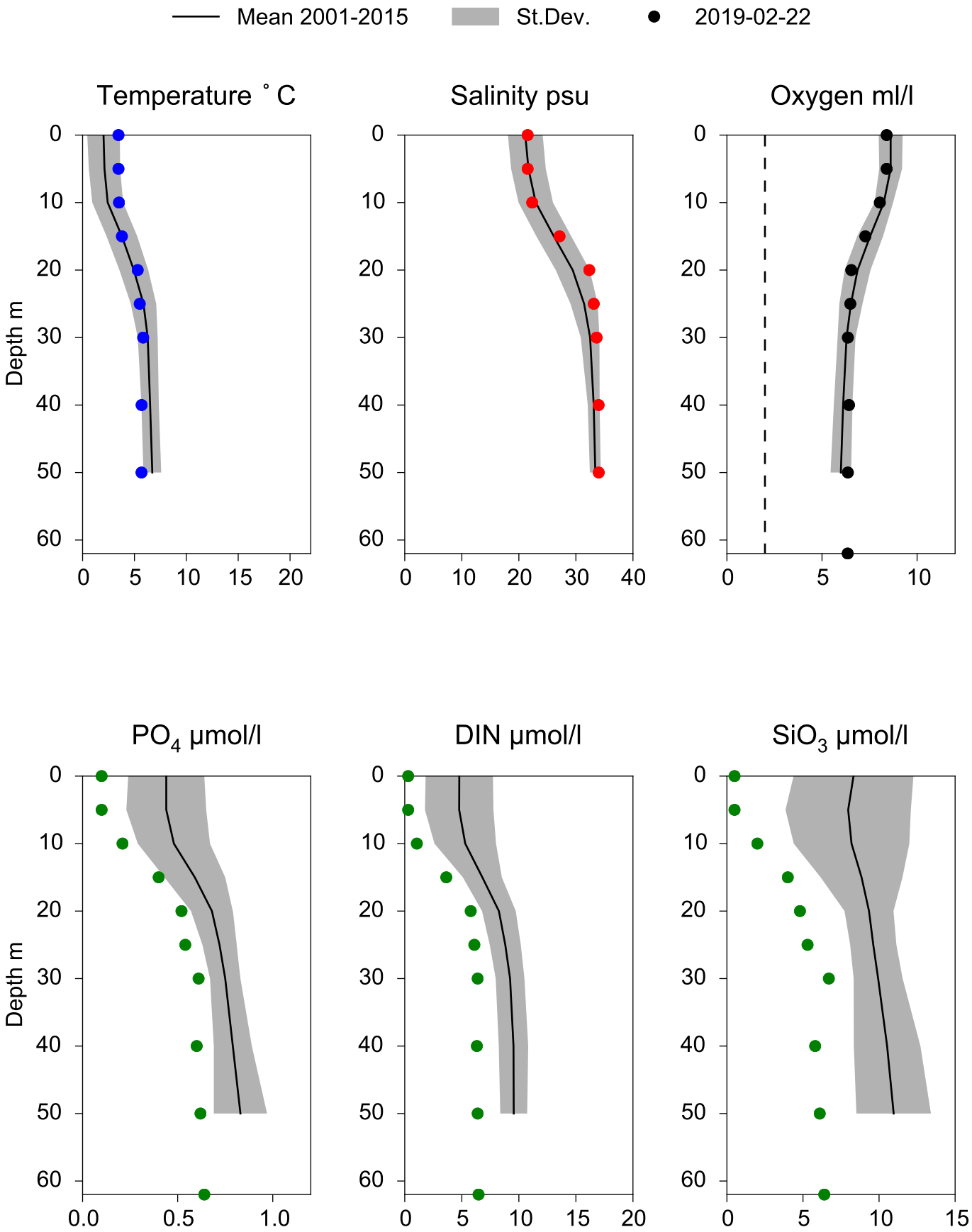
Mean 2001-2015 | St.Dev. | 2019



OXYGEN IN BOTTOM WATER (depth >= 52 m)



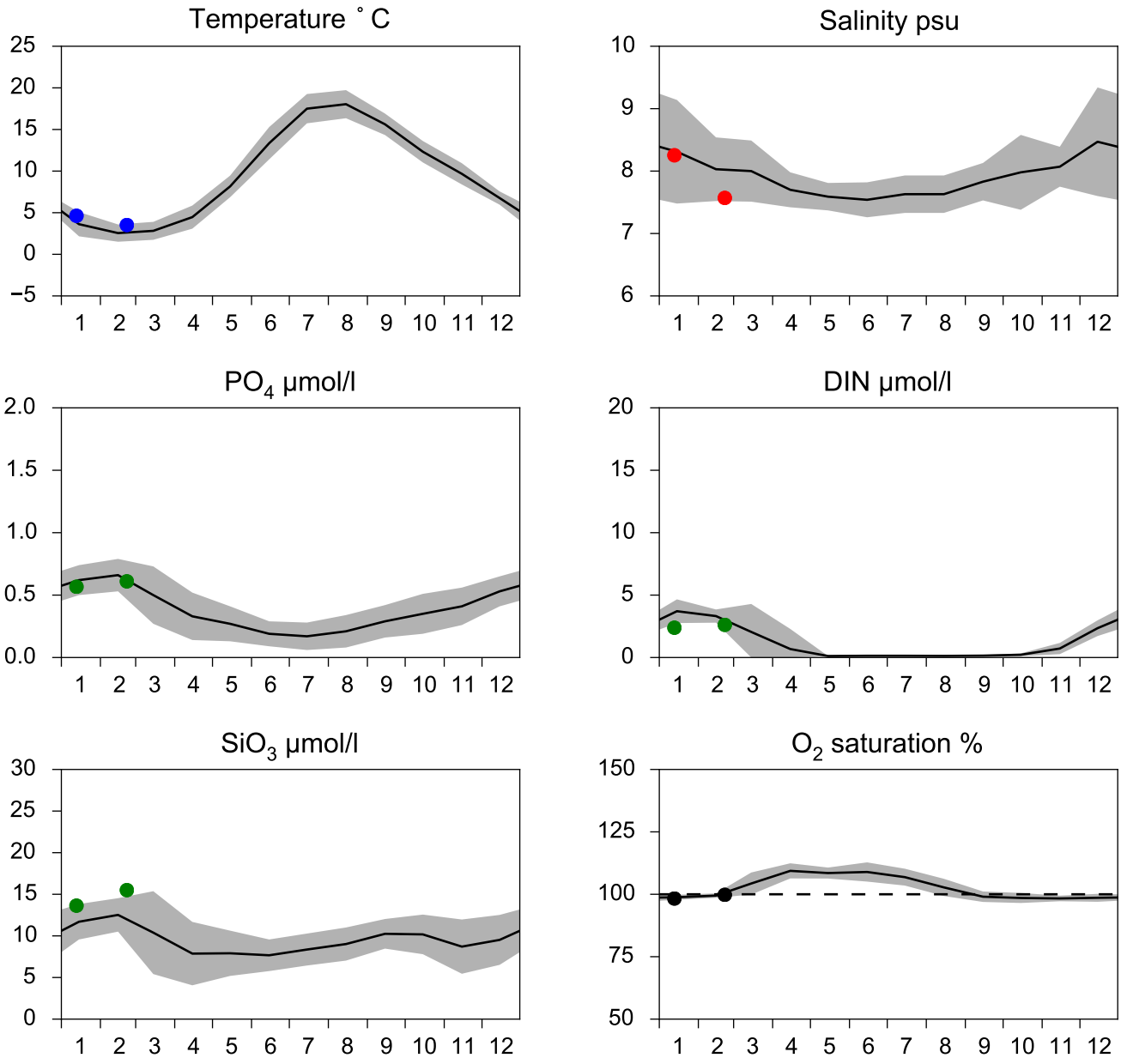
Vertical profiles ANHOLT E
February



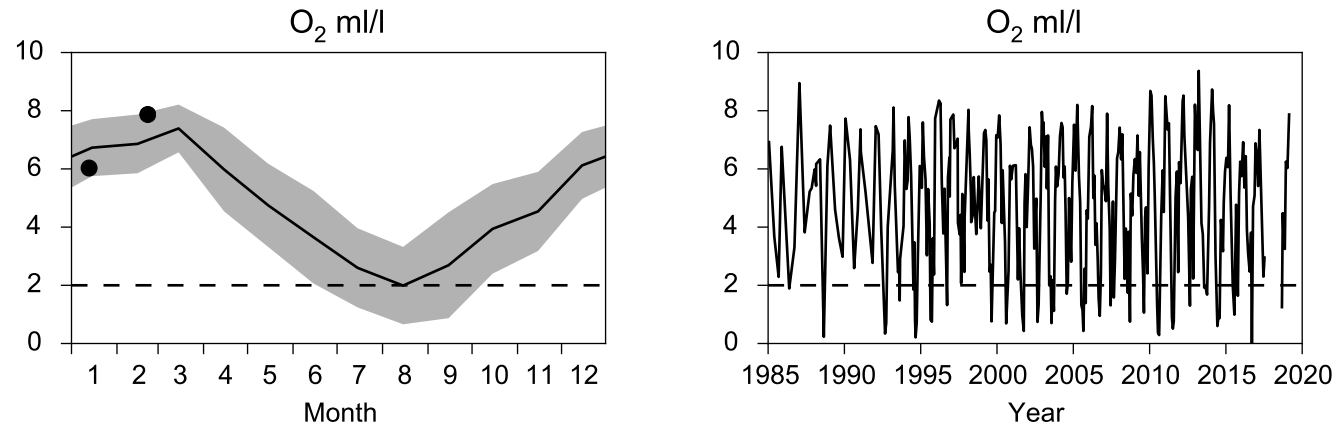
STATION BY1 SURFACE WATER (0-10 m)

Annual Cycles

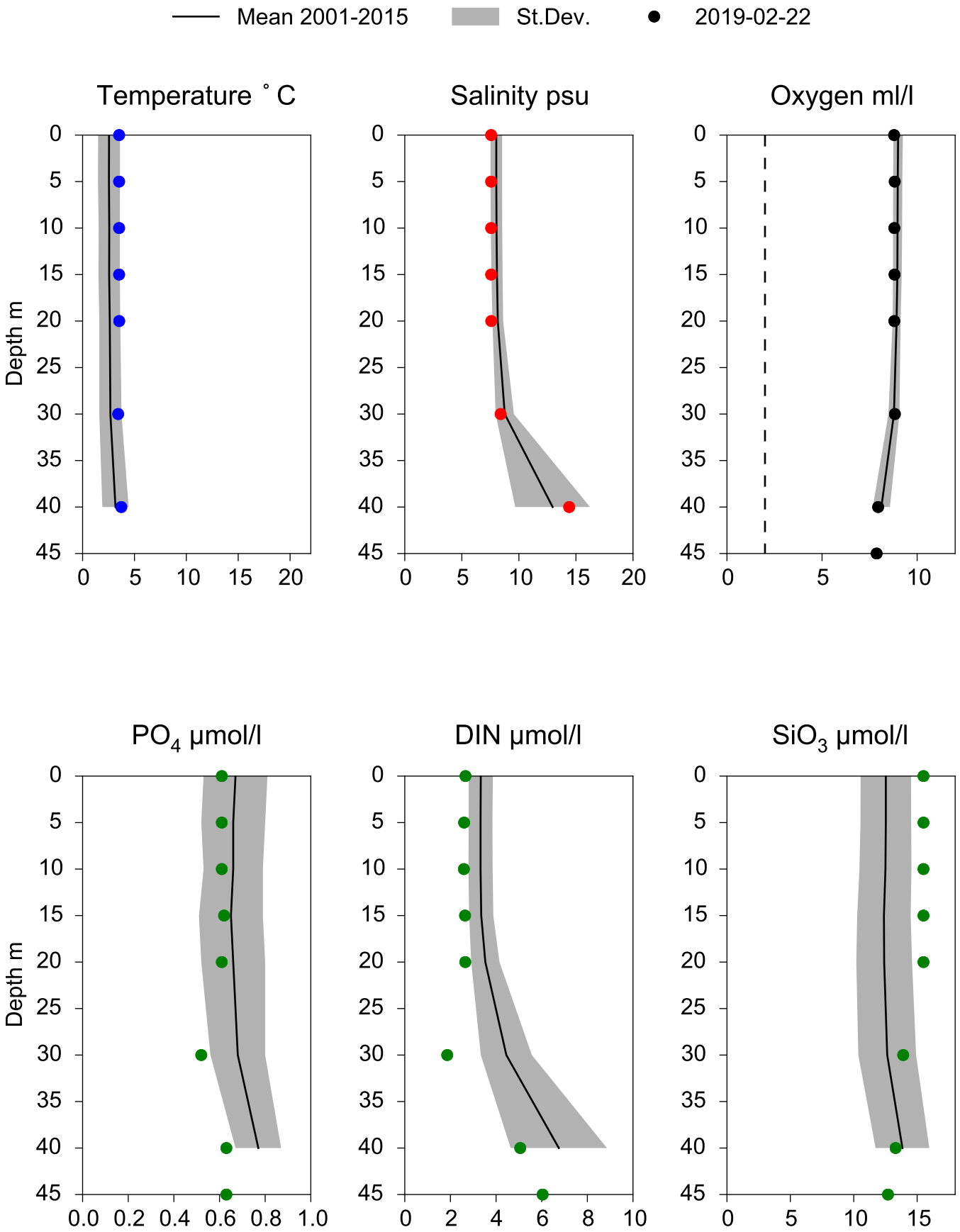
Mean 2001-2015 | St.Dev. | 2019



OXYGEN IN BOTTOM WATER (depth >= 40 m)



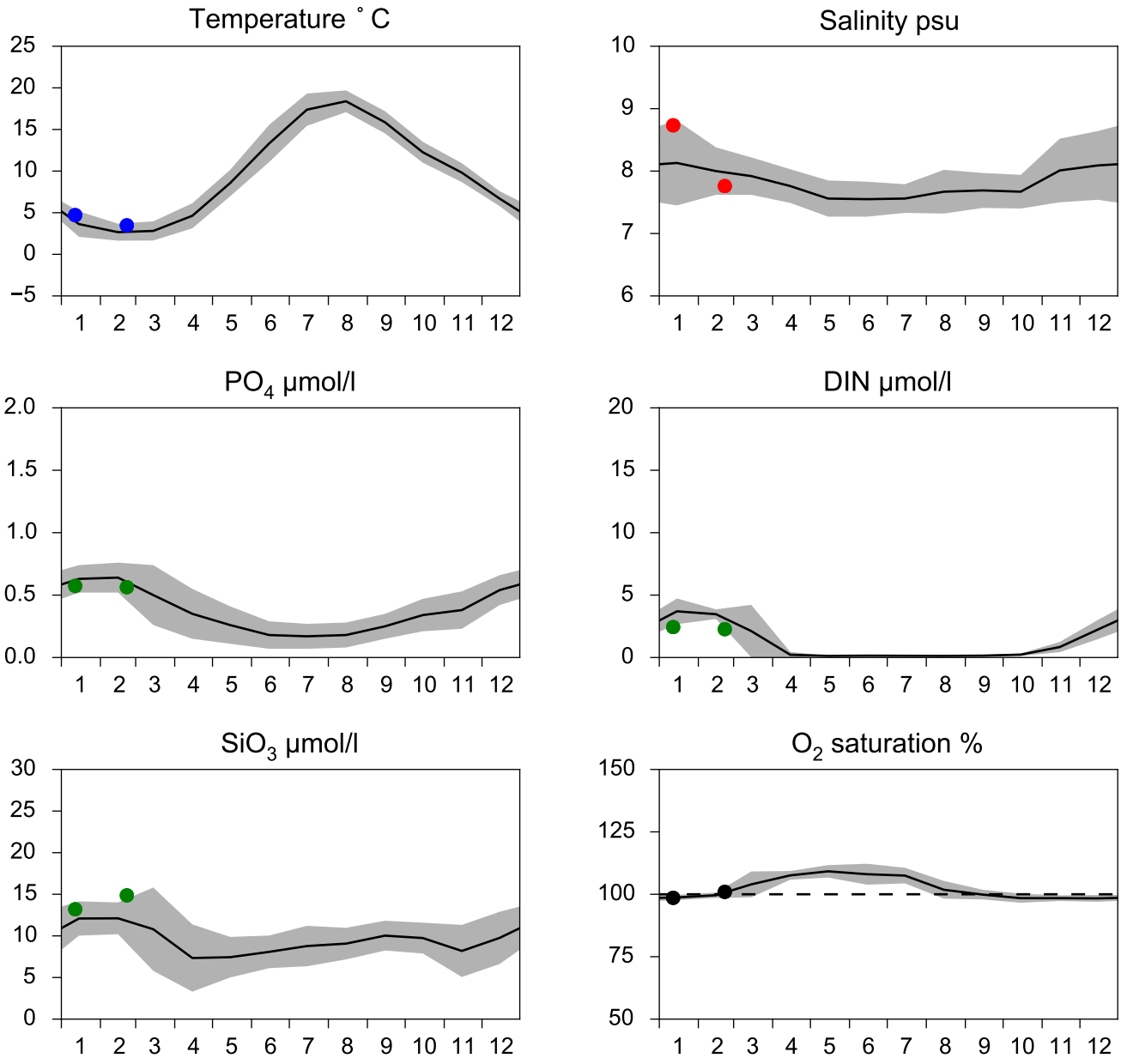
Vertical profiles BY1
February



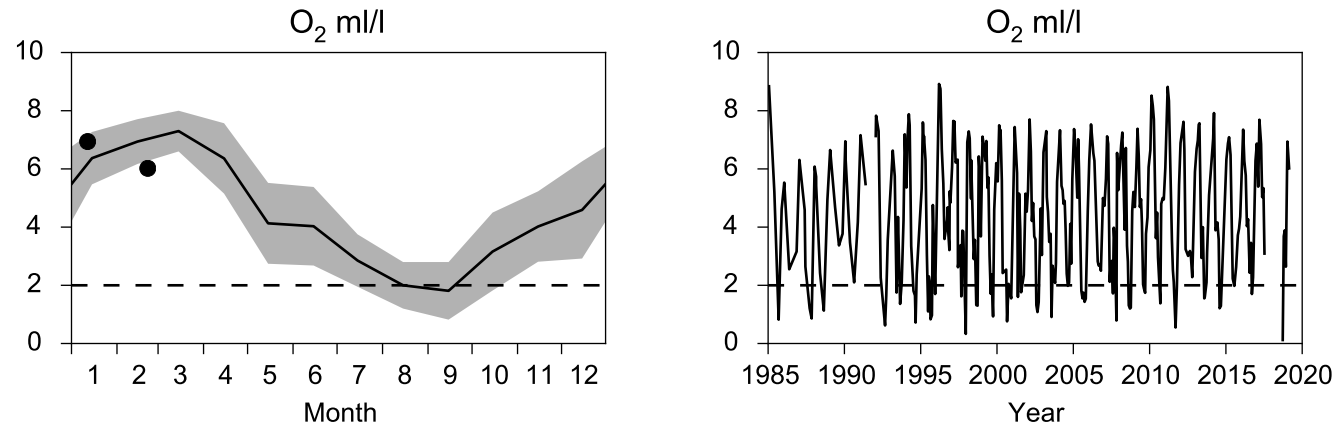
STATION BY2 ARKONA SURFACE WATER (0-10 m)

Annual Cycles

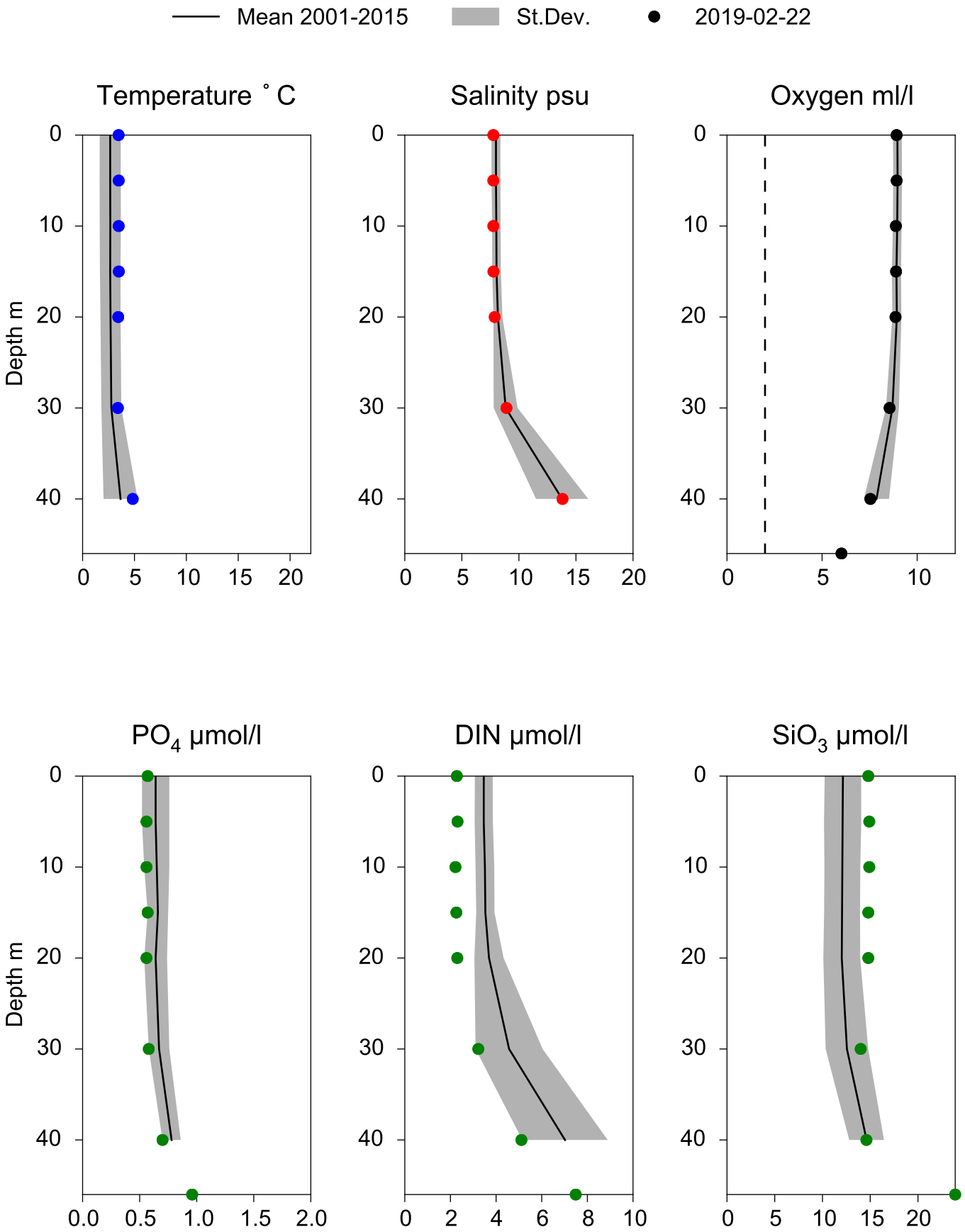
Mean 2001-2015 St.Dev. 2019



OXYGEN IN BOTTOM WATER (depth >= 40 m)



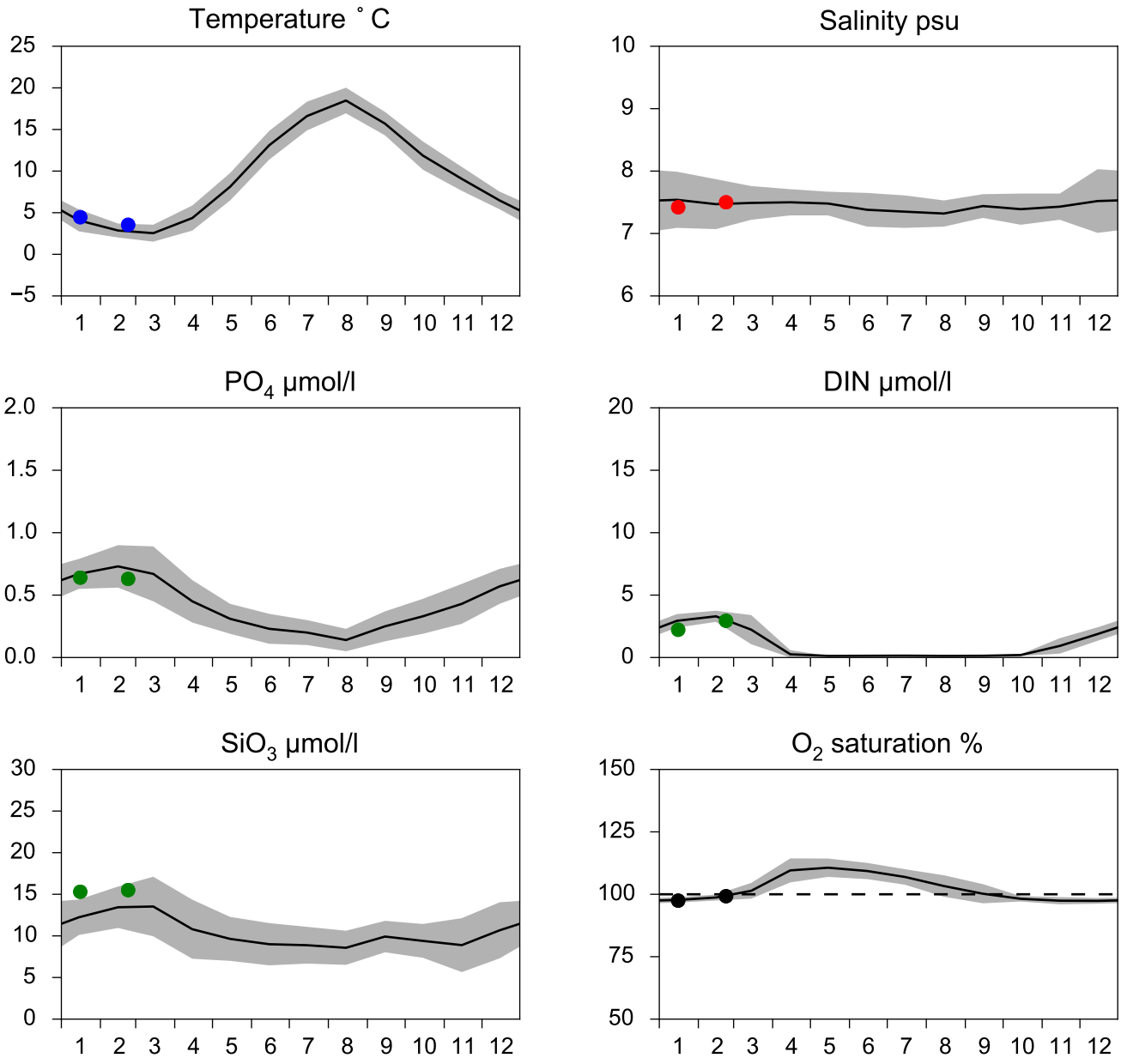
Vertical profiles BY2 ARKONA
February



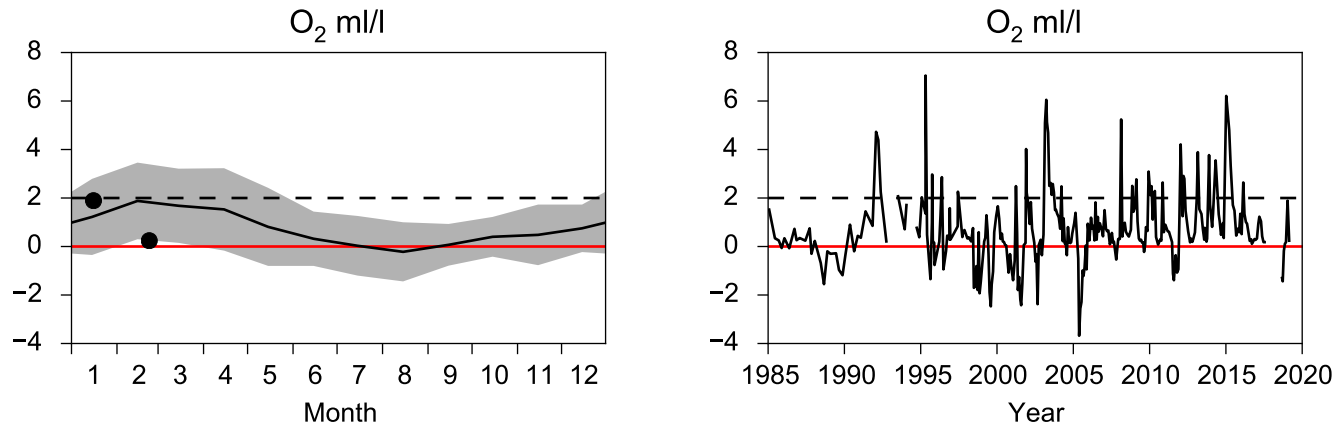
STATION HANÖBUKTEN SURFACE WATER (0-10 m)

Annual Cycles

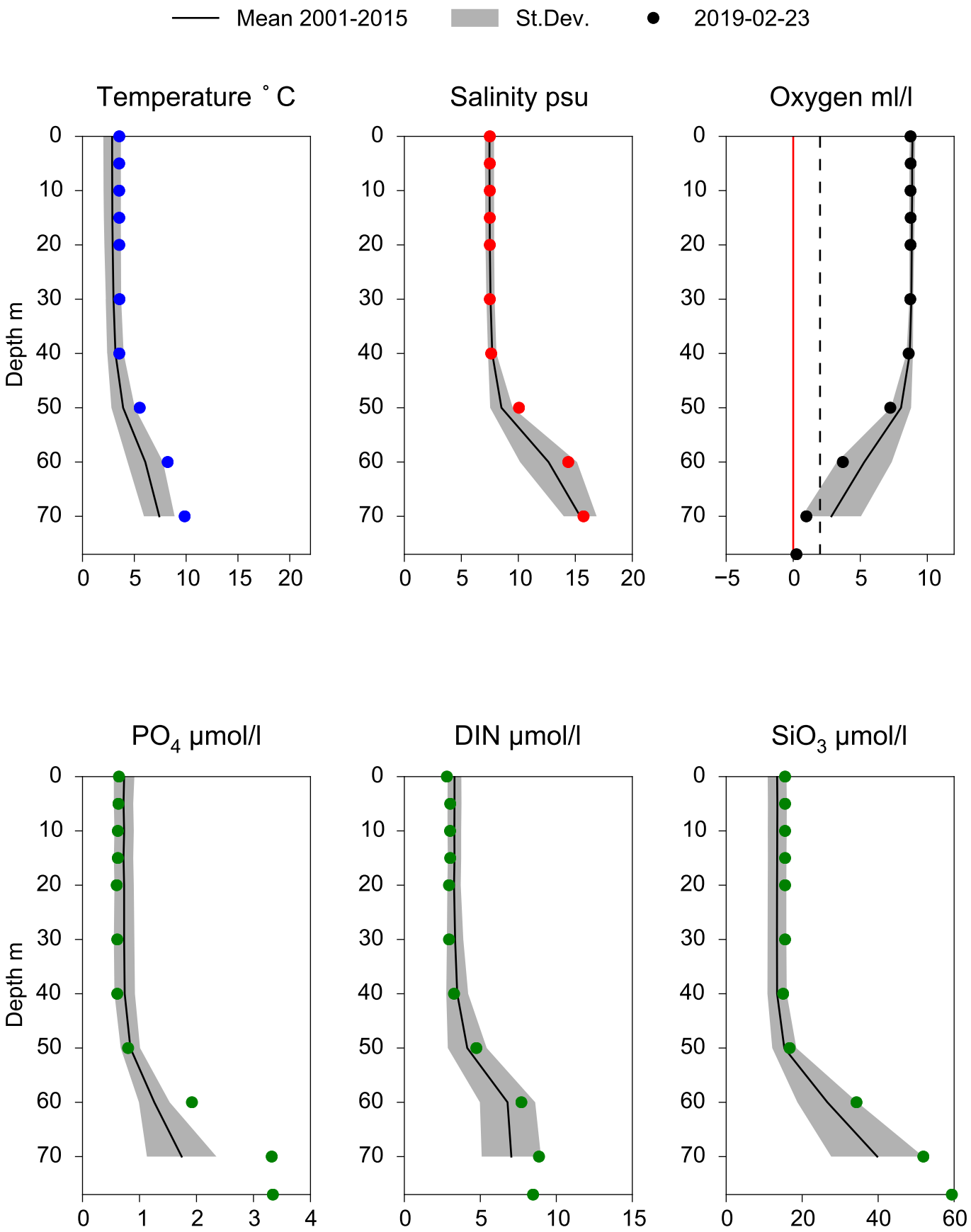
Mean 2001-2015 | St.Dev. | 2019



OXYGEN IN BOTTOM WATER (depth >= 70 m)



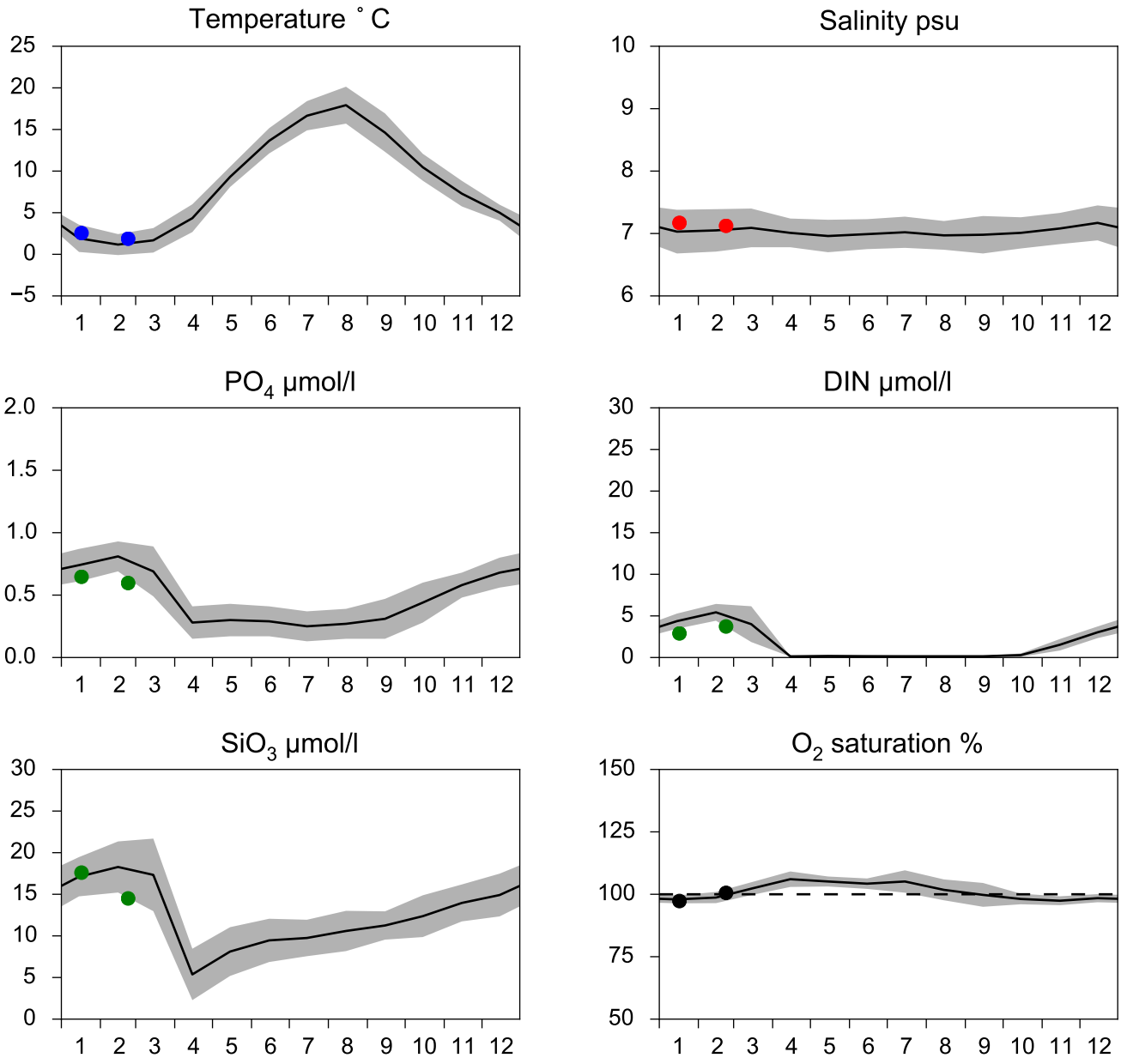
Vertical profiles HANÖBUKTEN
February



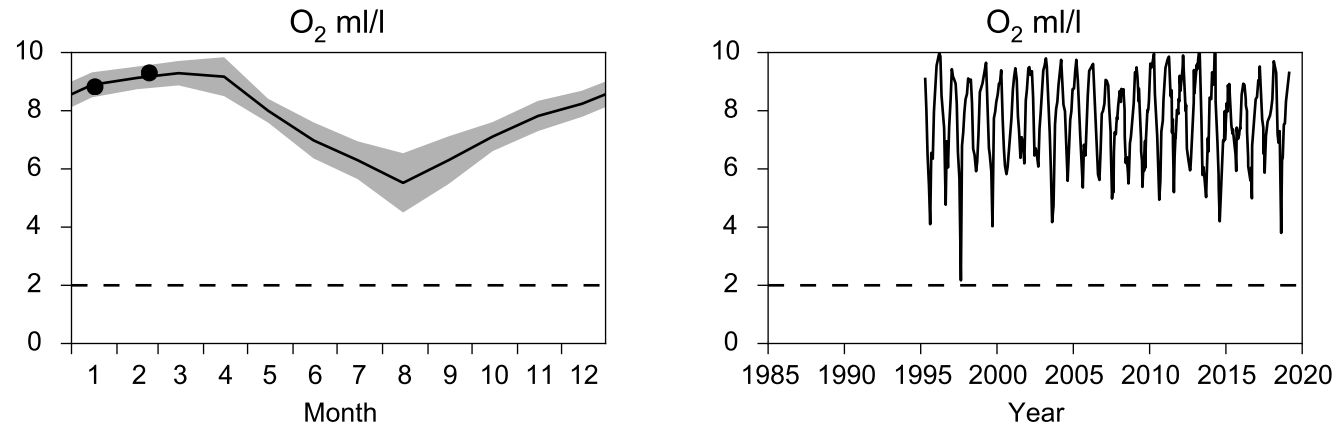
STATION REF M1V1 SURFACE WATER (0-10 m)

Annual Cycles

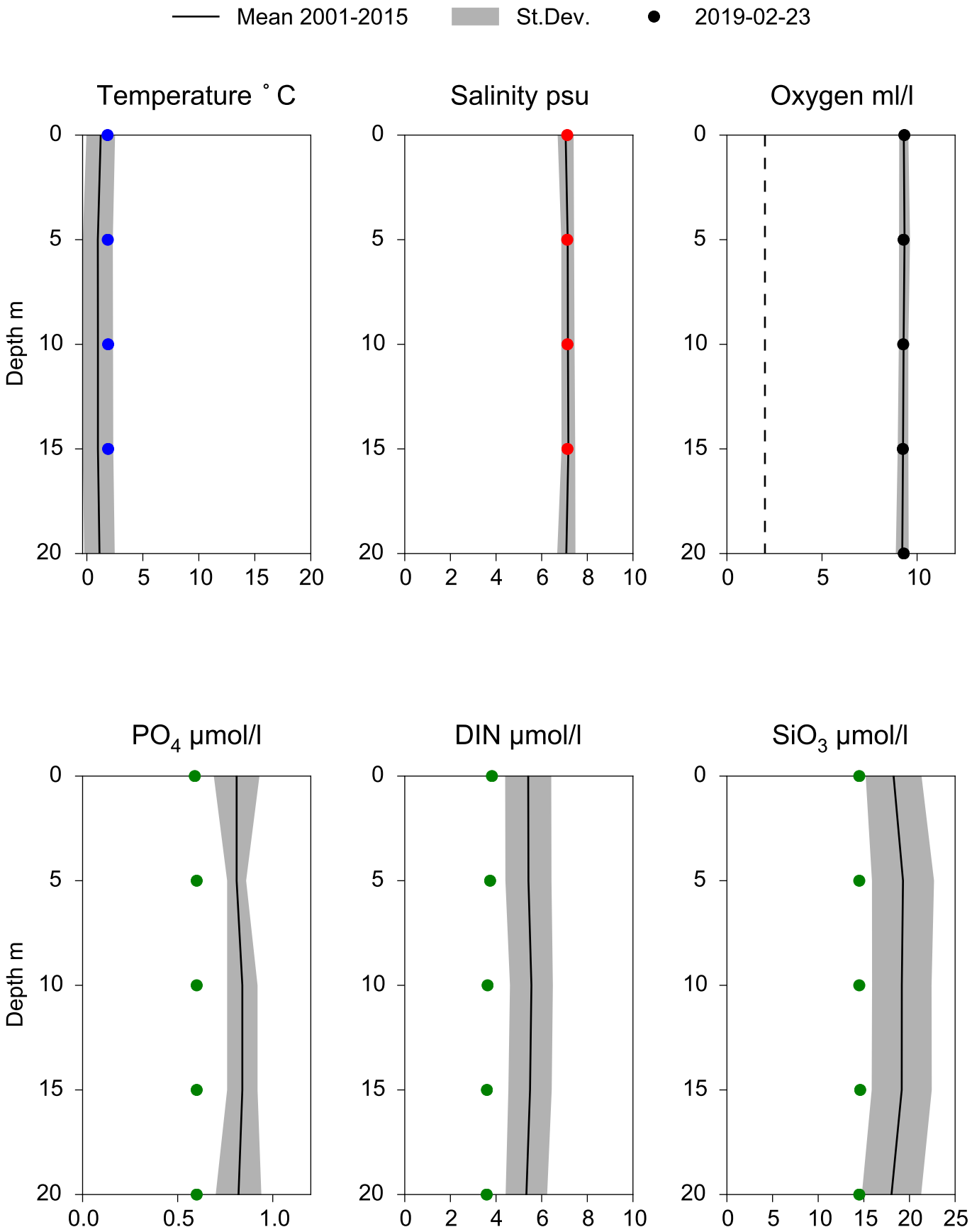
Mean 2001-2015 | St.Dev. | 2019



OXYGEN IN BOTTOM WATER (depth >= 17 m)

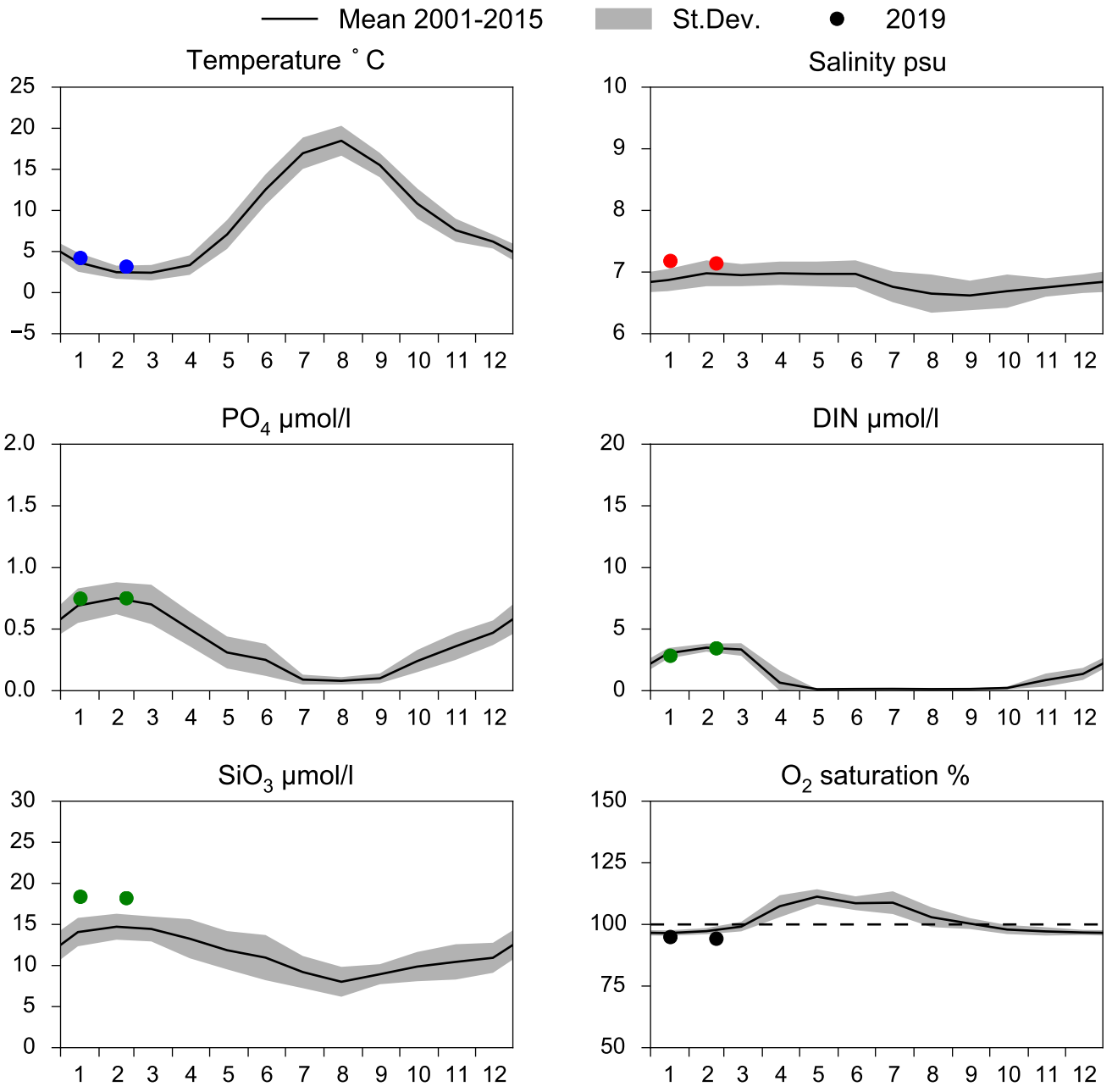


Vertical profiles REF M1V1
February

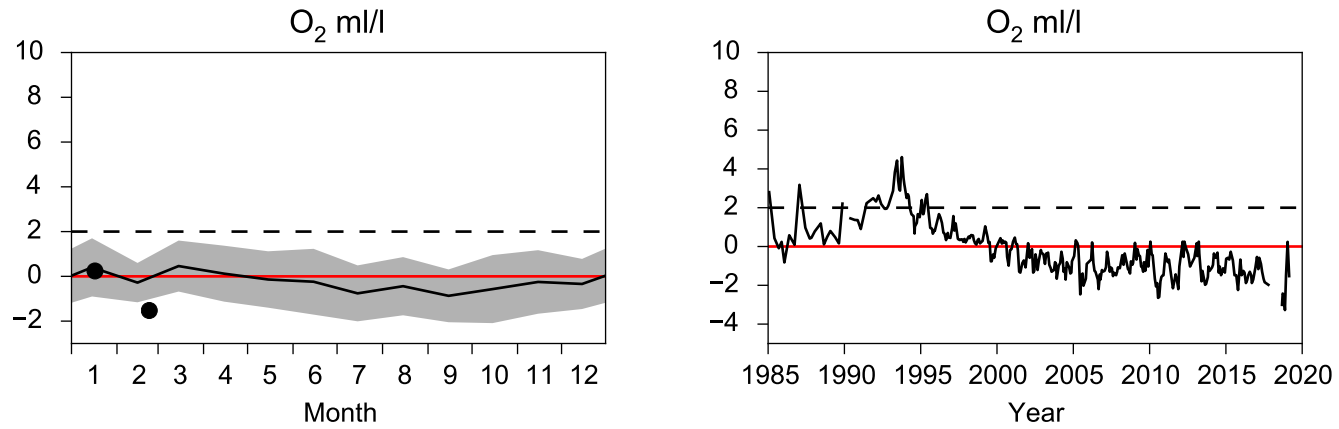


STATION BY38 KARLSÖDJ SURFACE WATER (0-10 m)

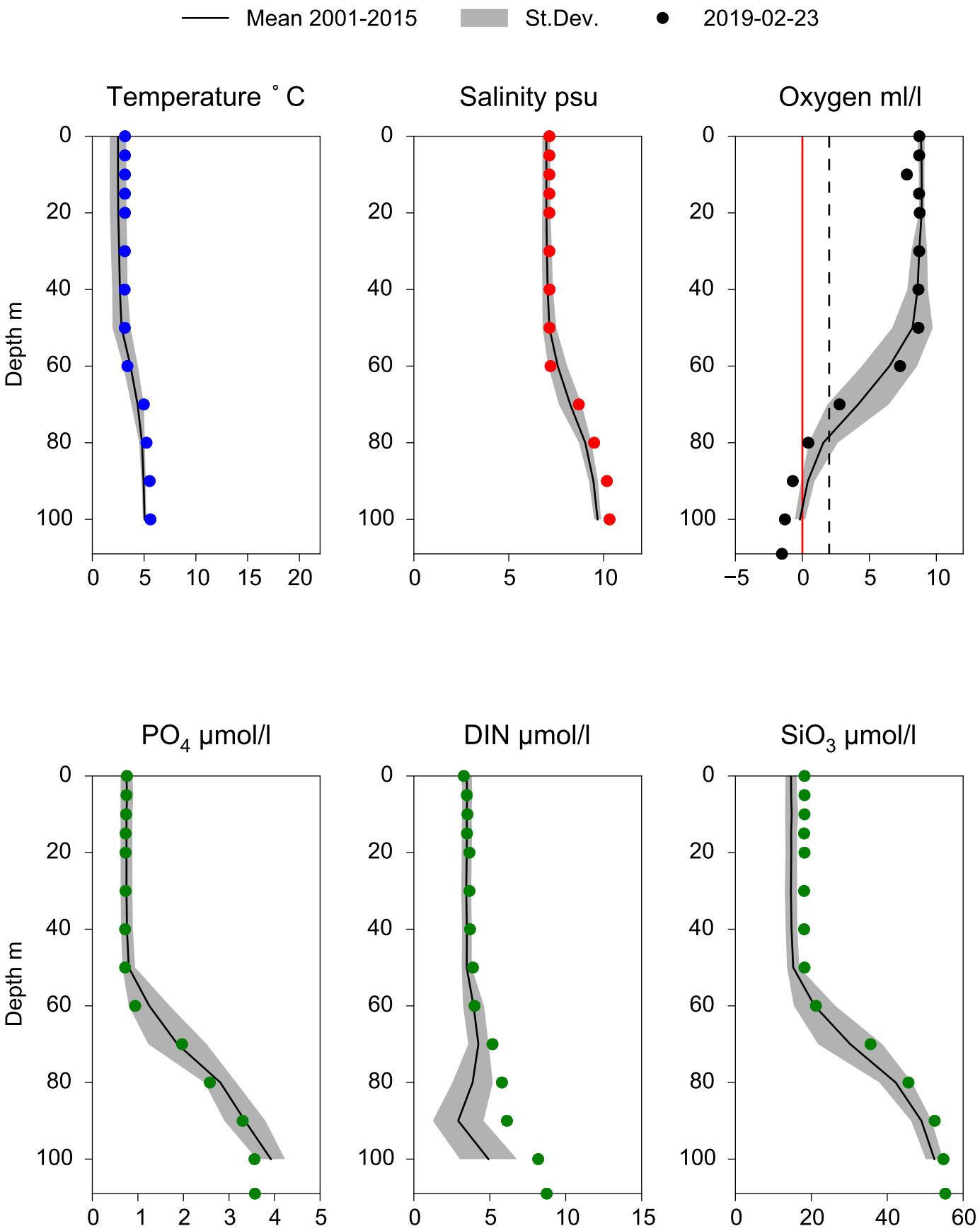
Annual Cycles



OXYGEN IN BOTTOM WATER (depth >= 100 m)



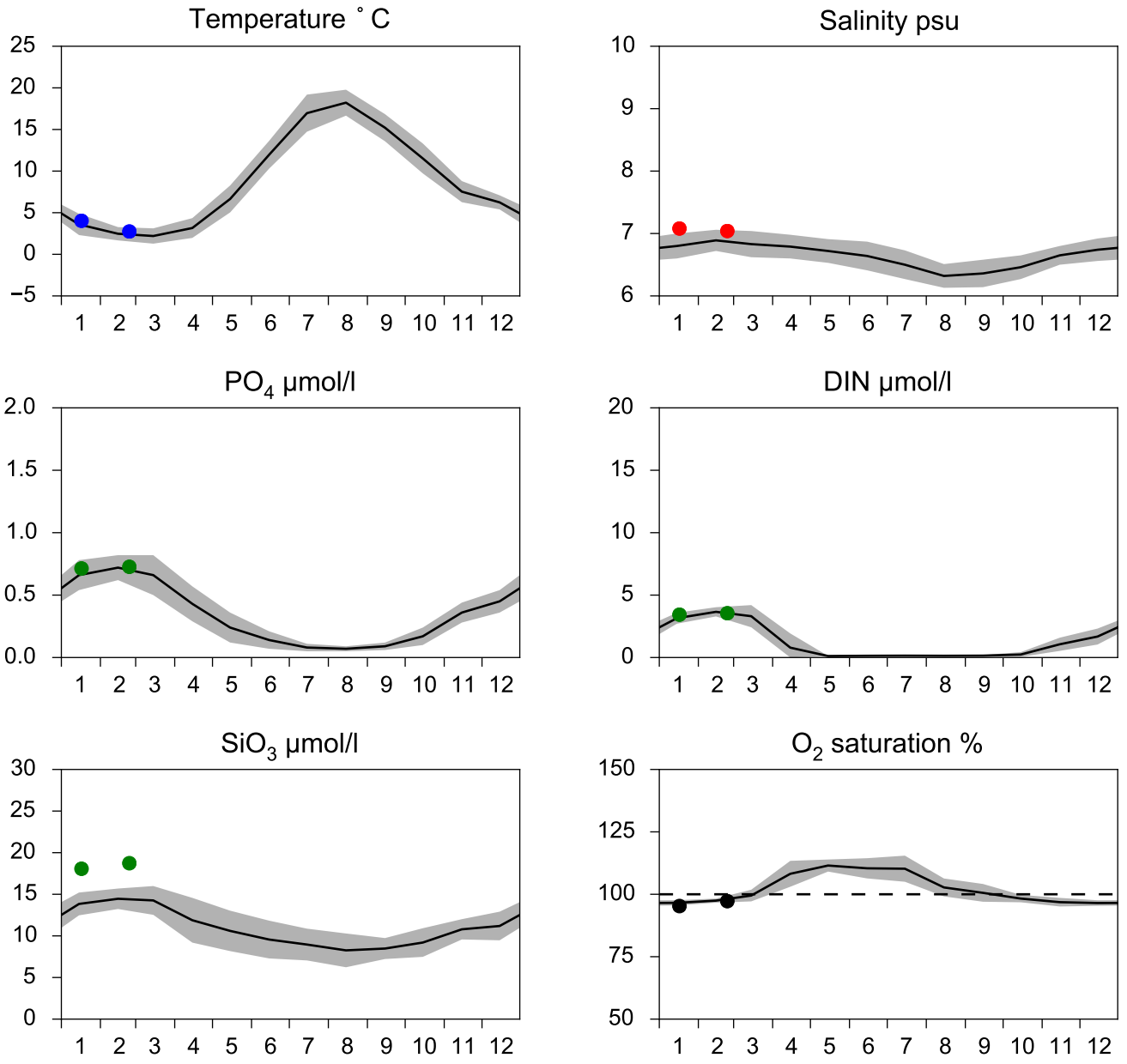
Vertical profiles BY38 KARLSÖDJ
February



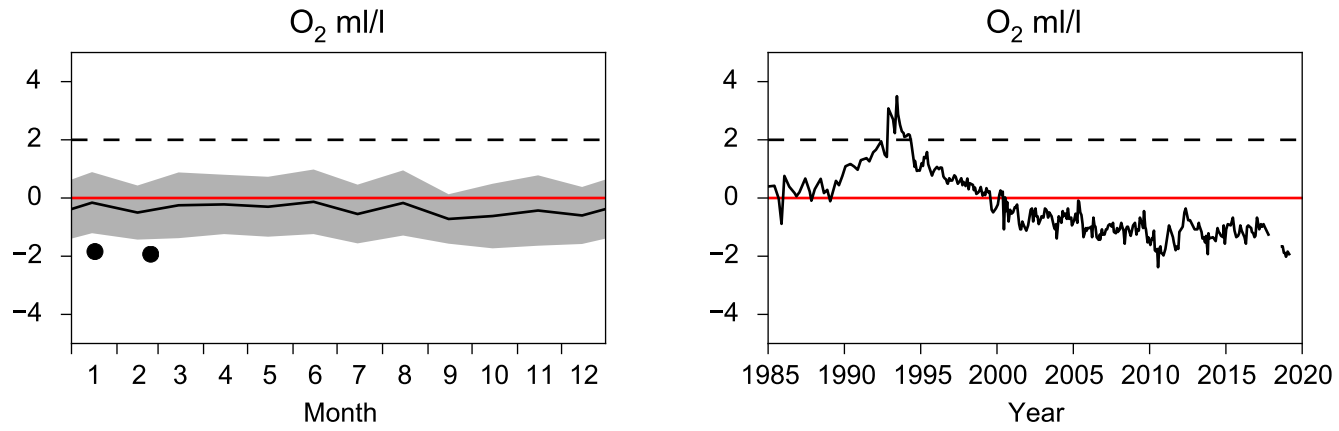
STATION BY32 NORRKÖPINGSDJ SURFACE WATER (0-10 m)

Annual Cycles

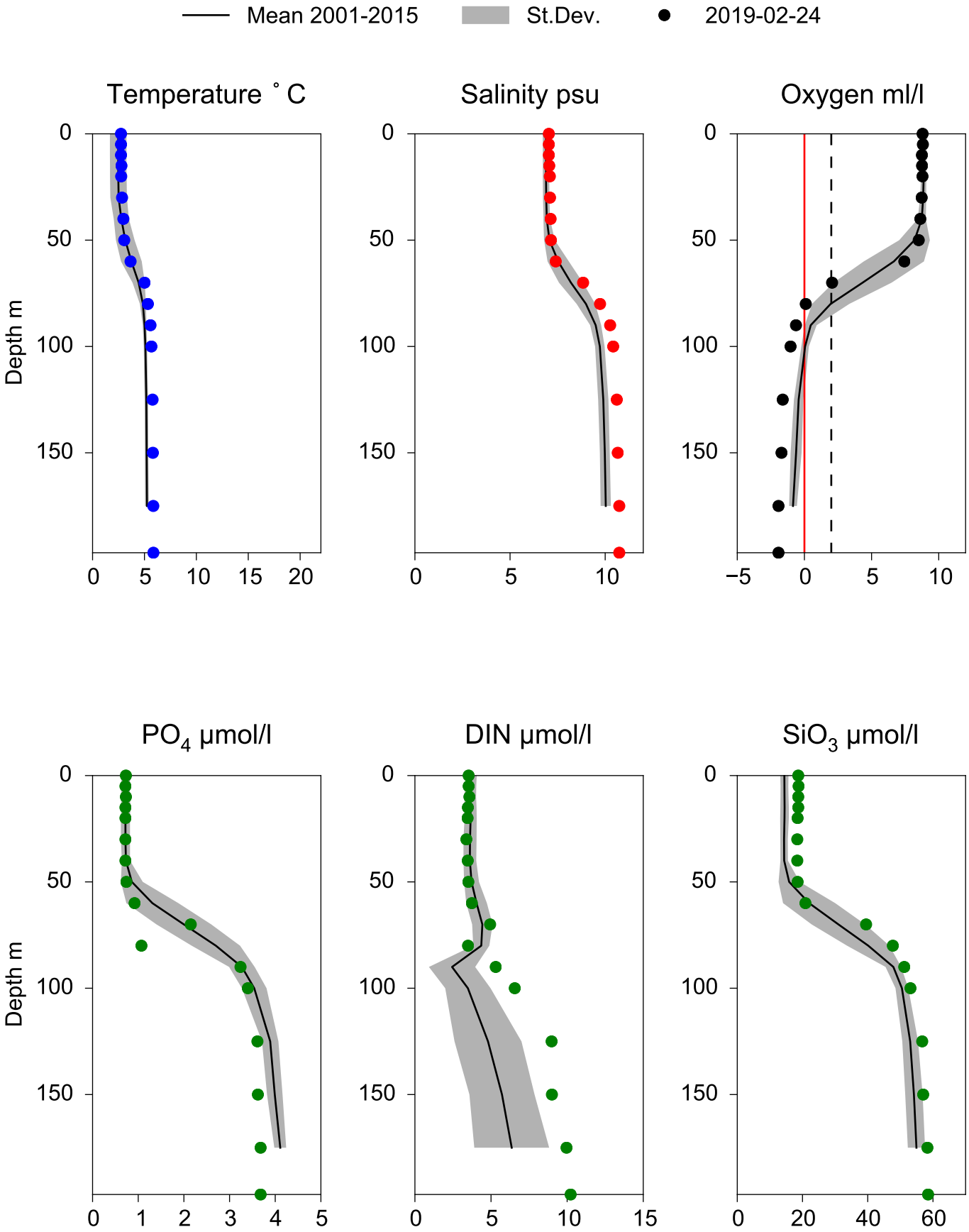
Mean 2001-2015 | St.Dev. | 2019



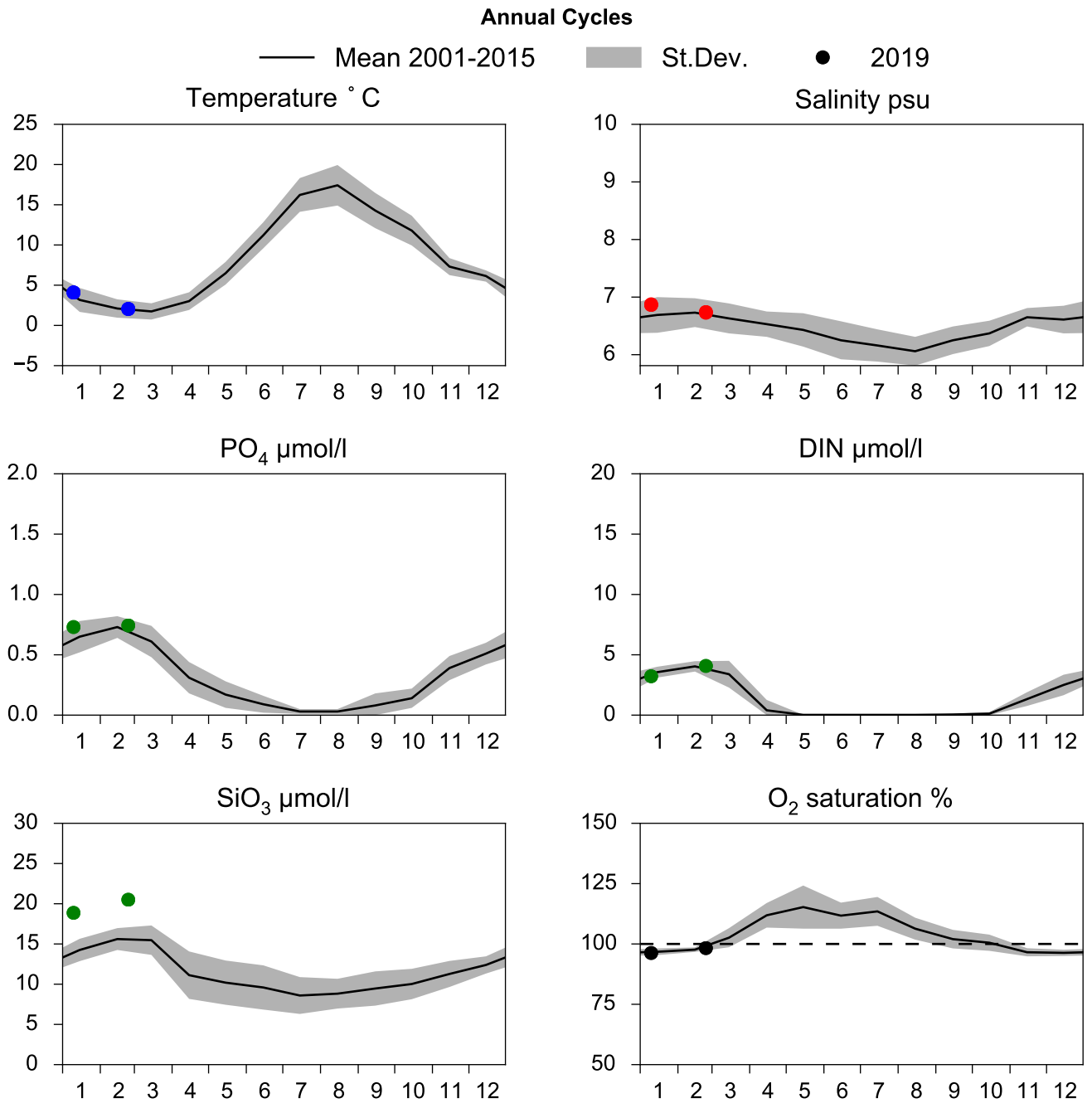
OXYGEN IN BOTTOM WATER (depth >= 175 m)



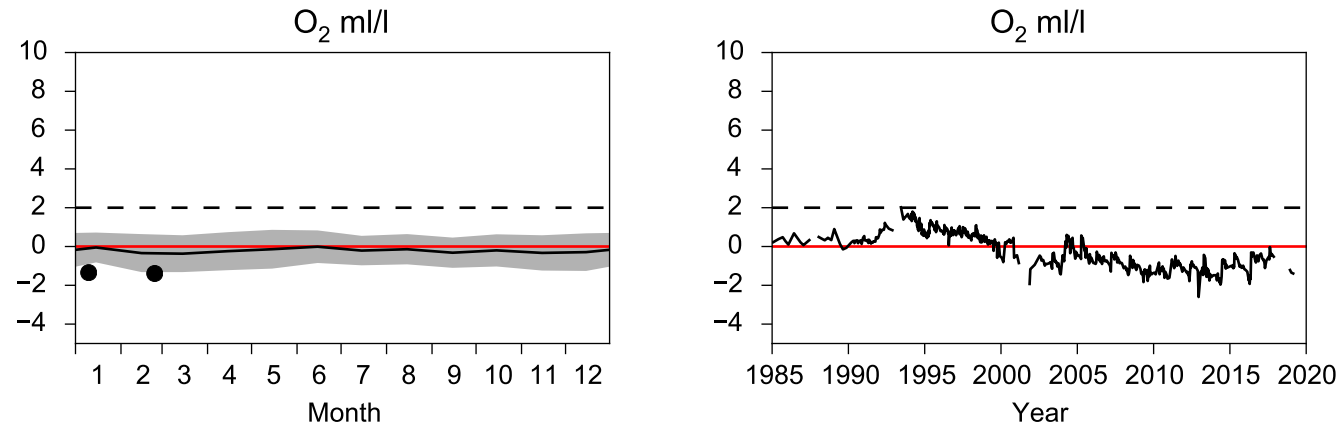
Vertical profiles BY32 NORRKÖPINGSDJ
February



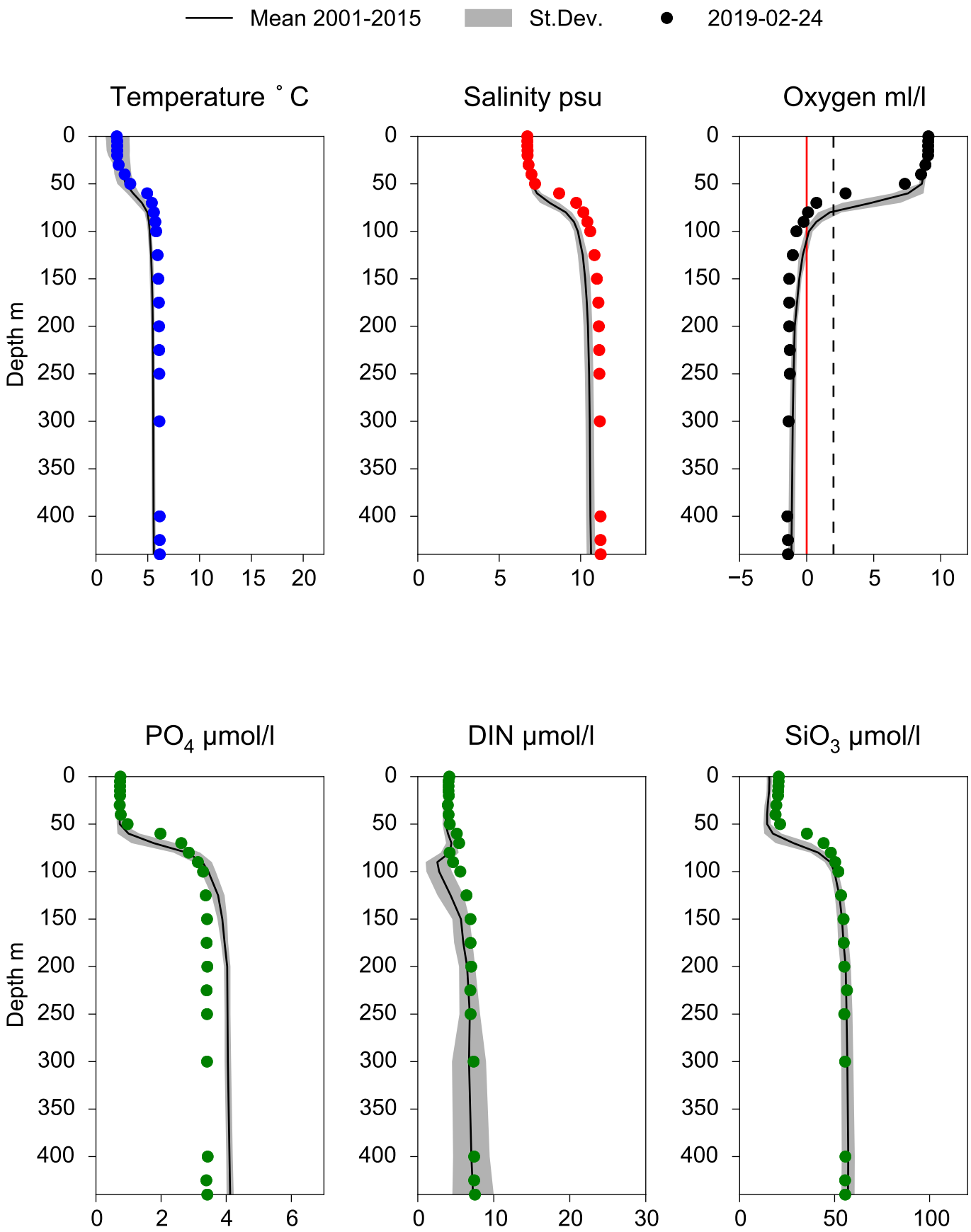
STATION BY31 LANDSORTSDJ SURFACE WATER (0-10 m)

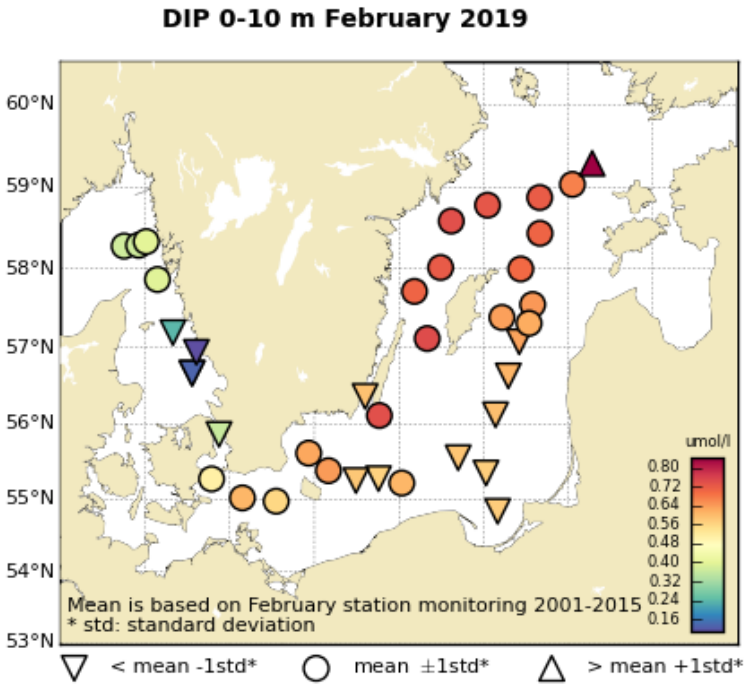


OXYGEN IN BOTTOM WATER (depth >= 425 m)

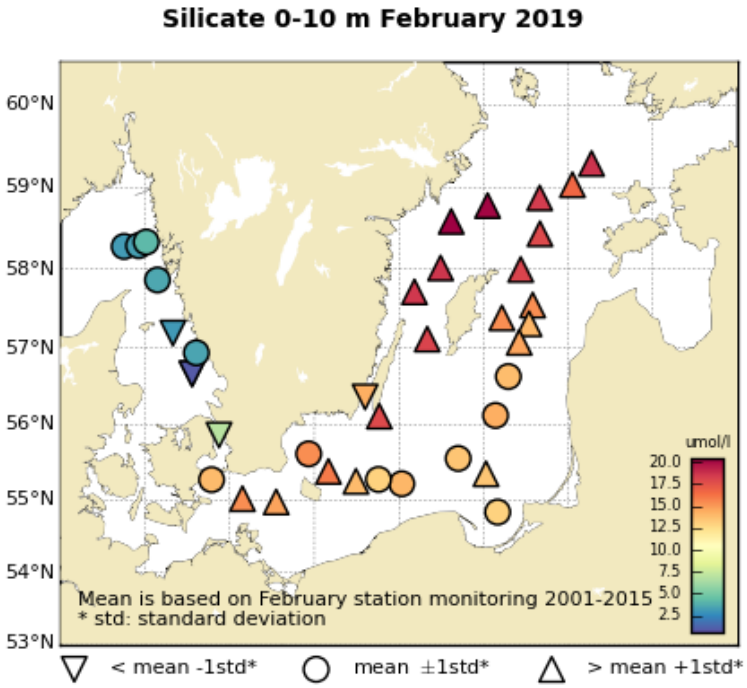


Vertical profiles BY31 LANDSORTSDJ
February





Löst oorganiskt fosfor (fosfat) i ytvattnet (0-10 m). Lägre halter än normalt i de sydöstra delarna av Egentliga Östersjön samt i Kattegatt.



Kisel i ytvattnet (0-10 m), högre koncentrationer än normalt i nästan hela Östersjön. Endast de sydliga delarna av Östra Gotlandsbassängen har normala värden.

Date: 2019-02-28
Time: 10:46

Ship: AR
Year: 2019

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 elac aove tueo hdsb	CZPP hohp loy apt o p	No de	No btl	Temp bottle	Temp bottle	Salt bottle	Salt bottle	Pho bottle	Doc bottle	Doc bottle	H2S	Phos	Nitr	Nitr	Nitr	Nitr	Amm	Nitr	Alk	Sil	Hum - sis
0119	3	KANX50	BAS...	N14 FALKENBERG	5656.42	01212.71	20190222	2340	30		09	9.6	1.8	1026	9990	xxx-	7	7	x	x	x	x	x	x	-	x	x	x	x	x	x	x	x	x	-
0124	3	BPSH05	BAS...	HANÖBUKTEN	5537.04	01452.03	20190223	0130	80		22	7	0.7	1046	9990	x---	11	11	x	x	x	x	-	x	x	-	x	x	x	x	x	x	x	-	x	-
0125	3	BPSH51	BAS...	HANÖBUKTEN-KBV	5548.01	01520.07	20190223	0405	60		25	10	1.7	1036	9990	----	9	9	x	x	x	x	-	x	x	-	x	x	x	x	x	x	x	-	x	-
0126	3	BPWK01	BAS...	REF M1V1	5622.01	01612.04	20190223	0900	21	5	25	11.2	1.6	1038	1320	xxx-	5	5	x	x	x	x	x	x	x	-	x	x	x	x	x	x	x	x	x	-
0127	3	BPSE49	BAS...	BY39 ÖLANDS S UDDE	5606.98	01632.18	20190223	1130	50	10	24	13.1	2.4	1037	1240	----	8	8	x	x	x	x	-	x	x	-	x	x	x	x	x	x	x	-	x	-
0128	3	BPWX45	BAS...	BY38 KARLSÖDJ	5707.02	01740.11	20190223	1805	114		27	9	3.6	1014	9990	x---	14	14	x	x	x	x	-	x	x	x	x	x	x	x	x	x	x	-	x	x
0129	3	BPWX42	BAS...	BY36	5743.01	01722.00	20190223	2215	140		27	8.1	3.3	1031	9990	----	15	15	x	x	x	x	-	x	x	x	x	x	x	x	x	x	x	-	x	-
0130	3	BPWX38	BAS...	BY32 NORRKÖPINGSDJ	5801.00	01759.05	20190224	0140	205		29	4.2	2.9	1028	9990	x---	17	17	x	x	-	x	-	x	x	x	x	x	x	x	x	x	x	-	x	-
0131	3	BPNX37	BAS...	BY31 LANDSORTSDJ	5835.61	01814.18	20190224	0520	459	10	25	8	2.4	1025	9430	xxxx	23	23	x	x	-	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
0132	3	BPNX37	BAS...	BY31 LANDSORTSDJ	5835.62	01814.18	20190224	0735	459		24	10	2.8	1025	1630	----	0	0	-	x	-	x	-	-	x	-	-	-	-	-	-	-	-	-	-	-
0133	3	BPNX36	BAS...	BY30	5847.29	01905.70	20190224	1130	191	8	27	13	3.7	1013	1130	----	16	16	x	x	-	x	-	x	x	x	x	x	x	x	x	x	x	-	x	-