Suomen ympäristökeskus
Finlands miljöcentral
Finnish Environment Institute

ILMATIETEEN LAITOS

CRUISE REPORT

R/V Aranda

Cruise 02/2023

Combine spring cruise

18.4.2023 – 28.4.2023

This report is based on preliminary data and is subject to changes.

Objectives of the cruise

The objectives of the cruise were:

1) Monitoring of the Gulf of Finland, Northern Baltic Proper, Åland Sea, Archipelago Sea, Bothnian Sea and the Southern part of the Bothnian Bay. Measured variables were temperature, salinity, oxygen, hydrogen sulfide, pH, inorganic (nitrite, nitrate, ammonium, phosphate, dissolved silicate) and total (nitrogen, phosphorus) nutrients, Chlorophyll a and phytoplankton community composition.
2) Samples were taken for DNA sequencing and determination of picoplankton communities by flow cytometry.
3) Grazing rates of picophytoplankton and heterotrophic bacteria by microzooplankton.
4) The stoichiometric ratio between carbon, nitrogen and phosphorus for different size fractions.

Table 1 The scientific crew

Name	On board	Organization
Kristian Spilling	18-28 April	Syke
Riikka Mattsson	18-28 April	Syke
Tanja Kinnunen	18-28 April	Syke
Antti Räike	18-28 April	Syke
Niklas Trebs	18-28 April	Syke
Susanna Hyvärinen	18-28 April	Syke
Annaliina Skyttä	18-28 April	Syke
Jere Riikonen	18-28 April	Syke
Ilkka Lastumäki	18-28 April	Syke
Lumi Haraguchi	18-28 April	Syke
Elsa Lescroart	18-28 April	Syke
Maiju Lehtiniemi	25-28 April	Syke
Anne-Mari Lehto	25-28 April	Syke
Siru Tasala	25-28 April	Syke
Kimmo Aaltonen	18-28 April	Syke
Ossi Kinnunen	18-28 April	Syke
Sara Karvo	25-28 April	FMI
Tuomo Roine	18-28 April	FMI
Heini Jalli	18-28 April	FMI
Meri Smedberg	18-25 April	FMI
Pertti Jämsén	25-28 April	FMI

Sami Rantapusa	25-28 April	FMI
Hedi Kanarik	25-28 April	FMI
Atte Koukonen	18-21 April	film crew
Jasper Mäkinen	18-21 April	film crew
Karl Kirso Vene	25-28 April	FlyDogMarine
Thomas Mollica	18-28 April	Linnaeus Univ.
Elizabeth Sands	18-28 April	Umeå Univ.

Cruise Route

We left Helsinki as planned on Tuesday 18 April, and did the first deployments and sampling stations in the Gulf of Finland (GoF) off Helsinki (Fig 1). We continued to the eastern part of GoF before returning turning around sailing westwards into the northern Baltic Proper. We did several of the Landsort - Lovisa (LL) transect points before moving towards the Åland Sea. There we visited Mariehamn to let off two persons before proceeding north through the Åland Sea into the Bothnian Sea (BS). We sampled the western and mid BS, sailing northwards and moving into the Kvarken region. Here we met an ice cover, but the ice was relatively soft, and we were able to continue as planned into the Bothnian Bay (BB), where we had out northernmost sampling point (BO3, Fig 1). Turning south we sampled the eastern points in BS before going to the Uusikaupunki harbor. We got some additional personnel on board and continued southwards through the Archipelago Sea (AS). At the southernmost AS, close to Utö we did several deployments before continuing to northern Baltic Proper again where we did CTD calibrations. After this, we continued eastwards and took some sampling stations in the GoF. We revisited a few of the stations we had already taken. This was done to follow the change over the week as our first visit was during the start of the spring bloom, but on our second visit we were at the peak of the spring bloom.

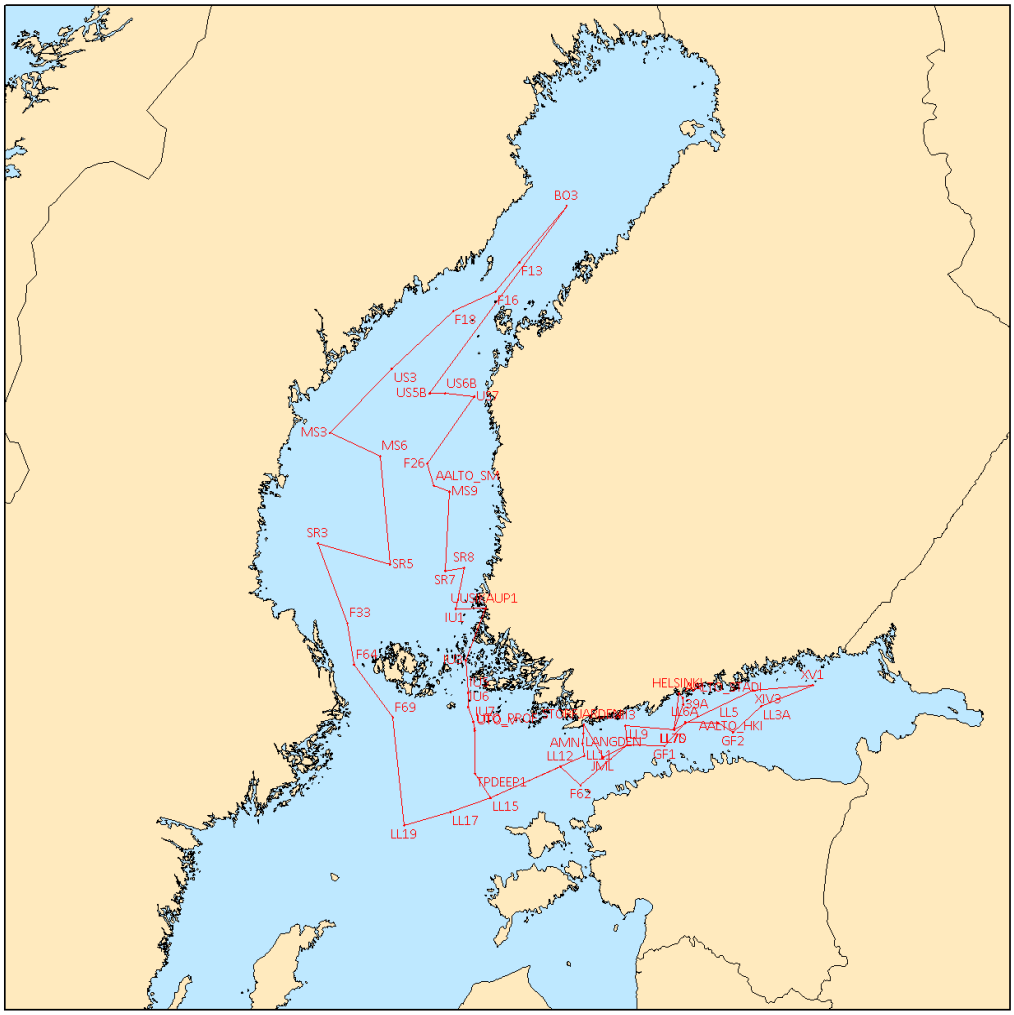

Fig 1. Cruise route, see text for details. The full station list can be found in Annex 2

Observations

The weather at the start of the cruise was calm and sunny, and the spring bloom was only just starting with relatively much nitrate left 4-6 µmol L^{-1} in the Gulf of Finland (Fig 2), but with a bit more advanced bloom in the easternmost points in GoF. In the northern Baltic Proper the water was clearer with greater Secchi depth (>6 m) and depleted nitrate as expected. In the Bothnian Sea this was also the case, and the bloom in terms of nutrient draw down seems to have been more advanced in the Bothnian Sea compared with the Gulf of Finland which was a bit surprising. In the Bothnian Bay there was still an ice cover and there was very little biological activity with relatively much nitrate available but the primary producers in this sub basis in phosphorus limited. We sampled again in the Gulf of Finland on our way back to Helsinki, and it was clear that the nice calm weather with clear sky had triggered the spring bloom, which was at or close to peak levels during our return in terms of nitrate being close to depleted.

Temperature, salinity, and other hydrographical variables were as expected for the time of the year and more details of vertical profiles and full list of stations can be found in Annex 1-3.

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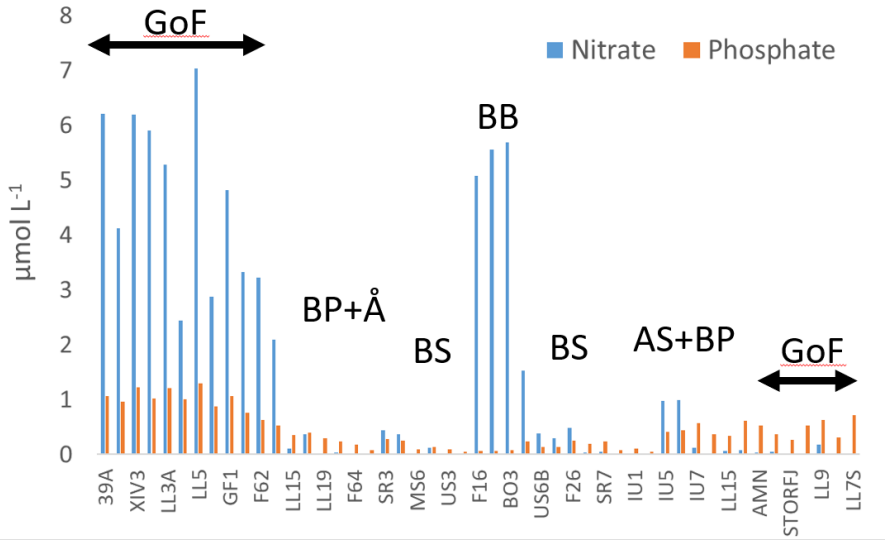

Fig 2. The concentration of nitrate+nitrite (blue) and phosphate (orange) at 5 m depth in all the sampling stations in the order we took them (Fig 1, Annex 2). On top the sub-basin is indicated: Gulf of Finland (GoF), Baltic Proper and Åland Sea (BP+Å), Bothnian Sea (BS), Bothnian Bay (BB), and Archipelago Sea and Boltic Proper (AS+BP). Note that not all sampling station names are mentioned in the x-axis, see Annex 2 for the full list. Preliminary data.

The concentration of dissolved silicate (DSi) was relatively high (> 5µmol L^{-1}) throughout the sampling stations in the surface (Fig 3). The only exception was IU3 in the Archipelago Sea with a concentration of 1.5 µmol DSi L^{-1}. The DSi concentration in the Bothnian Bay was as expected considerably higher than the rest of the sub-basis at >30 µmol L^{-1} due to the extensive influence of freshwater runoff in this sub-basin.

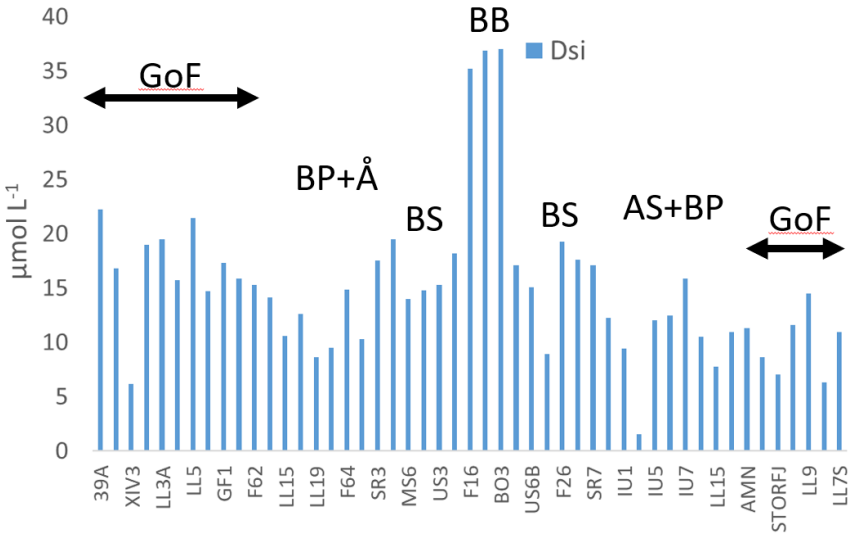

Fig 3. The dissolved silicate at 5 m depth in all the sampling stations in the order we took them (Fig 1, Annex 2). On top the sub-basin is indicated: Gulf of Finland (GoF), Baltic Proper and Åland Sea (BP+Å), Bothnian Sea (BS), Bothnian Bay (BB), and Archipelago Sea and Baltic Proper (AS+BP). Note that not all sampling station names are mentioned in the x-axis, see Annex 2 for the full list. Preliminary data.

The preliminary chlorophyll a (Chl-a) concentration, based on converted fluorescence measurements are presented in Fig 4. The Chl-a concentration was highest, on average, in the Bothnian Sea (average 5.5 µg Chl-a L^{-1} at 5 m depth), with the rest of the sub basins slightly lower at an average 4.0 to 4.5 µg Chl-a L^{-1}, except for the Bothnian Bay where the Chl-a concentration was clearly lower (0.6 µg Chl-a L^{-1}). The highest concentration was found in the easternmost Gulf of Finland at ~12 µg Chl a L^{-1}.

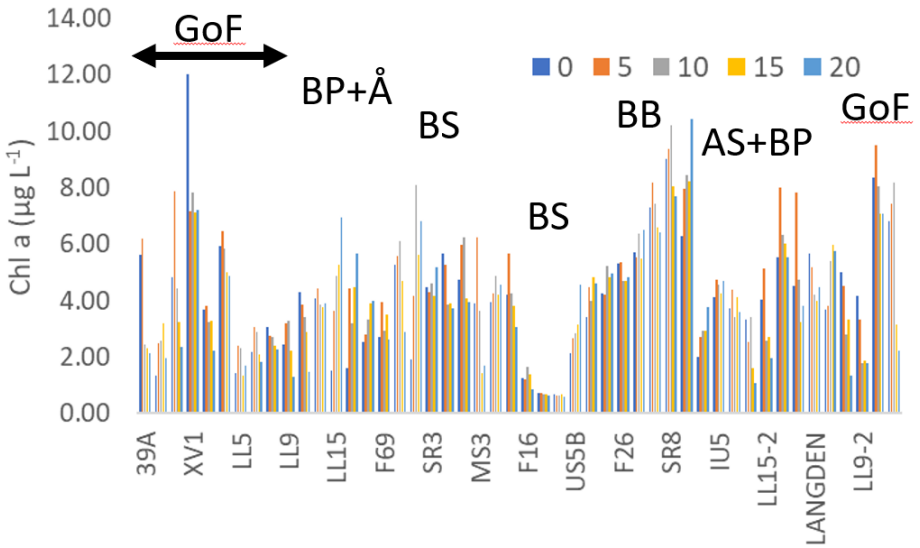

Fig 4. The preliminary Chlorophyll a (Chl a) concentration based on converted fluorescence measuremnets at 0, 5, 10, 15 and 20 m depths (color legend) in all the sampling stations in the order we took them (Fig 1, Annex 2). On top the sub-basin is indicated: Gulf of Finland (GoF), Baltic Proper and Åland Sea (BP+Å), Bothnian Sea (BS), Bothnian Bay (BB), and Archipelago Sea and Baltic Proper (AS+BP). Note that not all sampling station names are mentioned in the x-axis, see Annex 2 for the full list. Preliminary data.

We had a flow cytometer on board and the pico- and microphytoplankton abundance was clearly different in the different sub-basins (Fig 5). The stations in Bothnian Bay but also northern Baltic Proper had the lowest abundance, whereas the highest abundance of picophytoplantkton was found in the Bothnian Sea (Fig 5). The flowcytometer was also used to enumerate heterotrophic bacteria that had the highest abundance in the Archipelago Sea (Fig 6).

Fig 5. Abundance of pico-and nanophytoplankton in selected stations at 0, 5, 10, 15 and 20 m depth. Large here indicates cells 20-30 µm, nano size 2 – 20 µm and pico 0.2 – 2 µm in size. Chla indicate cells with primarily Chla fluorescence, whereas PC and PE represents cells with primarily phycocyanin and phycoerythrin fluorescence respectively. The x-axis is in cells mL^{-1}. Preliminary data provided by Lumi Haraguchi.

Fig 6. Counts of heterotrophic bacteria at selected stations at 0, 5, 10, 15 and 20 m depth. All abundances in cells mL^{-1}. Preliminary data provided by Lumi Haraguchi.

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Conclusions

In conclusion, we were sampling during and close to the peak of the spring bloom in the Gulf of Finland, Åland Sea, Archipelago Sea and Bothnian Sea. In the Northern Baltic Proper we were after the peak of the spring bloom, but the spring bloom peak is less pronounced here compared to the Gulf of Finland. In the Bothnian Bay there were still winter conditions with very little biological activity, but this sub basin is also characterized by phosphate limitation of primary producers and very much smaller peak of the spring bloom.

Temperature, salinity, and other hydrographical variables were as expected for the time of the year.

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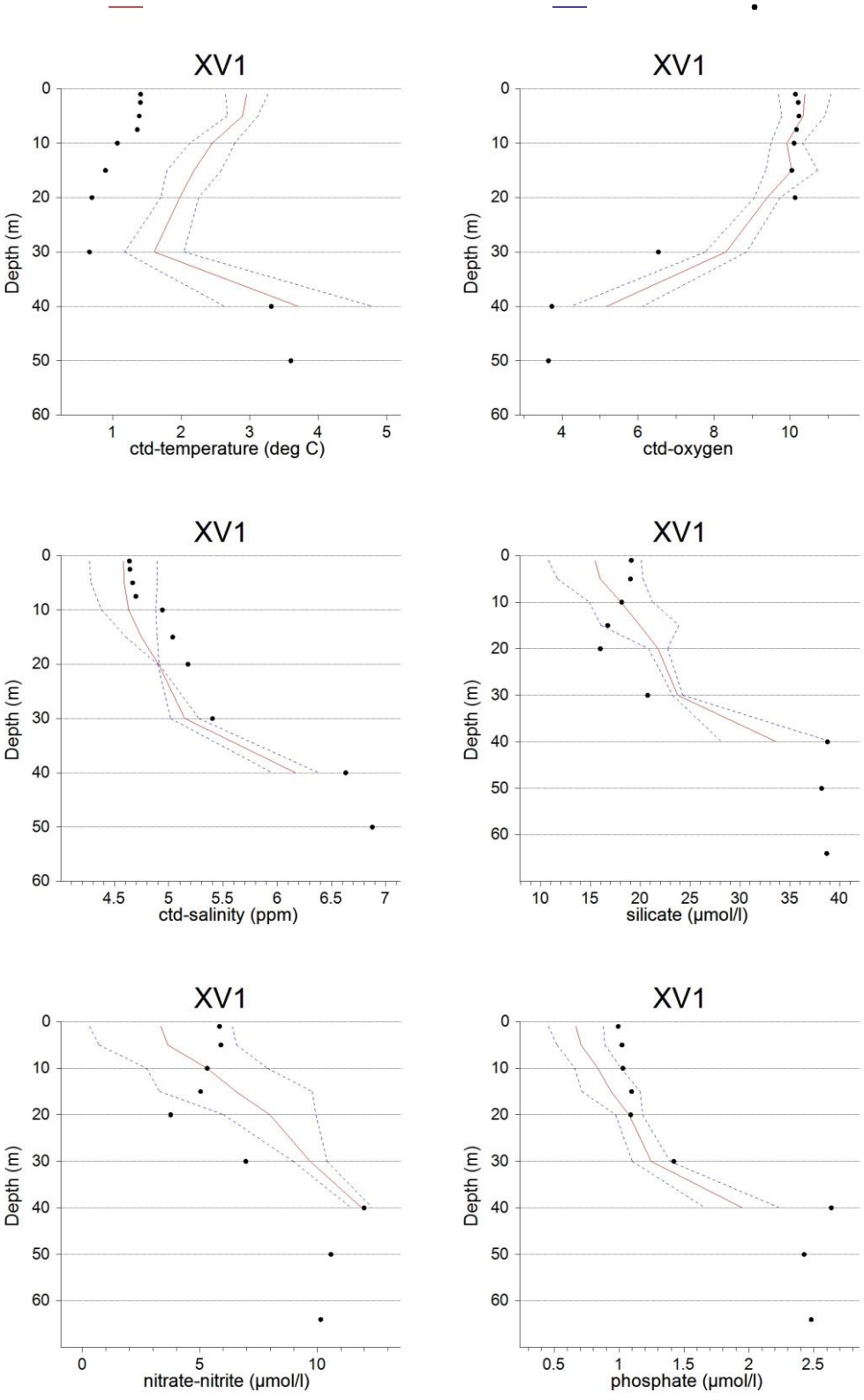
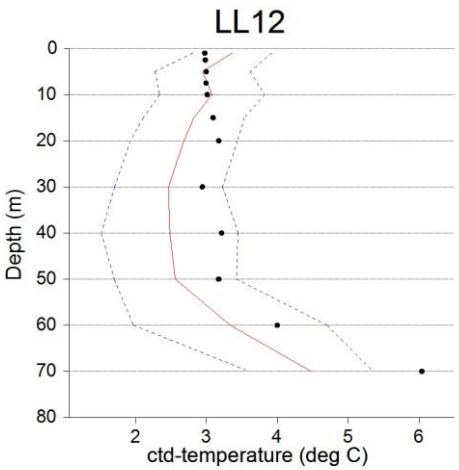
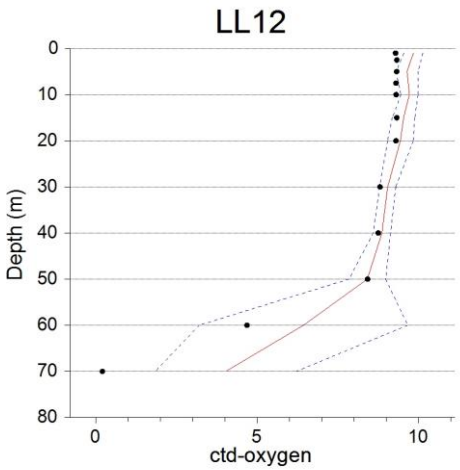
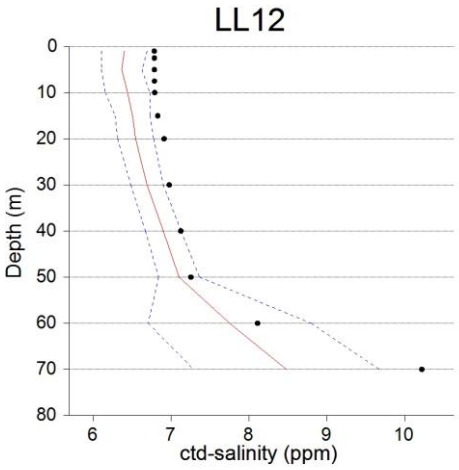
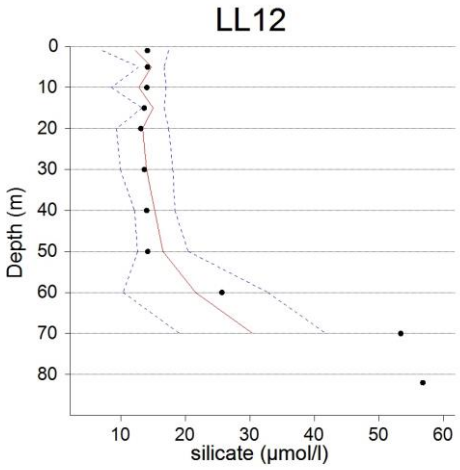
Annex 1. Selected variables at the stations XV1, LL12, LL17, F64, SR5, US5B and BO3. Mean (red solid line) and standard deviation (blue dotted lines) represent the data collected at the same time of season since the year 2000.

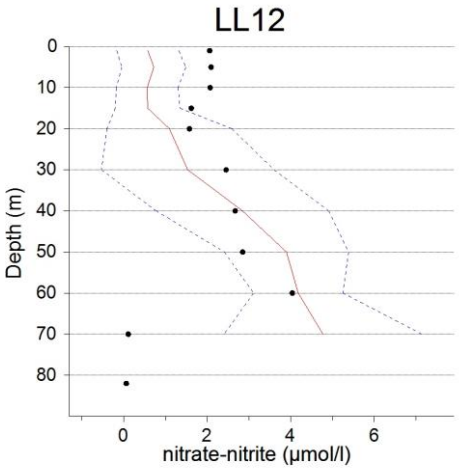


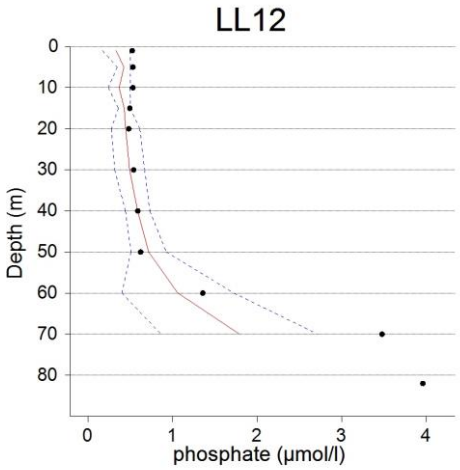

LL12
Depth (m)
0
10
20
30
40
50
60
70
80
2
3
4
5
6
ctd-temperature (deg C)

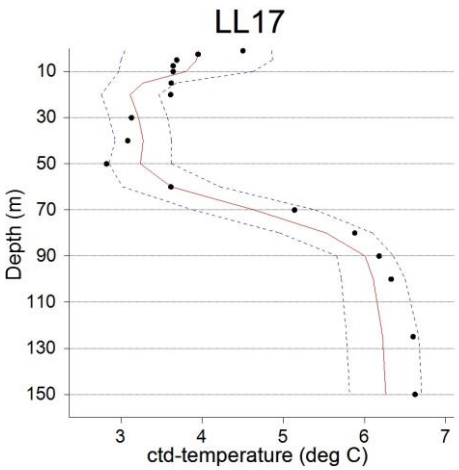

LL12
Depth (m)
0
10
20
30
40
50
60
70
80
0
5
10
ctd-oxygen

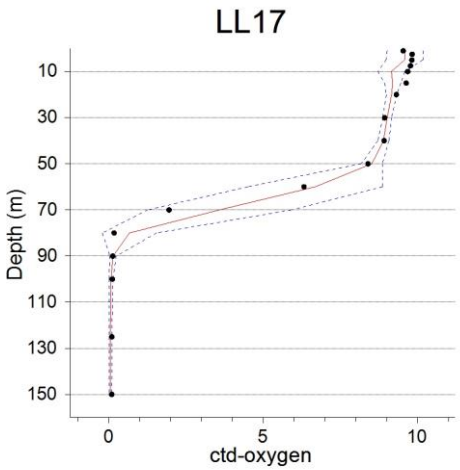

LL12
Depth (m)
0
10
20
30
40
50
60
70
80
6
7
8
9
10
ctd-salinity (ppm)

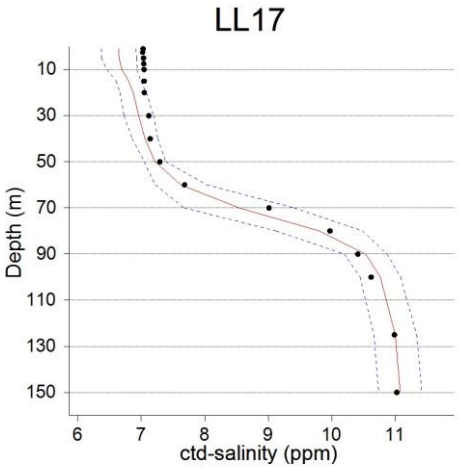

LL12
Depth (m)
0
10
20
30
40
50
60
70
80
10
20
30
40
50
60
silicate (µmol/l)

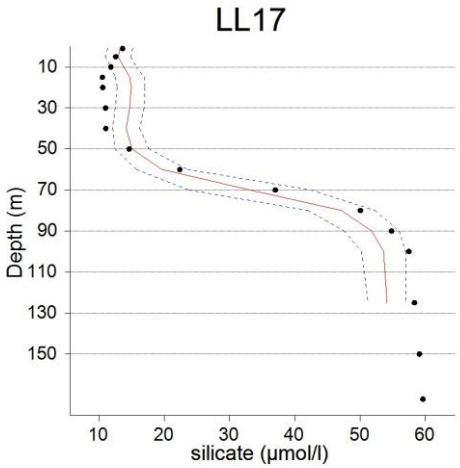

LL12
Depth (m)
0
10
20
30
40
50
60
70
80
0
2
4
6
nitrate-nitrite (µmol/l)

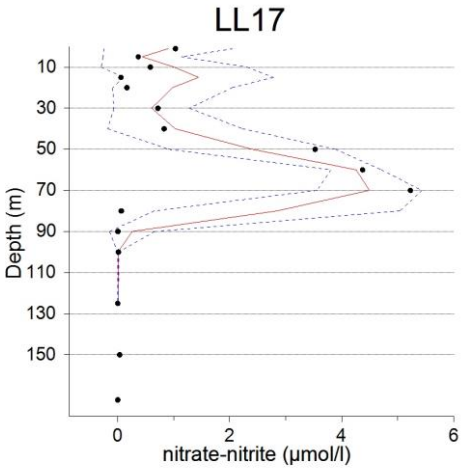

LL12
Depth (m)
0
10
20
30
40
50
60
70
80
0
1
2
3
4
phosphate (µmol/l)

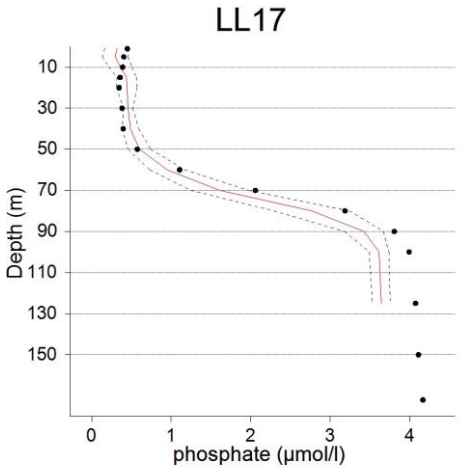

LL17
Depth (m)
10
30
50
70
90
110
130
150
3
4
5
6
7
ctd-temperature (deg C)

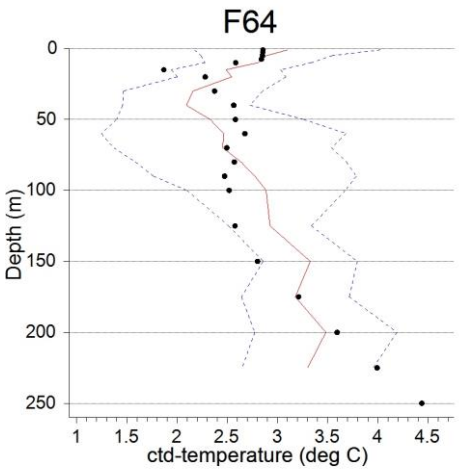

LL17
Depth (m)
10
30
50
70
90
110
130
150
0
5
10
ctd-oxygen

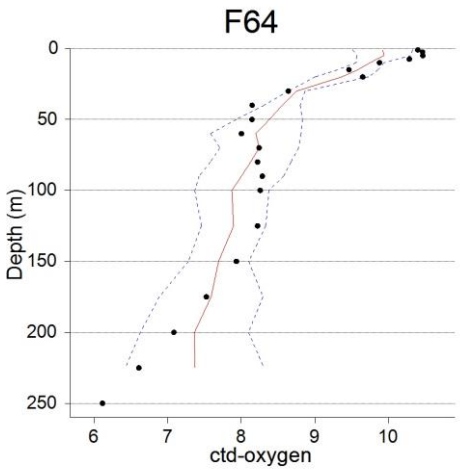

LL17
Depth (m)
10
30
50
70
90
110
130
150
6
7
8
9
10
11
ctd-salinity (ppm)

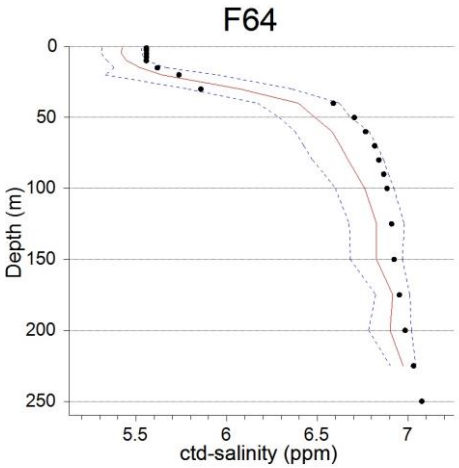

LL17
Depth (m)
10
30
50
70
90
110
130
150
10
20
30
40
50
60
silicate (µmol/l)

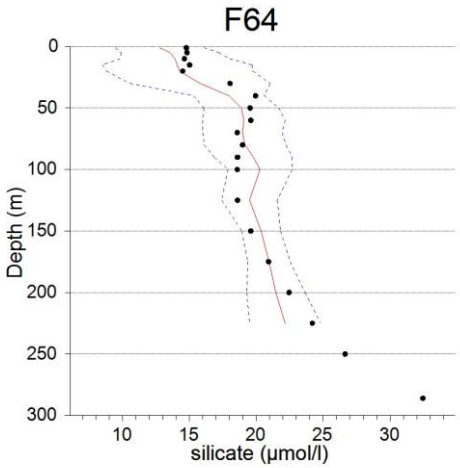

LL17
Depth (m)
10
30
50
70
90
110
130
150
0
2
4
6
nitrate-nitrite (µmol/l)

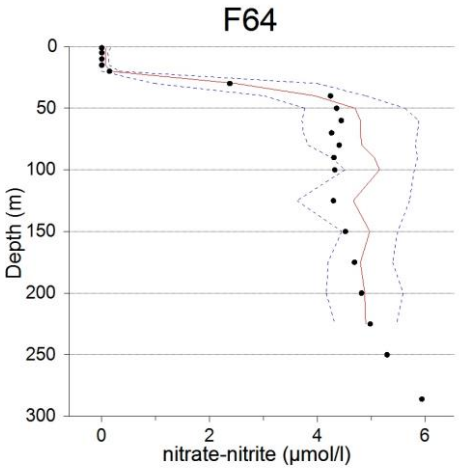

LL17
Depth (m)
10
30
50
70
90
110
130
150
0
1
2
3
4
phosphate (µmol/l)

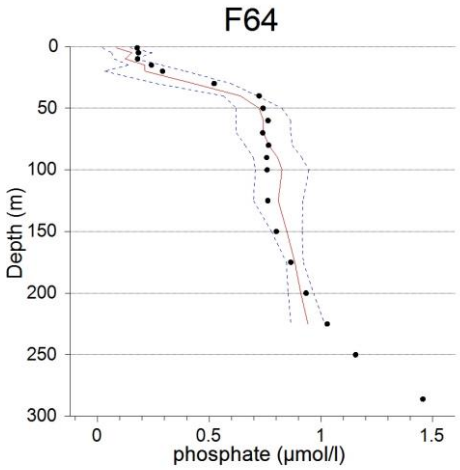

F64
Depth (m)
0
50
100
150
200
250
1
1.5
2
2.5
3
3.5
4
4.5
ctd-temperature (deg C)

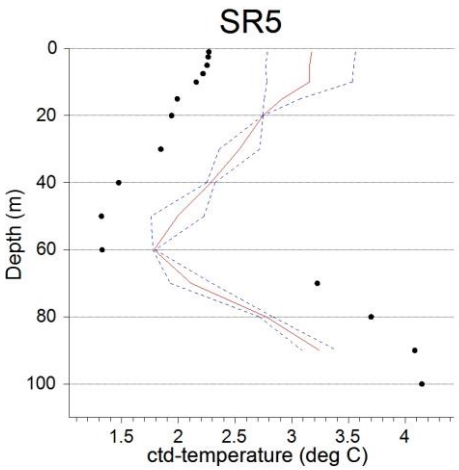

F64
Depth (m)
0
50
100
150
200
250
6
7
8
9
10
ctd-oxygen

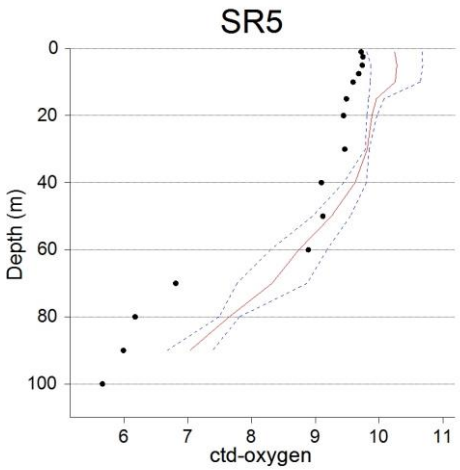

F64
Depth (m)
0
50
100
150
200
250
5.5
6
6.5
7
ctd-salinity (ppm)

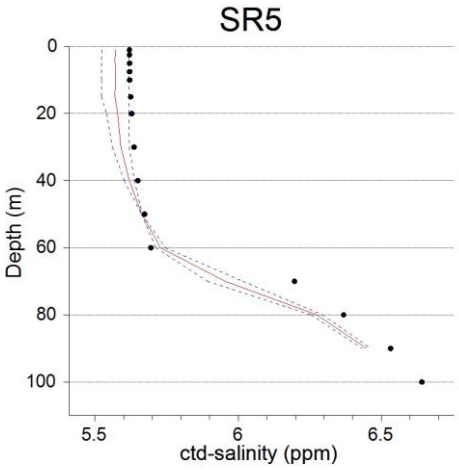

F64
Depth (m)
0
50
100
150
200
250
300
10
15
20
25
30
silicate (µmol/l)

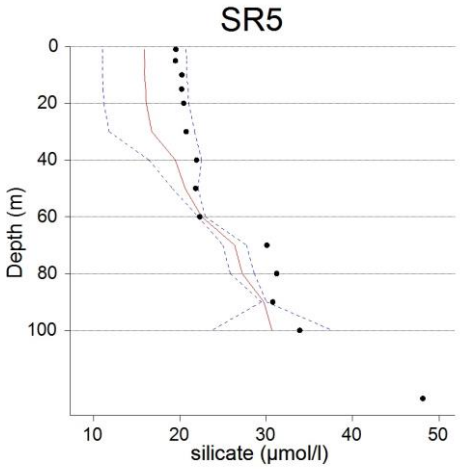

F64
Depth (m)
0
50
100
150
200
250
300
0
2
4
6
nitrate-nitrite (µmol/l)

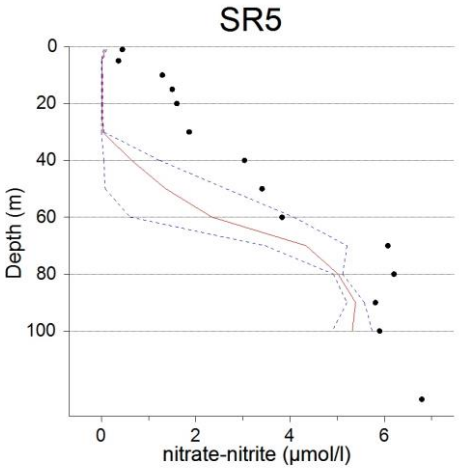

F64
Depth (m)
0
50
100
150
200
250
300
0
0.5
1
1.5
phosphate (µmol/l)

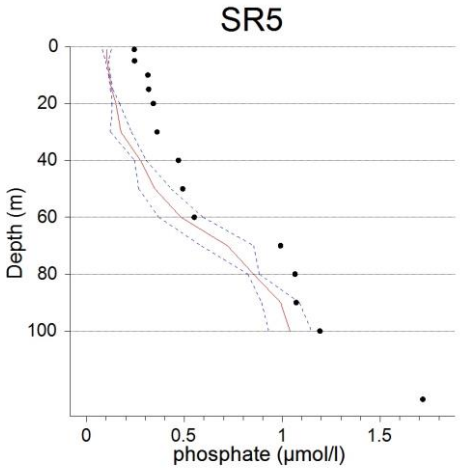

SR5
Depth (m)
0
20
40
60
80
100
1.5
2
2.5
3
3.5
4
ctd-temperature (deg C)

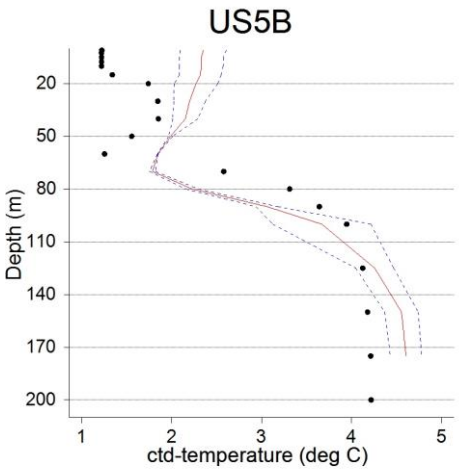

SR5
Depth (m)
0
20
40
60
80
100
6
7
8
9
10
11
ctd-oxygen

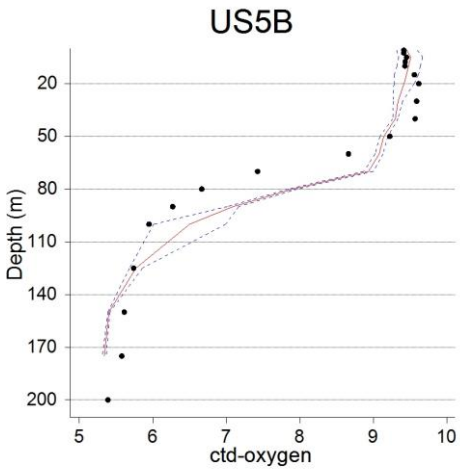

SR5
Depth (m)
0
20
40
60
80
100
5.5
6
6.5
ctd-salinity (ppm)

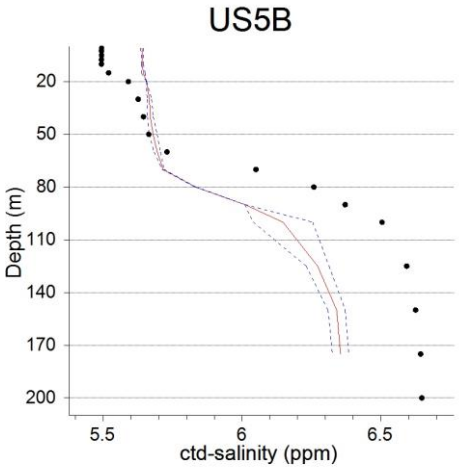

SR5
Depth (m)
0
20
40
60
80
100
10
20
30
40
50
silicate (µmol/l)

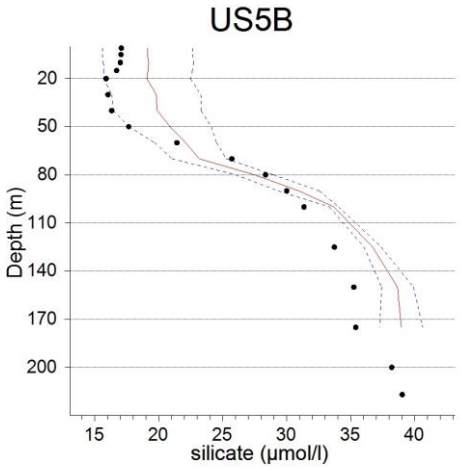

SR5
Depth (m)
0
20
40
60
80
100
0
2
4
6
nitrate-nitrite (µmol/l)

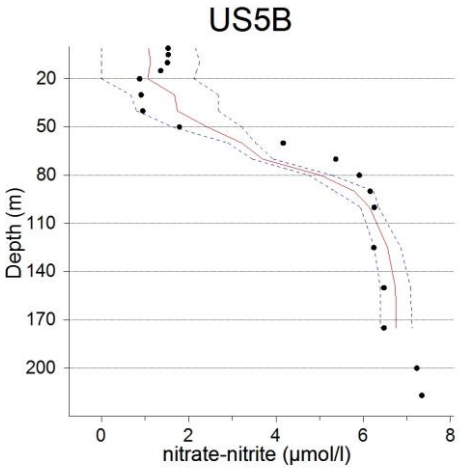

SR5
Depth (m)
0
20
40
60
80
100
0
0.5
1
1.5
phosphate (µmol/l)

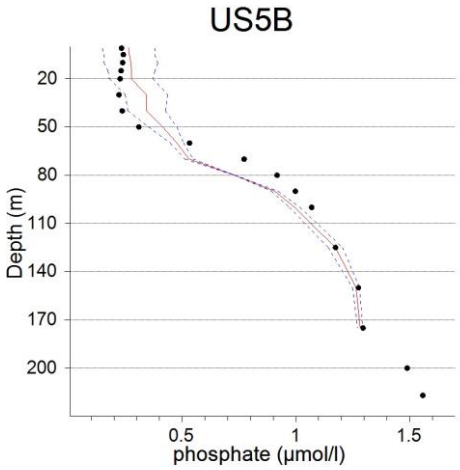

US5B
Depth (m)
20
50
80
110
140
170
200
1
2
3
4
5
ctd-temperature (deg C)

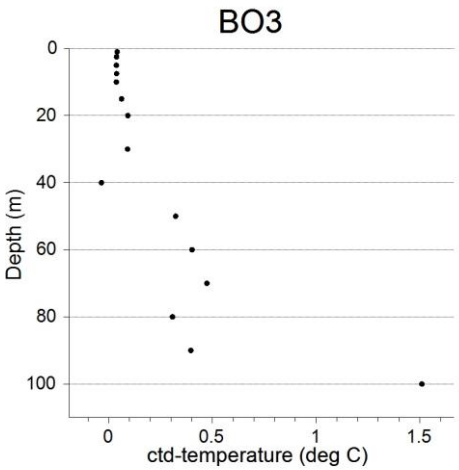

US5B
Depth (m)
20
50
80
110
140
170
200
5
6
7
8
9
10
ctd-oxygen

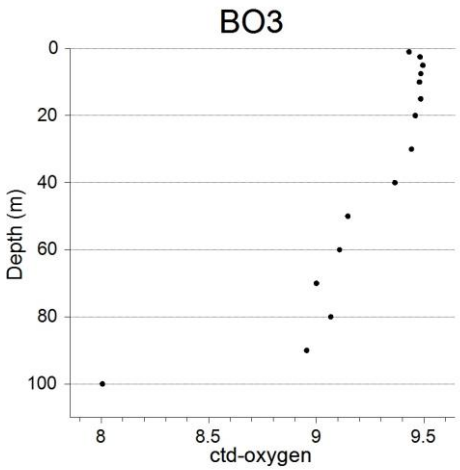

US5B
Depth (m)
20
50
80
110
140
170
200
5.5
6
6.5
ctd-salinity (ppm)

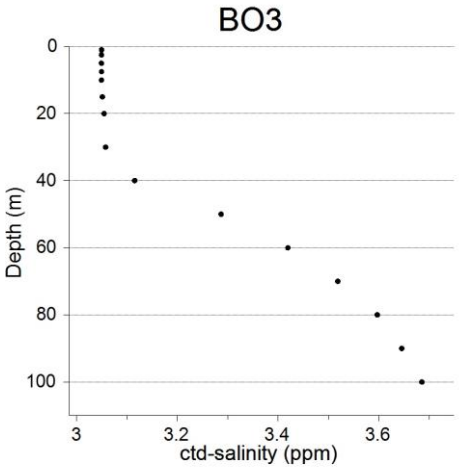

US5B
Depth (m)
20
50
80
110
140
170
200
15
20
25
30
35
40
silicate (µmol/l)

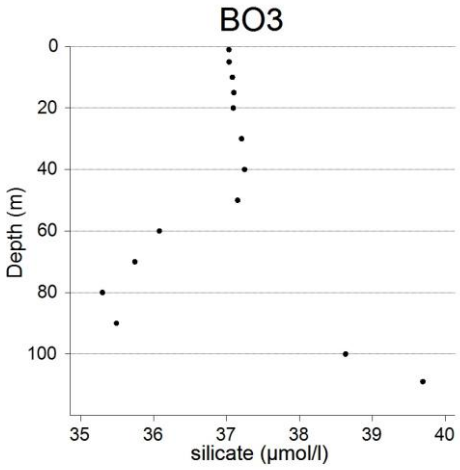

US5B
Depth (m)
20
50
80
110
140
170
200
0
2
4
6
8
nitrate-nitrite (µmol/l)

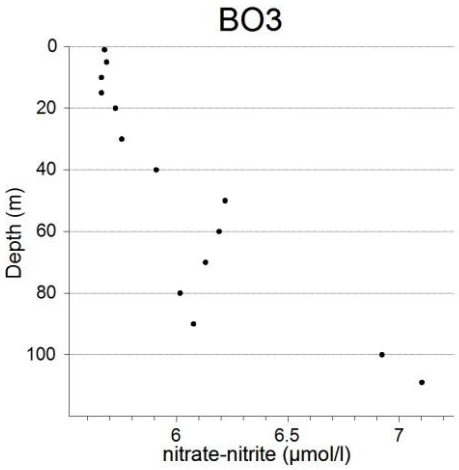

US5B
Depth (m)
20
50
80
110
140
170
200
0.5
1
1.5
phosphate (µmol/l)

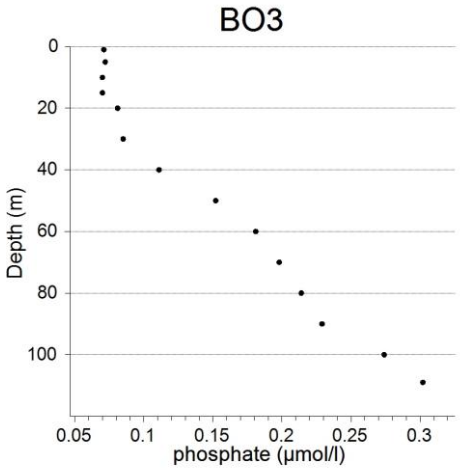

BO3
Depth (m)
0
20
40
60
80
100
0
0.5
1
1.5
ctd-temperature (deg C)


BO3
Depth (m)
0
20
40
60
80
100
8
8.5
9
9.5
ctd-oxygen


BO3
Depth (m)
0
20
40
60
80
100
3
3.2
3.4
3.6
ctd-salinity (ppm)


BO3
Depth (m)
0
20
40
60
80
100
35
36
37
38
39
40
silicate (µmol/l)


BO3
Depth (m)
0
20
40
60
80
100
6
6.5
7
nitrate-nitrite (µmol/l)

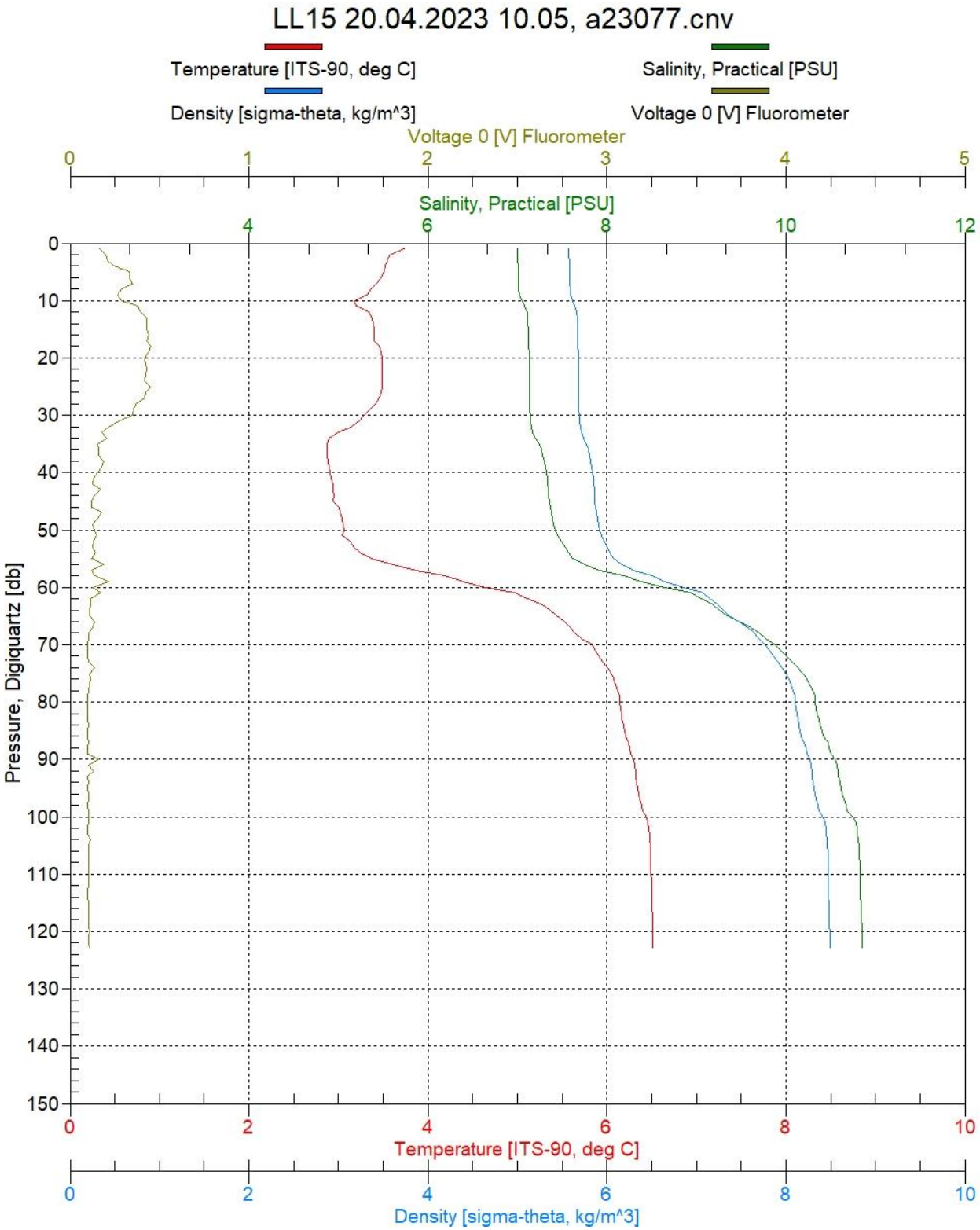

BO3
Depth (m)
0
20
40
60
80
100
0.05
0.1
0.15
0.2
0.25
0.3
phosphate (µmol/l)

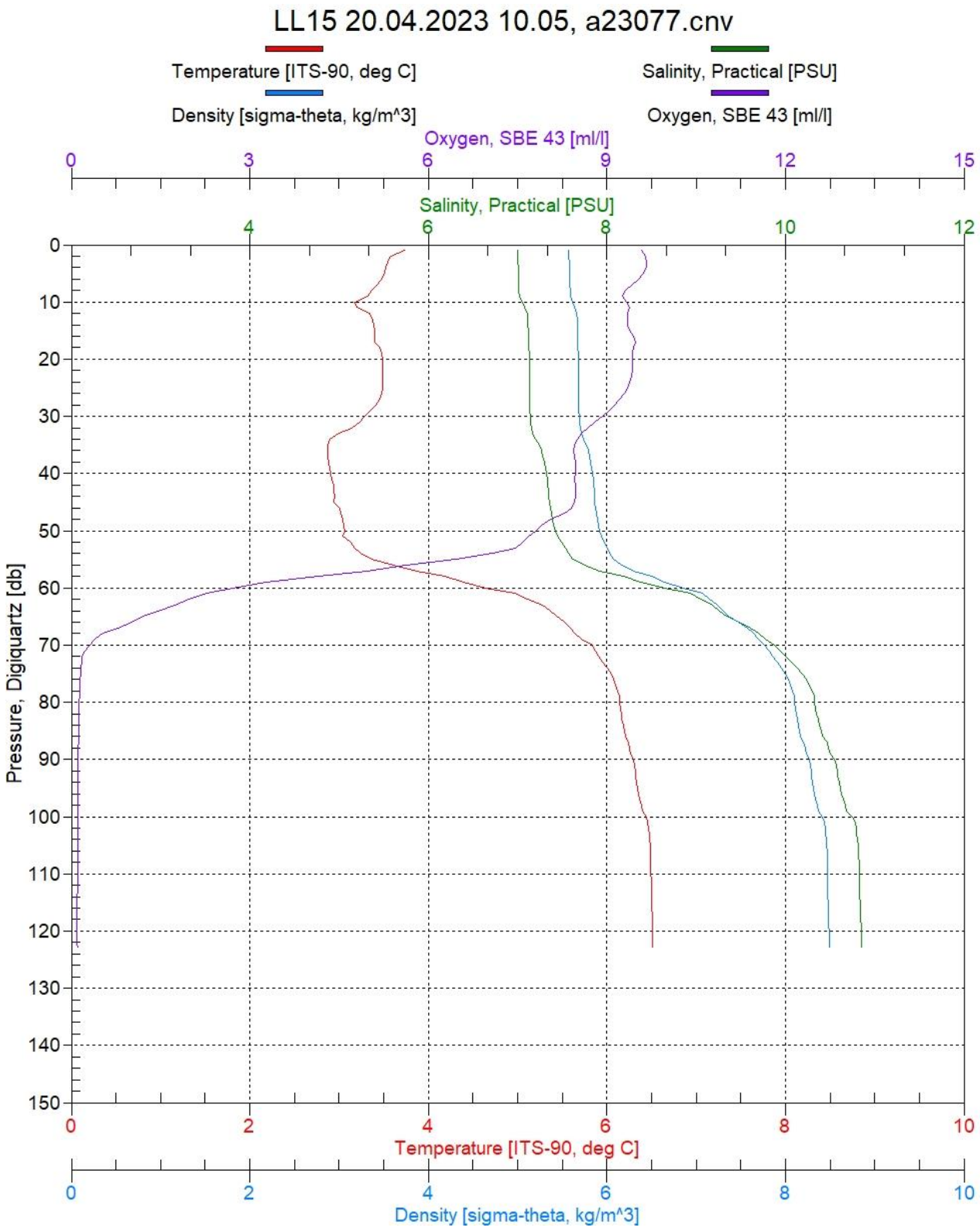
Annex 2. List of sampled stations of the cruise

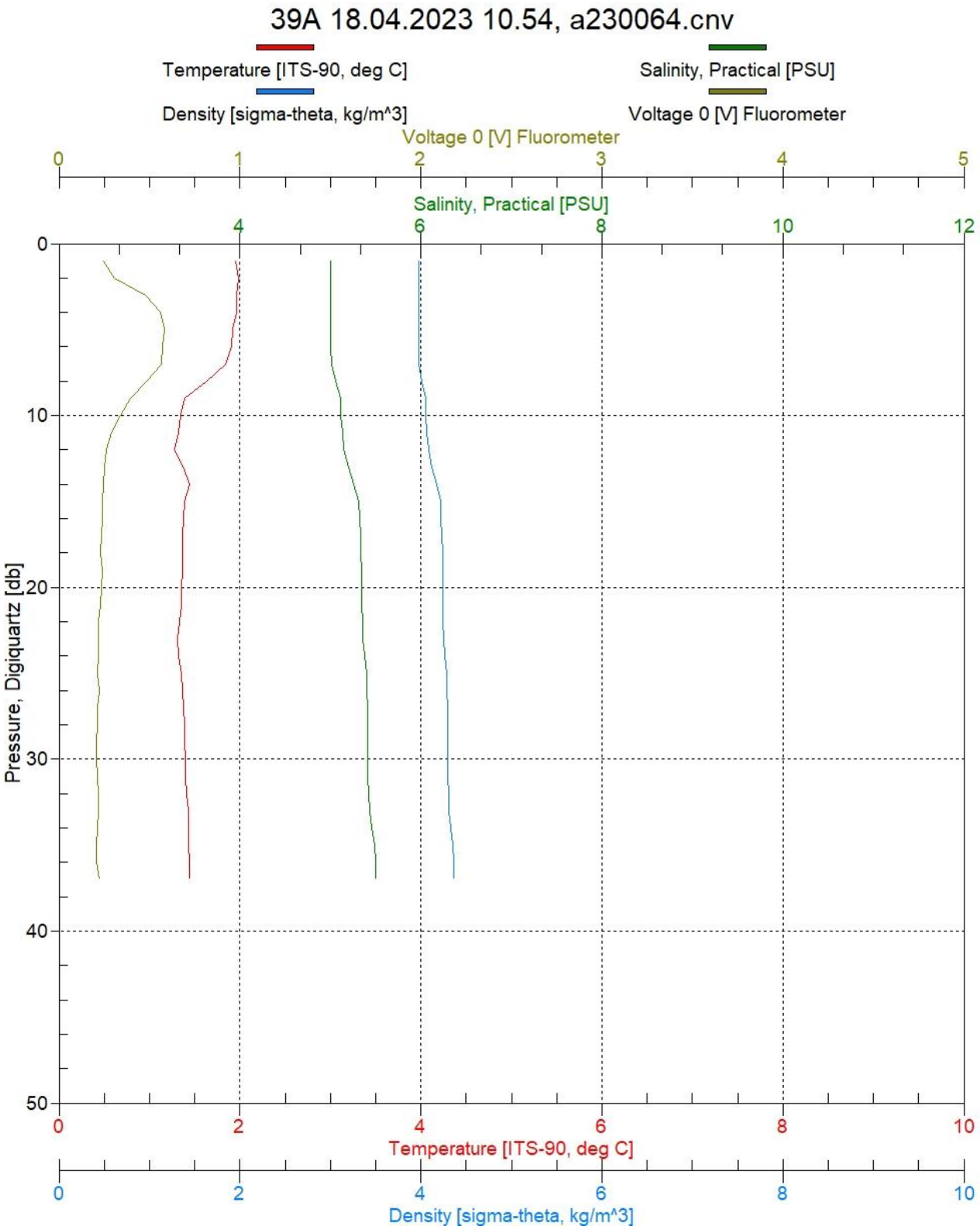
INDEX	STATION	latitude	longitude	depth	DATE	time	ctd	pH	ox	nu	ph	zo	be	chl	oil	tox	secchi
HELSINKI	HELSINKI	60.16182	24.90155		2023-04-18	08:14											
2023010063	AALTO_STADI	60.12362	24.97333	0	2023-04-18	09:05											
2023010064	39A	60.06683	24.98013	42	2023-04-18	11:10	x	x	x	x				x			x
2023010065	LL7D	59.84642	24.83795	103	2023-04-18	13:47	x	x	x	x	x			x			x
2023010066	AALTO_HKI	59.96517	25.23545	71	2023-04-18	16:52											
2023010067	XIV3	60.20313	26.19268	75	2023-04-18	21:24	x	x	x	x				x			
2023010068	XV1	60.25012	27.24728	65	2023-04-19	02:02	x	x	x	x	x			x			x
2023010069	LL3A	60.06717	26.34663	68	2023-04-19	06:23	x	x	x	x	x			x			x
2023010070	GF2	59.83862	25.85700	85	2023-04-19	10:00	x	x	x	x				x			x
2023010071	LL5	59.91688	25.59705	70	2023-04-19	12:17	x	x	x	x				x			x
2023010072	LL6A	59.91683	25.03022	73	2023-04-19	15:09	x	x	x	x				x			
2023010073	GF1	59.70498	24.68202	84	2023-04-19	18:04	x	x	x	x	x			x			
2023010074	LL9	59.70017	24.03000	66	2023-04-19	21:39	x	x	x	x	x			x			
2023010075	F62	59.33350	23.26350	97	2023-04-20	02:03	x	x	x	x				x			
2023010076	LL12	59.48357	22.89687	83	2023-04-20	04:52	x	x	x	x	x			x			x
2023010077	LL15	59.18337	21.74673	131	2023-04-20	10:17	x	x	x	x				x			x
2023010078	LL17	59.03337	21.07958	173	2023-04-20	14:00	x	x	x	x	x			x			x
2023010079	LL19	58.88062	20.31078	166	2023-04-20	18:52	x	x	x	x				x			
2023010080	F69	59.78337	19.93003	191	2023-04-21	02:16	x	x	x	x				x			
2023010081	F64	60.18897	19.14250	287	2023-04-21	15:18	x	x	x	x	x			x			x
2023010082	F33	60.53315	18.93740	133	2023-04-21	20:13	x	x	x	x				x			
2023010083	SR3	61.18333	18.23003	73	2023-04-22	01:55	x	x	x	x				x			
2023010084	SR5	61.08332	19.57967	125	2023-04-22	06:56	x	x	x	x	x			x			x
2023010085	MS6	61.99570	19.16337	76	2023-04-22	13:42	x	x	x	x				x			x
2023010086	MS3	62.13455	18.16318	88	2023-04-22	18:01	x	x	x	x				x			
2023010087	US3	62.75887	19.19567	176	2023-04-23	00:27	x	x	x	x				x			
2023010088	F18	63.31433	20.27263	102	2023-04-23	06:29	x	x	x	x				x			x
2023010089	F16	63.51877	21.06593	48	2023-04-23	10:22	x	x	x	x	x			x			x
2023010090	F13	63.78410	21.48072	64	2023-04-23	13:29	x	x	x	x				x			x
2023010091	BO3	64.30228	22.33290	110	2023-04-23	18:33	x	x	x	x	x			x			
2023010092	US5B	62.58615	19.96878	218	2023-04-24	07:29	x	x	x	x	x			x			x
2023010093	US6B	62.60022	20.26307	81	2023-04-24	11:09	x	x	x	x				x			x
2023010094	US7	62.60018	20.82965	28	2023-04-24	13:46	x	x	x	x				x			x
2023010095	F26	61.98352	20.06305	137	2023-04-24	18:48	x	x	x	x				x			
2023010096	AALTO_SM	61.80125	20.23252	111	2023-04-24	21:24											
2023010097	MS9	61.76685	20.53062	101	2023-04-24	23:32	x	x	x	x				x			
2023010098	SR7	61.08355	20.59665	78	2023-04-25	05:19	x	x	x	x				x			
2023010099	SR8	61.12648	20.92995	47	2023-04-25	07:25	x	x	x	x				x			x
2023010100	IU1	60.76685	20.84667	33	2023-04-25	10:48	x	x	x	x				x			x
UUSIKAUP1	UUSIKAUP1	60.79543	21.37987		2023-04-25	13:36											
2023010101	IU3	60.33335	21.11335	48	2023-04-25	20:55	x	x	x	x		x		x			
2023010102	IU5	60.05818	21.19832	90	2023-04-26	01:18	x	x	x	x				x			
2023010103	IU6	59.93687	21.22097	118	2023-04-26	03:44	x	x	x	x		x		x			
2023010104	IU7	59.81518	21.33667	92	2023-04-26	06:37	x	x	x	x	x			x			x
2023010105	UTO_PROF	59.75627	21.36808	78	2023-04-26	12:22	x		x								
2023010106	UTO_V	59.74023	21.37642	74	2023-04-26	13:04											
2023010107	TPDEEP1	59.37835	21.44117	209	2023-04-26	17:29	x	x	x	x							x
2023010108	TPDEEP1	59.37835	21.44115	209	2023-04-26	18:49	x	x	x								
2023010109	TPDEEP1	59.37837	21.44117	209	2023-04-26	22:48	x	x	x								
2023010110	TPDEEP1	59.37838	21.44115	218	2023-04-27	01:27	x										
2023010111	LL15	59.18330	21.74690	131	2023-04-27	04:07	x	x	x	x				x			
2023010112	LL11	59.58352	23.29688	67	2023-04-27	10:39	x	x	x	x				x			x
2023010113	AMN	59.69050	23.25720	55	2023-04-27	12:42	x	x	x	x				x			x
2023010114	LANGDEN	59.77683	23.26283	57	2023-04-27	14:30	x	x	x	x	x			x			x
2023010115	STORFJARDEN	59.85608	23.26317	35	2023-04-27	16:28	x	x	x	x				x			x
2023010116	JML	59.58183	23.62680	80	2023-04-27	19:37	x	x	x	x				x			
2023010117	LL9	59.70015	24.03022	69	2023-04-27	22:05	x	x	x	x	x			x			
2023010118	XII3	59.86415	23.98560	38	2023-04-28	00:14	x	x	x	x				x			
2023010119	LL7S	59.85012	24.83005	77	2023-04-28	03:42	x	x	x	x	x			x			x
HELSINKI	HELSINKI	60.16182	24.90155		2023-04-28	09:00											

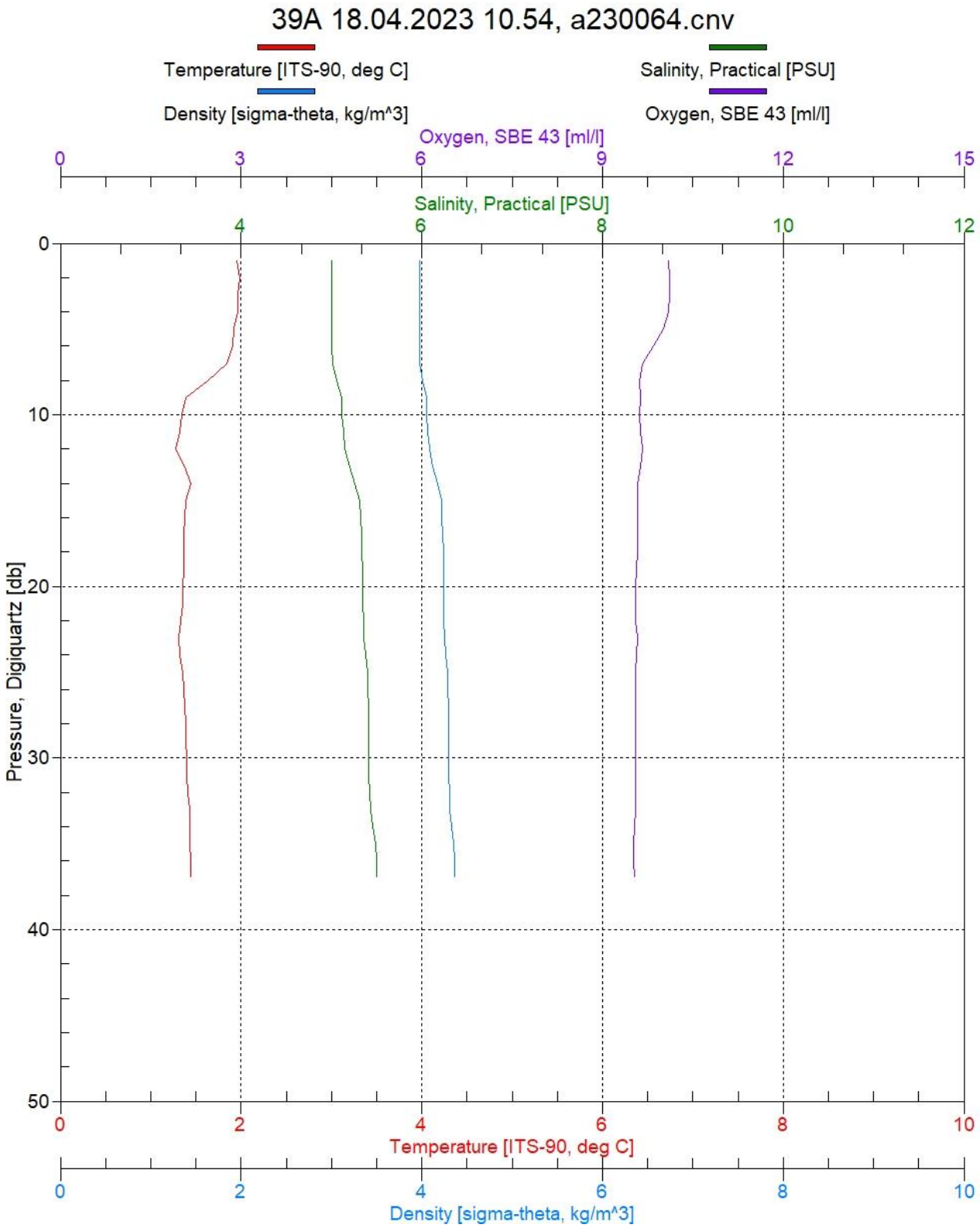
Parameters: ox = oxygen, nu = nutrients, ph = phytoplankton, zo = zooplankton, be = benthos, chl = chlorophyll a, oil = dissolved oil, tox = phytotoxins.

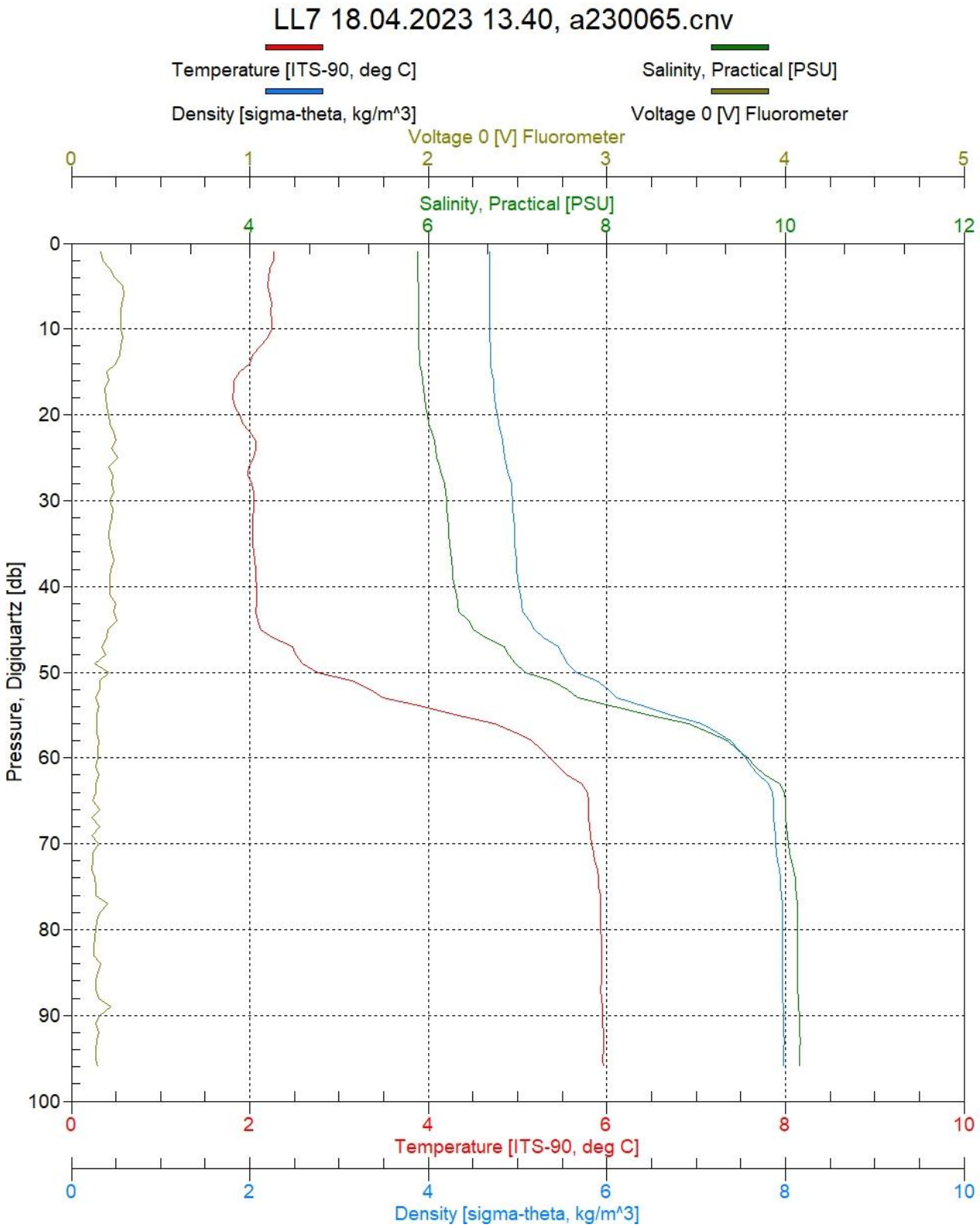
Annex 3. CTD profiles from all stations

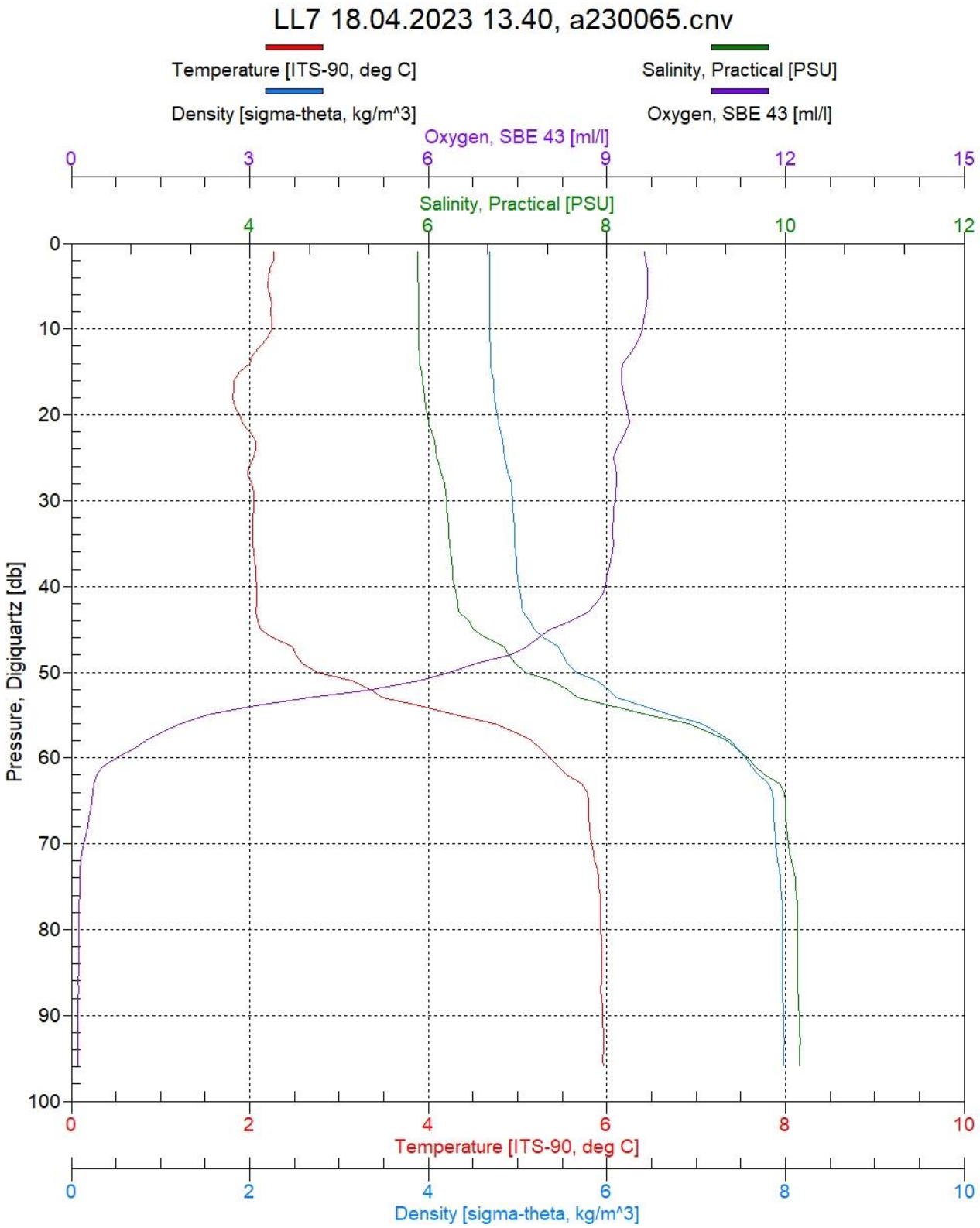


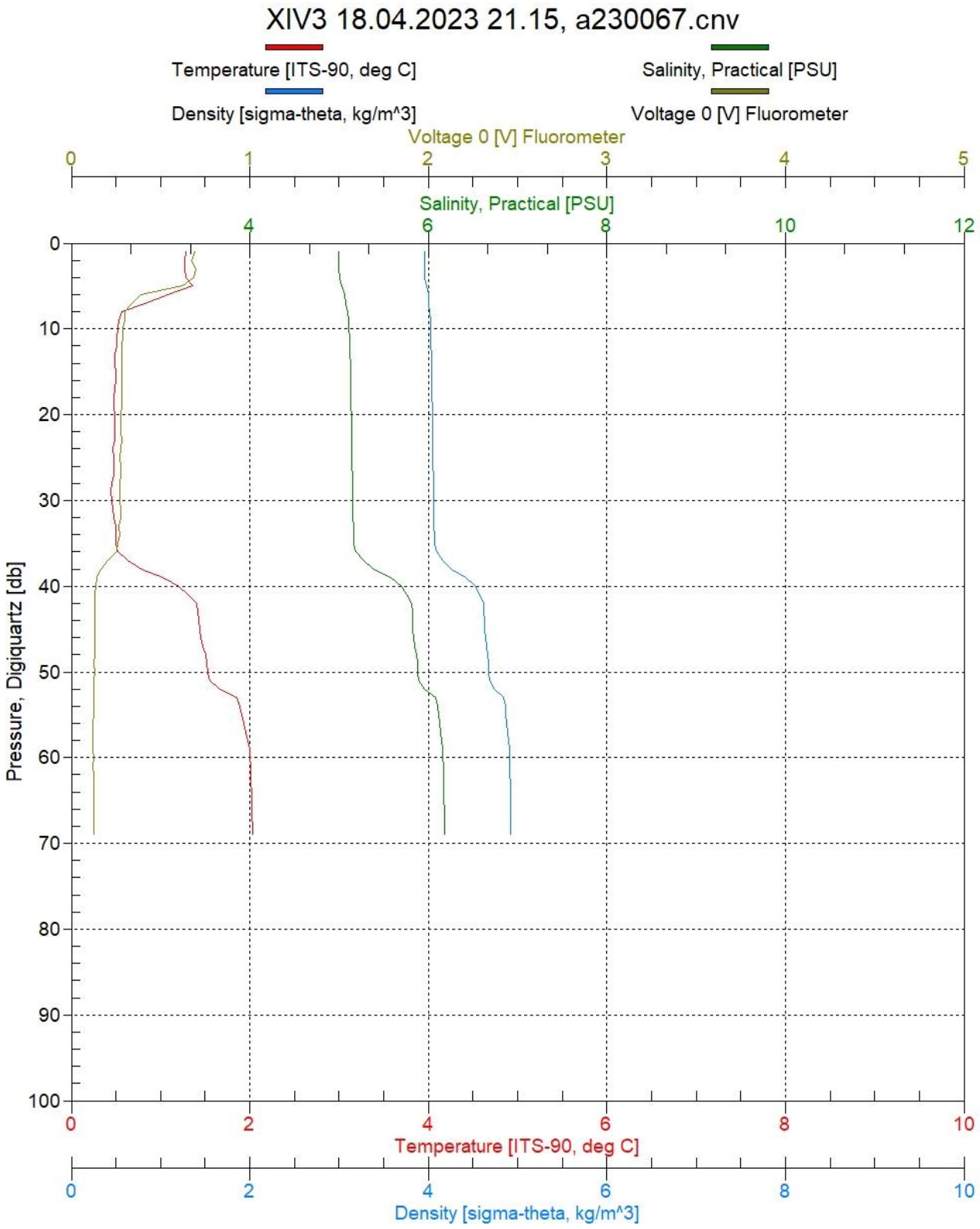

LL15 20.04.2023 10.05, a23077.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Oxygen, SBE 43 [ml/l]
Oxygen, SBE 43 [ml/l]
0 3 6 9 12 15
Salinity, Practical [PSU]
4 6 8 10 12
Pressure, Digiquartz [db]
0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150
0 2 4 6 8 10
Temperature [ITS-90, deg C]
0 2 4 6 8 10
Density [sigma-theta, kg/m^3]

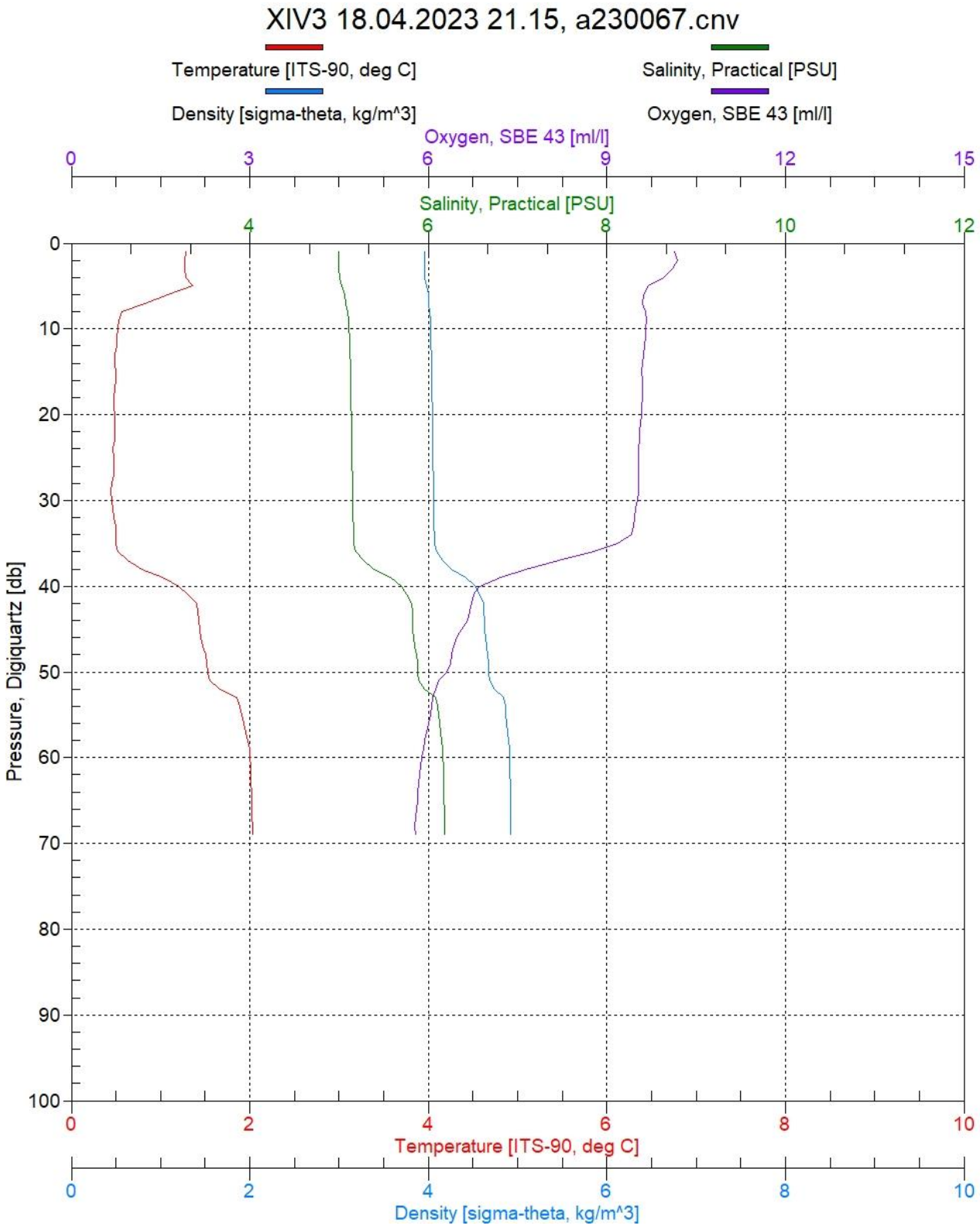

39A 18.04.2023 10.54, a230064.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Voltage 0 [V] Fluorometer
Voltage 0 [V] Fluorometer
0
1
2
3
4
5
Salinity, Practical [PSU]
4
6
8
10
12
Pressure, Digiquartz [db]
0
10
20
30
40
50
0
2
4
6
8
10
Temperature [ITS-90, deg C]
0
2
4
6
8
10
Density [sigma-theta, kg/m^3]

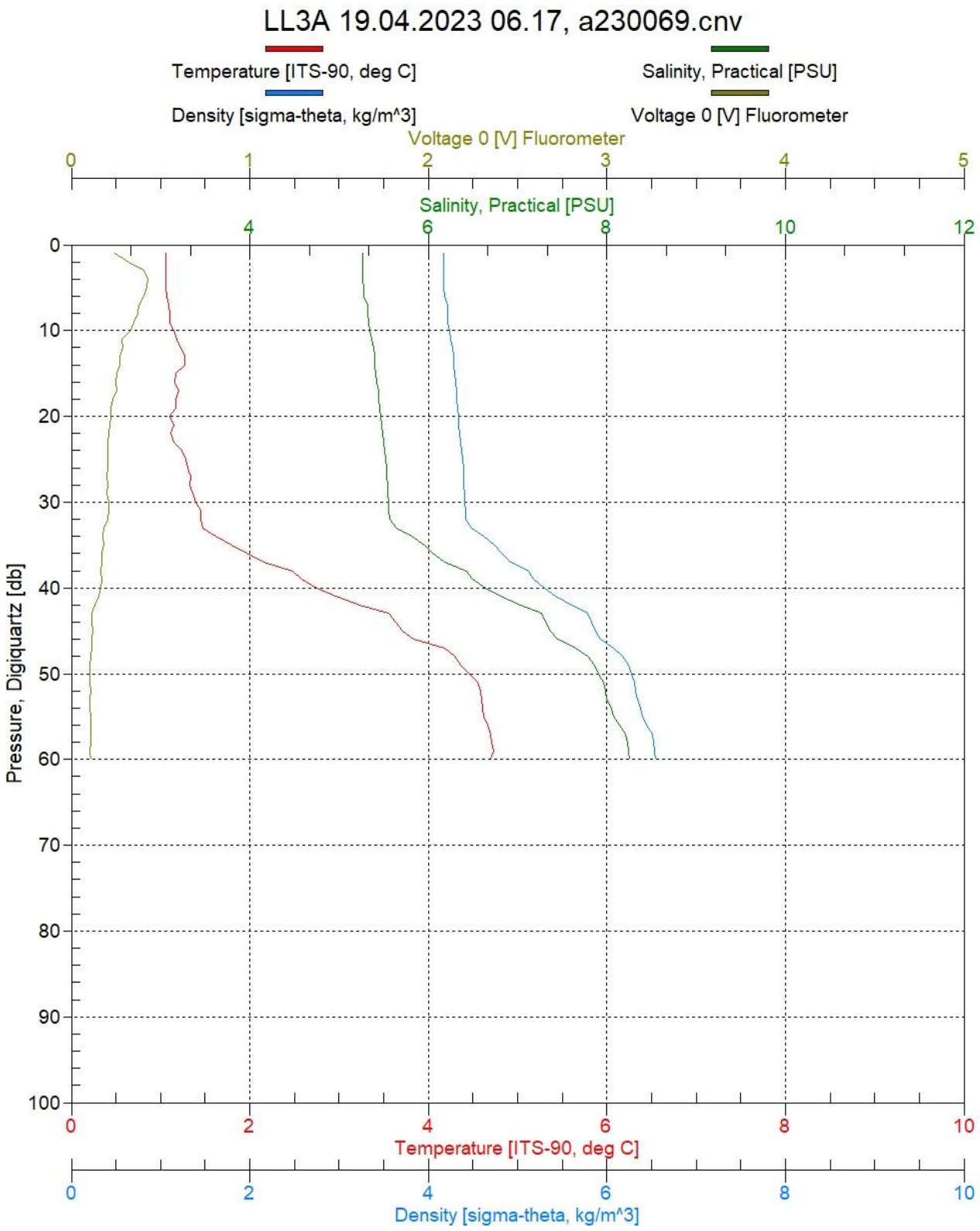

39A 18.04.2023 10.54, a230064.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Oxygen, SBE 43 [ml/l]
Oxygen, SBE 43 [ml/l]
0
3
6
9
12
15
Salinity, Practical [PSU]
4
6
8
10
12
0
10
20
30
40
50
Pressure, Digiquartz [db]
0
2
4
6
8
10
Temperature [ITS-90, deg C]
0
2
4
6
8
10
Density [sigma-theta, kg/m^3]

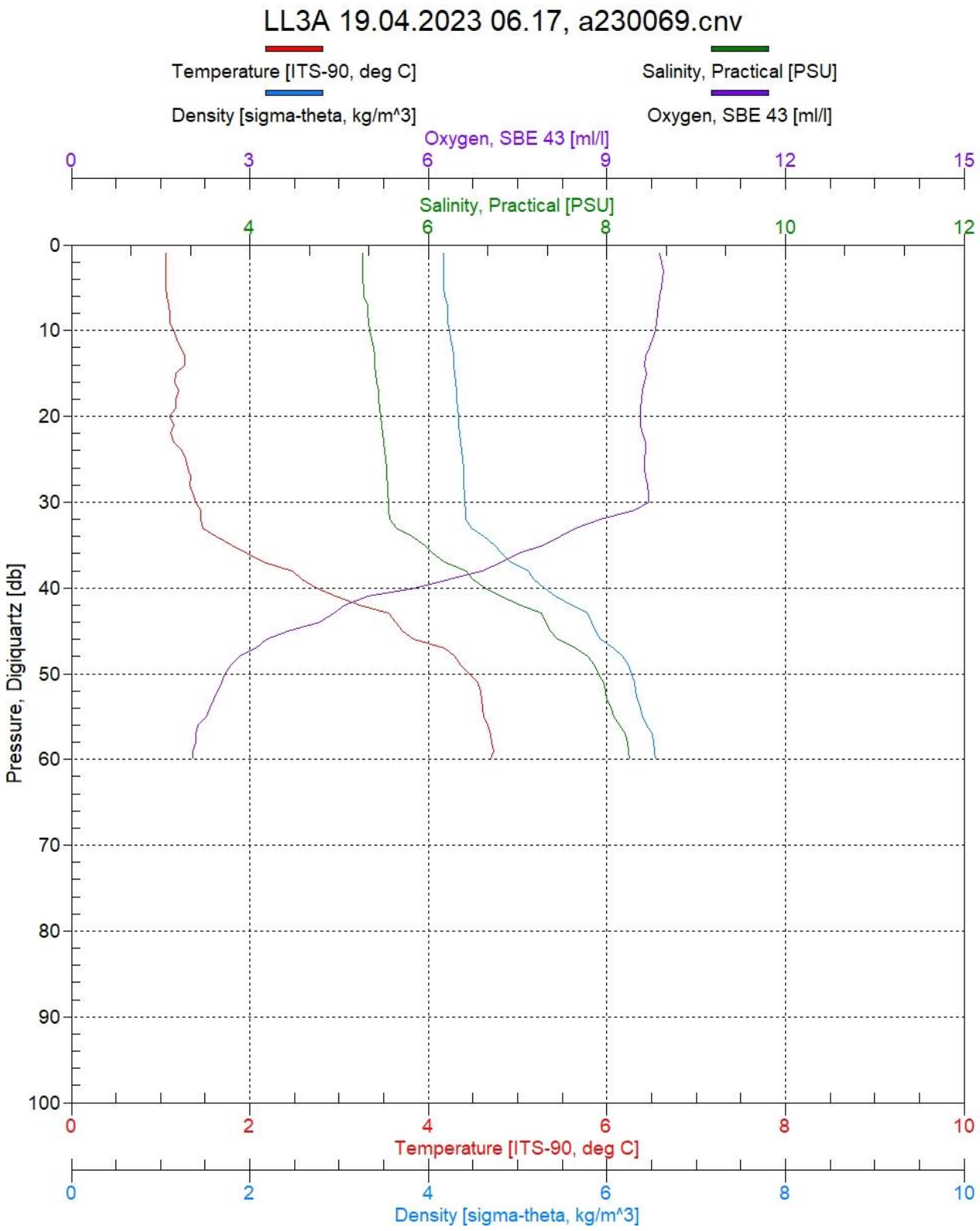

LL7 18.04.2023 13.40, a230065.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Voltage 0 [V] Fluorometer
Voltage 0 [V] Fluorometer
Salinity, Practical [PSU]
Pressure, Digiquartz [db]
Temperature [ITS-90, deg C]
Density [sigma-theta, kg/m^3]

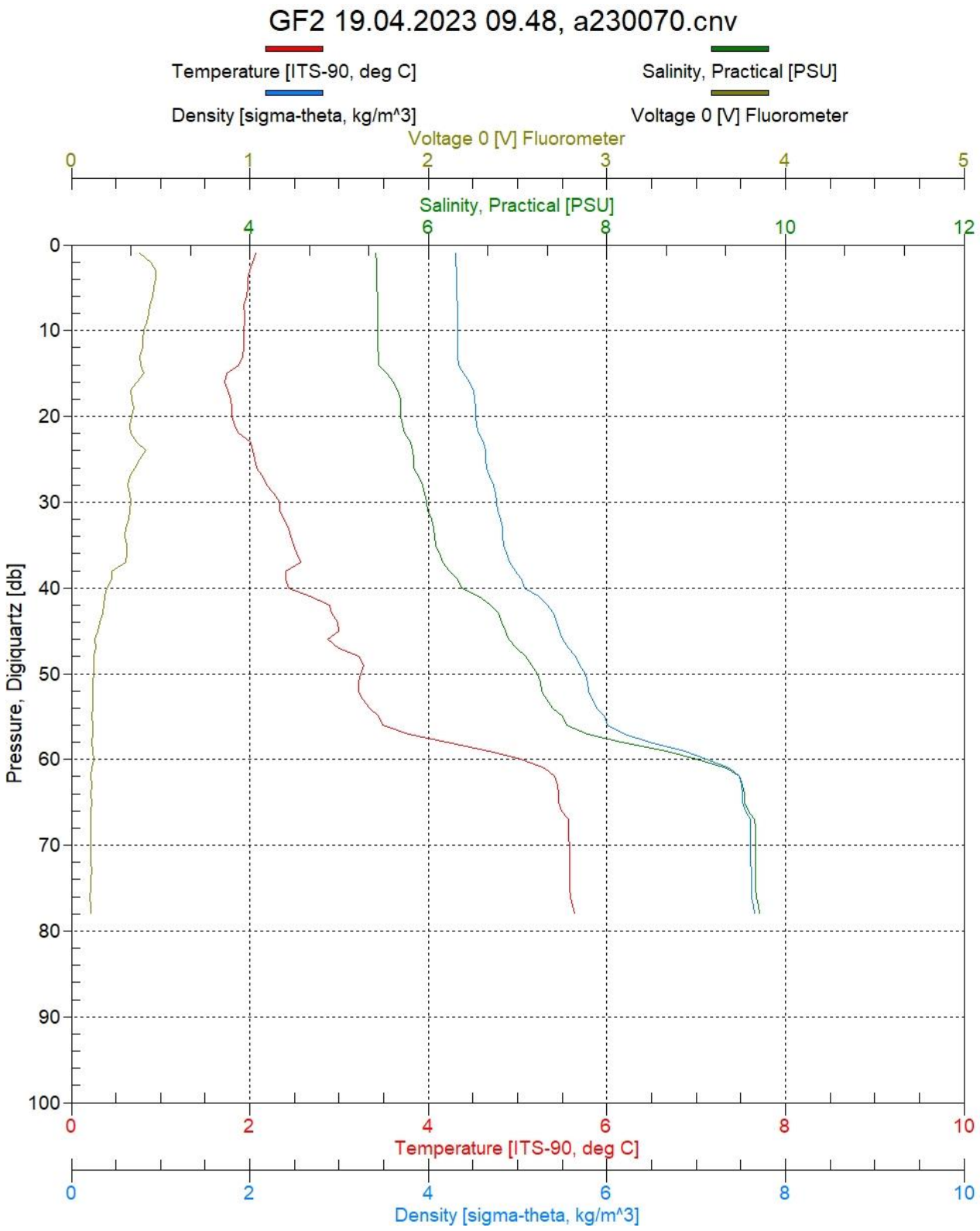

LL7 18.04.2023 13.40, a230065.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Oxygen, SBE 43 [ml/l]
Oxygen, SBE 43 [ml/l]
0 3 6 9 12 15
Salinity, Practical [PSU]
4 6 8 10 12
Pressure, Digiquartz [db]
0 10 20 30 40 50 60 70 80 90 100
0 2 4 6 8 10
Temperature [ITS-90, deg C]
0 2 4 6 8 10
Density [sigma-theta, kg/m^3]

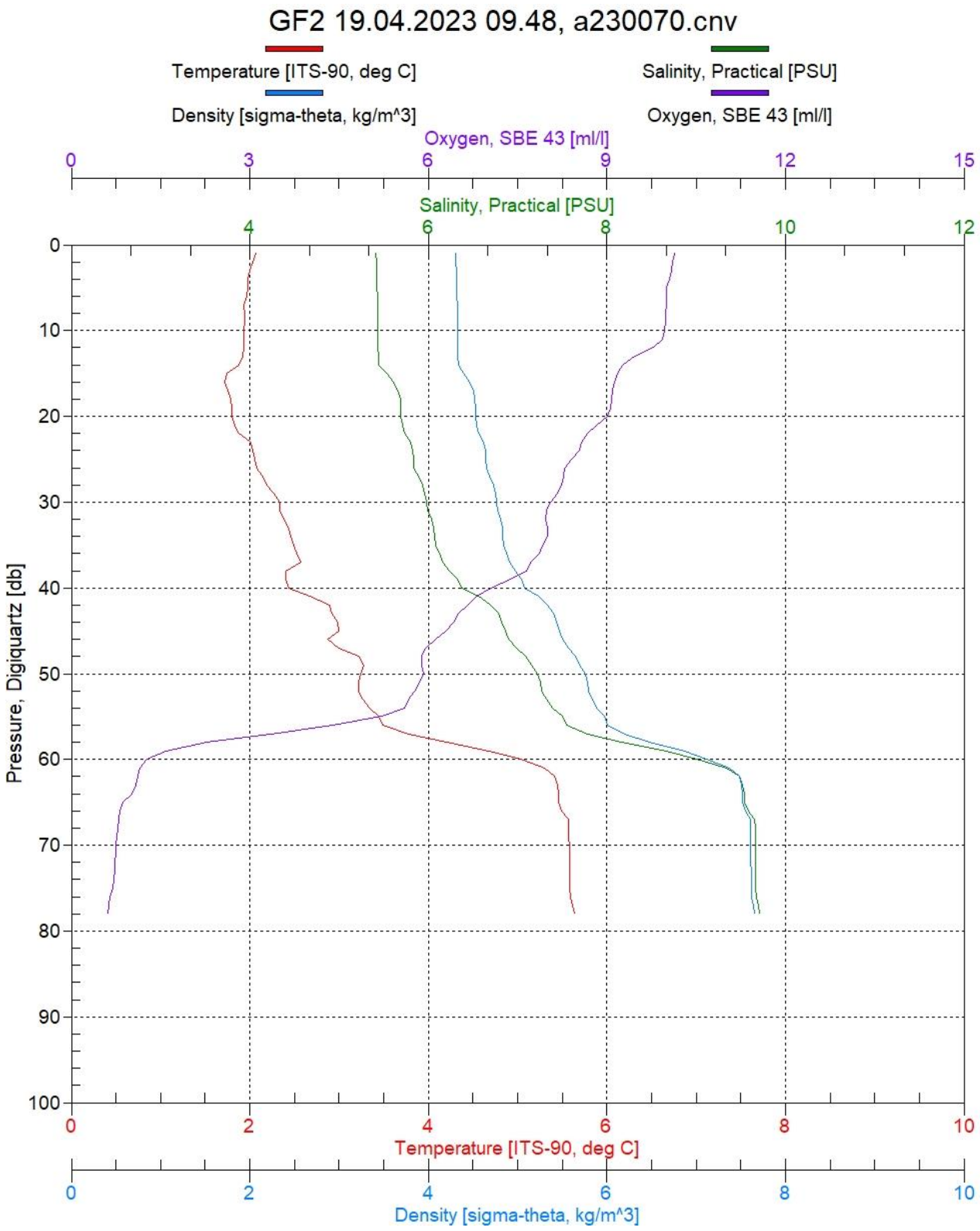

XIV3 18.04.2023 21.15, a230067.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Voltage 0 [V] Fluorometer
Voltage 0 [V] Fluorometer
0
1
2
3
4
5
Salinity, Practical [PSU]
4
6
8
10
12
Pressure, Digiquartz [db]
0
10
20
30
40
50
60
70
80
90
100
0
2
4
6
8
10
Temperature [ITS-90, deg C]
0
2
4
6
8
10
Density [sigma-theta, kg/m^3]

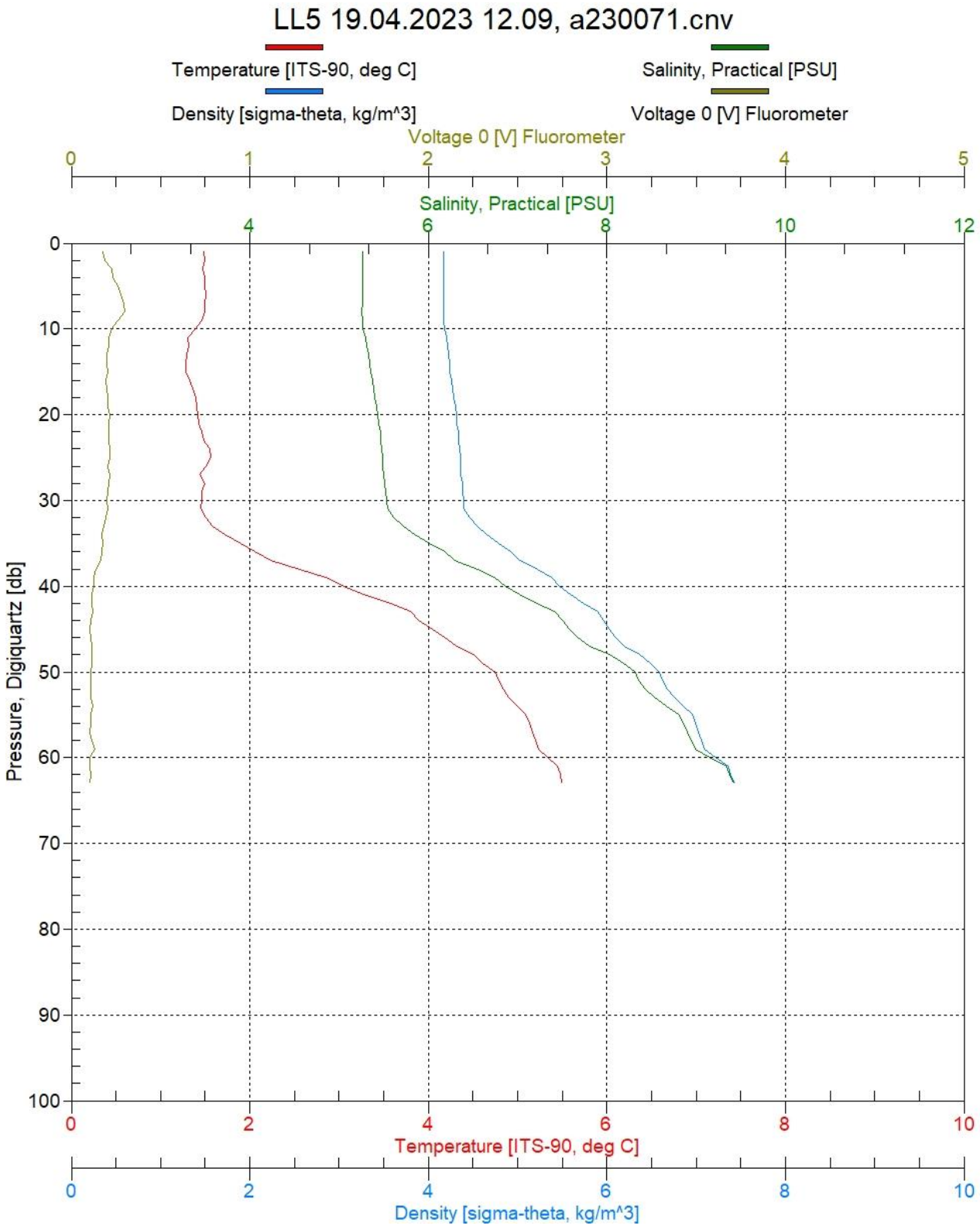

XIV3 18.04.2023 21.15, a230067.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Oxygen, SBE 43 [ml/l]
Oxygen, SBE 43 [ml/l]
0
3
6
9
12
15
Salinity, Practical [PSU]
4
6
8
10
12
0
10
20
30
40
50
60
70
80
90
100
Pressure, Digiquartz [db]
0
2
4
6
8
10
Temperature [ITS-90, deg C]
0
2
4
6
8
10
Density [sigma-theta, kg/m^3]

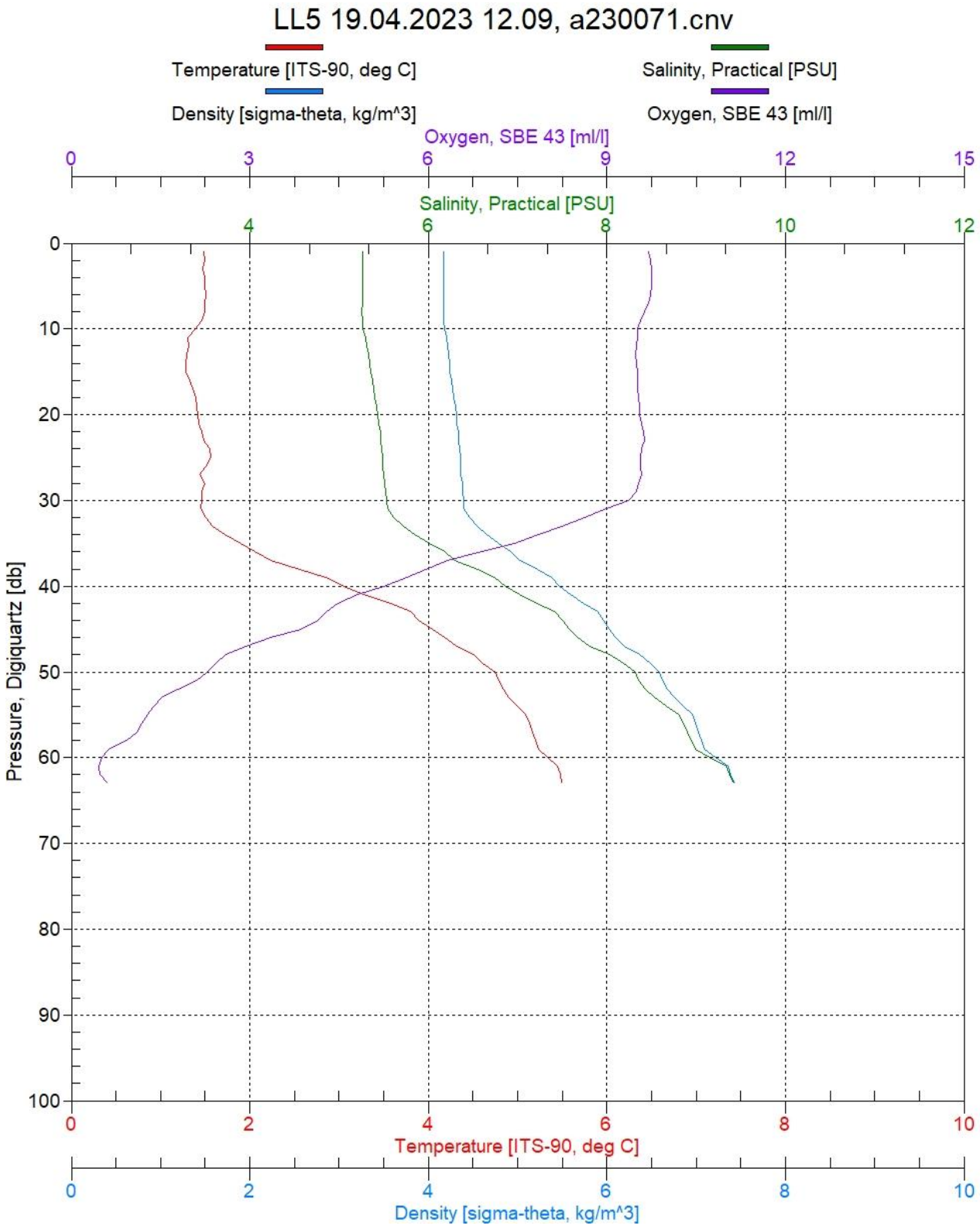

LL3A 19.04.2023 06.17, a230069.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Voltage 0 [V] Fluorometer
Voltage 0 [V] Fluorometer
0 1 2 3 4 5
Salinity, Practical [PSU]
4 6 8 10 12
Pressure, Digiquartz [db]
0 10 20 30 40 50 60 70 80 90 100
0 2 4 6 8 10
Temperature [ITS-90, deg C]
0 2 4 6 8 10
Density [sigma-theta, kg/m^3]

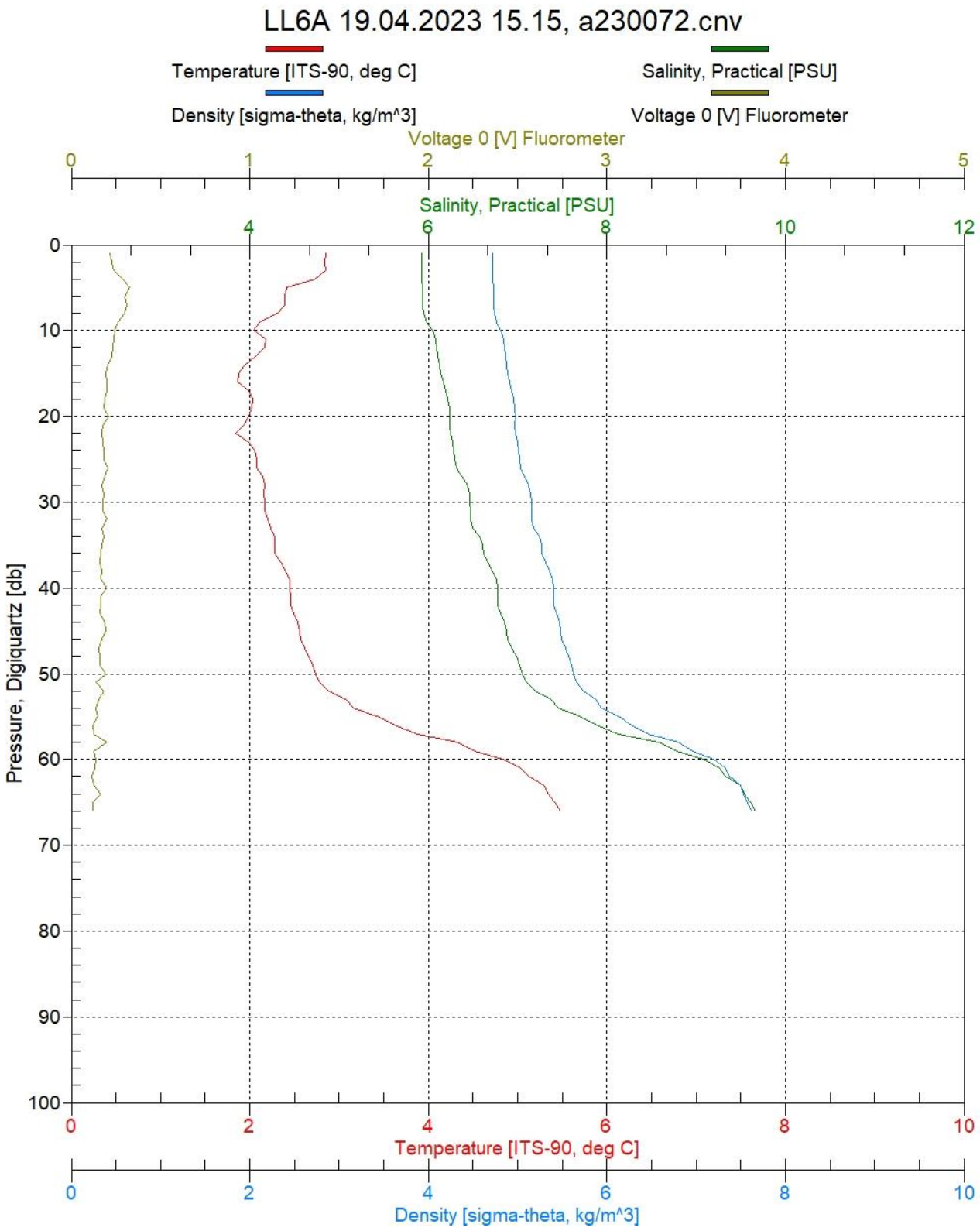

LL3A 19.04.2023 06.17, a230069.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Oxygen, SBE 43 [ml/l]
Oxygen, SBE 43 [ml/l]
0 3 6 9 12 15
Salinity, Practical [PSU]
4 6 8 10 12
Pressure, Digiquartz [db]
0 10 20 30 40 50 60 70 80 90 100
0 2 4 6 8 10
Temperature [ITS-90, deg C]
0 2 4 6 8 10
Density [sigma-theta, kg/m^3]

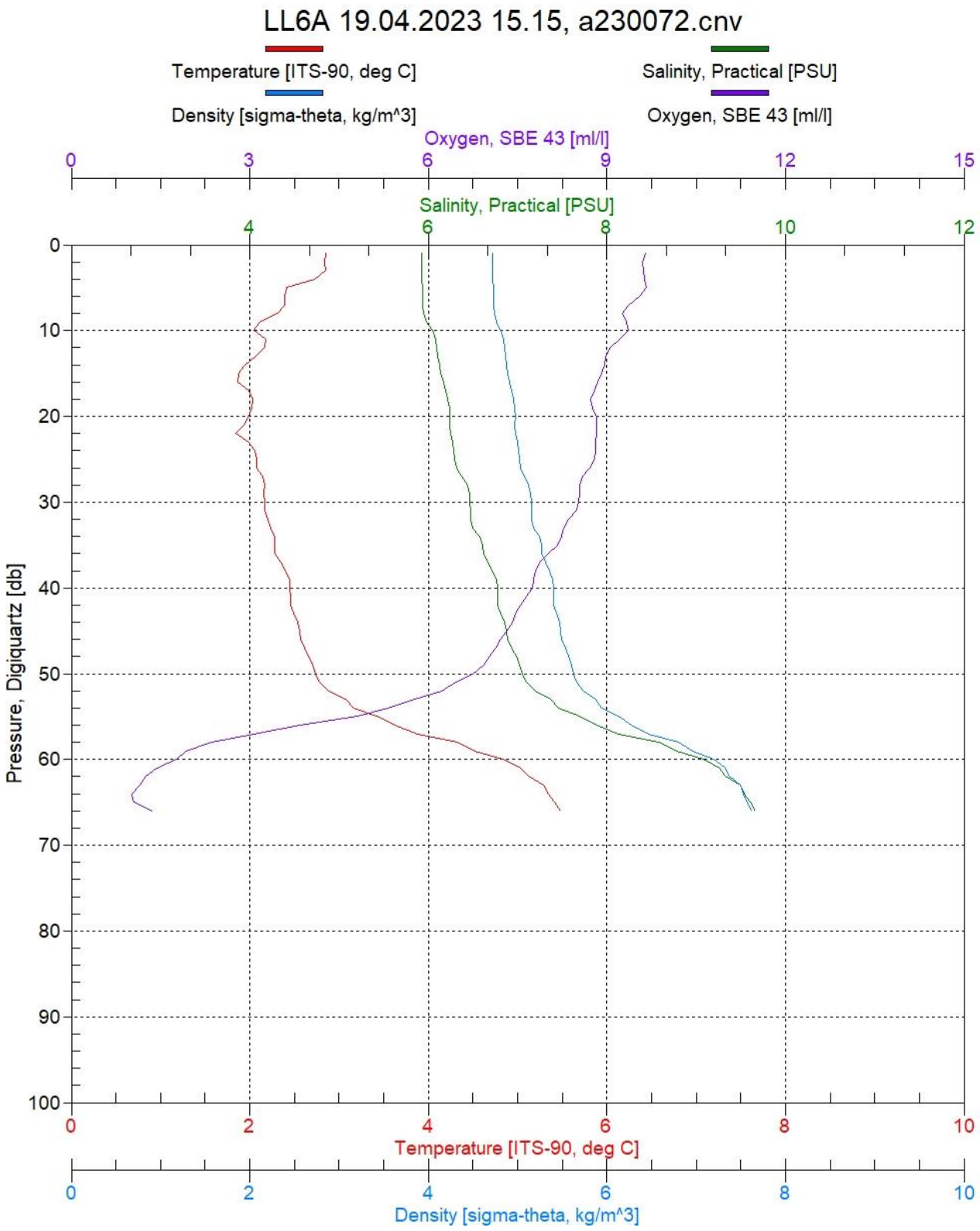

GF2 19.04.2023 09.48, a230070.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Voltage 0 [V] Fluorometer
Voltage 0 [V] Fluorometer
0
1
2
3
4
5
Salinity, Practical [PSU]
4
6
8
10
12
Pressure, Digiquartz [db]
0
10
20
30
40
50
60
70
80
90
100
0
2
4
6
8
10
Temperature [ITS-90, deg C]
0
2
4
6
8
10
Density [sigma-theta, kg/m^3]

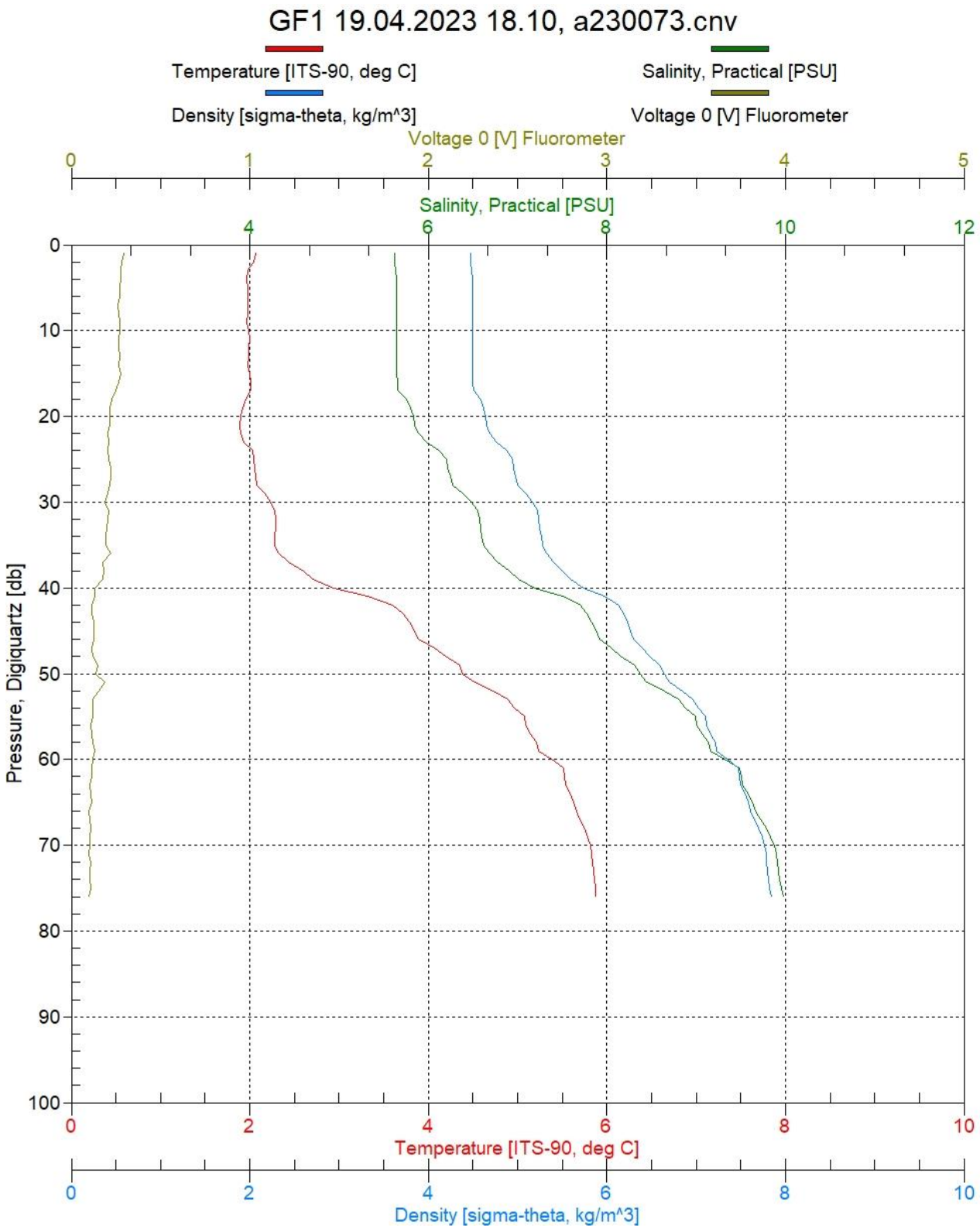

GF2 19.04.2023 09.48, a230070.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Oxygen, SBE 43 [ml/l]
Oxygen, SBE 43 [ml/l]
0
3
6
9
12
15
Salinity, Practical [PSU]
4
6
8
10
12
0
10
20
30
40
50
60
70
80
90
100
Pressure, Digiquartz [db]
0
2
4
6
8
10
Temperature [ITS-90, deg C]
0
2
4
6
8
10
Density [sigma-theta, kg/m^3]

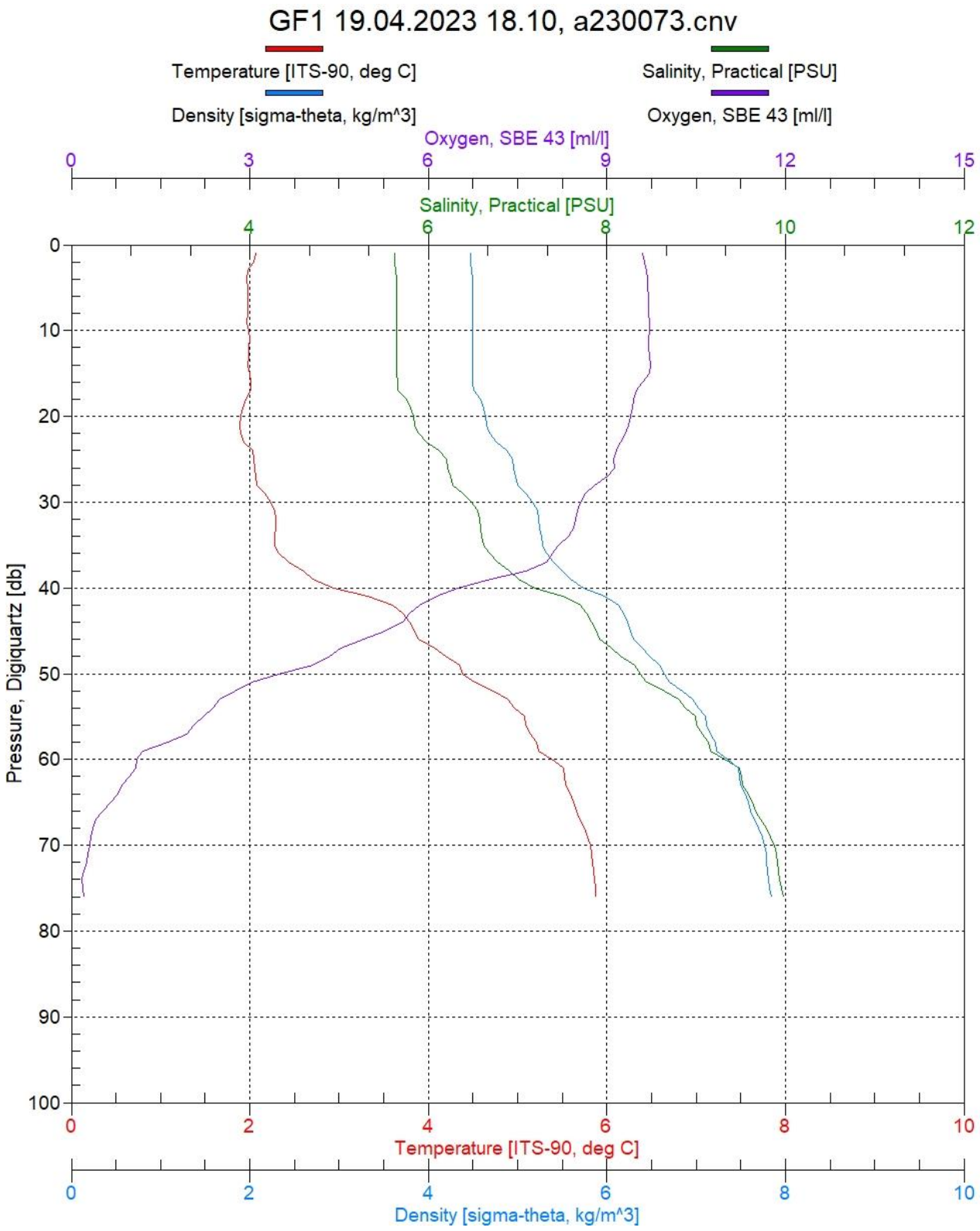

LL5 19.04.2023 12.09, a230071.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Voltage 0 [V] Fluorometer
Voltage 0 [V] Fluorometer
Salinity, Practical [PSU]
Pressure, Digiquartz [db]
Temperature [ITS-90, deg C]
Density [sigma-theta, kg/m^3]

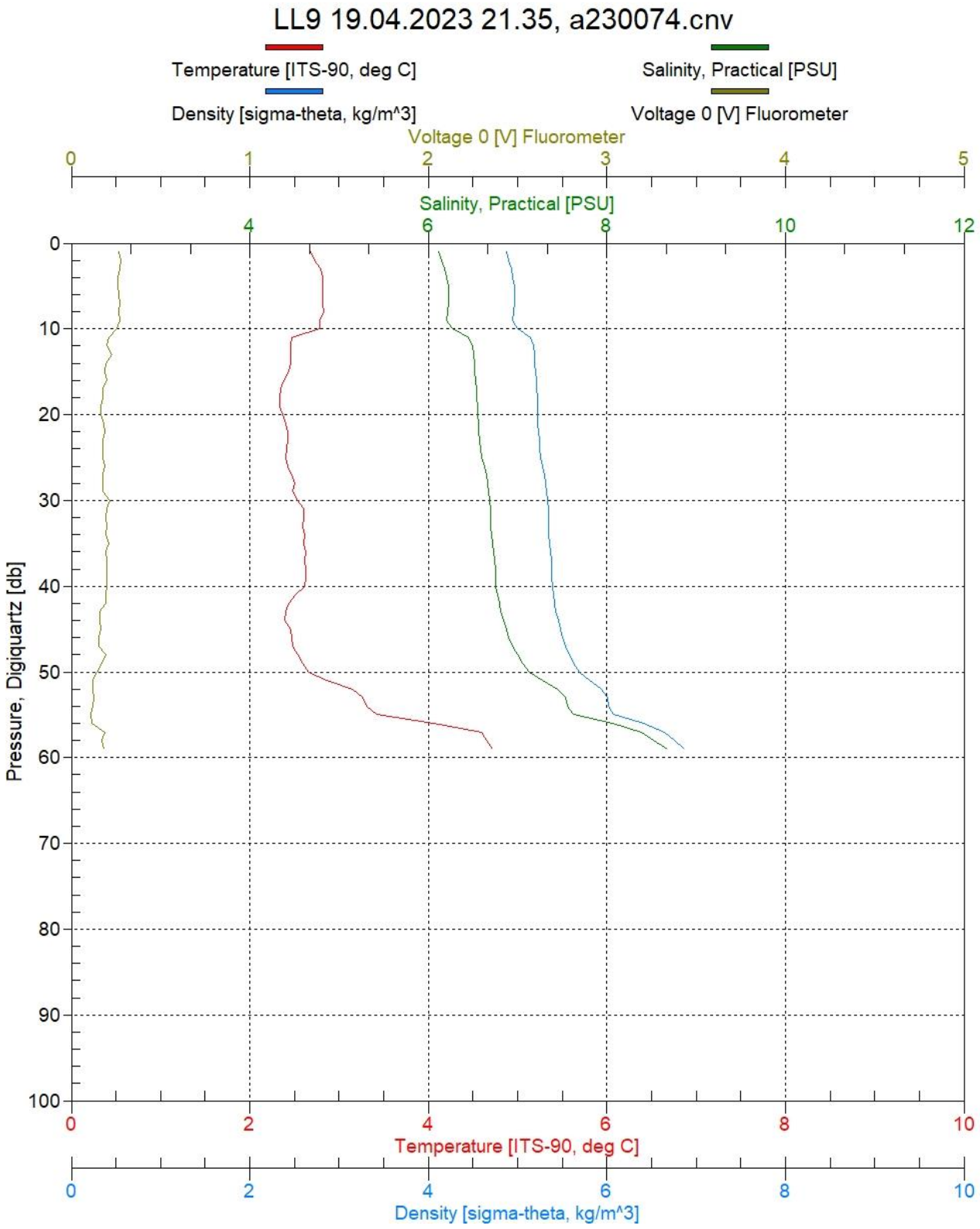

LL5 19.04.2023 12.09, a230071.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Oxygen, SBE 43 [ml/l]
Oxygen, SBE 43 [ml/l]
0
3
6
9
12
15
Salinity, Practical [PSU]
4
6
8
10
12
0
10
20
30
40
50
60
70
80
90
100
Pressure, Digiquartz [db]
0
2
4
6
8
10
Temperature [ITS-90, deg C]
0
2
4
6
8
10
Density [sigma-theta, kg/m^3]

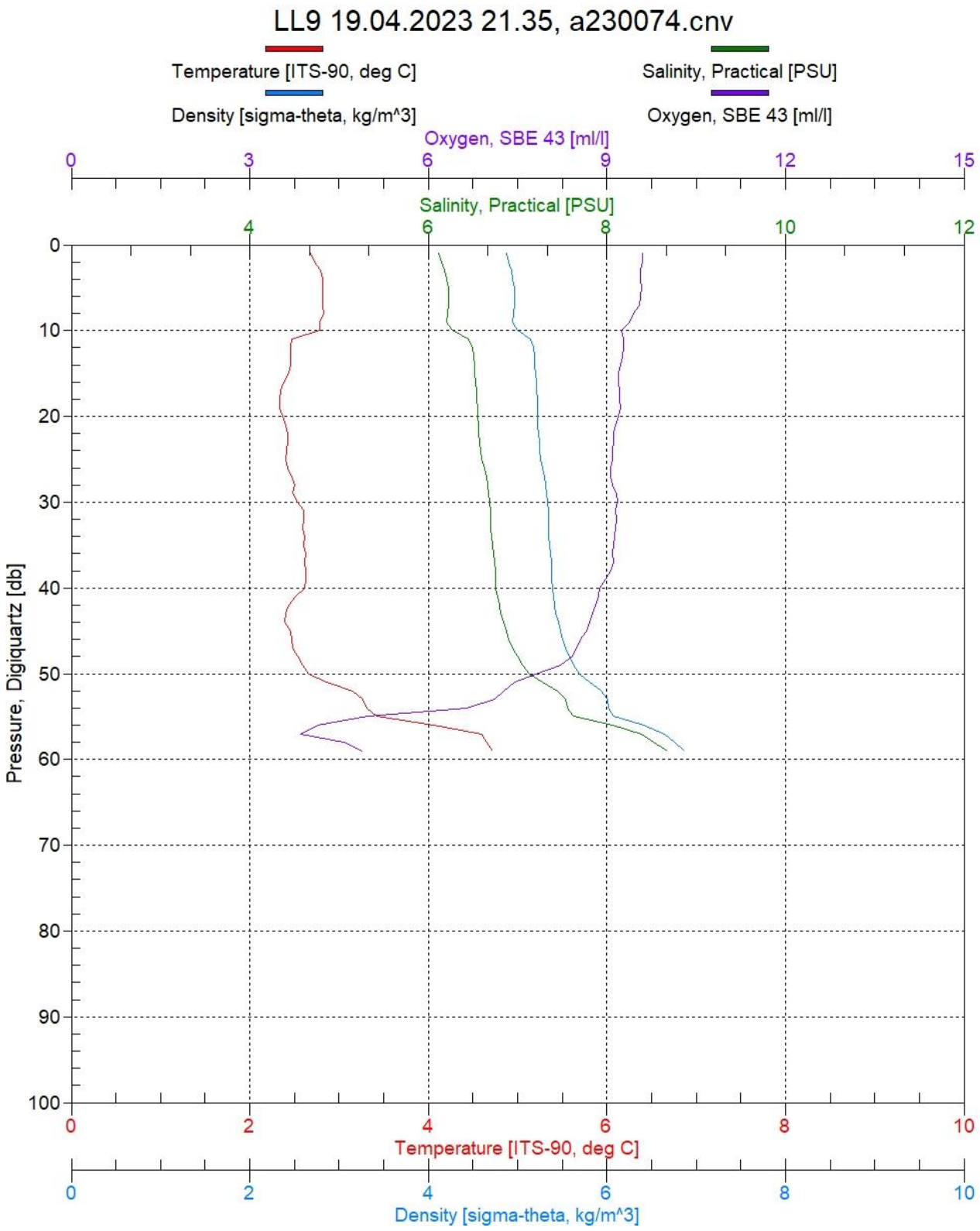

LL6A 19.04.2023 15.15, a230072.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Voltage 0 [V] Fluorometer
Voltage 0 [V] Fluorometer
Salinity, Practical [PSU]
Pressure, Digiquartz [db]
Temperature [ITS-90, deg C]
Density [sigma-theta, kg/m^3]

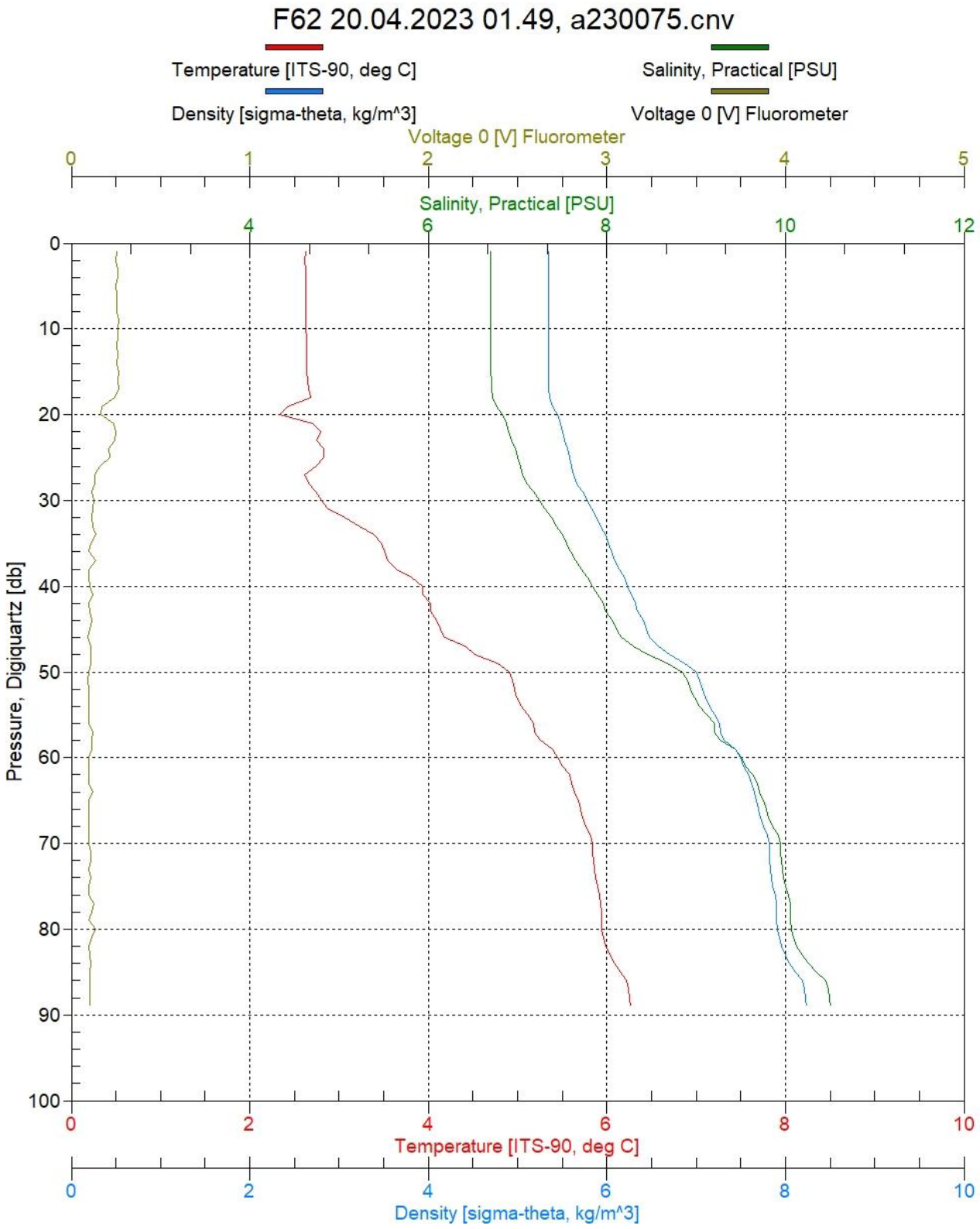

LL6A 19.04.2023 15.15, a230072.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Oxygen, SBE 43 [ml/l]
Oxygen, SBE 43 [ml/l]
0
3
6
9
12
15
Salinity, Practical [PSU]
4
6
8
10
12
0
10
20
30
40
50
60
70
80
90
100
Pressure, Digiquartz [db]
0
2
4
6
8
10
Temperature [ITS-90, deg C]
0
2
4
6
8
10
Density [sigma-theta, kg/m^3]

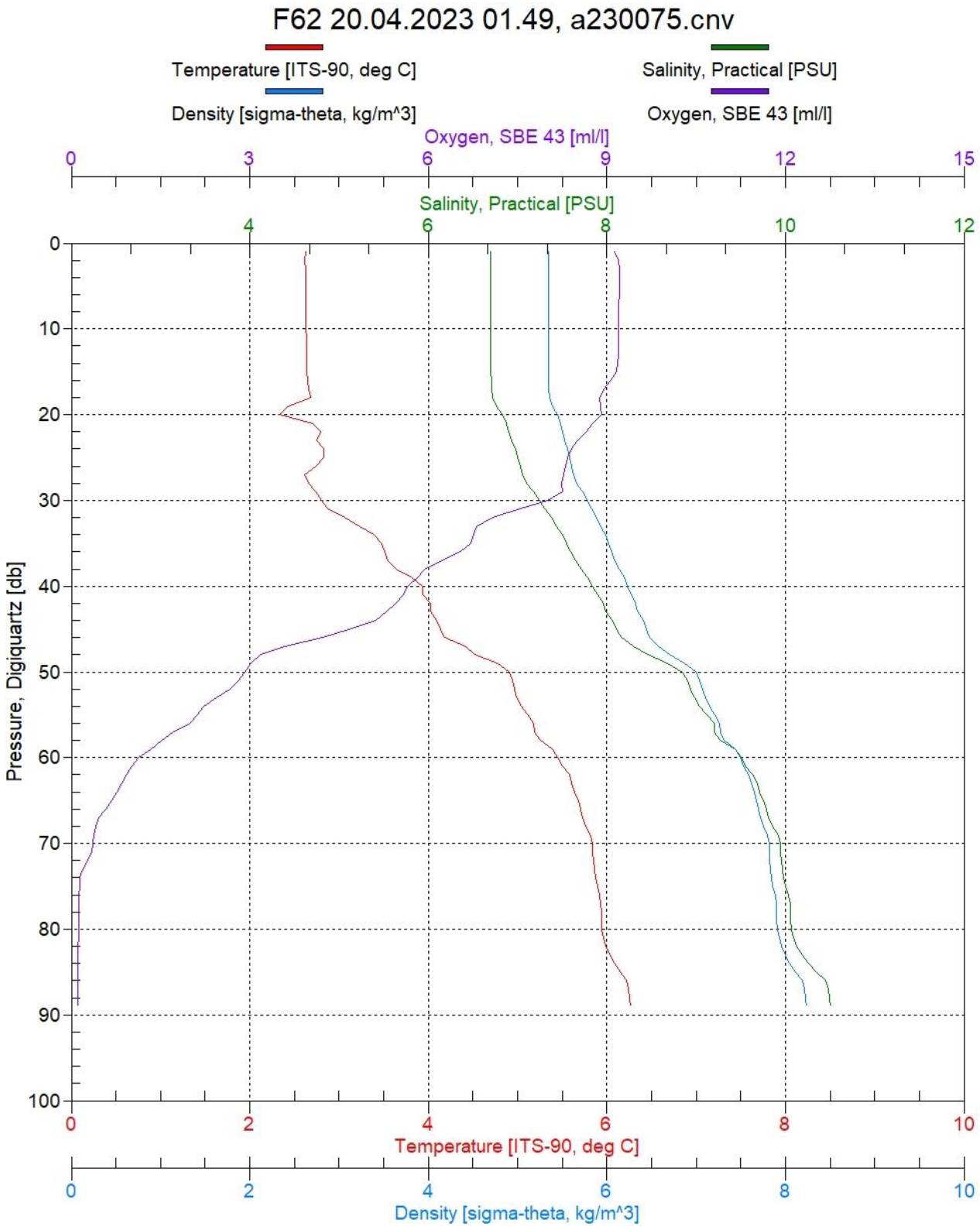

GF1 19.04.2023 18.10, a230073.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Voltage 0 [V] Fluorometer
Voltage 0 [V] Fluorometer
0 1 2 3 4 5
Salinity, Practical [PSU]
4 6 8 10 12
Pressure, Digiquartz [db]
0 10 20 30 40 50 60 70 80 90 100
0 2 4 6 8 10
Temperature [ITS-90, deg C]
0 2 4 6 8 10
Density [sigma-theta, kg/m^3]

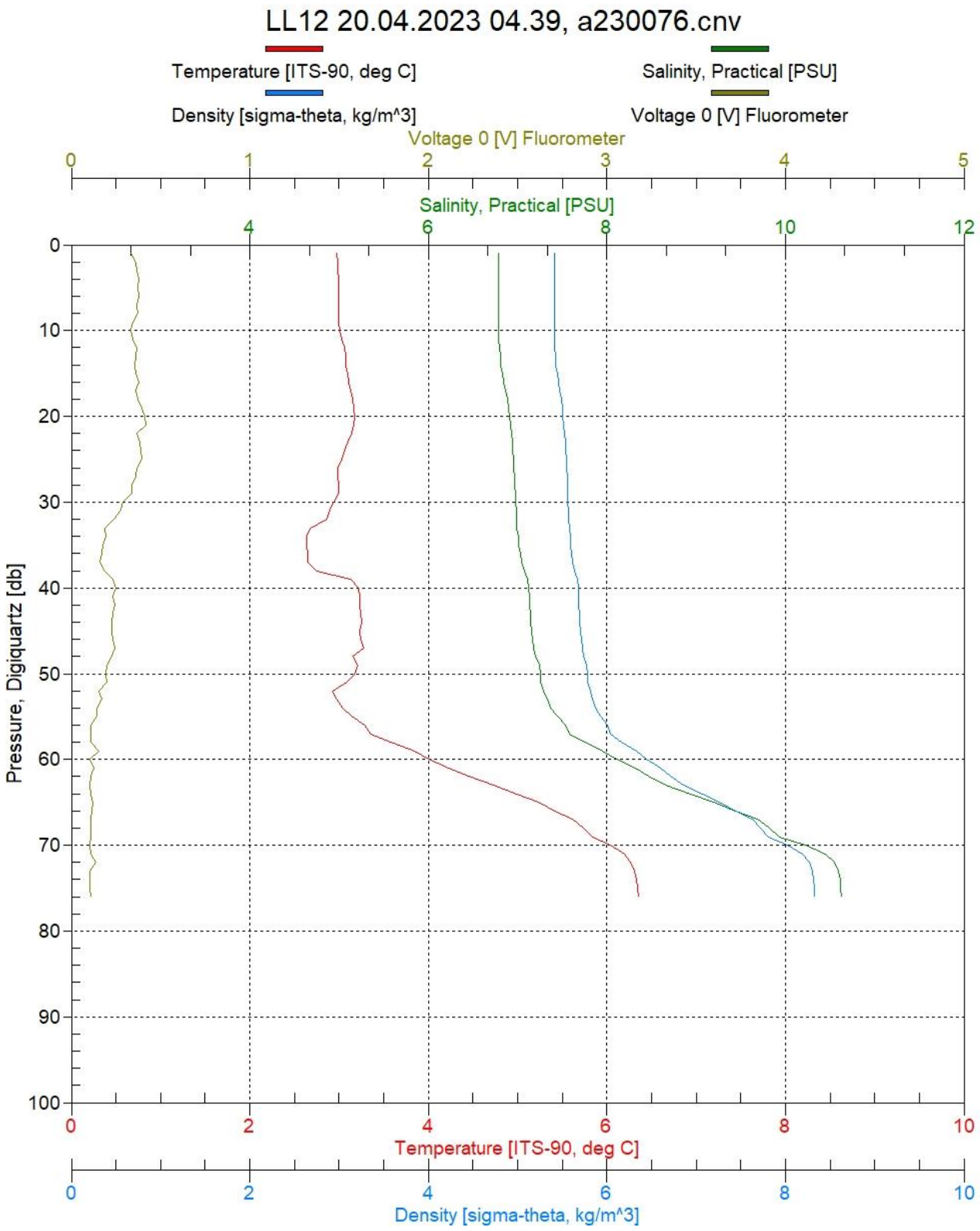

GF1 19.04.2023 18.10, a230073.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Oxygen, SBE 43 [ml/l]
Oxygen, SBE 43 [ml/l]
0
3
6
9
12
15
Salinity, Practical [PSU]
4
6
8
10
12
0
10
20
30
40
50
60
70
80
90
100
Pressure, Digiquartz [db]
0
2
4
6
8
10
Temperature [ITS-90, deg C]
0
2
4
6
8
10
Density [sigma-theta, kg/m^3]

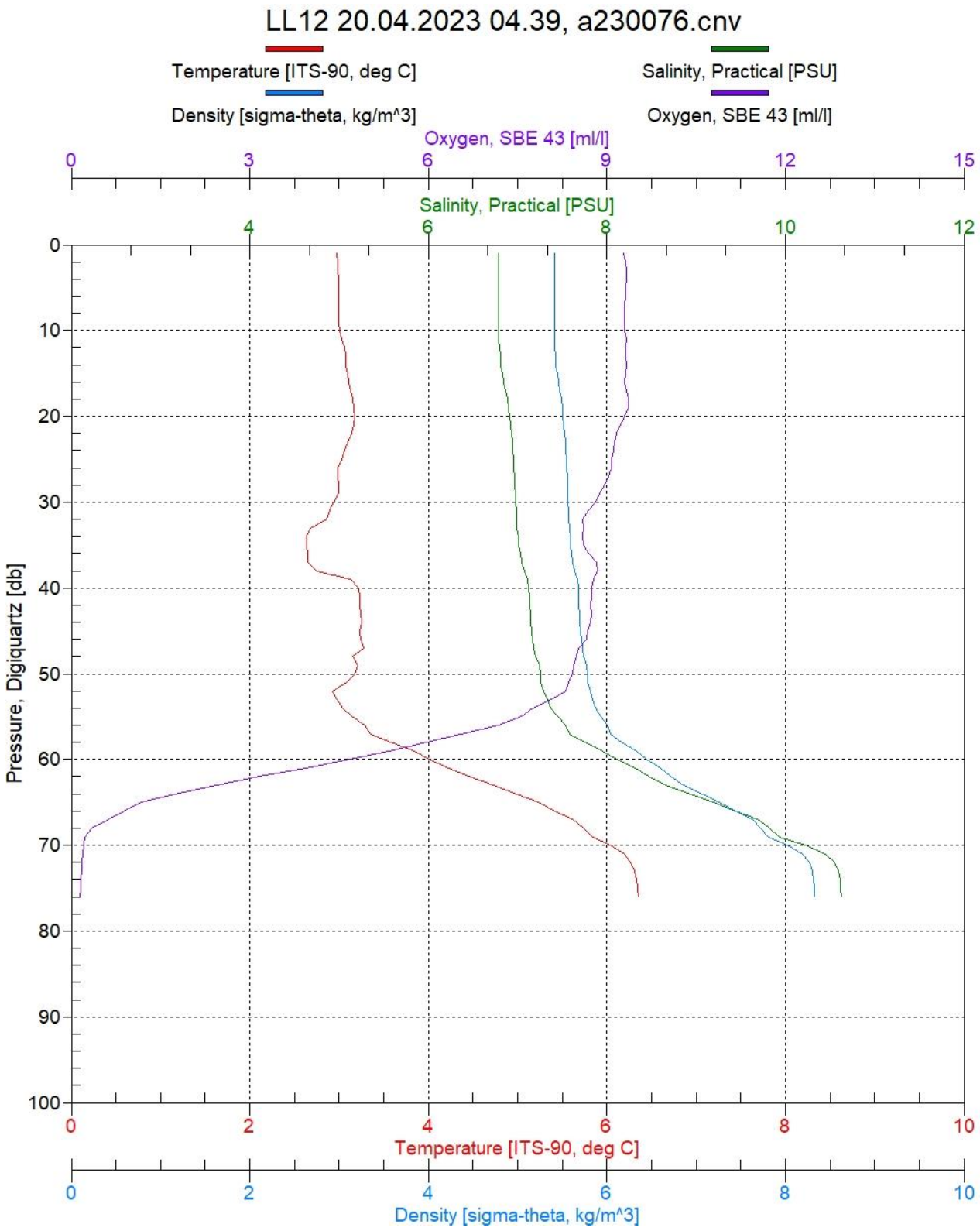

LL9 19.04.2023 21.35, a230074.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Voltage 0 [V] Fluorometer
Voltage 0 [V] Fluorometer
Salinity, Practical [PSU]
Pressure, Digiquartz [db]
Temperature [ITS-90, deg C]
Density [sigma-theta, kg/m^3]

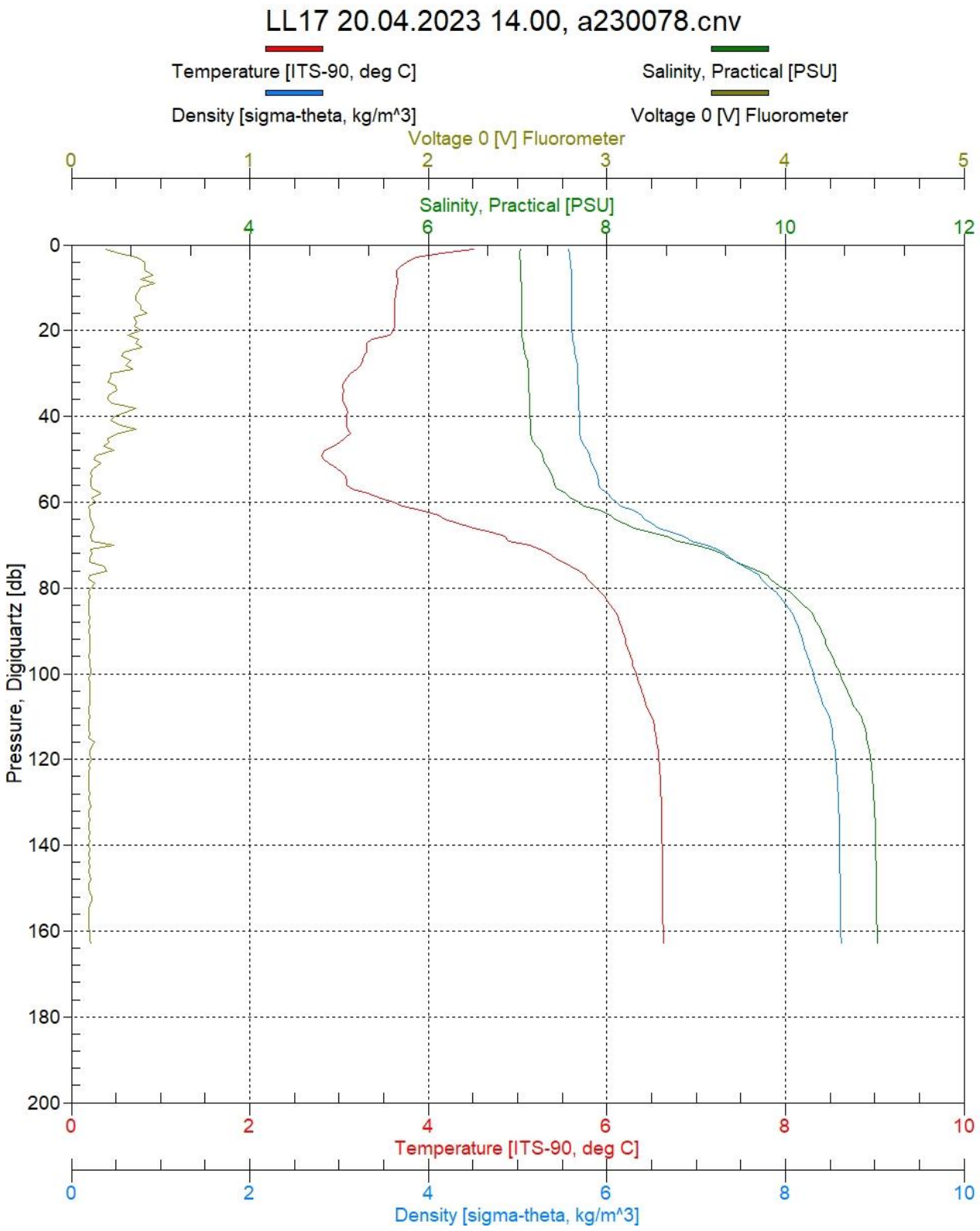

LL9 19.04.2023 21.35, a230074.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Oxygen, SBE 43 [ml/l]
Oxygen, SBE 43 [ml/l]
0 3 6 9 12 15
Salinity, Practical [PSU]
4 6 8 10 12
Pressure, Digiquartz [db]
0 10 20 30 40 50 60 70 80 90 100
0 2 4 6 8 10
Temperature [ITS-90, deg C]
0 2 4 6 8 10
Density [sigma-theta, kg/m^3]

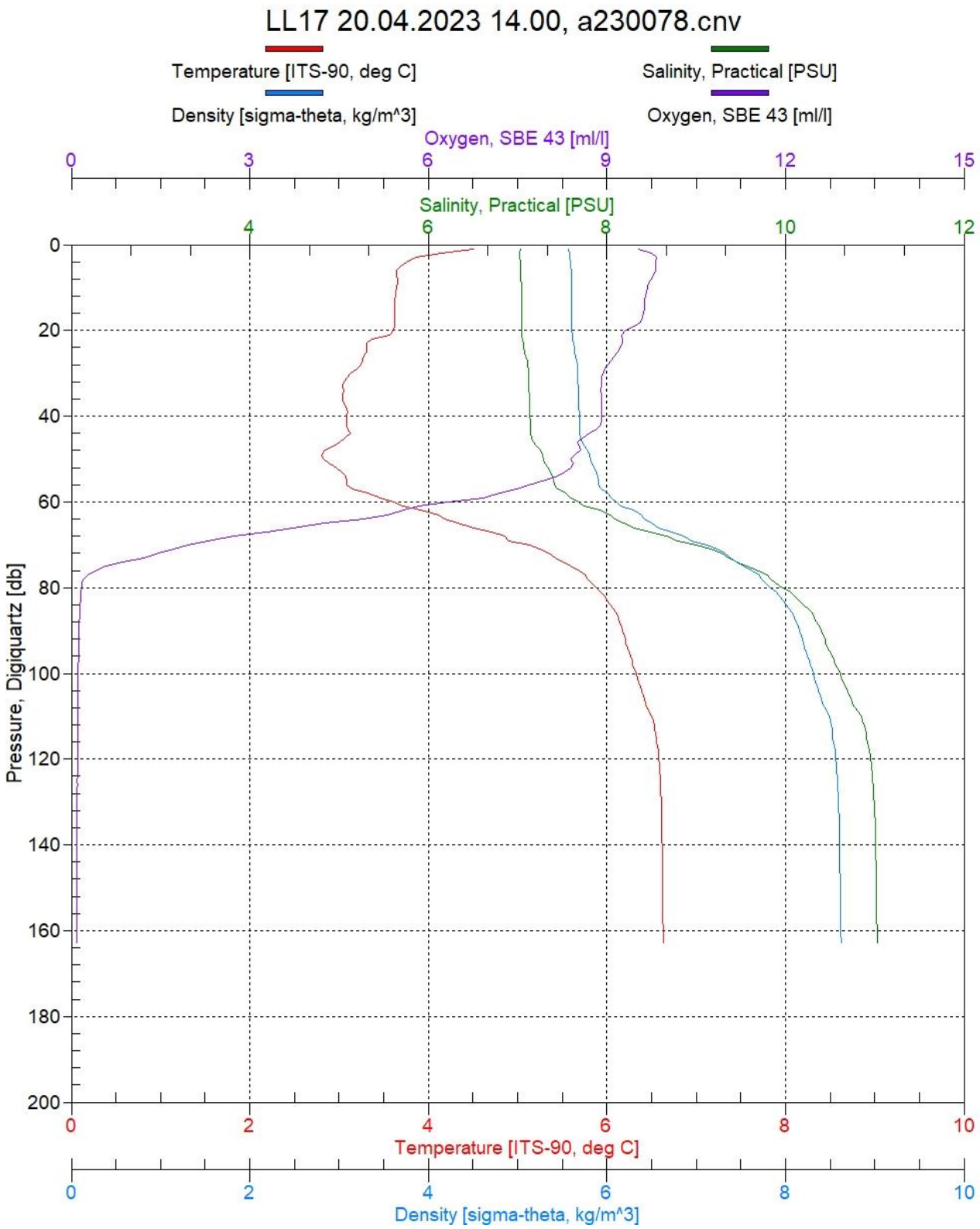

F62 20.04.2023 01.49, a230075.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Voltage 0 [V] Fluorometer
Voltage 0 [V] Fluorometer
Salinity, Practical [PSU]
Pressure, Digiquartz [db]
Temperature [ITS-90, deg C]
Density [sigma-theta, kg/m^3]

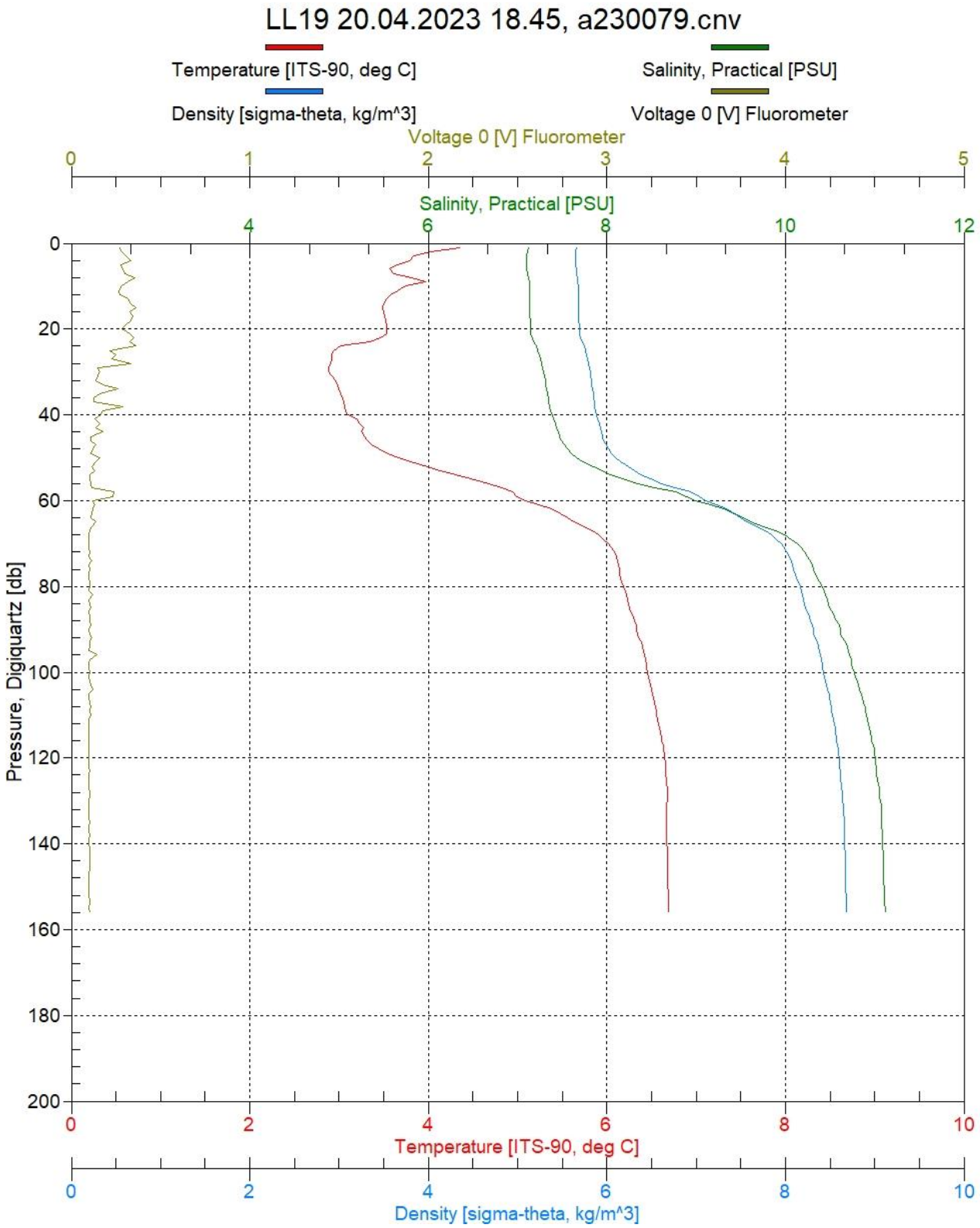

F62 20.04.2023 01.49, a230075.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Oxygen, SBE 43 [ml/l]
Oxygen, SBE 43 [ml/l]
0 3 6 9 12 15
Salinity, Practical [PSU]
4 6 8 10 12
Pressure, Digiquartz [db]
0 10 20 30 40 50 60 70 80 90 100
0 2 4 6 8 10
Temperature [ITS-90, deg C]
0 2 4 6 8 10
Density [sigma-theta, kg/m^3]

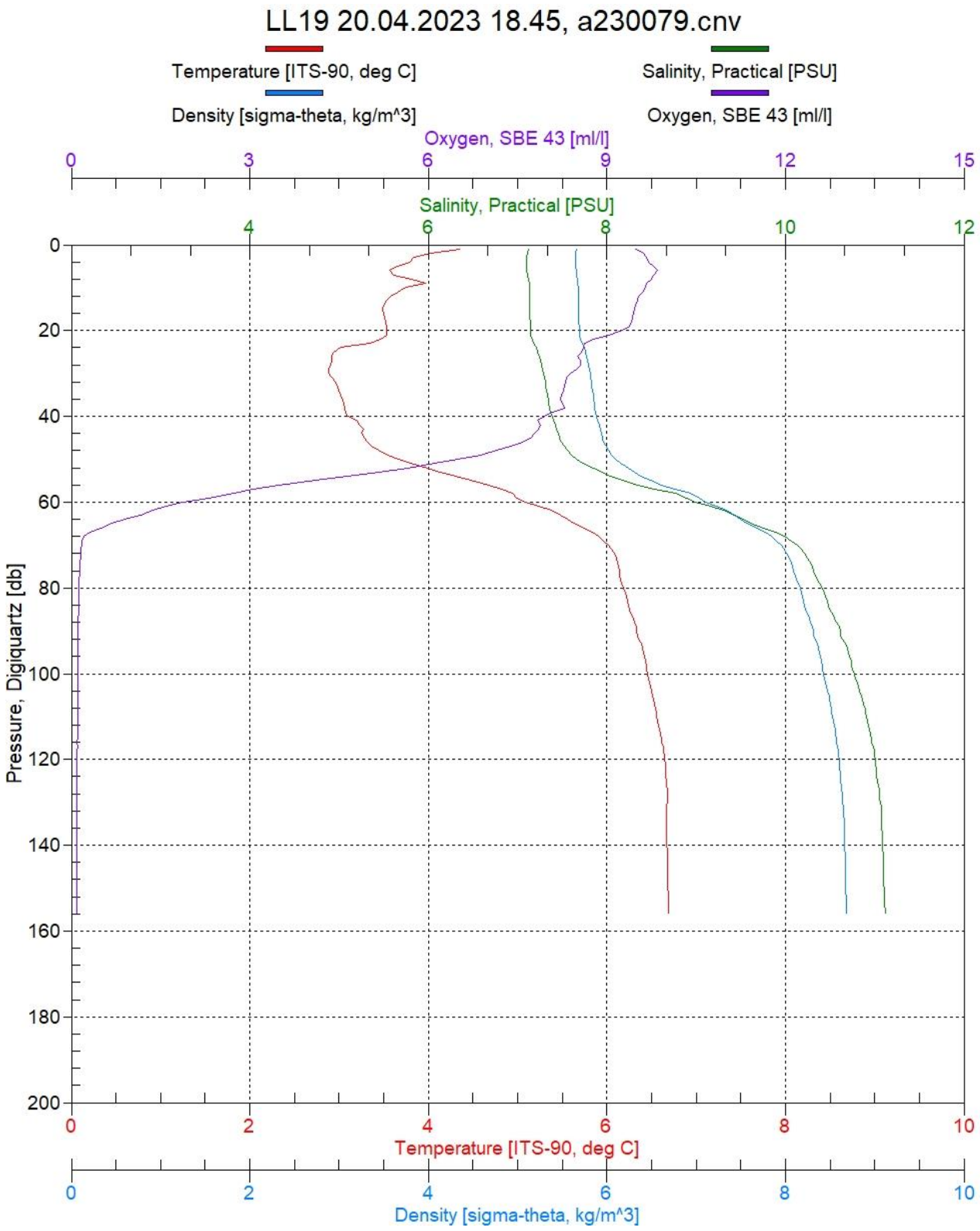

LL12 20.04.2023 04.39, a230076.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Voltage 0 [V] Fluorometer
Voltage 0 [V] Fluorometer
Salinity, Practical [PSU]
Pressure, Digiquartz [db]
Temperature [ITS-90, deg C]
Density [sigma-theta, kg/m^3]

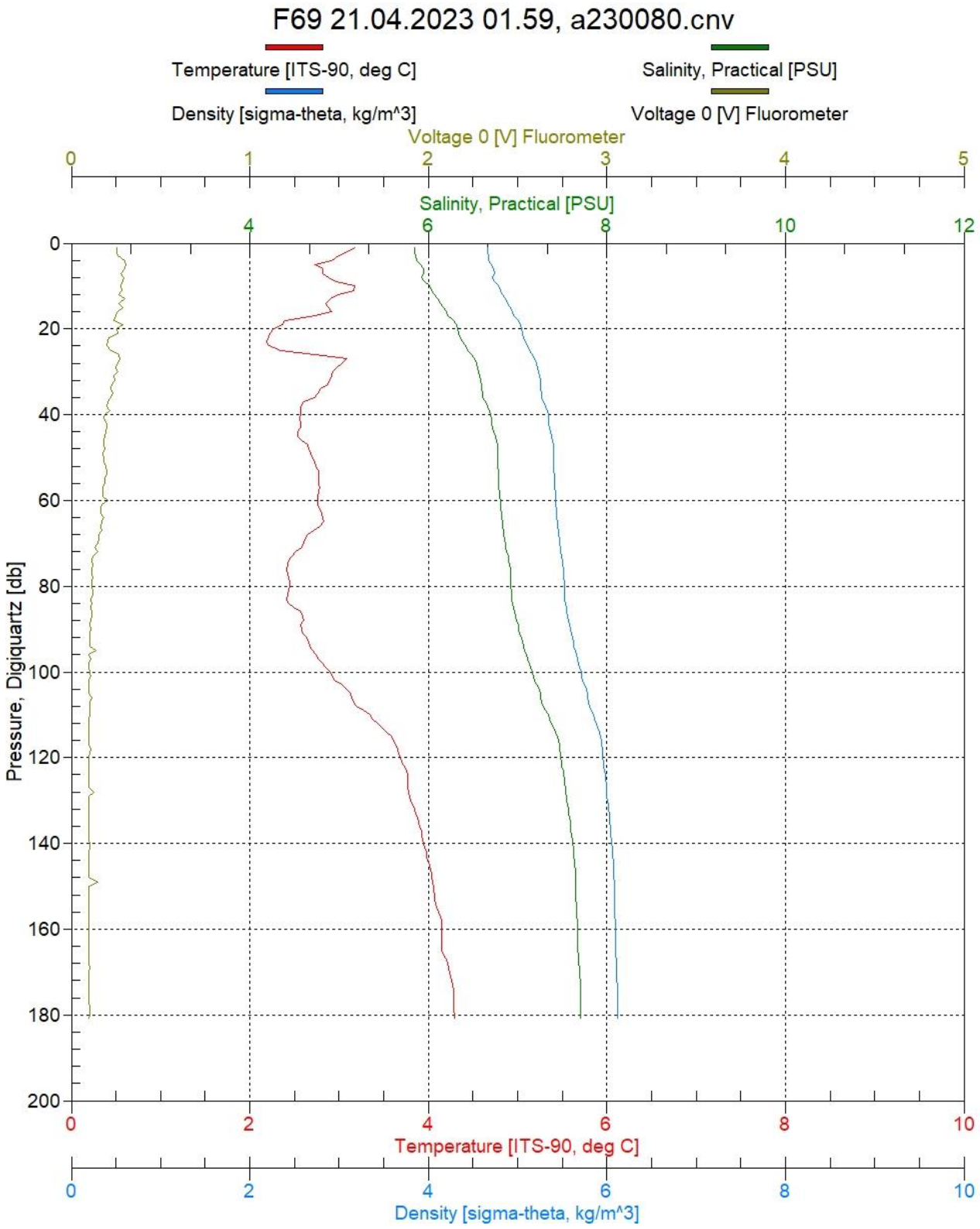

LL12 20.04.2023 04.39, a230076.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Oxygen, SBE 43 [ml/l]
Oxygen, SBE 43 [ml/l]
0
3
6
9
12
15
Salinity, Practical [PSU]
4
6
8
10
12
0
10
20
30
40
50
60
70
80
90
100
Pressure, Digiquartz [db]
0
2
4
6
8
10
Temperature [ITS-90, deg C]
0
2
4
6
8
10
Density [sigma-theta, kg/m^3]

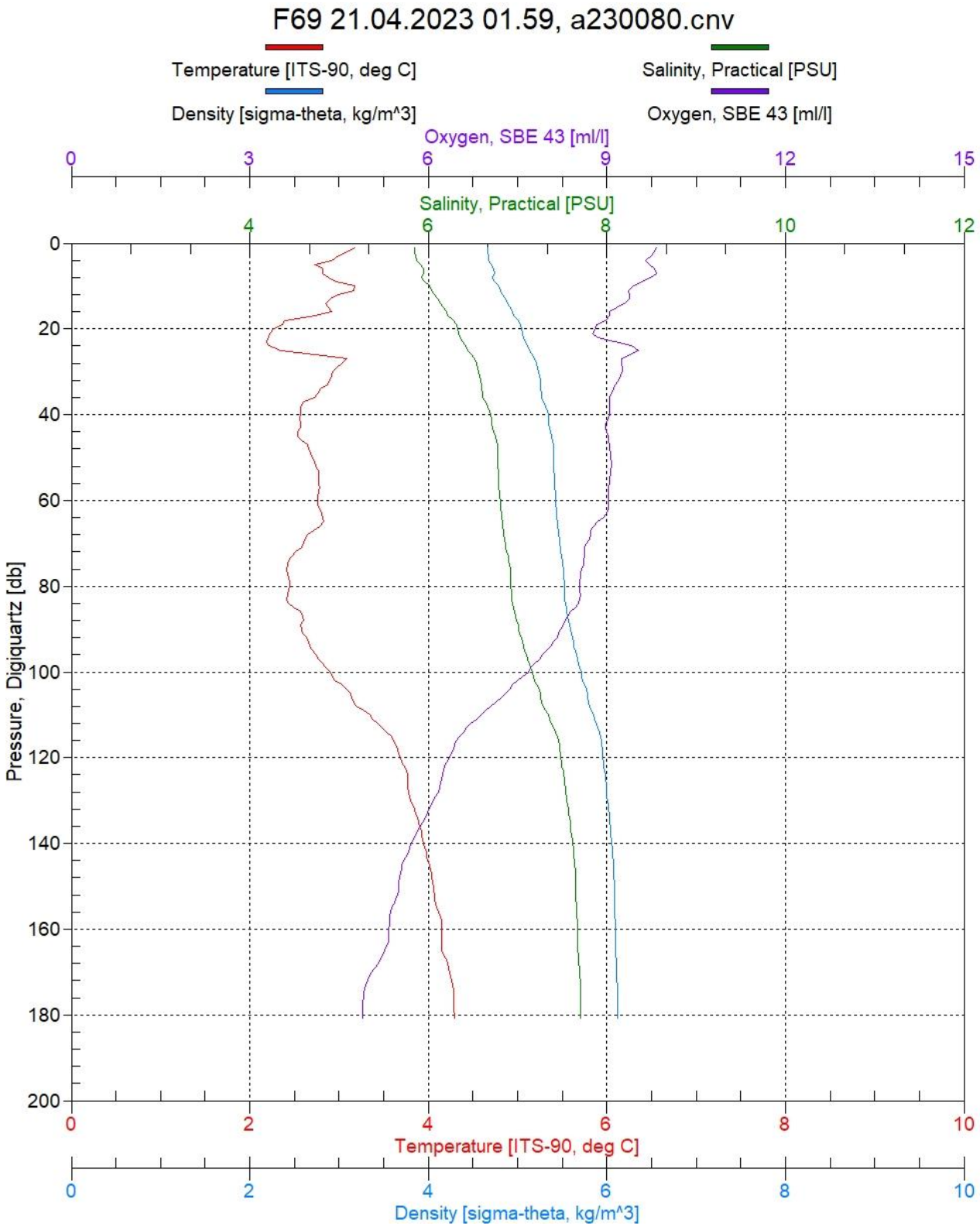

LL17 20.04.2023 14.00, a230078.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Voltage 0 [V] Fluorometer
Voltage 0 [V] Fluorometer
Salinity, Practical [PSU]
Pressure, Digiquartz [db]
Temperature [ITS-90, deg C]
Density [sigma-theta, kg/m^3]

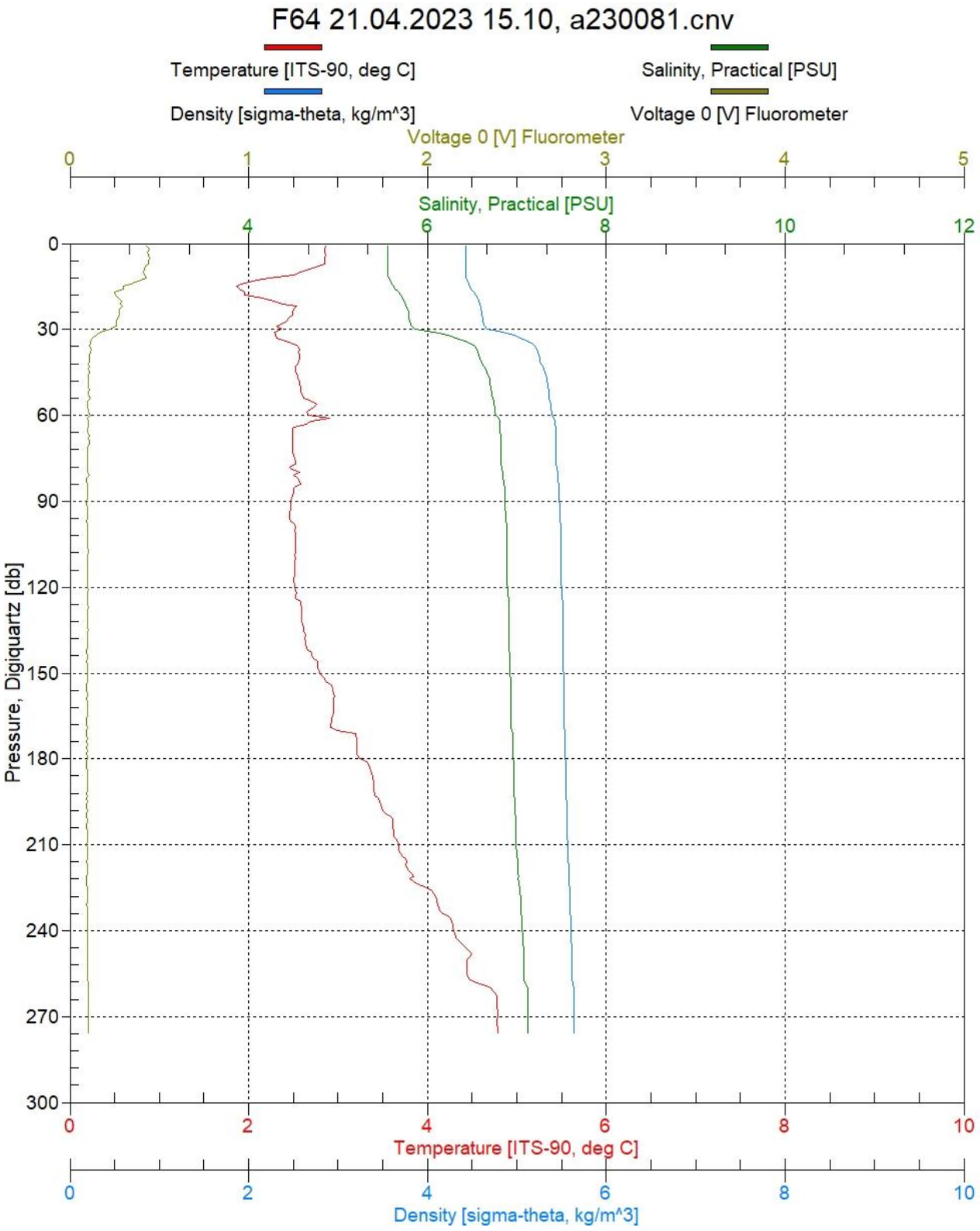

LL17 20.04.2023 14.00, a230078.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Oxygen, SBE 43 [ml/l]
Oxygen, SBE 43 [ml/l]
0
3
6
9
12
15
Salinity, Practical [PSU]
4
6
8
10
12
0
20
40
60
80
100
120
140
160
180
200
Pressure, Digiquartz [db]
0
2
4
6
8
10
Temperature [ITS-90, deg C]
0
2
4
6
8
10
Density [sigma-theta, kg/m^3]

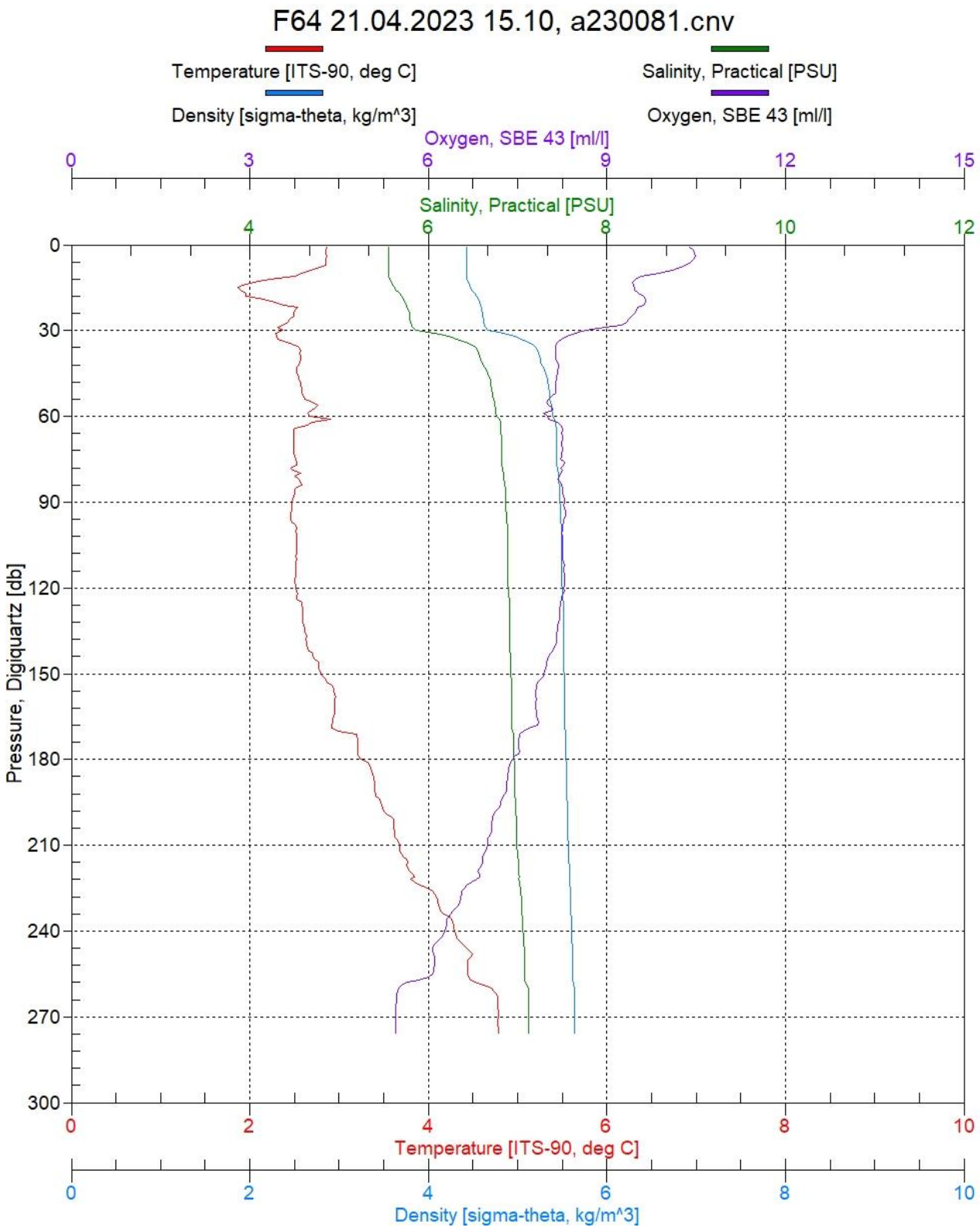

LL19 20.04.2023 18.45, a230079.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Voltage 0 [V] Fluorometer
Voltage 0 [V] Fluorometer
Salinity, Practical [PSU]
Pressure, Digiquartz [db]
Temperature [ITS-90, deg C]
Density [sigma-theta, kg/m^3]

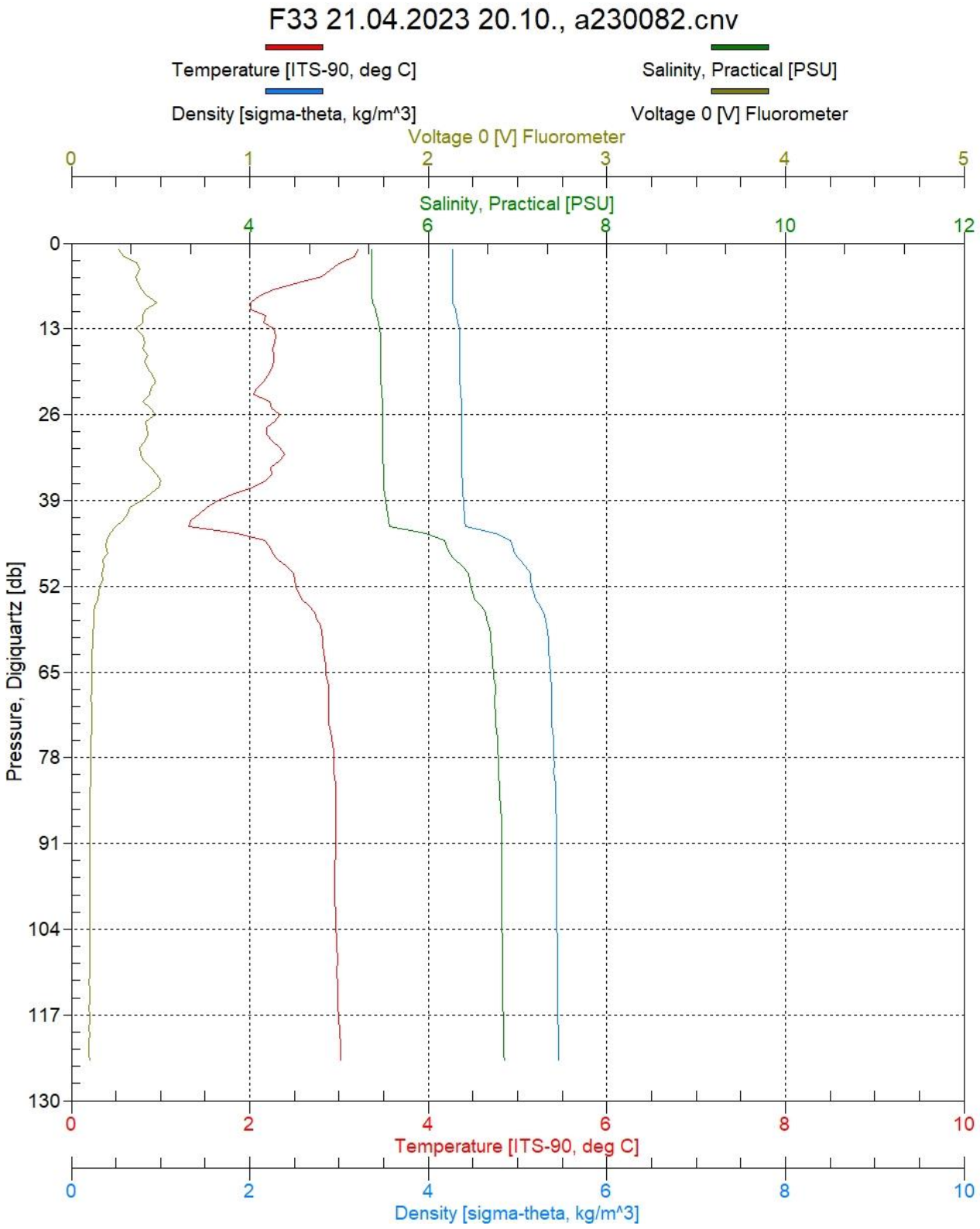

LL19 20.04.2023 18.45, a230079.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Oxygen, SBE 43 [ml/l]
Oxygen, SBE 43 [ml/l]
0 3 6 9 12 15
Salinity, Practical [PSU]
4 6 8 10 12
0 20 40 60 80 100 120 140 160 180 200
Pressure, Digiquartz [db]
0 2 4 6 8 10
Temperature [ITS-90, deg C]
0 2 4 6 8 10
Density [sigma-theta, kg/m^3]

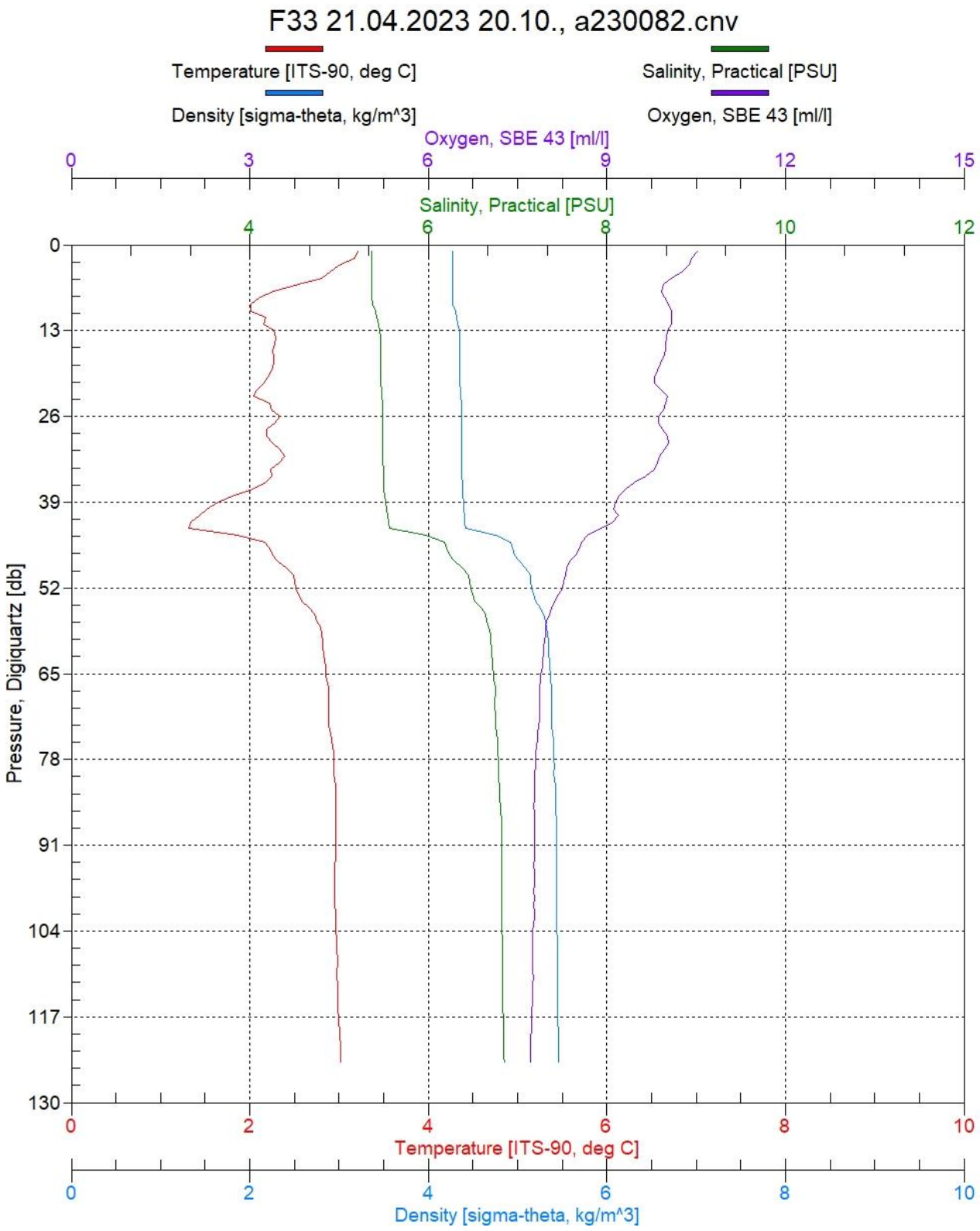

F69 21.04.2023 01.59, a230080.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Voltage 0 [V] Fluorometer
Voltage 0 [V] Fluorometer
Salinity, Practical [PSU]
Pressure, Digiquartz [db]
Temperature [ITS-90, deg C]
Density [sigma-theta, kg/m^3]

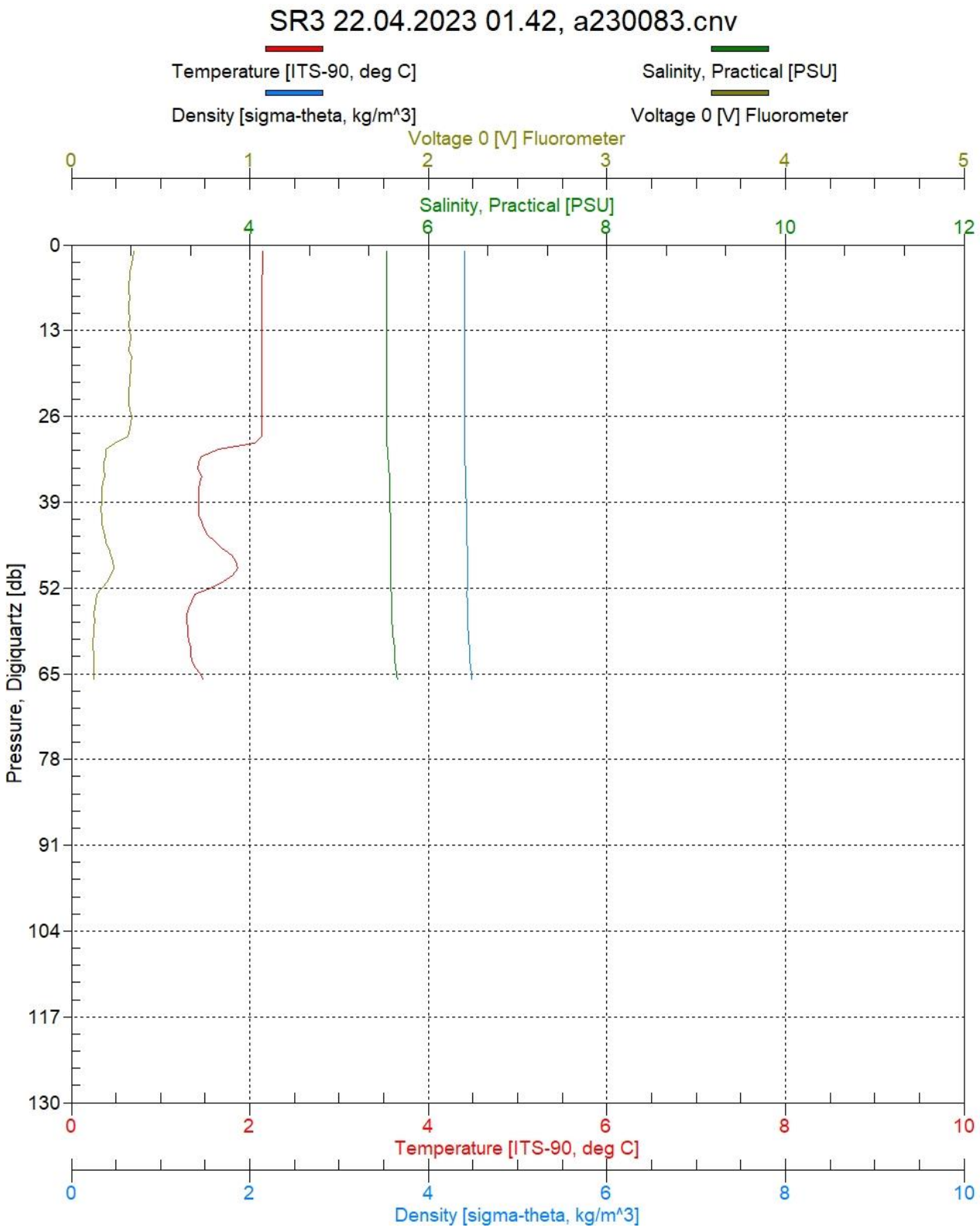

F69 21.04.2023 01.59, a230080.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Oxygen, SBE 43 [ml/l]
Oxygen, SBE 43 [ml/l]
0 3 6 9 12 15
Salinity, Practical [PSU]
4 6 8 10 12
Pressure, Digiquartz [db]
0 20 40 60 80 100 120 140 160 180 200
0 2 4 6 8 10
Temperature [ITS-90, deg C]
0 2 4 6 8 10
Density [sigma-theta, kg/m^3]

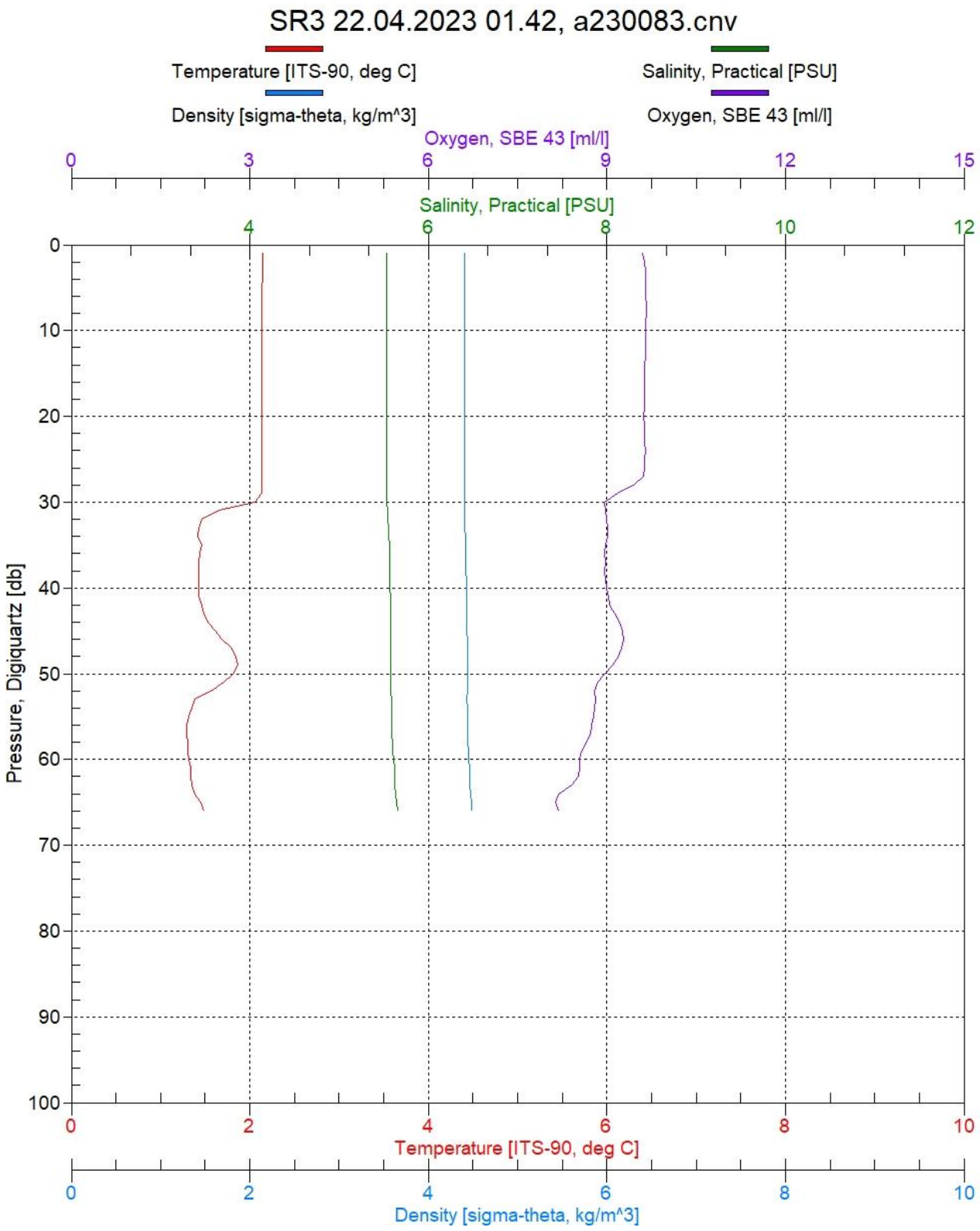

F64 21.04.2023 15.10, a230081.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Voltage 0 [V] Fluorometer
Voltage 0 [V] Fluorometer
0
1
2
3
4
5
Salinity, Practical [PSU]
4
6
8
10
12
Pressure, Digiquartz [db]
0
30
60
90
120
150
180
210
240
270
300
0
2
4
6
8
10
Temperature [ITS-90, deg C]
0
2
4
6
8
10
Density [sigma-theta, kg/m^3]

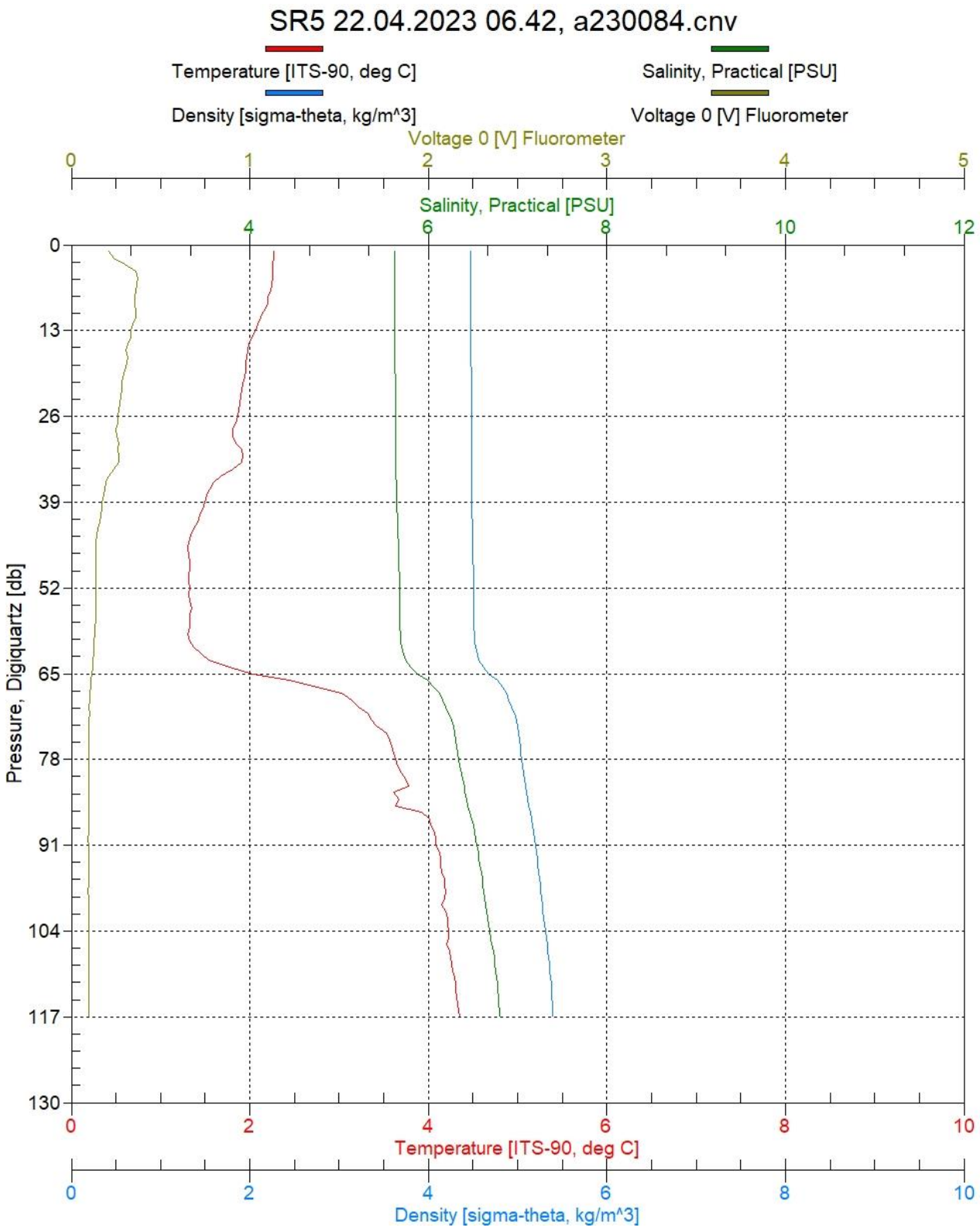

F64 21.04.2023 15.10, a230081.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Oxygen, SBE 43 [ml/l]
Oxygen, SBE 43 [ml/l]
0
3
6
9
12
15
Salinity, Practical [PSU]
4
6
8
10
12
0
30
60
90
120
150
180
210
240
270
300
Pressure, Digiquartz [db]
0
2
4
6
8
10
Temperature [ITS-90, deg C]
0
2
4
6
8
10
Density [sigma-theta, kg/m^3]

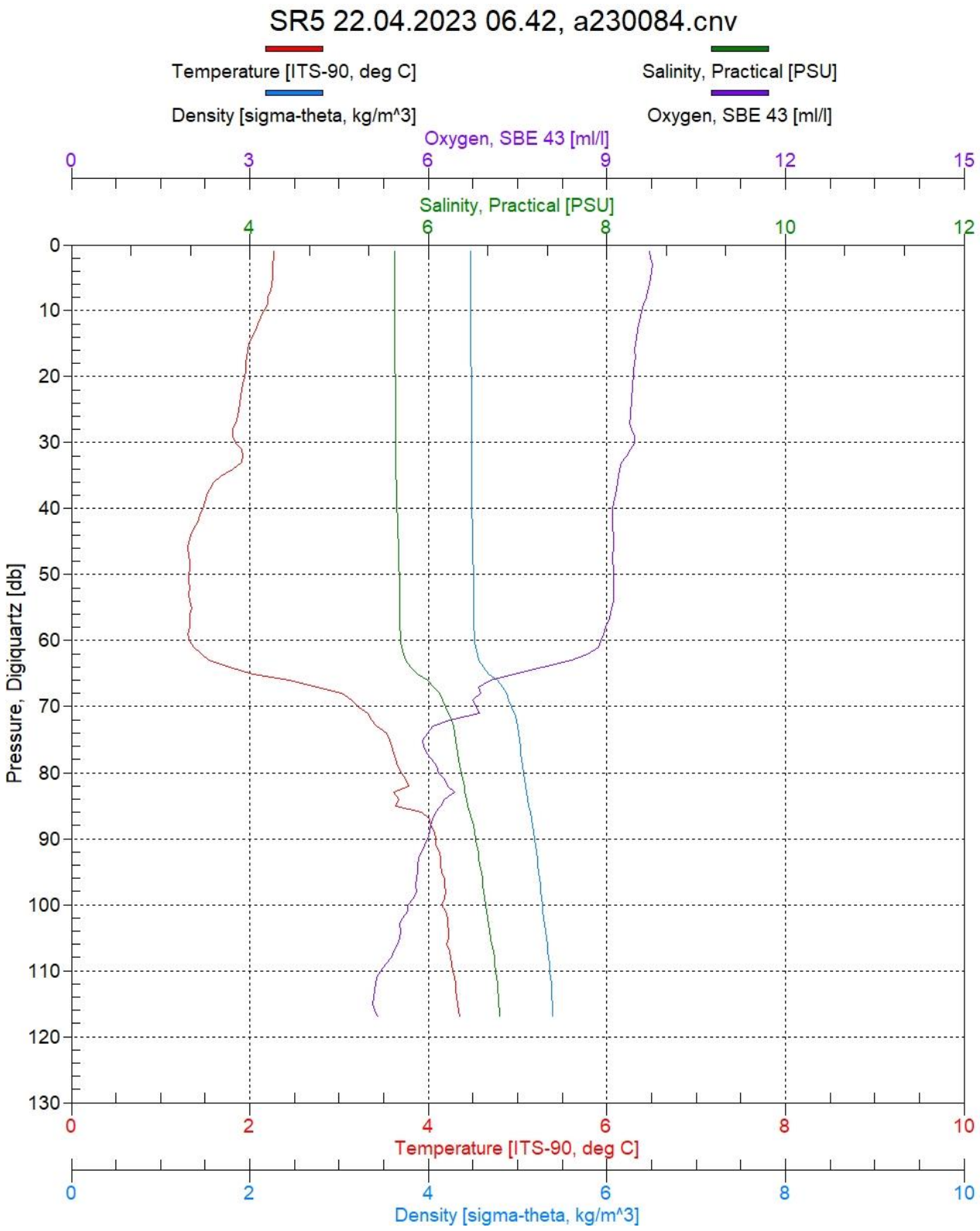

F33 21.04.2023 20.10., a230082.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Voltage 0 [V] Fluorometer
Voltage 0 [V] Fluorometer
0
1
2
3
4
5
Salinity, Practical [PSU]
4
6
8
10
12
Pressure, Digiquartz [db]
0
13
26
39
52
65
78
91
104
117
130
0
2
4
6
8
10
Temperature [ITS-90, deg C]
0
2
4
6
8
10
Density [sigma-theta, kg/m^3]

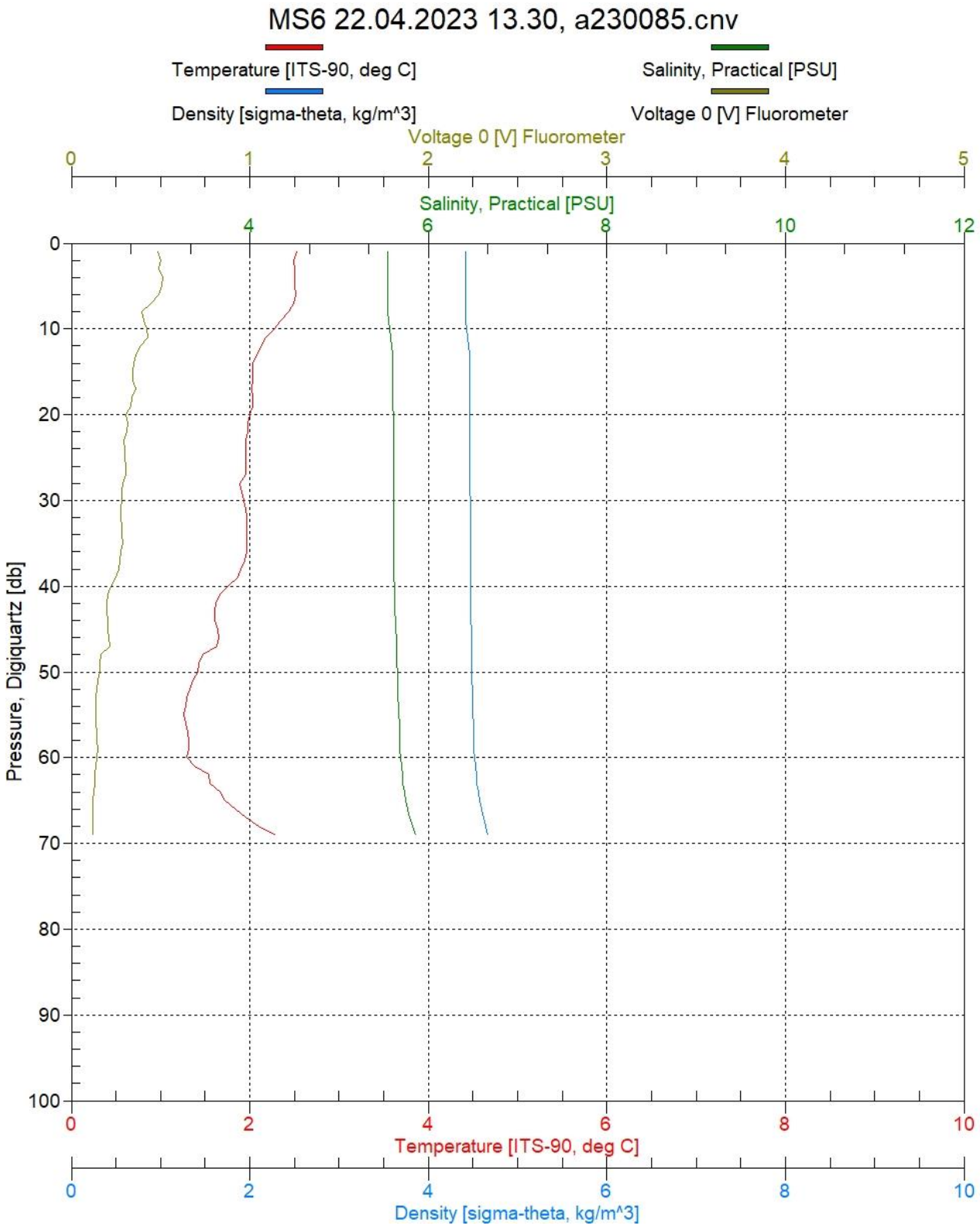

F33 21.04.2023 20.10., a230082.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Oxygen, SBE 43 [ml/l]
Oxygen, SBE 43 [ml/l]
0
3
6
9
12
15
Salinity, Practical [PSU]
4
6
8
10
12
Pressure, Digiquartz [db]
0
13
26
39
52
65
78
91
104
117
130
0
2
4
6
8
10
Temperature [ITS-90, deg C]
0
2
4
6
8
10
Density [sigma-theta, kg/m^3]

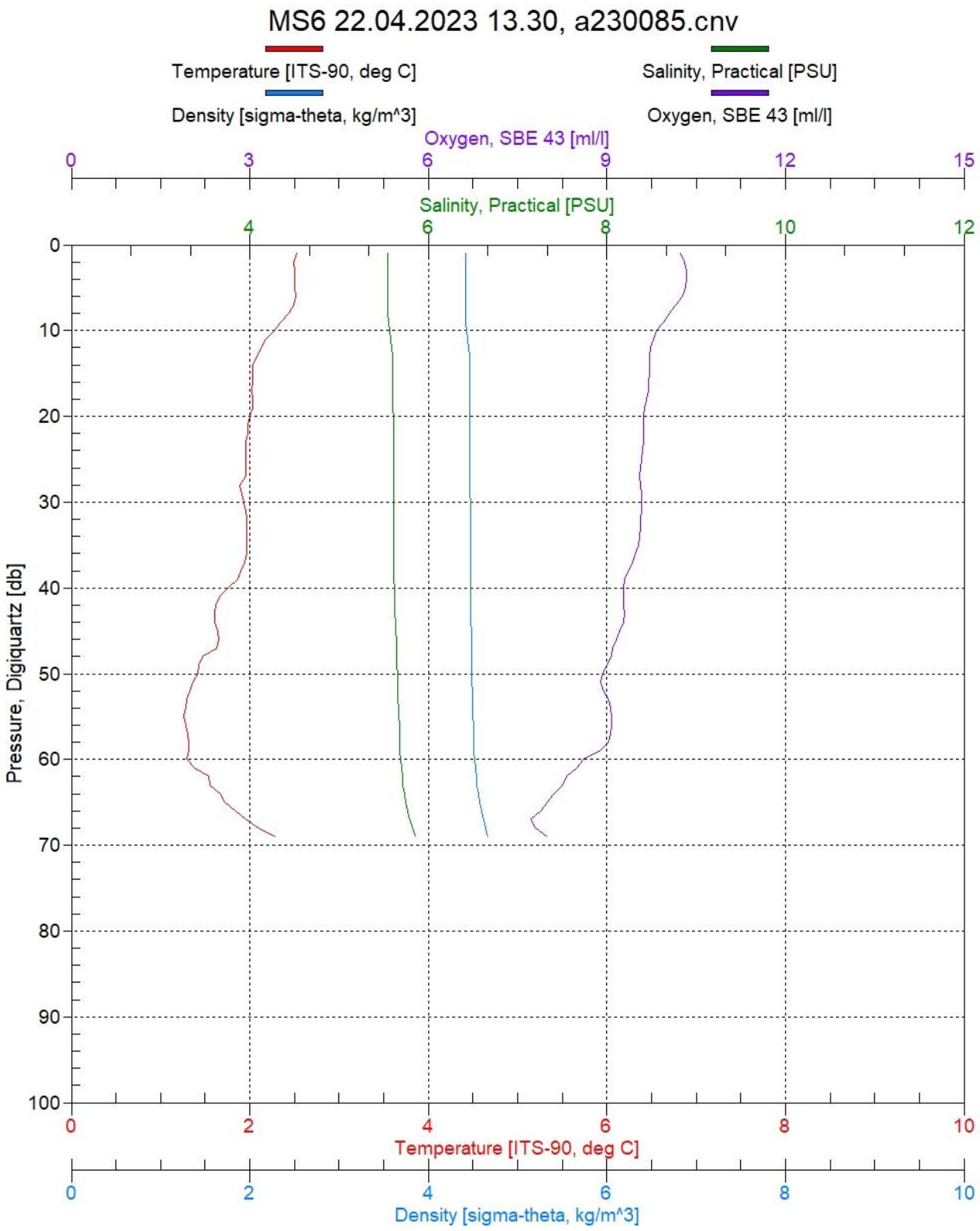

SR3 22.04.2023 01.42, a230083.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Voltage 0 [V] Fluorometer
Voltage 0 [V] Fluorometer
0
1
2
3
4
5
Salinity, Practical [PSU]
4
6
8
10
12
Pressure, Digiquartz [db]
0
13
26
39
52
65
78
91
104
117
130
0
2
4
6
8
10
Temperature [ITS-90, deg C]
0
2
4
6
8
10
Density [sigma-theta, kg/m^3]

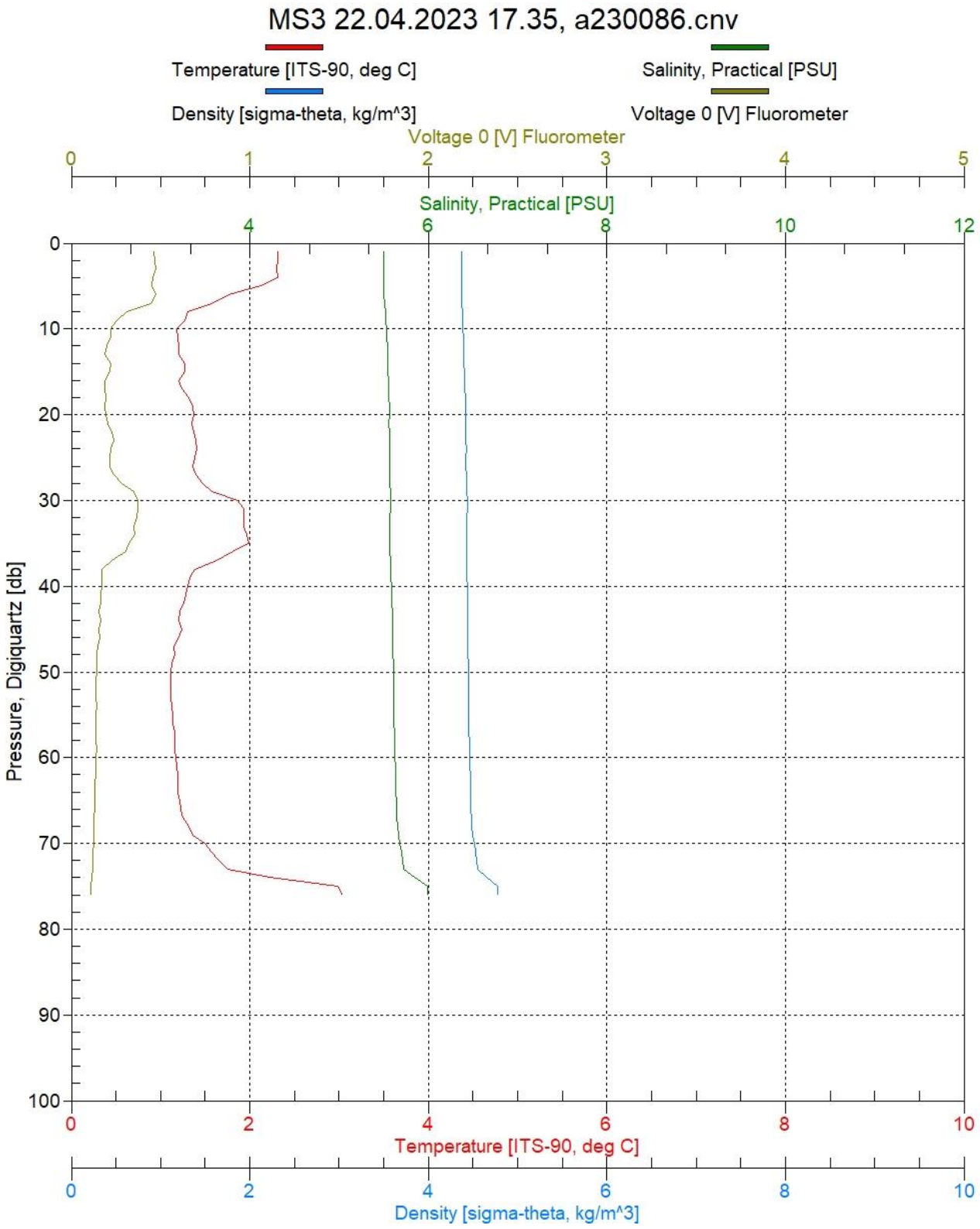

SR3 22.04.2023 01.42, a230083.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Oxygen, SBE 43 [ml/l]
Oxygen, SBE 43 [ml/l]
0 3 6 9 12 15
Salinity, Practical [PSU]
4 6 8 10 12
0 10 20 30 40 50 60 70 80 90 100
Pressure, Digiquartz [db]
0 2 4 6 8 10
Temperature [ITS-90, deg C]
0 2 4 6 8 10
Density [sigma-theta, kg/m^3]

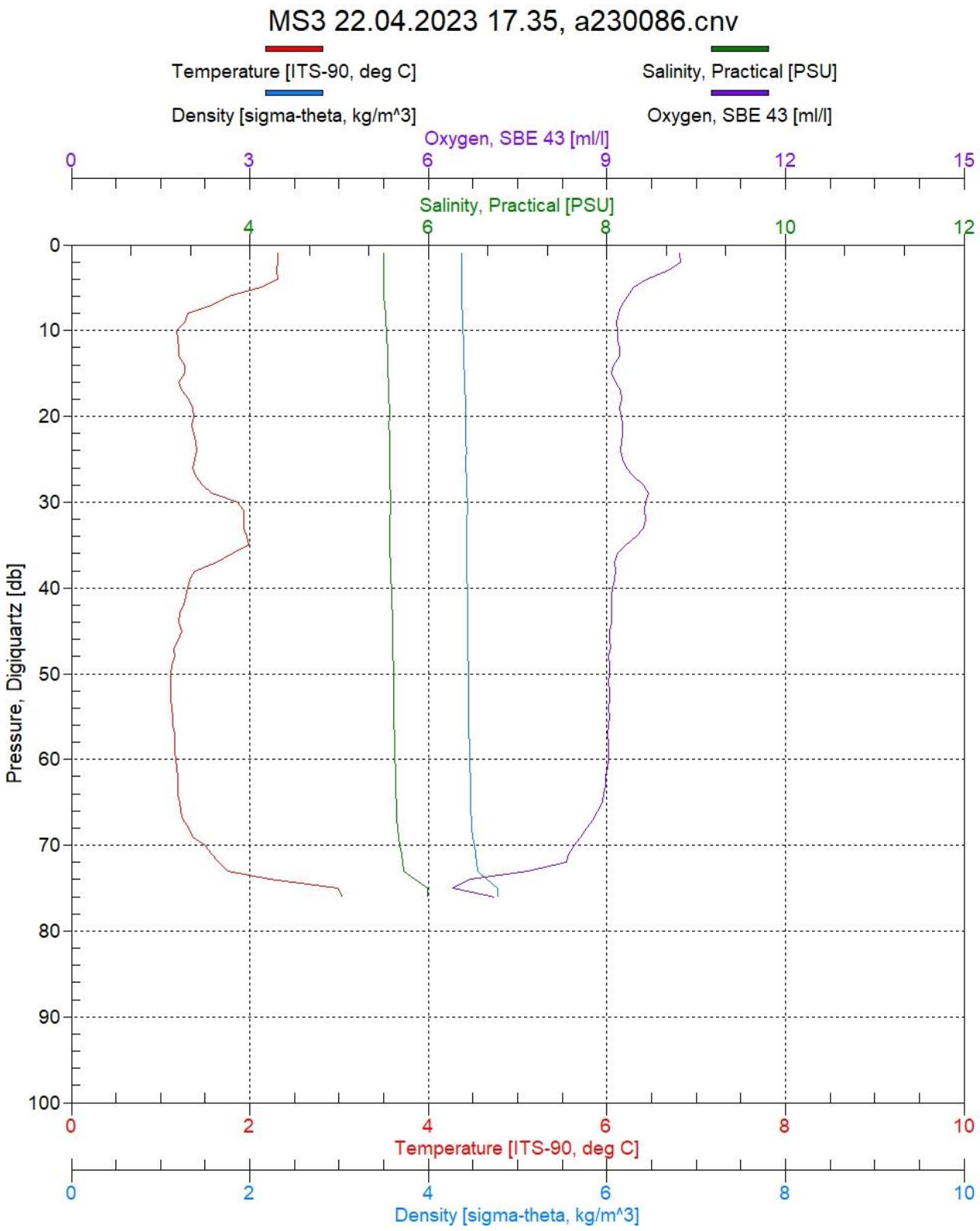

SR5 22.04.2023 06.42, a230084.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Voltage 0 [V] Fluorometer
Voltage 0 [V] Fluorometer
0
1
2
3
4
5
Salinity, Practical [PSU]
4
6
8
10
12
Pressure, Digiquartz [db]
0
13
26
39
52
65
78
91
104
117
130
0
2
4
6
8
10
Temperature [ITS-90, deg C]
0
2
4
6
8
10
Density [sigma-theta, kg/m^3]

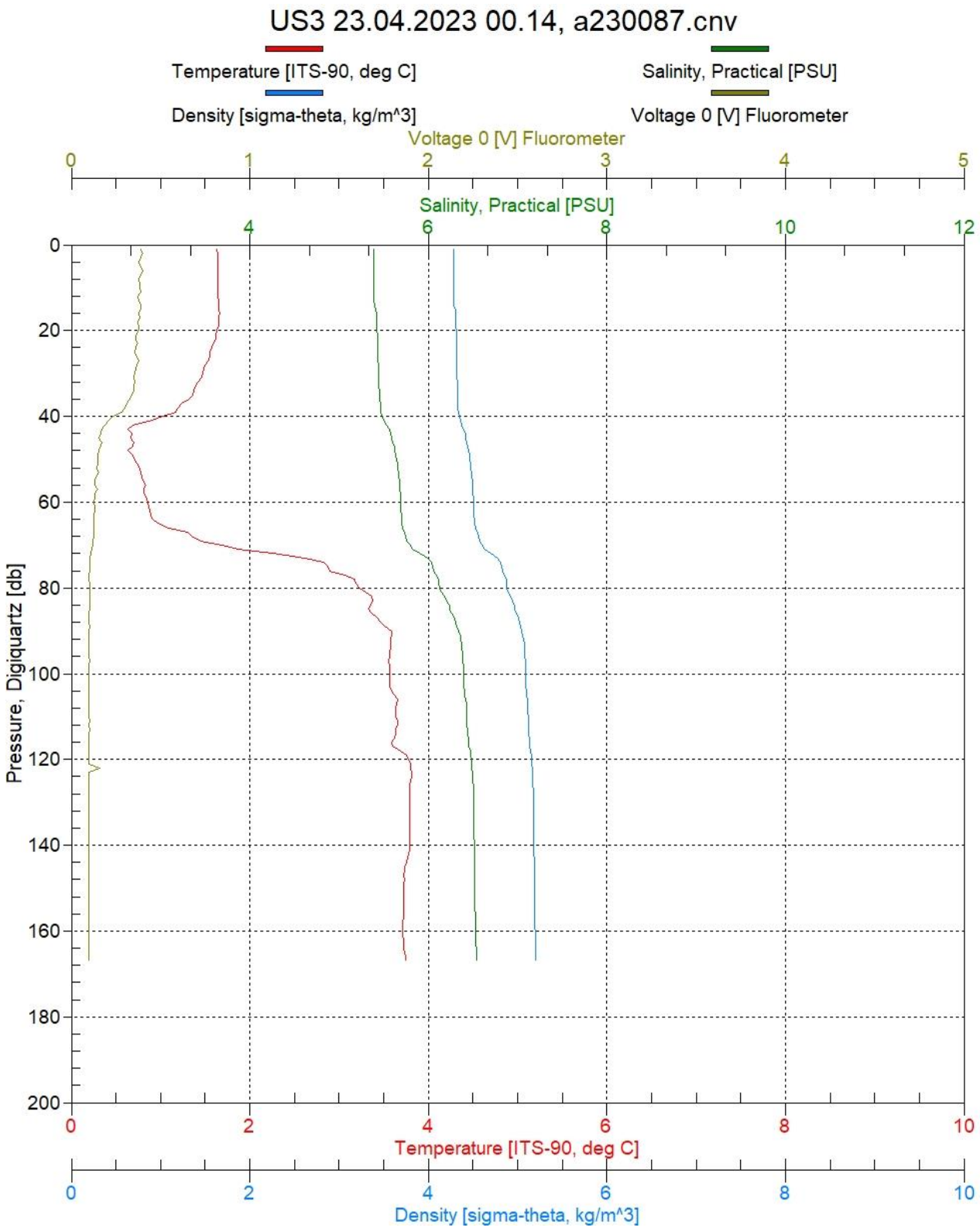

SR5 22.04.2023 06.42, a230084.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Oxygen, SBE 43 [ml/l]
Oxygen, SBE 43 [ml/l]
0 3 6 9 12 15
Salinity, Practical [PSU]
4 6 8 10 12
Pressure, Digiquartz [db]
0 10 20 30 40 50 60 70 80 90 100 110 120 130
0 2 4 6 8 10
Temperature [ITS-90, deg C]
0 2 4 6 8 10
Density [sigma-theta, kg/m^3]

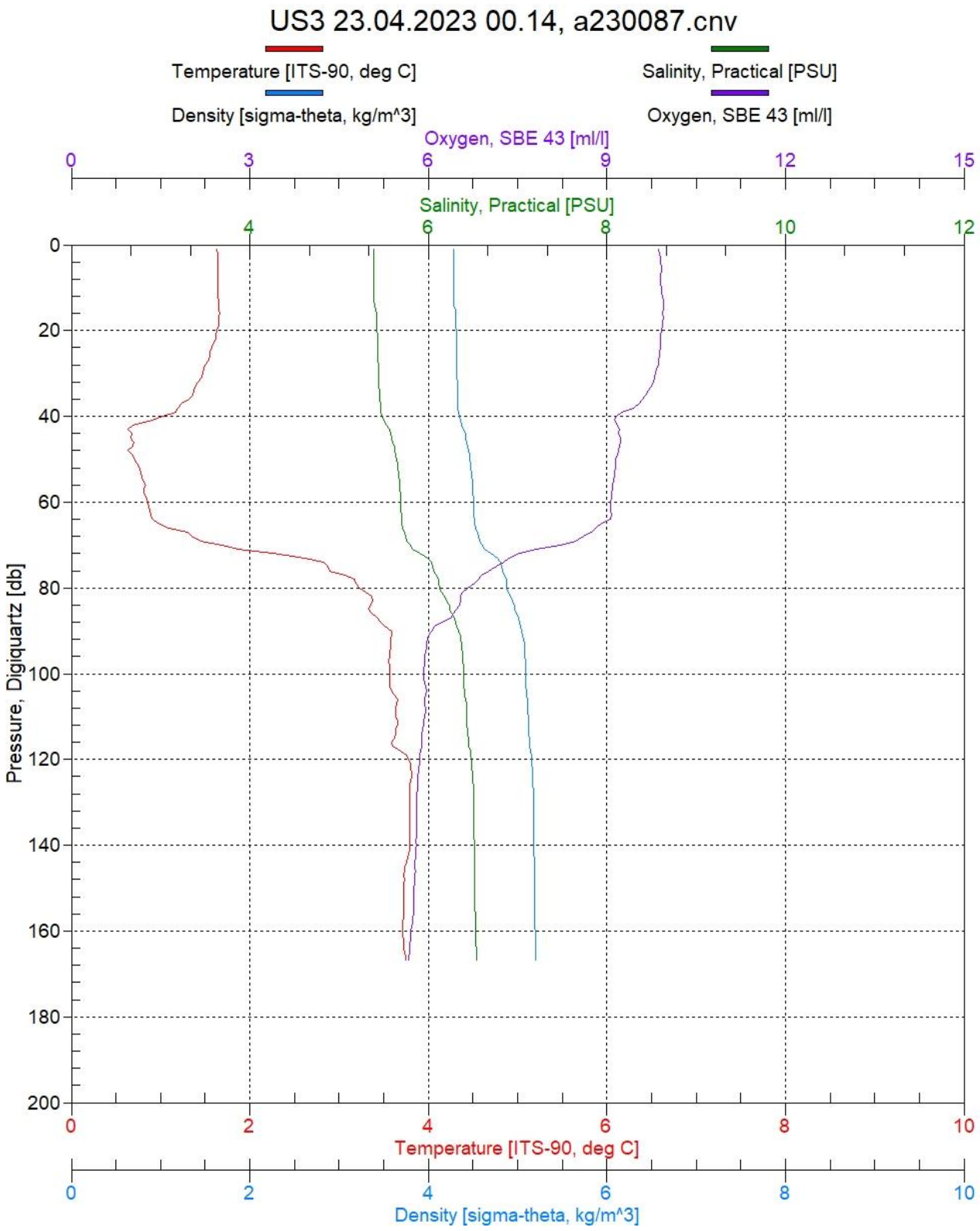

MS6 22.04.2023 13.30, a230085.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Voltage 0 [V] Fluorometer
Voltage 0 [V] Fluorometer
Salinity, Practical [PSU]
Pressure, Digiquartz [db]
Temperature [ITS-90, deg C]
Density [sigma-theta, kg/m^3]

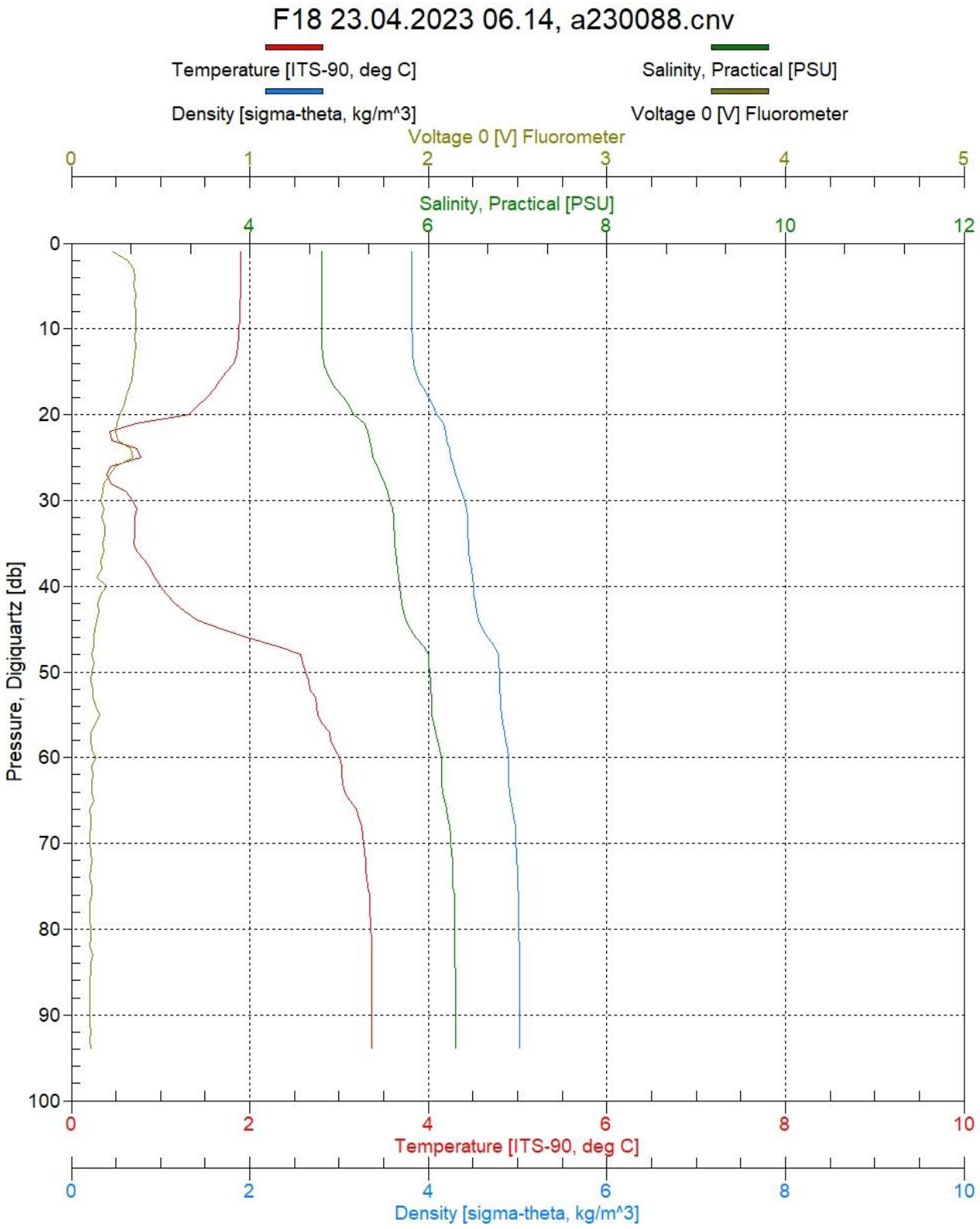

MS6 22.04.2023 13.30, a230085.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Oxygen, SBE 43 [ml/l]
Oxygen, SBE 43 [ml/l]
0 3 6 9 12 15
Salinity, Practical [PSU]
4 6 8 10 12
Pressure, Digiquartz [db]
0 10 20 30 40 50 60 70 80 90 100
0 2 4 6 8 10
Temperature [ITS-90, deg C]
0 2 4 6 8 10
Density [sigma-theta, kg/m^3]

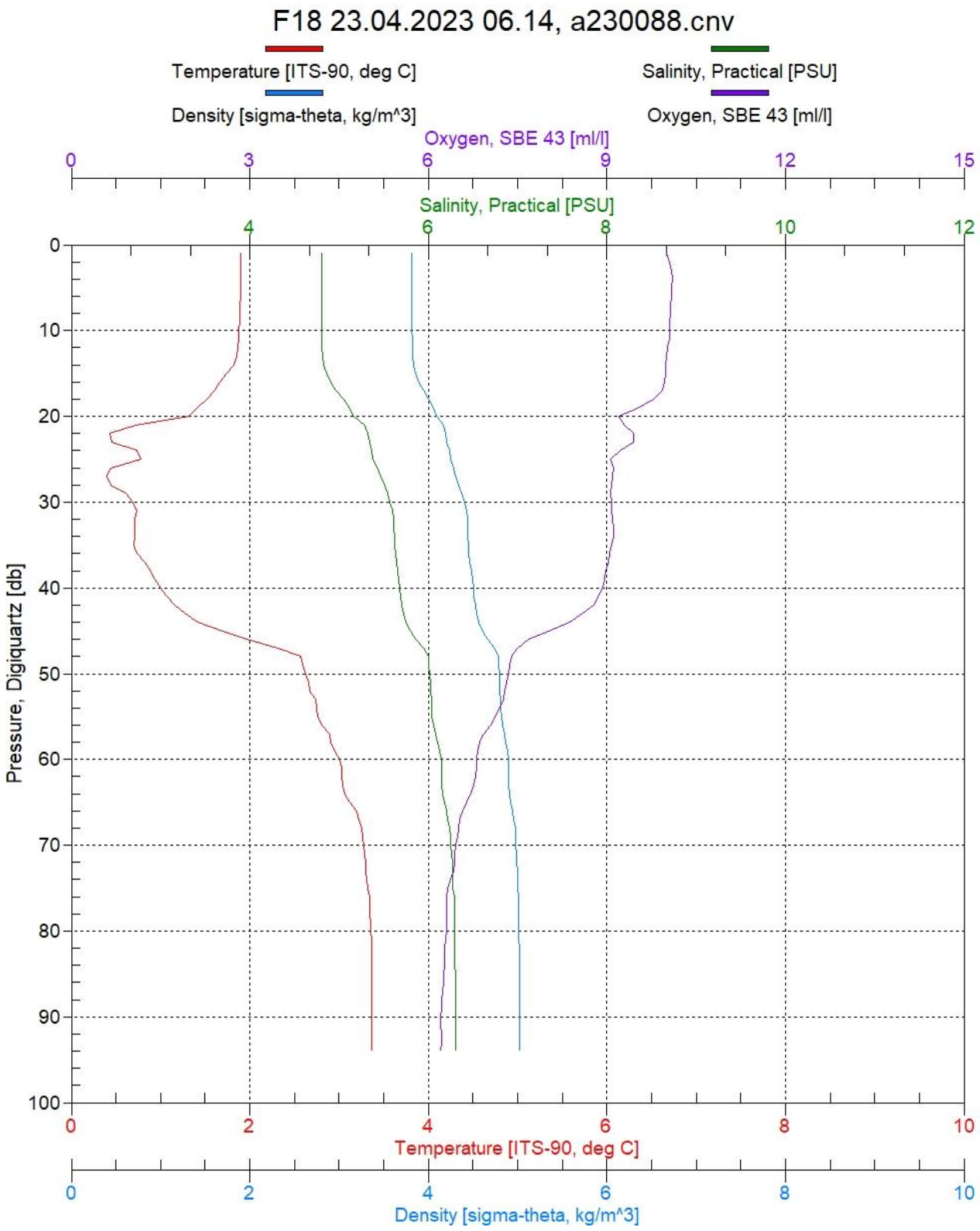

MS3 22.04.2023 17.35, a230086.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Voltage 0 [V] Fluorometer
Voltage 0 [V] Fluorometer
Salinity, Practical [PSU]
Pressure, Digiquartz [db]
Temperature [ITS-90, deg C]
Density [sigma-theta, kg/m^3]

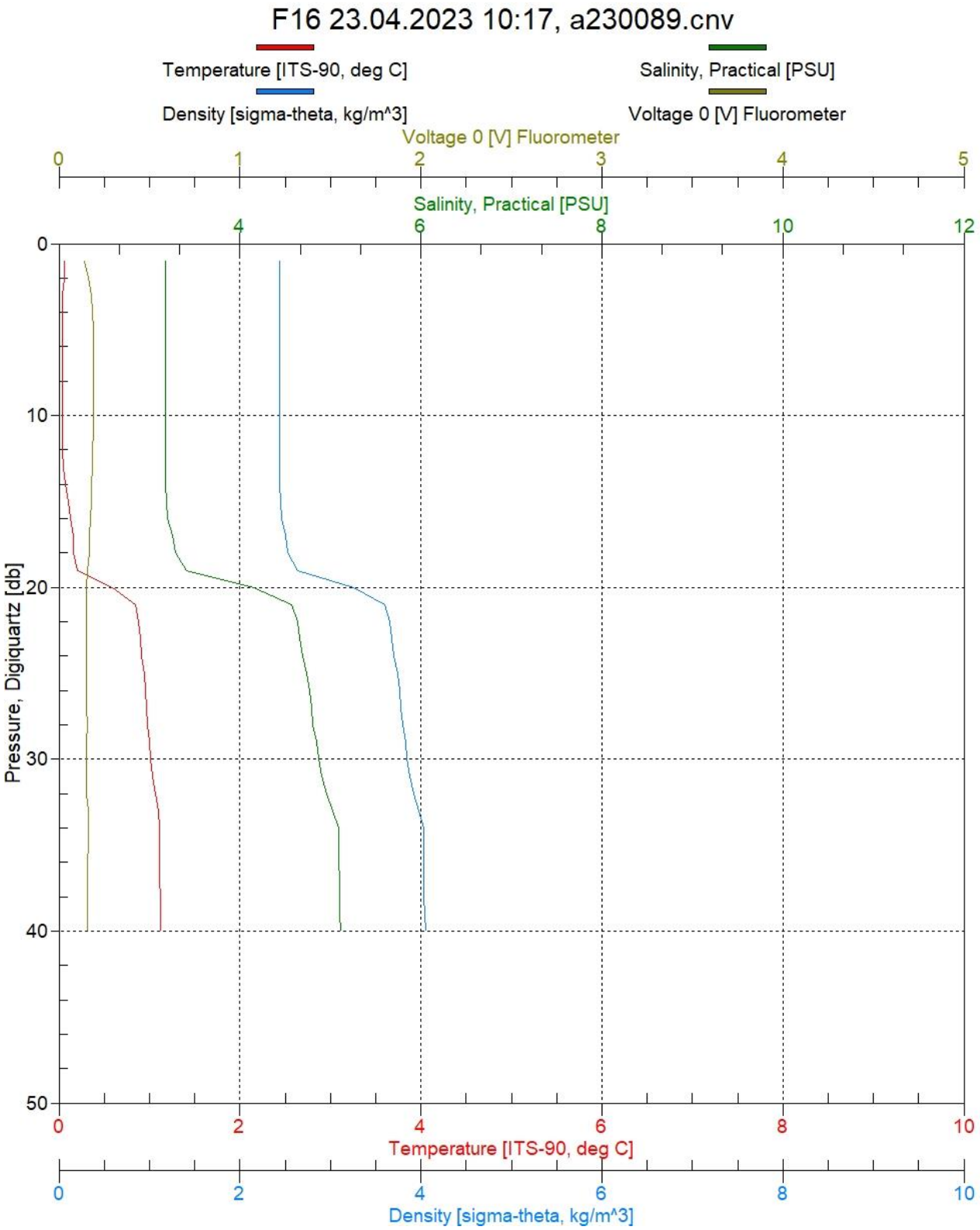

MS3 22.04.2023 17.35, a230086.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Oxygen, SBE 43 [ml/l]
Oxygen, SBE 43 [ml/l]
0
3
6
9
12
15
Salinity, Practical [PSU]
4
6
8
10
12
Pressure, Digiquartz [db]
0
10
20
30
40
50
60
70
80
90
100
0
2
4
6
8
10
Temperature [ITS-90, deg C]
0
2
4
6
8
10
Density [sigma-theta, kg/m^3]

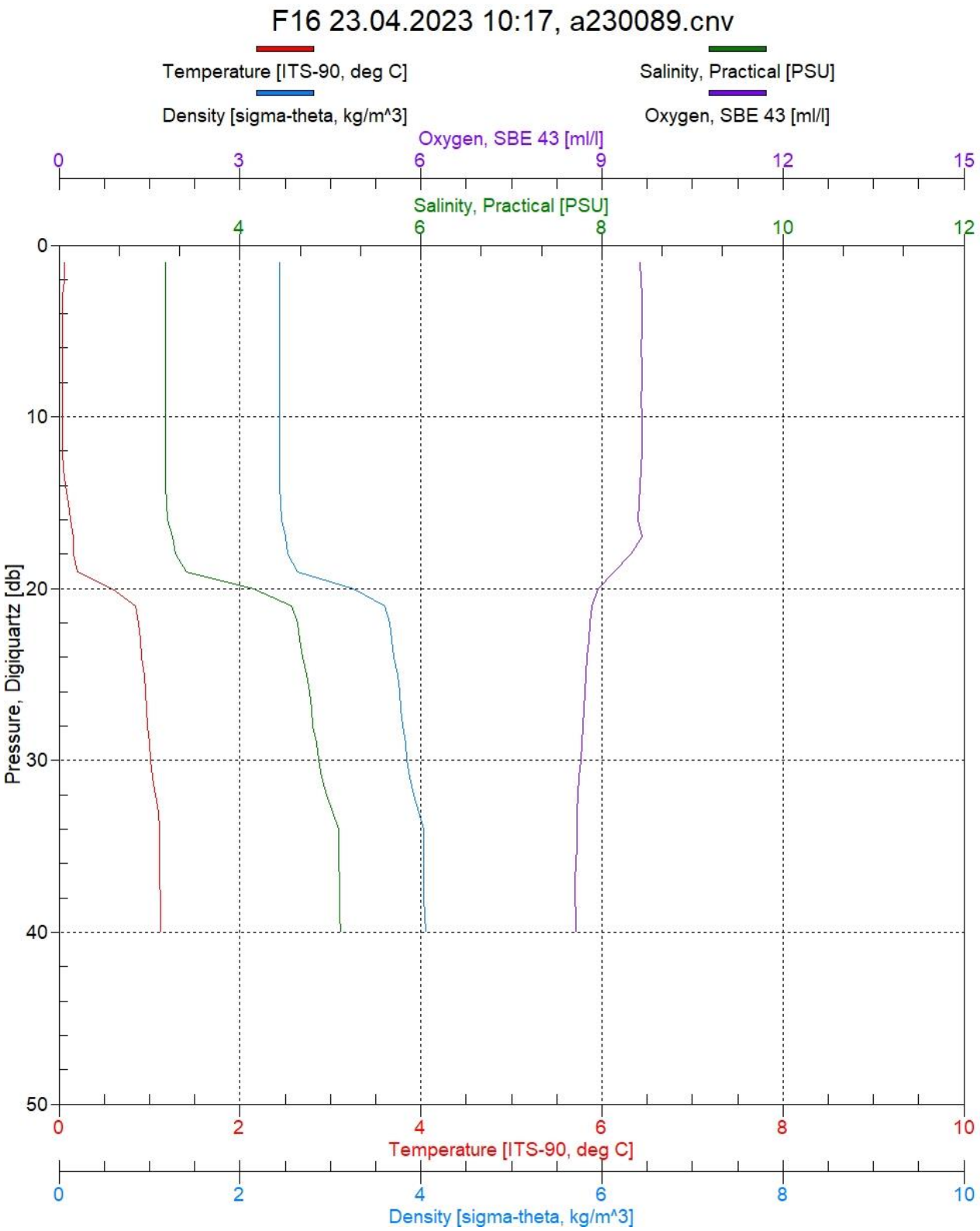

US3 23.04.2023 00.14, a230087.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Voltage 0 [V] Fluorometer
Voltage 0 [V] Fluorometer
0
1
2
3
4
5
Salinity, Practical [PSU]
4
6
8
10
12
Pressure, Digiquartz [db]
0
20
40
60
80
100
120
140
160
180
200
0
2
4
6
8
10
Temperature [ITS-90, deg C]
0
2
4
6
8
10
Density [sigma-theta, kg/m^3]

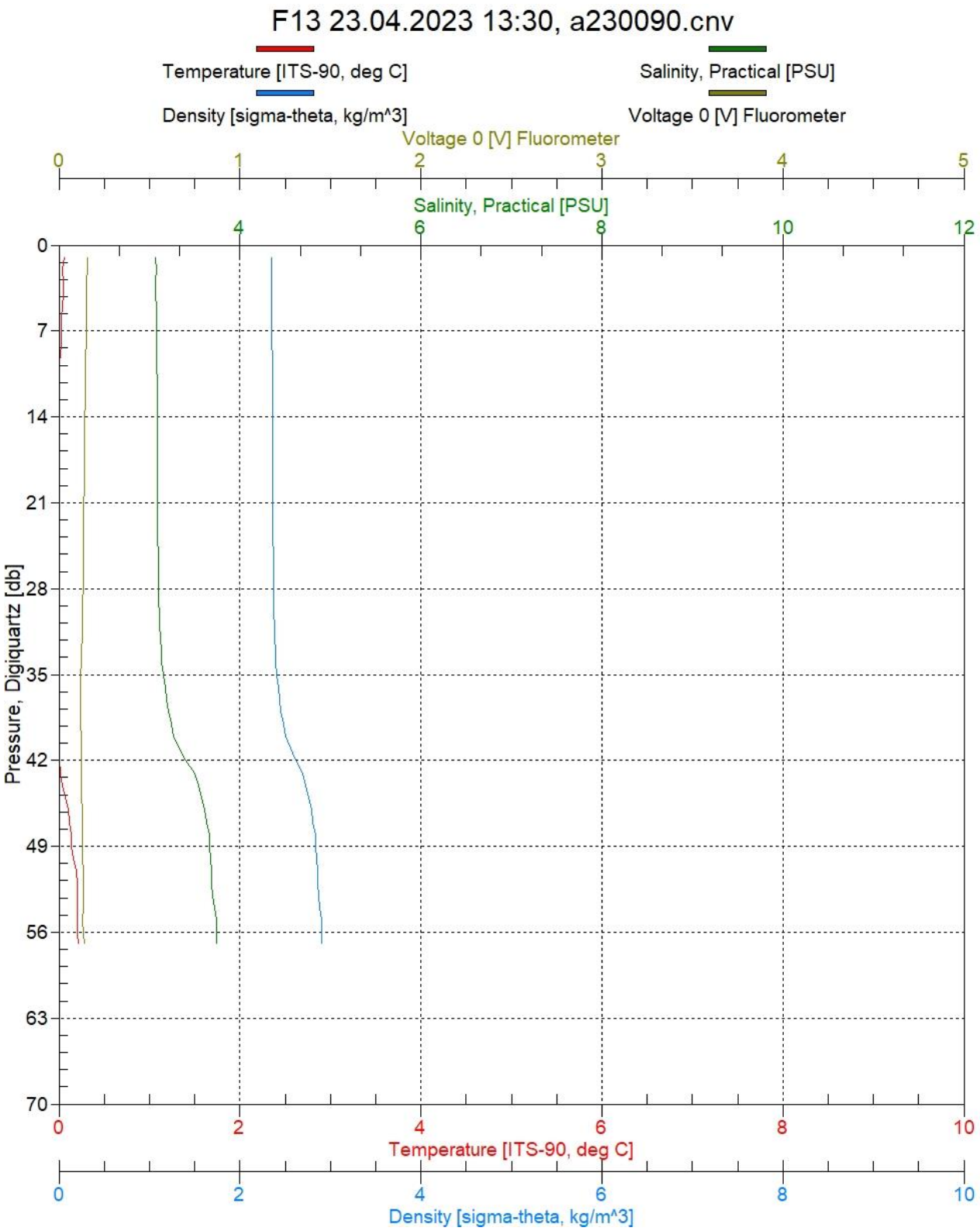

US3 23.04.2023 00.14, a230087.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Oxygen, SBE 43 [ml/l]
Oxygen, SBE 43 [ml/l]
0 3 6 9 12 15
Salinity, Practical [PSU]
4 6 8 10 12
Pressure, Digiquartz [db]
0 20 40 60 80 100 120 140 160 180 200
0 2 4 6 8 10
Temperature [ITS-90, deg C]
0 2 4 6 8 10
Density [sigma-theta, kg/m^3]

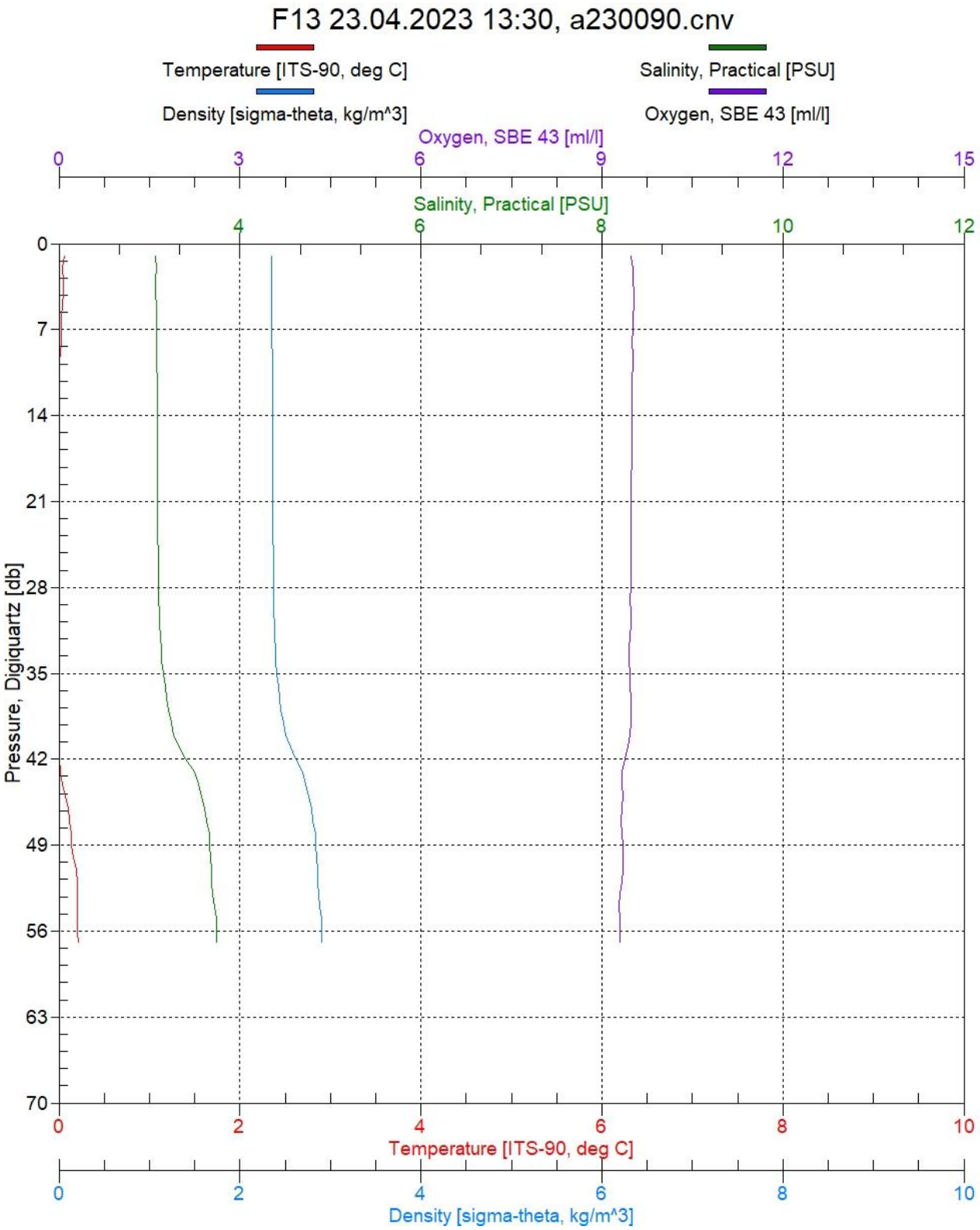

F18 23.04.2023 06.14, a230088.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Voltage 0 [V] Fluorometer
Voltage 0 [V] Fluorometer
Salinity, Practical [PSU]
Pressure, Digiquartz [db]
Temperature [ITS-90, deg C]
Density [sigma-theta, kg/m^3]

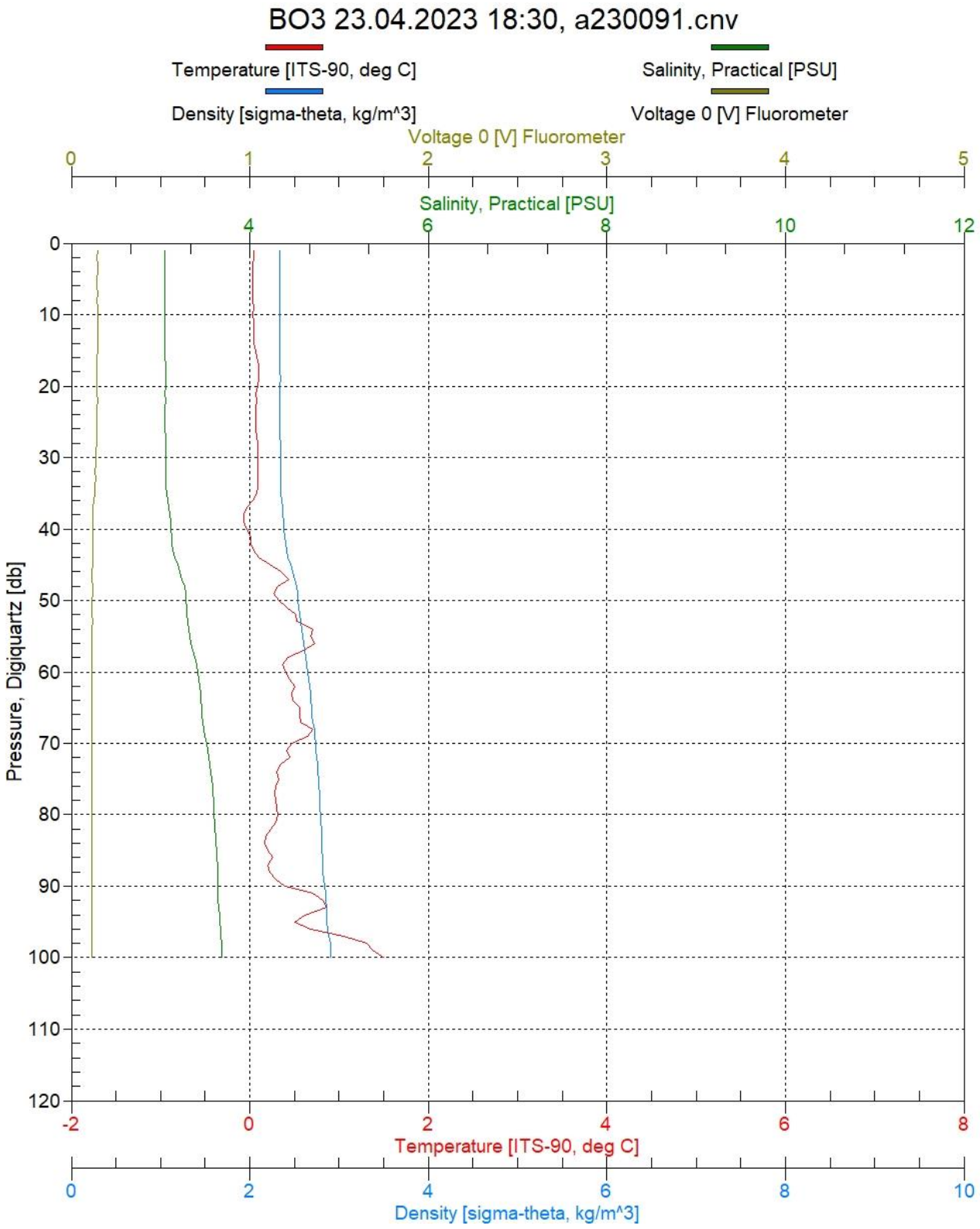

F18 23.04.2023 06.14, a230088.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Oxygen, SBE 43 [ml/l]
Oxygen, SBE 43 [ml/l]
0
3
6
9
12
15
Salinity, Practical [PSU]
4
6
8
10
12
0
10
20
30
40
50
60
70
80
90
100
Pressure, Digiquartz [db]
0
2
4
6
8
10
Temperature [ITS-90, deg C]
0
2
4
6
8
10
Density [sigma-theta, kg/m^3]

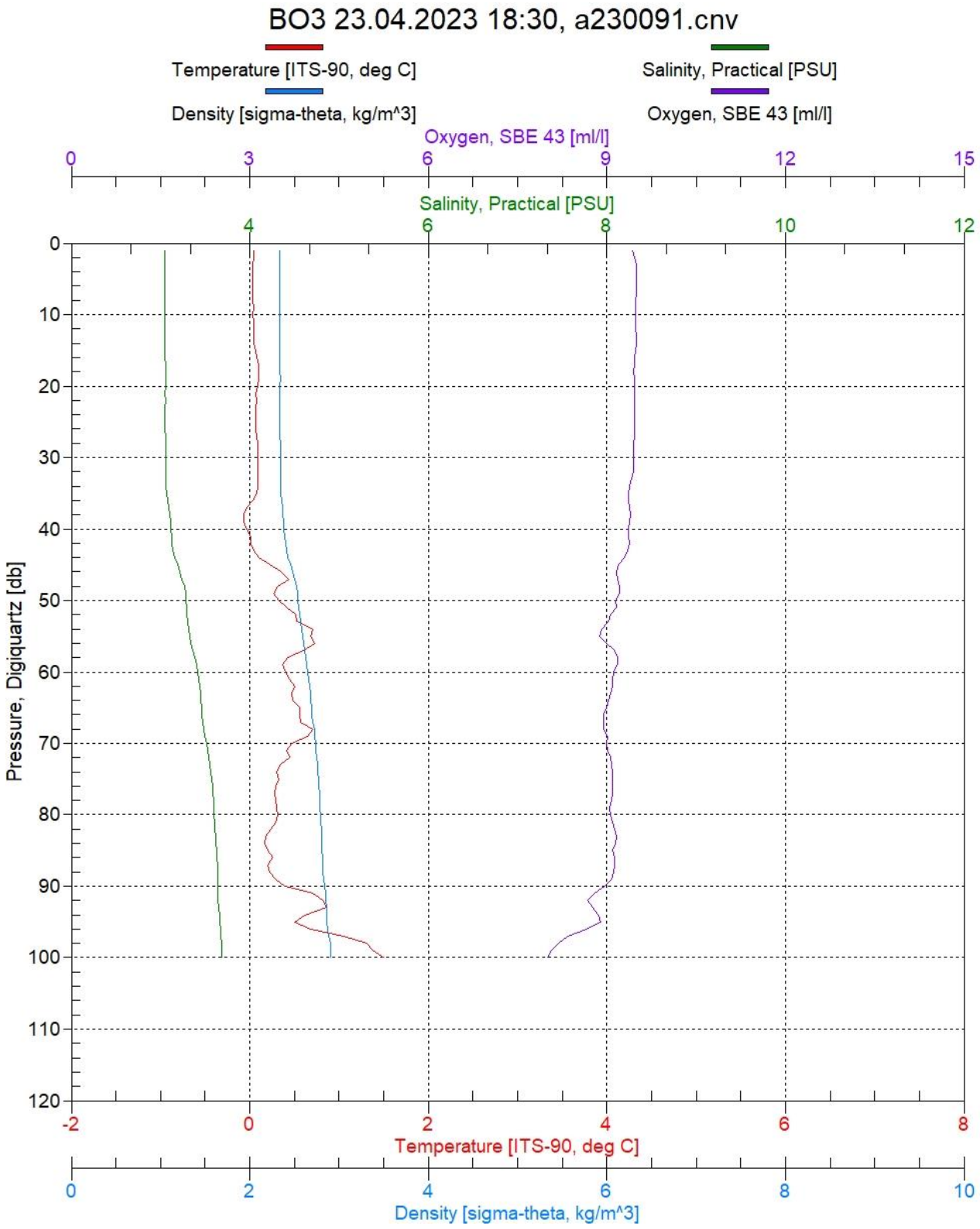

F16 23.04.2023 10:17, a230089.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Voltage 0 [V] Fluorometer
Voltage 0 [V] Fluorometer
0
1
2
3
4
5
Salinity, Practical [PSU]
4
6
8
10
12
Pressure, Digiquartz [db]
0
10
20
30
40
50
0
2
4
6
8
10
Temperature [ITS-90, deg C]
0
2
4
6
8
10
Density [sigma-theta, kg/m^3]

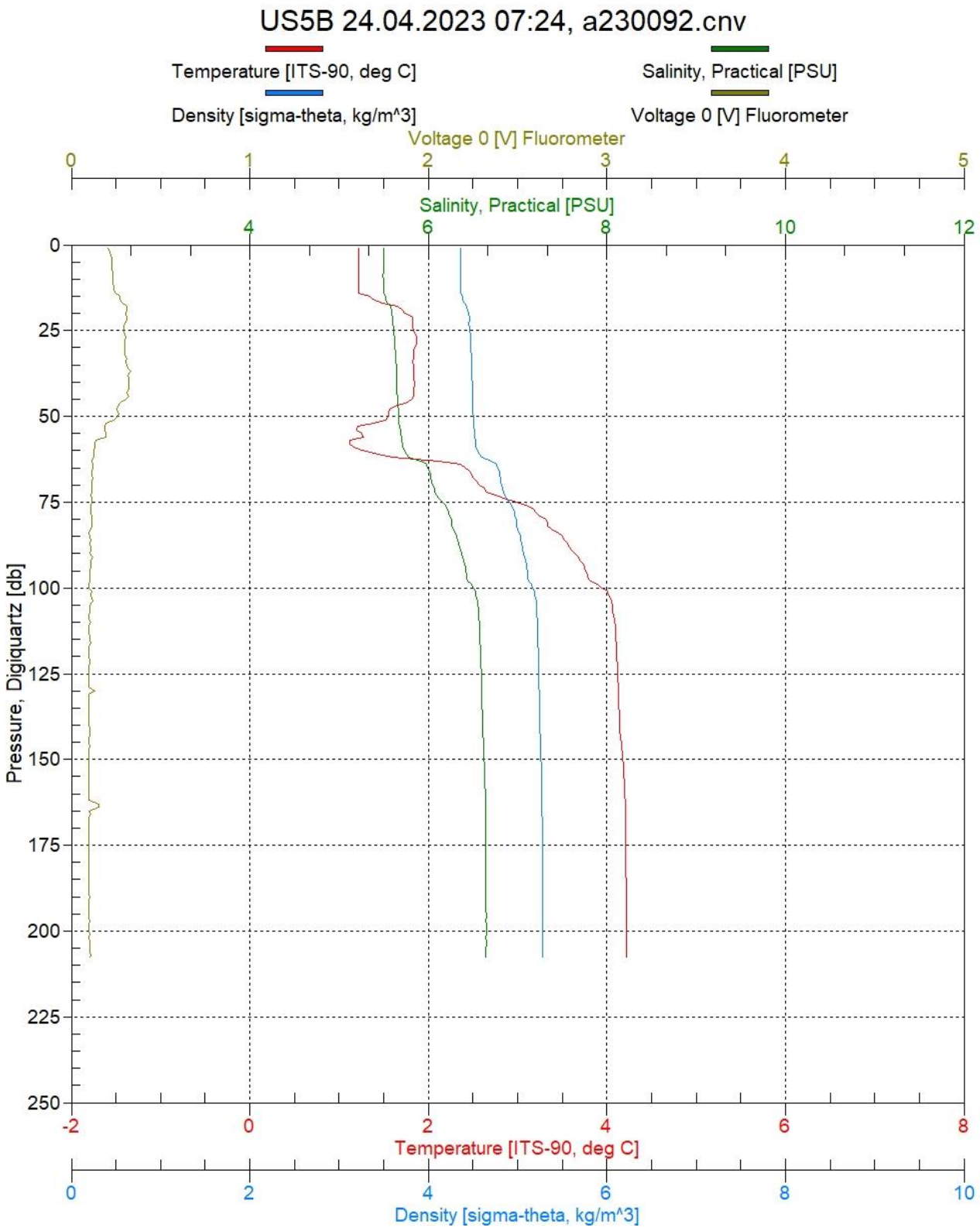

F16 23.04.2023 10:17, a230089.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Oxygen, SBE 43 [ml/l]
Oxygen, SBE 43 [ml/l]
0
3
6
9
12
15
Salinity, Practical [PSU]
4
6
8
10
12
0
10
20
30
40
50
Pressure, Digiquartz [db]
0
2
4
6
8
10
Temperature [ITS-90, deg C]
0
2
4
6
8
10
Density [sigma-theta, kg/m^3]

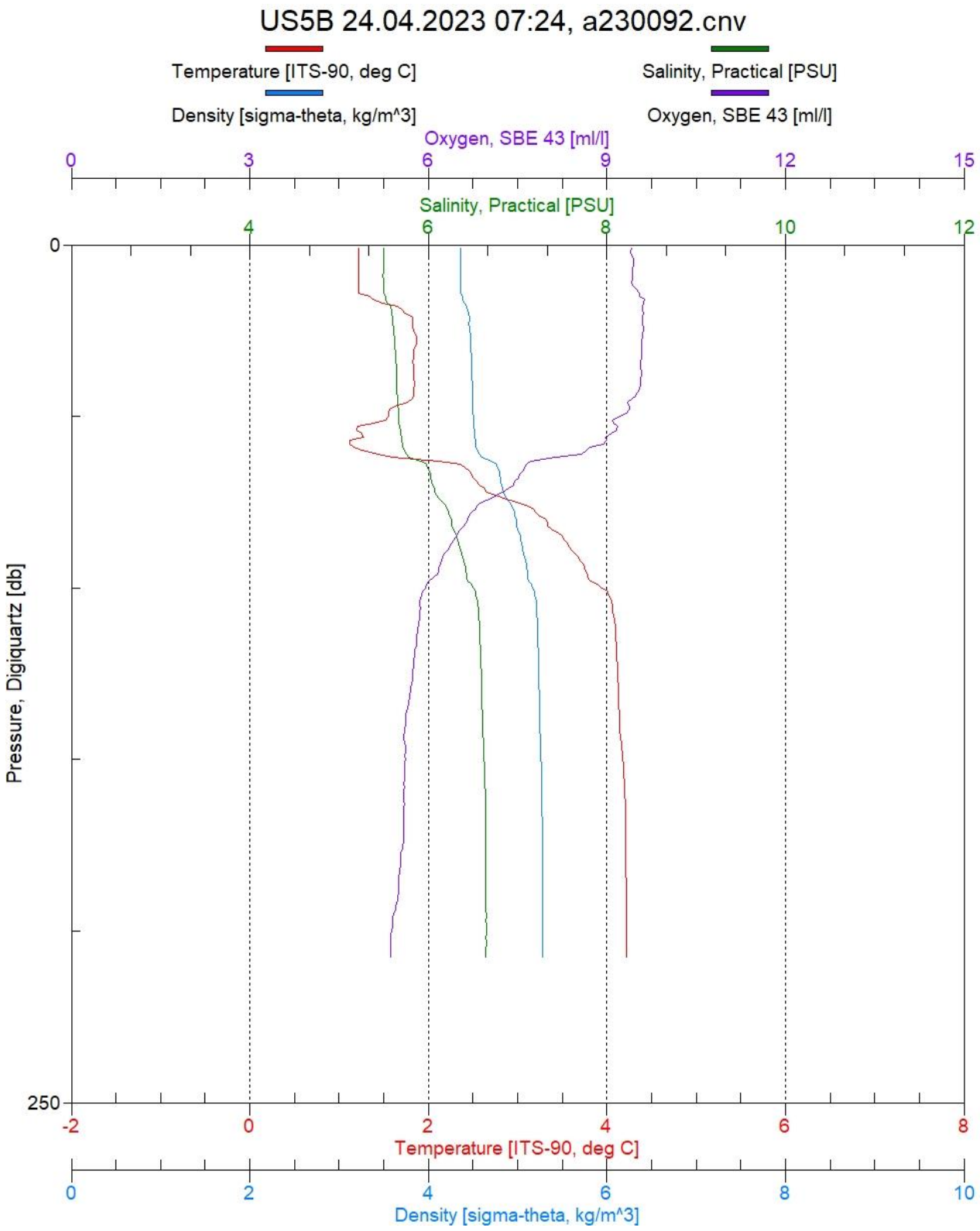

F13 23.04.2023 13:30, a230090.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Voltage 0 [V] Fluorometer
Voltage 0 [V] Fluorometer
0 1 2 3 4 5
Salinity, Practical [PSU]
4 6 8 10 12
Pressure, Digiquartz [db]
0 7 14 21 28 35 42 49 56 63 70
0 2 4 6 8 10
Temperature [ITS-90, deg C]
0 2 4 6 8 10
Density [sigma-theta, kg/m^3]

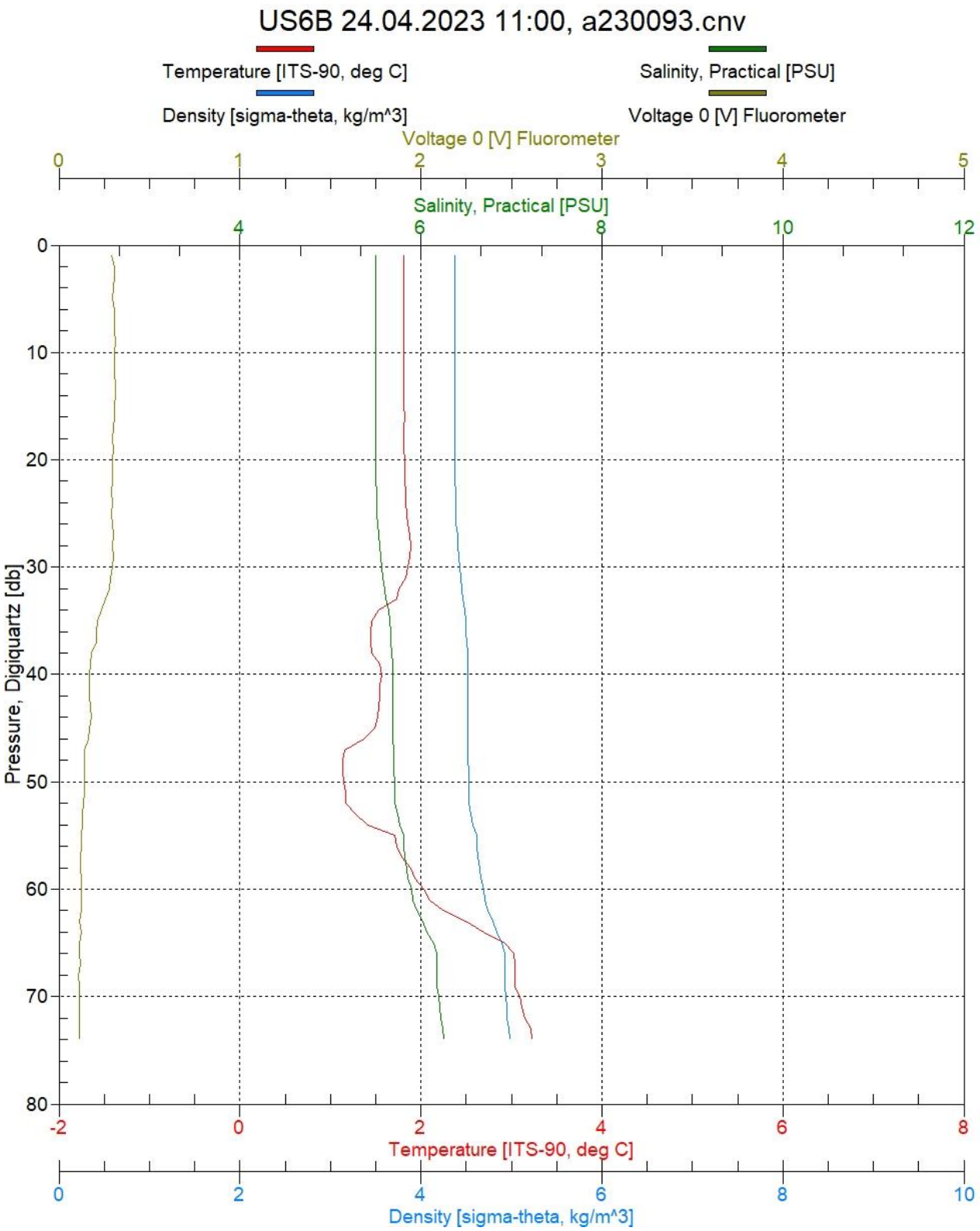

F13 23.04.2023 13:30, a230090.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Oxygen, SBE 43 [ml/l]
Oxygen, SBE 43 [ml/l]
0
3
6
9
12
15
Salinity, Practical [PSU]
4
6
8
10
12
Pressure, Digiquartz [db]
0
7
14
21
28
35
42
49
56
63
70
0
2
4
6
8
10
Temperature [ITS-90, deg C]
0
2
4
6
8
10
Density [sigma-theta, kg/m^3]

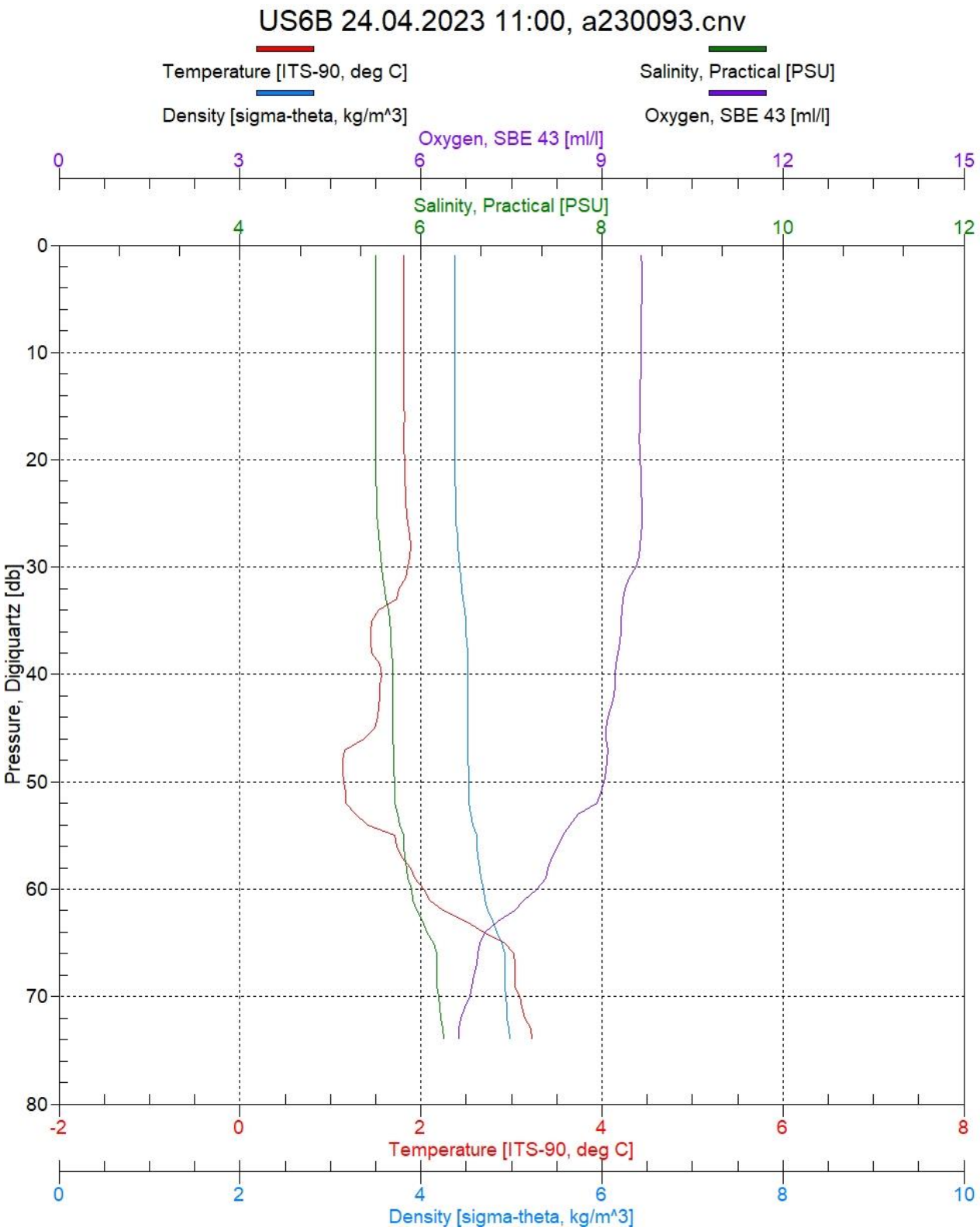

BO3 23.04.2023 18:30, a230091.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Voltage 0 [V] Fluorometer
Voltage 0 [V] Fluorometer
Salinity, Practical [PSU]
Pressure, Digiquartz [db]
Temperature [ITS-90, deg C]
Density [sigma-theta, kg/m^3]

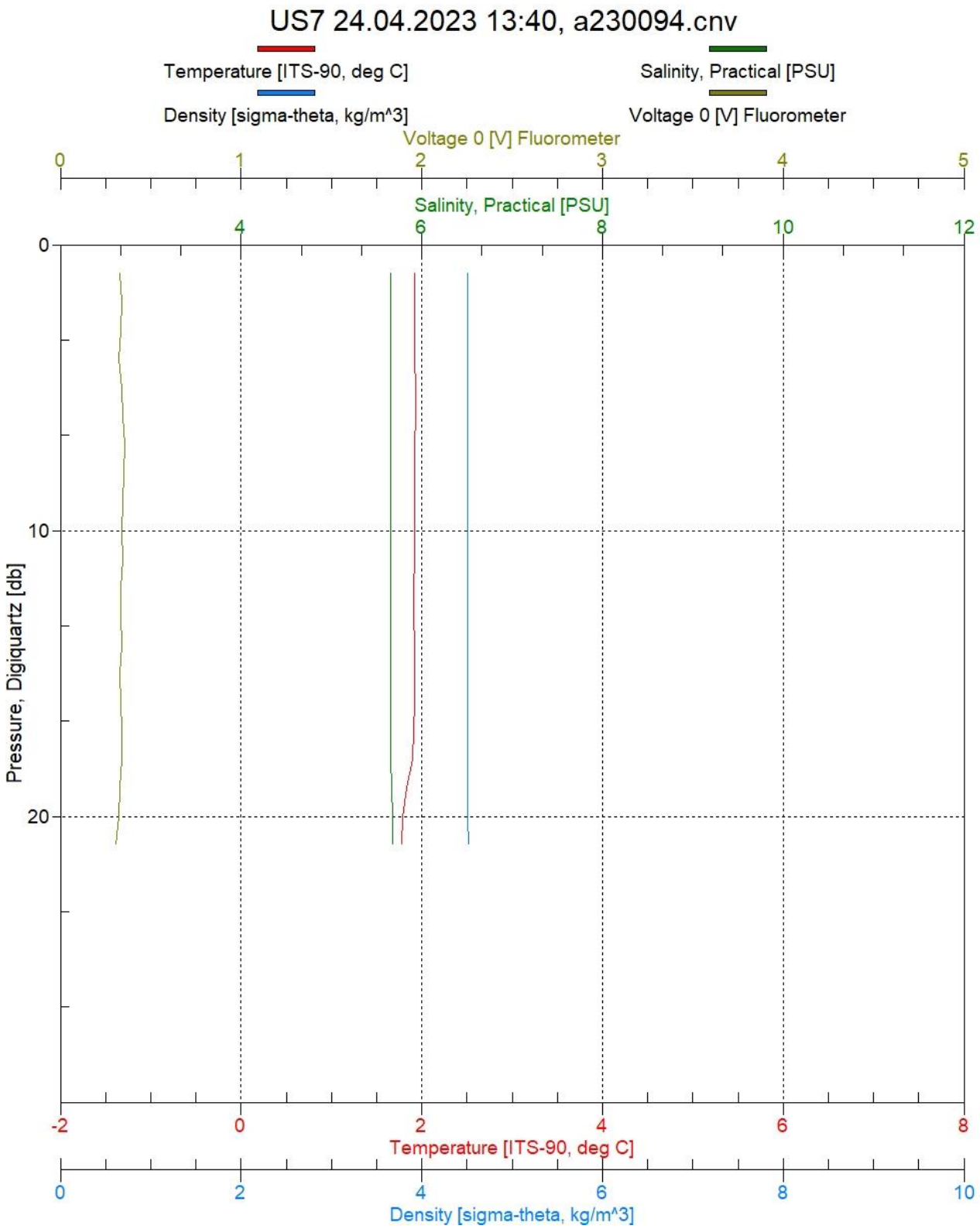

BO3 23.04.2023 18:30, a230091.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Oxygen, SBE 43 [ml/l]
Oxygen, SBE 43 [ml/l]
0
3
6
9
12
15
Salinity, Practical [PSU]
4
6
8
10
12
0
10
20
30
40
50
60
70
80
90
100
110
120
Pressure, Digiquartz [db]
-2
0
2
4
6
8
Temperature [ITS-90, deg C]
0
2
4
6
8
10
Density [sigma-theta, kg/m^3]

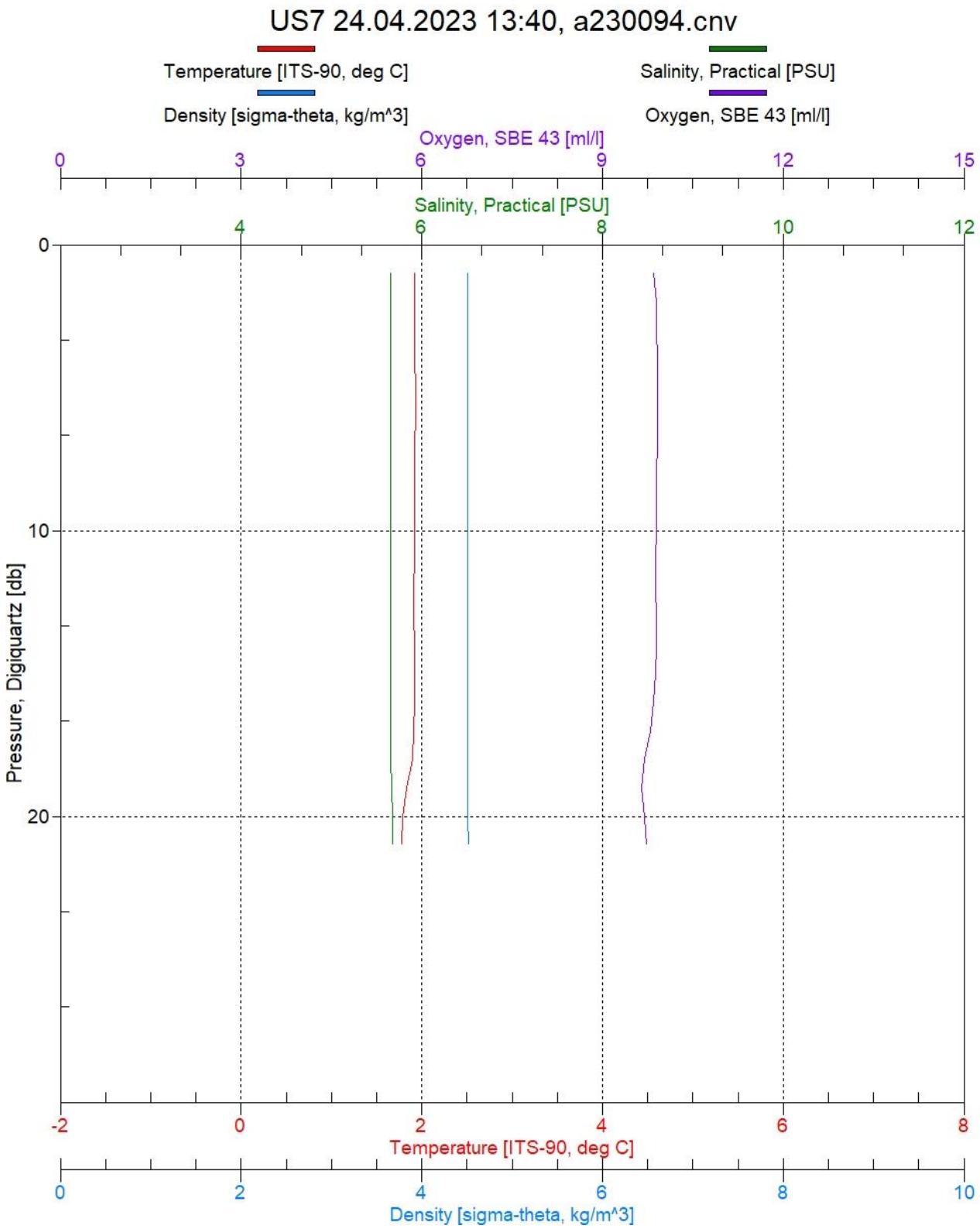

US5B 24.04.2023 07:24, a230092.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Voltage 0 [V] Fluorometer
Voltage 0 [V] Fluorometer
Salinity, Practical [PSU]
Pressure, Digiquartz [db]
Temperature [ITS-90, deg C]
Density [sigma-theta, kg/m^3]

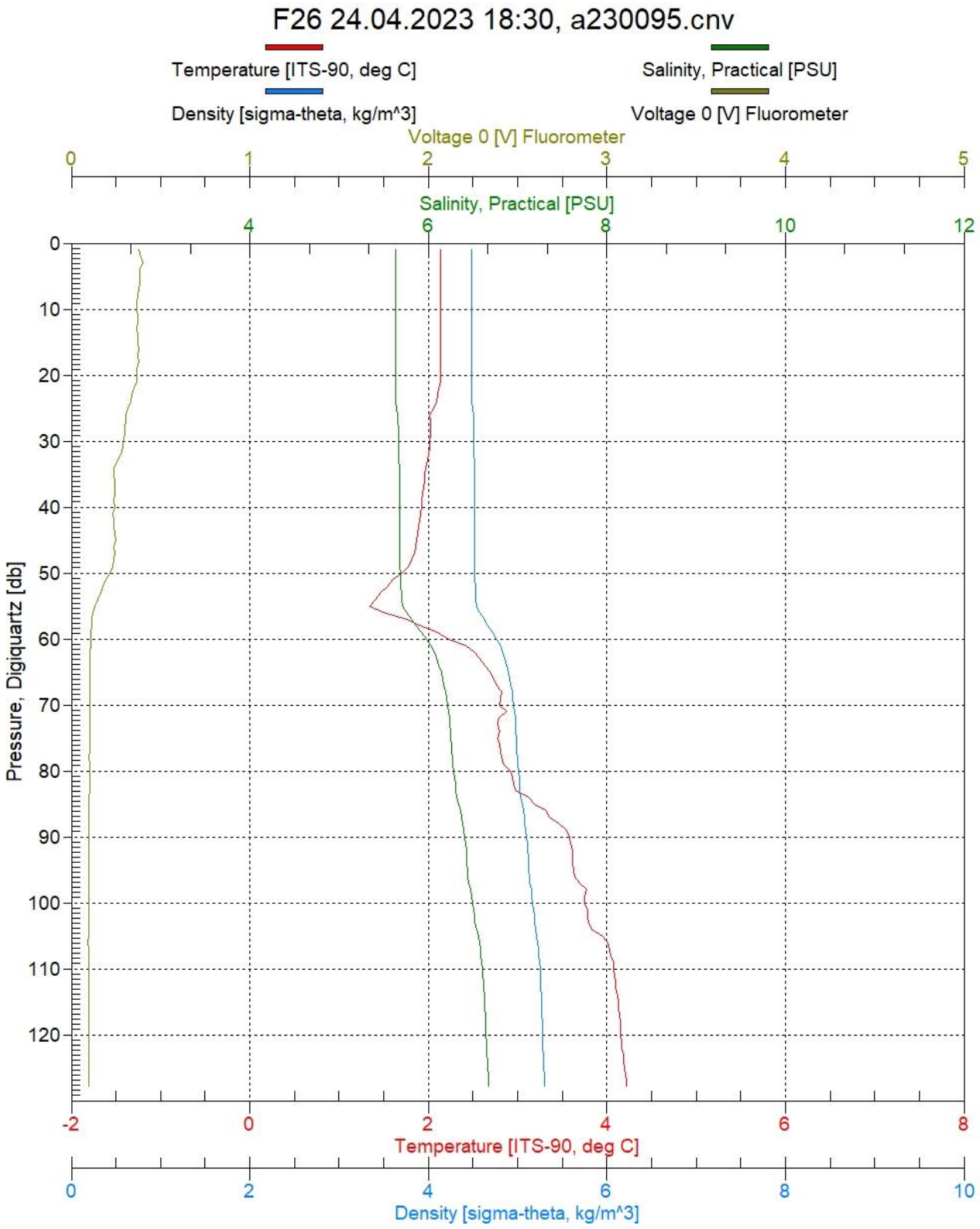

US5B 24.04.2023 07:24, a230092.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Oxygen, SBE 43 [ml/l]
Oxygen, SBE 43 [ml/l]
0
3
6
9
12
15
Salinity, Practical [PSU]
4
6
8
10
12
0
Pressure, Digiquartz [db]
250
-2
0
2
4
6
8
Temperature [ITS-90, deg C]
0
2
4
6
8
10
Density [sigma-theta, kg/m^3]

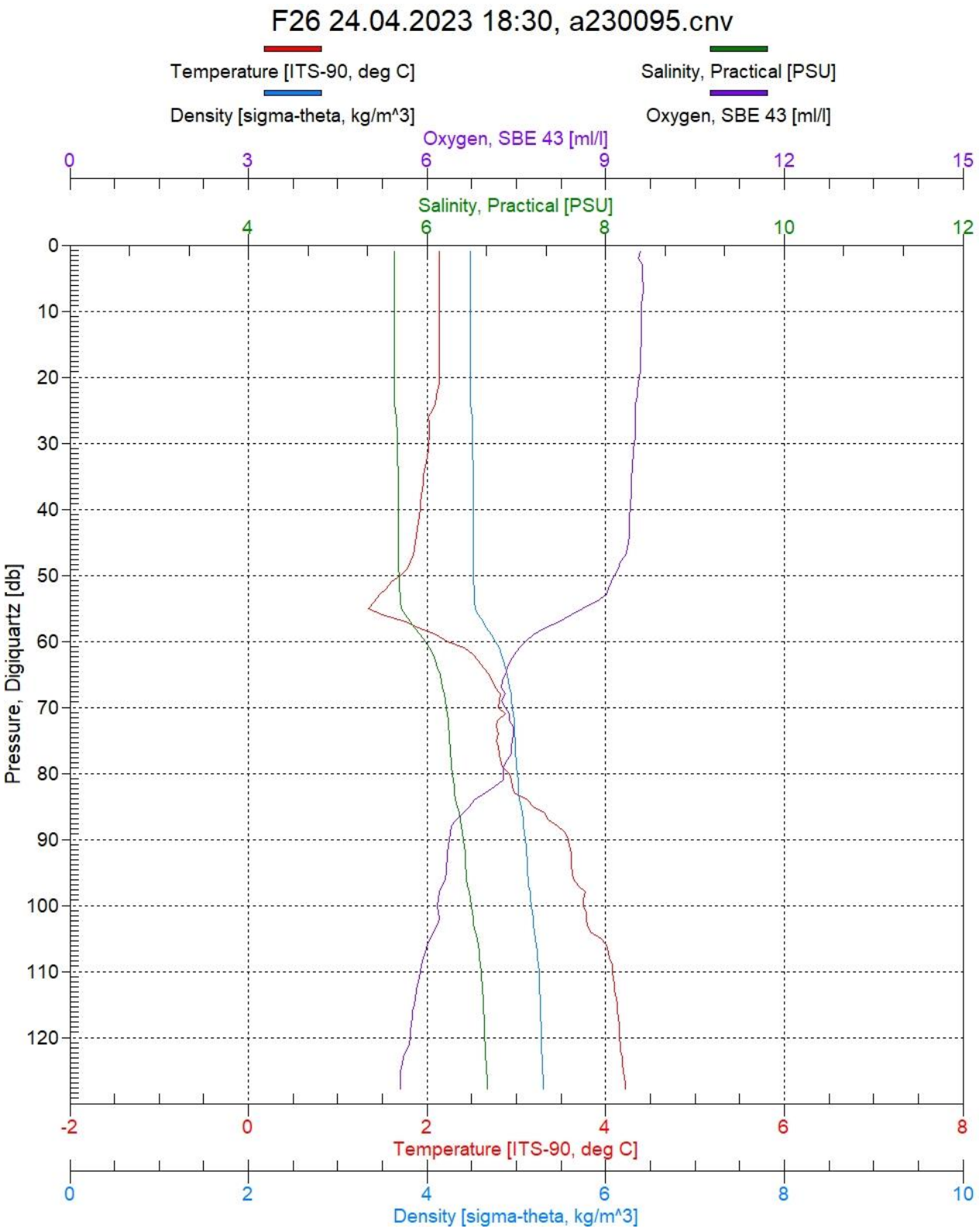

US6B 24.04.2023 11:00, a230093.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Voltage 0 [V] Fluorometer
Voltage 0 [V] Fluorometer
Salinity, Practical [PSU]
Pressure, Digiquartz [db]
Temperature [ITS-90, deg C]
Density [sigma-theta, kg/m^3]

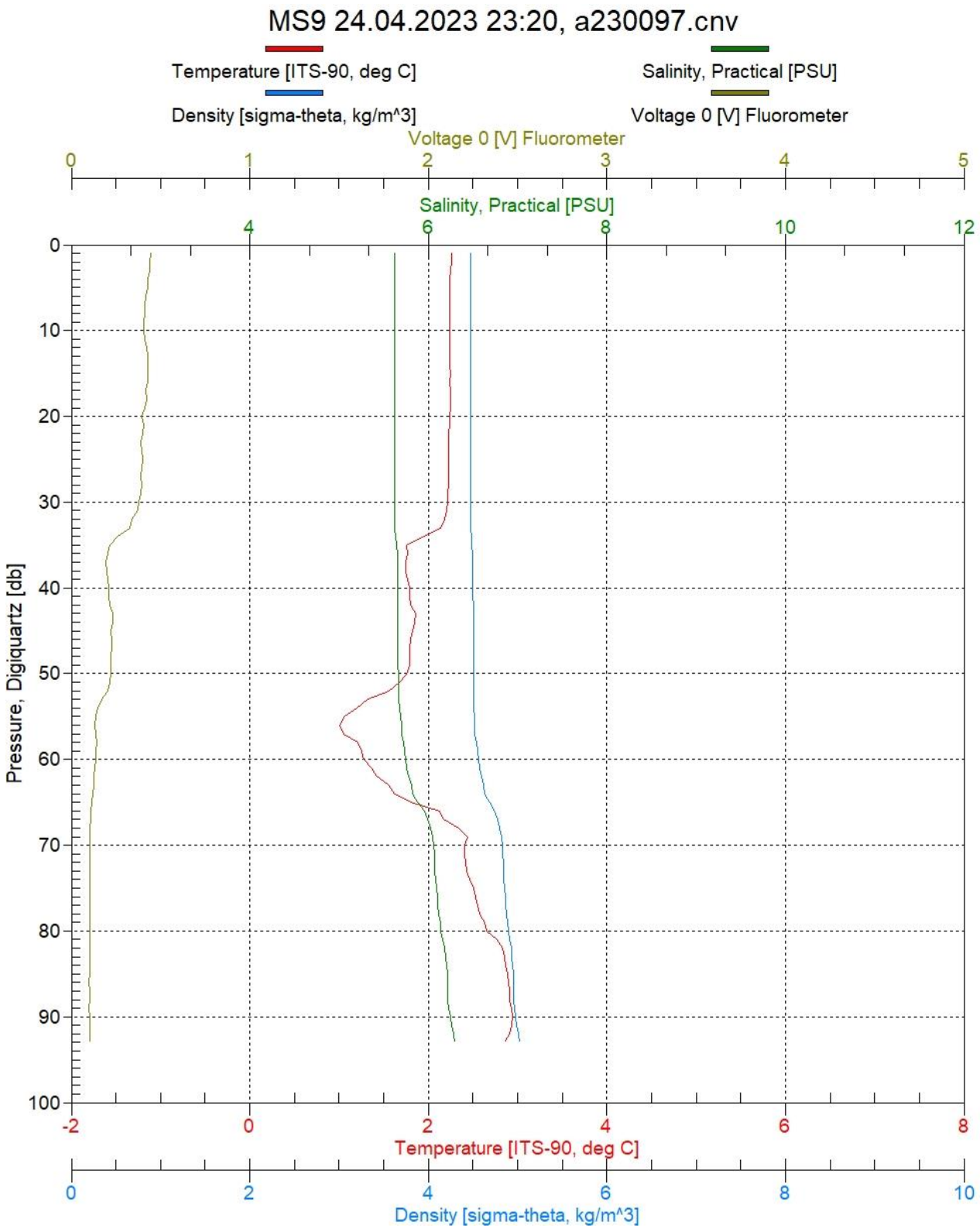

US6B 24.04.2023 11:00, a230093.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Oxygen, SBE 43 [ml/l]
Oxygen, SBE 43 [ml/l]
0
3
6
9
12
15
Salinity, Practical [PSU]
4
6
8
10
12
0
10
20
30
40
50
60
70
80
Pressure, Digiquartz [db]
-2
0
2
4
6
8
Temperature [ITS-90, deg C]
0
2
4
6
8
10
Density [sigma-theta, kg/m^3]

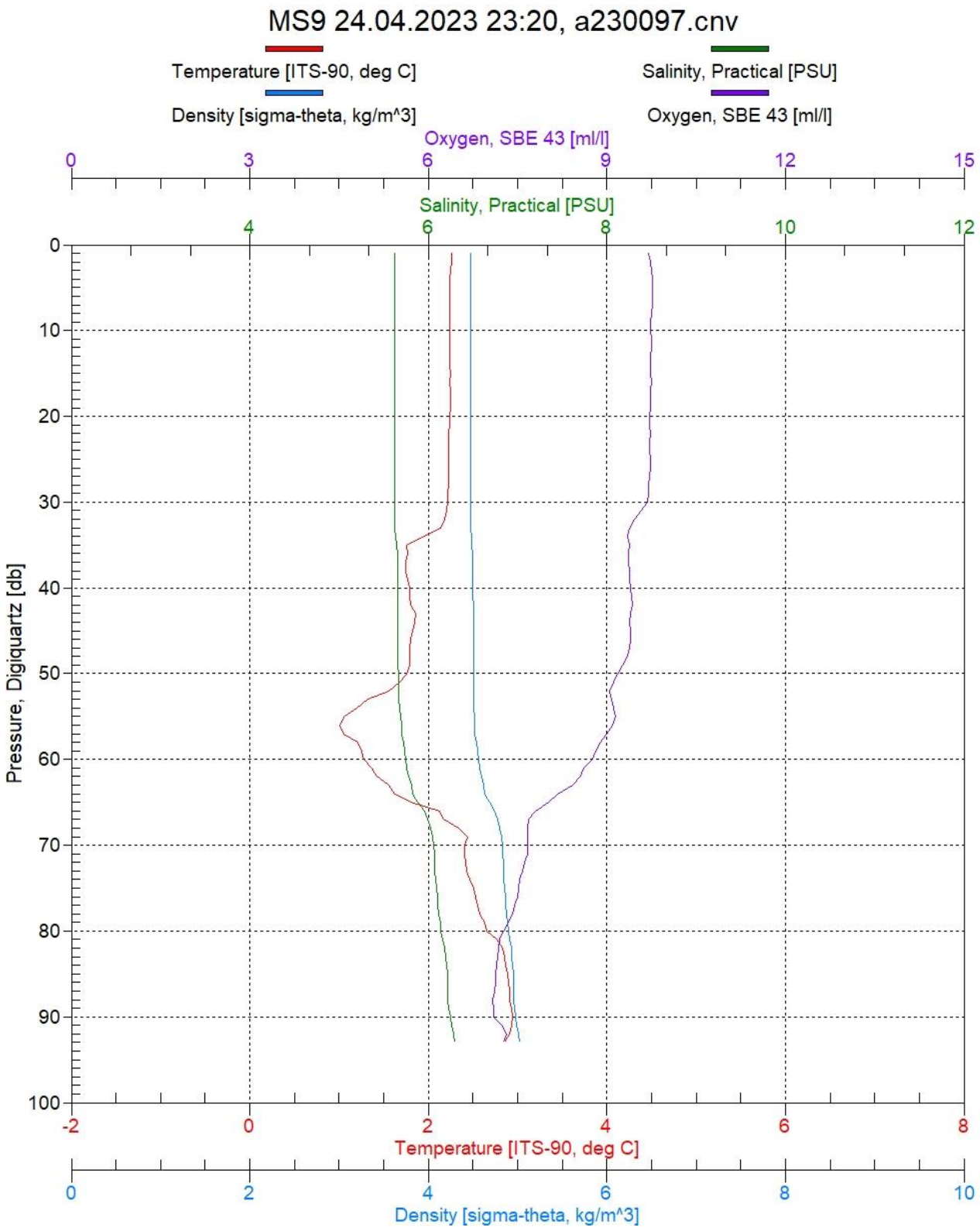

US7 24.04.2023 13:40, a230094.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Voltage 0 [V] Fluorometer
Voltage 0 [V] Fluorometer
0
1
2
3
4
5
Salinity, Practical [PSU]
4
6
8
10
12
0
10
20
Pressure, Digiquartz [db]
-2
0
2
4
6
8
Temperature [ITS-90, deg C]
0
2
4
6
8
10
Density [sigma-theta, kg/m^3]

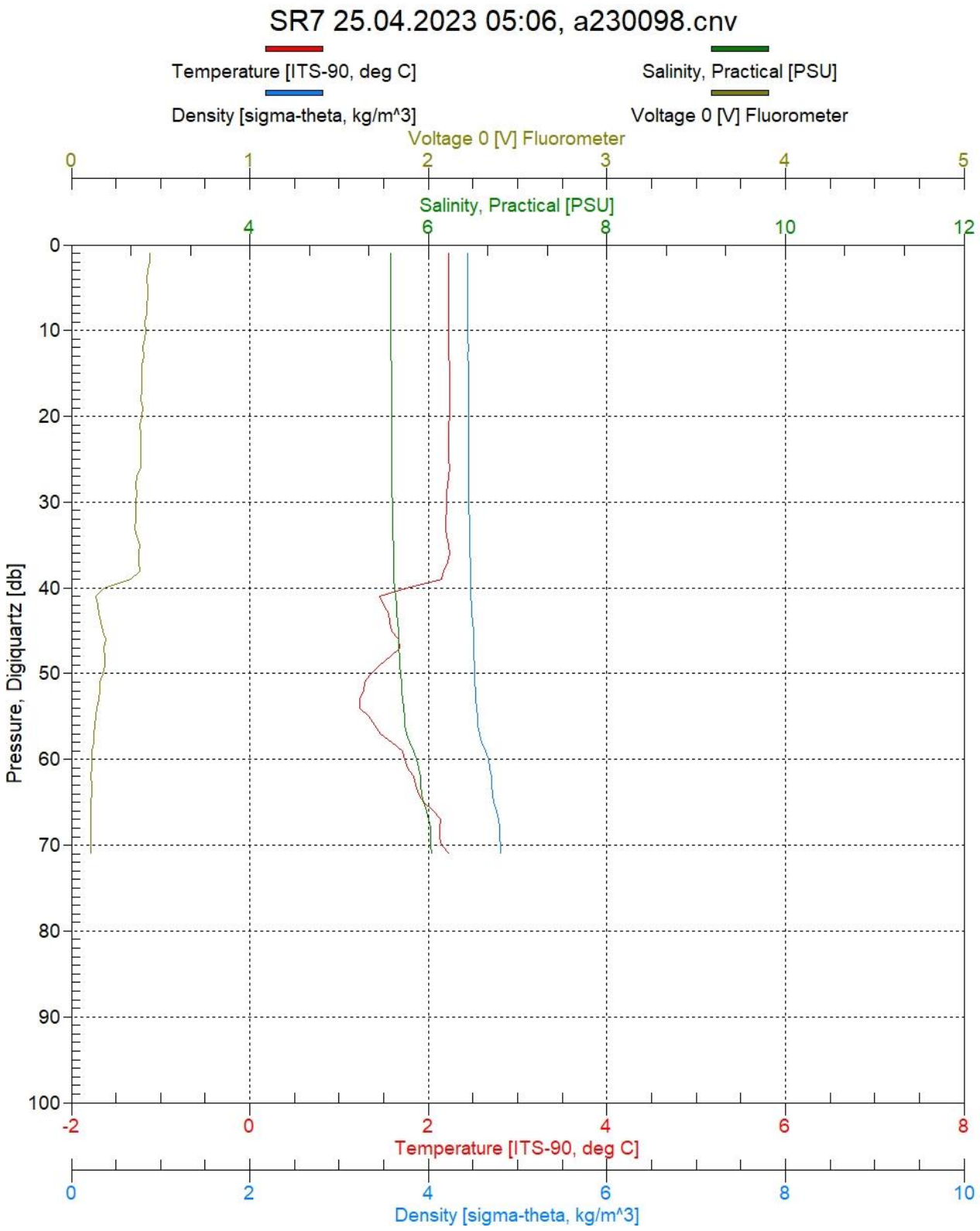

US7 24.04.2023 13:40, a230094.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Oxygen, SBE 43 [ml/l]
Oxygen, SBE 43 [ml/l]
0
3
6
9
12
15
Salinity, Practical [PSU]
4
6
8
10
12
0
10
20
Pressure, Digiquartz [db]
-2
0
2
4
6
8
Temperature [ITS-90, deg C]
0
2
4
6
8
10
Density [sigma-theta, kg/m^3]

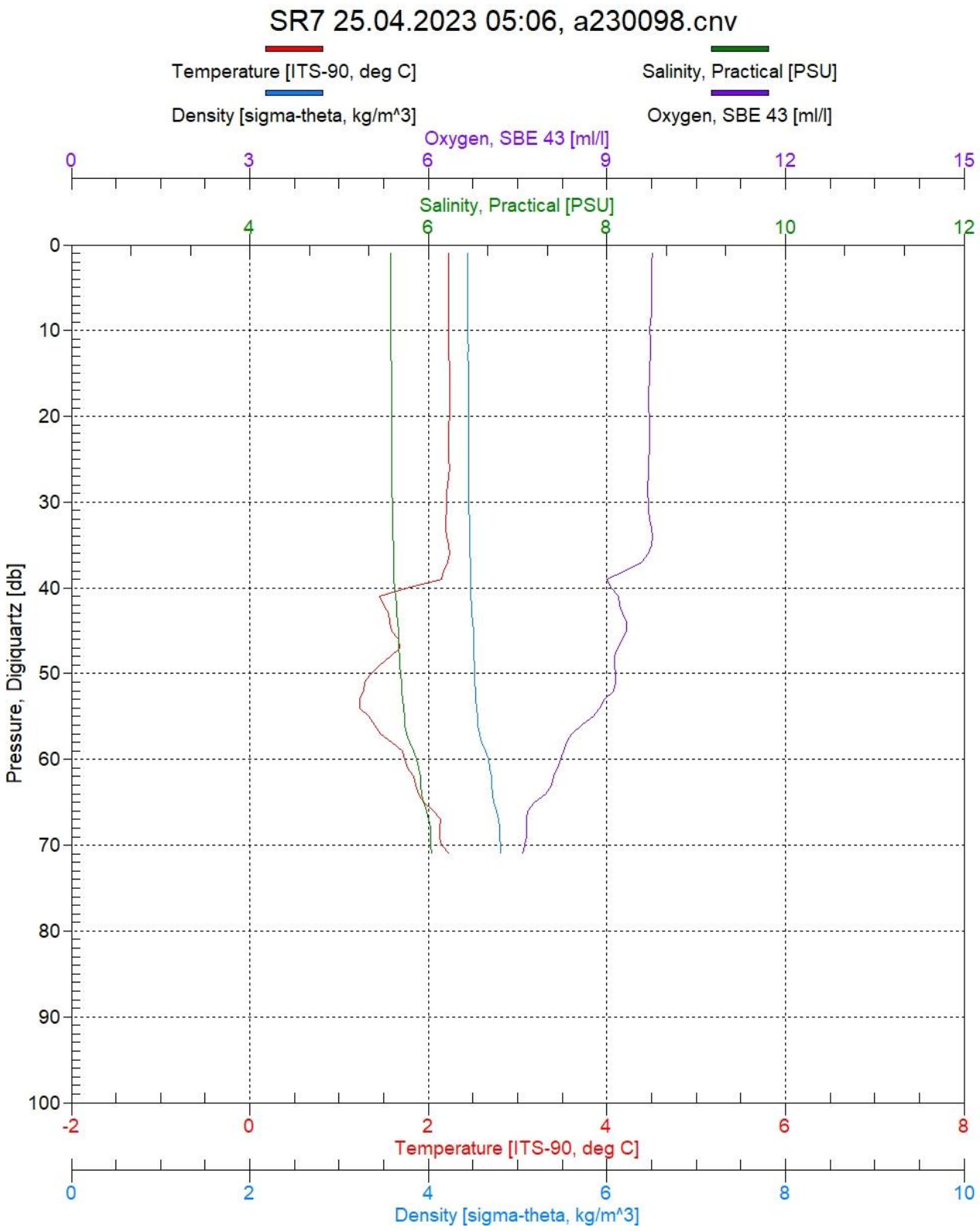

F26 24.04.2023 18:30, a230095.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Voltage 0 [V] Fluorometer
Voltage 0 [V] Fluorometer
0 1 2 3 4 5
Salinity, Practical [PSU]
4 6 8 10 12
Pressure, Digiquartz [db]
0 10 20 30 40 50 60 70 80 90 100 110 120
-2 0 2 4 6 8
Temperature [ITS-90, deg C]
0 2 4 6 8 10
Density [sigma-theta, kg/m^3]

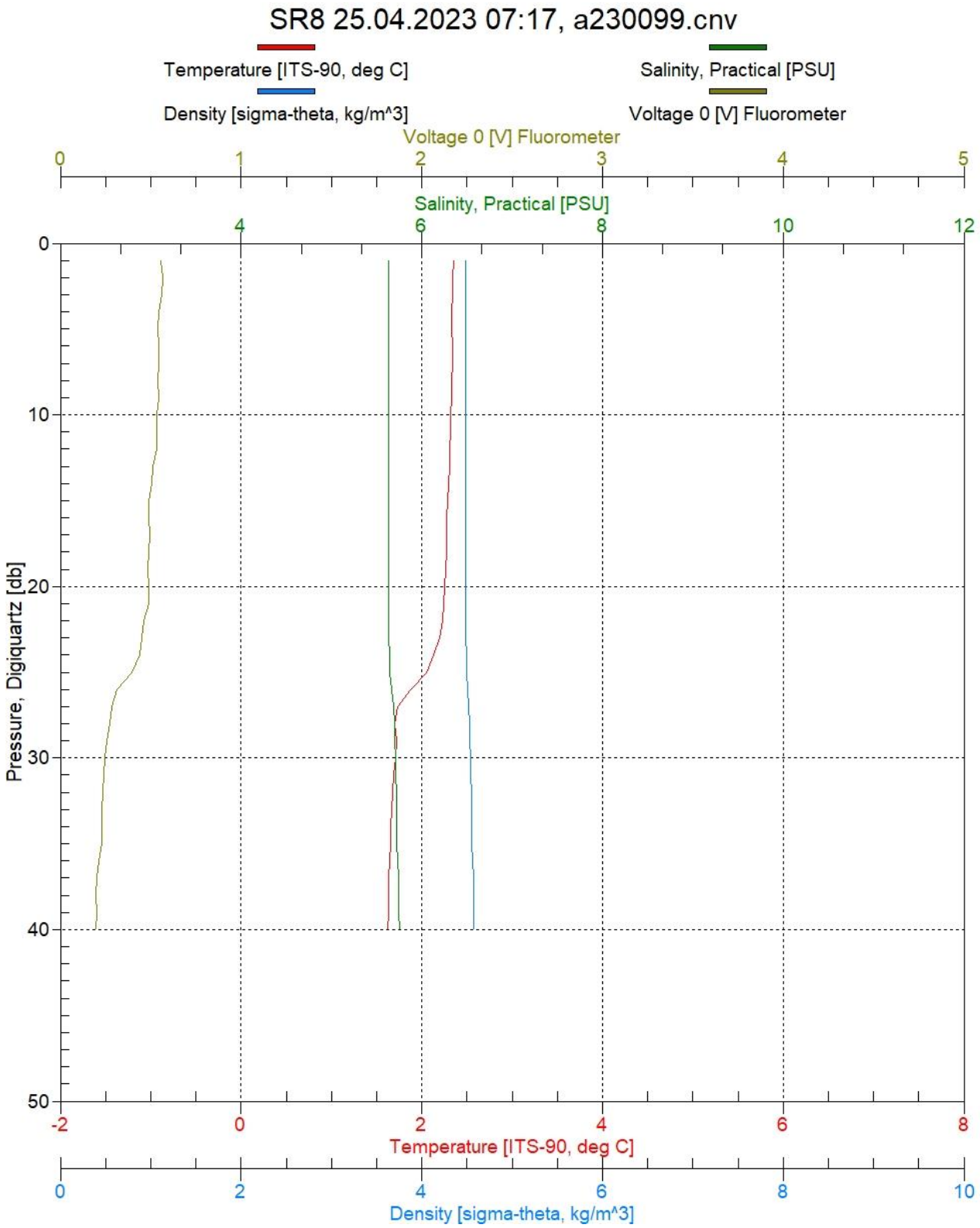

F26 24.04.2023 18:30, a230095.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Oxygen, SBE 43 [ml/l]
Oxygen, SBE 43 [ml/l]
0 3 6 9 12 15
Salinity, Practical [PSU]
4 6 8 10 12
Pressure, Digiquartz [db]
0 10 20 30 40 50 60 70 80 90 100 110 120
-2 0 2 4 6 8
Temperature [ITS-90, deg C]
0 2 4 6 8 10
Density [sigma-theta, kg/m^3]

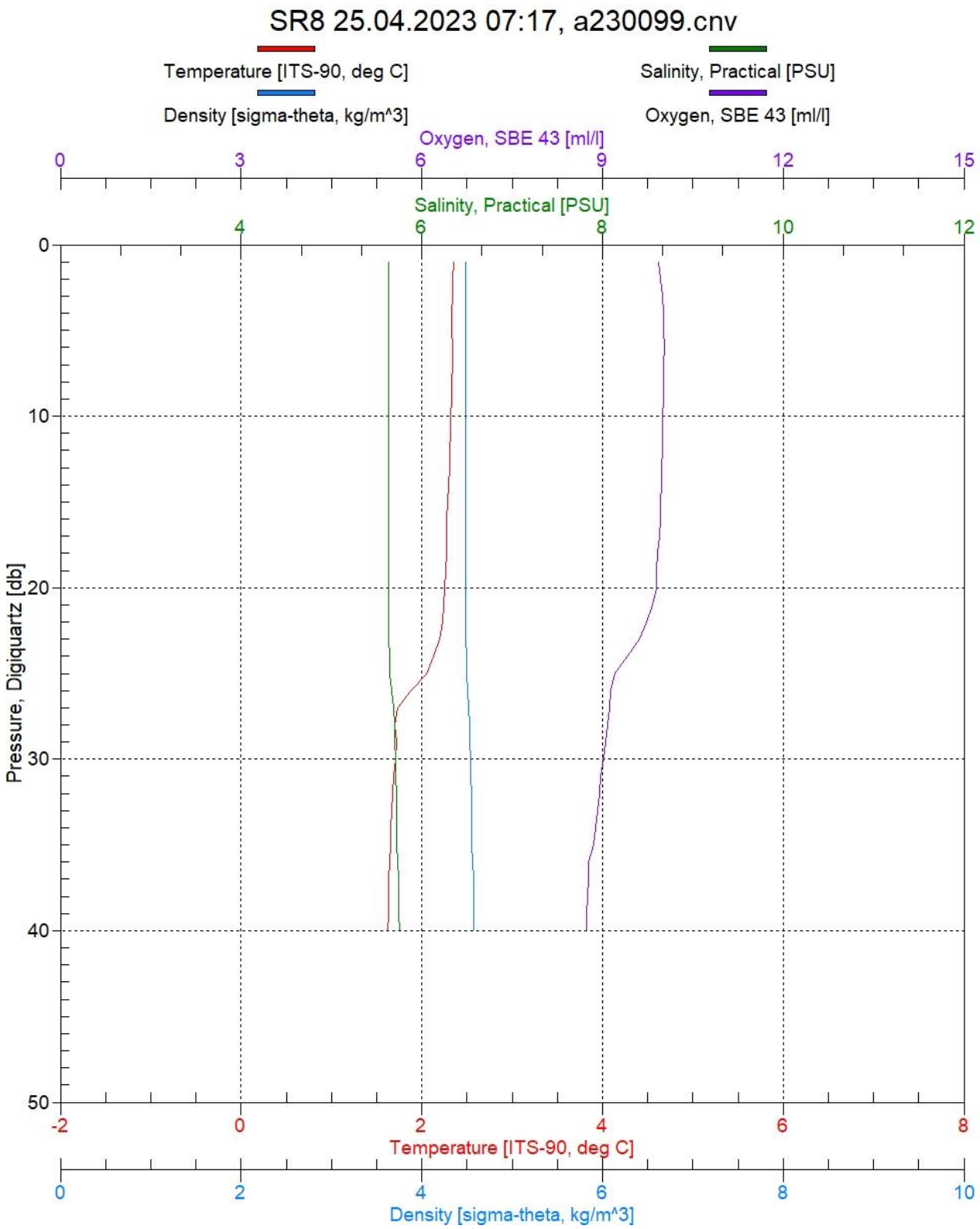

MS9 24.04.2023 23:20, a230097.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Voltage 0 [V] Fluorometer
Voltage 0 [V] Fluorometer
Salinity, Practical [PSU]
Pressure, Digiquartz [db]
Temperature [ITS-90, deg C]
Density [sigma-theta, kg/m^3]

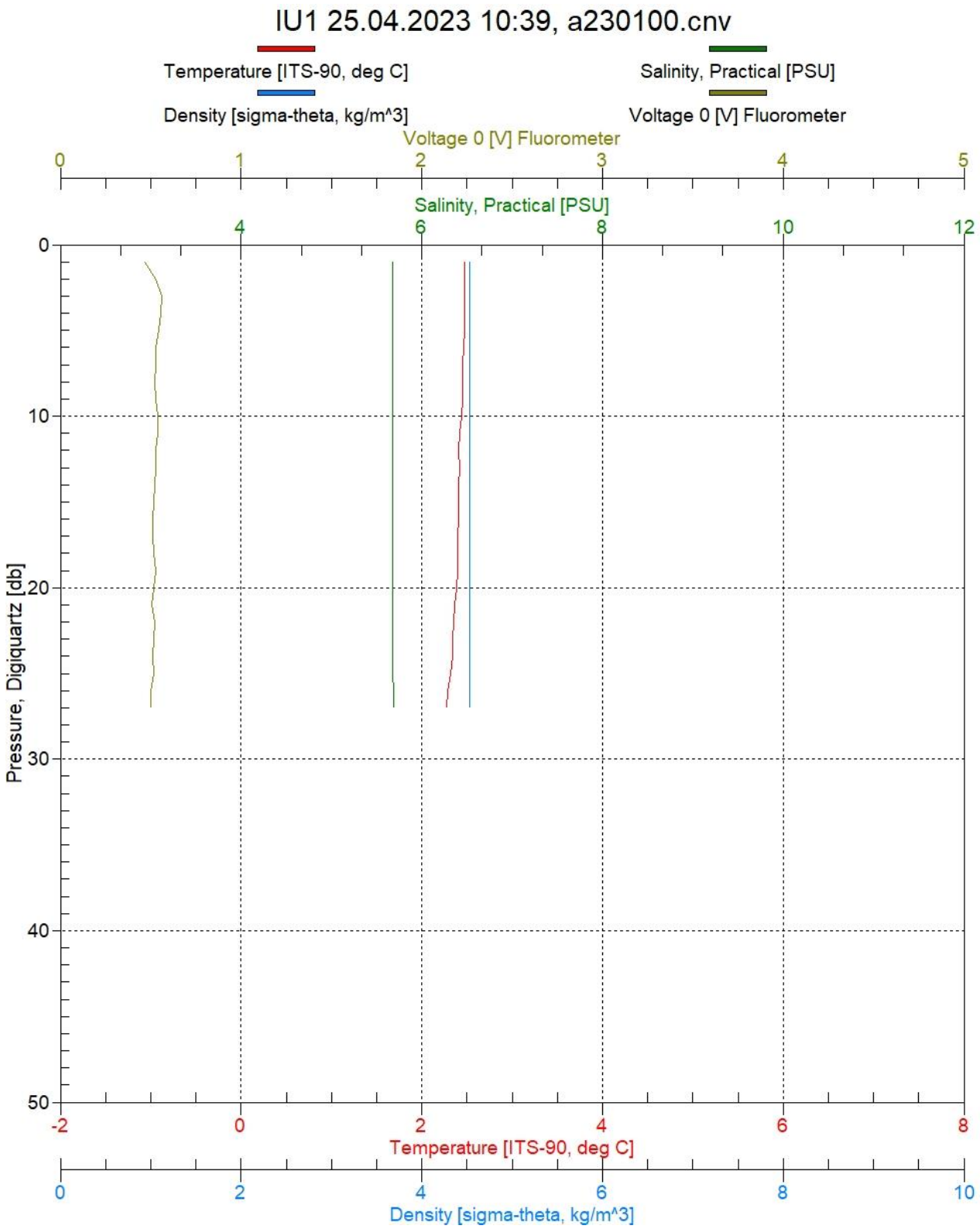

MS9 24.04.2023 23:20, a230097.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Oxygen, SBE 43 [ml/l]
Oxygen, SBE 43 [ml/l]
0
3
6
9
12
15
Salinity, Practical [PSU]
4
6
8
10
12
0
10
20
30
40
50
60
70
80
90
100
Pressure, Digiquartz [db]
-2
0
2
4
6
8
Temperature [ITS-90, deg C]
0
2
4
6
8
10
Density [sigma-theta, kg/m^3]

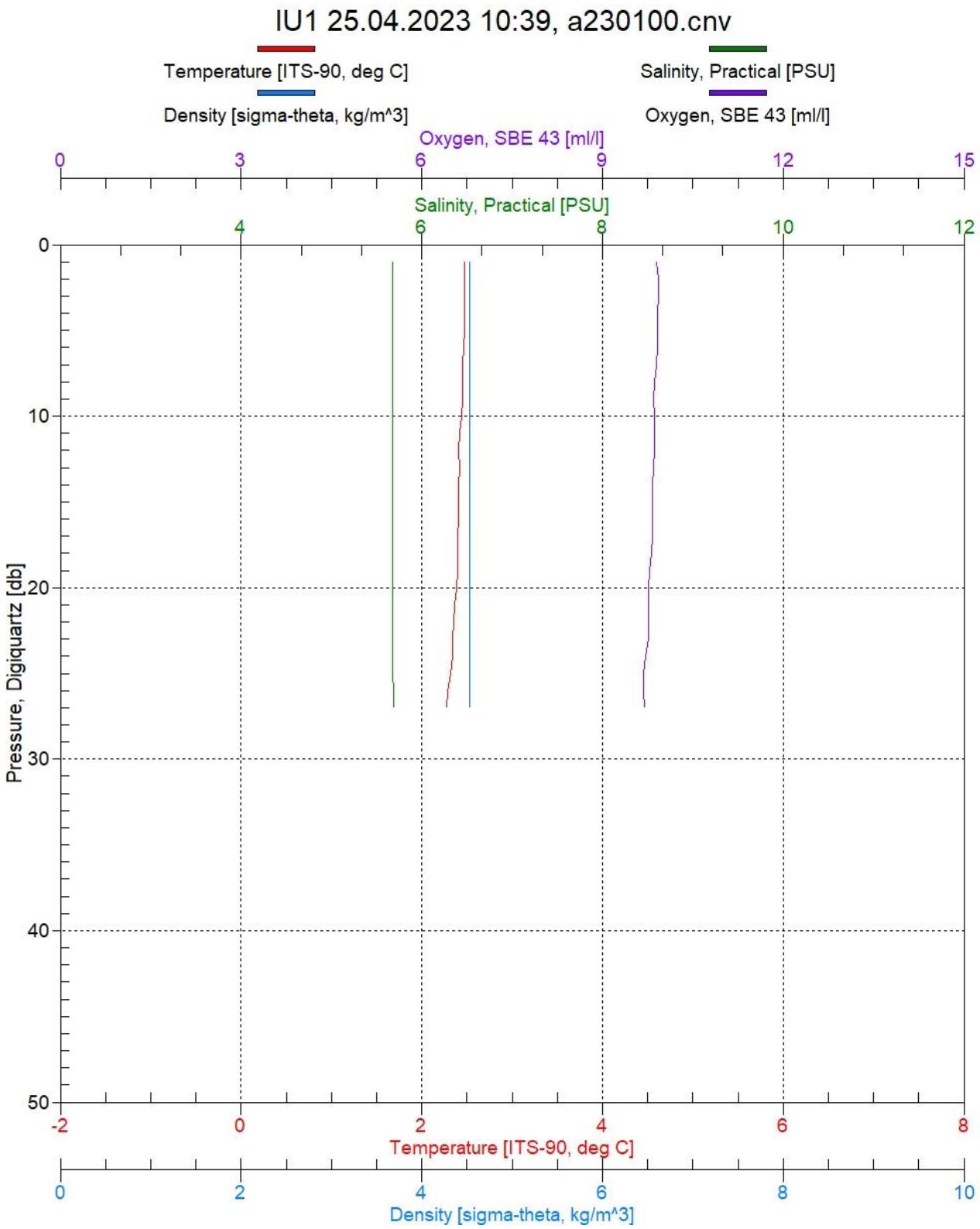

SR7 25.04.2023 05:06, a230098.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Voltage 0 [V] Fluorometer
Voltage 0 [V] Fluorometer
Salinity, Practical [PSU]
Pressure, Digiquartz [db]
Temperature [ITS-90, deg C]
Density [sigma-theta, kg/m^3]

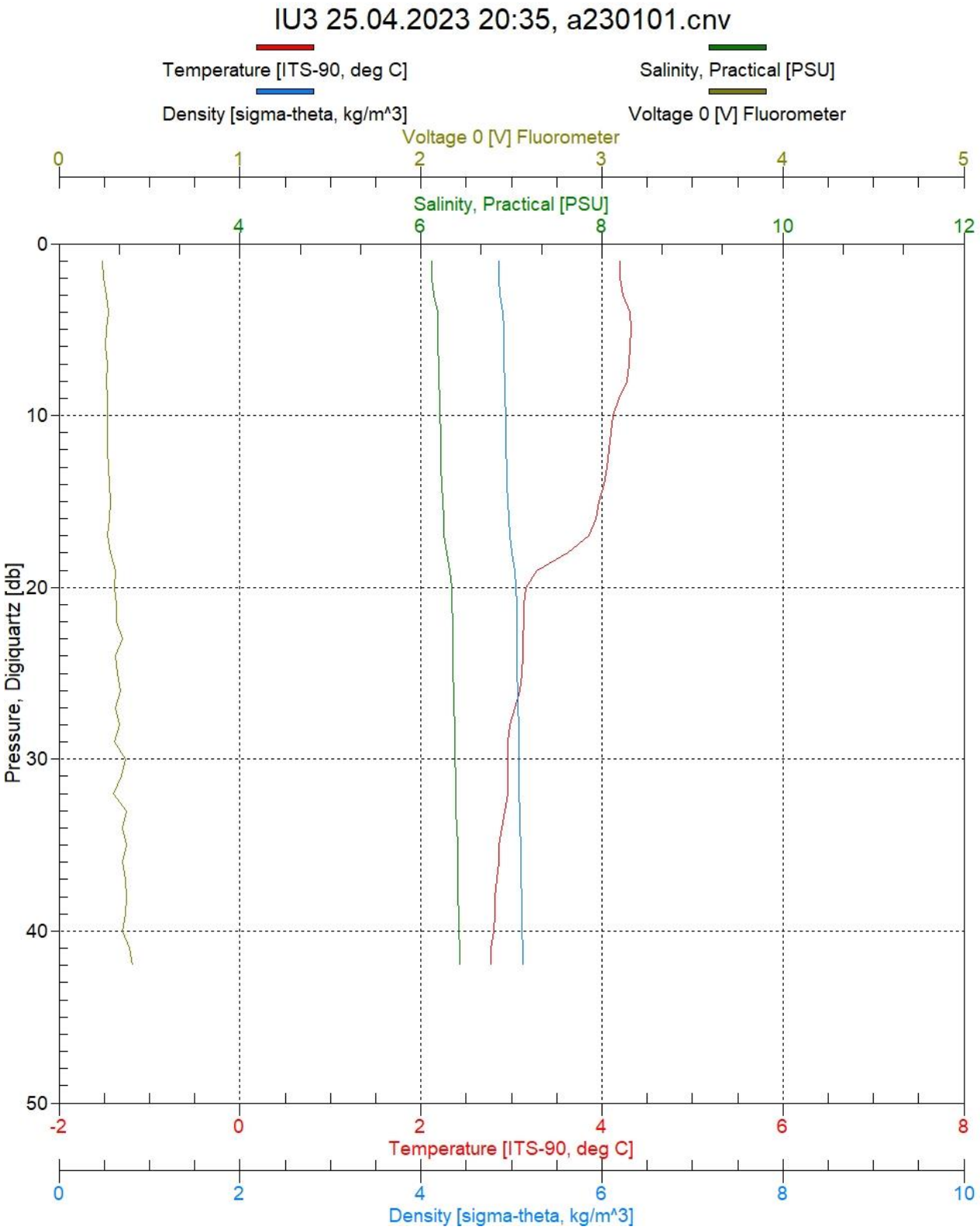

SR7 25.04.2023 05:06, a230098.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Oxygen, SBE 43 [ml/l]
Oxygen, SBE 43 [ml/l]
0
3
6
9
12
15
Salinity, Practical [PSU]
4
6
8
10
12
0
10
20
30
40
50
60
70
80
90
100
Pressure, Digiquartz [db]
-2
0
2
4
6
8
Temperature [ITS-90, deg C]
0
2
4
6
8
10
Density [sigma-theta, kg/m^3]

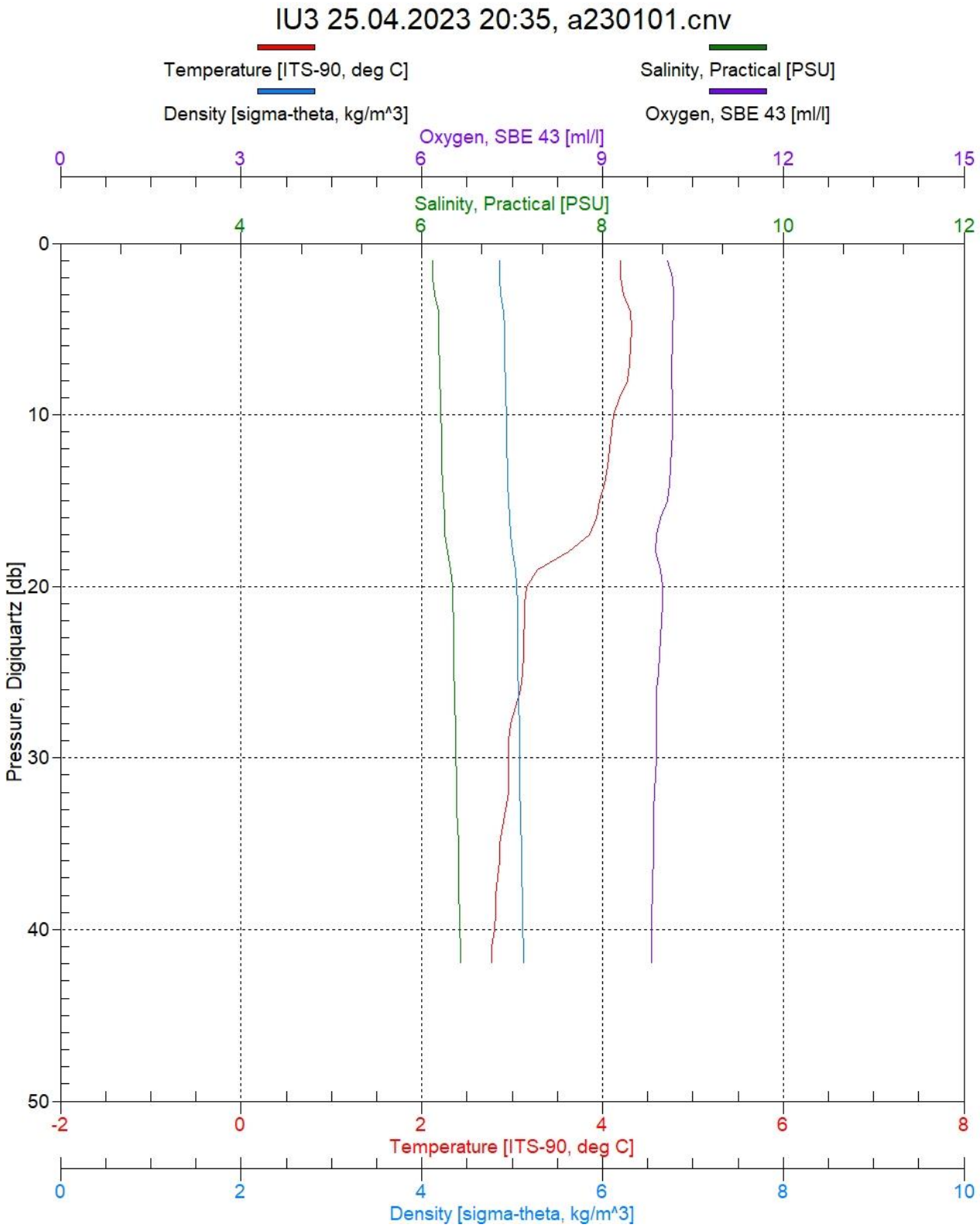

SR8 25.04.2023 07:17, a230099.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Voltage 0 [V] Fluorometer
Voltage 0 [V] Fluorometer
Salinity, Practical [PSU]
Pressure, Digiquartz [db]
Temperature [ITS-90, deg C]
Density [sigma-theta, kg/m^3]

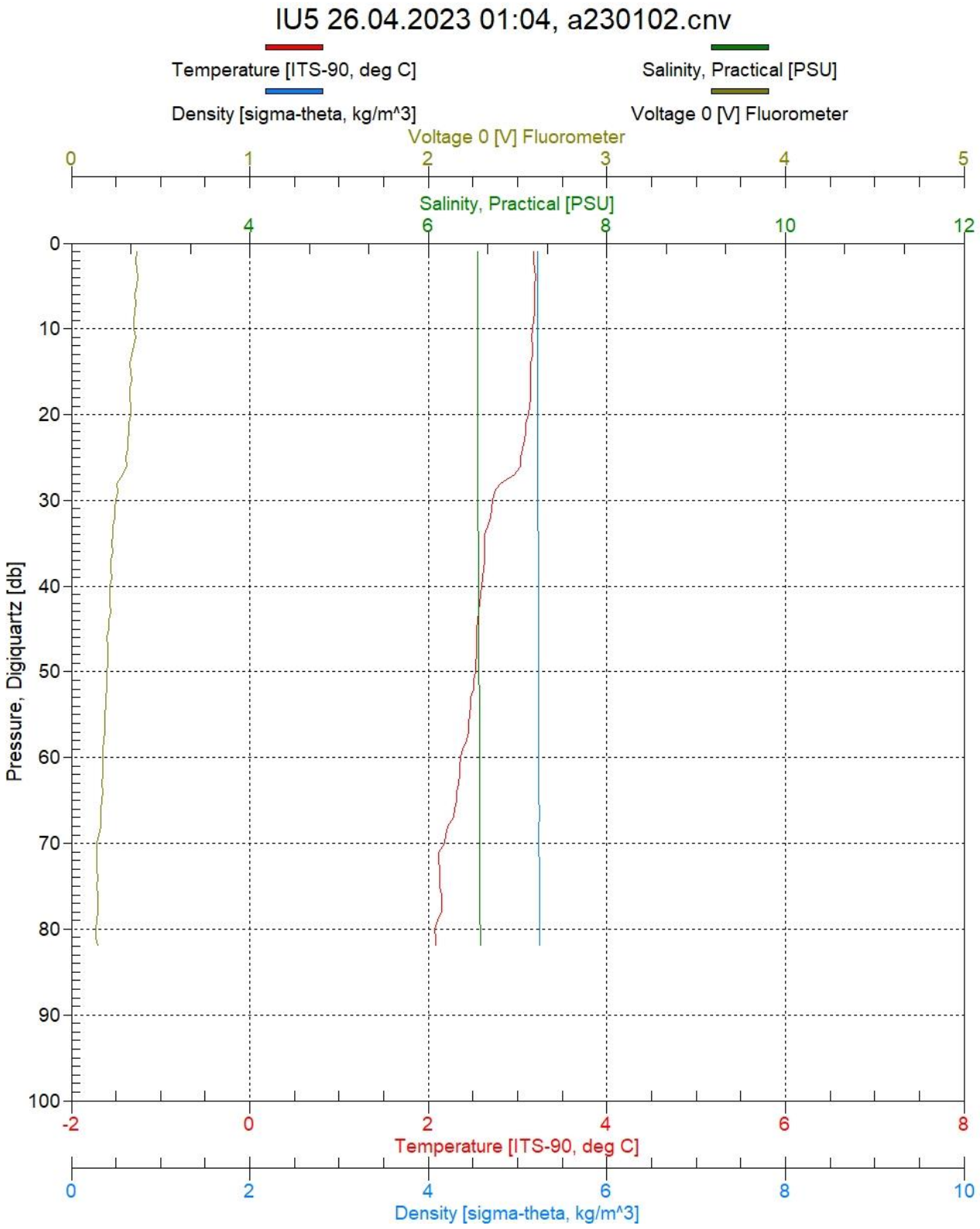

SR8 25.04.2023 07:17, a230099.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Oxygen, SBE 43 [ml/l]
Oxygen, SBE 43 [ml/l]
0
3
6
9
12
15
Salinity, Practical [PSU]
4
6
8
10
12
0
10
20
30
40
50
Pressure, Digiquartz [db]
-2
0
2
4
6
8
Temperature [ITS-90, deg C]
0
2
4
6
8
10
Density [sigma-theta, kg/m^3]

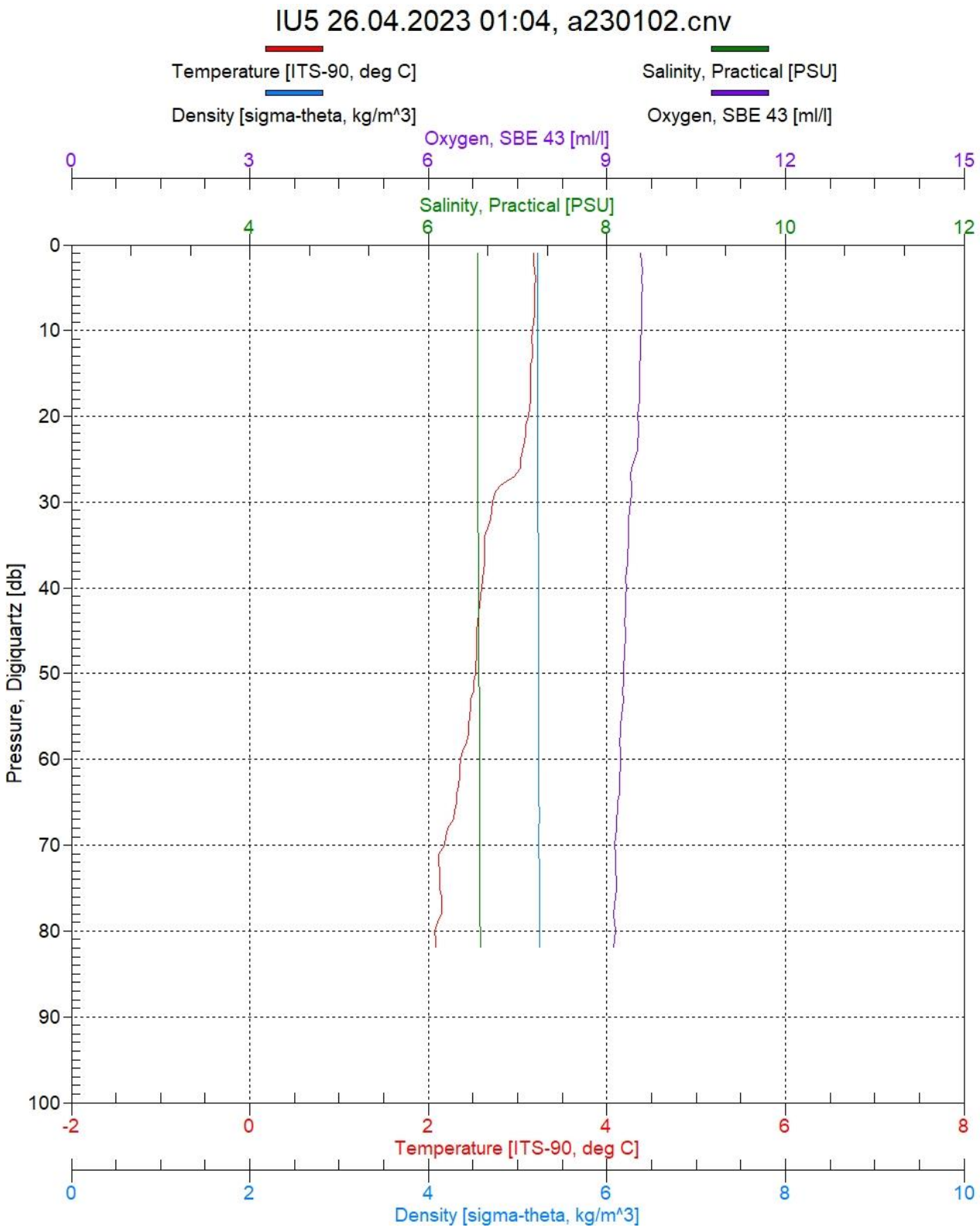

IU1 25.04.2023 10:39, a230100.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Voltage 0 [V] Fluorometer
Voltage 0 [V] Fluorometer
Salinity, Practical [PSU]
Pressure, Digiquartz [db]
Temperature [ITS-90, deg C]
Density [sigma-theta, kg/m^3]

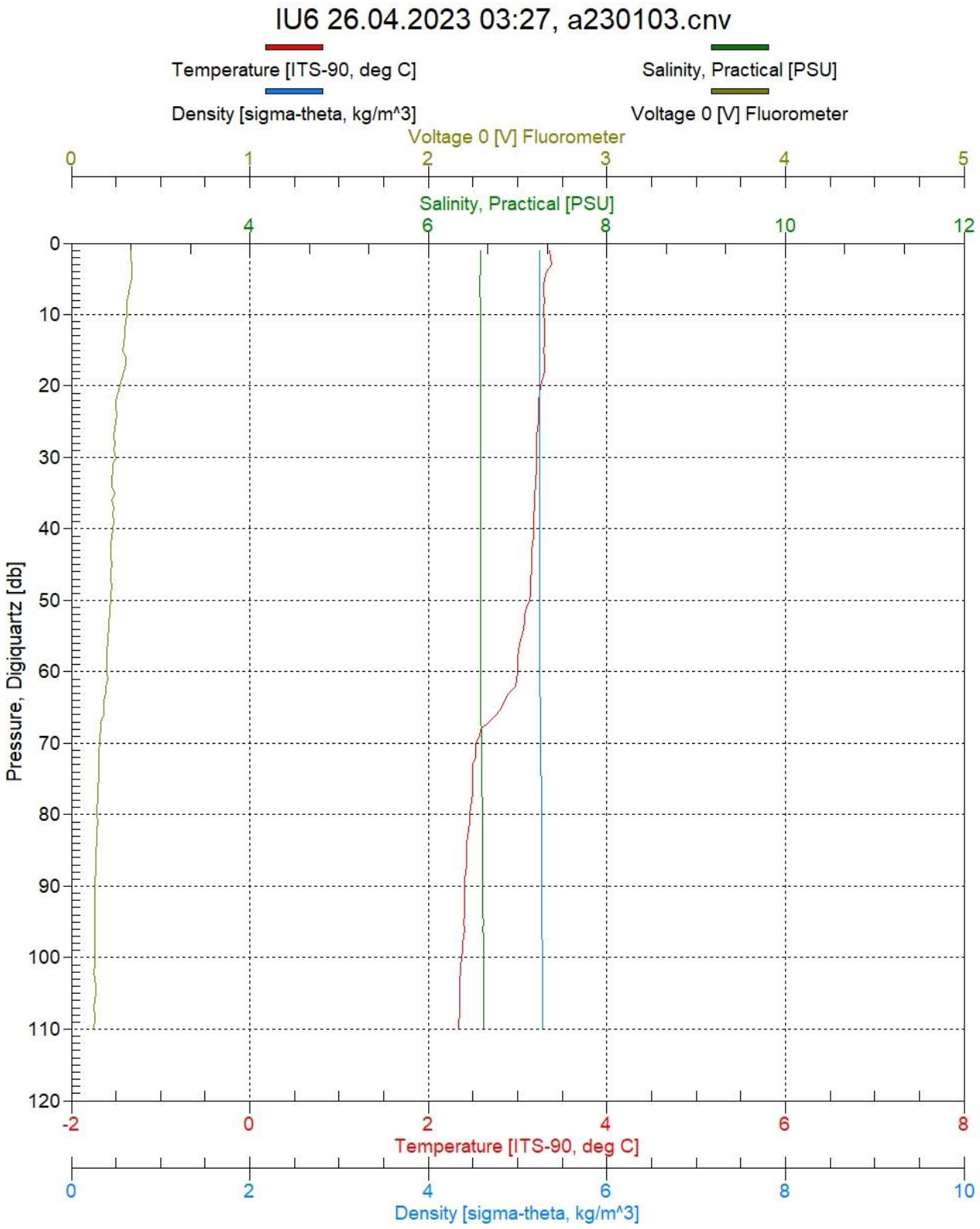

IU1 25.04.2023 10:39, a230100.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Oxygen, SBE 43 [ml/l]
Oxygen, SBE 43 [ml/l]
0
3
6
9
12
15
Salinity, Practical [PSU]
4
6
8
10
12
0
10
20
30
40
50
Pressure, Digiquartz [db]
-2
0
2
4
6
8
Temperature [ITS-90, deg C]
0
2
4
6
8
10
Density [sigma-theta, kg/m^3]

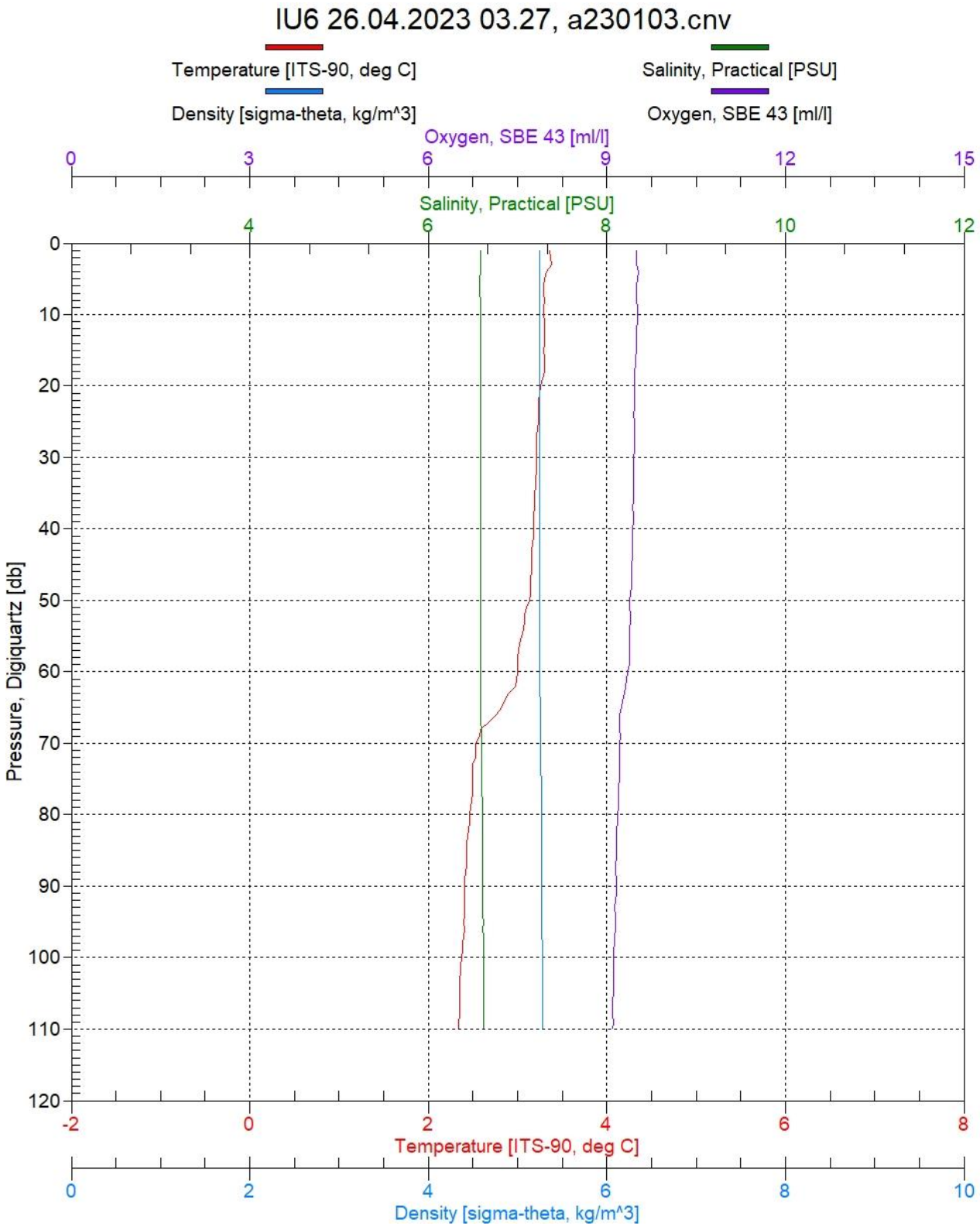

IU3 25.04.2023 20:35, a230101.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Voltage 0 [V] Fluorometer
Voltage 0 [V] Fluorometer
Salinity, Practical [PSU]
Pressure, Digiquartz [db]
Temperature [ITS-90, deg C]
Density [sigma-theta, kg/m^3]

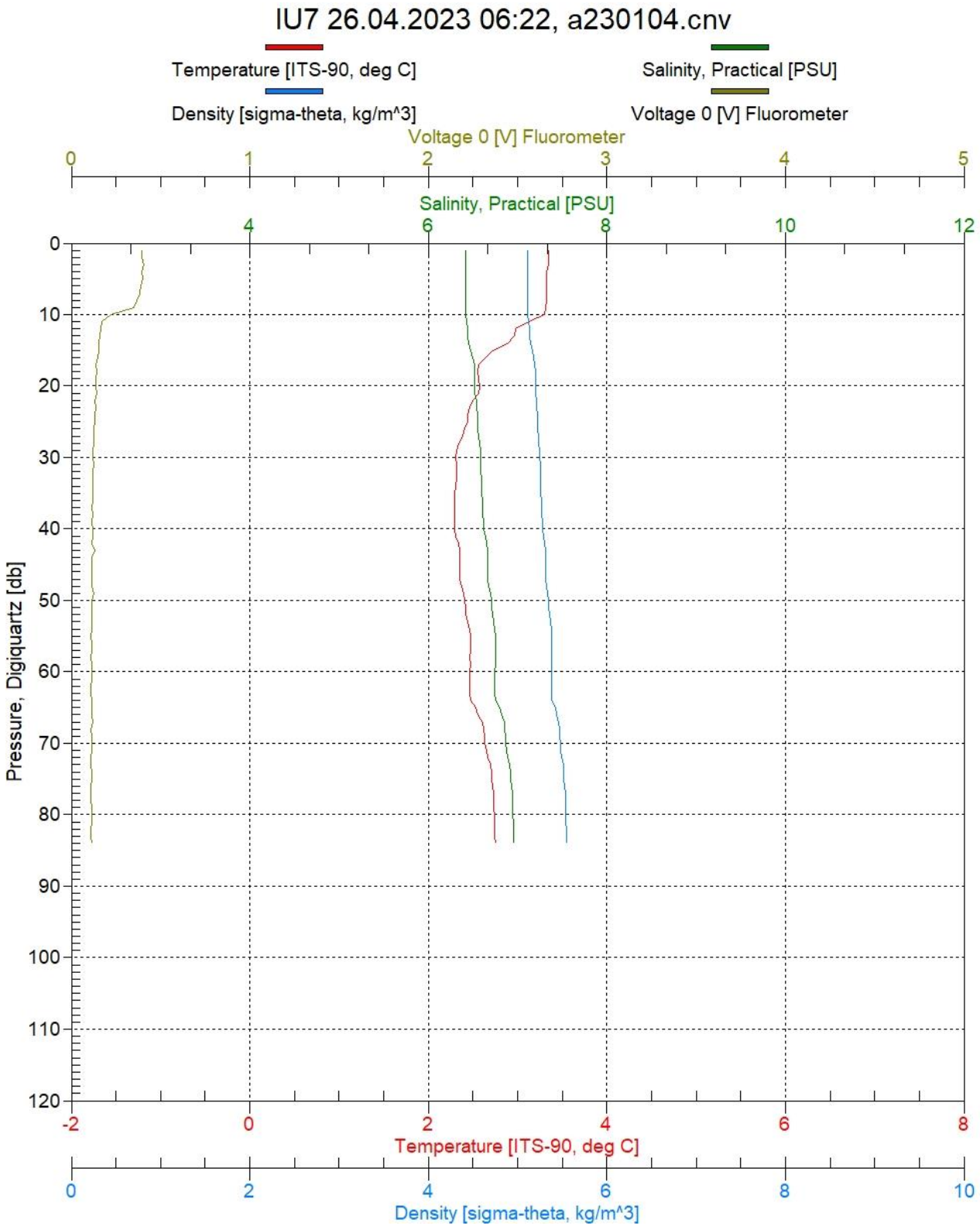

IU3 25.04.2023 20:35, a230101.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Oxygen, SBE 43 [ml/l]
Oxygen, SBE 43 [ml/l]
0
3
6
9
12
15
Salinity, Practical [PSU]
4
6
8
10
12
0
10
20
30
40
50
Pressure, Digiquartz [db]
-2
0
2
4
6
8
Temperature [ITS-90, deg C]
0
2
4
6
8
10
Density [sigma-theta, kg/m^3]

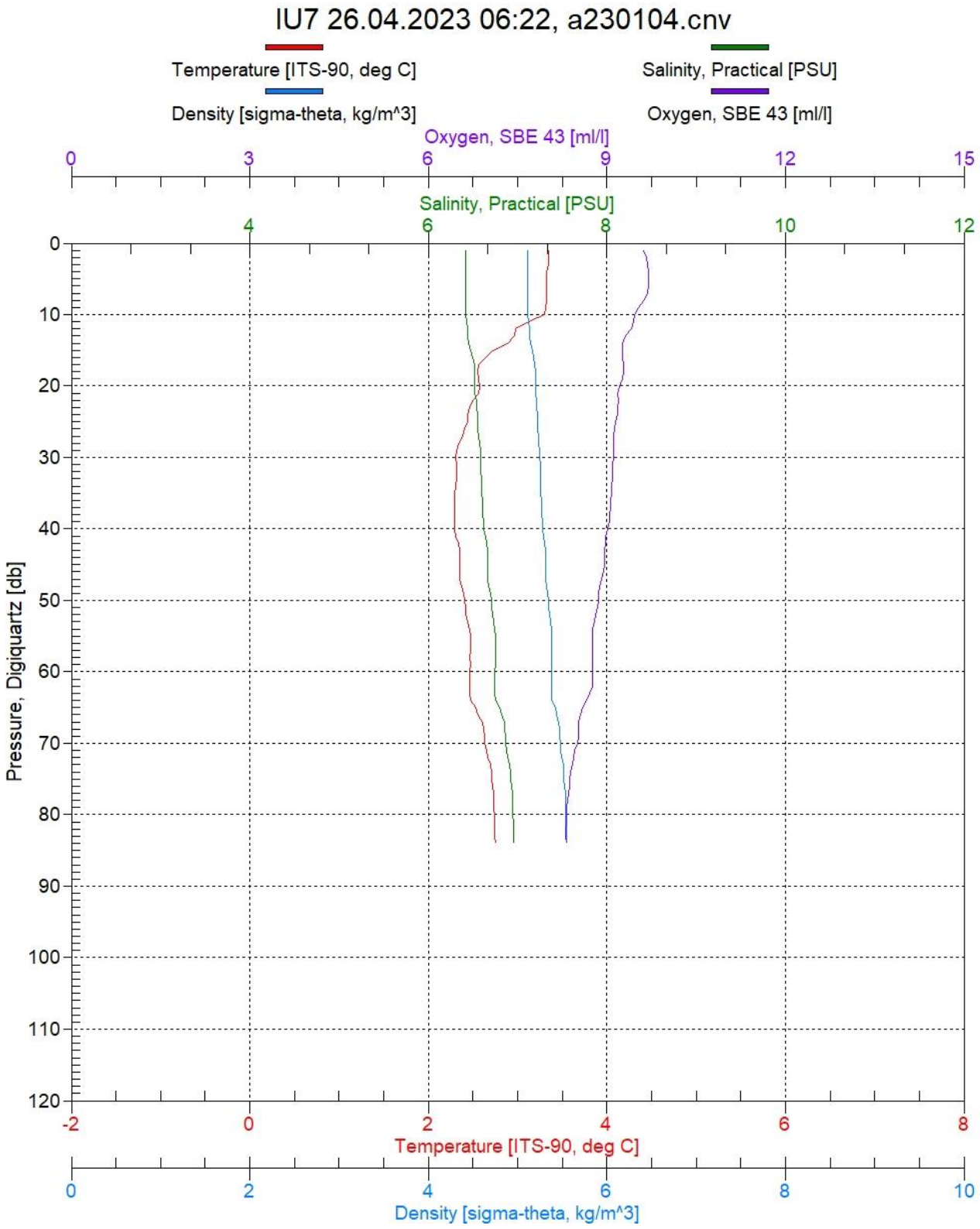

IU5 26.04.2023 01:04, a230102.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Voltage 0 [V] Fluorometer
Voltage 0 [V] Fluorometer
Salinity, Practical [PSU]
Pressure, Digiquartz [db]
Temperature [ITS-90, deg C]
Density [sigma-theta, kg/m^3]

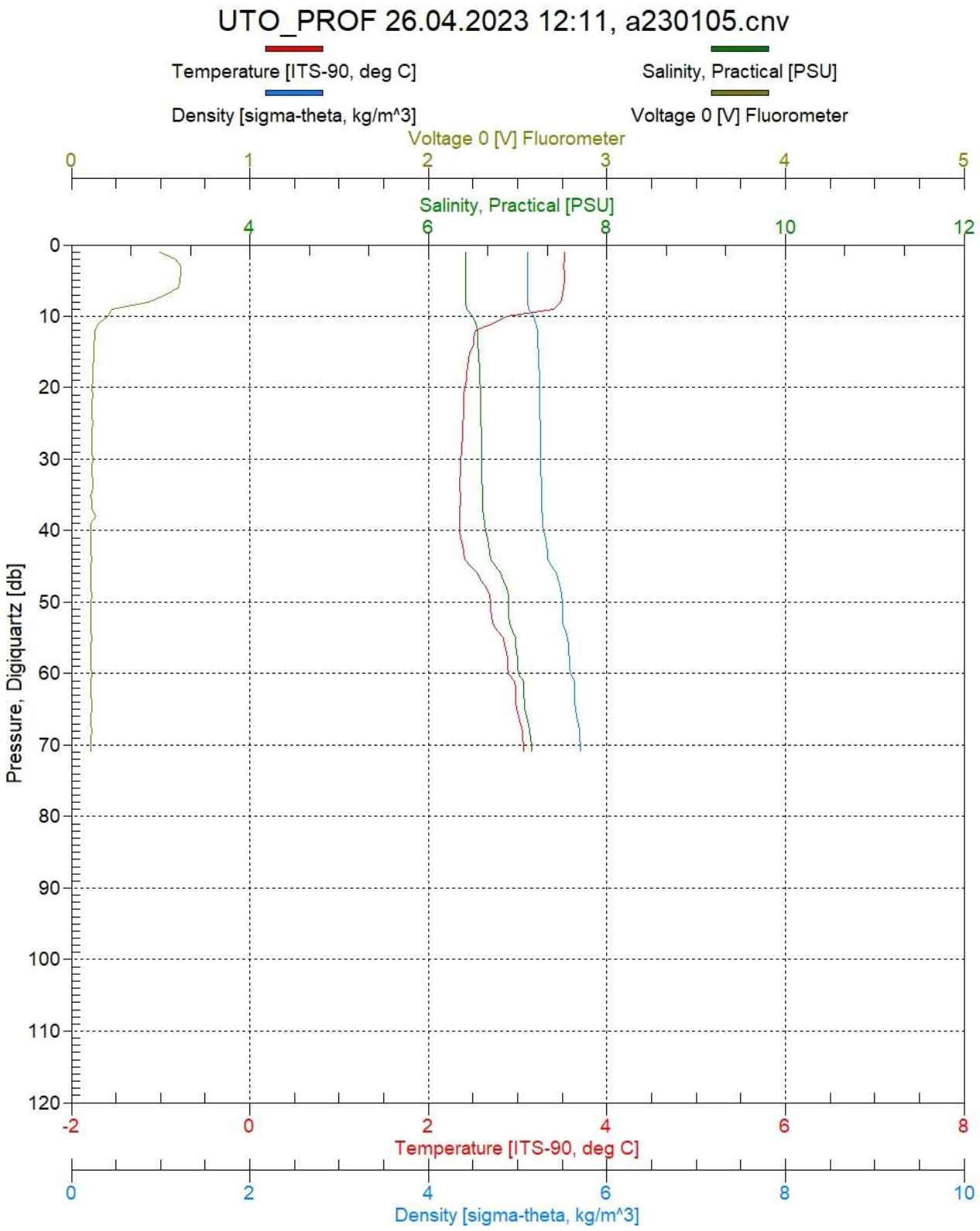

IU5 26.04.2023 01:04, a230102.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Oxygen, SBE 43 [ml/l]
Oxygen, SBE 43 [ml/l]
0 3 6 9 12 15
Salinity, Practical [PSU]
4 6 8 10 12
Pressure, Digiquartz [db]
0 10 20 30 40 50 60 70 80 90 100
-2 0 2 4 6 8
Temperature [ITS-90, deg C]
0 2 4 6 8 10
Density [sigma-theta, kg/m^3]

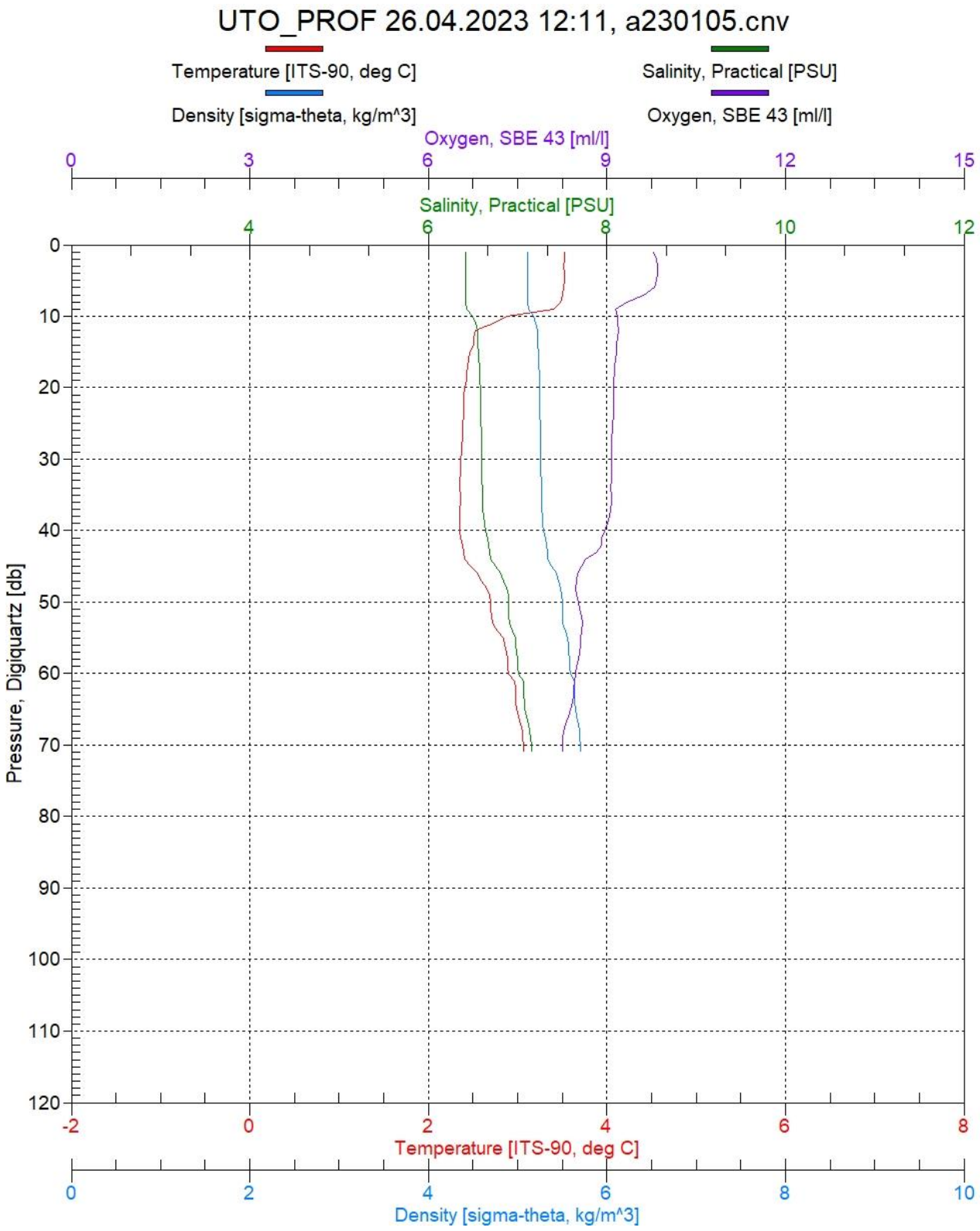

IU6 26.04.2023 03:27, a230103.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Voltage 0 [V] Fluorometer
Voltage 0 [V] Fluorometer
Salinity, Practical [PSU]
Pressure, Digiquartz [db]
Temperature [ITS-90, deg C]
Density [sigma-theta, kg/m^3]

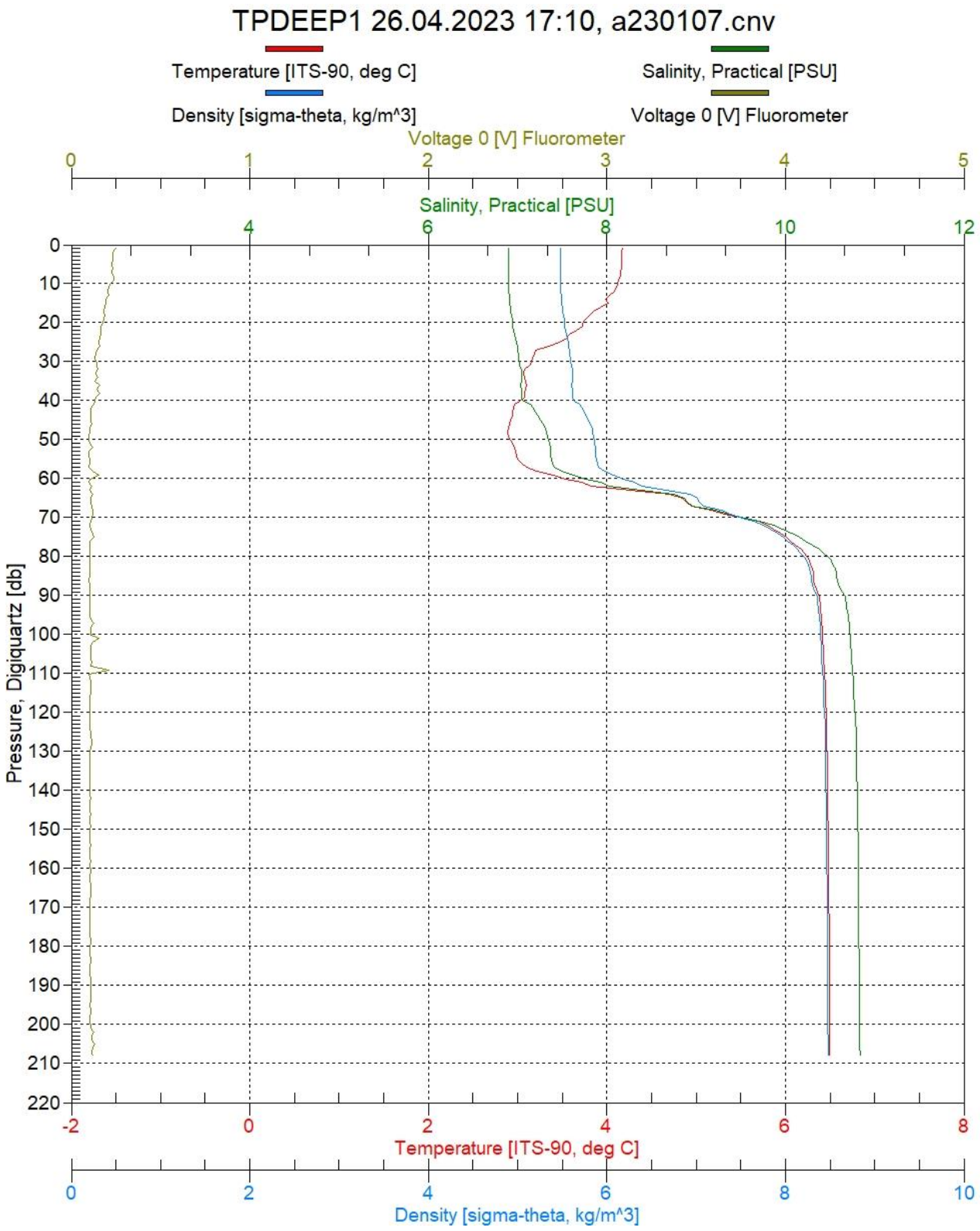

IU6 26.04.2023 03.27, a230103.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Oxygen, SBE 43 [ml/l]
Oxygen, SBE 43 [ml/l]
0 3 6 9 12 15
Salinity, Practical [PSU]
4 6 8 10 12
0 10 20 30 40 50 60 70 80 90 100 110 120
Pressure, Digiquartz [db]
-2 0 2 4 6 8
Temperature [ITS-90, deg C]
0 2 4 6 8 10
Density [sigma-theta, kg/m^3]

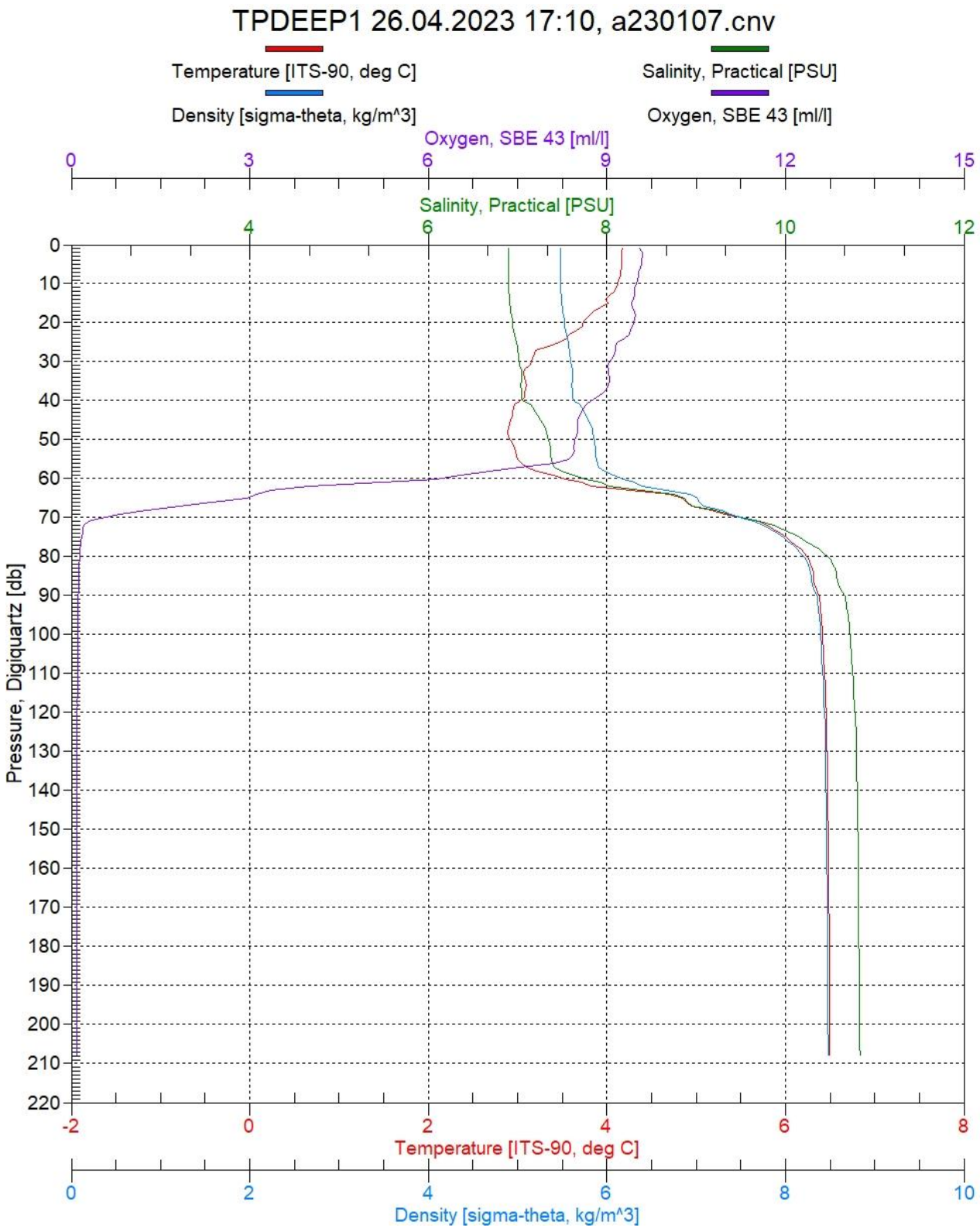

IU7 26.04.2023 06:22, a230104.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Voltage 0 [V] Fluorometer
Voltage 0 [V] Fluorometer
Salinity, Practical [PSU]
Pressure, Digiquartz [db]
Temperature [ITS-90, deg C]
Density [sigma-theta, kg/m^3]

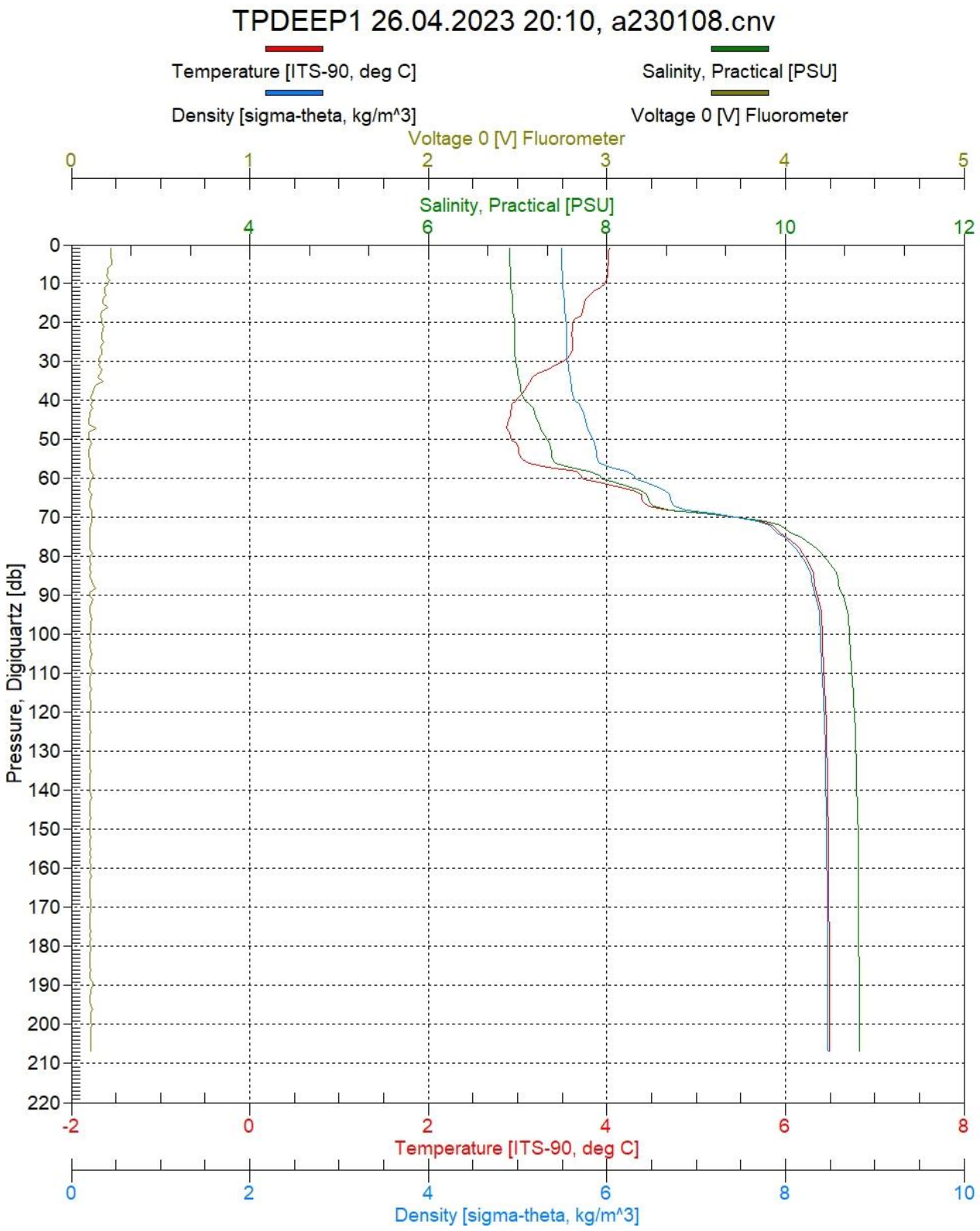

IU7 26.04.2023 06:22, a230104.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Oxygen, SBE 43 [ml/l]
Oxygen, SBE 43 [ml/l]
0 3 6 9 12 15
Salinity, Practical [PSU]
4 6 8 10 12
Pressure, Digiquartz [db]
0 10 20 30 40 50 60 70 80 90 100 110 120
-2 0 2 4 6 8
Temperature [ITS-90, deg C]
0 2 4 6 8 10
Density [sigma-theta, kg/m^3]

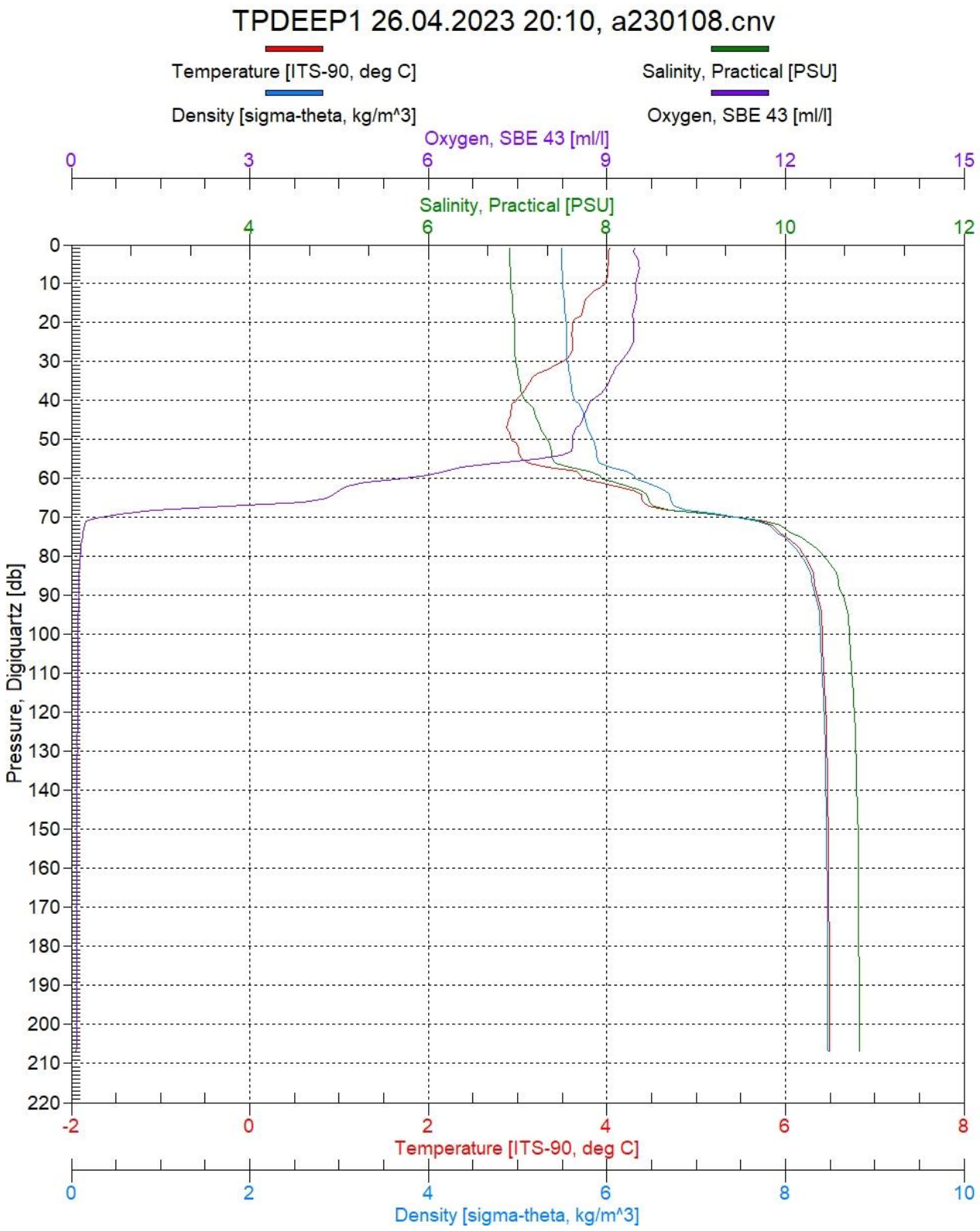

UTO_PROF 26.04.2023 12:11, a230105.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Voltage 0 [V] Fluorometer
Voltage 0 [V] Fluorometer
Salinity, Practical [PSU]
Pressure, Digiquartz [db]
Temperature [ITS-90, deg C]
Density [sigma-theta, kg/m^3]

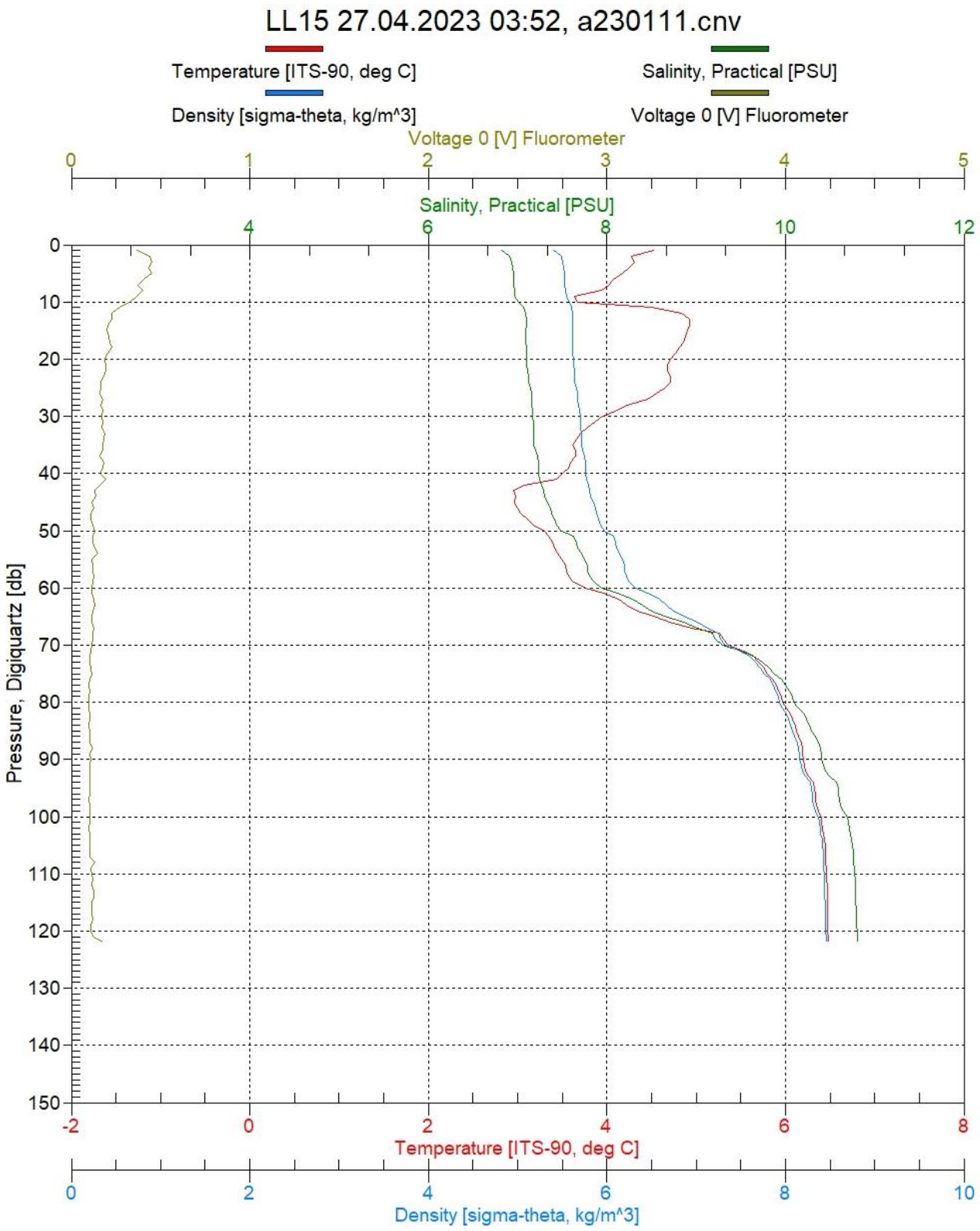

UTO_PROF 26.04.2023 12:11, a230105.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Oxygen, SBE 43 [ml/l]
Oxygen, SBE 43 [ml/l]
0
3
6
9
12
15
Salinity, Practical [PSU]
4
6
8
10
12
0
10
20
30
40
50
60
70
80
90
100
110
120
Pressure, Digiquartz [db]
-2
0
2
4
6
8
Temperature [ITS-90, deg C]
0
2
4
6
8
10
Density [sigma-theta, kg/m^3]

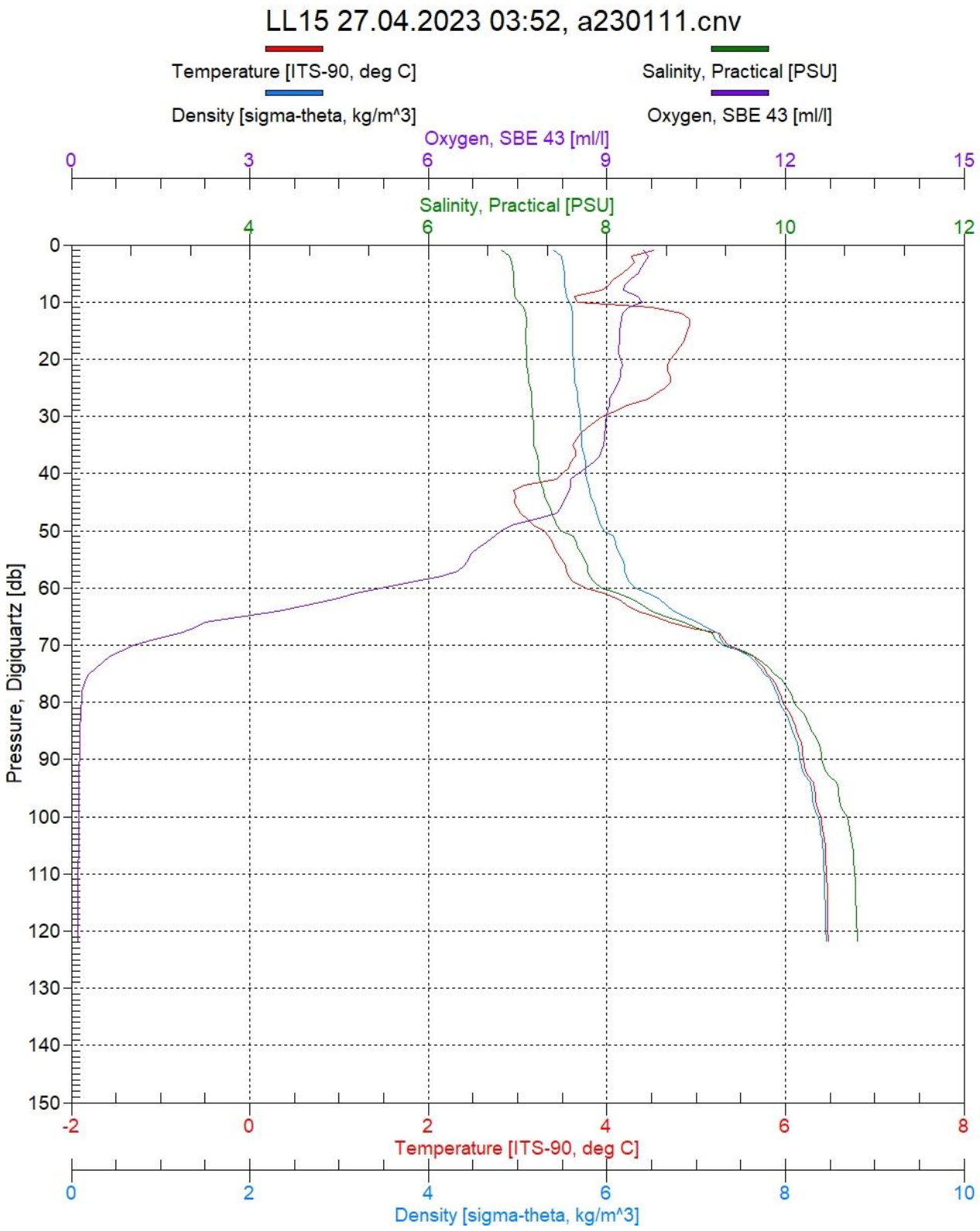

TPDEEP1 26.04.2023 17:10, a230107.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Voltage 0 [V] Fluorometer
Voltage 0 [V] Fluorometer
Salinity, Practical [PSU]
Pressure, Digiquartz [db]
Temperature [ITS-90, deg C]
Density [sigma-theta, kg/m^3]

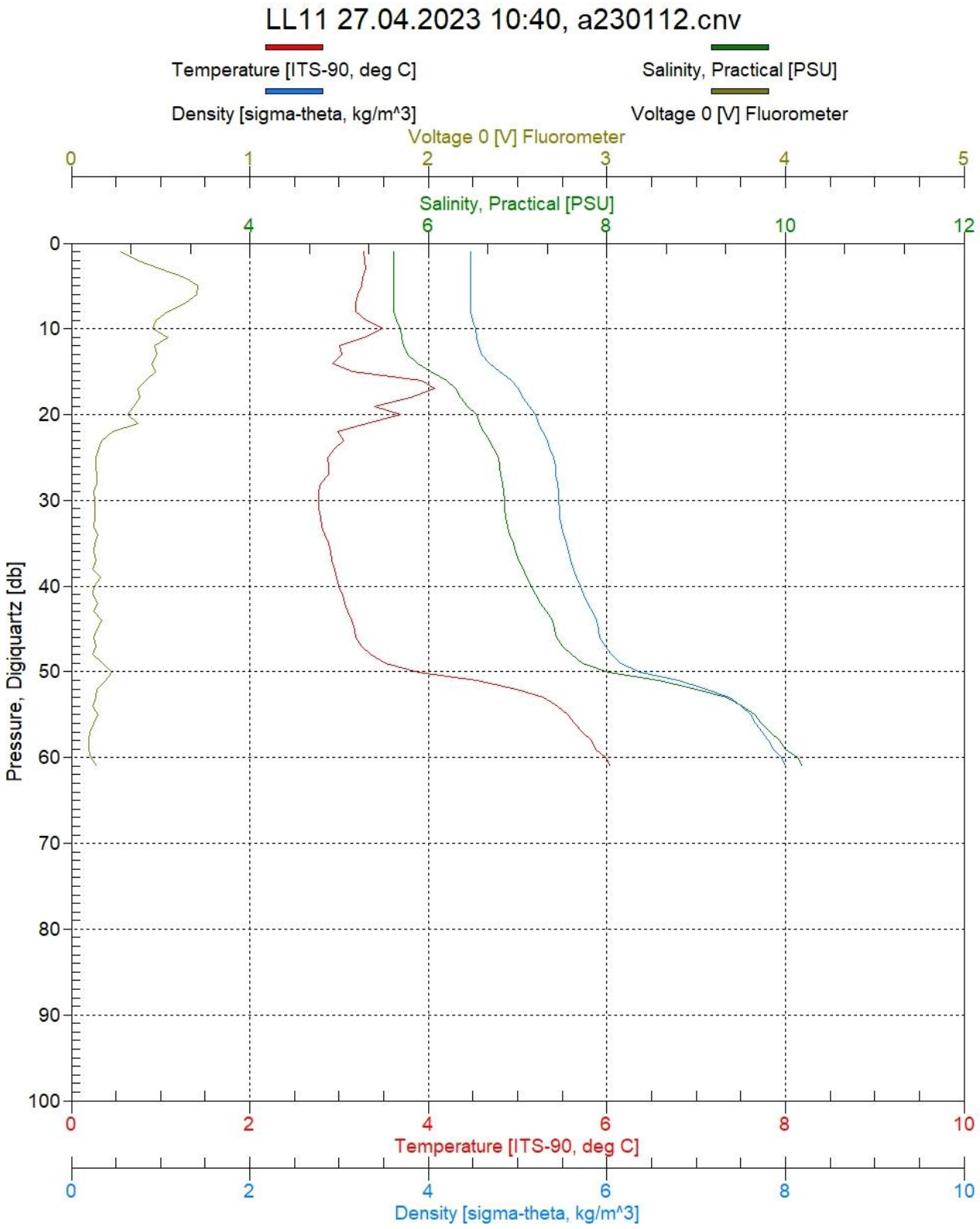

TPDEEP1 26.04.2023 17:10, a230107.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Oxygen, SBE 43 [ml/l]
Oxygen, SBE 43 [ml/l]
0 3 6 9 12 15
Salinity, Practical [PSU]
4 6 8 10 12
Pressure, Digiquartz [db]
0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220
-2 0 2 4 6 8
Temperature [ITS-90, deg C]
0 2 4 6 8 10
Density [sigma-theta, kg/m^3]

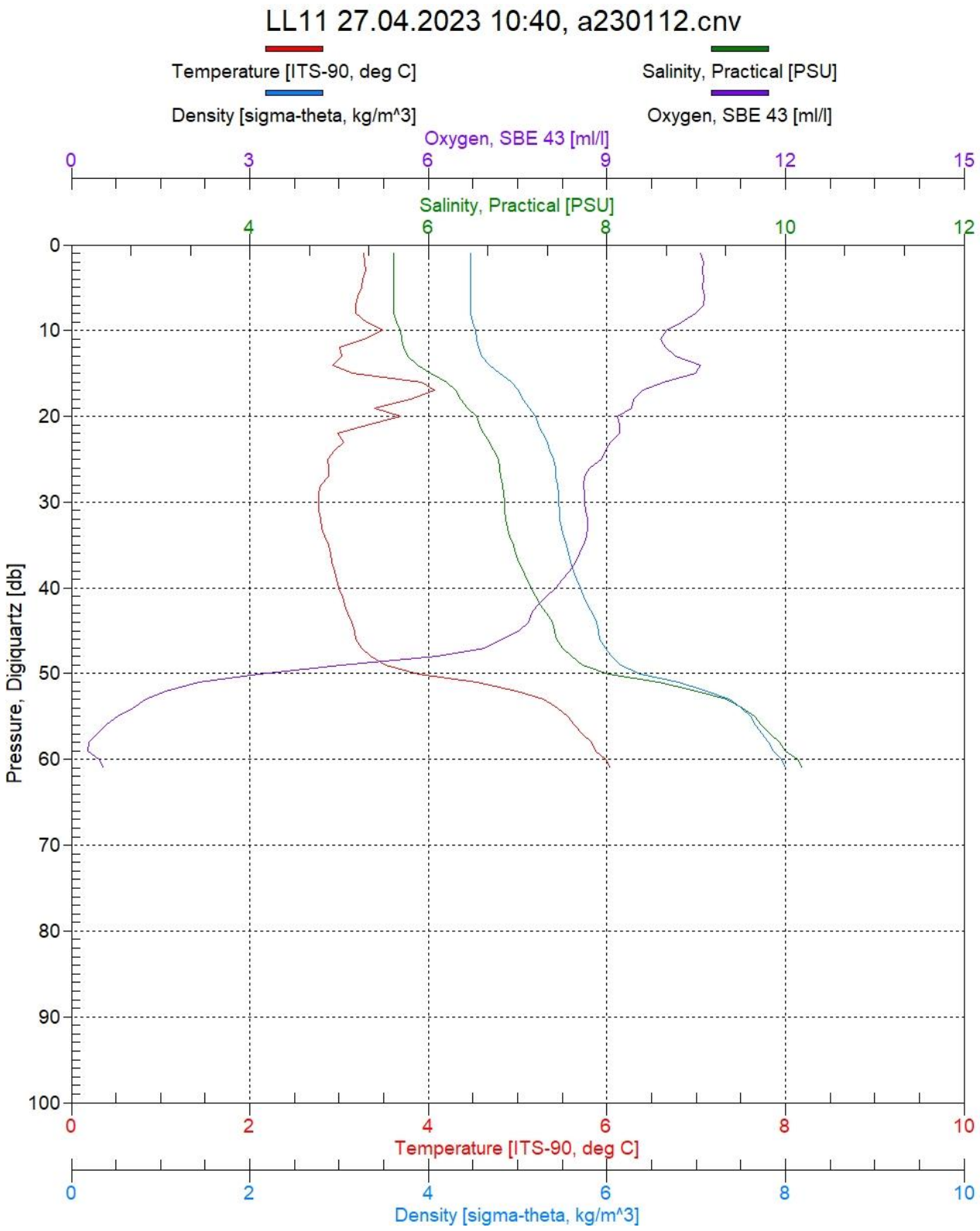

TPDEEP1 26.04.2023 20:10, a230108.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Voltage 0 [V] Fluorometer
Voltage 0 [V] Fluorometer
Salinity, Practical [PSU]
Pressure, Digiquartz [db]
Temperature [ITS-90, deg C]
Density [sigma-theta, kg/m^3]

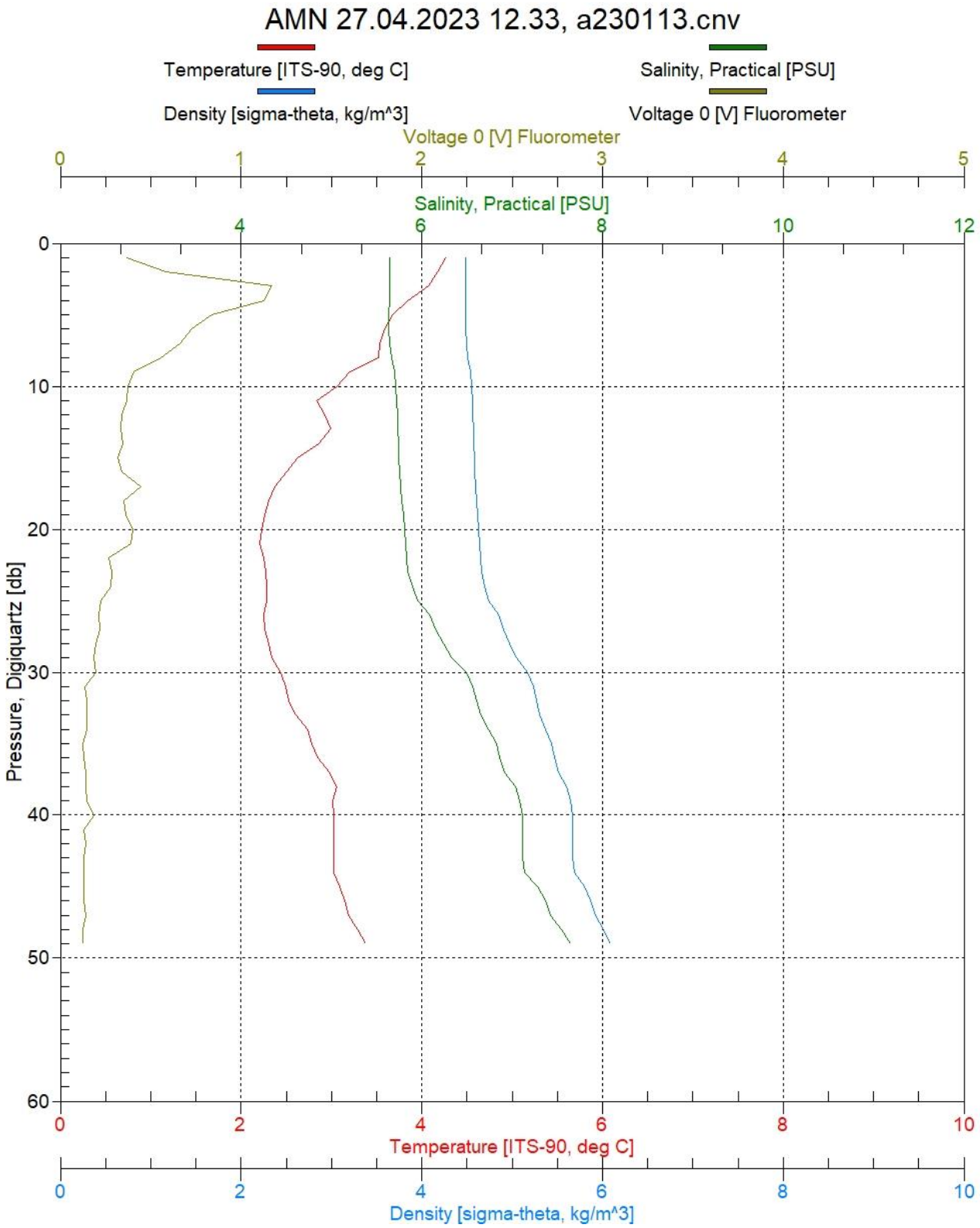

TPDEEP1 26.04.2023 20:10, a230108.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Oxygen, SBE 43 [ml/l]
Oxygen, SBE 43 [ml/l]
0 3 6 9 12 15
Salinity, Practical [PSU]
4 6 8 10 12
Pressure, Digiquartz [db]
0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220
-2 0 2 4 6 8
Temperature [ITS-90, deg C]
0 2 4 6 8 10
Density [sigma-theta, kg/m^3]

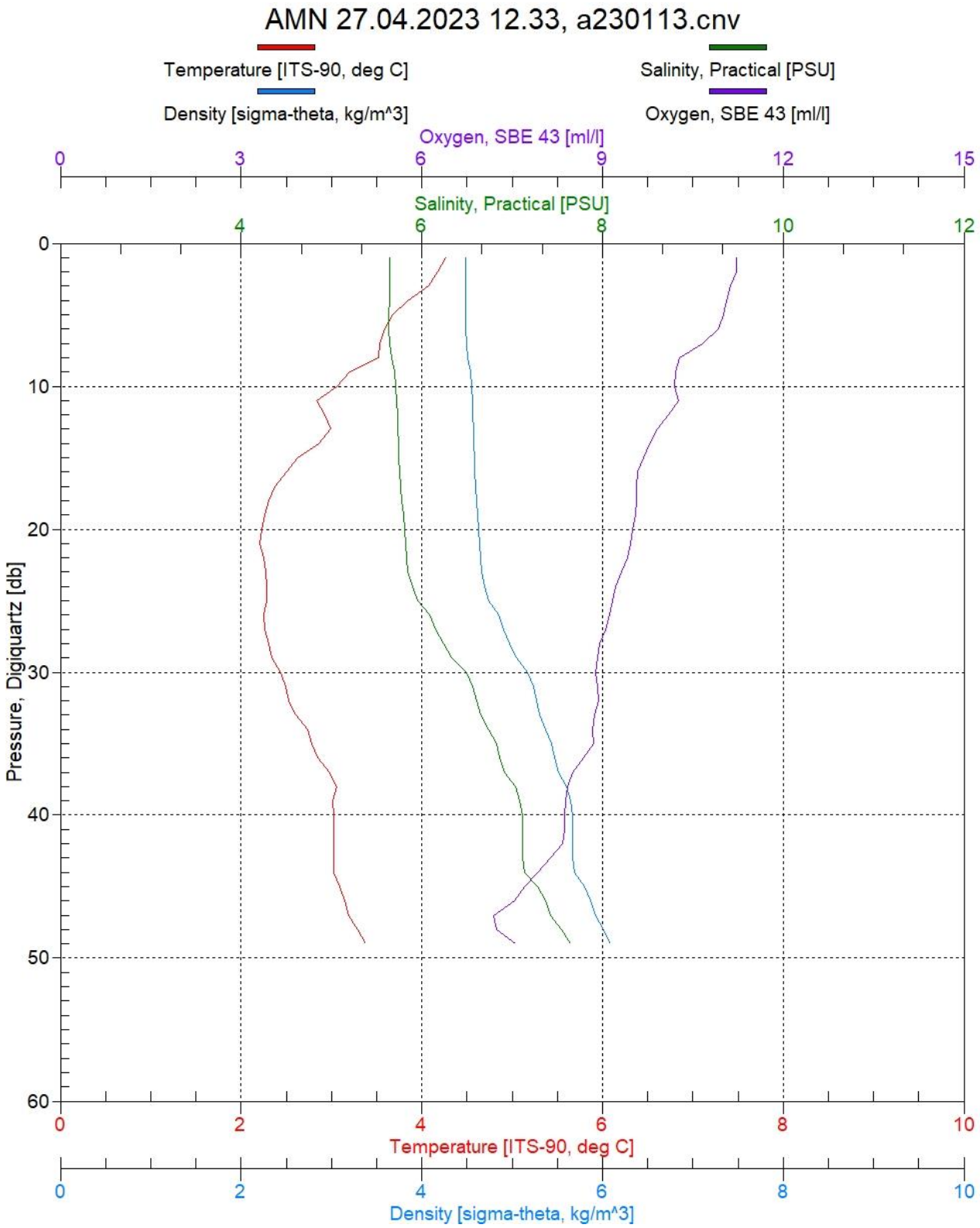

LL15 27.04.2023 03:52, a230111.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Voltage 0 [V] Fluorometer
Voltage 0 [V] Fluorometer
Salinity, Practical [PSU]
Pressure, Digiquartz [db]
Temperature [ITS-90, deg C]
Density [sigma-theta, kg/m^3]

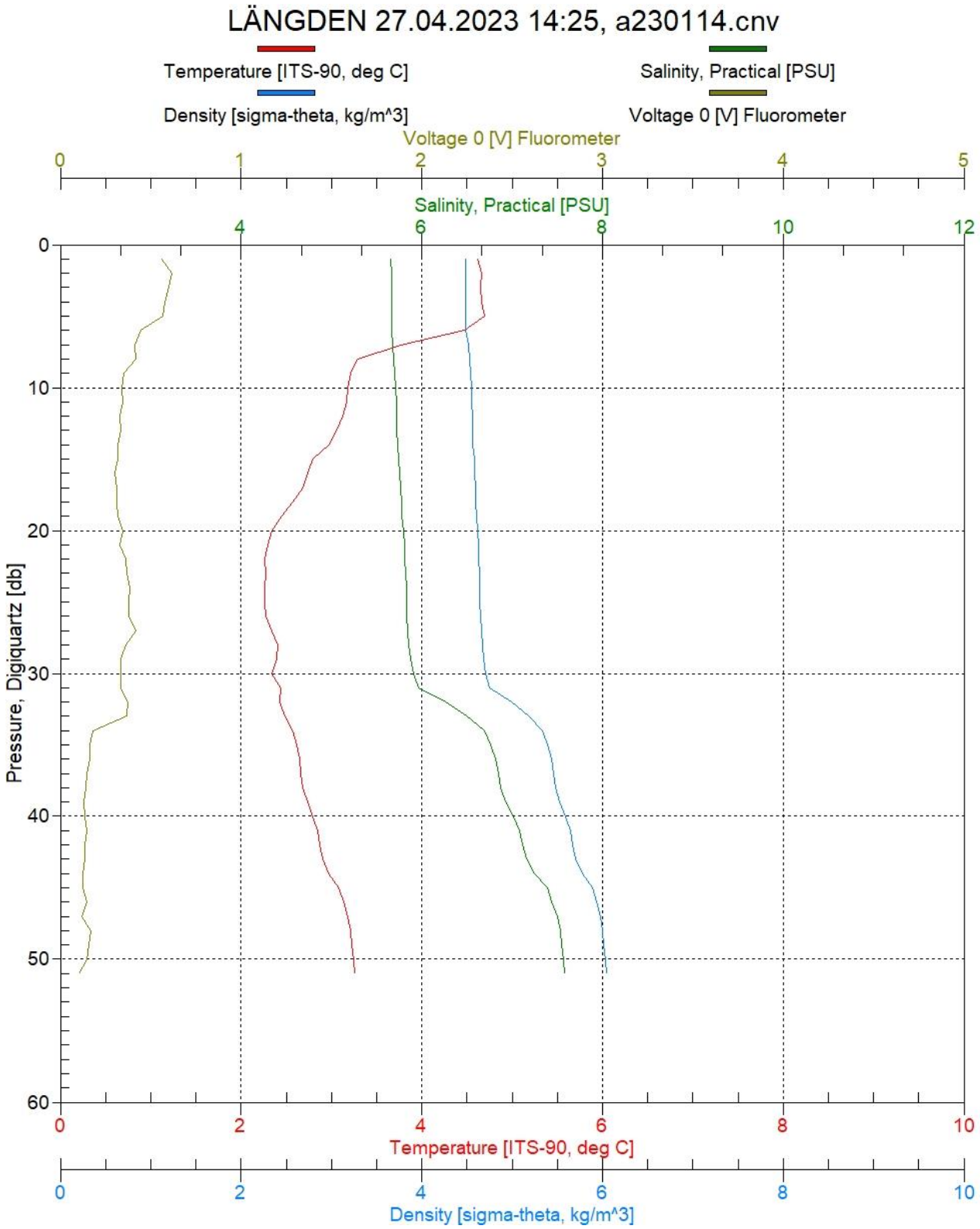

LL15 27.04.2023 03:52, a230111.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Oxygen, SBE 43 [ml/l]
Oxygen, SBE 43 [ml/l]
0 3 6 9 12 15
Salinity, Practical [PSU]
4 6 8 10 12
Pressure, Digiquartz [db]
0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150
-2 0 2 4 6 8
Temperature [ITS-90, deg C]
0 2 4 6 8 10
Density [sigma-theta, kg/m^3]

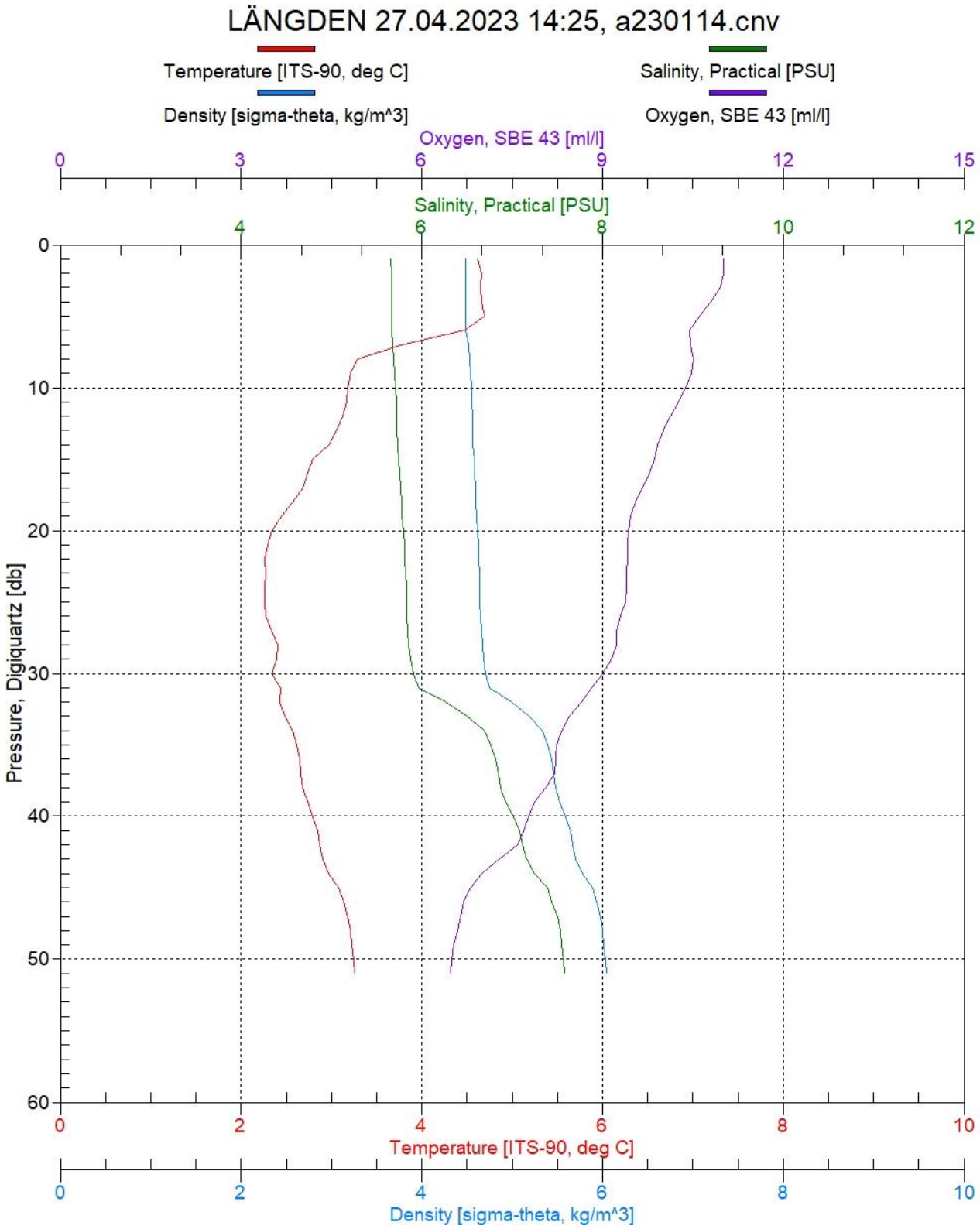

LL11 27.04.2023 10:40, a230112.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Voltage 0 [V] Fluorometer
Voltage 0 [V] Fluorometer
0 1 2 3 4 5
Salinity, Practical [PSU]
4 6 8 10 12
Pressure, Digiquartz [db]
0 10 20 30 40 50 60 70 80 90 100
0 2 4 6 8 10
Temperature [ITS-90, deg C]
0 2 4 6 8 10
Density [sigma-theta, kg/m^3]

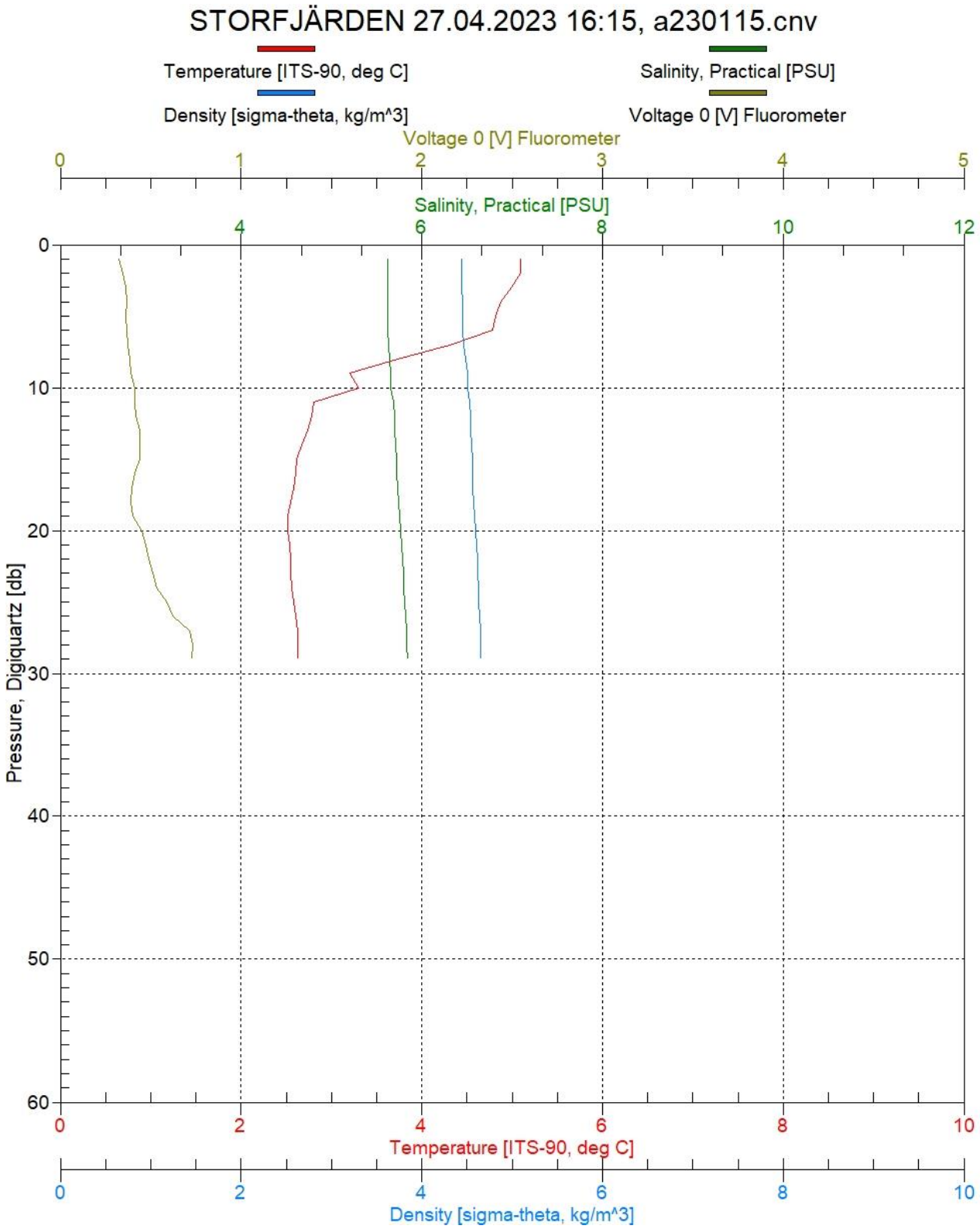

LL11 27.04.2023 10:40, a230112.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Oxygen, SBE 43 [ml/l]
Oxygen, SBE 43 [ml/l]
0 3 6 9 12 15
Salinity, Practical [PSU]
4 6 8 10 12
Pressure, Digiquartz [db]
0 10 20 30 40 50 60 70 80 90 100
0 2 4 6 8 10
Temperature [ITS-90, deg C]
0 2 4 6 8 10
Density [sigma-theta, kg/m^3]

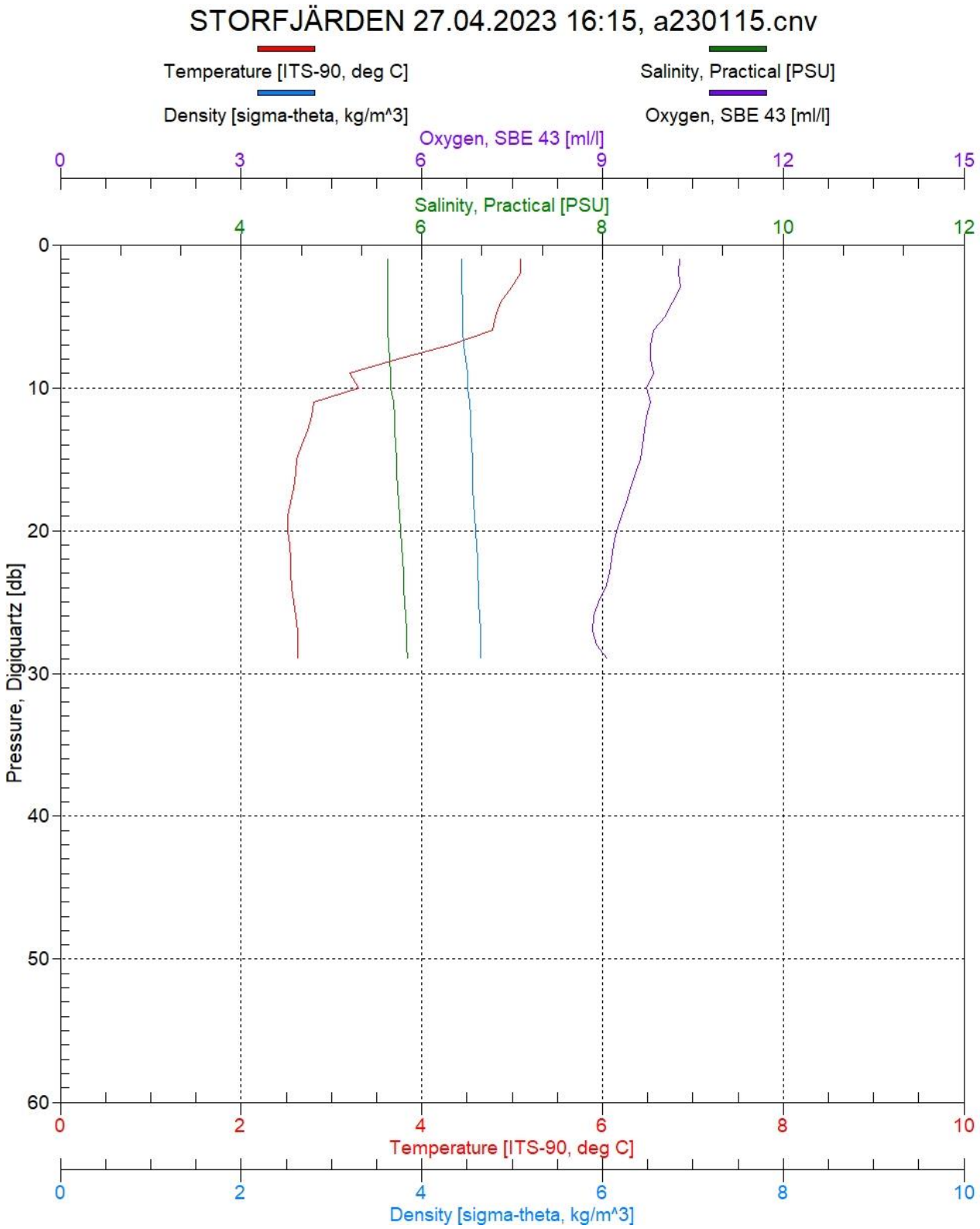

AMN 27.04.2023 12.33, a230113.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Voltage 0 [V] Fluorometer
Voltage 0 [V] Fluorometer
Salinity, Practical [PSU]
Pressure, Digiquartz [db]
Temperature [ITS-90, deg C]
Density [sigma-theta, kg/m^3]

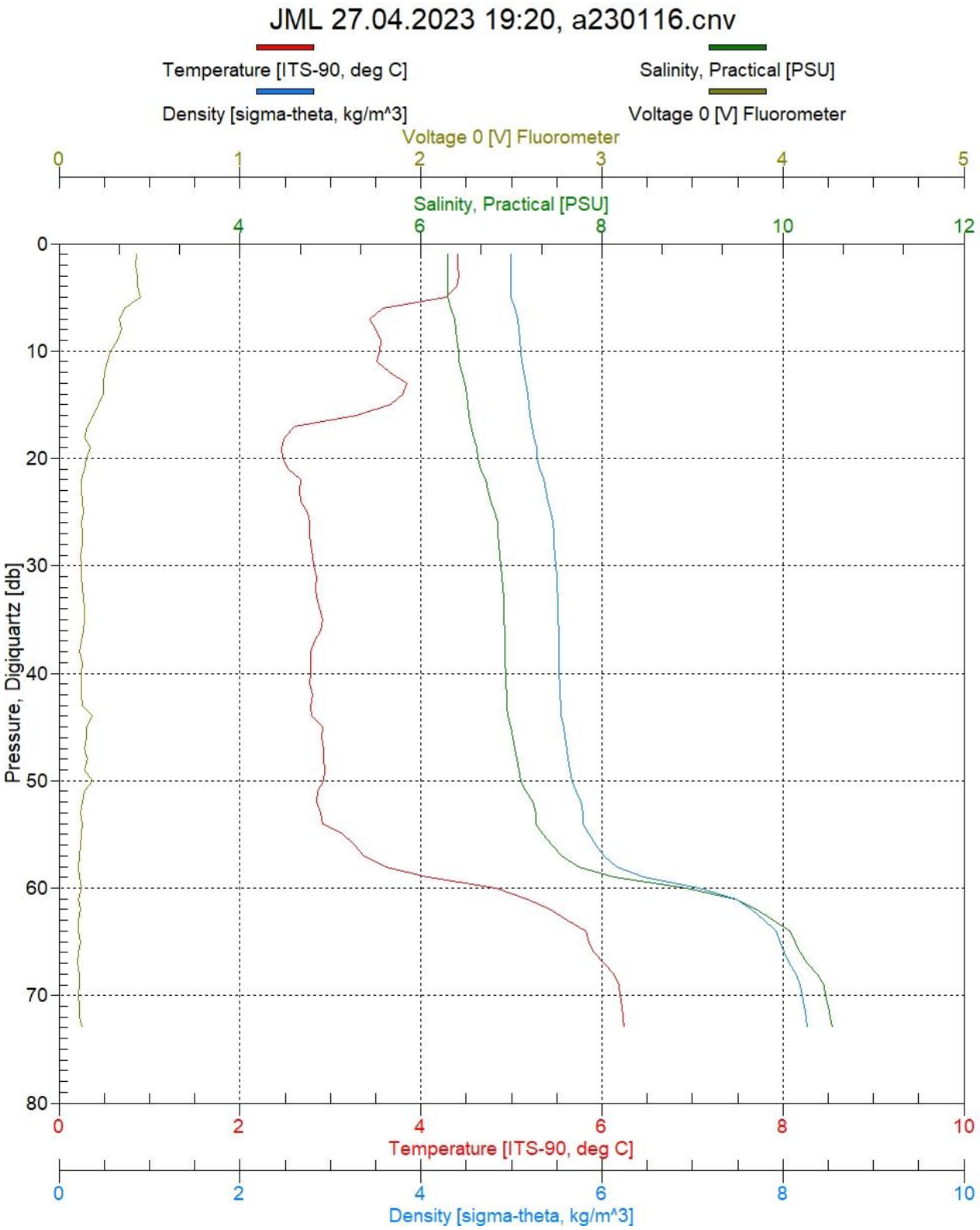

AMN 27.04.2023 12.33, a230113.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Oxygen, SBE 43 [ml/l]
Oxygen, SBE 43 [ml/l]
0
3
6
9
12
15
Salinity, Practical [PSU]
4
6
8
10
12
0
10
20
30
40
50
60
Pressure, Digiquartz [db]
0
2
4
6
8
10
Temperature [ITS-90, deg C]
0
2
4
6
8
10
Density [sigma-theta, kg/m^3]

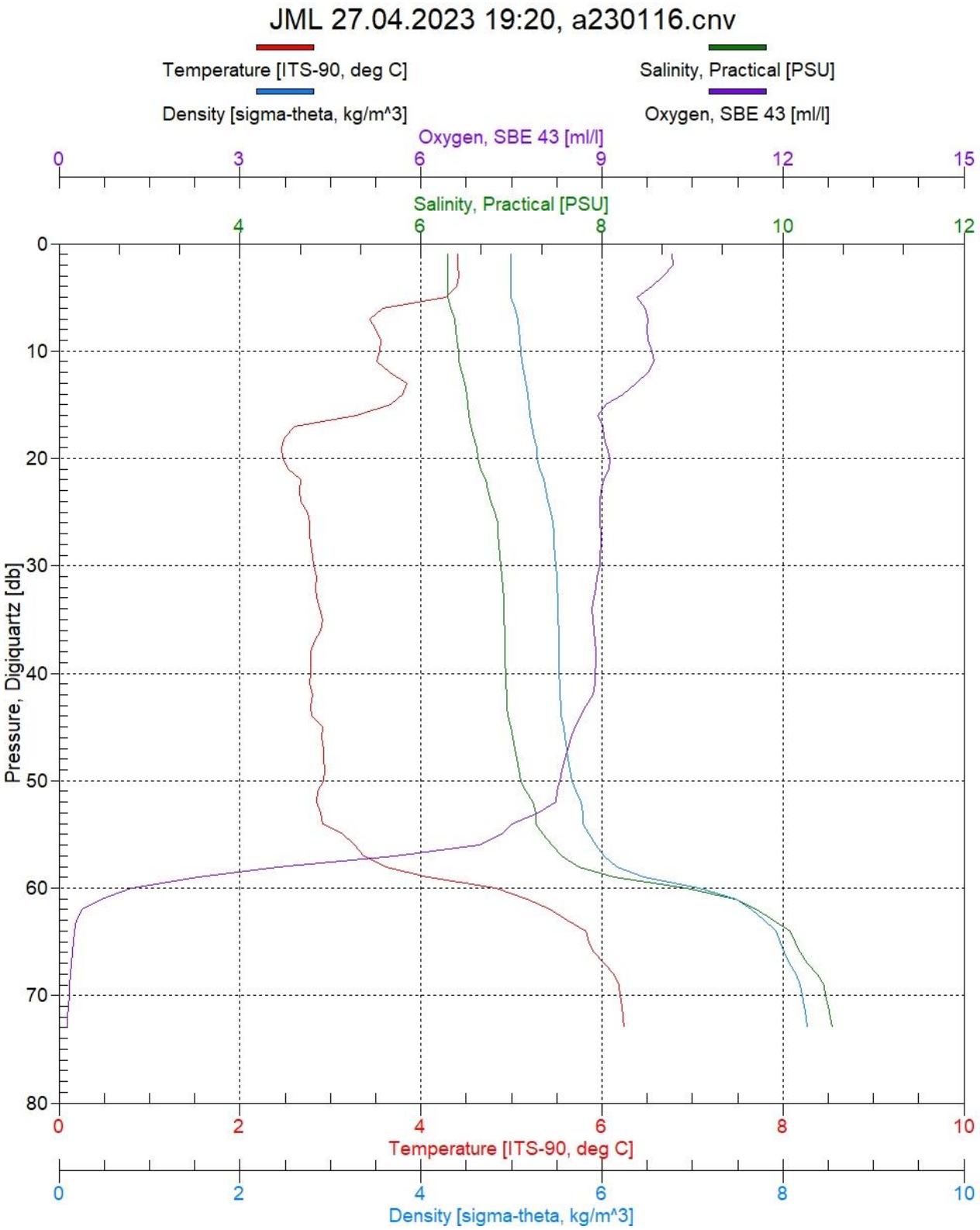

LÄNGDEN 27.04.2023 14:25, a230114.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Voltage 0 [V] Fluorometer
Voltage 0 [V] Fluorometer
0
1
2
3
4
5
Salinity, Practical [PSU]
4
6
8
10
12
Pressure, Digiquartz [db]
0
10
20
30
40
50
60
0
2
4
6
8
10
Temperature [ITS-90, deg C]
0
2
4
6
8
10
Density [sigma-theta, kg/m^3]

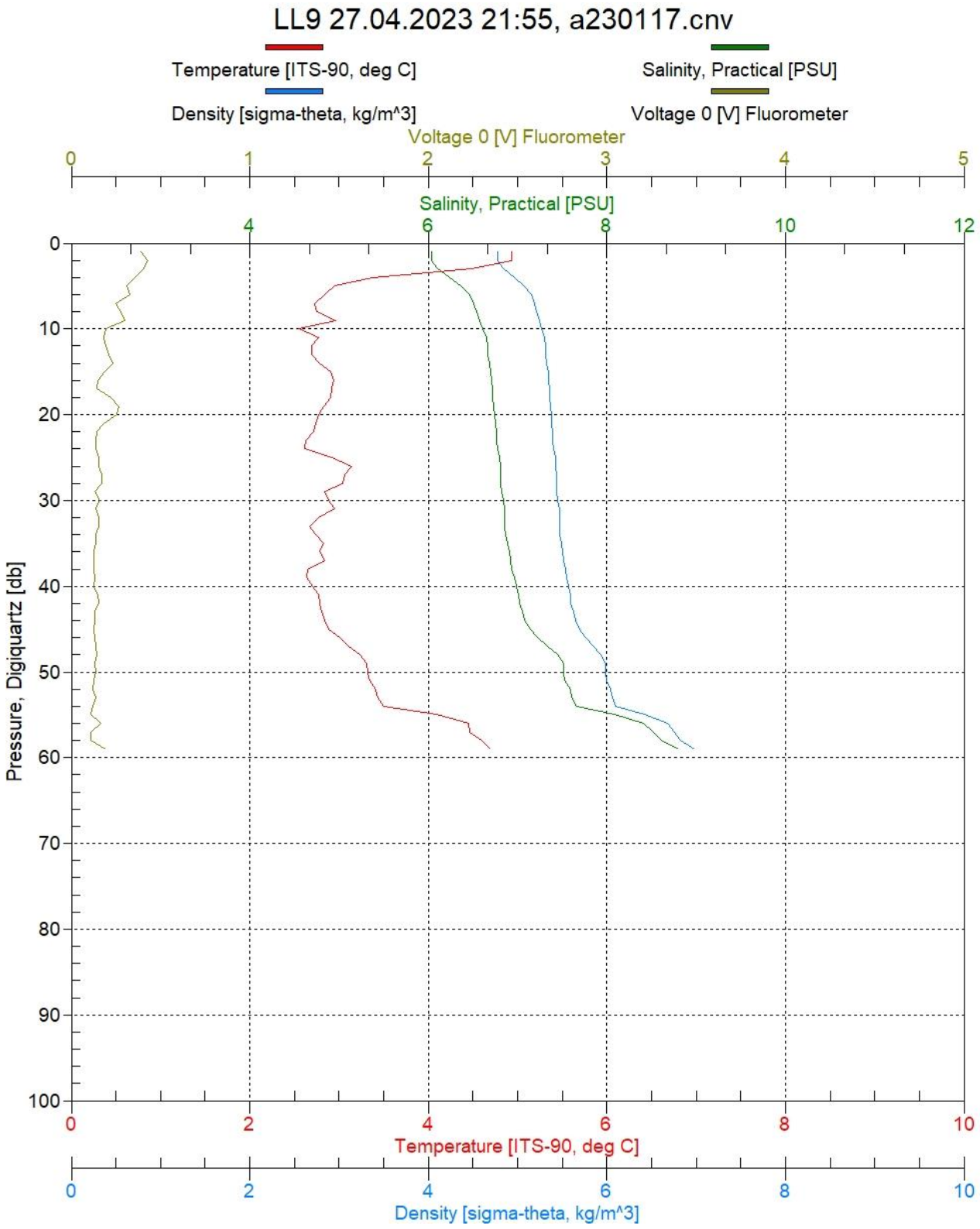

LÄNGDEN 27.04.2023 14:25, a230114.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Oxygen, SBE 43 [ml/l]
Oxygen, SBE 43 [ml/l]
0 3 6 9 12 15
Salinity, Practical [PSU]
4 6 8 10 12
Pressure, Digiquartz [db]
0 10 20 30 40 50 60
0 2 4 6 8 10
Temperature [ITS-90, deg C]
0 2 4 6 8 10
Density [sigma-theta, kg/m^3]

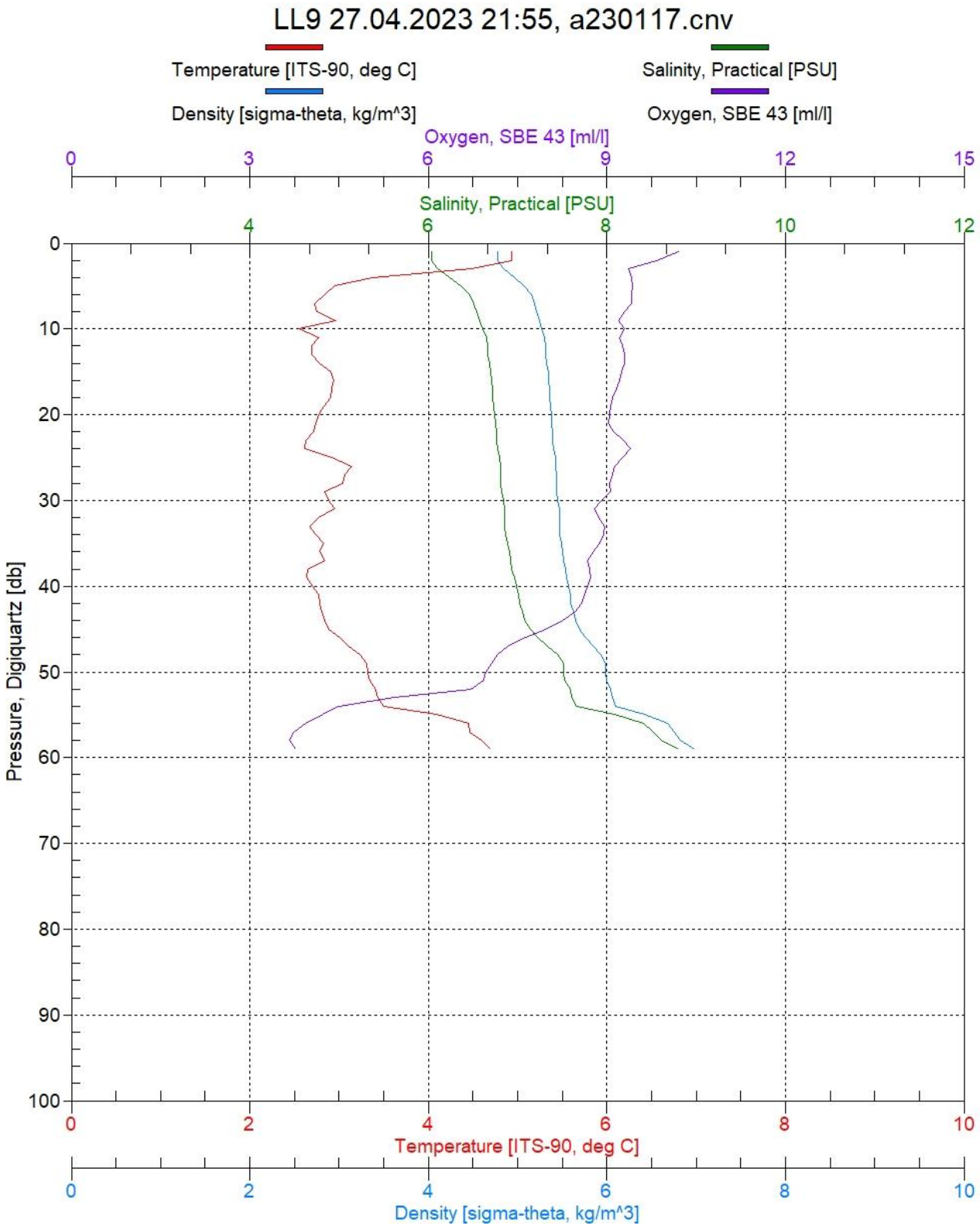

STORFJÄRDEN 27.04.2023 16:15, a230115.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Voltage 0 [V] Fluorometer
Voltage 0 [V] Fluorometer
0 1 2 3 4 5
Salinity, Practical [PSU]
4 6 8 10 12
Pressure, Digiquartz [db]
0 10 20 30 40 50 60
0 2 4 6 8 10
Temperature [ITS-90, deg C]
0 2 4 6 8 10
Density [sigma-theta, kg/m^3]

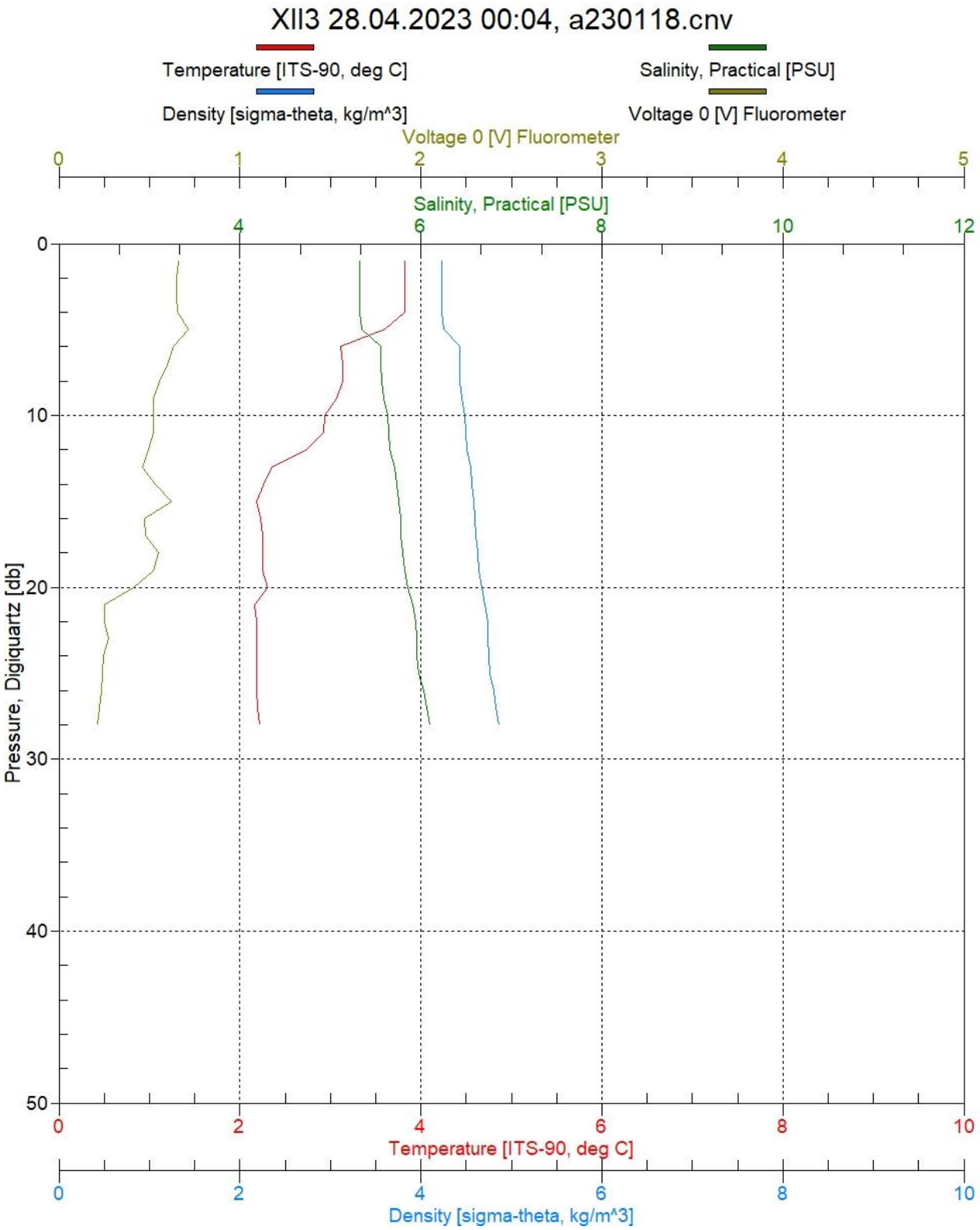

STORFJÄRDEN 27.04.2023 16:15, a230115.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Oxygen, SBE 43 [ml/l]
Oxygen, SBE 43 [ml/l]
0
3
6
9
12
15
Salinity, Practical [PSU]
4
6
8
10
12
0
10
20
30
40
50
60
Pressure, Digiquartz [db]
0
2
4
6
8
10
Temperature [ITS-90, deg C]
0
2
4
6
8
10
Density [sigma-theta, kg/m^3]

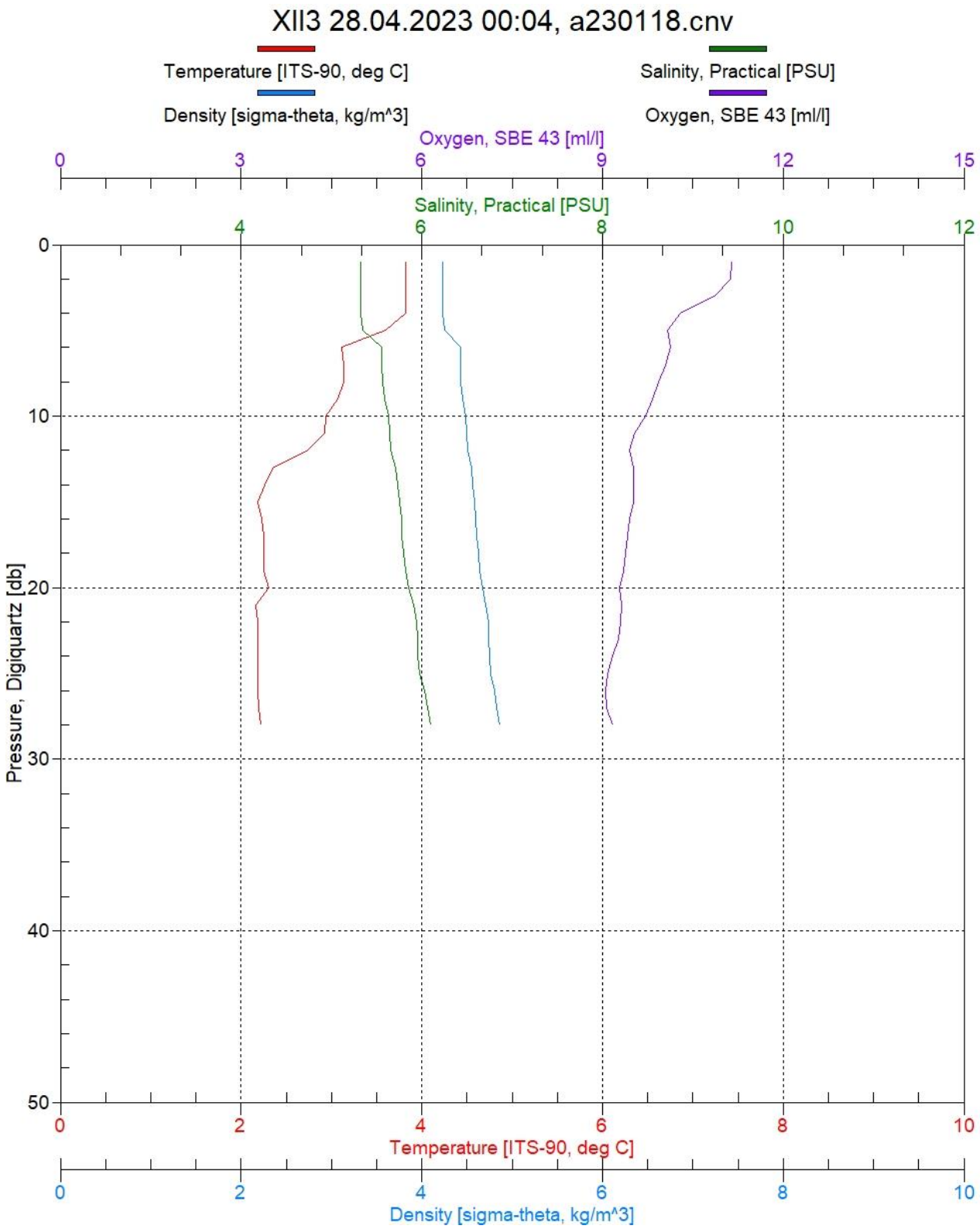

JML 27.04.2023 19:20, a230116.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Voltage 0 [V] Fluorometer
Voltage 0 [V] Fluorometer
Salinity, Practical [PSU]
Pressure, Digiquartz [db]
Temperature [ITS-90, deg C]
Density [sigma-theta, kg/m^3]

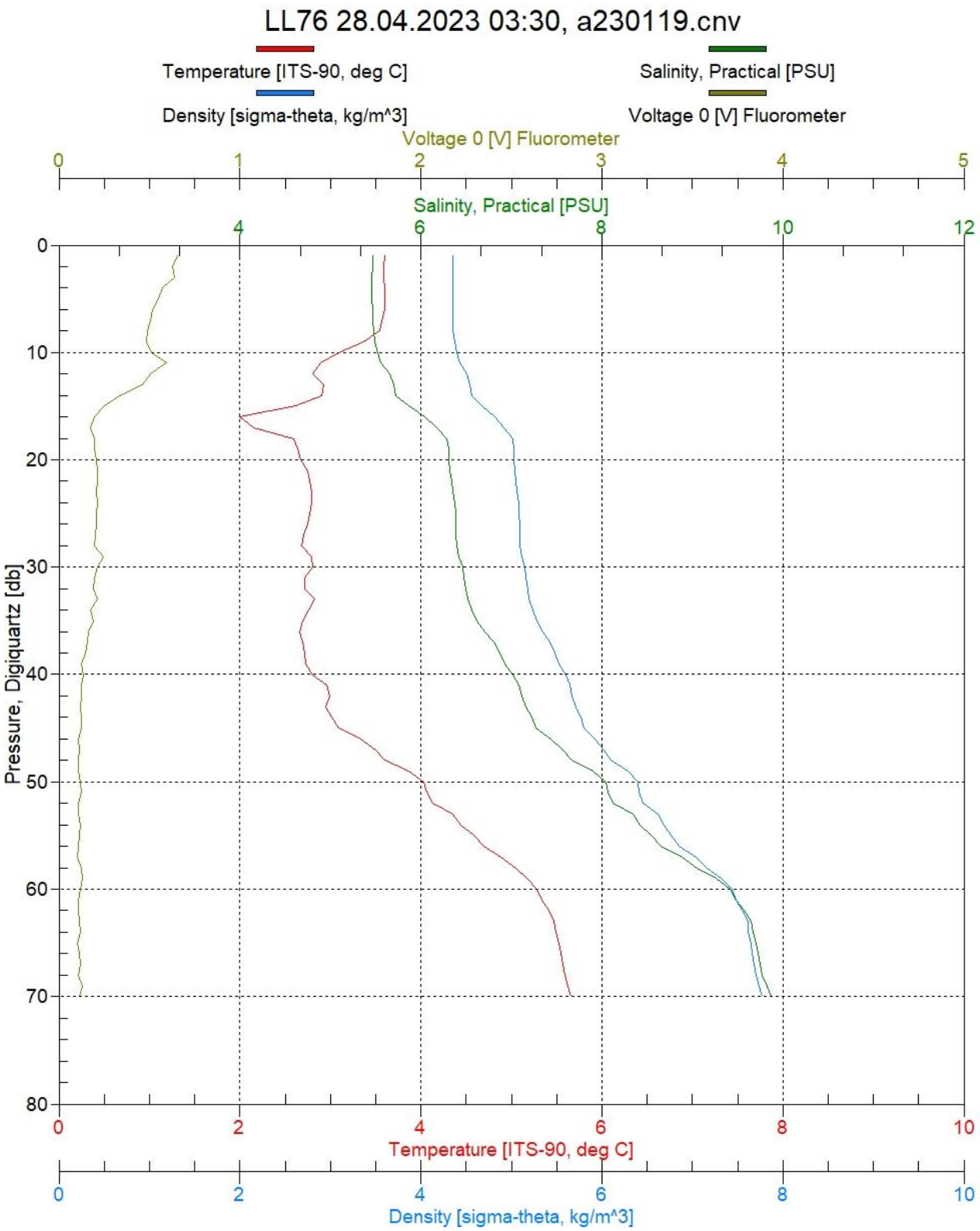

JML 27.04.2023 19:20, a230116.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Oxygen, SBE 43 [ml/l]
Oxygen, SBE 43 [ml/l]
0
3
6
9
12
15
Salinity, Practical [PSU]
4
6
8
10
12
0
10
20
30
40
50
60
70
80
Pressure, Digiquartz [db]
0
2
4
6
8
10
Temperature [ITS-90, deg C]
0
2
4
6
8
10
Density [sigma-theta, kg/m^3]

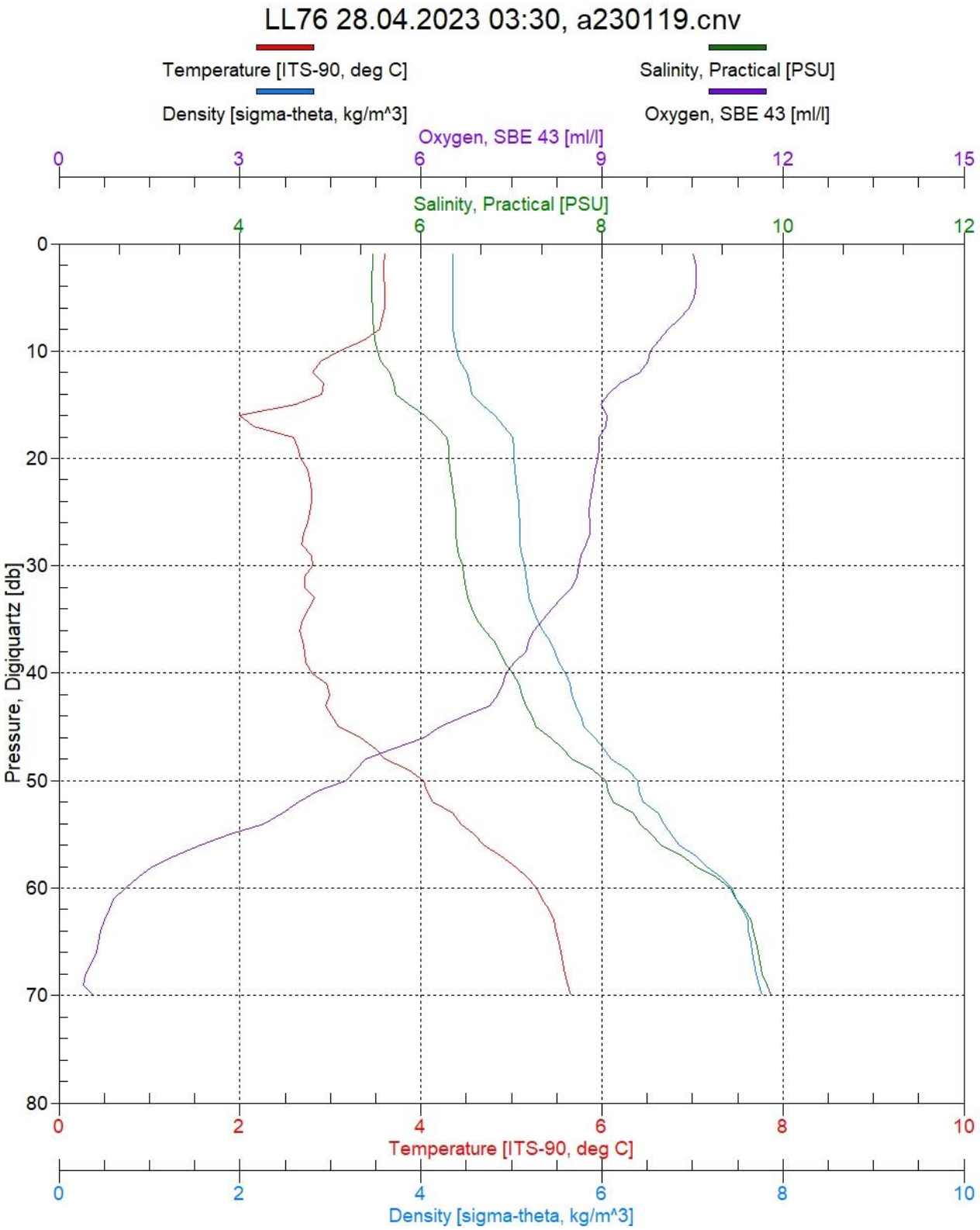

LL9 27.04.2023 21:55, a230117.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Voltage 0 [V] Fluorometer
Voltage 0 [V] Fluorometer
Salinity, Practical [PSU]
Pressure, Digiquartz [db]
Temperature [ITS-90, deg C]
Density [sigma-theta, kg/m^3]


LL9 27.04.2023 21:55, a230117.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Oxygen, SBE 43 [ml/l]
Oxygen, SBE 43 [ml/l]
0
3
6
9
12
15
Salinity, Practical [PSU]
4
6
8
10
12
0
10
20
30
40
50
60
70
80
90
100
Pressure, Digiquartz [db]
0
2
4
6
8
10
Temperature [ITS-90, deg C]
0
2
4
6
8
10
Density [sigma-theta, kg/m^3]


XII3 28.04.2023 00:04, a230118.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Voltage 0 [V] Fluorometer
Voltage 0 [V] Fluorometer
Salinity, Practical [PSU]
Pressure, Digiquartz [db]
Temperature [ITS-90, deg C]
Density [sigma-theta, kg/m^3]


XII3 28.04.2023 00:04, a230118.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Oxygen, SBE 43 [ml/l]
Oxygen, SBE 43 [ml/l]
0
3
6
9
12
15
Salinity, Practical [PSU]
4
6
8
10
12
0
10
20
30
40
50
Pressure, Digiquartz [db]
0
2
4
6
8
10
Temperature [ITS-90, deg C]
0
2
4
6
8
10
Density [sigma-theta, kg/m^3]


LL76 28.04.2023 03:30, a230119.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Voltage 0 [V] Fluorometer
Voltage 0 [V] Fluorometer
Salinity, Practical [PSU]
Pressure, Digiquartz [db]
Temperature [ITS-90, deg C]
Density [sigma-theta, kg/m^3]


LL76 28.04.2023 03:30, a230119.cnv
Temperature [ITS-90, deg C]
Salinity, Practical [PSU]
Density [sigma-theta, kg/m^3]
Oxygen, SBE 43 [ml/l]
Oxygen, SBE 43 [ml/l]
0
3
6
9
12
15
Salinity, Practical [PSU]
4
6
8
10
12
0
10
20
30
40
50
60
70
80
Pressure, Digiquartz [db]
0
2
4
6
8
10
Temperature [ITS-90, deg C]
0
2
4
6
8
10
Density [sigma-theta, kg/m^3]

Annex 4. Cruise photo. Photo by Ilkka Lastumäki