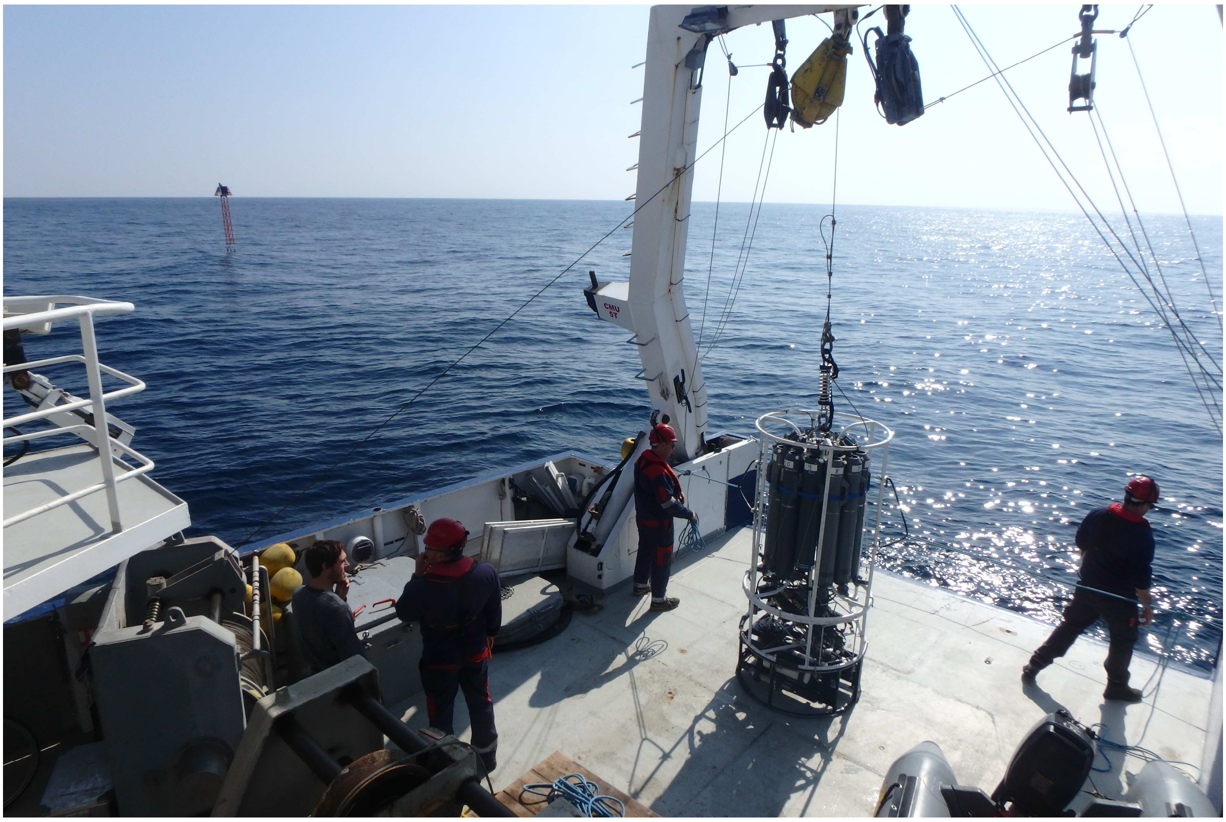
BOUSSOLE PROJECT

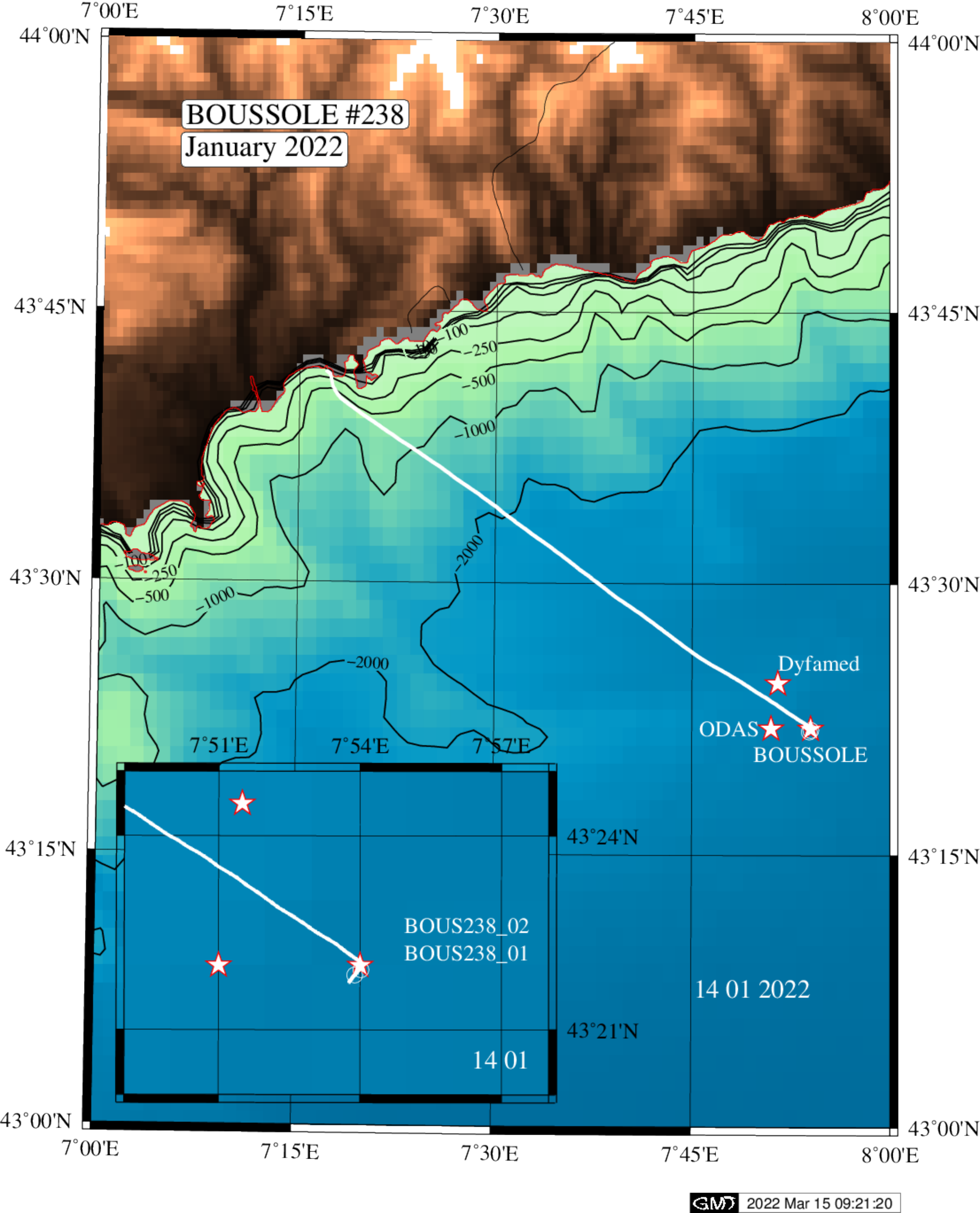
CTD Data catalogue for 2022
Cruise 238 to cruise 249

Institut de la Mer de Villefranche (IMEV), 06230 Villefranche sur mer, France

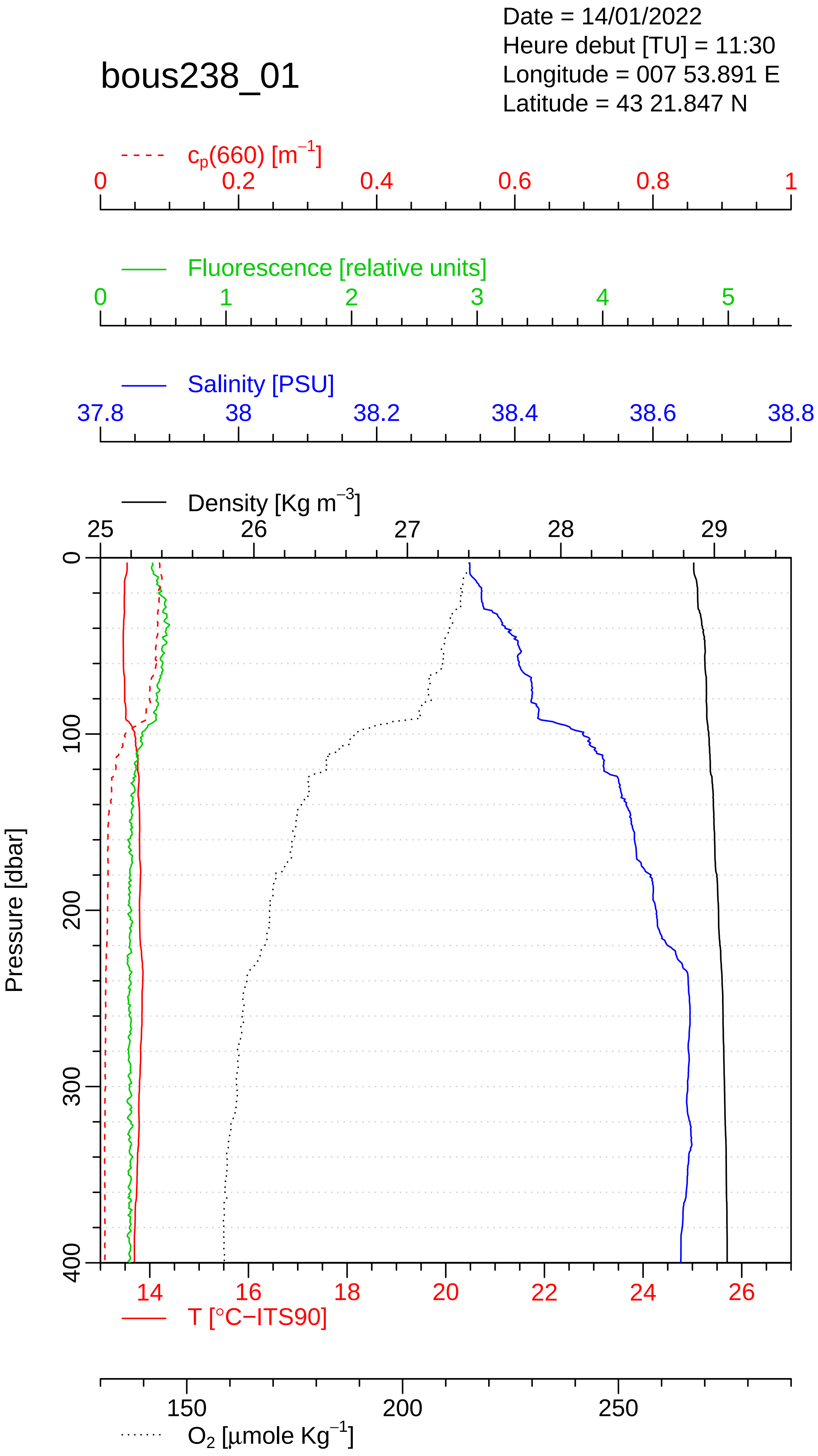


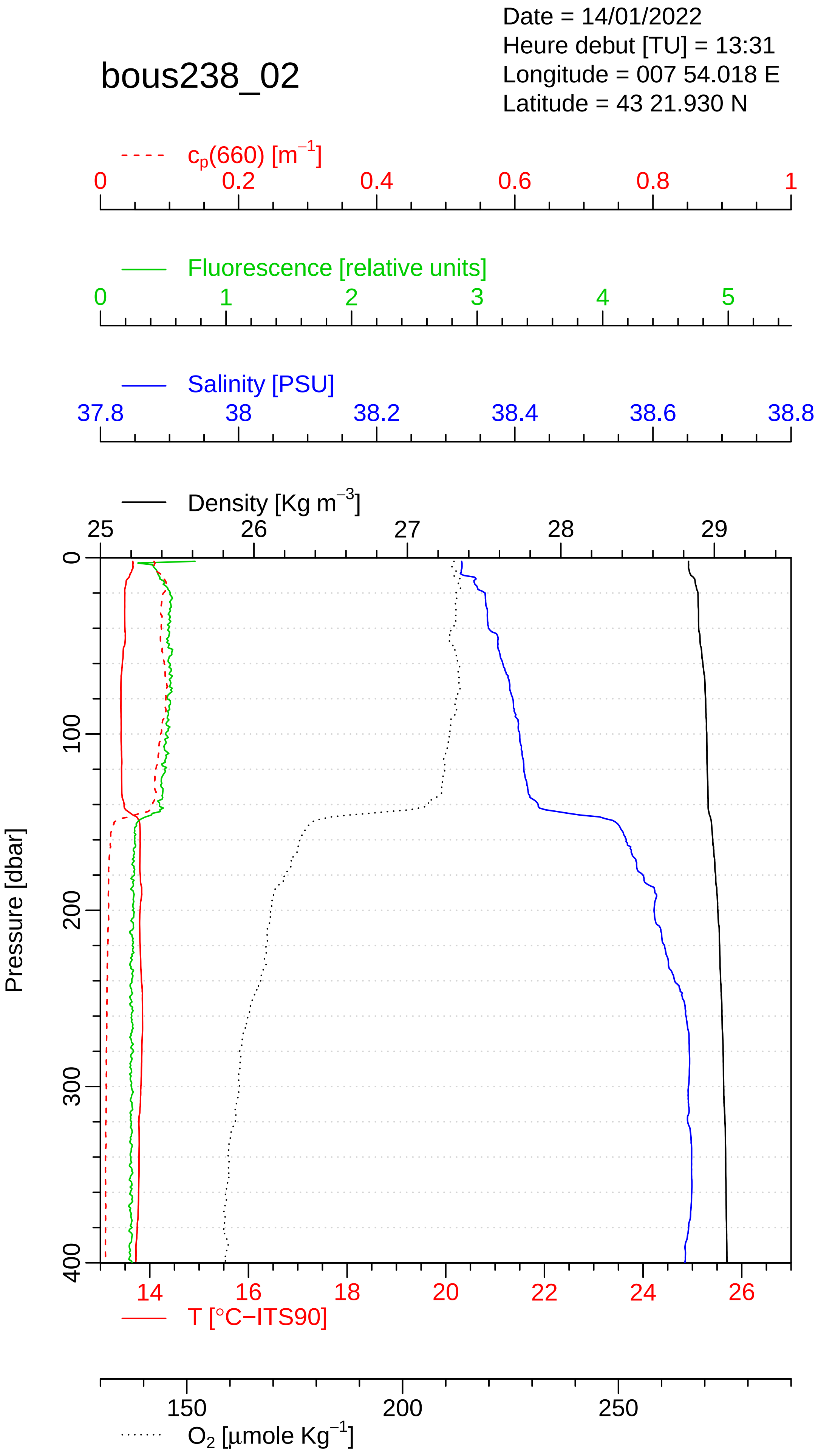
A view of the aft deck of the R/V *Téthys II* before the deployment of the CTD Rosette at the BOUSSOLE site.

ESA/ESRIN contract N° 4000119096/17/I-BG



BOUSSOLE #238
January 2022
7°00'E
7°15'E
7°30'E
7°45'E
8°00'E
44°00'N
43°45'N
43°30'N
43°15'N
43°00'N
−100
−250
−500
−1000
−2000
Dyfamed
ODAS
BOUSSOLE
7°51'E
7°54'E
7°57'E
43°24'N
43°21'N
BOUS238_02
BOUS238_01
14 01
14 01 2022
GMT 2022 Mar 15 09:21:20


bous238_01
Date = 14/01/2022
Heure debut [TU] = 11:30
Longitude = 007 53.891 E
Latitude = 43 21.847 N
c_p(660) [m^{-1}]
0 0.2 0.4 0.6 0.8 1
Fluorescence [relative units]
0 1 2 3 4 5
Salinity [PSU]
37.8 38 38.2 38.4 38.6 38.8
Density [Kg m^{-3}]
25 26 27 28 29
Pressure [dbar]
0 100 200 300 400
14 16 18 20 22 24 26
T [°C−ITS90]
150 200 250
O_2 [µmole Kg^{-1}]



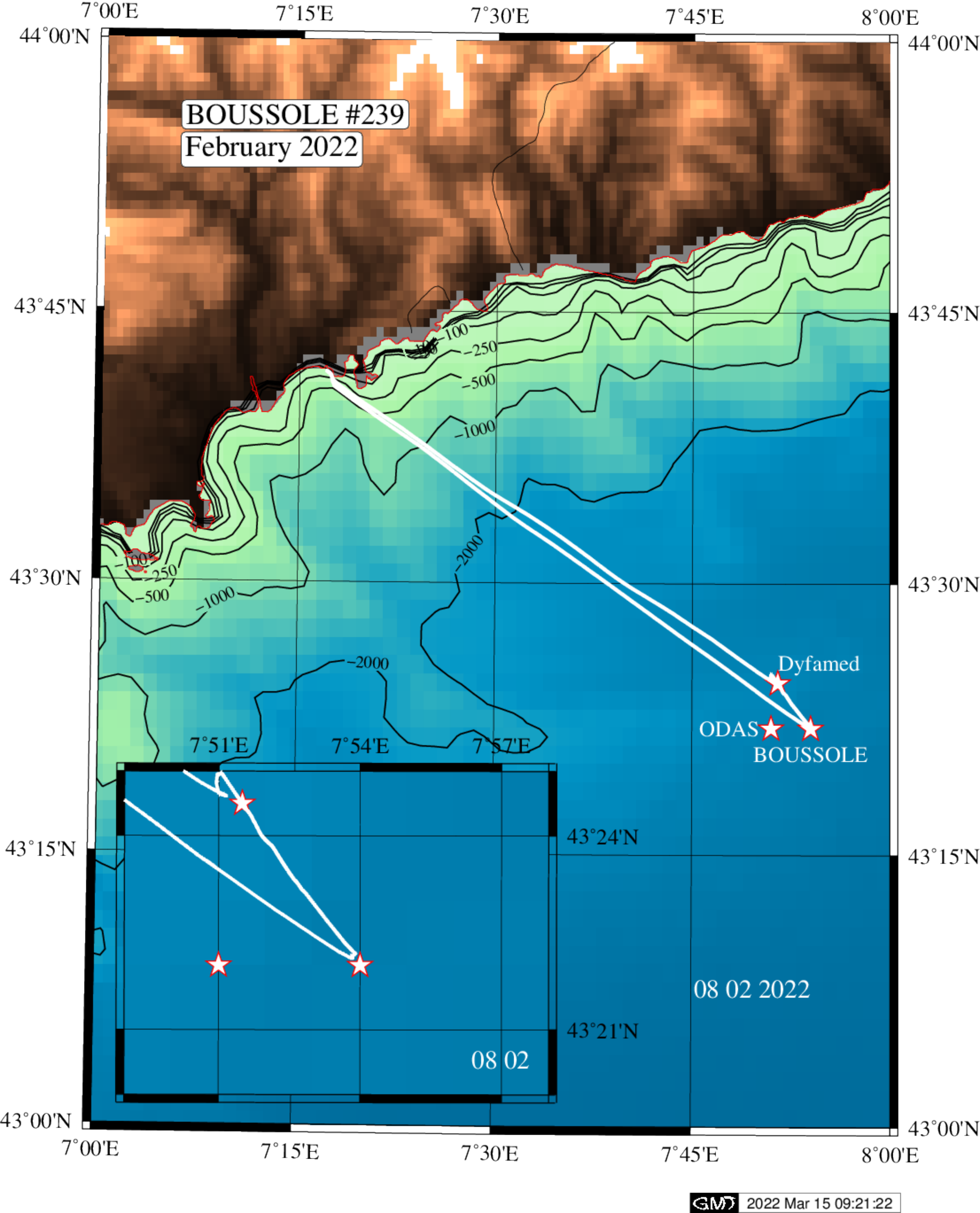
bous238_02
Date = 14/01/2022
Heure debut [TU] = 13:31
Longitude = 007 54.018 E
Latitude = 43 21.930 N
cp(660) [m−1]
0
0.2
0.4
0.6
0.8
1
Fluorescence [relative units]
0
1
2
3
4
5
Salinity [PSU]
37.8
38
38.2
38.4
38.6
38.8
Density [Kg m−3]
25
26
27
28
29
Pressure [dbar]
0
100
200
300
400
14
16
18
20
22
24
26
T [°C−ITS90]
150
200
250
O2 [µmole Kg−1]

Date: 02/02/2023

Instrument configuration file: D:\Melek\boussole\Data\CTD\data&process\2022\B238\raw\BOUS238_01.XMLCON

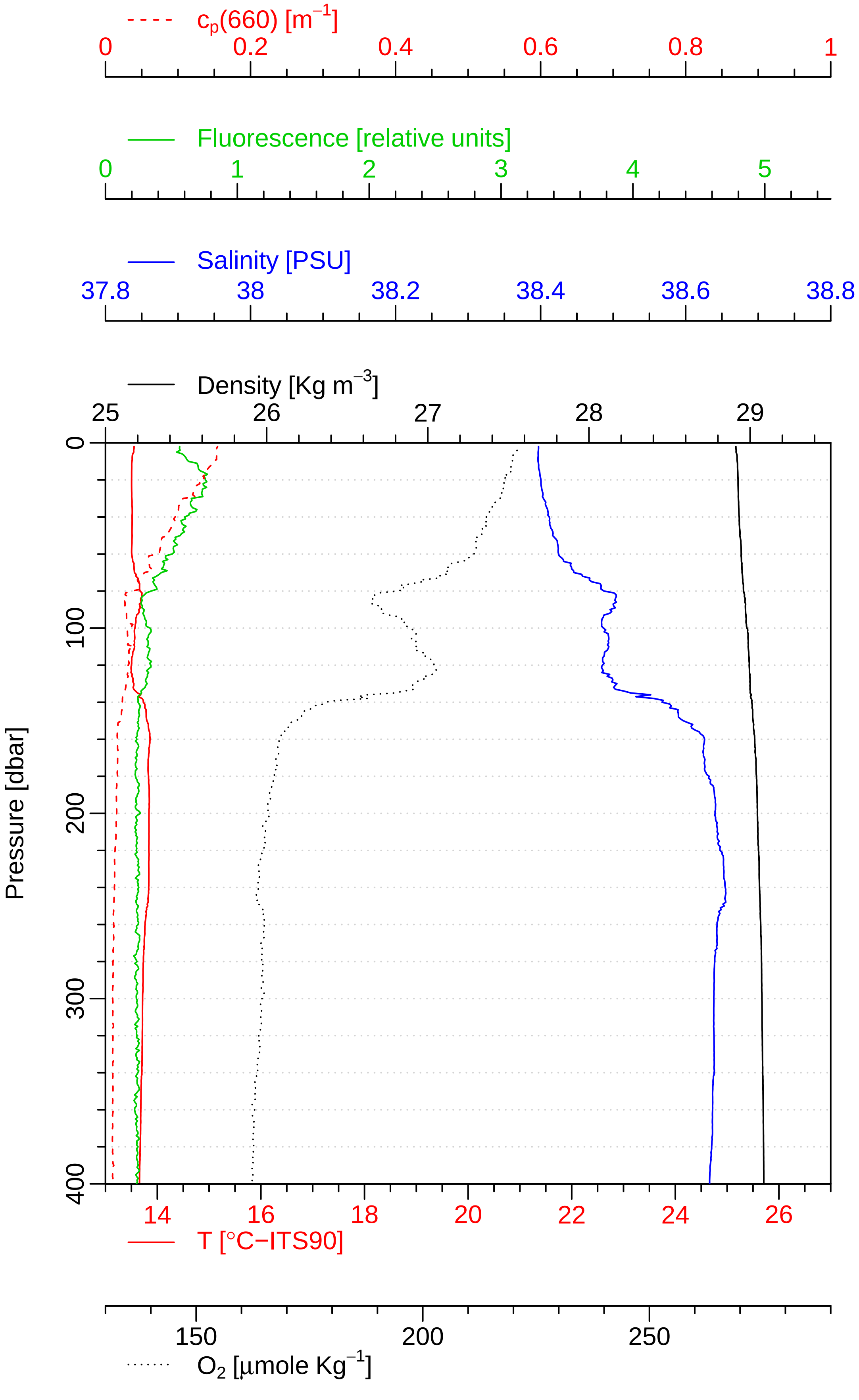
```
Configuration report for SBE 911plus/917plus CTD
------------------------------------------------

Frequency channels suppressed : 0
Voltage words suppressed      : 1
Computer interface            : RS-232C
Deck unit                     : SBE11plus Firmware Version >= 5.0
Scans to average              : 1
NMEA position data added      : Yes
NMEA depth data added         : No
NMEA time added               : No
NMEA device connected to      : deck unit
Surface PAR voltage added     : No
Scan time added               : No

1) Frequency 0, Temperature

   Serial number : 1378
   Calibrated on : 17-Jun-21
   G             : 4.83714772e-003
   H             : 6.70524923e-004
   I             : 2.63336304e-005
   J             : 2.14843005e-006
   F0            : 1000.000
   Slope         : 1.00000000
   Offset        : 0.0000

2) Frequency 1, Conductivity

   Serial number : 2929
   Calibrated on : 05-Mar-20
   G             : -1.05951733e+001
   H             : 1.41908901e+000
   I             : 7.59510042e-004
   J             : 2.04144674e-005
   CTcor         : 3.2500e-006
   CPcor         : -9.57000000e-008
   Slope         : 1.00000000
   Offset        : 0.00000

3) Frequency 2, Pressure, Digiquartz with TC

   Serial number : 0329
   Calibrated on : 04-Dec-09 (corr May-2017)
   C1            : -4.499631e+004
   C2            : 4.598757e-001
   C3            : 1.505020e-002
   D1            : 3.936600e-002
   D2            : 0.000000e+000
   T1            : 3.004570e+001
   T2            : -1.880753e-004
   T3            : 4.727060e-006
   T4            : -1.923520e-009
   T5            : 0.000000e+000
   Slope         : 0.99996509
   Offset        : -2.27039
   AD590M        : 1.280100e-002
   AD590B        : -9.240166e+000

4) Frequency 3, Temperature, 2

   Serial number : 2473
   Calibrated on : 04-Mar-20
   G             : 4.36726120e-003
   H             : 6.43151581e-004
   I             : 2.33812060e-005
   J             : 2.23255667e-006
   F0            : 1000.000
   Slope         : 1.00000000
   Offset        : 0.0000
```

```
5) Frequency 4, Conductivity, 2

   Serial number : 1313
   Calibrated on : 18-May-21
   G             : -9.85039520e+000
   H             : 1.33613831e+000
   I             : -4.64958478e-004
   J             : 1.12844381e-004
   CTcor         : 3.2500e-006
   CPcor         : -9.57000000e-008
   Slope         : 1.00000000
   Offset        : 0.00000

6) A/D voltage 0, Oxygen, SBE 43

   Serial number : 0378
   Calibrated on : 18-May-21
   Equation      : Sea-Bird
   Soc           : 3.60130e-001
   Offset        : -6.52900e-001
   A             : -4.74250e-003
   B             : 2.16910e-004
   C             : -3.37400e-006
   E             : 3.60000e-002
   Tau20         : 1.21000e+000
   D1            : 1.92634e-004
   D2            : -4.64803e-002
   H1            : -3.30000e-002
   H2            : 5.00000e+003
   H3            : 1.45000e+003

7) A/D voltage 1, Free

8) A/D voltage 2, Fluorometer, Chelsea Aqua 3

   Serial number : 088-193
   Calibrated on : 11-jul-2019
   VB            : 0.406700
   V1            : 1.761800
   Vacetone      : 0.683330
   Scale factor  : 1.000000
   Slope         : 1.000000
   Offset        : -0.260000

9) A/D voltage 3, Transmissometer, WET Labs C-Star

   Serial number : CST-887DR
   Calibrated on : oct2019
   M             : 21.0776
   B             : -0.2951
   Path length   : 0.250

10) A/D voltage 4, User Polynomial

    Serial number : 171
    Calibrated on : 19May2014
    Sensor name   : RINKOIII_DO
    A0            : 0.00000000
    A1            : 1.00000000
    A2            : 0.00000000
    A3            : 0.00000000

11) A/D voltage 5, User Polynomial, 2

    Serial number : 171
    Calibrated on : 12May2014
    Sensor name   : RINKOIII_Temp
    A0            : -5.25367500
    A1            : 16.66254000
    A2            : -2.13105300
    A3            : 0.45564880

Scan length                   : 34
```


BOUSSOLE #239
February 2022
7°00'E
7°15'E
7°30'E
7°45'E
8°00'E
44°00'N
43°45'N
43°30'N
43°15'N
43°00'N
-100
-250
-500
-1000
-2000
Dyfamed
ODAS
BOUSSOLE
7°51'E
7°54'E
7°57'E
43°24'N
43°21'N
08 02
08 02 2022
GMT 2022 Mar 15 09:21:22

bous239_01

Date = 08/02/2022
Heure debut [TU] = 10:12
Longitude = 007 53.864 E
Latitude = 43 22.144 N



Date: 02/02/2023

Instrument configuration file: D:\Melek\boussole\Data\CTD\data&process\2022\B239\raw\BOUS239_01.XMLCON

Configuration report for SBE 911plus/917plus CTD

```
Frequency channels suppressed : 0
Voltage words suppressed      : 1
Computer interface            : RS-232C
Deck unit                     : SBE11plus Firmware Version >= 5.0
Scans to average              : 1
NMEA position data added      : Yes
NMEA depth data added         : No
NMEA time added               : No
NMEA device connected to      : deck unit
Surface PAR voltage added     : No
Scan time added               : No
```

1) Frequency 0, Temperature

```
   Serial number : 1378
   Calibrated on : 17-Jun-21
   G             : 4.83714772e-003
   H             : 6.70524923e-004
   I             : 2.63336304e-005
   J             : 2.14843005e-006
   F0            : 1000.000
   Slope         : 1.00000000
   Offset        : 0.0000
```

2) Frequency 1, Conductivity

```
   Serial number : 2929
   Calibrated on : 05-Mar-20
   G             : -1.05951733e+001
   H             : 1.41908901e+000
   I             : 7.59510042e-004
   J             : 2.04144674e-005
   CTcor         : 3.2500e-006
   CPcor         : -9.57000000e-008
   Slope         : 1.00000000
   Offset        : 0.00000
```

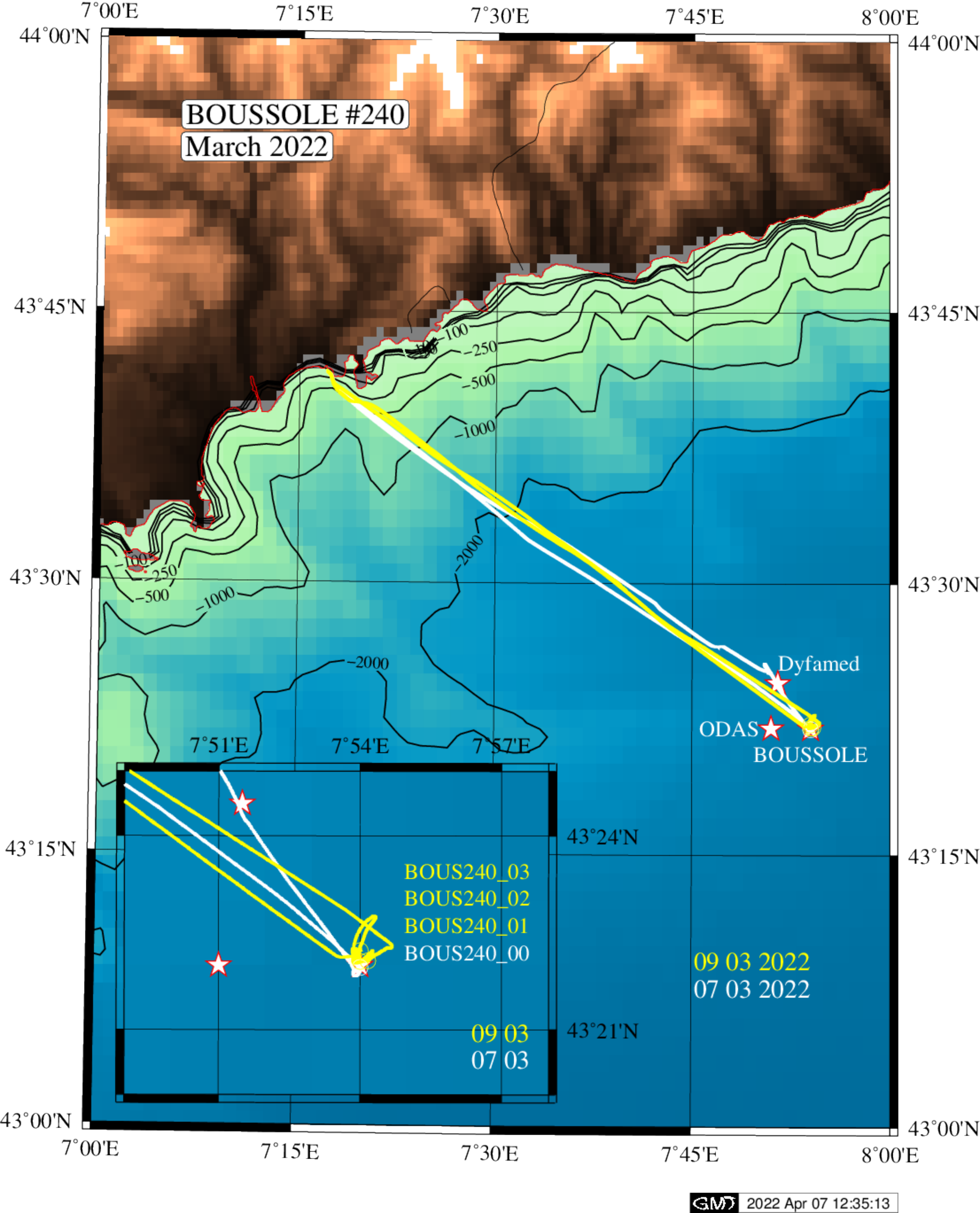
3) Frequency 2, Pressure, Digiquartz with TC

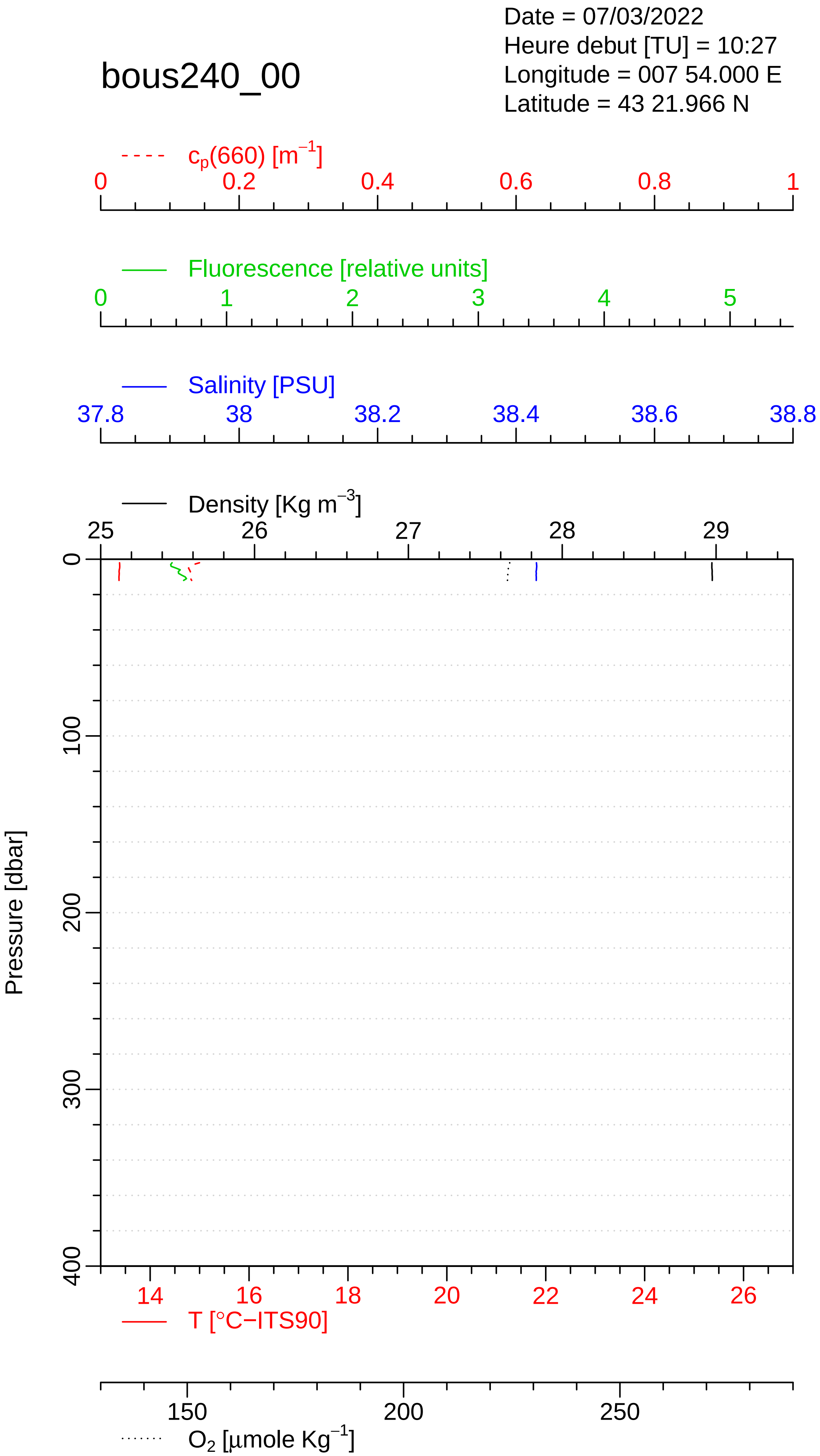
```
   Serial number : 0329
   Calibrated on : 04-Dec-09 (corr May-2017)
   C1            : -4.499631e+004
   C2            : 4.598757e-001
   C3            : 1.505020e-002
   D1            : 3.936600e-002
   D2            : 0.000000e+000
   T1            : 3.004570e+001
   T2            : -1.880753e-004
   T3            : 4.727060e-006
   T4            : -1.923520e-009
   T5            : 0.000000e+000
   Slope         : 0.99996509
   Offset        : -2.27039
   AD590M        : 1.280100e-002
   AD590B        : -9.240166e+000
```

4) Frequency 3, Temperature, 2

```
   Serial number : 2473
   Calibrated on : 04-Mar-20
   G             : 4.36726120e-003
   H             : 6.43151581e-004
   I             : 2.33812060e-005
   J             : 2.23255667e-006
   F0            : 1000.000
   Slope         : 1.00000000
   Offset        : 0.0000
```

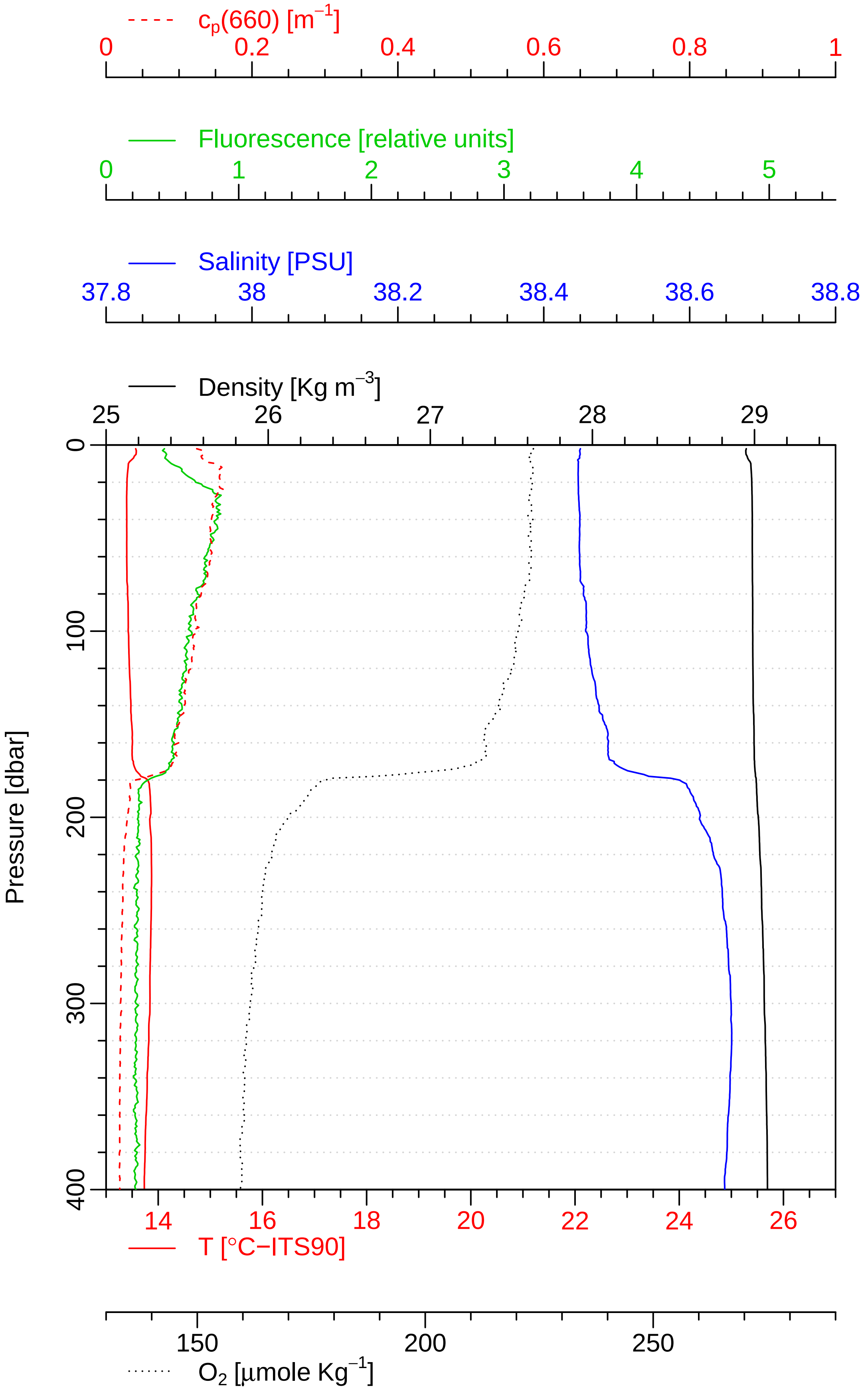
```
5) Frequency 4, Conductivity, 2

   Serial number : 1313
   Calibrated on : 18-May-21
   G             : -9.85039520e+000
   H             : 1.33613831e+000
   I             : -4.64958478e-004
   J             : 1.12844381e-004
   CTcor         : 3.2500e-006
   CPcor         : -9.57000000e-008
   Slope         : 1.00000000
   Offset        : 0.00000

6) A/D voltage 0, Oxygen, SBE 43

   Serial number : 0378
   Calibrated on : 18-May-21
   Equation      : Sea-Bird
   Soc           : 3.60130e-001
   Offset        : -6.52900e-001
   A             : -4.74250e-003
   B             : 2.16910e-004
   C             : -3.37400e-006
   E             : 3.60000e-002
   Tau20         : 1.21000e+000
   D1            : 1.92634e-004
   D2            : -4.64803e-002
   H1            : -3.30000e-002
   H2            : 5.00000e+003
   H3            : 1.45000e+003

7) A/D voltage 1, Free

8) A/D voltage 2, Fluorometer, Chelsea Aqua 3

   Serial number : 088-193
   Calibrated on : 11-jul-2019
   VB            : 0.406700
   V1            : 1.761800
   Vacetone      : 0.683330
   Scale factor  : 1.000000
   Slope         : 1.000000
   Offset        : -0.260000

9) A/D voltage 3, Transmissometer, WET Labs C-Star

   Serial number : CST-887DR
   Calibrated on : oct2019
   M             : 21.0776
   B             : -0.2951
   Path length   : 0.250

10) A/D voltage 4, User Polynomial

    Serial number : 171
    Calibrated on : 19May2014
    Sensor name   : RINKOIII_DO
    A0            : 0.00000000
    A1            : 1.00000000
    A2            : 0.00000000
    A3            : 0.00000000

11) A/D voltage 5, User Polynomial, 2

    Serial number : 171
    Calibrated on : 12May2014
    Sensor name   : RINKOIII_Temp
    A0            : -5.25367500
    A1            : 16.66254000
    A2            : -2.13105300
    A3            : 0.45564880

Scan length                  : 34
```

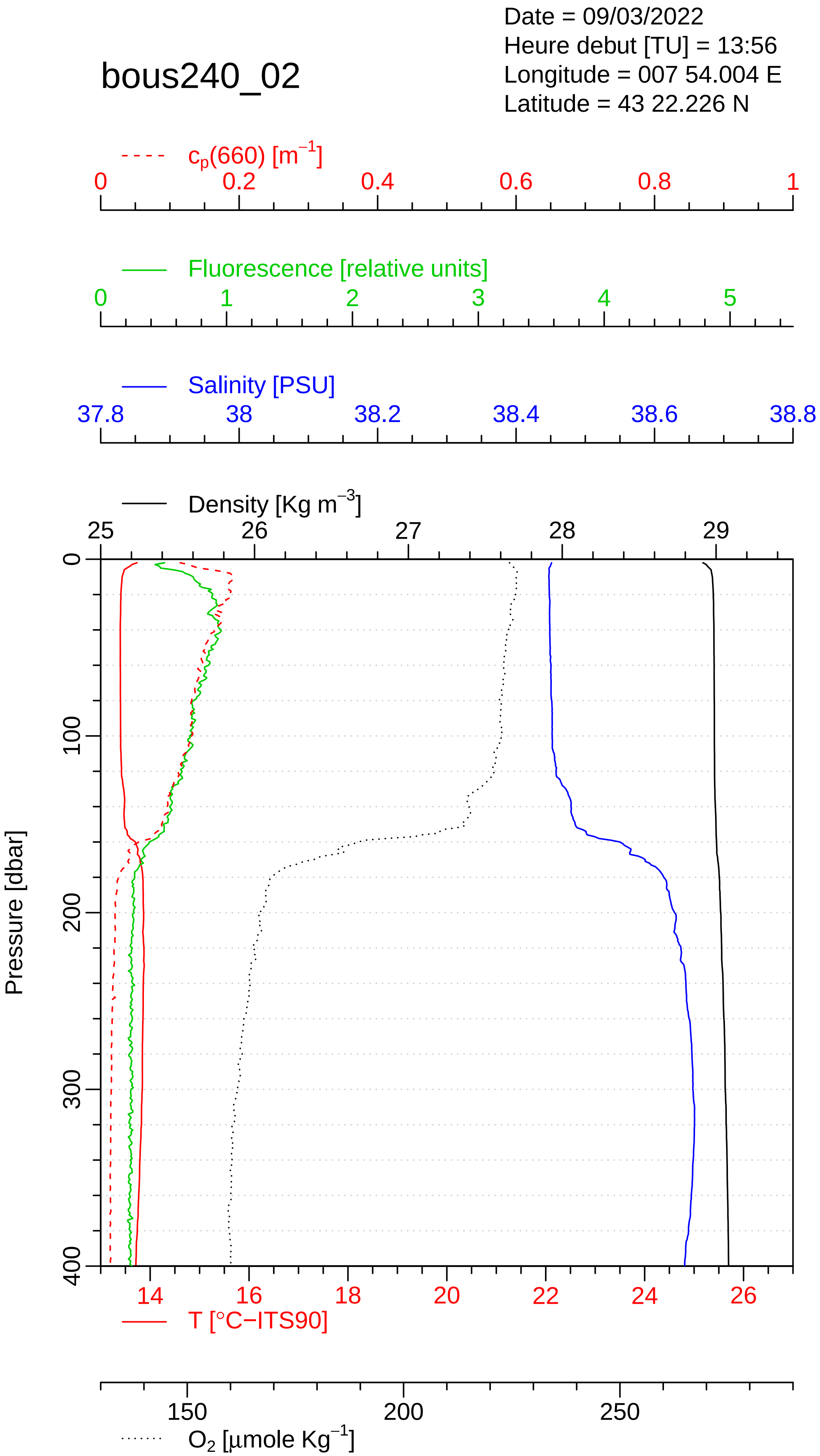

BOUSSOLE #240
March 2022
Dyfamed
ODAS
BOUSSOLE
BOUS240_03
BOUS240_02
BOUS240_01
BOUS240_00
09 03 2022
07 03 2022
09 03
07 03
7°00'E
7°15'E
7°30'E
7°45'E
8°00'E
44°00'N
43°45'N
43°30'N
43°15'N
43°00'N
7°51'E
7°54'E
7°57'E
43°24'N
43°21'N
−100
−250
−500
−1000
−2000
2022 Apr 07 12:35:13


bous240_00
Date = 07/03/2022
Heure debut [TU] = 10:27
Longitude = 007 54.000 E
Latitude = 43 21.966 N
cp(660) [m−1]
0 0.2 0.4 0.6 0.8 1
Fluorescence [relative units]
0 1 2 3 4 5
Salinity [PSU]
37.8 38 38.2 38.4 38.6 38.8
Density [Kg m−3]
25 26 27 28 29
0 100 200 300 400
Pressure [dbar]
14 16 18 20 22 24 26
T [°C−ITS90]
150 200 250
O2 [µmole Kg−1]

bous240_01

Date = 09/03/2022
Heure debut [TU] = 12:03
Longitude = 007 54.008 E
Latitude = 43 22.056 N

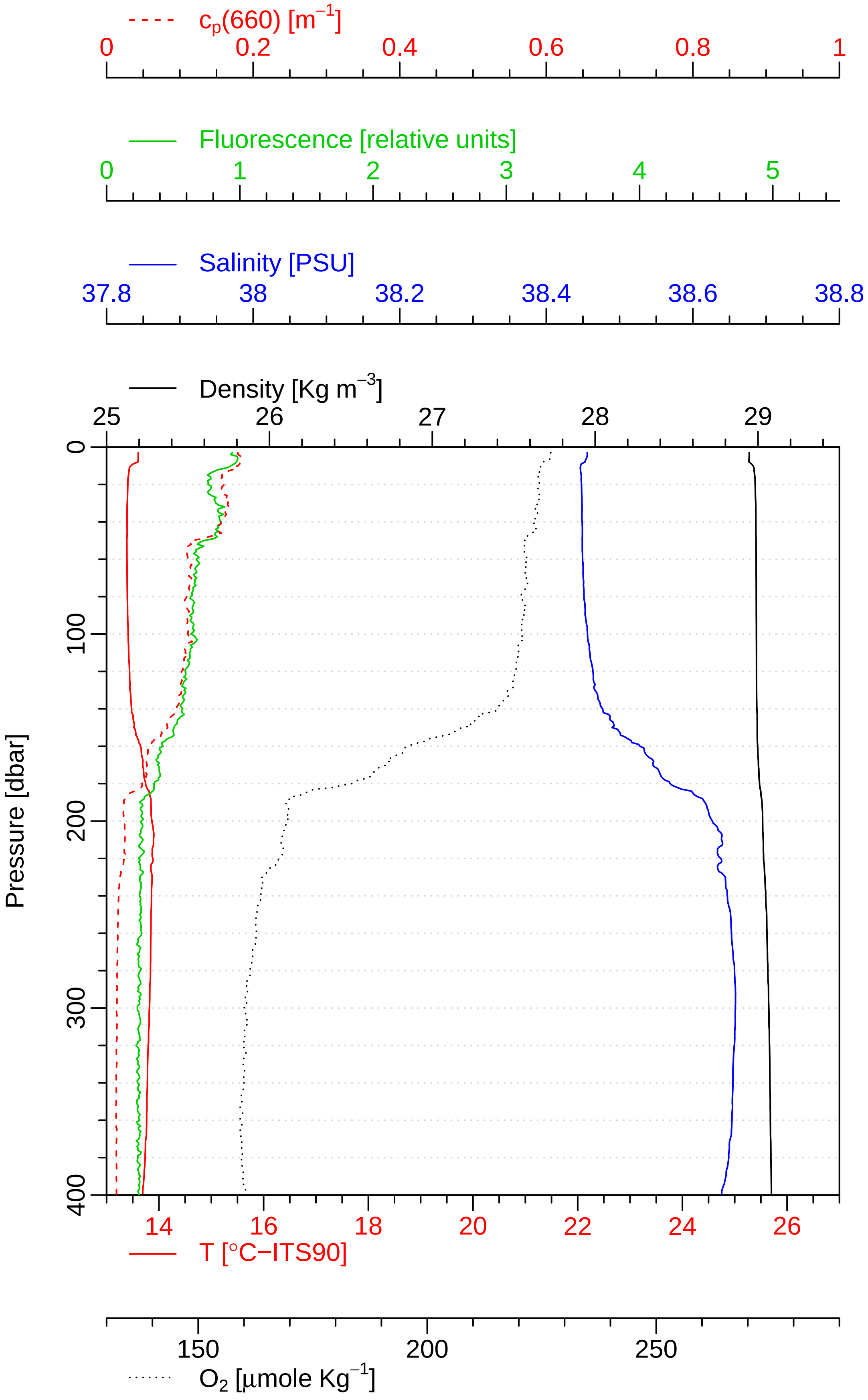




bous240_02
Date = 09/03/2022
Heure debut [TU] = 13:56
Longitude = 007 54.004 E
Latitude = 43 22.226 N
$c_p(660)$ [m^{-1}]
0 0.2 0.4 0.6 0.8 1
Fluorescence [relative units]
0 1 2 3 4 5
Salinity [PSU]
37.8 38 38.2 38.4 38.6 38.8
Density [Kg m^{-3}]
25 26 27 28 29
Pressure [dbar]
0 100 200 300 400
14 16 18 20 22 24 26
T [°C−ITS90]
150 200 250
O_2 [µmole Kg^{-1}]

bous240_03

Date = 09/03/2022
Heure debut [TU] = 16:23
Longitude = 007 54.166 E
Latitude = 43 22.065 N



Date: 02/02/2023

Instrument configuration file: D:\Melek\boussole\Data\CTD\data&process\2022\B240\raw\BOUS240_01.XMLCON

Configuration report for SBE 911plus/917plus CTD

```
Frequency channels suppressed : 0
Voltage words suppressed      : 1
Computer interface            : RS-232C
Deck unit                     : SBE11plus Firmware Version >= 5.0
Scans to average              : 1
NMEA position data added      : Yes
NMEA depth data added         : No
NMEA time added               : No
NMEA device connected to      : deck unit
Surface PAR voltage added     : No
Scan time added               : No

1) Frequency 0, Temperature

   Serial number : 1378
   Calibrated on : 17-Jun-21
   G             : 4.83714772e-003
   H             : 6.70524923e-004
   I             : 2.63336304e-005
   J             : 2.14843005e-006
   F0            : 1000.000
   Slope         : 1.00000000
   Offset        : 0.0000

2) Frequency 1, Conductivity

   Serial number : 2929
   Calibrated on : 05-Mar-20
   G             : -1.05951733e+001
   H             : 1.41908901e+000
   I             : 7.59510042e-004
   J             : 2.04144674e-005
   CTcor         : 3.2500e-006
   CPcor         : -9.57000000e-008
   Slope         : 1.00000000
   Offset        : 0.00000

3) Frequency 2, Pressure, Digiquartz with TC

   Serial number : 0329
   Calibrated on : 04-Dec-09 (corr May-2017)
   C1            : -4.499631e+004
   C2            : 4.598757e-001
   C3            : 1.505020e-002
   D1            : 3.936600e-002
   D2            : 0.000000e+000
   T1            : 3.004570e+001
   T2            : -1.880753e-004
   T3            : 4.727060e-006
   T4            : -1.923520e-009
   T5            : 0.000000e+000
   Slope         : 0.99996509
   Offset        : -2.27039
   AD590M        : 1.280100e-002
   AD590B        : -9.240166e+000

4) Frequency 3, Temperature, 2

   Serial number : 2473
   Calibrated on : 04-Mar-20
   G             : 4.36726120e-003
   H             : 6.43151581e-004
   I             : 2.33812060e-005
   J             : 2.23255667e-006
   F0            : 1000.000
   Slope         : 1.00000000
   Offset        : 0.0000
```

5) Frequency 4, Conductivity, 2

```
   Serial number : 1313
   Calibrated on : 18-May-21
   G             : -9.85039520e+000
   H             : 1.33613831e+000
   I             : -4.64958478e-004
   J             : 1.12844381e-004
   CTcor         : 3.2500e-006
   CPcor         : -9.57000000e-008
   Slope         : 1.00000000
   Offset        : 0.00000
```

6) A/D voltage 0, Oxygen, SBE 43

```
   Serial number : 0378
   Calibrated on : 18-May-21
   Equation      : Sea-Bird
   Soc           : 3.60130e-001
   Offset        : -6.52900e-001
   A             : -4.74250e-003
   B             : 2.16910e-004
   C             : -3.37400e-006
   E             : 3.60000e-002
   Tau20         : 1.21000e+000
   D1            : 1.92634e-004
   D2            : -4.64803e-002
   H1            : -3.30000e-002
   H2            : 5.00000e+003
   H3            : 1.45000e+003
```

7) A/D voltage 1, Free

8) A/D voltage 2, Fluorometer, Chelsea Aqua 3

```
   Serial number : 088-193
   Calibrated on : 11-jul-2019
   VB            : 0.406700
   V1            : 1.761800
   Vacetone      : 0.683330
   Scale factor  : 1.000000
   Slope         : 1.000000
   Offset        : -0.260000
```

9) A/D voltage 3, Transmissometer, WET Labs C-Star

```
   Serial number : CST-887DR
   Calibrated on : oct2019
   M             : 21.0776
   B             : -0.2951
   Path length   : 0.250
```

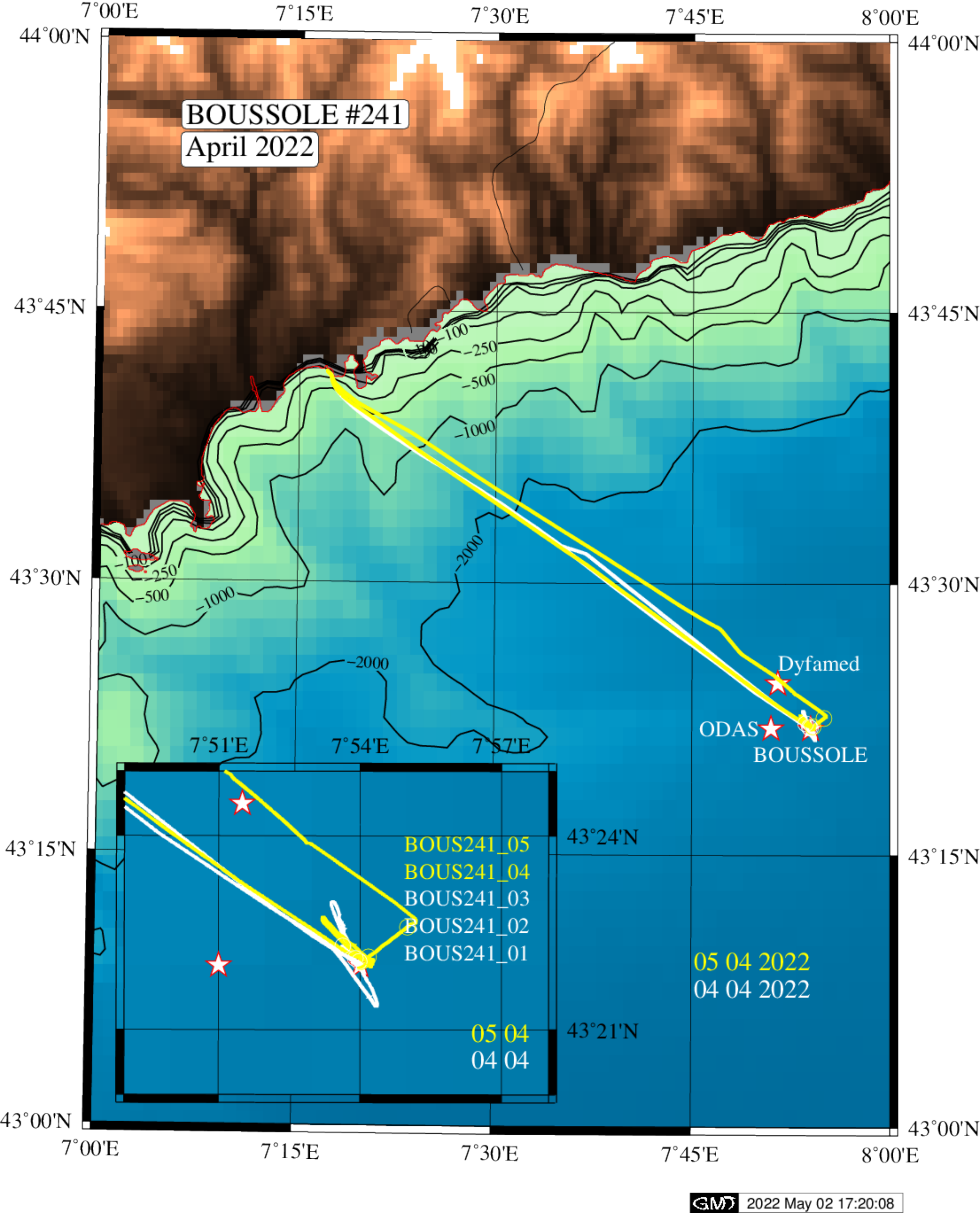
10) A/D voltage 4, User Polynomial

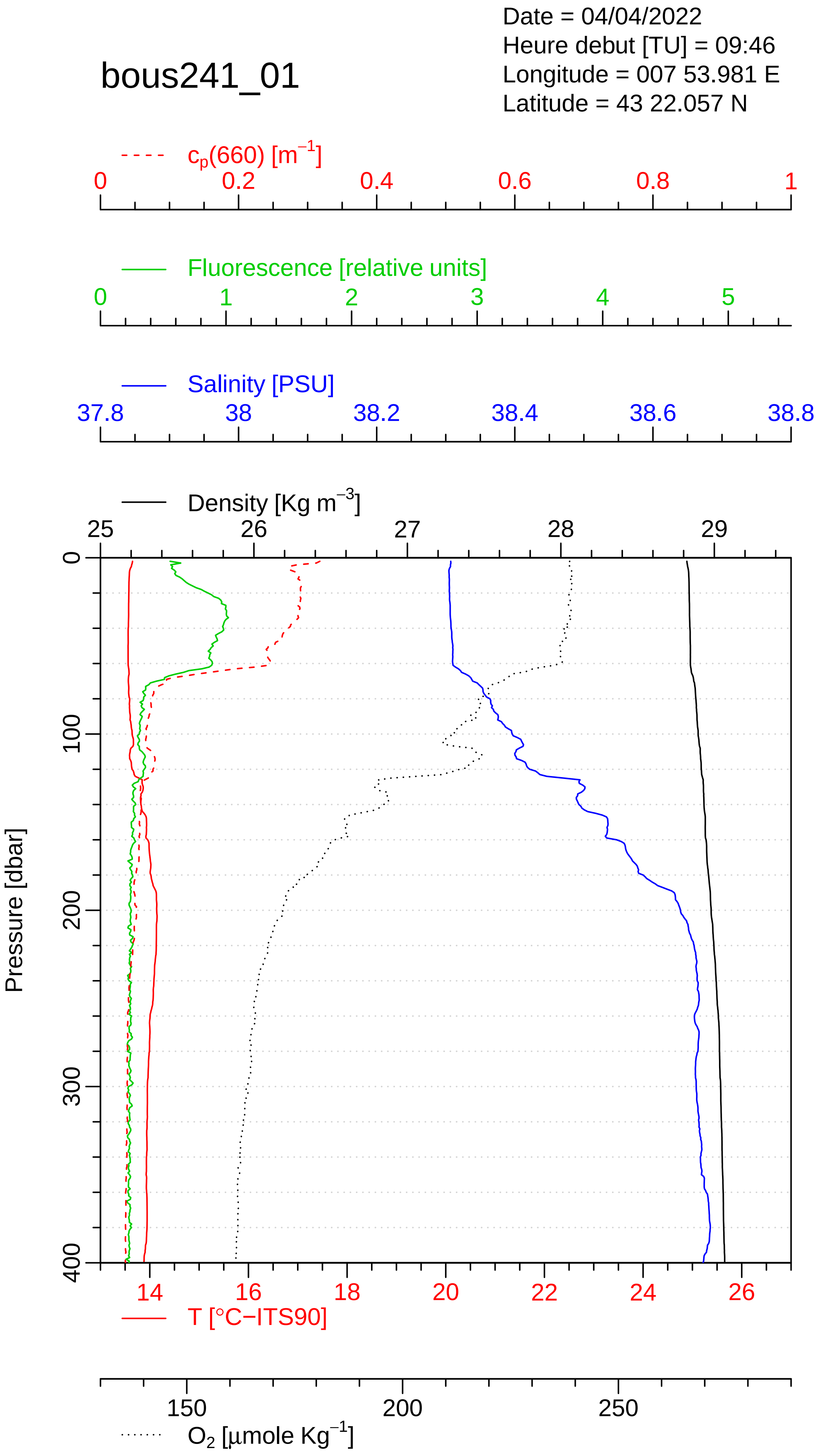
```
    Serial number : 171
    Calibrated on : 19May2014
    Sensor name   : RINKOIII_DO
    A0            : 0.00000000
    A1            : 1.00000000
    A2            : 0.00000000
    A3            : 0.00000000
```

11) A/D voltage 5, User Polynomial, 2

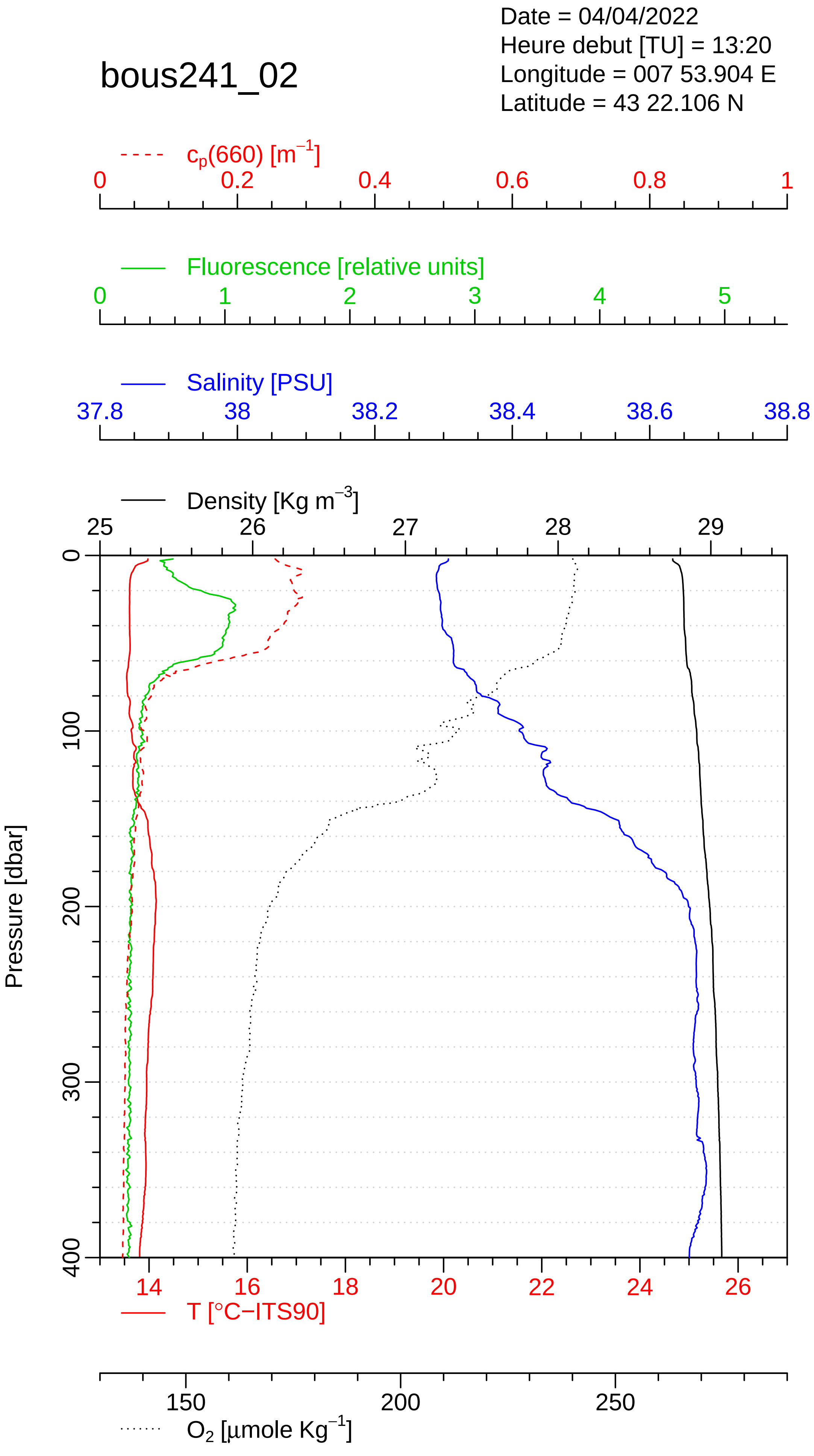
```
    Serial number : 171
    Calibrated on : 12May2014
    Sensor name   : RINKOIII_Temp
    A0            : -5.25367500
    A1            : 16.66254000
    A2            : -2.13105300
    A3            : 0.45564880
```

```
Scan length                  : 34
```

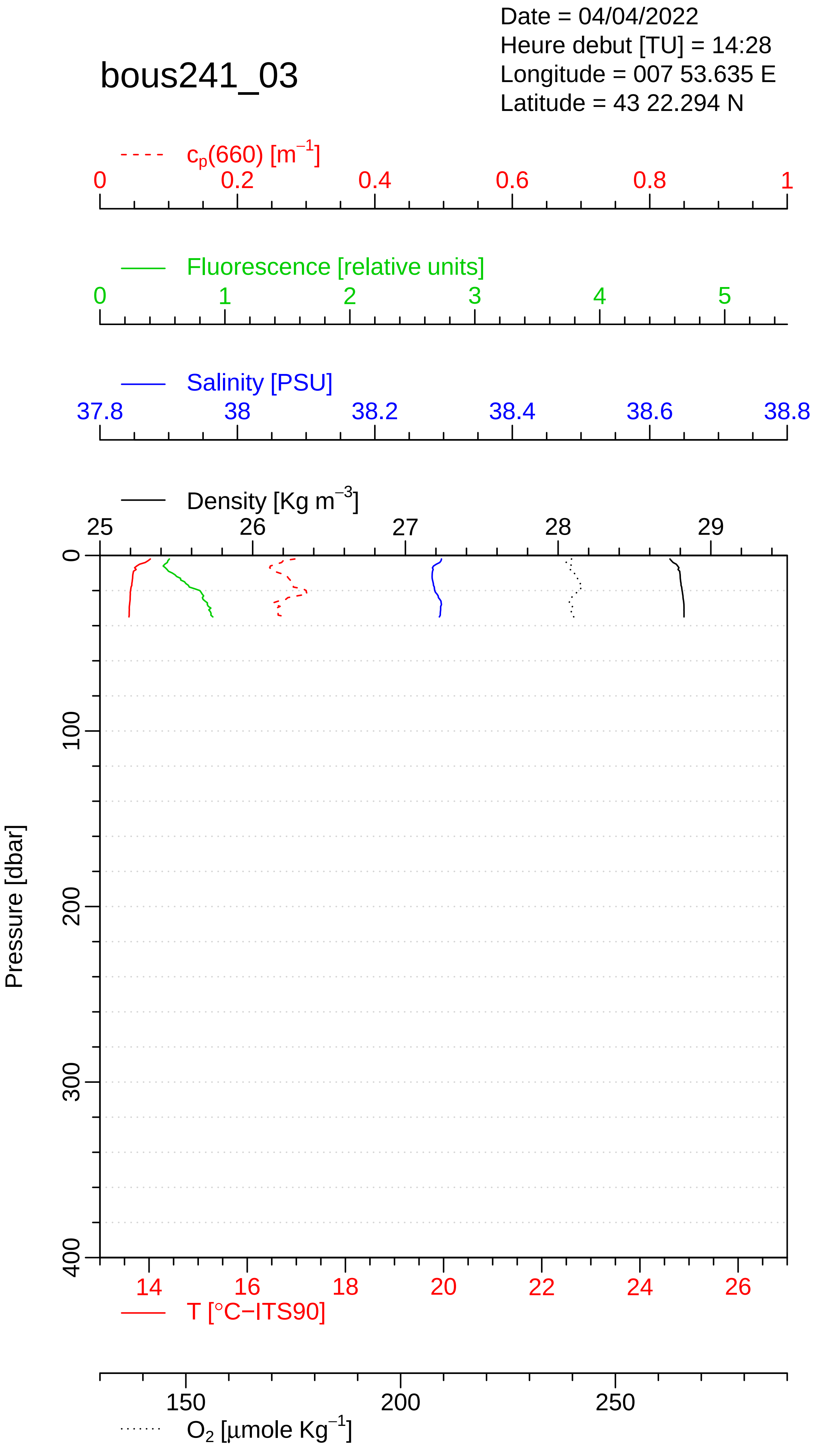

BOUSSOLE #241
April 2022
7°00'E
7°15'E
7°30'E
7°45'E
8°00'E
44°00'N
43°45'N
43°30'N
43°15'N
43°00'N
-100
-250
-500
-1000
-2000
Dyfamed
ODAS
BOUSSOLE
7°51'E
7°54'E
7°57'E
43°24'N
43°21'N
BOUS241_05
BOUS241_04
BOUS241_03
BOUS241_02
BOUS241_01
05 04 2022
04 04 2022
05 04
04 04
GMT 2022 May 02 17:20:08

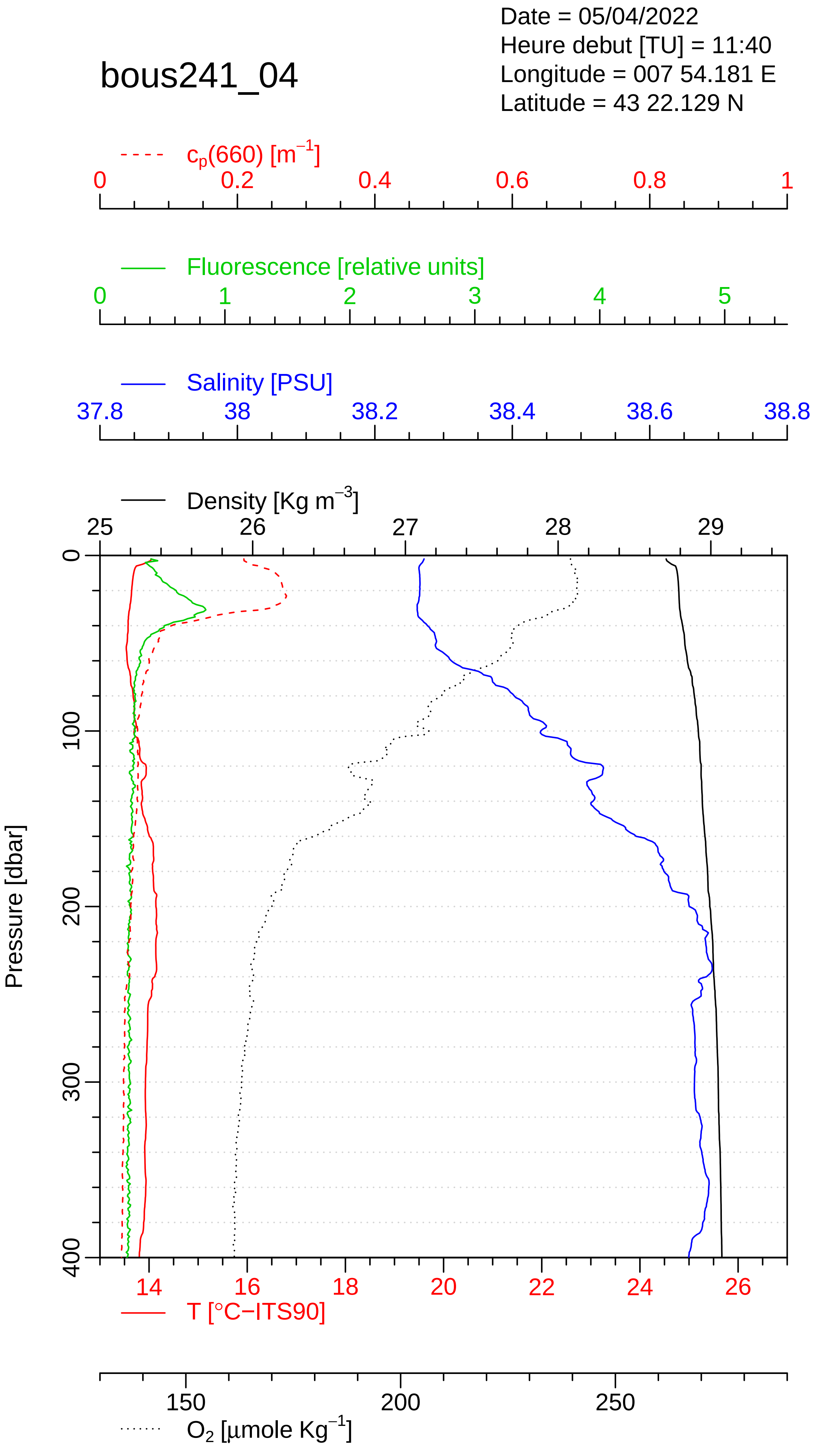


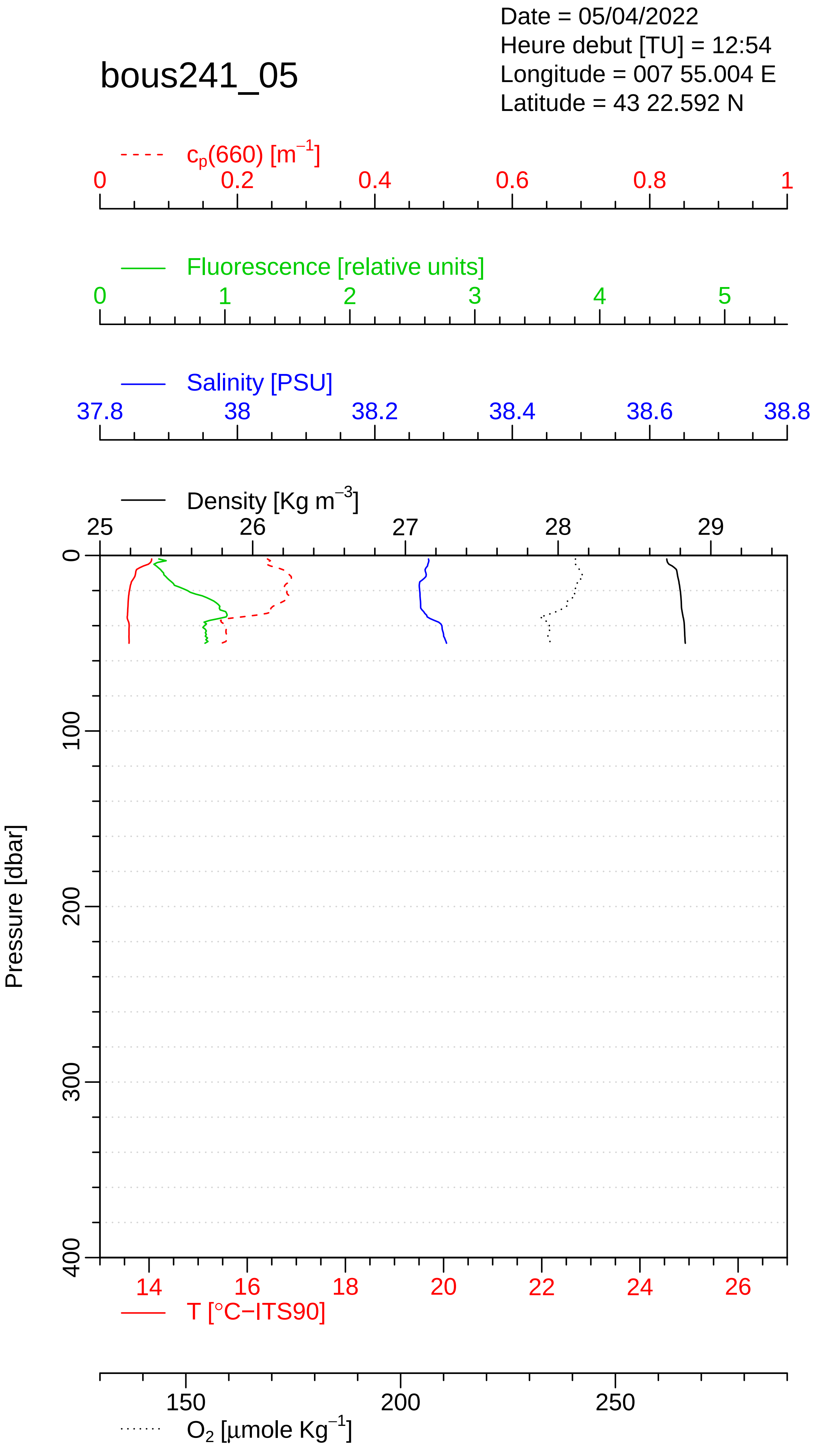
bous241_01
Date = 04/04/2022
Heure debut [TU] = 09:46
Longitude = 007 53.981 E
Latitude = 43 22.057 N
c_p(660) [m^-1]
0 0.2 0.4 0.6 0.8 1
Fluorescence [relative units]
0 1 2 3 4 5
Salinity [PSU]
37.8 38 38.2 38.4 38.6 38.8
Density [Kg m^-3]
25 26 27 28 29
Pressure [dbar]
0 100 200 300 400
14 16 18 20 22 24 26
T [°C−ITS90]
150 200 250
O2 [µmole Kg^-1]



bous241_02
Date = 04/04/2022
Heure debut [TU] = 13:20
Longitude = 007 53.904 E
Latitude = 43 22.106 N
$c_p(660)$ [m^{-1}]
0 0.2 0.4 0.6 0.8 1
Fluorescence [relative units]
0 1 2 3 4 5
Salinity [PSU]
37.8 38 38.2 38.4 38.6 38.8
Density [Kg m^{-3}]
25 26 27 28 29
Pressure [dbar]
0 100 200 300 400
14 16 18 20 22 24 26
T [°C−ITS90]
150 200 250
O_2 [µmole Kg^{-1}]


bous241_03
Date = 04/04/2022
Heure debut [TU] = 14:28
Longitude = 007 53.635 E
Latitude = 43 22.294 N
cp(660) [m−1]
0 0.2 0.4 0.6 0.8 1
Fluorescence [relative units]
0 1 2 3 4 5
Salinity [PSU]
37.8 38 38.2 38.4 38.6 38.8
Density [Kg m−3]
25 26 27 28 29
Pressure [dbar]
0 100 200 300 400
14 16 18 20 22 24 26
T [°C−ITS90]
150 200 250
O2 [µmole Kg−1]


bous241_04
Date = 05/04/2022
Heure debut [TU] = 11:40
Longitude = 007 54.181 E
Latitude = 43 22.129 N
cp(660) [m−1]
0 0.2 0.4 0.6 0.8 1
Fluorescence [relative units]
0 1 2 3 4 5
Salinity [PSU]
37.8 38 38.2 38.4 38.6 38.8
Density [Kg m−3]
25 26 27 28 29
Pressure [dbar]
0 100 200 300 400
14 16 18 20 22 24 26
T [°C−ITS90]
150 200 250
O2 [µmole Kg−1]


bous241_05
Date = 05/04/2022
Heure debut [TU] = 12:54
Longitude = 007 55.004 E
Latitude = 43 22.592 N
c_p(660) [m^-1]
0
0.2
0.4
0.6
0.8
1
Fluorescence [relative units]
0
1
2
3
4
5
Salinity [PSU]
37.8
38
38.2
38.4
38.6
38.8
Density [Kg m^-3]
25
26
27
28
29
Pressure [dbar]
0
100
200
300
400
14
16
18
20
22
24
26
T [°C−ITS90]
150
200
250
O2 [µmole Kg^-1]

Date: 02/02/2023

Instrument configuration file: D:\Melek\boussole\Data\CTD\data&process\2022\B241\raw\BOUS241_01.XMLCON

Configuration report for SBE 911plus/917plus CTD

```
Frequency channels suppressed : 0
Voltage words suppressed      : 1
Computer interface            : RS-232C
Deck unit                     : SBE11plus Firmware Version >= 5.0
Scans to average              : 1
NMEA position data added      : Yes
NMEA depth data added         : No
NMEA time added               : No
NMEA device connected to      : deck unit
Surface PAR voltage added     : No
Scan time added               : No
```

1) Frequency 0, Temperature

```
Serial number : 1378
Calibrated on : 17-Jun-21
G             : 4.83714772e-003
H             : 6.70524923e-004
I             : 2.63336304e-005
J             : 2.14843005e-006
F0            : 1000.000
Slope         : 1.00000000
Offset        : 0.0000
```

2) Frequency 1, Conductivity

```
Serial number : 2929
Calibrated on : 05-Mar-20
G             : -1.05951733e+001
H             : 1.41908901e+000
I             : 7.59510042e-004
J             : 2.04144674e-005
CTcor         : 3.2500e-006
CPcor         : -9.57000000e-008
Slope         : 1.00000000
Offset        : 0.00000
```

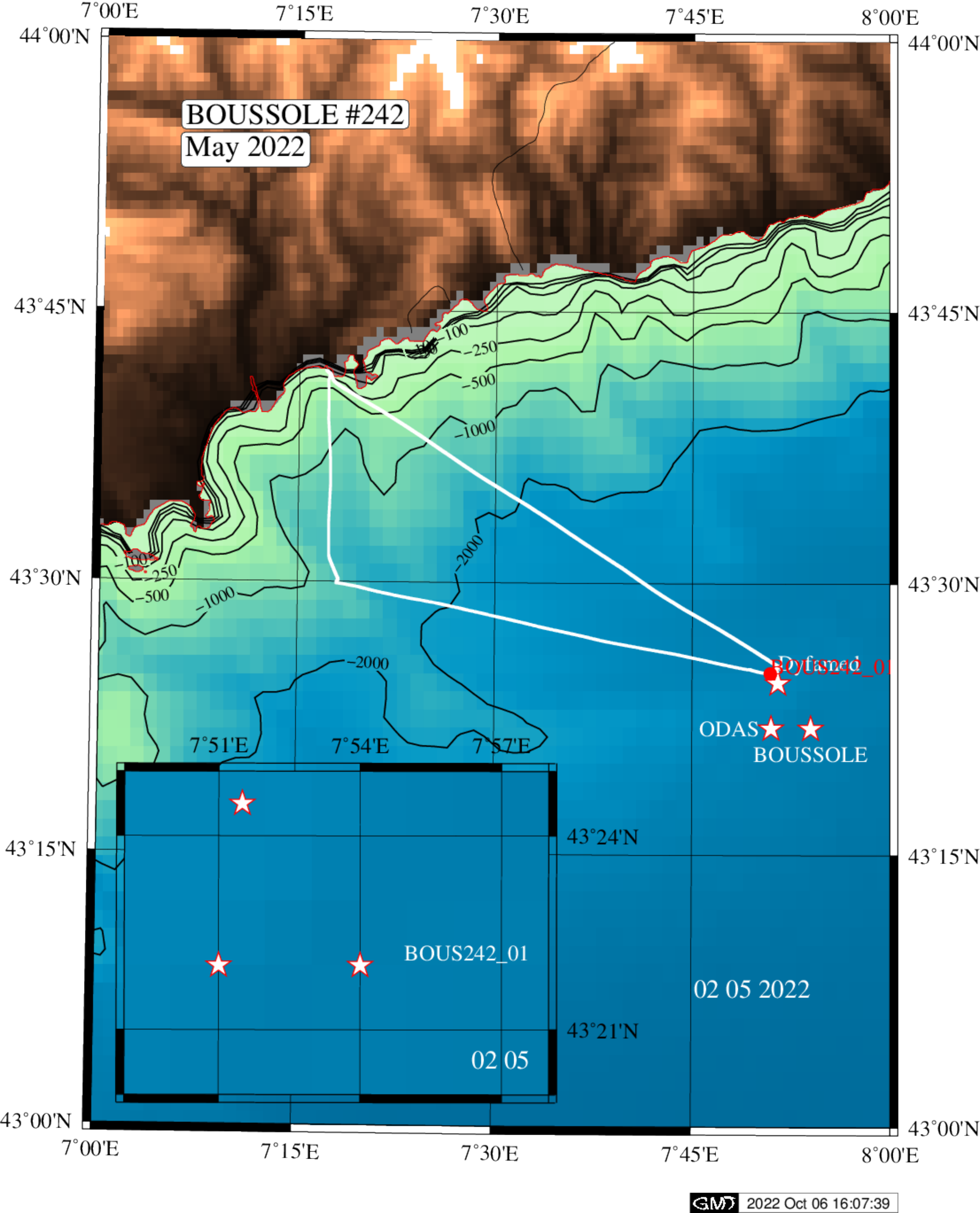
3) Frequency 2, Pressure, Digiquartz with TC

```
Serial number : 0329
Calibrated on : 04-Dec-09 (corr May-2017)
C1            : -4.499631e+004
C2            : 4.598757e-001
C3            : 1.505020e-002
D1            : 3.936600e-002
D2            : 0.000000e+000
T1            : 3.004570e+001
T2            : -1.880753e-004
T3            : 4.727060e-006
T4            : -1.923520e-009
T5            : 0.000000e+000
Slope         : 0.99996509
Offset        : -2.27039
AD590M        : 1.280100e-002
AD590B        : -9.240166e+000
```

4) Frequency 3, Temperature, 2

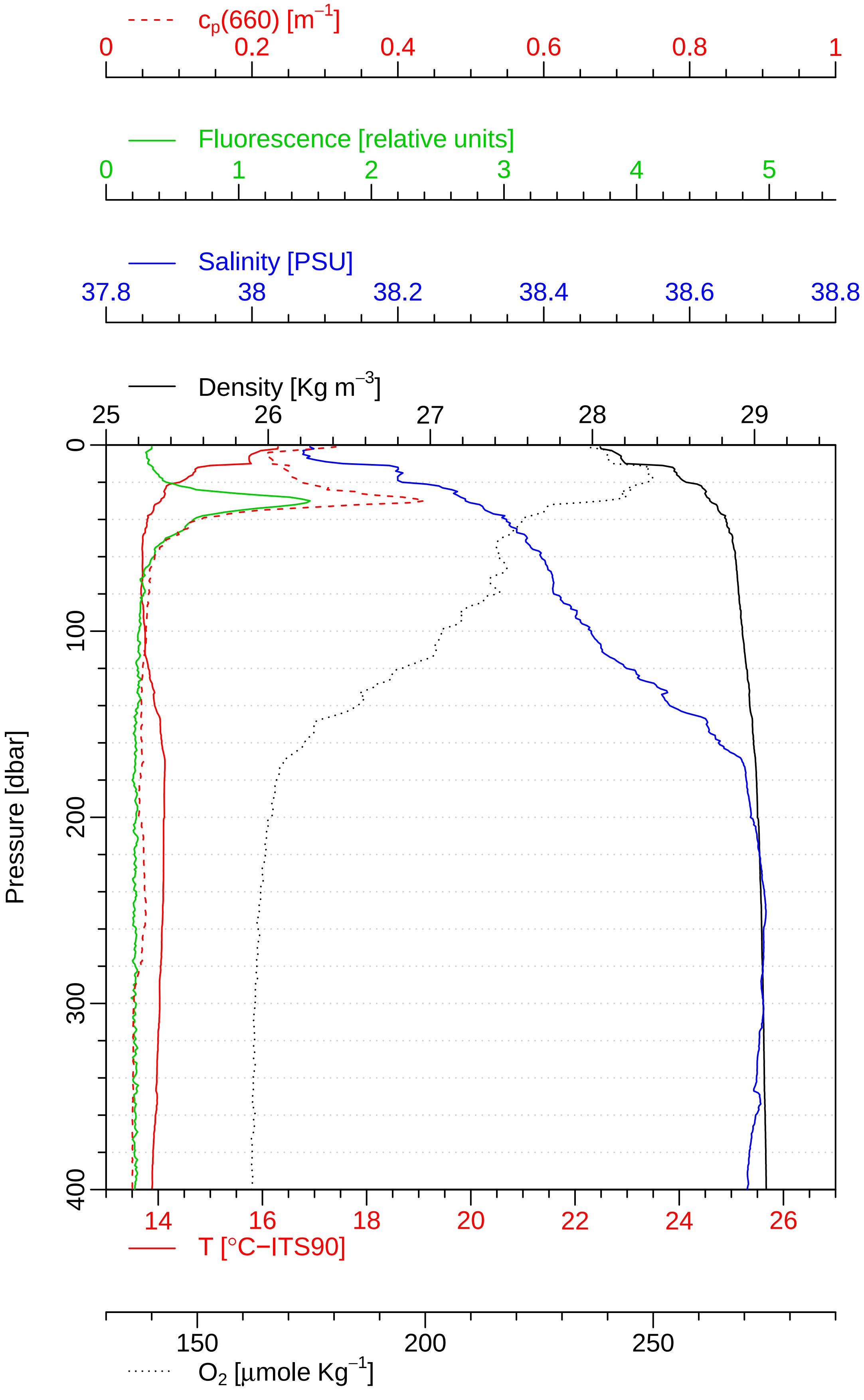
```
Serial number : 2473
Calibrated on : 04-Mar-20
G             : 4.36726120e-003
H             : 6.43151581e-004
I             : 2.33812060e-005
J             : 2.23255667e-006
F0            : 1000.000
Slope         : 1.00000000
Offset        : 0.0000
```

```
5) Frequency 4, Conductivity, 2

   Serial number : 1313
   Calibrated on : 18-May-21
   G             : -9.85039520e+000
   H             : 1.33613831e+000
   I             : -4.64958478e-004
   J             : 1.12844381e-004
   CTcor         : 3.2500e-006
   CPcor         : -9.57000000e-008
   Slope         : 1.00000000
   Offset        : 0.00000

6) A/D voltage 0, Oxygen, SBE 43

   Serial number : 0378
   Calibrated on : 18-May-21
   Equation      : Sea-Bird
   Soc           : 3.60130e-001
   Offset        : -6.52900e-001
   A             : -4.74250e-003
   B             : 2.16910e-004
   C             : -3.37400e-006
   E             : 3.60000e-002
   Tau20         : 1.21000e+000
   D1            : 1.92634e-004
   D2            : -4.64803e-002
   H1            : -3.30000e-002
   H2            : 5.00000e+003
   H3            : 1.45000e+003

7) A/D voltage 1, Free

8) A/D voltage 2, Fluorometer, Chelsea Aqua 3

   Serial number : 088-193
   Calibrated on : 11-jul-2019
   VB            : 0.406700
   V1            : 1.761800
   Vacetone      : 0.683330
   Scale factor  : 1.000000
   Slope         : 1.000000
   Offset        : -0.260000

9) A/D voltage 3, Transmissometer, WET Labs C-Star

   Serial number : CST-887DR
   Calibrated on : oct2019
   M             : 21.0776
   B             : -0.2951
   Path length   : 0.250

10) A/D voltage 4, User Polynomial

    Serial number : 171
    Calibrated on : 19May2014
    Sensor name   : RINKOIII_DO
    A0            : 0.00000000
    A1            : 1.00000000
    A2            : 0.00000000
    A3            : 0.00000000

11) A/D voltage 5, User Polynomial, 2

    Serial number : 171
    Calibrated on : 12May2014
    Sensor name   : RINKOIII_Temp
    A0            : -5.25367500
    A1            : 16.66254000
    A2            : -2.13105300
    A3            : 0.45564880

Scan length                   : 34
```


BOUSSOLE #242
May 2022
7°00'E
7°15'E
7°30'E
7°45'E
8°00'E
44°00'N
43°45'N
43°30'N
43°15'N
43°00'N
−100
−250
−500
−1000
−2000
Dyfamed
BOUS242_01
ODAS
BOUSSOLE
7°51'E
7°54'E
7°57'E
43°24'N
43°21'N
BOUS242_01
02 05
02 05 2022
GMT 2022 Oct 06 16:07:39

bous242_01

Date = 02/05/2022
Heure debut [TU] = 11:28
Longitude = 007 50.936 E
Latitude = 43 25.050 N



Date: 02/02/2023

Instrument configuration file: D:\Melek\boussole\Data\CTD\data&process\2022\B242\raw\BOUS242_01.XMLCON

Configuration report for SBE 911plus/917plus CTD

```
Frequency channels suppressed : 0
Voltage words suppressed      : 0
Computer interface            : RS-232C
Deck unit                     : SBE11plus Firmware Version >= 5.0
Scans to average              : 1
NMEA position data added      : Yes
NMEA depth data added         : No
NMEA time added               : No
NMEA device connected to      : deck unit
Surface PAR voltage added     : No
Scan time added               : No

1) Frequency 0, Temperature

   Serial number : 1378
   Calibrated on : 17-Jun-21
   G             : 4.83714772e-003
   H             : 6.70524923e-004
   I             : 2.63336304e-005
   J             : 2.14843005e-006
   F0            : 1000.000
   Slope         : 1.00000000
   Offset        : 0.0000

2) Frequency 1, Conductivity

   Serial number : 2929
   Calibrated on : 05-Mar-20
   G             : -1.05951733e+001
   H             : 1.41908901e+000
   I             : 7.59510042e-004
   J             : 2.04144674e-005
   CTcor         : 3.2500e-006
   CPcor         : -9.57000000e-008
   Slope         : 1.00000000
   Offset        : 0.00000

3) Frequency 2, Pressure, Digiquartz with TC

   Serial number : 0329
   Calibrated on : 04-Dec-09 (corr May-2017)
   C1            : -4.499631e+004
   C2            : 4.598757e-001
   C3            : 1.505020e-002
   D1            : 3.936600e-002
   D2            : 0.000000e+000
   T1            : 3.004570e+001
   T2            : -1.880753e-004
   T3            : 4.727060e-006
   T4            : -1.923520e-009
   T5            : 0.000000e+000
   Slope         : 0.99996509
   Offset        : -2.27039
   AD590M        : 1.280100e-002
   AD590B        : -9.240166e+000

4) Frequency 3, Temperature, 2

   Serial number : 2473
   Calibrated on : 04-Mar-20
   G             : 4.36726120e-003
   H             : 6.43151581e-004
   I             : 2.33812060e-005
   J             : 2.23255667e-006
   F0            : 1000.000
   Slope         : 1.00000000
   Offset        : 0.0000
```

5) Frequency 4, Conductivity, 2

```
Serial number : 1313
Calibrated on : 18-May-21
G             : -9.85039520e+000
H             : 1.33613831e+000
I             : -4.64958478e-004
J             : 1.12844381e-004
CTcor         : 3.2500e-006
CPcor         : -9.57000000e-008
Slope         : 1.00000000
Offset        : 0.00000
```

6) A/D voltage 0, Oxygen, SBE 43

```
Serial number : 0378
Calibrated on : 18-May-21
Equation      : Sea-Bird
Soc           : 3.60130e-001
Offset        : -6.52900e-001
A             : -4.74250e-003
B             : 2.16910e-004
C             : -3.37400e-006
E             : 3.60000e-002
Tau20         : 1.21000e+000
D1            : 1.92634e-004
D2            : -4.64803e-002
H1            : -3.30000e-002
H2            : 5.00000e+003
H3            : 1.45000e+003
```

7) A/D voltage 1, Free

8) A/D voltage 2, Fluorometer, Chelsea Aqua 3

```
Serial number : 088-193
Calibrated on : 11-jul-2019
VB            : 0.406700
V1            : 1.761800
Vacetone      : 0.683330
Scale factor  : 1.000000
Slope         : 1.000000
Offset        : -0.260000
```

9) A/D voltage 3, Transmissometer, WET Labs C-Star

```
Serial number : CST-887DR
Calibrated on : oct2019
M             : 21.0776
B             : -0.2951
Path length   : 0.250
```

10) A/D voltage 4, User Polynomial

```
Serial number : 171
Calibrated on : 19May2014
Sensor name   : RINKOIII_DO
A0            : 0.00000000
A1            : 1.00000000
A2            : 0.00000000
A3            : 0.00000000
```

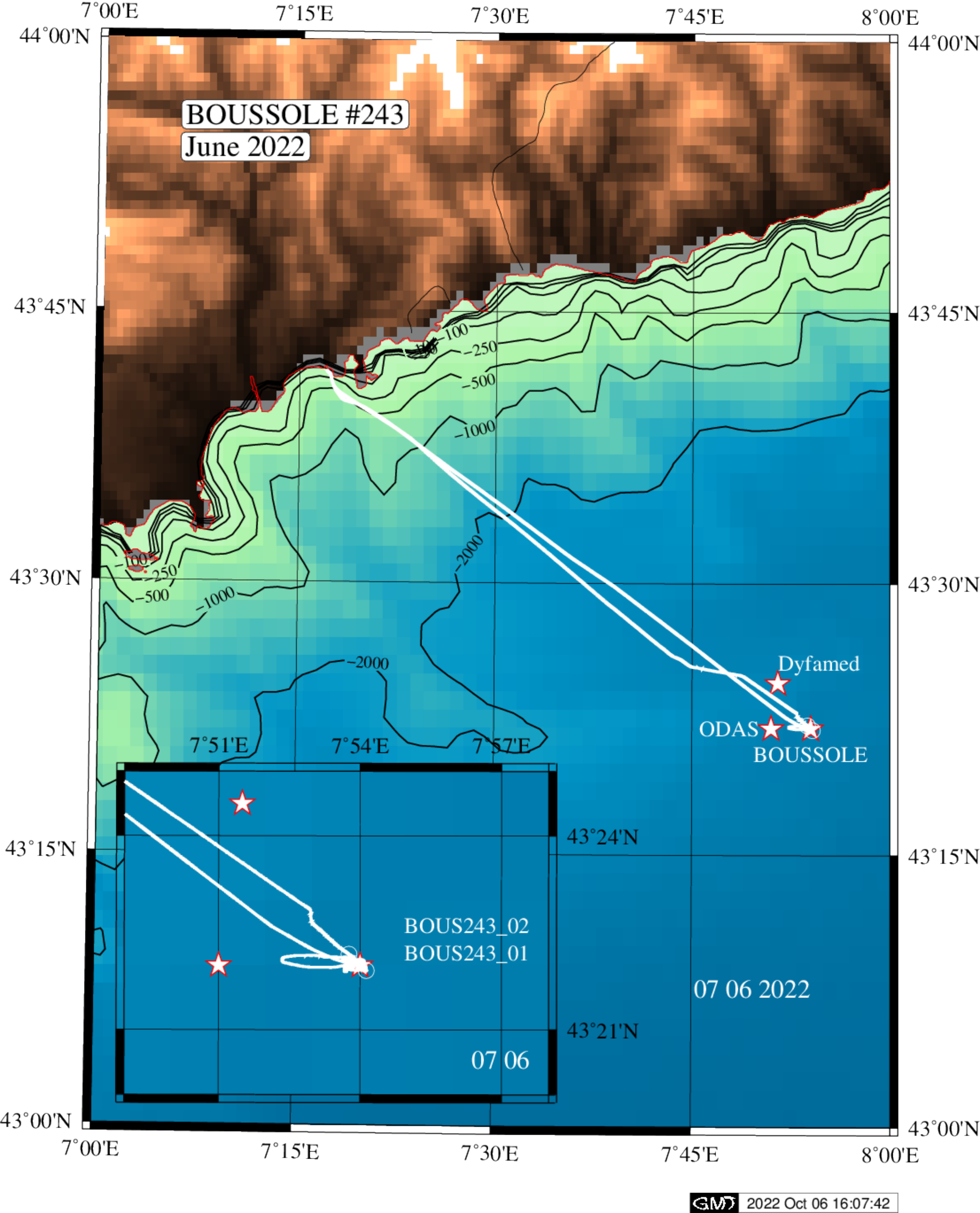
11) A/D voltage 5, User Polynomial, 2

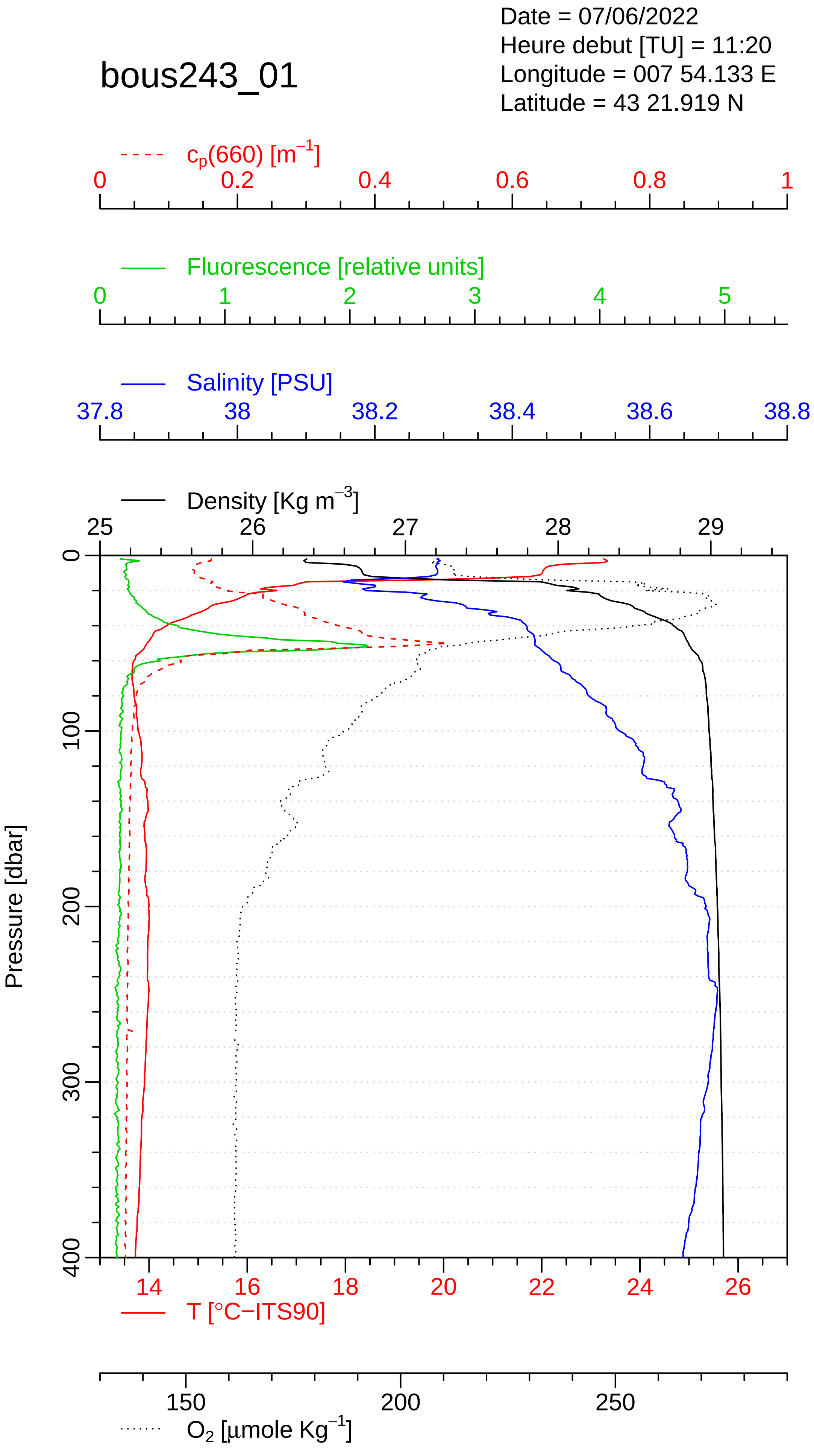
```
Serial number : 171
Calibrated on : 12May2014
Sensor name   : RINKOIII_Temp
A0            : -5.25367500
A1            : 16.66254000
A2            : -2.13105300
A3            : 0.45564880
```

12) A/D voltage 6, Altimeter

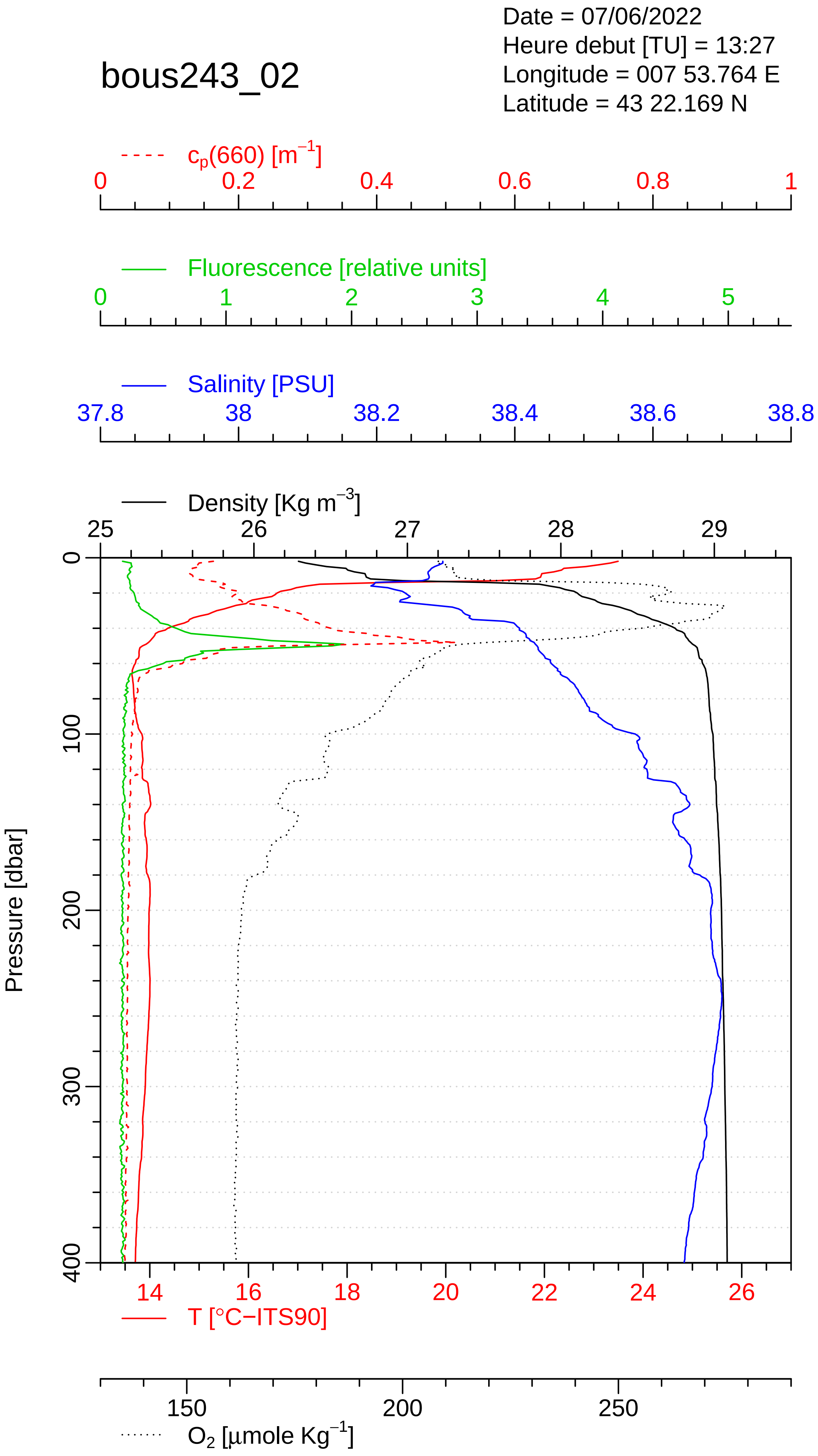
```
Serial number : 310799
Calibrated on : 19-Oct-16
```

```
    Scale factor  : 15.000
    Offset        : 0.000

13) A/D voltage 7, Free

Scan length                   : 37
```


BOUSSOLE #243
June 2022
7°00'E
7°15'E
7°30'E
7°45'E
8°00'E
44°00'N
43°45'N
43°30'N
43°15'N
43°00'N
−100
−250
−500
−1000
−2000
Dyfamed
ODAS
BOUSSOLE
7°51'E
7°54'E
7°57'E
43°24'N
43°21'N
BOUS243_02
BOUS243_01
07 06
07 06 2022
2022 Oct 06 16:07:42



bous243_01
Date = 07/06/2022
Heure debut [TU] = 11:20
Longitude = 007 54.133 E
Latitude = 43 21.919 N
c_p(660) [m^{-1}]
0 0.2 0.4 0.6 0.8 1
Fluorescence [relative units]
0 1 2 3 4 5
Salinity [PSU]
37.8 38 38.2 38.4 38.6 38.8
Density [Kg m^{-3}]
25 26 27 28 29
Pressure [dbar]
0 100 200 300 400
14 16 18 20 22 24 26
T [°C−ITS90]
150 200 250
O_2 [µmole Kg^{-1}]



bous243_02
Date = 07/06/2022
Heure debut [TU] = 13:27
Longitude = 007 53.764 E
Latitude = 43 22.169 N
c_p(660) [m^{-1}]
0 0.2 0.4 0.6 0.8 1
Fluorescence [relative units]
0 1 2 3 4 5
Salinity [PSU]
37.8 38 38.2 38.4 38.6 38.8
Density [Kg m^{-3}]
25 26 27 28 29
Pressure [dbar]
0 100 200 300 400
14 16 18 20 22 24 26
T [°C−ITS90]
150 200 250
O_2 [µmole Kg^{-1}]

Date: 02/02/2023

Instrument configuration file: D:\Melek\boussole\Data\CTD\data&process\2022\B243\raw\BOUS243_01.XMLCON

Configuration report for SBE 911plus/917plus CTD

```
Frequency channels suppressed : 0
Voltage words suppressed      : 1
Computer interface            : RS-232C
Deck unit                     : SBE11plus Firmware Version >= 5.0
Scans to average              : 1
NMEA position data added      : Yes
NMEA depth data added         : No
NMEA time added               : No
NMEA device connected to      : deck unit
Surface PAR voltage added     : No
Scan time added               : No

1) Frequency 0, Temperature

   Serial number : 1378
   Calibrated on : 17-Jun-21
   G             : 4.83714772e-003
   H             : 6.70524923e-004
   I             : 2.63336304e-005
   J             : 2.14843005e-006
   F0            : 1000.000
   Slope         : 1.00000000
   Offset        : 0.0000

2) Frequency 1, Conductivity

   Serial number : 2929
   Calibrated on : 05-Mar-20
   G             : -1.05951733e+001
   H             : 1.41908901e+000
   I             : 7.59510042e-004
   J             : 2.04144674e-005
   CTcor         : 3.2500e-006
   CPcor         : -9.57000000e-008
   Slope         : 1.00000000
   Offset        : 0.00000

3) Frequency 2, Pressure, Digiquartz with TC

   Serial number : 0329
   Calibrated on : 04-Dec-09 (corr May-2017)
   C1            : -4.499631e+004
   C2            : 4.598757e-001
   C3            : 1.505020e-002
   D1            : 3.936600e-002
   D2            : 0.000000e+000
   T1            : 3.004570e+001
   T2            : -1.880753e-004
   T3            : 4.727060e-006
   T4            : -1.923520e-009
   T5            : 0.000000e+000
   Slope         : 0.99996509
   Offset        : -2.27039
   AD590M        : 1.280100e-002
   AD590B        : -9.240166e+000

4) Frequency 3, Temperature, 2

   Serial number : 2473
   Calibrated on : 04-Mar-20
   G             : 4.36726120e-003
   H             : 6.43151581e-004
   I             : 2.33812060e-005
   J             : 2.23255667e-006
   F0            : 1000.000
   Slope         : 1.00000000
   Offset        : 0.0000
```

5) Frequency 4, Conductivity, 2

```
Serial number : 1313
Calibrated on : 18-May-21
G             : -9.85039520e+000
H             : 1.33613831e+000
I             : -4.64958478e-004
J             : 1.12844381e-004
CTcor         : 3.2500e-006
CPcor         : -9.57000000e-008
Slope         : 1.00000000
Offset        : 0.00000
```

6) A/D voltage 0, Oxygen, SBE 43

```
Serial number : 0378
Calibrated on : 18-May-21
Equation      : Sea-Bird
Soc           : 3.60130e-001
Offset        : -6.52900e-001
A             : -4.74250e-003
B             : 2.16910e-004
C             : -3.37400e-006
E             : 3.60000e-002
Tau20         : 1.21000e+000
D1            : 1.92634e-004
D2            : -4.64803e-002
H1            : -3.30000e-002
H2            : 5.00000e+003
H3            : 1.45000e+003
```

7) A/D voltage 1, Free

8) A/D voltage 2, Fluorometer, Chelsea Aqua 3

```
Serial number : 088-193
Calibrated on : 11-jul-2019
VB            : 0.406700
V1            : 1.761800
Vacetone      : 0.683330
Scale factor  : 1.000000
Slope         : 1.000000
Offset        : -0.260000
```

9) A/D voltage 3, Transmissometer, WET Labs C-Star

```
Serial number : CST-373DR
Calibrated on : 20211012
M             : 21.7581
B             : -1.2837
Path length   : 0.250
```

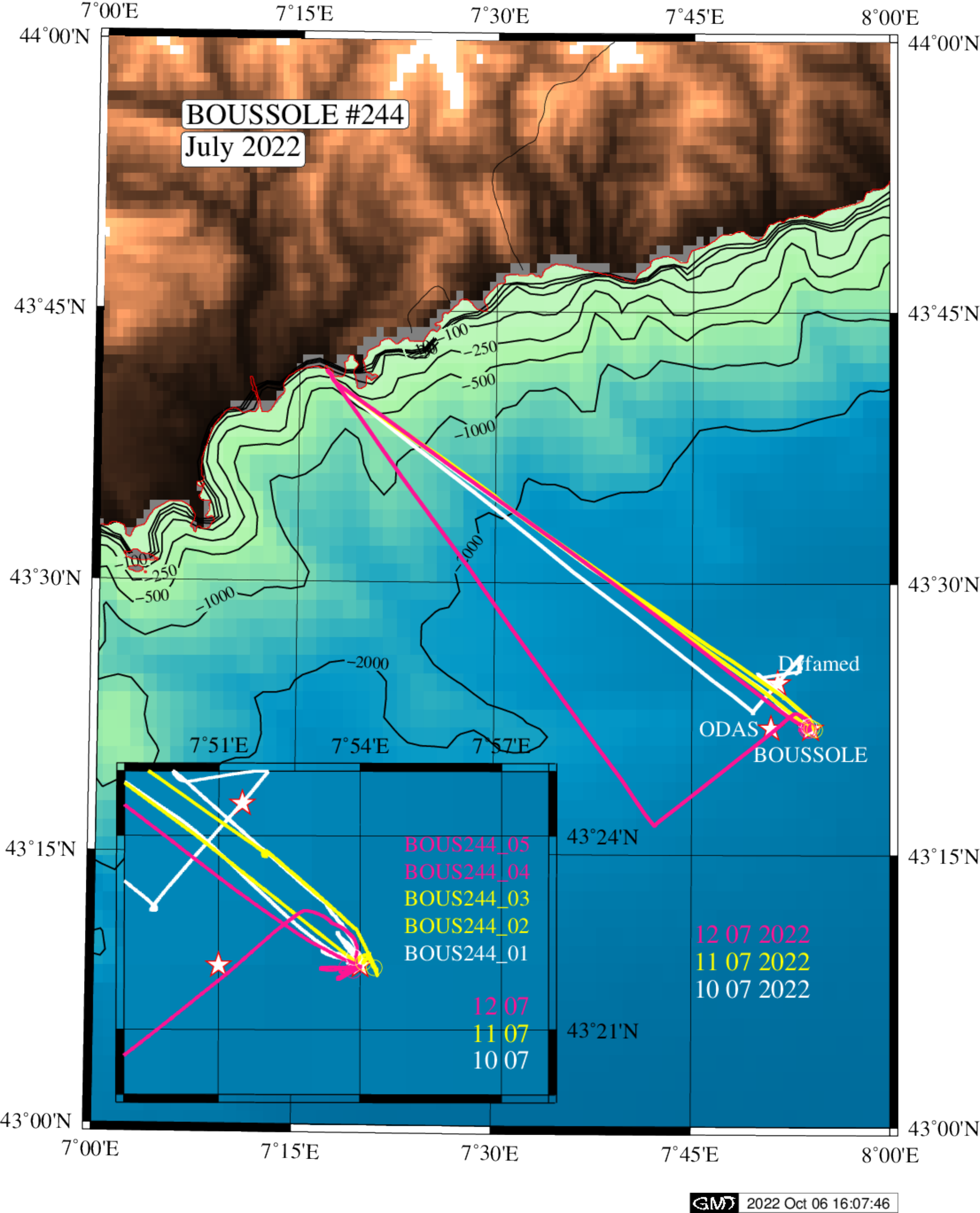
10) A/D voltage 4, User Polynomial

```
Serial number : 171
Calibrated on : 19May2014
Sensor name   : RINKOIII_DO
A0            : 0.00000000
A1            : 1.00000000
A2            : 0.00000000
A3            : 0.00000000
```

11) A/D voltage 5, User Polynomial, 2

```
Serial number : 171
Calibrated on : 12May2014
Sensor name   : RINKOIII_Temp
A0            : -5.25367500
A1            : 16.66254000
A2            : -2.13105300
A3            : 0.45564880
```

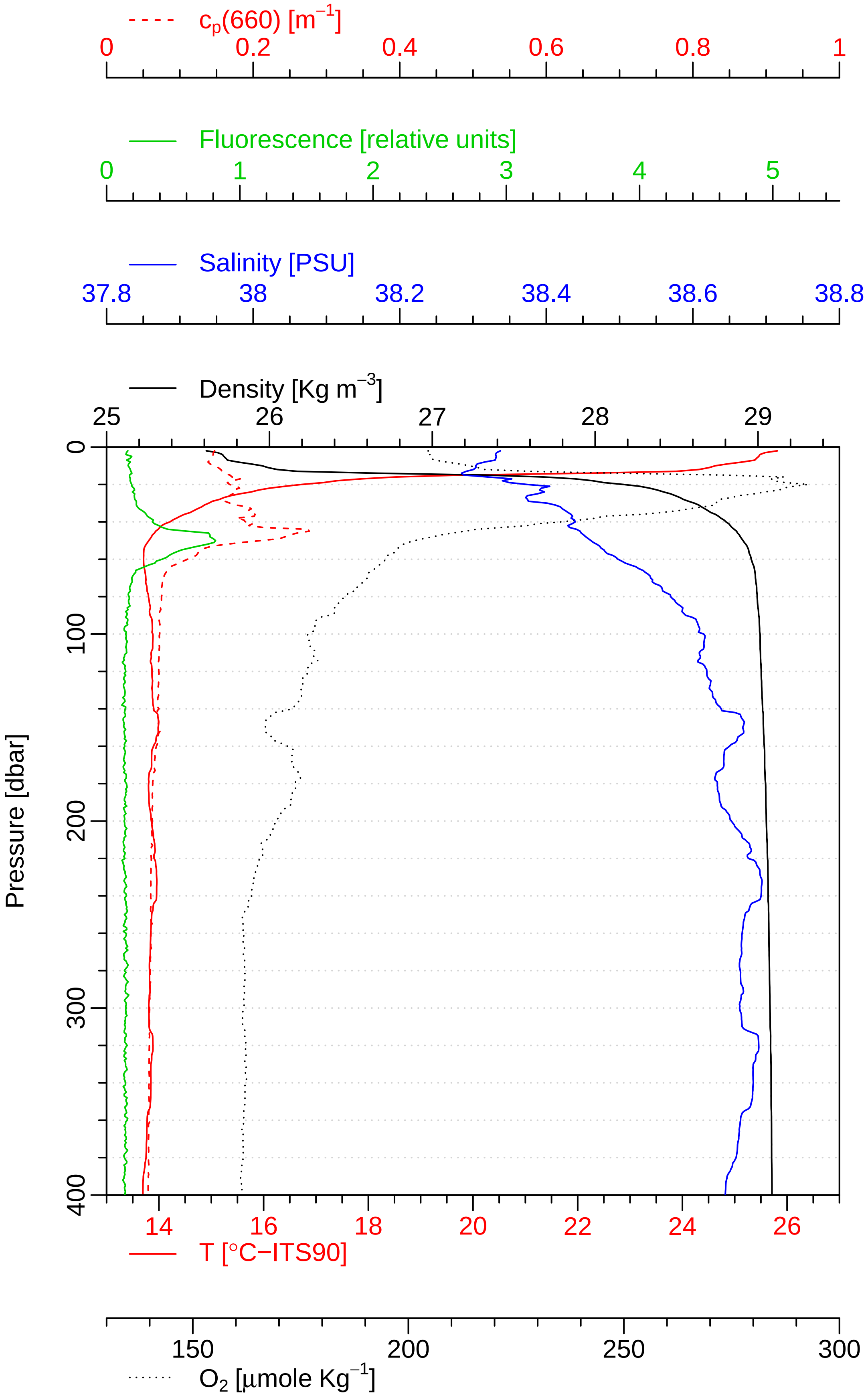
Scan length : 34



BOUSSOLE #244
July 2022
7°00'E
7°15'E
7°30'E
7°45'E
8°00'E
44°00'N
43°45'N
43°30'N
43°15'N
43°00'N
−100
−250
−500
−1000
−2000
Dyfamed
ODAS
BOUSSOLE
7°51'E
7°54'E
7°57'E
43°24'N
43°21'N
BOUS244_05
BOUS244_04
BOUS244_03
BOUS244_02
BOUS244_01
12 07
11 07
10 07
12 07 2022
11 07 2022
10 07 2022
2022 Oct 06 16:07:46

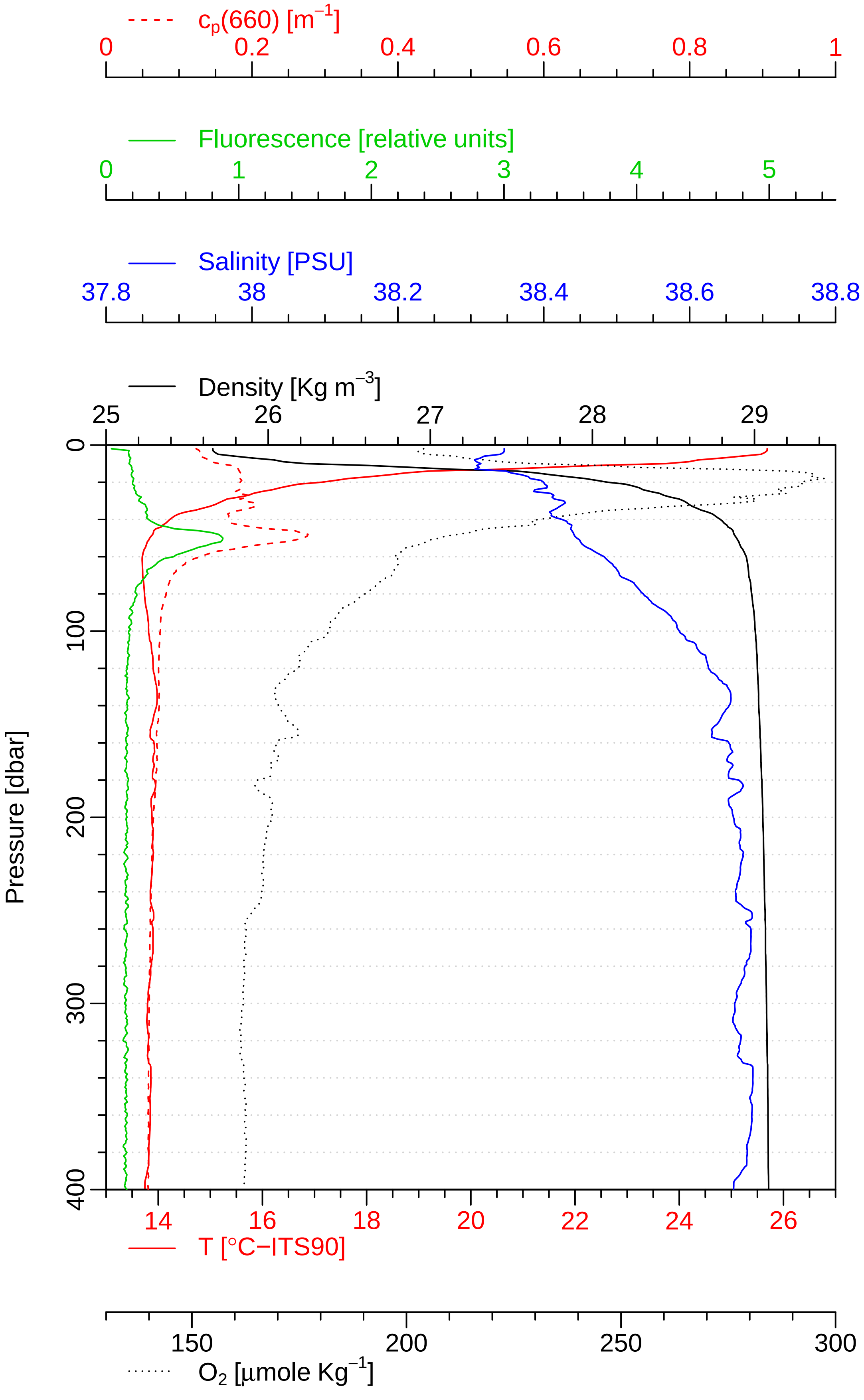
bous244_01

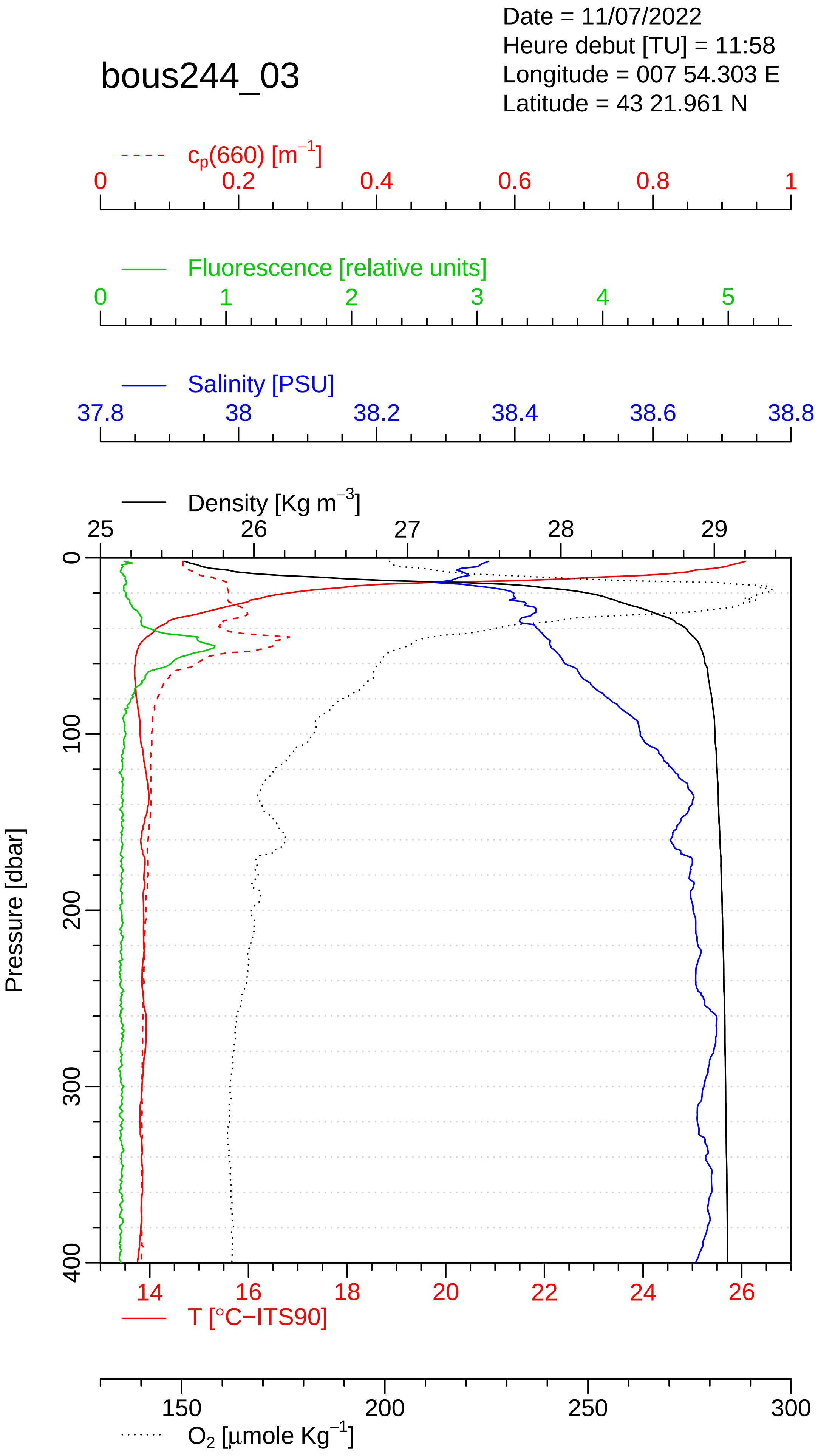
Date = 10/07/2022
Heure debut [TU] = 10:34
Longitude = 007 53.874 E
Latitude = 43 22.121 N



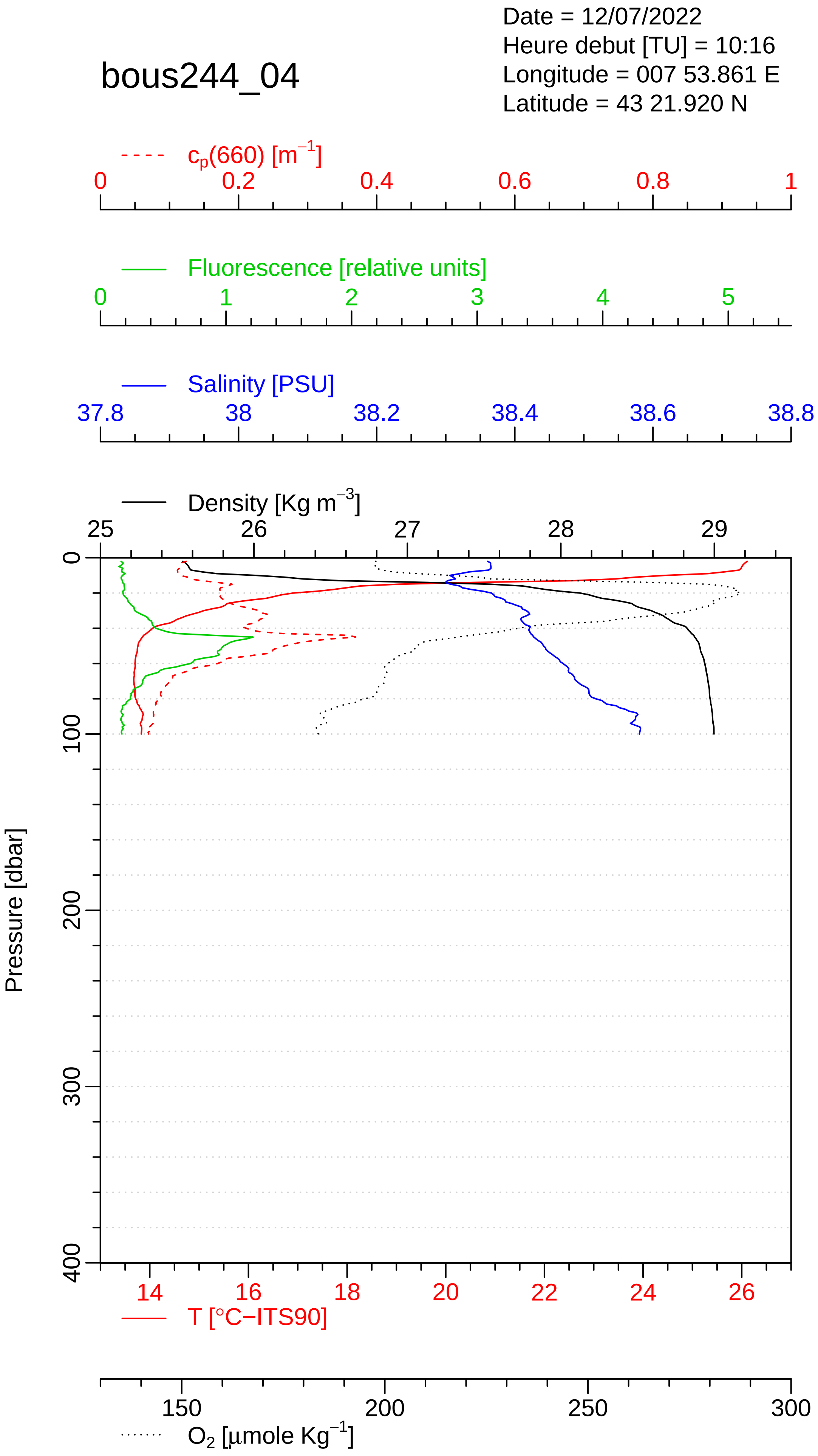
bous244_02

Date = 11/07/2022
Heure debut [TU] = 10:03
Longitude = 007 54.075 E
Latitude = 43 22.047 N





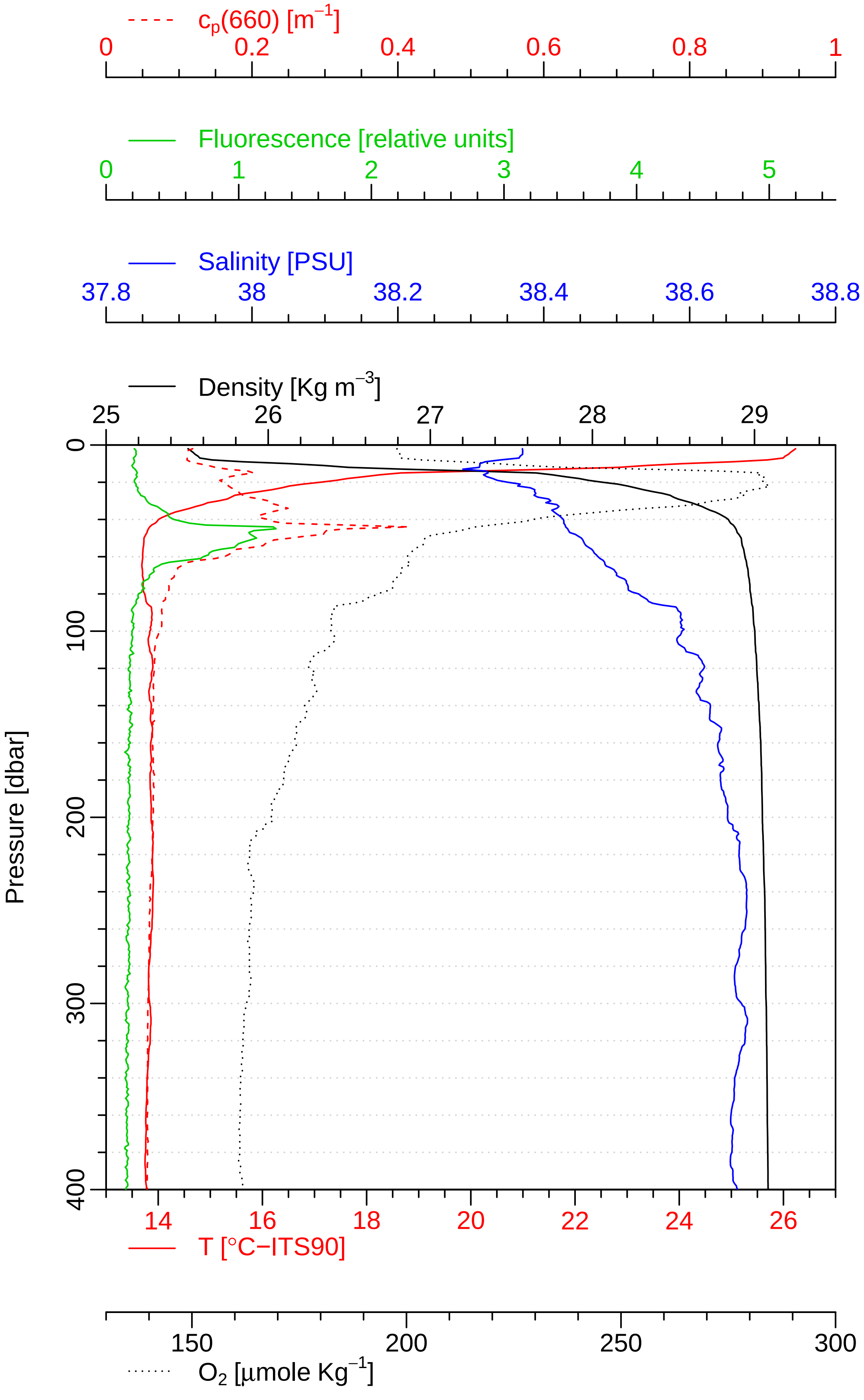
bous244_03
Date = 11/07/2022
Heure debut [TU] = 11:58
Longitude = 007 54.303 E
Latitude = 43 21.961 N
c_p(660) [m^-1]
0 0.2 0.4 0.6 0.8 1
Fluorescence [relative units]
0 1 2 3 4 5
Salinity [PSU]
37.8 38 38.2 38.4 38.6 38.8
Density [Kg m^-3]
25 26 27 28 29
Pressure [dbar]
0 100 200 300 400
14 16 18 20 22 24 26
T [°C−ITS90]
150 200 250 300
O2 [µmole Kg^-1]



bous244_04
Date = 12/07/2022
Heure debut [TU] = 10:16
Longitude = 007 53.861 E
Latitude = 43 21.920 N
c_p(660) [m^-1]
0 0.2 0.4 0.6 0.8 1
Fluorescence [relative units]
0 1 2 3 4 5
Salinity [PSU]
37.8 38 38.2 38.4 38.6 38.8
Density [Kg m^-3]
25 26 27 28 29
Pressure [dbar]
0 100 200 300 400
14 16 18 20 22 24 26
T [°C−ITS90]
150 200 250 300
O2 [µmole Kg^-1]

bous244_05

Date = 12/07/2022
Heure debut [TU] = 11:22
Longitude = 007 53.721 E
Latitude = 43 21.969 N



Date: 02/02/2023

Instrument configuration file: D:\Melek\boussole\Data\CTD\data&process\2022\B244\raw\BOUS244_01.XMLCON

Configuration report for SBE 911plus/917plus CTD

```
Frequency channels suppressed : 0
Voltage words suppressed      : 0
Computer interface            : RS-232C
Deck unit                     : SBE11plus Firmware Version >= 5.0
Scans to average              : 1
NMEA position data added      : Yes
NMEA depth data added         : No
NMEA time added               : No
NMEA device connected to      : deck unit
Surface PAR voltage added     : No
Scan time added               : No

1) Frequency 0, Temperature

   Serial number : 1378
   Calibrated on : 17-Jun-21
   G             : 4.83714772e-003
   H             : 6.70524923e-004
   I             : 2.63336304e-005
   J             : 2.14843005e-006
   F0            : 1000.000
   Slope         : 1.00000000
   Offset        : 0.0000

2) Frequency 1, Conductivity

   Serial number : 2929
   Calibrated on : 05-Mar-20
   G             : -1.05951733e+001
   H             : 1.41908901e+000
   I             : 7.59510042e-004
   J             : 2.04144674e-005
   CTcor         : 3.2500e-006
   CPcor         : -9.57000000e-008
   Slope         : 1.00000000
   Offset        : 0.00000

3) Frequency 2, Pressure, Digiquartz with TC

   Serial number : 0329
   Calibrated on : 04-Dec-09 (corr May-2017)
   C1            : -4.499631e+004
   C2            : 4.598757e-001
   C3            : 1.505020e-002
   D1            : 3.936600e-002
   D2            : 0.000000e+000
   T1            : 3.004570e+001
   T2            : -1.880753e-004
   T3            : 4.727060e-006
   T4            : -1.923520e-009
   T5            : 0.000000e+000
   Slope         : 0.99996509
   Offset        : -2.27039
   AD590M        : 1.280100e-002
   AD590B        : -9.240166e+000

4) Frequency 3, Temperature, 2

   Serial number : 2473
   Calibrated on : 04-Mar-20
   G             : 4.36726120e-003
   H             : 6.43151581e-004
   I             : 2.33812060e-005
   J             : 2.23255667e-006
   F0            : 1000.000
   Slope         : 1.00000000
   Offset        : 0.0000
```

5) Frequency 4, Conductivity, 2

```
Serial number : 1313
Calibrated on : 18-May-21
G             : -9.85039520e+000
H             : 1.33613831e+000
I             : -4.64958478e-004
J             : 1.12844381e-004
CTcor         : 3.2500e-006
CPcor         : -9.57000000e-008
Slope         : 1.00000000
Offset        : 0.00000
```

6) A/D voltage 0, Oxygen, SBE 43

```
Serial number : 0378
Calibrated on : 18-May-21
Equation      : Sea-Bird
Soc           : 3.60130e-001
Offset        : -6.52900e-001
A             : -4.74250e-003
B             : 2.16910e-004
C             : -3.37400e-006
E             : 3.60000e-002
Tau20         : 1.21000e+000
D1            : 1.92634e-004
D2            : -4.64803e-002
H1            : -3.30000e-002
H2            : 5.00000e+003
H3            : 1.45000e+003
```

7) A/D voltage 1, Free

8) A/D voltage 2, Fluorometer, Chelsea Aqua 3

```
Serial number : 088-193
Calibrated on : 11-jul-2019
VB            : 0.406700
V1            : 1.761800
Vacetone      : 0.683330
Scale factor  : 1.000000
Slope         : 1.000000
Offset        : -0.260000
```

9) A/D voltage 3, Transmissometer, WET Labs C-Star

```
Serial number : CST-373DR
Calibrated on : 20211012
M             : 21.7581
B             : -1.2837
Path length   : 0.250
```

10) A/D voltage 4, User Polynomial

```
Serial number : 171
Calibrated on : 19May2014
Sensor name   : RINKOIII_DO
A0            : 0.00000000
A1            : 1.00000000
A2            : 0.00000000
A3            : 0.00000000
```

11) A/D voltage 5, User Polynomial, 2

```
Serial number : 171
Calibrated on : 12May2014
Sensor name   : RINKOIII_Temp
A0            : -5.25367500
A1            : 16.66254000
A2            : -2.13105300
A3            : 0.45564880
```

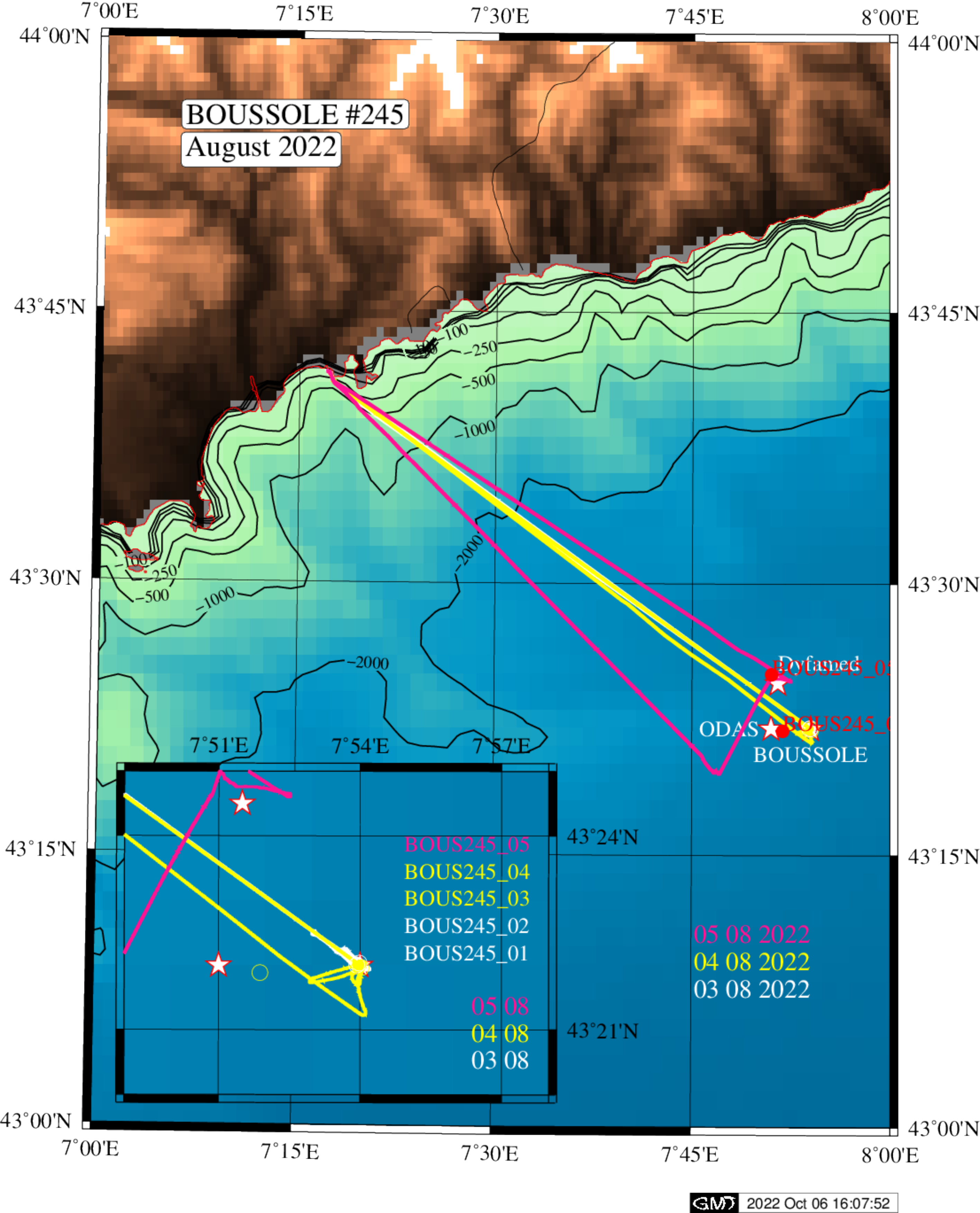
12) A/D voltage 6, Fluorometer, Chelsea Aqua 3, 2

```
Serial number : 088-094
Calibrated on : 12-Nov-2015
```

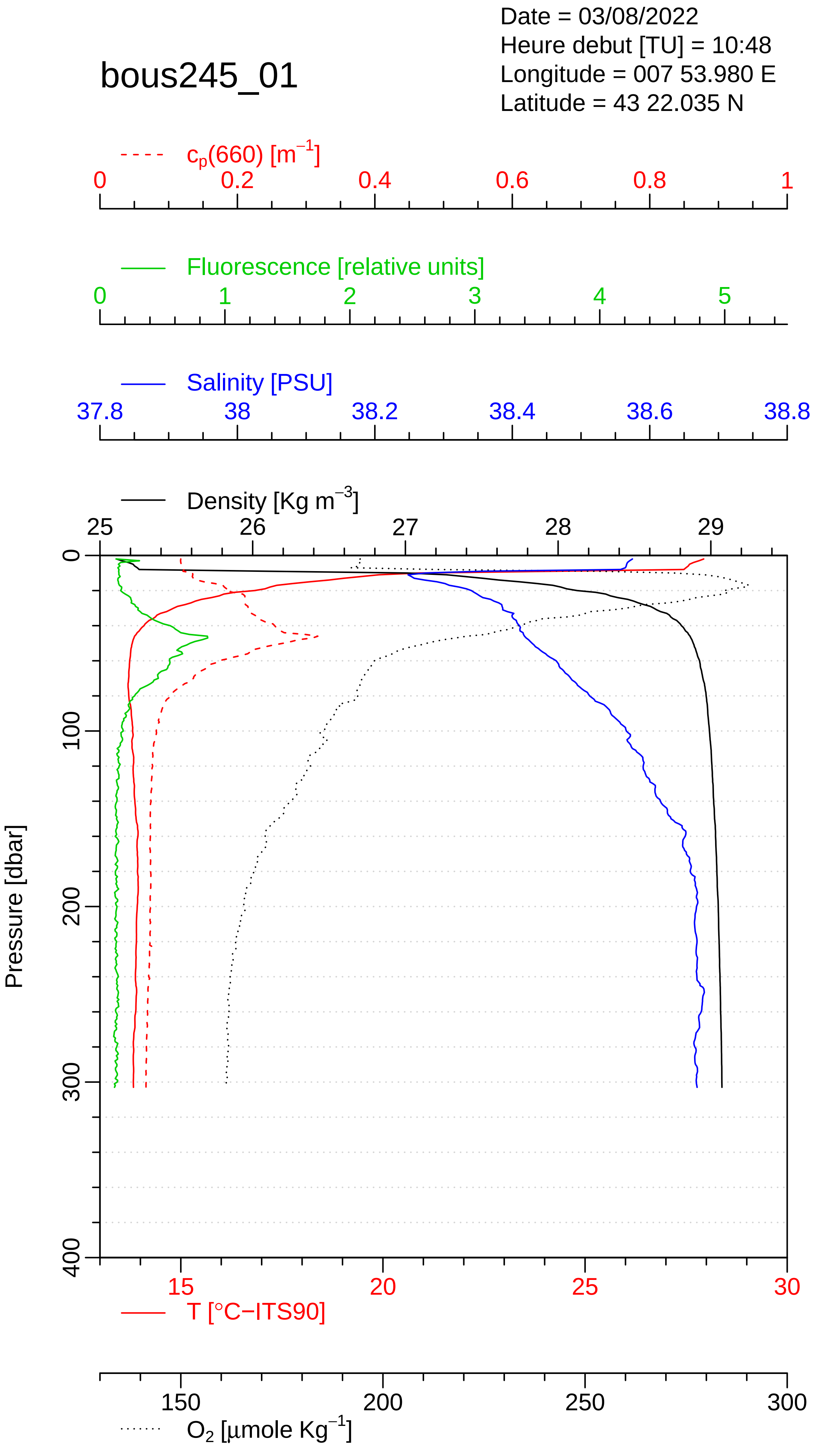
```
    VB            : 0.311200
    V1            : 2.082900
    Vacetone      : 0.434600
    Scale factor  : 1.000000
    Slope         : 1.000000
    Offset        : 0.000000
```

13) A/D voltage 7, Free

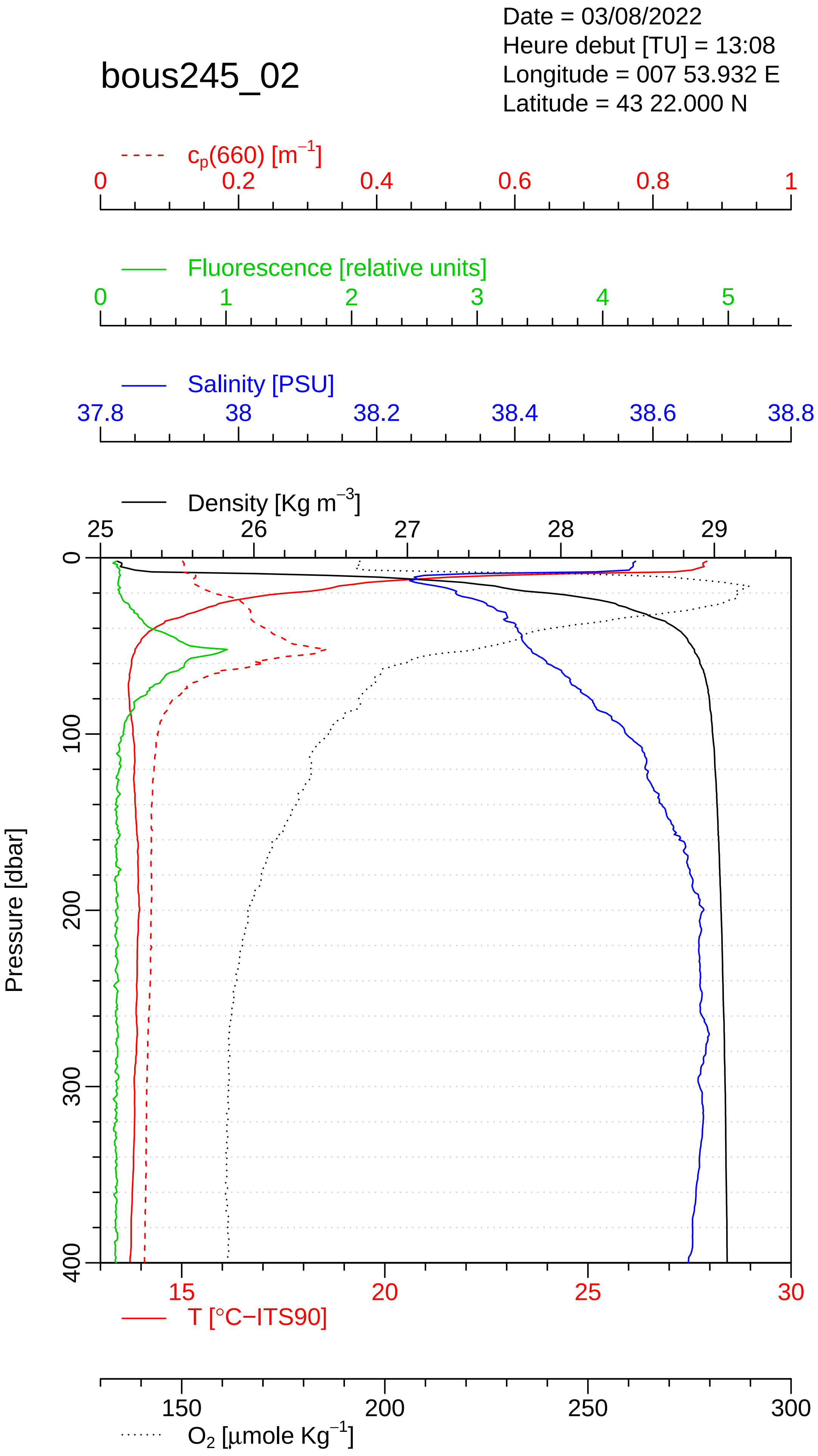
Scan length : 37



BOUSSOLE #245
August 2022
7°00'E
7°15'E
7°30'E
7°45'E
8°00'E
44°00'N
43°45'N
43°30'N
43°15'N
43°00'N
−100
−250
−500
−1000
−2000
Dyfamed
BOUS245_05
ODAS
BOUSSOLE
7°51'E
7°54'E
7°57'E
43°24'N
43°21'N
BOUS245_05
BOUS245_04
BOUS245_03
BOUS245_02
BOUS245_01
05 08
04 08
03 08
05 08 2022
04 08 2022
03 08 2022
2022 Oct 06 16:07:52

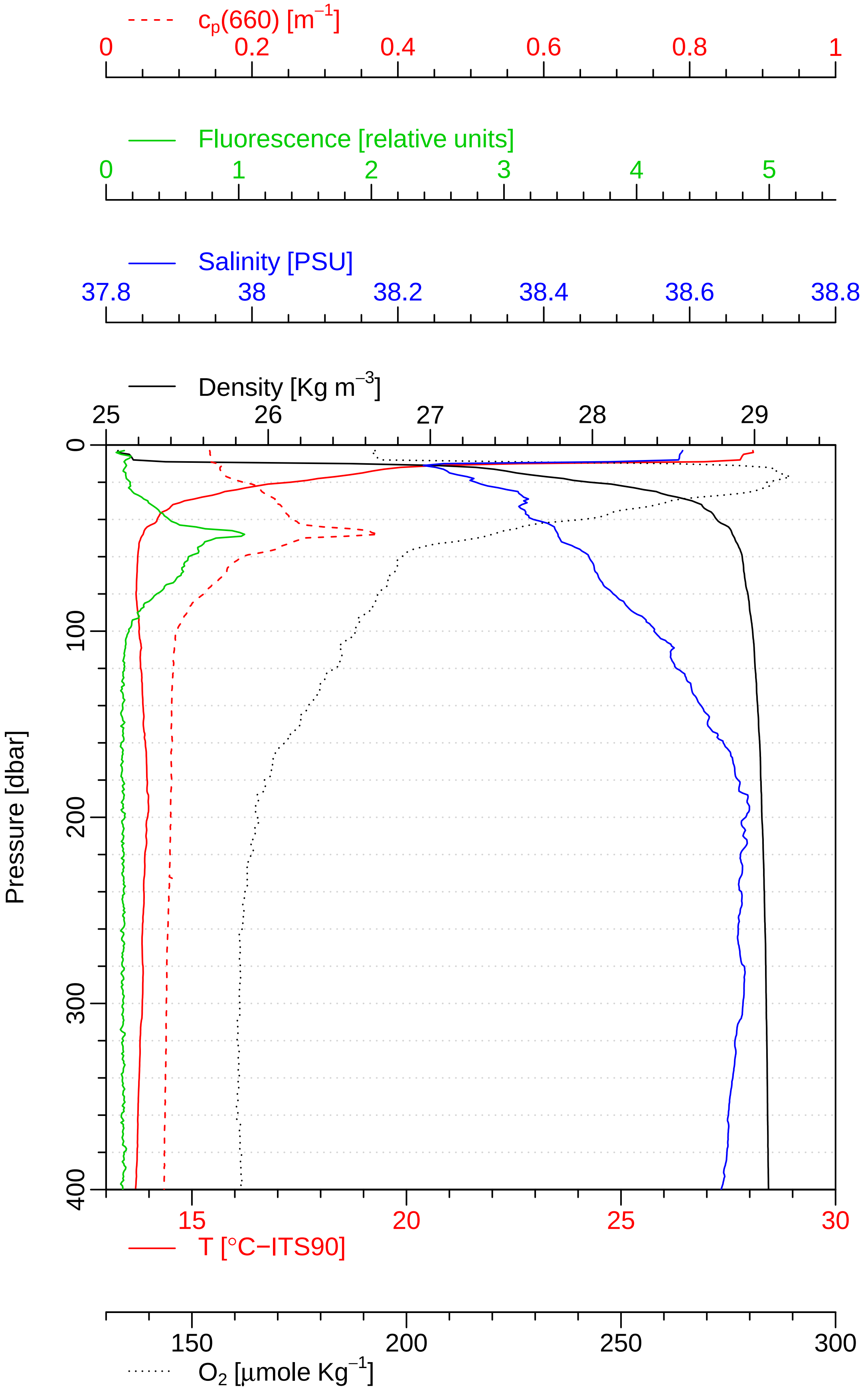


bous245_01
Date = 03/08/2022
Heure debut [TU] = 10:48
Longitude = 007 53.980 E
Latitude = 43 22.035 N
c_p(660) [m^−1]
0 0.2 0.4 0.6 0.8 1
Fluorescence [relative units]
0 1 2 3 4 5
Salinity [PSU]
37.8 38 38.2 38.4 38.6 38.8
Density [Kg m^−3]
25 26 27 28 29
Pressure [dbar]
0 100 200 300 400
15 20 25 30
T [°C−ITS90]
150 200 250 300
O2 [µmole Kg^−1]


bous245_02
Date = 03/08/2022
Heure debut [TU] = 13:08
Longitude = 007 53.932 E
Latitude = 43 22.000 N
c_p(660) [m^-1]
0 0.2 0.4 0.6 0.8 1
Fluorescence [relative units]
0 1 2 3 4 5
Salinity [PSU]
37.8 38 38.2 38.4 38.6 38.8
Density [Kg m^-3]
25 26 27 28 29
Pressure [dbar]
0 100 200 300 400
15 20 25 30
T [°C−ITS90]
150 200 250 300
O2 [µmole Kg^-1]

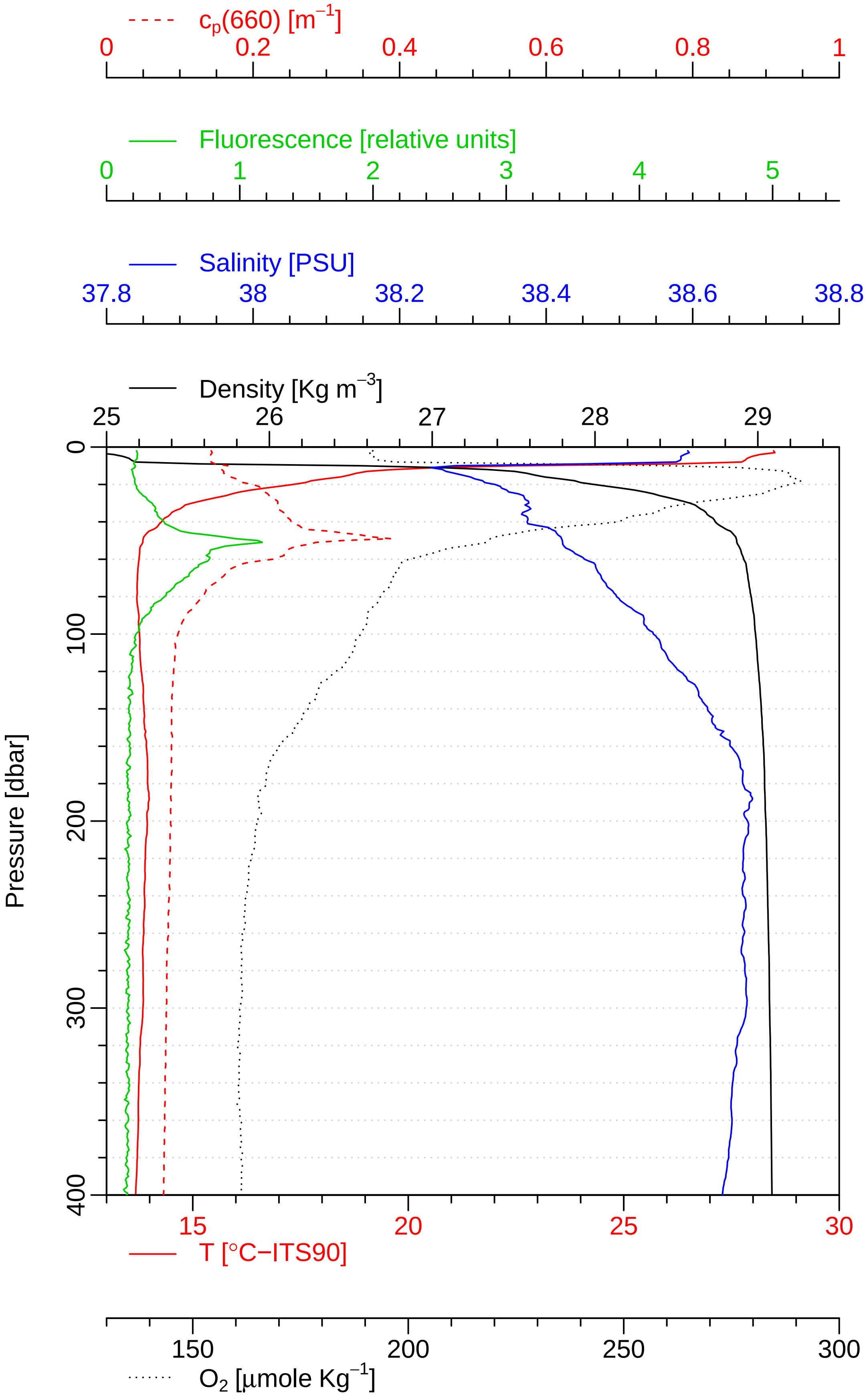
bous245_03

Date = 04/08/2022
Heure debut [TU] = 11:06
Longitude = 007 54.023 E
Latitude = 43 21.960 N



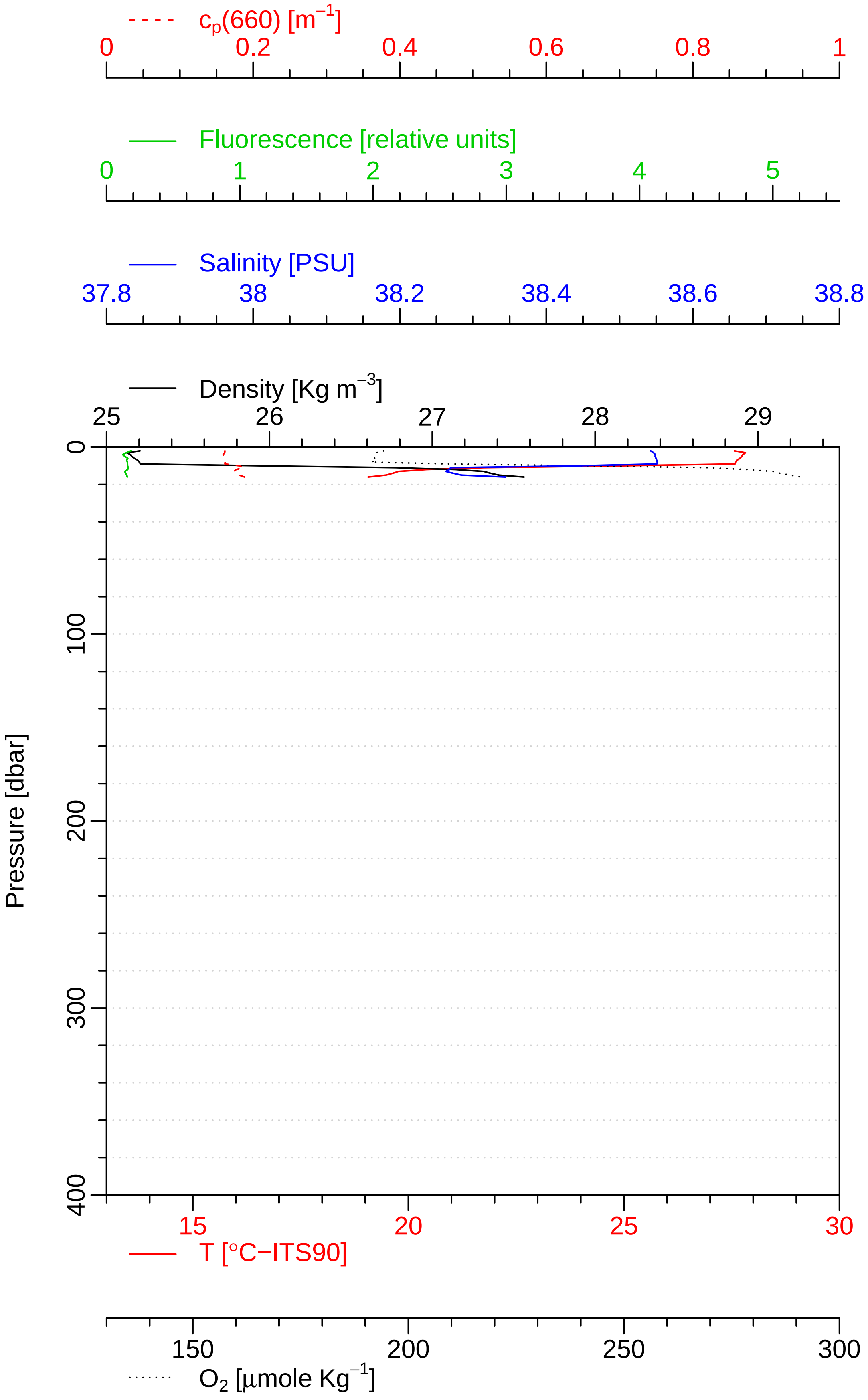
bous245_04

Date = 04/08/2022
Heure debut [TU] = 13:01
Longitude = 007 51.881 E
Latitude = 43 21.882 N



bous245_05

Date = 05/08/2022
Heure debut [TU] = 11:49
Longitude = 007 51.032 E
Latitude = 43 25.0007 N



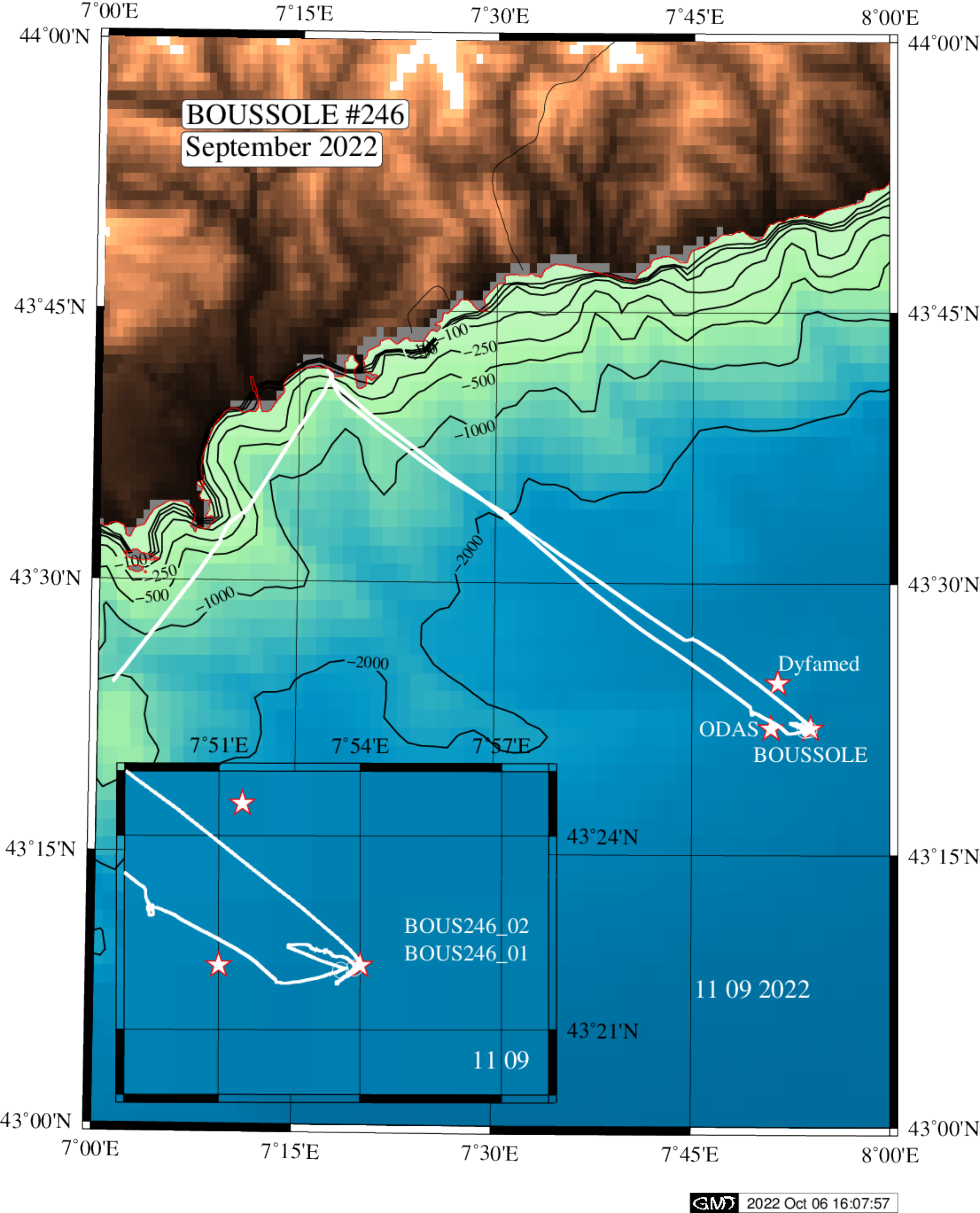
Date: 02/02/2023

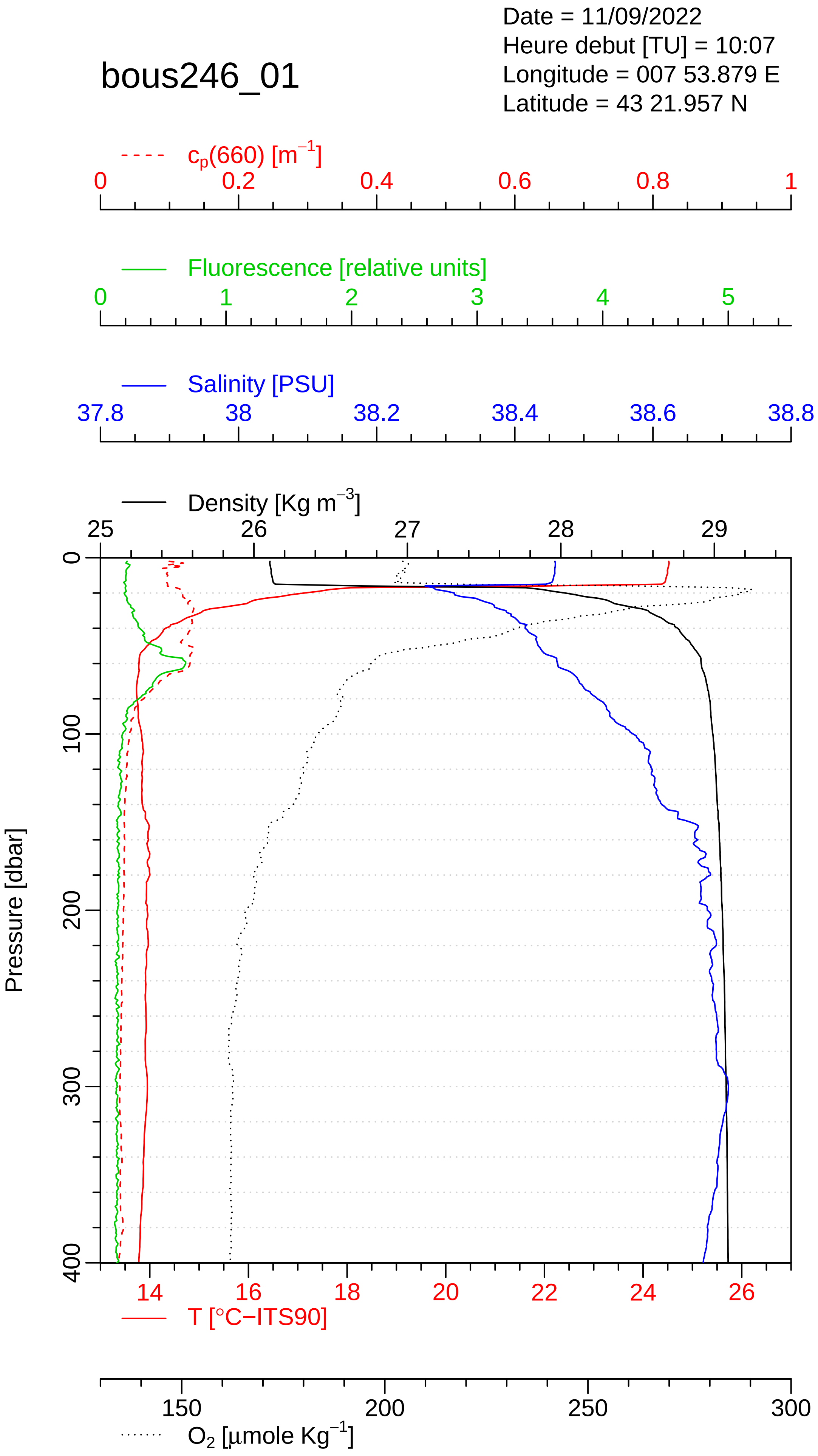
Instrument configuration file: D:\Melek\boussole\Data\CTD\data&process\2022\B245\raw\BOUS245_01.XMLCON

Configuration report for SBE 911plus/917plus CTD

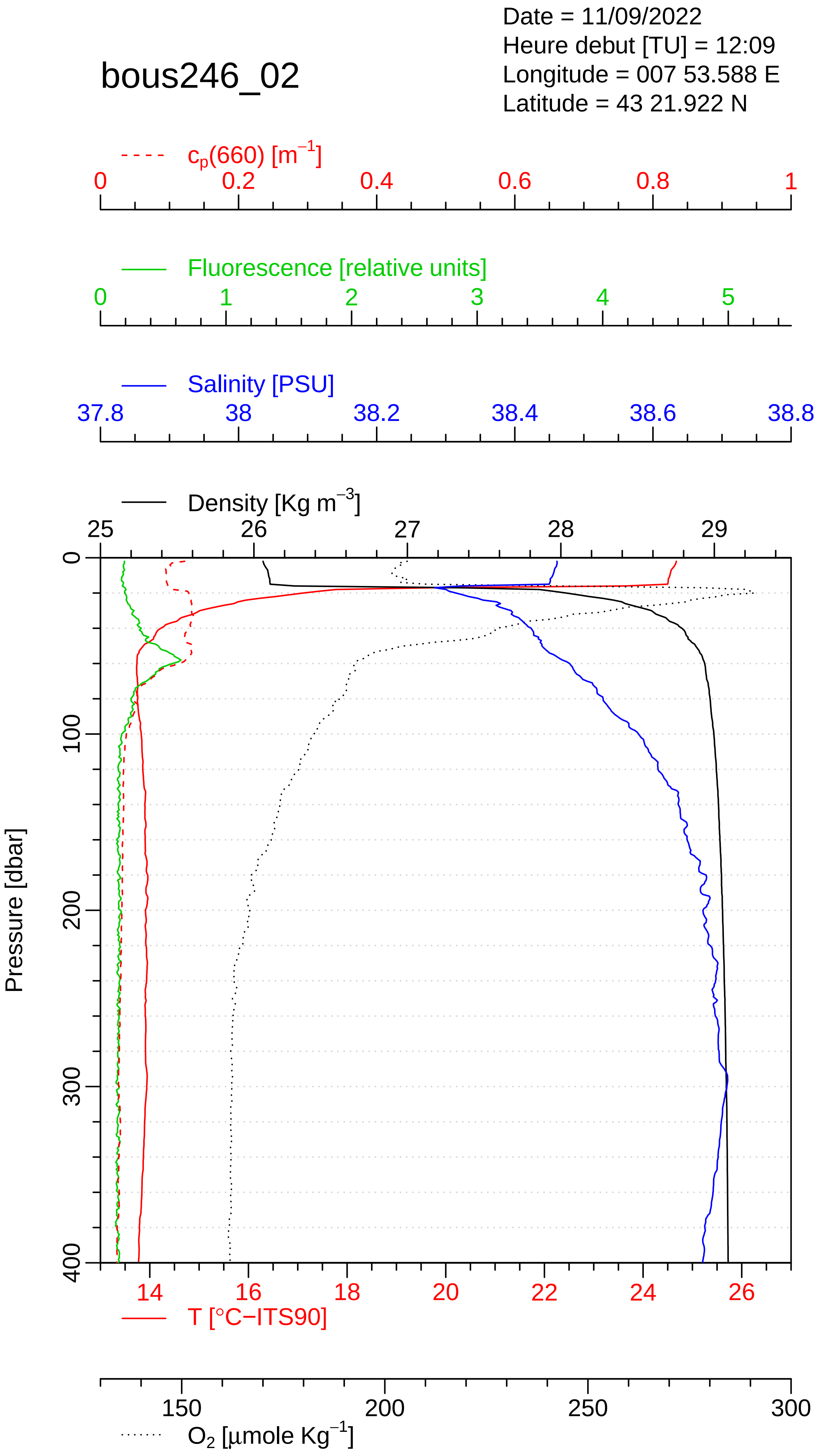
```
Frequency channels suppressed : 0
Voltage words suppressed      : 1
Computer interface            : RS-232C
Deck unit                     : SBE11plus Firmware Version >= 5.0
Scans to average              : 1
NMEA position data added      : No
NMEA depth data added         : No
NMEA time added               : No
Surface PAR voltage added     : No
Scan time added               : No

1) Frequency 0, Temperature

   Serial number : 1378
   Calibrated on : 17-Jun-21
   G             : 4.83714772e-003
   H             : 6.70524923e-004
   I             : 2.63336304e-005
   J             : 2.14843005e-006
   F0            : 1000.000
   Slope         : 1.00000000
   Offset        : 0.0000

2) Frequency 1, Conductivity

   Serial number : 2929
   Calibrated on : 05-Mar-20
   G             : -1.05951733e+001
   H             : 1.41908901e+000
   I             : 7.59510042e-004
   J             : 2.04144674e-005
   CTcor         : 3.2500e-006
   CPcor         : -9.57000000e-008
   Slope         : 1.00000000
   Offset        : 0.00000

3) Frequency 2, Pressure, Digiquartz with TC

   Serial number : 0329
   Calibrated on : 04-Dec-09 (corr May-2017)
   C1            : -4.499631e+004
   C2            : 4.598757e-001
   C3            : 1.505020e-002
   D1            : 3.936600e-002
   D2            : 0.000000e+000
   T1            : 3.004570e+001
   T2            : -1.880753e-004
   T3            : 4.727060e-006
   T4            : -1.923520e-009
   T5            : 0.000000e+000
   Slope         : 0.99996509
   Offset        : -2.27039
   AD590M        : 1.280100e-002
   AD590B        : -9.240166e+000

4) Frequency 3, Temperature, 2

   Serial number : 2473
   Calibrated on : 04-Mar-20
   G             : 4.36726120e-003
   H             : 6.43151581e-004
   I             : 2.33812060e-005
   J             : 2.23255667e-006
   F0            : 1000.000
   Slope         : 1.00000000
   Offset        : 0.0000

5) Frequency 4, Conductivity, 2
```

```
   Serial number : 1313
   Calibrated on : 18-May-21
   G             : -9.85039520e+000
   H             : 1.33613831e+000
   I             : -4.64958478e-004
   J             : 1.12844381e-004
   CTcor         : 3.2500e-006
   CPcor         : -9.57000000e-008
   Slope         : 1.00000000
   Offset        : 0.00000

6) A/D voltage 0, Oxygen, SBE 43

   Serial number : 0378
   Calibrated on : 18-May-21
   Equation      : Sea-Bird
   Soc           : 3.60130e-001
   Offset        : -6.52900e-001
   A             : -4.74250e-003
   B             : 2.16910e-004
   C             : -3.37400e-006
   E             : 3.60000e-002
   Tau20         : 1.21000e+000
   D1            : 1.92634e-004
   D2            : -4.64803e-002
   H1            : -3.30000e-002
   H2            : 5.00000e+003
   H3            : 1.45000e+003

7) A/D voltage 1, Free

8) A/D voltage 2, Fluorometer, Chelsea Aqua 3

   Serial number : 088-193
   Calibrated on : 11-jul-2019
   VB            : 0.406700
   V1            : 1.761800
   Vacetone      : 0.683330
   Scale factor  : 1.000000
   Slope         : 1.000000
   Offset        : -0.260000

9) A/D voltage 3, Transmissometer, WET Labs C-Star

   Serial number : CST-373DR
   Calibrated on : 20211012
   M             : 21.7581
   B             : -1.2837
   Path length   : 0.250

10) A/D voltage 4, User Polynomial

    Serial number : 171
    Calibrated on : 19May2014
    Sensor name   : RINKOIII_DO
    A0            : 0.00000000
    A1            : 1.00000000
    A2            : 0.00000000
    A3            : 0.00000000

11) A/D voltage 5, User Polynomial, 2

    Serial number : 171
    Calibrated on : 12May2014
    Sensor name   : RINKOIII_Temp
    A0            : -5.25367500
    A1            : 16.66254000
    A2            : -2.13105300
    A3            : 0.45564880

Scan length                  : 27
```


BOUSSOLE #246
September 2022
7°00'E
7°15'E
7°30'E
7°45'E
8°00'E
44°00'N
43°45'N
43°30'N
43°15'N
43°00'N
−100
−250
−500
−1000
−2000
Dyfamed
ODAS
BOUSSOLE
7°51'E
7°54'E
7°57'E
43°24'N
43°21'N
BOUS246_02
BOUS246_01
11 09
11 09 2022
2022 Oct 06 16:07:57



bous246_01
Date = 11/09/2022
Heure debut [TU] = 10:07
Longitude = 007 53.879 E
Latitude = 43 21.957 N
c_p(660) [m^{-1}]
0 0.2 0.4 0.6 0.8 1
Fluorescence [relative units]
0 1 2 3 4 5
Salinity [PSU]
37.8 38 38.2 38.4 38.6 38.8
Density [Kg m^{-3}]
25 26 27 28 29
Pressure [dbar]
0 100 200 300 400
14 16 18 20 22 24 26
T [°C−ITS90]
150 200 250 300
O_2 [μmole Kg^{-1}]



bous246_02
Date = 11/09/2022
Heure debut [TU] = 12:09
Longitude = 007 53.588 E
Latitude = 43 21.922 N
c_p(660) [m^{-1}]
0 0.2 0.4 0.6 0.8 1
Fluorescence [relative units]
0 1 2 3 4 5
Salinity [PSU]
37.8 38 38.2 38.4 38.6 38.8
Density [Kg m^{-3}]
25 26 27 28 29
Pressure [dbar]
0 100 200 300 400
14 16 18 20 22 24 26
T [°C−ITS90]
150 200 250 300
O_2 [µmole Kg^{-1}]

Date: 02/02/2023

Instrument configuration file: D:\Melek\boussole\Data\CTD\data&process\2022\B246\raw\BOUS246_01.XMLCON

Configuration report for SBE 911plus/917plus CTD

```
Frequency channels suppressed : 2
Voltage words suppressed      : 2
Computer interface            : RS-232C
Deck unit                     : SBE11plus Firmware Version >= 5.0
Scans to average              : 1
NMEA position data added      : No
NMEA depth data added         : No
NMEA time added               : No
Surface PAR voltage added     : No
Scan time added               : No
```

1) Frequency 0, Temperature

```
   Serial number : 2473
   Calibrated on : 04-Mar-20
   G             : 4.36726120e-003
   H             : 6.43151581e-004
   I             : 2.33812060e-005
   J             : 2.23255667e-006
   F0            : 1000.000
   Slope         : 1.00000000
   Offset        : 0.0000
```

2) Frequency 1, Conductivity

```
   Serial number : 1313
   Calibrated on : 18-May-21
   G             : -9.85039520e+000
   H             : 1.33613831e+000
   I             : -4.64958478e-004
   J             : 1.12844381e-004
   CTcor         : 3.2500e-006
   CPcor         : -9.57000000e-008
   Slope         : 1.00000000
   Offset        : 0.00000
```

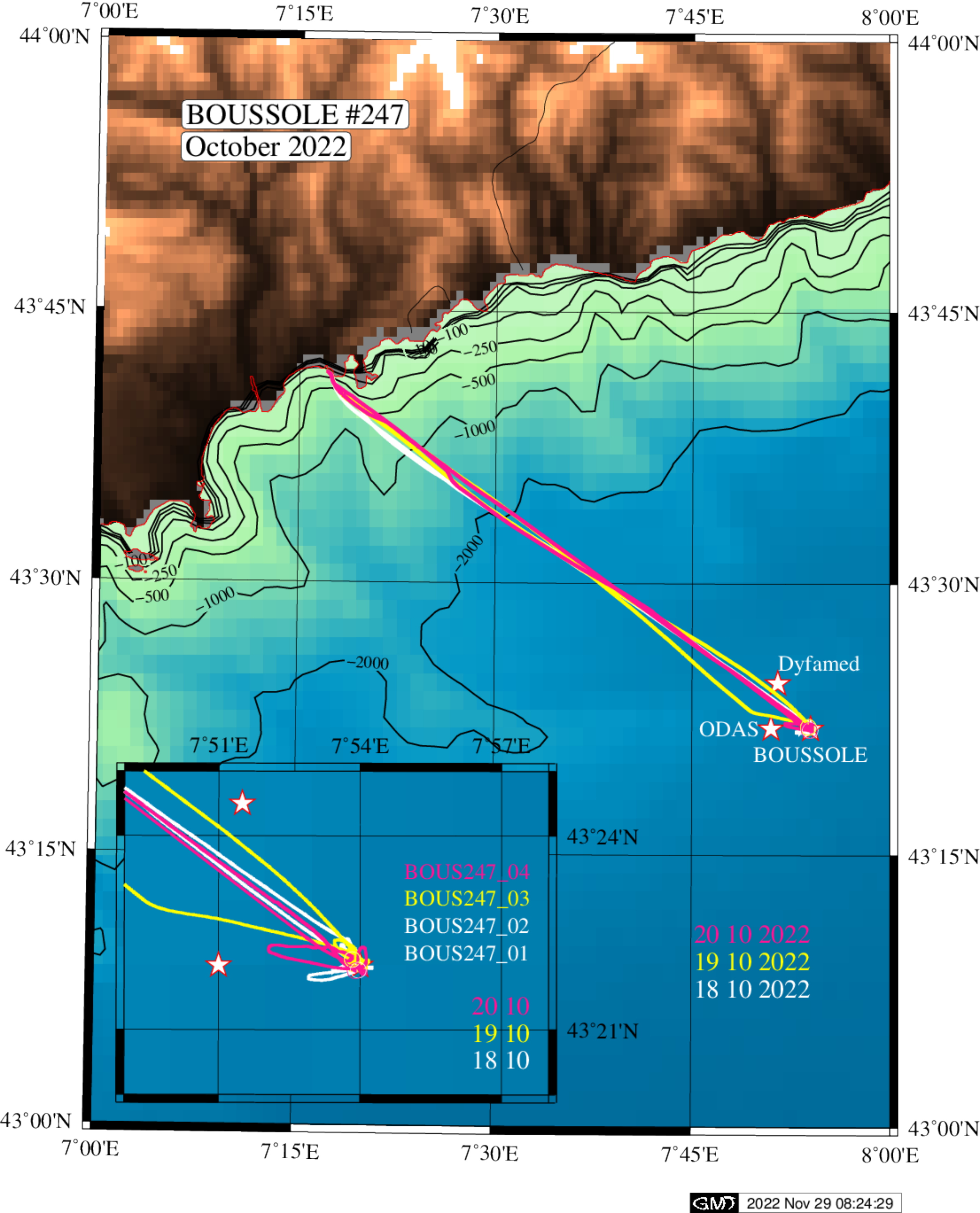
3) Frequency 2, Pressure, Digiquartz with TC

```
   Serial number : 0329
   Calibrated on : 04-Dec-09 (corr May-2017)
   C1            : -4.499631e+004
   C2            : 4.598757e-001
   C3            : 1.505020e-002
   D1            : 3.936600e-002
   D2            : 0.000000e+000
   T1            : 3.004570e+001
   T2            : -1.880753e-004
   T3            : 4.727060e-006
   T4            : -1.923520e-009
   T5            : 0.000000e+000
   Slope         : 0.99996509
   Offset        : -2.27039
   AD590M        : 1.280100e-002
   AD590B        : -9.240166e+000
```

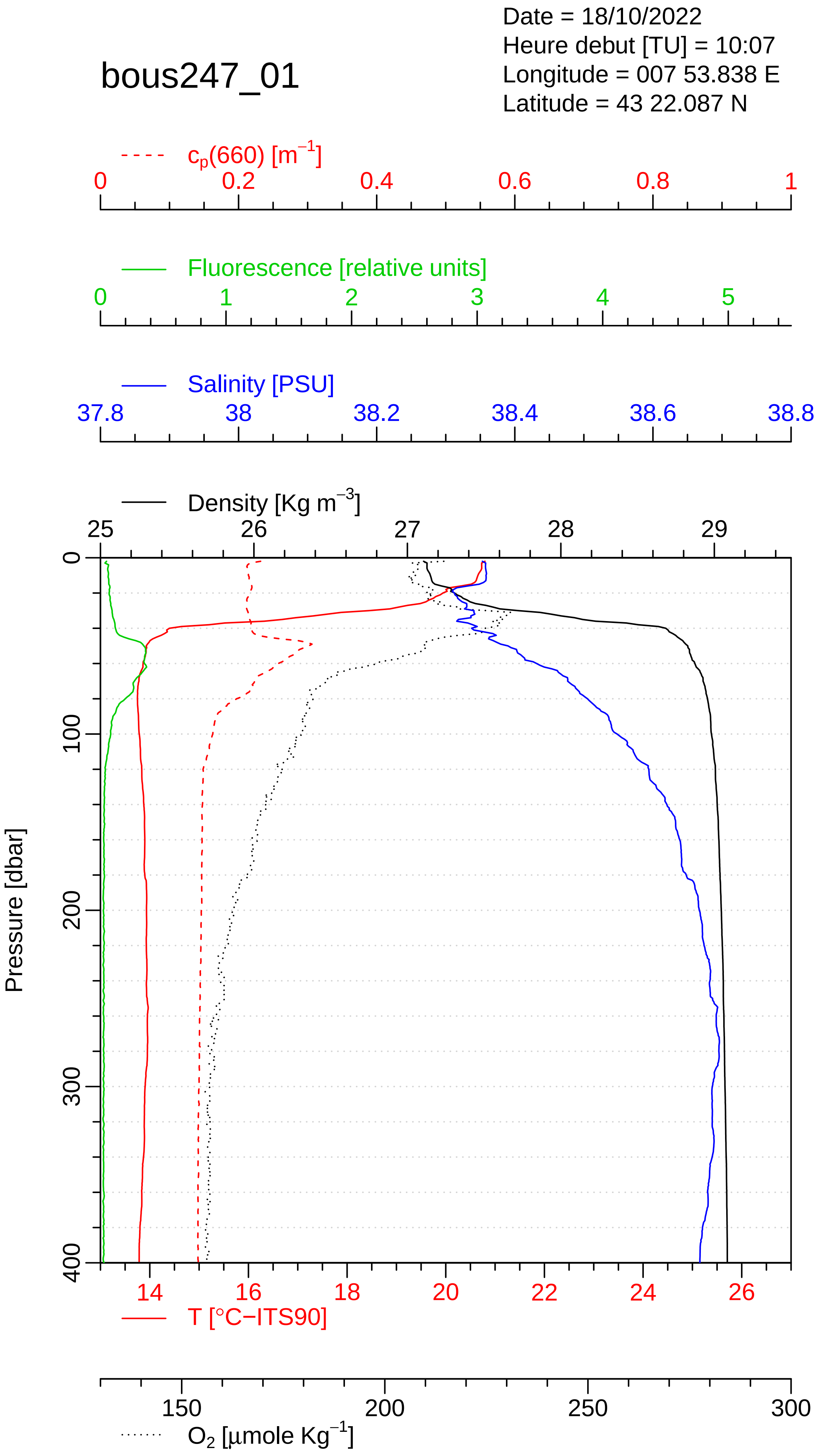
4) A/D voltage 0, Oxygen, SBE 43

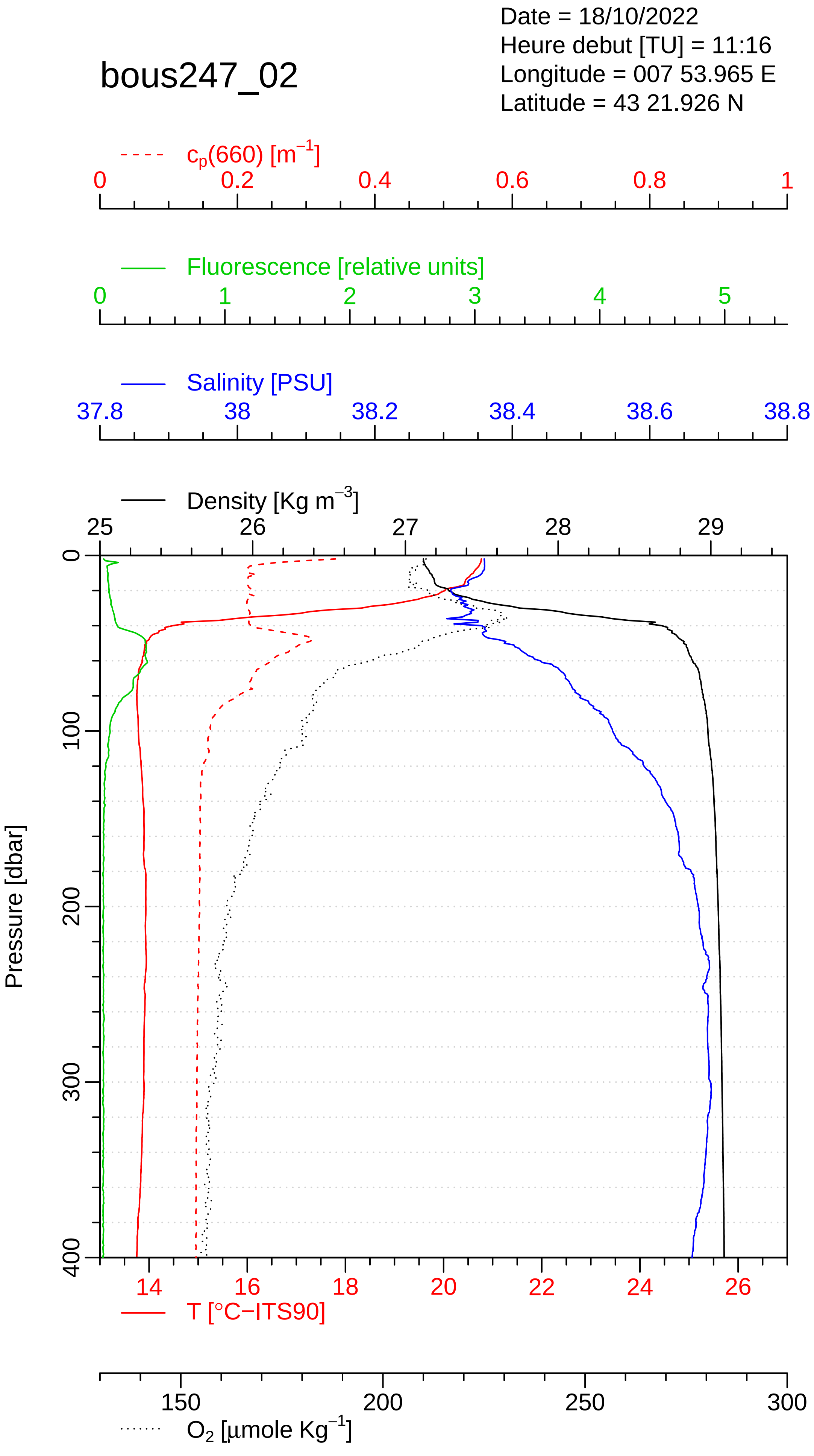
```
   Serial number : 0378
   Calibrated on : 18-May-21
   Equation      : Sea-Bird
   Soc           : 3.60130e-001
   Offset        : -6.52900e-001
   A             : -4.74250e-003
   B             : 2.16910e-004
   C             : -3.37400e-006
   E             : 3.60000e-002
   Tau20         : 1.21000e+000
   D1            : 1.92634e-004
```

```
   D2             : -4.64803e-002
   H1             : -3.30000e-002
   H2             : 5.00000e+003
   H3             : 1.45000e+003

5) A/D voltage 1, Free

6) A/D voltage 2, Fluorometer, Chelsea Aqua 3

   Serial number : 088-193
   Calibrated on : 11-jul-2019
   VB             : 0.406700
   V1             : 1.761800
   Vacetone       : 0.683330
   Scale factor  : 1.000000
   Slope          : 1.000000
   Offset         : -0.260000

7) A/D voltage 3, Transmissometer, WET Labs C-Star

   Serial number : CST-887DR
   Calibrated on : oct2019
   M              : 21.0776
   B              : -0.2951
   Path length   : 0.250

Scan length                    : 18
```

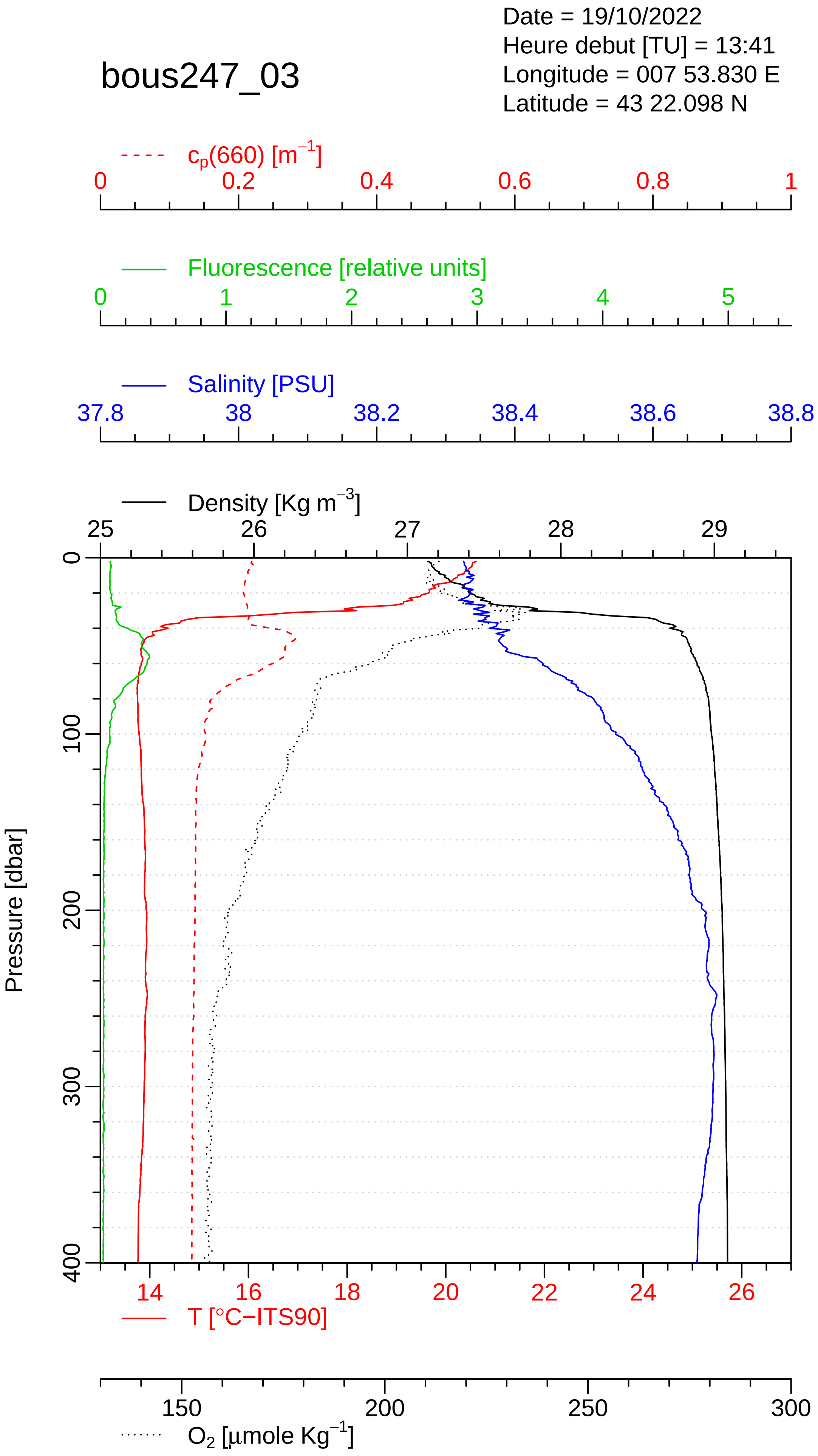


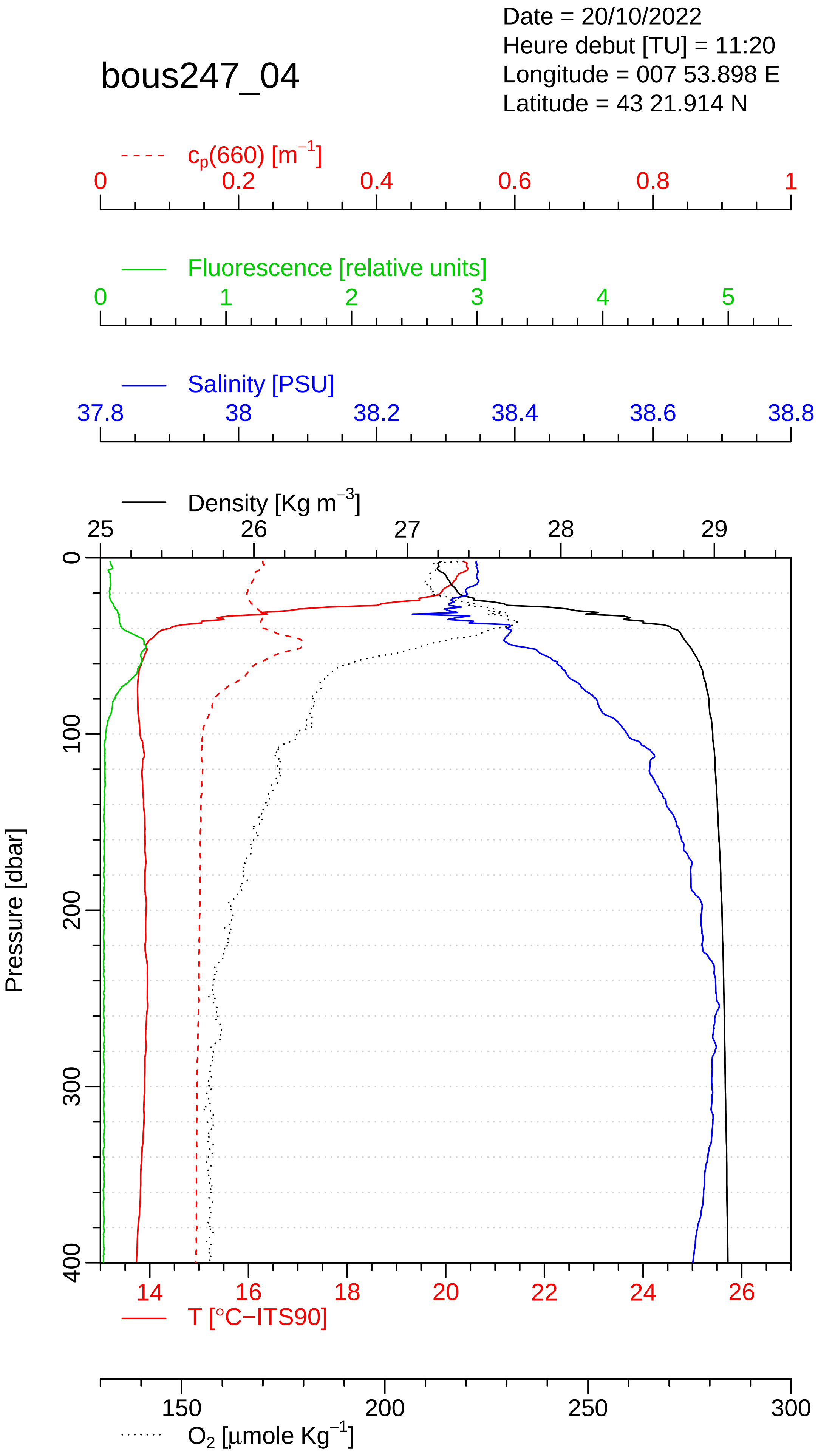
BOUSSOLE #247
October 2022
Dyfamed
ODAS
BOUSSOLE
BOUS247_04
BOUS247_03
BOUS247_02
BOUS247_01
20 10
19 10
18 10
20 10 2022
19 10 2022
18 10 2022
7°00'E
7°15'E
7°30'E
7°45'E
8°00'E
44°00'N
43°45'N
43°30'N
43°15'N
43°00'N
7°51'E
7°54'E
7°57'E
43°24'N
43°21'N
-100
-250
-500
-1000
-2000
2022 Nov 29 08:24:29


bous247_01
Date = 18/10/2022
Heure debut [TU] = 10:07
Longitude = 007 53.838 E
Latitude = 43 22.087 N
cp(660) [m−1]
0 0.2 0.4 0.6 0.8 1
Fluorescence [relative units]
0 1 2 3 4 5
Salinity [PSU]
37.8 38 38.2 38.4 38.6 38.8
Density [Kg m−3]
25 26 27 28 29
Pressure [dbar]
0 100 200 300 400
14 16 18 20 22 24 26
T [°C−ITS90]
150 200 250 300
O2 [µmole Kg−1]



bous247_02
Date = 18/10/2022
Heure debut [TU] = 11:16
Longitude = 007 53.965 E
Latitude = 43 21.926 N
c_p(660) [m^-1]
0 0.2 0.4 0.6 0.8 1
Fluorescence [relative units]
0 1 2 3 4 5
Salinity [PSU]
37.8 38 38.2 38.4 38.6 38.8
Density [Kg m^-3]
25 26 27 28 29
Pressure [dbar]
0 100 200 300 400
14 16 18 20 22 24 26
T [°C−ITS90]
150 200 250 300
O2 [µmole Kg^-1]


bous247_03
Date = 19/10/2022
Heure debut [TU] = 13:41
Longitude = 007 53.830 E
Latitude = 43 22.098 N
c_p(660) [m^−1]
0
0.2
0.4
0.6
0.8
1
Fluorescence [relative units]
0
1
2
3
4
5
Salinity [PSU]
37.8
38
38.2
38.4
38.6
38.8
Density [Kg m^−3]
25
26
27
28
29
Pressure [dbar]
0
100
200
300
400
14
16
18
20
22
24
26
T [°C−ITS90]
150
200
250
300
O2 [µmole Kg^−1]



bous247_04
Date = 20/10/2022
Heure debut [TU] = 11:20
Longitude = 007 53.898 E
Latitude = 43 21.914 N
$c_p(660)$ [m^{-1}]
0 0.2 0.4 0.6 0.8 1
Fluorescence [relative units]
0 1 2 3 4 5
Salinity [PSU]
37.8 38 38.2 38.4 38.6 38.8
Density [Kg m^{-3}]
25 26 27 28 29
Pressure [dbar]
0 100 200 300 400
14 16 18 20 22 24 26
T [°C−ITS90]
150 200 250 300
O_2 [μmole Kg^{-1}]

Date: 02/02/2023

Instrument configuration file: D:\Melek\boussole\Data\CTD\data&process\2022\B247\raw\BOUS247_01.XMLCON

Configuration report for SBE 911plus/917plus CTD

```
Frequency channels suppressed : 0
Voltage words suppressed      : 0
Computer interface            : RS-232C
Deck unit                     : SBE11plus Firmware Version >= 5.0
Scans to average              : 1
NMEA position data added      : Yes
NMEA depth data added         : No
NMEA time added               : No
NMEA device connected to      : deck unit
Surface PAR voltage added     : No
Scan time added               : No
```

1) Frequency 0, Temperature

```
   Serial number : 5545
   Calibrated on : 12-Apr-22
   G             : 4.31344074e-003
   H             : 6.26377384e-004
   I             : 1.93525259e-005
   J             : 1.44189131e-006
   F0            : 1000.000
   Slope         : 1.00000000
   Offset        : 0.0000
```

2) Frequency 1, Conductivity

```
   Serial number : 4097
   Calibrated on : 23-Mar-22
   G             : -9.93827440e+000
   H             : 1.22512976e+000
   I             : -2.11436380e-003
   J             : 2.09010787e-004
   CTcor         : 3.2500e-006
   CPcor         : -9.57000000e-008
   Slope         : 1.00000000
   Offset        : 0.00000
```

3) Frequency 2, Pressure, Digiquartz with TC

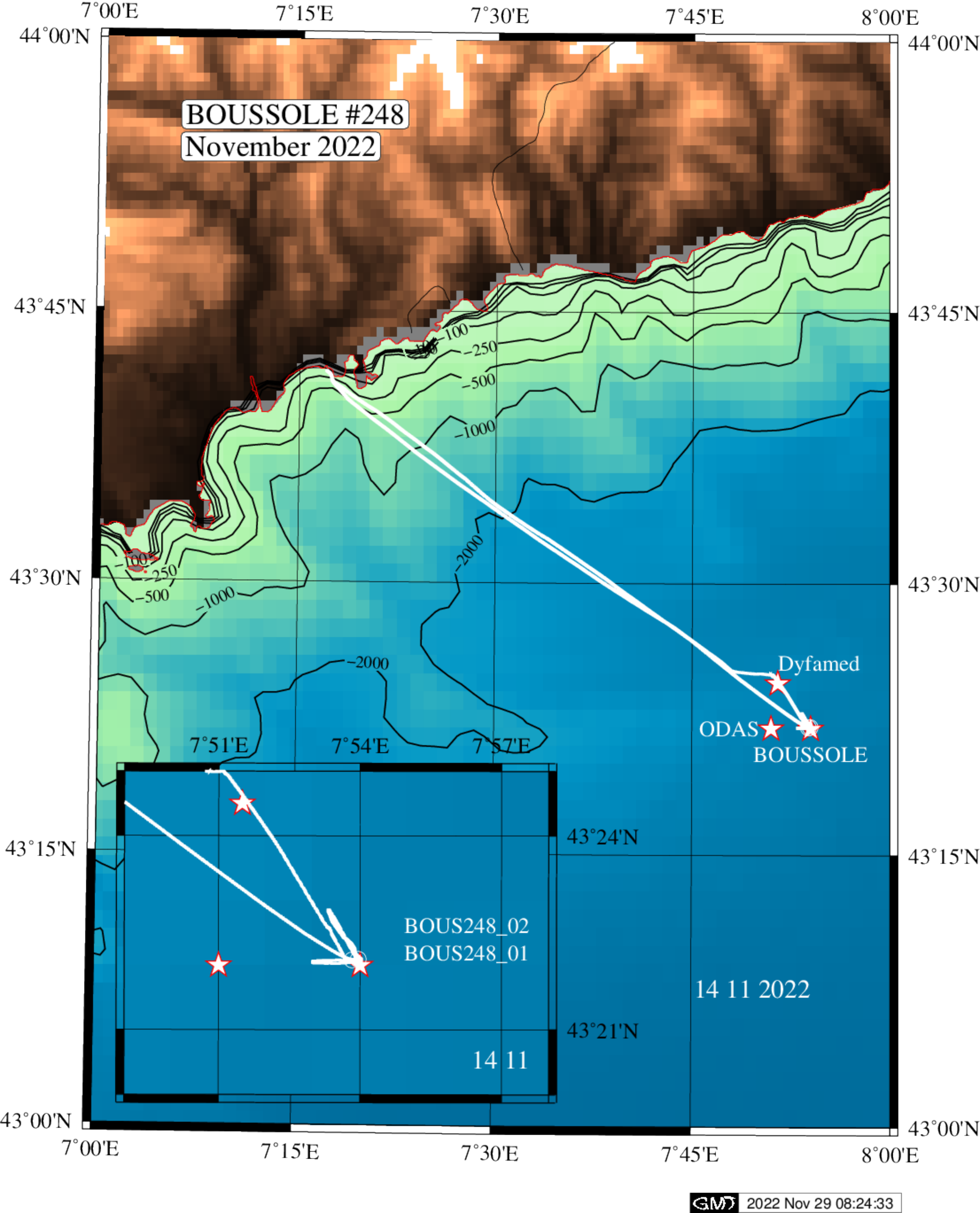
```
   Serial number : 0294
   Calibrated on : 28-Jun-22
   C1            : -4.258985e+004
   C2            : 1.749594e-001
   C3            : 1.368020e-002
   D1            : 3.936700e-002
   D2            : 0.000000e+000
   T1            : 3.021237e+001
   T2            : -2.856130e-004
   T3            : 4.591050e-006
   T4            : 1.633320e-009
   T5            : 0.000000e+000
   Slope         : 0.99998843
   Offset        : 1.00805
   AD590M        : 1.279180e-002
   AD590B        : -9.448050e+000
```

4) Frequency 3, Temperature, 2

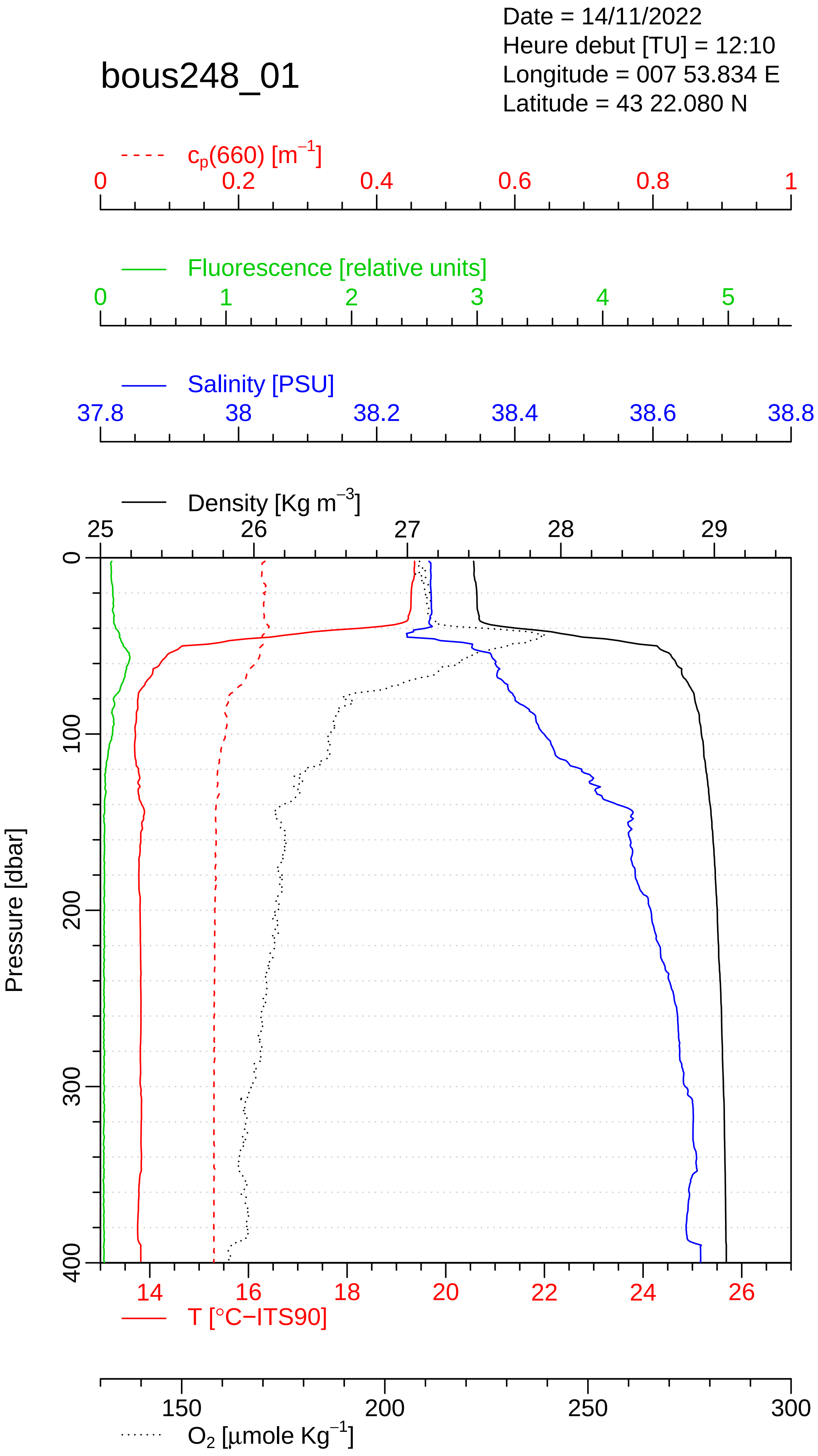
```
   Serial number : 1378
   Calibrated on : 17-Jun-21
   G             : 4.83714772e-003
   H             : 6.70524923e-004
   I             : 2.63336304e-005
   J             : 2.14843005e-006
   F0            : 1000.000
   Slope         : 1.00000000
   Offset        : 0.0000
```

```
5) Frequency 4, Conductivity, 2

   Serial number : 2929
   Calibrated on : 05-Mar-20
   G             : -1.05951733e+001
   H             : 1.41908901e+000
   I             : 7.59510042e-004
   J             : 2.04144674e-005
   CTcor         : 3.2500e-006
   CPcor         : -9.57000000e-008
   Slope         : 1.00000000
   Offset        : 0.00000

6) A/D voltage 0, Oxygen, SBE 43

   Serial number : 0587
   Calibrated on : 06-Jul-22
   Equation      : Sea-Bird
   Soc           : 4.86320e-001
   Offset        : -5.21300e-001
   A             : -4.53330e-003
   B             : 1.70820e-004
   C             : -2.49520e-006
   E             : 3.60000e-002
   Tau20         : 9.00000e-001
   D1            : 1.92634e-004
   D2            : -4.64803e-002
   H1            : -3.30000e-002
   H2            : 5.00000e+003
   H3            : 1.45000e+003

7) A/D voltage 1, Free

8) A/D voltage 2, Fluorometer, Chelsea Aqua 3

   Serial number : 088-094
   Calibrated on : 12-Nov-2015
   VB            : 0.311200
   V1            : 2.082900
   Vacetone      : 0.434600
   Scale factor  : 1.000000
   Slope         : 1.000000
   Offset        : 0.000000

9) A/D voltage 3, Transmissometer, WET Labs C-Star

   Serial number : 373-DR
   Calibrated on : 12-oct-2021
   M             : 21.7581
   B             : -1.2837
   Path length   : 0.250

10) A/D voltage 4, User Polynomial

    Serial number : 171
    Calibrated on : 19May2014
    Sensor name   : RINKOIII_DO
    A0            : 0.00000000
    A1            : 1.00000000
    A2            : 0.00000000
    A3            : 0.00000000

11) A/D voltage 5, User Polynomial, 2

    Serial number : 171
    Calibrated on : 12May2014
    Sensor name   : RINKOIII_Temp
    A0            : -5.25367500
    A1            : 16.66254000
    A2            : -2.13105300
    A3            : 0.45564880

12) A/D voltage 6, Altimeter

    Serial number : 310799
    Calibrated on : 19-Oct-16
```

```
    Scale factor  : 15.000
    Offset        : 0.000

13) A/D voltage 7, Free

Scan length                   : 37
```

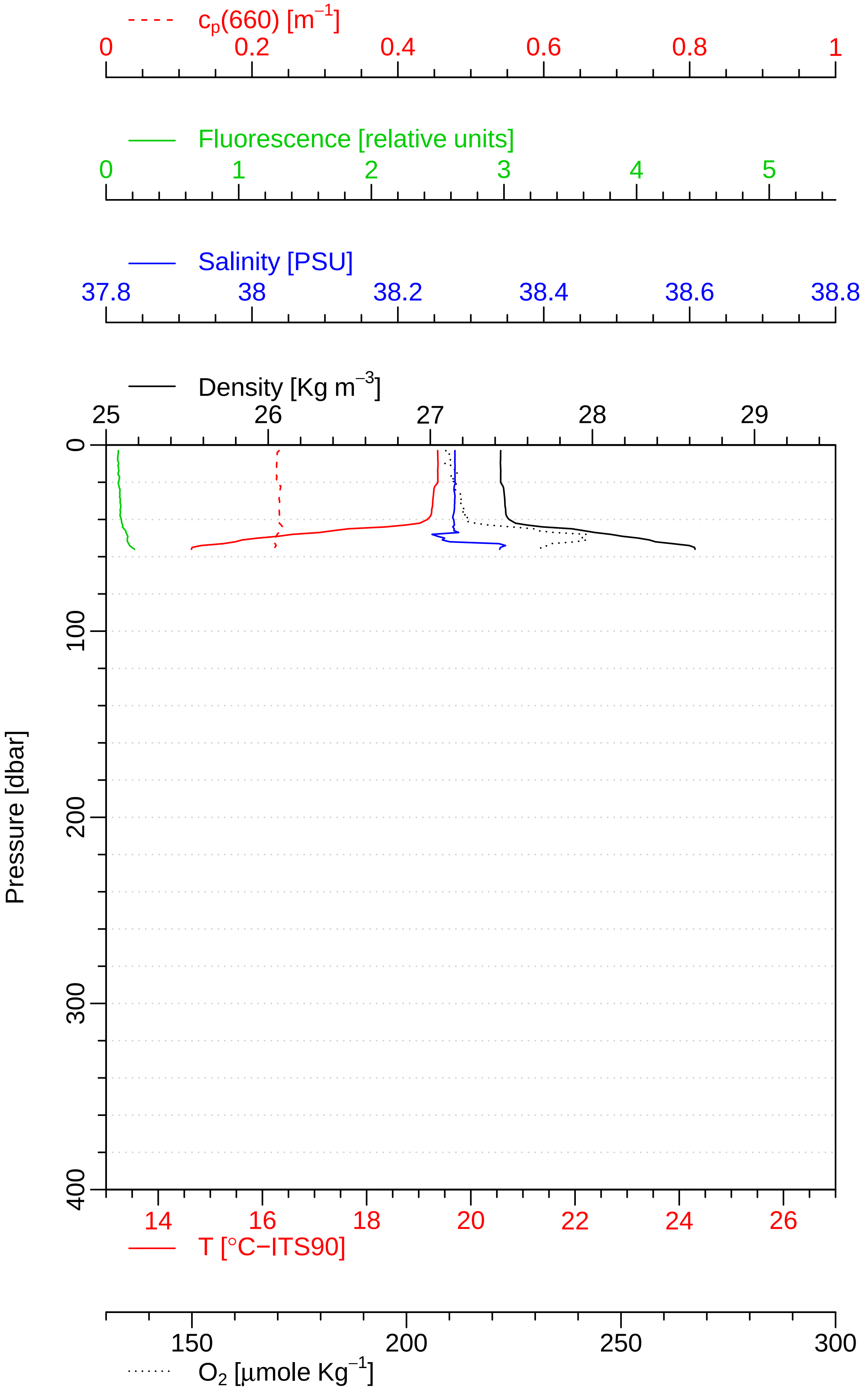


BOUSSOLE #248
November 2022
Dyfamed
ODAS
BOUSSOLE
BOUS248_02
BOUS248_01
14 11 2022
14 11
7°00'E
7°15'E
7°30'E
7°45'E
8°00'E
44°00'N
43°45'N
43°30'N
43°15'N
43°00'N
7°51'E
7°54'E
7°57'E
43°24'N
43°21'N
−100
−250
−500
−1000
−2000
GMT 2022 Nov 29 08:24:33


bous248_01
Date = 14/11/2022
Heure debut [TU] = 12:10
Longitude = 007 53.834 E
Latitude = 43 22.080 N
c_p(660) [m^-1]
0 0.2 0.4 0.6 0.8 1
Fluorescence [relative units]
0 1 2 3 4 5
Salinity [PSU]
37.8 38 38.2 38.4 38.6 38.8
Density [Kg m^-3]
25 26 27 28 29
Pressure [dbar]
0 100 200 300 400
14 16 18 20 22 24 26
T [°C−ITS90]
150 200 250 300
O2 [µmole Kg^-1]

bous248_02

Date = 14/11/2022
Heure debut [TU] = 13:54
Longitude = 007 53.963 E
Latitude = 43 22.092 N



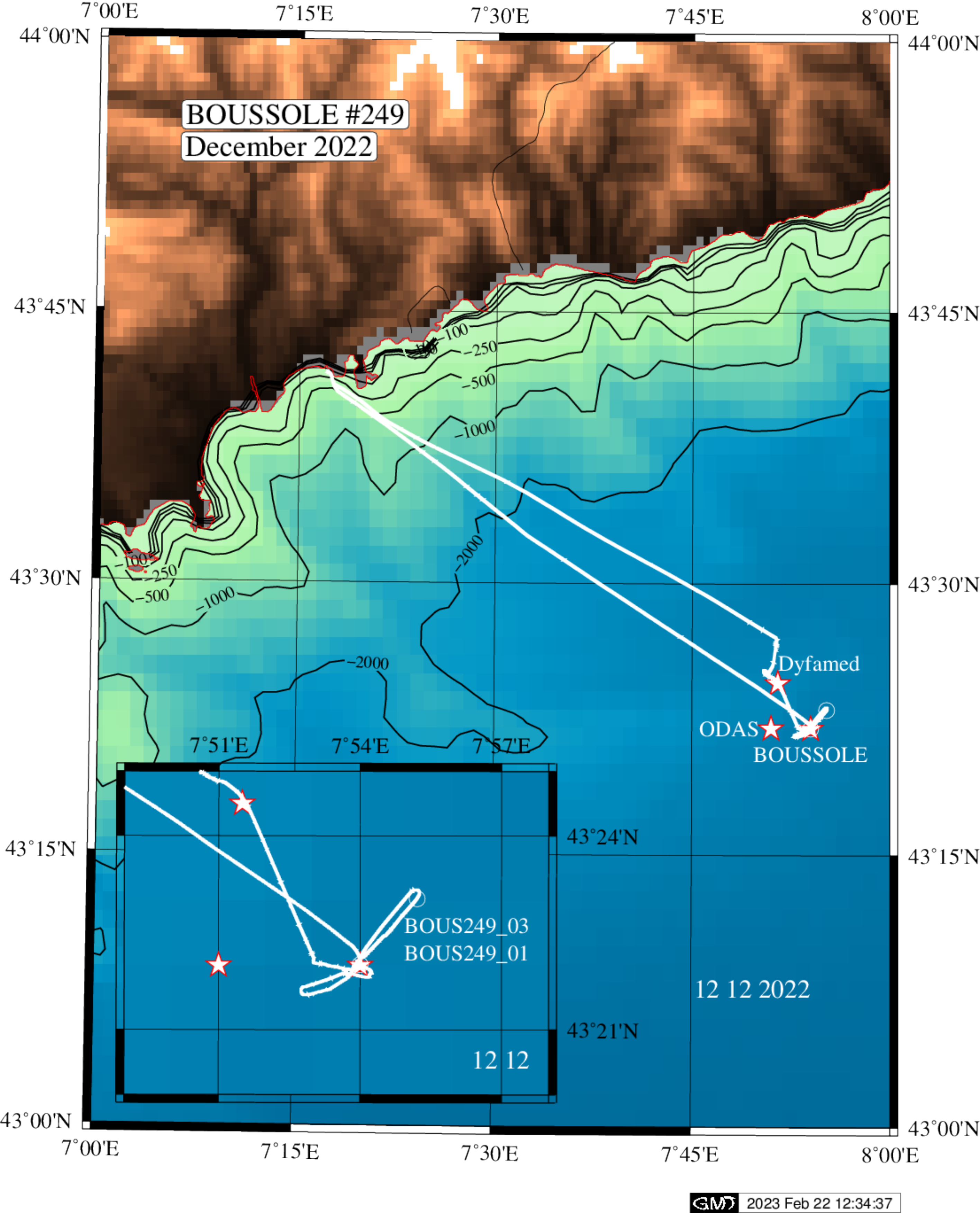
```
Date: 02/02/2023

Instrument configuration file: D:\Melek\boussole\Data\CTD\data&process\2022\B248\ra
w\BOUS248_01.XMLCON

Configuration report for SBE 911plus/917plus CTD
------------------------------------------------

Frequency channels suppressed : 0
Voltage words suppressed      : 0
Computer interface            : RS-232C
Deck unit                     : SBE11plus Firmware Version >= 5.0
Scans to average              : 1
NMEA position data added      : Yes
NMEA depth data added         : No
NMEA time added               : No
NMEA device connected to      : deck unit
Surface PAR voltage added     : No
Scan time added               : No

1) Frequency 0, Temperature

   Serial number : 5545
   Calibrated on : 12-Apr-22
   G             : 4.31344074e-003
   H             : 6.26377384e-004
   I             : 1.93525259e-005
   J             : 1.44189131e-006
   F0            : 1000.000
   Slope         : 1.00000000
   Offset        : 0.0000

2) Frequency 1, Conductivity

   Serial number : 4097
   Calibrated on : 23-Mar-22
   G             : -9.93827440e+000
   H             : 1.22512976e+000
   I             : -2.11436380e-003
   J             : 2.09010787e-004
   CTcor         : 3.2500e-006
   CPcor         : -9.57000000e-008
   Slope         : 1.00000000
   Offset        : 0.00000

3) Frequency 2, Pressure, Digiquartz with TC

   Serial number : 0294
   Calibrated on : 28-Jun-22
   C1            : -4.258985e+004
   C2            : 1.749594e-001
   C3            : 1.368020e-002
   D1            : 3.936700e-002
   D2            : 0.000000e+000
   T1            : 3.021237e+001
   T2            : -2.856130e-004
   T3            : 4.591050e-006
   T4            : 1.633320e-009
   T5            : 0.000000e+000
   Slope         : 0.99998843
   Offset        : 1.00805
   AD590M        : 1.279180e-002
   AD590B        : -9.448050e+000

4) Frequency 3, Temperature, 2

   Serial number : 1378
   Calibrated on : 17-Jun-21
   G             : 4.83714772e-003
   H             : 6.70524923e-004
   I             : 2.63336304e-005
   J             : 2.14843005e-006
   F0            : 1000.000
   Slope         : 1.00000000
   Offset        : 0.0000
```

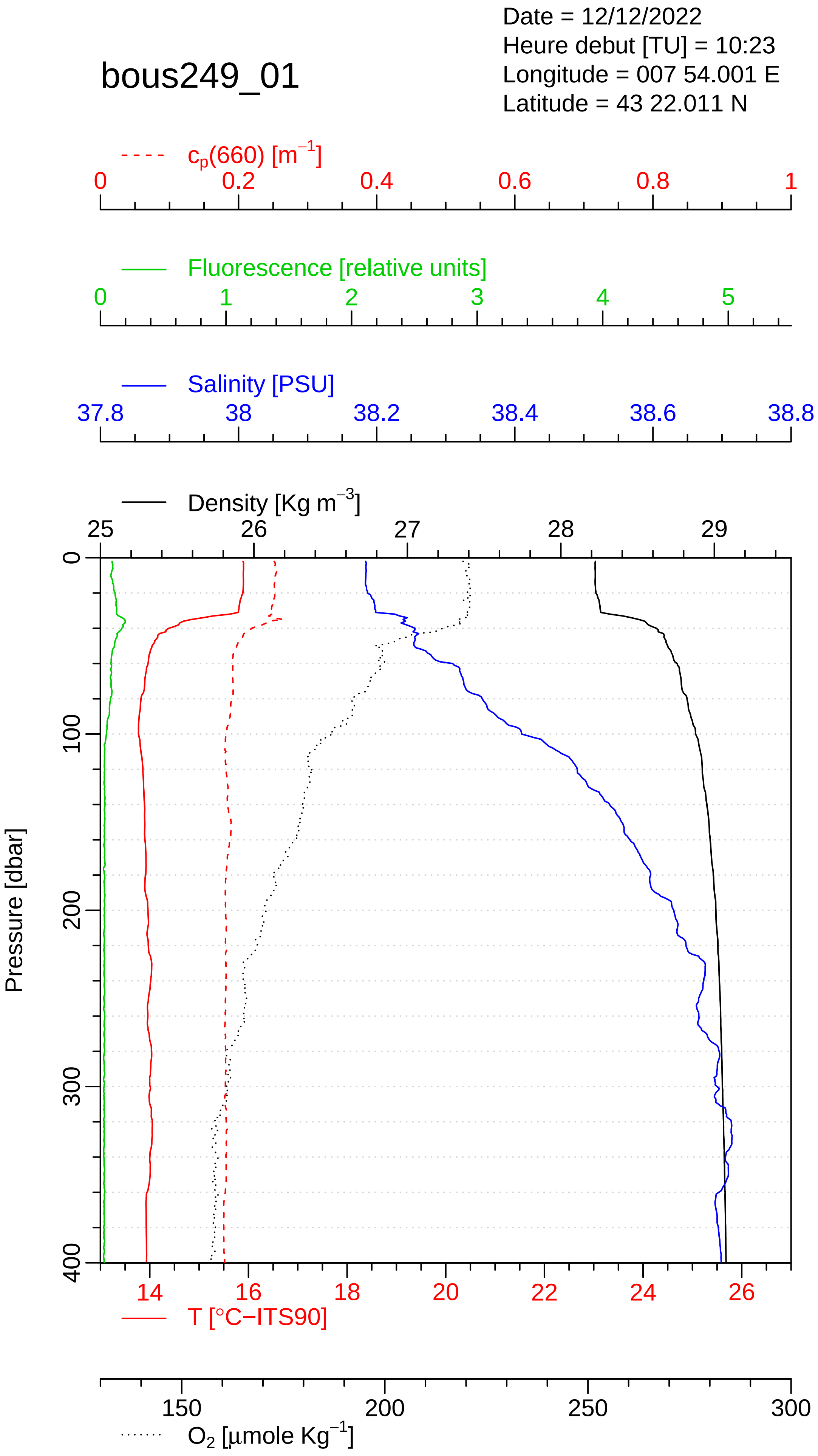
```
5) Frequency 4, Conductivity, 2

   Serial number : 2929
   Calibrated on : 05-Mar-20
   G             : -1.05951733e+001
   H             : 1.41908901e+000
   I             : 7.59510042e-004
   J             : 2.04144674e-005
   CTcor         : 3.2500e-006
   CPcor         : -9.57000000e-008
   Slope         : 1.00000000
   Offset        : 0.00000

6) A/D voltage 0, Oxygen, SBE 43

   Serial number : 0587
   Calibrated on : 06-Jul-22
   Equation      : Sea-Bird
   Soc           : 4.86320e-001
   Offset        : -5.21300e-001
   A             : -4.53330e-003
   B             : 1.70820e-004
   C             : -2.49520e-006
   E             : 3.60000e-002
   Tau20         : 9.00000e-001
   D1            : 1.92634e-004
   D2            : -4.64803e-002
   H1            : -3.30000e-002
   H2            : 5.00000e+003
   H3            : 1.45000e+003

7) A/D voltage 1, Free

8) A/D voltage 2, Fluorometer, Chelsea Aqua 3

   Serial number : 088-094
   Calibrated on : 12-Nov-2015
   VB            : 0.311200
   V1            : 2.082900
   Vacetone      : 0.434600
   Scale factor  : 1.000000
   Slope         : 1.000000
   Offset        : 0.000000

9) A/D voltage 3, Transmissometer, WET Labs C-Star

   Serial number : 373-DR
   Calibrated on : 12-oct-2021
   M             : 21.7581
   B             : -1.2837
   Path length   : 0.250

10) A/D voltage 4, User Polynomial

    Serial number : 171
    Calibrated on : 19May2014
    Sensor name   : RINKOIII_DO
    A0            : 0.00000000
    A1            : 1.00000000
    A2            : 0.00000000
    A3            : 0.00000000

11) A/D voltage 5, User Polynomial, 2

    Serial number : 171
    Calibrated on : 12May2014
    Sensor name   : RINKOIII_Temp
    A0            : -5.25367500
    A1            : 16.66254000
    A2            : -2.13105300
    A3            : 0.45564880

12) A/D voltage 6, Altimeter

    Serial number : 310799
    Calibrated on : 19-Oct-16
```

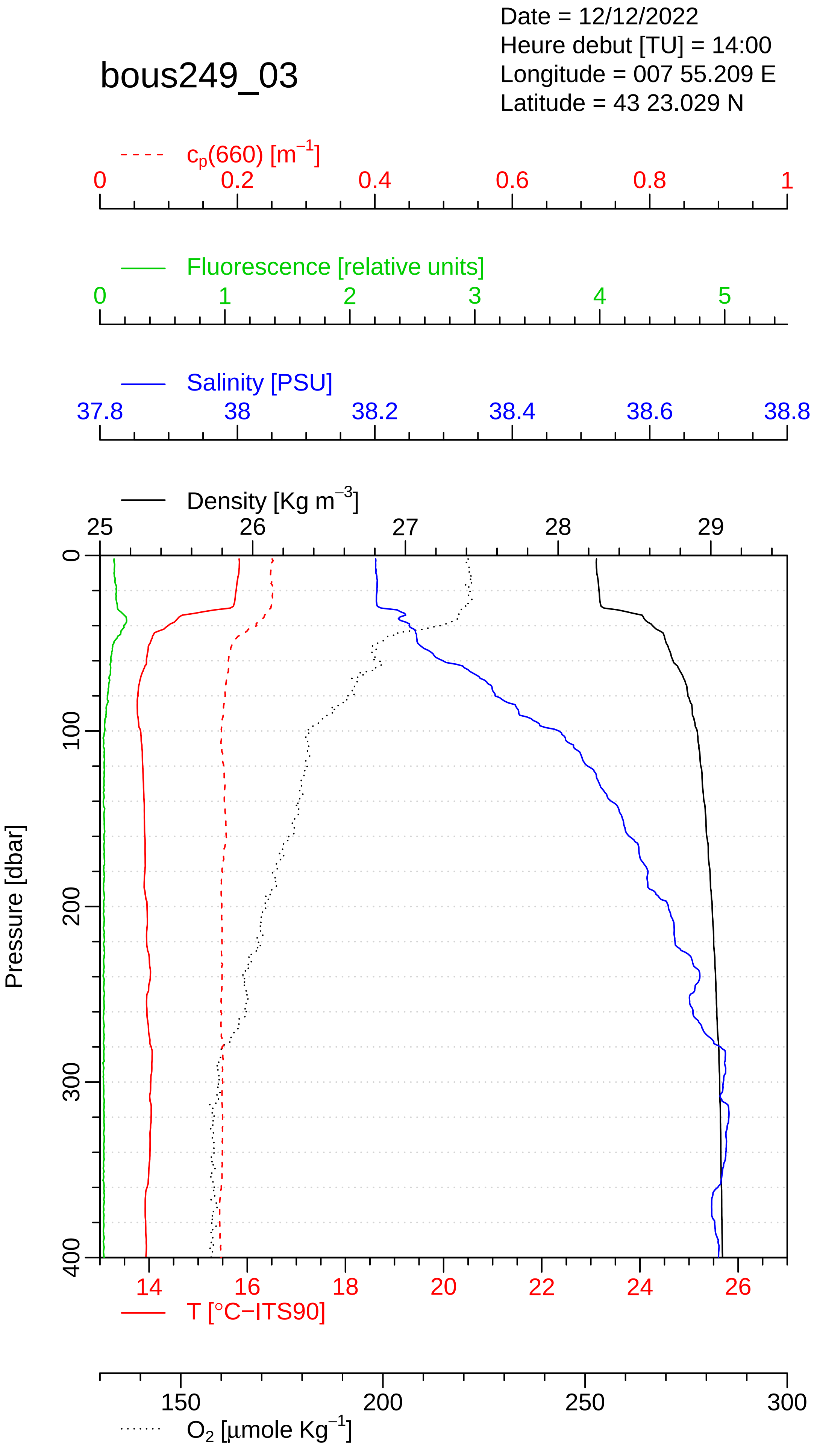
Scale factor : 15.000
Offset : 0.000

13) A/D voltage 7, Free

Scan length : 37


BOUSSOLE #249
December 2022
7°00'E
7°15'E
7°30'E
7°45'E
8°00'E
44°00'N
43°45'N
43°30'N
43°15'N
43°00'N
−100
−250
−500
−1000
−2000
Dyfamed
ODAS
BOUSSOLE
7°51'E
7°54'E
7°57'E
43°24'N
43°21'N
BOUS249_03
BOUS249_01
12 12
12 12 2022
GMT 2023 Feb 22 12:34:37


bous249_01
Date = 12/12/2022
Heure debut [TU] = 10:23
Longitude = 007 54.001 E
Latitude = 43 22.011 N
$c_p(660)$ [m^{-1}]
0 0.2 0.4 0.6 0.8 1
Fluorescence [relative units]
0 1 2 3 4 5
Salinity [PSU]
37.8 38 38.2 38.4 38.6 38.8
Density [Kg m^{-3}]
25 26 27 28 29
Pressure [dbar]
0 100 200 300 400
14 16 18 20 22 24 26
T [°C−ITS90]
150 200 250 300
O_2 [µmole Kg^{-1}]



bous249_03
Date = 12/12/2022
Heure debut [TU] = 14:00
Longitude = 007 55.209 E
Latitude = 43 23.029 N
$c_p(660)$ [m^{-1}]
0 0.2 0.4 0.6 0.8 1
Fluorescence [relative units]
0 1 2 3 4 5
Salinity [PSU]
37.8 38 38.2 38.4 38.6 38.8
Density [Kg m^{-3}]
25 26 27 28 29
Pressure [dbar]
0 100 200 300 400
14 16 18 20 22 24 26
T [°C−ITS90]
150 200 250 300
O_2 [μmole Kg^{-1}]

Date: 02/02/2023

Instrument configuration file: D:\Melek\boussole\Data\CTD\data&process\2022\B249\raw\BOUS249_01.XMLCON

Configuration report for SBE 911plus/917plus CTD

```
Frequency channels suppressed : 0
Voltage words suppressed      : 0
Computer interface            : RS-232C
Deck unit                     : SBE11plus Firmware Version >= 5.0
Scans to average              : 1
NMEA position data added      : Yes
NMEA depth data added         : No
NMEA time added               : No
NMEA device connected to      : PC
Surface PAR voltage added     : No
Scan time added               : No

1) Frequency 0, Temperature

   Serial number : 5545
   Calibrated on : 12-Apr-22
   G             : 4.31344074e-003
   H             : 6.26377384e-004
   I             : 1.93525259e-005
   J             : 1.44189131e-006
   F0            : 1000.000
   Slope         : 1.00000000
   Offset        : 0.0000

2) Frequency 1, Conductivity

   Serial number : 4097
   Calibrated on : 23-Mar-22
   G             : -9.93827440e+000
   H             : 1.22512976e+000
   I             : -2.11436380e-003
   J             : 2.09010787e-004
   CTcor         : 3.2500e-006
   CPcor         : -9.57000000e-008
   Slope         : 1.00000000
   Offset        : 0.00000

3) Frequency 2, Pressure, Digiquartz with TC

   Serial number : 0294
   Calibrated on : 28-Jun-22
   C1            : -4.258985e+004
   C2            : 1.749594e-001
   C3            : 1.368020e-002
   D1            : 3.936700e-002
   D2            : 0.000000e+000
   T1            : 3.021237e+001
   T2            : -2.856130e-004
   T3            : 4.591050e-006
   T4            : 1.633320e-009
   T5            : 0.000000e+000
   Slope         : 0.99998843
   Offset        : 1.00805
   AD590M        : 1.279180e-002
   AD590B        : -9.448050e+000

4) Frequency 3, Temperature, 2

   Serial number : 1378
   Calibrated on : 17-Jun-21
   G             : 4.83714772e-003
   H             : 6.70524923e-004
   I             : 2.63336304e-005
   J             : 2.14843005e-006
   F0            : 1000.000
   Slope         : 1.00000000
   Offset        : 0.0000
```

```
5) Frequency 4, Conductivity, 2

   Serial number : 1313
   Calibrated on : 18-May-21
   G             : -9.85039520e+000
   H             : 1.33613831e+000
   I             : -4.64958478e-004
   J             : 1.12844381e-004
   CTcor         : 3.2500e-006
   CPcor         : -9.57000000e-008
   Slope         : 1.00000000
   Offset        : 0.00000

6) A/D voltage 0, Oxygen, SBE 43

   Serial number : 0587
   Calibrated on : 06-Jul-22
   Equation      : Sea-Bird
   Soc           : 4.86320e-001
   Offset        : -5.21300e-001
   A             : -4.53330e-003
   B             : 1.70820e-004
   C             : -2.49520e-006
   E             : 3.60000e-002
   Tau20         : 9.00000e-001
   D1            : 1.92634e-004
   D2            : -4.64803e-002
   H1            : -3.30000e-002
   H2            : 5.00000e+003
   H3            : 1.45000e+003

7) A/D voltage 1, Free

8) A/D voltage 2, Fluorometer, Chelsea Aqua 3

   Serial number : 088-094
   Calibrated on : 12-Nov-2015
   VB            : 0.311200
   V1            : 2.082900
   Vacetone      : 0.434600
   Scale factor  : 1.000000
   Slope         : 1.000000
   Offset        : 0.000000

9) A/D voltage 3, Transmissometer, WET Labs C-Star

   Serial number : 373-DR
   Calibrated on : 12-oct-2021
   M             : 21.7581
   B             : -1.2837
   Path length   : 0.250

10) A/D voltage 4, User Polynomial

    Serial number : 171
    Calibrated on : 19May2014
    Sensor name   : RINKOIII_DO
    A0            : 0.00000000
    A1            : 1.00000000
    A2            : 0.00000000
    A3            : 0.00000000

11) A/D voltage 5, User Polynomial, 2

    Serial number : 171
    Calibrated on : 12May2014
    Sensor name   : RINKOIII_Temp
    A0            : -5.25367500
    A1            : 16.66254000
    A2            : -2.13105300
    A3            : 0.45564880

12) A/D voltage 6, Altimeter

    Serial number : 310799
    Calibrated on : 19-Oct-16
```

Scale factor : 15.000
Offset : 0.000

13) A/D voltage 7, Free

Scan length : 37

Problems identified during the cruises

BOUSSOLE #238
The IOP package was not available for this cruise. The instruments were still under calibration at Hobi Instruments Service.

CTD 02: there was a leak on the Niskin bottle#12, so the volume of seawater for HPLC sampling was reduced.

BOUSSOLE #239
The IOP package was not available for this cruise. The instruments were still under calibration at Hobi Instruments Service.

CTD 01: The upcast file was used for the data processing instead of the downcast file because of an acquisition problem during the first meters of the downcast (0 -7 m).

The metagenomic sampling for EFFICACY ANR project was not performed because of the cancellation of BOUSSOLE cruise.

BOUSSOLE #240
No problems.

BOUSSOLE #241
There were some spikes in the temperature, salinity and oxygen data acquired by the CTD during the upcasts.

At the end of the second day, we noticed that there was a leak in the inlet tube of the temperature sensor of the main CTD. So, the head of the temperature sensor was replaced.

BOUSSOLE #242
BOUSSOLE operations could not be performed during this cruise due to a failure on the R/V *Téthys II.* Nevertheless, the CTD data acquired at the DYFAMED site will be used for the BOUSSOLE data base. The water sampling for HPLC, ap, TSM, metagenomics, nutrients and cytometry could not be performed because the failure of the ship was not anticipated.

CTD 01: there were some spikes in the temperature, salinity and oxygen data acquired during the downcast. So, the upcast data were processed and used for the data base.

BOUSSOLE#243
CTD 02: the cast was performed with a 0.2µm filter put on the a-Sphere absorption meter for the dissolved matter absorption measurements. Nevertheless, this cast was stopped only at 6 depths during the ascent of the CTD (400, 150, 80, 60, 50 and 40 m) because of the arrival of the bad weather.

BOUSSOLE#244
The cable of the IOP package battery was not disconnected during the night by mistake, so the batteries discharged and there were no IOP data acquisition the last day due to the lack of battery. The backscattering dark measurements of the IOP package could not be performed.

CTD 02 : there was no blank for the TSM filtration.

BOUSSOLE#245
Problems appeared during the installation of the CTD Rosette and the first cast (CTD 01): firstly, when the deck unit was connected to the sea cable and switched on, the fuse was blown. Then the fuse was replaced and the connection was successful, so the CTD was deployed but the communication was lost at 300 m depth. The CTD was bring onboard and several tests were performed: fuses were blown at several times. Tests were performed on the deck of the ship with the cable test: the cable test and the extension cable (connected between the CTD and the cable test) were damaged. The extension cable was suspected to be faulty. So, the electrocarrier cable was extend by the crew to avoid the use of the extension cable. Finally, the electrocarrier cable was connected directly to the CTD and it functioned correctly.

CTD 04: there was a problem during the metagenomics filtration for the sample at 5 m depth. The filtration was performed without the filter of 3 µm diameter by mistake. So, the third day, an additional CTD (CTD 05) was performed with water sampling at 5 m in order to sample correctly this depth.

The last day, it was noticed that the nitrogen in the nitrogen container was totally evaporated. The HPLC, cytometry and metagenomics samples were put in the freezer of the ship at -20°C , then at -40°C. When arrived at the lab, the samples of the last day were put in the nitrogen before stocking them in the freezer at -80°C. However, the samples stayed always cold.

BOUSSOLE #246
No problems.

BOUSSOLE #247
No problems.

BOUSSOLE #248
Because of the lack of time due essentially to bad weather, it was not possible to perform the CTD cast including a 0.2 µm filter installed on the inlet tube of the a-Sphere for the dissolved matter absorption measurements.

BOUSSOLE #249
CTD 01: it was planned to sample at 5 m depth for TSM, TA/TC, DO and pH analyses. Unfortunately, the Niskin bottle could not be closed due to a software configuration problem. However, another CTD cast was deployed successively in order to sample for these parameters.