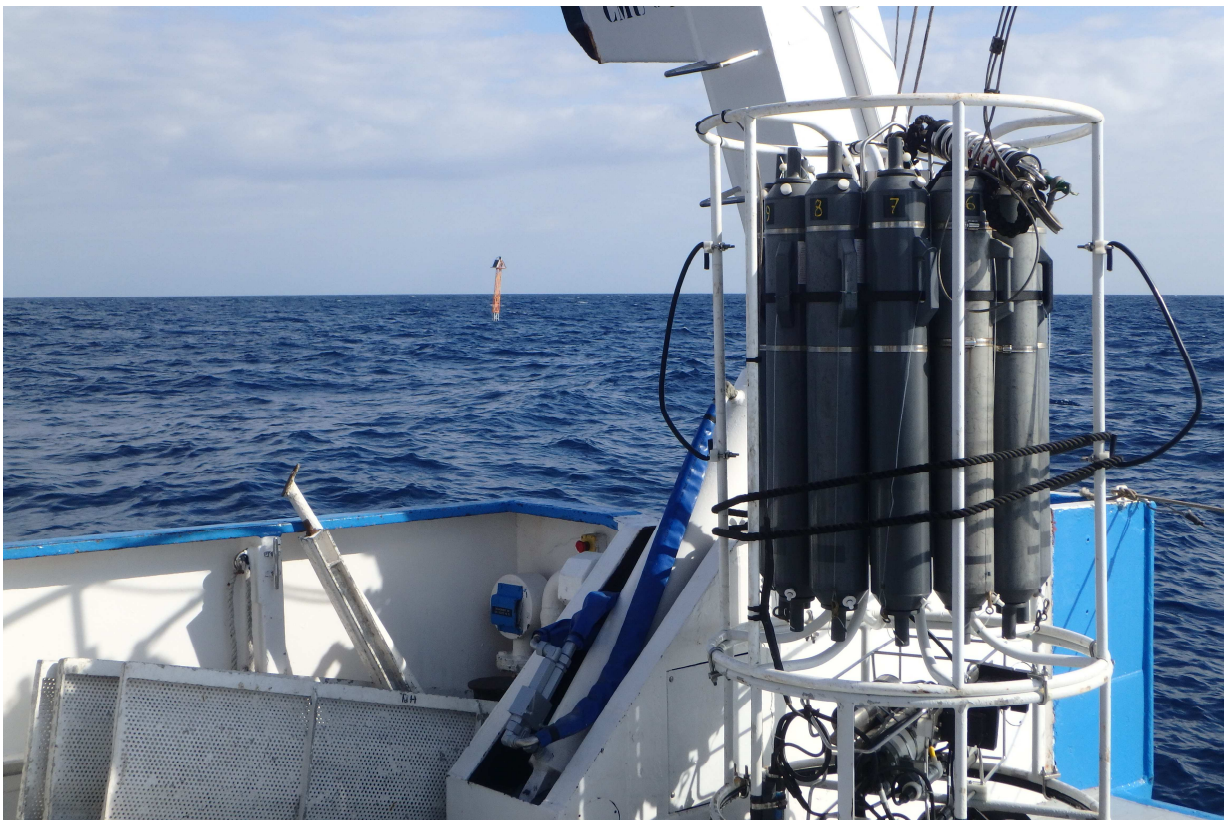
BOUSSOLE PROJECT

CTD Data catalogue for 2018

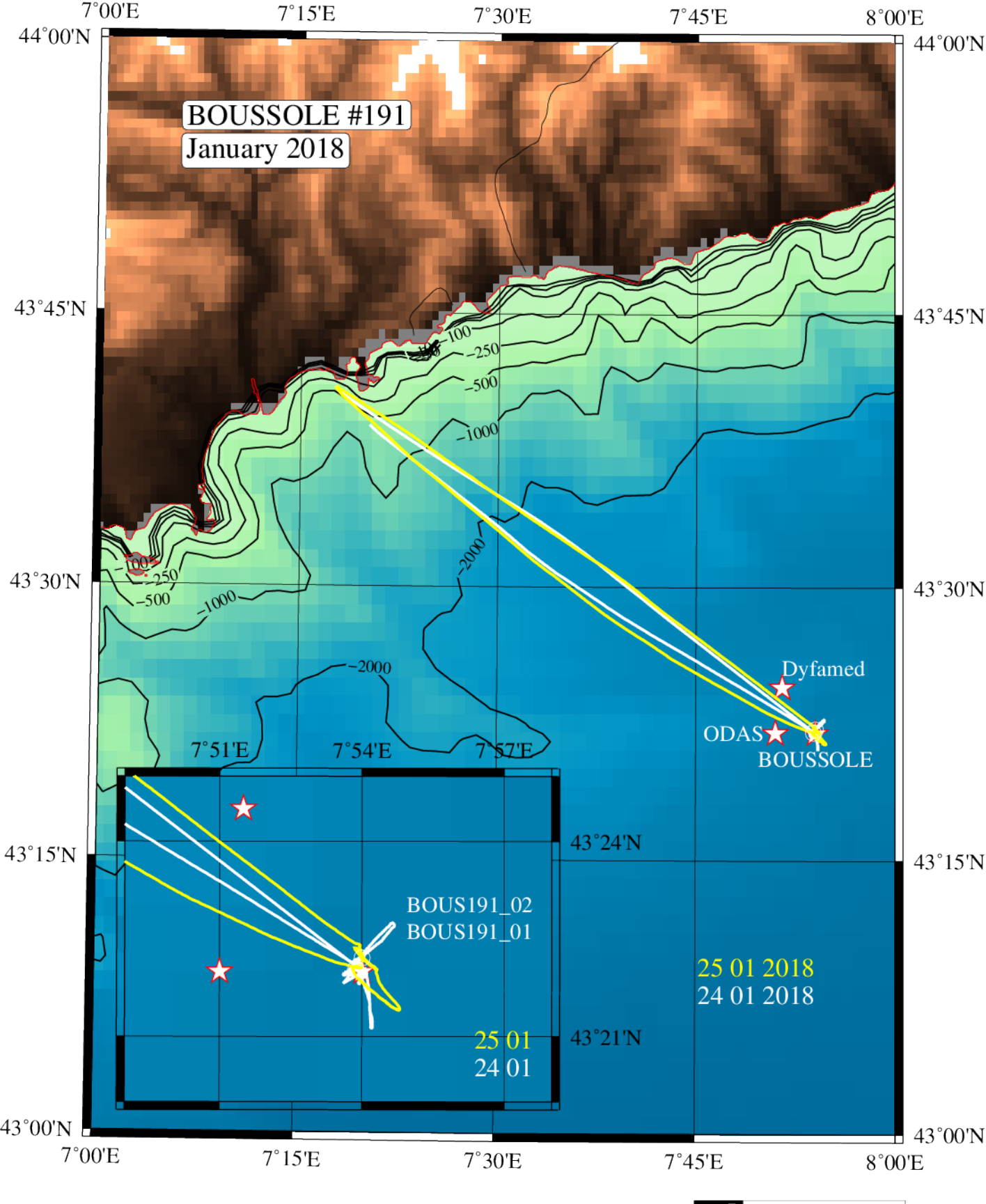
Cruise 191 to cruise 203

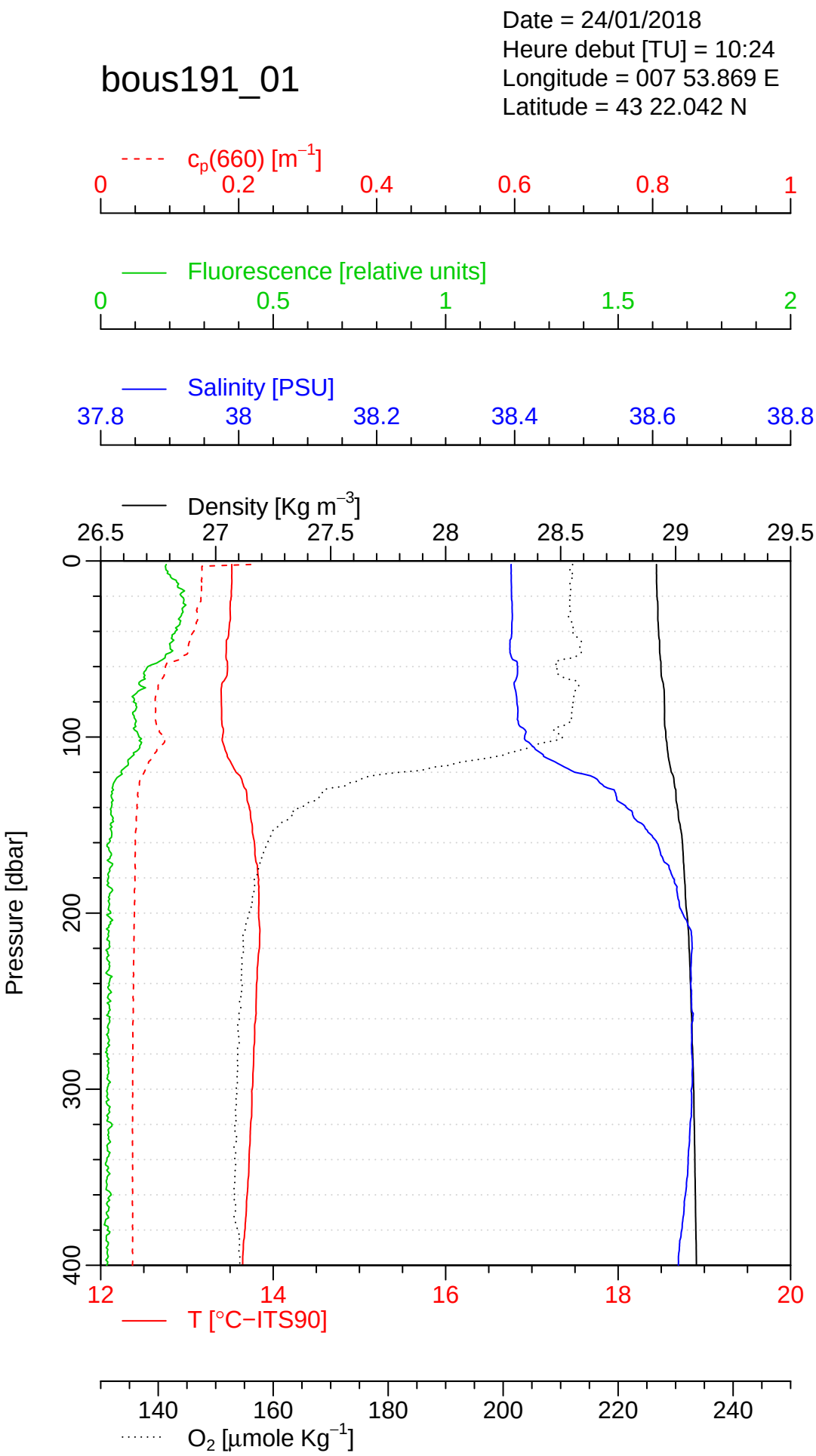
Laboratoire d'Océanographique de Villefranche (LOV), 06238 Villefranche sur mer cedex, France



CTD Rosette on the deck of the *R/V Téthys II* before its deployment, and the BOUSSOLE buoy in the background.

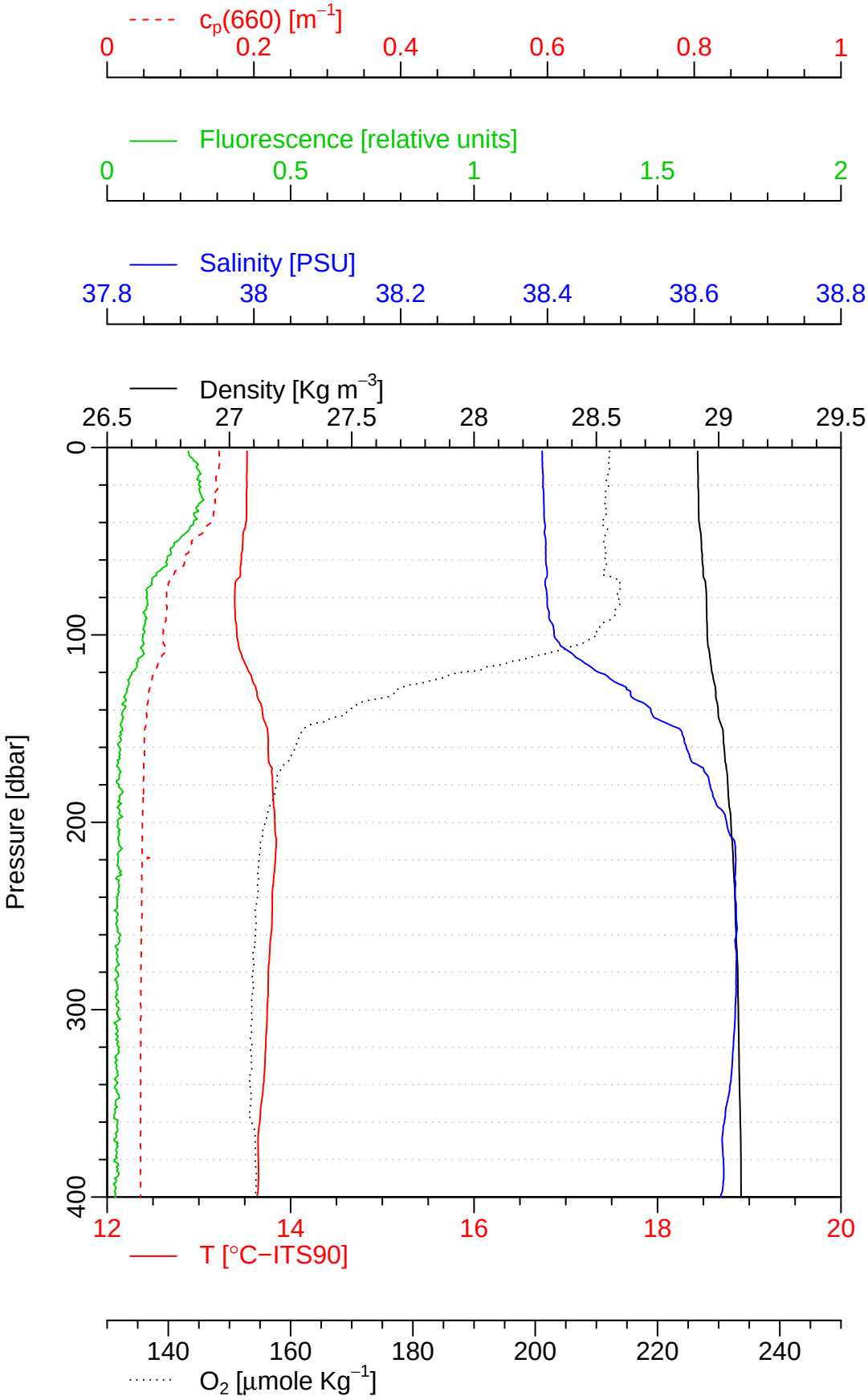
ESA/ESRIN contract N° 4000119096/17/I-BG


BOUSSOLE #191
January 2018
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
BOUS191_02
BOUS191_01
25 01 2018
24 01 2018
25 01
24 01
GMT 2018 Mar 18 08:59:27


bous191_01
Date = 24/01/2018
Heure debut [TU] = 10:24
Longitude = 007 53.869 E
Latitude = 43 22.042 N
c_p(660) [m^-1]
0 0.2 0.4 0.6 0.8 1
Fluorescence [relative units]
0 0.5 1 1.5 2
Salinity [PSU]
37.8 38 38.2 38.4 38.6 38.8
Density [Kg m^-3]
26.5 27 27.5 28 28.5 29 29.5
Pressure [dbar]
0 100 200 300 400
12 14 16 18 20
T [°C−ITS90]
140 160 180 200 220 240
O2 [µmole Kg^-1]

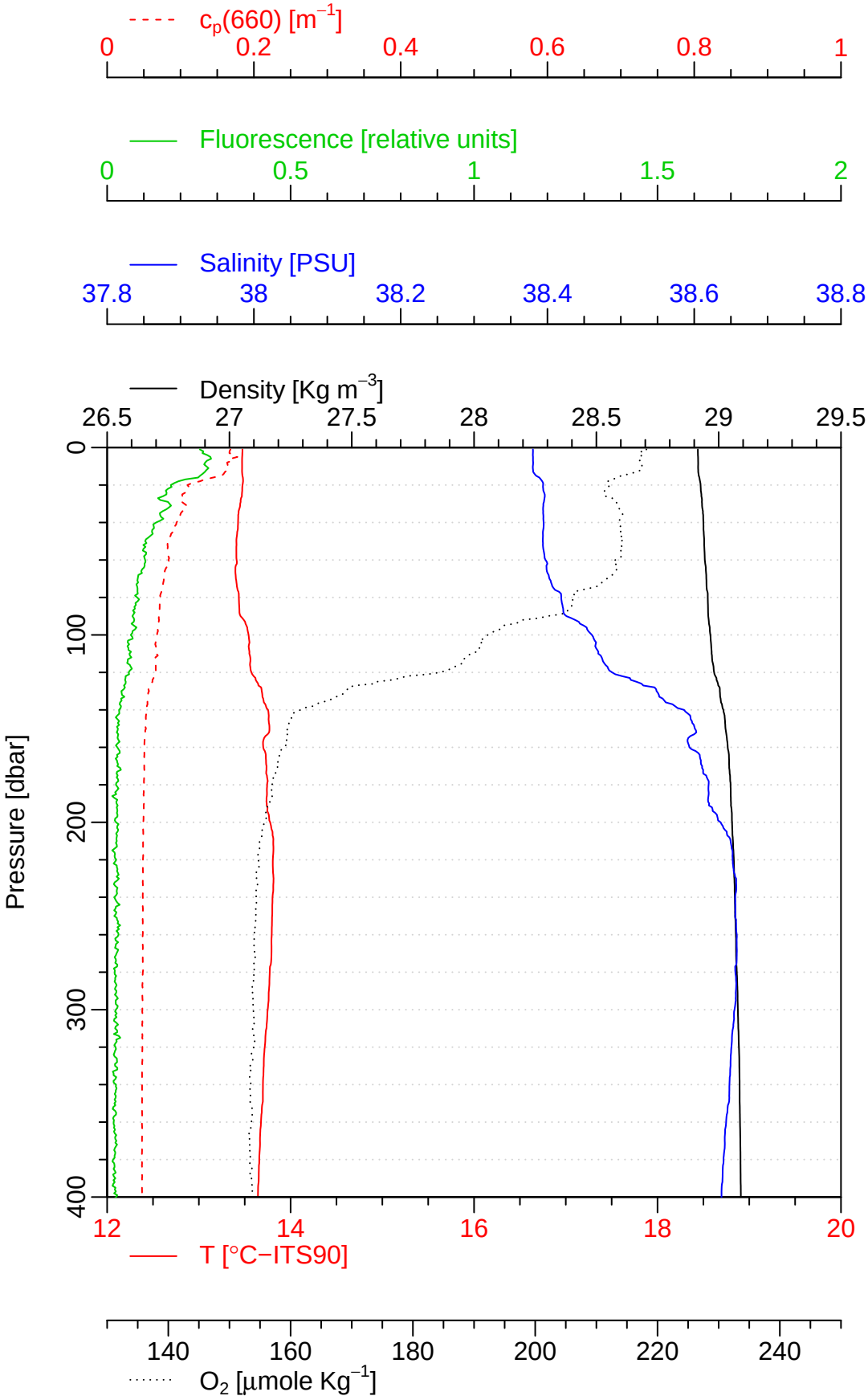
bous191_02

Date = 24/01/2018
Heure debut [TU] = 11:39
Longitude = 007 54.007 E
Latitude = 43 22.206 N



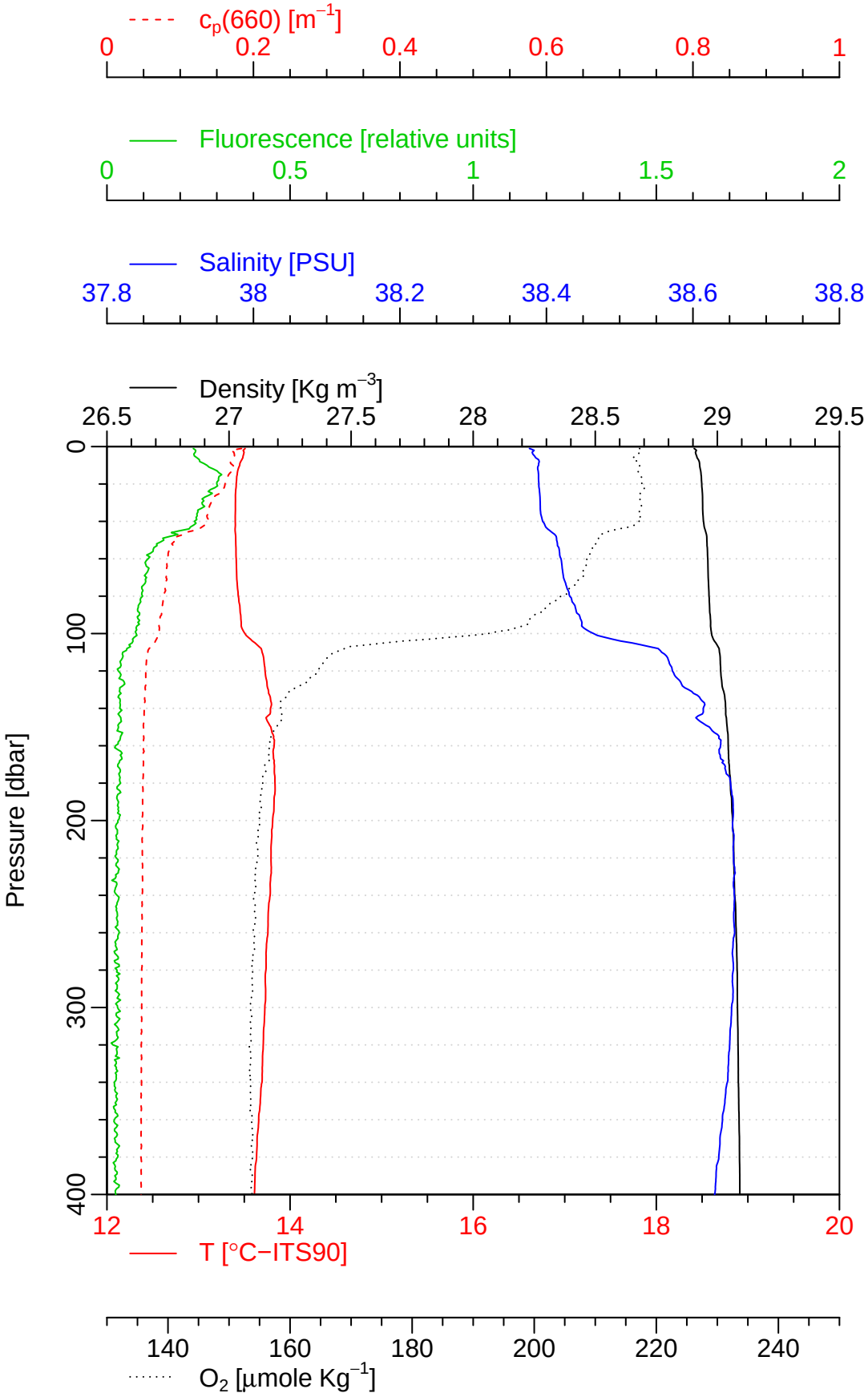
bous191_03

Date = 25/01/2018
Heure debut [TU] = 10:54
Longitude = 007 53.329 E
Latitude = 43 22.018 N



bous191_04

Date = 25/01/2018
Heure debut [TU] = 12:46
Longitude = 007 54.036 E
Latitude = 43 22.194 N



Date: 12/17/2018

Instrument configuration file: C:\Users\melek\AppData\Local\Temp\fz3temp-2\BOUS191_01.XMLCON

Configuration report for SBE 911plus/917plus CTD

```
Frequency channels suppressed : 2
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-Nov-16
   G             : 4.87027953e-003
   H             : 6.78490431e-004
   I             : 2.68163363e-005
   J             : 2.12217961e-006
   F0            : 1000.000
   Slope         : 1.00000000
   Offset        : 0.0000
```

2) Frequency 1, Conductivity

```
   Serial number : 2929
   Calibrated on : 15-Nov-16
   G             : -1.06028633e+001
   H             : 1.42156293e+000
   I             : 1.07532686e-004
   J             : 6.55385364e-005
   CTcor         : 3.2500e-006
   CPcor         : -9.57000000e-008
   Slope         : 1.00000000
   Offset        : 0.00000
```

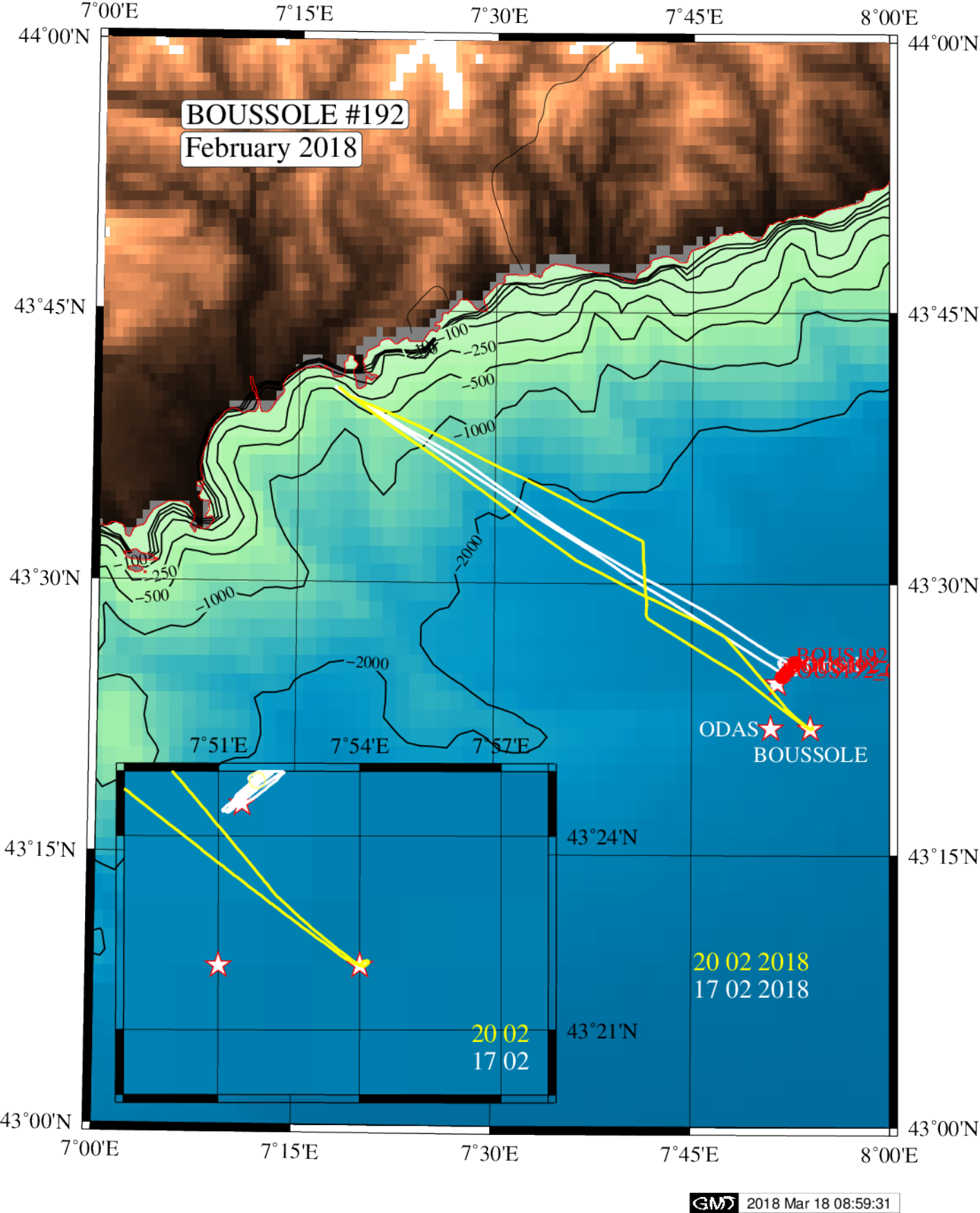
3) Frequency 2, Pressure, Digiquartz with TC

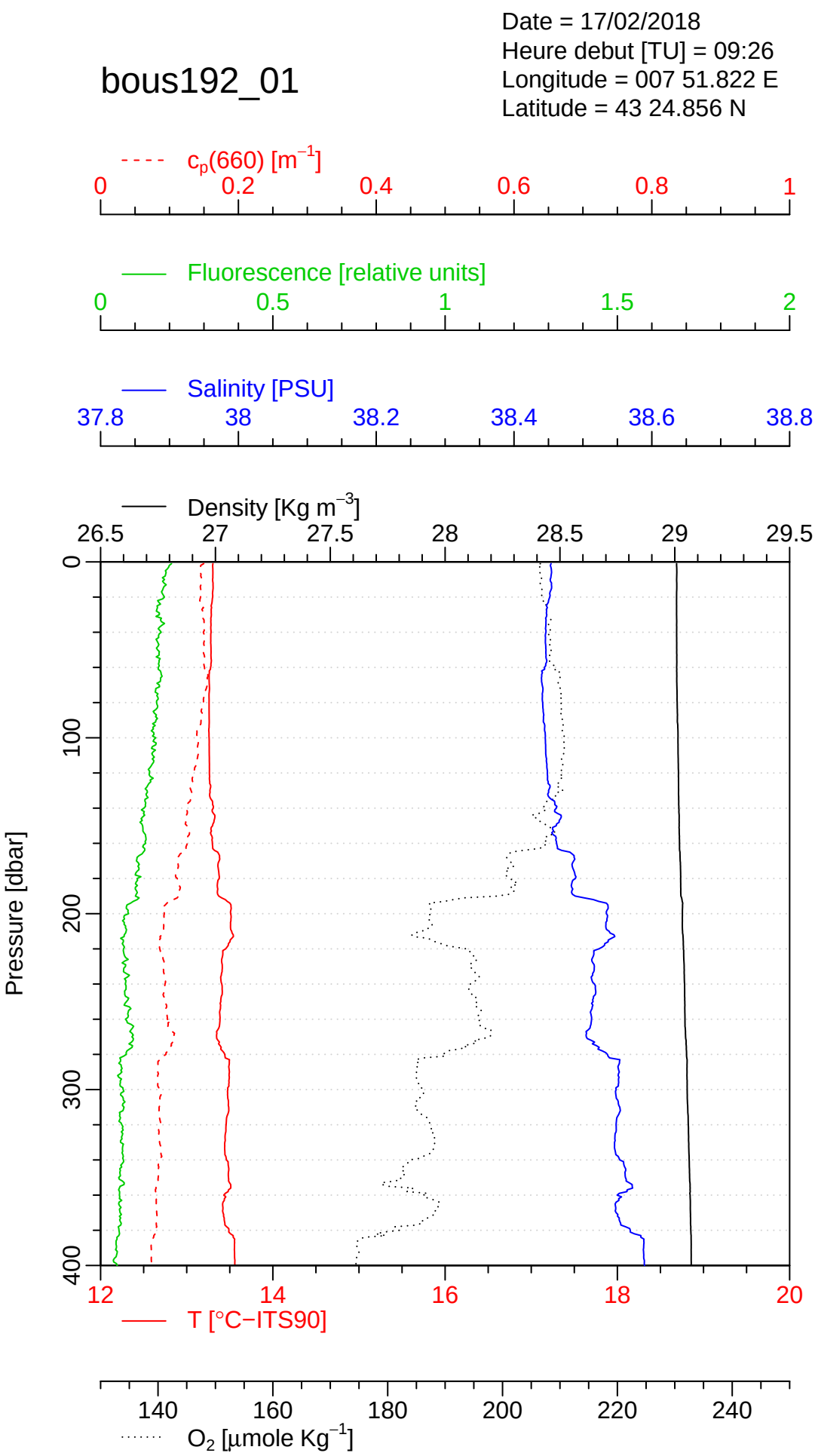
```
   Serial number : 0329
   Calibrated on : 04-Dec-09 (corr May-2017)
   C1            : -4.499631e+004
   C2            : 4.598757e-001
   C3            : 1.505020e-002
   D1            : 3.936600e-002
   D2            : 0.000000e+000
   T1            : 3.004570e+001
   T2            : -1.880753e-004
   T3            : 4.727060e-006
   T4            : -1.923520e-009
   T5            : 0.000000e+000
   Slope         : 0.99996509
   Offset        : -1.27039
   AD590M        : 1.280100e-002
   AD590B        : -9.240166e+000
```

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

```
   Serial number : 0378
   Calibrated on : 02-Dec-16
   Equation      : Sea-Bird
   Soc           : 3.44150e-001
   Offset        : -6.66600e-001
   A             : -2.23690e-003
   B             : 7.37750e-005
   C             : -1.02150e-006
   E             : 3.60000e-002
   Tau20         : 1.20000e+000
```

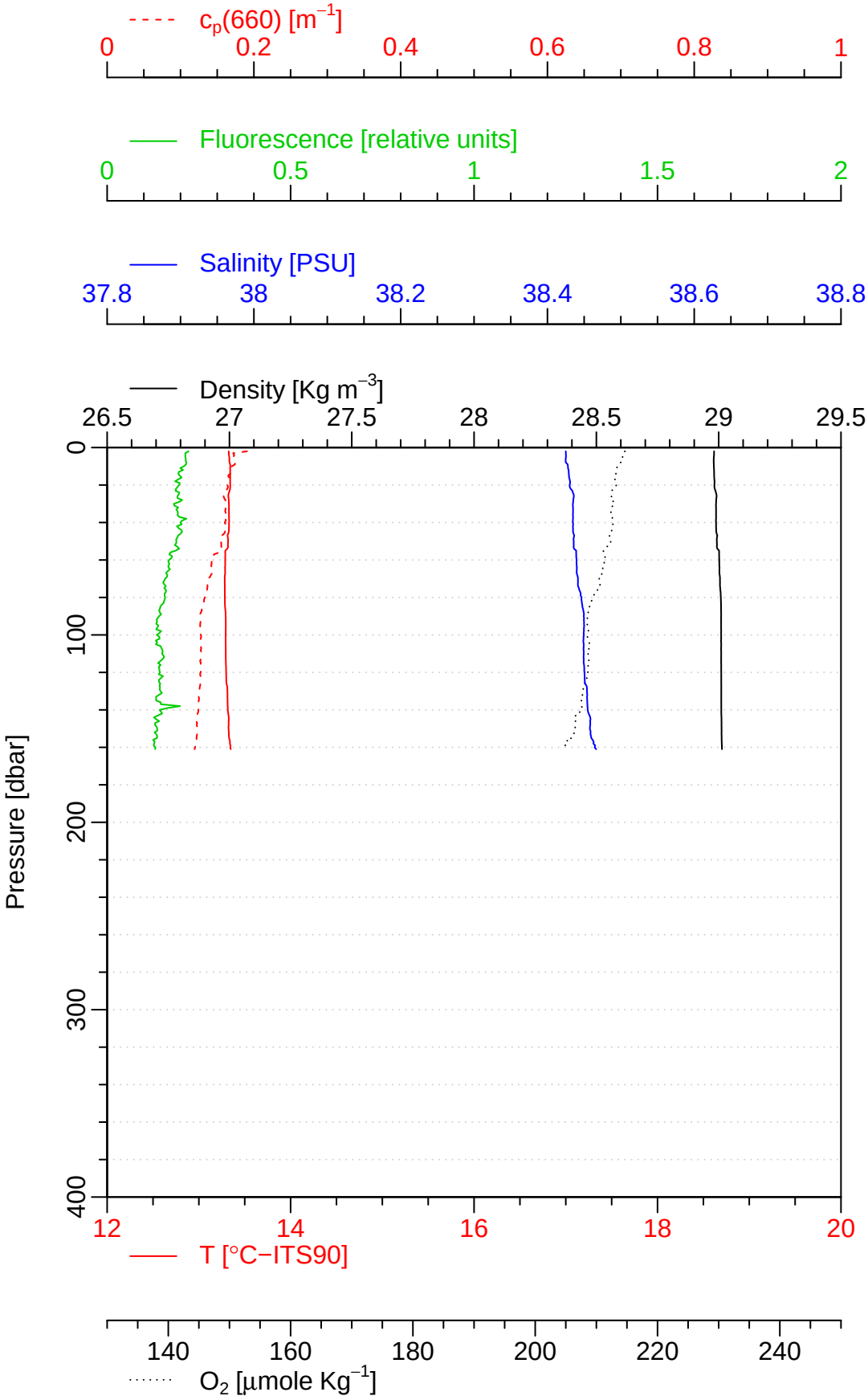
```
   D1            : 1.92634e-004
   D2            : -4.64803e-002
   H1            : -3.30000e-002
   H2            : 5.00000e+003
   H3            : 1.45000e+003

5) A/D voltage 1, Free

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

   Serial number : 088193
   Calibrated on : 27-Oct-97_cor201711
   VB            : 0.165000
   V1            : 1.933000
   Vacetone      : 0.250000
   Scale factor  : 1.000000
   Slope         : 1.000000
   Offset        : -0.210000

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

   Serial number : CST-887DR
   Calibrated on : 07112017
   M             : 21.3038
   B             : -0.1065
   Path length   : 0.250

8) A/D voltage 4, User Polynomial

   Serial number : 171
   Calibrated on : 19-May-14
   Sensor name   : RINKOIII_DO
   A0            : 0.00000000
   A1            : 1.00000000
   A2            : 0.00000000
   A3            : 0.00000000

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

   Serial number : 171
   Calibrated on : 12-May-14
   Sensor name   : RINKOIII_Temp
   A0            : -5.25367500
   A1            : 16.66254000
   A2            : -2.13105300
   A3            : 0.45564880

10) A/D voltage 6, Altimeter

    Serial number : 310799
    Calibrated on : 19-Oct-16
    Scale factor  : 15.000
    Offset        : 0.000

11) A/D voltage 7, Free

Scan length                   : 31
```

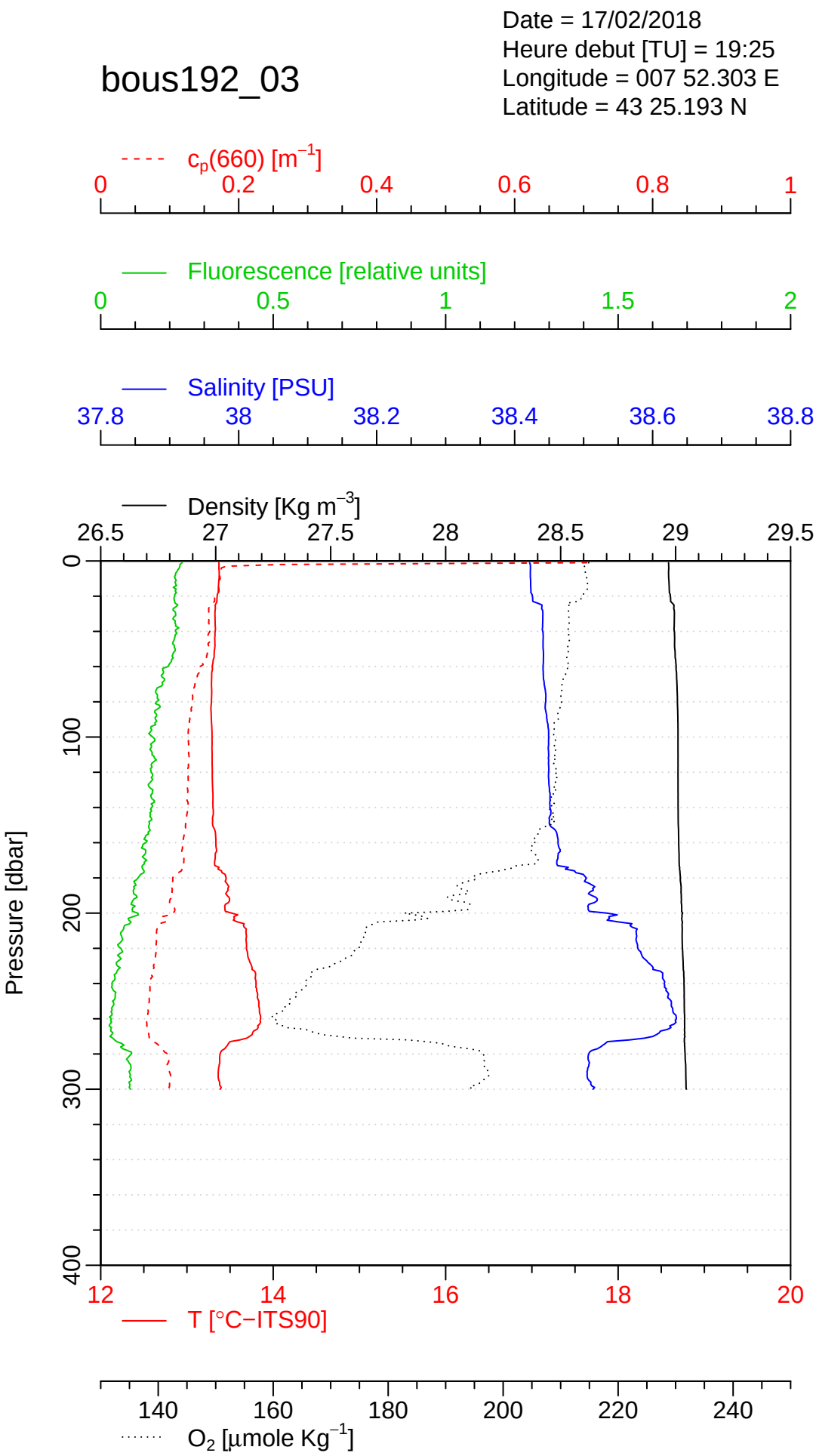

BOUSSOLE #192
February 2018
7°00'E
7°15'E
7°30'E
7°45'E
8°00'E
44°00'N
43°45'N
43°30'N
43°15'N
43°00'N
-100
-250
-500
-1000
-2000
ODAS
BOUSSOLE
7°51'E
7°54'E
7°57'E
43°24'N
43°21'N
20 02 2018
17 02 2018
20 02
17 02
GMT 2018 Mar 18 08:59:31


bous192_01
Date = 17/02/2018
Heure debut [TU] = 09:26
Longitude = 007 51.822 E
Latitude = 43 24.856 N
c_p(660) [m^-1]
0
0.2
0.4
0.6
0.8
1
Fluorescence [relative units]
0
0.5
1
1.5
2
Salinity [PSU]
37.8
38
38.2
38.4
38.6
38.8
Density [Kg m^-3]
26.5
27
27.5
28
28.5
29
29.5
Pressure [dbar]
0
100
200
300
400
12
14
16
18
20
T [°C−ITS90]
140
160
180
200
220
240
O2 [µmole Kg^-1]

bous192_02

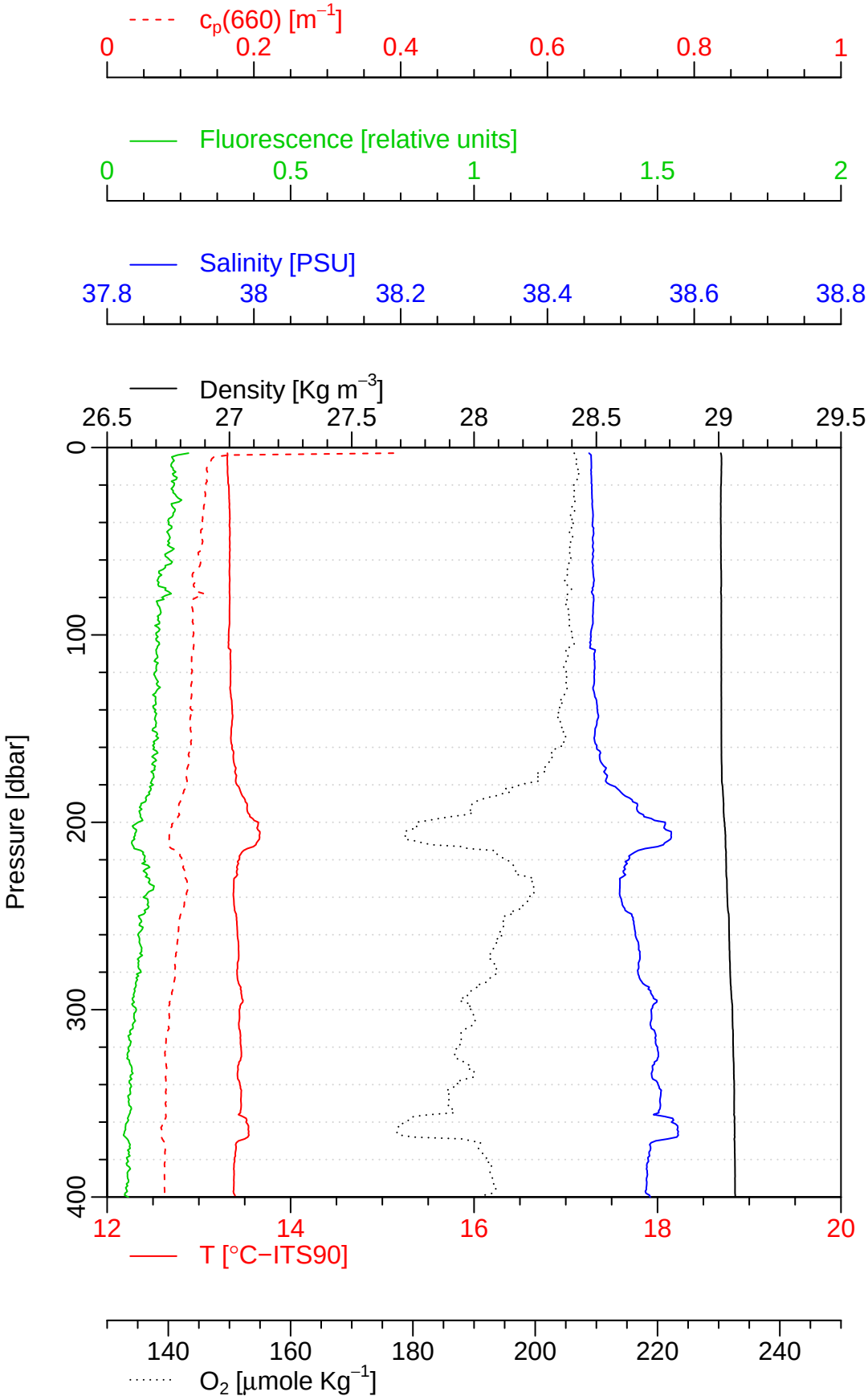
Date = 17/02/2018
Heure debut [TU] = 17:22
Longitude = 007 52.096 E
Latitude = 43 25.075 N




bous192_03
Date = 17/02/2018
Heure debut [TU] = 19:25
Longitude = 007 52.303 E
Latitude = 43 25.193 N
c_p(660) [m^-1]
0 0.2 0.4 0.6 0.8 1
Fluorescence [relative units]
0 0.5 1 1.5 2
Salinity [PSU]
37.8 38 38.2 38.4 38.6 38.8
Density [Kg m^-3]
26.5 27 27.5 28 28.5 29 29.5
Pressure [dbar]
0 100 200 300 400
12 14 16 18 20
T [°C−ITS90]
140 160 180 200 220 240
O2 [µmole Kg^-1]

bous192_04

Date = 18/02/2018
Heure debut [TU] = 03:16
Longitude = 007 52.888 E
Latitude = 43 25.669 N



Date: 12/17/2018

Instrument configuration file: C:\Users\melek\AppData\Local\Temp\fz3temp-2\bous192_01.XMLCON

Configuration report for SBE 911plus/917plus CTD

```
Frequency channels suppressed : 2
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-Nov-16
   G             : 4.87027953e-003
   H             : 6.78490431e-004
   I             : 2.68163363e-005
   J             : 2.12217961e-006
   F0            : 1000.000
   Slope         : 1.00000000
   Offset        : 0.0000
```

2) Frequency 1, Conductivity

```
   Serial number : 2929
   Calibrated on : 15-Nov-16
   G             : -1.06028633e+001
   H             : 1.42156293e+000
   I             : 1.07532686e-004
   J             : 6.55385364e-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        : -1.27039
   AD590M        : 1.280100e-002
   AD590B        : -9.240166e+000
```

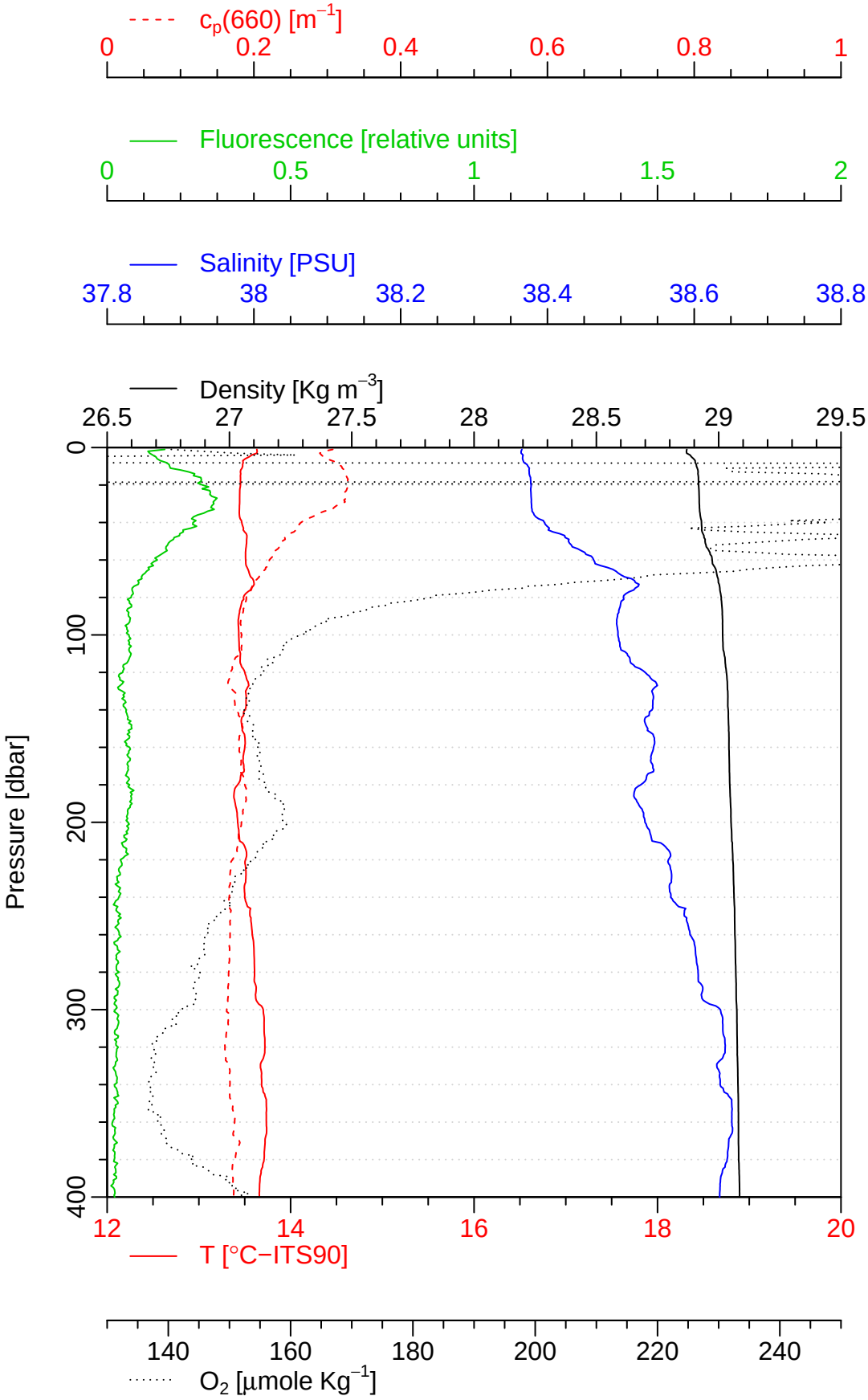
4) A/D voltage 0, Oxygen, SBE 43

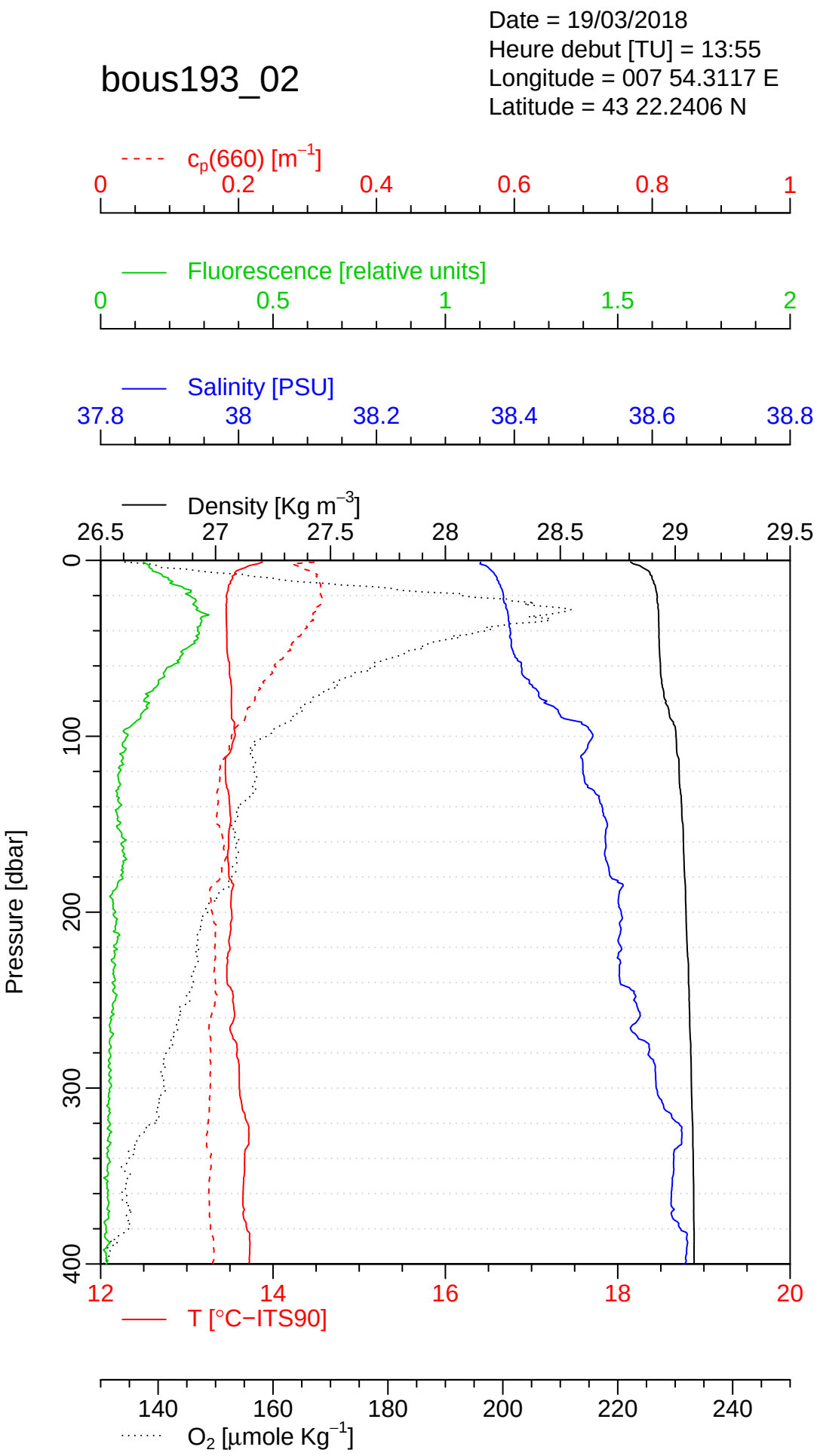
```
   Serial number : 0378
   Calibrated on : 02-Dec-16
   Equation      : Sea-Bird
   Soc           : 3.44150e-001
   Offset        : -6.66600e-001
   A             : -2.23690e-003
   B             : 7.37750e-005
   C             : -1.02150e-006
   E             : 3.60000e-002
   Tau20         : 1.20000e+000
```

```
   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 : 088193
   Calibrated on : 27-Oct-97_cor201711
   VB            : 0.165000
   V1            : 1.933000
   Vacetone      : 0.250000
   Scale factor  : 1.000000
   Slope         : 1.000000
   Offset        : -0.210000

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

   Serial number : CST-887DR
   Calibrated on : 07112017
   M             : 21.3038
   B             : -0.1065
   Path length   : 0.250

8) A/D voltage 4, User Polynomial

   Serial number : 171
   Calibrated on : 19-May-14
   Sensor name   : RINKOIII_DO
   A0            : 0.00000000
   A1            : 1.00000000
   A2            : 0.00000000
   A3            : 0.00000000

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

   Serial number : 171
   Calibrated on : 12-May-14
   Sensor name   : RINKOIII_Temp
   A0            : -5.25367500
   A1            : 16.66254000
   A2            : -2.13105300
   A3            : 0.45564880

10) A/D voltage 6, Altimeter

    Serial number : 310799
    Calibrated on : 19-Oct-16
    Scale factor  : 15.000
    Offset        : 0.000

11) A/D voltage 7, Free

Scan length                   : 31
```

bous193_01

Date = 19/03/2018
Heure debut [TU] = 12:24
Longitude = 007 54.898 E
Latitude = 43 22.299 N




bous193_02
Date = 19/03/2018
Heure debut [TU] = 13:55
Longitude = 007 54.3117 E
Latitude = 43 22.2406 N
c_p(660) [m^-1]
0
0.2
0.4
0.6
0.8
1
Fluorescence [relative units]
0
0.5
1
1.5
2
Salinity [PSU]
37.8
38
38.2
38.4
38.6
38.8
Density [Kg m^-3]
26.5
27
27.5
28
28.5
29
29.5
Pressure [dbar]
0
100
200
300
400
12
14
16
18
20
T [°C−ITS90]
140
160
180
200
220
240
O2 [µmole Kg^-1]

Date: 12/17/2018

Instrument configuration file: C:\Users\melek\AppData\Local\Temp\fz3temp-2\BOUS193_01.XMLCON

Configuration report for SBE 911plus/917plus CTD

```
Frequency channels suppressed : 2
Voltage words suppressed      : 0
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-Nov-16
   G             : 4.87027953e-003
   H             : 6.78490431e-004
   I             : 2.68163363e-005
   J             : 2.12217961e-006
   F0            : 1000.000
   Slope         : 1.00000000
   Offset        : 0.0000
```

2) Frequency 1, Conductivity

```
   Serial number : 2929
   Calibrated on : 15-Nov-16
   G             : -1.06028633e+001
   H             : 1.42156293e+000
   I             : 1.07532686e-004
   J             : 6.55385364e-005
   CTcor         : 3.2500e-006
   CPcor         : -9.57000000e-008
   Slope         : 1.00000000
   Offset        : 0.00000
```

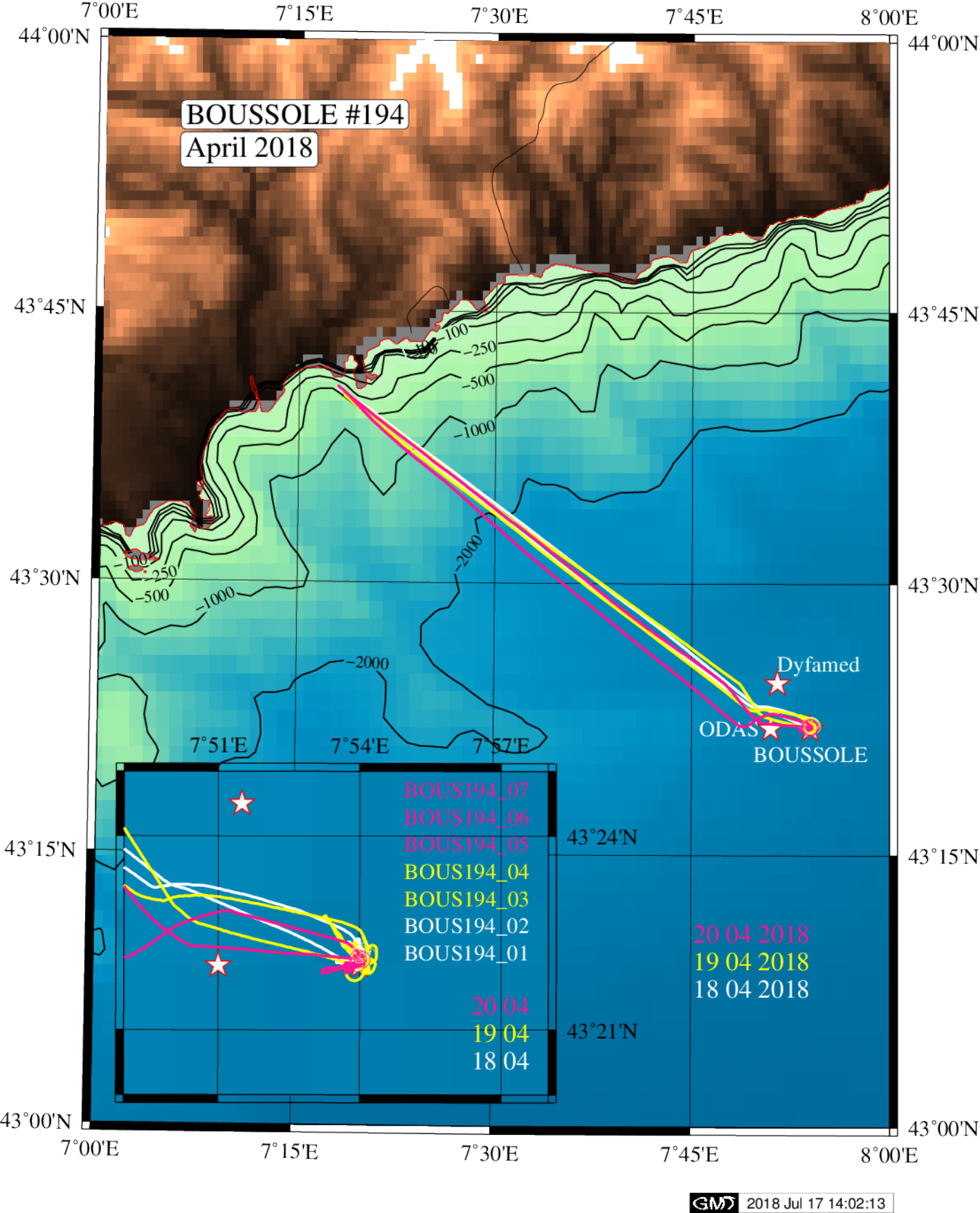
3) Frequency 2, Pressure, Digiquartz with TC

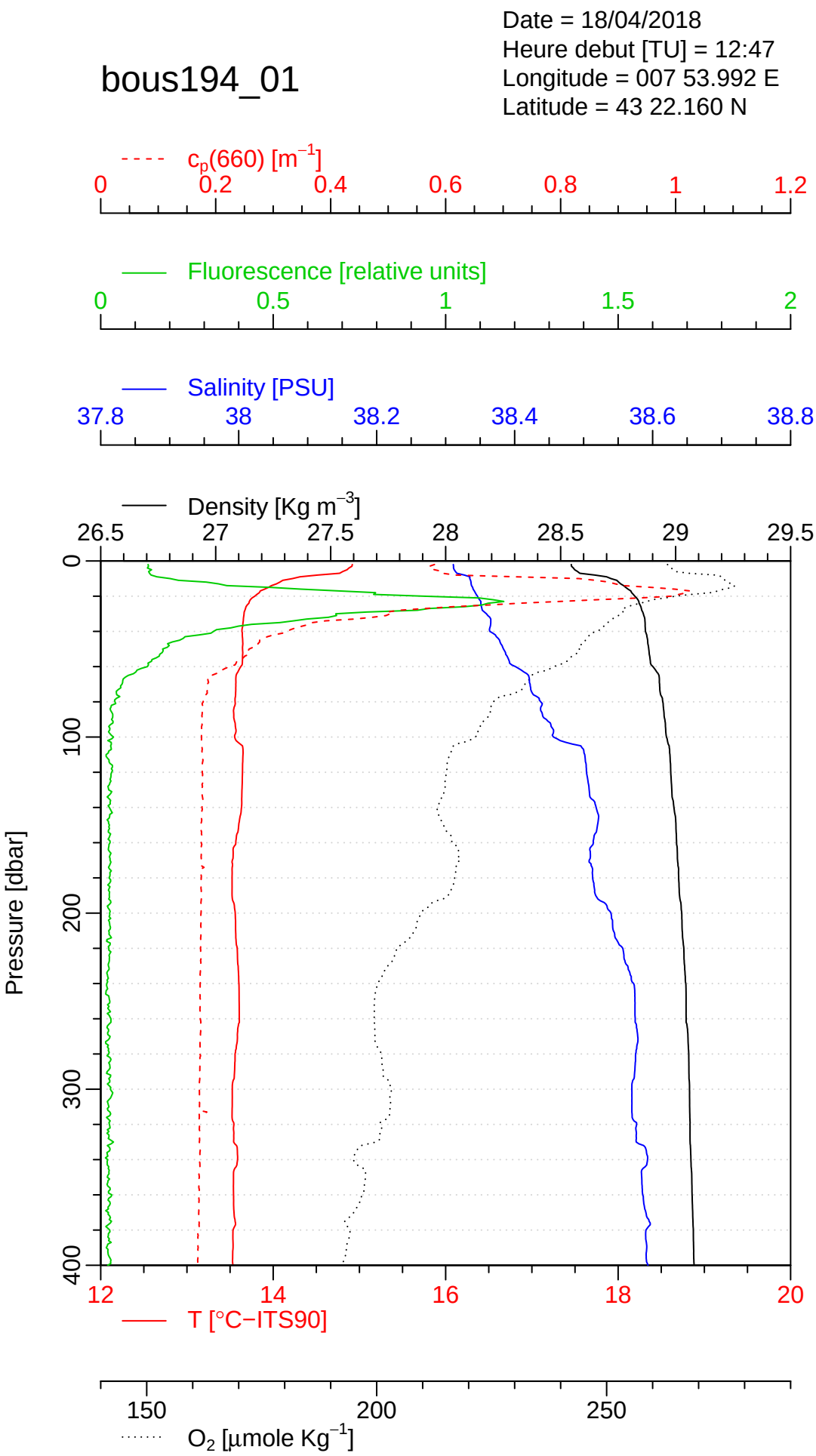
```
   Serial number : 0329
   Calibrated on : 04-Dec-09 (corr May-2017)
   C1            : -4.499631e+004
   C2            : 4.598757e-001
   C3            : 1.505020e-002
   D1            : 3.936600e-002
   D2            : 0.000000e+000
   T1            : 3.004570e+001
   T2            : -1.880753e-004
   T3            : 4.727060e-006
   T4            : -1.923520e-009
   T5            : 0.000000e+000
   Slope         : 0.99996509
   Offset        : -1.27039
   AD590M        : 1.280100e-002
   AD590B        : -9.240166e+000
```

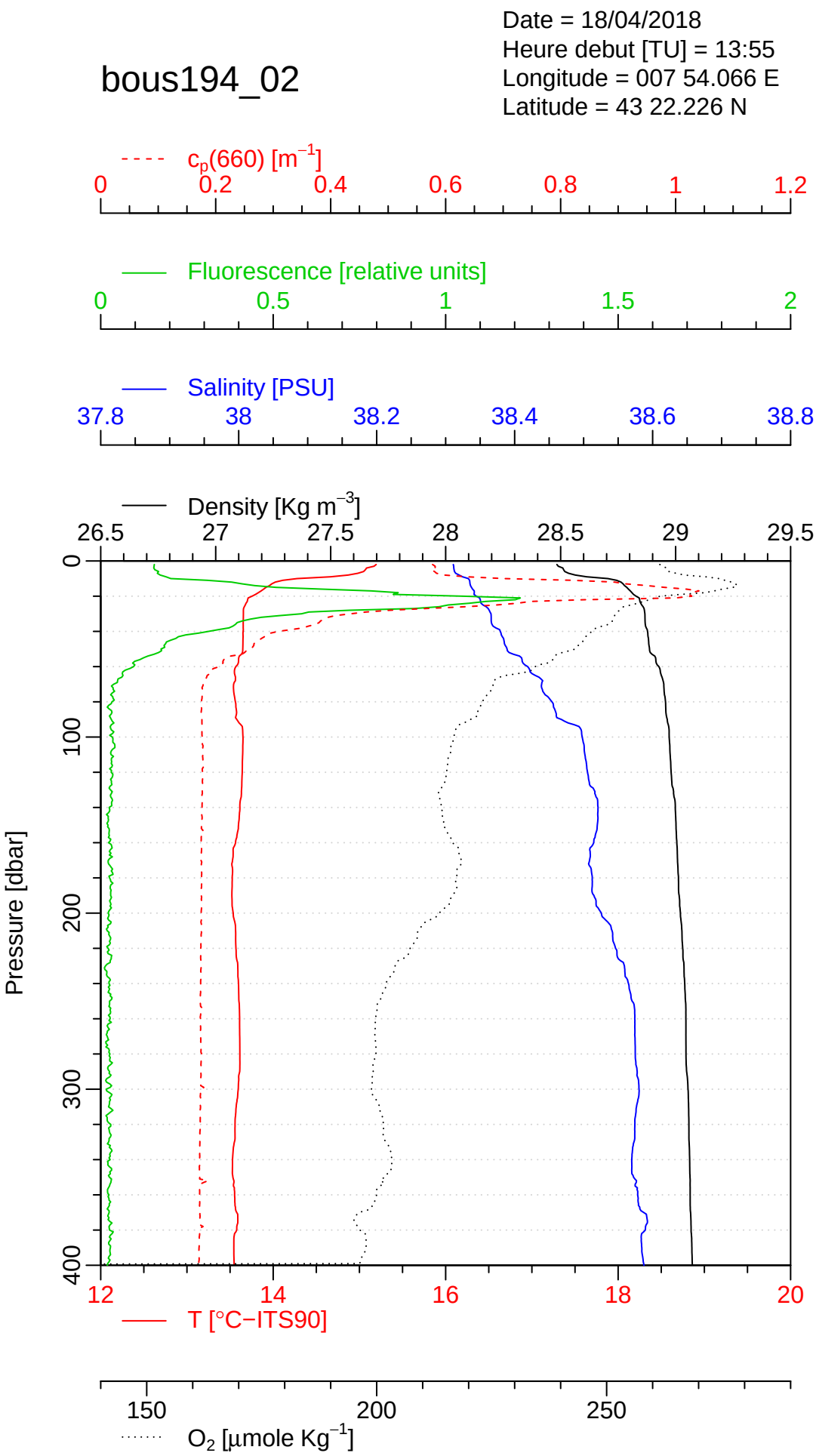
4) A/D voltage 0, Oxygen, SBE 43

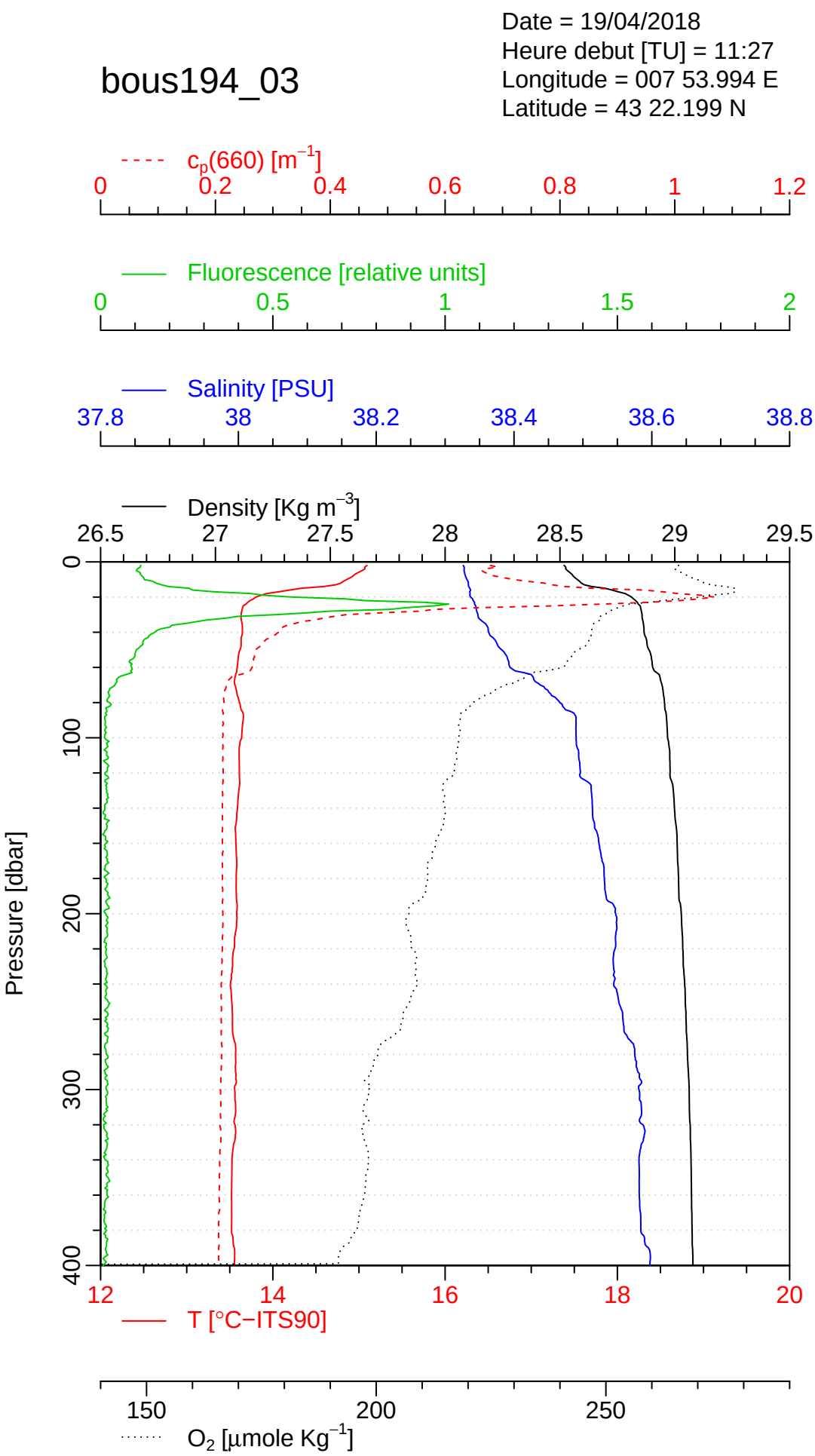
```
   Serial number : 0378
   Calibrated on : 02-Dec-16
   Equation      : Sea-Bird
   Soc           : 3.44150e-001
   Offset        : -6.66600e-001
   A             : -2.23690e-003
   B             : 7.37750e-005
   C             : -1.02150e-006
   E             : 3.60000e-002
   Tau20         : 1.20000e+000
   D1            : 1.92634e-004
```

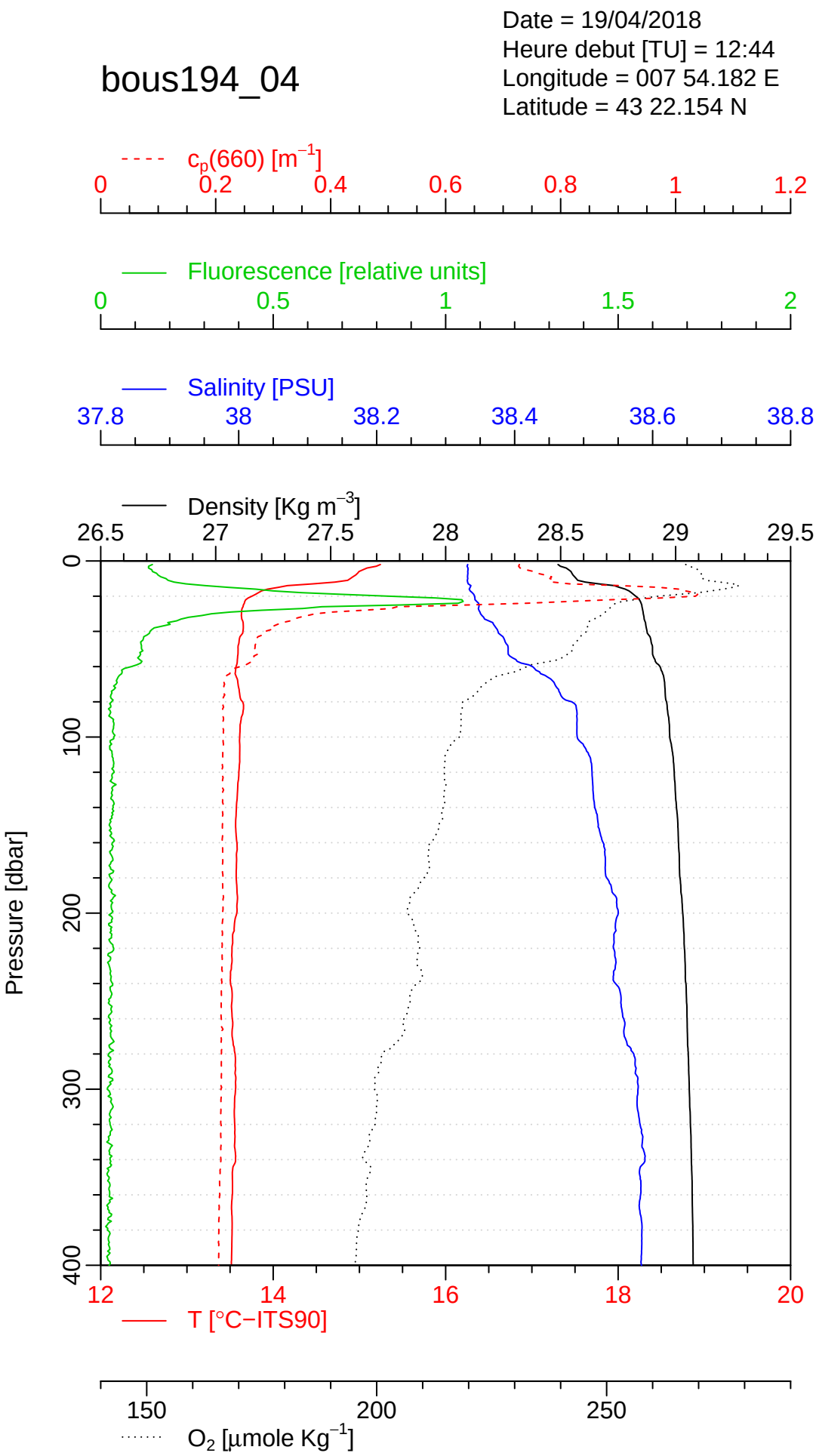
```
   D2            : -4.64803e-002
   H1            : -3.30000e-002
   H2            : 5.00000e+003
   H3            : 1.45000e+003

5) A/D voltage 1, Free

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

   Serial number : 088193
   Calibrated on : 27-Oct-97_cor201711
   VB            : 0.165000
   V1            : 1.933000
   Vacetone      : 0.250000
   Scale factor  : 1.000000
   Slope         : 1.000000
   Offset        : -0.210000

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

   Serial number : CST-887DR
   Calibrated on : 07112017
   M             : 21.3038
   B             : -0.1065
   Path length   : 0.250

8) A/D voltage 4, User Polynomial

   Serial number : 171
   Calibrated on : 19-May-14
   Sensor name   : RINKOIII_DO
   A0            : 0.00000000
   A1            : 1.00000000
   A2            : 0.00000000
   A3            : 0.00000000

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

   Serial number : 171
   Calibrated on : 12-May-14
   Sensor name   : RINKOIII_Temp
   A0            : -5.25367500
   A1            : 16.66254000
   A2            : -2.13105300
   A3            : 0.45564880

10) A/D voltage 6, Altimeter

    Serial number : 310799
    Calibrated on : 19-Oct-16
    Scale factor  : 15.000
    Offset        : 0.000

11) A/D voltage 7, Free

Scan length                   : 24
```

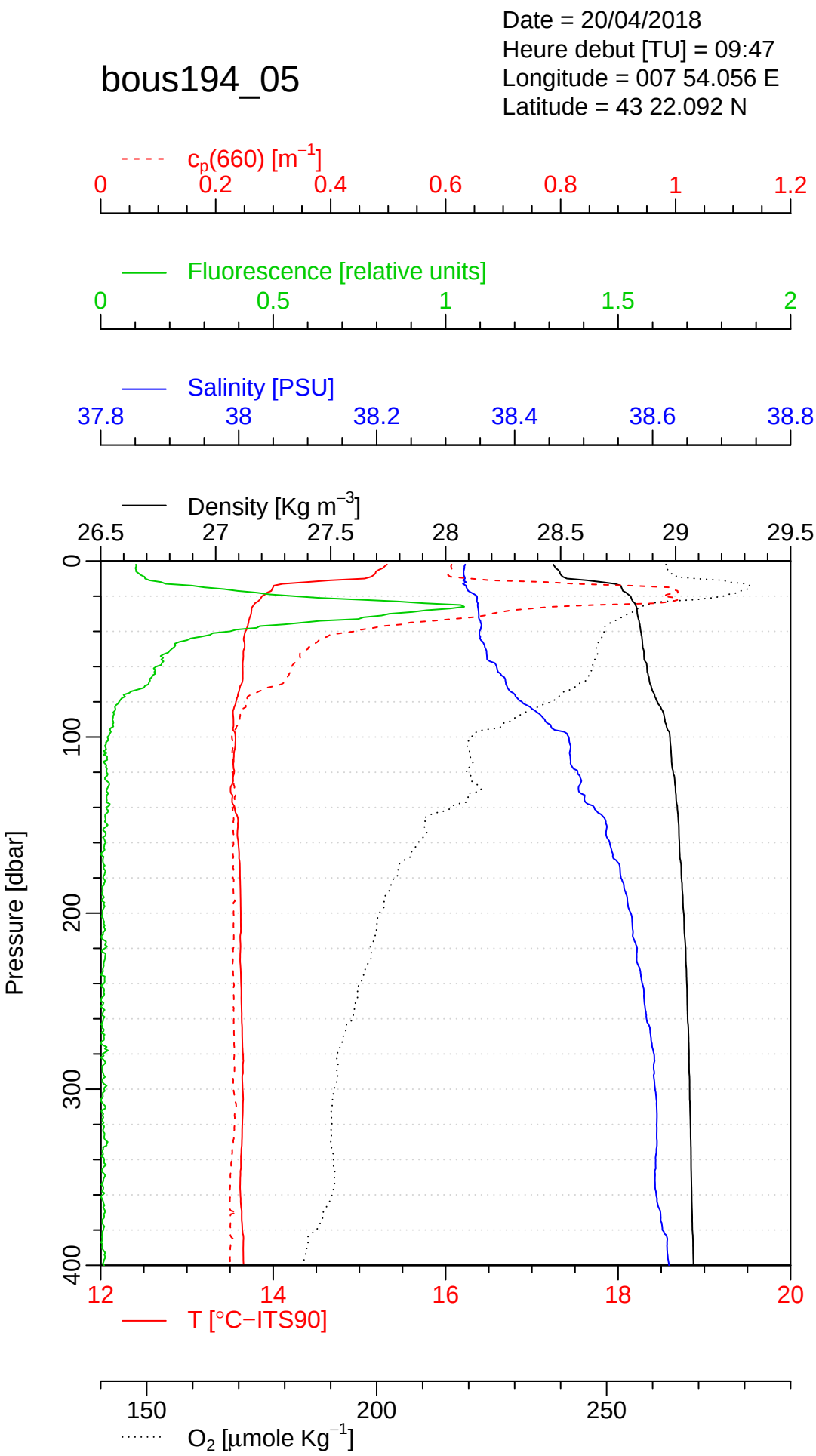

BOUSSOLE #194
April 2018
7°00'E
7°15'E
7°30'E
7°45'E
8°00'E
44°00'N
43°45'N
43°30'N
43°15'N
43°00'N
-100
-250
-500
-1000
-2000
Dyfamed
ODAS
BOUSSOLE
7°51'E
7°54'E
7°57'E
43°24'N
43°21'N
BOUS194_07
BOUS194_06
BOUS194_05
BOUS194_04
BOUS194_03
BOUS194_02
BOUS194_01
20 04
19 04
18 04
20 04 2018
19 04 2018
18 04 2018
GMT 2018 Jul 17 14:02:13

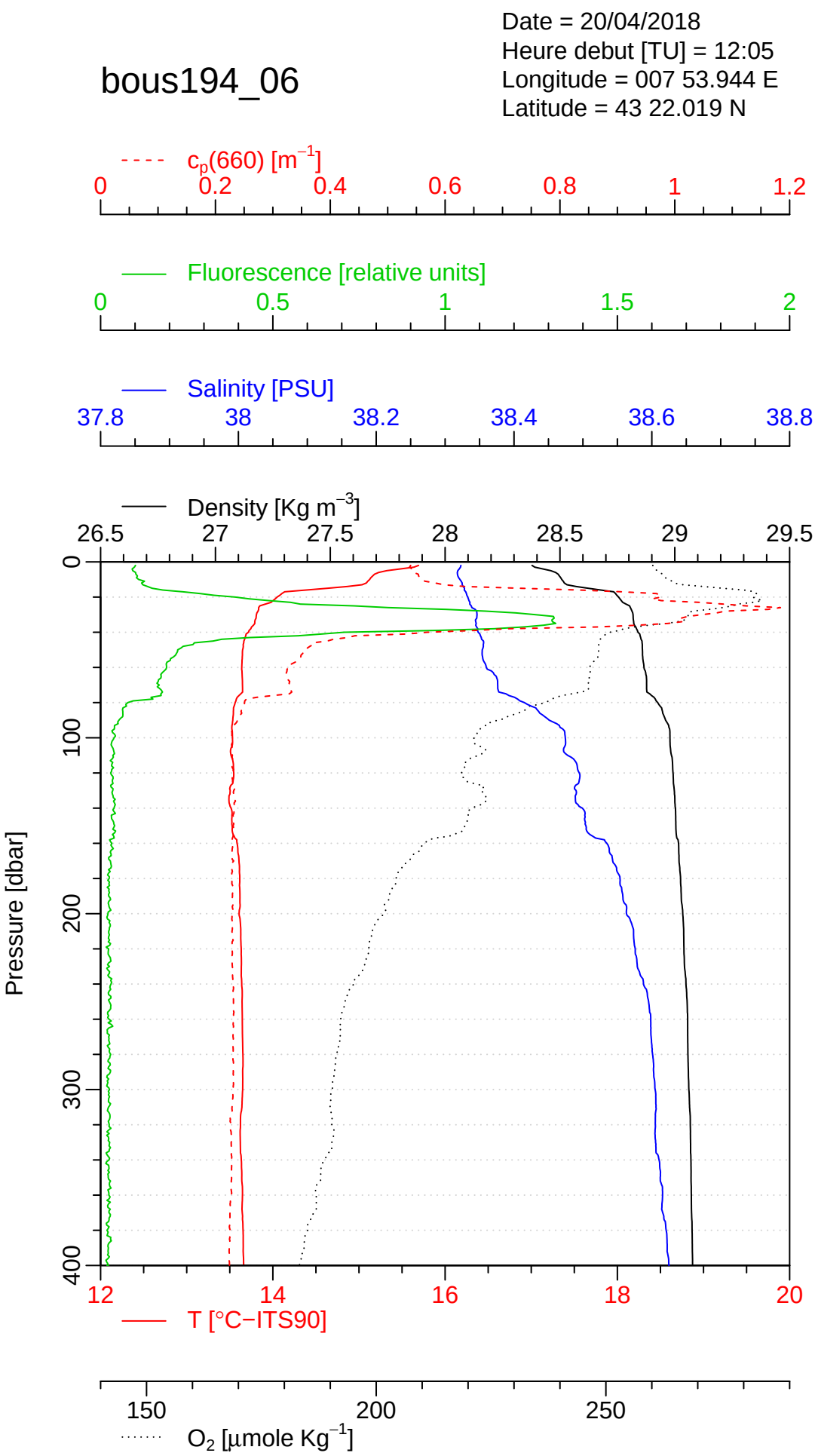

bous194_01
Date = 18/04/2018
Heure debut [TU] = 12:47
Longitude = 007 53.992 E
Latitude = 43 22.160 N
c_p(660) [m^-1]
0 0.2 0.4 0.6 0.8 1 1.2
Fluorescence [relative units]
0 0.5 1 1.5 2
Salinity [PSU]
37.8 38 38.2 38.4 38.6 38.8
Density [Kg m^-3]
26.5 27 27.5 28 28.5 29 29.5
Pressure [dbar]
0 100 200 300 400
12 14 16 18 20
T [°C−ITS90]
150 200 250
O2 [µmole Kg^-1]

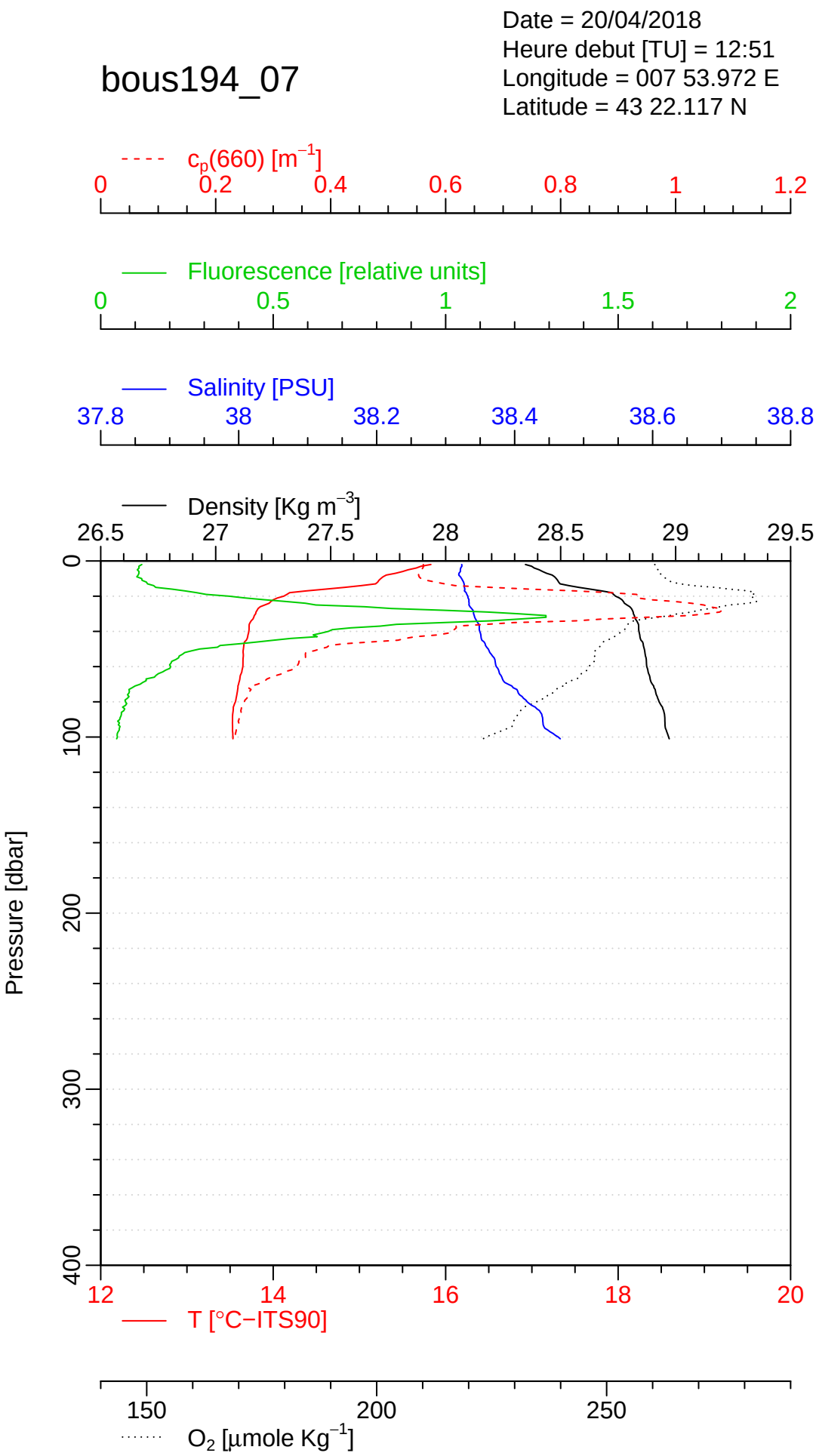

bous194_02
Date = 18/04/2018
Heure debut [TU] = 13:55
Longitude = 007 54.066 E
Latitude = 43 22.226 N
c_p(660) [m^-1]
0 0.2 0.4 0.6 0.8 1 1.2
Fluorescence [relative units]
0 0.5 1 1.5 2
Salinity [PSU]
37.8 38 38.2 38.4 38.6 38.8
Density [Kg m^-3]
26.5 27 27.5 28 28.5 29 29.5
Pressure [dbar]
0 100 200 300 400
12 14 16 18 20
T [°C−ITS90]
150 200 250
O2 [µmole Kg^-1]


bous194_03
Date = 19/04/2018
Heure debut [TU] = 11:27
Longitude = 007 53.994 E
Latitude = 43 22.199 N
c_p(660) [m^-1]
0 0.2 0.4 0.6 0.8 1 1.2
Fluorescence [relative units]
0 0.5 1 1.5 2
Salinity [PSU]
37.8 38 38.2 38.4 38.6 38.8
Density [Kg m^-3]
26.5 27 27.5 28 28.5 29 29.5
Pressure [dbar]
0 100 200 300 400
12 14 16 18 20
T [°C−ITS90]
150 200 250
O2 [µmole Kg^-1]


bous194_04
Date = 19/04/2018
Heure debut [TU] = 12:44
Longitude = 007 54.182 E
Latitude = 43 22.154 N
c_p(660) [m^-1]
0 0.2 0.4 0.6 0.8 1 1.2
Fluorescence [relative units]
0 0.5 1 1.5 2
Salinity [PSU]
37.8 38 38.2 38.4 38.6 38.8
Density [Kg m^-3]
26.5 27 27.5 28 28.5 29 29.5
Pressure [dbar]
0 100 200 300 400
T [°C−ITS90]
12 14 16 18 20
O2 [µmole Kg^-1]
150 200 250


bous194_05
Date = 20/04/2018
Heure debut [TU] = 09:47
Longitude = 007 54.056 E
Latitude = 43 22.092 N
c_p(660) [m^-1]
0 0.2 0.4 0.6 0.8 1 1.2
Fluorescence [relative units]
0 0.5 1 1.5 2
Salinity [PSU]
37.8 38 38.2 38.4 38.6 38.8
Density [Kg m^-3]
26.5 27 27.5 28 28.5 29 29.5
Pressure [dbar]
0 100 200 300 400
12 14 16 18 20
T [°C−ITS90]
150 200 250
O2 [µmole Kg^-1]


bous194_06
Date = 20/04/2018
Heure debut [TU] = 12:05
Longitude = 007 53.944 E
Latitude = 43 22.019 N
c_p(660) [m^-1]
0 0.2 0.4 0.6 0.8 1 1.2
Fluorescence [relative units]
0 0.5 1 1.5 2
Salinity [PSU]
37.8 38 38.2 38.4 38.6 38.8
Density [Kg m^-3]
26.5 27 27.5 28 28.5 29 29.5
Pressure [dbar]
0 100 200 300 400
12 14 16 18 20
T [°C−ITS90]
150 200 250
O2 [µmole Kg^-1]


bous194_07
Date = 20/04/2018
Heure debut [TU] = 12:51
Longitude = 007 53.972 E
Latitude = 43 22.117 N
c_p(660) [m^-1]
0 0.2 0.4 0.6 0.8 1 1.2
Fluorescence [relative units]
0 0.5 1 1.5 2
Salinity [PSU]
37.8 38 38.2 38.4 38.6 38.8
Density [Kg m^-3]
26.5 27 27.5 28 28.5 29 29.5
Pressure [dbar]
0 100 200 300 400
12 14 16 18 20
T [°C−ITS90]
150 200 250
O2 [µmole Kg^-1]

Date: 12/17/2018

Instrument configuration file: C:\Users\melek\AppData\Local\Temp\fz3temp-2\BOUS194_01.XMLCON

Configuration report for SBE 911plus/917plus CTD

```
Frequency channels suppressed : 2
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-Nov-16
   G             : 4.87027953e-003
   H             : 6.78490431e-004
   I             : 2.68163363e-005
   J             : 2.12217961e-006
   F0            : 1000.000
   Slope         : 1.00000000
   Offset        : 0.0000
```

2) Frequency 1, Conductivity

```
   Serial number : 2929
   Calibrated on : 15-Nov-16
   G             : -1.06028633e+001
   H             : 1.42156293e+000
   I             : 1.07532686e-004
   J             : 6.55385364e-005
   CTcor         : 3.2500e-006
   CPcor         : -9.57000000e-008
   Slope         : 1.00000000
   Offset        : 0.00000
```

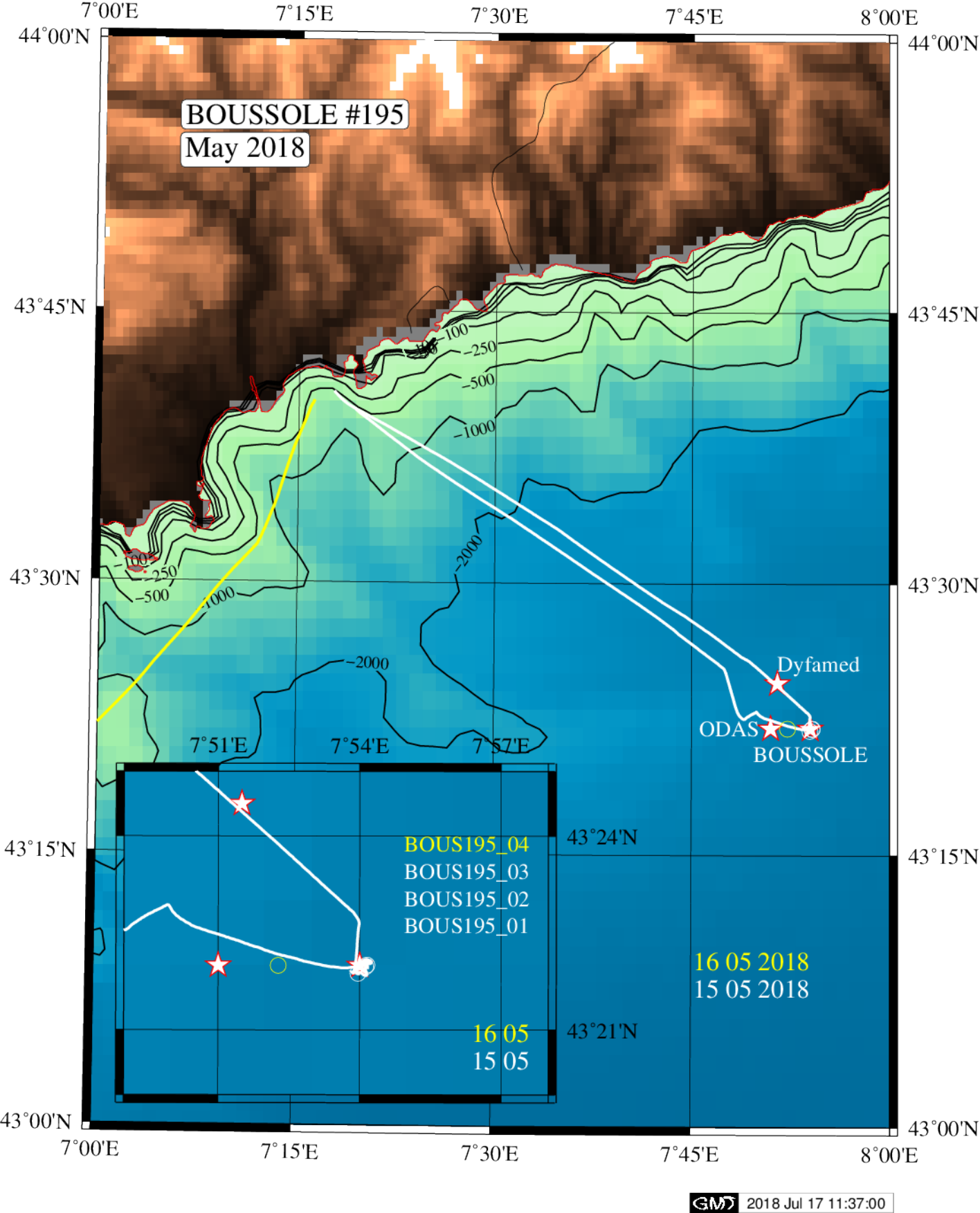
3) Frequency 2, Pressure, Digiquartz with TC

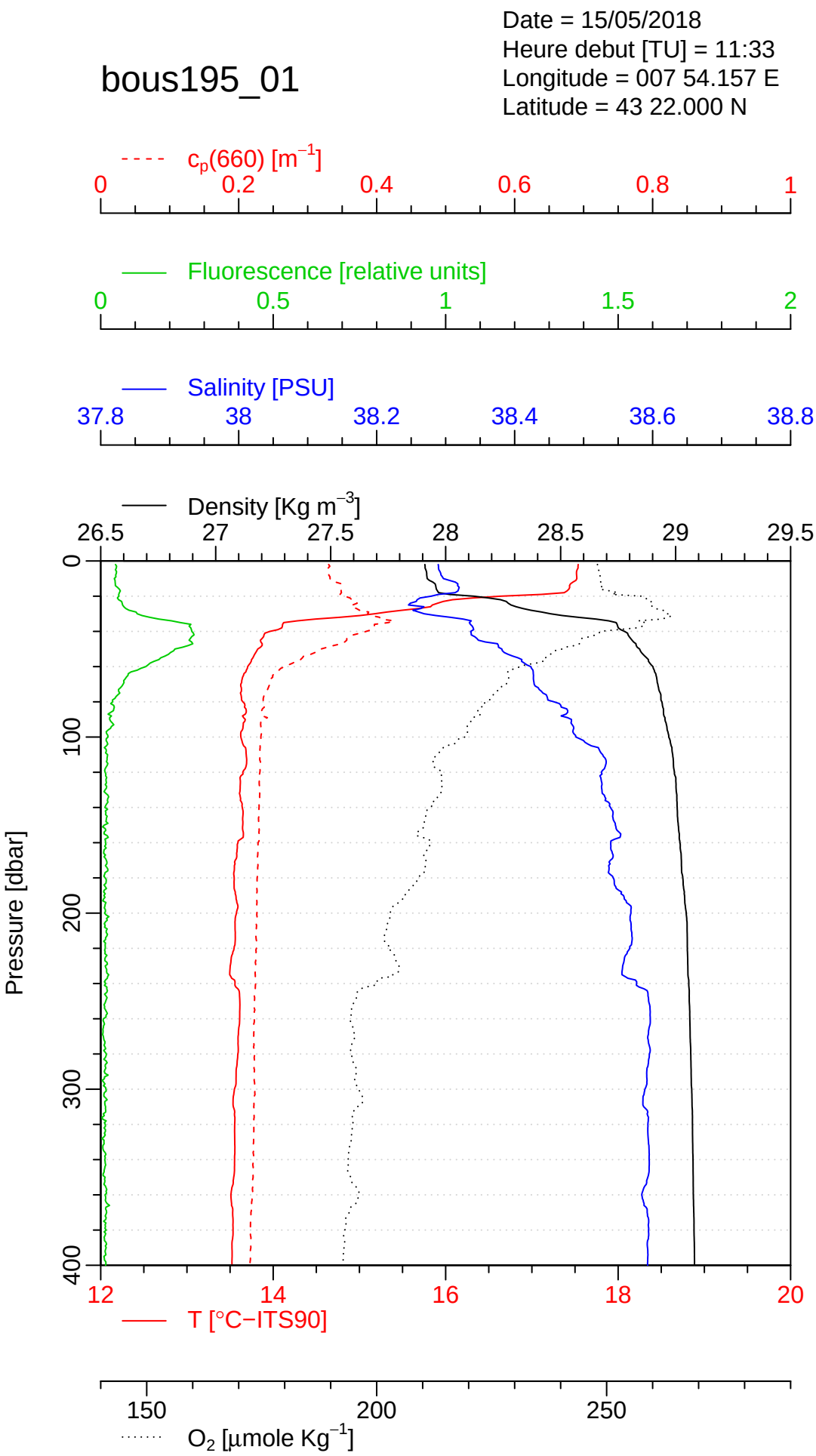
```
   Serial number : 0329
   Calibrated on : 04-Dec-09 (corr May-2017)
   C1            : -4.499631e+004
   C2            : 4.598757e-001
   C3            : 1.505020e-002
   D1            : 3.936600e-002
   D2            : 0.000000e+000
   T1            : 3.004570e+001
   T2            : -1.880753e-004
   T3            : 4.727060e-006
   T4            : -1.923520e-009
   T5            : 0.000000e+000
   Slope         : 0.99996509
   Offset        : -1.27039
   AD590M        : 1.280100e-002
   AD590B        : -9.240166e+000
```

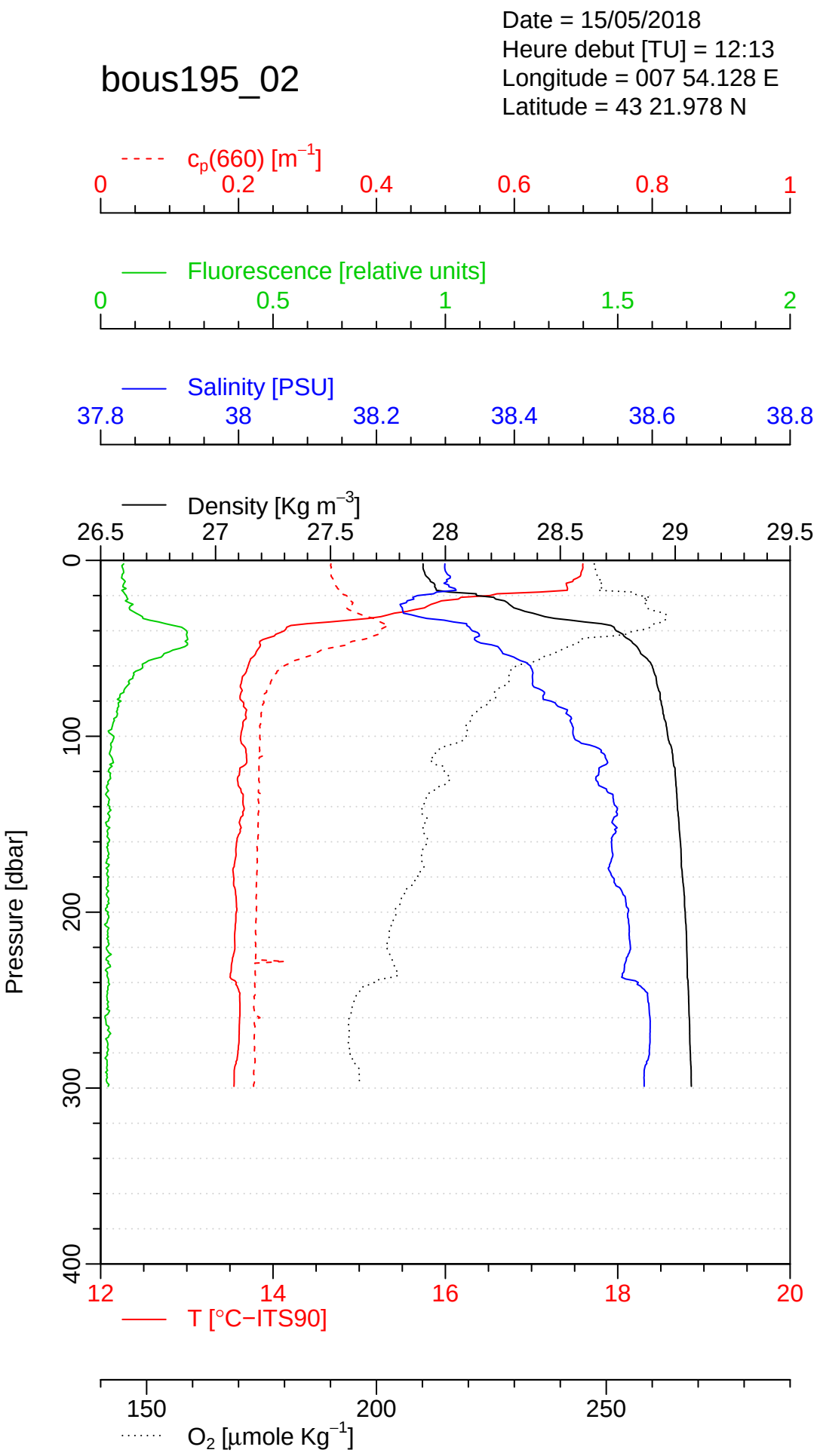
4) A/D voltage 0, Oxygen, SBE 43

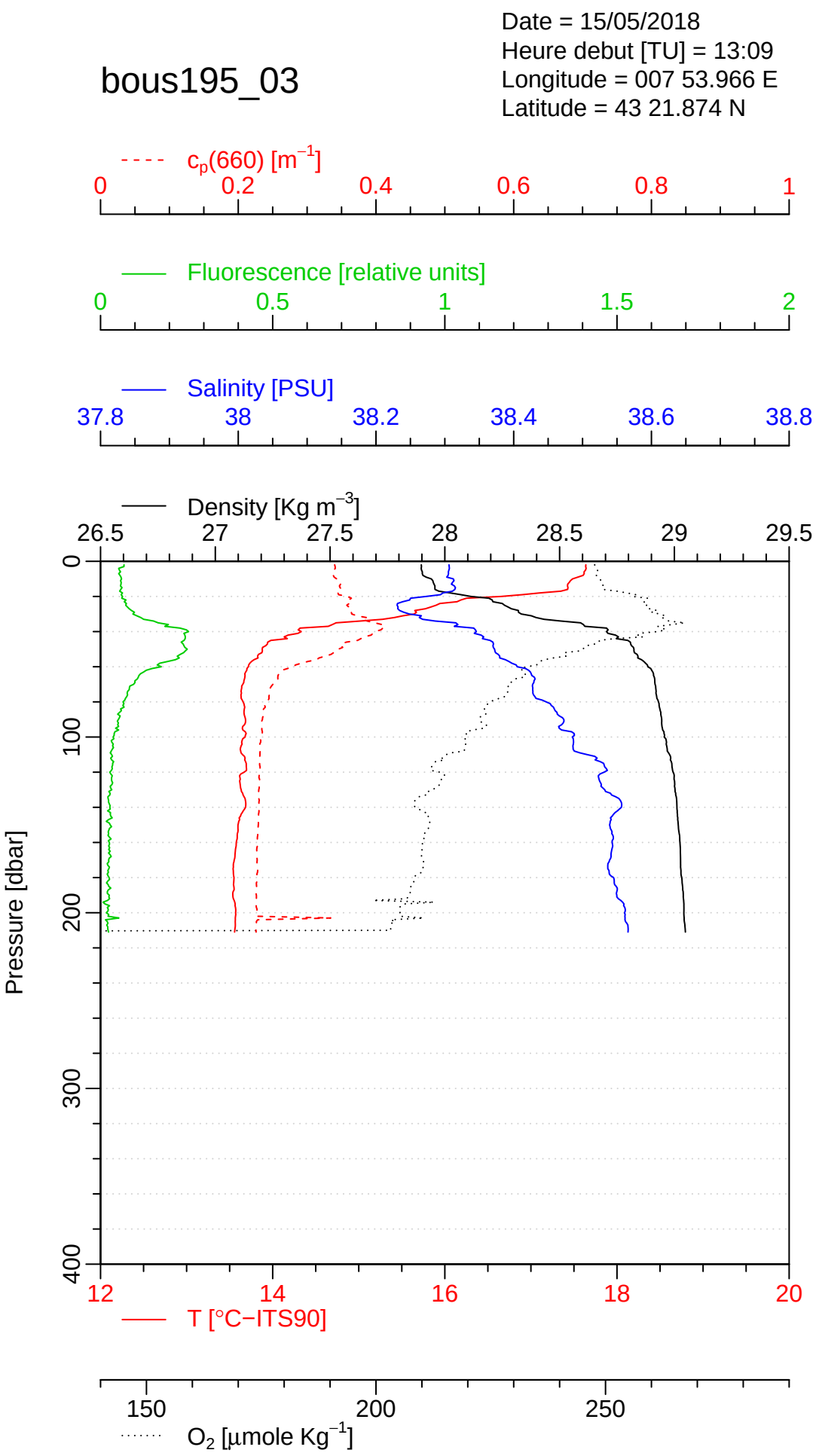
```
   Serial number : 0033
   Calibrated on : 20-May-17
   Equation      : Sea-Bird
   Soc           : 4.97380e-001
   Offset        : -4.88800e-001
   A             : -3.73290e-003
   B             : 1.83170e-004
   C             : -3.25560e-006
   E             : 3.60000e-002
   Tau20         : 1.35000e+000
```

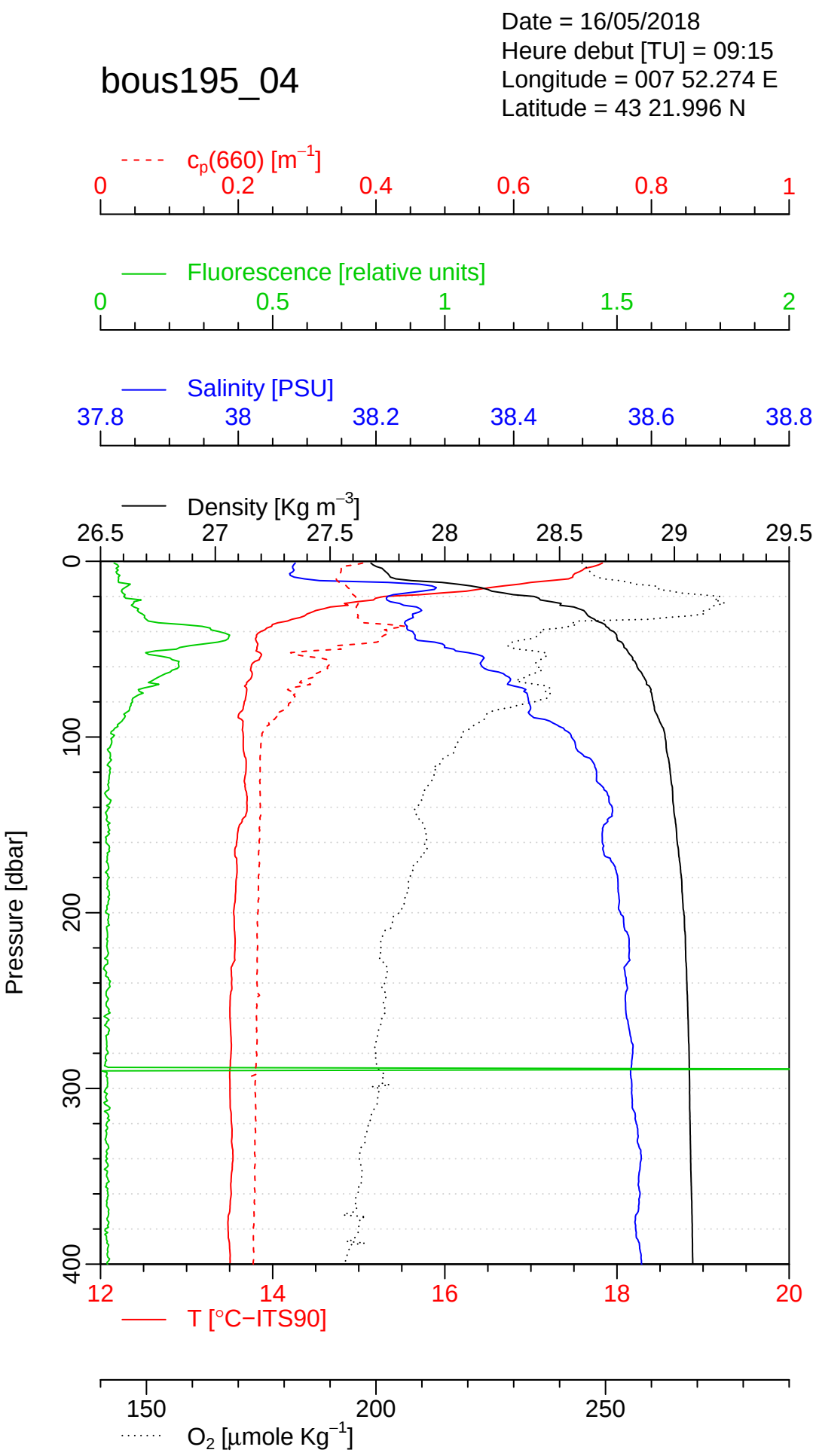
```
   D1            : 1.92634e-004
   D2            : -4.64803e-002
   H1            : -3.30000e-002
   H2            : 5.00000e+003
   H3            : 1.45000e+003

5) A/D voltage 1, Free

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

   Serial number : 088193
   Calibrated on : 27-Oct-97_cor201711
   VB            : 0.165000
   V1            : 1.933000
   Vacetone      : 0.250000
   Scale factor  : 1.000000
   Slope         : 1.000000
   Offset        : -0.210000

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

   Serial number : CST-887DR
   Calibrated on : 07112017
   M             : 21.3038
   B             : -0.1065
   Path length   : 0.250

8) A/D voltage 4, User Polynomial

   Serial number : 171
   Calibrated on : 19-May-14
   Sensor name   : RINKOIII_DO
   A0            : 0.00000000
   A1            : 1.00000000
   A2            : 0.00000000
   A3            : 0.00000000

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

   Serial number : 171
   Calibrated on : 12-May-14
   Sensor name   : RINKOIII_Temp
   A0            : -5.25367500
   A1            : 16.66254000
   A2            : -2.13105300
   A3            : 0.45564880

10) A/D voltage 6, Altimeter

    Serial number : 310799
    Calibrated on : 19-Oct-16
    Scale factor  : 15.000
    Offset        : 0.000

11) A/D voltage 7, Free

Scan length                   : 31
```


BOUSSOLE #195
May 2018
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
BOUS195_04
BOUS195_03
BOUS195_02
BOUS195_01
16 05 2018
15 05 2018
16 05
15 05
GMT 2018 Jul 17 11:37:00


bous195_01
Date = 15/05/2018
Heure debut [TU] = 11:33
Longitude = 007 54.157 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
0.5
1
1.5
2
Salinity [PSU]
37.8
38
38.2
38.4
38.6
38.8
Density [Kg m^-3]
26.5
27
27.5
28
28.5
29
29.5
Pressure [dbar]
0
100
200
300
400
12
14
16
18
20
T [°C−ITS90]
150
200
250
O2 [µmole Kg^-1]


bous195_02
Date = 15/05/2018
Heure debut [TU] = 12:13
Longitude = 007 54.128 E
Latitude = 43 21.978 N
c_p(660) [m^-1]
0
0.2
0.4
0.6
0.8
1
Fluorescence [relative units]
0
0.5
1
1.5
2
Salinity [PSU]
37.8
38
38.2
38.4
38.6
38.8
Density [Kg m^-3]
26.5
27
27.5
28
28.5
29
29.5
Pressure [dbar]
0
100
200
300
400
12
14
16
18
20
T [°C−ITS90]
150
200
250
O2 [µmole Kg^-1]


bous195_03
Date = 15/05/2018
Heure debut [TU] = 13:09
Longitude = 007 53.966 E
Latitude = 43 21.874 N
c_p(660) [m^-1]
0
0.2
0.4
0.6
0.8
1
Fluorescence [relative units]
0
0.5
1
1.5
2
Salinity [PSU]
37.8
38
38.2
38.4
38.6
38.8
Density [Kg m^-3]
26.5
27
27.5
28
28.5
29
29.5
Pressure [dbar]
0
100
200
300
400
12
14
16
18
20
T [°C−ITS90]
150
200
250
O2 [µmole Kg^-1]


bous195_04
Date = 16/05/2018
Heure debut [TU] = 09:15
Longitude = 007 52.274 E
Latitude = 43 21.996 N
c_p(660) [m^-1]
0
0.2
0.4
0.6
0.8
1
Fluorescence [relative units]
0
0.5
1
1.5
2
Salinity [PSU]
37.8
38
38.2
38.4
38.6
38.8
Density [Kg m^-3]
26.5
27
27.5
28
28.5
29
29.5
Pressure [dbar]
0
100
200
300
400
12
14
16
18
20
T [°C−ITS90]
150
200
250
O2 [µmole Kg^-1]

Date: 12/17/2018

Instrument configuration file: C:\Users\melek\AppData\Local\Temp\fz3temp-2\BOUS195_01.XMLCON

Configuration report for SBE 911plus/917plus CTD

```
Frequency channels suppressed : 2
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-Nov-16
   G             : 4.87027953e-003
   H             : 6.78490431e-004
   I             : 2.68163363e-005
   J             : 2.12217961e-006
   F0            : 1000.000
   Slope         : 1.00000000
   Offset        : 0.0000
```

2) Frequency 1, Conductivity

```
   Serial number : 2929
   Calibrated on : 15-Nov-16
   G             : -1.06028633e+001
   H             : 1.42156293e+000
   I             : 1.07532686e-004
   J             : 6.55385364e-005
   CTcor         : 3.2500e-006
   CPcor         : -9.57000000e-008
   Slope         : 1.00000000
   Offset        : 0.00000
```

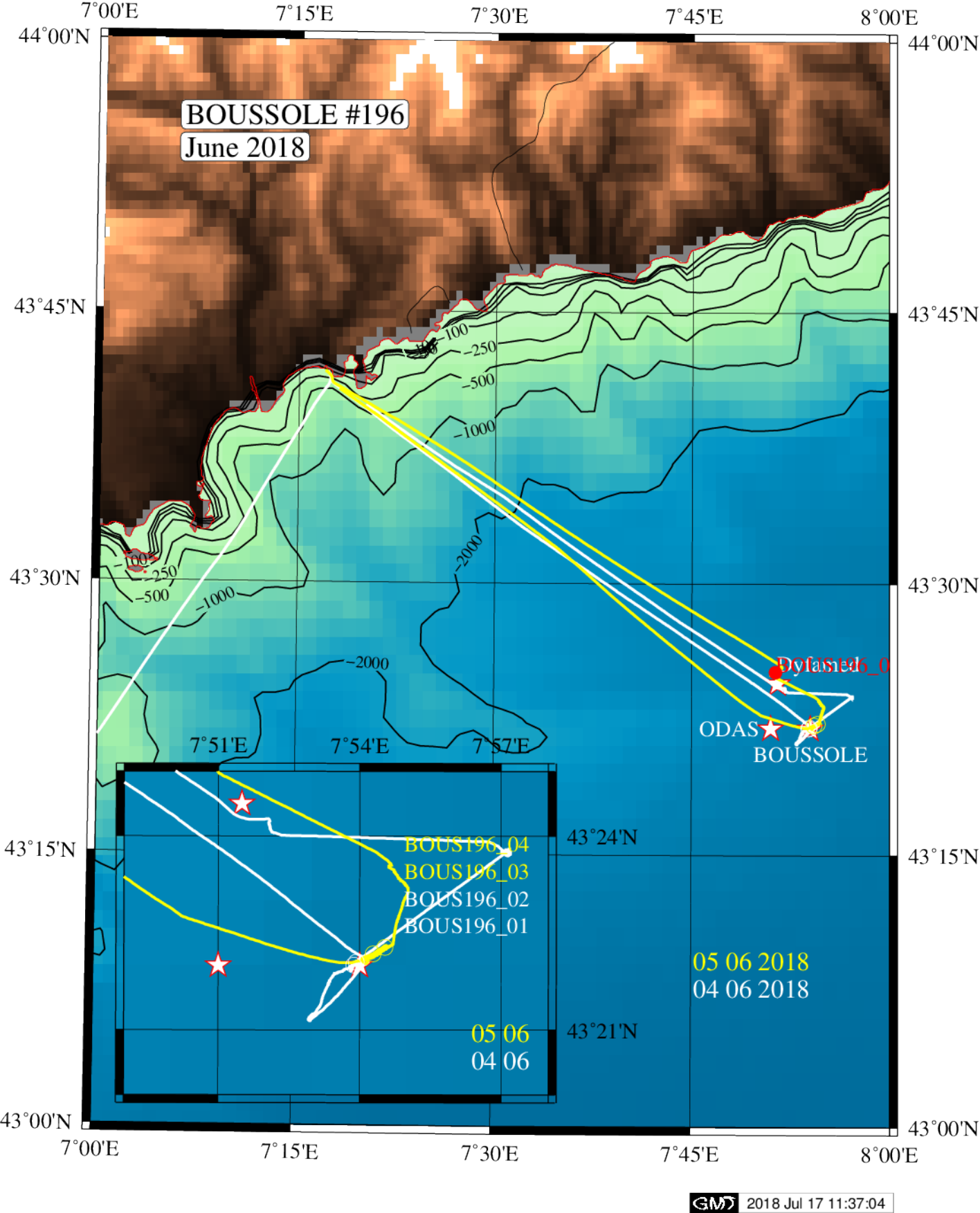
3) Frequency 2, Pressure, Digiquartz with TC

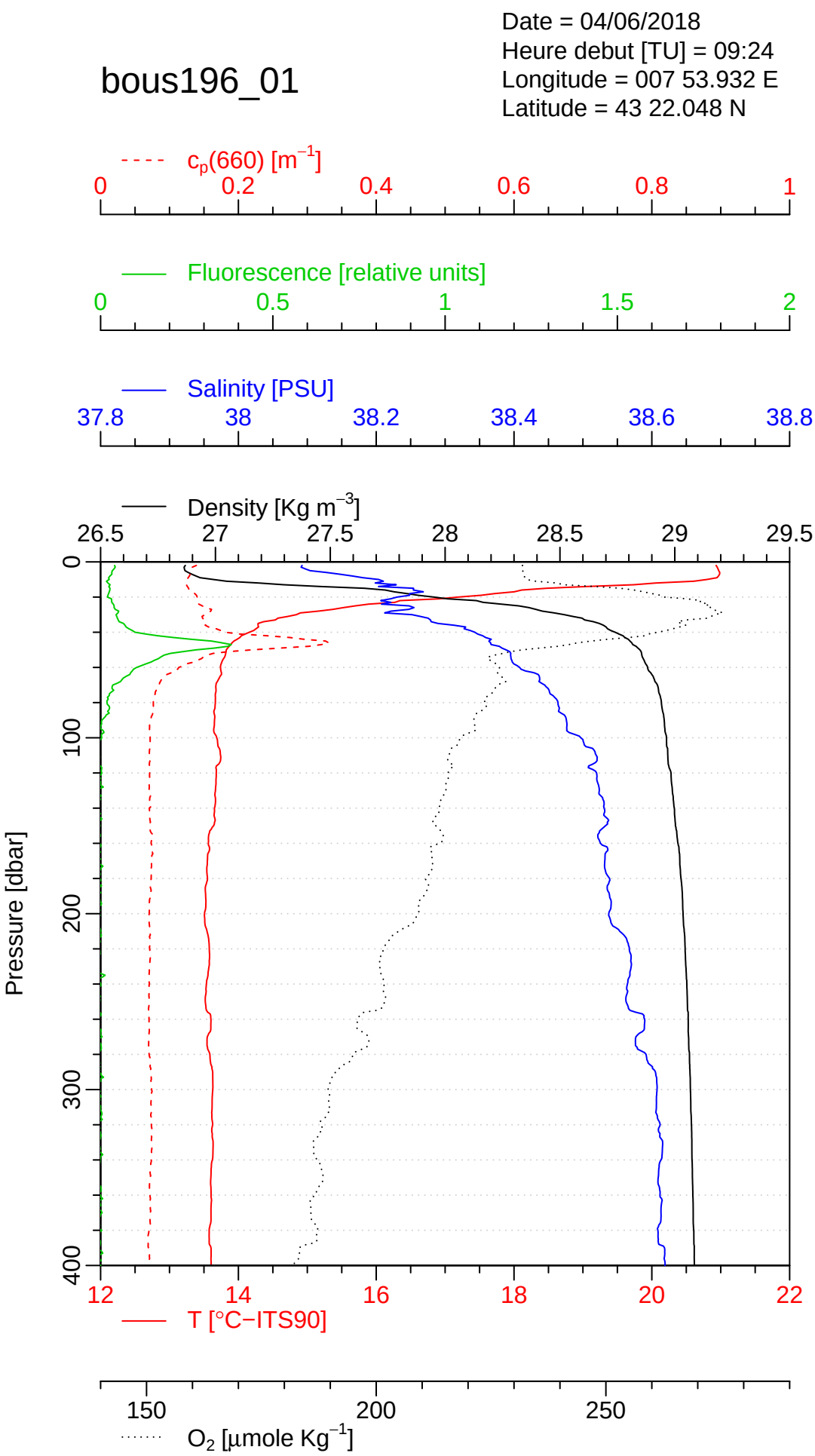
```
   Serial number : 0329
   Calibrated on : 04-Dec-09 (corr May-2017)
   C1            : -4.499631e+004
   C2            : 4.598757e-001
   C3            : 1.505020e-002
   D1            : 3.936600e-002
   D2            : 0.000000e+000
   T1            : 3.004570e+001
   T2            : -1.880753e-004
   T3            : 4.727060e-006
   T4            : -1.923520e-009
   T5            : 0.000000e+000
   Slope         : 0.99996509
   Offset        : -1.27039
   AD590M        : 1.280100e-002
   AD590B        : -9.240166e+000
```

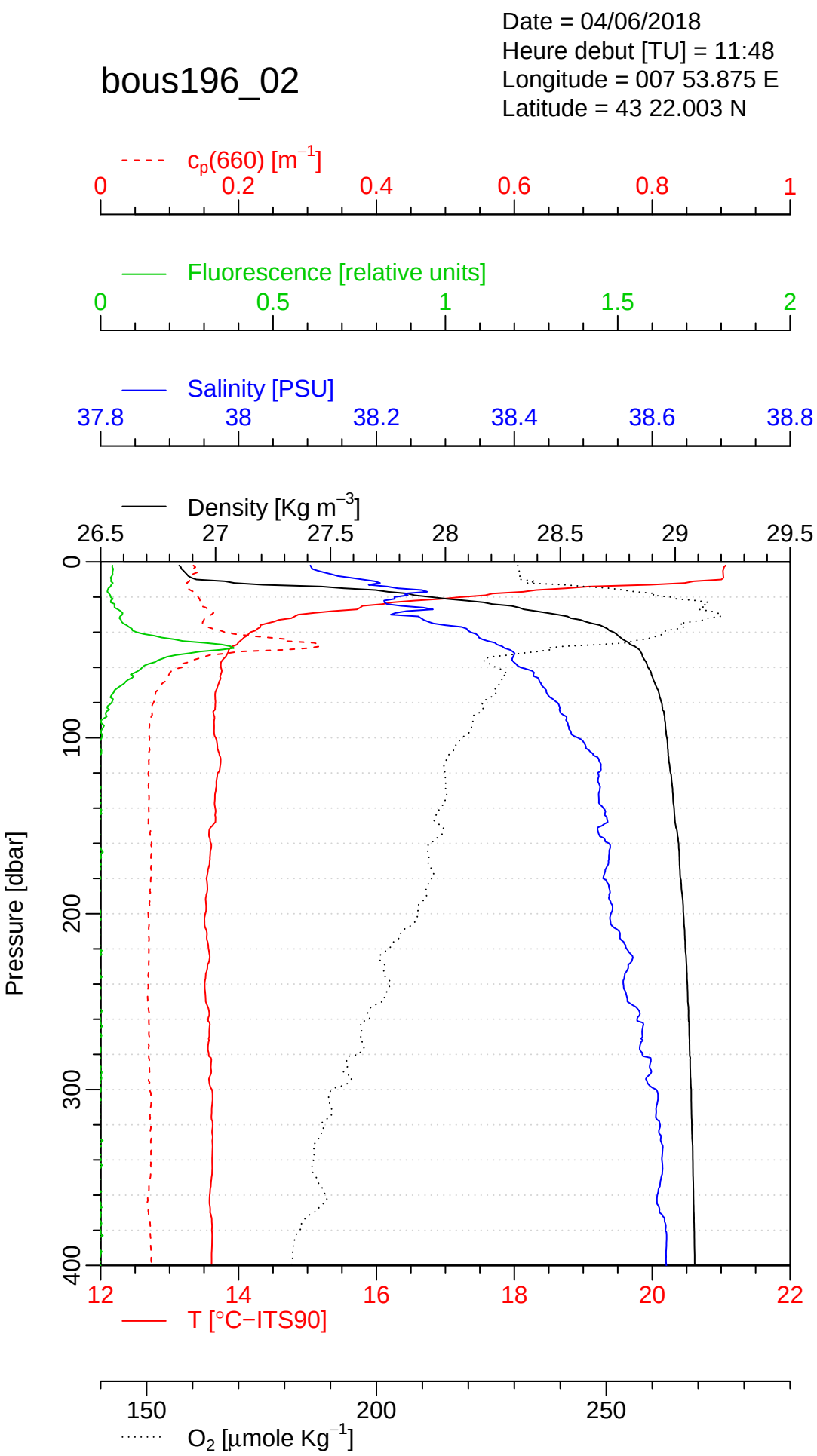
4) A/D voltage 0, Oxygen, SBE 43

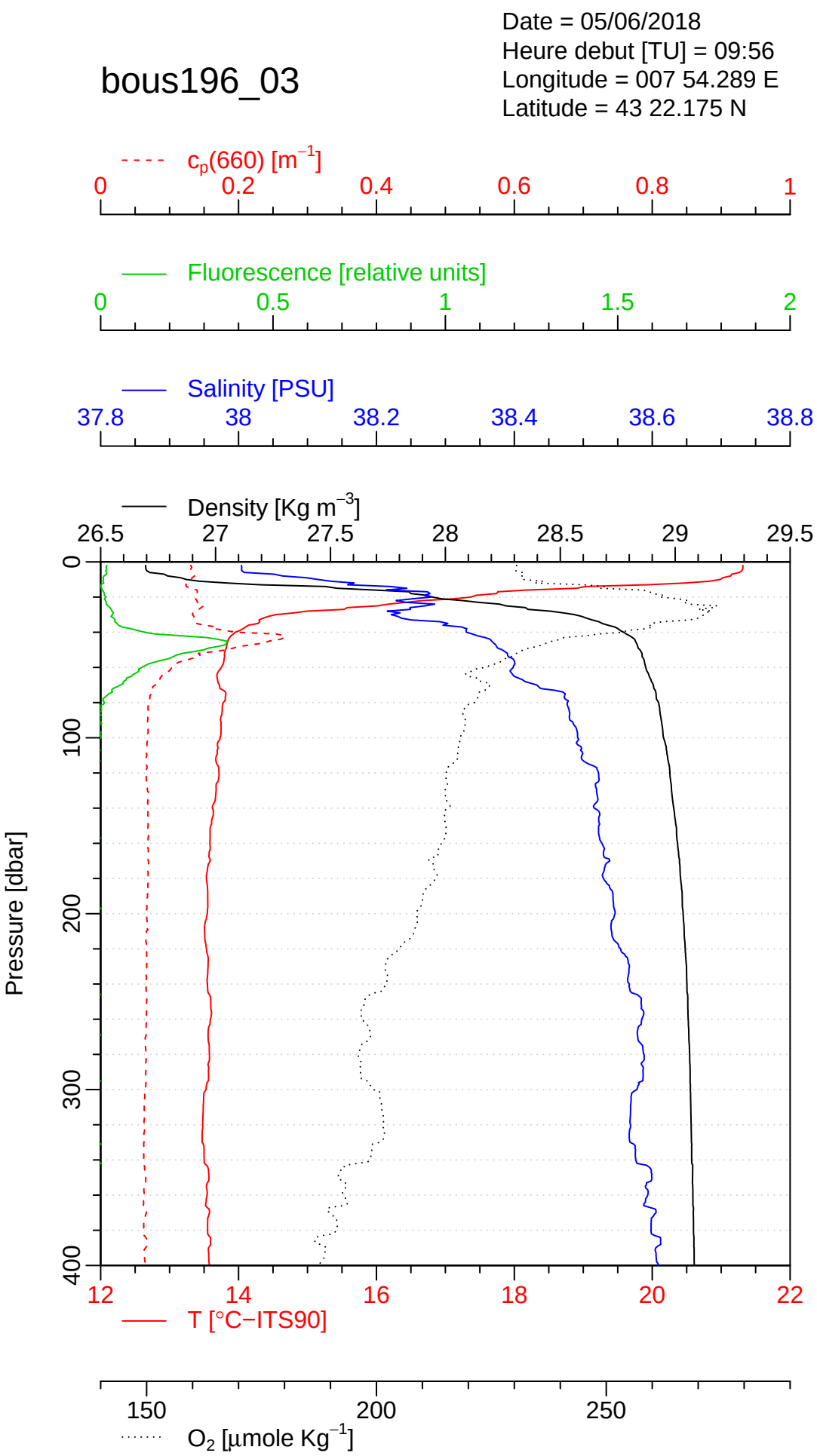
```
   Serial number : 0033
   Calibrated on : 20-May-17
   Equation      : Sea-Bird
   Soc           : 4.97380e-001
   Offset        : -4.88800e-001
   A             : -3.73290e-003
   B             : 1.83170e-004
   C             : -3.25560e-006
   E             : 3.60000e-002
   Tau20         : 1.35000e+000
```

```
   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 : 088193
   Calibrated on : 27-Oct-97_cor201711
   VB            : 0.165000
   V1            : 1.933000
   Vacetone      : 0.250000
   Scale factor  : 1.000000
   Slope         : 1.000000
   Offset        : -0.210000

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

   Serial number : CST-887DR
   Calibrated on : 07112017
   M             : 21.3038
   B             : -0.1065
   Path length   : 0.250

8) A/D voltage 4, User Polynomial

   Serial number : 171
   Calibrated on : 19-May-14
   Sensor name   : RINKOIII_DO
   A0            : 0.00000000
   A1            : 1.00000000
   A2            : 0.00000000
   A3            : 0.00000000

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

   Serial number : 171
   Calibrated on : 12-May-14
   Sensor name   : RINKOIII_Temp
   A0            : -5.25367500
   A1            : 16.66254000
   A2            : -2.13105300
   A3            : 0.45564880

10) A/D voltage 6, Altimeter

    Serial number : 310799
    Calibrated on : 19-Oct-16
    Scale factor  : 15.000
    Offset        : 0.000

11) A/D voltage 7, Free

Scan length                   : 31
```


BOUSSOLE #196
June 2018
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
ODAS
BOUSSOLE
7°51'E
7°54'E
7°57'E
43°24'N
43°21'N
BOUS196_04
BOUS196_03
BOUS196_02
BOUS196_01
05 06 2018
04 06 2018
05 06
04 06
GMT 2018 Jul 17 11:37:04

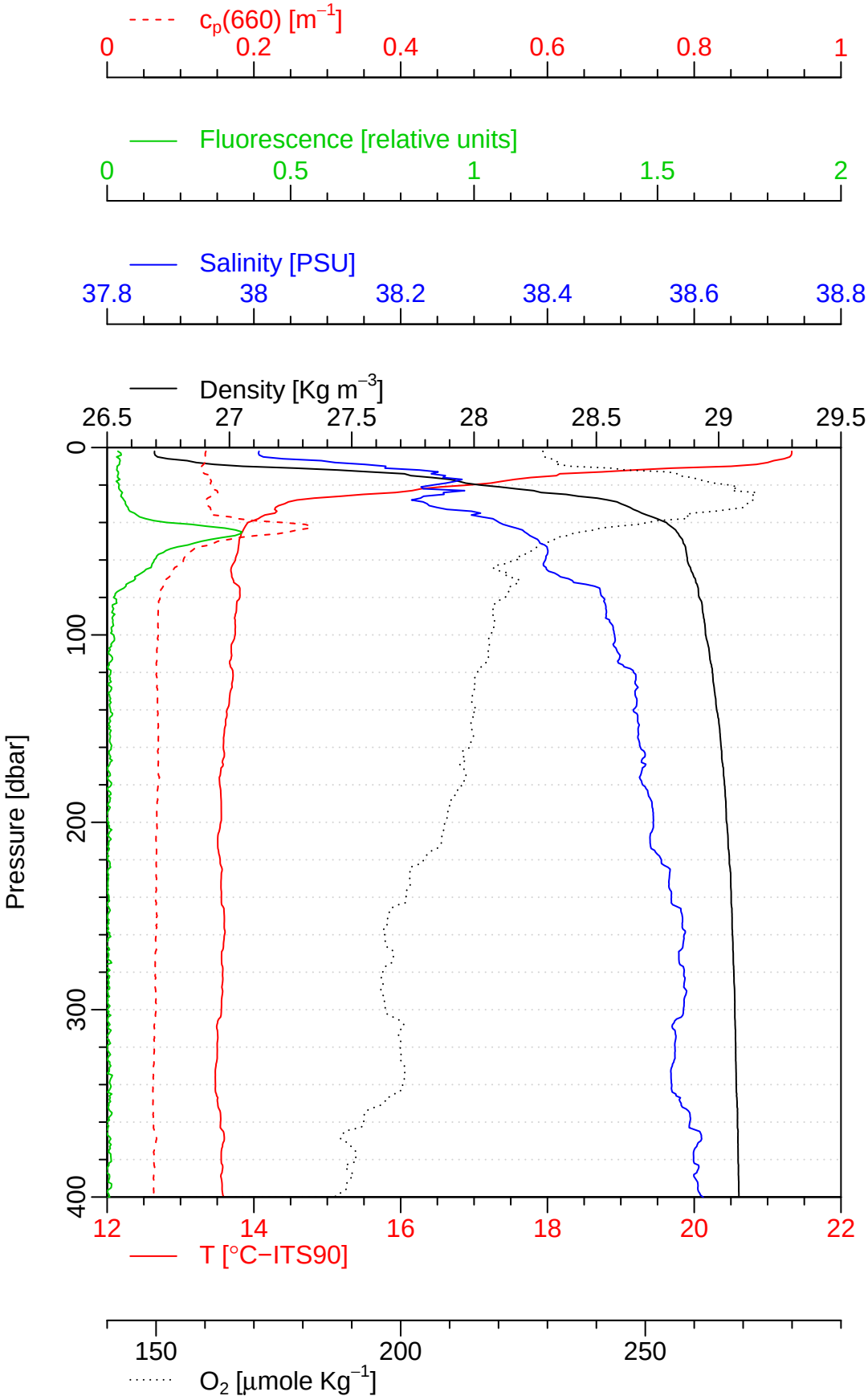

bous196_01
Date = 04/06/2018
Heure debut [TU] = 09:24
Longitude = 007 53.932 E
Latitude = 43 22.048 N
c_p(660) [m^-1]
0
0.2
0.4
0.6
0.8
1
Fluorescence [relative units]
0
0.5
1
1.5
2
Salinity [PSU]
37.8
38
38.2
38.4
38.6
38.8
Density [Kg m^-3]
26.5
27
27.5
28
28.5
29
29.5
Pressure [dbar]
0
100
200
300
400
12
14
16
18
20
22
T [°C−ITS90]
150
200
250
O2 [µmole Kg^-1]


bous196_02
Date = 04/06/2018
Heure debut [TU] = 11:48
Longitude = 007 53.875 E
Latitude = 43 22.003 N
c_p(660) [m^-1]
0
0.2
0.4
0.6
0.8
1
Fluorescence [relative units]
0
0.5
1
1.5
2
Salinity [PSU]
37.8
38
38.2
38.4
38.6
38.8
Density [Kg m^-3]
26.5
27
27.5
28
28.5
29
29.5
Pressure [dbar]
0
100
200
300
400
12
14
16
18
20
22
T [°C−ITS90]
150
200
250
O2 [µmole Kg^-1]


bous196_03
Date = 05/06/2018
Heure debut [TU] = 09:56
Longitude = 007 54.289 E
Latitude = 43 22.175 N
c_p(660) [m^-1]
0
0.2
0.4
0.6
0.8
1
Fluorescence [relative units]
0
0.5
1
1.5
2
Salinity [PSU]
37.8
38
38.2
38.4
38.6
38.8
Density [Kg m^-3]
26.5
27
27.5
28
28.5
29
29.5
Pressure [dbar]
0
100
200
300
400
12
14
16
18
20
22
T [°C−ITS90]
150
200
250
O2 [µmole Kg^-1]

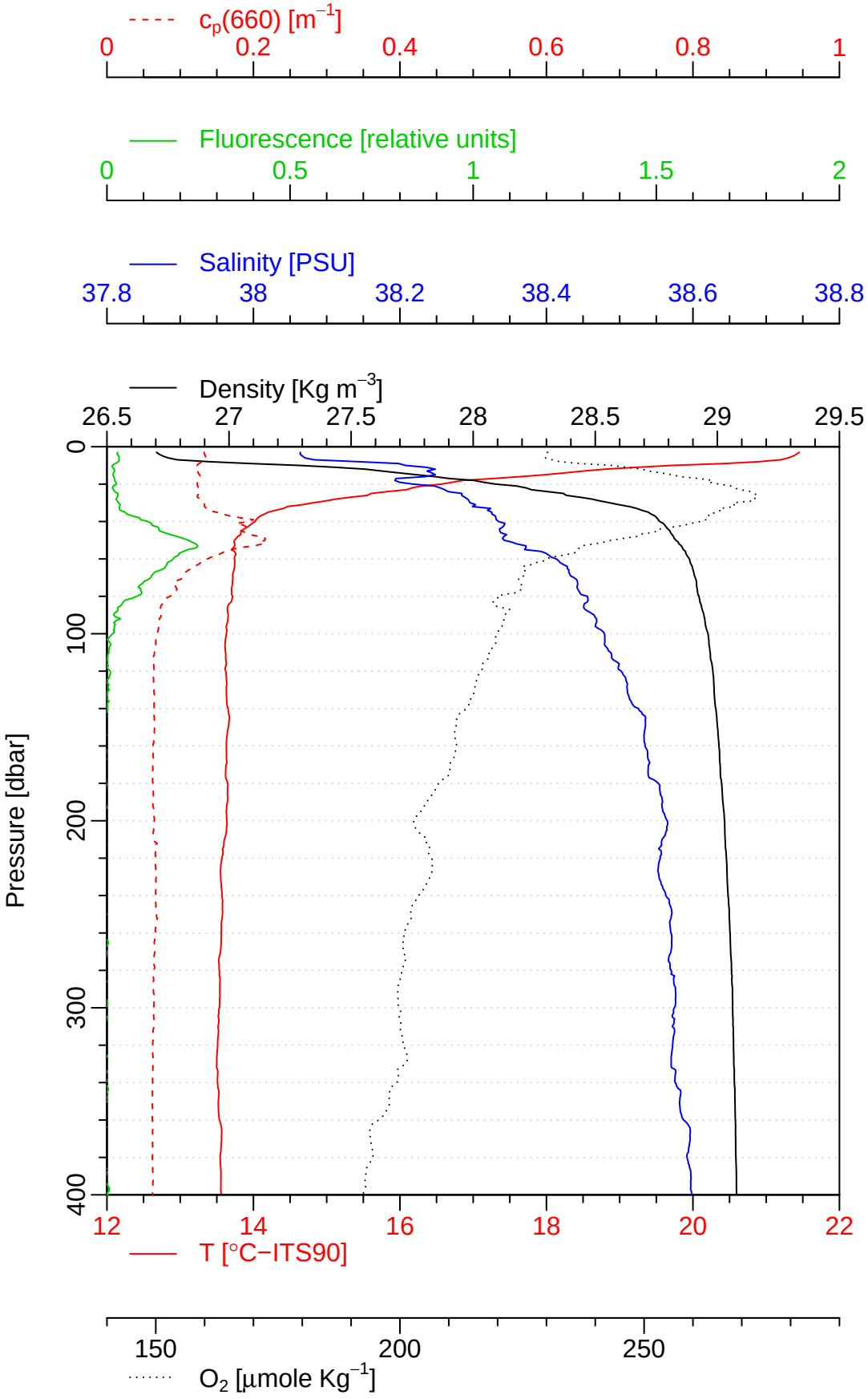
bous196_04

Date = 05/06/2018
Heure debut [TU] = 10:32
Longitude = 007 54.535 E
Latitude = 43 22.275 N



bous196_05

Date = 05/06/2018
Heure debut [TU] = 12:45
Longitude = 007 51.361 E
Latitude = 43 25.116 N



Date: 12/17/2018

Instrument configuration file: C:\Users\melek\AppData\Local\Temp\fz3temp-2\BOUS196_01.XMLCON

Configuration report for SBE 911plus/917plus CTD

```
Frequency channels suppressed : 2
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               : Yes
NMEA device connected to      : PC
Surface PAR voltage added     : No
Scan time added               : No
```

1) Frequency 0, Temperature

```
   Serial number : 5545
   Calibrated on : 15-Mar-18
   G             : 4.31330893e-003
   H             : 6.26109906e-004
   I             : 1.91915536e-005
   J             : 1.40900794e-006
   F0            : 1000.000
   Slope         : 1.00000000
   Offset        : 0.0000
```

2) Frequency 1, Conductivity

```
   Serial number : 4097
   Calibrated on : 01-Mar-18
   G             : -9.94539874e+000
   H             : 1.22627470e+000
   I             : -2.33361270e-003
   J             : 2.20576786e-004
   CTcor         : 3.2500e-006
   CPcor         : -9.57000000e-008
   Slope         : 1.00000000
   Offset        : 0.00000
```

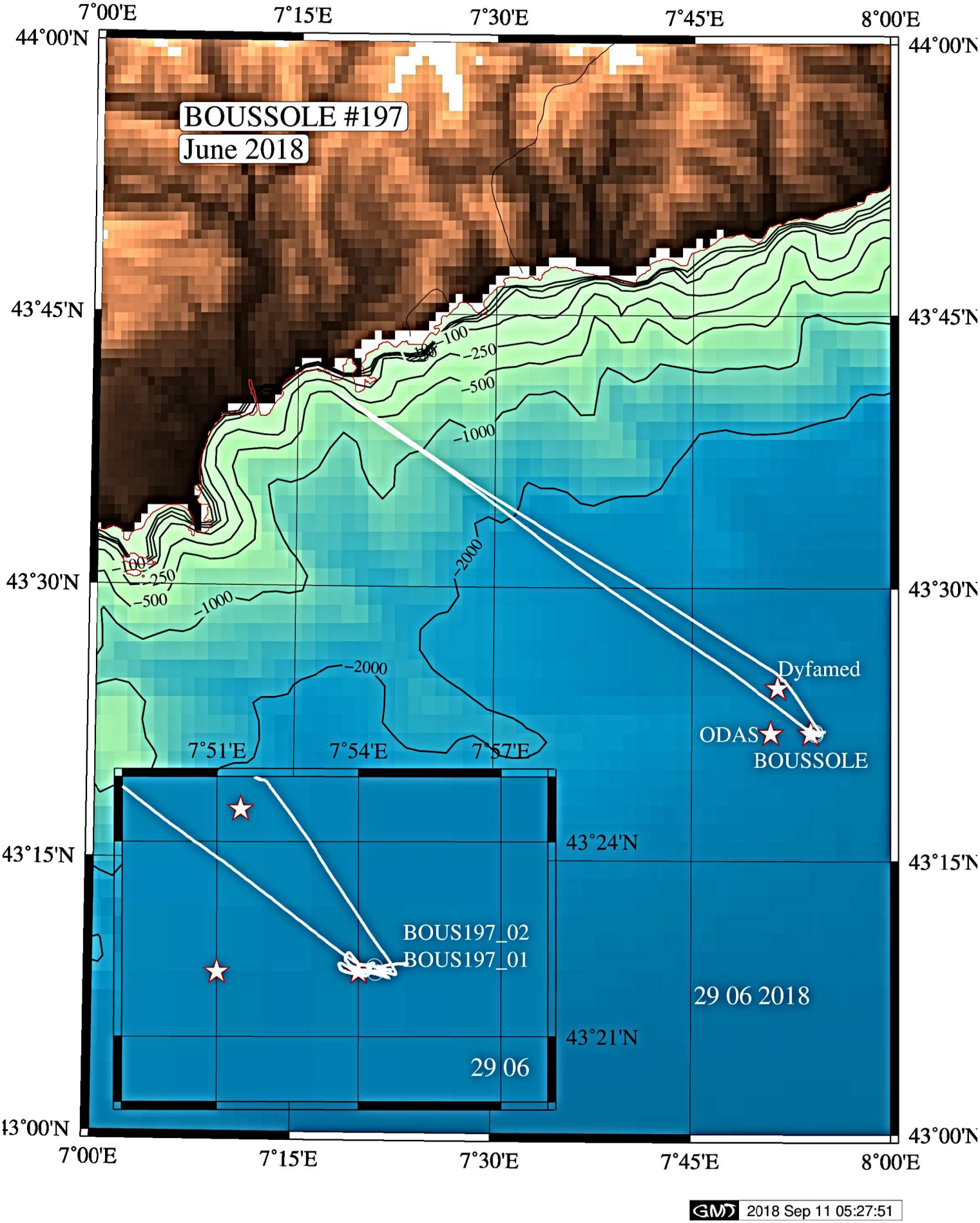
3) Frequency 2, Pressure, Digiquartz with TC

```
   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        : -1.27039
   AD590M        : 1.280100e-002
   AD590B        : -9.240166e+000
```

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

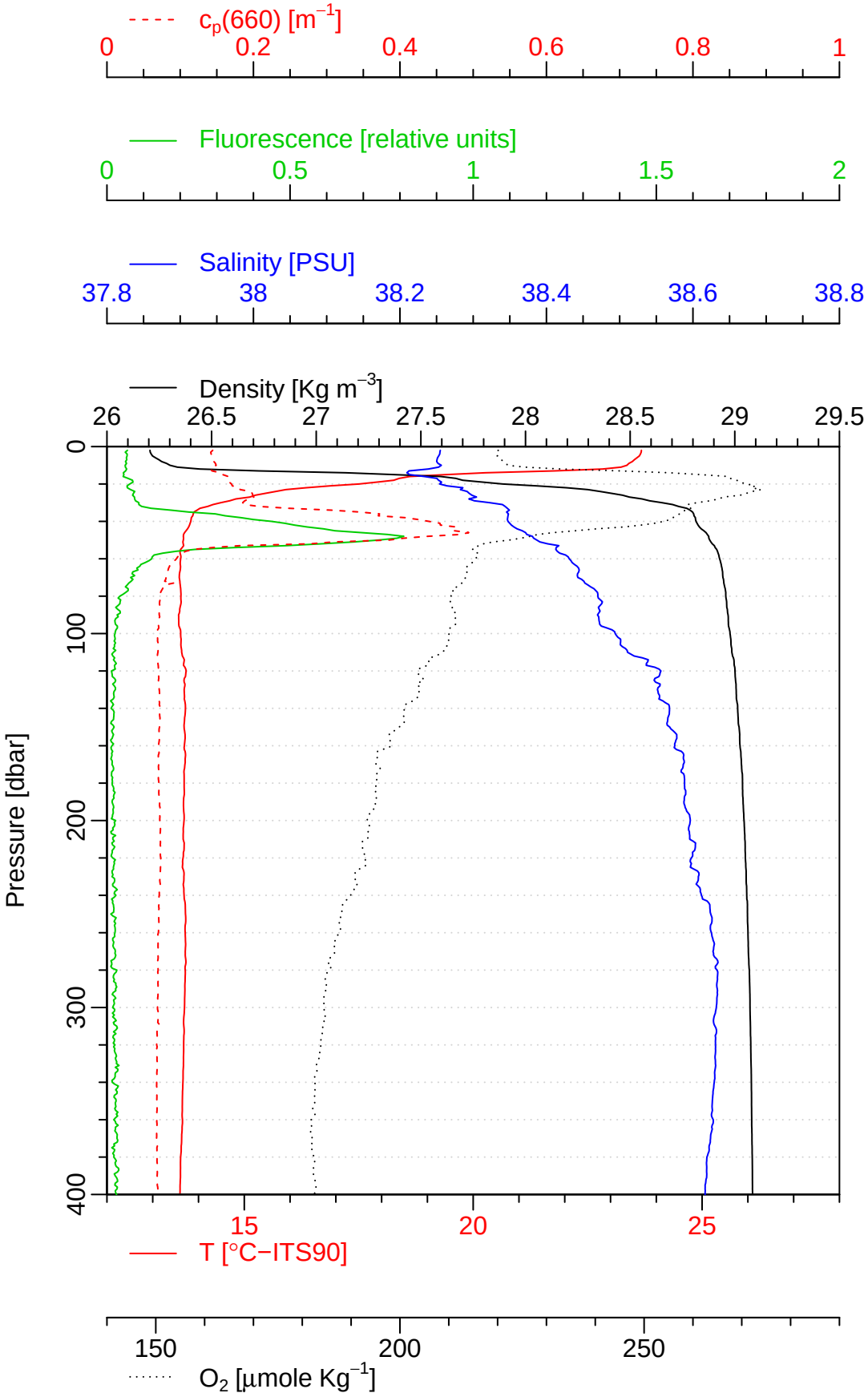
```
   Serial number : 0033
   Calibrated on : 20-May-17
   Equation      : Sea-Bird
   Soc           : 4.97380e-001
   Offset        : -4.88800e-001
   A             : -3.73290e-003
   B             : 1.83170e-004
   C             : -3.25560e-006
   E             : 3.60000e-002
   Tau20         : 1.35000e+000
```

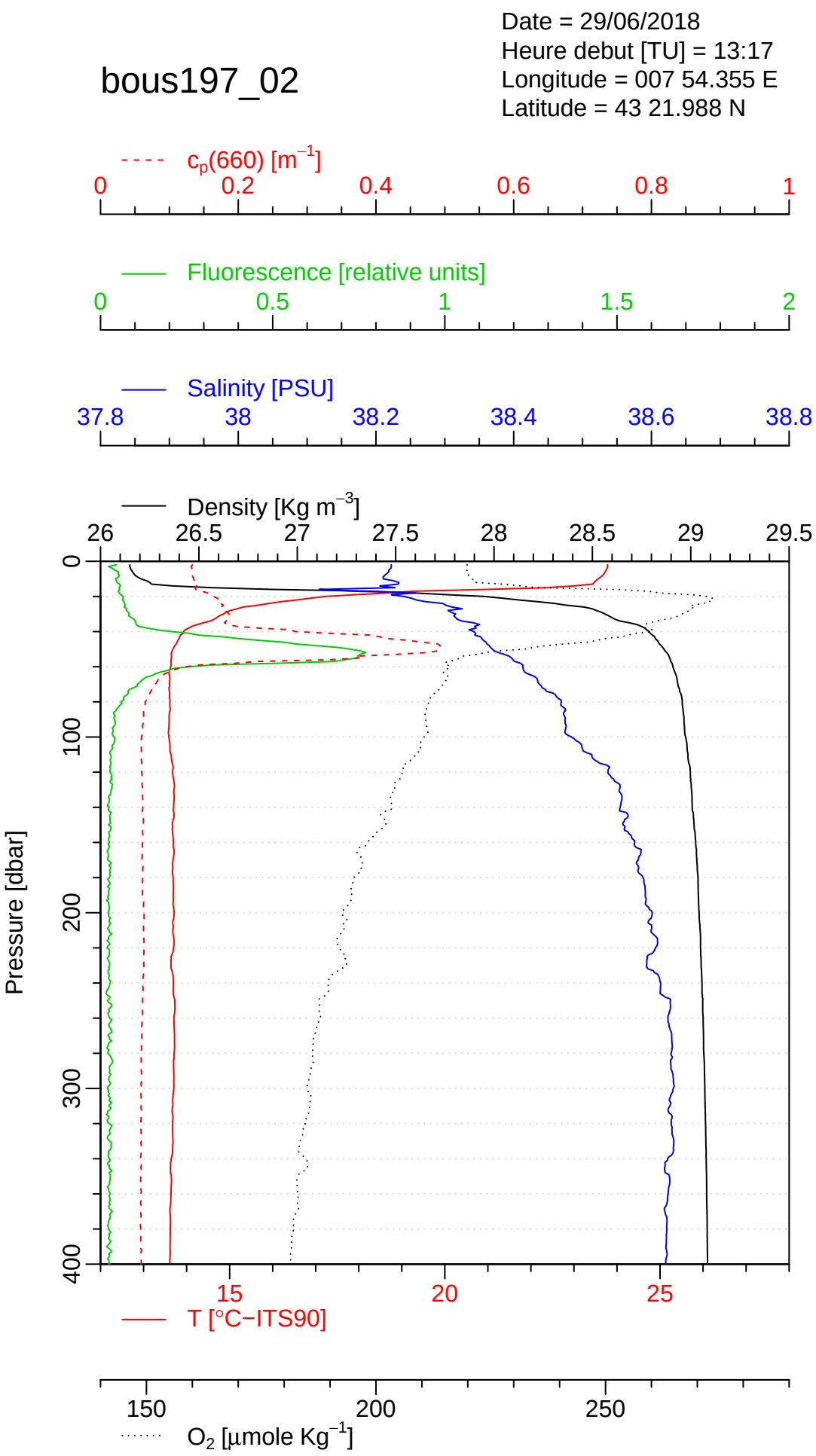
```
   D1            : 1.92634e-004
   D2            : -4.64803e-002
   H1            : -3.30000e-002
   H2            : 5.00000e+003
   H3            : 1.45000e+003

5) A/D voltage 1, Free

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

   Serial number : 088193
   Calibrated on : 27-Oct-97_cor201711
   VB            : 0.165000
   V1            : 1.933000
   Vacetone      : 0.250000
   Scale factor  : 1.000000
   Slope         : 1.000000
   Offset        : -0.210000

7) A/D voltage 3, Free

8) A/D voltage 4, Transmissometer, WET Labs C-Star

   Serial number : CST-887DR
   Calibrated on : 07112017
   M             : 21.3038
   B             : -0.1065
   Path length   : 0.250

9) A/D voltage 5, Free

10) A/D voltage 6, Altimeter

    Serial number : 310799
    Calibrated on : 19-Oct-16
    Scale factor  : 15.000
    Offset        : 0.000

11) A/D voltage 7, Free

Scan length                   : 35
```


BOUSSOLE #197
June 2018
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
BOUS197_02
BOUS197_01
29 06 2018
29 06
2018 Sep 11 05:27:51

bous197_01

Date = 29/06/2018
Heure debut [TU] = 11:18
Longitude = 007 54.338 E
Latitude = 43 22.076 N




bous197_02
Date = 29/06/2018
Heure debut [TU] = 13:17
Longitude = 007 54.355 E
Latitude = 43 21.988 N
c_p(660) [m^-1]
0
0.2
0.4
0.6
0.8
1
Fluorescence [relative units]
0
0.5
1
1.5
2
Salinity [PSU]
37.8
38
38.2
38.4
38.6
38.8
Density [Kg m^-3]
26
26.5
27
27.5
28
28.5
29
29.5
Pressure [dbar]
0
100
200
300
400
15
20
25
T [°C−ITS90]
150
200
250
O2 [µmole Kg^-1]

Date: 12/17/2018

Instrument configuration file: C:\Users\melek\AppData\Local\Temp\fz3temp-2\BOUS197_01.XMLCON

Configuration report for SBE 911plus/917plus CTD

```
Frequency channels suppressed : 2
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 : 15-Mar-18
   G             : 4.31330893e-003
   H             : 6.26109906e-004
   I             : 1.91915536e-005
   J             : 1.40900794e-006
   F0            : 1000.000
   Slope         : 1.00000000
   Offset        : 0.0000
```

2) Frequency 1, Conductivity

```
   Serial number : 4097
   Calibrated on : 01-Mar-18
   G             : -9.94539874e+000
   H             : 1.22627470e+000
   I             : -2.33361270e-003
   J             : 2.20576786e-004
   CTcor         : 3.2500e-006
   CPcor         : -9.57000000e-008
   Slope         : 1.00000000
   Offset        : 0.00000
```

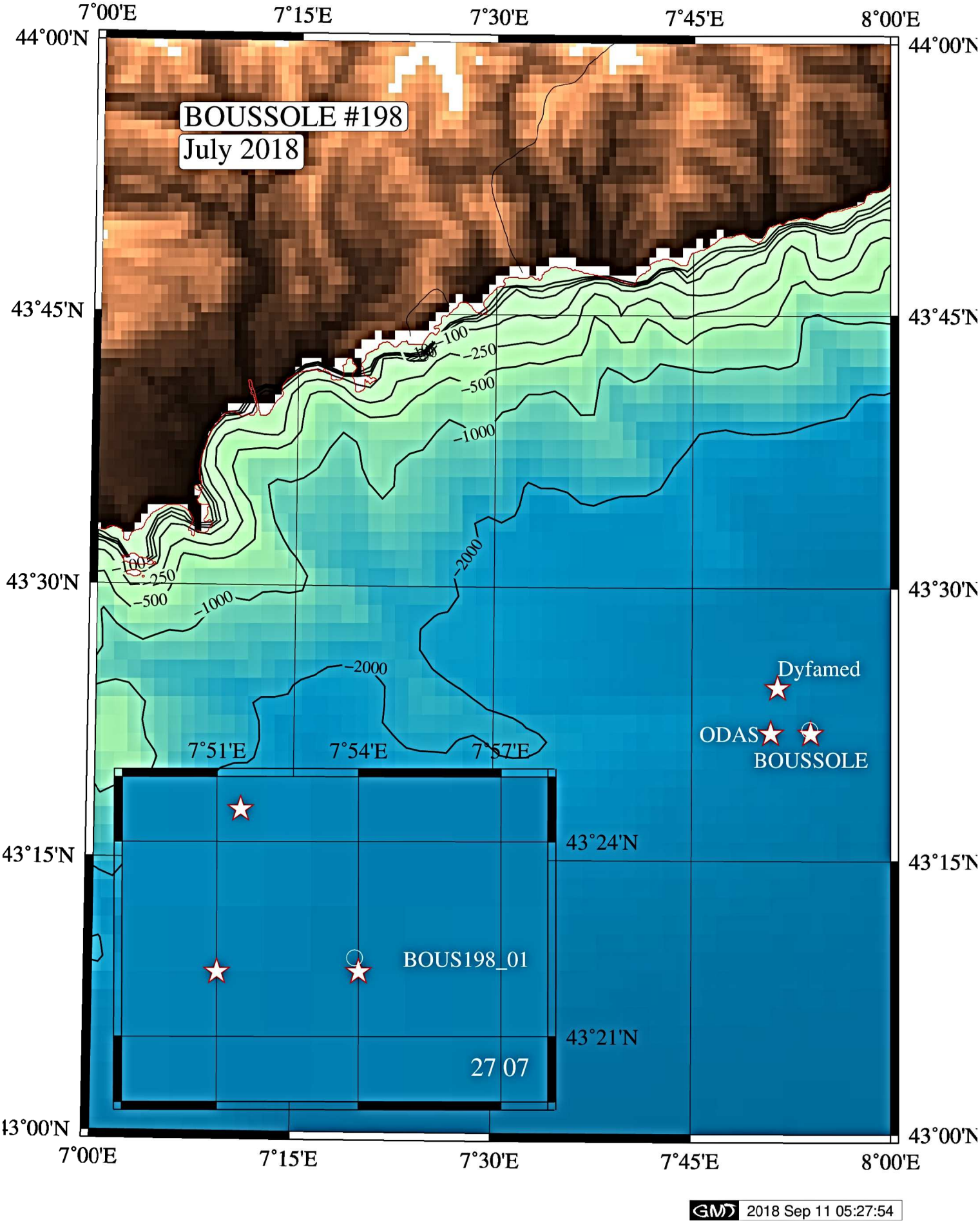
3) Frequency 2, Pressure, Digiquartz with TC

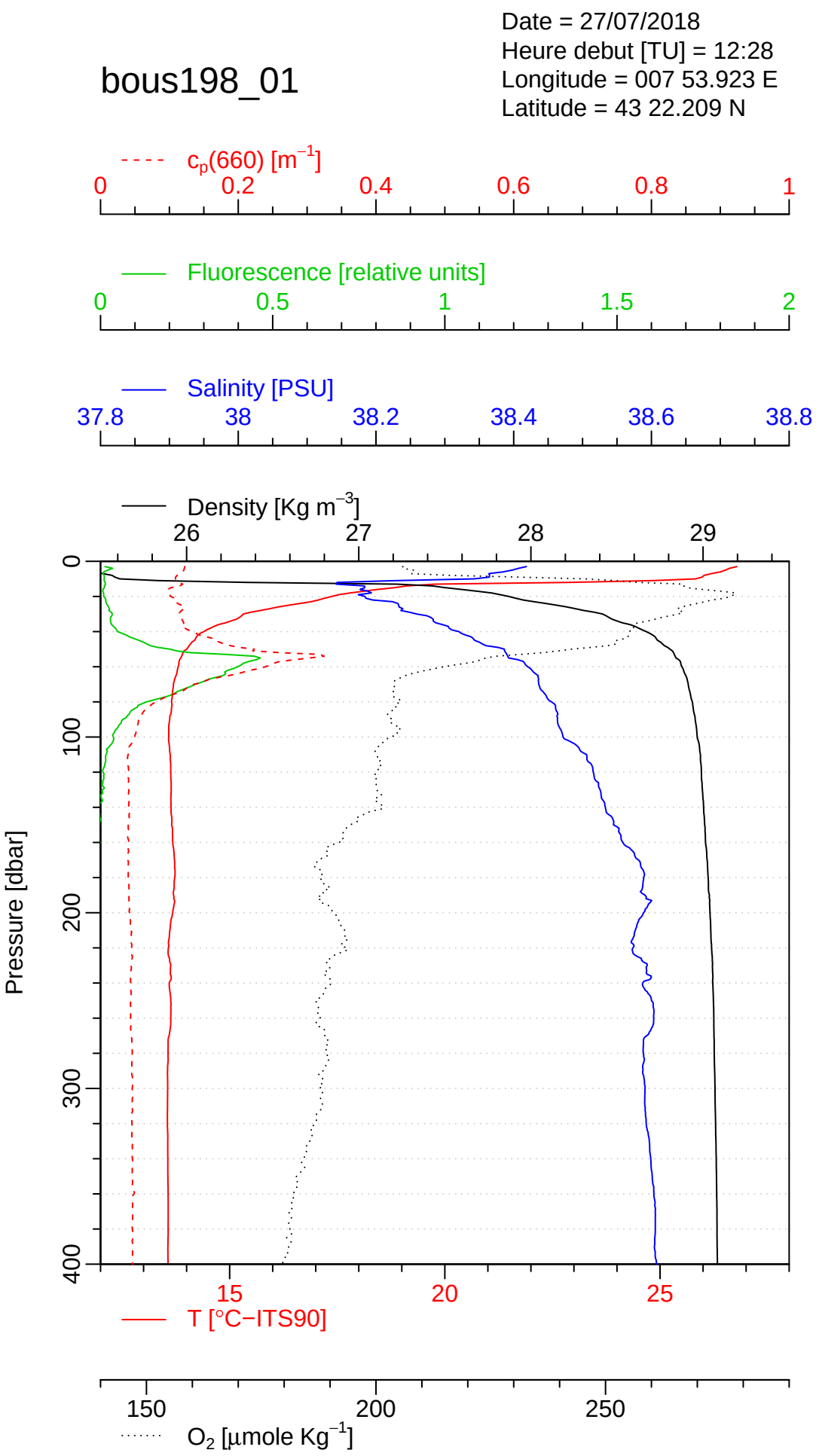
```
   Serial number : 0329
   Calibrated on : 04-Dec-09 (corr May-2017)
   C1            : -4.499631e+004
   C2            : 4.598757e-001
   C3            : 1.505020e-002
   D1            : 3.936600e-002
   D2            : 0.000000e+000
   T1            : 3.004570e+001
   T2            : -1.880753e-004
   T3            : 4.727060e-006
   T4            : -1.923520e-009
   T5            : 0.000000e+000
   Slope         : 0.99996509
   Offset        : -1.27039
   AD590M        : 1.280100e-002
   AD590B        : -9.240166e+000
```

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

```
   Serial number : 0033
   Calibrated on : 20-May-17
   Equation      : Sea-Bird
   Soc           : 4.97380e-001
   Offset        : -4.88800e-001
   A             : -3.73290e-003
   B             : 1.83170e-004
   C             : -3.25560e-006
   E             : 3.60000e-002
   Tau20         : 1.35000e+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 : 088193
   Calibrated on : 27-Oct-97_cor201806
   VB            : 0.165000
   V1            : 1.933000
   Vacetone      : 0.250000
   Scale factor  : 1.000000
   Slope         : 1.000000
   Offset        : -0.170000

7) A/D voltage 3, Free

8) A/D voltage 4, Transmissometer, WET Labs C-Star

   Serial number : CST-887DR
   Calibrated on : 07112017
   M             : 21.3038
   B             : -0.1065
   Path length   : 0.250

9) A/D voltage 5, Free

10) A/D voltage 6, Altimeter

    Serial number : 310799
    Calibrated on : 19-Oct-16
    Scale factor  : 15.000
    Offset        : 0.000

11) A/D voltage 7, Free

Scan length                   : 31
```


BOUSSOLE #198
July 2018
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
BOUS198_01
27 07
GMT 2018 Sep 11 05:27:54


bous198_01
Date = 27/07/2018
Heure debut [TU] = 12:28
Longitude = 007 53.923 E
Latitude = 43 22.209 N
c_p(660) [m^-1]
0
0.2
0.4
0.6
0.8
1
Fluorescence [relative units]
0
0.5
1
1.5
2
Salinity [PSU]
37.8
38
38.2
38.4
38.6
38.8
Density [Kg m^-3]
26
27
28
29
Pressure [dbar]
0
100
200
300
400
15
20
25
T [°C−ITS90]
150
200
250
O2 [µmole Kg^-1]

Date: 12/17/2018

Instrument configuration file: C:\Users\melek\AppData\Local\Temp\fz3temp-2\BOUS198_01.XMLCON

Configuration report for SBE 911plus/917plus CTD

```
Frequency channels suppressed : 2
Voltage words suppressed      : 0
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 : 15-Mar-18
   G             : 4.36735292e-003
   H             : 6.43354202e-004
   I             : 2.35222608e-005
   J             : 2.26240163e-006
   F0            : 1000.000
   Slope         : 1.00000000
   Offset        : 0.0000
```

2) Frequency 1, Conductivity

```
   Serial number : 1313
   Calibrated on : 15-Feb-18
   G             : -3.93898414e+000
   H             : 4.71340485e-001
   I             : -1.98155782e-004
   J             : 3.77528476e-005
   CTcor         : 3.2500e-006
   CPcor         : -9.57000000e-008
   Slope         : 1.00000000
   Offset        : 0.00000
```

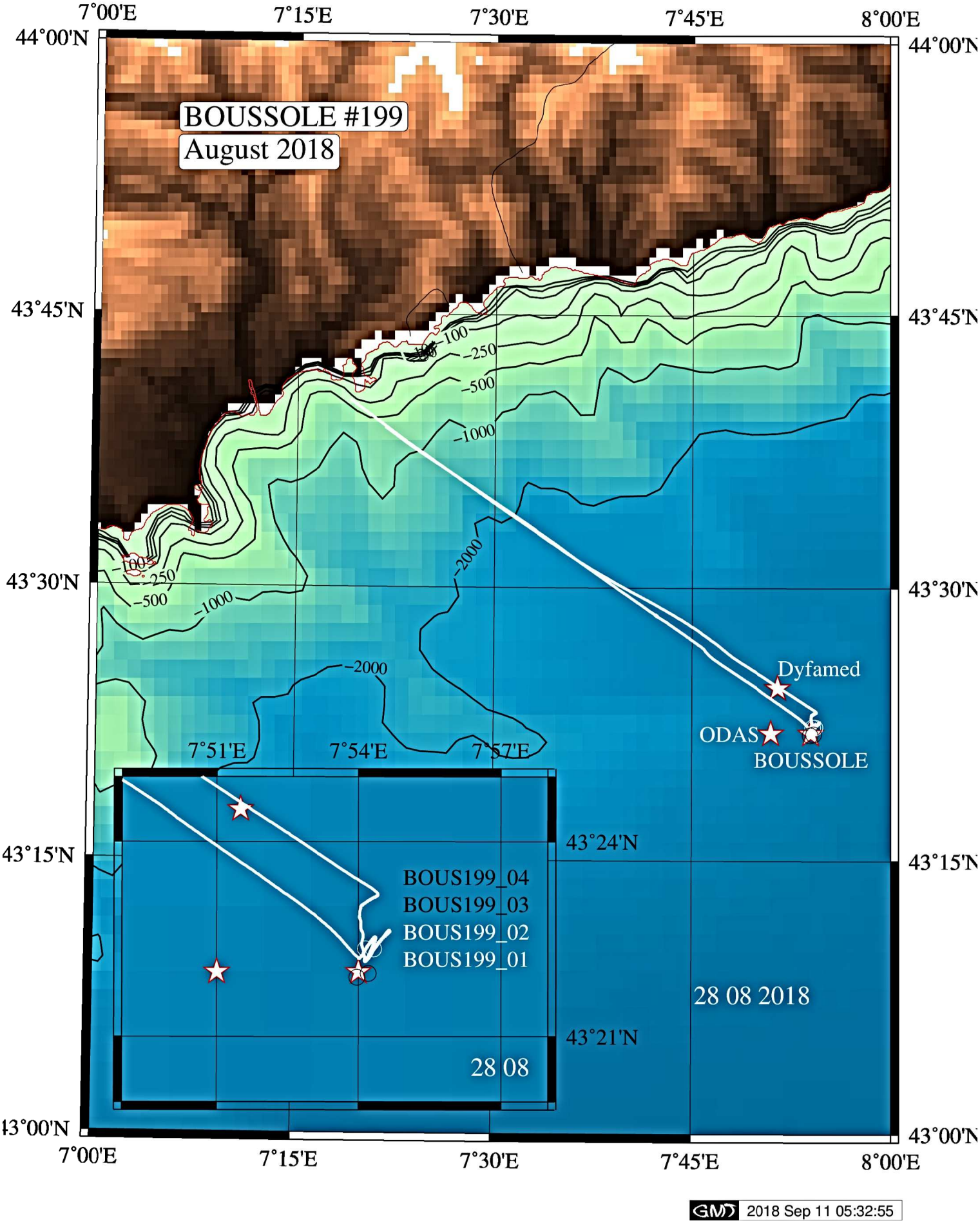
3) Frequency 2, Pressure, Digiquartz with TC

```
   Serial number : 0294
   Calibrated on : 22-Feb-13
   C1            : -4.258473e+004
   C2            : 1.874931e-001
   C3            : 1.368020e-002
   D1            : 3.936700e-002
   D2            : 0.000000e+000
   T1            : 3.021404e+001
   T2            : -2.815189e-004
   T3            : 4.591050e-006
   T4            : 1.633320e-009
   T5            : 0.000000e+000
   Slope         : 0.99982000
   Offset        : -1.63630
   AD590M        : 1.145000e-002
   AD590B        : -8.133300e+000
```

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

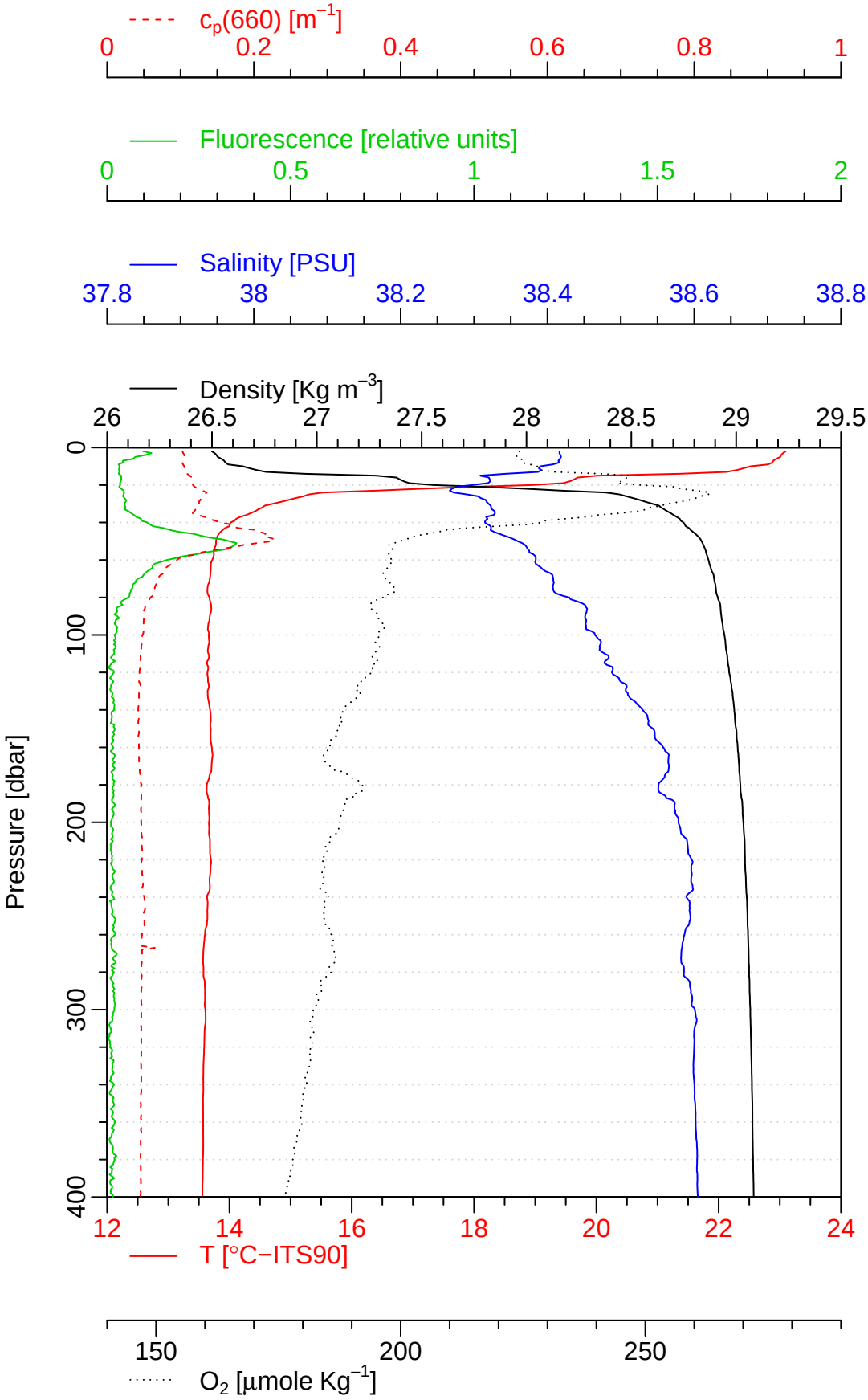
```
   Serial number : 0587
   Calibrated on : 24-Mar-18
   Equation      : Sea-Bird
   Soc           : 3.80390e-001
   Offset        : -6.90900e-001
   A             : -4.03530e-003
   B             : 1.51440e-004
   C             : -2.31100e-006
   E             : 3.60000e-002
   Tau20         : 1.18000e+000
   D1            : 1.92634e-004
```

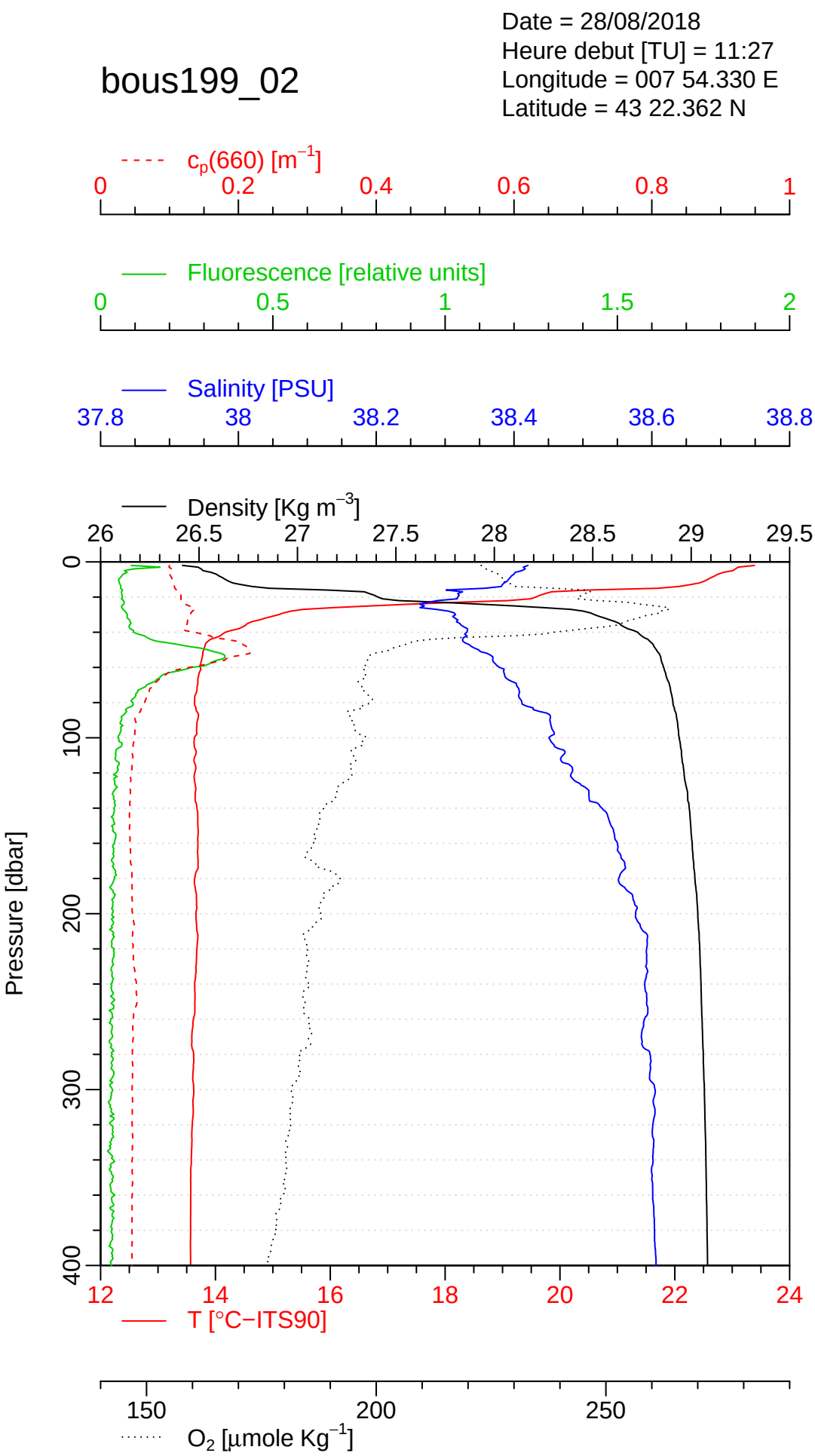
```
   D2             : -4.64803e-002
   H1             : -3.30000e-002
   H2             : 5.00000e+003
   H3             : 1.45000e+003

5) A/D voltage 1, Free

6) A/D voltage 2, User Polynomial

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

7) A/D voltage 3, 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

8) A/D voltage 4, Fluorometer, Chelsea Aqua 3

   Serial number : 088193
   Calibrated on : 27-Oct-97_cor201806
   VB             : 0.165000
   V1             : 1.933000
   Vacetone       : 0.250000
   Scale factor   : 1.000000
   Slope          : 1.000000
   Offset         : -0.170000

9) A/D voltage 5, Transmissometer, WET Labs C-Star

   Serial number : CST-887DR
   Calibrated on : 07112017
   M              : 21.3038
   B              : -0.1065
   Path length    : 0.250

10) A/D voltage 6, Free

11) A/D voltage 7, Free

Scan length                    : 24
```

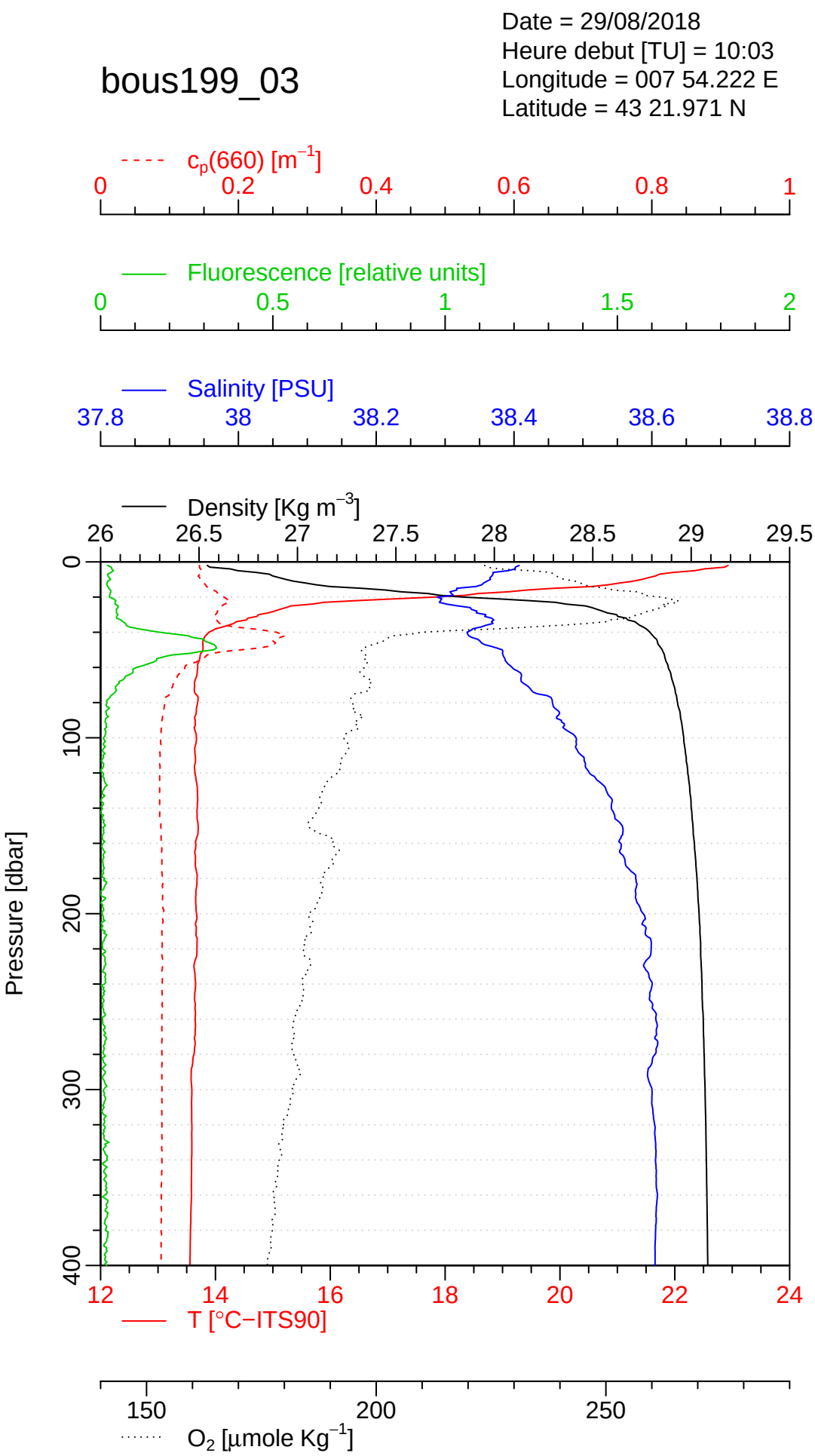

BOUSSOLE #199
August 2018
7°00'E
7°15'E
7°30'E
7°45'E
8°00'E
44°00'N
43°45'N
43°30'N
43°15'N
43°00'N
-100
-250
-500
-1000
-2000
Dyfamed
ODAS
BOUSSOLE
7°51'E
7°54'E
7°57'E
43°24'N
43°21'N
BOUS199_04
BOUS199_03
BOUS199_02
BOUS199_01
28 08 2018
28 08
GMT 2018 Sep 11 05:32:55

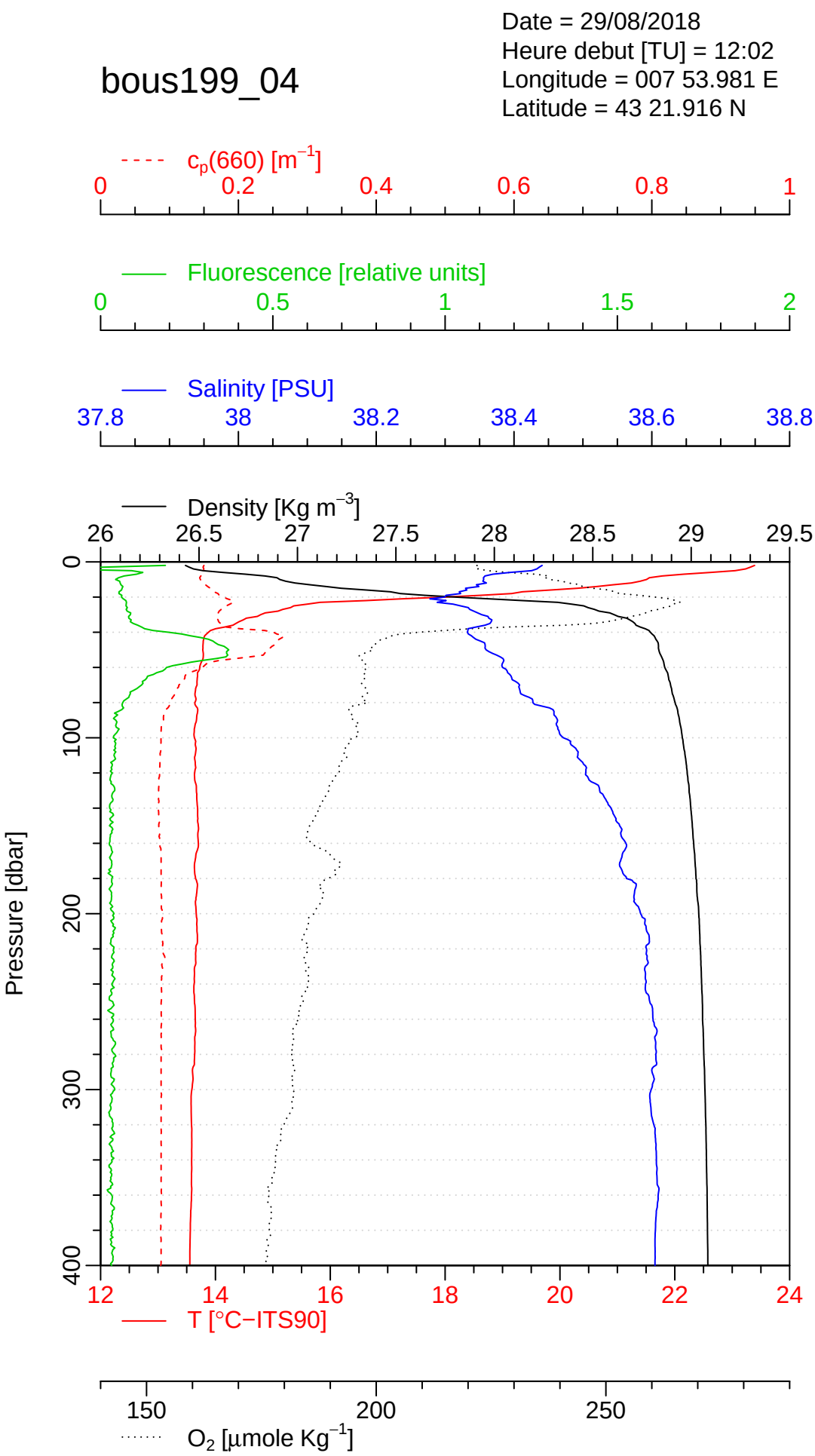
bous199_01

Date = 28/08/2018
Heure debut [TU] = 10:47
Longitude = 007 54.164 E
Latitude = 43 22.360 N




bous199_02
Date = 28/08/2018
Heure debut [TU] = 11:27
Longitude = 007 54.330 E
Latitude = 43 22.362 N
c_p(660) [m^-1]
0 0.2 0.4 0.6 0.8 1
Fluorescence [relative units]
0 0.5 1 1.5 2
Salinity [PSU]
37.8 38 38.2 38.4 38.6 38.8
Density [Kg m^-3]
26 26.5 27 27.5 28 28.5 29 29.5
Pressure [dbar]
0 100 200 300 400
12 14 16 18 20 22 24
T [°C−ITS90]
150 200 250
O2 [µmole Kg^-1]


bous199_03
Date = 29/08/2018
Heure debut [TU] = 10:03
Longitude = 007 54.222 E
Latitude = 43 21.971 N
c_p(660) [m^-1]
0
0.2
0.4
0.6
0.8
1
Fluorescence [relative units]
0
0.5
1
1.5
2
Salinity [PSU]
37.8
38
38.2
38.4
38.6
38.8
Density [Kg m^-3]
26
26.5
27
27.5
28
28.5
29
29.5
Pressure [dbar]
0
100
200
300
400
12
14
16
18
20
22
24
T [°C−ITS90]
150
200
250
O2 [µmole Kg^-1]


bous199_04
Date = 29/08/2018
Heure debut [TU] = 12:02
Longitude = 007 53.981 E
Latitude = 43 21.916 N
c_p(660) [m^-1]
0 0.2 0.4 0.6 0.8 1
Fluorescence [relative units]
0 0.5 1 1.5 2
Salinity [PSU]
37.8 38 38.2 38.4 38.6 38.8
Density [Kg m^-3]
26 26.5 27 27.5 28 28.5 29 29.5
Pressure [dbar]
0 100 200 300 400
12 14 16 18 20 22 24
T [°C−ITS90]
150 200 250
O2 [µmole Kg^-1]

Date: 12/17/2018

Instrument configuration file: C:\Users\melek\AppData\Local\Temp\fz3temp-2\BOUS199_01.XMLCON

Configuration report for SBE 911plus/917plus CTD

```
Frequency channels suppressed : 2
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 : 2473
   Calibrated on : 15-Mar-18
   G             : 4.36735292e-003
   H             : 6.43354202e-004
   I             : 2.35222608e-005
   J             : 2.26240163e-006
   F0            : 1000.000
   Slope         : 1.00000000
   Offset        : 0.0000
```

2) Frequency 1, Conductivity

```
   Serial number : 1313
   Calibrated on : 15-Feb-18
   G             : -3.93898414e+000
   H             : 4.71340485e-001
   I             : -1.98155782e-004
   J             : 3.77528476e-005
   CTcor         : 3.2500e-006
   CPcor         : -9.57000000e-008
   Slope         : 1.00000000
   Offset        : 0.00000
```

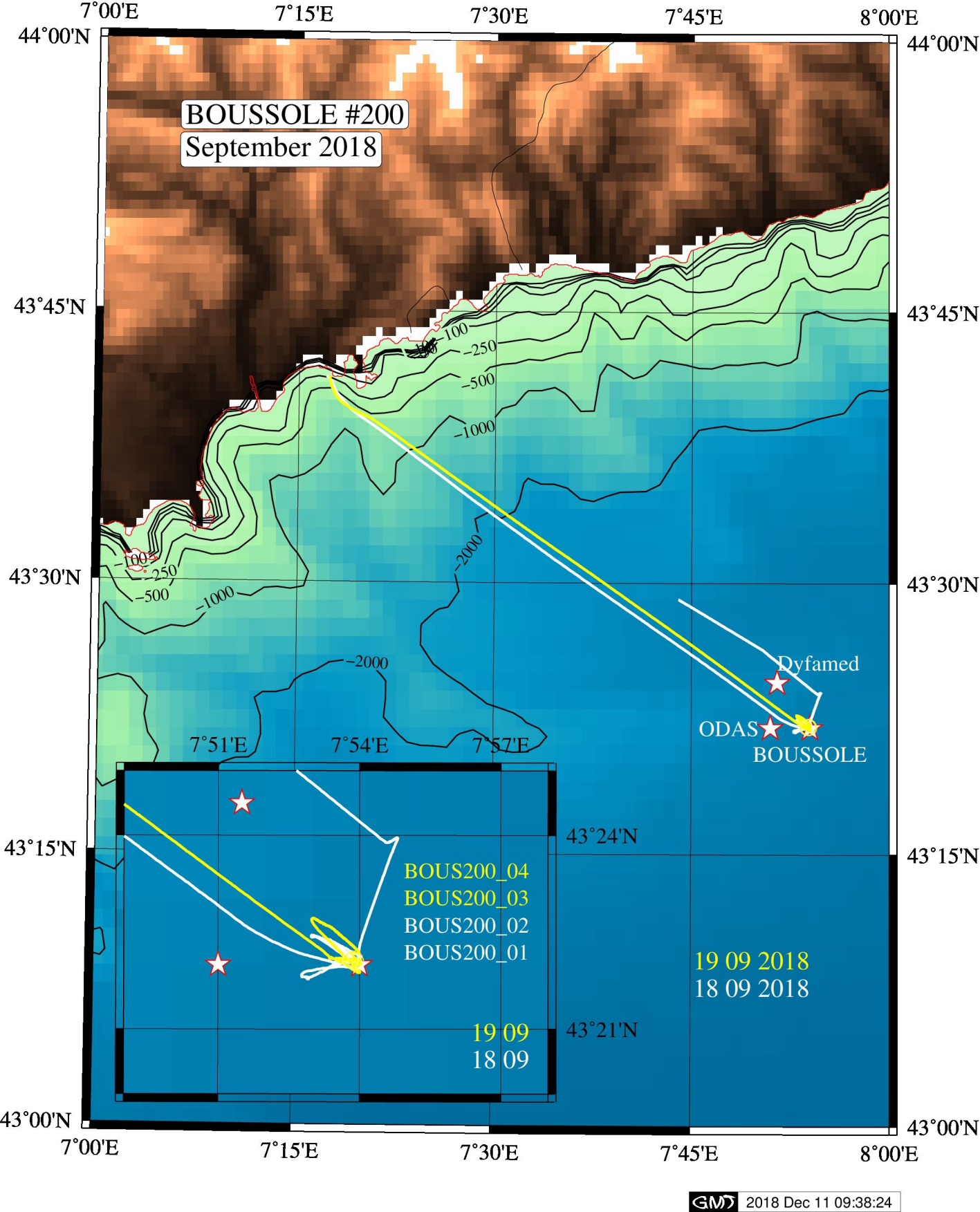
3) Frequency 2, Pressure, Digiquartz with TC

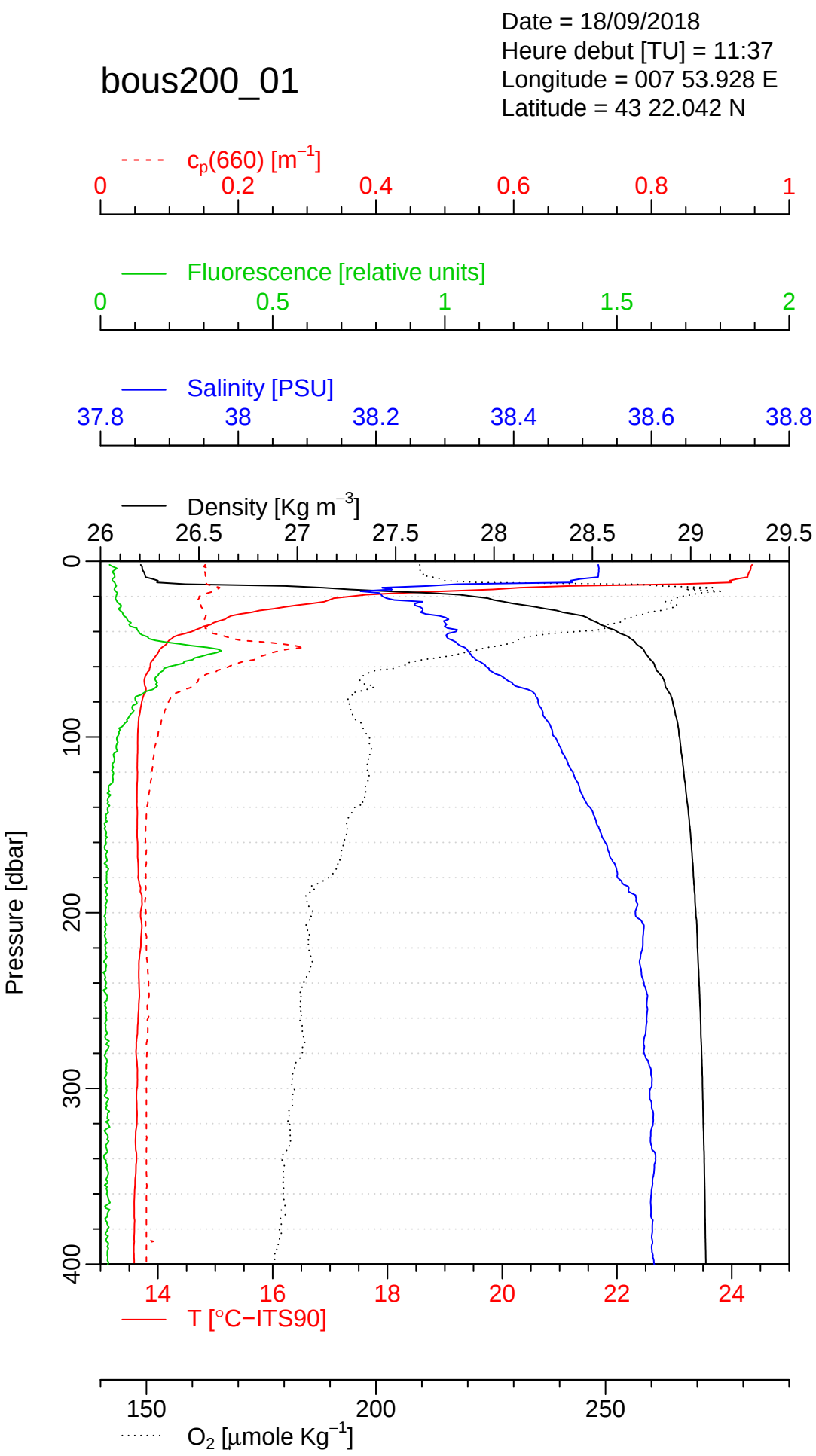
```
   Serial number : 0294
   Calibrated on : 22-Feb-13
   C1            : -4.258473e+004
   C2            : 1.874931e-001
   C3            : 1.368020e-002
   D1            : 3.936700e-002
   D2            : 0.000000e+000
   T1            : 3.021404e+001
   T2            : -2.815189e-004
   T3            : 4.591050e-006
   T4            : 1.633320e-009
   T5            : 0.000000e+000
   Slope         : 0.99982000
   Offset        : -1.63630
   AD590M        : 1.145000e-002
   AD590B        : -8.133300e+000
```

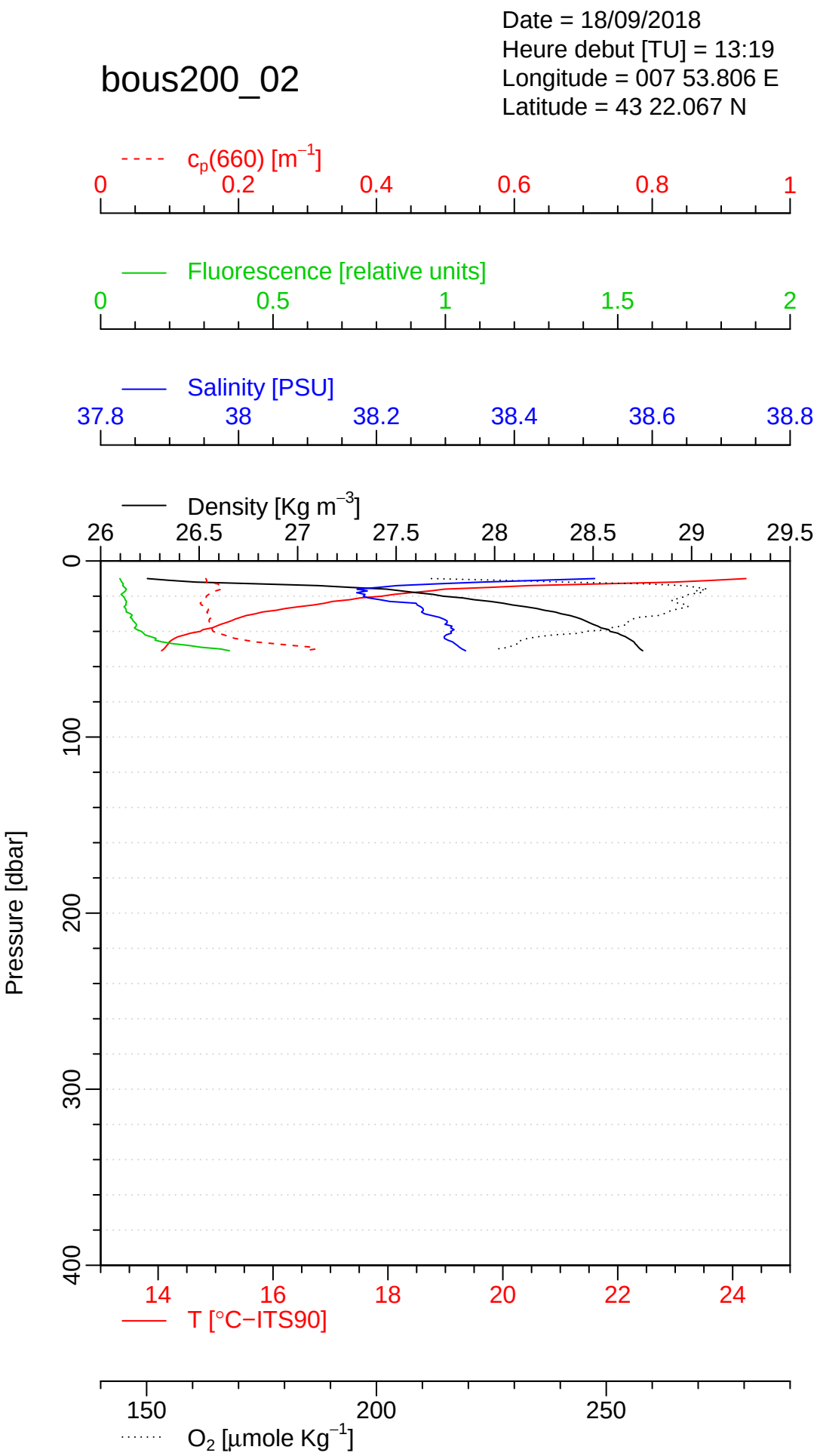
4) A/D voltage 0, Oxygen, SBE 43

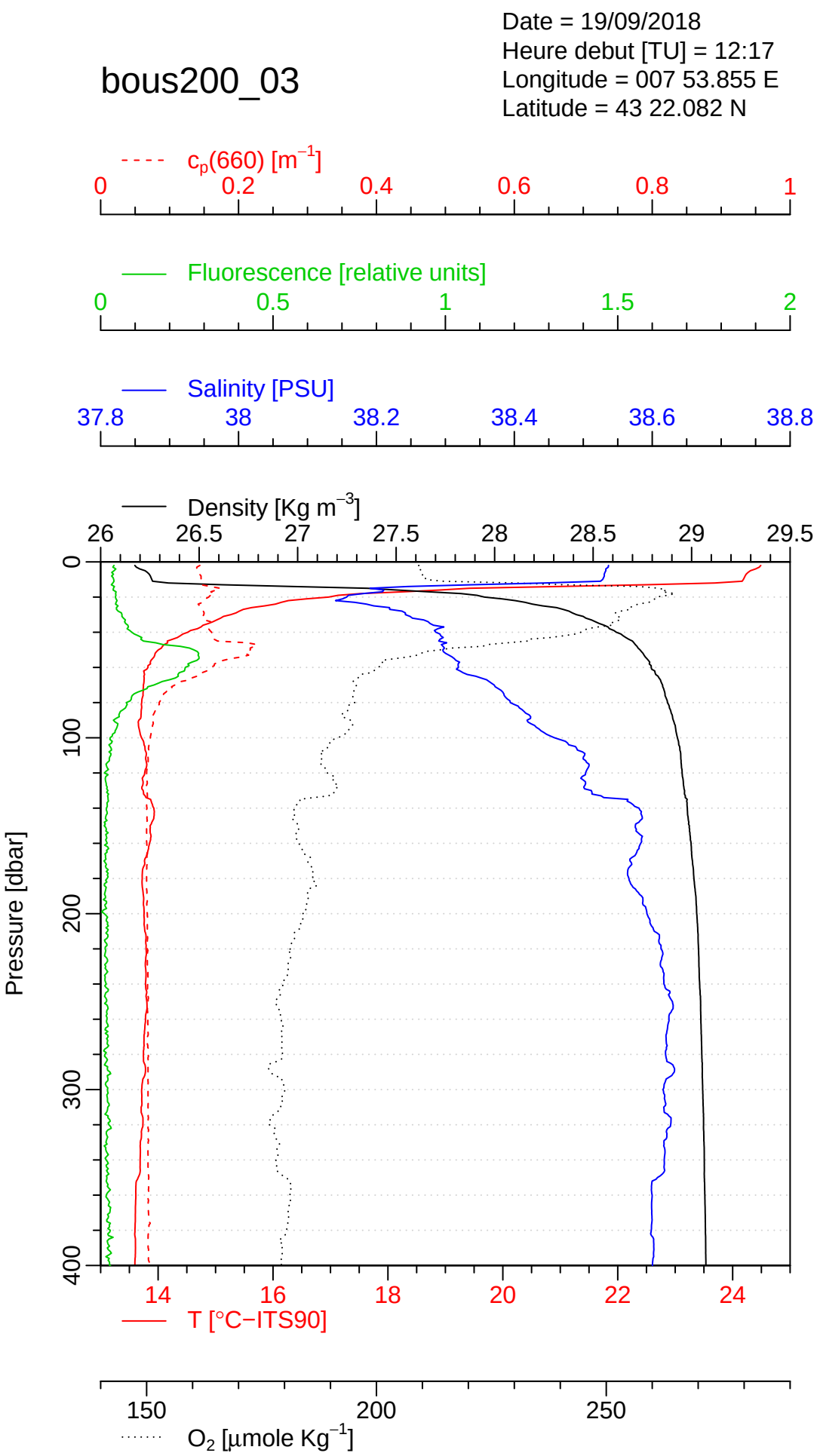
```
   Serial number : 0587
   Calibrated on : 24-Mar-18
   Equation      : Sea-Bird
   Soc           : 3.80390e-001
   Offset        : -6.90900e-001
   A             : -4.03530e-003
   B             : 1.51440e-004
   C             : -2.31100e-006
   E             : 3.60000e-002
   Tau20         : 1.18000e+000
```

```
   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, User Polynomial

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

7) A/D voltage 3, 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

8) A/D voltage 4, Fluorometer, Chelsea Aqua 3

   Serial number : 088193
   Calibrated on : 27-Oct-97_cor201806
   VB            : 0.165000
   V1            : 1.933000
   Vacetone      : 0.250000
   Scale factor  : 1.000000
   Slope         : 1.000000
   Offset        : -0.170000

9) A/D voltage 5, Transmissometer, WET Labs C-Star

   Serial number : CST-887DR
   Calibrated on : 07112017
   M             : 21.3038
   B             : -0.1065
   Path length   : 0.250

10) A/D voltage 6, Altimeter

    Serial number : 310799
    Calibrated on : 19-Oct-16
    Scale factor  : 15.000
    Offset        : 0.000

11) A/D voltage 7, Free

Scan length                   : 31
```


BOUSSOLE #200
September 2018
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
BOUS200_04
BOUS200_03
BOUS200_02
BOUS200_01
19 09 2018
18 09 2018
19 09
18 09
GMT 2018 Dec 11 09:38:24

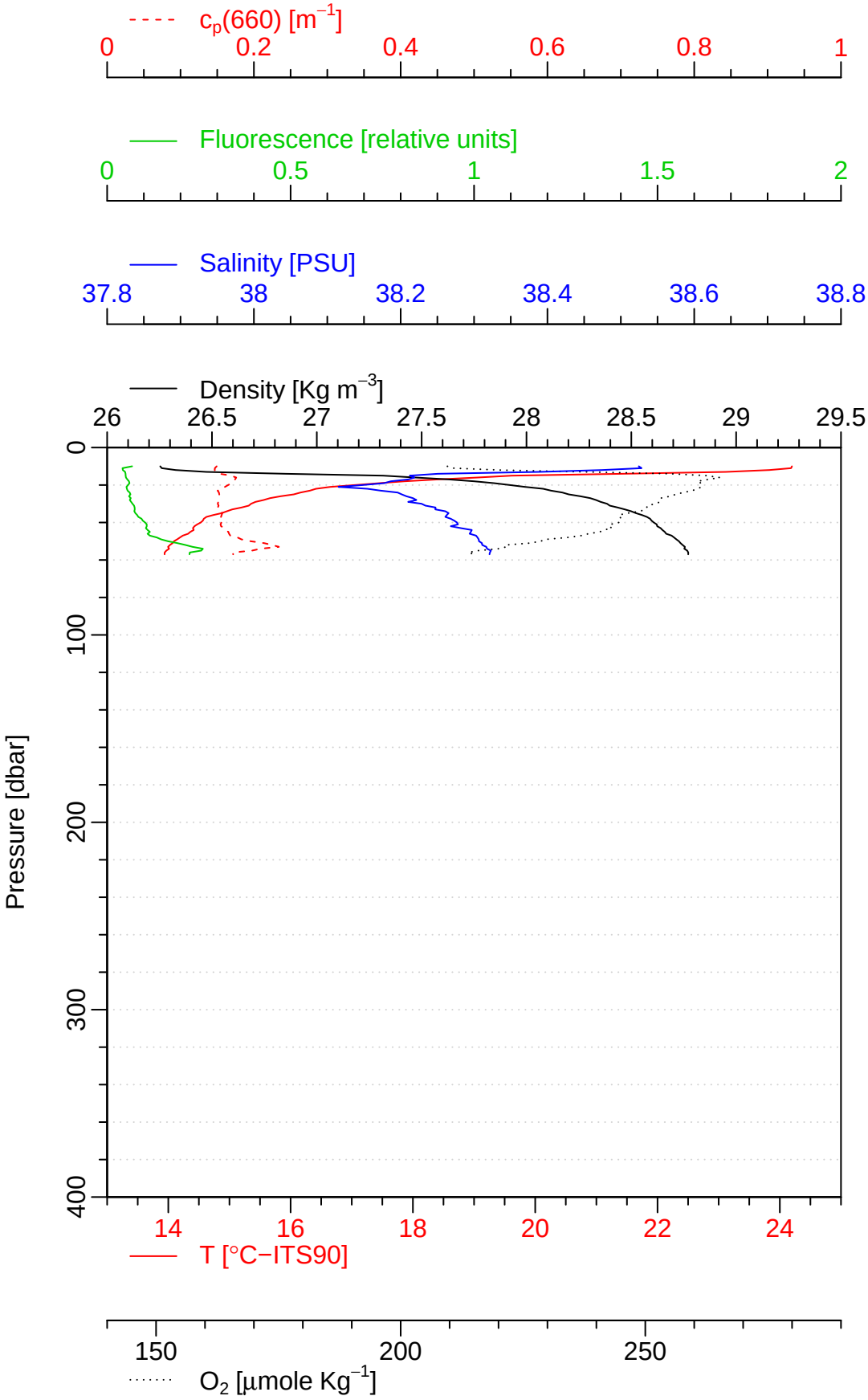

bous200_01
Date = 18/09/2018
Heure debut [TU] = 11:37
Longitude = 007 53.928 E
Latitude = 43 22.042 N
c_p(660) [m^-1]
0
0.2
0.4
0.6
0.8
1
Fluorescence [relative units]
0
0.5
1
1.5
2
Salinity [PSU]
37.8
38
38.2
38.4
38.6
38.8
Density [Kg m^-3]
26
26.5
27
27.5
28
28.5
29
29.5
Pressure [dbar]
0
100
200
300
400
14
16
18
20
22
24
T [°C−ITS90]
150
200
250
O2 [µmole Kg^-1]


bous200_02
Date = 18/09/2018
Heure debut [TU] = 13:19
Longitude = 007 53.806 E
Latitude = 43 22.067 N
c_p(660) [m^-1]
0
0.2
0.4
0.6
0.8
1
Fluorescence [relative units]
0
0.5
1
1.5
2
Salinity [PSU]
37.8
38
38.2
38.4
38.6
38.8
Density [Kg m^-3]
26
26.5
27
27.5
28
28.5
29
29.5
Pressure [dbar]
0
100
200
300
400
14
16
18
20
22
24
T [°C−ITS90]
150
200
250
O2 [µmole Kg^-1]


bous200_03
Date = 19/09/2018
Heure debut [TU] = 12:17
Longitude = 007 53.855 E
Latitude = 43 22.082 N
c_p(660) [m^-1]
0
0.2
0.4
0.6
0.8
1
Fluorescence [relative units]
0
0.5
1
1.5
2
Salinity [PSU]
37.8
38
38.2
38.4
38.6
38.8
Density [Kg m^-3]
26
26.5
27
27.5
28
28.5
29
29.5
Pressure [dbar]
0
100
200
300
400
14
16
18
20
22
24
T [°C−ITS90]
150
200
250
O2 [µmole Kg^-1]

bous200_04

Date = 19/09/2018
Heure debut [TU] = 13:30
Longitude = 007 53.902 E
Latitude = 43 22.087 N



Date: 12/17/2018

Instrument configuration file: C:\Users\melek\AppData\Local\Temp\fz3temp-2\BOUS200_01.XMLCON

Configuration report for SBE 911plus/917plus CTD

```
Frequency channels suppressed : 2
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 : 2473
   Calibrated on : 15-Mar-18
   G             : 4.36735292e-003
   H             : 6.43354202e-004
   I             : 2.35222608e-005
   J             : 2.26240163e-006
   F0            : 1000.000
   Slope         : 1.00000000
   Offset        : 0.0000
```

2) Frequency 1, Conductivity

```
   Serial number : 1313
   Calibrated on : 15-Feb-18
   G             : -3.93898414e+000
   H             : 4.71340485e-001
   I             : -1.98155782e-004
   J             : 3.77528476e-005
   CTcor         : 3.2500e-006
   CPcor         : -9.57000000e-008
   Slope         : 1.00000000
   Offset        : 0.00000
```

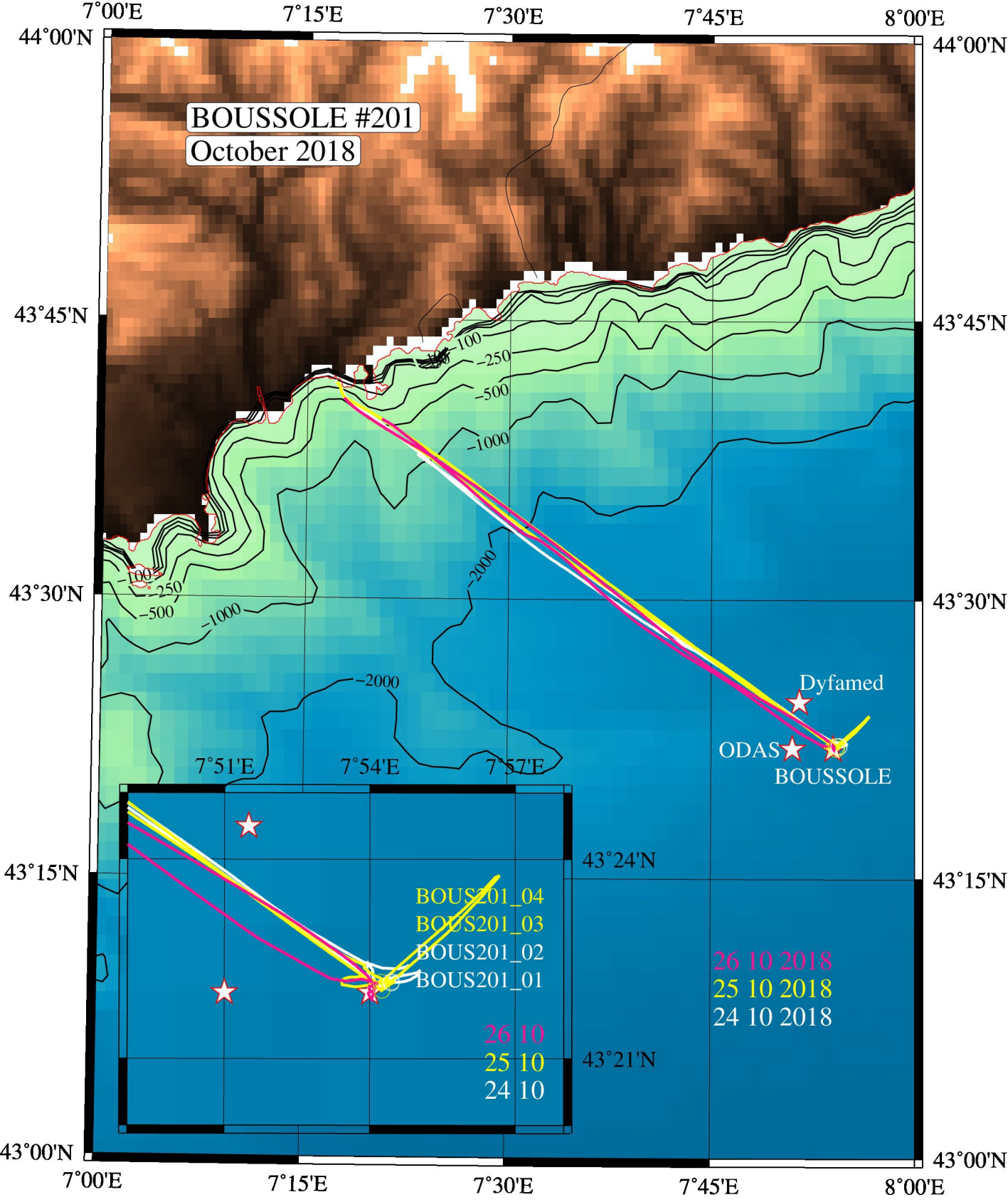
3) Frequency 2, Pressure, Digiquartz with TC

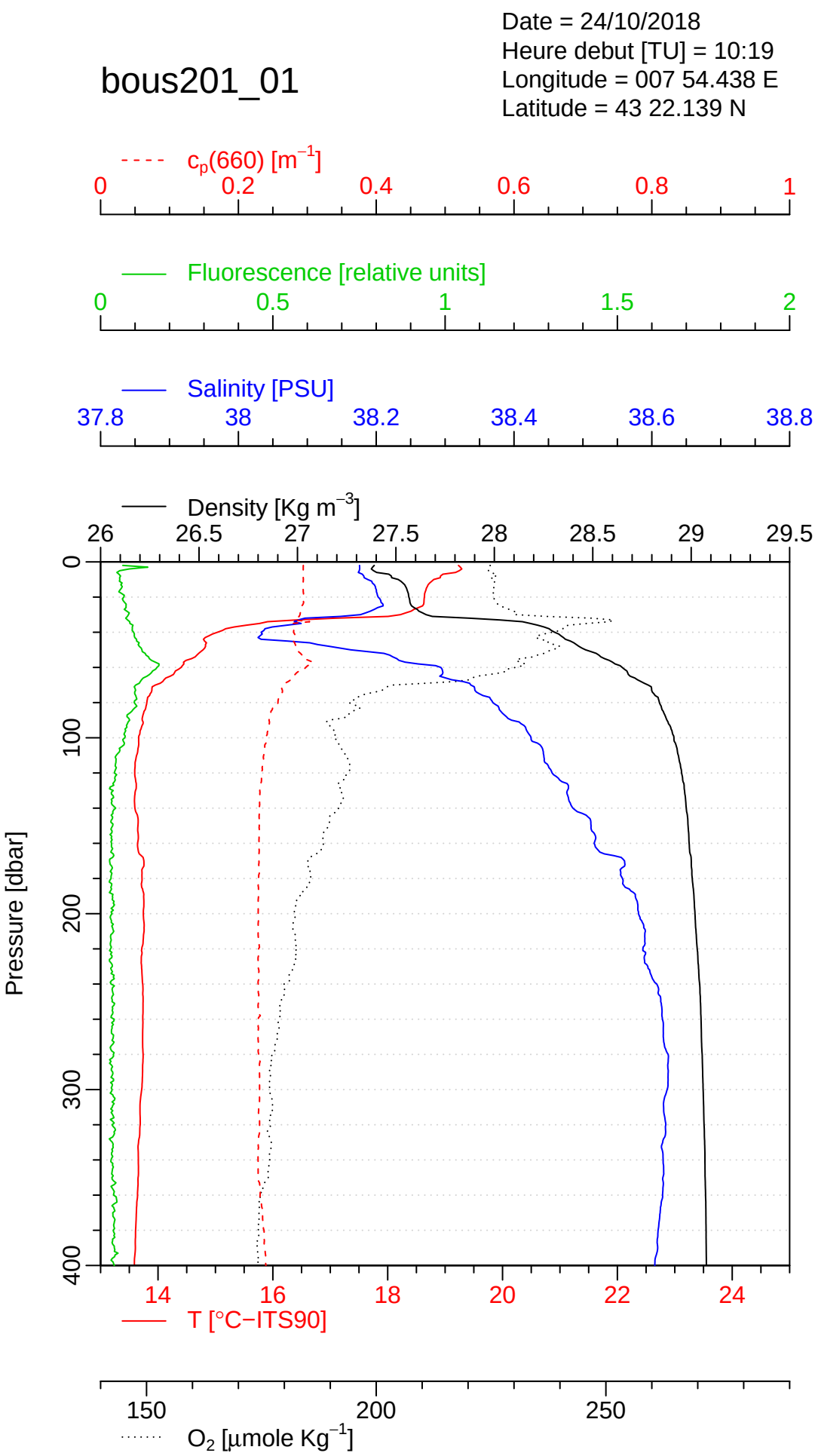
```
   Serial number : 0294
   Calibrated on : 22-Feb-13
   C1            : -4.258473e+004
   C2            : 1.874931e-001
   C3            : 1.368020e-002
   D1            : 3.936700e-002
   D2            : 0.000000e+000
   T1            : 3.021404e+001
   T2            : -2.815189e-004
   T3            : 4.591050e-006
   T4            : 1.633320e-009
   T5            : 0.000000e+000
   Slope         : 0.99982000
   Offset        : -1.63630
   AD590M        : 1.145000e-002
   AD590B        : -8.133300e+000
```

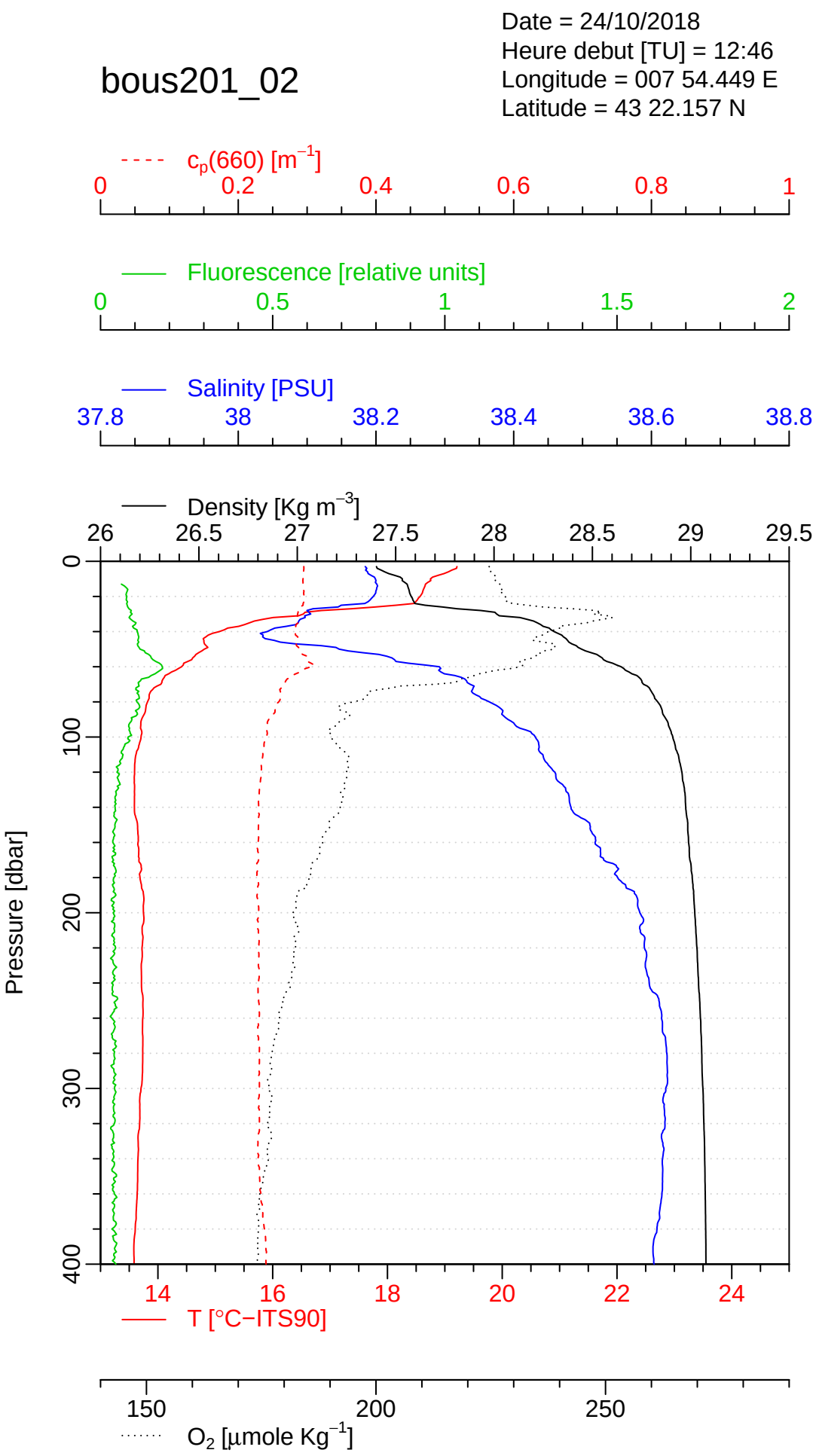
4) A/D voltage 0, Oxygen, SBE 43

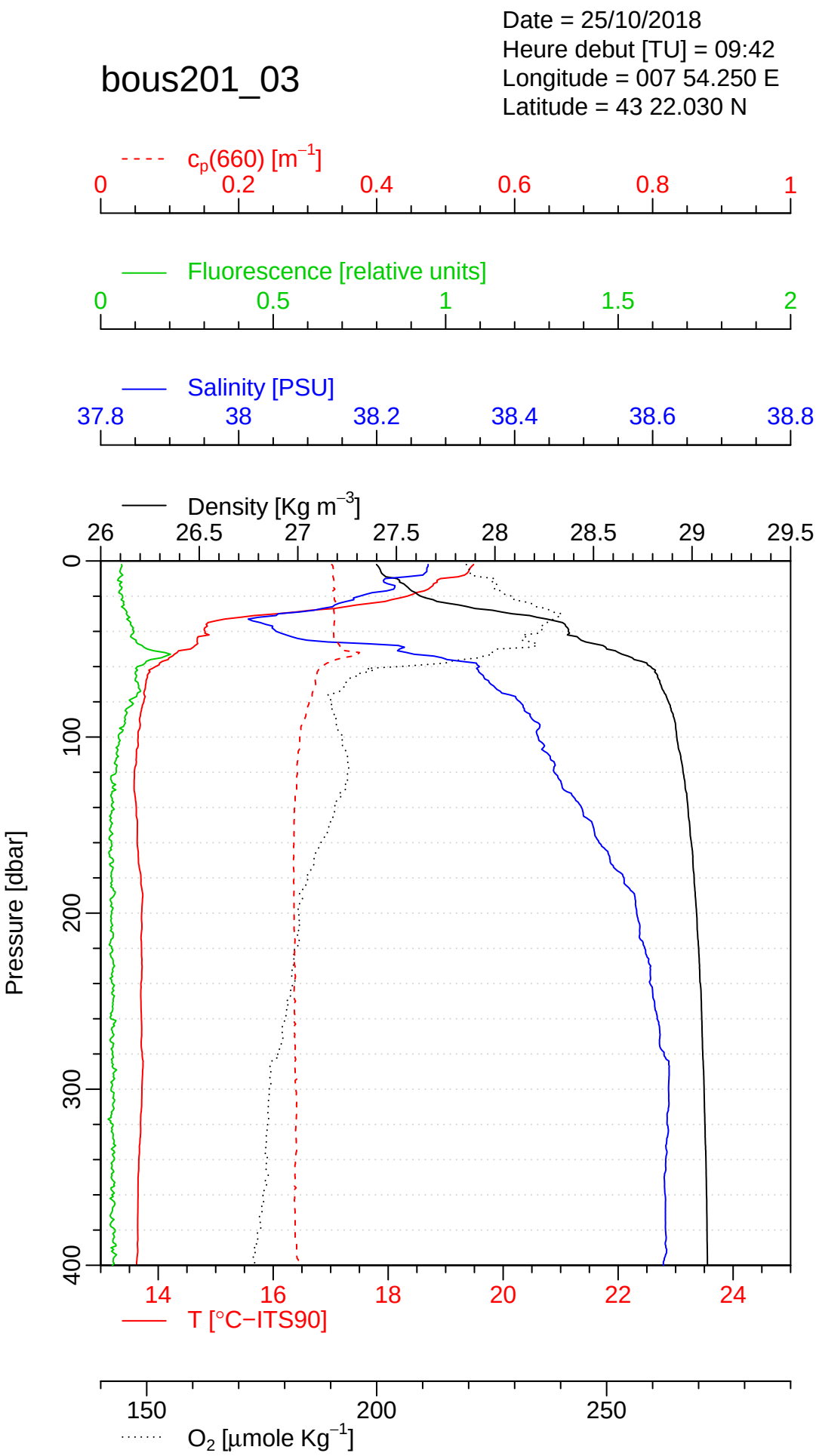
```
   Serial number : 0587
   Calibrated on : 24-Mar-18
   Equation      : Sea-Bird
   Soc           : 3.80390e-001
   Offset        : -6.90900e-001
   A             : -4.03530e-003
   B             : 1.51440e-004
   C             : -2.31100e-006
   E             : 3.60000e-002
   Tau20         : 1.18000e+000
```

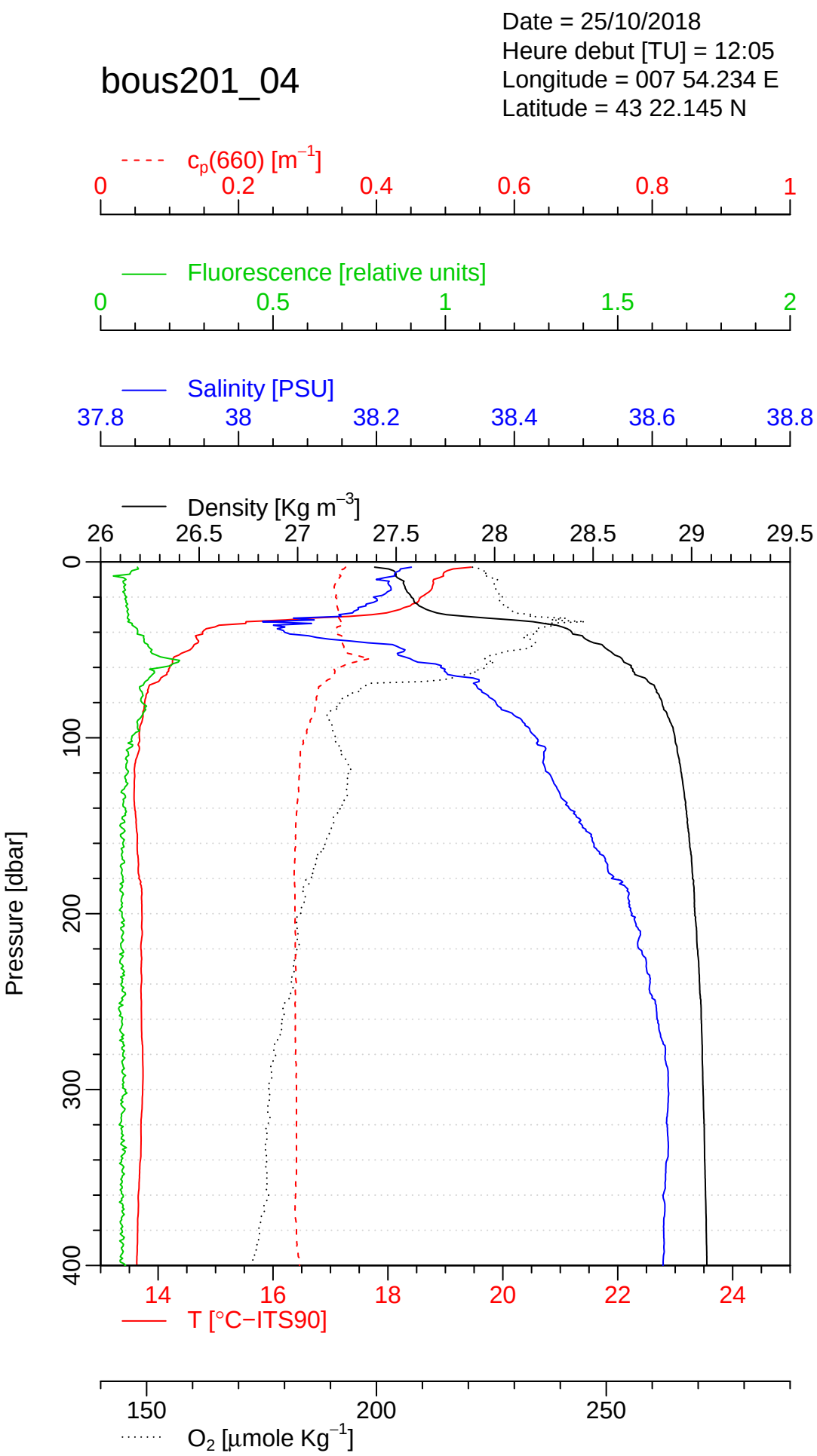
```
   D1            : 1.92634e-004
   D2            : -4.64803e-002
   H1            : -3.30000e-002
   H2            : 5.00000e+003
   H3            : 1.45000e+003

5) A/D voltage 1, Free

6) A/D voltage 2, User Polynomial

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

7) A/D voltage 3, 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

8) A/D voltage 4, Fluorometer, Chelsea Aqua 3

   Serial number : 088193
   Calibrated on : 27-Oct-97_cor201806
   VB            : 0.165000
   V1            : 1.933000
   Vacetone      : 0.250000
   Scale factor  : 1.000000
   Slope         : 1.000000
   Offset        : -0.170000

9) A/D voltage 5, Transmissometer, WET Labs C-Star

   Serial number : CST-887DR
   Calibrated on : 07112017
   M             : 21.3038
   B             : -0.1065
   Path length   : 0.250

10) A/D voltage 6, Altimeter

    Serial number : 310799
    Calibrated on : 19-Oct-16
    Scale factor  : 15.000
    Offset        : 0.000

11) A/D voltage 7, Free

Scan length                   : 31
```


BOUSSOLE #201
October 2018
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
BOUS201_04
BOUS201_03
BOUS201_02
BOUS201_01
26 10
25 10
24 10
26 10 2018
25 10 2018
24 10 2018
GMT 2018 Dec 11 09:49:39


bous201_01
Date = 24/10/2018
Heure debut [TU] = 10:19
Longitude = 007 54.438 E
Latitude = 43 22.139 N
c_p(660) [m^-1]
0
0.2
0.4
0.6
0.8
1
Fluorescence [relative units]
0
0.5
1
1.5
2
Salinity [PSU]
37.8
38
38.2
38.4
38.6
38.8
Density [Kg m^-3]
26
26.5
27
27.5
28
28.5
29
29.5
Pressure [dbar]
0
100
200
300
400
14
16
18
20
22
24
T [°C−ITS90]
150
200
250
O2 [µmole Kg^-1]


bous201_02
Date = 24/10/2018
Heure debut [TU] = 12:46
Longitude = 007 54.449 E
Latitude = 43 22.157 N
c_p(660) [m^-1]
0
0.2
0.4
0.6
0.8
1
Fluorescence [relative units]
0
0.5
1
1.5
2
Salinity [PSU]
37.8
38
38.2
38.4
38.6
38.8
Density [Kg m^-3]
26
26.5
27
27.5
28
28.5
29
29.5
Pressure [dbar]
0
100
200
300
400
14
16
18
20
22
24
T [°C−ITS90]
150
200
250
O2 [µmole Kg^-1]


bous201_03
Date = 25/10/2018
Heure debut [TU] = 09:42
Longitude = 007 54.250 E
Latitude = 43 22.030 N
c_p(660) [m^-1]
0 0.2 0.4 0.6 0.8 1
Fluorescence [relative units]
0 0.5 1 1.5 2
Salinity [PSU]
37.8 38 38.2 38.4 38.6 38.8
Density [Kg m^-3]
26 26.5 27 27.5 28 28.5 29 29.5
Pressure [dbar]
0 100 200 300 400
14 16 18 20 22 24
T [°C−ITS90]
150 200 250
O2 [µmole Kg^-1]


bous201_04
Date = 25/10/2018
Heure debut [TU] = 12:05
Longitude = 007 54.234 E
Latitude = 43 22.145 N
c_p(660) [m^-1]
0 0.2 0.4 0.6 0.8 1
Fluorescence [relative units]
0 0.5 1 1.5 2
Salinity [PSU]
37.8 38 38.2 38.4 38.6 38.8
Density [Kg m^-3]
26 26.5 27 27.5 28 28.5 29 29.5
Pressure [dbar]
0 100 200 300 400
14 16 18 20 22 24
T [°C−ITS90]
150 200 250
O2 [µmole Kg^-1]

Date: 12/17/2018

Instrument configuration file: C:\Users\melek\AppData\Local\Temp\fz3temp-2\BOUS201_01.XMLCON

Configuration report for SBE 911plus/917plus CTD

```
Frequency channels suppressed : 2
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 : 2473
   Calibrated on : 15-Mar-18
   G             : 4.36735292e-003
   H             : 6.43354202e-004
   I             : 2.35222608e-005
   J             : 2.26240163e-006
   F0            : 1000.000
   Slope         : 1.00000000
   Offset        : 0.0000
```

2) Frequency 1, Conductivity

```
   Serial number : 1313
   Calibrated on : 15-Feb-18
   G             : -3.93898414e+000
   H             : 4.71340485e-001
   I             : -1.98155782e-004
   J             : 3.77528476e-005
   CTcor         : 3.2500e-006
   CPcor         : -9.57000000e-008
   Slope         : 1.00000000
   Offset        : 0.00000
```

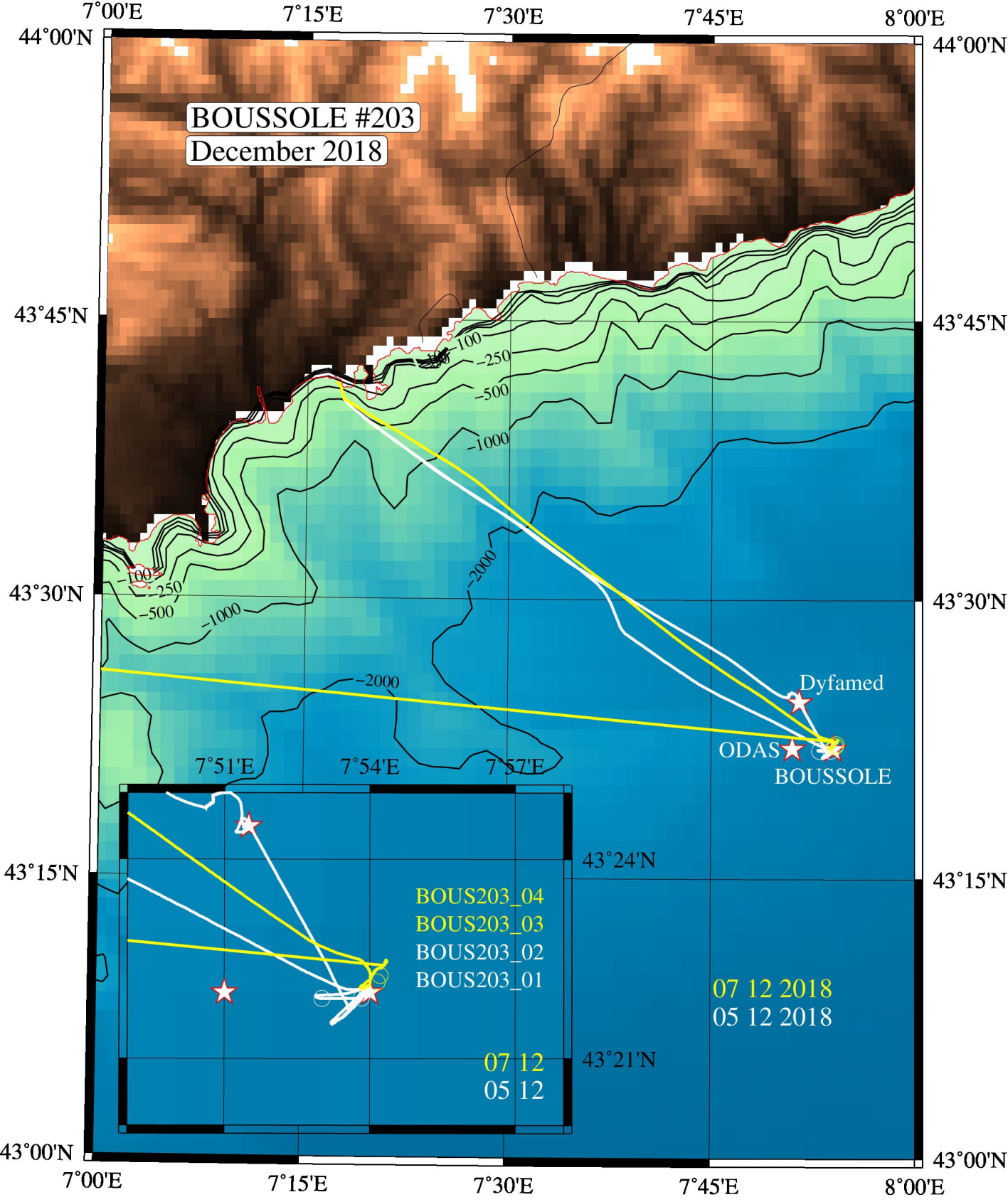
3) Frequency 2, Pressure, Digiquartz with TC

```
   Serial number : 0294
   Calibrated on : 22-Feb-13
   C1            : -4.258473e+004
   C2            : 1.874931e-001
   C3            : 1.368020e-002
   D1            : 3.936700e-002
   D2            : 0.000000e+000
   T1            : 3.021404e+001
   T2            : -2.815189e-004
   T3            : 4.591050e-006
   T4            : 1.633320e-009
   T5            : 0.000000e+000
   Slope         : 0.99982000
   Offset        : -1.63630
   AD590M        : 1.145000e-002
   AD590B        : -8.133300e+000
```

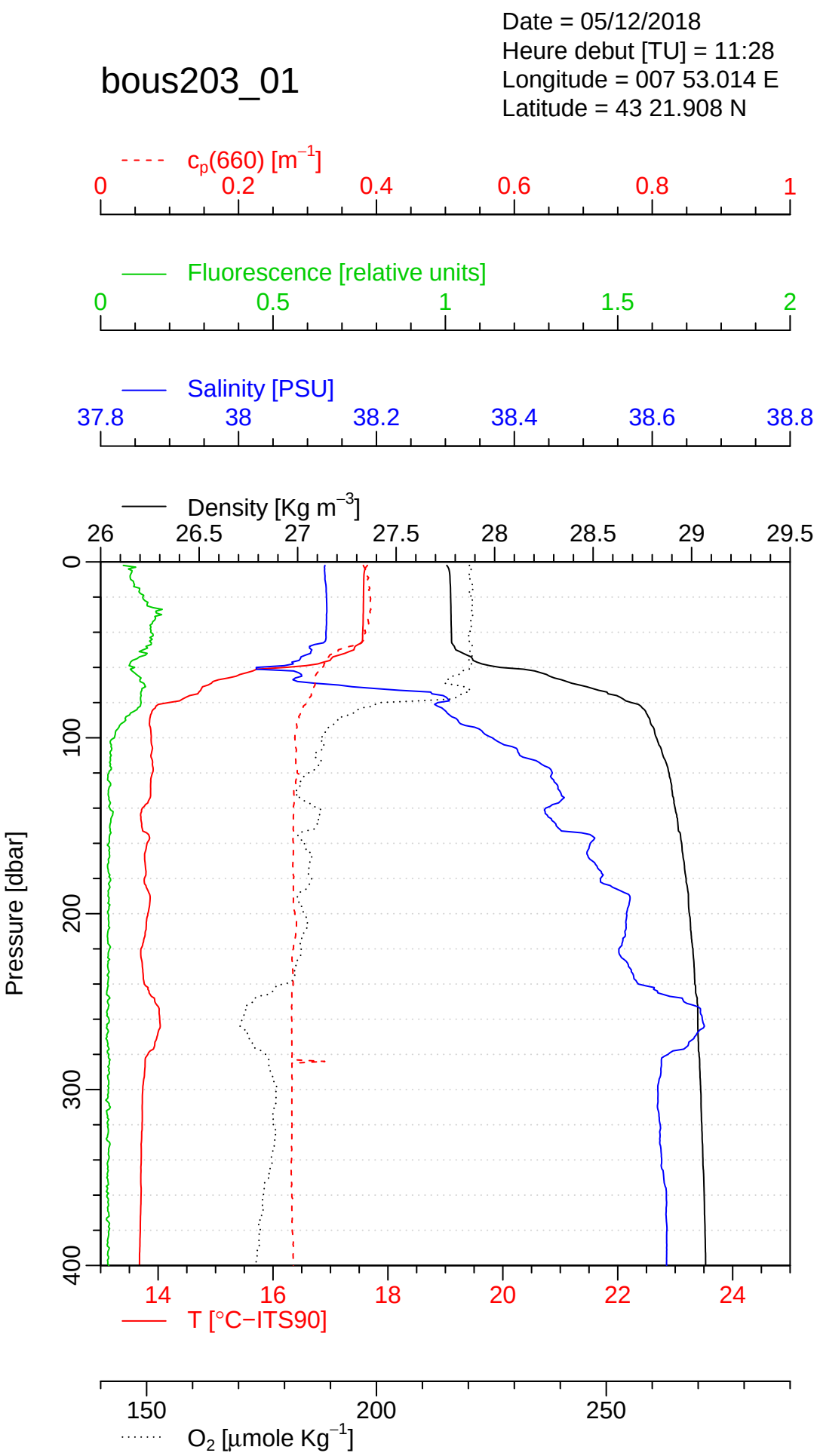
4) A/D voltage 0, Oxygen, SBE 43

```
   Serial number : 0587
   Calibrated on : 24-Mar-18
   Equation      : Sea-Bird
   Soc           : 3.80390e-001
   Offset        : -6.90900e-001
   A             : -4.03530e-003
   B             : 1.51440e-004
   C             : -2.31100e-006
   E             : 3.60000e-002
   Tau20         : 1.18000e+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, User Polynomial

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

7) A/D voltage 3, 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

8) A/D voltage 4, Fluorometer, Chelsea Aqua 3

   Serial number : 088193
   Calibrated on : 27-Oct-97_cor201806
   VB            : 0.165000
   V1            : 1.933000
   Vacetone      : 0.250000
   Scale factor  : 1.000000
   Slope         : 1.000000
   Offset        : -0.170000

9) A/D voltage 5, Transmissometer, WET Labs C-Star

   Serial number : CST-887DR
   Calibrated on : 07112017
   M             : 21.3038
   B             : -0.1065
   Path length   : 0.250

10) A/D voltage 6, Altimeter

    Serial number : 310799
    Calibrated on : 19-Oct-16
    Scale factor  : 15.000
    Offset        : 0.000

11) A/D voltage 7, Free

Scan length                   : 31
```

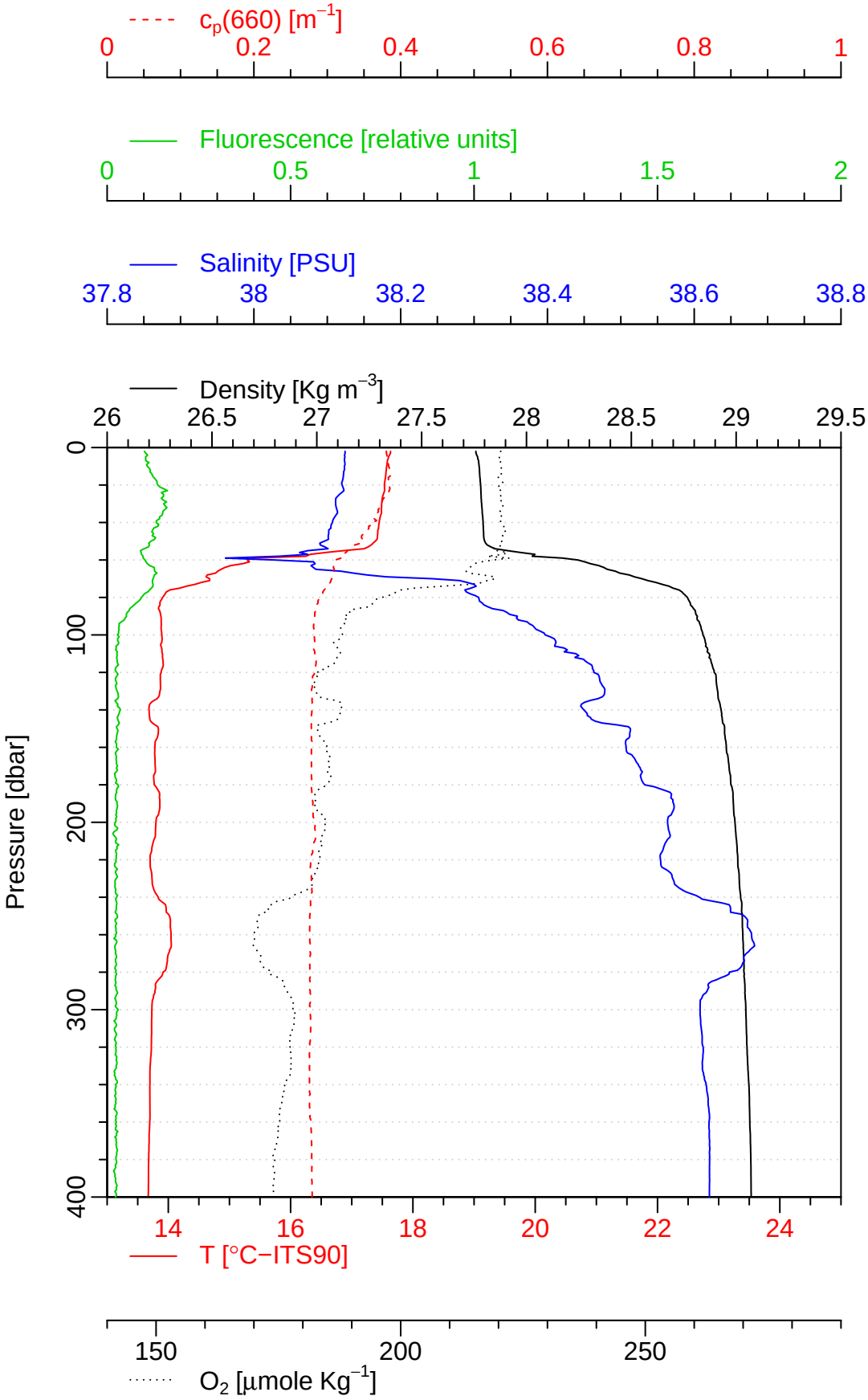


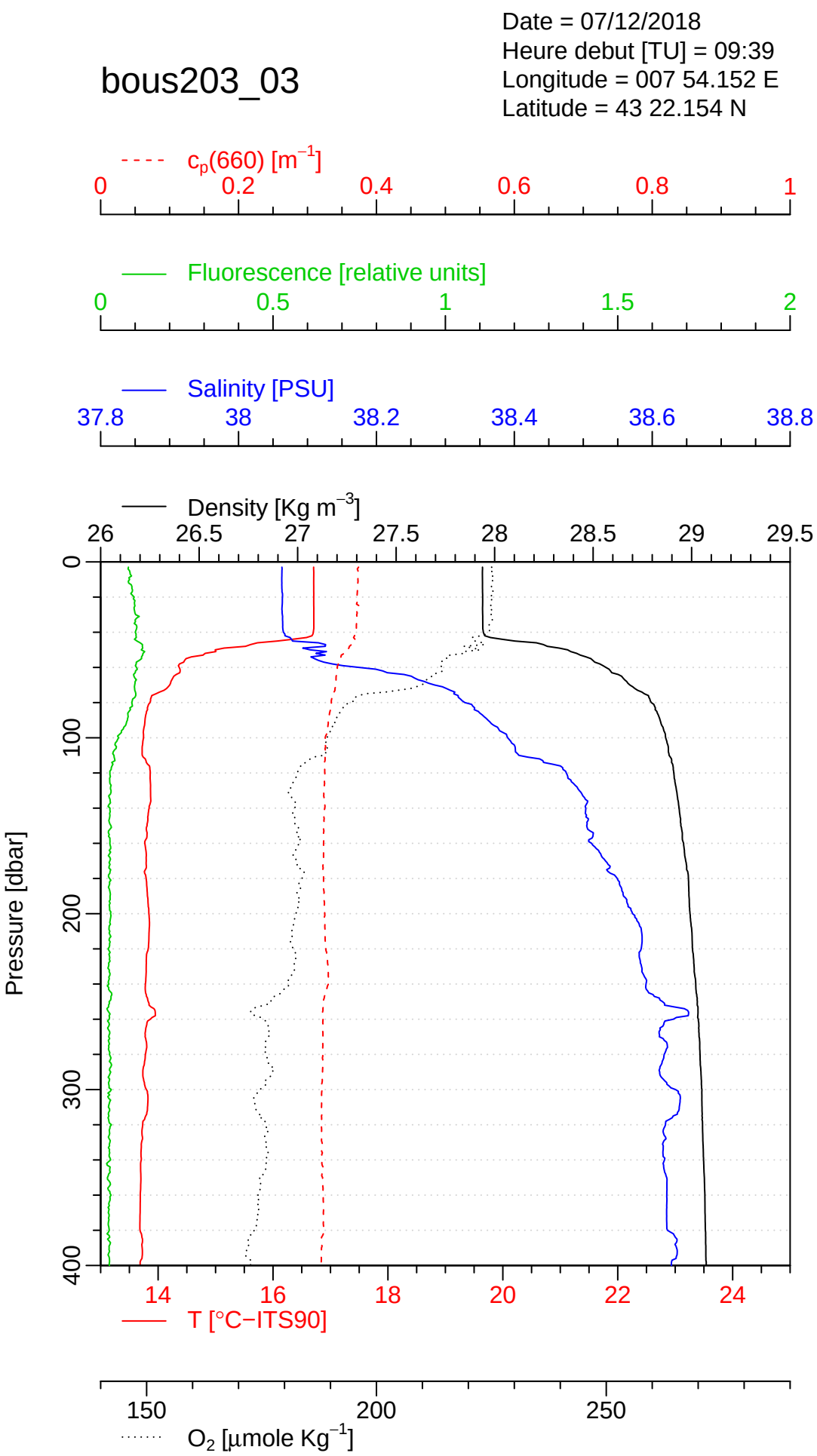
GMT 2018 Dec 15 09:46:47


bous203_01
Date = 05/12/2018
Heure debut [TU] = 11:28
Longitude = 007 53.014 E
Latitude = 43 21.908 N
c_p(660) [m^-1]
0
0.2
0.4
0.6
0.8
1
Fluorescence [relative units]
0
0.5
1
1.5
2
Salinity [PSU]
37.8
38
38.2
38.4
38.6
38.8
Density [Kg m^-3]
26
26.5
27
27.5
28
28.5
29
29.5
Pressure [dbar]
0
100
200
300
400
14
16
18
20
22
24
T [°C−ITS90]
150
200
250
O2 [µmole Kg^-1]

bous203_02

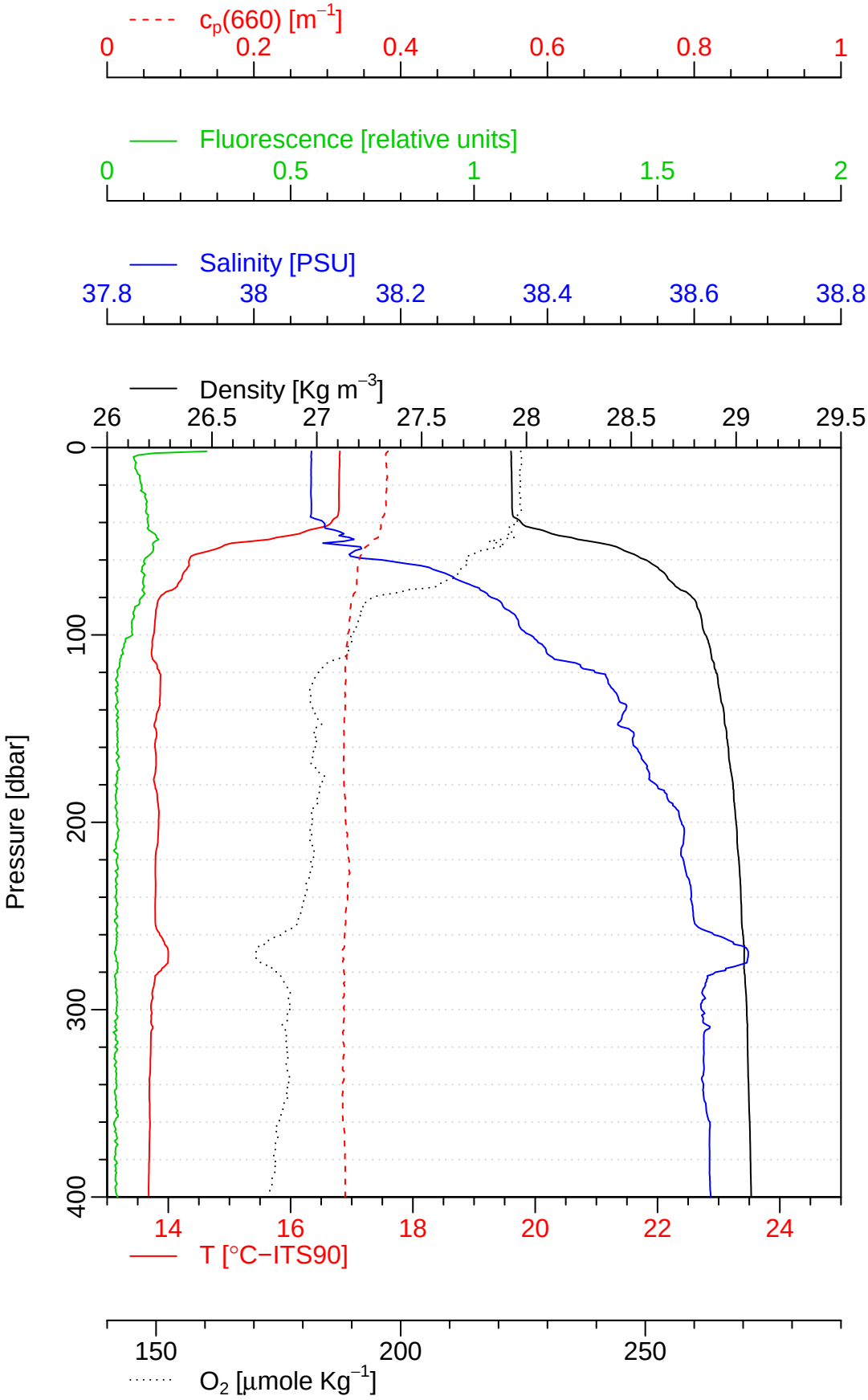
Date = 05/12/2018
Heure debut [TU] = 12:40
Longitude = 007 53.833 E
Latitude = 43 21.912 N




bous203_03
Date = 07/12/2018
Heure debut [TU] = 09:39
Longitude = 007 54.152 E
Latitude = 43 22.154 N
c_p(660) [m^-1]
0 0.2 0.4 0.6 0.8 1
Fluorescence [relative units]
0 0.5 1 1.5 2
Salinity [PSU]
37.8 38 38.2 38.4 38.6 38.8
Density [Kg m^-3]
26 26.5 27 27.5 28 28.5 29 29.5
Pressure [dbar]
0 100 200 300 400
14 16 18 20 22 24
T [°C−ITS90]
150 200 250
O2 [µmole Kg^-1]

bous203_04

Date = 07/12/2018
Heure debut [TU] = 11:42
Longitude = 007 54.214 E
Latitude = 43 22.253 N



Date: 12/17/2018

Instrument configuration file: C:\Users\melek\AppData\Local\Temp\fz3temp-2\BOUS203_01.XMLCON

Configuration report for SBE 911plus/917plus CTD

```
Frequency channels suppressed : 2
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 : 2473
   Calibrated on : 15-Mar-18
   G             : 4.36735292e-003
   H             : 6.43354202e-004
   I             : 2.35222608e-005
   J             : 2.26240163e-006
   F0            : 1000.000
   Slope         : 1.00000000
   Offset        : 0.0000
```

2) Frequency 1, Conductivity

```
   Serial number : 1313
   Calibrated on : 15-Feb-18
   G             : -3.93898414e+000
   H             : 4.71340485e-001
   I             : -1.98155782e-004
   J             : 3.77528476e-005
   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 : 22-Feb-13
   C1            : -4.258473e+004
   C2            : 1.874931e-001
   C3            : 1.368020e-002
   D1            : 3.936700e-002
   D2            : 0.000000e+000
   T1            : 3.021404e+001
   T2            : -2.815189e-004
   T3            : 4.591050e-006
   T4            : 1.633320e-009
   T5            : 0.000000e+000
   Slope         : 0.99982000
   Offset        : -1.63630
   AD590M        : 1.145000e-002
   AD590B        : -8.133300e+000
```

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

```
   Serial number : 0587
   Calibrated on : 24-Mar-18
   Equation      : Sea-Bird
   Soc           : 3.80390e-001
   Offset        : -6.90900e-001
   A             : -4.03530e-003
   B             : 1.51440e-004
   C             : -2.31100e-006
   E             : 3.60000e-002
   Tau20         : 1.18000e+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, User Polynomial

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

7) A/D voltage 3, 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

8) A/D voltage 4, 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 5, Transmissometer, WET Labs C-Star

   Serial number : CST-887DR
   Calibrated on : 07112017
   M             : 21.3038
   B             : -0.1065
   Path length   : 0.250

10) A/D voltage 6, Altimeter

    Serial number : 310799
    Calibrated on : 19-Oct-16
    Scale factor  : 15.000
    Offset        : 0.000

11) A/D voltage 7, Free

Scan length                   : 31
```

Problems identified during the cruises

BOUSSOLE #191

CTD 02: HPLC filters were rinsed with milliQ water by mistake.

BOUSSOLE #192

The bad weather did not allow us to work at the BOUSSOLE site. But CTD casts which were performed during another cruise at the DYFAMED site two days before, are available. There are no data for the other parameters.

BOUSSOLE #193

There was a problem with O_2 data in the first CTD cast: spikes appeared between 0 and 80 m depth. The problem appeared also in the CTD cast performed at the DYFAMED site after 600 m depth. It was probably due to a faulty cable. It will be replaced in the lab.

The instrumentation of the R/V *Téthys II* was faulty, so the thermosalinograph was not functioning and the navigation and meteorological files were not available.

BOUSSOLE #194

CTD 05: the filter used to remove big particles and normally placed on the inlet tube of the a-sphere absorption meter was not installed as it should have been normally.

BOUSSOLE #195

A problem appeared with the CTD. Firstly, the pump took a long time before turning on. For the CTD 03, the pump did not turn on at all. The connection between the pump and the CTD was checked and cleaned. But the problem persisted. The problem was solved the second day: sea water was injected in the pump circuit before the deployment. Another problem appeared during the CTD casts: there were spikes on the data under 200 m depth and it was not possible to close the Niskin bottles to sample water. The alarm of the deck unit sounded intermittently. Firstly, the problem was thought to originate from our CTD. But the problem persisted and the electrocarrier cable was tested. It appeared that it was faulty. It was repaired the last day during the way back to the Nice harbour.

It was not possible to sample water for HPLC, a_p, O_2 and TA/TC due to the problem with the CTD Rosette. So only one sample was collected from the surface with a bucket for HPLC, a_p and TSM measurements.

BOUSSOLE#196

The first day, the laboratory lights remained turned on by mistake when the HPLC samples were filtered.

The second day, there were problems on IOPs data: IOPs files were corrupted for CTD 03 cast and there was no data recording for CTD 04 cast. After the cruise, the IOP package was tested in the lab and this problem was solved by the cleaning of connections between the data logger and the cable of the batteries.

BOUSSOLE#197

No problems.

BOUSSOLE#198

It was not possible to use the main BOUSSOLE Rosette on the deck of the *Sagitta III*. So, the IOP package was deployed separately from the CTD and water sampling was performed directly with Niskin bottles and messengers.

The navigation and meteorological files were not available for this cruise (so recording equipment onboard the Sagitta-III)

BOUSSOLE #199

Navigation and meteorology were not recorded on 5th June 2018, after the R/V *Téthys II* onboard instrumentation stopped working.

BOUSSOLE #200

No problems.

BOUSSOLE #201

The first day, there was a problem of acquisition on the IOP package. There were no IOP data recorded during the CTD 001 cast. It seemed that the IOP package was not well switched. So a second cast was performed with HPLC and a_p sampling and the IOP package worked well.

The Niskin bottle #5 was not completely filled during the CTD 003 cast probably due to a leak. There was not enough sea water for HPLC and a_p sample at 70 m depth. So, the O-Ring of the bottle was replaced and the sample at 70 m was collected again during CTD 004 cast.

Unfortunately, there was no sampling of O_2 and TA/TC during this cruise because of the bad weather. This sampling was planned the last day as the weather forecasts were favourable the day before.

The thermosalinograph and fluorimeter of the R/V *Téthys II* were not functioning.

BOUSSOLE #202

Cruise cancelled because of a mechanical failure on the R/V *Téthys II*.

BOUSSOLE #203

No problems.