Rapport interne LPO/11-07

UMR 6523 **Laboratoire de Physique des Océans** 	**DELAYED MODE QUALITY CONTROL OF OVIDE ARGO DATA** **FLOAT WMO 6900637**	
Date : **11 mai 2011**	Auteurs : **Lagadec Catherine** **Thierry Virginie**	Archivage : **LPO**

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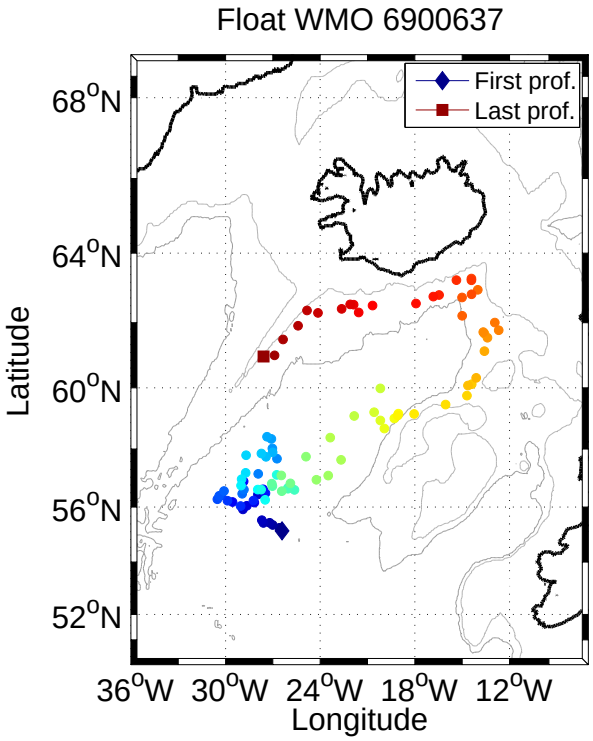
DELAYED MODE QUALITY CONTROL OF OVIDE ARGO DATA FLOAT WMO 6900637

C. Lagadec - V. Thierry

11 mai 2011



1 Presentation and DMQC summary

Number	Deployment (cycle OD) cycle OD	Last cycle 92
Provor WMO 6900637	26/06/2008 2H10	
CTS3 07-S3-0016	N 55.147 W 26.417	
Date of control	Float status	Last cycle
May 2011	DEAD	04/01/2011
Coriolis transmission		11/05/11

Tab. 1: Status of the float

1.1 QC flag checks and interesting profiles

The resolution is equal to 10 dbar from the surface to 800 dbar, then 25 dbar from 800 to 2000 dbar. Salinity data between 0 and 6 dbar are suspicious because they are acquired when the pump of the CTD is turned off.

1.2 Salinity correction from the OW method

We cannot see any evidence of a drift or bias in the salinity measurements. We thus conclude that it is not necessary to correct the salinity data. Errors bars are maximum value between 0.01 and those determined from the OW method with parameters from the OW configuration 1.

2 Data

Cycle	Para-meter	Vertical level	Old flag	New flag	Comments	Coriolis transmission
33A	PSAL	66 to 166 dbar	4	1		10/05/2011
	236,246 dbar	4	1			
36A	TEMP,PSAL	56 to 86 dbar	4	1		10/05/2011
42A	PSAL	186 to 216 dbar	3	1		10/05/2011
	PSAL	256 to 285 dbar	3	1		10/05/2011
	PSAL	386 to 406 dbar	3	1		10/05/2011
66A	PSAL	1640 to 1680 dbar	4	1		10/05/2011
	TEMP	1664 to 1680 dbar	4	1		10/05/2011
71A	PSAL,TEMP	1139 to 1257 dbar	3	1		10/05/2011
72A	PSAL,TEMP	1414 to 1457 dbar	3	1		10/05/2011
79A	PSAL,TEMP	3 values at bottom	3	1		10/05/2011
85A	PSAL,TEMP	1139 to 1257 dbar	3	1		10/05/2011
all cycles	PSAL	level 1	1	4		10/05/2011
(except 0D)	PSAL	(where PRES inf. 7)				
all cycles	PSAL	level 2	1	4		10/05/2011
(except 0D,2A,91A)	PSAL	(where PRES inf. 7)				
53A	PSAL				bad historical profile	10/05/2011

Tab. 2: Float 6900637. Summary of the modifications of the real-time QC flags and of the interesting or suspicous data.

OW CONFIGURATION	1	3	11	12
CONFIG_MAX_CASTS	250	250	250	250
MAP_USE_PV	1	1	1	1
MAP_USE_PV_ELLIPSE	1	1	1	1
MAP_USE_FACTEUR	1	1	1	1
MAPSCALE_LONGITUDE_LARGE	3.2	3.2	3.2	1.6
MAPSCALE_LONGITUDE_SMALL	0.8	0.8	0.8	0.8
MAPSCALE_LATITUDE_LARGE	2	2	2	1
MAPSCALE_LATITUDE_SMALL	0.5	0.5	0.5	0.5
MAPSCALE_PHI_LARGE	0.5	0.5	0.5	0.5
MAPSCALE_PHI_SMALL	0.1	0.1	0.1	0.1
MAPSCALE_AGE	0.69	0.69	0.69	0.69
MAP_P_EXCLUDE	500	500	500	500
MAP_P_DELTA	250	250	250	250
Reference data base	CTD only	CTD only	ARGO	CTD and ARGO
Comments		no break point		

Tab. 3: Parameters of the OW method.

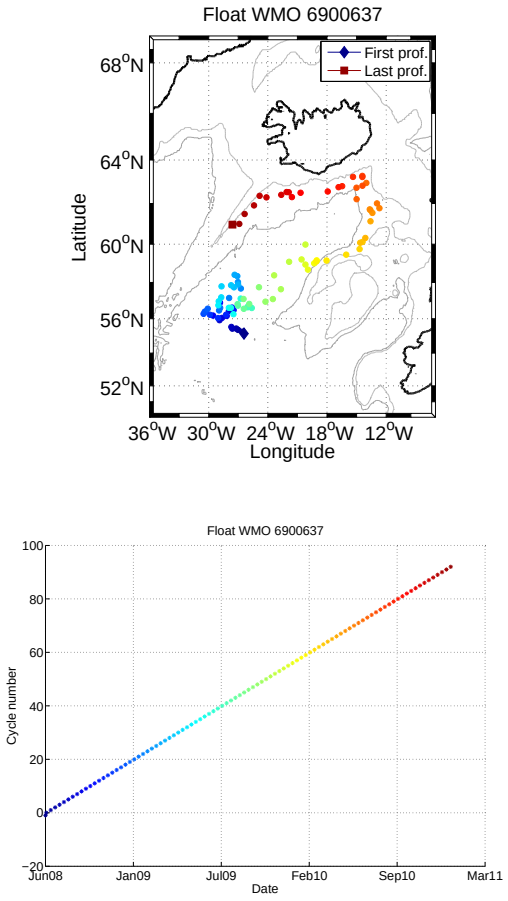


FIG. 1: Profiles position and relationship between cycle number, date and color.

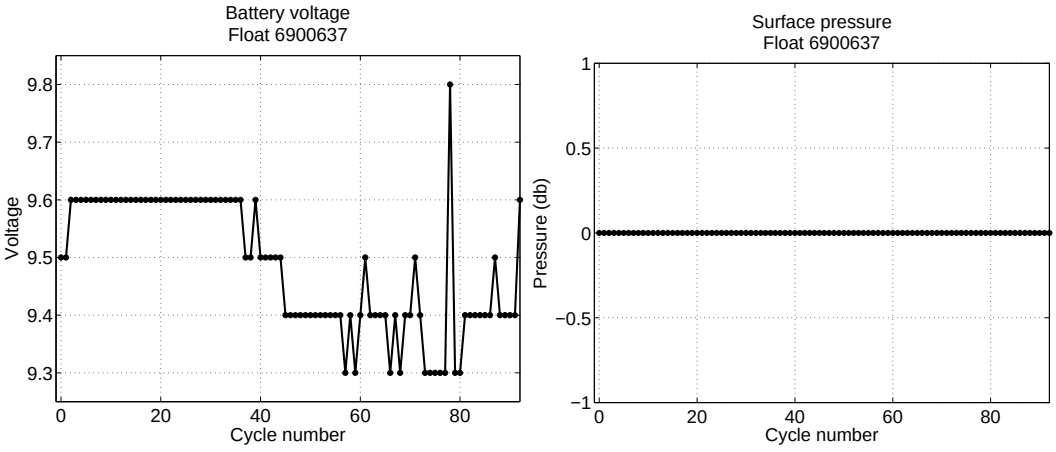


FIG. 2: Surface pressure

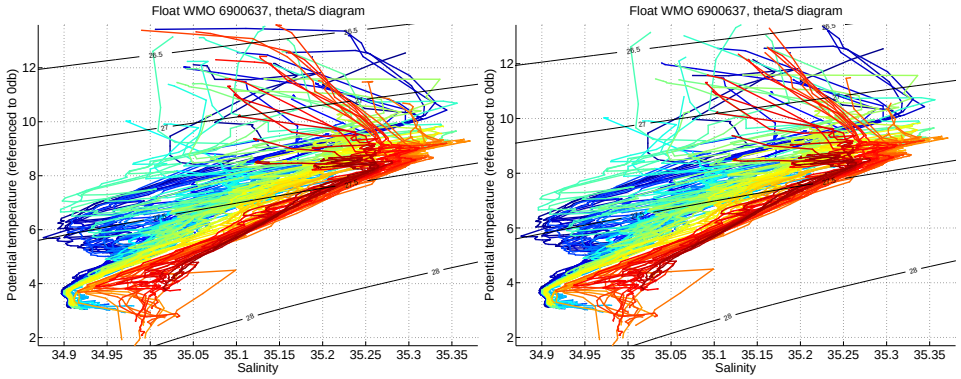


FIG. 3: θ/S diagrams. (Left panel) Flags are not taken into account. (Right panel) Quality flags are taken into account.

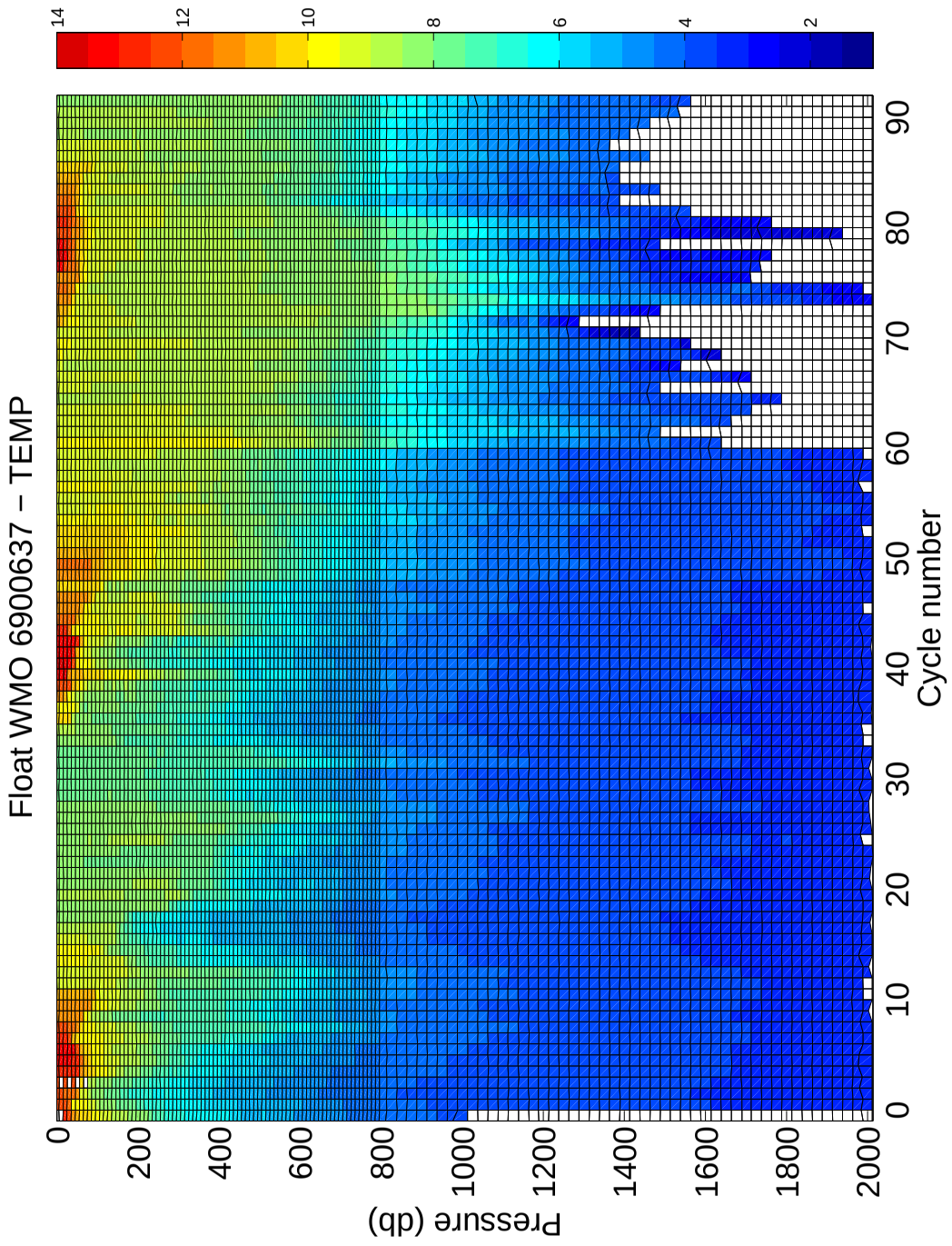


FIG. 4: Temperature section along the float trajectory. Quality flags are not taken into account.

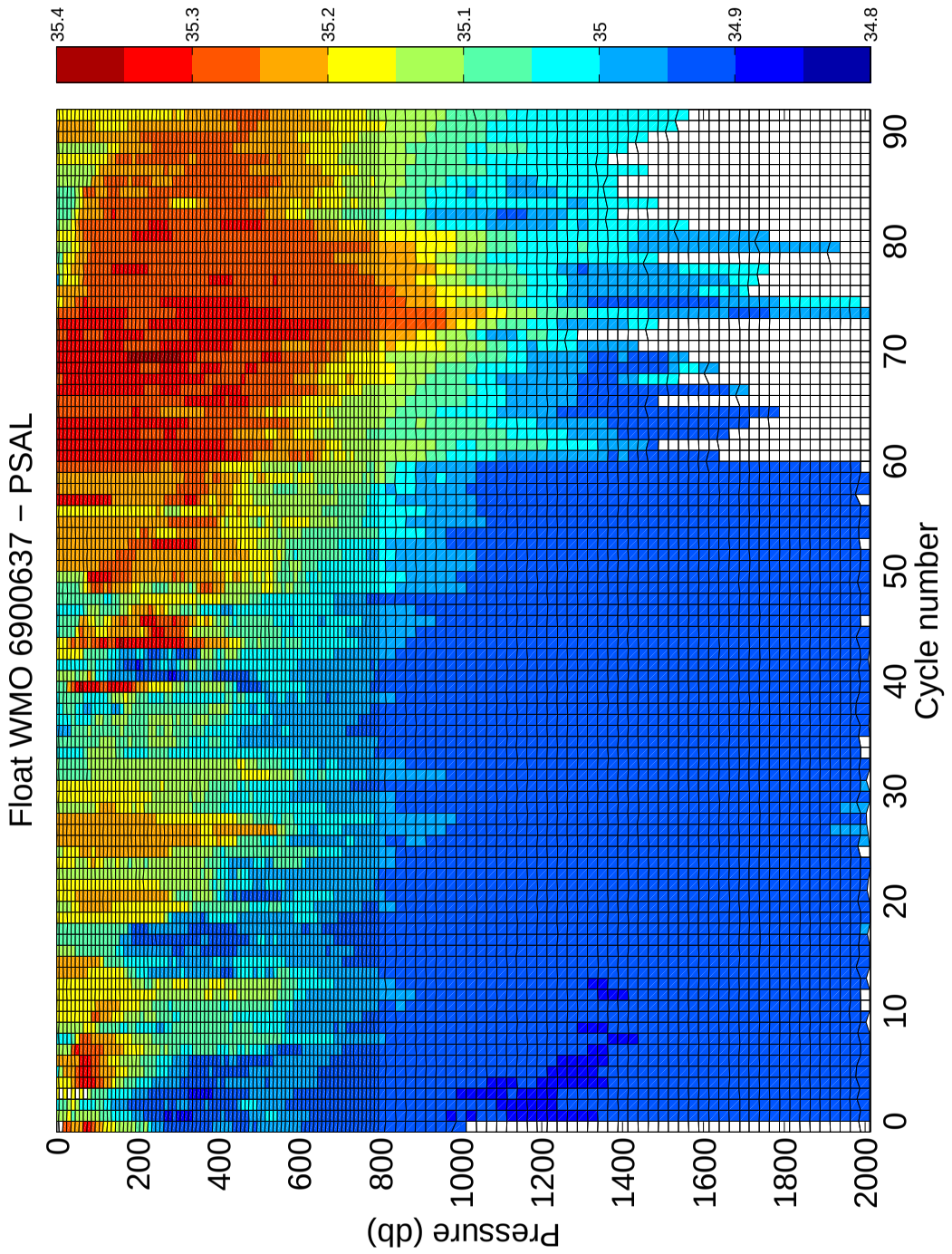


FIG. 5: Salinity section along the float trajectory. Quality flags are not taken into account.

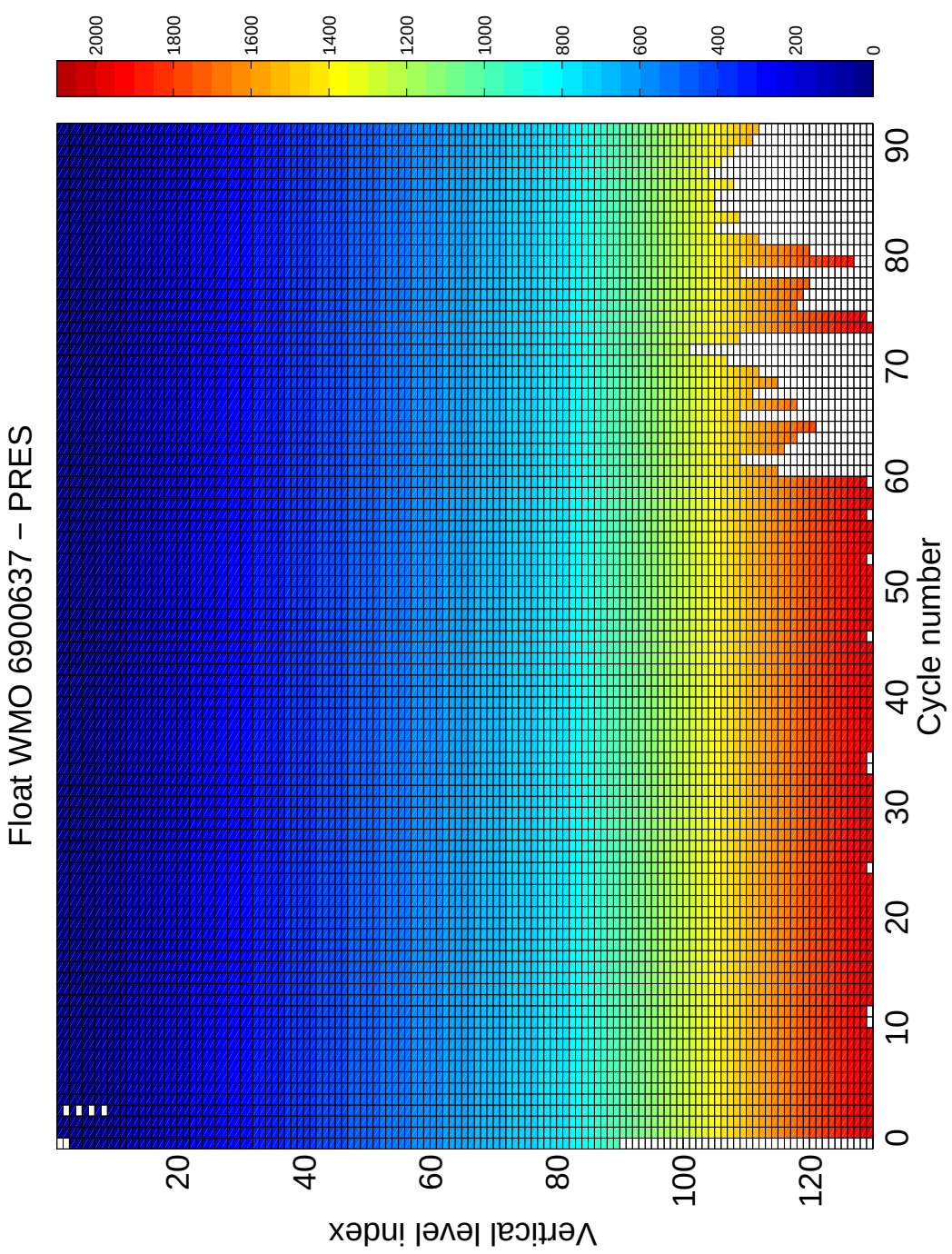


FIG. 6: Pression as fonction of cycle number and vertical level index along the float trajectory. Quality flags are taken into account.

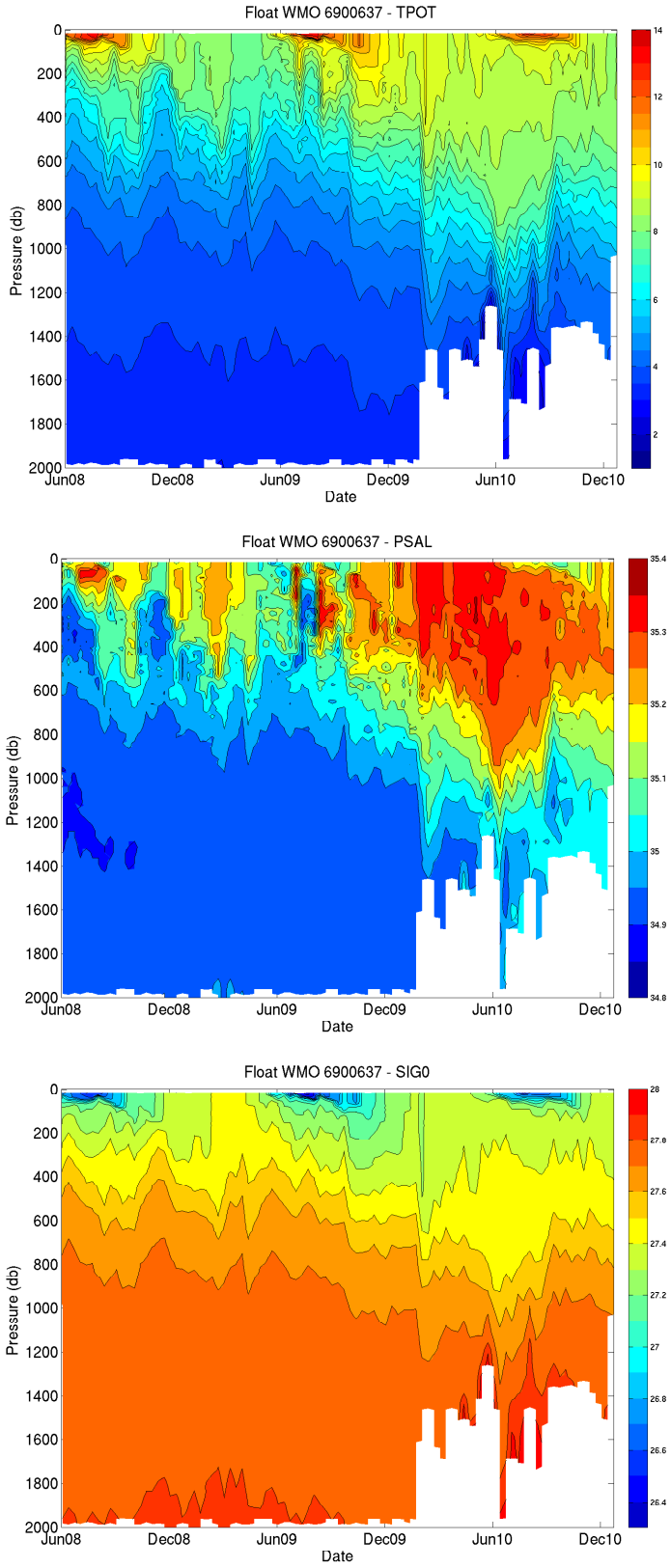


FIG. 7: Potential temperature, salinity and potential density sections along the float trajectory (interpolated on standard levels). Quality flags are taken into account.

3 Comparison to the OVIDE 2008 nearest CTD profile

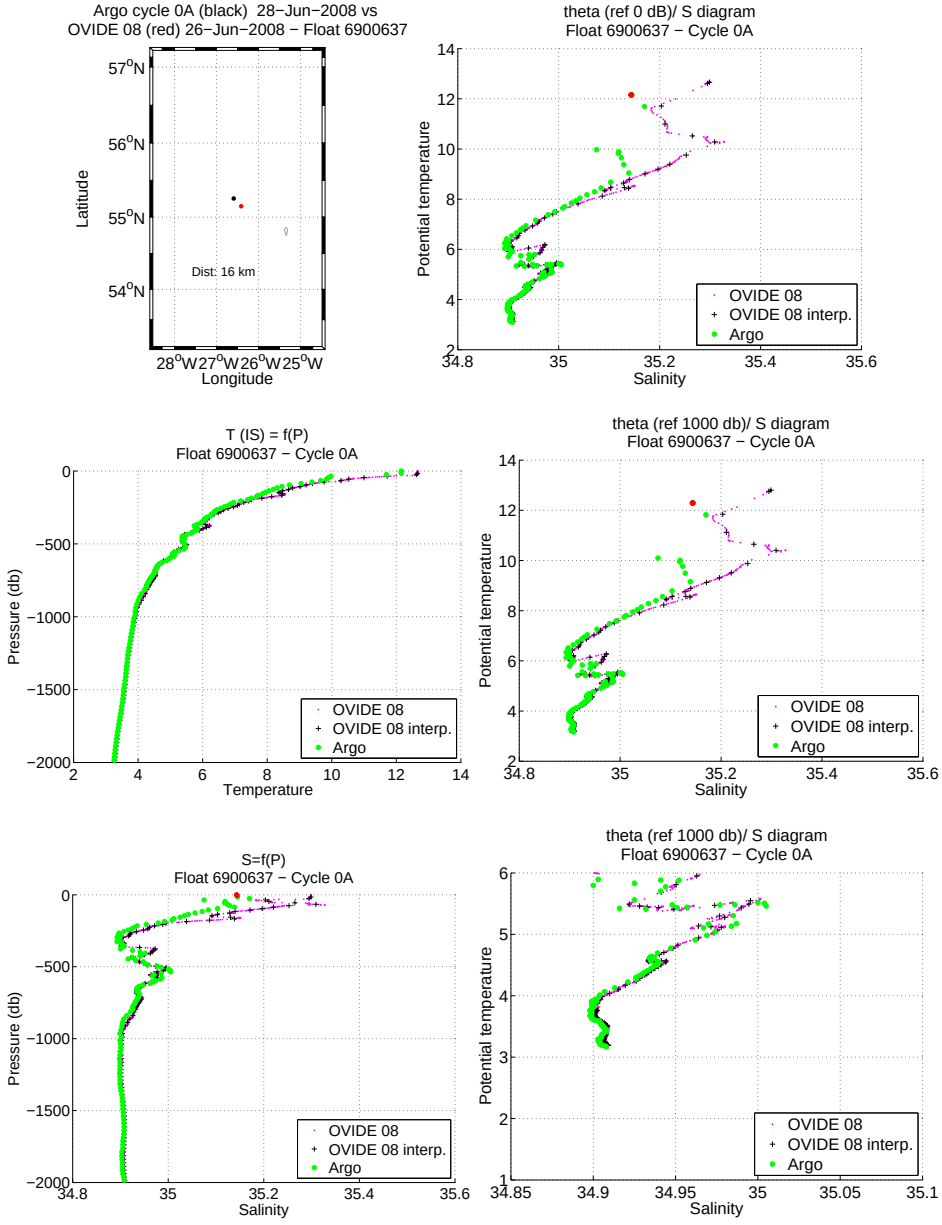


FIG. 8: Comparison of the cycle 0A with the nearest CTD profile done after the float deployment.

4 Cycle 33 - Comparaison to the nearest historical CTD profiles

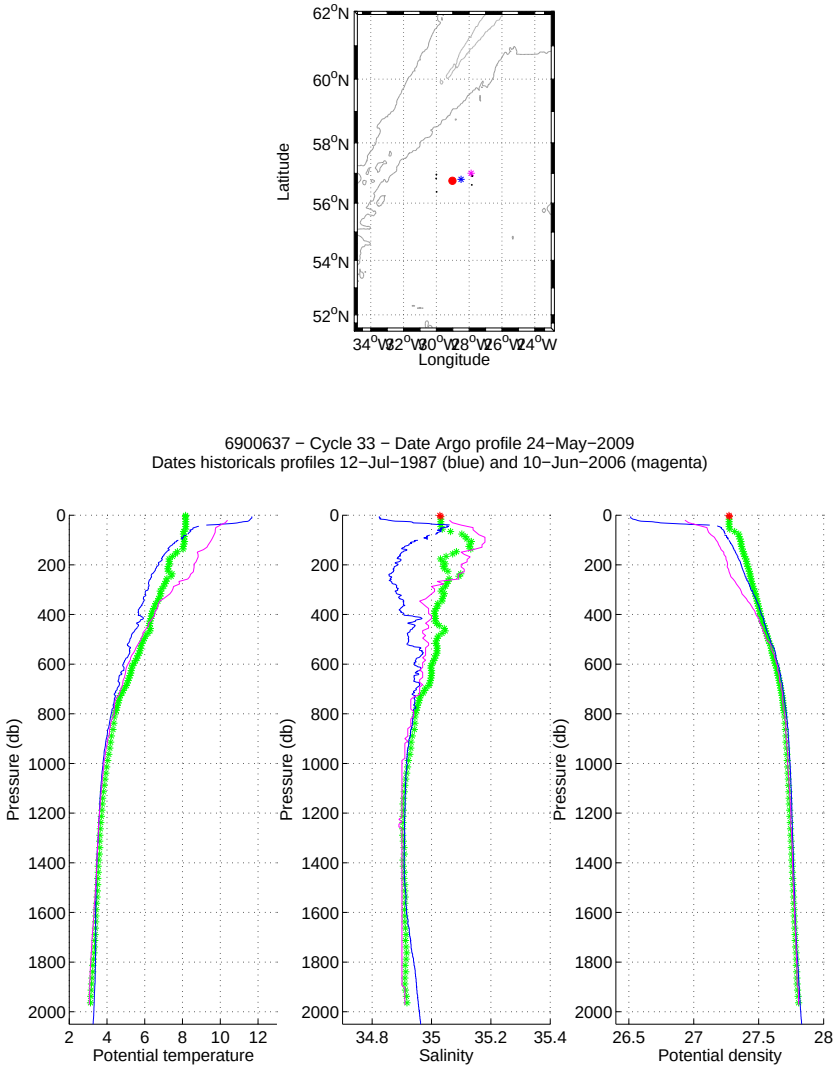


FIG. 9: Flotteur 6900637, cycle 33. Upper panel : Position of the Argo profile (red) and of the nearest CTD profiles (black). The nearest CTD profile in time is in magenta while the nearest CTD profile in space is in blue. Lower panels : Temperature, salinity and potential density as function of pressure for the Argo profile (stars) and for the nearest CTD profile in time (magenta line) and for the nearest CTD profile in space (blue line). The color of the Argo profile represents the QC flag (green for a QC=1 ; blue for a QC=2 ; orange for a QC=3 and red for a QC=4).

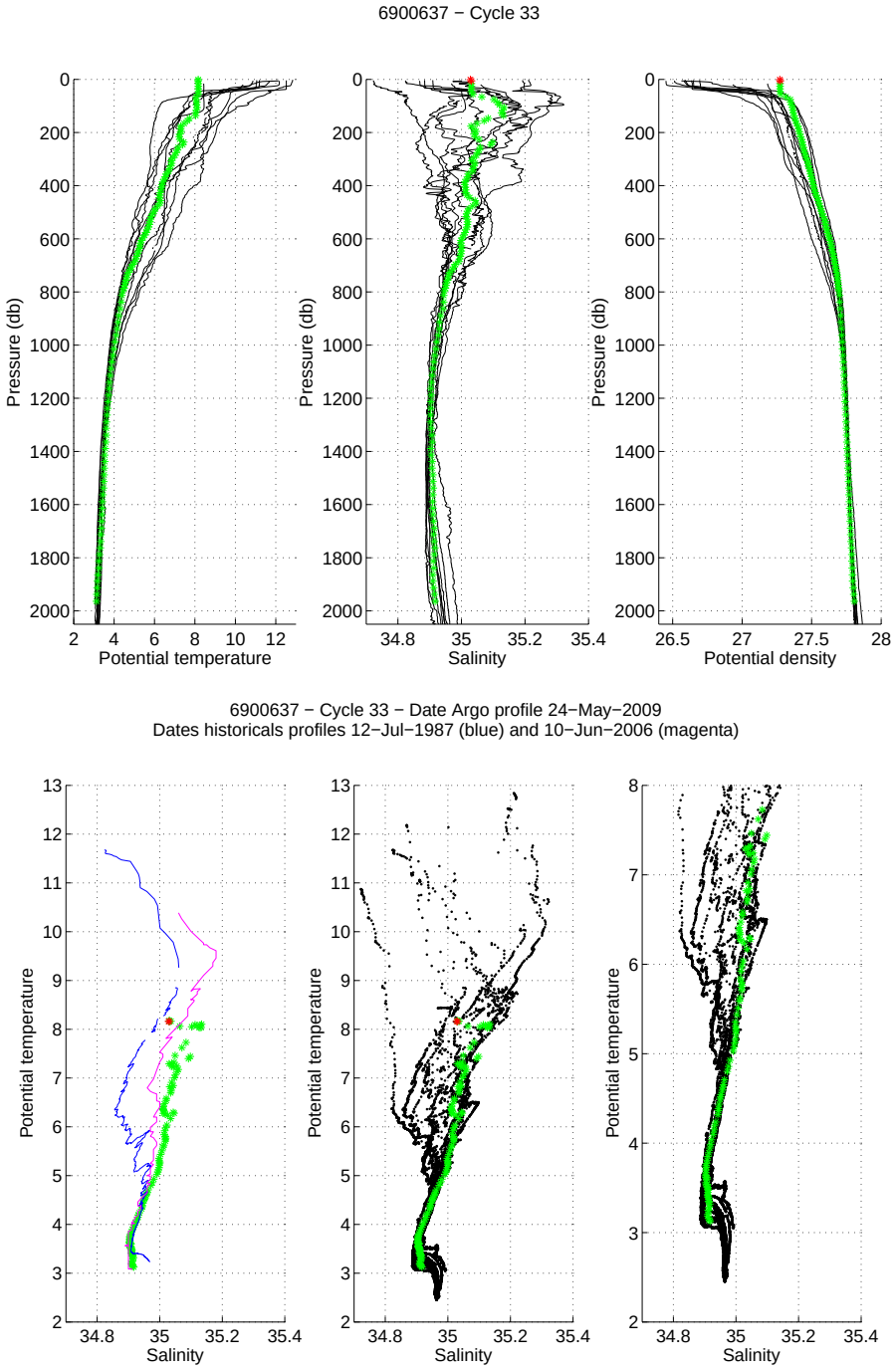


FIG. 10: Float 6900637, cycle 33. The Argo profile (stars) is compared to the nearest CTD profiles (black line) and to two specific profiles : the nearest profile in time (magenta) and the nearest profile in space (blue). The color of the Argo profile represents the QC flag (green for a QC=1 ; blue for a QC=2 ; orange for a QC=3 and red for a QC=4). (Upper panels) Temperature (left panel), salinity (middle panel) and potential density (right panel) as function of pressure. (Lower panels) θ/S diagrams.

5 Cycle 33 - Comparaison to the nearest ARGO profiles

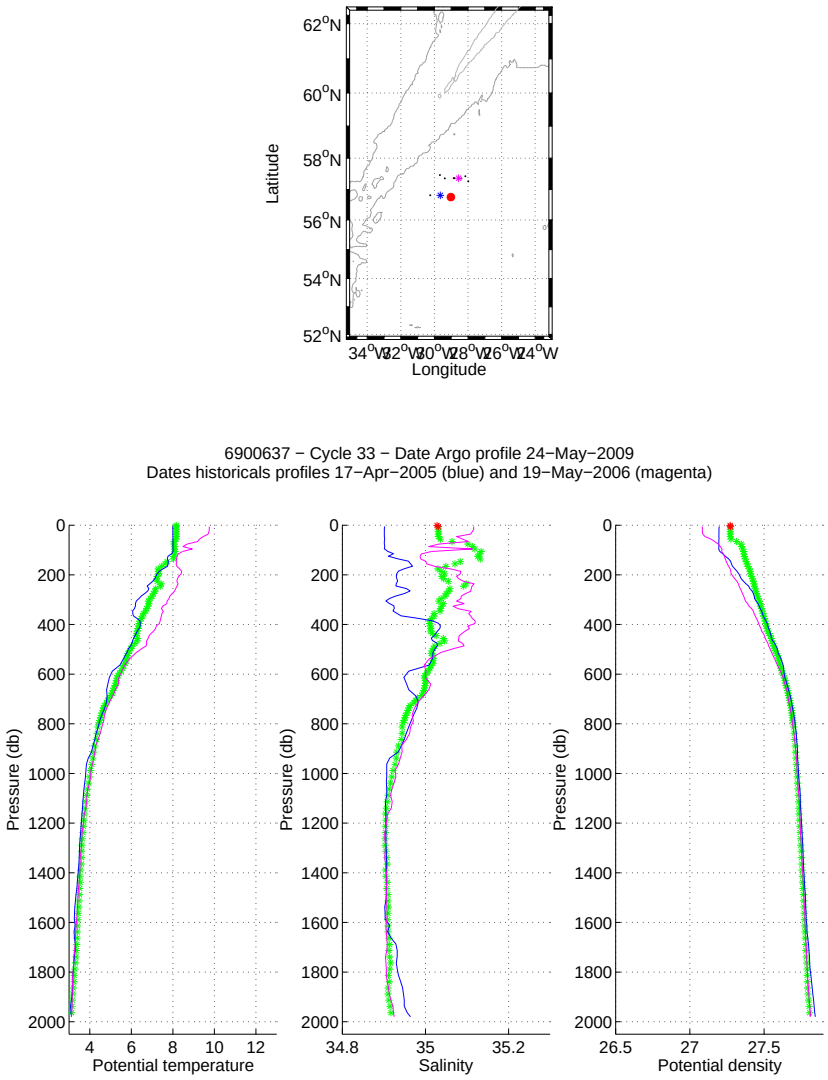


FIG. 11: Flotteur 6900637, cycle 33. Upper panel : Position of the analysed Argo profile (red) and of the nearest Argo profiles (black). The nearest Argo profile in time is in magenta while the nearest CTD profile in space is in blue. Lower panels : Temperature, salinity and potential density as function of pressure for the analysed Argo profile (stars) and for the nearest Argo profile in time (magenta line) and for the nearest Argo profile in space (blue line). The color of the analysed Argo profile represents the QC flag (green for a QC=1 ; blue for a QC=2 ; orange for a QC=3 and red for a QC=4).

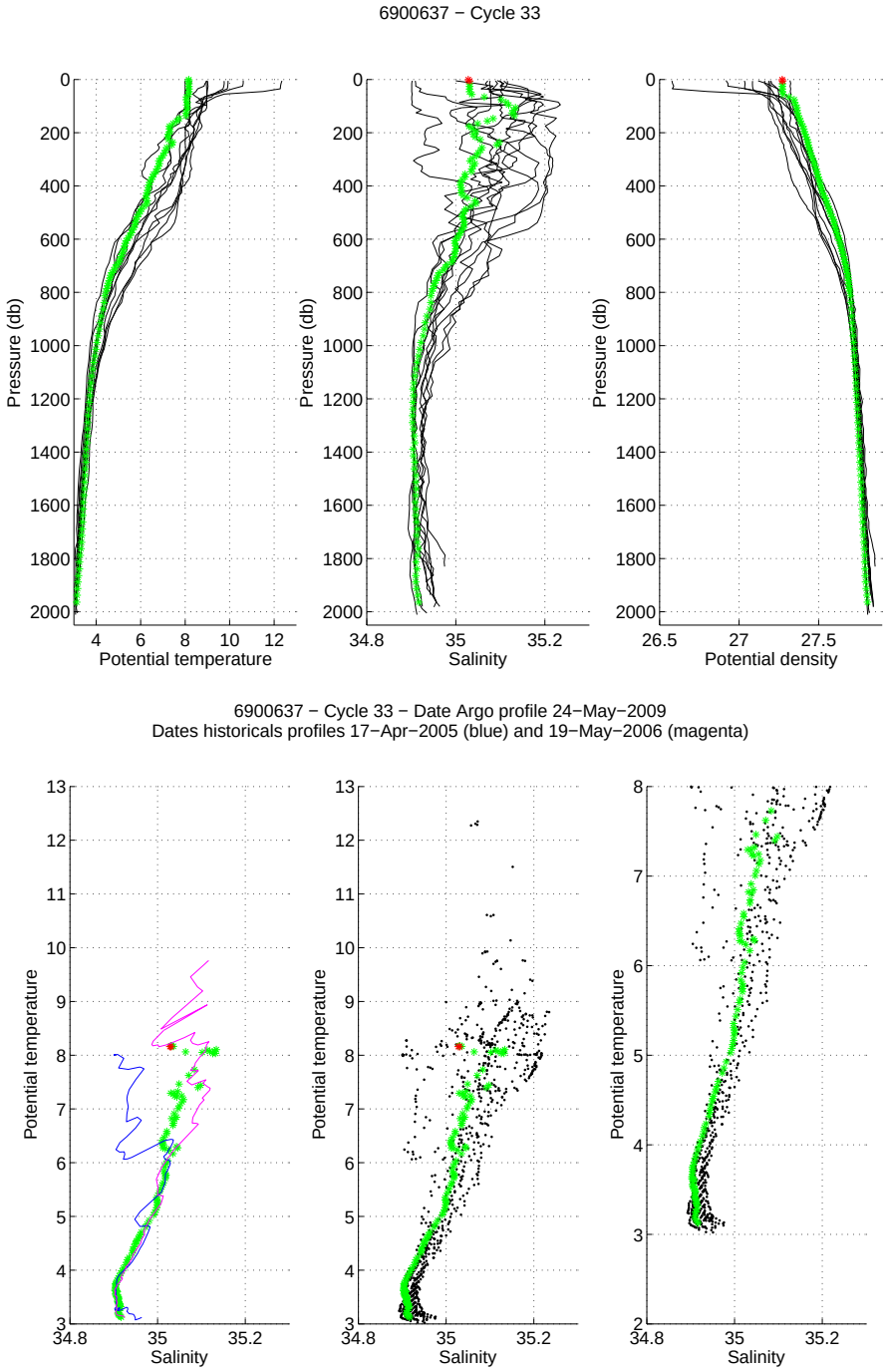


FIG. 12: Float 6900637, cycle 33. The analysed Argo profile (stars) is compared to the nearest Argo profiles (black line) and to two specific profiles : the nearest Argo profile in time (magenta) and the nearest Argo profile in space (blue). The color of the analysed Argo profile represents the QC flag (green for a QC=1 ; blue for a QC=2 ; orange for a QC=3 and red for a QC=4). (Upper panels) Temperature (left panel), salinity (middle panel) and potential density (right panel) as function of pressure. (Lower panels) θ/S diagrams.

6 Cycle 36 - Comparaison to the nearest historical CTD profiles

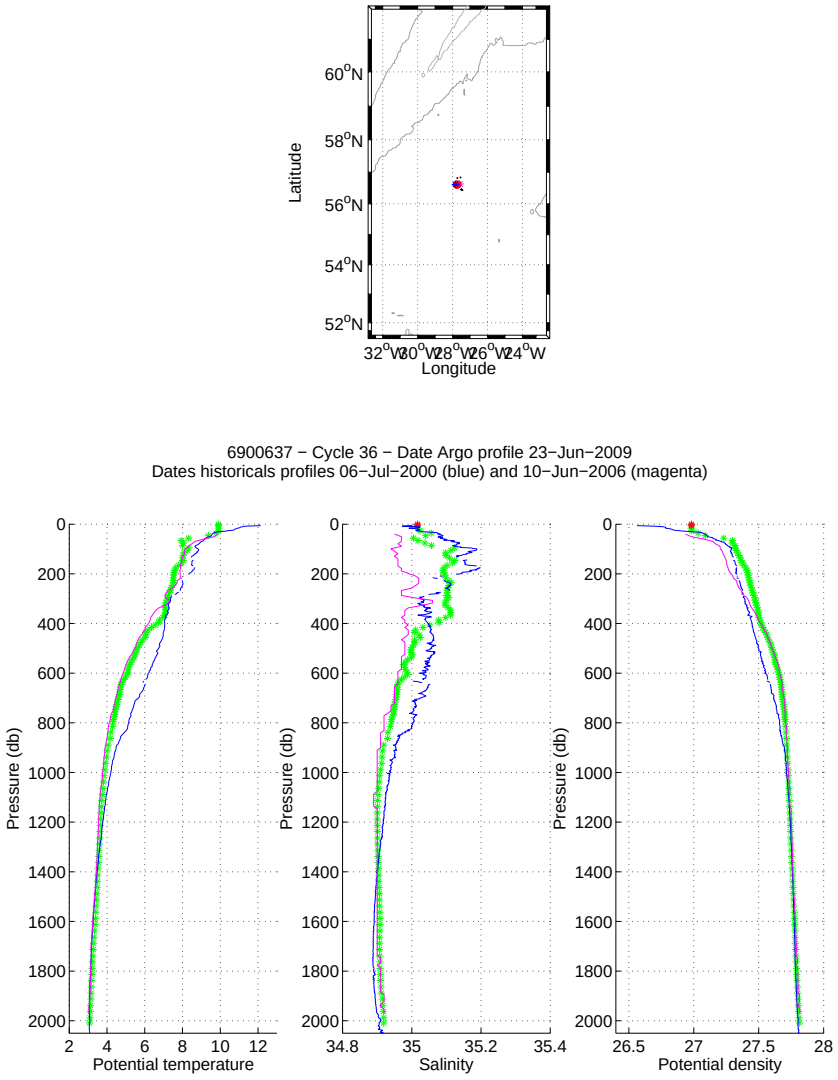


FIG. 13: Flotteur 6900637, cycle 36. Upper panel : Position of the Argo profile (red) and of the nearest CTD profiles (black). The nearest CTD profile in time is in magenta while the nearest CTD profile in space is in blue. Lower panels : Temperature, salinity and potential density as function of pressure for the Argo profile (stars) and for the nearest CTD profile in time (magenta line) and for the nearest CTD profile in space (blue line). The color of the Argo profile represents the QC flag (green for a QC=1 ; blue for a QC=2 ; orange for a QC=3 and red for a QC=4).

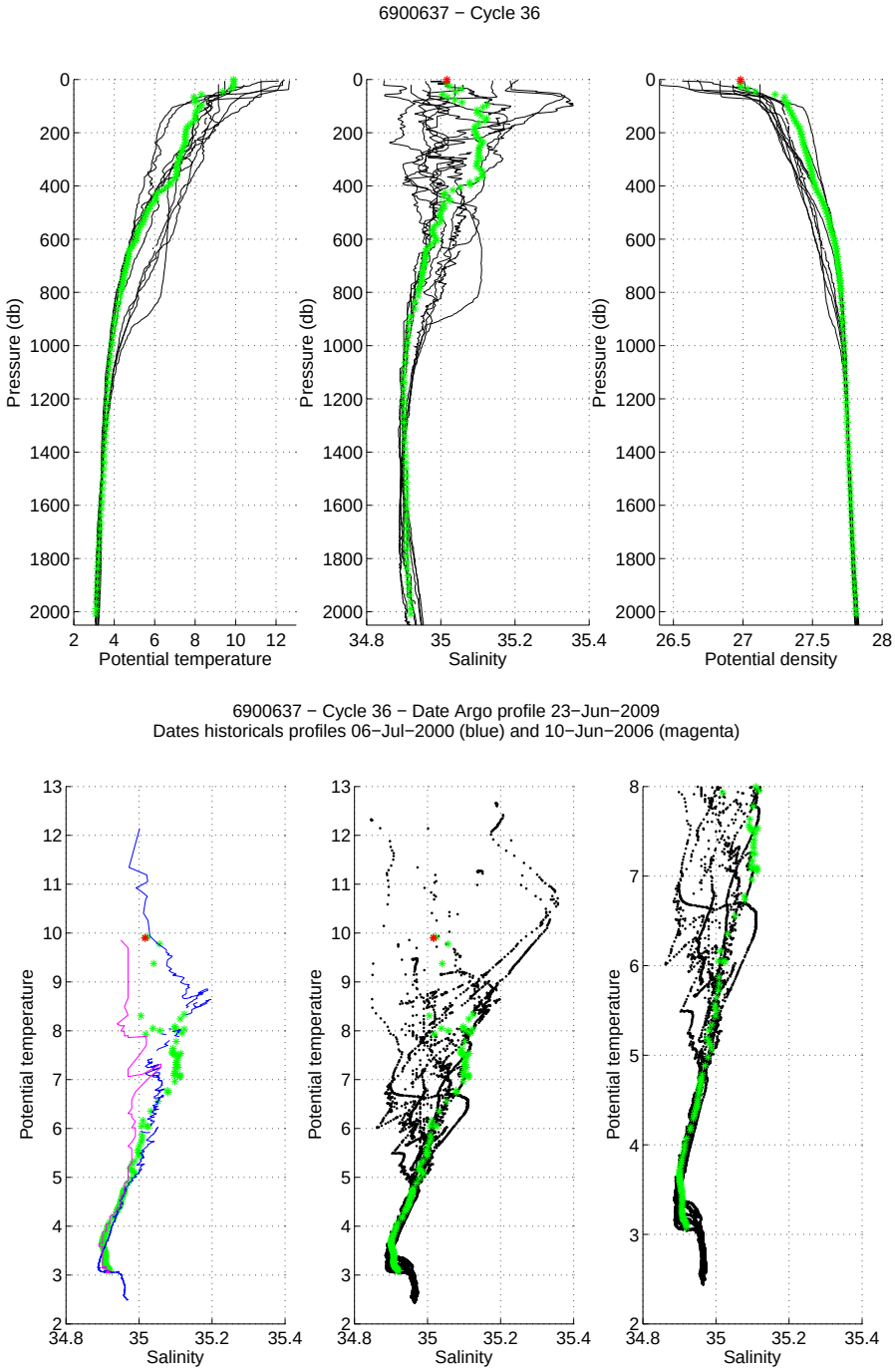


FIG. 14: Float 6900637, cycle 36. The Argo profile (stars) is compared to the nearest CTD profiles (black line) and to two specific profiles : the nearest profile in time (magenta) and the nearest profile in space (blue). The color of the Argo profile represents the QC flag (green for a QC=1 ; blue for a QC=2 ; orange for a QC=3 and red for a QC=4). (Upper panels) Temperature (left panel), salinity (middle panel) and potential density (right panel) as function of pressure. (Lower panels) θ/S diagrams.

7 Cycle 36 - Comparaison to the nearest ARGO profiles

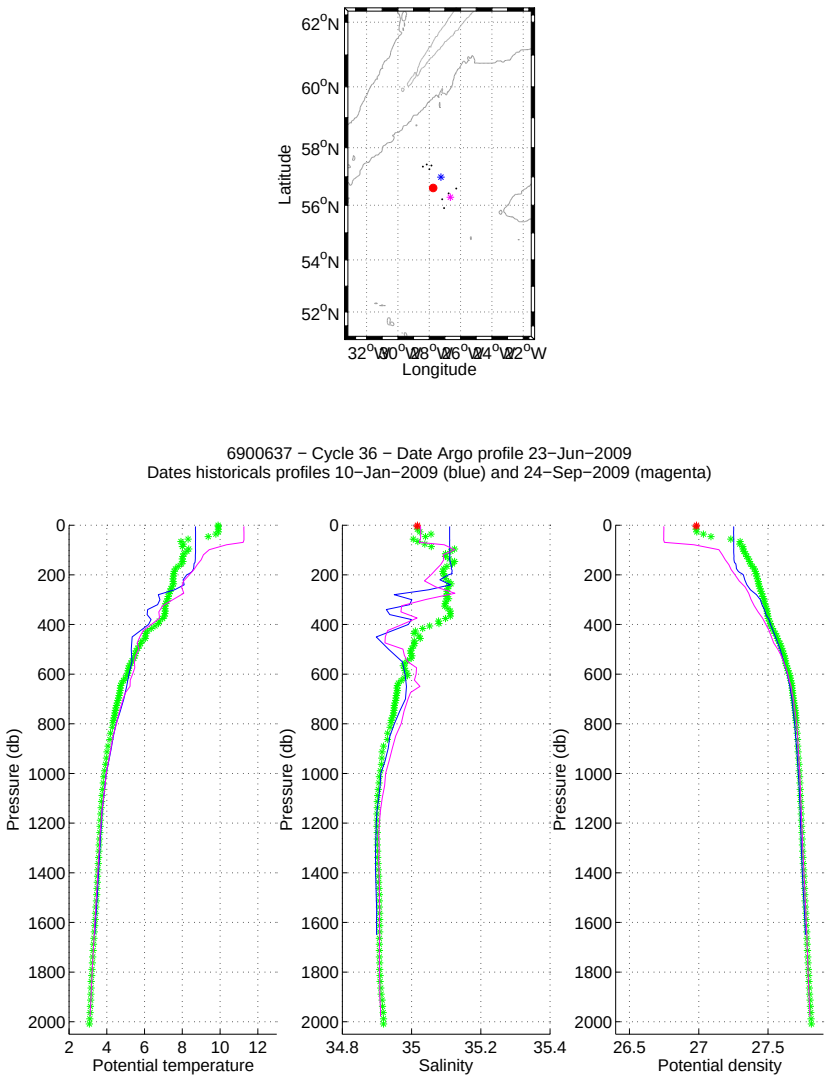


FIG. 15: Flotteur 6900637, cycle 36. Upper panel : Position of the analysed Argo profile (red) and of the nearest Argo profiles (black). The nearest Argo profile in time is in magenta while the nearest CTD profile in space is in blue. Lower panels : Temperature, salinity and potential density as function of pressure for the analysed Argo profile (stars) and for the nearest Argo profile in time (magenta line) and for the nearest Argo profile in space (blue line). The color of the analysed Argo profile represents the QC flag (green for a QC=1 ; blue for a QC=2 ; orange for a QC=3 and red for a QC=4).

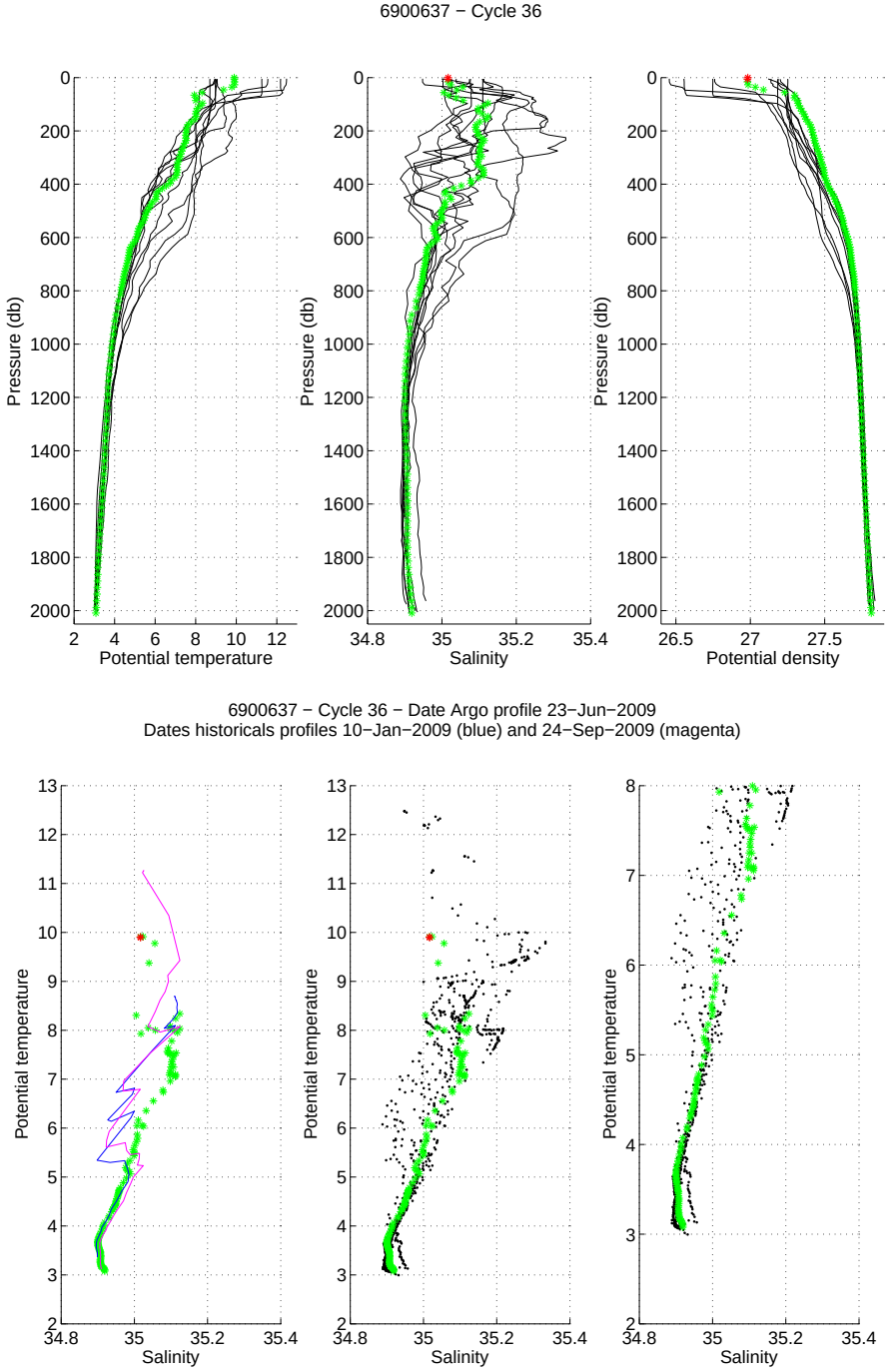


FIG. 16: Float 6900637, cycle 36. The analysed Argo profile (stars) is compared to the nearest Argo profiles (black line) and to two specific profiles : the nearest Argo profile in time (magenta) and the nearest Argo profile in space (blue). The color of the analysed Argo profile represents the QC flag (green for a QC=1 ; blue for a QC=2 ; orange for a QC=3 and red for a QC=4). (Upper panels) Temperature (left panel), salinity (middle panel) and potential density (right panel) as function of pressure. (Lower panels) θ/S diagrams.

8 Cycle 42 - Comparaison to the nearest historical CTD profiles

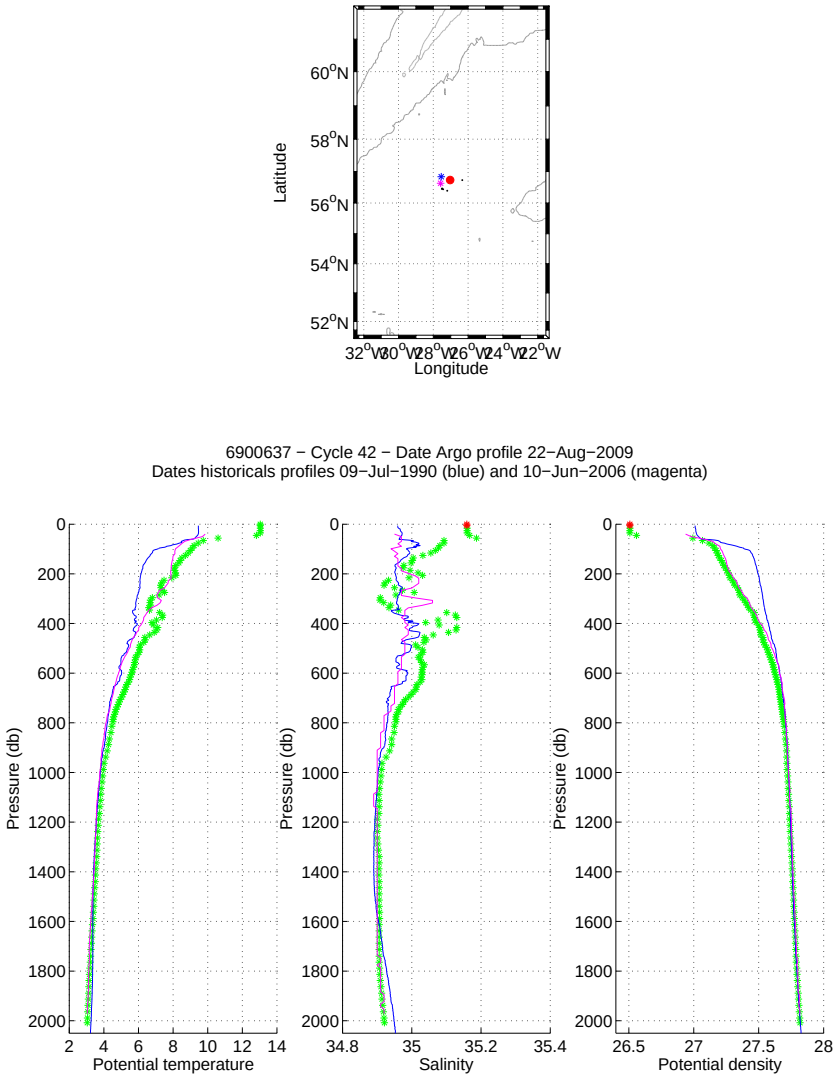


FIG. 17: Flotteur 6900637, cycle 42. Upper panel : Position of the Argo profile (red) and of the nearest CTD profiles (black). The nearest CTD profile in time is in magenta while the nearest CTD profile in space is in blue. Lower panels : Temperature, salinity and potential density as function of pressure for the Argo profile (stars) and for the nearest CTD profile in time (magenta line) and for the nearest CTD profile in space (blue line). The color of the Argo profile represents the QC flag (green for a QC=1 ; blue for a QC=2 ; orange for a QC=3 and red for a QC=4).

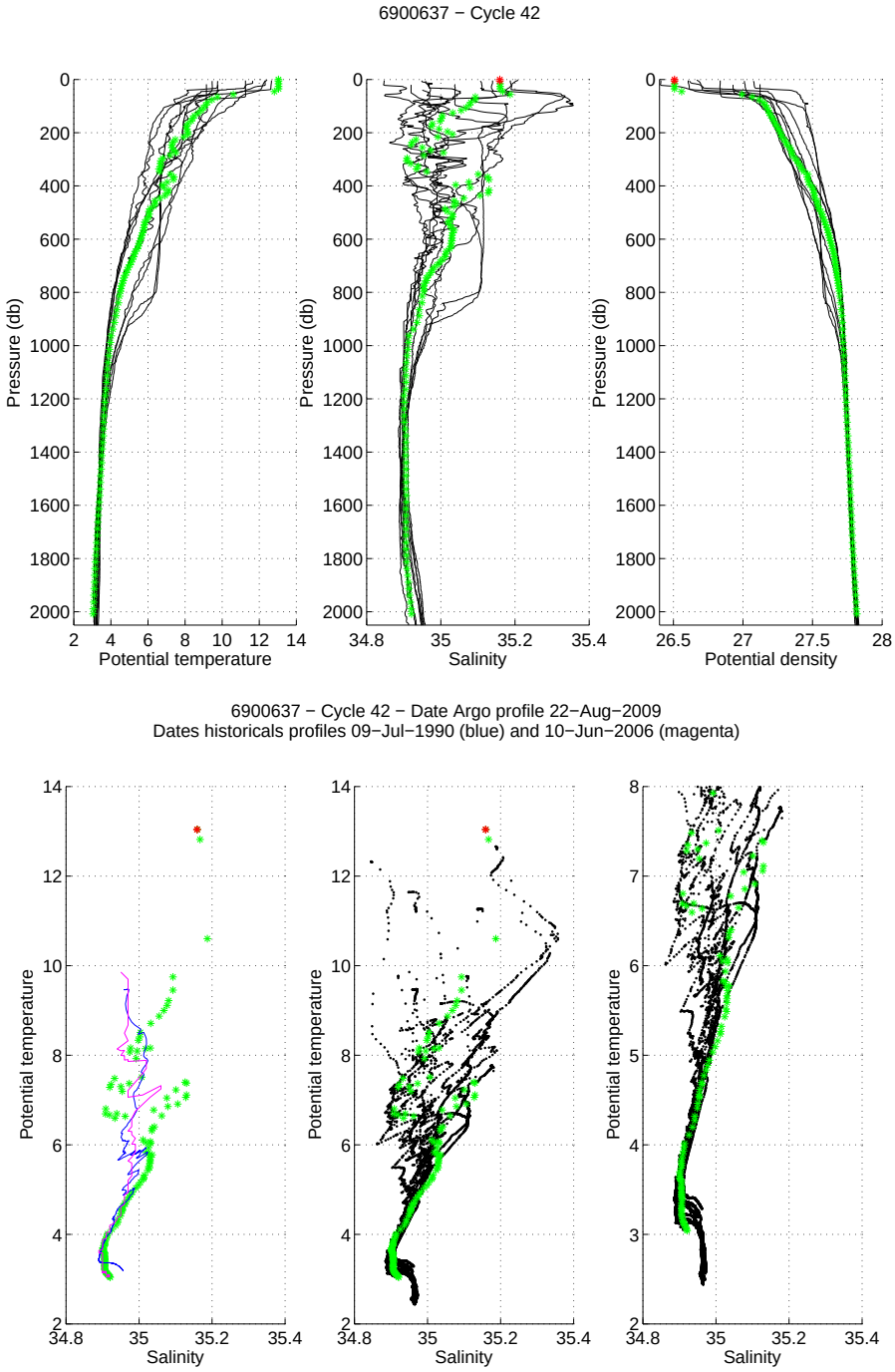


FIG. 18: Float 6900637, cycle 42. The Argo profile (stars) is compared to the nearest CTD profiles (black line) and to two specific profiles : the nearest profile in time (magenta) and the nearest profile in space (blue). The color of the Argo profile represents the QC flag (green for a QC=1 ; blue for a QC=2 ; orange for a QC=3 and red for a QC=4). (Upper panels) Temperature (left panel), salinity (middle panel) and potential density (right panel) as function of pressure. (Lower panels) θ/S diagrams.

9 Cycle 42 - Comparaison to the nearest ARGO profiles

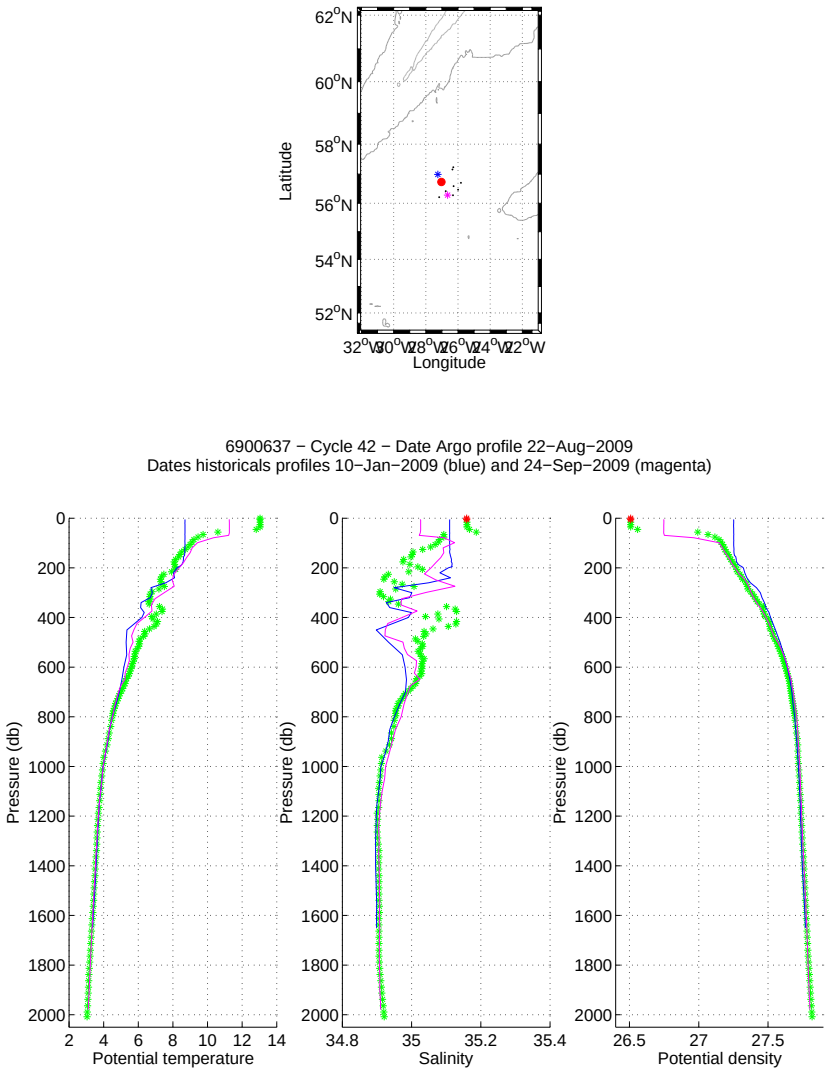


FIG. 19: Flotteur 6900637, cycle 42. Upper panel : Position of the analysed Argo profile (red) and of the nearest Argo profiles (black). The nearest Argo profile in time is in magenta while the nearest CTD profile in space is in blue. Lower panels : Temperature, salinity and potential density as function of pressure for the analysed Argo profile (stars) and for the nearest Argo profile in time (magenta line) and for the nearest Argo profile in space (blue line). The color of the analysed Argo profile represents the QC flag (green for a QC=1 ; blue for a QC=2 ; orange for a QC=3 and red for a QC=4).

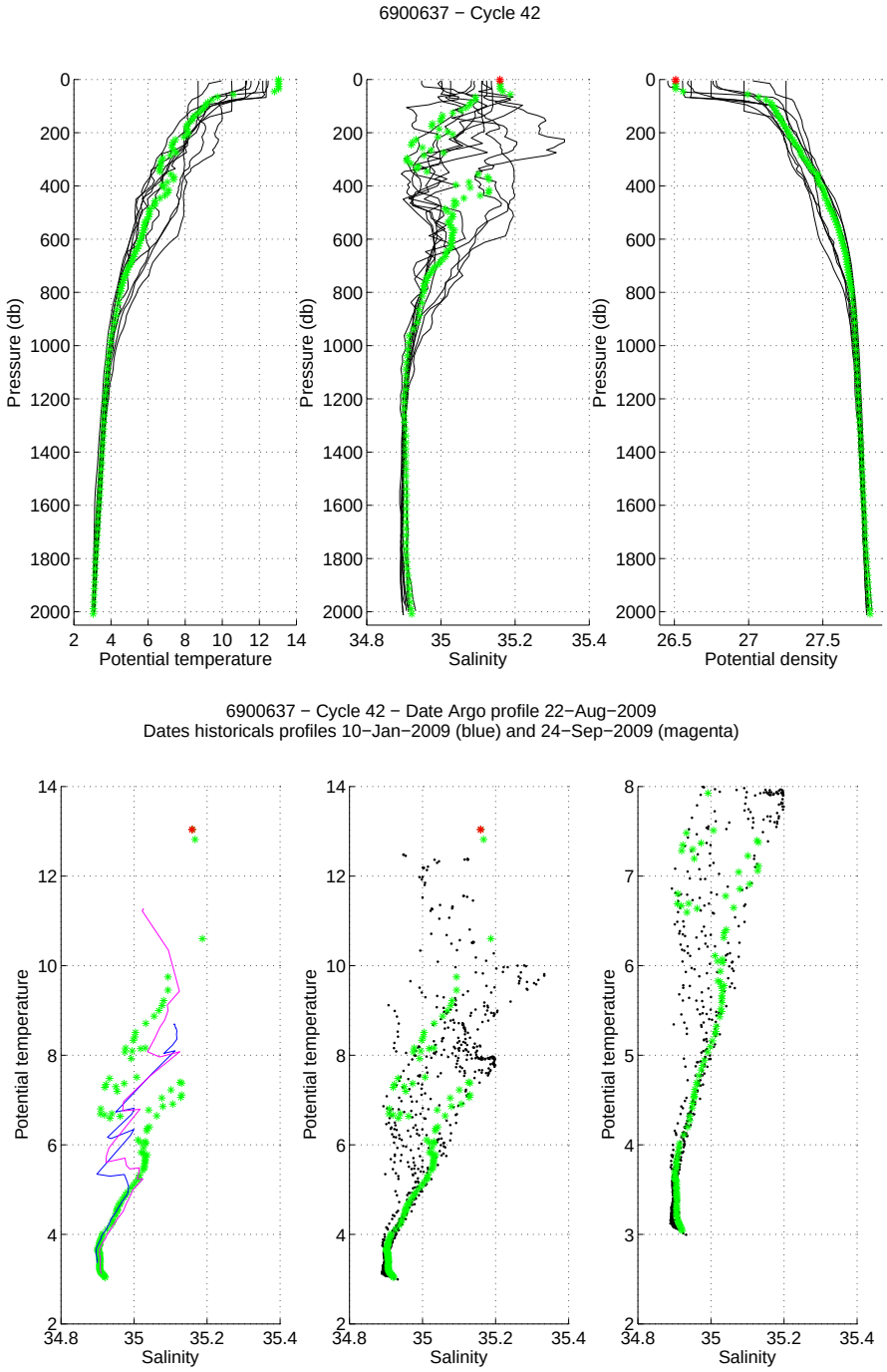


FIG. 20: Float 6900637, cycle 42. The analysed Argo profile (stars) is compared to the nearest Argo profiles (black line) and to two specific profiles : the nearest Argo profile in time (magenta) and the nearest Argo profile in space (blue). The color of the analysed Argo profile represents the QC flag (green for a QC=1 ; blue for a QC=2 ; orange for a QC=3 and red for a QC=4). (Upper panels) Temperature (left panel), salinity (middle panel) and potential density (right panel) as function of pressure. (Lower panels) θ/S diagrams.

10 Cycle 53 - Comparaison to the nearest historical CTD profiles

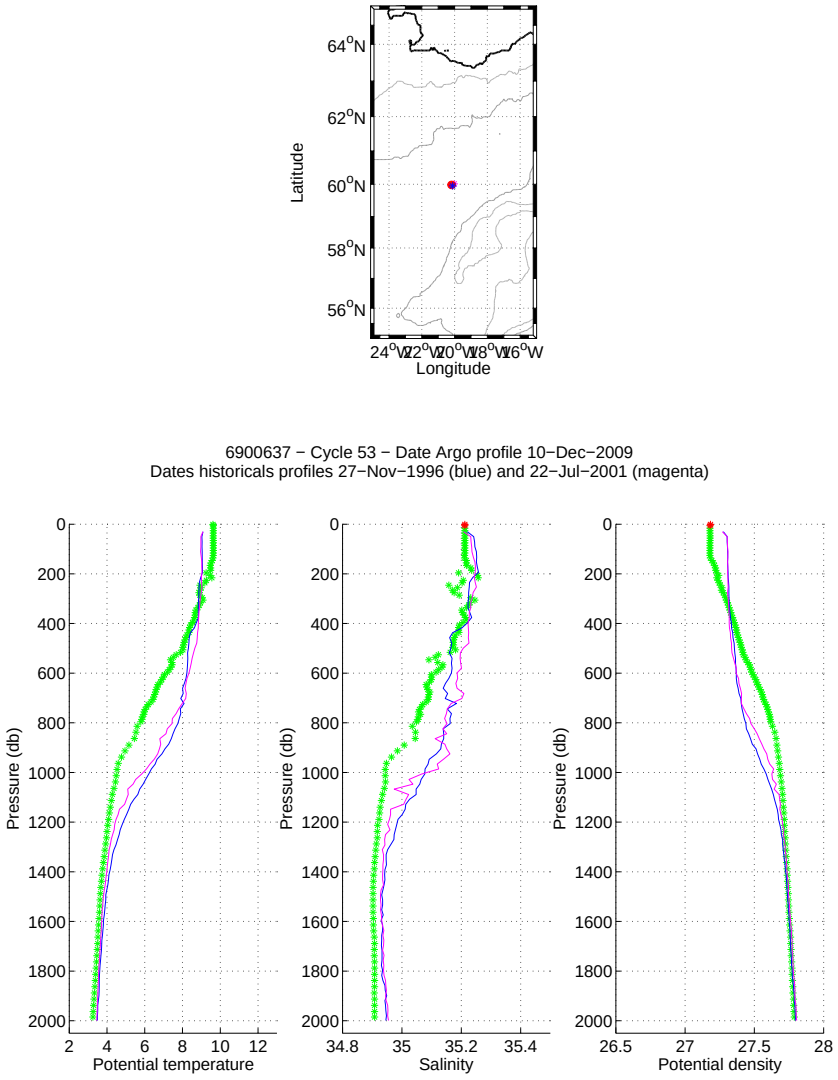


FIG. 21: Flotteur 6900637, cycle 53. Upper panel : Position of the Argo profile (red) and of the nearest CTD profiles (black). The nearest CTD profile in time is in magenta while the nearest CTD profile in space is in blue. Lower panels : Temperature, salinity and potential density as function of pressure for the Argo profile (stars) and for the nearest CTD profile in time (magenta line) and for the nearest CTD profile in space (blue line). The color of the Argo profile represents the QC flag (green for a QC=1 ; blue for a QC=2 ; orange for a QC=3 and red for a QC=4).

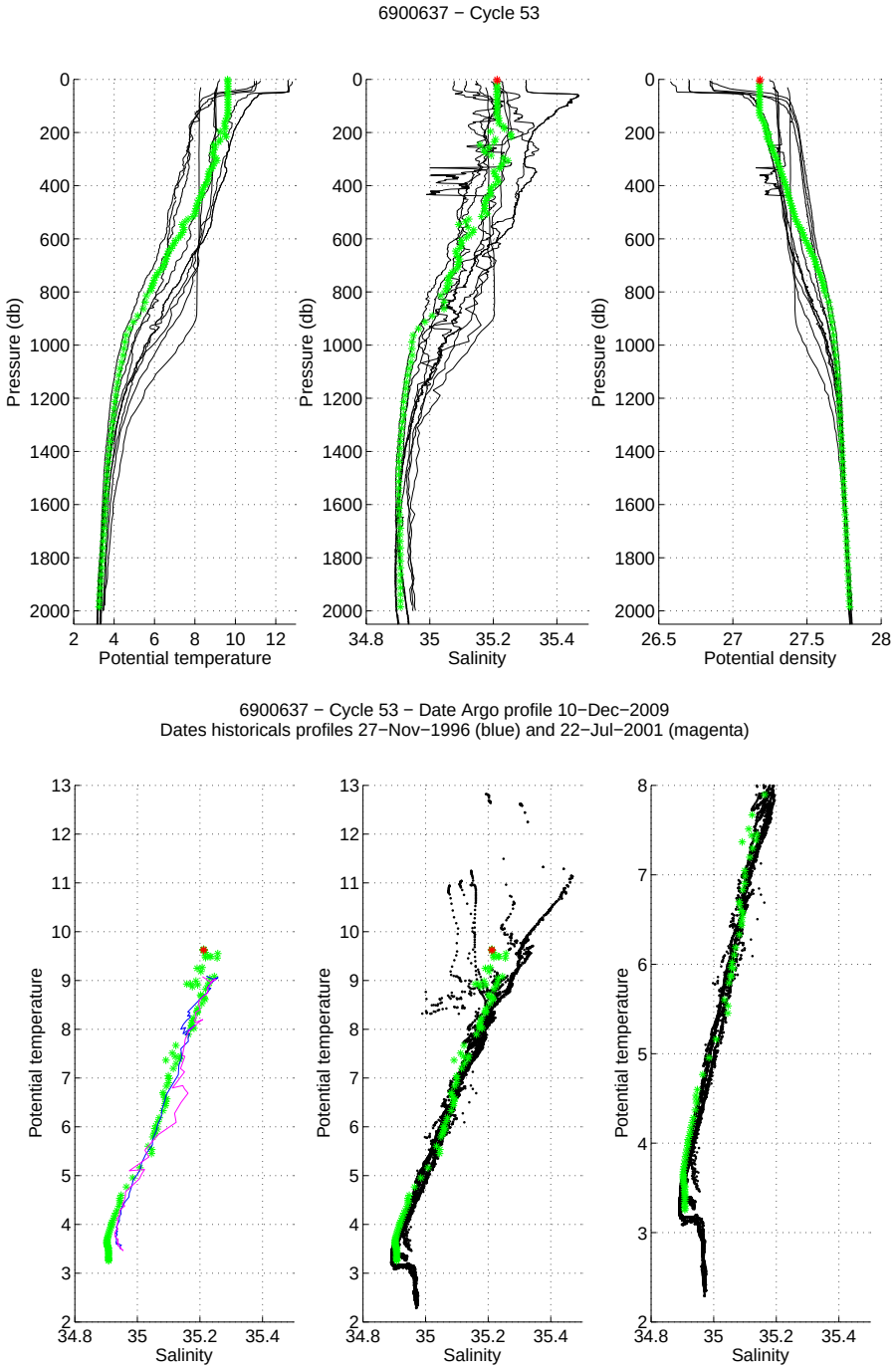


FIG. 22: Float 6900637, cycle 53. The Argo profile (stars) is compared to the nearest CTD profiles (black line) and to two specific profiles : the nearest profile in time (magenta) and the nearest profile in space (blue). The color of the Argo profile represents the QC flag (green for a QC=1 ; blue for a QC=2 ; orange for a QC=3 and red for a QC=4). (Upper panels) Temperature (left panel), salinity (middle panel) and potential density (right panel) as function of pressure. (Lower panels) θ/S diagrams.

11 Cycle 53 - Comparaison to the nearest ARGO profiles

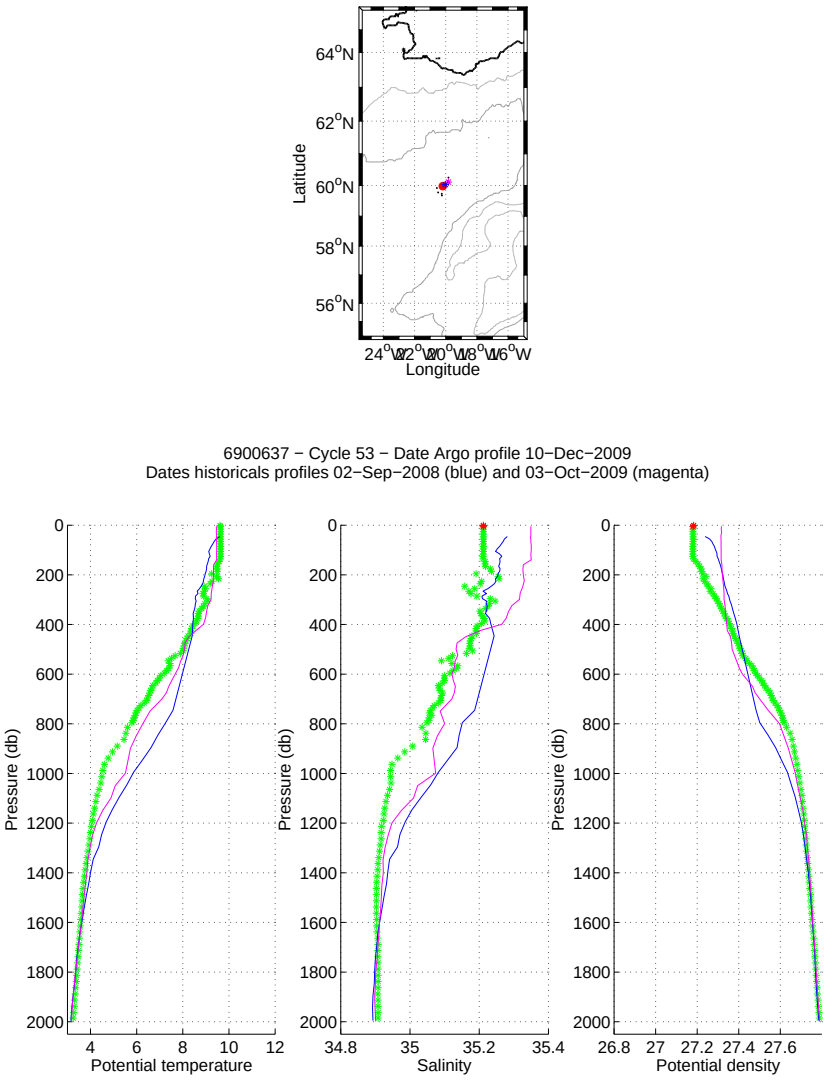


FIG. 23: Flotteur 6900637, cycle 53. Upper panel : Position of the analysed Argo profile (red) and of the nearest Argo profiles (black). The nearest Argo profile in time is in magenta while the nearest CTD profile in space is in blue. Lower panels : Temperature, salinity and potential density as function of pressure for the analysed Argo profile (stars) and for the nearest Argo profile in time (magenta line) and for the nearest Argo profile in space (blue line). The color of the analysed Argo profile represents the QC flag (green for a QC=1 ; blue for a QC=2 ; orange for a QC=3 and red for a QC=4).

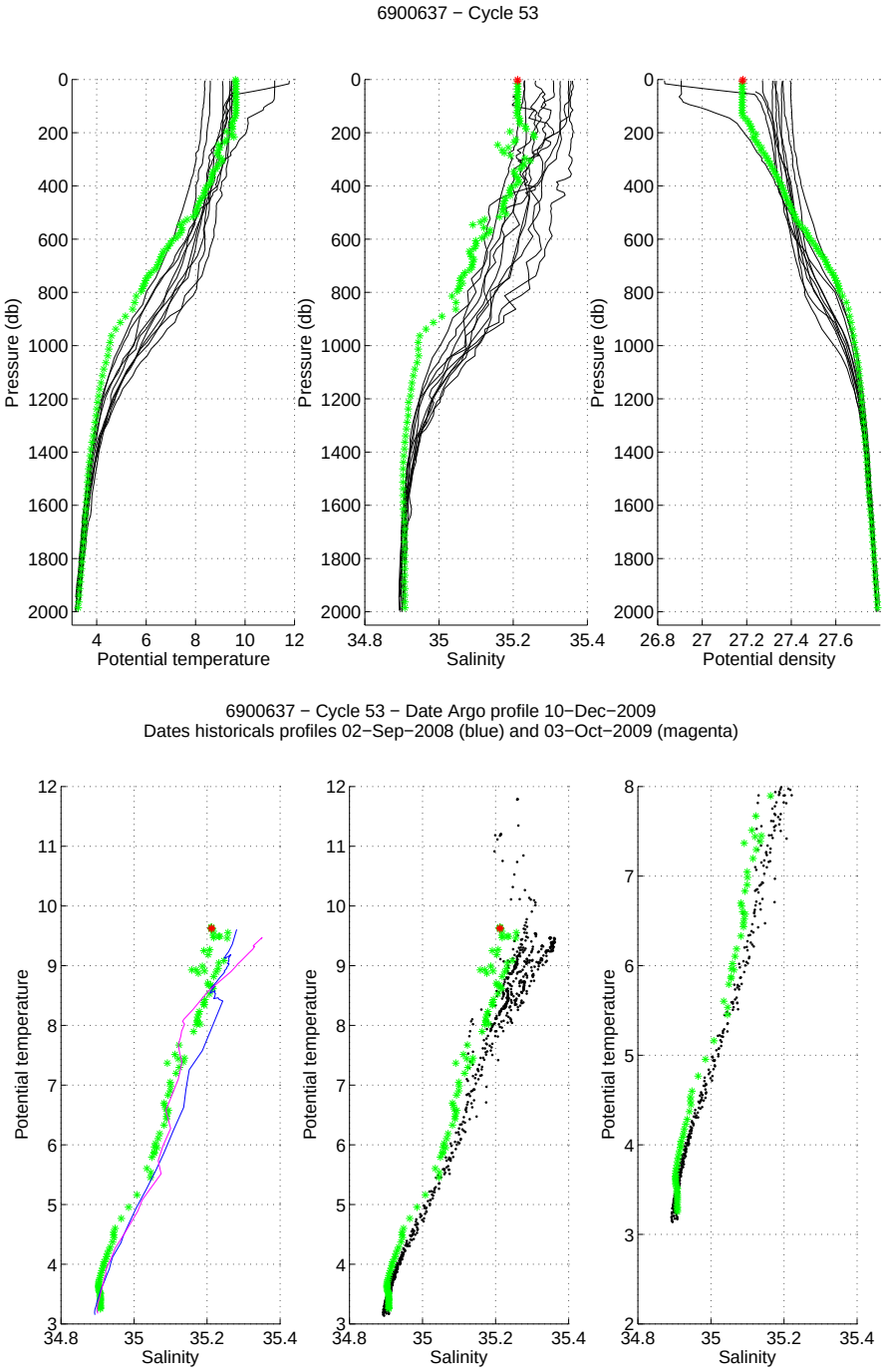


FIG. 24: Float 6900637, cycle 53. The analysed Argo profile (stars) is compared to the nearest Argo profiles (black line) and to two specific profiles : the nearest Argo profile in time (magenta) and the nearest Argo profile in space (blue). The color of the analysed Argo profile represents the QC flag (green for a QC=1 ; blue for a QC=2 ; orange for a QC=3 and red for a QC=4). (Upper panels) Temperature (left panel), salinity (middle panel) and potential density (right panel) as function of pressure. (Lower panels) θ/S diagrams.

12 Cycle 66 - Comparaison to the nearest historical CTD profiles

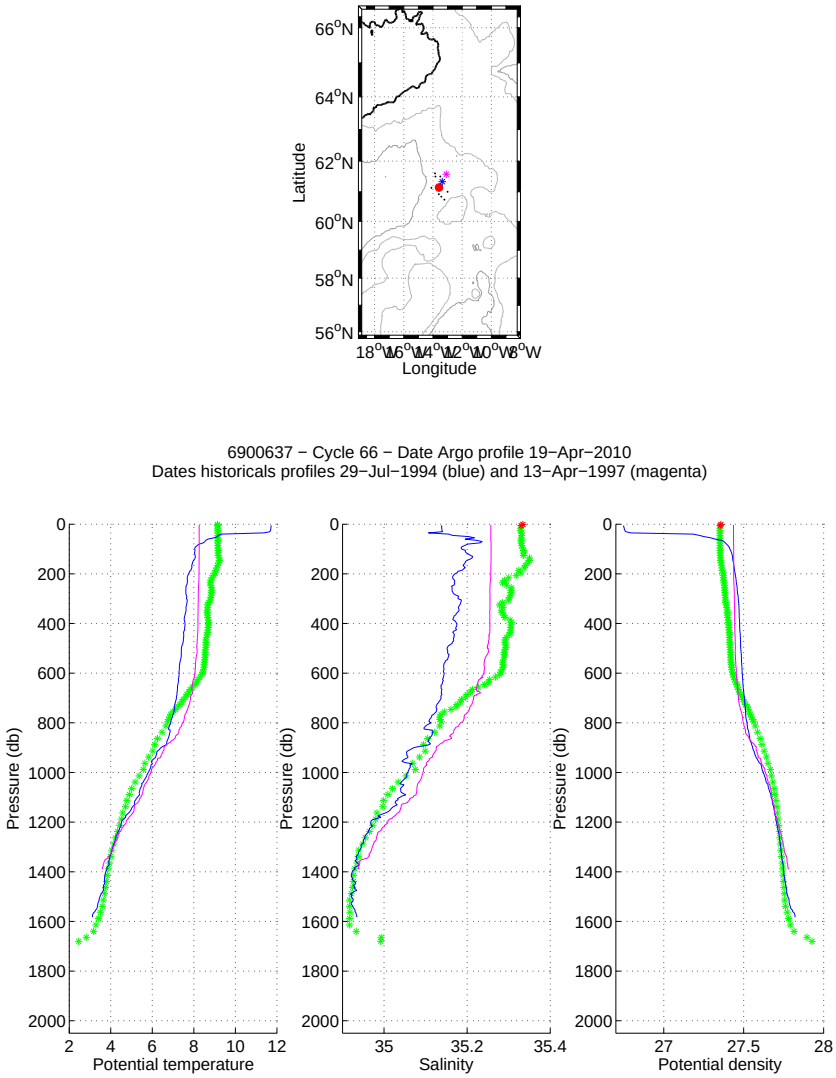


FIG. 25: Flotteur 6900637, cycle 66. Upper panel : Position of the Argo profile (red) and of the nearest CTD profiles (black). The nearest CTD profile in time is in magenta while the nearest CTD profile in space is in blue. Lower panels : Temperature, salinity and potential density as function of pressure for the Argo profile (stars) and for the nearest CTD profile in time (magenta line) and for the nearest CTD profile in space (blue line). The color of the Argo profile represents the QC flag (green for a QC=1 ; blue for a QC=2 ; orange for a QC=3 and red for a QC=4).

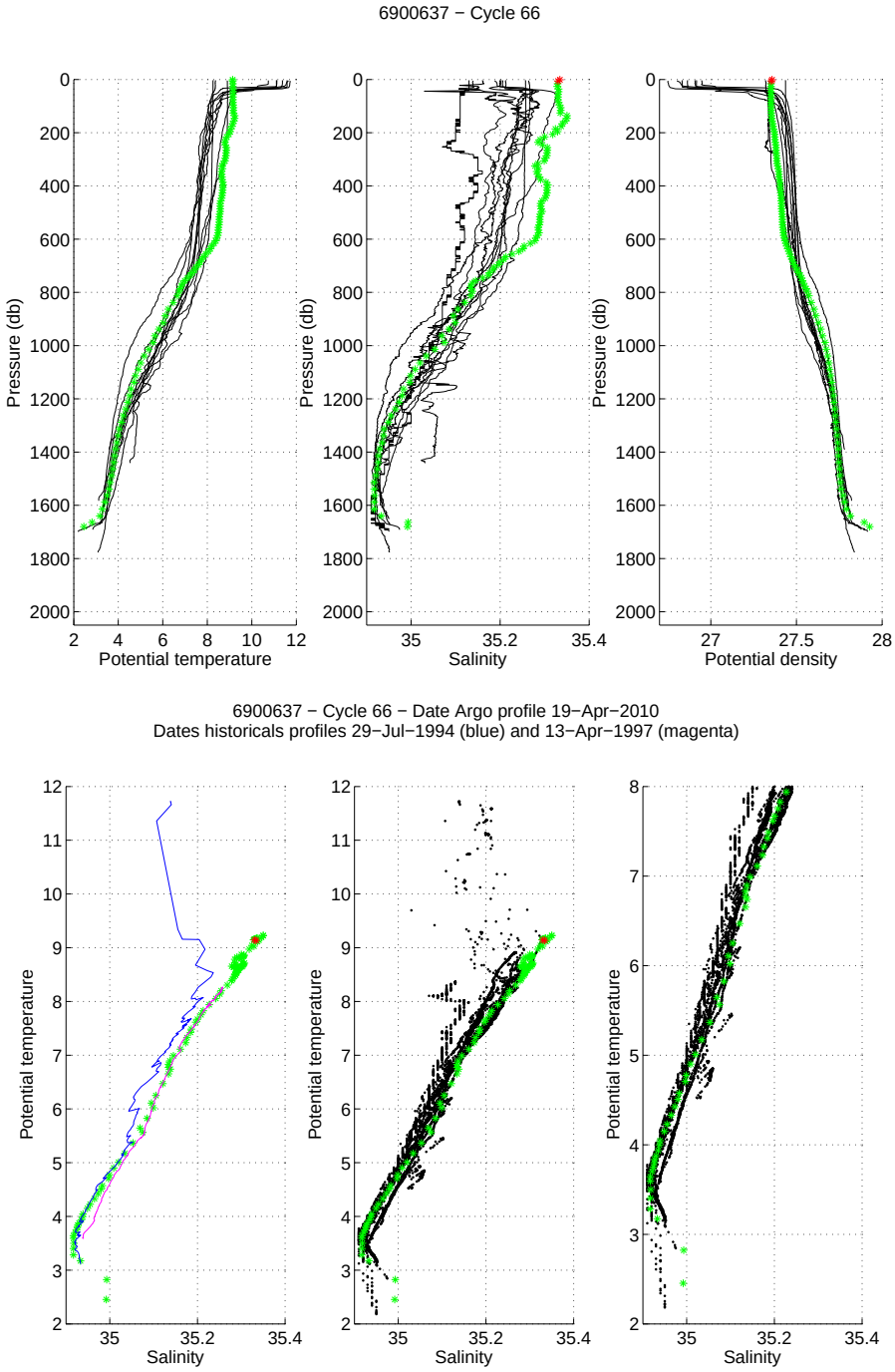


FIG. 26: Float 6900637, cycle 66. The Argo profile (stars) is compared to the nearest CTD profiles (black line) and to two specific profiles : the nearest profile in time (magenta) and the nearest profile in space (blue). The color of the Argo profile represents the QC flag (green for a QC=1 ; blue for a QC=2 ; orange for a QC=3 and red for a QC=4). (Upper panels) Temperature (left panel), salinity (middle panel) and potential density (right panel) as function of pressure. (Lower panels) θ/S diagrams.

13 Cycle 66 - Comparaison to the nearest ARGO profiles

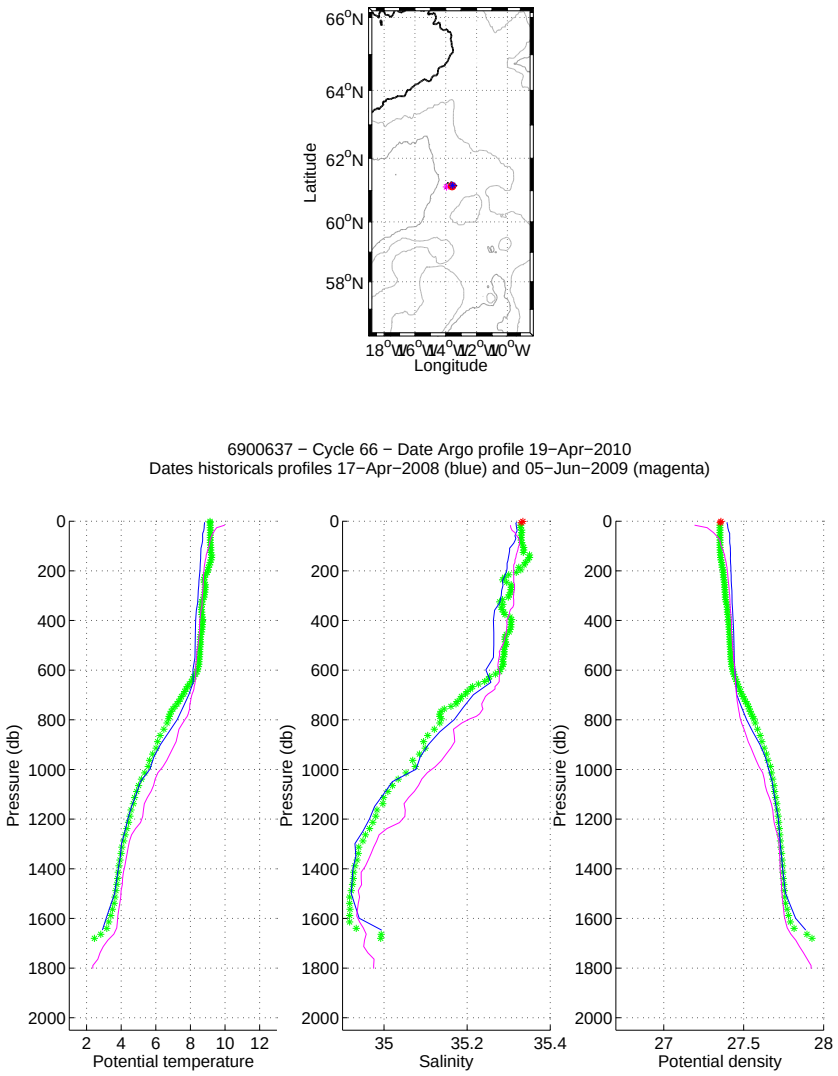


FIG. 27: Flotteur 6900637, cycle 66. Upper panel : Position of the analysed Argo profile (red) and of the nearest Argo profiles (black). The nearest Argo profile in time is in magenta while the nearest CTD profile in space is in blue. Lower panels : Temperature, salinity and potential density as function of pressure for the analysed Argo profile (stars) and for the nearest Argo profile in time (magenta line) and for the nearest Argo profile in space (blue line). The color of the analysed Argo profile represents the QC flag (green for a QC=1 ; blue for a QC=2 ; orange for a QC=3 and red for a QC=4).

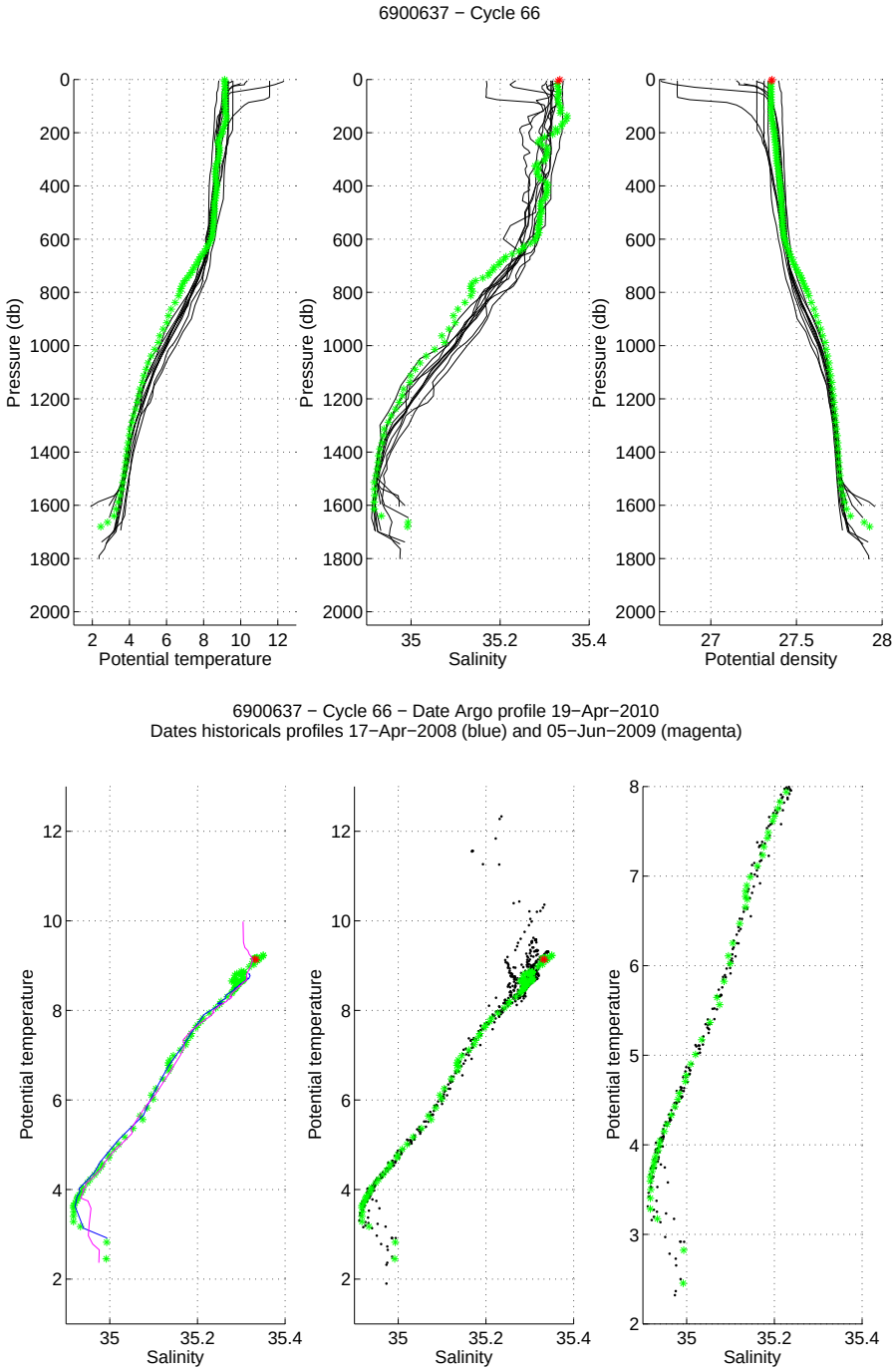


FIG. 28: Float 6900637, cycle 66. The analysed Argo profile (stars) is compared to the nearest Argo profiles (black line) and to two specific profiles : the nearest Argo profile in time (magenta) and the nearest Argo profile in space (blue). The color of the analysed Argo profile represents the QC flag (green for a QC=1 ; blue for a QC=2 ; orange for a QC=3 and red for a QC=4). (Upper panels) Temperature (left panel), salinity (middle panel) and potential density (right panel) as function of pressure. (Lower panels) θ/S diagrams.

14 Cycle 71 - Comparaison to the nearest historical CTD profiles

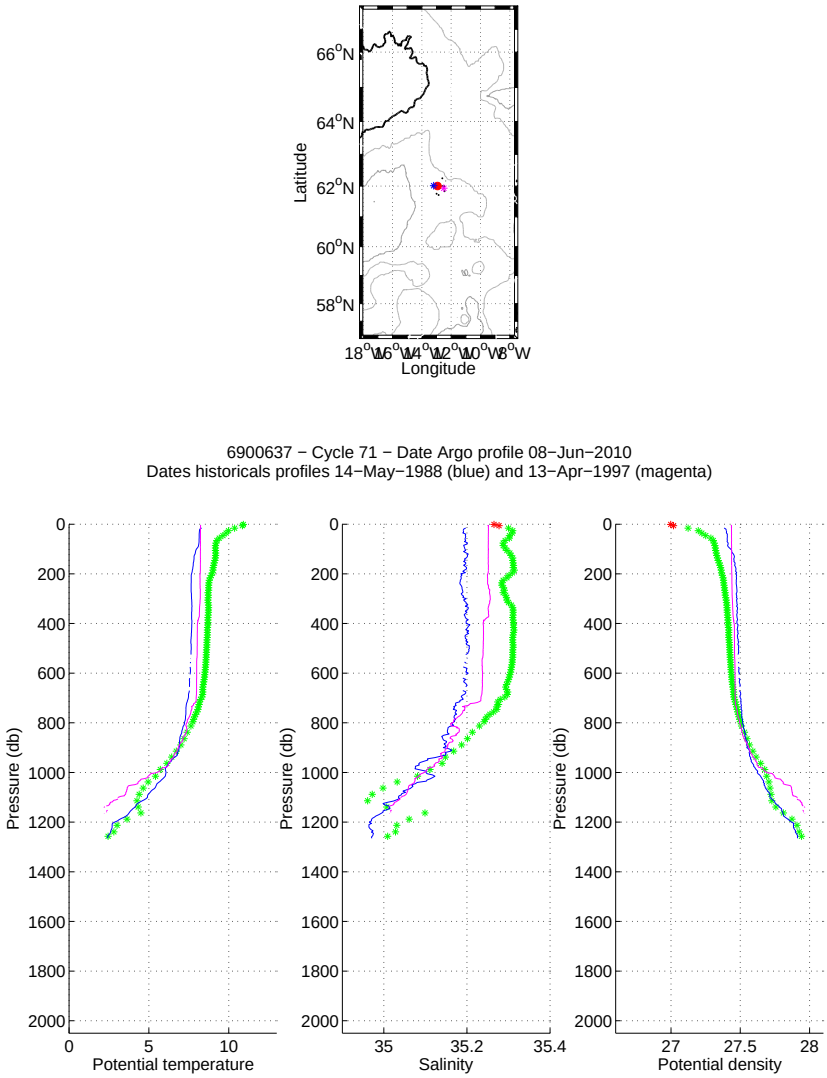


FIG. 29: Flotteur 6900637, cycle 71. Upper panel : Position of the Argo profile (red) and of the nearest CTD profiles (black). The nearest CTD profile in time is in magenta while the nearest CTD profile in space is in blue. Lower panels : Temperature, salinity and potential density as function of pressure for the Argo profile (stars) and for the nearest CTD profile in time (magenta line) and for the nearest CTD profile in space (blue line). The color of the Argo profile represents the QC flag (green for a QC=1 ; blue for a QC=2 ; orange for a QC=3 and red for a QC=4).

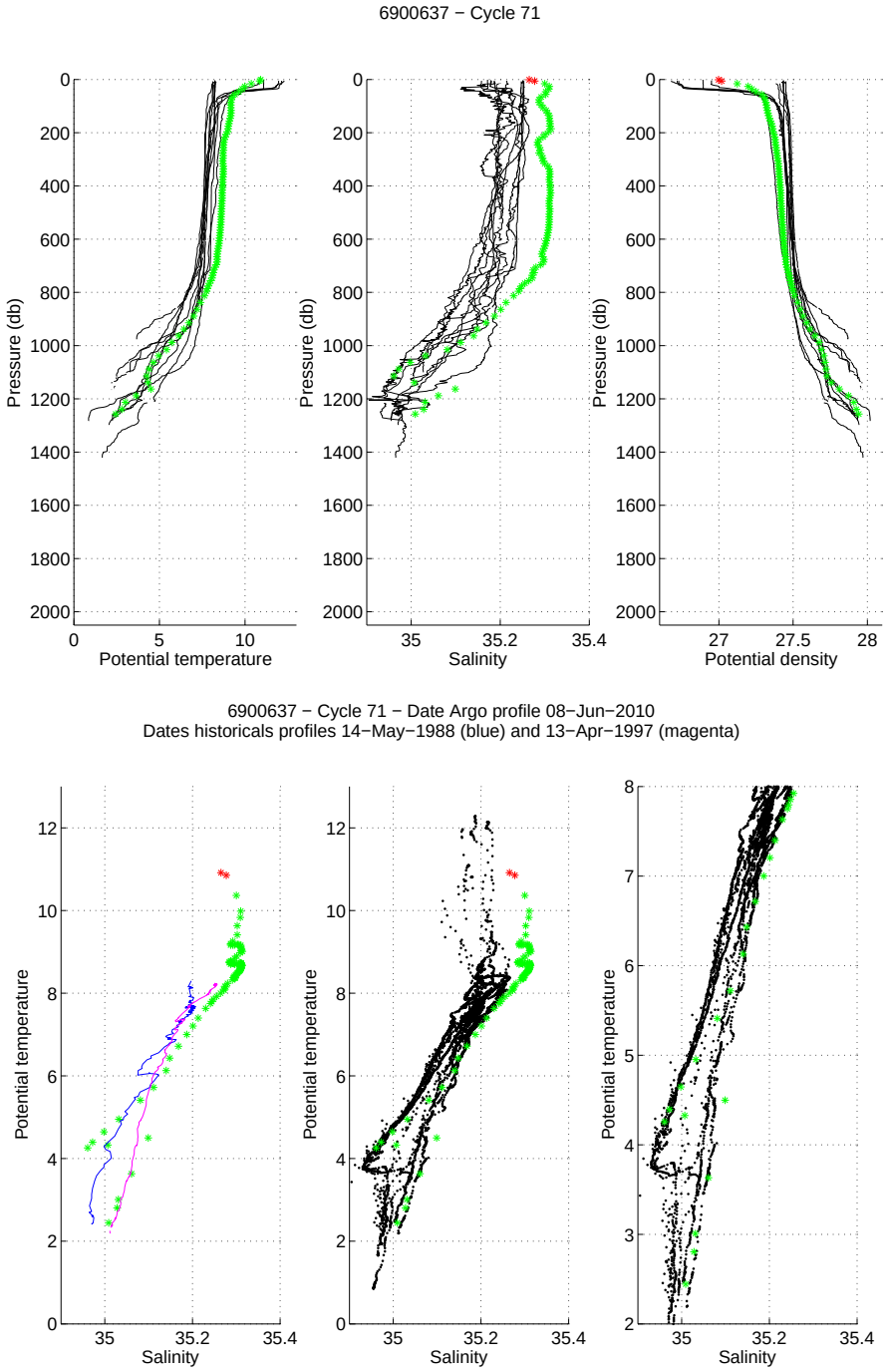


FIG. 30: Float 6900637, cycle 71. The Argo profile (stars) is compared to the nearest CTD profiles (black line) and to two specific profiles : the nearest profile in time (magenta) and the nearest profile in space (blue). The color of the Argo profile represents the QC flag (green for a QC=1 ; blue for a QC=2 ; orange for a QC=3 and red for a QC=4). (Upper panels) Temperature (left panel), salinity (middle panel) and potential density (right panel) as function of pressure. (Lower panels) θ/S diagrams.

15 Cycle 71 - Comparaison to the nearest ARGO profiles

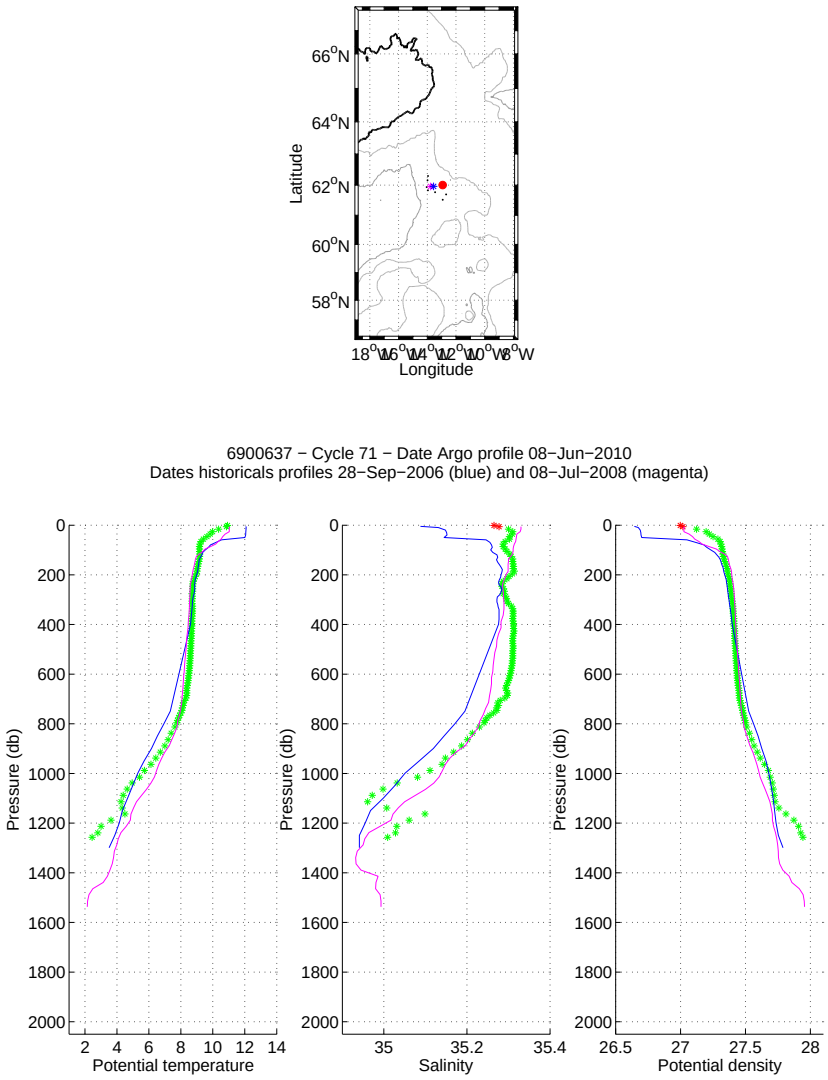


FIG. 31: Flotteur 6900637, cycle 71. Upper panel : Position of the analysed Argo profile (red) and of the nearest Argo profiles (black). The nearest Argo profile in time is in magenta while the nearest CTD profile in space is in blue. Lower panels : Temperature, salinity and potential density as function of pressure for the analysed Argo profile (stars) and for the nearest Argo profile in time (magenta line) and for the nearest Argo profile in space (blue line). The color of the analysed Argo profile represents the QC flag (green for a QC=1 ; blue for a QC=2 ; orange for a QC=3 and red for a QC=4).

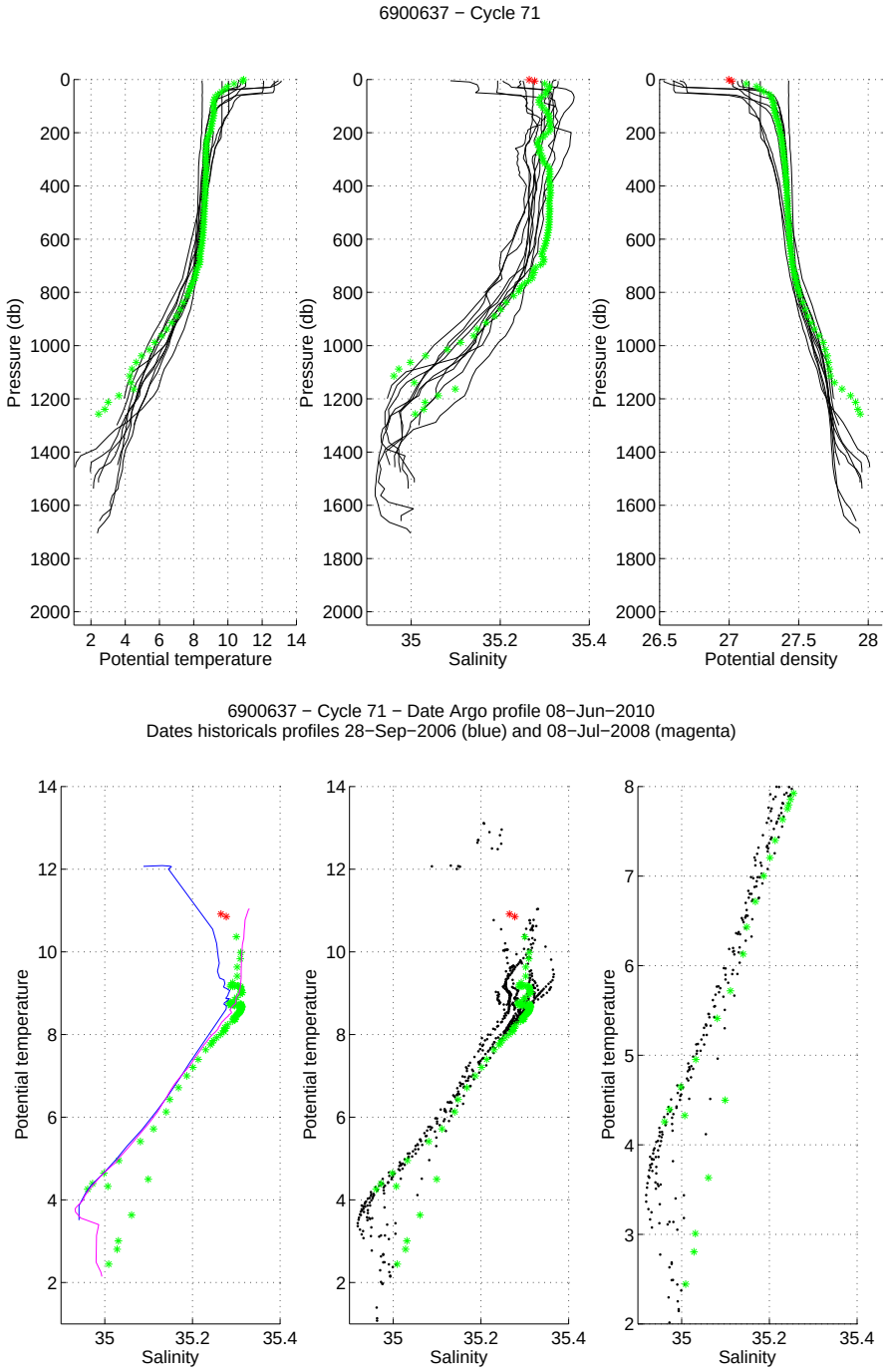


FIG. 32: Float 6900637, cycle 71. The analysed Argo profile (stars) is compared to the nearest Argo profiles (black line) and to two specific profiles : the nearest Argo profile in time (magenta) and the nearest Argo profile in space (blue). The color of the analysed Argo profile represents the QC flag (green for a QC=1 ; blue for a QC=2 ; orange for a QC=3 and red for a QC=4). (Upper panels) Temperature (left panel), salinity (middle panel) and potential density (right panel) as function of pressure. (Lower panels) θ/S diagrams.

16 Cycle 72 - Comparaison to the nearest historical CTD profiles

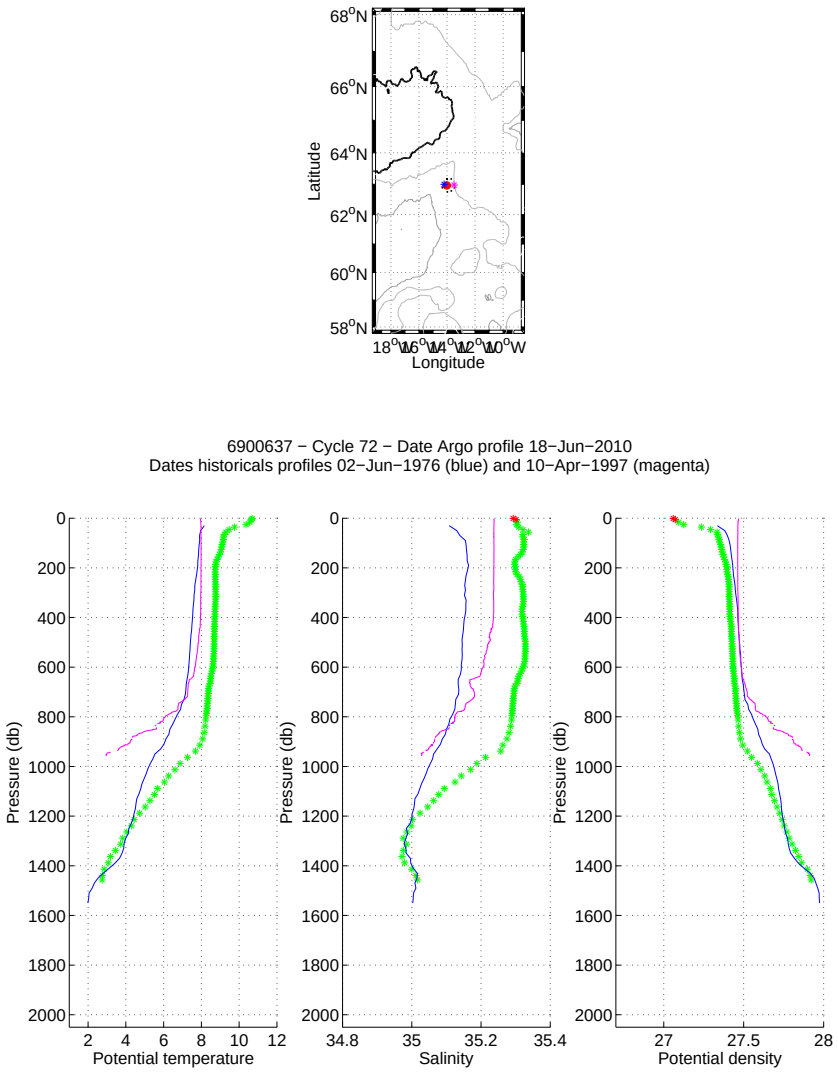


FIG. 33: Flotteur 6900637, cycle 72. Upper panel : Position of the Argo profile (red) and of the nearest CTD profiles (black). The nearest CTD profile in time is in magenta while the nearest CTD profile in space is in blue. Lower panels : Temperature, salinity and potential density as function of pressure for the Argo profile (stars) and for the nearest CTD profile in time (magenta line) and for the nearest CTD profile in space (blue line). The color of the Argo profile represents the QC flag (green for a QC=1 ; blue for a QC=2 ; orange for a QC=3 and red for a QC=4).

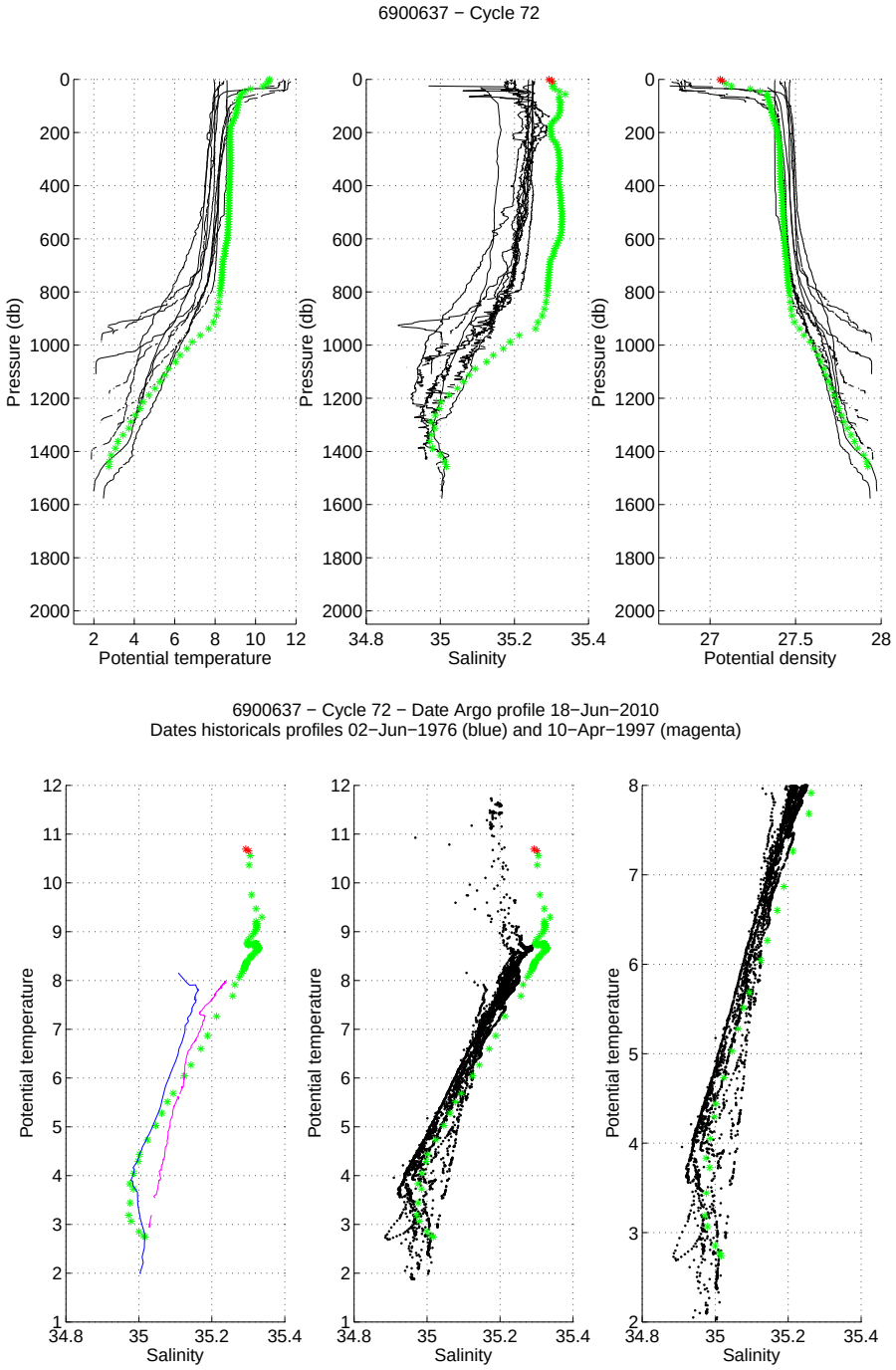


FIG. 34: Float 6900637, cycle 72. The Argo profile (stars) is compared to the nearest CTD profiles (black line) and to two specific profiles : the nearest profile in time (magenta) and the nearest profile in space (blue). The color of the Argo profile represents the QC flag (green for a QC=1 ; blue for a QC=2 ; orange for a QC=3 and red for a QC=4). (Upper panels) Temperature (left panel), salinity (middle panel) and potential density (right panel) as function of pressure. (Lower panels) θ/S diagrams.

17 Cycle 72 - Comparaison to the nearest ARGO profiles

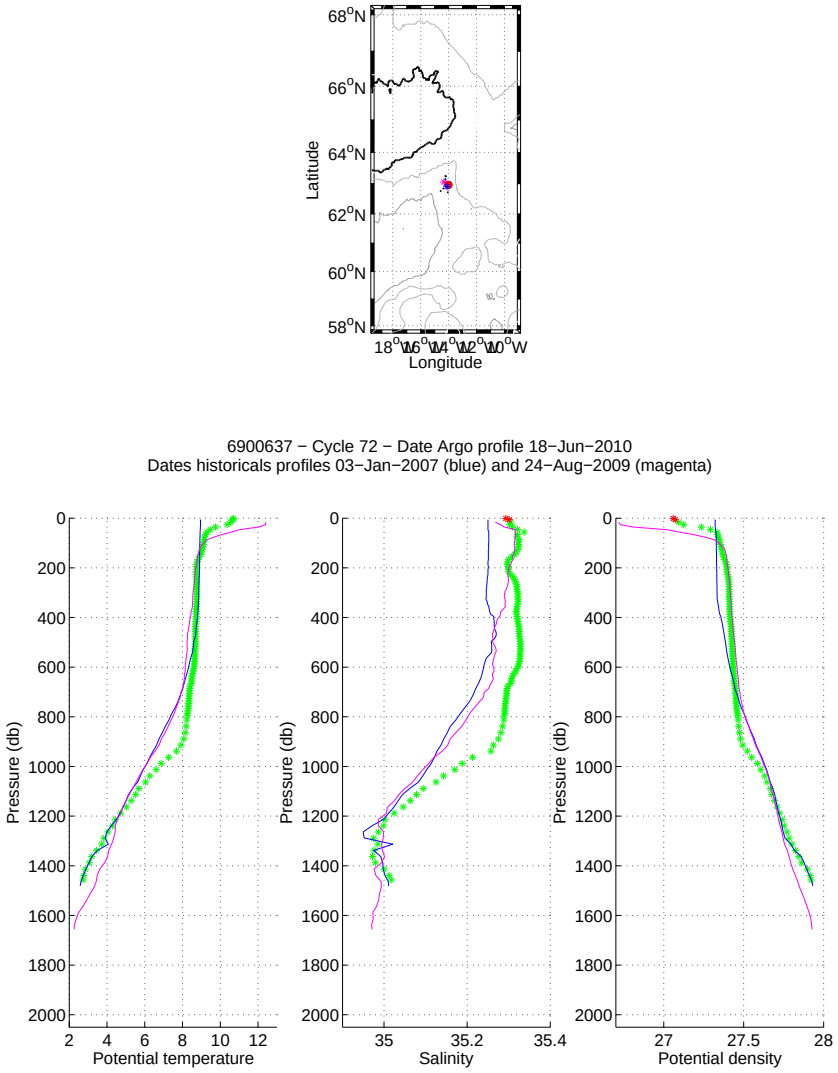


FIG. 35: Flotteur 6900637, cycle 72. Upper panel : Position of the analysed Argo profile (red) and of the nearest Argo profiles (black). The nearest Argo profile in time is in magenta while the nearest CTD profile in space is in blue. Lower panels : Temperature, salinity and potential density as function of pressure for the analysed Argo profile (stars) and for the nearest Argo profile in time (magenta line) and for the nearest Argo profile in space (blue line). The color of the analysed Argo profile represents the QC flag (green for a QC=1 ; blue for a QC=2 ; orange for a QC=3 and red for a QC=4).

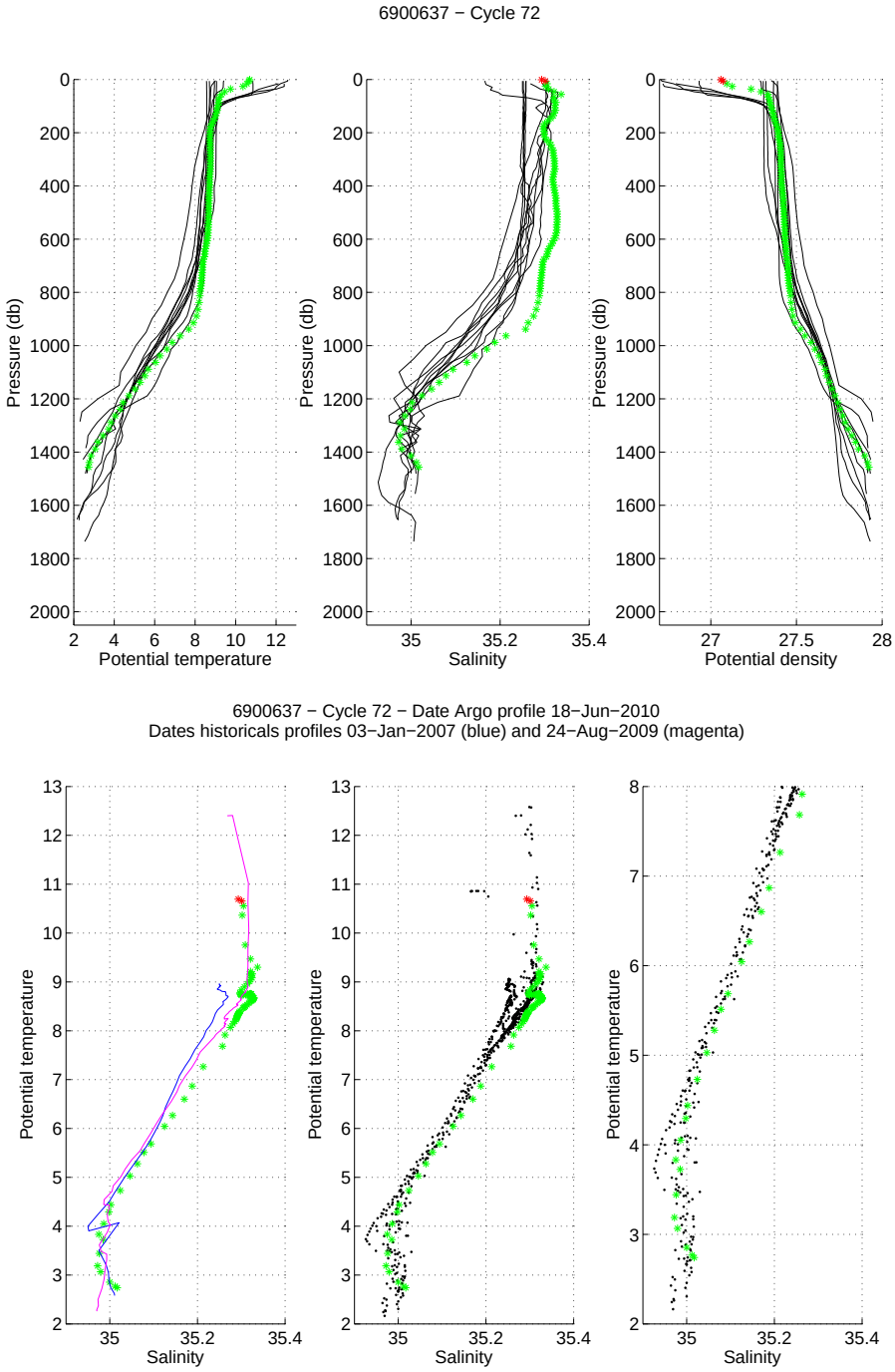


FIG. 36: Float 6900637, cycle 72. The analysed Argo profile (stars) is compared to the nearest Argo profiles (black line) and to two specific profiles : the nearest Argo profile in time (magenta) and the nearest Argo profile in space (blue). The color of the analysed Argo profile represents the QC flag (green for a QC=1 ; blue for a QC=2 ; orange for a QC=3 and red for a QC=4). (Upper panels) Temperature (left panel), salinity (middle panel) and potential density (right panel) as function of pressure. (Lower panels) θ/S diagrams.

18 Cycle 79 - Comparaison to the nearest historical CTD profiles

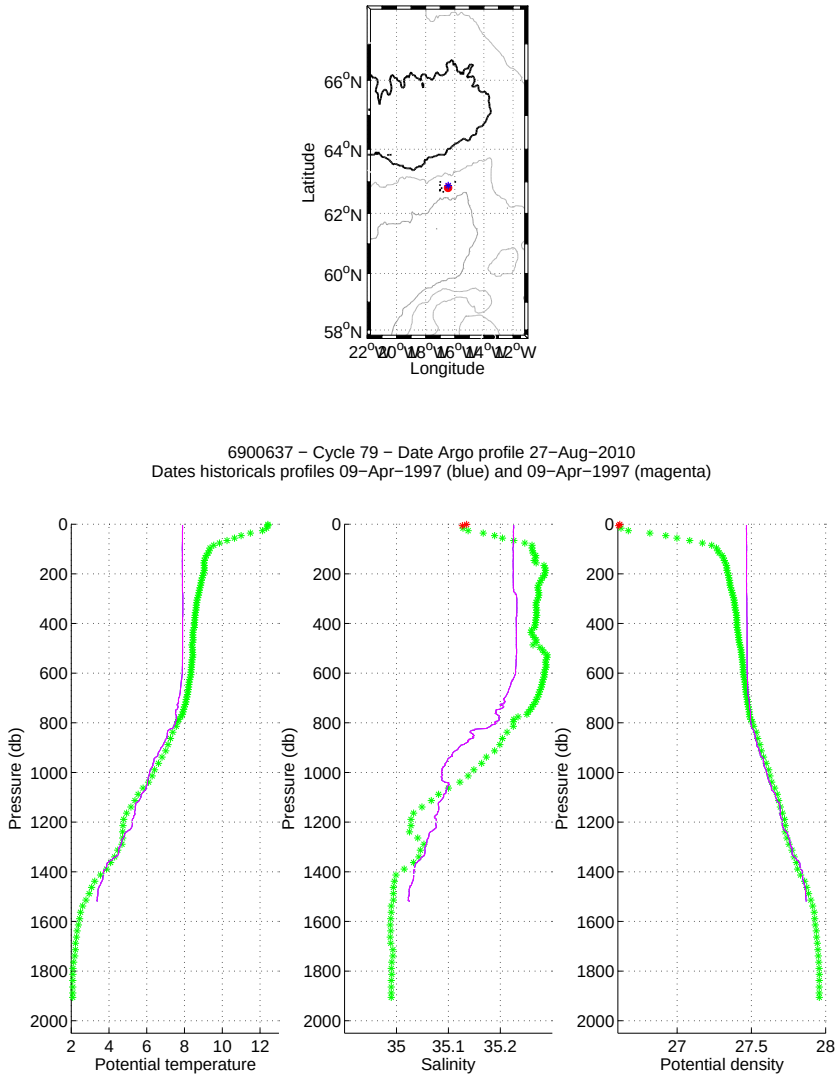


FIG. 37: Flotteur 6900637, cycle 79. Upper panel : Position of the Argo profile (red) and of the nearest CTD profiles (black). The nearest CTD profile in time is in magenta while the nearest CTD profile in space is in blue. Lower panels : Temperature, salinity and potential density as function of pressure for the Argo profile (stars) and for the nearest CTD profile in time (magenta line) and for the nearest CTD profile in space (blue line). The color of the Argo profile represents the QC flag (green for a QC=1 ; blue for a QC=2 ; orange for a QC=3 and red for a QC=4).

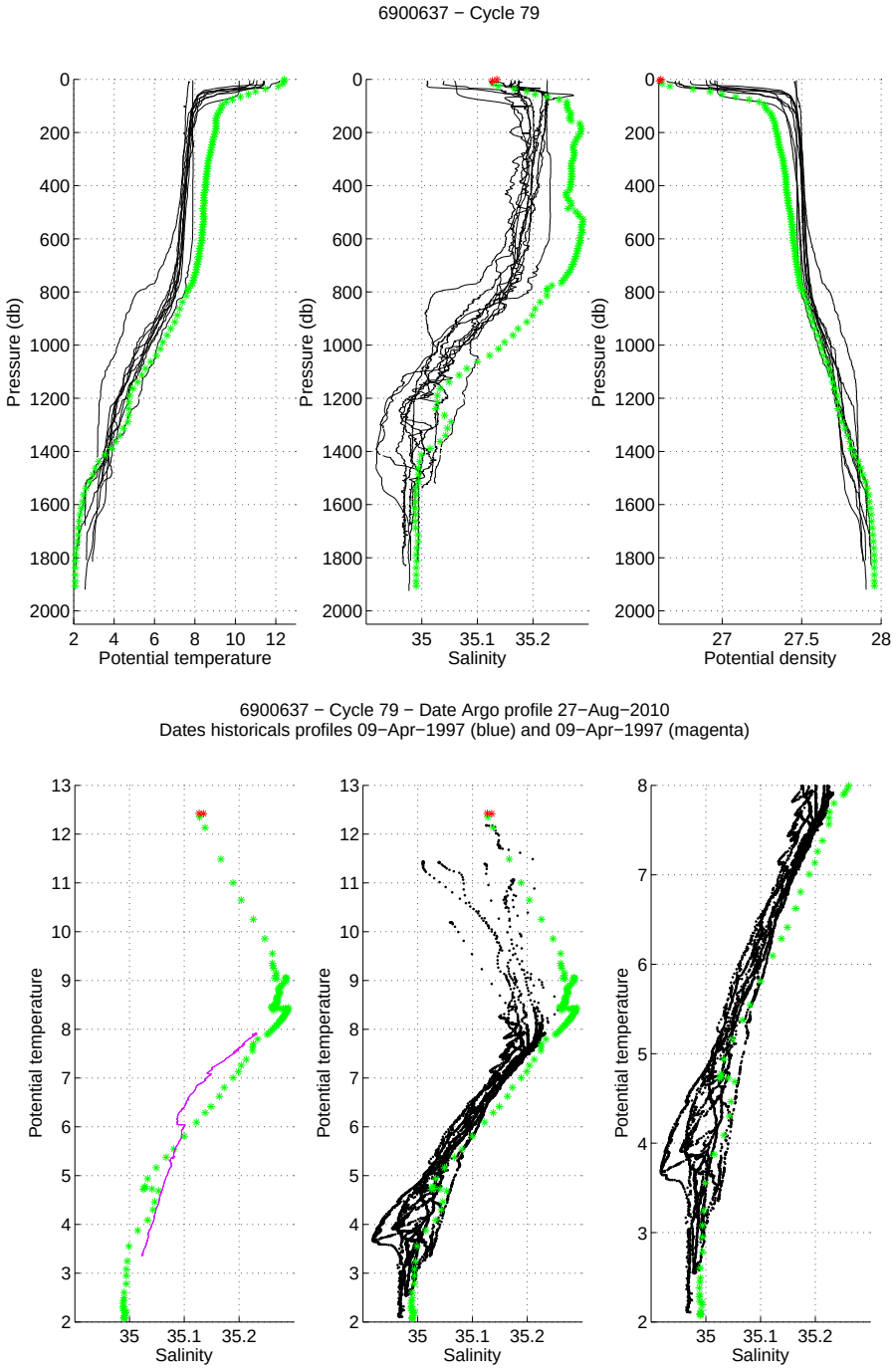


FIG. 38: Float 6900637, cycle 79. The Argo profile (stars) is compared to the nearest CTD profiles (black line) and to two specific profiles : the nearest profile in time (magenta) and the nearest profile in space (blue). The color of the Argo profile represents the QC flag (green for a QC=1 ; blue for a QC=2 ; orange for a QC=3 and red for a QC=4). (Upper panels) Temperature (left panel), salinity (middle panel) and potential density (right panel) as function of pressure. (Lower panels) θ/S diagrams.

19 Cycle 79 - Comparaison to the nearest ARGO profiles

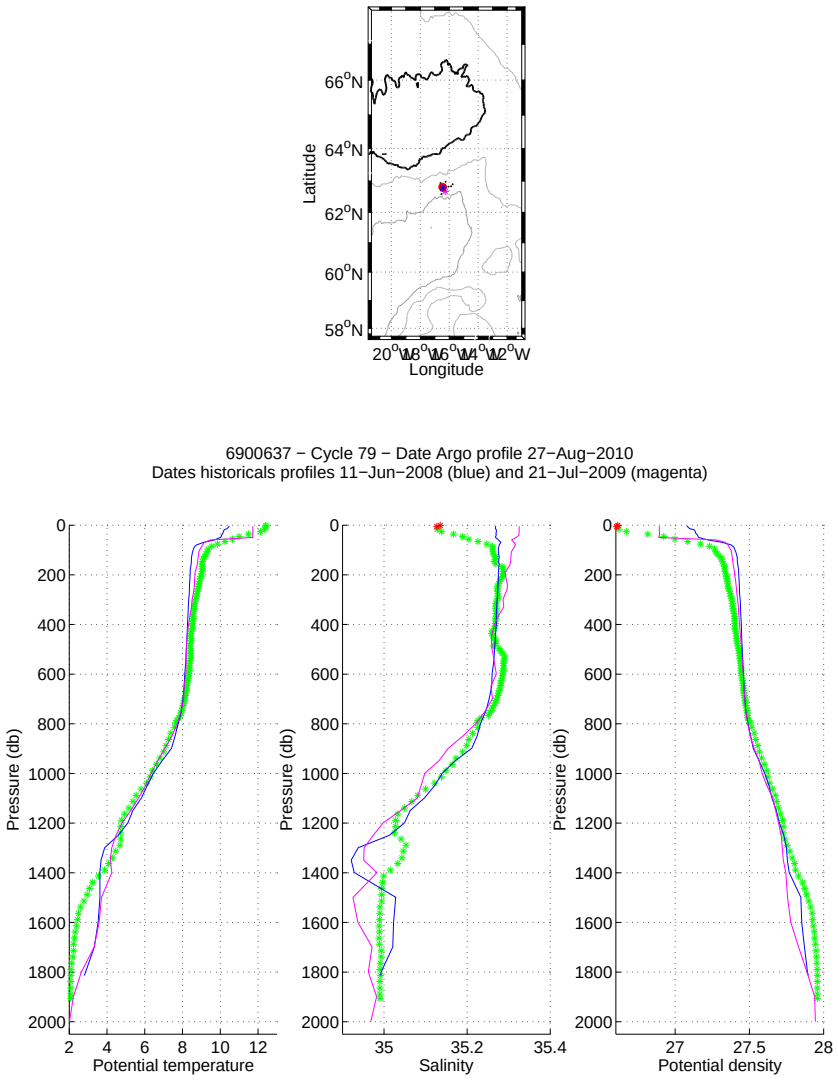


FIG. 39: Flotteur 6900637, cycle 79. Upper panel : Position of the analysed Argo profile (red) and of the nearest Argo profiles (black). The nearest Argo profile in time is in magenta while the nearest CTD profile in space is in blue. Lower panels : Temperature, salinity and potential density as function of pressure for the analysed Argo profile (stars) and for the nearest Argo profile in time (magenta line) and for the nearest Argo profile in space (blue line). The color of the analysed Argo profile represents the QC flag (green for a QC=1 ; blue for a QC=2 ; orange for a QC=3 and red for a QC=4).

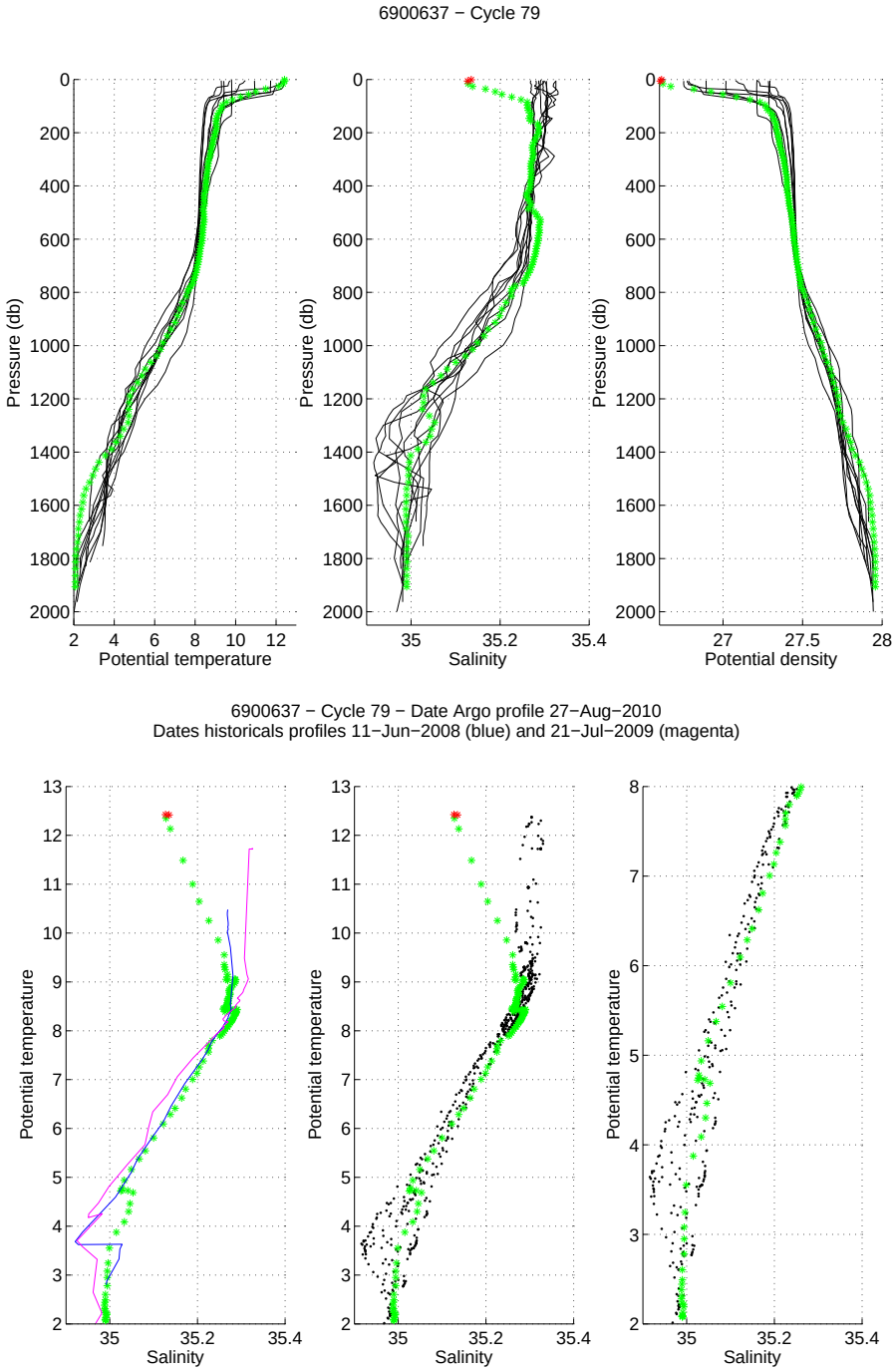


FIG. 40: Float 6900637, cycle 79. The analysed Argo profile (stars) is compared to the nearest Argo profiles (black line) and to two specific profiles : the nearest Argo profile in time (magenta) and the nearest Argo profile in space (blue). The color of the analysed Argo profile represents the QC flag (green for a QC=1 ; blue for a QC=2 ; orange for a QC=3 and red for a QC=4). (Upper panels) Temperature (left panel), salinity (middle panel) and potential density (right panel) as function of pressure. (Lower panels) θ/S diagrams.

20 Cycle 85 - Comparaison to the nearest historical CTD profiles

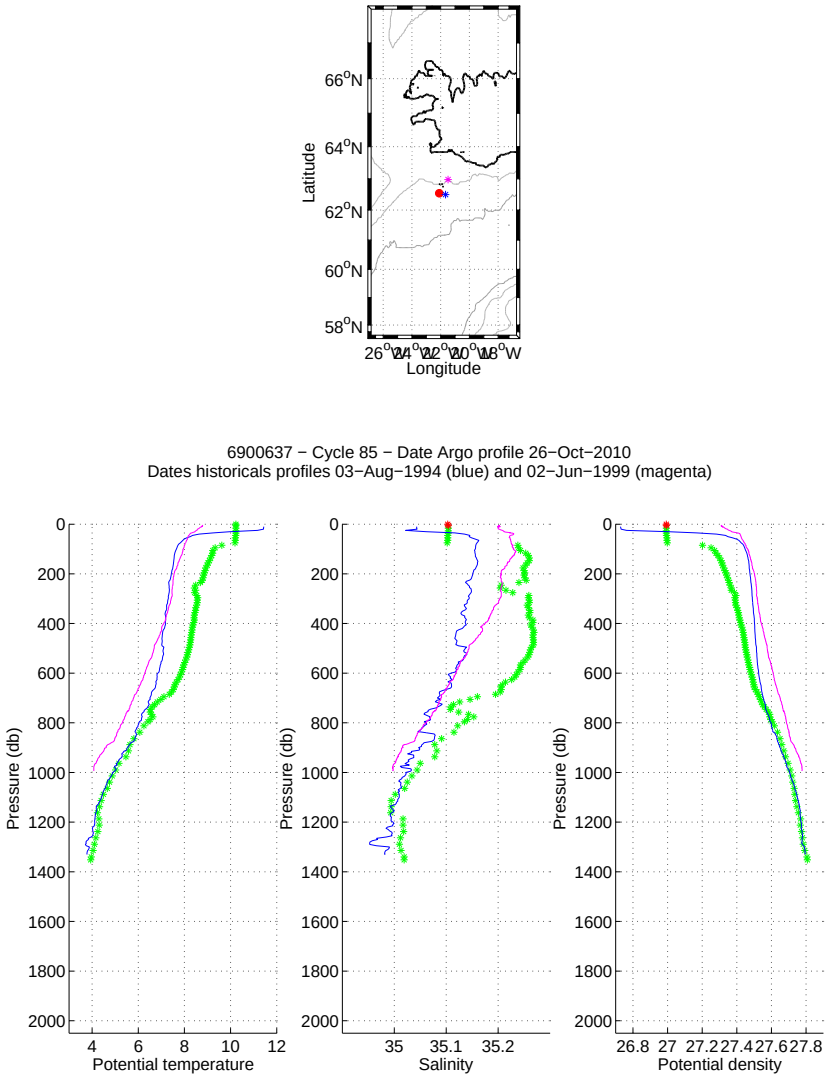


FIG. 41: Flotteur 6900637, cycle 85. Upper panel : Position of the Argo profile (red) and of the nearest CTD profiles (black). The nearest CTD profile in time is in magenta while the nearest CTD profile in space is in blue. Lower panels : Temperature, salinity and potential density as function of pressure for the Argo profile (stars) and for the nearest CTD profile in time (magenta line) and for the nearest CTD profile in space (blue line). The color of the Argo profile represents the QC flag (green for a QC=1 ; blue for a QC=2 ; orange for a QC=3 and red for a QC=4).

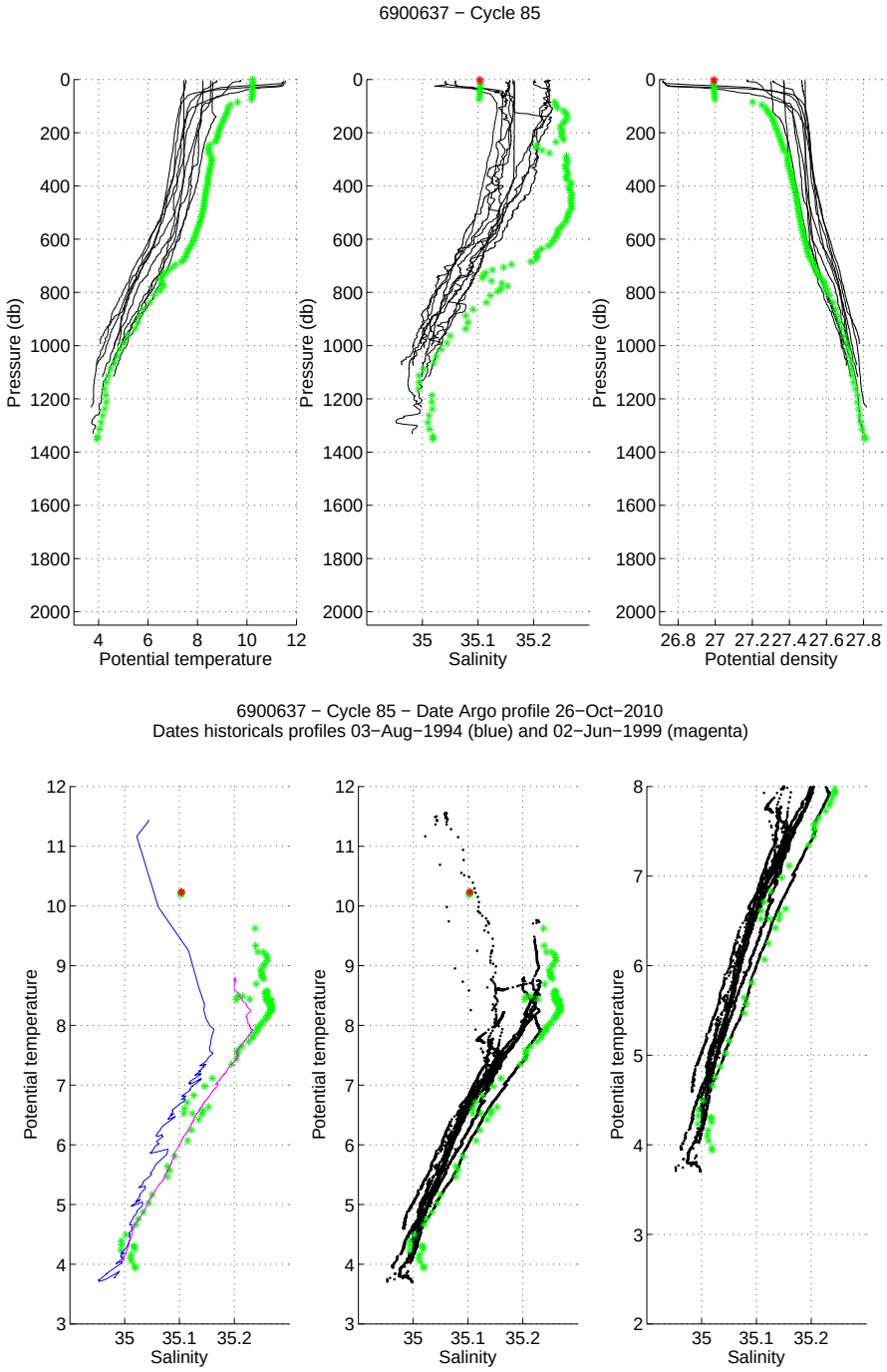


FIG. 42: Float 6900637, cycle 85. The Argo profile (stars) is compared to the nearest CTD profiles (black line) and to two specific profiles : the nearest profile in time (magenta) and the nearest profile in space (blue). The color of the Argo profile represents the QC flag (green for a QC=1 ; blue for a QC=2 ; orange for a QC=3 and red for a QC=4). (Upper panels) Temperature (left panel), salinity (middle panel) and potential density (right panel) as function of pressure. (Lower panels) θ/S diagrams.

21 Cycle 85 - Comparaison to the nearest ARGO profiles

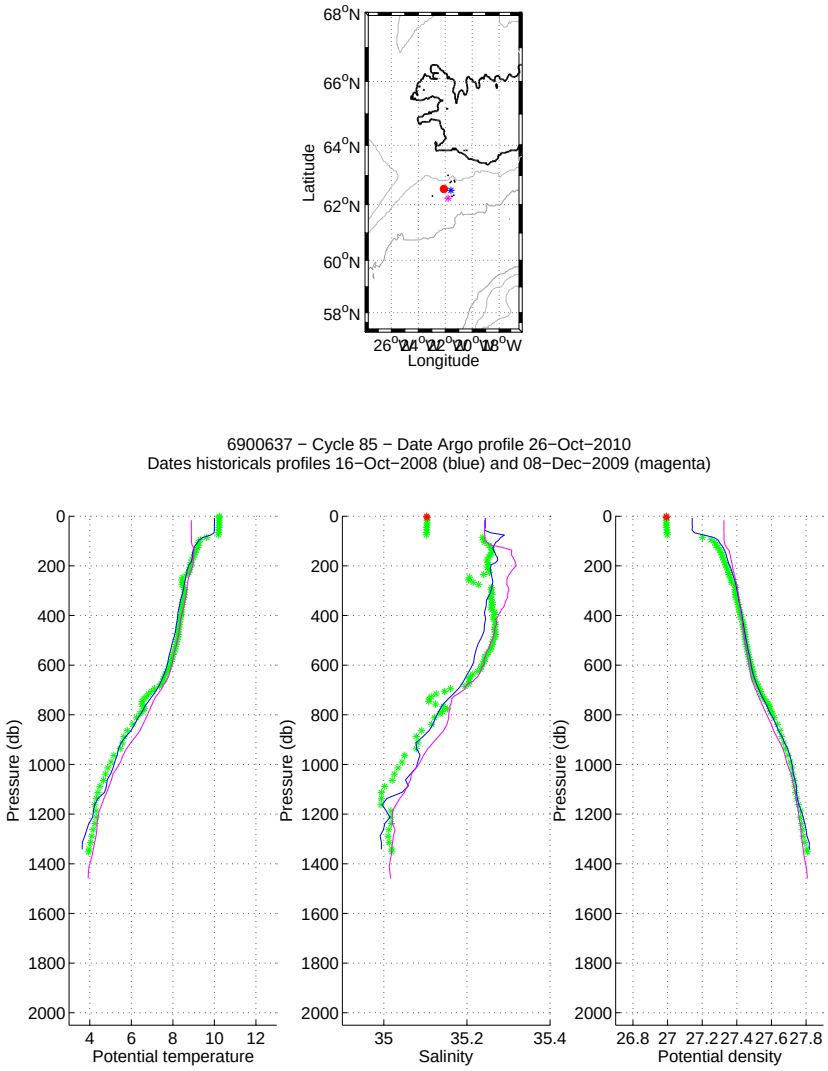


FIG. 43: Flotteur 6900637, cycle 85. Upper panel : Position of the analysed Argo profile (red) and of the nearest Argo profiles (black). The nearest Argo profile in time is in magenta while the nearest CTD profile in space is in blue. Lower panels : Temperature, salinity and potential density as function of pressure for the analysed Argo profile (stars) and for the nearest Argo profile in time (magenta line) and for the nearest Argo profile in space (blue line). The color of the analysed Argo profile represents the QC flag (green for a QC=1 ; blue for a QC=2 ; orange for a QC=3 and red for a QC=4).

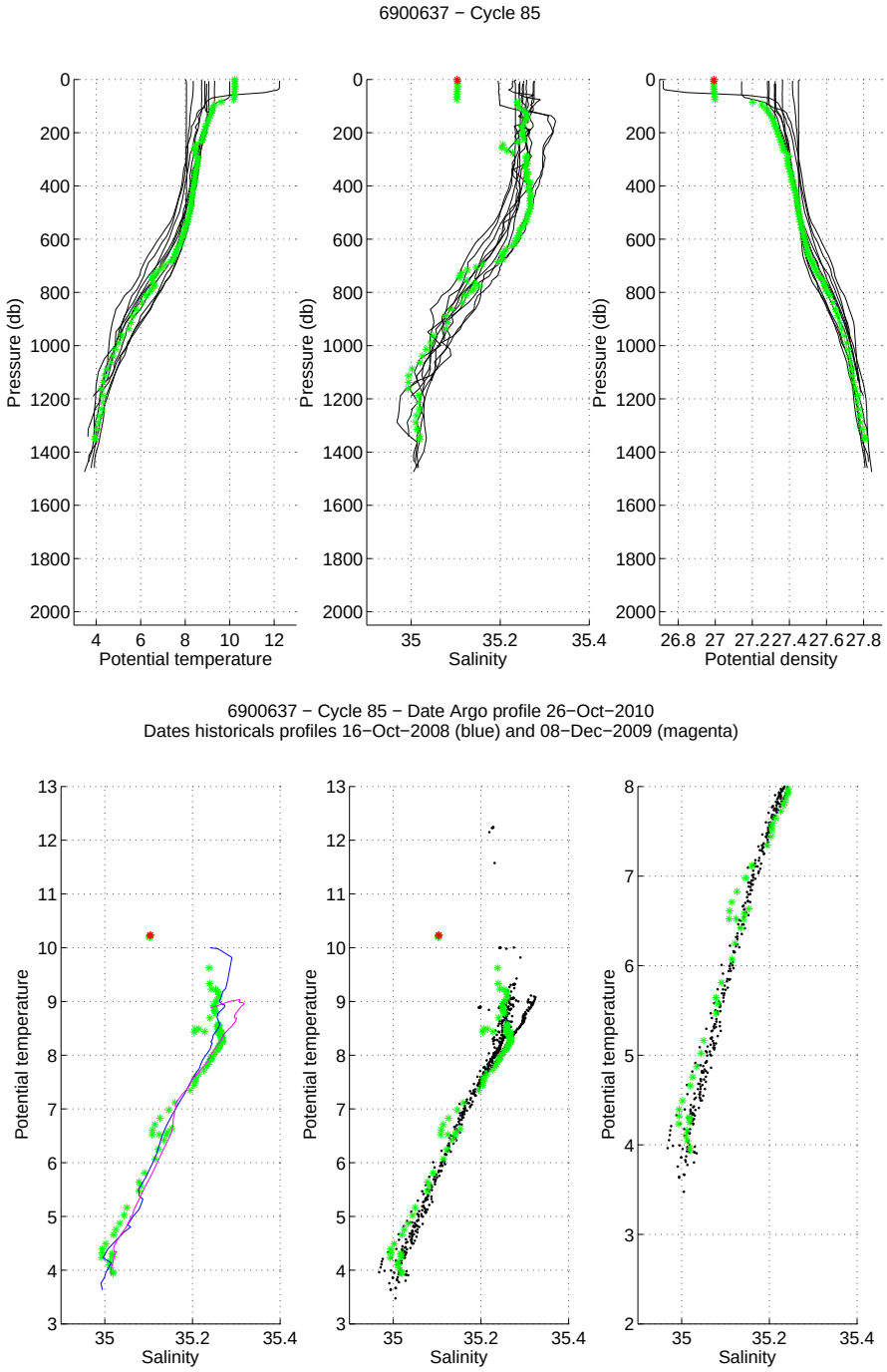


FIG. 44: Float 6900637, cycle 85. The analysed Argo profile (stars) is compared to the nearest Argo profiles (black line) and to two specific profiles : the nearest Argo profile in time (magenta) and the nearest Argo profile in space (blue). The color of the analysed Argo profile represents the QC flag (green for a QC=1 ; blue for a QC=2 ; orange for a QC=3 and red for a QC=4). (Upper panels) Temperature (left panel), salinity (middle panel) and potential density (right panel) as function of pressure. (Lower panels) θ/S diagrams.

22 OW method, CONFIGURATION # 1

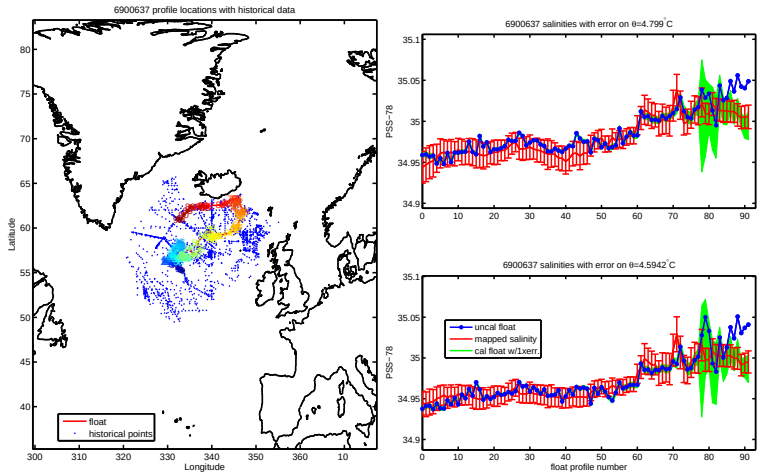


FIG. 45: Figures from the OW method. (Left) Position of the historical and float data. (Right) Comparison, on various θ levels, between the float data and the historical data interpolated at the float position.

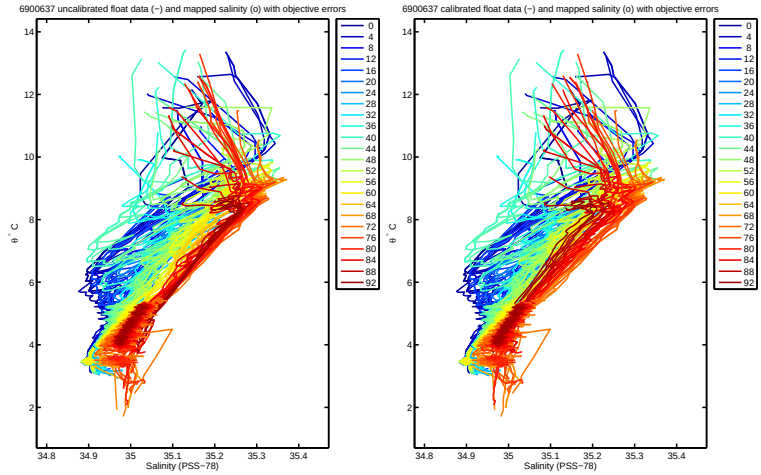


FIG. 46: Figures from the OW method. Compararison of the θ/S diagram of the float with the historial database. (left) raw data ; (right) corrected data using the OW correction.

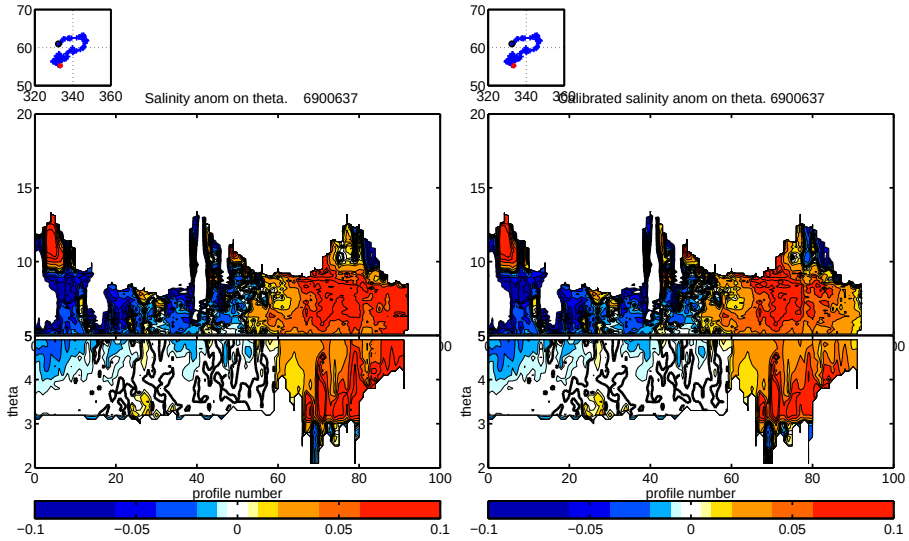


FIG. 47: Figures from the OW method. Salinity anomaly :(left) raw data ; (right) corrected data using the OW correction .

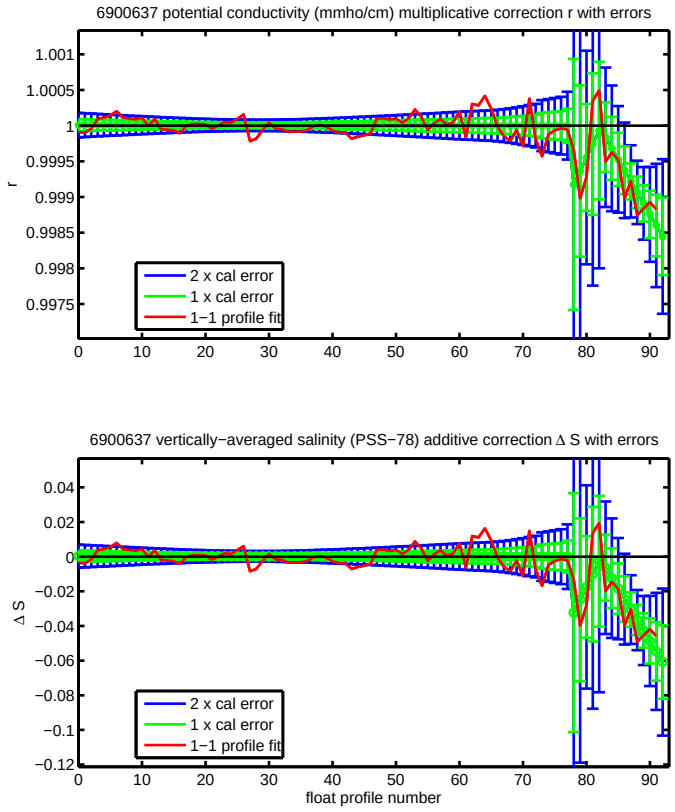


FIG. 48: Correction proposed by the OW method.

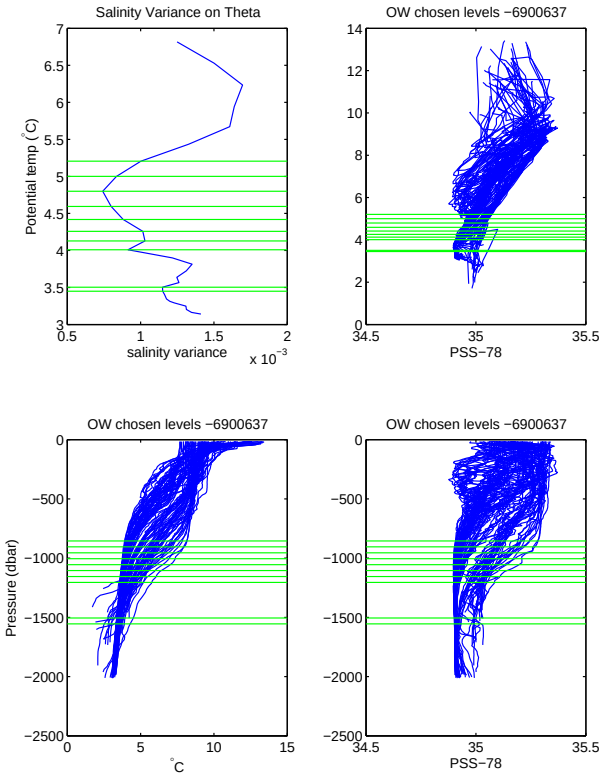


FIG. 49: Chosed levels by the OW method.

23 OW method, CONFIGURATION # 3

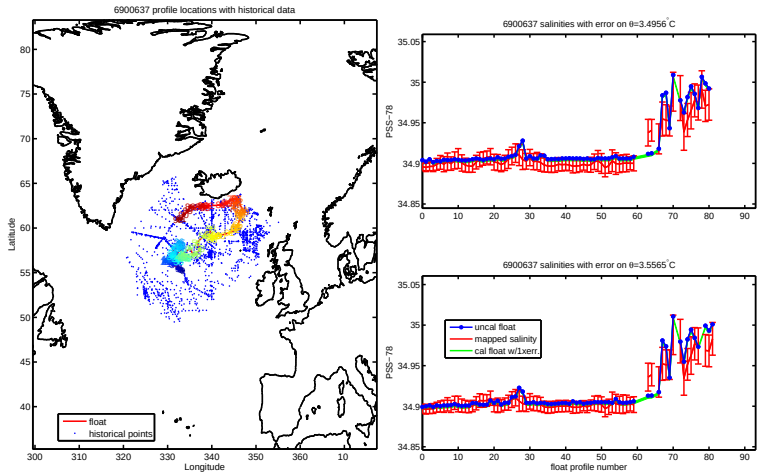


FIG. 50: Figures from the OW method. (Left) Position of the historical and float data. (Right) Comparison, on various θ levels, between the float data and the historical data interpolated at the float position.

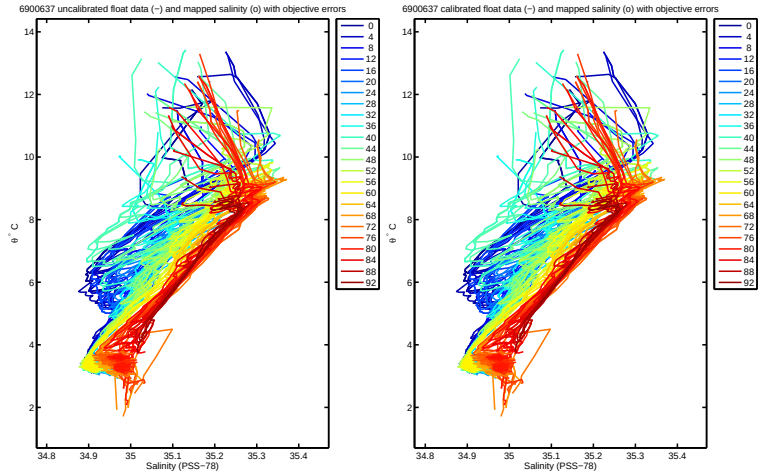


FIG. 51: Figures from the OW method. Compararison of the θ/S diagram of the float with the historial database. (left) raw data ; (right) corrected data using the OW correction.

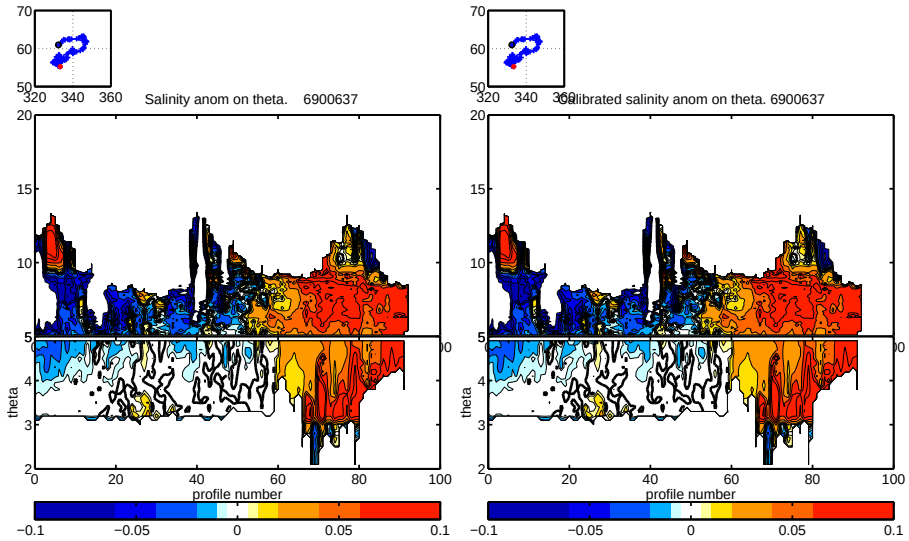


FIG. 52: Figures from the OW method. Salinity anomaly :(left) raw data ; (right) corrected data using the OW correction .

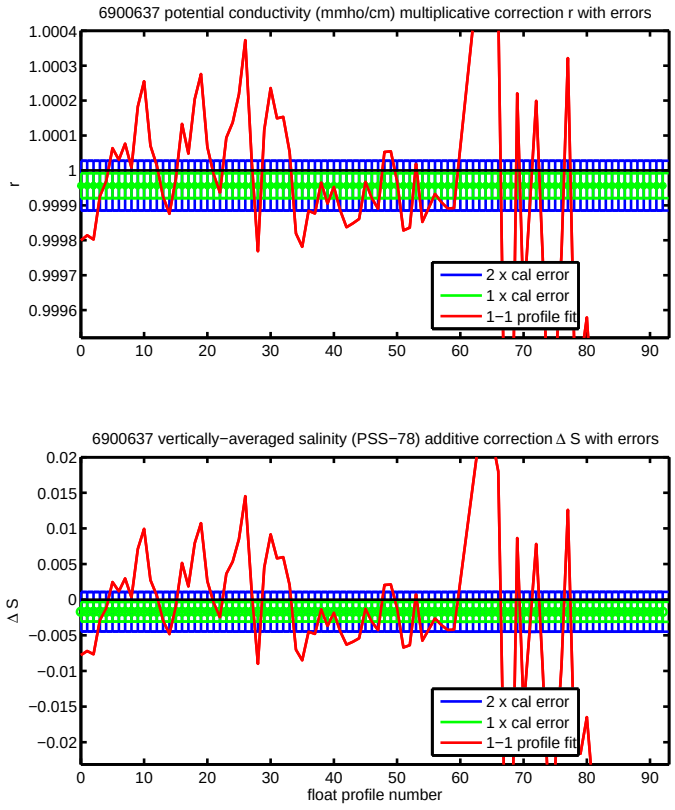


FIG. 53: Correction proposed by the OW method.

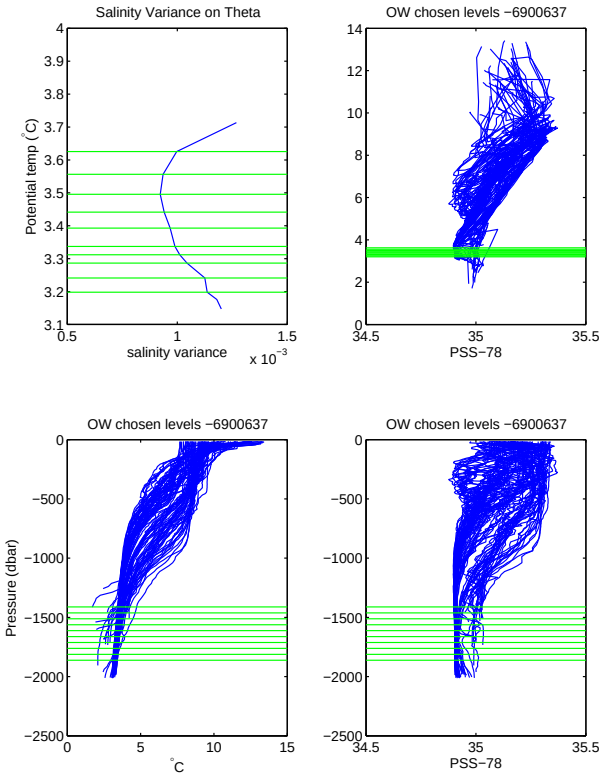


FIG. 54: Chosed levels by the OW method.

24 OW method, CONFIGURATION # 11

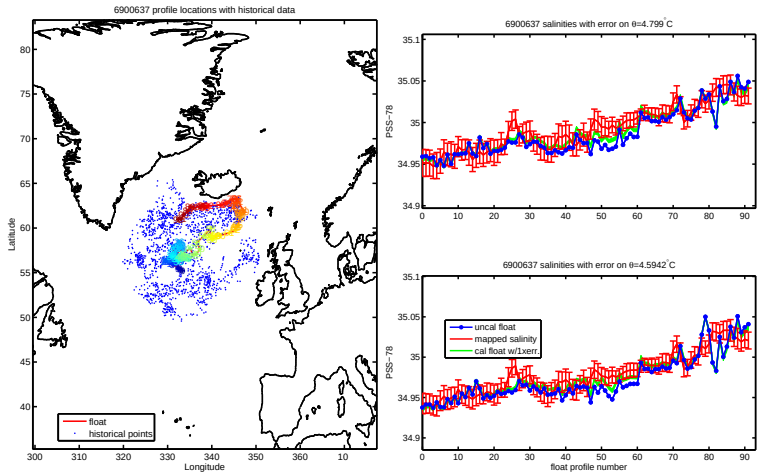


FIG. 55: Figures from the OW method. (Left) Position of the historical and float data. (Right) Comparison, on various θ levels, between the float data and the historical data interpolated at the float position.

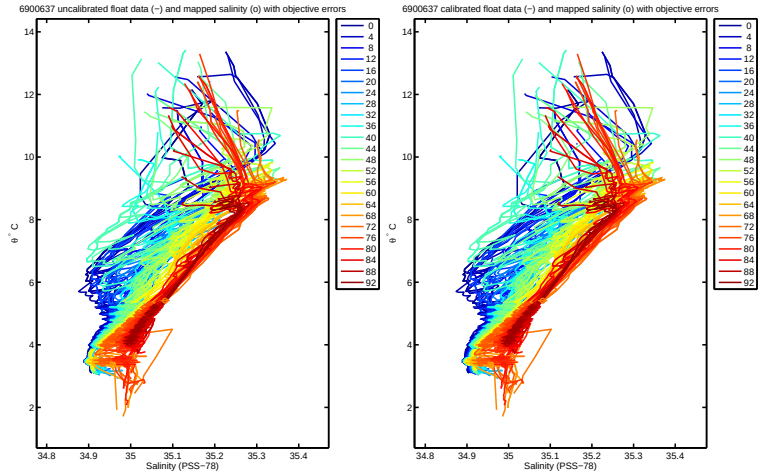


FIG. 56: Figures from the OW method. Compararison of the θ/S diagram of the float with the historial database. (left) raw data ; (right) corrected data using the OW correction.

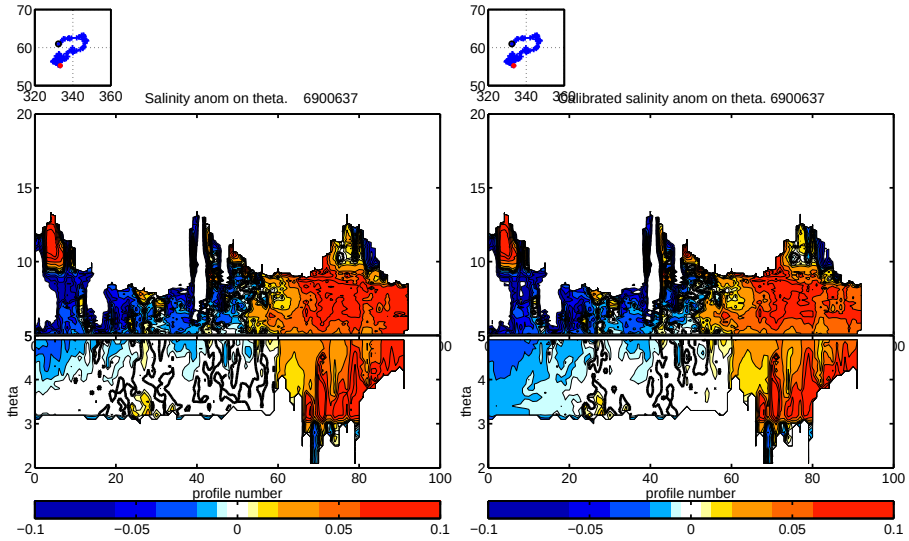


FIG. 57: Figures from the OW method. Salinity anomaly :(left) raw data ; (right) corrected data using the OW correction .

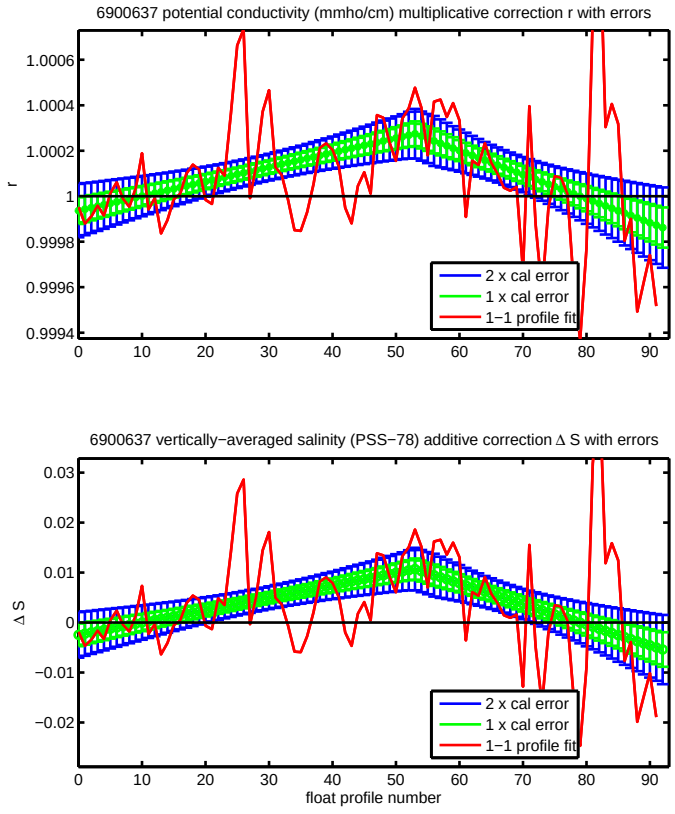


FIG. 58: Correction proposed by the OW method.

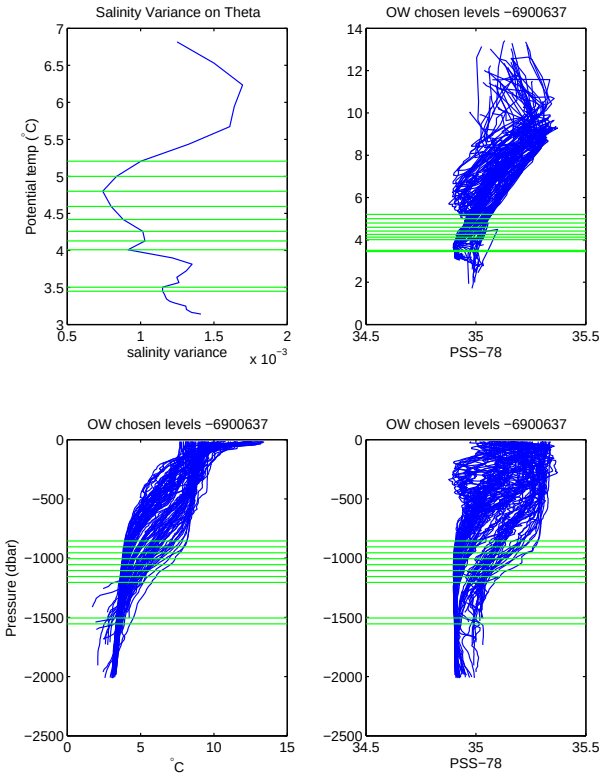


FIG. 59: Chosed levels by the OW method.

25 OW method, CONFIGURATION # 12

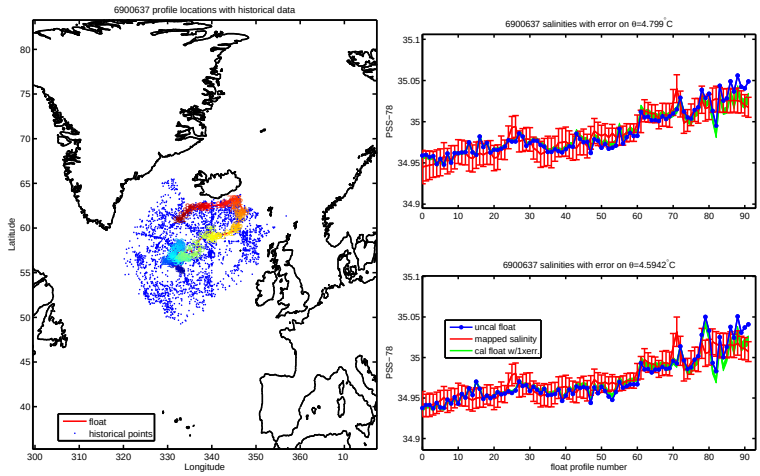


FIG. 60: Figures from the OW method. (Left) Position of the historical and float data. (Right) Comparison, on various θ levels, between the float data and the historical data interpolated at the float position.

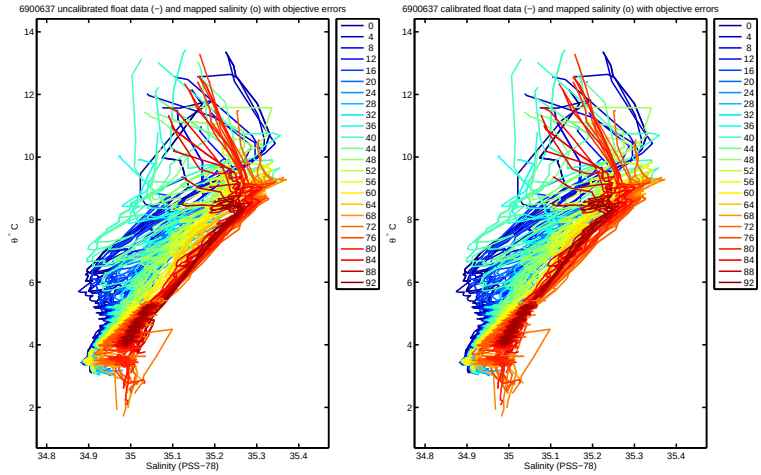


FIG. 61: Figures from the OW method. Compararison of the θ/S diagram of the float with the historial database. (left) raw data ; (right) corrected data using the OW correction.

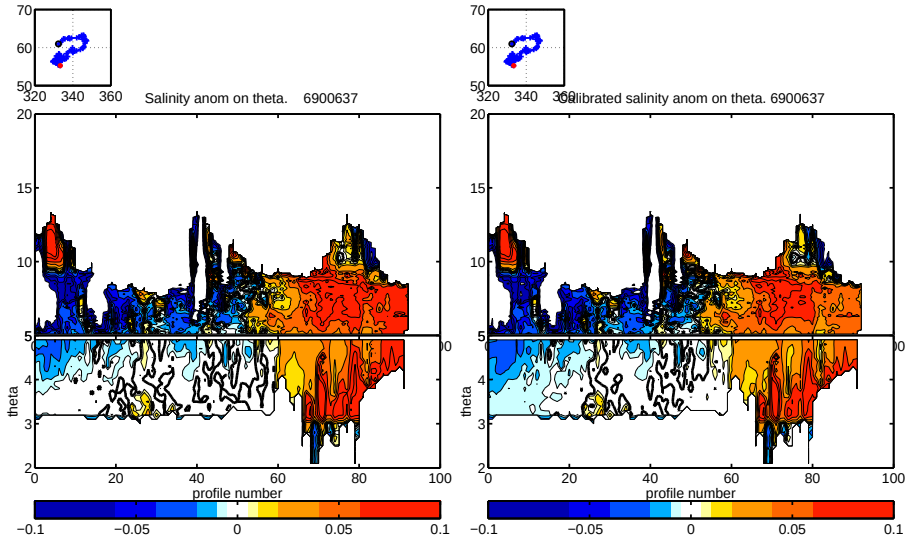


FIG. 62: Figures from the OW method. Salinity anomaly :(left) raw data ; (right) corrected data using the OW correction .

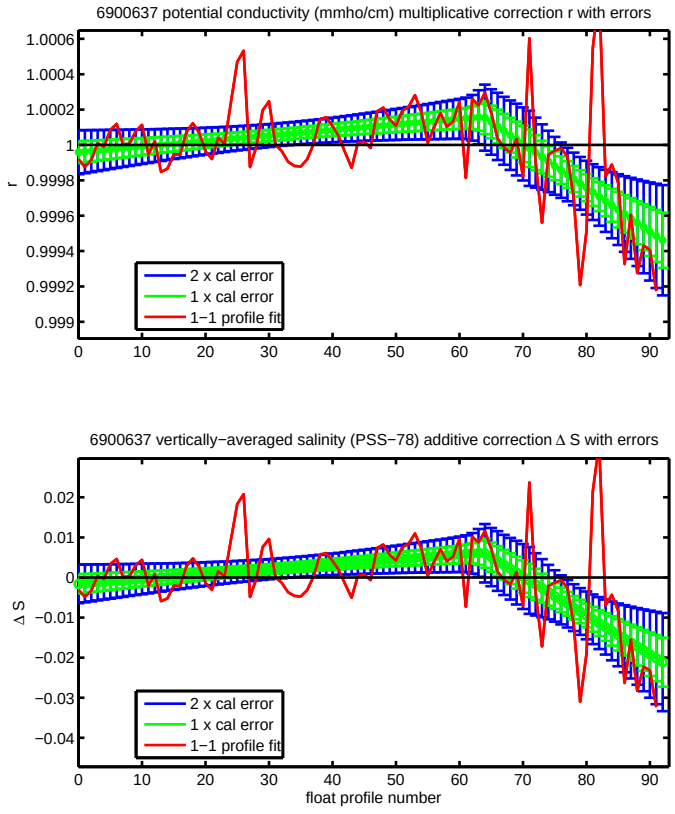


FIG. 63: Correction proposed by the OW method.

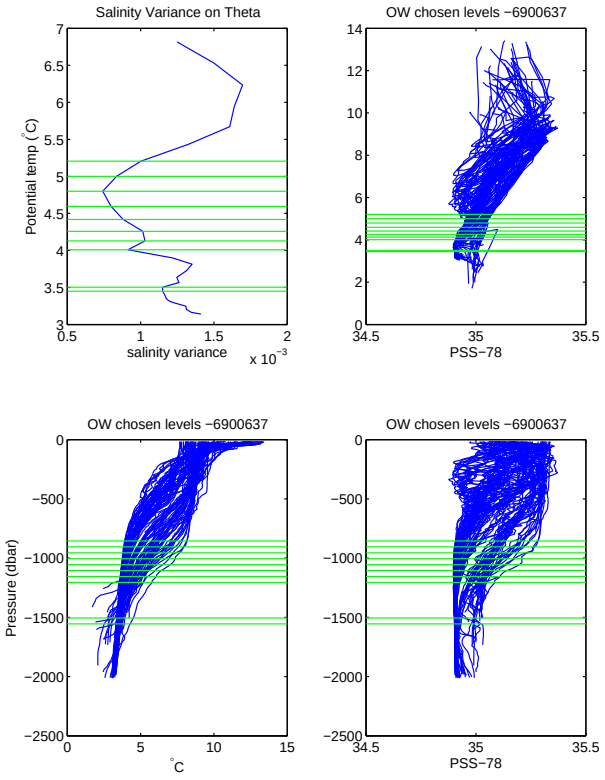


FIG. 64: Chosed levels by the OW method.