

I have processed the float 6903197 (Italy, Apex, status: inactive)

Profiles: 1-86

```
% =====  
%  
% Objective Mapping Parameters  
%
```

```
% max number of historical casts used in objective mapping  
CONFIG_MAX_CASTS=300
```

```
% 1=use PV constraint, 0=don't use PV constraint, in objective mapping  
MAP_USE_PV=1
```

```
% 1=use SAF separation criteria, 0=don't use SAF separation criteria, in objective mapping  
MAP_USE_SAF=0
```

```
% spatial decorrelation scales, in degrees  
MAPSCALE_LONGITUDE_LARGE=4  
MAPSCALE_LONGITUDE_SMALL=1.33  
MAPSCALE_LATITUDE_LARGE=4  
MAPSCALE_LATITUDE_SMALL=1.33
```

```
% cross-isobath scales, dimensionless, see BS(2005)  
MAPSCALE_PHI_LARGE=0.5  
MAPSCALE_PHI_SMALL=0.1
```

```
% temporal decorrelation scale, in years  
MAPSCALE_AGE=10
```

```
% exclude the top xxx dbar of the water column  
MAP_P_EXCLUDE=800
```

```
% only use historical data that are within +/- yyy dbar from float data  
MAP_P_DELTA=100
```

```
use_percent_gt = 0.5  
breaks = 1
```

```
Applied OW from profile 47 to 86  
SPO corrected  
QC non cambiati da profile 1 a 73  
PSAL_QC = 4 dal profilo 74 al 86 (tutta la colonna di acqua)
```

PARAMETER =

PRES

PSAL

TEMP

SCIENTIFIC_CALIB_EQUATION =

PRES_ADJUSTED=PRES – clean surface
pressure

PSAL_ADJUSTED=PSAL (corrected for SPO)

PSAL_ADJUSTED=PSAL (corrected for SPO)+ΔS1 from cycle 47 to 86

TEMP_ADJUSTED=TEMP

PARAMETER_ADJUSTED_QC =

PRES_ADJUSTED_QC='1'

PSAL_ADJUSTED_QC='1' (1-73)

PSAL_ADJUSTED_QC='4' (74-86)

TEMP_ADJUSTED_QC='1'

SCIENTIFIC_CALIB_COEFFICIENT =

clean Surface Pressure = xxx

from cycle 47 to 86: $r = xxx (\pm xxx)$, vertically averaged $\Delta S1 = xxx (\pm xxx)$

from cycle 1 to 46: vertically averaged $dS = xxx$

none

SCIENTIFIC_CALIB_COMMENT =

Adjustment for Surface Pressure offset is required. Diagnostics plots

http://nettuno.ogs.trieste.it/sire/medargo/all/table_out_all.php

No evidence of salinity drift. No adjustment is needed. OW methods adopted. Map scales:

$x=4,1.33$; $y=4,1.33$. Potential Vorticity used. Other qualitative checks adopted.

Salinity offset and drift detected. Adjustment is needed. OW method adopted. Map scales: $x=4,1.33$; $y=4,1.33$. Potential Vorticity used. Other qualitative checks adopted.

No adjustment is needed because no significant temperature sensor drift has been detected.

DMQC diagnostic plots available on http://nettuno.ogs.trieste.it/sire/medargo/all/table_out_all.php

CTD_for_DMQC: historical CTD data in the Mediterranean Sea

ARGO_for_DMQC 2018V1

Additional comment:

none