GTSPP National Data Management Report
2017 Coriolis data centre - Ifremer
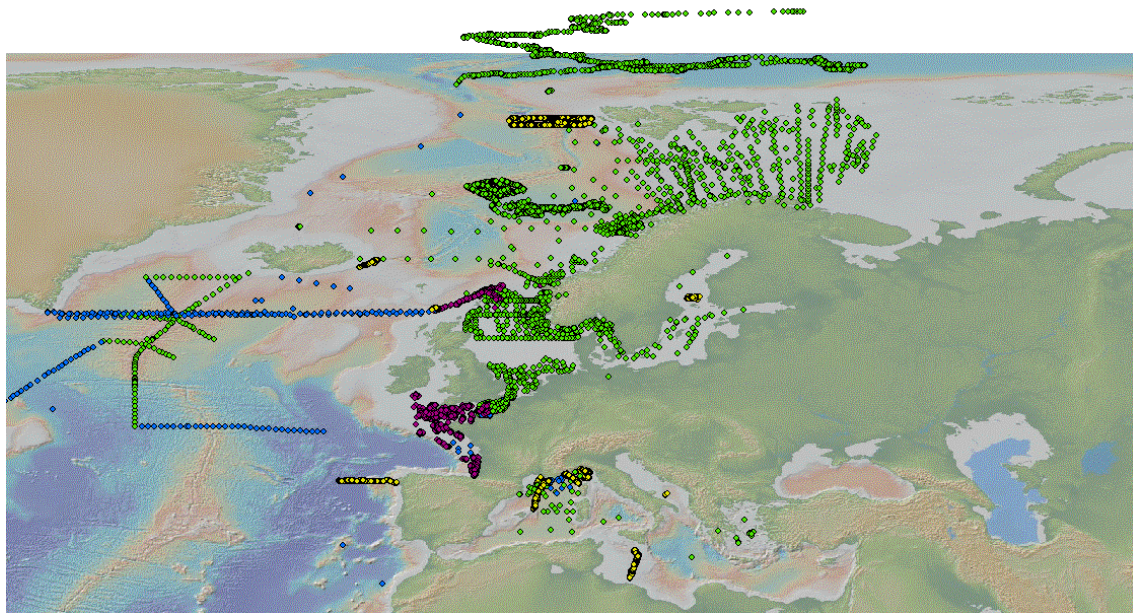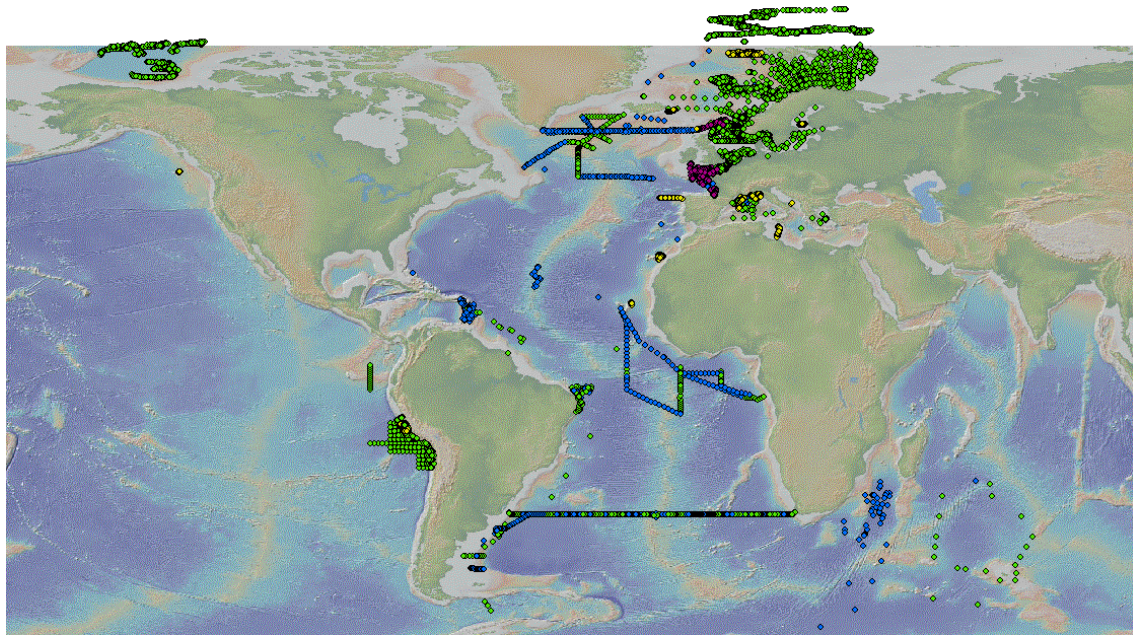
GTSPP profiles observed in 2017, provided by Coriolis data centre

1 Introduction

This is the Coriolis data center report on GTSPP activities during year 2017.
It includes data aggregated in France (SHOM, Ifremer, IRD, CNRS, Institut Polaire Paul Emile Victor).
It also includes European data aggregated within Copernicus Marine services.

2 Status

- (Please report the progress made towards completing the following tasks, if your center is currently performing these tasks, and if not yet complete, estimate when you expect them to be complete)
  - Data acquired from ships, gliders, sea-mammal – numbers, locations, platform types, SOOP line numbers…
    List of the platforms that reported temperature and/or salinity profiles:
    - SHIPS :
    - Gliders :
    - Sea-mammals :
    - Fishing boats :
    - Other type of platforms:
  - Data issued to GTS
    - Status of switch to BUFR data delivery to the GTS
  - Data issued to US-NODC after real-time QC
  - Data issued for delayed QC
  - Delayed mode data sent to US-NCEI
  - Web pages – availability of data locally?
  - Statistics of GTSPP data usage (operational models, scientific applications, number of National PIs…)
  - Products generated from GTSPP data…

3 Data acquired from ships, gliders, sea-mammals

Between January 2017 and December 2017, **37412** new profiles from 171 platforms where collected, controlled and distributed.
All profiles processed during that period are available in one file on:

- http://www.ifremer.fr/co/gtspp/2017/
- Overview with GoogleEarth http://www.ifremer.fr/co/gtspp/2017/co_gtspp_2017.kmz

| Format	Type	nb profiles
GL	Glider profiles	24 540
OS	CTD from vessels by way of Copernicus	6 945
RE	Fishing boats profiles	3 750
CT	CTD from vessels by way of Coriolis	1 203
XB	XBT from vessels by way of Coriolis	974

Total profiles	37 412

GTSPP new profiles managed by Coriolis in 2017

Remark: Argo profiles are not mentioned in this report, as there is a direct link between GTSPP and Argo global data centers.
However, the French coastal profiling floats are not part of Argo, they are included in this report.

3.1 Maps of 2017 profiles managed from Coriolis data centre
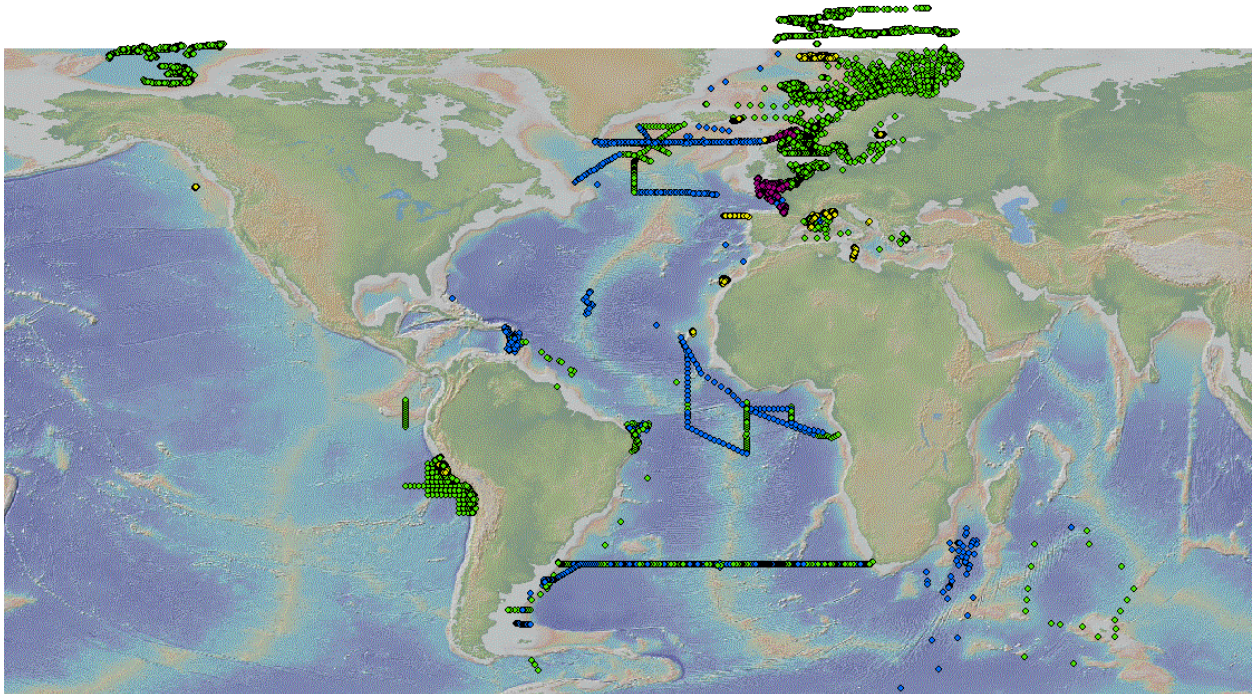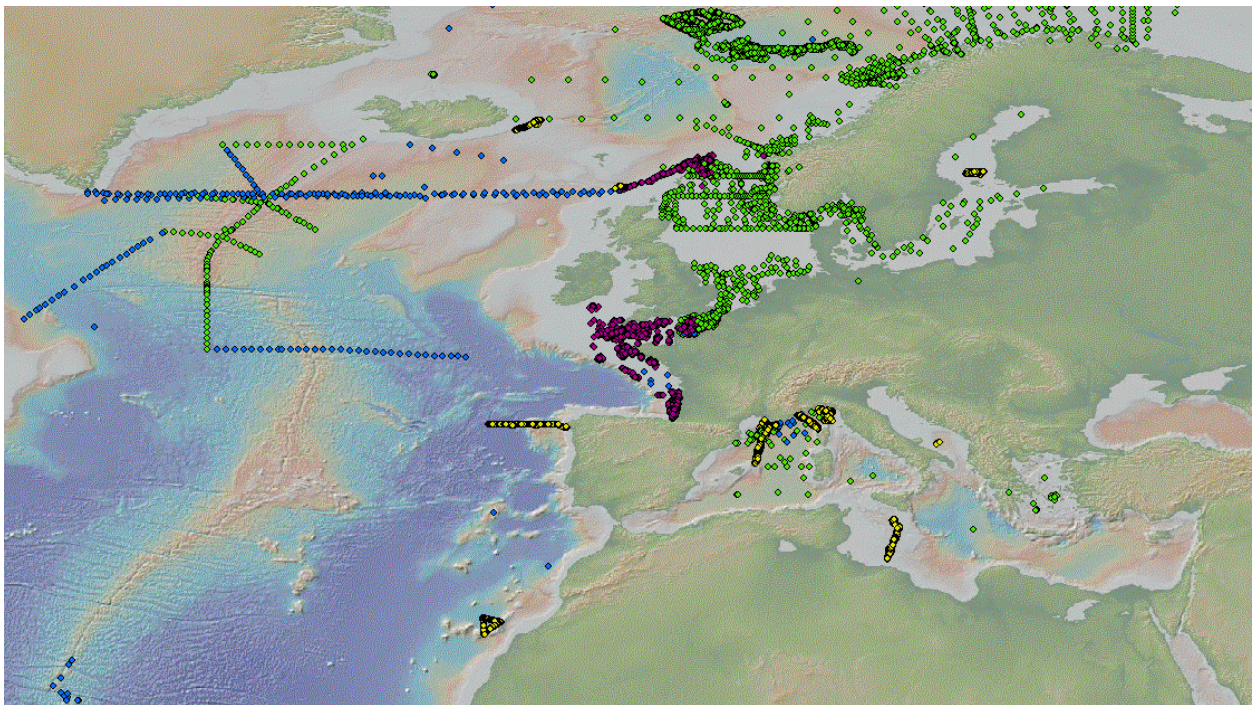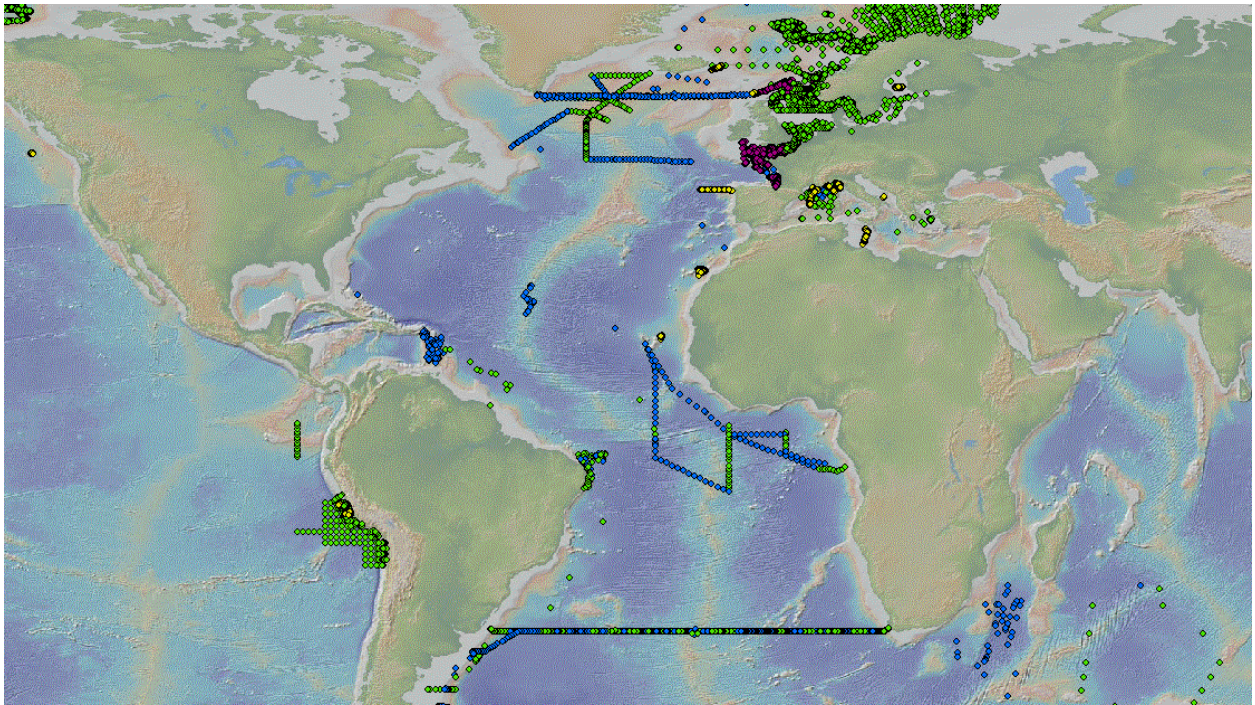
3.2 Platform list of 2017 observations

Vessel platforms

platform code	Name	nb profiles
LGWS	KRISTINE BONNEVIE	746
DBBH	METEOR	497

LDGJ	JOHAN HJORT	494
DBBT	Maria S. Merian	469
FNFP	THALASSA	385
FNCM	L'ATALANTE	322
OXYH2	NUKA ARCTICA	195
FMCY	POURQUOI PAS?	137
FNUR	ANTEA	87
FHQB	ALIS	40
FNIN	MARION DUFRESNE	32
EXMY1233	Ingoy	22
EXMY1231	Sognesjoen	13
EFCP	HESPERIDES	6
ZDLP	JAMES CLARK ROSS	3
FKJB	L'EUROPE	2
SXYY	AEGAEO	1
FZVN	LE SUROIT	1

Glider platforms

platform code	Name	nb profiles
18951	IFM07 Slocum glider	5847
68453	Theque glider	3631
58970	Campe slocum glider	2686
6801663	Maria Glider	1931
18952	IFM09 Slocum glider	1800
6801661	Dora Glider	1574
6801634	IFM13 glider	1242
18904	IFM03 Slocum glider	1109
6801590	IFM12 glider	1076
68954	Tintin slocum glider	1054
18956	Bonpland slocum glider	777
61866	POTAME GLIDER	666
6801612	6801612	592
6801613	6801613	499
68451	Crate glider	456
6801635	IFM14 glider	317
6801631	p202 deep Slocum glider	228
6800957	unit_403 Leonardo glider	58
6801690	Uivelo slocum glider	56
4800995	sn651 Slocum glider	32
68907	SG560 Glider	18

Recopesca fishing gear sensor

platform code	name	nb profiles
EXRE0010	Recopesca sensor 5030	770
EXRE0184	Recopesca sensor 5245	363
EXRE0174	Recopesca sensor 5209	351
EXRE0014	Recopesca sensor 5046	340

EXRE0054	Recopesca sensor 5092	236
EXRE0216	Recopesca sensor 5223	200
EXRE0147	Recopesca sensor 5113	127
EXRE0092	Recopesca sensor 15096	126
EXRE0218	Recopesca sensor 15065	113
EXRE0222	Recopesca sensor 15138	92
EXRE0229	Recopesca sensor 5341	79
EXRE0036	Recopesca sensor 15033	78
EXRE0230	Recopesca sensor 5243	72
EXRE0219	Recopesca sensor 5229	69
EXRE0138	Recopesca sensor 15074	65
EXRE0221	Recopesca sensor 5192	55
EXRE0224	Recopesca sensor 15128	55
EXRE0075	Recopesca sensor 15081	54
EXRE0083	Recopesca sensor 15017	53
EXRE0220	Recopesca sensor 15061	43
EXRE0179	Recopesca sensor 5080	39
EXRE0189	Recopesca sensor 5118	38
EXRE0193	Recopesca sensor 5063	35
EXRE0182	Recopesca sensor 5186	34
EXRE0228	Recopesca sensor 35001	33
EXRE0195	Recopesca sensor 5224	29
EXRE0202	Recopesca sensor 15052	26
EXRE0231	Recopesca sensor 5334	25
EXRE0011	Recopesca sensor 5036	20
EXRE0233	Recopesca sensor 15057	19
EXRE0227	Recopesca sensor 15054	18
EXRE0223	Recopesca sensor 5225	17
EXRE0200	Recopesca sensor 5351	16
EXRE0099	Recopesca sensor 15100	15
EXRE0070	Recopesca sensor 15069	12
EXRE0066	Recopesca sensor 15094	7
EXRE0225	Recopesca sensor 25004	6
EXRE0107	Recopesca sensor 15118	6
EXRE0226	Recopesca sensor 5188	5
EXRE0188	Recopesca sensor 5350	4
EXRE0217	Recopesca sensor 15066	3
EXRE0209	Recopesca sensor 5336	2

4 Historical and delayed mode data

## 4.1 Provide historical profiles that are not yet in GTSPP – OCL

A comparison between OCL profiles and Coriolis profiles is underway.
The profiles from Coriolis that do not exist in OCL will be provided to GTSPP.

4.2 UDASH German project, Arctic area

In 2017, our German colleagues from the UDASH project
A total of 300 000 UDASH profiles, 20731 were new to Coriolis data base.
These new profiles were added in Coriolis database, with a specific data format code:
"UD".
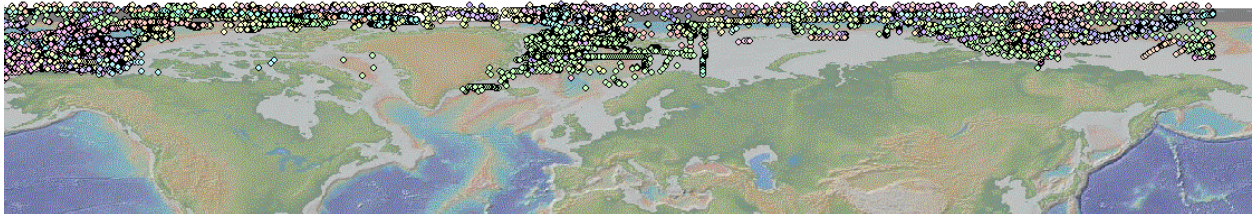
4.3 Delayed mode data from MEOP sea-mammals program

In November 2017, the MEOP program published its 2017 release.
Roquet Fabien, Guinet Christophe, Charrassin Jean-Benoit, Costa Daniel P., Kovacs Kit M, Lydersen Christian, Bornemann Horst, Bester Marthan N., Muelbert Monica C., Hindell Mark A., McMahon Clive R., Harcourt Rob, Boehme Lars, Fedak Mike A. (2014). **MEOP-CTD in-situ data collection: a Southern ocean Marine-mammals calibrated sea water temperatures and salinities observations**. *SEANOE.*
http://doi.org/10.17882/45461

The Coriolis data team is now working on the ingestion of MEOP 2017 release. All sea-mammal profiles from GTS or previous MEOP profiles will be removed and replaced by MEOP 2017 profiles.
All former IF* platform codes will be eliminated and replaced by their proper WMO code.
The sea-mammal "platforms" with no WMO platform code will receive an "EXSM*" code.
An action is underway with JCOMMOPS to assign WIGOS platform codes to historical sea-mammal platforms that never received a WMO platform code.

4.4 Delayed mode data from French research vessels ADCPs

As part of Coriolis observing system, the hull ADCP from French research vessels are continuously measuring current velocity profiles.
These data are public and reusable.
If requested, they may contribute to GTSPP project.

5 Delayed Mode QC

- (Please report on the progress made towards providing delayed mode GTSPP data, how it's organized and the difficulties encountered and estimate when you expect to be pre-operational, if any)

CORA, the Coriolis delayed mode reanalysis on temperature and salinity is released once a year.
Szekely Tanguy, Gourrion Jerome, Pouliquen Sylvie, Reverdin Gilles (2016). **CORA, Coriolis Ocean Dataset for Reanalysis***. SEANOE. http://doi.org/10.17882/46219*

All vertical profiles from 1950 to now are analyzed with ISAS V6 objective analysis. Alert on profiles generated by ISAS and by the MIN-MAX comparison are visually checked in Coriolis database.
The visual inspection is performed by a scientist who may decide to flag suspicious data as bad.

http://www.umr-lops.fr/en/SNO-Argo/Products/ISAS-T-S-fields
The MIN-MAX quality control method

6 Research operations

- (Please report any research activities, such as XBT fall rate tests or system tests undertaken during the year, if any)

The MIN-MAX quality control is regularly improved by Coriolis-science team.
The ISAS objective analysis is also regularly improved by Ifremer-CNRS physical oceanography laboratory team (LOPS).

7 Difficulties encountered

- (Please report on any difficulties or issues you have faced since these might be more widespread than expected)

Medsascii format issues were pointed out by Norman Hall on the last Ifremer data delivery: the history section of some profiles was exceeding the Medsascii limit. These were fixed in December 2017.

An action is underway to upload in GTSPP CMD database the Meds-ascii files provided by Ifremer.