# GOSUD (Global Ocean Surface Underway Data Project report for 2007

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# Some history

- Began in 2001
- Objective is to
  - build a comprehensive archive of surface underway ocean data (for the moment only SSS & SST have been taken into account
  - to add value by building standardized QC procedures
  - to provide data in a timely way to users
  - to improve data acquisition
  - to work with science programs and users interested in the data

#### Data flow



#### Partnership

- At the beginning the Project relied on the experience gained by
  - IRD for maintaining a merchant ship network (10 vessels: more than 30 years of experience)
  - MEDS for monitoring the data that circulate on the GTS
  - Coriolis for managing an ocean in situ database
  - US-NODC for final archiving and repository
- Second step focused on:
  - find new data providers (European projects or partners)
  - in this context a common approach on data exchanges was scheduled with SAMOS but effort must still be carried on
  - monitor the data that circulate on the GTS to track SeaKeepers data (2 links to the GTS have been implemented)
  - other contacts have been taken (IODE, FerryBox,...)

# Statistics data archived at the GDAC



#### **Statistics**



-38 vessels have reported data in 2007

- 14 research vessels
- 28 merchant ships
- 17 have reported directly to the GDAC
- 21 have inserted data through the GTS

- Details on the ships that have reported data in 2007 are available in the GOSUD Annual report (http://www.gosud.org)

#### Statistics

Map of data received in 2007 at the GDAC



-The increase of the amount of data observed in 2006 is confirmed in 2007 (more than 500.000 locations)

- They are more data that were reported on the GTS in 2007 than in 2006

- Good news: data from new ships are now reported to the GDAC (via the GTS or directly): Poseidon –Germany-4 Seakeepers

- Bad news: some institute may have difficulties to maintain an operational system reporting regulary. Data are sent from time to time

- In 2007, no more delayed mode data have been sent to the GDAC than previously

#### Data access

A global repository center has been developed hosted by US-NODC. Synchronization is performed daily between the global server and the repository server.

See <u>http://www.ifremer.fr/gosud/gdac.htm</u> to view where the Gosud data are distributed.

A data selection web interface is available at <a href="http://www.coriolis.eu.org/cdc/GosudSelection/cdcGosudSelections.asp">http://www.coriolis.eu.org/cdc/GosudSelection/cdcGosudSelections.asp</a>

The GDAC is also receiving data directly from some countries and these data form the content of the archives.



Map of data received from 2000 to 2007 at the GDAC

## Data delivery

-The GDAC don't track the users of the GOSUD dataset

- Data are delivered through the GOSUD web and ftp sites but are also distributed on a daily basis as part of a global dataset which includes other datasets such as moorings, vertical profiles (Argo, XBT, CTD)

- Data that reaches the GDAC directly prior any other distribution are also inserted on the GTS (trackob format)

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#### Plans

- We must go on with the data from NOAA vessels

-Encourage new data providers to make their data available

- A simple format (ASCII) is available for those who want to send their data to the GDAC (obviously it is not mandatory to use it)

- A FerryBox project workshop (UK) will be held on the 30<sup>th</sup> of september 2008. Gosud will be represented

- The non governmental agency VOS-Nippon contacted GOSUD to deliver their data. Questions of masking "call sign" must be solved before going ahead

- Australia is a potential provider

### Plans

- Answer to the user's requirements

and check that the satellite community needs are taken in account

- A new GOSUD format will be proposed. It will allow to manage:
  Data in a single file that corresponds to a unique period of installation (same instrument on the same ship)
  - Both near real-time and delayed mode data
  - data and corresponding meta-data (it is planned to use the ODAS-Meta-T recommendations)
  - matching SAMOS & GOSUD data will be adressed

- A method to elaborate a delayed mode data set will be presented by IRD (taking in account water samples when available)

#### Plans

- Products

- How to integrate SST and SSS to existing products such as objective analysis ?

- Other products ?