



GLOBAL TEMPERATURE AND SALINITY PROFILE PROGRAMME (GTSPP)

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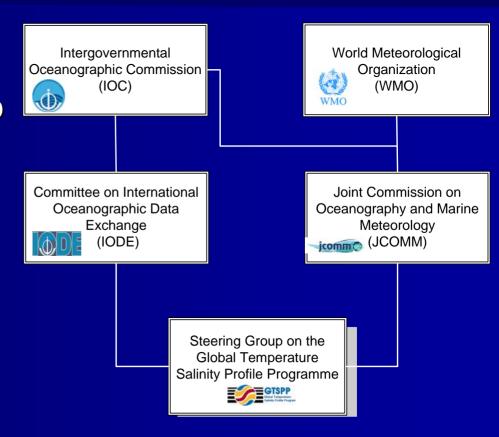


What's GTSPP?



GTSPP = Global Temperature Salinity Profile Programme

- TSPP is a joint WMO-IOC program designed to provide improved access to the highest resolution, highest quality data as quickly as possible.
- GTSPP began as an official IODE pilot project in 1989.
- It went into operation in November 1990.













International Partners



Active Participants: Argentina, Australia, Canada, France, Japan, Germany, and USA

- Argentina: Instituto Nacional de Investigación y Desarrollo Pesquero (INIDEP); Delayed-Mode Data Assembly Center (DM-DAC) and OC
- Australia: AODC, BOM, CSIRO: DM-DAC and QC
- Canada: ISDM: Real-Time data assembly, QC and Duplicates Management
- France: SISMER, Delayed-Mode Data Assembly and OC
- Japan: Japan Meteorological Agency, Real-Time data assembly
- Germany: Federal Maritime and Hydrographic Agency (BSH)
- USA: AOML, Real-Time Data Center and QC; NODC, Continuously Managed Database (CMD)

2007 Participants (DM-DAC)

- National Marine Data and Information Service (NMDIS) of China
- Federal Maritime and Hydrographic Agency (BSH) of Germany

2008 Participants (DM-DAC)

- Japan Oceanographic Data Center (JODC)
- British Oceanographic Data Center (BODC)

2009 Participants (DM-DAC)

- Indian National Institute of Oceanography (NIO)
- Italian National Agency for New Technologies, Energy and the Environment (ENEA)
- Contributing countries include those making at sea profile observations









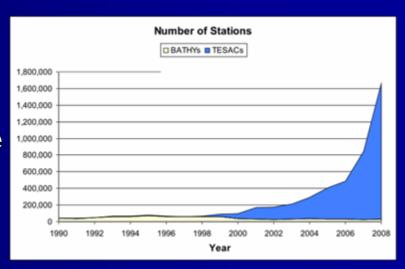


Data Volume as of December 2008



More than 80% of ship reports get into the archives within 3 days and nearly 90% of Argo arrive within 24 hours. These are significant improvements from the start of GTSPP.

- Volumes of real-time BATHY reported steadily increased from 24,855 in 2007 to 27,775 in 2008.
- TESACs have increased due to Argo and moorings that report hourly observations. Almost 1.6 million profiles in 2008.







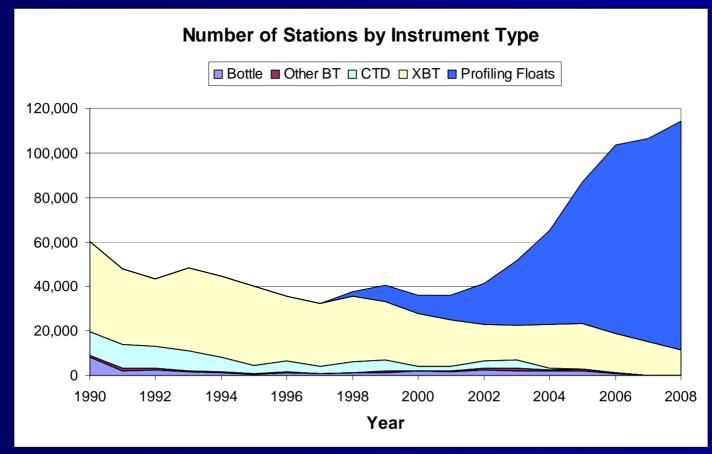






GTSPP Data Sorted by Instrument Type















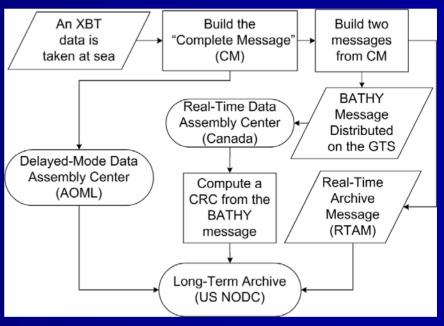
Highlights of GTSPP Activities



XBT Data Management

- Preserve original
 XBT data.
 - Corrections to the depth would be applied only to the data that were placed on the final WOCE DVDs.

2. Unique Data Tag Identification







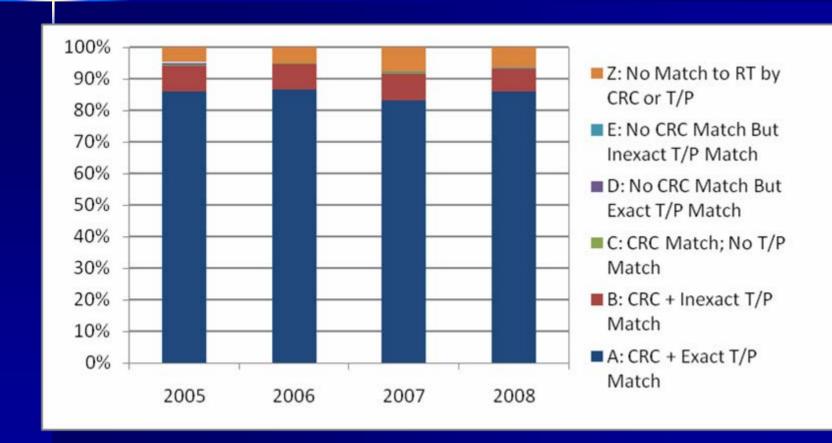






CRC Scheme Test Results















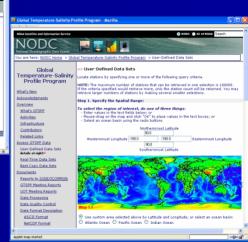
Online Data Delivery



- Access Data
 - Real-Time data
 - Best Copy Data
 - User-Defined Data
- HTTP Server
 - http://data.nodc.noaa.gov/gtspp/
- FTP Server

ftp://ftp.nodc.noaa.gov/pub/data.nodc/gtspp















Online Data Delivery: GTSPP Web Interface (GWI)



NODC All of NOAA

Easternmost Longitude

http://www.nodc.noaa.gov/cgi-bin/gtspp/gtsppform01.cgi

Ability to search by:

- Spatial Range (including 3 options)
 - Latitude-longitude text boxes
 - Rubber-band dragging on the map
 - An ocean basin using the radio button
- Date Range (1990 Present)
- Season Filter
- Data Mode (Real Time, Delayed-Mode, or Best Copy)
- Data Type (Argo Profiling Floats, TAO/TRITON/PIRATA Fixed Buoys, BOT, CTD, MBT, XBT)

Products:

Geneva, Switzerland 18 – 22 May 2009

- List of Station numbers
- Retrieve data and/or display in HTML







Global Temperature-Salinity Profile Program - Mozilla

Global Temperature-Salinity

Profile Program

What's New

Overview

Activities

Acknowledgments

What's GTSPP

Infrastructure

Contributors

Related Links

Access GTSPP Data

details at right">
Real-Time Data Sets
Best Copy Data Sets

Documents

User-Defined Data Sets

Reports to IODE/JCOMMON

GTSPP Meeting Reports

UOT Meeting Reports

Data Processing

Data Quality Control

Data Format Description

ASCII Format

NetCDF Format

Applet imap started

You are here: NODC Home -> Global Temperature-Salinity Profile Program -> User-Defined Data Sets

> User-Defined Data Sets

Sten 1. Specify the Spatial Range:

Westernmost Longitude -180.0

Enter values in the text fields below: or

Select an ocean basin using the radio buttons

Locate stations by specifying one or more of the following guery criteria

retrieve larger numbers of stations by making several smaller selections

- Mouse-drag on the map and click "OK" to place values in the text boxes: or

.90.0

To select the region of interest, do one of three things:

NOTE: The maximum number of stations that can be retrieved in one selection is 100000.

If the criteria specified would retrieve more, only the station count will be returned. You may

Northernmost Latitude

Southernmost Latitude

Use custom area selected above by Latitude and Longitude; or select an ocean basin

margovermenta Uceanographic Commission of UNESCU International Oceanographic Data and Information Exchange

O Atlantic Ocean O Pacific Ocean O Indian Ocean







Offline Data Delivery



DVD Features

- Written to the ISO9660 format with the RockRidge extension.
- Data stored in the netCDF format, sorted by years and months, then compressed.
- All documents including meeting reports.
- Tools for exploring the data.
- Data size of about 14 GB written to three single layer DVD5±R discs or two double layer DVD9±R discs.



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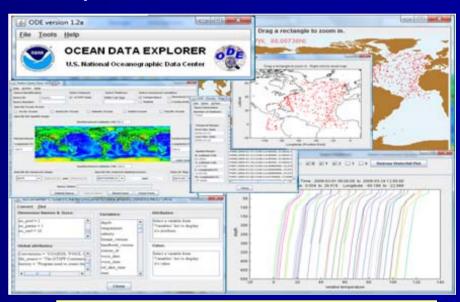
Ocean Data Explorer (ODE)



The ODE application is a software package that provides graphic exploration tools to examine oceanographic data stored on optical disc media. It

contains:

- SQForm: Station Query Form
- ncConverter: Convert NetCDF files



Snap Shoots of the ODE features









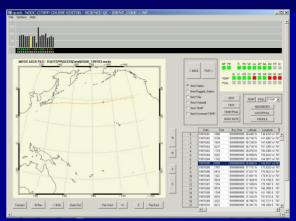


Data Quality Cruise Editor: QCED



Features:

- Map of ship position for visual inspection of the cruise.
- Bar graph of the ship speeds between stations in the cruise.
- Waterfall plot of neighboring profiles.
- Profile plot overlaid on the World Ocean Atlas 2001 climatology and ETOPO5 Bathymetry plots
- > Temperature/Salinity plot when both are available.
- Formatted text display of all fields from the data file.
- Key metadata displayed in a scrolling list.
- Performs a suite of automated data quality tests and displays "trouble lights" to draw operator attention to questionable data.
- Operator may edit
 - [']- Time and Position.
 - QC flags for temperature or salinity values.















Highlights of Work Plans



2009

- Update the GTSPP RT QC Manual.
- Document the CRC scheme.
- Submit the RT QC and CRC proposals for IODE/JCOMM Standards Process per IODE committee's request.
- Complete bi-annual report for 2007–2008.
- Present the GTSPP community white paper at the upcoming OceanObs'09 Conference.

2010 – 2011

- Convene a two-day workshop at the **IODE Program Office** in May 2010.
- Design and Publish GTSPP data on DVD for using in the IODE training/outreach program in 2011.



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Acknowledgments



- US NODC Management
- NOAA PRIDE Program
- Ship Of Opportunity Programme (SOOP)
- IODE Data Centres
- IODE GODAR Project
- Staff at AODC, BOM, CSIRO, ISDM and SISMER for processing delayed-mode data

- Mr. Robert Keeley for his leadership of the GTSPP till 2007
- Dr. Ann Thresher for her assistance in managing the GTSPP since May 2007
- Dr. Norm Hall for managing the GTSPP database (CMD)
- Ms. Melanie Hamilton for processing the GTSPP data













THANK YOU ALL!

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